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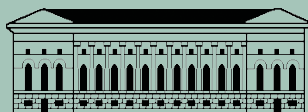
**ANNOTATED CATALOGUE
OF THE HYMENOPTERA OF RUSSIA**

VOLUME I

SYMPHYTA AND APOCRITA: ACULEATA



SUPPLEMENT № 6, 2017



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SAINT PETERSBURG
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OF THE HYMENOPTERA OF RUSSIA

VOLUME I

SYMPHYTA AND APOCRITA: ACULEATA

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ТРУДЫ ЗООЛОГИЧЕСКОГО ИНСТИТУТА
РОССИЙСКОЙ АКАДЕМИИ НАУК

ПРИЛОЖЕНИЕ № 6

**АННОТИРОВАННЫЙ КАТАЛОГ
ПЕРЕПОНЧАТОКРЫЛЫХ НАСЕКОМЫХ РОССИИ**

ТОМ I

**СИДЯЧЕБРЮХИЕ (SYMPHYTA)
И ЖАЛОНОСНЫЕ (АРОСРИТА: ACULEATA)**



САНКТ-ПЕТЕРБУРГ
2017

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РОССИЙСКОЙ АКАДЕМИИ НАУК

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ТОМ I

СИДЯЧЕБРЮХИЕ (SYMPHYTA)
И ЖАЛОНОСНЫЕ (ARCRITA: ACULEATA)

Под общей редакцией С.А. Белокобыльского и А.С. Лелея

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ANNOTATED CATALOGUE OF THE HYMENOPTERA OF RUSSIA. VOLUME I. SYMPHYTA AND APOCRITA: ACULEATA

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ABSTRACT

Hymenoptera is one of the largest insect orders, with a world fauna of 155.5 thousand species in 8423 genera from 94 extant families, a Palaearctic fauna of 50–60 thousand estimated species, and a Russian fauna of more than 15 thousand estimated species in more than 1500 genera from 78 families. The modern classification of Hymenoptera is given. The first volume treats the sawflies (13 families, 170 genera, 1546 species), wasps (15 families, 253 genera, 1695 species), ants (1 family, 44 genera, 264 species) and bees (6 families, 66 genera, 1216 species) which together, in Russia, comprise 4721 species in 533 genera. The sections for each of the 35 families include characteristics, number of taxa, references, and an annotated catalogue of the genera and species recorded from the fauna of Russia. For each valid genus the type species, synonymy, short characterization, and number of species are given. For each valid species the synonymy, known host plants, hosts or prey, and distribution (in Russia and general) are provided. The book is illustrated using geoschemes for Russia, Europe, and China. The large bibliography helps to assess the level of study of each family. The index of scientific names of Hymenoptera (more than 16000 names) will be useful for taxon searching.

Key words: sawflies, wasps, ants, bees, Xyeloidea, Tenthredinoidea, Pamphilioidea, Cephoidea, Siricoidea, Orussoidea, Chrysoidea, Scolioidea, Pompiloidea, Vespoidea, Formicoidea, Apoidea

АННОТИРОВАННЫЙ КАТАЛОГ ПЕРЕПОНЧАТОКРЫЛЫХ НАСЕКОМЫХ РОССИИ. ТОМ I. СИДЯЧЕБРЮХИЕ (СИМФЫТА) И ЖАЛОНОСНЫЕ (АПОКРИТА: АКУЛЕАТА)

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РЕЗЮМЕ

Перепончатокрылые – один из самых больших отрядов насекомых, который насчитывает в мире 155.5 тыс. видов, 8423 рода из 94 рецентных семейств, в Палеарктике ожидается 50–60 тыс. видов, в России – более 15 тыс. видов из более чем 1500 родов и 78 семейств. Приведена современная общая классификация отряда

Hymenoptera. Первый том охватывает пилильщиков и рогахвостов (13 семейств, 170 родов, 1546 видов), ос (15 семейств, 253 рода, 1695 видов), муравьев (1 семейство, 44 рода, 264 вида) и пчел (6 семейств, 66 родов, 1216 видов); в целом в России насчитываются 4721 вид из 533 родов. Каждый раздел (35 семейств) включает краткую характеристику, число таксонов, литературу и аннотированный каталог родов и видов, известных из России. Для каждого валидного рода приведены типовой вид, синонимия, краткая характеристика и число видов. Для каждого валидного вида приведены синонимия, известные кормовые растения, хозяева или добыча и распространение (в России и общее). Книга иллюстрирована схематическими картами России, Европы и Китая. Большая библиография даст представление о степени изученности каждого семейства. Указатель латинских названий перепончатокрылых (в целом свыше 16000 названий) облегчит поиск необходимых названий.

Key words: пилильщики, осы, муравьи, пчелы, Xyeloidea, Tenthredinoidea, Pamphilioidea, Cephoidea, Siricoidea, Orussoidea, Chrysidioidea, Scolioidea, Pompiloidea, Vespoidea, Formicoidea, Apoidea

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PREFACE

S.A. BELOKOBYLSKIY AND A.S. LELEJ

Hymenoptera is one of the largest insect orders, with a world fauna 155.5 thousand species in 8423 genera from 94 extant families (Aguilar et al., 2013). Probably Hymenoptera in total includes 250–300 thousand species (Rasnitsyn, 2002; Gauld et al., 1988). According to our estimation, the Palaearctic fauna has about 50–60 thousand species; in Russia there are more than 15 thousand species in more than 1500 genera from 78 families of Hymenoptera (Lelej et al., 2012).

The Annotated Catalogue of Hymenoptera of Russia is based on six Hymenoptera books of the series “Keys to the insects of the European part of USSR” (1978a, 1978b; 1981; 1986a, 1978b; 1988, which treat 10748 recorded and potentially occurring species in 1938 genera) and five Hymenoptera books of the series “Keys to the insects of the Russian Far East” (1995a, 1995b; 1998; 2000; 2007, which include 4948 recorded and potentially occurring species in 1389 genera) as well as original papers published in the last decades. The last catalogue of Hymenoptera of the Russian Far East (Lelej et al., 2012) includes 7503 recorded species in 1363 genera from 69 families. Among the 78 families of Hymenoptera so far recorded from Russia, Stephanidae, Evaniidae, Agaonidae, Signiphoridae, Bradynobaenidae and Ampulicidae are known to occur only in the European part of the country, while distribution of Roproniidae, Proctorenyxidae and Vanhorniidae is limited to south of the Russian Far East. The rare family Sierolomorphidae is known from south of the Russian Far East (Primorskiy Terr.), Western Siberia (Novosibirsk Prov.), and Ural (Orenburg Prov.).

Significance of such types of catalogues is in uniting comprehensive information about contents, biological peculiarity, distribution, and host specificity of the insect fauna of a country of interest. They are also extremely important for development of the Russian national insect collections.

The first volume of this Catalogue treats the sawflies (13 families, 170 genera, 1546 species), wasps (15 families, 253 genera, 1695 species), ants (1 family, 44 genera, 264 species), and bees (6 families, 66 genera, 1216 species); their total number in Russia is 4721 species in 533 genera. Sections for each of 35 families include brief data, number of taxa, references, and annotated catalogues of genera and species recorded from Russia. For each valid genus, the type species, synonymy, a brief characteristic, and number of species are

given. For each valid species, synonymy, known host plants, hosts or preys, and distribution (from Russia and general) are provided. The book is illustrated by geoschemes for Russia, Europe, and China (Figs 1–3).

The boundary of Russia and the adjacent countries is given in geoscheme (Fig. 1) using abbreviations. For better understanding of the species distribution, also provided are geoschemes of Europe (Fig. 2) and China (Fig. 3). For most families and genera, the current (as of October 2017) number of valid species in the World is given, followed by that in the Palaearctic region and Russia. For the species distribution, the Russian regions are listed first, followed by Europe and other countries (regions) in the following order: Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG, CH). – Europe (WE, NE, SE, EE), N Africa, Georgia, Armenia, Azerbaijan (or Caucasus – for all three countries), Turkey, Syria, Jordan, Lebanon, Israel, Iraq, Iran, Afghanistan, Pakistan, Turkmenistan, Tajikistan, Uzbekistan, Kyrgyzstan (or Central Asia – for all four countries), Kazakhstan, Mongolia, China (NE, NC, NW, CC, SW, WP, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu), N America, SE Asia, India, Africa, S America, Australia. The names of countries and Russian regions are given according to the All-Russian classifier of the countries of the world (<http://klassifikators.ru/oksm>), and English names of the Russian regions follows Gorskaya (1994).

Geoscheme for Europe according to United Nations geoscheme for Europe (https://en.wikipedia.org/wiki/United_Nations_geoscheme_for_Europe), including of United Kingdom and Republic of Ireland in Western Europe and excluding of Turkey and Kazakhstan (Fig. 2). **Western Europe** (WE): Austria, Belgium, France, Germany, Republic of Ireland, Liechtenstein, Luxemburg, Monaco, Netherlands, Switzerland, United Kingdom; **Northern Europe** (NE): Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway, Sweden; **Southern Europe** (SE): Albania, Andorra, Bosnia and Herzegovina, Croatia, Greece, Italy, Republic of Macedonia, Malta, Montenegro, Portugal, San Marino, Serbia, Slovenia, Spain; **Eastern Europe** (EE): Belarus, Bulgaria, Czech Republic, Hungary, Republic of Moldova, Poland, Romania, Slovakia, Ukraine; European part of Russia (treated separated from other countries of EE in structure of whole Russian Federation).

DZ – Algeria; **MA** – Morocco; **TN** – Tunisia; **TR** – Turkey. Codes for the names of countries follow the standard of the International Organization for Standardization (ISO 3166-1 alpha-2).

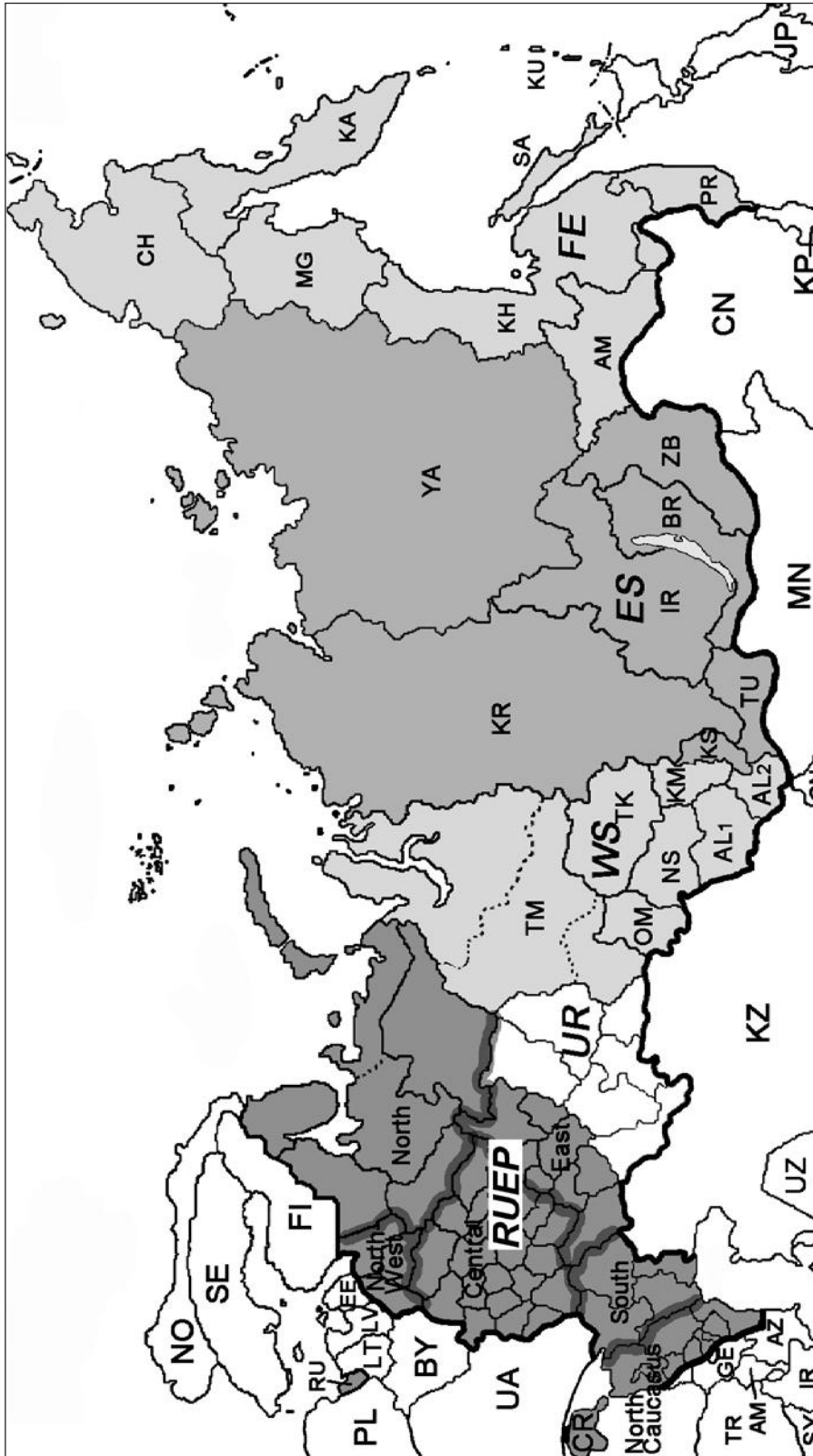


Fig. 1. Geoscheme for Russia. **EUROPEAN PART (RU EP = EP)**: North (N): Murmansk Prov., Arkhangelsk Prov., Karelian Rep., Vologda Prov., Komi Rep.; North-West (NW): Kaliningrad Prov., Leningrad Prov., Pskov Prov., Novgorod Prov.; Centre (C): Tver Prov., Yaroslavl Prov., Kostroma Prov., Smolensk Prov., Moscow Prov., Vladimir Prov., Ivanovo Prov., Nizhniy Novgorod Prov., Kaluga Prov., Tula Prov., Ryazan Prov., Mordovian Rep., Bryansk Prov., Orel Prov., Lipetsk Prov., Tambov Prov., Penza Prov., Kursk Prov., Belgorod Prov., Voronezh Prov.; East (E): Kirov Prov., Udmurt Rep., Mari El Rep., Chuvash Rep., Tatar Rep., Ulyanovsk Prov., Samara Prov., Saratov Prov.; South (S): Rostov Prov., Volgograd Prov., Kalmyk Rep., Astrakhan Rep.; North Caucasus (NC): Krasnodar Terr., Stavropol Terr., Adygei Rep., Karachayvo-Cherkess Rep., Ingush Rep., Kabardino-Balkarian Rep., North Ossetian Rep., Chechen Rep., Dagestan Rep.; Crimea (CR): Crimean Rep., Sebastopol. **URALS (UR)**: Perm Terr., Sverdlovsk Prov., Bashkir Rep., Chelyabinsk Prov., Orenburg Prov., Kurgan Prov. **WESTERN SIBERIA (WS)**: Tyumen Prov. (TM), Omsk Prov. (OM), Tomsk Prov. (TK), Novosibirsk Prov. (NS), Kemerovo Prov. (KM), Altai (AL) (including Altai Rep. and Altai Terr.). **EASTERN SIBERIA (ES)**: Khakass Rep. (KS), Tuva Rep. (TU), Krasnoyarsk Terr. (KR), Irkutsk Prov. (IR), Buryat Rep. (BR), Yakutsk Rep. (YA), Zabaikalskii Terr. (ZB); **FAREAST (FE)**: Amur Prov. (AM), Khabarovsk Terr. (including Jewish Autonomous Region) (KH), Primorskii Terr. (PR), Sakhalin (SA), Kuril Islands (KU), Kamchatka Terr. (KA), Magadan Prov. (MG), Chukot Autonomous Area (CH). **Other countries**: AM – Armenia; AZ – Azerbaijan; BY – Belarus; CN – China; EE – Estonia; FI – Finland; GE – Georgia; IR – Iran; JP – Japan; KP – North Korea (Democratic People's Republic of Korea); KZ – Kazakhstan; LT – Lithuania; LV – Latvia; MN – Mongolia; NO – Norway; PL – Poland; RU – Russia; SE – Sweden; SY – Syria; TR – Turkey; UA – Ukraine; UZ – Uzbekistan.

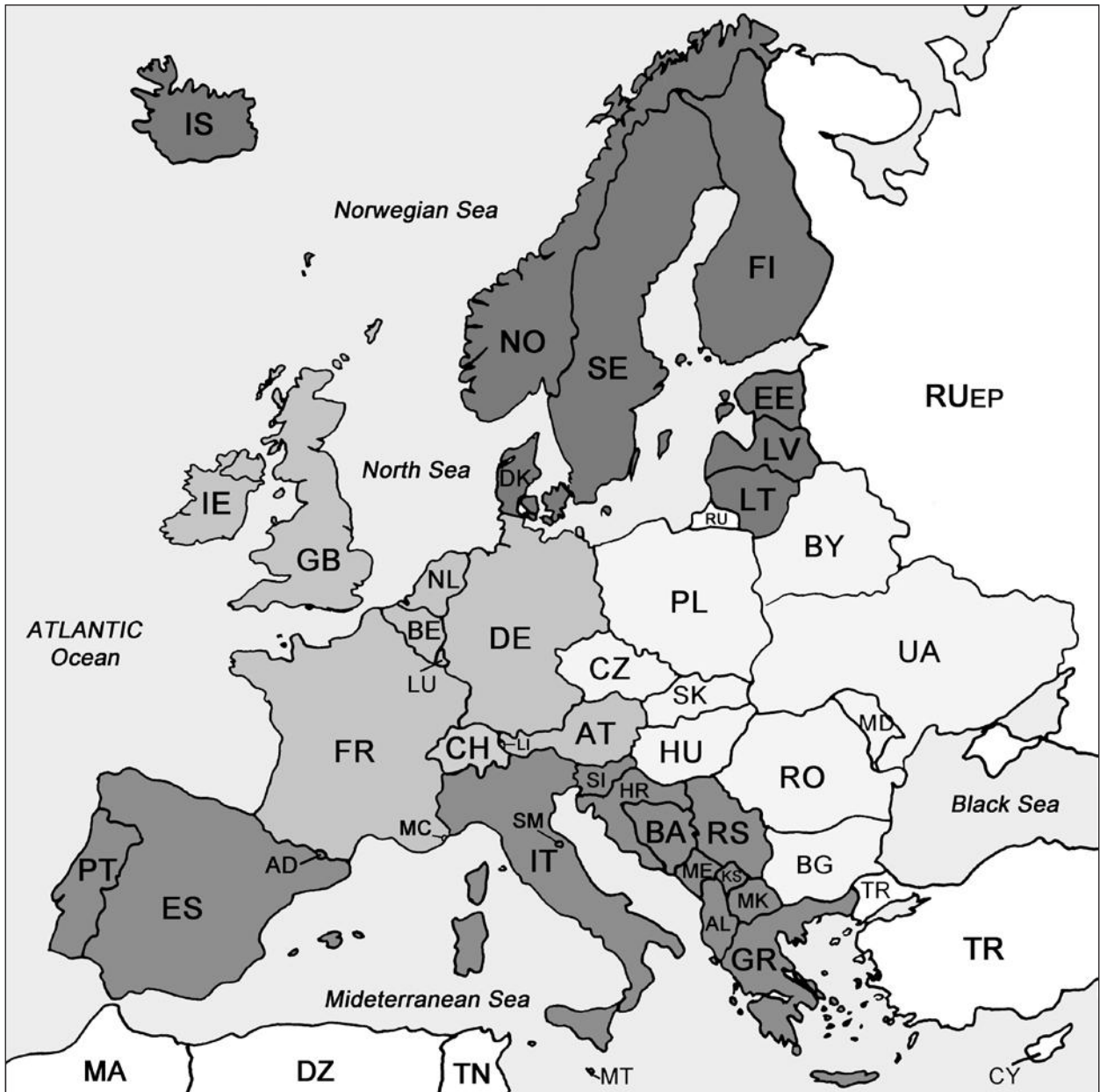


Fig. 2. Geoscheme for Europe. *European countries:* AD – Andorra; AL – Albania; AT – Austria; BA – Bosnia and Herzegovina; BE – Belgium; BG – Bulgaria; BY – Belarus; CH – Switzerland; CZ – Czech Republic; DE – Germany; DK – Denmark; EE – Estonia; ES – Spain; FI – Finland; FR – France; GB – United Kingdom; GR – Greece; HR – Croatia; HU – Hungary; IE – Republic of Ireland; IS – Iceland; IT – Italy; KS – Kosovo; LI – Liechtenstein; LT – Lithuania; LU – Luxembourg; LV – Latvia; MC – Monaco; MD – Republic of Moldova; ME – Montenegro; MK – Republic of Macedonia; MT – Malta; NL – Netherlands; NO – Norway; PL – Poland; PT – Portugal; RO – Romania; RS – Serbia; RUEP – Russian Federation (European part); SE – Sweden; SI – Slovenia; SM – San-Marino; SK – Slovakia; UA – Ukraine. *Other countries:* CY – Cyprus; DZ – Algeria; MA – Morocco; TN – Tunisia; TR – Turkey. Codes for the names of countries follow the standard of the International Organization for Standardization (ISO 3166-1 alpha-2).

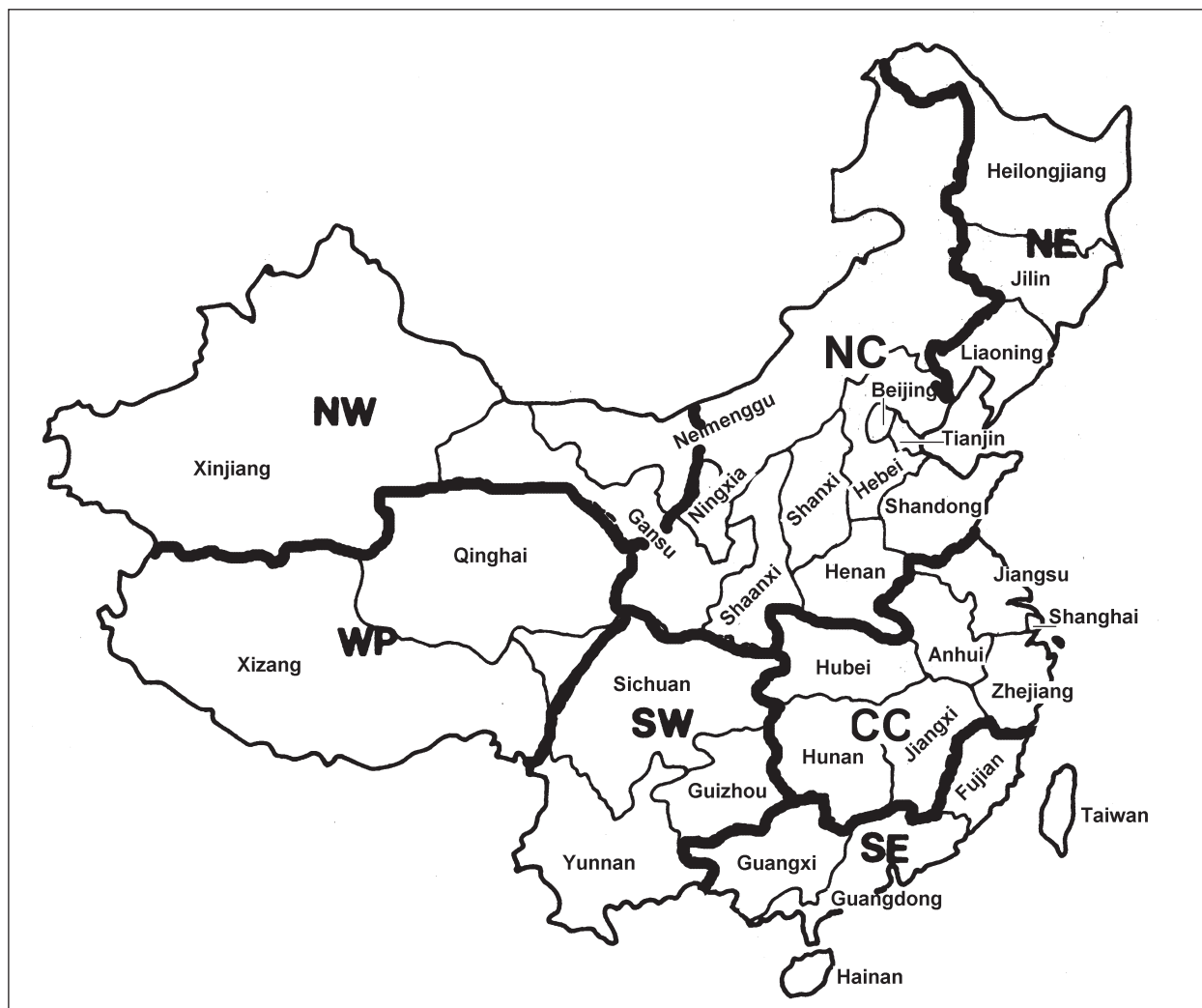


Fig. 3. Geoscheme for China. *Regions of China:* Northeastern Territory (NE), Northern Territory (NC), Northwestern Territory (NW), the Western Plateau (WP), Central Territory (CC), Southwestern Territory (SW), Southeastern Territory (SE).

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ORDER HYMENOPTERA

INTRODUCTION

A.S. LELEJ AND S.A. BELOKOBYSKIJ

The first volume of the Annotated Catalogue of the Hymenoptera of Russia (Table) treats the sawflies (13 families, 170 genera, 1546 species), wasps (15 families, 253 genera, 1695 species), ants (1 family, 44 genera, 264 species), and bees (6 families, 66 genera, 1216 species); their total number in Russia is 4721 species in 533 genera. The large bibliography helps to document the level of knowledge of each family. Index of Latin names of Hymenoptera (more than 16000 names total) can be useful for searching particular taxa.

Classification

In this book we followed the classification of Hymenoptera as proposed by Sharkey (2007) and Sharkey et al. (2011) for higher-level groupings and the survey of taxonomic richness by Aguiar et al. (2013), complemented by the recent new descriptions (Yu, 2012; Li et al., 2013; Engel et al., 2013, 2016a, b; Engel, 2015; Rodriguez et al., 2016; Rasnitsyn et al., 2017; Wang et al., 2017; Zhang et al., 2017). Also used were classifications by Rasnitsyn (1988) and Rasnitsyn & Zhang (2010) regarding the infraorders but with some changes. Infraorder Orussomorpha is a transition between the suborders Symphyta and Apocrita, but is traditionally placed in Symphyta.

Recently, Pilgrim et al. (2008) undertook a molecular analysis based on four nuclear genes of 64 taxa across the entire Vespoidea, in which they concluded that this superfamily and some included families were paraphyletic, and proposed recognition of six “vespoid” superfamilies (Formicoidea, Pompiloidea, Scolioidea, Tiphioidea, Thynnoidea and Vespoidea) and transfer of Myrmosinae from Mutillidae to its own family (Myrmosidae), both within Pompiloidea (with Pompilidae and Sapygidae), but they lacked specimens of most of the mutillid subfamilies and had only one of Myrmosinae, so the basis for their results was limited.

The families recorded from Russia are numbered (under these numbers they are placed in the taxonomic part of this catalogue; these are marked by a point (•) if they are not registered in Russia, and by a special symbol (†) if they are fossil).

Suborder SYMPHYTA

Xyelomorpha

Xyeloidea Newman, 1834

1. Xyelidae Newman, 1834

† Sypastoxyelidae Engel et Huang, 2016

Tenthredinomorpha

Tenthredinoidea Latreille, 1803

† Electrotomidae Rasnitsyn, 1977

† Xyelotomidae Rasnitsyn, 1968

2. Argidae Konow, 1890

• Pergidae Rohwer, 1911

3. Blasticotomidae Thomson, 1871

4. Cimbicidae W. Kirby, 1837

5. Diprionidae Rohwer, 1910

6. Heptamelidae Benson, 1938

7. Tenthredinidae Latreille, 1803

Siricomorpha

Pamphilioidea Cameron, 1890

† Xyelydidae Rasnitsyn, 1986

† Mirolydidae Wang, Rasnitsyn et Ren, 2017

8. Pamphiliidae Cameron, 1890

9. Megalodontesidae Konow, 1897

Cephoidea Newman, 1834

† Sepulcidae Rasnitsyn, 1968

10. Cephidae Newman, 1834

Siricoidea Billberg, 1820

† Daohugoidae Rasnitsyn et Zhang, 2004

† Protosiricidae Rasnitsyn et Zhang, 2004

† Pseudosiricidae Handlirsch, 1908

11. Siricidae Billberg, 1820

12. Xiphydriidae Leach, 1819

Anaxyeloidea Martynov, 1925

•Anaxyelidae Martynov, 1925

Orussomorpha

Orussoidea Newman, 1834

† Karatavitidae Rasnitsyn, 1963

† Paroryssidae Martynov, 1925

13. Orussidae Newman, 1834

Suborder APOCRITA

Parasitica¹

Stephanomorpha

Stephanoidea Leach, 1815

† Eostephanitidae Hong, 2002²

† Ephialtitidae Handlirsch, 1906

† Myanmarinidae Zhang et Rasnitsyn, 2017

¹ Group of non-fixed rank

² *Eostephanites* Hong, 2002 [type genus of Eostephanitidae] has been placed to Stephanoidea: Eostephanitidae (Yu, 2012) but A.P. Rasnitsyn considers (pers. comm.) that it belongs to the Braconidae

Table. Hymenoptera of Russia: number of taxa of Symphyta and Apocrita: Aculeata

Family	World		Palearctic		Russia	
	Genera	Species	Genera	Species	Genera	Species
Symphyta						
1. Xyelidae	8	85	4	40	3	13
2. Argidae	60	920	17	310	7	88
3. Blasticotomidae	2	12	2	8	2	3
4. Cimbicidae	15	190	10	150	8	72
5. Diprionidae	11	140	9	70	8	28
6. Heptamelidae	6	50	2	13	2	5
7. Tenthredinidae	400	5600	220	3500	109	1124
8. Pamphiliidae	10	300	10	200	9	99
9. Megalodontesidae	1	37	1	37	1	12
10. Cephidae	24	165	16	120	10	57
11. Siricidae	11	130	7	75	5	20
12. Xiphydriidae	29	150	14	50	4	21
13. Orussidae	17	90	5	20	2	4
Total	594	7879	317	4603	170	1546
Apocrita: Aculeata						
57. Dryinidae	50	1827	24	257	8	63
58. Embolemidae	3	39	3	10	2	5
59. Bethyidae	84	2340	20	244	20	34
60. Chrysididae	95	2815	36	1557	23	330
61. Sapygidae	12	66	6	31	5	9
62. Scolidae	43	560	11	100	5	20
63. Tiphidae	120	2000	17	100	6	28
64. Sierolomorphidae	2	12	2	5	1	2
65. Mutillidae	216	4300	61	525	20	74
66. Bradynobaenidae	10	188	4	43	1	2
67. Pompilidae	254	4855	65	1000	37	246
68. Vespidae	256	5274	90	1181	38	197
69. Formicidae	485	13978	94	1350	44	264
70. Ampulicidae	6	202	3	38	2	4
71. Sphecidae	19	779	13	260	11	68
72. Crabronidae	250	8900	84	2000	74	613
73. Colletidae	86	2630	2	432	2	100
74. Andrenidae	77	2917	13	1100	5	244
75. Halictidae	79	4420	23	950	13	263
76. Melittidae	15	198	5	85	3	25
77. Megachilidae	76	4096	36	1100	18	198
78. Apidae	176	5614	33	1358	25	386
Total	2414	68010	645	13726	363	3175

Note. Data for the World are given from Aguiar et al. (2013), and for the Palearctic region and Russia from this book.

14. Stephanidae Leach, 1815

Evaniomorpha

Evanioidea Latreille, 1802

- † Andreneliidae Rasnitsyn et Martínez-Declòs, 2000
- † Anomopterellidae Rasnitsyn, 1975
- † Othniodellithidae Engel et Huang, 2016
- † Praeaulacidae Rasnitsyn, 1972
- 15. Aulacidae Shuckard, 1841
- 16. Gasteruptiidae Ashmead, 1900
- 17. Evaniidae Latreille, 1802

Ceraphronomorpha

Ceraphronoidea Haliday, 1833

- † Radiophronidae Ortega-Blanco, Rasnitsyn et Declòs, 2010
- † Stigmaphronidae Kozlov, 1975
- † Aptenoperissidae Rasnitsyn & Poinar, 2017
- 18. Megaspilidae Ashmead, 1893
- 19. Ceraphronidae Haliday, 1833

Megalyroidea Schletterer, 1889

- † Maimetshidae Rasnitsyn, 1975
- Megalyridae Schletterer, 1889

Trigonalynoidea Cresson, 1887

- 20. Trigonalynidae Cresson, 1887

Proctotrupoomorpha

Proctotrupoidea Latreille, 1802

- † Jurapriidae Rasnitsyn, 1983
- † Mesoserphidae Kozlov, 1970
- Austroniidae Kozlov, 1975
- Peleciniidae Haliday, 1839
- Peradeniidae Naumann et Masner, 1985
- 21. Heloridae Förster, 1856
- 22. Proctotrupidae Latreille, 1802
- 23. Roproniidae Bradley, 1905
- 24. Proctorenyxidae Lelej et Kozlov, 1999
- 25. Vanhorniidae Crawford, 1909

Diaprioidea Haliday, 1833

- 26. Diapriidae Haliday, 1833
- 27. Ismaridae Thomson, 1858
- Maamingidae Early, Masner, Naumann et Austin, 2001
- Monomachidae Ashmead, 1902
- † Spathiopterygidae Engel et Ortega-Blanco, 2013

Platygastridae Haliday, 1833

- 28. Platygastridae Haliday, 1833
- 29. Scelionidae Haliday, 1839

† **Serphitoidea** Brues, 1937

- † Serphitidae Brues, 1937
- † Archaeoserphitidae Engel, 2015

Cynipoidea Latreille, 1802

- † Gerocynipidae Liu et Engel, 2007
- † Protimaspidae Liu et Engel, 2007
- † Stolamissidae Liu et Engel, 2007
- Austrocynipidae Riek, 1971
- 30. Ibaliidae Thomson, 1862
- 31. Liopteridae Ashmead, 1895
- 32. Figitidae Hartig, 1840
- 33. Cynipidae Latreille, 1802

Chalcidoidea Latreille, 1817

- † Khutelchalcididae Rasnitsyn, Basibuyuk et Quicke, 2004
- 34. Chalcididae Latreille, 1817
- 35. Leucospidae Walker, 1834
- 36. Perilampidae Förster, 1856
- 37. Eucharitidae Walker, 1846
- 38. Pteromalidae Dalman, 1820
- 39. Eupelmidae Walker, 1833
- 40. Encyrtidae Walker, 1837
- 41. Eurytomidae Walker, 1832
- 42. Torymidae Walker, 1833
- 43. Ormyridae Förster, 1856
- 44. Agaonidae Walker, 1846
- 45. Tetracampidae Förster, 1856
- 46. Eulophidae Westwood, 1829
- 47. Aphelinidae Thomson, 1876
- 48. Azotidae Nikol'skaya et Yasnosh, 1966
- 49. Cynipencyrtidae Trjapitzin, 1973
- Eriaporidae Ghesquère, 1955
- 50. Trichogrammatidae Haliday, 1851
- 51. Signiphoridae Howard, 1894
- 52. Mymaridae Haliday, 1833
- Rotoitidae Bouček et Noyes, 1987
- Tanaostigmatidae Ashmead, 1904

Mymarommatoidea Debauche, 1948

- † Alavarommatidae Ortega-Blanco, Peñalver, Delclòs et Engel, 2011
- † Gallorommatidae Gibson, Read et Huber, 2007
- 53. Mymarommatidae Debauche, 1948

Ichneumonomorpha

Ichneumonoidea Latreille, 1802

- † Praeichneumonidae Rasnitsyn, 1983
- 54. Ichneumonidae Latreille, 1802
- 55. Braconidae Nees, 1811
- 56. Aphidiidae Haliday, 1833

Aculeata³

Vespomorpha

† **Bethylonymoidea** Rasnitsyn, 1975

- † Bethylonymidae Rasnitsyn, 1975

³ Group of non-fixed rank

Chrysoidea Latreille, 1802

- † Falsiformicidae Rasnitsyn, 1975
- † Plumalexiidae Brothers, 2011
- Plumariidae Bischoff, 1914
- Sclerogibbidae Ashmead, 1902
- Scolebythidae Evans, 1963
- 57. Dryinidae Haliday, 1833
- 58. Embolemidae Förster, 1856
- 59. Bethyidae Haliday, 1839
- 60. Chrysididae Latreille, 1802

Scolioidea Latreille, 1802

- † Bryopompilidae Engel et Grimaldi, 2006
- 61. Sapygidae Latreille, 1810
- 62. Scoliidae Latreille, 1802
- 63. Tiphiidae Leach, 1815
- 64. Sierolomorphidae Krombein, 1951
- 65. Mutillidae Latreille, 1802
- 66. Bradynobaenidae de Saussure, 1892
- Rhopalosomatidae Ashmead, 1896

Pompiloidea Latreille, 1804

- 67. Pompilidae Latreille, 1804

Vespoidea Latreille, 1802

- 68. Vespidae Latreille, 1802

Formicoidea Latreille, 1802

- 69. Formicidae Latreille, 1802

Apoidea Latreille, 1802Section Spheciformes⁴

- † Angarosphecidae Rasnitsyn, 1975
- Heterogynaidae Nagy, 1969
- 70. Ampulicidae Shuckard, 1840
- 71. Sphecidae Latreille, 1802
- 72. Crabronidae Latreille, 1802

Section Apiformes⁵

- † Mellitosphecidae Poinar et Danforth, 2006
- † Paleomelittidae Engel, 2001
- 73. Colletidae Lepeletier de Saint Fargeau, 1841
- 74. Andrenidae Latreille, 1802
- 75. Halictidae Thomson, 1869
- 76. Melittidae Schenck, 1860
- 77. Megachilidae Latreille, 1802
- 78. Apidae Latreille, 1802
- Stenotritidae Cockerell, 1934

Apocrita incertae sedis

- † Archaeocynipidae Rasnitsyn et Kovalev, 1988
- † Kuafuidae Rasnitsyn et Zhang, 2010

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**SUBORDER SYMPHYTA –
SAWFLIES AND WOOD WASPS**

YU.N. SUNDUKOV

Sawflies are distinguished from other Hymenoptera by the anterior margin of the tergum 1, which appears as part of abdomen rather than thorax, though it is fused to the postnotum of the metathorax. The suborder is distributed worldwide. Number of recent taxa: World – 15 families, 45 subfamilies, about 650 genera, about 8250 species; Palaearctic – 13/24/>310/about 4400; Russia – 13/22/170/1546.

The classification used here reflects classification, derived from the “World catalog of Symphyta” (Taeger et al., 2010), taking into account the latest taxonomic changes (see the list of references).

INFRAORDER XYELOMORPHA

SUPERFAMILY XYELOIDEA

One family: Xyelidae.

1. FAMILY XYELIDAE

Xyelidae is the earliest known family of Hymenoptera according to the fossil record, with the oldest members dating from the Early Triassic some 220 million years ago (Blank, 2002b). Xyelidae is a small family of herbivorous wasps. These are small (Xyelinae) or medium sized (Macroxyelinae) insects (3–17 mm). Characterized by very long 3th antennal segment (actually formed by fusion of at least 8 segments) surmounted by a slender filament of 9 or more tiny segments. The larvae of subfamily Xyelinae live in the male cones of pines (*Pinus* spp.), where they feed on the sporophylls, or bores in the shoots of conifers (*Abies*, *Picea*). Larvae of Macroxyelinae – in the inflorescences of deciduous trees.

The family is distributed in the Holarctic, Oriental and Neotropical regions, mainly in their temperate zone. Number of recent taxa: World – 2 subfamilies, 8 genera, about 85 species; Palaearctic – 2/4/> 40; Russia – 2/3/13.

R e f e r e n c e s. Gussakovskij, 1935; Rasnitsyn, 1965; Shinohara, 1992b, 1995; Blank et al., 2005, 2013, 2017; Taeger et al., 2006, 2010; Sundukov, Lelej, 2012; Vasilenko, Korshunov, 2012; Kostyunin, 2015; Sundukov, 2015.

Subfamily MACROXYELINAE

MEGAXYELA Ashmead, 1898 (*Odontophyes* Konow, 1899; *Megaloxyla* Schulz, 1906; *Paraxyela* MacGillivray, 1912). The larvae feed on the Juglandaceae. Type species *Xyela major* Cresson, 1880. The genus is distributed in East Palaearctic and Nearctic region. Number of species: World – 11; Palaearctic – 6; Russia – 2.

Megaxyela gigantea Mocsàry, 1909 (*M. mikado* Sato, 1930). Host plant: *Juglans mandshurica*, *J. ailanthifolia*, *J. regia* (Juglandaceae). Russia: FE (KH, PR). – Korean Peninsula.

Megaxyela pulchra Blank, Shinohara et Sundukov, 2017. Host plant: *Juglans mandshurica*, *?J. ailanthifolia*, *?J. regia*, *?Pterocarya* spp. (Juglandaceae). Russia: FE (PR). – China (NE, WP, SE), Korean Peninsula.

Subfamily XYELINAE

PLERONEURA Konow, 1897 (*Manoxyela* Ashmead, 1898). Type species *Xyela dahli* Hartig, 1837. The larvae of species bores in the shoot of *Abies* and *Picea* (Pinaceae). The genus is distributed in the Holarctic and Neotropical regions. Number of species: World – 12; Palaearctic – 7; Russia – 3.

Pleroneura dahlii (Hartig, 1837) [*Xyela*]. Host plant: *Abies* spp. (Pinaceae). Russia: EP (NC). – Europe (WE, EE).

Pleroneura piceae Shinohara et Hara, 1995. Host plant: *Picea glehnii* (Pinaceae). Russia: FE (KU). – Japan (Hok).

Pleroneura subulata Shinohara, 1995. Russia: FE (KH, PR). – Korean Peninsula, Japan (Hon, Shi).

XYELA Dalman, 1819 (*Pinicola* Brébisson, 1818; *Mastigocerus* Latreille, 1818; *Tritikreion* Schilling, 1826; *Mastigocera* Berthold, 1827; *Pinicolites* Meunier, 1920; *Neoxyela* Curran, 1923; *Xyelatana* Benson, 1938; *Mesoxyela* Rasnitsyn, 1965; *Magnixyela* Rasnitsyn, 1971; *Alpigenixyela* Rasnitsyn, 1971; *Desertixyela* Rasnitsyn, 1971; *Concavixyela* Rasnitsyn, 1971; *Linsleyixyela* Rasnitsyn, 1971; *Minorixyela* Rasnitsyn, 1971). Type species *Xyela pusilla* Dalman, 1819. The larvae of most species live in the male cones of pines (Pinaceae) where they feed on the sporophylls. The genus is distributed in the Holarctic, Oriental and

Neotropical regions. Number of species: World – near 50; Palaeartic – 29; Russia – 8.

Xyela julii (Brébisson, 1818) [Pinicola] (*X. pusilla* Dalman, 1819; *X. henschii* Mocsáry, 1912). Host plant: *Pinus nigra*, *P. rotundata*, *P. sylvestris* (Pinaceae). Russia: **EP** (N, NW, C), **WS** (KM, AL), **ES** (IR). – Europe (WE, NE, SE, EE), Georgia, Turkey, Mongolia.

Xyela kamtshatica Gussakovskij, 1935. Host plant: *Pinus pumila* (Pinaceae). Russia: **FE** (KA). – Japan (Hok, Hon).

Xyela koraiensis Blank et Shinohara, 2013. Host plant: *Pinus koraiensis* (Pinaceae). Russia: **FE** (PR). – Korean Peninsula.

Xyela longula Dalman, 1819 (*X. piliserra* C.G. Thomson, 1871). Host plant: *Pinus sylvestris* (Pinaceae). Russia: **EP** (NW, C). – Europe (WE, NE, EE).

Xyela pumilae Blank et Shinohara, 2013. Host plant: *Pinus pumila* (Pinaceae). Russia: **FE** (KU). – Japan (Hok).

Xyela rasnitsyni Blank et Shinohara, 2013. Host plant: *Pinus koraiensis* (Pinaceae). Russia: **FE** (PR). – China (NE), Korean Peninsula.

Xyela sibirica Blank, 2013. Host plant: *Pinus sibirica* (Pinaceae). Russia: **WS** (KM), **ES** (KR, IR). – Mongolia.

Xyela ussuriensis Rasnitsyn, 1965 (*X. suwonae* Ryu et Lee, 1992). Host plant: *Pinus koraiensis* (Pinaceae). Russia: **FE** (PR). – Korean Peninsula.

INFRAORDER TENTHREDINOMORPHA

SUPERFAMILY TENTHREDINOIDEA

Head usually open without hypostomal bridge. Pronotum very short medially and strongly emarginate behind; mesopleura with epimeron divided into upper convex and lower concave portion; mesosternum trapezoidal without presternal bridge and sutures often obsolete. Male genitalia strophandrious; female sawsheath usually abbreviated, but sometimes exerted. The larvae are polypodous or oligopodous.

The superfamily is distributed worldwide. Number of taxa: World – 7 families, 33 subfamilies, > 550 genera, > 7300 species; Palaearctic – 6/15/> 250/about 4000; Russia – 6/13/134/1318 (+ 34 ssp.).

2. FAMILY ARGIDAE

Slow, heavily built insects. Distinguished from all other families by the flagellum of its antenna being fused into a single long segment; this segment is subclavate in the female, but in the male is either uniform in thickness with a brush of short setae below (Arginae), or bifid like a tuning-fork (Sterictophorinae). Fore wing with vein *2r* absent. Cenchri very large. Tibiae with or without preapical spines; front tibia with two unmodified apical spurs. The larvae are free feeding, polypodous, with 6-8 pairs of abdominal legs; they feed predominantly on the leaves of various trees and shrubs.

The family is distributed worldwide. Number of taxa: World – 6 subfamilies, 60 genera, about 920 species; Palaearctic – 3/17/about 310; Russia – 2/7/88 (+ 2 ssp.).

References. Zaddach, 1859; André, 1881; Dalla Torre, 1894; Jakovlev, 1900; Konow, 1902b; Dovnar-Zapolskij, 1926, 1930; Kuznetsov-Ugamskij, 1927; Takeuchi, 1927, 1932; Gussakovskij, 1935; Zhelochovtsev, 1939, 1976, 1988; Stroganova, 1966, 1970, 1978a; Muche, 1972, 1977; Verzhutskii, 1973, 1974, 1981; Ermolenko, 1975, 1976, 1984; Zhelochovtsev, Prochorova, 1976; Koch, 1982, 1988a; Liston, 1992, 1995; Zhelochovtsev, Zinovjev, 1992, 1995; Pesarini et al., 1995; Blank, 1996; Blank, Taeger, 1998a,b; Wen et al., 1998; Wei, Wen, 2002; Vasilenko, 2004, 2009a, 2010b,c; Vikberg, 2004; Taeger, 2005; Vasilenko, Dolgov, 2005; Hara, Shinohara, 2006, 2008, 2012, 2014; Kajmuk, Popov, 2006; Liston et al., 2006, 2014a; Taeger et al., 2006, 2010; Wei et al., 2006, 2017; Hara et al., 2007, 2012; Popov, Kajmuk, 2007, 2009a; Shinohara, Hara, 2007; Sundukov, 2007,

2009, 2011b, 2013, 2015, 2017; Koch, Goergen, 2008; Roller, Haris, 2008; Humala, Polevoi, 2009; Schedl, 2009a; Shinohara et al., 2009, 2011; Sundukov, Lelej, 2009, 2012; Blank et al., 2011, 2014; Taeger, Blank, 2011; Artokhin et al., 2012; Macek, 2012; Vasilenko, Korshunov, 2012; Beneš, 2014b; Beneš, Holuša, 2015; Choi et al., 2015, 2016; Kostyunin, 2015; Noblecourt, 2016.

Subfamily ARGINAE

ARGE Schrank, 1802 (*Cryptus* Jurine, 1801; *Hylotoma* Latreille, 1803; *Corynia* Labram et Imhoff, 1836; *Acanthoptenos* Ashmead, 1898; *Bathyblepta* Konow, 1906; *Didocha* Konow, 1907; *Miocephala* Konow, 1907; *Calarge* Enslin, 1911; *Alloscencia* Enderlein, 1919; *Rhopalospiria* Enderlein, 1919; *Friwaldszkyiformis* Ermolenko, 1975; *Ochropusiformis* Ermolenko, 1975; *Paganiformis* Ermolenko, 1975; *Melanochroiformis* Ermolenko, 1975; *Pleuriticiformis* Ermolenko, 1975; *Ustilatiformis* Ermolenko, 1975; *Rusticiformis* Ermolenko, 1975; *Berberidiformis* Ermolenko, 1975). Type species *Tenthredo enodis* Linnaeus, 1767. The larvae feed on the Rosaceae, Salicaceae, Betulaceae. The genus is distributed worldwide. Number of species: World – > 350; Palaearctic – about 170; Russia – 55.

Arge altaica Gussakovskij, 1935. Russia: **WS** (AL). – Korean Peninsula.

Arge aurata (Zaddach, 1864) [*Hylotoma*]. Russia: **EP** (NC). – Caucasus, Turkey, Syria.

Arge auripennis Konow, 1891 (*Hylotoma graeffei* Kriechbaumer, 1892). Russia: **EP** (NC). – Europe (EE), Caucasus, Turkey, Syria.

Arge azhendarovensis Vasilenko, 2010. Russia: **WS** (KM).

Arge beckeri Tournier, 1889 (*Hylotoma rufescens* Zaddach, 1864; *H. pallipes* Kriechbaumer, 1892; *H. pallidipes* Dalla Torre, 1894). Russia: **EP** (S, NC, CR). – Europe (EE, SE), Turkey.

Arge berberidis Schrank, 1802 (*Tenthredo xanthopyga* Vallot, 1836). Host plant: Berberis spp. (Berberidaceae). Russia: **EP** (C, S, NC, CR). – Europe (WE, EE, SE), Caucasus, Turkey, Japan (Hok).

Arge captiva (F. Smith, 1874) [*Hylotoma*] (*Hylotoma flavicollis* Cameron, 1876; *Arge sanguinolenta* Mocsáry, 1909; *A. kalthoffi* Forsius, 1927; *A. captiva rufoscutellata* Takeuchi, 1927; *A. captiva watana-bei* Takeuchi, 1932). Host plant: Ulmus spp. (Ulmaceae); flies into the light. Russia: **WS** (NS, KM, AL), **ES** (ZB), **FE** (KH, PR, KU). – Kazakhstan (N),

- Mongolia, China (NE, CC, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Tsushima), India (N), SE Asia.
- Arge carinifrons** Enslin, 1917. Russia: **EP** (NC). – Georgia, Armenia.
- Arge caucasica** Tournier, 1889 (*A. halinae* Kuznetzov-Ugamskij, 1927). Russia: **EP** (E, S, NC), **UR**, **WS** (OM, NS, AL). – Europe (EE, SE), Armenia, Kyrgyzstan, Kazakhstan.
- Arge ciliaris** (Linnaeus, 1767) [Tenthredo] (*Hylotoma coerulea* Klug, 1814; *H. corusca* Zaddach, 1859; *Arge fuscipes bleusei* Pic, 1917). Host plant: Filipendula spp., Spiraea spp. (Rosaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (TK, NS, KM, AL), **ES** (KR, IR, BR, YA), **FE** (AM, KH, PR, KA). – Europe (WE, EE, NE, SE), Turkey, Mongolia, China (NE, NC).
- Arge cinnabarina** Gussakovskij, 1935. Russia: **FE** (PR). – China (SW).
- Arge corallina** Gussakovskij, 1935. Russia: **FE** (AM, PR). – China (SW).
- Arge cyanocrocea** (Förster, 1771) [Tenthredo] (*Tenthredo coerulescens* Fabricius, 1775; *T. bicolor* Schrank, 1776; *Hylotoma syriaca* Mocsáry, 1880; *H. cyanocrocea messanensis* De-Stefani, 1885; *H. syriaca damascena* Magretti, 1890). Host plant: Rubus spp., Sanguisorba spp. (Rosaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (NS, KM). – Europe (WE, EE, NE, SE), Caucasus, Asia Minor, Iran, Turkmenistan.
- Arge dimidiata** (Fallén, 1808) [Hylotoma] (*Hylotoma rufescens* Drapiez, 1819; *H. fasciata* Lepeletier, 1823; *H. fasciata* Serville, 1823; *H. mediata* Fallén, 1829; *H. aenescens* Förster, 1854; *H. confusa* Dietrich, 1868; *Arge kongauensis* Rohwer, 1925; *A. dimidiata aeneoviridescens* Bischoff, 1925; *A. pravei* Dovnar-Zapolskij, 1926). Host plant: Alnus spp., Betula spp. (Betulaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (TK, NS, KM, AL), **ES** (KS, KR, IR, BR, YA), **FE** (AM, PR, SA). – Europe (WE, EE, NE, SE), Georgia, Kazakhstan, Mongolia, China (NE, CC, SE), Korean Peninsula.
- Arge disparilis** (W.F. Kirby, 1882) [Hylotoma] (*Hylotoma humeralis* F. Smith, 1874). Russia: **FE** (PR). – Japan (Hon).
- Arge enodis** (Linnaeus, 1767) [Tenthredo] (*Tenthredo violacea* Fabricius, 1779; *T. coeruleipennis* Retzius, 1783; *Hylotoma atrata* Klug, 1814; *H. amethystina* Klug, 1814; *H. vulgaris* Klug, 1834). Host plant: the smooth-leaved species of Salix (Salicaceae). Russia: **EP** (NW, C, E, S, NC), **UR**, **WS** (TK, NS, KM, AL), **ES** (KR, BR, YA), **FE** (PR). – Europe (WE, EE, NE, SE), Georgia, Armenia, Turkey, Iran, Kyrgyzstan, Kazakhstan, Korean Peninsula, Japan (Hon).
- Arge expansa** (Klug, 1834) [Hylotoma]. Host plant: Salix spp., Populus spp. (Salicaceae). Russia: **WS** (TM, KM, AL), **FE** (AM, KU, KA). – Mongolia, China (NC).
- Arge flavomixta** (André, 1881) [Hylotoma]. Russia: “Siberia or.” (André, 1881), **FE** (PR). – Korean Peninsula.
- Arge frivaldszkyi** (Tischbein, 1852) [Hylotoma] (*Hylotoma schmiedeknechtii* Costa, 1890). Russia: **EP** (NC, CR). – Europe (EE, SE), Caucasus, Turkey.
- Arge fuscipennis** (Herrich-Schäffer, 1835) [Hylotoma]. Host plant: Betula spp. (Betulaceae), ?Lythrum spp. (Lythraceae), ?Solidago spp. (Asteraceae). Russia: **EP** (C, E), **UR**. – Europe (WE, EE, SE).
- Arge fuscipes fuscipes** (Fallén, 1808) [Hylotoma] (*Hylotoma violacea* Klug, 1814; *H. atrocoerulea* Serville, 1823; *H. atrocoerulea* Lepeletier, 1823; *Arge fuscipennis* Lindqvist, 1974). Host plant: Betula spp. (Betulaceae), Salix spp., Populus spp. (Salicaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (TK, NS, KM, AL), **ES** (KR, ZB), **FE** (KH, PR, KU, KA, MG). – Europe (WE, EE, NE, SE), Kazakhstan, Mongolia, China (NE), Korean Peninsula.
- Arge gracilicornis** (Klug, 1814) [Hylotoma] (*Tenthredo coerulescens* Geoffroy, 1785; *T. incolorata* Christ, 1791; *Hylotoma pilicornis* Leach, 1817; *H. cyanella* Klug, 1834; *H. crassa* Konow, 1884). Host plant: Rosa spp., Rubus spp. (Rosaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, TK, NS, KM, AL), **ES** (TU, KR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG, CH). – Europe (WE, EE, NE, SE), Caucasus, Turkey, Mongolia, China (Wei et al., 2006), Korean Peninsula, Japan (Hok, Hon, Shi).
- Arge hasegawae** Takeuchi, 1927. Russia: **FE** (PR). – Korean Peninsula.
- Arge jonasi** (W.F. Kirby, 1882) [Hylotoma] (*Hylotoma nigritarsis* F. Smith, 1874; *H. japonica* Marlatt, 1898). Host plant: Pourthiaea spp., Aria spp., Crataegus spp., Sorbus spp., Cotoneaster spp. (Rosaceae). Russia: **FE** (KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Arge kobayashii** Takeuchi, 1931. Host plant: Betula spp. (Betulaceae). Russia: **FE** (SA, KU). – Japan (Hok).
- Arge longicornis** Kuznetzov-Ugamskij, 1927 (*A. ciliaris pacifica* Malaise, 1931). Russia: **FE** (PR). – Korean Peninsula.

- Arge macrops** Shinohara, Hara et Kim, 2009. Host plant: *Ulmus* spp. (Ulmaceae). Russia: **WS** (AL), **FE** (PR). – China (NE, NC, CC), Korean Peninsula.
- Arge mali** (Uchiyama, 1906) [Hylotoma] (*A. xanthocera* Mocsáry, 1909; *Hylotoma mali* Matsumura, 1912). Host plant: *Malus* spp. (Rosaceae). Russia: **FE** (AM, KH, PR). – China (NE), Korean Peninsula, Japan (Hok, Hon).
- Arge melanochra** (Gmelin, 1790) [Tenthredo] (*Hylotoma femoralis* Klug, 1814; *H. dimidiata* Lepeletier, 1823; *H. dimidiata* Serville, 1823; *H. nigritarsis* Klug, 1834; *H. similis* Rudow, 1871; *Arge fuliginata* Konow, 1907). Host plant: *Crataegus* spp. (Rosaceae). Russia: **EP** (S, NC, CR), **UR** (S), **WS** (KM). – Europe (WE, EE, SE), Armenia, Asia Minor, Iran, Turkmenistan.
- Arge nigripes nigripes** (Retzius, 1783) [Tenthredo] (*Hylotoma anglica* Leach, 1817). Host plant: *Rosa* spp., *Fragaria* spp., *Rubus* spp. (Rosaceae); live in colonies. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, TK, NS, KM, AL), **ES** (TU, KR, IR, BR, YA), **FE** (AM, PR, SA, KA, MG). – Europe (WE, EE, NE, SE), Georgia, Turkey, Kyrgyzstan, Kazakhstan, Mongolia.
- Arge nigronodosa** (Motschulsky, 1860) [Hylotoma] (*Hylotoma flava* Snellen van Vollenhoven, 1860; *H. trinotata* F. Smith, 1874; *H. similis* F. Smith, 1874; *H. dubia* W.F. Kirby, 1882; *H. quadripunctata* W.F. Kirby, 1882). Host plant: *Rosa* spp. (Rosaceae). Russia: **FE** (AM, KH, PR, SA). – China (NE), Japan (Hok, Hon, Shi, Kyu), Nepal.
- Arge nigrovaginata** Malaise, 1931. Russia: **FE** (AM, PR). – China (NE, CC, SE), Korean Peninsula, Japan (Hon).
- Arge nipponensis** Rohwer, 1910. Host plant: *Rosa* spp. (Rosaceae); 3-4 generations per year. Russia: **FE** (SA, KU). – China (SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Sado).
- Arge obesa** Hara et Shinohara, 2012. Host plant: *Carpinus* spp., *Ostrya japonica* (Betulaceae). Russia: **FE** (KU). – Japan (Hok, Hon, Shi, Kyu).
- Arge ochropus** (Gmelin, 1790) [Tenthredo] (*A. rosicola* Schrank, 1802; *Hylotoma rosarum* Klug, 1814; *H. pyrenaica* André, 1879; *Arge soror* Konow, 1890; *A. pyrenaica nigripes* Konow, 1895; *A. modesta* Konow, 1905; *A. pyrenaica mauritanica* Schulz, 1906; *Hylotoma rosae diversicolor* Pic, 1917; *Arge pyrenaica luteola* Muche, 1977). Host plant: *Rosa* spp. (Rosaceae). Russia: **EP** (N, NE, C, E, S, NC, CR), **UR**, **WS** (OM, TK, NS, KM, AL), **ES** (TU, KR, IR, YA). – Europe (WE, EE, NE, SE), N Africa, Georgia, Armenia, Asia Minor, Iran, Turkmenistan, Kazakhstan; introduced into N America.
- Arge pagana pagana** (Panzer, 1797) [Tenthredo] (*Tenthredo tricolor* Gmelin, 1790; *T. nigripennis* Panzer, 1804; *Hylotoma flaviventris* Fallén, 1807; *H. assimilis* Radoszkowsky, 1889). Host plant: *Rosa* spp. (Rosaceae); live in colonies. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TK, NS, KM, AL), **ES** (TU, KR, IR, BR, YA), **FE** (AM, PR, KA). – Europe (WE, EE, NE, SE), N Africa, Mongolia, China (NE, NC, CC, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu), India (NE).
- Arge paganiformis** Rohwer, 1925. Host plant: *Rosa* spp. (Rosaceae). Russia: **FE** (KH, PR).
- Arge pallidinervis** Gussakovskij, 1935. Russia: **EP** (CR). – Europe (EE), Armenia.
- Arge pleuritica** (Klug, 1834) [Hylotoma] (*Hylotoma sanguinicornis* André, 1880). Russia: **EP** (E, S, NC, CR). – Europe (EE, SE), Caucasus, Asia Minor, Uzbekistan.
- Arge potanini** Jakovlev, 1891 (*Hylotoma zonalis* Matsumura, 1911). Host plant: *Acer mono*, *A. mayrii* (Sapindaceae). Russia: **ES** (IR, BR, ZB), **FE** (AM, KH, PR, SA). – Mongolia, China (NE, NC), Korean Peninsula.
- Arge pseudorejecta** Wei et Lee, 2016. Russia: **FE** (PR). – China (NE), Korean Peninsula.
- Arge pullata** (Zaddach, 1859) [Hylotoma] (*Hylotoma ventriosa* Zaddach, 1864; *Arge nyemitawa* Rohwer, 1925). Host plant: *Betula* spp. (Betulaceae). Russia: **EP** (NW, C, E, S, NC), **UR**, **WS** (TM, TK, NS, AL), **ES** (KS, KR, ZB), **FE** (PR, SA, KU). – Europe (WE, EE, NE, SE), Armenia, Turkey, China (NE, NC), Korean Peninsula, Japan (Hok, Hon).
- Arge rufocincta** Gussakovskij, 1935. Russia: **FE** (PR). – China (NE), Japan (Hok).
- Arge rustica** (Linnaeus, 1758) [Tenthredo] (*Tenthredo atrata* Forster, 1771; *Cryptus segmentarius* Panzer, 1803; *Hylotoma klugii* Leach, 1817; *H. albicruris* Brullé, 1832; *H. leachii* Stephens, 1835; *H. marginata* Boheman, 1852; *H. discus* Costa, 1858; *H. saliceti* Rudow, 1871; *H. thomsoni* Konow, 1884; *Arge segmentaria rufiventris* Konow, 1899). Host plant: *Quercus* spp. (Fagaceae). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, EE, NE, SE), Armenia, Turkey, Syria.
- Arge scita** (Mocsáry, 1880) [Hylotoma] (*Hylotoma proxima* André, 1881; *Arge debilis* Konow, 1887; *A. zarudnyi* Gussakovskij, 1935). Russia: **EP**

- (Taeger, Blank, 2011). – Europe (SE, EE), Armenia, Asia Minor, Iran, Turkmenistan.
- Arge semicoerulea** (Klug, 1814) [Tenthredo] (*Hylotoma dimidiata* Klug, 1814). Russia: **EP** (E), **ES** (KS, KR, ZB), **FE** (AM, PR). – Mongolia, China (NE).
- Arge similis** (Snellen van Vollenhoven, 1860) [Hylotoma] (*Hylotoma imperator* F. Smith, 1874). Host plant: Rhododendron spp. (Ericaceae); up to 3 generations per year. Russia: **FE** (PR, KU). – China (NE, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu), Nepal, India.
- Arge simillima** (F. Smith, 1874) [Hylotoma] (*A. forficula* Jakovlev, 1891; *A. coriacea* Jakovlev, 1891; *A. simillima asahi* Tskeuchi, 1932). Russia: **FE** (KH, PR, KU). – China (NE, SE, CC, SW), Korean Peninsula, Japan (Hon).
- Arge simulatrix** Konow, 1887. Russia: **EP** (NC). – Georgia, Asia Minor, Iran.
- Arge solowiyofka** (Matsumura, 1911) [Hylotoma]. Host plant: Betula spp. (Betulaceae). Russia: **FE** (PR, SA). – Mongolia, China (NE, CC, SE), Japan (Hok, Hon).
- Arge stroganovae** Sundukov, 2007 (*A. altaica* Stroganova, 1977). Russia: **WS** (AL).
- Arge suspicax** Konow, 1908 (*A. punctifrons* Kuznetsov-Ugamskij, 1927; *A. masudai* Takeuchi, 1932). Russia: **ES** (IR, BR, ZB), **FE** (AM, PR). – Mongolia, China (NE), Korean Peninsula, Japan (Hon, Shi).
- Arge ustulata** (Linnaeus, 1758) [Tenthredo] (*Tenthredo flavipes* Retzius, 1783; *T. ochroptera* Geoffroy, 1785; *T. crocipennis* Christ, 1791; *T. pilicornis* Preysslér, 1793; *Hylotoma claripennis* Rudow, 1871; *H. distinguenda* Konow, 1884; *Arge monostega* Konow, 1886; *Hylotoma anceps* Radoszkowsky, 1889; *Arge ustulata stigmatica* Pic, 1927). Host plant: Salix spp. (Salicaceae), Betula spp. (Betulaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (TK, NS, KM, AL), **ES** (KS, KR, IR, BR, YA, ZB), **FE** (AM, PR, SA, KU, KA). – Europe (WE, EE, NE, SE), Georgia, Turkey, Kyrgyzstan, Mongolia, Korean Peninsula.
- Arge verticosa** Konow, 1907. Russia: **WS** (AL). – Kazakhstan, China (NW).
- Arge zhelochovzevi** Stroganova, 1966. Russia: **ES** (KR, IR).
- KOKUJEWIA** Konow, 1902. Type species *Kokujewia ectrapela* Konow, 1902. The larvae feed on the Polygonaceae. The genus is distributed in West Palaeartic. Number of species: World and Palaeartic – 3; Russia – 1.
- Kokujewia ectrapela** Konow, 1902 (*K. ectrapela clarescens* Zirngiebl, 1949). Host plant: Rumex spp. (Polygonaceae). Russia: **EP** (NC). – Caucasus, Turkey, Iran.
- PSEUDARGE** Gussakovskij, 1935. Type species *Pseudarge rubicunda* Gussakovskij, 1935. The genus is distributed in the Palaeartic and Oriental regions. Number of species: World – 6; Palaeartic – 4; Russia – 1.
- Pseudarge eversmanni** Gussakovskij, 1935. Russia: **EP** (E, S). – Europe (EE).
- SPINARGE** Wei, 1998. Type species *Spinarge sichuanensis* Wei, 1998. The larvae feed on the Betulaceae. The genus is distributed in East Asia and Oriental region. Number of species: World – 11; Palaeartic – 9; Russia – 2.
- Spinarge fulvicornis** (Mocsáry, 1909) [Arge]. Host plant: Betula spp. (Betulaceae). Russia: **ES** (YA), **FE** (AM, KH, PR, SA, KU). – China (NE, CC), Korean Peninsula, Japan (Hok, Hon, Shi).
- Spinarge metallica** (Klug, 1834) [Hylotoma]. Host plant: Betula spp. (Betulaceae). Russia: **EP** (NW, C, E), **UR**, **WS** (NS, KM, AL), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KA). – Europe (WE, EE, NE, SE), Mongolia, Korean Peninsula.

Subfamily STERICTIPHORINAE

- APROCEROS** Malaise, 1931. Type species *Aproceros umbricola* Malaise, 1931. The larvae feed on the Ulmus spp. (Ulmaceae). The genus is distributed in East Asia; one species in the Oriental region, and one species was introduced into West Europe. Number of species: World – 10; Palaeartic – 9; Russia – 3.
- Aproceros hakusanus** Togashi, 1962. Host plant: Ulmus spp. (Ulmaceae). Russia: **FE** (PR, SA, KU). – Japan (Hon).
- Aproceros leucopoda** Takeuchi, 1939. Host plant: Ulmus spp. (Ulmaceae). Russia: **EP** (C, S, NC), **WS** (KM), **FE** (PR, SA). – Europe (WE, EE, SE), Kazakhstan, China (CC), Japan (Hok).
- Aproceros pallidicornis** (Mocsáry, 1909) [Aprosthemata] (*A. umbricola* Malaise, 1931). Host plant: Ulmus spp. (Ulmaceae). Russia: **FE** (AM, KH, PR). – Korean Peninsula, Japan (Hon).
- APROSTHEMA** Konow, 1899 (*Copidoceros* Forsius, 1921; *Lyrola* Ross, 1937). Type species

- Hylotoma brevicornis* Fallén, 1808. The larvae feed on the Fabaceae. The genus is distributed in the Holarctic and Oriental regions, mainly in the Palaearctic region. Number of species: World – about 55; Palaearctic – > 50; Russia – 22 (+ 2 ssp.).
- Aprosthem a austriacum** (Konow, 1892) [Schizocera]. Russia: **EP** (CR). – Europe (WE, EE, NE, SE), Kazakhstan.
- Aprosthem a axillare** (Zaddach, 1863) [Schizocera] (*Schizocera zaddachi* André, 1880). Russia: **EP** (NW, NC, CR). – Europe (WE, EE, SE).
- Aprosthem a bifidum** (Klug, 1834) [Hylotoma] (*Schizocera flavipes* Zaddach, 1864; *S. geniculata* Thomson, 1871). Russia: **EP** (NW, NC). – Europe (WE, EE, NE, SE).
- Aprosthem a bifurca** (Klug, 1834) [Hylotoma] (*Schizocera fusca* Zaddach, 1863). Russia: **EP** (NW, C). – Europe (WE, EE, NE, SE), Turkey.
- Aprosthem a brevicorne** (Fallén, 1808) [Hylotoma] (*Schizocera pallipes* Bremsi-Wolf, 1849). Russia: **EP** (C, E, S). – Europe (WE, EE, NE).
- Aprosthem a enslini** Dovnar-Zapolskij, 1930. Russia: **EP** (NC).
- Aprosthem a fulvum** Vasilenko, 2009. Russia: **WS** (NS).
- Aprosthem a fuscicorne** (Thomson, 1871) [Schizocera]. **EP** (NW). – Europe (WE, EE, NE, SE).
- Aprosthem a humeratum** (Konow, 1892) [Schizocera]. Russia: **EP** (Zhelochovtsev, Zinovjev, 1995). – Europe (EE, SE).
- Aprosthem a instratum instratum** (Zaddach, 1859) [Schizocera]. Russia: **EP** (NW, C). – Europe (WE, EE, SE).
- Aprosthem a intermedium** (Zaddach, 1864) [Schizocera] (*A. hyalinoptera* Conde, 1934; *A. volgensis* Gussakovskij, 1935). Host plant: Lathyrus vernus (Fabaceae). Russia: **EP** (NW, C, S). – Europe (WE, EE, NE).
- Aprosthem a maculatum maculatum** (Jurine, 1807) [Cryptus] (*Hylotoma scutellaris* Herrich-Schäffer, 1835; *Schizocera scutellaris dorsalis* Konow, 1892; *Aprosthem a maculata moravica* Gregor, 1940). Russia: **EP** (CR). – Europe (WE, EE, SE).
- Aprosthem a maculatum nigripenne** Muche, 1972. Russia: **EP** (NC). – Georgia.
- Aprosthem a melanurum** (Klug, 1814) [Hylotoma] (*Schizocera cylindricornis* Thomson, 1871; *S. alfkeni* Konow, 1895; *S. friesei* Konow, 1895). Host plant: Lathyrus spp., Vicia spp. (Fabaceae); in East Siberia 2 generations. Russia: **EP** (NW, C, E, S, NC), **UR**, **WS** (TK, NS, KM), **ES** (KR, IR). – Europe (WE, EE, NE, SE), Central Asia, China (NC).
- Aprosthem a peletieri peletieri** (Villaret, 1832) [Schizocerus] (*Schizocera bleusei* Pic, 1918). Russia: **EP** (C, S, NC). – Europe (WE, EE, SE).
- Aprosthem a peletieri melanoptera** Muche, 1972. Russia: **EP** (NC). – Georgia.
- Aprosthem a sibiricum** Gussakovskij, 1935. Russia: **ES** (ZB).
- Aprosthem a staudingeri georgiense** Muche, 1972. Russia: **EP** (NC). – Georgia.
- Aprosthem a stroganovae** Vasilenko, 2009. Russia: **WS** (KM).
- Aprosthem a syrmiese** (Mocsáry, 1897) [Schizocera]. Russia: **EP** (NC). – Europe (SE), Turkey.
- Aprosthem a tardum** (Klug, 1814) [Hylotoma] (*A. carpentieri* Konow, 1902). Host plant: Lathyrus spp., Vicia spp. (Fabaceae). Russia: **EP** (C, E, S, NC), **UR**, **WS** (KM, AL), **ES** (KS). – Europe (WE, EE, SE), Turkey, Kyrgyzstan, Kazakhstan.
- Aprosthem a tauricum** Gussakovskij, 1935. **EP** (S, CR). – Europe (EE).
- Aprosthem a vittatum** (Mocsáry, 1879) [Schizocera]. Russia: **EP** (CR). – Europe (EE, SE).
- Aprosthem a xanthurum** Gussakovskij, 1935. Russia: **WS** (TK), **FE** (AM).
- STRICTIPHORA** Billberg, 1820 (*Schizocerus* Berthold, 1827; *Schizocerus* Lepeletier et Serville, 1828; *Schizocera* Latreille, 1829; *Schizocera* Guérin, 1834; *Cyphona* Dahlbom, 1835; *Schizoceros* Konow, 1899). Type species *Tenthredo furcata* Villers, 1789. The larvae feed on the Rosaceae. The genus is distributed in the Holarctic; one species in Afrotropical, and two species in Oriental regions. Number of species: World – > 40; Palaearctic – about 35; Russia – 4.
- Strictiphora caspica** Koch, 1988. Russia: **EP** (NC). – Iran.
- Strictiphora furcata** (Villers, 1789) [Tenthredo] (*Tenthredo rubi idaei* Rossi, 1790; *Schizocera inaequalis* Bremsi-Wolf, 1849; *Aprosthem a terebralis flavipes* Enslin, 1917). Host plant: Rubus spp., Prunus spp. (Rosaceae). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, EE, SE), N Africa, Azerbaijan, Armenia, Turkey, Syria, Iran, Kazakhstan.
- Strictiphora geminata** (Gmelin, 1790) [Tenthredo]. Host plant: Rosa spp., ?Sorbus spp. (Rosaceae). Russia: **EP** (C, NC), **UR**, **WS** (NS, KM), **ES** (BR, ZB), **FE** (PR, KA). – Europe (WE, EE, NE, SE), Armenia, Turkey, Turkmenistan, Kyrgyzstan.
- Strictiphora orientalis** (Zhelochovtsev, 1939) [Schizocera]. Russia: **FE** (PR).

3. FAMILY BLASTICOTOMIDAE

Adult are characterized by their short 4-segmented antennae, of which an elongate 3rd segment forms almost the entire flagellum except for the minute (and sometimes obsolete) 4th segment. Scutellum without a post-tergite; the wing venation is unique in having the pear-shaped cell *IM* of the fore wing, rounded apically; the stigma is large and almost semi-circular in shape; vein *Sc* without a transverse branch joining *C*; and the anal cell has an oblique cross-vein; the wing membranes are corrugated at the apices. The legs are without preapical tibial spines and the front tibia has 2 apical spurs, the inner one of which is bifid apically. The abdomen is carinate laterally, and the ovipositor is of the exerted type, about half as long as the abdomen, though the apical projecting part, the sawsheath, is much shorter than the basal plate. The larvae are stem-borers in ferns and of a oligopodous type, with no abdominal legs.

The family is distributed in the Palaearctic and Oriental regions. Number of taxa: World – 2 genera, 12 species; Palaearctic – 2/8; Russia – 2/3 (+ 1 ssp.).

R e f e r e n c e s. Gussakovskij, 1935; Zhelochovtsev, 1935a, 1988; Ermolenko, 1972; Togashi, 1989; Zhelochovtsev, Zinovjev, 1995; Kim et al., 1997; Wei, Nie, 1999; Liston et al., 2006, 2014a; Shcherbakov, 2006; Taeger et al., 2006, 2010; Wei et al., 2006; Biryukova, Novgorodova, 2008; Schedl, 2009; Novgorodova, Biryukova, 2011; Taeger, Blank, 2011; Vasilenko, 2011b; Sundukov, Lelej, 2012; Kostyunin, 2015; Sundukov, 2015; Noblecourt, 2016.

BLASTICOTOMA Klug, 1834. **T y p e s p e c i e s** *Blasticotoma filiceti* Klug, 1834. The larvae in the petioles of ferns (Polypodiophyta). The genus is distributed in the Palaearctic region; 1 species in the Oriental region. Number of species: World – 5; Palaearctic – 4; Russia – 2 (+ 1 ssp.).

Blasticotoma atra Zhelochovtsev, 1935. Host plant: ferns of families of Dryopteridaceae, Onocleaceae, Osmundaceae, Dennstaedtiaceae. Russia: **FE** (KH, PR, KU). – Japan (Hok, Hon).

Blasticotoma filiceti filiceti Klug, 1834. Host plant: Athyrium spp., Dryopteris spp. (Dryopteridaceae), Matteuccia spp. (Onocleaceae), Osmunda spp. (Osmundaceae), Pteridium spp. (Dennstaedtiaceae). Russia: **EP** (N, C, E), **UR, WS** (NS, KM, AL), **ES** (KR, IR, BR). – Europe (WE, EE, NE).

Blasticotoma filiceti pacifica Malaise, 1931. Host plant: ferns of families of Dryopteridaceae, Onocleaceae, Osmundaceae, Dennstaedtiaceae. Russia: **FE** (KH, PR, SA, KU). – China (NE, CC), Korean Peninsula, Japan (Hok, Hon).

RUNARIA Malaise, 1931 (*Bohea* Maa, 1944). **T y p e s p e c i e s** *Runaria reducta* Malaise, 1931. The genus is distributed in East Asia and Oriental region. Number of species: World – 7; Palaearctic – 4; Russia – 1.

Runaria reducta Malaise, 1931. Host plant: ferns of families of Dryopteridaceae, Onocleaceae, Osmundaceae, Dennstaedtiaceae. Russia: **FE** (AM, PR, KU). – Japan (Hok, Hon).

4. FAMILY CIMBICIDAE

Stout fast-flying insects with strongly clubbed antennae and broad, laterally carinate abdomens, arched above and flat beneath, so that they can be curled right down under the thorax at rest. Fore wing vein *2r* presents. Tibiae without preapical spines and front tibia with pair of unmodified apical spurs. The larvae are free-feeding, with 8 pairs of abdominal legs. The larvae feed on Salicaceae, Betulaceae, Caprifoliaceae and other plant families. Pupation usually occurs in a cocoon with a dense wall in the soil or on branches of trees and shrubs.

The family is distributed in the Northern Hemisphere and Neotropical region. Number of taxa: World – 4 subfamilies, 15 genera, about 190 species; Palaearctic – 3/10/about 150; Russia – 3/8/72 (+ 2 ssp.).

R e f e r e n c e s. Konow, 1906; Mocsáry, 1909; Kuznetsov-Ugamskij, 1927; Zhelochovtsev, 1935a, 1968, 1976, 1988; Malaise, 1939; Gussakovskij, 1947; Saari-
nen, 1950b; Ermolenko, 1972, 1973, 1976, 1984, 1992; Verzhutskii, 1974, 1981; Zhelochovtsev, Prochorova, 1976; Stroganova, 1978a; Viitasaari, 1989; Shinohara, 1990; Vikberg, Viitasaari, 1991; Liston, 1995; Zhelochovtsev, Zinovjev, 1995; Kim, Shinohara, 1997; Togashi, 1998; Lee, Jung, 1999; Hara, Shinohara, 2000, 2017; Vasilenko, 2004, 2009b, 2010b,d, 2011c; Taeger, 2005; Vasilenko, Dolgov, 2005; Kajmuk, Popov, 2006; Liston et al., 2006, 2014a,b; Taeger et al., 2006, 2010; Wei et al., 2006; Roller, Haris, 2008; Humala, Polevoi, 2009; Schedl, 2009; Sundukov, Lelej, 2009, 2012; Popov, Kajmuk, 2010a; Blank, 2011; Sundukov, 2011b, 2013, 2015; Taeger, Blank, 2011; Vasilenko, Korshunov, 2012; Beneš, 2014b; Noblecourt, 2016.

Subfamily ABIINAE

ABIA Leach, 1817 (*Zaraea* Leach, 1817; *Parabia* Semenov, 1891; *Orientabia* Malaise, 1934; *Hemibia* Semenov, 1937; *Auroabia* Kangas, 1946; *Aenoabia* Kangas, 1946; *Procimbex* Hong, 1984). **T y p e s p e c i e s** *Tenthredo sericea* Linnaeus, 1767. The larvae on the Caprifoliaceae. The genus is distributed in the Holarctic and Oriental regions. Number of species: World – 52; Palaearctic – 43; Russia – 24.

Abia aenea (Klug, 1820) [Cimbex] (*A. bifida* Thomson, 1871; *A. bigens* Kangas, 1946). Host plant: Lonicera spp., Symphoricarpos spp. (Caprifoliaceae), Sambucus spp. (Adoxaceae). Russia: **EP** (NW, C, E, S,

NC), **WS** (TK, KM). – Europe (WE, EE, NE, SE), Georgia, Turkey.

Abia aurata (Takeuchi, 1931) [Zaraea]. Russia: **FE** (KU). – Korean Peninsula, Japan (Hok).

Abia berezowskii Semenov, 1896. Russia: **FE** (AM, PR). – Mongolia, China (SW), Korean Peninsula, Japan (Hon).

Abia candens Konow, 1887 (*A. symballophthalma* Semenov, 1892; *A. candens subopaca* Kangas, 1946). Host plant: Knautia arvensis (Caprifoliaceae). Russia: **EP** (NW, C, E, NC). – Europe (WE, EE, NE, SE).

Abia coreana Takeuchi, 1927 (*Orientabia pacifica* Semenov et Gussakovskij, 1937). Russia: **FE** (PR). – Korean Peninsula.

Abia dubiosa (Gussakovskij, 1947) [Orientabia]. Russia: **FE** (SA). – Japan (Hon).

Abia egregia Kuznetsov-Ugamskij, 1927. Russia: **FE** (PR).

Abia fasciata (Linnaeus, 1758) [Tenthredo]. Host plant: Lonicera spp., Symphoricarpos spp., Linnaea spp., Leycesteria spp. (Caprifoliaceae). Russia: **EP** (N, NW, C, E), **UR**, **WS** (TM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, SA, KA, MG). – Europe (WE, EE, NE, SE), Kazakhstan, China (NE, NW), Korean Peninsula, Japan (Hok, Hon).

Abia fulgens Zaddach, 1863 (*A. fulgens unicoloricornis* Pic, 1933; *A. plana* Benson, 1954). Host plant: Lonicera spp. (Caprifoliaceae). Russia: **EP** (NC). – Europe (WE, EE, SE).

Abia gussakovskii Semenov, 1935. Russia: **EP** (NC).

Abia japonica Cameron, 1887 (*A. pilosa* Konow, 1896; *A. bantaizana* Matsumura, 1912; *Orientabia finitima* Semenov et Gussakovskij, 1937). Host plant: Weigela spp. (Caprifoliaceae). Russia: **FE** (PR, KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Sado).

Abia lewisii Cameron, 1887 (*Zaraea lewisii matsumurai* Takeuchi, 1931). Host plant: Lonicera spp. (Caprifoliaceae). Russia: **FE** (KU). – Japan (Hon).

Abia marginata Mocsáry, 1909. Host plant: Lonicera spp. (Caprifoliaceae). Russia: **FE** (KH, PR). – Korean Peninsula.

Abia metallica Mocsáry, 1909. Host plant: Lonicera spp. (Caprifoliaceae). Russia: **FE** (KH, PR). – China (NE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

Abia mutica Thomson, 1871. Host plant: Lonicera spp., Knautia arvensis (Caprifoliaceae). Russia: **EP** (N, NW, C), **UR**, **WS** (NS, AL), **ES** (TU, KR, IR, BR, YA, ZB), **FE** (PR). – Europe (WE, EE, NE, SE), Kazakhstan, Mongolia.

- Abia ochotica** (Semenov et Gussakovskij, 1937) [Orientabia]. Russia: **FE** (KH).
- Abia sachalinensis** Takeuchi, 1931. Russia: **FE** (PR, SA). – Japan (Hok).
- Abia semenoviana** Gussakovskij, 1947. Host plant: Lonicera spp. (Caprifoliaceae). Russia: **ES** (BR, ZB), **FE** (PR). – Korean Peninsula.
- Abia sericata** Zhelochovtsev, 1935. Russia: **FE** (AM, KH, PR).
- Abia sericea** (Linnaeus, 1767) [Tenthredo] (*A. dorsalis* Costa, 1859). Host plant: Succica spp., Knautia spp., Dipsacus spp. (Caprifoliaceae), ?Fragaria spp. (Rosaceae). Russia: **EP** (NW, C, E, S, NC, CR). – Europe (WE, EE, NE, SE), Caucasus, Turkey, China (NW).
- Abia sibirica** Mocsáry, 1883. Host plant: Lonicera spp. (Caprifoliaceae). Russia: **WS** (OM, NS, AL), **ES** (KS, BR). – Kazakhstan.
- Abia skorikovi** Semenov, 1935. Russia: **EP** (NC).
- Abia tsherskii** Semenov, 1935. Russia: **FE** (KH).
- Abia zhelochovtzevi** (Gussakovskij, 1947) [Zaraea]. Host plant: Lonicera spp. (Caprifoliaceae). Russia: **FE** (KH, PR).

Subfamily CIMBICINAE

- AGENOCIMBEX** Rohwer, 1910. Type species *Cimbex maculata* Marlatt, 1898. The genus is distributed in East Asia; one species in the Oriental region. Number of species: World and Palaeartic – 6; Russia – 2.
- Agenocimbex eous** Semenov, 1935. Russia: **FE** (PR). – Korean Peninsula, Japan (Kyu).
- Agenocimbex malaisei** Gussakovskij, 1947. Russia: **FE** (PR).
- CIMBEX** Olivier, 1791 (*Crabro* Geoffroy, 1762; *Clavellarius* Olivier, 1789; *Clavellaria* Lamarck, 1801; *Palaeocimbex* Semenov, 1935; *Deuterocimbex* Semenov, 1935; *Neocimbex* Malaise, 1937; *Allocimbex* Zirngiebl, 1953). Type species *Tenthredo lutea* Linnaeus, 1758. The larvae mainly on the Salicaceae and Betulaceae. The genus is distributed in the Holarctic region; one species in the Oriental region. Number of species: World – 14; Palaeartic – 10; Russia – 6 (+ 2 ssp.).
- Cimbex amurensis** Forsius, 1930. Host plant: Salix spp. (Salicaceae), Betula spp. (Betulaceae). Russia: **FE** (AM, PR).
- Cimbex carinulatus** Konow, 1897 (*C. nomurae* Marlatt, 1898; *C. suzukii* Matsumura, 1912). Host

plant: Pyrus spp., Amelanchier asiatica, Prunus spp., Chaenomeles spp. (Rosaceae). Russia: **FE** (PR, KU). – Korean Peninsula, Japan (Hok, Hon).

- Cimbex connatus connatus** (Schrank, 1776) [Tenthredo] (*Crabro maculatus* Geoffroy, 1785; *Tenthredo montana* Panzer, 1801; *T. alnivaga* Bechstein et Scharfenberg, 1805; *Cimbex ornata* Serville, 1823; *C. luteola* Serville, 1823; *C. ornata* Lepeletier, 1823; *C. luteola* Lepeletier, 1823; *C. humboldtii* Ratzeburg, 1844; *C. variabilis nigroviolacea* Eversmann, 1847; *C. violascens* Thomson, 1871). Host plant: Salix spp., Populus spp. (Salicaceae), Alnus spp. (Betulaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (NS, KM), **ES** (IR). – Europe (WE, EE, NE, SE), Caucasus, Kazakhstan.
- Cimbex connatus japonicus** W.F. Kirby, 1882 (*C. saporensis* Matsumura, 1912). Host plant: Salix spp. (Salicaceae). Russia: **FE** (KH, PR, SA, KU). – China (NE, CC), Japan (Hok, Hon).
- Cimbex connatus taukushi** Marlatt, 1898 (*C. taukushiensis* Konow, 1905; *C. castanea* Matsumura et Ushida, 1927; *Neocimbex taukushi carbonaria* Malaise, 1939). Host plant: Alnus spp. (Betulaceae), Salix spp. (Salicaceae). Russia: **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR, KU). – Mongolia, China (NE), Korean Peninsula, Japan (Hon, Shi, Kyu).
- Cimbex femoratus** (Linnaeus, 1758) [Tenthredo] (*Tenthredo tristis* Fabricius, 1779; *Crabro lunulatus* Geoffroy, 1785; *C. annulatus* Geoffroy, 1785; *Tenthredo sylvarum* Fabricius, 1793; *Cimbex europaea* Leach, 1817; *C. varians* Leach, 1817; *C. variabilis* Klug, 1820; *Tenthredo russa* Klug, 1820; *Cimbex schaefferi* Lepeletier, 1823; *C. pallens* Lepeletier, 1823; *C. schaefferi* Serville, 1823; *C. pallens* Serville, 1823; *C. pallidus* Stephens, 1829; *C. venusta* Perty, 1833; *C. biguetina* Lepeletier, 1834; *C. pallida* Stephens, 1835; *C. betulae* Zaddach, 1863; *C. betulae pulla* Zaddach, 1863; *C. betulae lutescens* Zaddach, 1863; *C. betulae nigra* Zaddach, 1863; *C. tonnaitchana* Matsumura, 1911; *C. femorata unicolor* Enslin, 1917; *C. femorata abdominalis* Enslin, 1917; *C. femorata ornata* Uchida, 1927; *C. quadrimaculata sachalinensis* Uchida, 1927; *Crabro uchidai* Takeuchi, 1931). Host plant: Alnus spp. (Betulaceae), Salix spp. (Salicaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KA, MG). – Europe (WE, EE, NE, SE), Turkey, Kyrgyzstan, Uzbekistan, Kazakhstan, Mongolia, China (NE, NC), Korean Peninsula, Japan (Hok, Hon).

- Cimbex luteus** (Linnaeus, 1758) [Tenthredo] (*C. griffinii* Leach, 1817; *C. saliceti* Zaddach, 1863; *C. variabilis salicis* Zaddach, 1863; *C. brevispina* Thomson, 1871; *C. lutea testacea* Konow, 1890; *C. saliceti testacea* Dalla Torre, 1894; *C. capreae* Konow, 1897; *C. femorata coreana* Uchida, 1927). Host plant: *Salix* spp., *Populus* spp. (Salicaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR, WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, KR, IR, BR, YA), **FE** (KH, PR, SA, MG). – Europe (WE, EE, NE, SE), Kyrgyzstan, Uzbekistan, Kazakhstan, China (NC, NW), Korean Peninsula, Japan (Hok, Hon).
- Cimbex sibiricus** W.F. Kirby, 1882. Russia: **ES** (IR, BR).
- LEPTOCIMBEX** Semenov, 1896 (*Euclavellaria* Enslin, 1911; *Cimbicisoma* Rohwer, 1915; *Okamotoionus* Sato, 1928). Type species *Leptocimbex potanini* Semenov, 1896. The genus is distributed in East Asia and Oriental region. Number of species: World – 26; Palaeartic – 21; Russia – 4.
- Leptocimbex allantiformis** (Mocsáry, 1909) [Clavellaria] (*L. petrimagni* Malaise, 1931). Russia: **FE** (KH, PR). – China (NE), Korean Peninsula.
- Leptocimbex gracilentus** (Mocsáry, 1904) [Clavellaria] (*Okamotoionus kurisuei* Sato, 1928). Russia: **FE** (KH, PR). – China (SE), Korean Peninsula.
- Leptocimbex potanini** Semenov, 1896 (*Clavellaria marginata* R.E. Turner, 1920; *Leptocimbex potanini sinobirmanica* Malaise, 1939). Russia: **FE** (PR). – China (SW), India (NE), SE Asia.
- Leptocimbex terrificus** Malaise, 1931. Russia: **FE** (PR).
- PRAIA** Wankowicz, 1880. Type species *Praia taczanowskii* Wankowicz, 1880. The larvae feed on the Betulaceae and Rosaceae. The genus is distributed in the Palaeartic region. Number of species: World, Palaeartic and Russia – 2.
- Praia taczanowskii** Wankowicz, 1880. Host plant: *Betula* spp. (Betulaceae). Russia: **EP** (NW, C, E), **UR, WS** (TK, NS, KM), **ES** (IR, BR, YA), **FE** (AM, PR, KA). – Europe (WE, EE, NE), Mongolia.
- Praia ussuriensis** Malaise, 1939. Host plant: *Betula* spp. (Betulaceae), *Prunus* spp. (Rosaceae). Russia: **ES** (Zhelochovtsev, Zinovjev, 1995), **FE** (PR, SA, KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- PSEUDOCLAVELLARIA** Schulz, 1906. Type species *Tenthredo amerinae* Linnaeus, 1758. The larvae feed on the Salicaceae. The genus is distributed in Palaeartic. Number of species: World and Palaeartic – 3; Russia – 2.
- Pseudoclavellaria amerinae** (Linnaeus, 1758) [Tenthredo] (*Tenthredo marginata* Linnaeus, 1767; *T. 4-fasciata* Degeer, 1773; *T. rufa* Retzius, 1783; *Cimbex saliceti* Sasaki, 1902; *Clavellaria nitobei* Matsumura, 1912; *Trichosoma albopilosum* Matsumura, 1912; *Clavellaria amerinae delagrangei* Pic, 1920; *C. amerinae anatolica* Pic, 1920). Host plant: *Salix* spp., *Populus* spp. (Salicaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR, WS** (TM, OM, TK, NS, KM), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, MG). – Europe (WE, EE, NE, SE), Caucasus, Turkey, Mongolia, China (NE), Korean Peninsula.
- Pseudoclavellaria semenovi** (Gussakovskij, 1947) [Clavellaria]. Russia: **ES** (ZB), **FE** (PR).
- TRICHIOSOMA** Leach, 1817 (*Asitrichiosoma* Malaise, 1939; *Lucorumiformis* Ermolenko, 1972; *Vitelliniformis* Ermolenko, 1972; *Sericeiformis* Ermolenko, 1972; *Sorbiformis* Ermolenko, 1972). Type species *Tenthredo lucorum* Linnaeus, 1758. The larvae feed on the deciduous of trees and shrubs. The genus is distributed in Holarctic and Oriental region. Number of species: World – 38; Palaeartic – 33; Russia – 24.
- Trichiosoma aenescens** Gussakovskij, 1947. Host plant: *Prunus* spp., *Padus* spp. (Rosaceae). Russia: **EP** (N, NW, C, E), **UR, WS** (NS, KM, AL), **ES** (KS, IR, YA), **FE** (AM, PR). – Europe (EE, NE), Japan (Hok).
- Trichiosoma anthracinum** Forsius, 1930. Russia: **WS** (AL). – China (SW).
- Trichiosoma asachalinense** Verzhutskii, 1973. Host plant: *Spiraea* spp., *Dasiphora fruticosa* (Rosaceae). Russia: **ES** (IR), **FE** (KA).
- Trichiosoma bombiforme** Takeuchi, 1939. Russia: **FE** (PR). – China (SE), Japan (Hon).
- Trichiosoma crassum** W.F. Kirby, 1882 (*T. arcticum* W.F. Kirby, 1882; *T. arctica* Konow, 1903; *T. jakovleffi* Konow, 1905; *T. jakovlevi tinctipennis* Enslin, 1919; *T. jakovlevi* Gussakovskij, 1947). Host plant: *Betula* spp. (Betulaceae). Russia: **EP** (N), **WS** (TM, AL), **ES** (KR, YA), **FE** (KH, PR, SA, KA, MG, CH). – Europe (NE), Mongolia, Japan (Hok, Hon), N America.
- Trichiosoma hirtellum** Gussakovskij, 1947. Host plant: *Salix* spp. (Salicaceae), *Betula* spp. (Betulaceae). Russia: **ES** (KR, IR, YA, ZB), **FE** (AM, KH, MG).
- Trichiosoma latreillii** Leach, 1817. Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (N, NW, C, E), **UR, WS** (TK, NS, KM, AL), **ES** (KR, IR, BR, YA, ZB),

- FE** (AM, KH, PR, KA, MG). – Europe (WE, EE), Turkey, Mongolia, China (NE, NC), Japan (Hon).
- Trichiosoma lucorum** (Linnaeus, 1758) [Tenthredo] (*T. unidentatum* Leach, 1817; *Cimbex betuleti* Klug, 1834; *Trichiosoma salicis* Hartig, 1840). Host plant: Betula spp. (Betulaceae), Salix spp. (Salicaceae). Russia: **EP** (N, NW, C, E), **UR**, **WS** (TM, TK, NS, KM, AL), **ES** (KR, IR, YA), **FE** (SA). – Europe (WE, EE, NE, SE), Kazakhstan, Mongolia, China (NC), Japan (Hok, Hon).
- Trichiosoma malaisei** Saarinen, 1950. Host plant: Betula spp. (Betulaceae). Russia: **EP** (N), **FE** (MG). – Europe (NE).
- Trichiosoma melanopygum** Zhelochovtsev, 1968. Host plant: Betula spp. (Betulaceae). Russia: **ES** (IR, BR).
- Trichiosoma nanae** Vikberg et Viitasari, 1991. Host plant: Betula nana (Betulaceae). Russia: **ES** (KR). – Europe (NE).
- Trichiosoma nigricoma** Konow, 1906. Host plant: Salix spp. (Salicaceae), Betula spp. (Betulaceae). Russia: **EP** (N, NW), **WS** (AL), **ES** (TU, KR). – Europe (NE).
- Trichiosoma opacum** Konow, 1906 (*T. jozankeanum* Matsumura, 1912). Host plant: Salix spp. (Salicaceae), Betula spp. (Betulaceae). Russia: **ES** (KR, IR, YA, ZB), **FE** (KH, PR, SA, MG). – Korean Peninsula, Japan (Hok, Hon).
- Trichiosoma pusillum** Stephens, 1835 (*T. biverrucatum* Stephens, 1835; *T. nigripes* Gussakovskij, 1947; *T. groenblomi* Saarinen, 1947). Host plant: Populus spp., Salix spp. (Salicaceae). Russia: **EP** (N), **WS** (NS, AL), **ES** (KR, IR, BR, ZB), **FE** (AM). – Europe (WE, NE).
- Trichiosoma sachalinense** Matsumura, 1911 (*T. bilineata* Malaise, 1931). Host plant: Salix spp. (Salicaceae). Russia: **EP** (N, NW), **WS** (NS, KM, AL), **ES** (IR, BR, YA, ZB), **FE** (KH, SA, KA, MG, CH). – Mongolia, Korean Peninsula, Japan (Hok).
- Trichiosoma scalesii** Leach, 1817 (*T. fennicum* Saarinen, 1947). Russia: **ES** (YA). – Europe (WE, NE).
- Trichiosoma sericeum** Konow, 1903. Host plant: Betula spp. (Betulaceae), Populus spp., Salix spp. (Salicaceae). Russia: **EP** (N, NW, E), **UR**, **WS** (TK, NS, KM, AL), **ES** (KS, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR). – Europe (NE), Mongolia, China (NE), Korean Peninsula.
- Trichiosoma sibiricum** Gussakovskij, 1947. Russia: **WS** (AL), **ES** (KR, IR, YA), **FE** (AM, KH, KA). – Europe (NE), China (NE).
- Trichiosoma sorbi** Hartig, 1840. Host plant: Sorbus spp. (Rosaceae). Russia: **EP** (N, NW, C, E), **UR**, **WS** (KM, AL), **ES** (YA). – Europe (WE, EE, NE, SE).
- Trichiosoma sylvaticum** Leach, 1817. Host plant: Populus spp., Salix spp. (Salicaceae). Russia: **EP** (N, NW, C, E), **WS** (TK, NS, KM, AL), **ES** (KS, BR, YA). – Europe (EE, SE).
- Trichiosoma tibiale** Stephens, 1835 (*Cimbex crataegi* Zaddach, 1863; *Tenthredo crataegi* Newman, 1870; *Trichiosoma oxyacanthae* Morley, 1907; *T. tibiale decipiens* Enslin, 1917). Host plant: Salix spp. (Salicaceae), Sorbus spp., Crataegus spp. (Rosaceae). Russia: **EP** (N, NW, C), **WS** (AL), **ES** (IR, YA), **FE** (KU, KA, MG, CH). – Europe (WE, EE, NE, SE), Japan (Hok, Hon).
- Trichiosoma ushinskii** Ermolenko, 1973. Russia: **FE** (KU).
- Trichiosoma villosum** (Motschulsky, 1860) [Cimbex] (*T. pubescens* Jakovlev, 1891; *T. relictum* Saarinen, 1950). Host plant: Populus spp., Salix spp. (Salicaceae). Russia: **EP** (NW, C), **WS** (NS, KM, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, KA). – Europe (NE), Kazakhstan, China (NE).
- Trichiosoma vitellina** (Linnaeus, 1760) [Tenthredo] (*Cynips betulae* Ström, 1762; *Trichiosoma marginale* Leach, 1817; *Cimbex trichiosoma* Lepeletier, 1823; *Trichiosoma boreale* Gussakovskij, 1947). Host plant: Alnus spp., Betula spp. (Betulaceae), Salix spp., Populus spp. (Salicaceae). Russia: **EP** (N, NW, C, E, S), **UR**, **WS** (TK, NS, KM, AL), **ES** (KS, KR, IR, BR, YA, ZB), **FE** (KH, PR). – Europe (WE, EE, NE, SE), Korean Peninsula.

Subfamily CORYNIDINAE

- CORYNIS** Thunberg, 1789 (*Amasis* Leach, 1817; *Amoeniformis* Ermolenko, 1972; *Lateralisiformis* Ermolenko, 1972; *Obscuriformis* Ermolenko, 1972). Type species *Tenthredo obscura* Fabricius, 1775. The larvae feed on the herbaceous plants. The genus is distributed in the Palaearctic region. Number of species: World and Palaearctic – 28; Russia – 8.
- Corynis amoena** (Klug, 1834) [Cimbex]. Adults on the Ranunculus (Ranunculaceae). Russia: **EP** (N, NW, C, E, S, NC). – Europe (WE, EE, NE), Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia.
- Corynis caucasica** (Mocsáry, 1886) [Amasis] (*Amasis caspica* Konow, 1886). Russia: **EP** (NC). – Europe (EE), Armenia, Azerbaijan, Turkey, Iran.

- Corynis crassicornis** (Rossi, 1790) [Tenthredo] (*Cimbex sylvatica* Olivier, 1791; *Tenthredo laeta* Fabricius, 1798; *T. ranunculi* Panzer, 1804; *Cimbex jurinae* Serville, 1823; *C. jurinae* Lepeletier, 1823; *C. olivieri* Lepeletier, 1823; *Amasis crassicornis nigriventris* Soldanski, 1916; *A. crassicornis algerica* Pic, 1916; *A. crassicornis gallica* Pic, 1918). Host plant: *Sedum* spp. (Crassulaceae), *Ranunculus* spp. (Ranunculaceae). Russia: **EP** (CR). – Europe (WE, EE, SE), N Africa, Georgia, Azerbaijan.
- Corynis frontina** (Konow, 1905) [Amasis]. Russia: **EP** (NC). – Europe (SE), Azerbaijan, Turkey.
- Corynis lateralis** (Brullé, 1832) [Amasis] (*Amasis lateralis sibirica* Kuznetzov-Ugamskij, 1925; *Corynis dominiquei* Chevin, 1988). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (EE, SE), Caucasus, Turkey, Kazakhstan.
- Corynis mutabilis** (Tischbein, 1852) [Abia] (*Amasis concinna* J.P.E.F. Stein, 1876; *A. bleyli* Mucbe, 1964). Adults on the *Ranunculus* (Ranunculaceae). Russia: **EP** (CR). – Europe (EE, SE), Armenia, Turkey.
- Corynis obscura** (Fabricius, 1775) [Tenthredo] (*Amasis helvetica* Konow, 1886; *A. obscura adusta* Zirngiebl, 1953; *A. valkanovi* Vassilev, 1969). Host plant: *Geranium* spp. (Geraniaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TK, NS, KM), **ES** (IR). – Europe (WE, EE, NE, SE), Caucasus, Turkey, Iran.
- Corynis ovicula** Zhelochovtsev, 1968. Russia: **ES** (BR, ZB).

5. FAMILY DIPRIONIDAE

Stout, slow-flying insects associated with conifers. They are characterized by plumose male and serrate female antennae of more than 9 segments and by absence of vein *2r* on the fore wing; scutellum without a transverse furrow cutting off a post-tergite; hind wing with both middle closed cells *RS* and *M* present; tibiae without preapical spines and front tibiae with simple unmodified spurs.

The larvae are free-living, often gregariously on needles of conifers. They have 8 pairs of abdominal legs (segments 2-8 and 10). The cocoons are double, and upon emerging the adult severs a cap at one end of the cocoon and this cap is left hanging by a few threads.

The family is distributed in the Holarctic, Oriental and Neotropical regions. Number of taxa: World – 2 subfamilies, 11 genera, about 140 species; Palaearctic – 2/9/about 70; Russia – 2/7 (+ 1 unplaced)/26 (+ 2 unplaced).

References. Fischer von Waldheim, 1806; Guskovskij, 1947; Verzhutskii, 1974, 1981; Ermolenko, 1975; Zhelochovtsev, Prochorova, 1976; Ermolenko, Zemkova, 1979; Viitasaari, Varama, 1987; Zhelochovtsev, 1988; Liston, 1995; Zhelochovtsev, Zinovjev, 1995; Liston et al., 2006, 2014a; Taeger et al., 2006, 2010; Wei et al., 2006; Roller, Haris, 2008; Blank et al., 2009; Gnienko, Seryi, 2009; Humala, Polevoi, 2009; Schedl, 2009; Taeger, Blank, 2011; Vasilenko, 2011b; Hara, Smith, 2012; Macek, 2012; Sundukov, Lelej, 2012; Vasilenko, Korshunov, 2012; Kostyunin, 2013, 2015; Popov, 2013; Beneš, 2014b; Borowski, Marczak, 2015; Hara, Shinohara, 2015; Sundukov, 2015, 2017; Noblecourt, 2016.

Subfamily DIPRIONINAE

DIPRION Schrank, 1802 (*Pteronus* Jurine, 1801; *Lophyrus* Latreille, 1803; *Pteronus* Panzer, 1806; *Anachoreta* Gistel, 1848; *Cristiger* Gistel, 1848). Type species *Tenthredo pini* Linnaeus, 1758. The larvae feed on the conifers. The genus is distributed in the Palaearctic and Oriental regions; one species was introduced into the Nearctic region. Number of species: World – 13; Palaearctic – 9; Russia – 3.

Diprion koreanus Takagi, 1931. Host plant: *Larix* spp. (Pinaceae); live in groups. Russia: **UR, ES** (IR, YA, ZB), **FE** (AM, KH). – Korean Peninsula.

Diprion pini (Linnaeus, 1758) [*Tenthredo*] (*Tenthredo dorsata* Fabricius, 1781; *T. eques* Schrank, 1782;

T. pineti Bechstein et Scharfenberg, 1805; *Lophyrus pini nigripictus* Matsumura, 1912; *Diprion pini nigroscutellatum* Enslin, 1916; *D. pini nigristernis* Enslin, 1916; *D. pini klugi* Enslin, 1916; *D. butovitschi* Hedqvist, 1967). Host plant: *Pinus* spp. (Pinaceae); live in groups, 2 generation per year. Russia: **EP** (N, NW, C, E, S, NC), **UR, WS** (TK, NS, KM), **ES** (IR, YA). – Europe (WE, EE, NE, SE), N Africa, Georgia, Cyprus, Turkey.

Diprion similis (Hartig, 1836) [*Lophyrus*] (*Lophyrus eremita* Thomson, 1871; *Diprion simile claristernis* Enslin, 1916; *D. simile atroscutellatum* Enslin, 1916). Host plant: *Pinus* spp. (Pinaceae); live alone, 2 generation per year. Russia: **EP** (N, NW, C, E, S, NC), **UR, WS** (TM, AL), **ES** (IR, YA). – Europe (WE, EE, NE, SE); introduced into N America.

GILPINIA Benson, 1939. Type species *Lophyrus polytomus* Hartig, 1834. Larvae feed on conifers. The genus is distributed in the Palaearctic and Oriental regions; two species were introduced to the Nearctic region. Number of species: World – about 40; Palaearctic – > 30; Russia – 15.

Gilpinia abieticola (Dalla Torre, 1894) [*Lophyrus*] (*Lophyrus abietis* Stein, 1866). Host plant: *Picea* spp. (Pinaceae). Russia: **EP** (C), **WS** (TM), **ES** (IR, YA). – Europe (WE, EE, NE, SE).

Gilpinia catocala (Snellen van Vollenhoven, 1858) [*Lophyrus*] (*Gilpinia verticalis* Gussakovskij, 1947). Host plant: *Pinus* spp. (Pinaceae). Russia: **EP** (NW, C, E), **WS** (TK, NS, KM). – Europe (EE, NE).

Gilpinia daisetusana Takeuchi, 1940. Host plant: *Picea* spp. (Pinaceae). Russia: **FE** (KU). – Japan (Hok).

Gilpinia fennica (Forsius, 1911) [*Diprion*]. Host plant: *Picea* spp. (Pinaceae). Russia: **ES** (TU, YA). – Europe (EE, NE), China (NC).

Gilpinia frutetorum (Fabricius, 1793) [*Tenthredo*] (*Lophyrus anachoreta* Costa, 1894; *Diprion frutetorum lutescens* Enslin, 1916; *D. frutetorum luteolum* Enslin, 1916). Host plant: *Pinus* spp. (Pinaceae); live alone, 2 generation per year. Russia: **EP** (NW, C, E, S, NC), **UR, WS** (TK, NS, AL), **ES** (IR, YA). – Europe (WE, EE, NE, SE), Turkey; introduced into N America.

Gilpinia hercyniae (Hartig, 1837) [*Lophyrus*]. Host plant: *Picea* spp. (Pinaceae). Russia: **EP** (NW, C, NC), **UR, WS** (TM), **ES** (KR, IR, BR, YA), **FE** (PR). – Europe (WE, EE, NE, SE), Pakistan, Mongolia, Korean Peninsula, Japan (Hok, Hon); introduced into N America.

- Gilpinia hokkaidoensis** Hara et Shinohara, 2015. Host plant: *Picea* spp., *Abies* spp. (Pinaceae). Russia: **FE** (KU). – Japan (Hok).
- Gilpinia laricis** (Jurine, 1807) [Pteronous] (*Diprion laricis fenestratum* Enslin, 1916; *D. laricis flavo-marginatum* Enslin, 1916; *D. laricis lugens* Enslin, 1916). Host plant: *Pinus* spp. (Pinaceae); live alone, 1-2 generation per year. Russia: **EP** (NW, C, E), **WS** (TM, TK, KM, AL), **ES** (IR, YA). – Europe (WE, EE, NE, SE).
- Gilpinia pallida** (Klug, 1812) [Lophyrus] (*Lophyrus minor* Serville, 1823; *L. minor* Lepeletier, 1823). Host plant: *Pinus* spp. (Pinaceae); live in groups, 2 generation per year. Russia: **EP** (NW, C, S), **WS** (TK), **ES** (IR, YA). – Europe (WE, EE, NE, SE).
- Gilpinia polytoma** (Hartig, 1834) [Lophyrus] (*Diprion polytomum pseudopallidum* Enslin, 1916). Host plant: *Picea* spp., *Abies* spp., *Larix* spp. (Pinaceae); live alone, 1-2 generation per year. Russia: **EP** (NW, C), **UR**, **WS** (TM, TK, NS), **ES** (IR, BR, YA), **FE** (KH, PR, KU). – Europe (WE, EE, NE, SE), Korean Peninsula, Japan (Hok, Hon), Pakistan, India.
- Gilpinia sachalinensis** Takeuchi, 1940. Russia: **FE** (SA).
- Gilpinia socia** (Klug, 1812) [Lophyrus] (*Lophyrus pineti* Hartig, 1837). Host plant: *Pinus* spp. (Pinaceae); live in groups, 2 generation per year. Russia: **EP** (NW), **ES** (KR). – Europe (WE, EE, NE, SE).
- Gilpinia tohi** Takeuchi, 1940. Host plant: *Picea* spp., *Abies* spp. (Pinaceae). Russia: **FE** (PR, KU). – China (NE), Japan (Hok).
- Gilpinia variegata** (Hartig, 1834) [Lophyrus] (*Lophyrus thomsoni* Konow, 1884). Host plant: *Pinus* spp. (Pinaceae); live alone, 2 generation per year. Russia: **EP** (NW, C), **WS** (TK, NS, AL), **ES** (KR, IR). – Europe (WE, EE, NE, SE), Kazakhstan.
- Gilpinia virens** (Klug, 1812) [Lophyrus] (*Diprion virens atramentarium* Enslin, 1916). Host plant: *Pinus* spp. (Pinaceae); live alone, 1-2 generation per year. Russia: **EP** (NW, C), **WS** (TM, NS, AL), **ES** (IR, YA). – Europe (WE, EE, NE, SE), Mongolia.
- MACRODIPRION** Enslin, 1914. Type species *Lophyrus nemoralis* Enslin, 1917. The larvae feed on the *Pinus* spp. (Pinaceae). The genus is distributed in Palaearctic and Oriental region. Number of species: World – 2; Palaearctic – 1; Russia – 1.
- Macrodipteron nemoralis** (Enslin, 1917) [Lophyrus] (*Tenthredo nemorum* Fabricius, 1793). Host plant: *Pinus* spp. (Pinaceae); live alone, 1-2 generation per year. Russia: **EP** (N, NW, C), **WS** (NS), **ES** (KR, IR, BR). – Europe (WE, EE, NE, SE).
- MICRODIPRION** Enslin, 1914. Type species *Hylotoma pallipes* Fallén, 1808. The larvae on the *Pinus* spp. (Pinaceae). The genus is distributed in Palaearctic and Oriental region. Number of species: World – 5; Palaearctic – 3; Russia – 2.
- Microdipteron fuscipennis** (Forsius, 1911) [Diprion]. Host plant: *Picea* spp. (Pinaceae); live in groups in the younger ages, singly in the senior, 2 generation per year. Russia: **EP** (C, E), **ES** (KR). – Europe (EE, NE).
- Microdipteron pallipes** (Fallén, 1808) [Hylotoma] (*Lophyrus elongatulus* Klug, 1812; *L. politus* Klug, 1812; *L. pulchricornis* Bremi-Wolf, 1849; *L. pallidipes* Dalla Torre, 1894; *Diprion pallipes aterrimum* Enslin, 1916). Host plant: *Pinus* spp. (Pinaceae); live in groups, 1-2 generation per year. Russia: **EP** (N, NW, C, NC), **WS** (TK), **ES** (KR, IR, BR, YA), **FE** (AM, PR, KU). – Europe (WE, EE, NE, SE), Kazakhstan.
- NEODIPRION** Rohwer, 1918. Type species *Lophyrus lecontei* Fitch, 1858. The larvae feed on the *Pinus* spp. (Pinaceae). The genus is distributed in Holarctic, Oriental and Neotropical regions. Number of species: World – > 45; Palaearctic – 2; Russia – 1.
- Neodiprion sertifer** (Geoffroy, 1785) [Tenthredo] (*Tenthredo pectinata rufa* Retzius, 1783; *T. pinirufa* Villers, 1789; *Hylotoma rufa* Fallén, 1808; *Lophyrus piceae* Lepeletier, 1823; *L. piceae* Serville, 1823; *L. basalis* Matsumura, 1915). Host plant: *Pinus* spp. (Pinaceae); live in groups, often severely pest. Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (TK, NS, KM, AL), **ES** (IR), **FE** (AM). – Europe (WE, EE, NE, SE), Caucasus, Turkey, Kazakhstan, Korean Peninsula, Japan (Hok, Hon, Kyu), N America.
- NESODIPRION** Rohwer, 1910. Type species *Lophyrus japonicus* Marlatt, 1898. The larvae feed on the *Pinus* (Pinaceae). The genus is distributed in East Palaearctic and Oriental region. Number of species: World – 13; Palaearctic – 11; Russia – 1.
- Nesodiprion japonicus** (Marlatt, 1898) [Lophyrus]. Host plant: *Pinus* spp., *Larix* spp., *Cedrus* spp. (Pinaceae). Russia: **FE** (PR). – China (SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu), N America (California).

Subfamily MONOCTENINAE

MONOCTENUS Dahlbom, 1835. *Type species* *Tenthredo juniperi* Linnaeus, 1758. Larvae feed on the Juniperus (Cupressaceae). The genus occurs in the Holarctic and Neotropical regions. Number of species: World – 12; Palaeartic – 8; Russia – 3.

Monoctenus juniperi (Linnaeus, 1758) [Tenthredo] (*Tenthredo pterophorus* Sulzer, 1761; *Monoctenus andrei* Mocsáry, 1880). Host plant: Juniperus spp. (Cupressaceae). Russia: **EP** (NW, C, E), **UR**. – Europe (WE, EE, NE, SE), Turkey, Syria.

Monoctenus nipponicus Takeuchi, 1940. Host plant: Juniperus spp. (Cupressaceae). Russia: **FE** (PR). – Japan (Hon).

Monoctenus obscuratus (Hartig, 1837) [Lophyrus] (*M. obscuratus intermedius* Zombori, 1975). Host

plant: Juniperus spp. (Cupressaceae). Russia: **WS** (AL), **ES** (YA). – Europe (WE, EE, NE, SE).

Unplaced Diprionidae

NYCTERIDIUM Fischer von Waldheim, 1806. *Type species* *Nycteridium fischeri* Fischer von Waldheim, 1806. The genus with incomprehensible systematic status (see Blank et al., 2009). The genus distribution in Palaeartic. Number of species: World and Palaeartic – 2; Russia – 2.

Nycteridium fischeri Fischer von Waldheim, 1806. Russia: without region (Fischer von Waldheim, 1806).

Nycteridium mosquense Fischer von Waldheim, 1806. Russia: **EP** (C).

6. FAMILY HEPTAMELIDAE

Have previously been classified into the subfamily Selandriinae within Tenthredinidae. Now treated as a separate family, within the “higher” Tenthredinoidea (Tenthredinidae, Cimbicidae, and Diprionidae), thus not forcing the inclusion of the well defined families Diprionidae and Cimbicidae into Tenthredinidae (Liston et al., 2014a; Malm, Nyman, 2015; Schmidt et al., 2016; Schneider, 2016). All known larvae feed on ferns. No reports exist of economic damage caused by Heptamelidae.

The family is distributed in the Holarctic and Oriental regions. Number of taxa: World – 6 genera, about 50 species; Palaearctic – 2/13; Russia – 2/5.

R e f e r e n c e s. Verzhutskii, 1974; Zhelochovtsev, 1988; Zhelochovtsev, Zinovjev, 1992, 1996; Vikberg, Liston, 2009; Sundukov, Lelej, 2012; Liston et al., 2014a; Malm, Nyman, 2015; Schmidt et al., 2016; Schneider, 2016; Vikberg, 2017.

HEPTAMELUS Haliday, 1855 (*Melicerta* Stephens, 1835; *Caenoneura* Thomson, 1870). Type species *Melicerta ochroleuca* Stephens, 1835. The larvae feed on the ferns. The genus is distributed in Palaearctic and Oriental region; one species was

introduced into N America. Number of species: World – 37; Palaearctic – 11; Russia – 4.

Heptamelus dahlbomi (Thomson, 1870) [Caenoneura]. Host plant: *Athyrium filix-femina* (Dryopteridaceae). Russia: **EP** (N). – Europe (WE, NE); introduced into N America.

Heptamelus magnocularis Malaise, 1931. Russia: **FE** (SA, KA).

Heptamelus ochroleucus (Stephens, 1835) [Melicerta]. Host plant: Dryopteridaceae, Blechnaceae, Onocleaceae, Polypodiaceae. Russia: **EP** (NW, C). – Europe (WE, EE, NE), Japan (Hon).

Heptamelus ussuriensis Malaise, 1931. Russia: **FE** (AM, PR).

PSEUDOHEPTAMELUS Conde, 1932. Type species *Pseudoheptamelus runari* Conde, 1932. The larvae feed on the ferns. The genus is distributed in Palaearctic. Number of species: World and Palaearctic – 2; Russia – 1.

Pseudoheptamelus runari Conde, 1932. Host plant: *Athyrium* spp. (Dryopteridaceae); larva in the ferns stem. Russia: **EP** (N, NW, C), **ES** (IR), **FE** (PR). – Europe (NE).

7. FAMILY TENTHREDINIDAE

Adults of Tenthredinidae are distinguished from those of other families by the presence of 7-10 flagellomeres, by the metapleuron clearly separated from the tergum 1, and by the long and clearly outlined (at least laterally) mesoscutellar appendage. Adults are herbivorous or do not feed, few predators. The larvae of most species are external feeders on foliage, but those of some species are leaf miners, gall formers, or shoot borers; usually oligophages, less often monophages or polyphages. Host plants are horsetails, ferns, conifers or angiosperms (especially many species on willows, poplars, birches and rosaceous). It usually hibernates a prepupa, sometimes a pupa, less often eggs. Part of the species are pests of fruit and berry and forest plants.

The family is distributed worldwide. Number of taxa: World – 6 subfamilies, about 400 genera, > 5600 species; Palaearctic – 6/about 220/about 3500; Russia – 6/109/1124 (+ 29 ssp.).

R e f e r e n c e s. Hartig, 1837; Eversmann, 1847; Erichson, 1851; Zaddach, 1859; Kawall, 1864; Kirby, 1882; Brischke, 1883, 1884; Holmgren, 1883; Konow, 1886, 1891, 1895, 1897, 1900, 1902a,c, 1904, 1907, 1908; Jakovlev, 1888, 1891, 1900; Dalla Torre, 1894; Mocsáry, 1909; Rohwer, 1910, 1925; Matsumura, 1911; Enslin, 1915, 1919, 1920, 1927; Dovnar-Zapolskij, 1925, 1929, 1930, 1931b; Kokujev, 1927; Kuznetsov-Ugamskij, 1927, 1929; Forsius, 1928, 1929; Zhelochovtsev, 1928, 1935b, 1939, 1941, 1951, 1952, 1968, 1976, 1988; Malaise, 1931a,b, 1945, 1947, 1963, 1964; Takeuchi, 1931, 1933, 1936, 1937, 1938, 1939, 1940, 1941, 1955, 1956; Conde, 1935; Hellén, 1948, 1956; Saarinen, 1950a; Ermolenko, 1955, 1959, 1968, 1971a, 1975, 1981, 1984, 1992; Stroganova, 1960, 1973, 1978b, 1980, 1988; Benson, 1962, 1965b; Muche, 1965a,b, 1968a,b, 1969, 1971a,b, 1973a,b,c,d, 1975a; Kuwayama, 1967; Lindqvist, 1968, 1970, 1971, 1972, 1975, 1977; Inomata, 1970; Naito, 1971a,b, 1980, 1990, 2004; Okutani, 1972; Verzhutskii, 1973, 1974, 1981; Zombori, 1973, 1974, 1978; Schtundjuk, Zelochovtsev, 1974; Tomilova, 1974; Smith, 1975, 1981; Zhelochovtsev, Prochorova, 1976; Bogacheva, 1977; Zinovjev, 1978, 1981, 1985, 1986, 1993a,b,c,d, 1994, 2000, 2010; Abe, 1981; Seiyama, 1981; Zhelochovtsev, Zinovjev, 1981, 1992, 1994, 1995, 1996; Koch, 1982, 1988b,c, 1989; Taeger, 1985, 1986, 1988, 1989, 1991, 1992, 2005, 2013; Goulet, 1986; Kajmuk, 1986, 1988; Altenhofer, Zombori, 1987; Zerova et al., 1988; Viitasaari, Zinovjev, 1991; Blank, 1993, 1996, 2002a; Liston, 1994, 1995, 2012; Shinohara, 1994a,b, 1997c, 2002a, 2005b, 2015; Zinovjev,

Schmidt, 1994; Pesarini et al., 1995; Haris, Blank, 1996; Lee, Ryu, 1996; Schmidt, 1997; Wei, 1997a,b, 1998a,b, 2006; Wei, Nie, 1997b, 2008; Andreeva, 1998; Blank, Ritzau, 1998; Blank, Taeger, 1998a, 2006; Lacourt, 1999; Zinovjev, Vikberg, 1999; Haris, 2000, 2001, 2002, 2003, 2006a,b, 2009; Lee et al., 2000; Shinohara et al., 2000, 2000, 2013, 2015; Togashi, 2000; Nie, Wei, 2001, 2004a,b; Altenhofer, Pschorn-Walcher, 2003; Kajmuk, Popov, 2003; Magis, 2003; Vikberg, 2003, 2009, 2010, 2013; Heidemaa et al., 2004, 2012; Heidemaa, Viitasaari, 2004; Heidemaa, Zinovjev, 2004; Vasilenko, 2004, 2006, 2008, 2009b, 2010a,b, 2011a; Astapenko et al., 2006; Averskiy et al., 2006; Heidemaa, Prous, 2006; Liston et al., 2006, 2014a, 2017; Saini et al., 2006; Shilenkov, Tolstonogova, 2006; Taeger et al., 2006, 2010, 2016, 2017; Vikberg, Zinovjev, 2006, 2014; Wei et al., 2006; Haris, Zsolnai, 2007; Kopelke, 2007a,b,c; Lelej, Taeger, 2007b; Stepanov et al., 2007; Zabroda, Sirenko, 2007, 2008; Popov, Kajmuk, 2008, 2009a,b, 2010b; Roller, Haris, 2008; Shcherbakov, 2008; Arutyunyan et al., 2009; Blank et al., 2009; Schedl, 2009; Sundukov, Lelej, 2009, 2012; Macek, 2010, 2012; Sundukov, 2010, 2011b, 2013, 2017; Wei, Niu, 2010; Yegorenkova et al., 2010; Astapenko, Pal'nikova, 2011; Belov, 2011; Li et al., 2011, 2014, 2016; Popov, 2011a,b, 2016; Prous et al., 2011, 2011, 2014, 2016, 2017; Smith, Altenhofer, 2011a,b; Taeger, Blank, 2011; Nie et al., 2012; Niu et al., 2012; Ahn et al., 2013; Niu, Wei, 2013; Petrov, Sautkin, 2013; Beneš, 2014a,b,c, 2015; Heibo et al., 2014; Setrakova, 2014; Beneš, Holuša, 2015; Liu et al., 2015; Qi et al., 2015; Shinohara, Hara, 2015; Shinohara, Yoshida, 2015; Smith, Wei, 2015; Taeger, Viitasaari, 2015; Noblecourt, 2016; Smith, Gourlay, 2016; Wu et al., 2016; Hara, Shinohara, 2017; Taeger, Kramp, 2017.

Subfamily ALLANTINAE

ALLANTUS Panzer, 1801 (*Emphytus* Klug, 1815; *Anemphytus* Dovnar-Zapolskij, 1931; *Synemphytus* Malaise, 1945). **Type species** *Tenthredo togata* Panzer, 1801. The larvae feed on the deciduous trees and shrubs; when pupation is carried into dry branches and bark. The genus is distributed in Holarctic and Oriental region. Number of species: World – > 45; Palaearctic – about 35; Russia – 17 from 2 subgenera.

Allantus (Allantus) calliblepharus (Konow, 1900) [Emphytus] (*Emphytus karafutonis* Matsumura, 1911). Host plant: *Salix* spp. (Salicaceae). Russia: **WS**

- (KM, AL), **ES** (IR, YA), **FE** (KH, PR, SA, KU). – Europe (NE), Korean Peninsula, Japan (Hok, Hon).
- Allantus (Allantus) luctifer luctifer** (F. Smith, 1874) [Macrophyta]. Host plant: *Salix* spp. (Salicaceae), *Rumex* spp., *Polygonum* spp. (Polygonaceae). Russia: **FE** (PR, SA). – China (CC, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Allantus (Allantus) togatus** (Panzer, 1801) [Tenthredo] (*Tenthredo ferruginosa* Gmelin, 1790; *T. succincta* Klug, 1818; *Emphytus succinctus steini* Schmiedeknecht, 1881; *E. leucostomus* Costa, 1890; *E. succinctus ruficornis* Costa, 1890). Host plant: *Salix* spp. (Salicaceae), *Betula* spp. (Betulaceae), *Quercus* spp. (Fagaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (NS), **ES** (YA), **FE** (SA). – Europe (WE, EE, NE, SE), Turkey.
- Allantus (Allantus) viennensis** (Schrank, 1781) [Tenthredo] (*Emphytus viennensis nigricoxis* De-Stefani, 1883; *E. viennensis medinae* Konow, 1894; *Allantus viennensis uberior* Enslin, 1914; *Emphytus viennensis atricornis* Pic, 1948). Host plant: *Rosa* spp. (Rosaceae). Russia: **EP** (S, NC). – Europe (WE, EE, SE), Georgia, Armenia, Turkey, Central Asia, N America.
- Allantus (Emphytus) albicinctus** (Matsumura, 1912) [Dolerus]. Host plant: *Filipendula* spp., *Rubus* spp., *Rosa* spp. (Rosaceae). Russia: **FE** (SA, KU). – China (NC), Japan (Hok).
- Allantus (Emphytus) basalis basalis** (Klug, 1818) [Tenthredo] (*Emphytus basalis masculus* Zirngiebl, 1937). Host plant: *Rosa* spp., *Dasiphora* spp., *Potentilla* spp. (Rosaceae), *Betula* spp. (Betulaceae). Russia: **EP** (N, NW, C, E, S), **UR**, **WS** (NS), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG). – Europe (WE, EE, NE, SE), Turkey, Mongolia, China (NE, NC), Korean Peninsula, Japan (Hok, Hon), N America.
- Allantus (Emphytus) calceatus** (Klug, 1818) [Tenthredo] (*Dolerus vicinus* Lepeletier, 1823; *D. vicinus* Serville, 1823; *Tenthredo vitis* Vallot, 1845; *Emphytus dissimilis* Dietrich, 1868). Host plant: *Filipendula* spp., *Spiraeae* spp., *Rubus* spp. and others Rosaceae. Russia: **EP** (N, NW, C, S, E, NC), **UR**, **WS** (Zhelochovtsev, Zinovjev, 1996), **FE** (AM, PR, YA). – Europe (WE, EE, NE, SE), Georgia, Kazakhstan, Mongolia, China (Wei et al., 2006).
- Allantus (Emphytus) cinctus** (Linnaeus, 1758) [Tenthredo] (*Tenthredo cordigera* Geoffroy, 1785; *Dolerus cinctus* Jurine, 1807; *D. varipes* Lepeletier, 1823; *D. cingulatus* Serville, 1823; *D. varipes* Serville, 1823; *Emphytus neglectus* Zaddach, 1859; *E. cinctipes* Norton, 1867; *E. infasciatus* Pic, 1948). Host plant: *Fragaria* spp., *Rosa* spp., *Rubus* spp. (Rosaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **WS** (NS), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR, KA, MG). – Europe (WE, EE, NE, SE), Armenia, Turkey, Iran, Kazakhstan, Mongolia, China (Wei et al., 2006), N America.
- Allantus (Emphytus) cingillipes** (Kontuniemi, 1947) [Emphytus]. Russia: **FE** (SA). – Europe (NE).
- Allantus (Emphytus) cingillum** (Klug, 1818) [Tenthredo]. Host plant: *Betula* spp. (Betulaceae), ?*Rosa* spp. (Rosaceae). Russia: **EP** (NW, C, E), **ES** (KR, IR, BR, YA). – Europe (WE, EE, NE).
- Allantus (Emphytus) cingulatus** (Scopoli, 1763) [Tenthredo] (*Dolerus cingulatus* Lepeletier, 1823; *Tenthredo tenius* Lepeletier, 1823; *Emphytus elegans* Costa, 1859; *Allantus cingulatus muliebris* Enslin, 1914). Host plant: *Fragaria* spp., *Rosa* spp. (Rosaceae). Russia: **EP** (NW, NC), **ES** (TU), **FE** (KA). – Europe (WE, EE, NE, SE), Georgia, Armenia, Turkey.
- Allantus (Emphytus) didymus didymus** (Klug, 1818) [Tenthredo]. Host plant: *Sanguisorba* spp., *Rosa* spp. (Rosaceae). Russia: **EP** (C, E, S, NC), **WS** (NS). – Europe (WE, EE, SE), N Africa, Caucasus, SW Asia, Iran, Kazakhstan.
- Allantus (Emphytus) melanarius** (Klug, 1818) [Tenthredo] (*Emphytus tricoloripes* Costa, 1859). Host plant: *Cornus sanguinea* (Cornaceae). Russia: **EP** (NC). – Europe (WE, EE, SE), Iran.
- Allantus (Emphytus) ruficeps** (Konow, 1899) [Emphytus]. **EP** (NC). – Georgia.
- Allantus (Emphytus) rufocinctus** (Retzius, 1783) [Tenthredo] (*Tenthredo zonata* Christ, 1791; *T. rufocincta* Klug, 1818; *T. cingulum* Klug, 1818; *T. agilis* Drapiez, 1820; *Dolerus fasciatus* Lepeletier, 1823; *D. fasciatus* Serville, 1823; *Tenthredo ruralis* Dahlbom, 1835; *Emphytus rufocinctus ruralis* Thomson, 1871). Host plant: *Rosa* spp., *Rubus* spp. (Rosaceae). Russia: **EP** (N, NW, C). – Europe (WE, EE, SE), Mongolia.
- Allantus (Emphytus) truncatoides** Koch, 1988. Russia: **ES** (IR).
- Allantus (Emphytus) truncatus** (Klug, 1818) [Tenthredo] (*Tenthredo fulvipes* Fallén, 1829; *T. schoenherri* Dahlbom, 1835; *T. angustata* Zetterstedt, 1838). Host plant: *Filipendula* spp., *Fragaria* spp., *Potentilla* spp. and others (Rosaceae). Russia: **EP** (NW, C, E, NC), **UR**, **WS** (NS), **ES** (YA), **FE** (KA). – Europe (WE, EE, NE), Kyrgyzstan, Kazakhstan, Mongolia, China (NC, NW).

- AMETASTEGIA** Costa, 1882 (*Aomodictium* Ashmead, 1898; *Protemphytus* Rohwer, 1909; *Emphytina* Rohwer, 1911; *Simplemphytus* MacGillivray, 1914; *Unitaxonus* MacGillivray, 1921; *Ocla* Malaise, 1957). Type species *Ametastegia fulvipes* Costa, 1882. The larvae before pupation borer branches, stems, bark or fruit. The genus distribution in Holarctic, Oriental and Neotropical regions. Number of species: World – about 60; Palaearctic – > 30; Russia – 13 from 2 subgenera.
- Ametastegia (Ametastegia) albipes** (Thomson, 1871) [Taxonus] (*Taxonus fletcheri* Cameron, 1878; *Eriocampa alabastripes* Costa, 1890). Russia: **EP** (N, NW, C, E, NC), **FE** (KA). – Europe (WE, EE, NE, SE).
- Ametastegia (Ametastegia) equiseti** (Fallén, 1808) [Tenthredo] (*Tenthredo bicolor* Klug, 1817; *T. gracilis* Serville, 1823; *T. gracilis* Lepeletier, 1823; *T. fuscitarsis* Hummel, 1827; *T. coxalis* Hartig, 1837; *T. bizonata* Zetterstedt, 1838; *Taxonus minutus* Costa, 1859; *Tenthredo angustula* Eversmann, 1864; *Taxonus innominatus* MacGillivray, 1901; *Unitaxonus repentinus* MacGillivray, 1921; *U. rumicis* MacGillivray, 1921; *Strongylogastroidea depressata* MacGillivray, 1921; *S. rufocinctella* MacGillivray, 1923; *Hemitaxonus dediticius* MacGillivray, 1923; *Ametastegia equiseti stitia* Zirngiebl, 1954). Host plant: Polygonum spp., Rumex spp. (Polygonaceae), Chenopodium (Amaranthaceae), etc. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **ES** (IR, BR, YA). – Europe (WE, EE, NE, SE), Georgia, Armenia, Turkey, Mongolia, China (Wei et al., 2006), N America.
- Ametastegia (Ametastegia) glabrata** (Fallén, 1808) [Tenthredo] (*Tenthredo violacea* Christ, 1791; *T. agilis* Klug, 1817; *T. rufipes* Lepeletier, 1823; *T. rufipes* Serville, 1823; *T. nigrisoma* Norton, 1862; *Ametastegia fulvipes* Costa, 1882; *Strongylogaster abnormis* Provancher, 1885; *Strongylogastroidea potulenta* MacGillivray, 1923). Host plant: Polygonum spp., Rumex spp. (Polygonaceae), Chenopodium (Amaranthaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **WS** (KM). – Europe (WE, EE, NE, SE), N Africa, SW Asia, Kazakhstan, Central Asia, Mongolia, China (NW), N America, S America, Australia.
- Ametastegia (Ametastegia) kirishimensis** Takeuchi, 1929. Russia: **FE** (PR, SA). – Japan (Kyu).
- Ametastegia (Ametastegia) wuorentausi** Forsius, 1928 (*A. montana* Malaise, 1931). Russia: **FE** (KA). – China (NE).
- Ametastegia (Protemphytus) albovaria** (Takeuchi, 1936) [Emphytina]. Russia: **FE** (SA, KU). – Japan (Hok, Hon).
- Ametastegia (Protemphytus) carpini** (Hartig, 1837) [Emphytus] (*Taxonus glottianus* Cameron, 1874; *Emphytus arcticus* Nerén, 1892; *Allantus carpini decipiens* Enslin, 1914; *Emphytus perla obscura* Zirngiebl, 1954). Host plant: Geranium spp. (Geraniaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (TU, BR), **FE** (AM, PR, KA). – Europe (WE, EE, NE, SE), Armenia, Turkey, Central Asia, Kazakhstan.
- Ametastegia (Protemphytus) pallipes** (Spinola, 1808) [Tenthredo] (*Tenthredo grossulariae* Klug, 1818; *Dolerus leucopodus* Lepeletier, 1823; *D. leucopodus* Serville, 1823; *Tenthredo lapponica* Zetterstedt, 1838; *Emphytus pallipes* Provancher, 1878; *E. canadensis* W.F. Kirby, 1882; *E. pallidipes* Dalla Torre, 1894; *Empria cavata* MacGillivray, 1911; *E. cetaria* MacGillivray, 1921; *Emphytus hyacinthus* MacGillivray, 1923; *E. hospitus* MacGillivray, 1923; *E. halesus* MacGillivray, 1923; *E. heroicus* MacGillivray, 1923; *E. hiatus* MacGillivray, 1923). Host plant: Viola spp. (Violaceae), Vicia spp. (Fabaceae). Russia: **EP** (NW, C, E, NC, CR), **UR**, **ES** (TU), **FE** (KU, KA). – Europe (WE, EE, NE, SE), Caucasus, Turkey, Iran, N America.
- Ametastegia (Protemphytus) perla** (Klug, 1818) [Tenthredo] (*Tenthredo bohemanii* Dahlbom, 1835). Host plant: Salix spp., Populus spp. (Salicaceae), Quercus spp. (Fagaceae), Polygonum spp. (Polygonaceae). Russia: **EP** (NW, C), **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (IR), **FE** (KA). – Europe (WE, EE, NE).
- Ametastegia (Protemphytus) tenera** (Fallén, 1808) [Tenthredo] (*Tenthredo patellata* Klug, 1818; *Dolerus luctuosus* Lepeletier, 1823; *D. nigritus* Lepeletier, 1823; *D. luctuosus* Serville, 1823; *D. nigritus* Serville, 1823; *Tenthredo trunculi* Vallot, 1845; *Simplemphytus pacificus* MacGillivray, 1914; *Emphytina vanduzeei* Rohwer, 1915; *Emphytus haustus* MacGillivray, 1923; *E. haliartus* MacGillivray, 1923; *Empria columna* MacGillivray, 1923). Host plant: Acetosa spp., Rumex spp. (Polygonaceae), Filipendula spp. (Rosaceae), Cirsium spp. (Asteraceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (IR, BR), **FE** (AM, KH, MG). – Europe (WE, EE, NE, SE), Armenia, Turkey, Iran, Kyrgyzstan, Kazakhstan, Mongolia, China (NW), N America.

- Ametastegia geranii** (Takeuchi, 1929) [Emphytina]. Host plant: *Geranium* spp. (Geraniaceae). Russia: **FE** (KU). – Japan (Hon, Shi).
- Ametastegia longicornis** (Takeuchi, 1929) [Emphytina]. Russia: **FE** (KU). – Japan (Hon, Shi).
- Ametastegia polygoni** Takeuchi, 1929. Host plant: *Polygonum* spp. (Polygonaceae). Russia: **FE** (SA, KU). – China (NE), Korean Peninsula, Japan (Hon, Kyu).
- APETHYMUS** Benson, 1939 (*Kjellia* Malaise, 1947). Type species *Dolerus abdominalis* Lepeletier, 1823. The larvae feed on deciduous trees and shrubs. The genus is distributed in Palaearctic and Oriental region. Number of species: World – about 25; Palaearctic – about 24; Russia – 7.
- Apethymus apicalis** (Klug, 1818) [Tenthredo] (*Emphytus klugii* Thomson, 1871). Host plant: *Rosa* spp. (Rosaceae). Russia: **EP** (Liston, 1995). – Europe (WE, EE, NE), Turkey.
- Apethymus filiformis** (Klug, 1818) [Tenthredo] (*Tenthredo serotina* Klug, 1818; *T. tarsata* Zetterstedt, 1819; *Dolerus abdominalis* Lepeletier, 1823; *D. abdominalis* Serville, 1823; *Emphytus temesiensis* Mocsáry, 1879; *E. serotinus melanopus* Ulbricht, 1913; *E. autumnalis* Forsius, 1933). Host plant: *Quercus* spp. (Fagaceae). Russia: **EP** (NW). – Europe (WE, EE, NE, SE).
- Apethymus kunugi** Togashi, 2005 (*A. proceratis*: Sundukov, Lelej, 2012). Host plant: *Quercus acutissima*, *Q. mongolicus* (Fagaceae). Russia: **FE** (PR). – Japan (Hon).
- Apethymus kuri** Takeuchi, 1952. Host plant: *Castanea crenata*, *Quercus crispula* (Fagaceae). Russia: **FE** (KU). – Japan (Hok, Hon, Shi, Kyu).
- Apethymus parallelus** (Eversmann, 1847) [Emphytus]. Russia: **UR**, **FE** (MG).
- Apethymus serotinus** (O.F. Müller, 1776) [Tenthredo] (*Tenthredo braccata* Gmelin, 1790; *T. varicornis* Gmelin, 1790; *T. tibialis* Panzer, 1799; *Emphytus caligatus* Eversmann, 1847; *E. panzeri* W.F. Kirby, 1882). Host plant: *Quercus* spp. (Fagaceae), *Rosa* spp. (Rosaceae). Russia: **EP** (NW, C, E, NC), **UR**, **WS** (NS). – Europe (WE, EE, NE, SE), Georgia.
- Apethymus sidorenkoi** Sundukov, 2010. Host plant: *Quercus mongolicus* (Fagaceae). Russia: **FE** (PR).
- ASIEMPHYTUS** Malaise, 1947. Type species *Macremphytus deutziae* Takeuchi, 1929. The larvae feed on the deciduous trees and shrubs; when pupation is carried into dry branches and bark. The genus is distributed in East Asia and Oriental region. Number of species: World – 10; Palaearctic – 8; Russia – 2.
- Asiemphytus dellei** (Conde, 1935) [Macremphytus]. Host plant: *Deutzia crenata* (Hydrangeaceae). Russia: **FE** (AM, PR, KU). – China (NE, SE).
- Asiemphytus fasciatus** (Takeuchi, 1929) [Macremphytus]. Host plant: *Cornus controversa* (Cornaceae). Russia: **FE** (SA). – Japan (Hok, Hon, Shi, Kyu).
- BELESES** Cameron, 1877 (*Anisoneura* Cameron, 1876; *Belesidea* Rohwer, 1916). Type species *Anisoneura stigmatalis* Cameron, 1876. The genus is distributed in East Asia and Oriental region. Number of species: World – 22; Palaearctic – 14; Russia – 1.
- Beleses satonis** (Takeuchi, 1929) [Abeleses]. Host plant: *Actinidia arguta* (Actinidiaceae). Russia: **FE** (KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- DINAX** Konow, 1897 (*Adamas* Malaise, 1945). Type species *Dinax jakowleffi* Konow, 1897. The larvae feed on the Rosaceae. The genus is distributed mainly in East Asia; one species in Oriental region, and one species up to the Urals. Number of species: World – 6; Palaearctic – 5; Russia – 2.
- Dinax ermak** (Zhelochovtsev, 1968) [Adamas]. Host plant: *Spiraea* spp. (Rosaceae). Russia: **EP** (E), **UR**, **ES** (ZB), **FE** (MG). – Europe (EE).
- Dinax jakowleffi** Konow, 1897. Host plant: *Spiraea* spp. (Rosaceae). Russia: **ES** (IR, YA), **FE** (AM, KH, PR). – China (NE).
- EMPRIA** Lepeletier et Serville, 1828 (*Poecilostoma* Dahlbom, 1835; *Prosecris* Gistel, 1848; *Poecilostoma* Thomson, 1870; *Poecilostomidea* Ashmead, 1898; *Tetratneura* Ashmead, 1898; *Parataxonus* MacGillivray, 1908; *Leucempria* Enslin, 1913; *Triempria* Enslin, 1914). Type species *Dolerus pallimacula* Lepeletier, 1823. The larvae mainly feed on Rosaceae, some on *Betula* (Betulaceae) and *Salix* (Salicaceae). The genus is distributed in Holarctic, Oriental and Neotropical regions. Number of species: World – about 50; Palaearctic – about 40; Russia – 28.
- Empria alector** Benson, 1938. Host plant: *Filipendula* spp. (Rosaceae). Russia: **EP** (N, NW, C, E), **WS** (Zelochovtsev, 1988). – Europe (WE, EE, NE).
- Empria alpina** Benson, 1938. Host plant: *Dryas* spp. (Rosaceae). Russia: **EP** (NW). – Europe (WE, NE).

- Empria archangelskii** Dovnar-Zapolskij, 1929. Russia: **EP** (NC). – Caucasus, SW Asia.
- Empria basalis** Lindqvist, 1968. Host plant: Geum spp. (Rosaceae). Russia: **EP** (N). – Europe (WE, EE, NE).
- Empria camtschatica** Forsius, 1928. Host plant: Salix spp. (Salicaceae). Russia: **FE** (KA). – Europe (NE).
- Empria candidata** (Fallén, 1808) [Tenthredo] (*Tenthredo repanda* Klug, 1816). Host plant: Betula spp. (Betulaceae). Russia: **EP** (NW, C, E), **WS** (NS), **ES** (IR, BR, YA), **FE** (AM, KH, PR, KA). – Europe (WE, EE, NE, SE), Kazakhstan, Mongolia, China (NE), Korean Peninsula, Japan (Hok), N America.
- Empria excisa** (Thomson, 1871) [Poecilosoma] (*E. africana* Forsius, 1918). Host plant: Filipendula spp. (Rosaceae). Russia: **EP** (N). – Europe (WE, EE, NE, SE), N Africa, Turkey.
- Empria fletcheri** (Cameron, 1878) [Poecilosoma]. Host plant: Betula spp. (Betulaceae). Russia: **EP** (N), **WS** (TM), **ES** (TU, BR). – Europe (WE, NE), Mongolia.
- Empria gelida** (Erichson, 1851) [Tenthredo]. Russia: **FE** (KH).
- Empria hungarica** (Konow, 1895) [Poecilosoma] (*E. zacharovi* Dovnar-Zapolskij, 1929). Host plant: Filipendula spp. (Rosaceae). Russia: **EP** (C, S, NC). – Europe (WE, EE, NE, SE), Kazakhstan.
- Empria immersa** (Klug, 1818) [Tenthredo] (*Selandria labialis* Brullé, 1832; *Tenthredo opacomaculata* Eversmann, 1847; *Emphytus majalis* Snellen van Vollenhoven, 1869; *Empria tirolensis* Enslin, 1914). Host plant: Salix spp. (Salicaceae). Russia: **EP** (NW, E), **UR**, **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (IR, BR, YA), **FE** (AM, KH, MG). – Europe (WE, EE, NE, SE), Mongolia.
- Empria liturata** (Gmelin, 1790) [Tenthredo] (*Tenthredo guttata* Fallén, 1808; *T. impressa* Klug, 1816; *Emphytus pallimaculatus* Stephens, 1835; *Tenthredo spuria* Zetterstedt, 1838; *Emphytus fenestratus* Eversmann, 1847; *E. vernalis* Dietrich, 1868; *Poecilosoma submutica* Thomson, 1871; *P. undulata* Konow, 1885; *Harpiphorus calderoni* Medina, 1888). Host plant: Filipendula spp., Fragaria spp., Geum spp., Rubus spp. (Rosaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (NS, KM), **ES** (KR, IR, YA), **FE** (MG). – Europe (WE, EE, NE, SE), Turkey, Mongolia, Japan (Hok).
- Empria loktini** Ermolenko, 1971. Host plant: Geum japonicum, G. calthifolium (Rosaceae). Russia: **FE** (SA). – Japan (Hok).
- Empria longicornis** (Thomson, 1871) [Poecilosoma] (*E. rubi* Kontuniemi, 1951). Host plant: Rubus spp. (Rosaceae). Russia: **EP** (NW, C, E), **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (Zhelochovtsev, Zinovjev, 1996). – Europe (WE, EE, NE, SE), Mongolia.
- Empria mongolica** (Konow, 1895) [Poecilosoma]. Russia: **ES** (TU). – Mongolia, China (NC).
- Empria pallimacula** (Serville, 1823) [Dolerus] (*Dolerus pallimacula* Lepeletier, 1823; *Empria baltica* Conde, 1937). Host plant: Filipendula spp. (Rosaceae). Russia: **EP** (NW, C, E, S, NC), **UR**, **WS** (NS, KM), **ES** (YA). – Europe (WE, EE, NE, SE), Armenia.
- Empria parvula** (Konow, 1892) [Poecilosoma] (*E. pseudoklugi* Dovnar-Zapolskij, 1929; *E. kuznetzovi* Dovnar-Zapolskij, 1929). Host plant: Geum spp. (Rosaceae). Russia: **EP** (N, NW, C, E, S), **FE** (AM, PR). – Europe (WE, EE, NE, SE), Mongolia.
- Empria plana** (Jakovlev, 1891) [Poecilosoma] (*Tenthredo hybrida* Erichson, 1851; *Empria itelmena* Malaise, 1931; *E. erichsoni* Liston, 1995). Host plant: Salix spp. (Salicaceae). Russia: **WS** (Lelej, Taeger, 2007), **ES** (IR), **FE** (AM, KH, PR, KA, MG). – Mongolia, Japan (Hok, Hon).
- Empria pravei** Dovnar-Zapolskij, 1925. Russia: **EP** (NC). – Armenia, Iran.
- Empria pumila** (Konow, 1896) [Poecilosoma]. Host plant: Filipendula spp. (Rosaceae). Russia: **EP** (NW, E), **WS** (KM). – Europe (WE, EE, NE, SE), Kazakhstan.
- Empria pumiloides** Lindqvist, 1968 (*E. tricornis* Lindqvist, 1968). Host plant: Filipendula spp. (Rosaceae). Russia: **EP** (Heidema, Prous, 2006). – Europe (WE, NE).
- Empria quadrimaculata** Takeuchi, 1952. Host plant: Rosa multiflora, Potentilla indica, ?Rubus parvifolius (Rosaceae). Russia: **FE** (KU). – Japan (Hon, Shi, Kyu).
- Empria rubicola** Ermolenko, 1971. Russia: **FE** (SA). – Japan (Hok).
- Empria sexpunctata** (Serville, 1823) [Tenthredo] (*Tenthredo sexpunctata* Lepeletier, 1823; *Selandria klugii* Stephens, 1835; *Poecilosoma guttata* Thomson, 1871; *P. carbonarium* Konow, 1884; *Empria waldstaetterense* Liston, 1980). Host plant: Geum spp. (Rosaceae). Russia: **EP** (NW, C, E, S, NC), **UR**. – Europe (WE, EE, NE, SE), Georgia, Armenia.
- Empria testaceipes** (Konow, 1896) [Poecilosoma]. Host plant: Sanguisorba officinalis (Rosaceae).

- Russia: **EP** (E), **ES** (IR), **FE** (AM). – Europe (WE, EE, NE), SW Asia, Mongolia.
- Empria tridens** (Konow, 1896) [Poecilosoma] (*E. caucasica* Dovnar-Zapolskij, 1929; *E. gussakovskii* Dovnar-Zapolskij, 1929; *E. konowi* Dovnar-Zapolskij, 1929). Host plant: Geum japonicum, Filipendula camtschatica, Rubus spp. (Rosaceae). Russia: **EP** (NW, C, E, S, NC), **UR**, **ES** (TU, IR), **FE** (AM, PR, SA, KA). – Europe (WE, EE, NE, SE), Turkey, Mongolia, Japan (Hok).
- Empria tridentis** Lee et Ryu, 1996. Host plant: Geum japonicum, Filipendula camtschatica (Rosaceae). Russia: **FE** (KH, PR, SA). – Korean Peninsula, Japan (Hok).
- Empria ushinskii** Dovnar-Zapolskij, 1929. **EP** (NC, CR). – Europe (EE).
- EOPSIS** Benson, 1959. Type species *Eopsis beaumonti* Benson, 1959. The genus is distributed in West Palaearctic. Number of species: one West Palaearctic species.
- Eopsis beaumonti** Benson, 1959 (*Monosoma mosquense* Zhelochovtsev, 1981). Host plant: Rumex spp., Polygonum spp. (Polygonaceae). Russia: **EP** (C). – Europe (WE, EE).
- ERIOCAMPA** Hartig, 1837 (*Brachyocampa* Zirngiebl, 1956). Type species *Tenthredo ovata* Linnaeus, 1760. The genus is distributed in Holarctic and Oriental region; one species was introduced into North America. Number of species: World – about 20; Palaearctic – 15; Russia – 6.
- Eriocampa albipes** Matsumura, 1912. Host plant: Alnus spp. (Betulaceae). Russia: **FE** (AM, KH, SA). – Korean Peninsula, Japan (Hok, Hon, Shi).
- Eriocampa dorpatica** Konow, 1887. Host plant: black currant – *Ribes nigrum* and others (Grossulariaceae). Russia: **EP** (NW, C, E), **UR**, **ES** (KR, IR). – Europe (NE).
- Eriocampa mitsukurii** Rohwer, 1910. Host plant: Alnus spp. (Betulaceae). Russia: **FE** (AM, KH, PR, SA, KU). – China (SE), Japan (Hok, Hon, Shi).
- Eriocampa ovata ovata** (Linnaeus, 1760) [Tenthredo] (*Tenthredo gossypina* Retzius, 1783; *T. vernalis* Geoffroy, 1785; *T. leucogona* Schrank, 1802; *Eriocampa ovata nigritibiis* Enslin, 1914). Host plant: Alnus spp. (Betulaceae), Rhamnus spp., Frangula spp. (Rhamnaceae), Salix spp. (Salicaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**. – Europe (WE, EE, NE, SE), Georgia, Turkey; introduced into N America.
- Eriocampa peineae** Zirngiebl, 1956. Russia: **EP** (Lacourt, 1999). – Iran.
- Eriocampa umbratica** (Klug, 1816) [Tenthredo]. Host plant: Alnus spp. (Betulaceae). Russia: **EP** (N, NW, C, E, S, NC). – Europe (WE, EE, NE, SE), Georgia, Turkey.
- ERIOCAMPOPSIS** Takeuchi, 1952. Type species *Eriocampopsis subtruncata* Takeuchi, 1952. The genus is distributed in East Asia. Number of species: World and Palaearctic – 2; Russia – 1.
- Eriocampopsis subtruncata** Takeuchi, 1952. Host plant: Actaea spp. (Ranunculaceae). Russia: **FE** (PR). – Japan (Hon).
- FILIXUNGULIA** Wei, 1997. Type species *Filixungulia alboclypea* Wei, 1997. East Palaearctic genus. Palaearctic – 3 species, Russia – 1.
- Filixungulia alboclypea** Wei, 1997. Russia: **FE** (PR). – China (NE).
- HARPIPHORUS** Hartig, 1837 (*Asticta* Newman, 1838; *Harpophorus* Agassiz, 1848). Type species *Tenthredo lepida* Klug, 1818. The larvae feed on the Quercus (Fagaceae). The genus is distributed in West Palaearctic. Number of species: one species.
- Harpiphorus lepidus** (Klug, 1818) [Tenthredo] (*Fenusa ianthe* Newman, 1837). Host plant: Quercus robur (Fagaceae). Russia: **EP** (NW, C). – Europe (WE, EE, NE, SE).
- HEMIBELESES** Takeuchi, 1929. Type species *Hemibeleseles nigriceps* Takeuchi, 1929. The genus is distributed in East Asia and Oriental region. Number of species: World – about 20; Palaearctic – 14; Russia – 1.
- Hemibeleseles ventralis** Takeuchi, 1952. Russia: **FE** (PR). – Korean Peninsula, Japan (Hon, Shi, Kyu).
- HEPTAPOTAMIUS** Malaise, 1935. Type species *Heptapotamius simini* Malaise, 1935. The genus is distributed in Central Eurasia. Number of species: one species.
- Heptapotamius simini** Malaise, 1935. Russia: **EP** (S). – Uzbekistan, Kyrgyzstan, Kazakhstan.
- MONOSTEGIA** Costa, 1859 (*Nematoceros* Konow, 1896). Type species *Tenthredo luteola* Klug, 1816. The larvae pupate in the soil. The genus is distributed in Palaearctic; one species was introduced

into N America. Number of species: World and Palaearctic – 5; Russia – 2.

Monostegia abdominalis (Fabricius, 1798) [Tenthredo] (*Tenthredo luteola* Klug, 1816; *Monostegia martini* MacGillivray, 1908; *M. nearctica* Rohwer, 1912; *Empria abdominalis rufinotis* Enslin, 1914). Host plant: *Lysimachia* spp., *Anagallis* spp. (Primulaceae), *Lactuca* spp. (Asteraceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (IR, YA), **FE** (AM, PR). – Europe (WE, EE, NE, SE), Azerbaijan, Armenia, SW Asia, Kyrgyzstan, Kazakhstan, China (Wei et al., 2006); introduced into N America.

Monostegia cingulata (Konow, 1891) [Poecilosoma]. Russia: **EP** (NC). – Georgia.

MONSOMA MacGillivray, 1908 (*Monosoma* Viereck, 1910). Type species *Poecilostoma inferentia* Norton, 1868. The larvae feed on Betulaceae. The genus is distributed in Holarctic. Number of species: World – 4; Palaearctic – 3; Russia – 2.

Monsoma pallipes (Matsumura, 1912) [Poecilosoma]. Host plant: ?*Alnus* spp. (Betulaceae). Russia: **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (Zhelochovtsev, Zinovjev, 1996), **FE** (PR). – Japan (Hok).

Monsoma pulveratum (Retzius, 1783) [Tenthredo] (*Tenthredo limbata* Gmelin, 1790; *T. pulverulenta* Christ, 1791; *T. obesa* Klug, 1817; *T. obtusa* Klug, 1817; *Selandria pulchella* Stephens, 1835; *Tenthredo leucozonias* Hartig, 1837; *T. segmentata* Zetterstedt, 1838; *Harpiphorus taeniatus* Costa, 1869; *Empria pulverata obtusalis* Enslin, 1914). Host plant: *Alnus* spp. (Betulaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **WS** (KM). – Europe (WE, EE, NE, SE), N Africa, Caucasus, SW Asia; introduced into N America.

STENEMPHYTUS Wei et Nie, 1999. Type species *Stenemphytus superbis* Wei et Nie, 1999. The genus is distributed in East Asia and Oriental region. Number of species: World – 4; Palaearctic – 2; Russia – 1.

Stenemphytus nakabusensis (Takeuchi, 1929) [Allantus]. Host plant: *Prunus* spp. (Rosaceae). Russia: **FE** (KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

TAXOBLENUS Wei et Nie, 1999. Type species *Taxoblenus longicornis* Wei et Nie, 1999. The genus is distributed in Palaearctic and Oriental region. Number of species: World – 11; Palaearctic – 8; Russia – 1.

Taxoblenus latus (Jakovlev, 1888) [Taxonus] (*Taxonus ballioni* Konow, 1891). Russia: **EP** (S), **ES** (IR, ZB).

TAXONUS Hartig, 1837 (*Ermilia* Costa, 1859; *Parasiobla* Ashmead, 1898; *Strongylogastroidea* Ashmead, 1898; *Hypotaxonus* Ashmead, 1898). Type species *Tenthredo nitida* Klug, 1817. The larvae pupate in the soil. The genus is distributed in Holarctic and Oriental region. Number of species: World – 60; Palaearctic – about 45; Russia – 7.

Taxonus abdominis Lee et Ryu, 1996. Russia: **FE** (PR). – Korean Peninsula.

Taxonus agrorum (Fallén, 1808) [Tenthredo] (*Tenthredo nitida* Klug, 1817; *Perineura dualis* Förster, 1844; *Tenthredo anomala* Eversmann, 1847; *T. subjecta* Eversmann, 1847; *Ermilia pulchella* Costa, 1859; *Strongylogaster rubrofasciatus* Palma, 1861; *Taxonus creperus* Konow, 1900). Host plant: *Rubus* spp. (Rosaceae). Russia: **EP** (NW, C, E), **UR**, **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (IR, BR, YA, ZB), **FE** (KH). – Europe (WE, EE, NE, SE), Turkey, Japan (Hok, Hon, Shi, Kyu).

Taxonus carbonarius Takeuchi, 1929. Russia: **FE** (PR). – China (SE).

Taxonus delumbis Konow, 1900 (*T. kamtchaticus* Malaise, 1931). Host plant: *Populus* spp. (Salicaceae). Russia: **ES** (KR, IR, BR, YA), **FE** (PR, SA, KA, MG). – China (Wei et al., 2006), Korean Peninsula, Japan (Togashi, 2000).

Taxonus fluvicornis Matsumura, 1912 (*Conaspidia bergrothi* Forsius, 1925). Host plant: *Polygonum cuspidatum* (Polygonaceae). Russia: **FE** (SA, KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

Taxonus sticticus (Klug, 1817) [Tenthredo]. Host plant: *Rosa* spp. (Rosaceae). Russia: **EP** (S, NC), **ES** (IR). – Europe (WE, EE, SE), Turkey.

Taxonus zhelochovtsevi Viitasaari et Zinovjev, 1991. Russia: **FE** (KH, PR). – China (NE).

Unplaced Allantinae

Emphytus albisternus André, 1882. Russia: “Amur” (?*Ametastegia* Costa, 1882; see Blank et al., 2009).

Subfamily ATHALIINAE

ATHALIA Leach, 1817 (*Dentathalia* Benson, 1931). Type species *Tenthredo spinarum* Fabricius, 1793. The larvae feed on the Brassicaceae and Lamiaceae. The genus is distributed in Palaearctic,

Oriental and Afrotropic regions. Number of species: World – about 95; Palaearctic - > 45; Russia – 18 (+ 3 spp.).

- Athalia ahngeri** Kokujev, 1910. Russia: **EP** (Lacourt, 1999). – Azerbaijan, Armenia, Uzbekistan, Kazakhstan.
- Athalia ancilla ancilla** Serville, 1823 (*A. ancilla* Lepeletier, 1823; *A. glabricollis* Thomson, 1870; *A. glabricollis bulgarica* Gregor, 1932). Host plant: *Daucus* spp. (Apiaceae). Russia: **EP** (C, NC, CR), **UR**, **WS** (NS). – Europe (WE, EE, NE, SE), N Africa, Georgia, Turkey.
- Athalia bicolor** Serville, 1823 (*Tenthredo annulata* Fabricius, 1787; *Athalia richardi* Serville, 1823; *A. richardi* Lepeletier, 1823; *A. bicolor* Lepeletier, 1823; *A. bicolor nigritegulis* Enslin, 1918). Host plant: ?*Ranunculus* spp. (Ranunculaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **WS** (NS). – Europe (WE, EE, NE, SE), N Africa, Caucasus, Turkey, Turkmenistan.
- Athalia circularis circularis** (Klug, 1815) [Tenthredo] (*Tenthredo annulata* Gmelin, 1790; *Athalia lineolata* Lepeletier, 1823; *A. lineolata* Serville, 1823; *A. rosae sternalis* Costa, 1894; *A. bolivari* Dusmet, 1896; ?*A. lineolata niezabitowskii* Szulczewski, 1938; ?*A. lineolata gorakaensis* Szulczewski, 1938; *A. cordatoides* Kontuniemi, 1951; *A. alpina* Chevin, 1969). Host plant: Plantaginaceae, Asteraceae, Lamiaceae, etc. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (NS, KM, AL), **ES** (KS, KR). – Europe (WE, EE, NE, SE), N Africa, Caucasus, Turkey, Pakistan, Uzbekistan, Tajikistan, Kazakhstan, India (NW).
- Athalia circularis melanoptera** Benson, 1962. Host plant: Plantaginaceae, Asteraceae, Lamiaceae, etc. Russia: **ES** (IR, ZB), **FE** (AM, SA, KU, KA). – Mongolia, China (NE), Korean Peninsula.
- Athalia cordata** Serville, 1823 (*A. suessionensis* Serville, 1823; *A. suessionensis* Lepeletier, 1823; *A. cordata* Lepeletier, 1823; *A. blanchardi* Brullé, 1846; *A. rosae obscura* Konow, 1884; *A. lineolata analis* Enslin, 1913). Host plant: Plantaginaceae and Lamiaceae. Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, EE, NE, SE), N Africa, Caucasus, SW Asia.
- Athalia cornubiae** Benson, 1931. Host plant: *Sedum* spp. (Crassulaceae). Russia: **EP** (CR). – Europe (WE, EE, SE), Georgia, Armenia, Turkey, Uzbekistan; introduced into N America.
- Athalia decorata** Konow, 1900. Russia: **ES** (KS, KR, IR, BR, ZB), **FE** (AM, PR). – China (SW).
- Athalia dimidiata** Konow, 1891. Russia: **EP** (Lacourt, 1999). – Georgia, Armenia, Turkey.
- Athalia infumata** (Marlatt, 1898) [Phyllotoma] (*A. nigrinotum* Matsumura, 1912). Host plant: *Cardamine* spp., *Nasturtium* spp., *Rorippa* spp., *Brassica* spp. (Brassicaceae). Russia: **FE** (PR, SA, KU). – China (SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu), India.
- Athalia japonica** (Klug, 1815) [Tenthredo] (*A. novitola* Kokujev, 1927). Host plant: Brassicaceae. Russia: **WS** (AL), **ES** (KS, KR, IR), **FE** (AM, KH, PR, SA, KU). – Kazakhstan, China (NE, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu), India.
- Athalia liberta** (Klug, 1815) [Tenthredo] (*A. rosae immaculata* Konow, 1884). Host plant: Brassicaceae. Russia: **EP** (NW, C, E, S, NC), **UR**, **ES** (KR). – Europe (WE, EE, NE, SE), Caucasus, Turkey, Iran, Tajikistan, Uzbekistan, Kyrgyzstan, China (NW, SW), India.
- Athalia longifoliae** Kontuniemi, 1951. Host plant: *Veronica longifolia* (Plantaginaceae). Russia: **EP** (NW, C, S, NC). – Europe (WE, NE), Central Asia, Kazakhstan.
- Athalia lugens** (Klug, 1815) [Tenthredo] (*A. lugens flavoscutellata* Enslin, 1918). Host plant: *Ajuga reptans* (Lamiaceae), ?Brassicaceae. Russia: **EP** (NW, C, NC, CR), **WS** (NS), **ES** (BR), **FE** (PR, KA). – Europe (WE, EE, NE, SE), Georgia, China (NE), Korean Peninsula, Japan (Hon), India, SE Asia.
- Athalia proxima** (Klug, 1815) [Tenthredo] (*A. tibialis* Cameron, 1876; *A. spinarum orientalis* Cameron, 1877; *A. proxima funebris* Forsius, 1925; *A. colibri kuroiwae* Matsumura et Uchida, 1926; *A. lugens camtschatica* Forsius, 1928; *A. lugens tristis* Forsius, 1934). Host plant: Brassicaceae. Russia: **FE** (KH, PR, SA, KU, KA). – China (SE), Korean Peninsula, Japan (Ryu), India, SE Asia.
- Athalia rosae rosae** (Linnaeus, 1758) [Tenthredo] (*Tenthredo colibri* Christ, 1791; *T. spinarum* Fabricius, 1793; *T. centifoliae* Panzer, 1797). Host plant: Brassicaceae. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (NS, KM, AL), **ES** (KS, KR). – Europe (WE, EE, NE, SE), N Africa, Caucasus, SW Asia, Kazakhstan.
- Athalia rosae ruficornis** Jakovlev, 1888 (*A. leucostoma* Cameron, 1904; *A. spinarum japonensis* Rohwer, 1910). Host plant: Brassicaceae. Russia: **ES** (IR, BR), **FE** (AM, KH, PR, SA, KU). – Mongolia, China (NE, NC, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu), India.

Athalia rufoscutellata Mocsáry, 1879 (*A. maculata* Mocsáry, 1879; *A. maritima* W.F. Kirby, 1884; *A. rufoscutellata mocsaryi* Konow, 1892; *A. rufoscutellata nigroscutellata* Konow, 1892; *A. rufoscutellata pleuralis* Konow, 1898; *A. rufoscutellata obscurata* Konow, 1904). Host plant: *Teucrium* spp. (Lamiaceae). Russia: **EP** (S, NC, CR). – Europe (WE, EE, SE), Georgia, Armenia, Turkey, China (Wei et al., 2006).

Athalia scutellariae scutellariae Cameron, 1880 (*Dentathalia galericulatae* Kontuniemi, 1951). Host plant: *Scutellaria* spp., *Lycopus* spp. (Lamiaceae). Russia: **EP** (NW, C, E). – Europe (WE, EE, NE, SE), Turkey, Kyrgyzstan.

Athalia scutellariae flammula Zhelochovtsev, 1927. Host plant: *Scutellaria* spp. (Lamiaceae). Russia: **ES** (IR, ZB), **FE** (AM, KH, PR). – Mongolia, China (NC).

Athalia yanoi Takeuchi, 1952. Russia: **FE** (KH, PR, SA, KU). – Japan (Hok, Hon).

Subfamily BLENNOCAMPINAE (HETERARTHRIINAE)

ANAFENUSA Benson, 1959. Type species *Entodecta impropria* Malaise, 1931. The genus is distributed in East Asia and Oriental region. Number of species: World – 4; Palaeartic – 3; Russia – 1.

Anafenusia impropria (Malaise, 1931) [Entodecta]. Russia: **FE** (PR).

APAREOPHORA Sato, 1928. Type species *Apareophora forsythiae* Sato, 1928. The genus is distributed in Holarctic and Oriental region. Number of species: World – 8; Palaeartic – 6; Russia – 1.

Apareophora coreana Sato, 1928. Russia: **FE** (PR). – China (NC), Korean Peninsula.

ARDIS Konow, 1886 (*Valco* Ross, 1937). Type species *Tenthredo bipunctata* Klug, 1817. The larvae without spines on the body; borer the branches of *Rosa* (Rosaceae); go down the branch. The genus is distributed in Holarctic. Number of species: World – 5; Palaeartic – 4; Russia – 1.

Ardis pallipes (Serville, 1823) [Dolerus] (*Tenthredo bipunctata* Klug, 1817; *Dolerus pallipes* Lepeletier, 1823; *Tenthredo brunniiventris* Hartig, 1837; *Monophadnus dissimilis* Costa, 1859; *Selandria irrogata* Cresson, 1880; *Emphytus dubius* W.F. Kirby, 1882; *Aphanisus odoratus* MacGillivray, 1908;

A. parallelus MacGillivray, 1923). Host plant: *Rosa* spp. (Rosaceae). Russia: **EP** (N, NW, C, E, S, NC), **FE** (MG). – Europe (WE, EE, NE, SE), Central Asia, China (Wei et al., 2006), Japan (Hon); introduced into N America.

BLENNOCAMPA Hartig, 1837. Type species *Tenthredo pusilla* Klug, 1816. The larvae with branched spines on the body; feeding on Rosaceae. The genus is distributed in Palaeartic, Oriental and Neotropical regions. Number of species: World – 10; Palaeartic – 3; Russia – 2.

Blennocampa phyllocolpa Viitasaari et Vikberg, 1985 (*Tenthredo pusilla* Klug, 1816). Host plant: *Rosa* spp. (Rosaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **ES** (IR), **FE** (AM, SA, KA, MG). – Europe (WE, EE, NE, SE), Turkey, Central Asia, Kazakhstan, China (NW).

Blennocampa sibirica Jakovlev, 1891. Russia: **ES** (IR).

CALIROA Costa, 1859 (*Eriocampoides* Konow, 1890; *Perichistoptera* Ashmead, 1898). Type species *Caliroa sebetia* Costa, 1859. The larvae are covered with mucus; skeletonize of leaves of trees and shrubs, pupate in the soil. The genus is distributed in Holarctic and Oriental region; was introduced into the Neotropical, Ephiopian and Australasian regions. Number of species: World – about 60; Palaeartic – 30; Russia – 7.

Caliroa angustata Forsius, 1927. Russia: **FE** (AM). – China (CC, SE).

Caliroa annulipes (Klug, 1816) [Tenthredo] (*Selandria atra* Stephens, 1835; *Eriocampa myrtilli* Brischke, 1889). Host plant: Salicaceae, Betulaceae, Fagaceae, Cannabaceae, etc. Russia: **EP** (N, NW, C, E), **UR**, **ES** (IR, BR, YA), **FE** (KA, MG). – Europe (WE, EE, NE, SE), Turkey, China (Wei et al., 2006), Japan (Hon), N America.

Caliroa cerasi (Linnaeus, 1758) [Tenthredo] (*Tenthredo flavipes* Schrank, 1781; *T. limacina* Retzius, 1783; *T. adumbrata* Klug, 1816; *Monostegia antipoda* W.F. Kirby, 1881; *Caliroa laudata* MacGillivray, 1909; *C. lacinata* MacGillivray, 1909). Host plant: Rosaceae, Salicaceae, Fagaceae, etc. Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (NS), **FE** (AM, KH, PR). – Europe (WE, EE, NE, SE), N Africa, SW Asia, Uzbekistan, Kyrgyzstan, Kazakhstan, China (NE, CC, SW, SE); introduced into N America, S America, S Africa, Australia, New Zealand.

- Caliroa cinxia** (Klug, 1816) [Tenthredo]. Host plant: *Quercus* spp. (Fagaceae). Russia: **EP** (C, S, NC). – Europe (WE, EE, NE, SE).
- Caliroa oishii** (Takeuchi, 1933) [Eriocampoides]. Host plant: *Quercus* spp. (Fagaceae). Russia: **FE** (PR, SA). – China (NE), Korean Peninsula, Japan (Hon).
- Caliroa tremulae** Chevin, 1974. Host plant: *Populus tremula* (Salicaceae). Russia: **EP** (NW). – Europe (WE, EE, NE).
- Caliroa varipes** (Klug, 1816) [Tenthredo] (*Eriocampa crassicornis* Tischbein, 1846; *Eriocampoides variipes* Dalla Torre, 1894). Host plant: *Salix* spp. (Salicaceae), *Betula* spp. (Betulaceae), *Quercus robur* (Fagaceae). Russia: **EP** (NW, C, S, NC), **WS** (Zhelochovtsev, Zinovjev, 1996), **FE** (AM, PR). – Europe (WE, EE, NE), Turkey, Japan (Hok).
- CLADARDIS** Benson, 1952. Type species *Tenthredo elongatula* Klug, 1817. The larvae borer the branches of *Rosa* (Rosaceae); move from top to bottom along the branch. The genus is distributed in Palaearctic; one species in Oriental region. Number of species: World and Palaearctic – 4; Russia – 2.
- Cladardis elongatula** (Klug, 1817) [Tenthredo]. Host plant: *Rosa* spp. (Rosaceae). Russia: **EP** (NW, C, E), **FE** (PR). – Europe (WE, EE, NE, SE), Turkey, Mongolia.
- Cladardis hartigi** Liston, 1995 (*Tenthredo semicincta* Hartig, 1837). Host plant: *Rosa* spp. (Rosaceae). Russia: **EP** (NW). – Europe (WE, EE, NE).
- CLAREMONTIA** Rohwer, 1909 (*Pseudoblennocampa Malaise*, 1935). Type species *Claremontia typica* Rohwer, 1909. The larvae feed on herbaceous of Rosaceae. The genus is distributed in Holarctic; one species in Oriental region. Number of species: World – 16; Palaearctic – 9; Russia – 7.
- Claremontia alternipes** (Klug, 1816) [Tenthredo] (*Tenthredo maura* Schrank, 1802; *Blennocampa divisa* Konow, 1884; *B. intermedia* Kriechbaumer, 1885; *B. tergestina* Kriechbaumer, 1888; *B. finitima* Konow, 1900). Host plant: *Rubus* spp. (Rosaceae). Russia: **EP** (NW, C, S, NC, CR), **WS** (Lelej, Taeger, 2007), **ES** (IR), **FE** (MG). – Europe (WE, EE, NE, SE), Mongolia.
- Claremontia brevicornis** (Brischke, 1883) [Blennocampa] (*Blennocampa confusa* Konow, 1886; *B. mixta* Malaise, 1920). Host plant: *Fragaria* spp., *Potentilla* spp., *Sanguisorba* spp. (Rosaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (KM), **ES** (IR). – Europe (WE, EE, NE, SE), Mongolia.
- Claremontia puncticeps** (Konow, 1886) [Blennocampa]. Host plant: *Poterium sanguisorba* (Rosaceae). Russia: **EP** (C, E), **WS** (NS), **ES** (IR), **FE** (AM, PR). – Europe (WE, SE), Turkey, Kyrgyzstan, Kazakhstan.
- Claremontia springatei** Koch, 1988. Russia: **ES** (IR).
- Claremontia tenuicornis** (Klug, 1816) [Tenthredo] (*Phyllotoma conformis* Fallén, 1829; *Selandria tibialis* Stephens, 1835; *Blennocampa spiraeae* Brischke, 1883). The larvae feed on the *Spiraea* spp., *Filipendula* spp., *Alchemilla* spp. (Rosaceae). Russia: **EP** (N, NW, C, E, NC), **UR**, **ES** (IR), **FE** (PR, MG). – Europe (WE, EE, NE, SE), Armenia, Turkey, China (Wei et al., 2006).
- Claremontia uncta** (Klug, 1816) [Tenthredo] (*Selandria humeralis* Snellen van Vollenhoven, 1869; *Blennocampa lioparea* Konow, 1884). Russia: **EP** (Liston, 1995). – Europe (WE, EE, NE).
- Claremontia waldheimii** (Gimmerthal, 1847) [Tenthredo] (*Selandria subcana* Zaddach, 1859; *Blennocampa subserrata* Thomson, 1870; *B. subcana angularis* Konow, 1895). Host plant: *Geum* spp. (Rosaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (NS), **ES** (Zhelochovtsev, Zinovjev, 1996), **FE** (AM, PR). – Europe (WE, EE, NE, SE), Armenia, Turkey, Mongolia.
- ENDELOMYIA** Ashmead, 1898. Type species *Selandria rosae* T.W. Harris, 1841. The larvae skeletonize of leaves of trees and shrubs, pupate in the soil. The genus is distributed in Palaearctic and Oriental region; one wasv species introduced into N America. Number of species: World and Palaearctic – 3; Russia – 1.
- Endelomyia aethiops** (Gmelin, 1790) [Tenthredo] (*Tenthredo morio* Fabricius, 1781; *T. atratula* Dahlbom, 1835; *Selandria rosae* T.W. Harris, 1841; *Eriocampa livonensis* Gimmerthal, 1844; *E. nitida* Tischbein, 1846; *Tenthredo dolosa* Eversmann, 1847; *Emphytus radialis* Eversmann, 1847; *Selandria soror* Snellen van Vollenhoven, 1869; *Eriocampa atratula* Thomson, 1870; *E. testaceipes* Cameron, 1874; *E. caninae* Cameron, 1878; *Poecilosoma nigricolle* Cameron, 1882). Host plant: *Rosa* spp. (Rosaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (AL), **FE** (PR). – Europe (WE, EE, NE, SE), Georgia, Armenia, Kyrgyzstan; introduced into N America.
- ENDEMYOLIA** Wei, 1998. Type species *Endemyolia genata* Wei, 1998. The larvae skeletonize of leaves of trees and shrubs, pupate in the soil. The genus is distributed in East Asia and Oriental

region. Number of species: World – 6; Palaearctic – 1; Russia – 1.

Endemyolia negativa (Malaise, 1931) [Caliroa]. Russia: **FE** (PR). – China (Wei et al., 2006).

EUPAREOPHORA Enslin, 1914. Type species *Blennocampa exarmata* Thomson, 1871. The genus is distributed in West Palaearctic and Nearctic. Number of species: World – 2; Palaearctic – 1; Russia – 1.

Eupareophora exarmata (Thomson, 1871) [Blennocampa]. Host plant: Fraxinus spp. (Oleaceae). Russia: **EP** (NC). – Europe (WE, EE, NE), Georgia.

EURHADINOCERAEA Enslin, 1920 (*Pseudoblennocampa* Malaise, 1935). Type species *Rhadinoceraea roseni* Enslin, 1920. The larvae feed on the Ranunculaceae. The genus is distributed in Palaearctic and Oriental region. Number of species: World – 16; Palaearctic – 15; Russia – 4.

Eurhadinoceraea athalioides (Jakovlev, 1891) [Monophadnus] (*Rhadinoceraea singularis* Konow, 1897). Host plant: Clematis spp., Pulsatella spp. (Ranunculaceae). Russia: **EP** (NC), **FE** (PR). – Europe (WE), Armenia, China (NC).

Eurhadinoceraea roseni (Enslin, 1920) [Rhadinoceraea]. Host plant: Clematis spp. (Ranunculaceae). Russia: **FE** (KH). – China.

Eurhadinoceraea sanguinicollis (Mocsáry, 1880) [Blennocampa] (*Rhadinoceraea insignis* Konow, 1896). Host plant: Clematis spp. (Ranunculaceae). Russia: **ES** (IR). – Europe (EE).

Eurhadinoceraea ventralis (Panzer, 1799) [Tenthredo] (*Monophadnus rufoniger* Tischbein, 1852; *Blennocampa coronata* André, 1881). Host plant: Clematis recta, C. vitalba (Ranunculaceae). Russia: **EP** (C), **WS** (NS), **ES** (TU). – Europe (WE, SE), Kyrgyzstan, Kazakhstan.

EUTOMOSTETHUS Enslin, 1914 (*Atomostethus* Enslin, 1914; *Tomostethopsis* Sato, 1928; *Forsia* Malaise, 1931). Type species *Tenthredo luteiventris* Klug, 1816. The larvae feed on the Juncaceae, Poaceae, Cyperaceae. The genus is distributed in Palaearctic and Oriental region; two species were introduced into N America. Number of species: World – > 100; Palaearctic – > 60; Russia – 10 (+ 1 ssp.).

Eutomostethus apicalis (Matsumura, 1912) [Monophadnus] (*Tomostethus juncivorus* Rohwer, 1924). Host plant: Juncus spp. (Juncaceae). Russia: **FE** (SA, KU). – Japan (Hok, Hon, Shi).

Eutomostethus ephippium ephippium (Panzer, 1798) [Tenthredo] (*Tenthredo dubia* Gmelin, 1790; *Selandria inhabilis* Norton, 1861). Host plant: Poa spp. (Poaceae). Russia: **EP** (N, NW, C, E, S), **UR**, **FE** (PR). – Europe (WE, EE, NE, SE), N Africa, Caucasus, Turkey, India (NW); introduced into N America.

Eutomostethus ephippium vopiscus (Konow, 1899) [Tomostethus]. Host plant: Poa spp. (Poaceae). Russia: **EP** (NC, CR). – Europe (EE), Georgia, Armenia.

Eutomostethus flavipes (Matsumura, 1911) [Tomostethus]. Russia: **FE** (SA).

Eutomostethus gagathinus (Klug, 1816) [Tenthredo] (*E. gagathinus meridionalis* Benson, 1954). Host plant: Juncus spp. (Juncaceae), Carex spp. (Cyperaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (OM, NS, AL), **ES** (IR). – Europe (WE, EE, NE, SE), N Africa, SW Asia, Kazakhstan, Mongolia.

Eutomostethus luteiventris (Klug, 1816) [Tenthredo] (*Tenthredo fuscipennis* Serville, 1823; *T. fuscipennis* Lepeletier, 1823; *Phyllotoma fuscipennis* Fallén, 1829). Host plant: Juncus spp. (Juncaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**. – Europe (WE, EE, NE, SE), Caucasus; introduced into N America.

Eutomostethus metallicus (Sato, 1928) [Tomostethopsis]. Russia: **FE** (PR). – Korean Peninsula, China (NE, SE).

Eutomostethus punctatus (Konow, 1887) [Tomostethus] (*Tomostethus brachycera* Cameron, 1893). Host plant: Carex spp. (Cyperaceae). Russia: **EP** (E), **UR**, **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (TU, IR), **FE** (PR). – Europe (WE, EE, NE, SE), Mongolia, China (NC).

Eutomostethus teberdicus Muche, 1969. Russia: **EP** (NC).

Eutomostethus tomostethi (Malaise, 1931) [Forsia]. Russia: **FE** (PR, SA, KA).

Eutomostethus tricolor (Malaise, 1934) [Tomostethus] (*E. hyalinus* Takeuchi, 1936). Russia: **FE** (PR, SA). – China (SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

FENELLA Westwood, 1839 (*Melinia* Costa, 1859; *Paraphyllotoma* Forsius, 1930). Type species *Fenella nigrita* Westwood, 1839. The larvae in mines on leaves of herbaceous plants. The genus is distributed in Palaearctic; one species was introduced into N America. Number of species: World and Palaearctic – 11; Russia – 3.

Fenella minuta (Dahlbom, 1835) [Phyllotoma] (*F. voighti* Hering, 1932). Host plant: Geranium

- spp. (Geraniaceae). Russia: **EP** (NC), **ES** (IR), **FE** (AM). – Europe (WE, EE, NE, SE), Kyrgyzstan, Kazakhstan, Mongolia.
- Fenella monilicornis** (Dahlbom, 1835) [Phyllotoma] (*F. famosa* Benson, 1950). Host plant: Geranium spp. (Geraniaceae). Russia: **WS** (AL). – Europe (WE, EE, NE), Mongolia, China (NW).
- Fenella nigrita** Westwood, 1839 (*Melinia minutissima* Costa, 1859; *Phyllotoma tormentillae* Healy, 1868; *Fenella agrimoniae* Brischke, 1888). Host plant: Agrimonia spp., Potentilla spp. (Rosaceae). Russia: **EP** (NW), **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (YA). – Europe (WE, EE, NE, SE), Kyrgyzstan, Kazakhstan, Mongolia, Korean Peninsula, Japan (Hon); introduced into N America.
- FENUSA** Leach, 1817 (*Kaliosysphinga* Tischbein, 1846; *Aphadnurus* Costa, 1859; *Phaenusa* Cameron, 1875; *Phoenusa* André, 1880; *Caliosysphinga* Konow, 1905; *Lithoryssus* Brues, 1906; *Kaliofenusa* Viereck, 1910). Type species *Tenthredo pumila* Klug, 1818. The larvae in mines on leaves of trees. The genus is distributed in Holarctic and Oriental region; one species was introduced into the Afro-tropical region. Number of species: World – 10; Palaearctic – 8; Russia – 6 from 2 subgenera.
- Fenusa (Fenusa) dohrnii** (Tischbein, 1846) [Kaliosysphinga] (*F. curtus* Norton, 1862; *Phaenusa melanopoda* Cameron, 1876; *Fenella westwoodi* Cameron, 1882). Host plant: Alnus spp., Betula spp. (Betulaceae). Russia: **EP** (N, NW, C, E, S), **UR**, **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (TU, IR, BR), **FE** (KU). – Europe (WE, EE, NE, SE), Turkey, Kazakhstan, Japan (Hok, Hon, Shi); introduced into N America and Tropical Africa.
- Fenusa (Fenusa) pumila** Leach, 1817 (*Tenthredo pumila* Klug, 1818; *Aphadnurus tantillus* Costa, 1859; *Fenusa fuliginosa* Healy, 1869; *F. minima* Brischke, 1883). Host plant: Betula spp., Alnus spp. (Betulaceae), Ulmus spp. (Ulmaceae). Russia: **EP** (N, NW, C, E, NC), **WS** (Lelej, Taeger, 2007), **ES** (IR, YA), **FE** (KH, SA, KA). – Europe (WE, EE, NE, SE), Turkey, Kyrgyzstan, Kazakhstan, Mongolia, China (SW), Japan (Hok, Hon); introduced into N America.
- Fenusa (Kaliofenusa) ulmi** Sundevall, 1847 (*F. intermedia* Thomson, 1871; *Messa alsia* MacGillivray, 1923). Host plant: Ulmus spp. (Ulmaceae). Russia: **EP** (C, E, S, NC), **ES** (IR, BR), **FE** (KH, PR). – Europe (WE, EE, NE, SE), Georgia, Armenia, Turkey, Japan (Smith, 1981); introduced into N America.
- Fenusa (Kaliofenusa) zinojevi** (Liston, 1994) [Kaliofenusa]. Russia: **FE** (PR).
- Fenusa absens** D.R. Smith et Altenhofer, 2011. Host plant: Ulmus pumila (Ulmaceae). Russia: **WS** (NS).
- Fenusa ewaldi** D.R. Smith, 2011. Host plant: Rosa spp. (Rosaceae). Russia: **WS** (NS).
- FENUSELLA** Enslin, 1912 (*Melanobates* MacGillivray, 1916). Type species *Fenusa wuestneii* Konow, 1894. The larvae in mines on leaves of Betulaceae, Salicaceae, etc. The genus is distributed in Holarctic. Number of species: World – 11; Palaearctic – 8; Russia – 4.
- Fesunella glaucopis** (Konow, 1907) [Phoenusa] (*Phoenusa ticinensis* Magretti, 1886). Host plant: Populus spp. (Salicaceae). Russia: **EP** (C, E, S), **UR**, **ES** (IR). – Europe (WE, EE, NE, SE), Kazakhstan.
- Fesunella hortulana** (Klug, 1818) [Tenthredo] (*Phoenusa dodderleini* De-Stefani, 1883; *Fenusella soenderupi* Hering, 1935). Host plant: Populus spp. (Salicaceae). Russia: **EP** (NC). – Europe (WE, EE, SE), N Africa, Azerbaijan, Turkey, Central Asia; introduced into N America.
- Fenusella nana** (Klug, 1816) [Tenthredo] (*Phyllotoma mellita* Newman, 1870; *Fenusa quercus* Cameron, 1885; *Scolioneura laeta* Enslin, 1918). Host plant: Betula spp. (Betulaceae). Russia: **EP** (NW, C, E), **UR**, **WS** (NS), **ES** (IR, BR), **FE** (AM, PR). – Europe (WE, EE, NE), Kyrgyzstan, Kazakhstan, Mongolia, Japan (Hok); introduced into N America.
- Fenusella wuestneii** (Konow, 1894) [Fenusa]. Host plant: Salix spp. (Salicaceae). Russia: **ES** (IR, BR), **FE** (KH). – Europe (WE, EE, NE), Kyrgyzstan, Kazakhstan, Japan (Hon); introduced into N America.
- HALIDAMIA** Benson, 1939. Type species *Hylotoma affinis* Fallén, 1807. The genus is distributed in West Palaearctic, introduced into the Nearctic. Number of species: Russia – 1.
- Halidamia affinis** (Fallén, 1807) [Hylotoma] (*Tenthredo hyalina* Klug, 1816; *Blennocampa assimilis* Thomson, 1870; *B. formosella* Costa, 1882; *B. affinis pleuritica* Enslin, 1914). Host plant: Galium spp. (Rubiaceae). Russia: **EP** (NW, C, E, S, NC, CR), **UR**. – Europe (WE, EE, NE, SE), Georgia, Armenia, Turkey; introduced into N America.

- HETERARTHUS** Stephens, 1835 (*Phyllotoma* Fallén, 1829; *Decatria* Stephens, 1835; *Druida* Newman, 1838; *Phlebotrophia* MacGillivray, 1909). Type species *Tenthredo ochropoda* Klug, 1818. The larvae in mines on leaves of *Acer* (Sapindaceae), *Betulaceae*, *Salicaceae*. The genus is distributed in Palaearctic; one species in Oriental region; one species introduced to North America. Number of species: World – 22; Palaearctic – 21; Russia – 11.
- Heterarthrus aceris** (Kaltenbach, 1856) [*Phyllotoma*] (*Phyllotoma fumipennis* Cameron, 1888). Host plant: *Acer platanoides* (Sapindaceae). Russia: **EP** (C, S). – Europe (WE, EE, NE, SE), Armenia.
- Heterarthrus aceroides** (Malaise, 1931) [*Phyllotoma*]. Russia: **FE** (KA).
- Heterarthrus aihinoensis** Haris, 2006. Russia: **FE** (KU).
- Heterarthrus alnivorus** Togashi, 1992. Host plant: *Alnus* spp. (*Betulaceae*). Russia: **FE** (PR). – Japan (Hon).
- Heterarthrus fasciatus** (Malaise, 1931) [*Phyllotoma*]. Host plant: *Populus* spp. (*Salicaceae*). Russia: **ES** (BR), **FE** (KA).
- Heterarthrus flavicollis** (Gussakovskij, 1947) [*Phyllotoma*]. Host plant: *Acer platanoides* (Sapindaceae). Russia: **EP** (NC). – Europe (WE, EE, NE), Georgia.
- Heterarthrus microcephalus** (Klug, 1818) [*Tenthredo*]. Host plant: *Salix* spp. (*Salicaceae*). Russia: **EP** (NW, C, NC), **WS** (NS), **ES** (IR), **FE** (KH). – Europe (WE, EE, NE, SE), Armenia, Kyrgyzstan, Kazakhstan.
- Heterarthrus nemoratus** (Fallén, 1808) [*Hylotoma*] (*Fenusa parviceps* Newman, 1837; *Phyllotoma tenella* Zaddach, 1859; *Phlebotrophia mathesoni* MacGillivray, 1909). Host plant: *Betula* spp., *Alnus* spp. (*Betulaceae*). Russia: **EP** (N, NW, C), **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (IR). – Europe (WE, EE, NE), Armenia; introduced into N America.
- Heterarthrus ochropoda** (Klug, 1818) [*Tenthredo*] (*Decatria fuscipennis* Stephens, 1835; *Phyllotoma pinguis* Snellen van Vollenhoven, 1869; *Ph. nigrescens* Gradl, 1881; *Ph. costae* Costa, 1894; *Ph. maxima* Strobl, 1896). Host plant: *Populus* spp. (*Salicaceae*), *Betula* spp. (*Betulaceae*). Russia: **EP** (NW, C, S, NC, CR), **UR**, **WS** (NS), **ES** (IR, BR), **FE** (AM, KH). – Europe (WE, EE, NE), Turkey, Kyrgyzstan.
- Heterarthrus vagans** (Fallén, 1808) [*Hylotoma*] (*Tenthredo melanopyga* Klug, 1818; *T. amaura* Klug, 1818; *Phyllotoma leucopoda* Dahlbom, 1835; *Ph. kamtchatica* Malaise, 1931; *Heterarthrus vagans anatolicus* Mucic, 1983). Host plant: *Alnus* spp., *Betula* spp. (*Betulaceae*). Russia: **EP** (N, NW, C, E, NC, CR), **UR**, **ES** (IR), **FE** (PR, KU, KA). – Europe (WE, EE, NE, SE), Azerbaijan, SW Asia, China (NE); introduced into N America.
- Heterarthrus wuestneii** (Konow, 1905) [*Phyllotoma*] (*Phyllotoma aceris* McLachlan, 1867; *Heterarthrus tauricus* Ermolenko, 1984; *H. healyi* Altenhofer et Zombori, 1987). Host plant: *Acer* spp. (Sapindaceae), *Alnus* spp. (*Betulaceae*). Russia: **EP** (CR). – Europe (WE, EE), N America.
- HINATARA** Benson, 1936. Type species *Fenusa excisa* Konow, 1885. The larvae in mines on leaves of trees. The genus is distributed in Palaearctic. Number of species: World and Palaearctic – 4; Russia – 3.
- Hinatara hakusana** Togashi, 2002. Russia: **FE** (PR). – Japan (Hon).
- Hinatara nigripes** (Konow, 1907) [*Fenusa*]. Host plant: *Acer campestre* (Sapindaceae). Russia: **EP** (S). – Europe (WE, EE, SE).
- Hinatara recta** (Thomson, 1871) [*Blennocampa*]. Host plant: *Acer platanoides* (Sapindaceae). Russia: **EP** (NW, C, S). – Europe (WE, EE, NE), Armenia.
- HOPLOCAMPOIDES** Enslin, 1914. Type species *Selandria xylostei* Giraud, 1863. The genus is distributed in Palaearctic. Number of species: World and Palaearctic – 2; Russia – 1.
- Hoplocampoides xylostei** (Vallot, 1836) [*Tenthredo*] (*Selandria xylostei* Giraud, 1863). Host plant: *Lonicera* spp. (*Caprifoliaceae*). Russia: **EP** (N, NW, C), **ES** (KR). – Europe (WE, EE, NE, SE).
- LAGONIS** Ross, 1937. Type species *Selandria nevadensis* Cresson, 1880. The genus is distributed in East Palaearctic and Nearctic. Number of species: World – 3; Palaearctic – 2; Russia – 1.
- Lagonis opacicollis** (Malaise, 1931) [*Rhadinoceraea*]. Host plant: *Sambucus sieboldiana* (*Adoxaceae*). Russia: **FE** (KU). – Japan (Hok, Hon, Shi).
- MASAARIA** Takeuchi, 1950. Type species *Masaakia longivaginata* Takeuchi, 1950. The genus is distributed in East Asia. Number of species: World and Palaearctic – 5; Russia – 2.
- Masaakia kichizoi** Haris, 2006. Russia: **FE** (KU).

- Masaakia longivaginata** Takeuchi, 1950. Russia: **FE** (KU). – Japan (Hon).
- METALLUS** Forbes, 1885 (*Entodecta* Konow, 1886; *Polybates* MacGillivray, 1909). Type species *Metallus rubi* Forbes, 1885. The larvae in mines on leaves of Rosaceae. The genus is distributed in Holarctic and Oriental region. Number of species: World – 21; Palaearctic – 7; Russia – 5.
- Metallus adamantis** Lee et Ryu, 1996. Russia: **FE** (PR). – Korean Peninsula.
- Metallus albipes** (Cameron, 1875) [Phaenusa] (*Entodecta tenuicornis* Hellén, 1935). Host plant: *Rubus* spp. (Rosaceae). Russia: **EP** (C), **FE** (SA, KA, MG). – Europe (WE, EE, NE), Japan (Hon).
- Metallus beckeri** (Konow, 1904) [Entodecta]. Russia: **EP** (NC). – Georgia, Turkey.
- Metallus lanceolatus** (Thomson, 1870) [Blennocampa] (*Fenusa gei* Brischke, 1883; *Entodecta decolor* Konow, 1886; *Metallus bensoni* D.R. Smith, 1971). Host plant: *Geum* spp. (Rosaceae). Russia: **EP** (NW, C, NC), **UR**, **FE** (AM). – Europe (WE, EE, NE), N America.
- Metallus pumilus** (Klug, 1816) [Tenthredo] (*Emphytus pumilio* Hartig, 1837; *Fenusa rubi* Boie, 1848). Host plant: *Rubus* spp. (Rosaceae). Russia: **EP** (NW, C, NC), **ES** (IR, BR), **FE** (KH, PR). – Europe (WE, EE, NE, SE), Japan (Hon).
- MONARDIS** Enslin, 1914. Type species *Tenthredo plana* Klug, 1817. The genus is distributed in Holarctic and Oriental region. Number of species: World – 8; Palaearctic – 4; Russia – 1.
- Monardis plana** (Klug, 1817) [Tenthredo] (*Tenthredo sericans* Hartig, 1837; *Blennocampa rosarum* Brischke, 1883). Host plant: *Rosa* spp. (Rosaceae); larvae in the buds and shoots. Russia: **EP** (NW, C, E, S, NC), **UR**, **WS** (KM). – Europe (WE, EE, NE, SE), Caucasus.
- MONOPHADNOIDES** Ashmead, 1898 (*Pseudomonophadnus* Malaise, 1935). Type species *Selandria rubi* T.W. Harris, 1845. The genus is distributed in Holarctic and Oriental region. Number of species: World and Palaearctic – 9; Russia – 4.
- Monophadnoides klausnitzeri** (Muche, 1973) [Monophadnus]. Russia: **EP** (NC).
- Monophadnoides rubi** (T.W. Harris, 1845) [Selandria] (*Tenthredo geniculata* Hartig, 1837; *T. longicornis* Hartig, 1837; *Selandria nigella* Cresson, 1880; *Monophadnus hudsonicus* W.F. Kirby, 1882; *M. atricornus* MacGillivray, 1893; *M. atricornis* Konow, 1905; *Blennocampa gillettei* Weldon, 1907; *Monophadnoides consobrinus* MacGillivray, 1908; *M. costalis* MacGillivray, 1908; *M. coracinus* MacGillivray, 1908; *M. collaris* MacGillivray, 1908; *M. conspicuus* MacGillivray, 1908; *M. conspersus* MacGillivray, 1908; *M. crassus* MacGillivray, 1908; *M. concessus* MacGillivray, 1908; *Aphanisus nigrinus* MacGillivray, 1908; *Aphanisus lenis* Rohwer, 1909; *Monophadnoides costatus* MacGillivray, 1916; *M. kincaidi* MacGillivray, 1923; *M. shawi* MacGillivray, 1923; *M. consonus* MacGillivray, 1923; *M. constitutus* MacGillivray, 1923; *M. corytus* MacGillivray, 1923; *M. curiosus* MacGillivray, 1923; *Paracharactus obversus* MacGillivray, 1923). Host plant: *Geum* spp., *Filipendula* spp., *Rubus* spp. (Rosaceae). Russia: **EP** (NW, C, E), **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (KR, BR). – Europe (WE, EE, NE, SE), Mongolia, N America; introduced into S America.
- Monophadnoides ruficurris** (Brullé, 1832) [Selandria] (*Blennocampa flavicollis* Jacobs, 1884; *Monophadnus dispar* Konow, 1886; *M. ruficurris plagiatus* Enslin, 1914). Host plant: *Rubus idaeus* (Rosaceae). Russia: **EP** (NC). – Europe (WE, EE, SE).
- Monophadnoides tuberculatus** Smith et Wei, 2015. Host plant: Rosaceae. Russia: **FE** (PR). – China (NE), Korean Peninsula.
- MONOPHADNUS** Hartig, 1837 (*Corporaalinus* Forsius, 1925; *Doderia* Malaise, 1935). Type species *Tenthredo albipes* Gmelin, 1790. The larvae without branched spines; feed on Ranunculaceae. The genus is distributed in Holarctic, Oriental and Neotropical regions. Number of species: World – about 25; Palaearctic – about 10; Russia – 3.
- Monophadnus monticola** (Hartig, 1837) [Tenthredo] (*Selandria feriata* Zaddach, 1859; *Monophadnus fuliginipennis* Costa, 1859; *M. fulgidipennis* Dalla Torre, 1894). Russia: **EP** (NW, C, CR). – Europe (WE, EE, NE, SE).
- Monophadnus pallescens** (Gmelin, 1790) [Tenthredo] (*Tenthredo albipes* Gmelin, 1790; *Selandria tiliae* Norton, 1861; *Blennocampa emarginata* Thomson, 1871; *Hoplocampa calceolata* Costa, 1881; *Monophadnus bipunctatus* MacGillivray, 1908; *M. furvus* Benson, 1930). Host plant: *Ranunculus* spp., *Anemone* spp. (Ranunculaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (KM, AL), **ES** (IR), **FE** (PR). – Europe (WE, EE, NE, SE), Caucasus,

Turkey, Kyrgyzstan, Kazakhstan; introduced into N America.

Monophadnus spinolae (Klug, 1816) [Tenthredo] (*Hylotoma ventralis* Spinola, 1806; *Tenthredo croceiventris* Klug, 1816; *T. bipartita* Lepeletier, 1823; *T. bipartita* Serville, 1823; *Monophadnus pleuriticus* Costa, 1859; *M. gastricus* Costa, 1859; *Blennocampa scutellaris* André, 1881; *Monophadnus spinolae pectoralis* Konow, 1886; *Periclista nigricarpa* Costa, 1894; *Monophadnus spinolae ruberrima* Enslin, 1914; *M. spinolae rufipectus* Enslin, 1914). Host plant: Clematis spp. (Ranunculaceae). Russia: **EP** (CR). – Europe (WE, EE, SE), Georgia; introduced into New Zealand.

OBTUSIA Malaise, 1964. Type species *Obtusia ussuriensis* Malaise, 1964. The genus is distributed in East Palaearctic. Number of species: one East Asian species.

Obtusia ussuriensis Malaise, 1964. Russia: **FE** (PR).

OKUTANIUS D.R. Smith, 1981. Type species *Okutanius lobatus* D.R. Smith, 1981. The genus is distributed in East Palaearctic. Number of species: World – 2; Palaearctic – 2; Russia – 1.

Okutanius lobatus D.R. Smith, 1981. Russia: **FE** (PR). – Korean Peninsula.

PARACHARACTUS MacGillivray, 1908 (*Dicrostema* Benson, 1952). Type species *Paracharactus obscuratus* MacGillivray, 1908. The genus is distributed in Holarctic. Number of species: World – 7; Palaearctic – 4; Russia – 2.

Paracharactus gracilicornis (Zaddach, 1859) [Selandria]. Host plant: Adoxa spp. (Adoxaceae). Russia: **EP** (NW, C, E), **UR**, **WS** (AL). – Europe (WE, EE, NE, SE), Kyrgyzstan, Kazakhstan.

Paracharactus japonicus (Malaise, 1931) [Neotomostethus]. Russia: **FE** (SA, KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

PARAMASAACKIA Ermolenko, 1971. Type species *Paramasaackia ajnu* Ermolenko, 1971. The genus is distributed in East Asia. Number of species: one species.

Paramasaackia ajnu Ermolenko, 1971. Russia: **FE** (SA). – China (SE).

PAREOPHORA Konow, 1886. Type species *Tenthredo luridiventris* Klug, 1816. The genus is

distributed in Palaearctic. Number of species: World and Palaearctic – 4; Russia – 1.

Pareophora pruni (Linnaeus, 1758) [Tenthredo] (*Tenthredo luridiventris* Klug, 1816; *T. nigripes* Klug, 1816; *Blennocampa bicolor* Tischbein, 1852; *Monophadnus nigripes maculiventris* Costa, 1894). Host plant: Prunus spinosa, P. tenella (Rosaceae). Russia: **EP** (S, NC, CR). – Europe (WE, EE, NE, SE).

PARNA Benson, 1936. Type species *Tenthredo tenella* Klug, 1816. The larvae in mines on leaves of trees. The genus is distributed in Palaearctic. Number of species: World and Palaearctic – 7; Russia – 2.

Parna apicalis (Brischke, 1888) [Blennocampa] (*P. reperi* Liston, 1993). Host plant: Tilia spp. (Tiliaceae). Russia: **EP** (NW). – Europe (WE, EE, NE).

Parna tenella (Klug, 1816) [Tenthredo] (*Blennocampa tiliae* Kaltenbach, 1874). Host plant: Tilia spp. (Tiliaceae). Russia: **EP** (C, E, NC), **FE** (PR). – Europe (WE, EE, NE), Armenia, Japan (Hon).

PERICLISTA Konow, 1886 (*Mogerus* MacGillivray, 1895; *Isodyctium* Ashmead, 1898; *Aphanisus* MacGillivray, 1908; *Neocharactus* MacGillivray, 1908; *Apericlista* Enslin, 1914; *Neoclista* Malaise, 1964). Type species *Tenthredo lineolata* Klug, 1816. The genus is distributed in Holarctic, Oriental and Neotropical regions. Number of species: World – about 55; Palaearctic – about 30; Russia – 4 from 2 subgenera.

Periclista (Periclista) albida (Klug, 1816) [Tenthredo] (*Tenthredo melanocephala* Fabricius, 1798; *T. testacea* Serville, 1823; *T. testacea* Lepeletier, 1823; *Selandria fulvicollis* Stephens, 1835; *S. versicolor* Newman, 1837; *Monophadnus inquilinus* Förster, 1844; *Periclista albida orbitalis* Enslin, 1914). Host plant: Quercus robur, Q. mongolica (Fagaceae). Russia: **EP** (S, NC, CR), **FE** (KH). – Europe (WE, EE, NE, SE).

Periclista (Periclista) lineolata (Klug, 1816) [Tenthredo] (*Monophadnus tenuicingulatus* Costa, 1859). Host plant: Quercus robur (Fagaceae). Russia: **EP** (NW, NC). – Europe (WE, EE, NE, SE).

Periclista (Periclista) pubescens (Zaddach, 1859) [Selandria] (*Periclista pubescens analis* Konow, 1886). Host plant: Quercus spp. (Fagaceae). Russia: **EP** (NW, S, CR). – Europe (WE, EE, SE).

Periclista (Neocharactus) albipennis (Zaddach, 1859) [Selandria]. Russia: **EP** (NW). – Europe (WE, EE).

- PHYMATOCERA** Dahlbom, 1835 (*Pectinia* Brullé, 1846; *Phymatoceros* Konow, 1905; *Hypargyricus* MacGillivray, 1908; *Melanoselandria* MacGillivray, 1908). Type species *Tenthredo aterrима* Klug, 1816. The larvae feed on the monocotyledonous plants (Liliales). The genus is distributed in Holarctic and Oriental region. Number of species: World – 13; Palaeartic – 6; Russia – 2.
- Phymatocera aterrима** (Klug, 1816) [Tenthredo] (*Tenthredo trichocera* Serville, 1823; *T. trichocera* Lapeletier, 1823; *Selandria robinsoni* Curtis, 1850). Host plant: Polygonatum spp. (Asparagaceae), Convallaria spp., Smilacina spp. (Convallariaceae). Russia: **EP** (NW, C, E, S, NC, CR), **WS** (NS). – Europe (WE, EE, NE, SE), Armenia, Kazakhstan, China (NW), Korean Peninsula.
- Phymatocera nipponica** Togashi, 1958. Host plant: Liliaceae. Russia: **FE** (SA, KU). – Korean Peninsula, Japan (Hon, Shi, Kyu).
- PHYMATOCERIOLA** Sato, 1928. Type species *Phymatoceriola suigenensis* Sato, 1928. The genus is distributed in East Asia. Number of species: World and Palaeartic – 4; Russia – 2.
- Phymatoceriola suigenensis** Sato, 1928. Russia: **ES** (IR), **FE** (KH). – Korean Peninsula.
- Phymatoceriola ussuriensis** Malaise, 1964. Russia: **FE** (PR).
- PHYMATOCEROPSIS** Rohwer, 1916. Type species *Phymatoceropsis fulvocincta* Rohwer, 1916. The genus is distributed in East Asia and Oriental region. Number of species: World – 9; Palaeartic – 5; Russia – 2.
- Phymatoceropsis melanogaster** He, Wei et Zhang, 2005. Russia: **FE** (PR). – China (CC, SE).
- Phymatoceropsis peregrinator** (Malaise, 1931) [Neotomostethus]. Russia: **FE** (KA). – Japan (Hok, Hon).
- PROFENUSA** MacGillivray, 1914 (*Gunnea* Malaise, 1964). Type species *Profenusa collaris* MacGillivray, 1914. The larvae in mines on leaves of trees. The genus is distributed in Holarctic and Oriental region. Number of species: World – 14; Palaeartic – 8; Russia – 2.
- Profenusa pygmaea** (Klug, 1816) [Tenthredo]. Host plant: Quercus spp., Castanea sativa (Fagaceae). Russia: **EP** (NW, C, S, NC). – Europe (WE, EE, NE, SE), Turkey.
- Profenusa thomsoni** (Konow, 1886) [Fenusa]. Host plant: Betula spp. (Betulaceae). Russia: **EP** (NW, C, NC), **ES** (BR), **FE** (AM, KH). – Europe (WE, EE, NE), Armenia, Turkey, Kyrgyzstan, Kazakhstan, Japan (Hok, Hon); introduced into N America.
- RHADINOCERAEA** Konow, 1886 (*Veratra* D.R. Smith, 1969). Type species *Tenthredo micans* Klug, 1816. The larvae feed on the Liliaceae, Iridaceae, Adoxaceae. The genus is distributed in Holarctic and Oriental region. Number of species: World – about 20; Palaeartic – about 10; Russia – 8 from 2 subgenera.
- Rhadinoceraea (Rhadinoceraea) bensoni** Beneš, 1961. Host plant: Liliaceae. Russia: **EP** (Zhelochovtsev, Zinovjev, 1996), **ES** (IR). – Europe (WE, EE, SE).
- Rhadinoceraea (Rhadinoceraea) caucasica** Dognar-Zapolskij, 1930. Russia: **EP** (NC).
- Rhadinoceraea (Rhadinoceraea) micans** (Klug, 1816) [Tenthredo] (*Monophadnus iridis* Kaltenbach, 1862). Host plant: Iris spp. (Iridaceae). Russia: **EP** (NW, C, E), **UR**, **WS** (AL). – Europe (WE, EE, NE, SE).
- Rhadinoceraea (Rhadinoceraea) reitteri** Konow, 1890. Host plant: Iris spp. (Iridaceae). Russia: **EP** (C). – Europe (WE, EE, SE).
- Rhadinoceraea (Rhadinoceraea) sachalinensis** Ermolenko, 1971. Russia: **FE** (SA).
- Rhadinoceraea (Veratra) nodicornis** Konow, 1886 (*Rh. heydeni* Konow, 1887). Host plant: Veratrum spp. (Liliaceae). Russia: **EP** (C, S), **UR**, **WS** (KM, AL), **ES** (KS, KR, IR, BR). – Europe (WE, EE, SE), China (NW).
- Rhadinoceraea (Veratra) subarctica** Hellén, 1948. Russia: **EP** (N). – Europe (NE).
- Rhadinoceraea sibiricola** Zhelochovtsev, 1939. Russia: **ES** (KR).
- SCOLIONEURA** Konow, 1890. Type species *Tenthredo betuleti* Klug, 1816. The genus is distributed in Holarctic, mainly in West Palaeartic; one species was introduced into N America. Number of species: World and Palaeartic – 4; Russia – 1.
- Scolioneura betuleti** (Klug, 1816) [Tenthredo] (*Tenthredo nigricans* Klug, 1818; *Fenusa betulae* Zaddach, 1859). Host plant: Betula spp. (Betulaceae). Russia: **EP** (NW, C, E), **UR**, **WS** (AL), **ES** (TU, IR, BR). – Europe (WE, EE, NE, SE), Armenia,

Kyrgyzstan, Kazakhstan, Mongolia; introduced into N America.

SENOCLIDEA Rohwer, 1912. Type species *Senoclidea amala* Rohwer, 1912. The genus is distributed in East Palaearctic, Oriental and Australian regions. Number of species: World – 17; Palaearctic – 6; Russia – 1.

Senoclidea koreana (Konow, 1898) [Monophadnus]. Russia: **FE** (PR). – Korean Peninsula, China (Wei et al., 2006).

STETHOMOSTUS Benson, 1939. Type species *Tenthredo fuliginosa* Schrank, 1781. The larvae feed on Ranunculus (Ranunculaceae). The genus is distributed in Palaearctic and Oriental region; one species was introduced into North America. Number of species: World – 6; Palaearctic – 4; Russia – 3.

Stethomostus flavicollaris (Sato, 1928) [Atomostethus]. Host plant: Ranunculus spp. (Ranunculaceae). Russia: **ES** (BR), **FE** (AM, PR). – China (NE), Korean Peninsula.

Stethomostus fuliginosus (Schrank, 1781) [Tenthredo] (*Tenthredo fusca* Serville, 1823; *T. fusca* Lapeletier, 1823; *Selandria geniculata* Stephens, 1835; *Blennocampa croceipes* Costa, 1864; *Monophadnus fukaii* Rohwer, 1910). Host plant: Ranunculus spp. (Ranunculaceae), Kerria spp. (Rosaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (KM). – Europe (WE, EE, NE, SE), Turkey, Kazakhstan, Japan (Hon, Shi); introduced into N America.

Stethomostus funereus (Klug, 1816) [Tenthredo]. Host plant: Ranunculus spp. (Ranunculaceae). Russia: **EP** (N, NW, C, E), **UR**, **ES** (BR). – Europe (WE, EE, NE), Turkey, Kazakhstan.

TOMOSTETHUS Konow, 1886. Type species *Tenthredo nigrita* Fabricius, 1804. The larvae feed on the woody plants. The genus is distributed in Holarctic, Oriental and Neotropical regions. Number of species: World – 8; Palaearctic – 6; Russia – 3.

Tomostethus juglans Takeuchi, 1929. Host plant: Juglans spp. (Juglandaceae). Russia: **FE** (PR). – Korean Peninsula.

Tomostethus nigritus (Fabricius, 1804) [Tenthredo] (*Tenthredo nigerrima* Klug, 1816; *T. brevicornis* Klug, 1816; *T. fraxini* Serville, 1823; *T. fraxini* Lapeletier, 1823; *Monophadnus latus* Costa, 1894). Host

plant: Fraxinus spp. (Oleaceae). Russia: **EP** (NW, C, S, NC), **ES** (BR), **FE** (PR, SA). – Europe (WE, EE, NE, SE), N Africa, Caucasus, Turkey, China (NE, CC), Korean Peninsula, Japan (Hon).

Tomostethus veles Konow, 1900. Russia: **ES** (IR).

ZAPHYMATOCERA Sato, 1928. Type species *Zaphymatocera typica* Sato, 1928. The genus is distributed in East Asia. Number of species: World and Palaearctic – 2; Russia – 1.

Zaphymatocera typica Sato, 1928. Russia: **FE** (KU, KA). – Korean Peninsula.

Subfamily NEMATINAE

ANOPLONYX Marlatt, 1896 (*Marlattia* Ashmead, 1898). Type species *Nematus lariciphagus* Zaddach, 1883. The larvae feed on Larix (Pinaceae). The genus is distributed in Holarctic. Number of species: World – 12; Palaearctic – 8; Russia – 7.

Anoplonyx apicalis (Brischke, 1883) [Leptopus] (*Leptopus curinthicus* Zaddach, 1883; *Camponiscus braunsii* Konow, 1884; *C. tscheiki* Rogenhofer et Kohl, 1885; *C. carinthiacus* Dalla Torre, 1894). Host plant: Larix spp. (Pinaceae). Russia: **EP** (NW), **UR**, **ES** (KR, IR, BR, YA, ZB), **FE** (AM). – Europe (WE, EE, NE), Mongolia.

Anoplonyx bilineatus Verzhutskii, 1981. Host plant: Larix spp. (Pinaceae). Russia: **ES** (TU, IR, YA, ZB), **FE** (MG). – Mongolia.

Anoplonyx destructor Benson, 1952. Host plant: Larix spp. (Pinaceae). Russia: **EP** (NW). – Europe (WE, EE, NE), Korean Peninsula, Japan (Hon).

Anoplonyx lariciphagus (Zaddach, 1883) [Nematus] (*Camponiscus luridus* Konow, 1884; *Platycampus pectoralis obscurus* Enslin, 1915). Host plant: Larix spp. (Pinaceae). Russia: **ES** (KR, IR, BR, ZB). – Europe (WE, EE), Korean Peninsula.

Anoplonyx orientis D.R. Smith, 1988. Host plant: Larix leptolepis, L. kurilensis (Pinaceae). Russia: **FE** (KU). – Japan (Hok, Hon).

Anoplonyx ovatus (Zaddach, 1883) [Leptopus]. Host plant: Larix spp. (Pinaceae). Russia: **EP** (NW), **ES** (YA, ZB). – Europe (WE, EE, NE).

Anoplonyx versicolor Vikberg, 1975 (*A. ornatus* Verzhutskii, 1981). Host plant: Larix spp. (Pinaceae). Russia: **EP** (NW), **ES** (IR, BR, YA), **FE** (AM). – Europe (NE), Mongolia, Korean Peninsula.

CLADIUS Illiger, 1807 (*Priophorus* Dahlbom, 1835; *Trichiocampus* Hartig, 1837; *Stevenia* Brullé, 1846;

Eudryas Gistel, 1848; *Prionophorus* Agassiz, 1848). Type species *Tenthredo difformis* Panzer, 1799. The larvae feed on the woody plants. The genus is distributed in Holarctic and Oriental region; one species was introduced into Neotropical and Australasian regions. Number of species: World – about 45; Palearctic - > 35; Russia – 15 from 3 subgenera.

- Cladius (Cladius) pectinicornis** (Geoffroy, 1785) [Tenthredo] (*Tenthredo alces* Thunberg, 1789; *T. difformis* Panzer, 1799; *Cladius geoffroyi* Serville, 1823; *C. morio* Serville, 1823; *C. geoffroyi* Lepeletier, 1823; *C. morio* Lepeletier, 1823; *Nematus crassicornis* Stephens, 1835; *Cladius isomera* Norton, 1861; *C. ramicornis* André, 1880; *C. gracilicornis* Konow, 1884; *C. crassicornis* Konow, 1884; *C. comari* Stein, 1886; *C. hyalinopterus* Konow, 1886; *C. palmicornis* Konow, 1892; *C. ordubadensis* Konow, 1892; *C. major* Cobelli, 1892; *C. orientalis* Cameron, 1902; *C. tibialatus* Konow, 1906). Host plant: *Rosa* spp., *Fragaria* spp., *Potentilla* spp., *Filipendula* spp. (Rosaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR, WS** (TM, KM, AL), **ES** (IR, BR, YA, ZB), **FE** (AM, PR, SA, KA, MG). – Europe (WE, EE, NE, SE), Georgia, Azerbaijan, SW Asia, Afghanistan, Central Asia, Kazakhstan, China (NE, NC), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu), India (NW), N America.
- Cladius (Priophorus) brullei** (Dahlbom, 1835) [Priophorus] (*C. immunis* Stephens, 1835; *Nematus melanostigma* Stephens, 1835; *Cladius tener* Zaddach, 1859; *C. tristis* Zaddach, 1859; *C. parvus* Zaddach, 1883; *Priophorus rubivorus* Rohwer, 1922; *P. montanus* Rohwer, 1922; *P. rubi* Rohwer, 1922; *P. foveivaginat* Malaise, 1931). Host plant: *Rubus* spp. (Rosaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR, WS** (AL), **ES** (KR, IR, ZB), **FE** (PR, SA, KA). – Europe (WE, EE, NE, SE), Central Asia, China (NC), Korean Peninsula, Japan (Hok, Hon), India, SE Asia, N America; introduced into S America, Australia, New Zealand.
- Cladius (Priophorus) compressicornis** (Fabricius, 1804) [Tenthredo] (*Tenthredo albipes* Fallén, 1808; *Cladius pallipes* Lepeletier, 1823; *C. pallipes* Serville, 1823; *C. albipes* Hartig, 1837; *C. aequalis* Norton, 1872; *Priophorus discors* Konow, 1894; *Cladius solitaris* Dyar, 1895; *Priophorus padi collaris* Enslin, 1915; *P. modestius* MacGillivray, 1921; *P. munditus* MacGillivray, 1921; *P. crataegi* Rohwer, 1922; *P. pruni* Rohwer, 1922; *P. plesius* Rohwer, 1922;

P. virginianus Rohwer, 1922). Host plant: *Salix* spp., *Populus* spp. (Salicaceae), *Rubus* spp., *Prunus* spp. (Rosaceae), and others. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR, ES** (KR, IR, YA, ZB), **FE** (KH, PR, SA, KA, MG). – Europe (WE, EE, NE, SE), Caucasus, Turkey, Iran, Kyrgyzstan, Kazakhstan, China (CC), Korean Peninsula, Japan (Hok, Hon), N America.

- Cladius (Priophorus) corniger** Zhelochovtsev, 1952. Russia: **ES** (ZB). – China (Wei et al., 2006).
- Cladius (Priophorus) hyalopterus** (Jakovlev, 1891) [Priophorus] (*Priophorus triangulifer* Konow, 1902). Russia: **EP** (E), **UR, WS** (KM), **ES** (IR, ZB), **FE** (AM). – Kyrgyzstan, Kazakhstan, Mongolia, China (NW, NC).
- Cladius (Priophorus) nubilus** (Konow, 1897) [Trichiocampus] (*Priophorus dellei* Conde, 1935). Russia: **EP** (E), **UR, WS** (AL), **ES** (IR), **FE** (AM, PR, KU). – China (NE).
- Cladius (Priophorus) rufipes** Serville, 1823 (*C. rufipes* Lepeletier, 1823; *C. uncinnata* Hartig, 1837; *C. discrepans* Costa, 1859; *Trichiocampus garbigliettii* Costa, 1864; *Priophorus phaeopterus* Costa, 1894). Host plant: *Ulmus* spp. (Ulmaceae). Russia: **EP** (C, S, NC). – Europe (WE, EE, NE), Turkey, Iran.
- Cladius (Trichiocampus) aeneus** Zaddach, 1859. Host plant: *Salix* spp., *Populus* spp. (Salicaceae). Russia: **EP** (N, NW), **ES** (KR, IR, YA). – Europe (EE, NE).
- Cladius (Trichiocampus) cannabis** (Xiao et Huang, 1986) [Trichiocampus]. Host plant: *Cannabis sativa* (Cannabaceae). Russia: **EP** (E), **ES** (IR), **FE** (AM). – China (NC, CC).
- Cladius (Trichiocampus) grandis** (Serville, 1823) [Nematus] (*Tenthredo viminalis* Fallén, 1808; *Nematus grandis* Lepeletier, 1823; *Cladius eucera* Bouché, 1834; *C. luteicornis* Stephens, 1835; *C. luteiventris* Dahlbom, 1836; *Aulacomeris lutescens* Lintner, 1888; *Platycampus victoria* MacGillivray, 1920). Host plant: *Populus* spp., *Salix* spp. (Salicaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR, WS** (Lelej, Taeger, 2007), **ES** (IR, BR, YA), **FE** (MG). – Europe (WE, EE, NE, SE), Georgia, Armenia, Turkey, Kazakhstan; introduced into N America.
- Cladius (Trichiocampus) pilicornis** Curtis, 1833. Host plant: *Crataegus* spp. (Rosaceae). Russia: **ES** (YA). – Europe (WE, EE, NE, SE).
- Cladius (Trichiocampus) populi** (Okamoto, 1912) [Trichiocampus]. Host plant: *Populus* spp. (Salicaceae). Russia: **FE** (SA). – Japan (Hok, Hon).
- Cladius (Trichiocampus) rufus** Verzhutskii, 1966 (*Trichiocampus pseudoviminalis* Huang et Wang,

- 1993). Host plant: *Populus* spp. (Salicaceae). Russia: **ES** (IR), **FE** (AM). – China (NE).
- Cladius (Trichiocampus) takeuchii** Liston, Taeger et Blank, 2009 (*Trichiocampus pruni* Takeuchi, 1956). Host plant: *Prunus* spp. (Rosaceae). Russia: **FE** (KU). – China (SE), Japan (Hok, Hon), SE Asia.
- Cladius (Trichiocampus) ulmi** (Linnaeus, 1758) [Tenthredo] (*C. eradiatus* Hartig, 1837; *C. drewseni* Thomson, 1871; *Priophorus distinguendus* Enslin, 1915; *P. laevifrons* Benson, 1936). Host plant: *Ulmus* spp. (Ulmaceae). Russia: **EP** (C, NC, CR), **WS** (AL). – Europe (WE, EE, NE, SE), Armenia.
- DINEURA** Dahlbom, 1835 (*Leachia* Brullé, 1846; *Dinevra* Agassiz, 1848; *Varna* Ross, 1937). Type species *Tenthredo degeeri* Klug, 1817. The larvae feed on the woody plants. The genus is distributed in Holarctic. Number of species: World and Palaearctic – 9; Russia – 5.
- Dineura parcialvis** (Konow, 1901) [Pontania]. Russia: **ES** (IR). – Europe (NE).
- Dineura pullior** Schmidt et Walter, 1995. Russia: **EP** (N). – Europe (NE).
- Dineura stilata** (Klug, 1816) [Tenthredo] (*Tenthredo mediocris* Lepeletier et Serville, 1828; *Nematus apicalis* Stephens, 1835; *Selandria scapularis* Stephens, 1835; *Nematus xanthocerus* Hartig, 1840; *Dineura flaveola* Eversmann, 1847; *Nematus posticus* Förster, 1854; *N. xanthopus* Zaddach, 1876; *N. v-flavum* Cameron, 1882; *Dineura melanoxantha* Zaddach, 1883; *D. sulcifrons* Konow, 1885; *D. nigroflava* Magretti, 1886; *Pristiphora oblita* Costa, 1894; *Pontania ancilla* Konow, 1901; *Dineura stilata virilis* Enslin, 1918). Host plant: *Sorbus* spp., *Crataegus* spp., *Cotoneaster* spp. (Rosaceae). Russia: **EP** (E). – Europe (WE, EE, NE, SE).
- Dineura testaceipes** (Klug, 1816) [Tenthredo] (*D. ventralis* Zaddach, 1859; *D. nigra* Zaddach, 1883; *D. testaceipes nigrioventris* Enslin, 1915). Host plant: *Sorbus* spp., *Crataegus* spp., *Cotoneaster* spp. (Rosaceae). Russia: **EP** (NW, C, E), **ES** (IR, BR, YA), **FE** (KH, PR, KA). – Europe (WE, EE, NE).
- Dineura virididorsata** (Retzius, 1783) [Tenthredo] (*Tenthredo nigricans* Christ, 1791; *T. degeeri* Klug, 1817; *Nematus varius* Lepeletier, 1823; *N. varius* Serville, 1823; *Dineura hartigii* Gimmerthal, 1844; *D. virididorsata dorsalis* Enslin, 1915). Host plant: *Betula* spp. (Betulaceae). Russia: **EP** (N, NW, C, E), **UR**, **ES** (IR, BR, YA), **FE** (AM, PR, SA, KA). – Europe (WE, EE, NE), China (Wei et al., 2006), Japan (Hok).
- ENDOPHYTUS** Hering, 1934 (*Neopelmatopus* Conde, 1934; *Verna* Kaisila, 1960; *Verna* Kontuniemi, 1960). Type species *Pelmatopus anemones* Hering, 1924. The larvae feed on *Anemone nemorosa* (Ranunculaceae). The genus is distributed in West Palaearctic. Number of species: one species.
- Endophytus anemones** (Hering, 1924) [Pelmatopus] (*Pelmatopus tenuiserra* Lindqvist, 1949). Host plant: *Anemone nemorosa* (Ranunculaceae). Russia: **EP** (NW). – Europe (WE, EE, NE).
- EUURA** Newman, 1837 (*Cryptocampus* Hartig, 1837; *Evura* Agassiz, 1848; *Pontania* Costa, 1852; *Epitactus* Förster, 1854; *Amauronematus* Konow, 1890; *Holcocneme* Konow, 1890; *Pachynematus* Konow, 1890; *Brachycolus* Konow, 1895; *Holcocnema* Schulz, 1906; *Holcocnemis* Konow, 1907; *Pteronidea* Rohwer, 1911; *Pontoprastia* Malaise, 1921; *Brachycoluma* Strand, 1929; *Decanematus* Malaise, 1931; *Pikonema* Ross, 1937; *Phyllocolpa* Benson, 1960; *Eitelius* Kontuniemi, 1966; *Gemmura* E.L. Smith, 1968; *Ribinematus* Kontuniemi, 1975; *Eupontania* Zinovjev, 1985; *Larinematus* Zhelochovtsev, 1988; *Polynematus* Zhelochovtsev, 1988; *Bacconematus* Zhelochovtsev, 1988; *Alpinematus* Lacourt, 1996; *Epicenematus* Lacourt, 1998; *Kontuniemiana* Lacourt, 1998; *Lindqvistia* Lacourt, 1998; *Luea* Wei et Nie, 1998; *Tubpontania* Vikberg, 2010). Type species *Euura gallae* Newman, 1837. The genus is distributed in Holarctic and Oriental region; introduced into the Neotropical, Ethiopian and Australasian regions. Number of species: World – about 450; Palaearctic – about 300; Russia – 258 (+ 1 ssp.).
- Euura abnormis** (Holmgren, 1883) [Nematus] (*Amauronematus tolli* Konow, 1907; *A. aulatus* MacGillivray, 1919). Russia: **EP** (N), **WS** (TM), **ES** (KR, YA). – Europe (WE, NE), N America.
- Euura aborigensis** (Vikberg, 2003) [Eupontania]. Host plant: *Salix dshugdshurica* (Salicaceae). Russia: **FE** (MG).
- Euura acuta** (Lindqvist, 1970) [Amauronematus]. Host plant: *Dasiphora* spp. (Rosaceae). Russia: **ES** (IR, ZB), **FE** (MG).
- Euura acutifoliae** (Zinovjev, 1985) [Pontania] (*Pontania acutifoliae daphnoides* Zinovjev, 1993; *Eupontania acutifoliae baltica* Vikberg et Zinovjev, 2006). Host plant: *Salix acutifolia*, *S. daphnoides* (Salicaceae). Russia: **EP** (N, NW, C, E, S). – Europe (WE, EE, NE).

- Euura acutiserra*** (Lindqvist, 1949) [Pontania]. Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (N). – Europe (WE, NE).
- Euura aeger*** (Konow, 1895) [Amauronematus] (*Amauronematus dalecarlicus* Malaise, 1921). Russia: **ES** (Zhelochovtsev, Zinovjev, 1995). – Europe (WE, EE, NE).
- Euura albipennis*** (Hartig, 1837) [Nematus] (*Nematus vernalis* Hartig, 1840; *N. obscuratus* Zaddach, 1883; *Polynematus legirupus* Konow, 1903; *P. sannio* Konow, 1903). Host plant: *Polygonum* spp. (Polygonaceae). Russia: **EP** (NW, C, E, S), **WS** (TK), **ES** (IR), **FE** (AM). – Europe (WE, EE, NE), Kazakhstan, Korean Peninsula.
- Euura albopicta*** (Malaise, 1931) [Pontania]. Host plant: *Salix* spp. (Salicaceae). Russia: **FE** (KA).
- Euura alpicola*** (Konow, 1895) [Amauronematus]. Host plant: *Salix phylicifolia* (Salicaceae). Russia: **EP** (NW). – Europe (WE).
- Euura amentorum*** (Förster, 1854) [Nematus] (*Nematus suavis* Ruthe, 1859; *N. laevigatus* Zaddach, 1883; *Pontania atra* Marlatt, 1896; *P. maura* Rohwer, 1908; *P. amentivora* Rohwer, 1915; *Pristiphora amentorum nigripleuris* Enslin, 1916; *Pontoprastia kamtchatica* Malaise, 1931). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (Taeger et al., 2006), **FE** (KA, CH). – Europe (WE, EE, NE), Greenland, N America.
- Euura amerinae*** (Linnaeus, 1758) [Cynips] (*Tenthredo salicispentandrae* Retzius, 1783; *Tenthredo gallarum* Latreille, 1804; *T. saliceti* Fallén, 1808; *Nematus pentandrae* Dahlbom, 1835; *Nematus populi* Hartig, 1837; *N. medullarius* Hartig, 1837; *N. impunctatus* Herrich-Schäffer, 1840; *N. buccatus* Thomson, 1863; *Pontania joergenseni* Strand, 1908). The larvae form a nutlike gall on the branches of *Salix pentandra* (Salicaceae). Russia: **EP** (N, NW, C, E), **UR**, **WS** (Zhelochovtsev, Zinovjev, 1995), **ES** (YA), **FE** (KA, MG). – Europe (WE, EE, NE, SE).
- Euura ampla*** (Konow, 1895) [Amauronematus]. Host plant: *Betula* spp. (Betulaceae). Russia: **EP** (N, NW, C, E), **UR**, **WS** (Zhelochovtsev, Zinovjev, 1995), **ES** (IR, ZB). – Europe (WE, EE, NE).
- Euura amurensis*** (Zinovjev, 1985) [Pontania]. Host plant: *Salix miyabeana* (Salicaceae). Russia: **ES** (ZB), **FE** (AM, KH, PR).
- Euura annulata*** (Gimmerthal, 1834) [Nematus] (*Nematus xanthopterus* Dahlbom, 1835; *N. flavipennis* Cameron, 1876; *Pachynematus freyi* Lindqvist, 1949; *P. lacteipennis* Benson, 1963). Host plant: *Rumex* spp. (Polygonaceae). Russia: **EP** (E, NC), **ES** (IR, BR), **FE** (KH, SA). – Europe (WE, EE, NE), Central Asia.
- Euura anomaloptera*** (Förster, 1854) [Nematus] (*Pontania joergenseni* Enslin, 1916; *Amauronematus maidli* Zirngiebl, 1937; *Pontania cyrnea* Liston, 2005). Host plant: *Salix carpea* (Salicaceae). Russia: **EP** (N, NW). – Europe (WE, EE, NE, SE).
- Euura arbusculae*** (Benson, 1941) [Pontania]. Host plant: *Salix arbuscula* (Salicaceae). Russia: **EP** (N). – Europe (WE).
- Euura arctica*** MacGillivray, 1919 (*Pontania deminuta* MacGillivray, 1919; *P. delicatula* MacGillivray, 1919; *Euura abortiva* MacGillivray, 1919). Host plant: *Salix reticulata* (Salicaceae). Russia: **ES** (YA), **FE** (CH). – N America.
- Euura arcticornis*** (Konow, 1904) [Pontania] (*Pontania phylicifoliae* Forsius, 1919; *P. viminalis hepaticifoliae* Malaise, 1920). Host plant: *Salix phylicifolia*, *S. lapponicum* (Salicaceae). Russia: **EP** (N, NW, E), **UR**, **WS** (TM, AL), **ES** (KR, IR, ZB, BR, YA), **FE** (AM, PR, MG). – Europe (WE, EE, NE), Korean Peninsula.
- Euura atra*** (Jurine, 1807) [Pteronus] (*Nematus angustus* Hartig, 1837; *E. salicicola* E.A. Smith, 1879; *Cryptocampus helveticus* Zaddach, 1883; *C. robustus* Zaddach, 1883; *Euura nigra* Provancher, 1888). Host plant: *Salix* spp. (Salicaceae); larvae in galls on shoots. Russia: **EP** (NC), **ES** (IR, BR, YA, ZB), **FE** (MG). – Europe (WE, EE, NE, SE), Armenia, Cyprus, Kyrgyzstan, Kazakhstan; introduced into N America.
- Euura auritae*** Kopelke, 2000 (*E. cinereae* Kopelke, 1996; *E. lapponica* Kopelke, 1996; *E. salicislaponicae* Kopelke, 2014). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (N). – Europe (WE, EE, NE).
- Euura bergmani*** (Malaise, 1931) [Amauronematus] (*Pteronidea kamtchatica* Lindqvist, 1971). Russia: **FE** (KA).
- Euura bergmanni*** (Dahlbom, 1835) [Nematus] (*Nematus virescens* Hartig, 1837; *N. pallicarpus* Hartig, 1837; *N. curtispina* Thomson, 1871; *N. varipictus* Holmgren, 1883; *N. anthophilus* Zaddach, 1884; *N. pallidicarpus* Dalla Torre, 1894; *Amauronematus longicornis* Konow, 1897; *Pteronus curtispinis* Konow, 1903; *Amauronematus trigonicus* Konow, 1905; *Lygaeonematus pallens* Enslin, 1916; *Pteronidea curtispina luctuosa* Enslin, 1916; *P. vernalis* Lindqvist, 1937). Host plant: *Salix* spp. (Salicaceae); up to 5 generations per year. Russia: **EP** (N, NW,

- C, E, S, NC), **UR, ES** (IR, YA). – Europe (WE, EE, NE, SE), Kyrgyzstan.
- Euura bertiloppii** Heibo et Liston, 2014 (*Amauronematus poppii* Konow, 1904). Host plant: Salix spp. (Salicaceae). Russia: **EP** (N, NW), **ES** (KR), **FE** (KA). – Europe (NE).
- Euura betulae** (Schmidt, 1997) [Amauronematus]. Host plant: Betula spp. (Betulaceae). Russia: **FE** (MG). – Europe (NE).
- Euura bicolor** (Jakovlev, 1891) [Amauronematus]. Russia: **ES** (IR), **FE** (AM).
- Euura bigallae** (Vikberg et Zinovjev, 2014) [Pontania]. Host plant: Salix spp. (Salicaceae); larvae in galls on shoots. Russia: **EP** (N). – Europe (NE).
- Euura bipartita** (Serville, 1823) [Nematus] (*Nematus bipartitus* Lepeletier, 1823; *N. aurantiacus* Hartig, 1837; *N. confusus* Förster, 1854; *N. xanthogaster* Förster, 1854; *N. ochropus* Thomson, 1863; *Pachynematus albipennis salicicola* Enslin, 1916). Host plant: Salix spp., Populus spp. (Salicaceae). Russia: **EP** (N, NW, C, E, S), **UR, WS** (TM, OM). – Europe (WE, EE, NE, SE), Kazakhstan.
- Euura bohemani** (Thomson, 1871) [Nematus] (*Pteronidea pseudonotabilis* Enslin, 1916; *P. pseudonotabilis simplex* Forsius, 1921; *P. pseudonotabilis t-magnum* Malaise, 1931). Host plant: Salix spp. (Salicaceae). Russia: **EP** (N, C), **FE** (KA). – Europe (EE, NE).
- Euura boreophila** (Lindqvist, 1971) [Pteronidea]. Host plant: Salix spp. (Salicaceae). Russia: **ES** (IR, BR). – Europe (NE).
- Euura borisi** (Vikberg, 2003) [Eupontania]. Host plant: Salix rhamnifolia (Salicaceae). Russia: **ES** (BR).
- Euura brevicera** Taeger et Blank, 2014 (*Pteronidea brachycera* Lindqvist, 1975). Host plant: Salix spp. (Salicaceae). Russia: **ES** (IR).
- Euura breviseta** (Lindqvist, 1949) [Pteronidea]. Host plant: Betula spp. (Betulaceae). Russia: **EP** (N). – Europe (NE).
- Euura brevivalva** (Thomson, 1871) [Nematus] (*Pteronius kriegeri* Konow, 1903; *Amauronematus spurcus* Konow, 1904; *Pteronidea absimilis* Lindqvist, 1949). Host plant: Betula spp. (Betulaceae). Russia: **EP** (N, NW), **ES** (IR, ZB), **FE** (AM, MG). – Europe (WE, NE).
- Euura bridgmanii** (Cameron, 1883) [Nematus] (*Pontania kirchneri* Zirngiebl, 1959). Host plant: Salix spp. (Salicaceae). Russia: **EP** (Zhelochovtsev, Zinovjev, 1995), “Siberia” (Zhelochovtsev, Zinovjev, 1995). – Europe (WE, NE).
- Euura brunneipicta** (Lindqvist, 1975) [Amauronematus]. Russia: **ES** (IR).
- Euura cadderensis** (Cameron, 1875) [Nematus] (*Pteronidea macroserrata* Lindqvist, 1943). Host plant: Betula spp. (Betulaceae), Salix spp. (Salicaceae). Russia: **EP** (N, E), **UR**. – Europe (WE, EE, NE).
- Euura caeruleocarpa** Hartig, 1837 (*Nematus propinquus* Dahlbom, 1835; *N. sulcipes* Hartig, 1837; *N. brevispinis* Förster, 1854; *N. brachyacanthus* Thomson, 1863; *N. insubricus* Cobelli, 1892). Host plant: Salix spp., Populus spp. (Salicaceae), Paeoniaceae, Ranunculaceae. Russia: **EP** (NW, C, NC), **ES** (IR, BR, YA, ZB), **FE** (KH, PR, MG). – Europe (WE, EE, NE), China (Wei et al., 2006), Japan (Hok, Hon).
- Euura camtschatcalis** (Enslin, 1927) [Amauronematus]. Russia: **FE** (KA).
- Euura camtschatica** (Forsius, 1928) [Pontania]. Host plant: Salix spp. (Salicaceae). Russia: **FE** (KA).
- Euura capito** (Konow, 1903) [Pteronus]. Host plant: Salix spp. (Salicaceae). Russia: **EP** (N, C), **UR, FE** (KA). – Europe (WE, EE, NE, SE), Kazakhstan, China (NW).
- Euura carelica** (Hellén, 1948) [Nematus] (*Pteronidea winterti* Lindqvist, 1958). Russia: **EP** (N). – Europe (NE).
- Euura caucasica** (Liston, Taeger et Blank, 2009) [Pachynematus] (*Pachynematus alticola* Muche, 1973). Russia: **EP** (NC). – Georgia, Mongolia.
- Euura caudalis** (Eversmann, 1847) [Nematus]. Russia: **EP** (E).
- Euura clibrichella** (Cameron, 1878) [Nematus] (*Nematus thomsoni* Cameron, 1882; *Pachynematus pubescens* Marlatt, 1896; *P. gotarus* Kincaid, 1900; *P. venustus* MacGillivray, 1921; *P. vernus* MacGillivray, 1921). Host plant: Carex spp. (Cyperaceae). Russia: **EP** (N). – Europe (WE, NE), N America.
- Euura clitellata** (Serville, 1823) [Nematus] (*Nematus clitellatus* Lepeletier, 1823; *N. kirbyi* Dahlbom, 1835; *N. leucocarpus* Hartig, 1840; *N. einersbergensis* Hartig, 1840; *N. flaviventris* Hartig, 1840; *N. palliceps* Hartig, 1840; *N. diaphanus* Eversmann, 1847; *N. umbripennis* Eversmann, 1847; *N. griseus* Eversmann, 1847; *Epitactus praecox* Förster, 1854; *Nematus trisignatus* Förster, 1854; *N. microps* Förster, 1854; *N. pectoralis* Snellen van Vollenhoven, 1867; *N. turgidus* Zaddach, 1876; *N. leucocarpus* André, 1880; *N. valesiacus* W.F. Kirby, 1882; *N. tener* Zaddach, 1884; *N. pallidiceps* Dalla Torre, 1894; *Pachynematus infumatus* Marlatt, 1896; *P. zaddachi* Konow, 1901; *P. lentus* Konow, 1903; *P. glesipennis* Konow, 1903; *P. foveolatus* Konow, 1903; *P. clitellatus transigens* Enslin, 1916; *P. clitellatus*

- flavissimus* Enslin, 1916; *P. refractarius* MacGillivray, 1921; *P. truncatus* Benson, 1948). Host plant: Poaceae. Russia: **EP** (NW, C, E, S, NC), **UR**, **WS** (Zhelochovtsev, 1988), **ES** (IR, BR), **FE** (SA, MG). – Europe (WE, EE, NE), Kazakhstan, China (Wei et al., 2006), Korean Peninsula, Japan (Hok).
- Euura clypeata** (Lindqvist, 1975) [Amauronematus]. Russia: **ES** (IR).
- Euura collectanea** (Förster, 1854) [Nematus] (*Nematus deficiens* Förster, 1854; *N. crassipes vacciniellus* Cameron, 1876; *N. xanthostylos* Zaddach, 1884; *Pontania viminalis lugubris* Enslin, 1918; *P. collectanea relicta* Weiffenbach, 1962; *Eupontania collectanea rosmarinifolia* Vikberg et Zinovjev, 2006). Host plant: *Salix repens repens*, *S. repens rosmarinifolia* (Salicaceae). Russia: **EP** (NW). – Europe (WE, EE, NE).
- Euura compacta** (Bogacheva, 1977) [Amauronematus]. Russia: **WS** (TM).
- Euura cornuta** (Lindqvist, 1962) [Amauronematus]. Russia: **FE** (MG). – Europe (NE).
- Euura crassidens** (Lindqvist, 1975) [Amauronematus]. Russia: **ES** (IR).
- Euura crassipes** (Thomson, 1871) [Nematus] (*Pontania lapponica* Malaise, 1920; *P. enslini* Zirngiebl, 1937). Host plant: *Salix herbacea*, *S. lapponum*, *S. polaris* (Salicaceae); larvae in galls on the central vein of the leaf. Russia: **EP** (N, C), **WS** (TM), **ES** (IR, YA), **FE** (KU, MG). – Europe (WE, NE).
- Euura crassispina** (Thomson, 1871) [Nematus]. Host plant: *Salix glauca*, *S. arctica*, *S. sphenophylla* (Salicaceae). Russia: **ES** (YA), **FE** (KA, MG). – Europe (NE).
- Euura dentata** (Lindqvist, 1937) [Pachynematus]. Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (NW). – Europe (NE).
- Euura dispar** (Zaddach, 1876) [Nematus]. Host plant: *Betula* spp. (Betulaceae). Russia: **EP** (N, NW, C, E), **ES** (IR). – Europe (WE, EE, NE).
- Euura distinguenda** (Enslin, 1915) [Amauronematus]. Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (NW). – Europe (WE, EE, NE).
- Euura dolichura** (Thomson, 1871) [Nematus] (*Nematus femoralis* Cameron, 1876; *Pontania robbinsi* Benson, 1935; *P. lapponicola* Kopelke, 1994). Host plant: *Salix lapponum*, *S. phylicifolia*, *?S. iliensis* (Salicaceae); larvae form galls. Russia: **EP** (N, NC), **WS** (AL), **ES** (KR, IR, BR, YA), **FE** (PR, KA, MG). – Europe (WE, EE, NE, SE), Kyrgyzstan, N America.
- Euura duplex** (Serville, 1823) [Pristiphora] (*Pristiphora duplex* Lepeletier, 1823). Host plant: Poaceae. Russia: **EP** (NW), **UR**, **ES** (KR, IR, BR, YA, ZB), **FE** (AM). – Europe (WE, EE, NE), Mongolia.
- Euura edentata** (Lindqvist, 1975) [Pachynematus]. Russia: **ES** (IR).
- Euura edenticulata** (Lindqvist, 1970) [Amauronematus]. Russia: **ES** (IR).
- Euura eiteli** (Saarinen, 1948) [Amauronematus]. Russia: **EP** (N), **ES** (ZB). – Europe (NE).
- Euura elaeagnocola** (Kopelke, 1994) [Pontania] (*Nematus parallelus* Kriechbaumer, 1876). Host plant: *Salix elaeagnos*, *S. lapponicum*, *S. alaxensis* (Salicaceae). Russia: **FE** (MG). – Europe (WE).
- Euura elbrus** Sundukov, 2017 (*Nematus nivalis* Muche, 1973). Russia: **EP** (NC). – Georgia.
- Euura epilosa** (Lindqvist, 1970) [Pteronidea]. Host plant: *Spiraea* spp. (Rosaceae). Russia: **ES** (IR).
- Euura erecta** (Lindqvist, 1945) [Amauronematus]. Russia: **WS** (TM). – Europe (WE, NE).
- Euura ermolenkoi** (Haris, 2006) [Nematus]. Russia: **FE** (KU).
- Euura erythropus** (Lindqvist, 1975) [Amauronematus]. Russia: **ES** (IR).
- Euura evenensis** (Zhelochovtsev, 1981) [Nematus]. Host plant: *?Chosenia arbutifolia* (Salicaceae). Russia: **FE** (MG).
- Euura excavata** (Marlatt, 1896) [Pontania] (*Pontania megacephala* Rohwer, 1908; *P. dstricta* MacGillivray, 1923; *P. apicifrons* Malaise, 1931). Host plant: *Populus suaveolens*, *Salix pentandra*, *S. pseudopentandra* (Salicaceae). Russia: **EP** (Zhelochovtsev, Zinovjev, 1995), **ES** (Zhelochovtsev, Zinovjev, 1995), **FE** (KA). – Europe (WE, NE), N America.
- Euura excisa** (Thomson, 1863) [Nematus] (*Lygaeonematus strandi* Konow, 1901). Host plant: *Geranium* spp. (Geraniaceae). Russia: **ES** (IR). – Europe (NE), Mongolia, N America.
- Euura extensicornis** (Norton, 1861) [Nematus] (*Nematus marylandicus* Norton, 1864; *N. aureopectus* Norton, 1867; *N. suadus* Cresson, 1880; *Pachynematus affinis* Marlatt, 1896; *P. tritici* Marlatt, 1896). Host plant: Poaceae. Russia: **ES** (IR), **FE** (MG). – N America.
- Euura facialis** (Lindqvist, 1969) [Pteronidea]. Host plant: *Alnus* spp. (Betulaceae). Russia: **ES** (IR). – Europe (NE).
- Euura fahraei** (Thomson, 1863) [Nematus] (*Nematus melanodus* Zaddach, 1884). Host plant: *Populus* spp. (Salicaceae). Russia: **ES** (IR, YA). – Europe (WE, EE, NE).
- Euura fallax** (Serville, 1823) [Nematus] (*Nematus fallax* Lepeletier, 1823; *N. melanocerus* Hartig, 1840;

- N. xanthocarpus* Hartig, 1840; *N. eupodius* Hartig, 1840; *N. haemorrhoidalis* Hartig, 1840; *N. brachycercus* Hartig, 1840; *N. schmidtii* Gimmerthal, 1844; *N. eversmanni* Förster, 1854; *N. emarginatus* Förster, 1854; *N. circumscriptus* Förster, 1854; *N. declinatus* Förster, 1854; *N. incertus* W.F. Kirby, 1882; *N. erythropareus* Zaddach, 1884; *Pachynematus sulcatus* Benson, 1948; *P. chambersi* Benson, 1948; *P. virginalis* Liston, 1980). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (NW, NC), **FE** (PR, KA, MG). – Europe (WE, EE, NE, SE), Turkey, Kyrgyzstan, Kazakhstan, Mongolia, China (NW), Korean Peninsula, Japan (Hon).
- Euura fasciata** (Konow, 1897) [Amauronematus] (*Amauronematus perkinsi* Benson, 1933). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (NW), **ES** (IR). – Europe (WE, EE, NE).
- Euura ferruginea** (Förster, 1854) [Nematus] (*Nematus glottianus* Cameron, 1882; *Amauronematus moricei* Konow, 1902; *Pteronidea ferruginea plagiata* Enslin, 1916). Host plant: *Salix* spp., *Populus* spp. (Salicaceae). Russia: **EP** (N), **ES** (IR). – Europe (WE, EE, NE).
- Euura filiformis** (Lindqvist, 1975) [Pachynematus]. Russia: **ES** (IR).
- Euura flavescens** (Stephens, 1835) [Nematus] (*Nematus dilutus* Brischke, 1883). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (NW), **ES** (YA), **FE** (KA). – Europe (WE, EE, NE), Central Asia.
- Euura foetidae** (Kopelke, 1989) [Pontania]. Host plant: *Salix foetida*, *S. saposchnikovii* (Salicaceae); larvae form galls. Russia: **WS** (AL). – Europe (WE).
- Euura frenalalis** (Thomson, 1888) [Nematus] (*Pteronius fastosus* Konow, 1904). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (N), “Siberia” (Zhelochovtsev, Zinovjev, 1995). – Europe (WE, EE, NE), China (Wei et al., 2006).
- Euura freyja** Liston, Taeger et Blank, 2009 (*Pontoprastia analis* Lindqvist, 1961). Host plant: *Salix* spp. (Salicaceae). Russia: **ES** (IR). – Europe (NE).
- Euura fujiense** (Zinovjev, 1993) [Pikonema]. Host plant: ?*Abies* spp., ?*Picea* spp. (Pinaceae). Russia: **FE** (KU). – Japan (Hon).
- Euura fulvescens** (Lindqvist, 1949) [Pteronidea]. Russia: **EP** (N). – Europe (NE).
- Euura fuscomaculata** (Förster, 1854) [Nematus] (*Nematus strongylogaster* Cameron, 1878; *Pteronius dossuarius* Konow, 1904). Host plant: *Populus* spp. (Salicaceae). Russia: **EP** (NW, C), **ES** (YA). – Europe (WE, EE, NE).
- Euura gehrsi** (Konow, 1903) [Pachynematus]. Host plant: *Polygonum* spp. (Polygonaceae). Russia: **EP** (NC), **ES** (IR). – Europe (WE).
- Euura glabrifrons** (Benson, 1960) [Pontania]. Host plant: *Salix lanata* (Salicaceae); larvae form galls. Russia: **EP** (N), **WS** (TM), **ES** (YA), **FE** (MG). – Europe (NE).
- Euura glacialis** (Jakovlev, 1891) [Amauronematus]. Russia: **EP** (N).
- Euura glaucae** (Kopelke, 1994) [Pontania]. Host plant: *Salix glauca*, *S. alpina*, *S. saxatilis* (Salicaceae); larvae form galls. Russia: **ES** (YA), **FE** (MG). – Europe (WE, NE).
- Euura gracilidentata** (Viitasaari, 1980) [Pteronidea]. Host plant: *Ribes alpinum* (Grossulariaceae). Russia: **EP** (NW). – Europe (WE, NE, SE).
- Euura groenlandica** (Malaise, 1933) [Amauronematus]. Russia: **EP** (N). – Europe (NE), Greenland, N America.
- Euura harpicola** (Bogacheva, 1977) [Amauronematus]. Russia: **WS** (TM).
- Euura hartigi** (Saarinen, 1950) [Amauronematus]. Russia: **EP** (NW). – Europe (WE).
- Euura hastatae** Malaise, 1920. Host plant: *Salix hastata* (Salicaceae). Russia: **EP** (N). – Europe (WE, EE, NE).
- Euura hastatavora** Vikberg, 2014 (*Pontania hastatae* Vikberg, 1970). Host plant: *Salix hastata* (Salicaceae). Russia: **EP** (N), **WS** (TM), **ES** (YA), **FE** (MG, CH). – Europe (WE, NE).
- Euura hebes** (Konow, 1907) [Amauronematus] (*Amauronematus pristiphorinus* Malaise, 1921). Russia: **WS** (TM). – Europe (NE), N America.
- Euura hedstroemi** (Malaise, 1931) [Amauronematus] (*Amauronematus rex* Benson, 1948). Russia: **EP** (N), **FE** (KA, CH). – Europe (WE, NE), N America.
- Euura helleni** (Lindqvist, 1941) [Amauronematus]. Russia: **EP** (N), **FE** (MG). – Europe (NE), N America.
- Euura helveticae** (Kopelke, 1986) [Pontania]. Host plant: *Salix helvetica*, *S. lanata*, *S. brachypoda* (Salicaceae); larvae form galls. Russia: **EP** (NW), **WS** (AL), **ES** (YA). – Europe (WE).
- Euura herbaceae** (Cameron, 1876) [Nematus] (*Pontania polaris* Malaise, 1920). Host plant: *Salix herbacea*, *S. polaris*, *S. nummularia* (Salicaceae). Russia: **EP** (N), **WS** (TM), **ES** (KR, BR, YA), **FE** (MG, CH). – Europe (WE, NE).
- Euura hirowatarii** (Haris et Zsolnai, 2007) [Pachynematus]. Russia: **FE** (SA). – Korean Peninsula.

- Euura histrio** (Serville, 1823) [Nematus] (*Nematus histrio* Lepeletier, 1823; *N. rufescens* Hartig, 1837; *N. fur* Walsh, 1866; *N. glenelgensis* Cameron, 1882). Host plant: Salix spp. (Salicaceae). Russia: **EP** (NW, C, E, NC), **UR**, **ES** (IR, ZB). – Europe (WE, EE, NE, SE), N America.
- Euura hulteni** (Malaise, 1931) [Amauronematus]. Russia: **FE** (KA). – N America.
- Euura humeralis** (Serville, 1823) [Nematus] (*Nematus humeralis* Lepeletier, 1823; *N. squalidus* Eversmann, 1847; *N. incanus* Förster, 1854; *Amauronematus terminalis* Malaise, 1931). Host plant: Salix spp. (Salicaceae). Russia: **EP** (NW, C, E), **UR**, **WS** (Zhelochovtsev, Zinovjev, 1995), **ES** (IR), **FE** (KA, MG). – Europe (WE, EE, NE).
- Euura hypoxantha** (Förster, 1854) [Nematus] (*Nematus palliatus* Thomson, 1863; *N. orbitalis* Cameron, 1884; *Pteronidea nigronota* Lindqvist, 1958). Host plant: Salix spp., Populus spp. (Salicaceae). Russia: **EP** (NW, C, S), **ES** (IR). – Europe (WE, EE, NE, SE), Kazakhstan, Japan (Hon).
- Euura imperfecta** (Zaddach, 1876) [Nematus] (*Pachynematus imperfectus claristernis* Enslin, 1916). Host plant: Larix spp. (Pinaceae). Russia: **EP** (NW), **ES** (IR, BR, YA, ZB). – Europe (WE, EE, NE).
- Euura incompleta** (Förster, 1854) [Nematus] (*Nematus smaragdinus* Stein, 1881; *N. pulchellus* Cameron, 1882; *N. chlorogaster* Zaddach, 1884; *Pteronidea segmentaria signata* Enslin, 1916; *P. segmentaria tessinensis* Enslin, 1916). Host plant: Lathyrus vernus (Fabaceae). Russia: **EP** (N, NW, C, E, S, NC), **ES** (ZB). – Europe (WE, EE, NE, SE), Georgia, Kazakhstan.
- Euura insigne** (Hartig, 1840) [Nematus] (*Nematus superbus* Gradl, 1881; *N. nobilis* W.F. Kirby, 1882). Host plant: Abies spp., Picea spp. (Pinaceae). Russia: **EP** (NW), **ES** (YA), **FE** (PR). – Europe (WE, EE, NE).
- Euura integra** (Zinovjev, 1985) [Pontania]. Host plant: Salix integra (Salicaceae). Russia: **FE** (KH, PR). – Japan (Zinovjev, 2010).
- Euura itelmene** (Malaise, 1931) [Pontoprístia]. Host plant: ?Salix alaxensis (Salicaceae). Russia: **FE** (KA). – N America.
- Euura itoi** (Okutani, 1955) [Pachynematus]. Host plant: Larix spp. (Pinaceae). Russia: **UR**, **ES** (TU, IR, BR, YA, ZB), **FE** (AM, MG). – Europe (WE), China (NE), Korean Peninsula, Japan (Hon).
- Euura jugicola** (Thomson, 1871) [Nematus] (*Pteronidea karvoneni* Lindqvist, 1969). Host plant: Salix aurita (Salicaceae). Russia: **EP** (NW). – Europe (WE, NE).
- Euura krausi** (Taeger et Blank, 1998) [Amauronematus]. Host plant: Populus tremula (Salicaceae). Russia: **EP** (N, NW, C), **ES** (IR). – Europe (WE, EE, NE, SE).
- Euura kunasirensis** (Haris, 2006) [Nematus]. Russia: **FE** (KU).
- Euura laeta** (Brischke, 1883) [Cryptocampus] (*E. viminalis* Kopelke, 2001). Host plant: Salix viminalis (Salicaceae); larvae in the galls at the base of the leaf petiole. Russia: **EP** (N, NW, C, E), **FE** (KA). – Europe (WE, EE, NE).
- Euura lanatae** Malaise, 1920. Host plant: Salix lanata (Salicaceae); larvae in enlarged buds. Russia: **WS** (TM), **ES** (KR). – Europe (NE), N America.
- Euura lanceata** (Hellén, 1970) [Amauronematus]. Russia: **FE** (MG). – Europe (NE).
- Euura lappo** Malaise, 1920. Host plant: Salix lapponum (Salicaceae). Russia: **EP** (N). – Europe (EE, NE).
- Euura latiserra** (Malaise, 1921) [Pontoprístia]. Host plant: Salix spp. (Salicaceae). Russia: **WS** (TM), **ES** (KR), **FE** (CH). – Europe (NE).
- Euura latisulcata** (Malaise, 1931) [Amauronematus]. Russia: **FE** (KA).
- Euura leionota** (Benson, 1933) [Pteronidea]. Host plant: Betula spp. (Betulaceae). Russia: **EP** (N). – Europe (WE, EE, NE).
- Euura leptoccephala** (Thomson, 1863) [Nematus] (*Amauronematus morawitsi* Jakovlev, 1891). Host plant: Salix spp. (Salicaceae). Russia: **EP** (NW). – Europe (NE), N America.
- Euura lethe** Prous et Liston, 2014 (*Amauronematus atratus* Lindqvist, 1961). Russia: **ES** (IR). – Europe (NE).
- Euura leucapsis** (Tischbein, 1846) [Nematus] (*Nematus viminalis* Hartig, 1840; *N. alienatus* Förster, 1854; *N. coriaceus* Benson, 1953; *Phyllocolpa rolleri* Liston, 2005). Host plant: Salix cinerea, S. aurita, S. silesiaca (Salicaceae). Russia: **EP** (NW), **ES** (IR, BR, YA), **FE** (AM, KA, MG). – Europe (WE, EE, NE), Tajikistan, Kyrgyzstan, Canada.
- Euura leucolena** (Brischke, 1883) [Nematus] (*Pontania unga* Kincaid, 1900; *Pteronidea egeria* MacGillivray, 1923). Host plant: Salix spp. (Salicaceae). Russia: **EP** (N, NW), **UR**, **WS** (TM), **ES** (KR, IR, BR, ZB), **FE** (KA, MG). – Europe (WE, EE, NE), N America.
- Euura leucopyga** (Lindqvist, 1949) [Amauronematus] (*Pteronidea bipicta* Lindqvist, 1959). Host plant:

- Alnus* spp. (Betulaceae). Russia: **EP** (N), **ES** (IR). – Europe (NE).
- Euura leucosticta** (Hartig, 1837) [Nematus] (*Nematus klugii* Gimmerthal, 1844; *N. crassulus* Thomson, 1863; *N. sharpi* Cameron, 1876; *Pontania ischnoceros nigrifrons* Konow, 1897; *P. auberti* Zirngiebl, 1957). Host plant: *Salix carpea*, *S. aurita*, *S. atrocinnerea* (Salicaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (Zhelochovtsev, Zinovjev, 1995). – Europe (WE, EE, NE, SE), N Africa, Armenia, Turkey, Kazakhstan.
- Euura leucotrocha** (Hartig, 1837) [Nematus] (*Nematus cylindricus* Hartig, 1840; *N. maculiventris* Hartig, 1840; *N. approximatus* Förster, 1854; *N. consobrinus* Snellen van Vollenhoven, 1871; *N. umbrius* Zaddach, 1876; *N. sauterianus* Zaddach, 1883; *N. multiplex* Zaddach, 1883; *Pteronidea cognata* Lindqvist, 1958). Host plant: *Ribes* spp. (Grossulariaceae). Russia: **EP** (NW, C, E), **UR**, **WS** (Zhelochovtsev, Zinovjev, 1995). – Europe (WE, EE, NE), China (Wei et al., 2006).
- Euura lichtwardti** (Konow, 1903) [Pachynematus] (*Nematus apicalis* Hartig, 1837; *Pachynematus kubesi* Konow, 1905). Host plant: Poaceae. Russia: **EP** (N), **ES** (IR). – Europe (WE, EE, NE), Korean Peninsula.
- Euura lienterica** (Holmgren, 1883) [Nematus]. Host plant: *Vaccinium* spp. (Ericaceae). Russia: **EP** (N), **WS** (TM), **ES** (KR), **FE** (MG, CH). – Europe (NE).
- Euura lindqvisti** (Hellén, 1951) [Amauronematus]. Russia: **ES** (Zhelochovtsev, Zinovjev, 1995). – Europe (NE).
- Euura longicauda** (Hellén, 1948) [Nematus]. Russia: **EP** (N), **FE** (MG). – Europe (NE), N America.
- Euura longiserra** (Thomson, 1863) [Nematus] (*Nematus leucodous* Zaddach, 1884). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (N, C), **WS** (AL), **ES** (IR, YA), **FE** (KA). – Europe (WE, NE).
- Euura magadanensis** (Vikberg et Zinovjev, 2014) [Pontania]. Host plant: *Salix* spp. (Salicaceae); larvae form galls. Russia: **ES** (YA), **FE** (KA, MG, CH).
- Euura malaisei** (Hellén, 1970) [Amauronematus] (*Decanematus longiserra* Malaise, 1931). Russia: **FE** (KA). – Europe (WE, EE, NE).
- Euura mandshurica** (Zinovjev, 1981) [Pontania]. Host plant: *Salix pierotii*, *S. babylonica* (Salicaceae); larvae form galls. Russia: **FE** (AM, PR). – Japan (Zinovjev, 2010).
- Euura mcluckiei** (Benson, 1935) [Amauronematus] (*Amauronematus pustulatus* Lindqvist, 1962). Host plant: *Salix reticulata* (Salicaceae). Russia: **EP** (N), “Siberia” (Zhelochovtsev, Zinovjev, 1995). – Europe (WE, NE).
- Euura melanocephala** (Hartig, 1837) [Nematus] (*Tenthredo salicis* Retzius, 1783; *Nematus perspicillaris* Hartig, 1840; *N. brevisculus* Eversmann, 1847; *N. pyrrhonotus* Zaddach, 1883; *Pteronus xanthostomus* Rohwer, 1910; *Pteronidea melanocephala mesothoracica* Enslin, 1916). Host plant: *Salix* spp., *Populus* spp. (Salicaceae). Russia: **EP** (NW, C). – Europe (WE, EE, NE, SE), Armenia.
- Euura microphyes** (Förster, 1854) [Nematus] (*Pontoprístia romani* Malaise, 1921; *P. nana* Lindqvist, 1949; *P. fennicus* Lindqvist, 1949). Host plant: *Salix* spp. (Salicaceae); larvae in the inflorescence. Russia: **EP** (N), **FE** (PR). – Europe (WE, NE), N America.
- Euura miliaris** (Panzer, 1797) [Tenthredo] (*Nematus dorsalis* Serville, 1823; *N. dorsalis* Lepeletier, 1823; *N. testaceus* Stephens, 1835; *N. fulvus* Hartig, 1837; *N. purus* Förster, 1854; *N. validicornis* Förster, 1854; *N. fulvus basalis* Costa, 1859; *N. fulvus exoleta* Costa, 1859; *N. trimaculatus* Snellen van Vollenhoven, 1862; *N. solitarius* Zaddach, 1883; *Pteronidea miliaris nigronotata* Enslin, 1916). Host plant: *Salix* spp. (Salicaceae); larvae form a galls on the leaves. Russia: **EP** (N, NW, C, E, S, NC), **UR**, **ES** (KR, IR, BR, YA), **FE** (SA). – Europe (WE, EE, NE, SE), SW Asia, Central Asia, China (Wei et al., 2006), Korean Peninsula.
- Euura miltonota** (Zaddach, 1883) [Nematus] (*Amauronematus jaroslawnensis* Jakovlev, 1891; *A. hercyniae* Konow, 1896). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (N, NW, C), **FE** (KA). – Europe (WE, EE).
- Euura mimator** Schmidt, 2014 (*Amauronematus mimus* Schmidt, 1997). Russia: **EP** (NW). – Europe (WE, NE).
- Euura mimus** (Konow, 1903) [Pteronus]. Russia: **EP** (NW). – Europe (WE, EE, SE).
- Euura mirabilis** (Zinovjev, 1985) [Pontania]. Host plant: *Salix cardiophylla* (Salicaceae). Russia: **FE** (PR, SA).
- Euura montana** (Zaddach, 1883) [Nematus] (*Nematus jemilleri* Stein, 1894). Host plant: *Picea* spp., *Abies* spp. (Pinaceae). Russia: **EP** (C), **ES** (YA). – Europe (WE, EE, NE).
- Euura monticola** (Thomson, 1871) [Nematus] (*Pachynematus perkioemaekii* Lindqvist, 1960; *Nematus pschornwalcheri* Muche, 1972). Russia: **EP** (N). – Europe (WE, EE, NE, SE).

- Euura mucronata** (Hartig, 1837) [Nematus] (*Cryptocampus pictus* Zaddach, 1883; *C. gemmarum* Brischke, 1883; *Euura insularis* Kincaid, 1900). Host plant: *Salix caprea*, *S. aurita* (Salicaceae); larvae in bugs. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **ES** (IR, YA), **FE** (AM, KA). – Europe (WE, EE, NE, SE), Armenia, Japan (Hon), N America.
- Euura mundus** (Konow, 1895) [Amauronematus]. Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (NW), **ES** (IR). – Europe (WE, NE), Mongolia, China (Wei et al., 2006).
- Euura myosotidis** (Fabricius, 1804) [Tenthredo] (*Nematus interruptus* Serville, 1823; *N. interruptus* Lepeletier, 1823; *N. segmentarius* Förster, 1854; *N. ambiguus* Förster, 1854; *N. decipiens* W.F. Kirby, 1882; *Pteronus myosotidis fallaciosus* Konow, 1903; *Pteronidea myosotidis pseudopavida* Enslin, 1916). Host plant: Fabaceae, Rosaceae. Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (AL), **ES** (KR, IR). – Europe (WE, EE, NE, SE), Armenia, Turkey, Kyrgyzstan, Kazakhstan.
- Euura myrsiniticola** (Kopelke, 1991) [Pontania]. Host plant: *Salix myrsinites* (Salicaceae). Russia: **EP** (N). – Europe (NE).
- Euura myrtilloidea** (Kopelke, 1991) [Pontania]. Host plant: *Salix myrtilloides* (Salicaceae). Russia: **EP** (N, NW), **FE** (AM, MG). – Europe (WE, NE).
- Euura neglecta** (W.F. Kirby, 1882) [Nematus] (*Amauronematus spiniserra* Malaise, 1920; *A. intermedius* Malaise, 1931). Host plant: *Salix* spp. (Salicaceae). Russia: **UR**, **ES** (TU, YA), **FE** (KA). – Europe (NE), N America.
- Euura nigricornis** (Serville, 1823) [Nematus] (*Nematus nigricornis* Lepeletier, 1823; *N. zetterstedti* Dahlbom, 1835; *N. miniatus* Hartig, 1837; *N. sibiricus* Jakovlev, 1888; *N. biannulatus* Costa, 1890). Host plant: *Salix* spp., *Populus* spp. (Salicaceae). Russia: **EP** (NW, C, E), **ES** (IR). – Europe (WE, EE, NE, SE), Japan (Hon).
- Euura nigriventris** (Holmgren, 1883) [Nematus] (*Amauronematus varianus* MacGillivray, 1919; *Pteronidea melanostoma* Rohwer, 1920). Russia: **EP** (N). – N America.
- Euura nitidipleuris** (Malaise, 1931) [Amauronematus]. Russia: **FE** (KA). – Europe (NE), N America.
- Euura nivalis** (Vikberg, 1970) [Pontania]. Host plant: *Salix glauca* (Salicaceae). Russia: **EP** (N), **WS** (TM, AL). – Europe (WE, NE), Canada.
- Euura nudipectus** (Vikberg, 1965) [Pontania]. Host plant: *Salix phylicifolia* (Salicaceae). Russia: **EP** (N, NW), **FE** (MG). – Europe (NE).
- Euura nuortevai** (Lindqvist, 1958) [Pteronidea]. Russia: **ES** (IR). – Europe (NE).
- Euura obducta** (Hartig, 1837) [Nematus] (*Nematus conductus* Ruthe, 1859; *N. graminis* Cameron, 1874; *N. palliventris* Cresson, 1880; *N. pallidiventralis* Dalla Torre, 1894; *Pachynematus boulderensis* Rohwer, 1920). Host plant: Poaceae. Russia: **EP** (N, NW, C, NC), **ES** (TU, IR), **FE** (SA, KU, KA, MG). – Europe (WE, EE, NE, SE), Turkey, Kyrgyzstan, N America.
- Euura oblita** (Serville, 1823) [Nematus] (*Nematus oblitus* Lepeletier, 1823; *N. pineti* Hartig, 1837; *N. pleurostictus* Förster, 1854; *N. lepidus* Förster, 1854; *N. puella* Thomson, 1871; *N. elegans* Zaddach, 1884). Host plant: *Salix triandra*, *S. alba*, *S. fragilis* (Salicaceae). Russia: **EP** (NW, C, S), **ES** (ZB). – Europe (WE, EE, NE), Armenia, Turkey.
- Euura obscuripes** (Holmgren, 1883) [Nematus]. Russia: **EP** (N).
- Euura olfaciens olfaciens** (Benson, 1953) [Nematus]. Host plant: *Ribes* spp. (Grossulariaceae). Russia: **EP** (NW, C). – Europe (WE, EE, NE).
- Euura olfaciens kolymensis** (Zhelochovtsev, 1981) [Nematus]. Host plant: *Ribes* spp. (Grossulariaceae). Russia: **ES** (YA), **FE** (MG).
- Euura oligospila** (Förster, 1854) [Nematus] (*Nematus mendicus* Walsh, 1866; *N. trivittatus* Norton, 1867; *N. microcercus* Thomson, 1871; *N. dorsivittatus* Cresson, 1880; *N. salicivorus* Cameron, 1882; *Pteronus koebelei* Marlatt, 1896; *Pteronidea vanduzeei* Rohwer, 1913; *P. elelea* MacGillivray, 1923; *Nematus desantisi* D.R. Smith, 1983). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **ES** (TU, IR). – Europe (WE, EE, NE, SE), Caucasus, Central Asia, Pakistan, N America; introduced into Tropical Africa, S America, Australia, New Zealand.
- Euura pallens** (Konow, 1903) [Pteronus] (*Pteronidea straminea* Lindqvist, 1958). Russia: **ES** (IR). – Europe (NE).
- Euura pallescens** (Hartig, 1837) [Nematus] (*Nematus olivaceus* Thomson, 1871; *N. ruficeps* Zaddach, 1883; *N. pachycerus* Borries, 1896). Host plant: *Picea* spp. (Pinaceae). Russia: **EP** (C). – Europe (WE, EE, NE).
- Euura pallidior** (Hellén, 1970) [Amauronematus]. Russia: **WS** (TM). – Europe (NE).

- Euura papillosa** (Retzius, 1783) [Tenthredo] (*Tenthredo fuscata* Christ, 1791; *Nematus melanaspis* Hartig, 1840; *N. lacteus* Thomson, 1871; *N. sulphureus* Zaddach, 1876; *N. citreus* André, 1880; *N. maculiger* Cameron, 1882; *N. brunnicornis* Zaddach, 1883; *Pteronidea sveae* Lindqvist, 1958). Host plant: Salix spp., Populus spp. (Salicaceae), Betula spp. (Betulaceae). Russia: **EP** (N, NW, C), **WS** (Zhelochovtsev, 1988), **ES** (IR, BR, YA). – Europe (WE, EE, NE, SE), Pakistan, Kyrgyzstan, Kazakhstan, Japan (Takeuchi, 1952).
- Euura parvula** (Holmgren, 1883) [Nematus] (*Pontania poppii* Konow, 1904; *Pteronidea gracilicornis* Lindqvist, 1962). Host plant: Vaccinium spp. (Ericaceae). Russia: **EP** (N), **ES** (IR). – Europe (NE).
- Euura pavida** (Serville, 1823) [Nematus] (*Nematus pavidus* Lepeletier, 1823; *N. ochraceus* Hartig, 1837; *N. semiorbitalis* Förster, 1854; *Cryptocampus quadrum* Costa, 1859; *Nematus wttewaalli* Snellen van Vollenhoven, 1862; *N. cameronii* Dalla Torre, 1894; *Pteronidea pavida notanda* Enslin, 1916). Host plant: Salix spp., Populus spp. (Salicaceae). Russia: **EP** (NW, C), **WS** (Zhelochovtsev, Zinovjev, 1995). – Europe (WE, EE, NE, SE).
- Euura pedunculi** (Hartig, 1837) [Nematus] (*Nematus bellus* Zaddach, 1876; *N. baccarum* Cameron, 1876; *N. curticornis* Cameron, 1885; *Pontania bella nigrescens* Enslin, 1915; *P. pusilla* Lindqvist, 1964). Host plant: Salix spp. (Salicaceae); larvae form galls. Russia: **EP** (NW, C), **WS** (Zhelochovtsev, Zinovjev, 1995), **ES** (YA), **FE** (SA, KA, MG). – Europe (WE, EE, NE, SE), Korean Peninsula.
- Euura piliserra** (Thomson, 1863) [Nematus] (*Pontania piliserra mascula* Enslin, 1915; *P. piliserra tristis* Enslin, 1915; *Pteronidea weiffenbachi* Lindqvist, 1958). Host plant: Salix viminalis (Salicaceae). Russia: **EP** (Zhelochovtsev, Zinovjev, 1995), **WS** (Zhelochovtsev, Zinovjev, 1995). – Europe (WE, EE, NE).
- Euura platystigma** (Lindqvist, 1949) [Pteronidea]. Russia: **ES** (IR). – Europe (NE).
- Euura poecilonota** (Zaddach, 1876) [Nematus] (*Nematus viridescens* Cameron, 1885; *Pteronidea hyalinus* Marlatt, 1896; *Pteronidea subnitens* Lindqvist, 1958). Host plant: Betula spp. (Betulaceae). Russia: **EP** (NW, C, E, S), **WS** (AL), **ES** (TU, IR, BR), **FE** (MG). – Europe (WE, EE, NE, SE), Turkey, Kyrgyzstan, Korean Peninsula.
- Euura polaris** (Holmgren, 1883) [Nematus] (*Nematus morionellus* Holmgren, 1883; *Pteronidea shumagensis* Kincaid, 1900; *Pontania islandica* Kincaid, 1900; *P. birulae* Konow, 1907). Host plant: Salix spp. (Salicaceae). Russia: **EP** (N), **WS** (TM), **FE** (MG). – Europe (WE, NE), N America.
- Euura polita** (Zaddach, 1883) [Nematus] (*Nematus sieboldii* Zaddach, 1884; *Pontania leucapsis connata* Enslin, 1915). Russia: **EP** (NW). – Europe (WE, EE).
- Euura pravus** (Konow, 1895) [Amauronematus]. Host plant: Salix spp. (Salicaceae). Russia: **EP** (NW), **ES** (YA). – Europe (WE, NE), N America.
- Euura pribaiatica** (Lindqvist, 1970) [Amauronematus]. Host plant: Salix spp. (Salicaceae). Russia: **ES** (IR).
- Euura pristiphoroides** (Lindqvist, 1972) [Amauronematus]. Host plant: Salix spp. (Salicaceae). Russia: **ES** (IR), **FE** (KA).
- Euura proxima** (Serville, 1823) [Nematus] (*Nematus proximus* Lepeletier, 1823; *N. gallicola* Stephens, 1835; *N. vallisnerii* Hartig, 1837; *N. redii* Contarini, 1852; *Pontania gallicola* Costa, 1852; *Nematus albicarpus* Costa, 1859; *Messa hyalina* Norton, 1864; *Nematus festivus* Zaddach, 1884; *Euura flavipes* Cameron, 1885; *Pontania daedala* MacGillivray, 1921). Host plant: Salix spp. (Salicaceae); larvae form galls on lateral veins. Russia: **EP** (N, NW, C, E, S), **WS** (AL), **ES** (IR, BR), **FE** (KU, KA, MG). – Europe (WE, EE, NE, SE), Cyprus, Kazakhstan; introduced into N America, Australia, New Zealand.
- Euura pseudodispar** (Lindqvist, 1969) [Pteronidea]. Host plant: Betula spp. (Betulaceae). Russia: **ES** (YA). – Europe (NE).
- Euura pseudoleptocephala** (Haris, 2006) [Amauronematus]. Russia: **FE** (SA).
- Euura pseudotorneensis** (Conde, 1935) [Amauronematus]. Russia: **FE** (SA).
- Euura pumilio** (Konow, 1903) [Pachynematus]. Host plant: Ribes spp. (Grossulariaceae); larvae in black currant berries. Russia: **EP** (NW, C, E), **WS** (TM, TK, AL), **ES** (KR). – Europe (WE, EE, NE).
- Euura punctifrons** (Malaise, 1931) [Pontania]. Russia: **FE** (KA).
- Euura punicea** (Christ, 1791) [Tenthredo] (*Tenthredo nigrata* Retzius, 1783; *T. crocea* Fabricius, 1804; *Nematus melanosternus* Serville, 1823; *N. melanosternus* Lepeletier, 1823; *N. prototypus* Förster, 1854; *Amauronematus excellens* Forsius, 1921). Host plant: Populus spp. (Salicaceae). Russia: **EP** (N, NW, C), **ES** (IR, YA). – Europe (WE, EE, NE), Korean Peninsula.

- Euura purpureae** (Cameron, 1884) [Nematus] (*E. acuminata* Enslin, 1915). Host plant: *Salix purpurea*, *S. acutifolia* (Salicaceae). Russia: **EP** (C). – Europe (WE, EE, NE, SE).
- Euura pustulator** (Forsius, 1923) [Pontania]. Host plant: *Salix phylicifolia*, *S. pulchra* (Salicaceae); larvae form galls. Russia: **EP** (N). – Europe (WE, EE, NE).
- Euura pygmaea** Brischke, 1883 (Cryptocampus). Russia: **EP** (NW). – Europe (EE).
- Euura quieta** (Eversmann, 1847) [Nematus]. Russia: **EP** (E).
- Euura quinqueмонтана** (Jakovlev, 1891) [Pachynematus]. Russia: **EP** (NC).
- Euura ranini** (Lindqvist, 1960) [Amauronematus]. Host plant: *Populus* spp. (Salicaceae). Russia: **ES** (IR). – Europe (NE).
- Euura relictana** (Zinovjev, 1981) [Pontania]. Host plant: *Chosenia arbutifolia* (Salicaceae); larvae form galls. Russia: **FE** (KH, PR, KA, MG).
- Euura respondens** (Förster, 1854) [Nematus] (*Nematus nitens* Thomson, 1888; *Pteronus balassagloi* Jakovlev, 1891). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (E). – Europe (WE, EE, NE), Uzbekistan, Kazakhstan.
- Euura reticulata** (Holmgren, 1883) [Nematus] (*Nematus arcticus* Thomson, 1871; *N. mysticus* Holmgren, 1883; *N. anceps* Holmgren, 1883; *N. occipitalis* Holmgren, 1883; *N. picticollis* Holmgren, 1883; *N. arctica* Dalla Torre, 1894; *Pontania popofiana* Kincaid, 1900; *P. glinka* Kancaid, 1900; *P. forsiusi* Enslin, 1915; *Amauronematus arcticus* Enslin, 1915; *A. alsius* Benson, 1935). Host plant: *Vaccinium* spp. (Ericaceae). Russia: **EP** (N), **WS** (TM), **ES** (KR, YA), **FE** (MG). – Europe (WE, NE), N America.
- Euura ribesicola** (Lindqvist, 1949) [Pteronidea] (*Nematus beybienkoi* Skorikova, 1952). Host plant: *Ribes* spp. (Grossulariaceae). Russia: **EP** (N), **WS** (Zhelochovtsev, Zinovjev, 1995), **ES** (IR, YA), **FE** (KH). – Europe (NE).
- Euura ribesii** (Scopoli, 1763) [Tenthredo] (*Nematus dimidiatus* Lepeletier, 1823; *N. trimaculatus* Lepeletier, 1823; *N. dimidiatus* Serville, 1823; *N. trimaculatus* Serville, 1823; *N. ribesii* Stephens, 1829; *Tenthredo grossulariae folii* Moore, 1831; *T. ventricosa* Bouché, 1834; *Nematus grossulariae* Dahlbom, 1835; *N. ventricosus* Hartig, 1837; *N. flavipes* Hartig, 1840; *N. xanthophorus* Hartig, 1840; *N. macrocerus* Hartig, 1840; *N. ribis* Leduc, 1842; *Tenthredo grossulariae* Fischer von Waldheim, 1843; *Pteronus longicornis* Marlatt, 1896; *P. arapahonum* Cockerell, 1906; *Pteronidea aceris* Rohwer, 1915; *P. ribesii feminina* Enslin, 1916; *P. ribesii konowi* Enslin, 1916; *P. equatia* MacGillivray, 1923). Host plant: *Ribes* spp. (Grossulariaceae). Russia: **EP** (NW, C, E, S, NC), **WS** (Zhelochovtsev, Zinovjev, 1995), **ES** (IR, YA, ZB), **FE** (KH, PR). – Europe (WE, EE, NE, SE), Central Asia, Kazakhstan, Korean Peninsula, Japan (Hon); introduced into N America.
- Euura rubiginosa** (Hellén, 1951) [Amauronematus]. Russia: **ES** (KR).
- Euura rufomacula** (Malaise, 1931) [Amauronematus] (*Amauronematus obesus* Lindqvist, 1959). Russia: **FE** (KA). – Europe (NE).
- Euura rufus** (Konow, 1896) [Amauronematus]. Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (N), **ES** (IR, ZB), **FE** (AM, KA, MG). – Europe (NE).
- Euura sagmarius** (Konow, 1895) [Amauronematus]. Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (N, NW, C, S), **WS** (TM), **ES** (KR). – Europe (WE, NE), N America.
- Euura saliceti sibirica** Stroganova, 1985. Russia: **WS**.
- Euura salicis** (Linnaeus, 1758) [Tenthredo] (*Tenthredo capreae* Linnaeus, 1758; *T. notata* O.F. Müller, 1776; *Cynips salicis capreae* Christ, 1791; *Nematus klugi* Dahlbom, 1835; *N. immaculatus* Snellen van Vollenhoven, 1869; *N. inflatus* Thomson, 1871; *Pteronidea salicis obscurior* Enslin, 1916). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (N, NW, C, S, NC). – Europe (WE, EE, NE, SE), Caucasus.
- Euura saliciscinereae** (Retzius, 1783) [Tenthredo] (*Tenthredo salicis* Christ, 1791; *Nematus gallarum* Hartig, 1837; *N. acerosus* Hartig, 1840; *N. saliceti* Förster, 1854; *N. aestivus* Thomson, 1863; *N. cinereae* Thomson, 1871; *Pontania harrisoni* Benson, 1940; *P. varia* Kopelke, 1991; *P. norvegica* Kopelke, 1991). Host plant: *Salix myrsinifolia* (Salicaceae); larvae form galls. Russia: **EP** (C, E), **UR**. – Europe (WE, EE, NE).
- Euura samolad** (Malaise, 1920) [Pontania]. Host plant: *Salix lapponum* (Salicaceae); larvae form galls. Russia: **EP** (N, NW). – Europe (WE, NE).
- Euura schlueteri** (Enslin, 1915) [Amauronematus] (*Amauronematus lundbohmi* Malaise, 1920; *A. uliginosae* Malaise, 1920; *A. squamotus* Lindqvist, 1959). Host plant: *Vaccinium* spp. (Ericaceae). Russia: **EP** (N), **WS** (TM), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, MG). – Europe (NE).
- Euura scotapsis** (Förster, 1854) [Nematus] (*Nematus westermanni* Thomson, 1863; *N. anglicus* Cameron, 1877; *N. nigrolineatus* Cameron, 1879). Host

- plant: *Salix viminalis*, *S. schwerinii* and others (Salicaceae). Russia: **EP** (N, NW, C), **ES** (KR, IR, YA), **FE** (KA). – Europe (WE, EE, NE), Armenia, Kyrgyzstan.
- Euura scutellata** (Hartig, 1837) [Nematus] (*Nematus immundus* Thomson, 1863). Host plant: *Abies* spp., *Picea* spp., *Larix* spp. (Pinaceae). Russia: **EP** (N, NW, C), **ES** (KR, IR, YA). – Europe (WE, EE, NE).
- Euura semilactea** (Zaddach, 1983) [Nematus]. Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (NW). – Europe (WE, EE, NE), N America.
- Euura semiopaca** (Lindqvist, 1958) [Pteronidea]. Russia: **EP** (N, NC), **WS** (TM). – Europe (NE).
- Euura sempersolis** (Kiær, 1898) [Amauronematus] (*Amauronematus tristis* Lindqvist, 1959). Russia: **EP** (N), **WS** (TM), **ES** (YA), **FE** (KA, MG). – Europe (NE).
- Euura septentrionalis** (Saarinen, 1950) [Amauronematus] (*Nematus taiganus* Zhelochovtsev, 1988). Russia: **FE** (MG). – Europe (NE).
- Euura seriepunctata** (Malaise, 1921) [Pteronidea]. Russia: **EP** (N), **FE** (MG). – Europe (NE).
- Euura sibirica** (Malaise, 1931) [Pontania]. Host plant: *Salix* spp. (Salicaceae). Russia: **FE** (KA).
- Euura sjoebloimi** (Malaise, 1931) [Amauronematus] (*Amauronematus tridentatus* Malaise, 1931). Russia: **FE** (KA).
- Euura smithae** (Ross, 1945) [Pachynematus] (*Pachynematus angustatus* Lindqvist, 1949). Russia: **EP** (Taeger et al., 2006). – Europe (WE, NE), N America.
- Euura speciosa** (Hellén, 1951) [Amauronematus]. Russia: **FE** (MG). – Europe (NE).
- Euura spiraeae** (Zaddach, 1883) [Nematus]. Host plant: *Spiraea* spp., ?*Aruncus* spp. (Rosaceae). Russia: **EP** (NW), **ES** (IR, BR). – Europe (WE, NE).
- Euura stenogaster** (Förster, 1854) [Nematus] (*Nematus trifurcatus* W.F. Kirby, 1882; *Amauronematus analis* Konow, 1897; *A. vescus* MacGillivray, 1921; *A. veneficus* MacGillivray, 1923; *A. festivus* Saarinen, 1950). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (Zhelochovtsev, Zinovjev, 1995), **ES** (IR, YA). – Europe (WE, EE, NE, SE), N America.
- Euura stichi** (Enslin, 1913) [Pteronidea] (*Nematus testaceus* Thomson, 1871; *Pteronidea fuscarima* Benson, 1933). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (N). – Europe (WE, EE, NE, SE).
- Euura styx** (Benson, 1958) [Pachynematus]. Host plant: *Picea* spp. (Pinaceae). Russia: **ES** (KR). – Europe (WE, EE, NE).
- Euura subgemma** Liston, 2006. Russia: **EP** (N). – Europe (WE, EE, NE).
- Euura sylvestris** (Cameron, 1884) [Nematus] (*Nematus silvester* Dalla Torre, 1894; *N. fastosus ponojense* Hellén, 1948; *N. fastosus punctiscuta* Hellén, 1948). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (C, NC), “Siberia” (Zhelochovtsev, Zinovjev, 1995), **FE** (SA). – Europe (WE, EE, NE).
- Euura temporalis** (Hellén, 1970) [Amauronematus]. Russia: **EP** (N, C), **FE** (KA). – Europe (NE).
- Euura tenuiserra** (Lindqvist, 1944) [Amauronematus]. Russia: **EP** (N, NW). – Europe (WE, NE).
- Euura testaceipes** (Brischke, 1883) [Cryptocampus] (*E. cynips* Newman, 1837). Host plant: *Salix* spp. (Salicaceae); larvae form spindle-shaped galls on the petiole or central vein of leaf. Russia: **EP** (NW, C, CR). – Europe (WE, EE, NE), Armenia.
- Euura tibialis** (Newman, 1837) [Nematus] (*Nematus hortensis* Hartig, 1837; *N. xanthobaptus* Förster, 1854; *N. trilineatus* Norton, 1867; *N. catachloris* Snellen van Vollenhoven, 1869; *N. similis* Norton, 1880; *N. robiniae* Forbes, 1885; *Pteronus solitarius* Rohwer, 1908). Host plant: *Robinia pseudoacacia* (Fabaceae). Russia: **EP** (C, S). – Europe (WE, EE, SE), N America.
- Euura tillbergi** (Malaise, 1920) [Amauronematus] (*Amauronematus tillbergi foveifrons* Malaise, 1920). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (N), **ES** (IR). – Europe (WE, NE), Kyrgyzstan, Korean Peninsula, N America.
- Euura toeniata** (Serville, 1823) [Nematus] (*Nematus taeniatus* Lepeletier, 1823; *Tenthredo humeralis* Zetterstedt, 1838; *Amauronematus aemulus* Konow, 1895; *A. zetterstedti* Malaise, 1920). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (NW), **ES** (IR, YA). – Europe (WE, EE, NE), Korean Peninsula.
- Euura tranquilla** Vårdal et Prous, 2014 (*Amauronematus pacificus* Malaise, 1931; *A. obscurus* Lindqvist, 1962). Russia: **ES** (Lindqvist, 1962), **FE** (KA). – Europe (NE).
- Euura transversalis** (Lindqvist, 1977) [Pteronidea]. Russia: **ES** (IR).
- Euura trautmanni** (Enslin, 1919) [Amauronematus] (*Amauronematus lateralis* Konow, 1895; *A. cameroni* Perkins, 1929; *A. piliserra* Lindqvist, 1943). Russia: **EP** (N, NW), **ES** (Zhelochovtsev, Zinovjev, 1995). – Europe (WE, EE, NE, SE).
- Euura triandrae** (Benson, 1941) [Pontania]. Host plant: *Salix triandra* (Salicaceae). Russia: **EP** (NW). – Europe (WE, EE, NE), Kazakhstan.

- Euura trochanterata** (Malaise, 1931) [Pteronidea] (*Nematus pيلي* Takeuchi, 1938). Russia: **FE** (PR). – China (NE).
- Euura tuberculata** (Benson, 1953) [Nematus]. Host plant: *Salix myrtilloides*, *S. saxatilis*, *S. bebbiana*, *S. integra* (Salicaceae). Russia: **EP** (N, NW), **ES** (YA), **FE** (PR, KU, MG, CH). – Europe (WE, NE).
- Euura tunicata** (Zaddach, 1883) [Nematus] (*Nematus laevis* Brischke, 1883). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (NW, C), **ES** (IR). – Europe (WE, EE, NE), Kyrgyzstan.
- Euura turgaiensis** (Safjanov, 1977) [Nematus]. Russia: **WS** (AL). – Kazakhstan.
- Euura udus** (Holmgren, 1883) [Nematus]. Russia: **EP** (N). – Europe (NE).
- Euura umbrata** (Thomson, 1871) [Nematus] (*Nematus collinus* Cameron, 1882; *Pteronus similis* Forsius, 1911; *Pteronidea verrucosae* Kontuniemi, 1966). Host plant: *Betula* spp. (Betulaceae). Russia: **EP** (NW, E), **ES** (IR). – Europe (WE, EE, NE).
- Euura unigallae** (Vikberg et Zinovjev, 2014) [Pontania]. Host plant: *Salix* spp. (Salicaceae); larvae form galls. Russia: **EP** (NW). – Europe (NE).
- Euura vaginosa** (Konow, 1903) [Pachynematus]. Russia: **ES** (IR). – Europe (NE).
- Euura vaga** (Fabricius, 1781) [Tenthredo] (*Tenthredo flaviventris* Gmelin, 1790; *Nematus leucogaster* Hartig, 1840; *N. hypoleucus* Förster, 1854; *N. micraulius* Förster, 1854; *N. punctipleuris* Thomson, 1863; *N. punctulatus* Thomson, 1863; *N. meridionalis* André, 1880; *N. inconspicuus* W.F. Kirby, 1882; *Pachynematus corticosus* MacGillivray, 1901; *Holcocneme ulbrichti* Enslin, 1910; *Pachynematus roscidus* MacGillivray, 1921). Host plant: *Carex* spp. (Poaceae), *Salix* spp. (Salicaceae). Russia: **EP** (N, NW, C, E, NC), **ES** (IR, YA), **FE** (AM, KA, MG). – Europe (WE, EE, NE), Turkey, Kyrgyzstan, Kazakhstan, Mongolia, China (NW).
- Euura variabilis** (Malaise, 1931) [Amauronematus]. Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (Taeger et al., 2006), **FE** (KA, MG).
- Euura varians** (Lindqvist, 1962) [Amauronematus]. Russia: **EP** (Zhelochovtsev, Zinovjev, 1995), **ES** (IR). – Europe (NE).
- Euura variator** (Ruthe, 1859) [Nematus] (*Amauronematus longidens* Lindqvist, 1962). Host plant: *Salix* spp. (Salicaceae). Russia: **FE** (MG). – Europe (WE, EE, NE), N America.
- Euura vastatrix** (Zhelochovtsev, 1935) [Pteronidea]. Host plant: *Ribes* spp. (Grossulariaceae). Russia: **WS** (TK), **ES** (KR, IR), **FE** (AM, KH).
- Euura vastidens** (Lindqvist, 1975) [Amauronematus]. Russia: **ES** (IR).
- Euura venusta** (Brischke, 1883) [Cryptocampus] (*Cryptocampus brevicornis* Zaddach, 1883). Host plant: *Salix* spp. (Salicaceae); larvae in galls on the base of a leaf petiole. Russia: **EP** (NW, C), “Siberia” (Zhelochovtsev, Zinovjev, 1995), **FE** (AM). – Europe (WE, EE, NE), Armenia.
- Euura vesicator** (Bremi-Wolf, 1849) [Nematus] (*Nematus helycinus* Brischke, 1850; *N. leptocerus* Förster, 1854; *N. lugdunensis* Snellen van Vollenhoven, 1871). Host plant: *Salix purpurea*, *S. superpurpurea* (Salicaceae); larvae form galls. Russia: **EP** (NW, C), **ES** (YA). – Europe (WE, EE, NE, SE), Caucasus.
- Euura vicina** (Serville, 1823) [Nematus] (*Nematus vicinus* Lepeletier, 1823; *N. longispinis* Kriechbaumer, 1885; *Holcocneme flavipes* Matsumura, 1912). Host plant: *Salix* spp., *Populus* spp. (Salicaceae), *Betula* spp. (Betulaceae), *Rumex* spp. (Polygonaceae). Russia: **EP** (NW, C, NC), **ES** (IR), **FE** (KH, PR, SA, KA). – Europe (WE, EE, NE, SE), Kyrgyzstan, Kazakhstan, Korean Peninsula, Japan (Hok, Hon), N America.
- Euura viduatinus** (Malaise, 1931) [Amauronematus] (*Amauronematus viduatinus apiciscerra* Malaise, 1931). Russia: **ES** (Zhelochovtsev, Zinovjev, 1995), **FE** (KA). – Europe (NE).
- Euura viduatoides** (Lindqvist, 1960) [Amauronematus]. Host plant: *Salix* spp. (Salicaceae). Russia: **ES** (IR). – Europe (WE, NE).
- Euura viduata** (Zetterstedt, 1838) [Tenthredo] (*Nematus lepidotus* Hartig, 1840; *N. brachyotus* Förster, 1854; *N. luctuosus* Förster, 1854; *N. notatus* Förster, 1854; *N. vagus* Zaddach, 1883; *Amauronematus viduatus lugens* Enslin, 1915; *A. viduatus laetus* Enslin, 1915). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (NW, C), **ES** (IR), **FE** (AM, MG). – Europe (WE, EE, NE, SE), Mongolia, China (NC), N America; introduced into Australia, New Zealand.
- Euura villosa** (Thomson, 1863) [Nematus] (*Nematus arcticus* Holmgren, 1869; *N. brachyacanthus palliditarsus* Cameron, 1876; *N. gelidus* W.F. Kirby, 1882). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (N), **ES** (KR, BR), **FE** (CH). – Europe (NE), N America.
- Euura viminalis** (Linnaeus, 1758) [Cynips] (*Nematus vollenhoveni* Cameron, 1874; *N. interstitialis* Cameron, 1876; *N. nigritarsis* André, 1880; *Pontania ciccum* Konow, 1901; *P. viminalis xanthaspis* Enslin,

- 1915; *P. hungarica* Enslin, 1918). Host plant: *Salix purpurea*, *S. babylonica* (Salicaceae); larvae form galls. Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (TU, YA), **FE** (AM, PR, SA, KU, KA, MG). – Europe (WE, EE, SE), Armenia, Turkey, Mongolia.
- Euura viridis** (Stephens, 1835) [Nematus] (*Nematus prasinus* Hartig, 1837; *N. polyspilus* Förster, 1854; *N. hypoleucus* Costa, 1859; *N. costae* W.F. Kirby, 1882). Host plant: *Betula* spp. (Betulaceae). Russia: **EP** (N), **ES** (IR, BR), **FE** (SA, MG). – Europe (WE, EE, NE, SE), Kazakhstan.
- Euura virilis** (Zirngiebl, 1955) [Pontania] (*Pontania rifana* Lacourt, 1973). Host plant: *Salix purpurea* (Salicaceae); larvae form galls. Russia: **EP** (NW). – Europe (WE, EE, NE, SE).
- Euura viridissima** (Möller, 1882) [Nematus] (*Nematus glutinosae* Cameron, 1882). Host plant: *Alnus* spp. (Betulaceae). Russia: **EP** (N, NW, C, E, S, NC). – Europe (WE, EE, NE, SE).
- Euura vittata** (Serville, 1823) [Nematus] (*Nematus vittatus* Lepeletier, 1823; *N. melanoleucus* Hartig, 1840; *N. exoletus* Eversmann, 1847; *N. continuus* Eversmann, 1847; *N. scabrivalvis* Thomson, 1871; *Amauronematus konowi* Enslin, 1915; *A. vittatus sternalis* Enslin, 1915; *A. crispus* Benson, 1948). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (N, NW, C, E), **UR**, **ES** (IR, YA), **FE** (KA, MG). – Europe (WE, EE, NE), Kyrgyzstan.
- Euura weiffenbachiella** Liston et Vikberg, 2017 (*E. weiffenbachii* Ermolenko, 1988). Host plant: *Salix rosmarinifolia*, *S. repens* (Salicaceae). Russia: **ES** (YA). – Europe (WE, EE, NE).
- Euura zaitzevi** (Enslin, 1919) [Amauronematus]. – Russia: **EP** (N), **WS** (TM).
- HEMICHROA** Stephens, 1835 (*Leptocerca* Hartig, 1837; *Engages* Gistel, 1848; *Leptocercus* Thomson, 1871; *Varna* Ross, 1937). Type species *Tenthredo australis* Serville, 1823. The larvae live in colonies on the *Alnus*, *Betula* (Betulaceae). The genus is distributed in Holarctic and Oriental region. Number of species: World – 13; Palaeartic – 10; Russia – 4.
- Hemichroa australis** (Serville, 1823) [Tenthredo] (*Tenthredo alni* Linnaeus, 1767; *T. luctuosa* Hill, 1773; *T. australis* Lepeletier, 1823). Host plant: *Betula* spp., *Alnus* spp. (Betulaceae); larvae live alone. Russia: **EP** (N, NW, C, E), **UR**, **WS** (TK, AL), **ES** (YA). – Europe (WE, EE, NE), Kazakhstan.
- Hemichroa crocea** (Geoffroy, 1785) [Tenthredo] (*Tenthredo rufa* Panzer, 1799; *Hemichroa stigma* Stephens, 1835; *Leptocercus nigriceps* Thomson, 1871; *Dineura unicolor* Rudow, 1872; *D. americana* Provancher, 1882; *Nematus ardens* Zaddach, 1883; *Dineura pallida* Ashmead, 1890; *Hemichroa dyari* Rohwer, 1918; *H. orientalis* Rohwer, 1921; *H. washingtonia* Rohwer, 1932). Host plant: *Alnus* spp., *Betula* spp., *Corylus* spp. (Betulaceae), *Salix* spp. (Salicaceae); larvae live in groups. Russia: **EP** (N, NW, C, E, NC), **UR**, **ES** (BR, YA), **FE** (AM, KH, PR, SA). – Europe (WE, EE, NE), China (Wei et al., 2006), India, SE Asia, N America.
- Hemichroa haematopygia** Zhelochovtsev, 1935. Host plant: *Alnus* spp., *Betula* spp. (Betulaceae). Russia: **ES** (IR, BR, YA), **FE** (AM, PR, SA, MG). – Korean Peninsula.
- Hemichroa paramushirensis** Takeuchi, 1933. Host plant: *Alnus* spp. (Betulaceae). Russia: **FE** (SA, KU). – Japan (Hon).
- HOPLOCAMPA** Hartig, 1837 (*Macgillivraya* Ashmead, 1898; *Macgillivrayella* Ashmead, 1900). Type species *Tenthredo brevis* Klug, 1816. The larvae in fruits of Rosaceae. The genus is distributed in Holarctic; two species in Oriental region. Number of species: World – > 40; Palaeartic – > 20; Russia – 11.
- Hoplocampa alpina** (Zetterstedt, 1838) [Tenthredo] (*Selandria pallida* Newman, 1837). Host plant: *Sorbus* spp. (Rosaceae). Russia: **EP** (N, C), **WS** (TM), **ES** (KR). – Europe (WE, EE, NE), Japan (Hon).
- Hoplocampa brevis** (Klug, 1816) [Tenthredo] (*Tenthredo fallax* Serville, 1823; *T. fallax* Lepeletier, 1823; *T. pyri* Vallot, 1848). Host plant: *Pyrus* spp., *Malus* spp. (Rosaceae). Russia: **EP** (NC, CR). – Europe (WE, EE, SE), Caucasus, SW Asia; introduced into N America.
- Hoplocampa chrysorrhoea** (Klug, 1816) [Tenthredo] (*H. chrysorrhoea nigrita* Enslin, 1914). Host plant: *Prunus* spp. (Rosaceae). Russia: **EP** (NC, CR). – Europe (WE, EE), Cyprus.
- Hoplocampa crataegi** (Klug, 1816) [Tenthredo] (*Tenthredo pallida* Serville, 1823; *T. luteola* Serville, 1823; *T. verticata* Serville, 1823; *T. pallida* Lepeletier, 1823; *T. luteola* Lepeletier, 1823; *T. verticata* Lepeletier, 1823). Host plant: *Crataegus* spp. (Rosaceae). Russia: **EP** (NC). – Europe (WE, EE, NE, SE).
- Hoplocampa ephippiata** Konow, 1897. Host plant: *Malus* spp. (Rosaceae). Russia: **WS** (AL), **ES** (IR, BR), **FE** (AM, KH, PR).
- Hoplocampa flava** (Linnaeus, 1760) [Tenthredo] (*Tenthredo ruficapilla* Gmelin, 1790; *T. glaucopsis*

- Rossi, 1790; *Allantus ferrugineus* Panzer, 1803; *Hylotoma ferruginea* Fabricius, 1804; *H. simplex* Fallén, 1807; *Tenthredo brunnea* Klug, 1816; *Hoplocampa flava dimidiata* Costa, 1894; *Tomostethus testaceus* Niezabitowski, 1899). Host plant: Prunus spp. (Rosaceae). Russia: **EP** (S, NC). – Europe (WE, EE, NE, SE), Caucasus, SW Asia.
- Hoplocampa fulvicornis** (Panzer, 1801) [Tenthredo] (*Tenthredo rutilicornis* Klug, 1816; *T. haemorrhoidalis* Serville, 1823; *T. haemorrhoidalis* Lepeletier, 1823; *Hoplocampa rutilicornis pleuris* Zirngiebl, 1954; *H. prunicola* Benson, 1968). Host plant: Prunus spp. (Rosaceae). Russia: **EP** (CR). – Europe (WE, EE, NE, SE).
- Hoplocampa minuta** (Christ, 1791) [Tenthredo] (*Tenthredo hylotomoides* Serville, 1823; *T. parvula* Serville, 1823; *T. hylotomoides* Lepeletier, 1823; *T. parvula* Lepeletier, 1823; *T. turcarum* Vallot, 1848; *Hoplocampa fabricii* W.F. Kirby, 1882; *H. minuta dudai* Gregor, 1942). Host plant: Prunus spp. (Rosaceae). Russia: **EP** (NW, CR). – Europe (WE, EE, NE, SE), Armenia, Syria, Uzbekistan, China (NW).
- Hoplocampa phantoma** Zinovjev, 1993. Host plant: Sorbus spp. (Rosaceae). Russia: **UR**, **ES** (Zhelechovtsev, Zinovjev, 1995), **FE** (PR).
- Hoplocampa plagiata** (Klug, 1816) [Tenthredo]. Host plant: Amelanchier spp., Crataegus spp. (Rosaceae). Russia: **EP** (S). – Europe (WE, EE, SE), Caucasus.
- Hoplocampa testudinea** (Klug, 1816) [Tenthredo]. Host plant: Malus spp., Pyrus spp. (Rosaceae). Russia: **EP** (C, S, NC, CR). – Europe (WE, EE, NE, SE), SW Asia; introduced into N America.
- MEGADINEURA** Malaise, 1931 (*Stenomesomeura* Wei, 1998). Type species *Dineura grandis* André, 1882. The genus is distributed in East Asia; one species in Oriental region. Number of species: World and Palaeartic – 5; Russia – 1.
- Megadineura grandis** (André, 1882) [Dineura]. Russia: **ES** (IR), **FE** (PR). – China (NE), Korean Peninsula, Japan (Takeuchi, 1952).
- MESONEURA** Hartig, 1837 (*Pristis* Brullé, 1846; *Mesoneura* Agassiz, 1848; *Lisconeura* Rohwer, 1908). Type species *Tenthredo opaca* Fabricius, 1775. The larvae feed on Quercus (Fagaceae). The genus is distributed in Palaeartic. Number of species: World and Palaeartic – 9; Russia – 3.
- Mesoneura koreana** Ryu, Kim et Lee, 1991. Host plant: Quercus mongolica (Fagaceae). Russia: **FE** (PR). – Korean Peninsula.
- Mesoneura lanigera** Benson, 1954. Host plant: Quercus spp. (Fagaceae). Russia: **EP** (NC, CR). – Europe (EE), Cyprus.
- Mesoneura opaca** (Fabricius, 1775) [Tenthredo] (*Tenthredo verna* Klug, 1816; *T. punctigera* Lepeletier, 1823; *T. punctigera* Serville, 1823; *Selandria biloba* Stephens, 1835; *Dineura pallipes* Hartig, 1837; *D. dorsalis* Förster, 1844; *D. selandriiformis* Cameron, 1875; *Mesoneura opaca nigerrima* Enslin, 1914; *M. opaca lucida* Enslin, 1914; *M. opaca obscuriventris* Enslin, 1914). Host plant: Quercus spp. (Fagaceae). Russia: **EP** (C, S, NC, CR). – Europe (WE, EE, NE, SE), Caucasus.
- NEMATINUS** Rohwer, 1911. Type species *Nematus fuscipennis* Lepeletier, 1823. The larvae feed on Betulaceae. The genus is distributed in Holarctic. Number of species: World – 26; Palaeartic – 22; Russia – 9.
- Nematinus acuminatus** (Thomson, 1871) [Nematus] (*Nematus nebulosus* Stein, 1881). Host plant: Betula spp., Corylus spp., Alnus spp. (Betulaceae). Russia: **EP** (NW, C, E), **UR**, **WS** (AL), **ES** (IR, YA), **FE** (AM, SA, MG). – Europe (WE, EE, NE, SE), Korean Peninsula, Japan (Hok).
- Nematinus aterrimus** Vikberg, 1982 (*Pteronidea pontanioides* Malaise, 1931). Russia: **FE** (SA, KA). – Japan (Hok, Hon).
- Nematinus bilineatus** (Klug, 1819) [Tenthredo] (*Nematus flavus* Gimmerthal, 1844; *N. luteus trimaculatus* Cameron, 1876; *N. flavicans* W.F. Kirby, 1882; *Nematinus bilineatus virilis* Enslin, 1915; *N. bilineatus muliebris* Enslin, 1915; *N. bilineatus luteiformis* Enslin, 1915). Host plant: Betula spp. (Betulaceae). Russia: **EP** (NW). – Europe (WE, EE, NE, SE), Turkey.
- Nematinus caledonicus** (Cameron, 1882) [Nematus] (*N. nigrosternatus* Malaise, 1931). Host plant: Betula spp. (Betulaceae). Russia: **EP** (NW, C), **ES** (IR), **FE** (PR, KU, KA). – Europe (WE, NE).
- Nematinus fuscipennis** (Serville, 1823) [Nematus] (*Tenthredo rufa* Schrank, 1802; *T. alina* Bechstein et Scharfenberg, 1805; *Nematus fuscipennis* Lepeletier, 1823; *N. fumipennis* Stephens, 1835; *N. gravenhorstii* Gimmerthal, 1836). Host plant: Alnus spp., Carpinus spp. (Betulaceae). Russia: **EP** (N, NW, C, E, S). – Europe (WE, EE, NE, SE).
- Nematinus kamtchaticus** Malaise, 1931. Russia: **ES** (KR), **FE** (SA, KA, MG, CH).
- Nematinus luteus** (Panzer, 1803) [Nematus] (*Tenthredo lutea* Fabricius, 1804; *Nematinus willigkiae*

- Stein, 1926; *N. willigkiae pilosus* Benson, 1958). Host plant: *Alnus* spp., *Corylus* spp. (Betulaceae). Russia: **EP** (N, NW, C, E, NC). – Europe (WE, EE, NE), Japan (Hok, Hon).
- Nematinus rubrocaudatus** Takeuchi, 1956. Russia: **FE** (KU). – Japan (Hon).
- Nematinus steini** Blank, 1998 (*Tenthredo alneti* Bechstein et Scharfenberg, 1805). Host plant: *Alnus* spp. (Betulaceae). Russia: **EP** (NW, C). – Europe (WE, EE, NE).
- NEMATUS** Panzer, 1801 (*Nematus* Jurine, 1801; *Nematus* Jurine, 1807; *Craesus* Leach, 1817; *Hypolaeopus* W.F. Kirby, 1882; *Paranematus* Zinovjev, 1978). Type species *Tenthredo lucida* Panzer, 1801. The larvae feed on the deciduous trees and shrubs. The genus is distributed mainly in Holarctic, few species in Oriental region. Number species: World – about 40; Palaearctic – about 35; Russia – 20 (+ 1 ssp.).
- Nematus alniastri** (Scharfenberg, 1805) [Tenthredo] (*N. varus* Villaret, 1832; *Croesus varus ligeris* Pic, 1923). Host plant: *Alnus* spp. (Betulaceae). Russia: **EP** (N, NW, C, E, NC). – Europe (WE, EE, NE, SE), Caucasus, Turkey; introduced into N America.
- Nematus brischkei** Zaddach, 1876. Host plant: *Carpinus* spp., *Corylus* spp. (Betulaceae). Russia: **EP** (NW). – Europe (WE, EE).
- Nematus coeruleus** Zinovjev, 1978. Host plant: *Lonicera coerulea* (Caprifoliaceae). Russia: **EP** (NW).
- Nematus egregius** Kajmuk, 1986. Host plant: *Crataegus* spp. (Rosaceae). Russia: **ES** (YA).
- Nematus inornatus** (Takeuchi, 1936) [Holcocneme]. Host plant: *Salix* spp. (Salicaceae), *Vaccinium* spp. (Ericaceae). Russia: **FE** (KU). – Japan (Hon, Sado).
- Nematus jakowleffi** (Konow, 1902) [Holcocneme]. Host plant: *Salix* spp. (Salicaceae), ?*Betula* spp. (Betulaceae). Russia: **ES** (IR), **FE** (AM).
- Nematus japonicus** (Takeuchi, 1921) [Croesus] (*N. nigromaculatus* Malaise, 1931). Host plant: *Alnus* spp. (Betulaceae). Russia: **FE** (PR, SA, KU, KA). – Korean Peninsula, Japan (Hok, Hon).
- Nematus latipes** Villaret, 1832. Host plant: *Betula* spp. (Betulaceae). Russia: **EP** (C, E), **ES** (BR, YA). – Europe (WE, EE, NE, SE), Kazakhstan.
- Nematus lonicerae** (Weiffenbach, 1957) [Pachynematus]. Host plant: *Lonicera* spp., *Symphoricarpos* spp. (Caprifoliaceae). Russia: **EP** (Zhelochovtsev, Zinovjev, 1995). – Europe (WE, NE, SE).
- Nematus lucens** (Enslin, 1918) [Pteronidea] (*Meso-neura nigrostigmata* Haris, 2001). Russia: **EP** (C). – Europe (EE).
- Nematus lucidus** (Panzer, 1801) [Tenthredo] (*N. cinctus* Serville, 1823; *N. cinctus* Lepeletier, 1823; *Holcocneme lucidus rufa* Zirngiebl, 1937). Host plant: *Crataegus* spp., *Prunus* spp. (Rosaceae). Russia: **EP** (NC), **ES** (YA), **FE** (KU). – Europe (WE, EE, NE, SE), Cyprus, Japan (Hok, Hon).
- Nematus mandshuricus** Zhelochovtsev et Zinovjev, 1994. Host plant: *Lonicera* spp. (Caprifoliaceae). Russia: **ES** (ZB), **FE** (KH).
- Nematus nigrodorsatus** Malaise, 1931. Russia: **FE** (KA).
- Nematus princeps** Zaddach, 1876. Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (NW), **UR**, **WS** (AL), **ES** (IR, BR, YA), **FE** (AM, PR, SA, KU, MG). – Europe (WE, EE, NE), Mongolia, Japan (Hok, Hon, Shi).
- Nematus septentrionalis** (Linnaeus, 1758) [Tenthredo] (*Tenthredo alni* Linnaeus, 1758; *T. largipes* Retzius, 1783; *Nematus laticrus* Villaret, 1832; *Croesus stephensii* Newman, 1837). Host plant: Betulaceae, Oleaceae, Salicaceae. Russia: **WS** (AL), **ES** (KS). – Europe (WE, EE, NE, SE), Armenia, Turkey.
- Nematus shinoharai** (Beneš, 1990) [Croesus]. Host plant: *Juglans* spp. (Juglandaceae). Russia: **FE** (PR). – Japan (Hok, Hon).
- Nematus tataricus** Zinovjev, 1978. Host plant: *Lonicera tatarica*, *L. xylosteum*, *Symphoricarpos racemosus* (Caprifoliaceae). Russia: **EP** (NW, C), **UR**. – Europe (WE, NE), Kazakhstan.
- Nematus tulunensis** Vikberg, 1972. Host plant: *Lonicera* spp., *Symphoricarpos* sp. (Caprifoliaceae). Russia: **EP** (NW, C), **UR**, **ES** (IR, YA). – Europe (NE).
- Nematus wahlbergi tavastiensis** Vikberg, 1972. Host plant: *Lonicera* spp. (Caprifoliaceae). Russia: **EP** (N). – Europe (NE).
- Nematus wahlbergi wahlbergi** Thomson, 1871 (*N. sardiniensis* Costa, 1886). Host plant: *Lonicera* spp. (Caprifoliaceae). Russia: **EP** (NW, C). – Europe (WE, EE, NE, SE).
- Nematus yokohamensis** (Konow, 1895) [Holcocneme]. Host plant: *Lonicera* spp. (Caprifoliaceae). Russia: **ES** (IR, BR), **FE** (PR, SA). – China (NE), Korean Peninsula, Japan (Hon).
- PLATYCAMPOS** Schiodte, 1839 (*Leptopus* Hartig, 1837; *Erasmus* Gistel, 1848; *Camponiscus* Newman, 1869). Type species *Nematus hypogastricus* Hartig, 1837. The larvae with strongly flattened body; live on the lower surface of leaves of woody plants. The genus is distributed in East Palaearctic; one species in West Europe, and one species

in Oriental region. Number of species: World and Palaearctic – 8; Russia – 6.

Platycampus amaculatus Verzhutskii, 1966. Host plant: *Betula* spp. (Betulaceae). Russia: **ES** (IR), **FE** (KH, PR).

Platycampus amurensis Zinovjev, 1986. Host plant: *Corylus* spp. (Betulaceae). Russia: **FE** (AM, PR).

Platycampus coryli Zinovjev, 1986. Host plant: *Corylus* spp. (Betulaceae). Russia: **FE** (AM, PR).

Platycampus luridiventris (Fallén, 1808) [Tenthredo] (*Tenthredo alnicola* Bechstein et Scharfenberg, 1805; *Nematus hypogastricus* Hartig, 1837; *N. alnivorus* Hartig, 1840; *N. rufipes* Tischbein, 1846; *Leptopus rufipes* Förster, 1854; *Nematus protensus* Förster, 1854; *Camponiscus healaei* Newman, 1869; *Nematus fennicus* André, 1880; *N. tischbeini* André, 1880; *N. alnicola* Zaddach, 1883; *N. cellularis* Brischke, 1884; *Platycampus luridiventris pleuritica* Enslin, 1915). Host plant: *Alnus* spp., *Corylus* spp., *Betula* spp. (Betulaceae). Russia: **EP** (NW, C), **UR**. – Europe (WE, EE, NE), China (Wei et al., 2006), Japan (Hon).

Platycampus speciosus Zinovjev, 1986. Host plant: *Alnus* spp. (Betulaceae). Russia: **FE** (AM, KH, PR).

Platycampus zhelochovtsevi Zinovjev, 1986. Host plant: *Alnus* spp. (Betulaceae). Russia: **FE** (AM, KH, PR, SA).

PRISTIPHORA Latreille, 1810 (*Diphadnus* Hartig, 1837; *Lygaeonematus* Konow, 1890; *Micronematus* Konow, 1890; *Gymnonychus* Marlatt, 1896; *Neopareophora* MacGillivray, 1908; *Neotomostethus* MacGillivray, 1908; *Dineuridea* Rohwer, 1912; *Sala* Ross, 1937; *Pristola* Ross, 1945; *Lygaeotus* Lindqvist, 1952; *Lygaeophora* Lindqvist, 1952; *Nepionema* Benson, 1960; *Melastola* Wong, 1968; *Sharliphora* Wong, 1969; *Oligonematus* Zhelochovtsev, 1988; *Lygaeotus* Liston, 1993; *Lygaeophora* Liston, 1993; *Pristicampus* Zinovjev, 1993). Type species *Pteronus testaceus* Jurine, 1807. The larvae feed on various plants, mainly on deciduous, rarely on coniferous. The genus is distributed in Holarctic, Oriental and Neotropical regions. Number of species: World – about 220; Palaearctic – about 170; Russia – 89.

Pristiphora abbreviata (Hartig, 1837) [Nematus] (*Gymnonychus californicus* Marlatt, 1896). Host plant: *Pyrus* spp. (Rosaceae). Russia: **EP** (NW, C, S, NC), **FE** (AM, KH, PR). – Europe (WE, EE, NE,

SE), Caucasus, Turkey, Kyrgyzstan; introduced into N America.

Pristiphora abietina (Christ, 1791) [Tenthredo] (*Tenthredo pini* Retzius, 1783; *T. abietina* Christ, 1791; *T. abietum* Hartig, 1834; *Nematus abietinus* Dahlbom, 1835; *N. truncatus* Hartig, 1837). Host plant: *Picea* spp. (Pinaceae). Russia: **EP** (NW, C), **ES** (YA). – Europe (WE, EE, NE, SE), Kyrgyzstan.

Pristiphora acutidens Lindqvist, 1977. Russia: **ES** (IR).

Pristiphora affinis (Lindqvist, 1952) [Lygaeonematus]. Host plant: *Salix* spp. (Salicaceae). Russia: **ES** (KR). – Europe (NE).

Pristiphora albilabris (Boheman, 1852) [Nematus] (*Nematus albilabris* Thomson, 1863; *N. collaris* Stein, 1884). Host plant: *Betula* spp. (Betulaceae). Russia: **EP** (N, E), **ES** (IR). – Europe (WE, NE).

Pristiphora albitibia (Costa, 1859) [Nematus] (*Nematus puncticeps* Thomson, 1863; *N. agilis* Zaddach, 1884; *Pristiphora aterrima* Lindqvist, 1977; *P. nigropuncticeps* Haris, 2002). Host plant: *Vicia* spp. (Fabaceae). Russia: **EP** (NW, NC), **WS** (Zhelochovtsev, Zinovjev, 1995), **ES** (IR, BR, YA). – Europe (WE, EE, NE, SE), Mongolia.

Pristiphora alpestris (Konow, 1903) [Pachynematus] (*Lygaeonematus karvoneni* Lindqvist, 1952). Host plant: *Betula pendula*, *B. pubescens* (Betulaceae). Russia: **EP** (N), **ES** (IR). – Europe (WE, EE, NE).

Pristiphora amphibola (Förster, 1854) [Nematus] (*Nematus laetus* Cameron, 1883; *N. fraternus* Cameron, 1885). Host plant: *Picea* spp. (Pinaceae). Russia: **EP** (NW). – Europe (WE, EE, NE).

Pristiphora angulata Lindqvist, 1974. Host plant: *Spiraea chamaedryfolia*, *S. salicifolia* (Rosaceae). Russia: **EP** (NW). – Europe (NE), Mongolia.

Pristiphora aphantoneura (Förster, 1854) [Nematus] (*Tenthredo fulvipes* Fallén, 1808; *Cryptocampus distinctus* Costa, 1882; *Pristiphora pygmaea* Lindqvist, 1964). Host plant: *Lathyrus pratensis* (Fabaceae). Russia: **EP** (N, NW, C, E, NC), **UR**. – Europe (WE, EE, NE, SE), Caucasus, Turkey, Kyrgyzstan, Kazakhstan, Mongolia, China (NW), Korean Peninsula.

Pristiphora appendiculata (Hartig, 1837) [Nematus] (*P. pallipes* Lepeletier, 1823; *P. pallipes* Serville, 1823; *Nematus flavipes* Dahlbom, 1835; *N. fuscicornis* Hartig, 1837; *N. enervis* Herrich-Schäffer, 1840; *N. cathoraticus* Förster, 1854; *N. pallicornis* Norton, 1861; *N. pallicornis labratus* Norton, 1861; *Pristiphora grossulariae* Walsh, 1866; *Nematus peletieri* André, 1880; *N. hypobalius* Zaddach, 1884;

- N. pumilus* Zaddach, 1884; *N. ghiliani* Costa, 1894; *Pristiphora anivoskiensis* Haris, 2006). Host plant: Ribes spp. (Grossulariaceae). Russia: **EP** (N, NW, C, E, S, NC), **ES** (IR, BR), **FE** (KH, PR, SA, MG). – Europe (WE, EE, NE, SE), Turkey, Kazakhstan, Mongolia, China (NC), Korean Peninsula, Japan, N America.
- Pristiphora apricoti** Zinovjev, 1993. Russia: **FE** (PR). – Korean Peninsula.
- Pristiphora armata** (Thomson, 1863) [Nematus] (*Nematus crassicornis* Hartig, 1837; *N. crataegi* Brischke, 1883; *N. fletcheri* Cameron, 1884; *N. melanostomus* Zaddach, 1884; *N. ensicornis* Jacobs, 1884; *N. nigricollis* Cameron, 1885). Host plant: Crataegus spp. (Rosaceae). Russia: **EP** (NW, C, S, NC), **FE** (SA, KA). – Europe (WE, EE, NE, SE), Turkey, Kazakhstan.
- Pristiphora biscalis** (Förster, 1854) [Nematus] (*Nematus conspersus* Zaddach, 1883; *N. pruni* Brischke, 1883; *N. lateralis* Brischke, 1885; *N. postumus* Dalla Torre, 1894). Host plant: Prunus spinosa (Rosaceae). Russia: **EP** (NW, C, NC), **ES** (IR, BR), **FE** (SA). – Europe (WE, EE), Turkmenistan.
- Pristiphora borea** (Konow, 1904) [Lygaeonematus] (*Nematus astutus* Cameron, 1885; *Pachynematus lapponicus* Enslin, 1916). Host plant: Betula nana (Betulaceae). Russia: **EP** (N), **WS** (TM), **ES** (IR, YA, ZB), **FE** (MG). – Europe (WE, EE, NE), N America.
- Pristiphora breadalbanensis** (Cameron, 1882) [Nematus] (*Lygaeonematus tromsouensis* Kiær, 1898; *L. corpulentus* Konow, 1904; *L. arctica* Enslin, 1916). Russia: **EP** (N), **ES** (YA), **FE** (CH). – Europe (WE, NE), N America.
- Pristiphora bufo** (Brischke, 1883) [Nematus] (*Pristiphora pallidula* Konow, 1902; *Pachynematus crassicauda* Lindqvist, 1964; *Pristiphora laricicola* Verzhutskii, 1966). Host plant: Larix spp. (Pinaceae). Russia: **EP** (NW), **WS** (TM), **ES** (TU, IR, BR, YA), **FE** (MG). – Europe (WE, EE, NE), Mongolia.
- Pristiphora carinata** (Hartig, 1837) [Nematus] (*Tenthredo pallipes* Fallén, 1808; *Nematus canaliculatus* Hartig, 1840; *N. denudatus* Hartig, 1840; *Pachynematus alticola* Enslin, 1916). Host plant: Vaccinium myrtillus (Ericaceae). Russia: **EP** (N, NW, C, E), **UR**, **WS** (AL), **ES** (KR, IR, YA, ZB), **FE** (KA, MG). – Europe (WE, EE, NE), Kyrgyzstan, Mongolia, China (NC).
- Pristiphora chromata** Rohwer, 1925. Russia: **FE** (PR).
- Pristiphora cincta** Newman, 1837 (*Nematus quercus* Hartig, 1837; *Tenthredo borealis* Zetterstedt, 1838; *Pristiphora identidem* Norton, 1867; *P. idiota* Norton, 1867; *P. coloradensis* Marlatt, 1896; *P. hoodi* Marlatt, 1896; *P. seorsa* Konow, 1897; *P. idiotiformis* Rohwer, 1910). Host plant: Vaccinium spp. (Ericaceae), Betula spp. (Betulaceae), Salix spp. (Salicaceae). Russia: **EP** (N, C, NC), **ES** (IR, BR, YA), **FE** (AM, KH, PR, SA, KA, MG). – Europe (WE, EE, NE), Kazakhstan, Mongolia, Korean Peninsula, Japan (Hon), N America.
- Pristiphora coactula** (Ruthe, 1859) [Nematus] (*Nematus winnipeg* Norton, 1867; *N. alpinus* Thomson, 1871; *N. winnipegensis* W.F. Kirby, 1882; *Lygaeonematus pachyvalvis* Konow, 1904; *Pristiphora dawsoni* Rohwer, 1908). Host plant: Vaccinium uliginosum (Ericaceae). Russia: **EP** (N, NW, C), **WS** (TM, AL), **ES** (TU, KR, IR, BR, YA, ZB), **FE** (MG). – Europe (WE, NE), N America.
- Pristiphora compressa** (Hartig, 1837) [Nematus]. Host plant: Picea spp. (Pinaceae). Russia: **EP** (NW, C, E), **WS** (AL), **ES** (TU, KR, IR). – Europe (WE, EE, NE), Mongolia, China (NC).
- Pristiphora condei** Lindqvist, 1955. Host plant: Sorbus aucuparia, Amelanchier spicata (Rosaceae). Russia: **EP** (NW, C), **FE** (PR). – Europe (NE, EE).
- Pristiphora confusa** Lindqvist, 1955. Host plant: Salix spp. (Salicaceae). Russia: **EP** (N), **FE** (PR). – Europe (WE, EE, NE).
- Pristiphora conjugata** (Dahlbom, 1835) [Nematus] (*Nematus gonymelas* Stephens, 1835; *N. discipennis* Herrich-Schäffer, 1840; *N. discoidalis* Thomson, 1888; *Pristiphora conjugata ulbrichti* Enslin, 1916; *P. conjugata forsiusi* Enslin, 1916). Host plant: Populus spp., Salix spp. (Salicaceae). Russia: **EP** (N, NW, C, E, S, NC), **ES** (IR, YA), **FE** (AM, PR, KA). – Europe (WE, EE, NE, SE), Armenia, Turkey, Iran, Kyrgyzstan, China (NW), Japan.
- Pristiphora dasiphorae** (Zinovjev, 1993) [Pristicampus]. Host plant: Potentilla fruticosa (Rosaceae). Russia: **ES** (IR, ZB), **FE** (MG).
- Pristiphora decipiens** (Enslin, 1916) [Lygaeonematus]. Host plant: Picea spp. (Pinaceae). Russia: **EP** (C), **ES** (YA). – Europe (WE, EE, NE), Kyrgyzstan.
- Pristiphora dochmocera** (Thomson, 1871) [Nematus] (*Tenthredo flavipes* Zetterstedt, 1838; *Nematus congener* W.F. Kirby, 1882; *Pristiphora thomsoni* Lindqvist, 1953). Russia: **EP** (Taeger et al., 2006), **WS** (Zhelochovtsev, Zinovjev, 1995), **FE** (AM). – Europe (NE), Turkey.

- Pristiphora erichsonii** (Hartig, 1837) [Nematus] (*Nematus leachii* Dahlbom, 1835; *N. notabilis* Cresson, 1880). Host plant: Larix spp. (Pinaceae). Russia: **EP** (NW, C), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, SA, KU). – Europe (WE, EE, NE, SE), China (NE), Japan (Hok, Hon); introduced into N America.
- Pristiphora friesei** (Konow, 1904) [Lygaeonematus] (*Pristiphora atrata* Lindqvist, 1975). Host plant: Larix decidua, L. eurolepis (Pinaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (TM), **ES** (IR). – Europe (WE, EE, NE, SE).
- Pristiphora frigida** (Boheman, 1865) [Nematus] (*P. adelungi* Konow, 1902; *P. gelida* Wong, 1968). Russia: **EP** (N). – Europe (NE), N America.
- Pristiphora geniculata** (Hartig, 1840) [Nematus] (*Nematus cheilon* Zaddach, 1876). Host plant: Sorbus spp. (Rosaceae). Russia: **EP** (NW, NC), **ES** (YA), **FE** (KA). – Europe (WE, EE, NE), Kyrgyzstan, Mongolia, China (NC); introduced into N America.
- Pristiphora gerula** (Konow, 1904) [Lygaeonematus]. Host plant: Picea spp. (Pinaceae). Russia: **EP** (Taeger et al., 2006). – Europe (WE, EE, NE).
- Pristiphora glauca** Benson, 1954 (*Pachynematus larivorus* Takagi, 1931; *Pristiphora takagii* Wong, 1975). Host plant: Larix spp. (Pinaceae). Russia: **EP** (N), **ES** (IR, BR), **FE** (PR, SA). – Europe (WE, NE), Mongolia, Korean Peninsula, Japan (Hon).
- Pristiphora groenblomi** (Lindqvist, 1952) [Lygaeonematus]. Host plant: Betula spp. (Betulaceae). Russia: **EP** (N, E), **ES** (IR). – Europe (WE, EE, NE), Mongolia, Korean Peninsula, N America.
- Pristiphora insularis** Rohwer, 1910 (*Amauronematus amelanchieris* Takeuchi, 1922; *Pristiphora kamtschatica* Malaise, 1931; *P. luteiventris* Koch, 1989). Host plant: Amelanchier asiatica, Chaenomeles japonica, Rosa spp. (Rosaceae). Russia: **EP** (N), **ES** (IR), **FE** (KA, MG). – Europe (WE, NE, SE), N Africa, Japan (Hon), N America.
- Pristiphora jacutica** Beneš, 2014. Host plant: Picea obovata (Pinaceae). Russia: **ES** (YA).
- Pristiphora jakowlewi** (Jakovlev, 1891) [Lygaeonematus]. Russia: **ES** (IR).
- Pristiphora kuznetzovororum** (Enslin, 1919) [Lygaeonematus]. Russia: **EP** (N), **WS** (TM).
- Pristiphora lanifica** (Zaddach, 1883) [Nematus]. Russia: **EP** (NW). – Europe (WE, NE).
- Pristiphora laricis** (Hartig, 1837) [Nematus] (*Nematus ruficollis* Hartig, 1840; *N. leucocnemis* Förster, 1854; *N. oblongus* Cameron, 1882; *N. larivorus* Brischke, 1883; *N. rusticanus* Brischke, 1884; *Pachynematus ravidus* Konow, 1903; *Lygaeonematus paedidus* Konow, 1904; *Pachynematus nigricorpus* Takagi, 1931). Host plant: Larix spp. (Pinaceae). Russia: **EP** (NW), **UR**, **WS** (NS), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, MG). – Europe (WE, EE, NE, SE), Mongolia, China (NE), Korean Peninsula, Japan.
- Pristiphora lativentris** (Thomson, 1871) [Nematus] (*Nematus scoticus* Cameron, 1881; *N. extremus* Holmgren, 1883; *Pristiphora bucoda* Kincaid, 1900; *Lygaeonematus alpicola* Konow, 1904; *L. pallipes femoralis* Zirngiebl, 1953). Russia: **EP** (N), **WS** (TM, AL), **ES** (TU, KR, IR), **FE** (MG). – Europe (WE, NE), Mongolia, N America.
- Pristiphora leucopodia** (Hartig, 1837) [Nematus] (*Nematus nitens* Borries, 1896; *Pachynematus sagulatus* Konow, 1903; *Nematus piceae* Zhelochovtsev, 1988; *Pristiphora hoverlaensis* Haris, 2001). Host plant: Picea spp. (Pinaceae). Russia: **EP** (NW, C), **UR**, **WS** (Zhelochovtsev, Zinovjev, 1995), **ES** (YA). – Europe (WE, EE, NE).
- Pristiphora leucopus** (Hellén, 1948) [Nematus] (*Nematus vitreipennis* Eversmann, 1864). Host plant: Tilia spp. (Tiliaceae). Russia: **EP** (NW, C, E), **UR**. – Europe (WE, EE, NE).
- Pristiphora longicornis** (Malaise, 1931) [Pachynematus]. Russia: **FE** (KA).
- Pristiphora luteipes** Linqvist, 1955. Host plant: Salix spp. (Salicaceae). Russia: **EP** (N, C). – Europe (WE, EE, NE, SE).
- Pristiphora maesta** (Zaddach, 1876) [Nematus] (*Nematus brevicornis* Thomson, 1863; *N. parvicornis* W.F. Kirby, 1882; *Pachynematus insularis* Malaise, 1921). Host plant: Malus spp. (Rosaceae). Russia: **EP** (NW, C, NC), **ES** (ZB), **FE** (PR, KA). – Europe (WE, EE, NE), Caucasus.
- Pristiphora malaisei** (Lindqvist, 1952) [Lygaeonematus] (*Mesoneura arctica* Lindqvist, 1959; *Pachynematus incisus* Lindqvist, 1970; *P. intermedius* Verzhutskii, 1974; *Pristiphora mongololaricis* Haris, 2003). Host plant: Potentilla fruticosa, ?Comarum palustre (Rosaceae). Russia: **ES** (IR), **FE** (MG). – Europe (WE, NE), Mongolia.
- Pristiphora melanocarpa** (Hartig, 1840) [Nematus] (*Nematus funerulus* Costa, 1859; *N. wuestneii* Stein, 1885; *Pristiphora ortinga* Kincaid, 1900). Host plant: Betula spp. (Betulaceae). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (Zhelochovtsev, Zinovjev, 1995), **ES** (Zhelochovtsev, Zinovjev, 1995), **FE** (KH,

- PR, SA). – Europe (WE, EE, NE, SE), Kyrgyzstan, China (NW), Korean Peninsula, N America.
- Pristiphora micronematica** Malaise, 1931 (*Lygaeonematus leucostoma* Lindqvist, 1952). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (NW), **ES** (Zhelochovtsev, 1988), **FE** (KA). – Europe (WE, NE), N America.
- Pristiphora mollis** (Hartig, 1837) [Nematus] (*Tenthredo bipunctata* Gmelin, 1790; *Nematus mollis* Hartig, 1837; *Tenthredo lapponica* Zetterstedt, 1838; *Nematus whitei* Cameron, 1878; *Pachynematus orarius* Kincaid, 1900; *P. kontkaneni* Lindqvist, 1960). Host plant: *Vaccinium myrtillus*, *V. uliginosum* (Ericaceae). Russia: **EP** (N, NW, C, E), **ES** (IR, BR, YA), **FE** (AM, MG, CH). – Europe (WE, EE, NE), Mongolia, Korean Peninsula, N America.
- Pristiphora monogyniae** (Hartig, 1840) [Nematus] (*Nematus pullus* Förster, 1854; *N. filicornis* Thomson, 1863; *N. hibernicus* Cameron, 1878; *N. nanus* Zaddach, 1884; *N. serotinus* Zaddach, 1884; *N. catulus* Zaddach, 1884; *N. ludens* Costa, 1894). Host plant: *Prunus spinosa*, *P. domestica* (Rosaceae). Russia: **EP** (NW, NC). – Europe (WE, EE, NE, SE), Caucasus.
- Pristiphora nestor** (Zhelochovtsev, 1981) [Nematus]. Russia: **ES** (IR), **FE** (MG).
- Pristiphora nigella** (Förster, 1854) [Nematus] (*Tenthredo ambigua* Fallén, 1808; *Nematus occultus* Förster, 1854; *N. furvescens* Cameron, 1876; *N. obscurus* Zaddach, 1884; *N. xanthomus* Zaddach, 1884; *N. obscurior* Dalla Torre, 1894). Host plant: *Picea abies* (Pinaceae). Russia: **EP** (NW, C, NC), **ES** (YA). – Europe (WE, EE, NE), Turkey.
- Pristiphora nigricans** (Eversmann, 1847) [Nematus] (*Nematus anderschi* Zaddach, 1876; *Pristiphora inocreata* Konow, 1902; *P. discolor* Lindqvist, 1975). Host plant: *Sanguisorba officinalis* (Rosaceae). Russia: **EP** (NW, C, E), **ES** (IR). – Europe (WE, EE), Kazakhstan.
- Pristiphora nigriceps** (Hartig, 1840) [Nematus] (*Nematus bistratus* Thomson, 1871). Host plant: *Picea abies* (Pinaceae). Russia: **EP** (Zhelochovtsev, Zinovjev, 1995), **ES** (YA), **FE** (PR). – Europe (WE, EE, NE).
- Pristiphora nigromongolica** Haris, 2002. Russia: **ES** (IR). – Mongolia.
- Pristiphora pallida** (Konow, 1904) [Lygaeonematus] (*Lygaeonematus stecki* Nägeli, 1936). Host plant: *Picea abies* (Pinaceae). Russia: "Siberia" (Zhelochovtsev, Zinovjev, 1995). – Europe (WE, EE, NE).
- Pristiphora pallidiventris** (Fallén, 1808) [Tenthredo] (*Nematus ephippiger* Hartig, 1840; *N. flavicomus* Tischbein, 1846; *N. gemellus* Förster, 1854; *N. marshalli* Cameron, 1875; *N. cirrhostomus* Zaddach, 1883; *Pristiphora pallidiventris denudata* Konow, 1902; *P. zella* Rohwer, 1909; *P. pallicoxa* Rohwer, 1910; *P. xanthotrachela* Rohwer, 1913; *P. pallidiventris haemorrhoidalis* Enslin, 1916; *P. pallidiventris stigmatica* Enslin, 1916; *P. ostiaria* MacGillivray, 1920; *P. pallidiventris megalpina* Lacourt, 1987). Host plant: *Filipendula* spp., *Geum* spp., *Rubus* spp. (Rosaceae). Russia: **EP** (NW, C, E, S, NC), **UR**, **ES** (YA), **FE** (AM, PR, SA, KU). – Europe (WE, EE, NE, SE), Georgia, Armenia, Turkey, Kazakhstan, Mongolia, China (NW), Korean Peninsula, Japan (Hok), N America.
- Pristiphora paralella** (Hartig, 1840) [Nematus] (*Lygaeonematus tenuicornis* Lindqvist, 1955). Host plant: *Picea* sp. (Pinaceae). Russia: **EP** (NW), **ES** (IR, YA), **FE** (PR). – Europe (WE, EE, NE), Korean Peninsula.
- Pristiphora parva** (Hartig, 1837) [Nematus] (*Nematus nigricornis* Zaddach, 1883; *N. germanicus* Dalla Torre, 1894; *Lygaeonematus ambiguus flavater* Enslin, 1916). Host plant: *Picea abies* (Pinaceae). Russia: **EP** (NW). – Europe (WE, EE, NE).
- Pristiphora pseudodecipiens** Beneš et Křístek, 1976. Host plant: *Picea* spp. (Pinaceae). Russia: **EP** (Zhelochovtsev, Zinovjev, 1995). – Europe (WE, EE, NE).
- Pristiphora pseudogeniculata** Lindqvist, 1969. Host plant: *Prunus padus* (Rosaceae). Russia: **FE** (KA). – Europe (NE).
- Pristiphora pseudomelanocarpa** Haris, 2006. Russia: **FE** (KU).
- Pristiphora punctifrons** (Thomson, 1871) [Nematus] (*Nematus platyceros* Zaddach, 1884; *Pristiphora viridana* Konow, 1902; *Micronematus camtschaticalis* Enslin, 1927; *Pristiphora aspericeps* Lindqvist, 1960; *P. flavipicta* Lindqvist, 1975; *P. mongoloexigua* Haris, 2002; *P. flavopleura* Haris, 2002; *P. mongolofausta* Haris, 2003). Host plant: *Rosa* spp. (Rosaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (IR, BR, YA), **FE** (SA, KA, MG). – Europe (WE, EE, NE, SE), Georgia, Central Asia, Kazakhstan, Mongolia, Japan (Hon), N America.
- Pristiphora retusa** (Thomson, 1871) [Nematus]. Host plant: *Prunus padus* (Rosaceae). Russia: **EP** (NW, C), **ES** (IR, YA), **FE** (KH, PR). – Europe (WE, EE, NE).

- Pristiphora reuteri** (Lindqvist, 1960) [Lygaeonematus]. Host plant: *Salix phylicifolia* (Salicaceae). Russia: **EP** (N), **UR**, **WS** (TM), **ES** (IR, BR), **FE** (KA, MG). – Europe (NE), N America.
- Pristiphora robusta** (Konow, 1895) [Lygaeonematus]. Host plant: *Picea* spp. (Pinaceae). Russia: **EP** (NW), **ES** (YA). – Europe (EE, NE).
- Pristiphora ruficornis** (Olivier, 1811) [Nematus] (*P. testaceicornis* Serville, 1823; *P. testaceicornis* Lepeletier, 1823; *Nematus fraxini* Hartig, 1837; *N. testaceicornis* Jacobs, 1884; *N. ruficornis integer* Hellén, 1948). Host plant: *Betula pubescens* (Betulaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (Zhelochovtsev, Zinovjev, 1995), **ES** (TU, IR, BR, ZB). – Europe (WE, EE, NE, SE), Armenia, Mongolia.
- Pristiphora rufipes** Serville, 1823 (*P. fusca* Serville, 1823; *Nematus suessionensis* Serville, 1823; *Pristiphora rufipes* Lepeletier, 1823; *P. fusca* Lepeletier, 1823; *Nematus suessionensis* Lepeletier, 1823; *N. selandrioides* Costa, 1859; *N. aquilegiae* Snellen van Vollenhoven, 1866). Host plant: *Aquilegia* spp. (Ranunculaceae). Russia: **EP** (C, S), **WS** (AL), **ES** (KS, KR, YA), **FE** (AM, PR). – Europe (WE, EE, NE, SE), Turkey, Kyrgyzstan; introduced into N America.
- Pristiphora salicivora** (Takeuchi, 1922) [Lygaeonematus]. Host plant: *Salix* spp. (Salicaceae). Russia: **FE** (SA). – Japan (Hon).
- Pristiphora sareptana** Kuznetsov-Ugamskij, 1924 (*P. moravica* Gregor, 1940). Russia: **EP** (C, E, S). – Europe (EE, NE), Kazakhstan.
- Pristiphora saxesenii** (Hartig, 1837) [Nematus] (*P. thalenhorsti* Wong, 1975). Host plant: *Picea* spp. (Pinaceae). Russia: **EP** (NW, C), **WS** (Zhelochovtsev, Zinovjev, 1995), **ES** (YA). – Europe (WE, EE, NE), Kyrgyzstan.
- Pristiphora sermola** Liston, 1993 (*Lygaeonematus variipes* Lindqvist, 1952). Host plant: *Salix* spp. (Salicaceae). Russia: **EP** (NW), **ES** (Zhelochovtsev, Zinovjev, 1995). – Europe (WE, NE).
- Pristiphora similis** Kuznetsov-Ugamskij, 1924. Russia: **EP** (S).
- Pristiphora simplicifrons** Malaise, 1931. Russia: **FE** (PR).
- Pristiphora staudingeri** (Ruthe, 1859) [Nematus] (*P. circularis* Kincaid, 1900; *P. hyperborea* Malaise, 1921; *P. asperlatus* Benson, 1935). Host plant: *Salix herbacea*, *S. phylicifolia* (Salicaceae). Russia: **EP** (N, NW, C), **ES** (KS, KR, IR, YA, ZB), **FE** (KH, KA, MG). – Europe (WE, EE, NE), Mongolia, China (NC), N America.
- Pristiphora subarctica** (Forsslund, 1936) [Lygaeonematus] (*P. pseudosaxesenii* Lindqvist, 1968). Host plant: *Picea abies* (Pinaceae). Russia: **EP** (C), **ES** (KR). – Europe (WE, EE, NE).
- Pristiphora subbifida** (Thomson, 1871) [Nematus] (*Nematus depressus* Hartig, 1840). Host plant: *Acer campestre* (Sapindaceae). Russia: **EP** (Taeger et al., 2006). – Europe (WE, EE, NE), Cyprus, N America.
- Pristiphora subopaca** Lindqvist, 1955 (*P. coniceps* Lindqvist, 1955; *P. brunniapex* Lindqvist, 1960). Host plant: *Salix caprea*, *S. phylicifolia* (Salicaceae). Russia: **EP** (NW), **ES** (IR). – Europe (WE, NE).
- Pristiphora tenuiserra** (Lindqvist, 1959) [Micronematus]. Russia: **EP** (Taeger et al., 2006). – Europe (WE, EE, NE).
- Pristiphora testacea** (Jurine, 1807) [Pteronius] (*Tenthredo betulae* Retzius, 1783; *T. betulae* Christ, 1791; *Nematus betulinus* Dahlbom, 1835; *N. betularius* Hartig, 1837; *N. betulae* Hartig, 1837; *N. melanurus* Hartig, 1840; *N. erythrogaster* Thomson, 1871; *N. crassiventris* Cameron, 1878; *N. hartigii* W.F. Kirby, 1882; *N. luteogaster* W.F. Kirby, 1882; *Pristiphora gaunitzi* Lindqvist, 1968). Host plant: *Betula* spp. (Betulaceae). Russia: **EP** (C). – Europe (WE, EE, NE), China (Wei et al., 2006).
- Pristiphora tetrica** (Zaddach, 1883) [Nematus] (*Nematus velatus* Zaddach, 1883; *Pristiphora nievesi* Haris, 2004). Host plant: *Acer* spp. (Sapindaceae). Russia: **EP** (NC). – Europe (WE, SE), N Africa.
- Pristiphora thalictri** (Kriechbaumer, 1884) [Nematus] (*P. henschi* Konow, 1902; *Diphadnus thalictri* Takeuchi, 1922). Host plant: *Thalictrum aquilegifolium*, *T. minus* (Ranunculaceae). Russia: **EP** (NW, C), **ES** (Zhelochovtsev, Zinovjev, 1995), **FE** (KU). – Europe (WE, EE, NE, SE), Kazakhstan, Mongolia, Korean Peninsula, Japan (Hon).
- Pristiphora thalictrivora** Lindqvist, 1962 (*P. thalicticola* Lindqvist, 1974; *P. rufiventris* Lindqvist, 1974). Host plant: *Thalictrum flavum*, *T. simplex* (Ranunculaceae). Russia: **EP** (Taeger et al., 2006), **ES** (IR). – Europe (NE).
- Pristiphora trochanterica** (Lindqvist, 1952) [Lygaeonematus]. Russia: **EP** (N), **WS** (TM), **ES** (KR). – Europe (NE).
- Pristiphora truncatiserra** Lindqvist, 1975. Russia: **ES** (IR, BR).

Pristiphora werzhutskii Lindqvist, 1970. Host plant: Spiraea spp. (Rosaceae). Russia: **ES** (IR).

Pristiphora wesmaeli (Tischbein, 1853) [Nematus] (*Nematus solea* Snellen van Vollenhoven, 1870). Host plant: Larix spp. (Pinaceae). Russia: **EP** (NW), **WS** (OM), **ES** (KR, IR, YA). – Europe (WE, EE, NE), China (NE), Korean Peninsula, Japan (Hon).

PSEUDODINEURA Konow, 1885 (*Pelmatopus* Hartig, 1837; *Phyllopais* Hering, 1934). Type species *Tenthredo parvula* Klug, 1816. The larvae live in minas on leaves of Ranunculaceae. The genus is distributed in Holarctic. Number of species: World – 12; Palaearctic – 9; Russia – 6.

Pseudodineura clematidis (Hering, 1932) [Pelmatopus]. Host plant: Clematis spp., ?Atragene spp. (Ranunculaceae). Russia: **UR** (Taeger et al., 2006). – Europe (WE, EE).

Pseudodineura enslini (Hering, 1923) [Pelmatopus]. Host plant: Trollius spp. (Ranunculaceae). Russia: **EP** (C), **ES** (KR, IR). – Europe (WE, EE, NE).

Pseudodineura fuscula (Klug, 1816) [Tenthredo] (*Dineura despecta* Hartig, 1837; *Dolerus minutus* Hartig, 1837; *Dineura simulans* Cameron, 1877). Host plant: Ranunculus spp. (Ranunculaceae). Russia: **EP** (N, NW, C, E, S, NC), **ES** (IR). – Europe (WE, EE, NE, SE), Armenia, Kazakhstan; introduced into N America.

Pseudodineura heringi (Enslin, 1921) [Pelmatopus]. Host plant: Anemone spp. (Ranunculaceae). Russia: **EP** (C), **ES** (IR). – Europe (WE, EE, NE).

Pseudodineura mentiensi (Thomson, 1871) [Blennocampa] (*Dineura hepaticae* Brischke, 1883; *Pelmatopus mentiensi konowi* Enslin, 1921). Host plant: Hepatica nobilis (Ranunculaceae). Russia: **EP** (NW, C, E, NC), **UR**, **FE** (KH, PR). – Europe (WE, EE, NE).

Pseudodineura parvula (Klug, 1816) [Tenthredo] (*Tenthredo minuta* Lepeletier et Serville, 1828). Host plant: Pulsatilla spp. (Ranunculaceae). Russia: **EP** (C), **ES** (ZB). – Europe (WE, EE).

STAUROMENEMATUS Benson, 1953 (*Stauronema* Benson, 1948). Type species *Nematus platycerus* Hartig, 1840. The larvae live in minas on leaves. The genus is distributed in Palaearctic. Number of species: one species.

Stauronematus platycerus (Hartig, 1840) [Nematus] (*Nematus vallator* Snellen van Vollenhoven, 1858;

N. cebrionicornis Costa, 1859; *N. callicerus* Thomson, 1863). Host plant: Populus spp., Salix alopecuroa (Salicaceae). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **ES** (IR, YA), **FE** (KH). – Europe (WE, EE, NE, SE), Caucasus, Turkey, Iran, Kyrgyzstan, Kazakhstan, China (CC), Korean Peninsula, Japan (Hok, Hon).

Unplaced Nematinae

Amauronematus nigridorsis Jakovlev, 1891. Russia: **ES** (IR).

Cryptocampus fuscus Zaddach, 1883. Russia: **EP** (NW).

Nematus cinereus Eversmann, 1847. Russia: **EP** (E).

Nematus konowi (Jakovlev, 1891) [Pteronus]. Russia: **EP** (NC).

Nematus contractus Eversmann, 1847. Russia: **EP** (S).

Nematus fruticum Eversmann, 1847. Russia: **EP** (E).

Nematus schewyrewi (Jakovlev, 1891) [Pteronus]. Russia: **EP** (NC).

Nematus (Pteronidea) pyramidalis Hellén, 1948. Russia: **ES** (KR).

Pteronus irkutensis Jakovlev, 1891. Russia: **ES** (IR).

Tenthredo (Selandria) umbrosa Eversmann, 1847. Russia: **EP** (E).

Subfamily SELANDRIINAE

ALPHASTROMBOCEROS Kuznetsov-Ugamskij, 1928 (*Parastromboceros* Takeuchi, 1941). Type species *Strongylogaster konowi* Jakovlev, 1891. The larvae on herbaceous plants. The genus is distributed in Palaearctic and Oriental region. Number of species: World – 5; Palaearctic – 3; Russia – 1.

Alphastromboceros konowi (Jakovlev, 1891) [Strongylogaster] (*Stromboceros filicis* Malaise, 1931). Host plant: Urtica spp. (Urticaceae). Russia: **EP** (C), **FE** (KH, PR, SA). – Europe (WE, EE), China (NE, SE), Korean Peninsula, Japan (Hok, Hon, Kyu).

ANEUGMENUS Hartig, 1837 (*Colposelandria* Enslin, 1912; *Atoposelandria* Enslin, 1913; *Polyselandria* MacGillivray, 1914; *Selandropha* Zirngiebl, 1956). Type species *Tenthredo coronata* Klug, 1818. The larvae on ferns. The genus is distributed in Holarctic, Oriental and Neotropical regions. Number of species: World – 32; Palaearctic – 15; Russia – 8.

- Aneugmenus carinifrons** (Malaise, 1931) [Selandria] (*Selandria planiceps* Malaise, 1931). Host plant: ?*Lysimachia* spp. (Primulaceae). Russia: **FE** (AM, PR). – China (SE), Korean Peninsula, Japan (Hok, Hon, Kyu, Sado, Tsushima).
- Aneugmenus coronatus** (Klug, 1818) [Tenthredo] (*Selandria analis* Thomson, 1871; *S. cereipes* Snellen van Vollenhoven, 1873; *S. bimaculata* Cobelli, 1892; *S. ogloblini* Dovnar-Zapolskij, 1930). Host plant: *Athyrium* spp., *Dryopteris* spp. (Dryopteridaceae), *Pteridium aquilinum* (Dennstaedtiaceae). Russia: **EP** (NW, C, NC), **WS** (AL), **FE** (AM, KH, PR). – Europe (WE, EE, NE, SE), Georgia, China (NE), Korean Peninsula, Japan (Niu, Wei, 2013).
- Aneugmenus fuerstenbergensis** (Konow, 1885) [Selandria]. Host plant: *Pteridium aquilinum* (Dennstaedtiaceae). Russia: **EP** (N, C, E). – Europe (WE, SE, EE, NE).
- Aneugmenus japonicus** Rohwer, 1910 (*A. gratus* Zhelochovtsev, 1951). Host plant: *Pteridium aquelinum* (Dennstaedtiaceae). Russia: **FE** (SA, KU). – China (NC, CC, SE), Korean Peninsula, Japan (Hon, Shi, Kyu).
- Aneugmenus kiotonis** Takeuchi, 1929. Host plant: *Pteridium aquelinum* (Dennstaedtiaceae). Russia: **FE** (SA, KU). – Japan (Hon, Shi, Kyu, Sado).
- Aneugmenus oertzeni** (Konow, 1887) [Selandria]. Russia: **EP** (C). – Europe (SE), SW Asia.
- Aneugmenus padi** (Linnaeus, 1760) [Tenthredo] (*Tenthredo stramineipes* Klug, 1816; *T. albipes* Serville, 1823; *T. albipes* Lapeletier, 1823; *Selandria rufitarsis* Brullé, 1832; *Allantus laticinctus* Brullé, 1832; *Tenthredo cerasorum* Dahlbom, 1835; *Selandria vollenhoveni* Gribodo, 1881; *S. urbis* Ross, 1930). Host plant: *Pteridium aquilinum* (Dennstaedtiaceae). Russia: **EP** (NW, S, NC). – Europe (WE, EE, NE, SE), N Africa, Georgia, Turkey, Iran; introduced into the N America.
- Aneugmenus temporalis** (Thomson, 1871) [Selandria]. Host plant: *Pteridium aquilinum* (Dennstaedtiaceae). Russia: **EP** (NW, C, E), **UR**, **FE** (AM, KH, PR, SA). – Europe (WE, EE, NE, SE), China (NC, NE, CC), Korean Peninsula, Japan (Niu, Wei, 2013).
- BIRKA** Malaise, 1944 (*Lineobirka* Wei et Nie, 1997). Type species *Tenthredo cinereipes* Klug, 1816. The genus is distributed in Palaearctic and Oriental region. Number of species: World – 17; Palaearctic – 11; Russia – 4 from 2 subgenera.
- Birka (Birka) annularis** (Thomson, 1870) [Selandria]. Host plant: *Rubus* spp. (Rosaceae). Russia: **EP** (E), **UR**, **WS** (KM, AL), **ES** (YA). – Europe (WE, EE, NE).
- Birka (Birka) catellata** (Konow, 1900) [Selandria]. Russia: **WS** (KM), **ES** (KR, IR), **FE** (AM).
- Birka (Birka) cinereipes** (Klug, 1816) [Tenthredo] (*Tenthredo aperta* Hartig, 1837; *Selandria foveifrons* Thomson, 1870). Host plant: *Myosotis* spp. (Boraginaceae). Russia: **EP** (NW, C, E), **UR**, **WS** (TM, NS, AL), **FE** (KA). – Europe (WE, EE, NE, SE), Caucasus, Turkey.
- Birka (Lineobirka) koreana** (Takeuchi, 1941) [Nesoselandria] (*B. pallipes* Zhelochovtsev, 1951). Host plant: *Pyrus* spp. (Rosaceae). Russia: **FE** (AM, PR). – China (NE), Korean Peninsula.
- BRACHYTHOPS** Curtis, 1839 (*Coryna* Lapeletier et Serville, 1828; *Paraselandria* Ashmead, 1898; *Selandridea* Rohwer, 1911; *Pseudoselandria* MacGillivray, 1914). Type species *Brachythops seminigra* Curtis, 1839. The larvae free-living, on *Carex* (Cyperaceae). The genus is distributed in Holarctic. Number of species: World and Palaearctic – 4; Russia – 3.
- Brachythops flavens** (Klug, 1816) [Tenthredo] (*Tenthredo scapularis* Lapeletier et Serville, 1828; *Phyllotoma puella* Fallén, 1829; *Brachythops seminigra* Curtis, 1839; *Selandria flavescens* Thomson, 1870; *S. decolorata* Cresson, 1880; *Selandridea vanduzeei* Rohwer, 1911; *Selandria flavens flavior* Enslin, 1913; *Pseudoselandria oxalata* MacGillivray, 1914; *Selandria flavens antennalis* Zirngiebl, 1954). Host plant: *Carex* spp. (Cyperaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **ES** (IR, BR), **FE** (AM, KH). – Europe (WE, EE, NE), Armenia, Kazakhstan, China (Wei et al., 2006), N America.
- Brachythops nitens** (Zhelochovtsev, 1951) [Selandria]. Host plant: *Carex* spp. (Cyperaceae). Russia: **FE** (KH, PR).
- Brachythops wuestneii** (Konow, 1885) [Selandria] (*Selandria flavistigma* Grönblom, 1939). Host plant: *Carex* spp. (Cyperaceae). Russia: **EP** (N, NW), **WS** (AL), **ES** (IR, BR), **FE** (KH). – Europe (WE, EE, NE), N America.
- BUSARBIDEA** Rohwer, 1915 (*Canoniades* Forsius, 1929). Type species *Busarbidea himalaiensis* Rohwer, 1915. The genus is distributed in East Palaearctic and Oriental region. Number of species: World – 19; Palaearctic – 8; Russia – 1.
- Busarbidea ussuriensis** (Malaise, 1931) [Canoniades]. Russia: **FE** (PR).

- DOLERUS** Panzer, 1801 (*Dolerus* Jurine, 1801; *Dosytheus* Leach, 1817; *Dositheus* Agassiz, 1848; *Loderus* Konow, 1890; *Hamatodentiden* Zirngiebl, 1930; *Multidentiden* Zirngiebl, 1930; *Nodulodentiden* Zirngiebl, 1930; *Pratensisformis* Ermolenko, 1975; *Gonagerformis* Ermolenko, 1975; *Nigerformis* Ermolenko, 1975; *Achaetoprion* Goulet, 1986; *Dicrodolerus* Goulet, 1986; *Neodolerus* Goulet, 1986; *Oncodolerus* Goulet, 1986; *Cyperolerus* Zhelochovtsev, 1988; *Poodolerus* Zhelochovtsev, 1988; *Juncilerus* Zhelochovtsev, 1988; *Equidolerus* Taeger et Blank, 1996). Type species *Tenthredo pedestris* Panzer, 1801. The larvae feed mainly on Poaceae and Equisetaceae, less often on Juncaceae and Cyperaceae. The genus is distributed in Holarctic and Oriental region. Number of species: World – about 225; Palaearctic – about 155; Russia – 75 (+ 8 ssp.) from 9 subgenera.
- Dolerus (Achaetoprion) ferrugatus** Serville, 1823 (*D. ferrugatus* Lepeletier, 1823; *D. brevicornis* Thomson, 1871; *D. thomsoni* Konow, 1884; *D. thomsoni miricolor* Konow, 1887). Host plant: Juncus spp. (Juncaceae). Russia: **EP** (C, E). – Europe (WE, EE, NE, SE), China (Wei et al., 2006).
- Dolerus (Achaetoprion) madidus** (Klug, 1818) [Tenthredo] (*Tenthredo lateritia* Klug, 1818; *Dolerus chappelli* Cameron, 1877; *D. lamprechtii* Konow, 1884; *D. madidus monozonus* Enslin, 1913). Host plant: Juncus spp. (Juncaceae). Russia: **EP** (NW, C, E, CR), **WS** (NS). – Europe (WE, EE, NE, SE), Korean Peninsula.
- Dolerus (Achaetoprion) pachycerus** Hartig, 1837 (*D. taeniatus* Zaddach, 1859; *D. tinctipennis* Cameron, 1881; *D. mocsaryi* Konow, 1895). Host plant: Juncus spp. (Juncaceae). Russia: **EP** (N, NW, C, E), **WS** (Zhelochovtsev, 1988), **ES** (BR, YA). – Europe (WE, EE, NE, SE), Kazakhstan.
- Dolerus (Achaetoprion) triplicatus** (Klug, 1818) [Tenthredo] (*Tenthredo tremula* Klug, 1818; *Dolerus trimaculatus* Lepeletier, 1823; *D. dimidiatus* Lepeletier, 1823; *D. trimaculatus* Serville, 1823; *D. dimidiatus* Serville, 1823; *D. lugubris* Gimmerthal, 1834; *D. steini* Konow, 1885; *D. tremulus aemula* Konow, 1902). Host plant: Juncus spp. (Juncaceae). Russia: **EP** (C, S, NC, CR). – Europe (WE, EE, NE, SE), Georgia, Armenia, Turkey.
- Dolerus (Cyperolerus) anticus anticus** (Klug, 1818) [Tenthredo]. Host plant: Carex spp., Eleocharis palustris (Cyperaceae). Russia: **EP** (C, E), **UR**, **WS** (NS), **ES** (Zhelochovtsev, Zinovjev, 1996). – Europe (WE, EE, NE, SE), Caucasus, Turkey, Kazakhstan.
- Dolerus (Dicrodolerus) apricus** (Norton, 1861) [Dositheus] (*D. luctatus* MacGillivray, 1908; *D. femurru-brum* Rohwer, 1909; *Loderus acerbus* MacGillivray, 1923; *L. alticinctus* MacGillivray, 1923; *L. ancisus* MacGillivray, 1923). Russia: **FE** (MG). – China (Wei et al., 2006), N America.
- Dolerus (Dicrodolerus) genucinctus** Zaddach, 1859 (*D. annulipes* Thomson, 1871; *Loderus genucinctus tegularis*). Host plant: Equisetum spp. (Equisetaceae). Russia: **EP** (NW, C, E), **UR**, **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (IR), **FE** (AM, KH, SA, KU, KA, MG). – Europe (WE, EE, NE), Mongolia, China (NE), Japan (Hok, Hon).
- Dolerus (Dicrodolerus) mongolicus** (Muche, 1965) [Loderus]. Host plant: Equisetum spp. (Equisetaceae). Russia: **ES** (ZB). – Mongolia, China (NC).
- Dolerus (Dicrodolerus) vestigialis vestigialis** (Klug, 1818) [Tenthredo]. Host plant: Equisetum spp. (Equisetaceae). Russia: **EP** (NW, C, E, NC), **WS** (KM), **ES** (IR, BR). – Europe (WE, EE, NE, SE), Armenia, Turkey, Iran.
- Dolerus (Dolerus) aericeps** Thomson, 1871 (*D. bajulus* Serville, 1823; *D. bajulus* Lepeletier, 1823; *D. mandibularis* Konow, 1884; *D. aericeps rufipes* Konow, 1888; *D. aericeps erythropus* Enslin, 1913; *D. aericeps theresae* Pic, 1948; *D. aericeps guttatus* Zirngiebl, 1954). Host plant: Equisetum spp. (Equisetaceae). Russia: **EP** (N, NW, C, E), **UR**, **WS** (KM, AL), **ES** (TU, IR, BR, YA), **FE** (PR). – Europe (WE, EE, NE, SE), Caucasus, Turkey, Kazakhstan.
- Dolerus (Dolerus) armillatus** Konow, 1896 (*D. austerus* Muche, 1965). Host plant: Poaceae. Russia: **WS** (AL), **ES** (IR, BR), **FE** (AM, KH, PR). – Mongolia, China (SW, SE), Korean Peninsula, Japan (Hok).
- Dolerus (Dolerus) bimaculatus** (Geoffroy, 1785) [Tenthredo] (*Tenthredo tristis* Fabricius, 1804; *Dolerus saxatilis* Hartig, 1837). Host plant: Equisetum spp. (Equisetaceae). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (AL), **ES** (TU, IR, BR, YA), **FE** (AM, KH, KA, MG). – Europe (WE, EE, NE, SE), Mongolia.
- Dolerus (Dolerus) cothurnatus** Serville, 1823 (*Tenthredo palustris* Klug, 1818; *Dolerus cothurnatus* Lepeletier, 1823; *Dosytheus junci* Stephens, 1835; *Dolerus busaei* Snellen van Vollenhoven, 1858). Host plant: Equisetum spp. (Equisetaceae). Russia: **EP** (N, NW, C, E, S, NC), **ES** (IR), **FE** (MG). – Europe (WE, EE, NE, SE), Mongolia, Korean Peninsula.

- Dolerus (Dolerus) elderi elderi** Kincaid, 1900 (*D. pusillus* Jakovlev, 1891; *D. cohaesus* MacGillivray, 1908; *D. nutricius* MacGillivray, 1923; *Loderus acriculus* MacGillivray, 1923; *Dolerus nyctelius* MacGillivray, 1923; *D. negotiosus* MacGillivray, 1923; *D. nemorosus* MacGillivray, 1923; *D. pullulus* Zhelochovtsev, 1928; *D. elderi auraneus* Ross, 1931; *D. elderi rubicanus* Ross, 1931; *D. elderi melanus* Ross, 1931; *D. pullulus coloratus* Hellén, 1956; *D. orchonensis* Muche, 1965). Host plant: Equisetum spp. (Equisetaceae). Russia: **EP** (N), **WS** (TM, AL), **ES** (KS, KR, IR, BR, YA), **FE** (KA). – Europe (NE), Tadjikistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NW, NC), N America.
- Dolerus (Dolerus) germanicus aterrimus** Zhelochovtsev, 1935. Host plant: Equisetum spp. (Equisetaceae). Russia: **FE** (KU). – Japan (Hok).
- Dolerus (Dolerus) germanicus claripennis** Zhelochovtsev, 1935. Host plant: Equisetum spp. (Equisetaceae). Russia: **FE** (KA, MG).
- Dolerus (Dolerus) germanicus fuscipennis** (Stephens, 1835) [Dositheus] (*D. arcticus* Thomson, 1871). Host plant: Equisetum spp. (Equisetaceae). Russia: **FE** (KA). – Europe (NE).
- Dolerus (Dolerus) germanicus germanicus** (Fabricius, 1775) [Tenthredo] (*Tenthredo hortorum* O.F. Müller, 1776; *T. melanocephala* Fourcroy, 1785; *T. eglanteriae* Fabricius, 1793; *T. pedestris* Panzer, 1801; *T. subfusca* Lepeletier, 1823; *Dositheus xanthopus* Stephens, 1835; *Tenthredo quadricincta* Zetterstedt, 1838; *Dolerus fennicus* André, 1880; *D. rufipus* Gradl, 1881; *D. pratensis nigripes* Konow, 1884; *D. pratensis mediator* Enslin, 1913; *D. pratensis laterater* Enslin, 1913; *D. pratensis terminator* Enslin, 1913; *D. pratensis totus* Malaise, 1931; *D. germanicus berlandi* Pic, 1948; *D. germanicus buyssoni* Pic, 1948; *D. pratensis major* Zirngiebl, 1954). Host plant: Equisetum spp. (Equisetaceae). Russia: **EP** (NW, C), **WS** (NS, KM, AL), **ES** (IR), **FE** (PR, KA). – Europe (WE, EE, NE, SE).
- Dolerus (Dolerus) germanicus meridianus** Zhelochovtsev, 1928. Host plant: Equisetum spp. (Equisetaceae). Russia: **EP** (NC). – Georgia, Armenia.
- Dolerus (Dolerus) germanicus orientalis** Zhelochovtsev, 1935. Host plant: Equisetum spp. (Equisetaceae). Russia: **FE** (AM, KH, PR, MG). – China (NE), Korean Peninsula.
- Dolerus (Dolerus) germanicus sibiricus** Zhelochovtsev, 1935. Host plant: Equisetum spp. (Equisetaceae). Russia: **EP** (N), **WS** (TM), **ES** (KS, KR, IR, BR, ZB), **FE** (MG). – Mongolia.
- Dolerus (Dolerus) germanicus subsolanus** Zhelochovtsev, 1928. Host plant: Equisetum spp. (Equisetaceae). Russia: **UR**, **WS** (OM, AL). – Kazakhstan.
- Dolerus (Dolerus) klutchianus** Malaise, 1931. Russia: **FE** (KA).
- Dolerus (Dolerus) manticatus** Konow, 1907. Host plant: Equisetum spp. (Equisetaceae). Russia: **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (KR, IR), **FE** (AM). – Mongolia, China (NC, SW).
- Dolerus (Dolerus) nigriceps** Konow, 1891. Russia: **EP** (Lacourt, 1999). – Caucasus, Turkey, Iran.
- Dolerus (Dolerus) subarcticus** Hellén, 1956 (*D. willoughbyi* Benson, 1956). Host plant: Equisetum spp. (Equisetaceae). Russia: **EP** (N, C), **WS** (NS), **ES** (KR, YA). – Europe (NE), Mongolia.
- Dolerus (Dolerus) variegatus** Jakovlev, 1891 (*D. patricius* Muche, 1965). Host plant: Equisetum spp. (Equisetaceae). Russia: **WS** (NS, AL), **ES** (IR, BR, ZB), **FE** (AM, MG). – Europe (WE), Mongolia, China (NC).
- Dolerus (Dolerus) yukonensis** Norton, 1872 (*D. scoticus* Cameron, 1881; *D. lateralis* Konow, 1895; *D. arcticola* Kiær, 1898; *D. nuntius* MacGillivray, 1923; *D. nundius* MacGillivray, 1923; *D. scoticus lenensis* Hellén, 1956; *D. thargitai* Zombori, 1994). Host plant: Equisetum spp. (Equisetaceae). Russia: **EP** (N, NW, C, E), **UR**, **WS** (KM), **ES** (IR, BR, YA), **FE** (AM, SA, KU, KA, MG). – Europe (WE, EE, NE), Mongolia, China (NC), N America.
- Dolerus (Equidolerus) gessneri** André, 1880 (*D. labiosus* Konow, 1897; *D. kamtchaticus* Malaise, 1931; *D. gessneri rufomaculata* Hellén, 1956). Host plant: Equisetum spp. (Equisetaceae). Russia: **EP** (NW, C), **WS** (TM), **ES** (KS, KR, IR, BR, ZB), **FE** (AM, SA, KA, MG). – Europe (WE, EE, NE), China (Wei et al., 2006), Korean Peninsula, Japan (Hok, Hon), N America.
- Dolerus (Equidolerus) konowi glacialis** Goulet, 1986. Host plant: Equisetum spp. (Equisetaceae). Russia: **FE** (KU, KA, CH). – N America (Alaska).
- Dolerus (Equidolerus) pratensis** (Linnaeus, 1758) [Tenthredo] (*Tenthredo dubia* Klug, 1818; *T. timida* Klug, 1818; *T. deserta* Klug, 1818; *Dositheus hyalinialis* Stephens, 1835; *Dolerus dubius niger* Enslin, 1909; *D. dubius atratus* Enslin, 1913; *D. pratensis camtschatcalis* Enslin, 1918; *D. variator* Enslin, 1927; *D. variator mesonotalis* Enslin, 1927; *D. variator mesopleuralis* Enslin, 1927). Host plant: Equisetum

- spp. (Equisetaceae). Russia: **EP** (N, NW, C, E), **UR**, **WS** (NS), **ES** (IR, BR, YA), **FE** (AM, KA). – Europe (WE, EE, NE), Turkey, Mongolia, China (NC), N America; introduced into Tropical Africa.
- Dolerus (Equidolerus) pseudoanticus** Malaise, 1931. Russia: **FE** (KA).
- Dolerus (Equidolerus) rhodogaster** Zhelochovtsev, 1935. Host plant: Equisetum spp. (Equisetaceae). Russia: **ES** (IR, BR), **FE** (AM, PR). – China (NE).
- Dolerus (Equidolerus) subfasciatus** F. Smith, 1874 (*D. picinus* Marlatt, 1898). Host plant: Equisetum spp. (Equisetaceae). Russia: **FE** (KU). – Japan (Hon, Shi).
- Dolerus (Loderus) gilvipes albifrons** (Norton, 1861) [Dosytheus] (*D. minusculus* MacGillivray, 1908; *Loderus accuratus* MacGillivray, 1923). Russia: **FE** (CH). – China (NE), N America.
- Dolerus (Loderus) gilvipes gilvipes** (Klug, 1818) [Tenthredo] (*D. tenebrosus* Eversmann, 1847; *Loderus ornatulus* Konow, 1897; *L. ornatulus plagiatus* Konow, 1897; *L. gilvipes camtschatcalis* Enslin, 1927). Russia: **EP** (N, E), **UR**, **ES** (IR, YA), **FE** (AM, PR, KA, MG). – Europe (WE, NE), Mongolia, China (NE, NC), Korean Peninsula, Japan (Goulet, 1986).
- Dolerus (Loderus) pratorum** (Fallén, 1808) [Tenthredo] (*Tenthredo equiseti* Klug, 1818; *Loderus pratorum maculifrons* Hellén, 1956). Host plant: Equisetum spp. (Equisetaceae). Russia: **EP** (N, NW, C, E, NC), **WS** (NS, KM), **ES** (IR, BR, YA), **FE** (AM). – Europe (WE, EE, NE), Kazakhstan, China (NE).
- Dolerus (Neodolerus) anatolii** Heidema et Zinovjev, 2004. Russia: **FE** (PR). – Korean Peninsula.
- Dolerus (Oncodolerus) eversmanni eversmanni** W.F. Kirby, 1882 (*Tenthredo palmata* Klug, 1818; *Dolerus fumosus* Eversmann, 1847; *D. trigeminus* Konow, 1884). Host plant: Equisetum spp. (Equisetaceae). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (KM), **ES** (IR, BR, YA), **FE** (AM, KH, MG). – Europe (WE, EE, NE), Georgia, Armenia, Turkey, Mongolia, China (NE).
- Dolerus (Poodolerus) aeneus** Hartig, 1837 (*D. longicornis* Zaddach, 1859; *D. incertus* Zaddach, 1859; *D. elongatus* Thomson, 1871; *D. aeneus zaddachi* Konow, 1886). Host plant: Poa spp., Hordeum vulgare, Triticum spp. (Poaceae), Carex spp. (Cyperaceae). Russia: **EP** (N, NW, C, E, S, NC), **WS** (AL), **ES** (IR), **FE** (KU, KA, MG). – Europe (WE, EE, NE, SE), Armenia, Turkey, Mongolia.
- Dolerus (Poodolerus) albertii** Muehe, 1969. Russia: **EP** (NC).
- Dolerus (Poodolerus) anthracinus** (Klug, 1818) [Tenthredo] (*Tenthredo mutilata* Klug, 1818; *Dolerus atricapillus* Hartig, 1837; *D. violaceus* Pigeot, 1918; *D. violaceus obscura* Pigeot, 1918). Host plant: Hordeum vulgare, Poa spp. (Poaceae). Russia: **EP** (N, NW, C, E, S). – Europe (WE, EE, NE, SE).
- Dolerus (Poodolerus) asper** Zaddach, 1859 (*D. oblongus* Cameron, 1882; *D. asper megapteroides* Muehe, 1964). Host plant: Deschampsia spp. (Poaceae), Carex spp. (Cyperaceae). Russia: **EP** (N, NW, C, E, S, NC), **ES** (IR, BR, YA), **FE** (AM, MG). – Europe (EE, NE, SE), Armenia, Turkey, Mongolia, China (NC).
- Dolerus (Poodolerus) blanki** Liston, 1995 (*Tenthredo opaca thoracica* Fallén, 1808; *T. thoracica* Klug, 1818). Russia: **EP** (C). – Europe (WE, EE, NE, SE), China (Wei et al., 2006).
- Dolerus (Poodolerus) brevicornis** Zaddach, 1859 (*D. tectus* MacGillivray, 1914). Russia: **EP** (N, NW). – Europe (WE, EE, NE), N America.
- Dolerus (Poodolerus) ciliatus** Konow, 1891 (*D. quasi-ciliatus* Kerenskij, 1926). Russia: **EP** (S, CR). – Europe (EE), Armenia, Turkey, Kazakhstan.
- Dolerus (Poodolerus) coracinus** (Klug, 1818) [Tenthredo]. Russia: **EP** (C). – Europe (WE, EE, NE), Korean Peninsula.
- Dolerus (Poodolerus) dathei** Muehe, 1973. Russia: **EP** (NC).
- Dolerus (Poodolerus) derzavini** Malaise, 1931. Russia: **FE** (KA).
- Dolerus (Poodolerus) docilus** Benson, 1956. Russia: **EP** (C, E), **UR**, **WS** (AL). – Kyrgyzstan, Kazakhstan.
- Dolerus (Poodolerus) fumosus** Stephens, 1835 (*D. brachygaster* Hartig, 1837; *D. gracilis* Zaddach, 1859; *D. brevis* Zaddach, 1859; *D. rarus* Zaddach, 1859). Russia: **EP** (NW). – Europe (WE, EE, NE).
- Dolerus (Poodolerus) gibbosus** Hartig, 1837 (*D. planatus* Hartig, 1837). Russia: **EP** (NW, C), **WS** (Zhelochovtsev, Zinovjev, 1996), **FE** (KH, SA). – Europe (WE, EE, NE), Armenia.
- Dolerus (Poodolerus) gonager** (Fabricius, 1781) [Tenthredo] (*Tenthredo erythrogona* Schrank, 1781; *T. geniculata* Geoffroy, 1785; *Dolerus femoratus* Eversmann, 1847; *D. magnicornis* Eversmann, 1847; *D. lucidus* Zirngiebl, 1930; *D. gonager flavitibia* Hellén, 1956). Host plant: Agrostis spp., Festuca spp., Poa spp., Triticum spp., etc. (Poaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (KM, AL),

- ES** (KS). – Europe (WE, EE, NE, SE), Armenia, Azerbaijan, Turkmenistan.
- Dolerus (Poodolerus) haematodes** (Schrank, 1781) [Tenthredo] (*Tenthredo collaris* Donovan, 1808; *Dolerus coerulescens* Hartig, 1837; *D. micans* Zaddach, 1859; *D. haematodes muliebris* Enslin, 1909; *D. haematodes rufatus* Enslin, 1913). Host plant: Poaceae, Cyperaceae, Juncaceae. Russia: **EP** (N, NW, C, E), **UR**, **WS** (TM), **ES** (TU, YA, ZB). – Europe (WE, EE, NE, SE), Armenia, Turkey.
- Dolerus (Poodolerus) harwoodi** Benson, 1947. Russia: **EP** (N, NW, C, E, S), **UR**, **WS** (NS), **ES** (IR, BR), **FE** (AM, KH). – Europe (WE, EE, NE).
- Dolerus (Poodolerus) kokujewi** Konow, 1902. Russia: **EP** (C, NC). – Caucasus, SW Asia, Iran.
- Dolerus (Poodolerus) liogaster liogaster** Thomson, 1871 (*D. annulatus* Stein, 1894; *D. liogaster rufonotatus* Enslin, 1913; *D. liogaster modestus* Dubois, 1920). Host plant: Dactylis spp., Festuca spp., Poa spp. (Poaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**. – Europe (WE, EE, NE), Kazakhstan.
- Dolerus (Poodolerus) liogaster schneideri** Kjaer, 1898. Host plant: Poaceae. Russia: **EP** (N), **UR**, **WS** (TM, KM, AL), **ES** (IR, BR). – Europe (NE).
- Dolerus (Poodolerus) melanopterus tauricus** Zhelochovtsev, 1928. Russia: **EP** (CR). – Europe (EE).
- Dolerus (Poodolerus) niger** (Linnaeus, 1767) [Tenthredo] (*Tenthredo angusta* Gmelin, 1790). Host plant: Avena spp., Hordeum spp., Secale spp., Triticum spp., etc. (Poaceae). Russia: **EP** (NW, C, E), **WS** (NS, KM). – Europe (WE, EE, NE, SE).
- Dolerus (Poodolerus) nigratus** (O.F. Müller, 1776) [Tenthredo] (*Tenthredo canescens* Gmelin, 1790; *Dolerus cenchris* Hartig, 1837; *D. leucobasis* Hartig, 1837; *D. fissus* Hartig, 1837; *D. hartigii* Scholtz, 1848; *D. analis* Konow, 1890). Host plant: Triticum spp., Festuca spp., Holcus spp., Poa spp., etc. (Poaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **WS** (KM), **ES** (BR). – Europe (WE, EE, NE, SE), Turkey, China (Wei et al., 2006).
- Dolerus (Poodolerus) nitens** Zaddach, 1859 (*D. coruscans* Konow, 1890; *D. wanda* Ross, 1935). Host plant: Festuca spp., Poa spp., Deschampsia spp. (Poaceae). Russia: **EP** (NW, C, E, NC), **UR**, **WS** (NS, KM), **ES** (Zhelochovtsev, Zinovjev, 1996). – Europe (WE, EE, NE, SE); introduced into N America.
- Dolerus (Poodolerus) nonultimus** Zhelochovtsev, 1941. Russia: **EP** (NC). – Georgia, Armenia, Turkey.
- Dolerus (Poodolerus) picipes** (Klug, 1818) [Tenthredo] (*D. brevitarsus* Hartig, 1837; *D. leucopterus* Zaddach, 1859; *D. ochroneurus* Förster, 1860; *D. intermedius* Cameron, 1881; *D. raddatzi* Konow, 1884; *D. leucopterus sulcatus* Konow, 1884). Host plant: Agrostis spp., Festuca sp. (Poaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (NS). – Europe (WE, EE, NE, SE), Armenia, Kazakhstan.
- Dolerus (Poodolerus) puncticollis** Thomson, 1871 (*D. croaticus* Konow, 1890). Host plant: Poa spp., Dactylis spp. (Poaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**. – Europe (WE, EE, NE, SE), N Africa, Armenia, SW Asia, Iran, Turkmenistan.
- Dolerus (Poodolerus) sanguinicollis** (Klug, 1818) [Tenthredo] (*D. lucens* André, 1880; *D. sanguinicollis reicherti* Konow, 1894; *D. sanguinicollis confusus* Enslin, 1913). Host plant: Poaceae. Russia: **EP** (N, NW, C, E), **UR**, **WS** (KM). – Europe (WE, EE, NE, SE).
- Dolerus (Poodolerus) schmidti** Konow, 1884. Russia: **EP** (N). – Europe (WE, NE).
- Dolerus (Poodolerus) stygius** Förster, 1860 (*D. megapterus* Cameron, 1881; *D. carinatus* Konow, 1884; *D. crassus* Konow, 1884; *D. megalopterus* Schulz, 1906; *D. eutropis* Speiser, 1908). Host plant: Carex spp. (Cyperaceae). Russia: **EP** (N, C, E, S), **UR**, **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (YA). – Europe (WE, EE, NE, SE), Turkey.
- Dolerus (Poodolerus) subalatus** Kerenskij, 1926. Russia: **EP** (C, S, NC). – Europe (EE).
- Dolerus (Poodolerus) vernalis** Ermolenko, 1964. Russia: **EP** (CR). – Europe (WE, EE, SE).
- Dolerus (Poodolerus) vulneratus** Mocsáry, 1878. Russia: **EP** (NW), **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (Zhelochovtsev, Zinovjev, 1996), **FE** (AM). – Europe (NE), China (NE), Korean Peninsula.
- Dolerus (Poodolerus) zhelochovtsevi** Heidema et Viitasaari, 2009. Russia: **EP** (NW, C), **WS** (TM). – Europe (WE, EE, NE).
- Dolerus coreanus** Takeuchi, 1927 (*D. merops* Zhelochovtsev, 1928). Russia: **FE** (PR). – China (NE), Korean Peninsula, Japan (Haris, 2000).
- Dolerus ephippiatus** F. Smith, 1874. Host plant: Poaceae (including Hordeum, Triticum, Secale), Equisetum spp. (Equisetaceae). Russia: **FE** (SA, KU). – China (SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Dolerus harukawai** Waterston, 1926. Host plant: Juncus spp. (Juncaceae). Russia: **FE** (PR). – China (NE), Japan (Hon, Kyu).
- Dolerus hyrcanus** Benson, 1968. Russia: **EP** (NC).

- Dolerus jesoensis** Matsumura, 1912. Russia: **FE** (SA). – Japan (Hok).
- Dolerus lewisii** Cameron, 1887. Host plant: *Hordeum* spp., *Triticum* spp. (Poaceae). Russia: **FE** (PR). – Korean Peninsula, Japan (Hon).
- Dolerus novograblenovi** Malaise, 1931. Russia: **FE** (PR, KA, MG). – Korean Peninsula.
- Dolerus okeanskajensis** Rohwer, 1925. Russia: **FE** (PR). – Korean Peninsula.
- Dolerus sachalinensis** Takeuchi, 1936. Russia: **FE** (SA).
- Unplaced *Dolerus*
- Dolerus carbonarius** Zaddach, 1859. Russia: **EP** (NW).
- Dolerus zaddachi** W.F. Kirby, 1882 (*D. fumosus* Zaddach, 1859). Russia: **EP** (NW).
- NEOSTROMBOCEROS** Rohwer, 1912 (*Stypoza* Enderlein, 1920). Type species *Stromboceros metallica* Rohwer, 1912. The larvae feed on the ferns. The genus is distributed in East Palaearctic, Oriental and Australasian regions. Number of species: World – about 135; Palaearctic – about 70; Russia – 2.
- Neostromboceros gracilis** Takeuchi, 1941. Russia: **FE** (KU). – Japan (Hok, Hon, Shi).
- Neostromboceros nipponicus** Takeuchi, 1941. Russia: **FE** (KU). – China (SC), Japan (Hon, Shi, Kyu).
- NESOSELANDRIA** Rohwer, 1910 (*Neobusarbia* Takeuchi, 1928; *Melisandra* Benson, 1939). Type species *Paraselandria imitatrix* Ashmead, 1905. The larvae feed on the ferns and herbaceous plants. The genus is distributed in Palaearctic and Oriental region, two species in Neotropical region; one species introduced into N America. Number of species: World – about 85; Palaearctic – 25; Russia – 2.
- Nesoselandria morio** (Fabricius, 1781) [Tenthredo] (*Tenthredo ulmi* Schrank, 1802; *T. tristis* Serville, 1823; *T. tristis* Lapeletier, 1823; *Emphytus infuscatus* Eversmann, 1847; *Selandria fabricii* Konow, 1885; *Aneugmenus brunneus* Magretti, 1886). Host plant: Ditrichaceae, Dicranaceae, Rosaceae, Boraginaceae, etc. Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (KM, AL), **ES** (IR, BR), **FE** (AM, KH, PR, KU). – Europe (WE, EE, NE, SE), Georgia, Armenia, Turkey, Kazakhstan, China (SE), Korean Peninsula, Japan (Hon); introduced into N America.
- Nesoselandria nipponica** Takeuchi, 1929. Host plant: Polypodiophyta. Russia: **FE** (KU). – China (SE), Japan (Hon, Shi, Kyu).
- POPPIA** Konow, 1904. Type species *Poppia athalioides* Konow, 1904. The larvae feed on the ferns. The genus is distributed in East Asia. Number of species: World and Palaearctic – 2; Russia – 1.
- Poppia athalioides** Konow, 1904. Host plant: Polypodiophyta, ?*Tilia* sp. (Tiliaceae). Russia: **EP** (NC), **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (YA, ZB), **FE** (AM, KH). – China (NE), Japan (Sado).
- PSEUDOHMITAXONUS** Conde, 1932. Type species *Pseudohemitaxonus exsectus* Conde, 1932. The genus is distributed in Palaearctic and Oriental region. Number of species: World – 4; Palaearctic – 3; Russia – 1.
- Pseudohemitaxonus parvus** Naito, 1969. Russia: **FE** (KU). – Japan (Hok, Hon).
- ROCALIA** Takeuchi, 1952. Type species *Rocalia longipennis* Takeuchi, 1952. The genus is distributed in Palaearctic and Oriental region. Number of species: World – 14; Palaearctic – 3; Russia – 1.
- Rocalia longipennis** Takeuchi, 1952. Host plant: *Dryopteris* spp. (Dryopteridaceae). Russia: **FE** (KU). – Europe (NE), Japan (Hok, Hon).
- SELANDRIA** Leach, 1817 (*Cubitella* Malaise, 1944). Type species *Tenthredo serva* Fabricius, 1793. The larvae feed on Poaceae, Juncaceae, Cyperaceae. The genus is distributed in Palaearctic, Oriental and Neotropical regions. Number of species: World – 8; Palaearctic – 4; Russia – 3.
- Selandria konoi** Takeuchi, 1936. Russia: **FE** (SA). – Japan (Hon).
- Selandria melanosterna** (Serville, 1823) [Tenthredo] (*Tenthredo melanosterna* Lapeletier, 1823; *Selandria sixii* Snellen van Vollenhoven, 1858; *S. grandis* Zaddach, 1859; *S. interstitialis* Thomson, 1871). Host plant: *Carex* spp., *Scirpus* spp. (Cyperaceae), *Juncus* spp. (Juncaceae). Russia: **EP** (NW, C, E), **ES** (IR). – Europe (WE, EE, NE).
- Selandria serva** (Fabricius, 1793) [Tenthredo] (*Hylotoma serva mascula* Fallén, 1807; *Tenthredo socia* Klug, 1816; *T. lepida* Serville, 1823; *T. lepida* Lapeletier, 1823; *Selandria dorsalis* Stephens, 1835; *S. excisa* Konow, 1885; *S. serva interstitialis* Konow, 1885; *S. serva fuscitarsis* Benson, 1954; *S. serva punctatus* Zirngiebl, 1956). Host plant: Poaceae, Cyperaceae, Juncaceae. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, TK, NS, AL), **ES** (KR,

IR), **FE** (KH, PR). – Europe (WE, EE, NE, SE), Georgia, Armenia, Turkey, Iran, Kazakhstan, Mongolia, China (NE), Korean Peninsula.

STROMBOCEROS Konow, 1885 (*Strombocerina* Malaise, 1942; *Arbusia* Malaise, 1944). Type species *Tenthredo delicatulus* Fallén, 1808. The larvae on the ferns; pupate inside stems and branches. The genus is distributed in Holarctic, Oriental and Neotropical regions. Number of species: World – 55; Palaearctic – 2; Russia – 2.

Stromboceros delicatulus (Fallén, 1808) [Tenthredo] (*Tenthredo eborina* Klug, 1817; *Synairema alpina* Bremi-Wolf, 1849; *Selandria phthisica* Snellen van Vollenhoven, 1869; *S. virescens* Rudow, 1871; *Tenthredo seesana* Rudow, 1871; *Strongylogaster viridis* Schmiedeknecht, 1881; *Stromboceros delicatulus albiceps* Takeuchi, 1941). Host plant: Dryopteridaceae, Dennstaedtiaceae, Onocleaceae, Polypodiaceae. Russia: **EP** (N, NW, C, E), **UR**, **WS** (NS, KM, AL), **ES** (KR, IR, BR), **FE** (PR, SA, KU, KA). – Europe (WE, EE, NE), China (CC), Korean Peninsula, Japan (Hok, Hon).

Stromboceros koebelei Rohwer, 1910 (*Strongylogaster compressus* Matsumura, 1912; *Stromboceros japonicus* Malaise, 1931). Host plant: Polystichum spp. (Dryopteridaceae). Russia: **UR**, **FE** (PR, SA, KU). – Korean Peninsula, Japan (Hok, Hon).

STRONGYLOGASTER Dahlbom, 1835 (*Pseudotaxonus* Costa, 1894; *Polystichophagus* Ashmead, 1898; *Prototaxonus* Rohwer, 1910). Type species *Tenthredo multifasciata* Geoffroy, 1785. The larvae feed on the ferns. The genus is distributed in Holarctic, Oriental and Neotropical regions. Number of species: World – 55; Palaearctic – 25; Russia – 12.

Strongylogaster baikalensis Naito, 1990. Host plant: Dryopteris spp. (Dryopteridaceae), Matteuccia spp. (Onocleaceae). Russia: **ES** (IR), **FE** (KH). – Europe (EE).

Strongylogaster empriaeformis (Malaise, 1931) [Thrinax]. Host plant: Adiantaceae, Dryopteridaceae, Dennstaedtiaceae, Onocleaceae. Russia: **UR**, **WS** (KM), **FE** (PR, KA). – Japan (Hon).

Strongylogaster filicis (Klug, 1817) [Tenthredo] (*Tenthredo carinata* Klug, 1817; *T. atricornis* Stephens, 1835; *Sciopteryx apicalis* Matsumura, 1912). Host plant: Pteridium aquilinum (Dennstaedtiaceae). Russia: **EP** (NW, C, E), **UR**, **WS** (AL), **ES** (KR, IR), **FE** (AM, KH, SA). – Europe (WE, EE, NE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Sado).

Strongylogaster macula (Klug, 1817) [Tenthredo] (*Thrinax intermedia* Konow, 1885). Host plant: Dryopteridaceae, Pteridium aquilinum (Dennstaedtiaceae). Russia: **EP** (C, E, NC), **UR**, **ES** (IR, BR, ZB), **FE** (PR, KA). – Europe (WE, EE, NE), Armenia, China (NE, SE), Korean Peninsula, Japan (Hok, Hon); introduced into N America.

Strongylogaster mixta (Klug, 1817) [Tenthredo] (*S. femoralis* Cameron, 1875; *Selandria japonica* Matsumura, 1912; *Thrinax contigua orientalis* Malaise, 1931). Host plant: Adiantaceae, Dryopteridaceae, Dennstaedtiaceae. Russia: **EP** (NW, C, E), **UR**, **WS** (KM), **ES** (IR), **FE** (KU, KA). – Europe (WE, EE, NE), Japan (Hok, Hon).

Strongylogaster moiwana Matsumura, 1912. Host plant: Coniogramme spp. (Adiantaceae), Osmunda spp. (Osmundaceae). Russia: **FE** (KU). – Japan (Hok, Hon, Shi).

Strongylogaster multifasciata (Geoffroy, 1785) [Tenthredo] (*Tenthredo lineata* Christ, 1791; *T. linearis* Klug, 1817; *T. alternans* Serville, 1823; *T. alternans* Lepeletier, 1823; *Strongylogaster iridipennis* F. Smith, 1874; *S. caucasicus* Schaposchnikov, 1885; *S. cretensis* Konow, 1887; *S. annularis* Matsumura, 1912; *S. lineata cyprina* Benson, 1954). Host plant: Dennstaedtiaceae, Dryopteridaceae. Russia: **EP** (NW, C, E, NC), **UR**, **WS** (TM, NS, AL), **ES** (IR), **FE** (AM, PR, SA, KU). – Europe (WE, EE, NE, SE), Georgia, SW Asia, Iran, China (SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Sado).

Strongylogaster rubra Naito, 1980. Russia: **ES** (IR), **FE** (KU). – Korean Peninsula, Japan (Hok, Hon).

Strongylogaster secunda (Takeuchi, 1929) [Pseudotaxonus] (*Pseudotaxonus tertius* Conde, 1935; *P. secundus humeralis* Takeuchi, 1955). Host plant: Osmunda japonica (Osmundaceae). Russia: **FE** (PR, KU). – China (NE, SE), Japan (Hok, Hon, Shi, Kyu).

Strongylogaster struthiopteridis (Malaise, 1931) [Thrinax] (*Thrinax maura* Zhelochovtsev, 1988). Host plant: Athyrium spp., Dryopteris spp. (Dryopteridaceae), Pteridium aquilinum (Dennstaedtiaceae). Russia: **UR**, **WS** (KM, AL), **ES** (IR), **FE** (AM, PR, KA). – Europe (NE).

Strongylogaster verzhutskii Naito, 1990. Russia: **ES** (IR).

Strongylogaster xanthocera (Stephens, 1835) [Tenthredo] (*S. geniculata* Thomson, 1871; *S. desbrochersi* Konow, 1892; *S. desbrochersi lepticus* Konow, 1902). Host plant: Dryopteris spp., Polystichum spp., Athyrium spp. (Dryopteridaceae), Pteridium

aquilinum (Dennstaedtiaceae). Russia: **EP** (NW, C), **WS** (AL), **ES** (IR), **FE** (AM, KH, PR). – Europe (WE, EE, NE, SE), China (NE, SE), Japan (Hon).

THRINAX Konow, 1885 (*Hemitaxonus* Ashmead, 1898; *Epitaxonus* MacGillivray, 1908; *Sahlbergia* Forsius, 1910; *Trearea* Malaise, 1947; *Canonarea* Malaise, 1947). Type species *Thrinax contigua* Konow, 1885. The larvae feed on the ferns. The genus is distributed in Holarctic and Oriental region. Number of species: World – 27; Palaeartic – 20; Russia – 7.

Thrinax angustata (Zhelochovtsev, 1951) [*Hemitaxonus*]. Russia: **FE** (KH, PR). – Korean Peninsula.

Thrinax athyrii (Naito, 1971) [*Hemitaxonus*]. Host plant: *Athyrium otophorum* (Dryopteridaceae). Russia: **FE** (KU). – Japan (Hok, Hon, Shi, Kyu).

Thrinax contigua Konow, 1885 (*Sahlbergia struthiopteridis* Forsius, 1910). Host plant: *Matteuccia* spp. (Onocleaceae). Russia: **EP** (NW), **ES** (IR), **FE** (PR, KU, KA). – Europe (NE), Japan (Hok, Hon).

Thrinax formosana (Takeuchi, 1928) [*Hemitaxonus*]. Russia: **FE** (PR). – China (SE).

Thrinax kamtchatica (Malaise, 1931) [*Hemitaxonus*]. Russia: **FE** (AM, PR, KA).

Thrinax paucipunctatus (Malaise, 1931) [*Hemitaxonus*]. Host plant: *Dryopteris* spp. (Dryopteridaceae). Russia: **ES** (IR), **FE** (KH, PR, KA). – Korean Peninsula, Japan (Hok, Hon).

Thrinax takeuchii (Naito, 1971) [*Hemitaxonus*]. Russia: **FE** (KU). – Japan (Hok, Hon).

Subfamily TENTHREDININAE

AGLAOSTIGMA W.F. Kirby, 1882 (*Laurentia* Costa, 1890; *Bivena* MacGillivray, 1894; *Homooneura* Ashmead, 1898; *Neopus* Viereck, 1910; *Macrophypopsis* Enslin, 1912; *Kincaidia* MacGillivray, 1914; *Astochus* MacGillivray, 1914; *Paralloma* Malaise, 1933; *Neurosiobla* Conde, 1935; *Laurentina* Malaise, 1937; *Stigmatosona* Malaise, 1945). Type species *Aglaostigma eburneiguttatum* W.F. Kirby, 1882. The larvae on herbaceous plants. The genus is distributed in Holarctic and Oriental region. Number of species: World – about 55; Palaeartic – 43; Russia – 15 from 5 subgenera.

Aglaostigma (Aglaostigma) amoorensis (Cameron, 1876) [*Tenthredo*] (*Tenthredo amurensis* W.F. Kirby, 1882). Host plant: *Veratrum* spp. (Melanthiaceae).

Russia: **WS** (NS, KM, AL), **ES** (KR, IR, BR), **FE** (AM, KH, PR). – China (NC, NE), Korean Peninsula, Japan (Hon).

Aglaostigma (Aglaostigma) gibbosum (Fallén, 1808) [*Tenthredo*] (*Perineura alpina* Thomson, 1871; *Aglaostigma eburneiguttatum* W.F. Kirby, 1882; *Tenthredopsis novograbenovi* Malaise, 1931). Host plant: *Filipendula* spp. (Rosaceae). Russia: **EP** (N), **UR**, **ES** (IR), **FE** (PR, KA). – Europe (WE, EE, NE, SE).

Aglaostigma (Astochus) aucupariae (Klug, 1817) [*Tenthredo*] (*Tenthredo juvenilis* Serville, 1823; *T. juvenilis* Lepeletier, 1823; *Allantus collaris* Dietrich, 1868; *Laurentia craverii* Costa, 1890; *Macrophya laticarpus* Kriechbaumer, 1891; *Aglaostigma aucupariae lacteore* Benson, 1968). Host plant: *Galium* spp. (Rubiaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (NS, KM), **ES** (IR, BR), **FE** (PR, KU). – Europe (WE, EE, NE), Georgia, Armenia, Turkey, China (Wei et al., 2006).

Aglaostigma (Astochus) fulvipes fulvipes (Scopoli, 1763) [*Tenthredo*]. Host plant: *Galium* spp. (Rubiaceae). Russia: **EP** (N, NW, C, E, S, NC), **WS** (KM, AL), **ES** (IR). – Europe (WE, EE, NE, SE), Georgia, Turkey, Central Asia, Kazakhstan.

Aglaostigma (Bivena) langei (Konow, 1894) [*Rhogogastera*] (*A. langei eichleri* Muehe, 1975). Host plant: *Epilobium* spp. (Onagraceae). Russia: **EP** (NC). – Europe (WE, EE), Armenia.

Aglaostigma (Macrophypopsis) carbo (Malaise, 1931) [*Macrophypopsis*]. Russia: **FE** (PR).

Aglaostigma (Macrophypopsis) grosseserratum (Malaise, 1931) [*Macrophypopsis*]. Russia: **FE** (PR).

Aglaostigma (Macrophypopsis) nebulosum (André, 1881) [*Macrophya*] (*Tenthredopsis schmiedeknechti* Konow, 1892). Host plant: *Filipendula* spp. (Rosaceae), *Impatiens* spp. (Balsaminoceae). Russia: **EP** (C, NC), **ES** (IR), **FE** (AM, PR, SA, KU). – Europe (WE, NE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

Aglaostigma (Macrophypopsis) occipitosum (Malaise, 1931) [*Macrophypopsis*]. Host plant: *Angelica polymorpha* (Apiaceae), *Petasites japonicus* (Asteraceae). Russia: **FE** (PR). – China (SE), Korean Peninsula, Japan (Hon, Shi, Kyu, Sado).

Aglaostigma (Macrophypopsis) ochraceum (Malaise, 1931) [*Macrophypopsis*]. Russia: **FE** (PR).

Aglaostigma (Macrophypopsis) tricolor (Malaise, 1931) [*Macrophypopsis*]. Russia: **FE** (PR).

Aglaostigma (Neurosiobla) malaisei (Conde, 1935) [*Neurosiobla*]. Russia: **FE** (PR).

- Aglaostigma (Neurosiobla) sachalinense** (Conde, 1935) [Neurosiobla] (*A. togashii* Zombori, 1973). Russia: **ES** (Zhelochovtsev, Zinovjev, 1996), **FE** (PR, SA). – Japan (Zinovjev, 1994).
- Aglaostigma (Neurosiobla) tertium** Zinovjev, 1994. Russia: **FE** (KH, PR).
- Aglaostigma sapporonis** (Matsumura, 1912) [Macrophya] (*Dolerus biguttatus* Matsumura, 1912). Russia: **FE** (PR). – Japan (Hok, Hon).
- ARMITARSUS** Malaise, 1931. Type species *Armitarsus punctifemoratus* Malaise, 1931. The genus is distributed in East Asia. Number of species: World and Palaearctic – 7; Russia – 4.
- Armitarsus albipes** Malaise, 1931. Russia: **FE** (AM, PR).
- Armitarsus minutus** Zhelochovtsev, 1935. Russia: **FE** (AM, PR). – Korean Peninsula, Japan (Hok).
- Armitarsus punctifemoratus** Malaise, 1931. Host plant: *Alnus* spp. (Betulaceae). Russia: **FE** (PR, SA). – Korean Peninsula, Japan (Hok, Hon).
- Armitarsus semirufus** Takeuchi, 1936. Russia: **FE** (SA). – Japan (Hok, Hon).
- CONASPIDIA** Konow, 1898. Type species *Conaspidia sikkimensis* Konow, 1898. The genus is distributed in East Asia and Oriental region. Number of species: World – 23; Palaearctic – 13; Russia – 3.
- Conaspidia guttata** (Matsumura, 1912) [Eriocampa] (*C. trifasciata* Malaise, 1931; *C. murotai* Togashi, 1984; *C. ishikawai* Togashi, 2005). Host plant: *Kalopanax septemlobus* (Araliaceae). Russia: **FE** (SA, KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Conaspidia hyalina** Sato, 1933. Russia: **FE** (KU). – Japan (Hok, Hon, Shi, Kyu).
- Conaspidia singularis** (Malaise, 1931) [Eriocampa] (*Macrophya flavipes* F. Smith, 1874). Russia: **FE** (KH, PR). – Japan (Hok, Hon).
- CORYMBAS** Konow, 1903 (*Siobloides* Takeuchi, 1919). Type species *Corymbas koreana* Konow, 1903. The genus is distributed in East Asia and Oriental region. Number of species: World – 7; Palaearctic – 5; Russia – 2.
- Corymbas aperta** (Takeuchi, 1919) [Siobloides]. Host plant: *Rhododendron* spp. (Ericaceae). Russia: **FE** (KU). – Japan (Hok, Hon, Shi, Kyu).
- Corymbas koreana** Konow, 1903. Russia: **FE** (PR). – China (SE), Korean Peninsula.
- LAGIDINA** Malaise, 1945. Type species *Macrophya irritans* F. Smith, 1874. The genus is distributed in East Palaearctic and Oriental region. Number of species: World – 8; Palaearctic – 6; Russia – 1.
- Lagidina platycerus platycerus** (Marlatt, 1898) [Tenthredo] (*Tenthredo platyceros* Konow, 1899). Host plant: *Iris laevigata* (Iridaceae), *Viola* spp. (Violaceae). Russia: **FE** (KU). – Japan (Hon, Shi, Kyu, Tsushima).
- MACROPHYA** Dahlbom, 1835 (*Zalagium* Rohwer, 1912; *Pseudomacrophya* Enslin, 1913; *Paramacrophya* Forsius, 1918). Type species *Tenthredo montana* Scopoli, 1763. The genus is distributed in Holarctic and Oriental region. Number of species: World – about 260; Palaearctic – about 160; Russia – 46 (+ 1 ssp.) from 2 subgenera.
- Macrophya (Macrophya) albicincta** (Schrank, 1776) [Tenthredo] (*Tenthredo albipes* Geoffroy, 1785; *T. albipalpis* Schrank, 1802; *T. luctuosa* Lepeletier, 1823; *T. lugubris* Serville, 1823; *T. luctuosa* Serville, 1823; *Macrophya leucopoda* Palma, 1861; *Tenthredo magnicornis* Eversmann, 1864; *Macrophya melanosoma* Rudow, 1871; *M. albicincta decipiens* Konow, 1884; *Perineura crippae* De-Stefani, 1885; *Macrophya albicincta candidata* Enslin, 1918; *M. albicincta agnani* Pic, 1948; *M. albicincta berlandi* Pic, 1948). Host plant: *Valeriana* ssp. (Caprifoliaceae), *Sambucus* spp., *Viburnum* spp. (Adoxaceae). Russia: **EP** (C, S, NC). – Europe (WE, EE, NE, SE), N Africa, Georgia, Armenia, Turkey, Iran.
- Macrophya (Macrophya) albipuncta** (Fallén, 1808) [Tenthredo] (*Tenthredo arbustorum* Pollich, 1781; *T. liciata* Eversmann, 1847; *Macrophya nivosa* Costa, 1894). Host plant: *Geranium* spp. (Geraniaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (KM, AL), **ES** (KS). – Europe (WE, EE, NE, SE).
- Macrophya (Macrophya) annulata** (Geoffroy, 1785) [Tenthredo] (*Tenthredo dorsigera* Rossi, 1790; *T. similis* Spinola, 1808; *T. neglecta* Klug, 1817; *Allantus dejectus* Norton, 1860; *Macrophya neglecta nigra* Konow, 1894; *M. annulata theresae* Pic, 1918). Host plant: *Potentilla* spp., *Rosa* spp., *Rubus* sp. (Rosaceae), *Sambucus* spp. (Adoxaceae), *Origanum* spp. (Lamiaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (NS), **ES** (IR, BR, YA), **FE** (AM, PR). – Europe (WE, EE, NE, SE), Armenia, Turkey, Iran, Central Asia.

- Macrophya (Macrophya) annulicornis** Konow, 1904.
Host plant: Sambucus spp. (Adoxaceae). Russia: **UR, WS** (AL), **ES** (IR, BR, ZB), **FE** (AM, SA). – Korean Peninsula.
- Macrophya (Macrophya) annulitibia** Takeuchi, 1933.
Russia: **FE** (PR, SA, KU). – China (NE, NC, CC), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Macrophya (Macrophya) apicalis** F. Smith, 1874.
Host plant: Sambucus racemosa, S. sieboldiana (Adoxaceae). Russia: **FE** (KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Macrophya (Macrophya) blanda** (Fabricius, 1775) [Tenthredo] (*Tenthredo ligustrina* Geoffroy, 1785; *T. cylindrica* Panzer, 1799; *T. albilabris* Klug, 1817; *T. lacrymosa* Lepeletier, 1823; *T. lacrymosa* Serville, 1823; *T. cognata* Fallén, 1829; *T. nyctea* Fischer von Waldheim, 1843; *Macrophya blanda brevicornis* Gradl, 1878; *M. albolapidaria* Kuznetzov-Ugamskij, 1927; *Tenthredo reductenotata* Pic, 1928). Host plant: Rubus spp., Fragaria spp. (Rosaceae). Russia: **EP** (C, E, S, NC, CR), **UR, WS** (Zhelochovtsev, Zinovjev, 1996). – Europe (WE, EE, NE, SE), Georgia, Armenia, Turkey, Kyrgyzstan, Kazakhstan.
- Macrophya (Macrophya) carbonaria** F. Smith, 1874.
Host plant: Sambucus racemosa, S. sieboldiana (Adoxaceae). Russia: **FE** (SA, KU). – China (CC, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Awa-shima, Awaji-shima, Tsushima).
- Macrophya (Macrophya) carinthiaca** (Klug, 1817) [Tenthredo]. Host plant: Geranium spp. (Geraniaceae). Russia: **EP** (N, C), **UR, WS** (AL). – Europe (WE, EE, NE).
- Macrophya (Macrophya) caucasica** (Mocsáry, 1880) [Allantus] (*M. prasiniipes* Konow, 1891). Russia: **EP** (NC). – Armenia.
- Macrophya (Macrophya) chrysuria** (Klug, 1817) [Tenthredo] (*M. albimacula* Mocsáry, 1881; *M. pallidilabris* Costa, 1890). Host plant: Daucus carota (Apiaceae). Russia: **EP** (S). – Europe (WE, EE, SE).
- Macrophya (Macrophya) convexiscutellaris** Muche, 1969. Russia: **EP** (NC).
- Macrophya (Macrophya) crassula** (Klug, 1817) [Tenthredo] (*Tenthredo maculosa* Serville, 1823; *T. maculosa* Lepeletier, 1823; *Macrophya klugii* Snellen van Vollenhoven, 1869; *M. cora* W.F. Kirby, 1886). Host plant: Sambucus spp. (Adoxaceae). Russia: **EP** (NC). – Europe (WE, EE, SE), Georgia, Armenia, Turkey.
- Macrophya (Macrophya) diversipes** (Schrank, 1782) [Tenthredo] (*Tenthredo haematopus* Panzer, 1801; *T. ocreata* Panzer, 1804; *T. rubripes* Drapiez, 1820; *T. corallipes* Eversmann, 1847; *Macrophya flavipes* Tischbein, 1852; *Tenthredo halensis* Aichinger, 1870; *Macrophya haematopus immaculiventris* Costa, 1871; *M. eximia* Mocsáry, 1877; *M. caucasica* André, 1881; *M. rubripes* André, 1881; *M. saundersi* W.F. Kirby, 1886; *M. sanguinipes* Mocsáry, 1891; *M. dalmatina* Gasperini, 1891; *M. diversipes passerinii* Ghigi, 1905; *M. diversipes feminina* Enslin, 1913; *M. diversipes masculina* Enslin, 1913; *M. diversipes maculativentris* Enslin, 1913; *M. diversipes nigratarsis* Enslin, 1913). Host plant: Fragaria spp., Rubus spp. (Rosaceae). Russia: **EP** (C, E, S, NC), **UR, ES** (TU). – Europe (WE, EE, SE), Georgia, Armenia, Turkey, Iran, Kyrgyzstan, Kazakhstan.
- Macrophya (Macrophya) duodecimpunctata duodecimpunctata** (Linnaeus, 1758) [Tenthredo] (*Tenthredo signata* Scopoli, 1763; *T. labiata* Geoffroy, 1785; *T. fera* Scopoli, 1786; *T. melanoleuca* Gmelin, 1790; *T. lugubris* Drapiez, 1820; *T. idriensis* Lepeletier, 1823; *T. albamacula* Lepeletier, 1823; *T. albamacula* Serville, 1823; *T. dolens* Eversmann, 1847; *T. curvipes* Gimmerthal, 1847; *Macrophya novemguttata* Costa, 1859; *M. luridicarpa* Costa, 1894; *M. duodecimpunctata nigrina* Konow, 1898). Host plant: Poaceae, Carex spp. (Cyperaceae). Russia: **EP** (NW, C, E, S, NC), **UR, WS** (NS, AL). – Europe (WE, EE, NE, SE), N Africa, Georgia, Armenia, Turkey.
- Macrophya (Macrophya) duodecimpunctata sodalitia** Mocsáry, 1909. Host plant: Carex spp. (Cyperaceae). Russia: **FE** (AM, KH, PR, SA). – Korean Peninsula, Japan (Hok, Hon).
- Macrophya (Macrophya) erythrocnema** Costa, 1859 (*Tenthredo femoralis* Eversmann, 1864). Russia: **EP** (NW, C, E), **UR**. – Europe (WE, EE, NE, SE), Armenia, SW Asia.
- Macrophya (Macrophya) hamata caucasicola** Muche, 1969. Russia: **EP** (NC).
- Macrophya (Macrophya) imitator** Takeuchi, 1937.
Host plant: Aster spp. (Asteraceae). Russia: **FE** (AM, PR, SA, KU). – Korean Peninsula, Japan (Hok, Hon).
- Macrophya (Macrophya) infumata** Rohwer, 1925 (*M. scutellata* Kuznetzov-Ugamskij, 1927). Host plant: Sambucus racemosa (Adoxaceae). Russia: **EP** (E), **UR, WS** (KM, AL), **ES** (TU, IR), **FE** (AM, PR, SA, KU). – China (NE), Korean Peninsula, Japan (Hok, Hon).
- Macrophya (Macrophya) kongosana** Takeuchi, 1937.
Russia: **FE** (PR). – Korean Peninsula.

- Macrophya (Macrophya) koreana** Takeuchi, 1937. Host plant: *Isodon effusus* (Lamiaceae). Russia: **FE** (AM, PR). – China (NC, CC), Korean Peninsula, Japan (Hon).
- Macrophya (Macrophya) maculitibia** Takeuchi, 1933. Host plant: *Petasites japonicus*, *Parasenecio hastatus* (Asteraceae). Russia: **ES** (IR), **FE** (SA, KU). – Korean Peninsula, Japan (Hok, Hon, Shi).
- Macrophya (Macrophya) militaris** (Klug, 1817) [Tenthredo] (*Tenthredo schaefferi* Serville, 1823; *T. schaefferi* Lepeletier, 1823; *Macrophya lepeletieri* Costa, 1859; *M. militaris cabreræ* Konow, 1896; *M. militaris nigriscutis* Enslin, 1913; *M. militaris falsa* Pic, 1928). Host plant: *Rubus* spp. (Rosaceae), *Origanum* spp. (Lamiaceae). Russia: **EP** (S, NC). – Europe (WE, EE, SE), Turkey.
- Macrophya (Macrophya) montana montana** (Scopoli, 1763) [Tenthredo] (*Tenthredo trifasciata* Geoffroy, 1785; *T. sulphurata* Gmelin, 1790; *T. melanochra* Gmelin, 1790; *T. tricincta* Christ, 1791; *T. notata* Panzer, 1799; *T. albimana* Lepeletier, 1823; *T. albimana* Serville, 1823; *T. laserpitii* Lepeletier, 1823; *Macrophya rustica scutellaris* Enslin, 1913; *M. rustica pleuralis* Enslin, 1913; *M. rustica martialis* Pic, 1925; *M. rustica luteonotata* Pic, 1925; *M. rustica kabyliana* Pic, 1929). Host plant: *Rubus* spp. (Rosaceae), *Alnus* spp. (Betulaceae). Russia: **EP** (NW, C, E, S, NC, CR), **UR**. – Europe (WE, EE, NE, SE), N Africa, Georgia, Armenia, Turkey, Iran, Turkmenistan.
- Macrophya (Macrophya) nemesis** Muche, 1969. Russia: **EP** (NC).
- Macrophya (Macrophya) ottomana** Mocsáry, 1881. Russia: **EP** (NC). – Armenia, Turkey.
- Macrophya (Macrophya) postica** (Brullé, 1832) [Tenthredo] (*M. ratzeburgii* Tischbein, 1852; *M. histrionica* Snellen van Vollenhoven, 1878; *M. postica nigripleuris* Enslin, 1913; *M. postica luteomaculata* Pic, 1918). Host plant: *Fragaria* spp., *Rubus* spp. (Rosaceae). Russia: **EP** (NC, CR). – Europe (EE, SE), Georgia, Armenia, Turkey.
- Macrophya (Macrophya) potanini** Jakovlev, 1891. Russia: **FE** (AM). – China (NC).
- Macrophya (Macrophya) recognata** Zombori, 1979 (*M. cognata* Mocsáry, 1881). Russia: **EP** (NC, CR). – Europe (WE, EE, SE), Georgia, Armenia.
- Macrophya (Macrophya) ribis** (Schrank, 1781) [Tenthredo] (*Tenthredo leucopus* Gmelin, 1790; *T. exalbida* Gmelin, 1790; *Macrophya bertolinii* Cobelli, 1890; *M. ribis morvandica* Pic, 1948). Host plant: *Sambucus* spp. (Adoxaceae). Russia: **EP** (NC). – Europe (WE, EE, NE, SE).
- Macrophya (Macrophya) rufipes** (Linnaeus, 1758) [Tenthredo] (*Tenthredo pavida* Fabricius, 1775; *T. dumetorum* Geoffroy, 1785; *T. multicolor* Geoffroy, 1785; *T. flavifasciata* Christ, 1791; *T. rufipes* Christ, 1791; *T. strigosa* Fabricius, 1798; *T. citreipes* Lepeletier, 1823; *T. citreipes* Serville, 1823; *Allantus ione* Newman, 1837; *Macrophya rufipes orientalis* Mocsáry, 1891; *M. rufipes muliebris* Enslin, 1913; *M. rufipes castiliensis* Enslin, 1914; *M. rufipes reductenotata* Pic, 1929; *M. rufipes diversereducta* Pic, 1929). Host plant: *Vitis* spp. (Vitaceae), *Agri-monia* spp. (Rosaceae). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, EE, NE, SE), Armenia, Turkey, Turkmenistan.
- Macrophya (Macrophya) sanguinolenta** (Gmelin, 1790) [Tenthredo] (*Tenthredo quadrimaculata* Fabricius, 1787; *T. picea* Gmelin, 1790; *Allantus sambuci* Panzer, 1803; *Tenthredo comma* Fallén, 1808; *Macrophya trochanterica* Costa, 1858; *Tenthredo poecilopus* Aichinger, 1870; *Macrophya quadrimaculata nigrifrons* Jakovlev, 1886; *M. quadrimaculata nigra* Jakovlev, 1888; *M. sanguinolenta borealis* Forsius, 1918; *M. sanguinolenta albitarsis* Enslin, 1918). Host plant: *Veronica* spp. (Plantaginaceae), *Senecia* spp. (Asteraceae), *Galeopsis* spp. (Lamiaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **ES** (IR), **FE** (AM, PR, SA, KU). – Europe (WE, EE, NE, SE), Georgia, Armenia, Turkey, Kazakhstan, Mongolia, China (NE, NC), Korean Peninsula.
- Macrophya (Macrophya) sibirica** Forsius, 1918 (*M. sibiricola* Forsius, 1925). Host plant: *Sambucus* spp. (Adoxaceae). Russia: **WS** (AL), **ES** (IR), **FE** (KH, PR). – China (NE, CC), Korean Peninsula.
- Macrophya (Macrophya) superba** Tischbein, 1852 (*Tenthredo erythropus* Brullé, 1832; *Macrophya erythropus croatica* Korlević, 1890; *M. flavipennis* Kriechbaumer, 1891; *M. erythropus fluminensis* Strobl, 1901; *M. superba nigricans* Enslin, 1913). Host plant: *Rubus* spp., *Fragaria* spp. (Rosaceae), *Euphorbia* (Euphorbiaceae). Russia: **EP** (NC). – Europe (EE, SE), Armenia, SW Asia.
- Macrophya (Macrophya) teutona** (Panzer, 1799) [Tenthredo] (*Tenthredo aureatensis* Schrank, 1802; *Macrophya marginata* Mocsáry, 1881; *M. klugi* Konow, 1894). Host plant: *Euphorbia* spp. (Euphorbiaceae). Russia: **EP** (NC), **UR** (S). – Europe (WE, EE, SE), Turkey.

- Macrophya (Macrophya) vacillans** Malaise, 1931 (*M. vacillans punctifrons* Malaise, 1931). Host plant: Ligustrum spp., Syringa spp. (Oleaceae). Russia: **FE** (PR). – Korean Peninsula.
- Macrophya (Pseudomacrophya) albitarsis** Mocsáry, 1909. Russia: **FE** (KH). – Korean Peninsula.
- Macrophya (Pseudomacrophya) crassuliformis** Forsius, 1925 (*M. brevilabris* Malaise, 1931; *M. brevilabris nigroscutellata* Malaise, 1931). Host plant: ?Ligustrum obtusifolium (Oleaceae). Russia: **FE** (KH, PR). – China (Shinohara, 2015), Korean Peninsula, Japan (Hon, Shi).
- Macrophya (Pseudomacrophya) dibowskii** André, 1881. Russia: “Sibiria” (André, 1881), **FE** (AM).
- Macrophya (Pseudomacrophya) minutissima** Takeuchi, 1937. Russia: **FE** (PR). – Korean Peninsula.
- Macrophya (Pseudomacrophya) punctumalbum** (Linnaeus, 1767) [Tenthredo] (*Tenthredo erythropus* Schrank, 1776; *T. punctum* Fabricius, 1781; *T. stellata* Geoffroy, 1785). Host plant: Ligustrum spp., Fraxinus spp. (Oleaceae), Crataegus spp. (Rosaceae), Quercus spp. (Fagaceae). Russia: **EP** (NW, C, S, NC, CR). – Europe (WE, EE, NE, SE), Georgia, Armenia.
- Macrophya brunripes** André, 1881 (*M. bruneipes* Dalla Torre, 1894). Russia: “Sibiria” (André, 1881).
- Macrophya coxalis** (Motschulsky, 1866) [Dolerus] (*M. ignava* F. Smith, 1874; *Emphytus japonicus* W.F. Kirby, 1882; *Macrophya discreta* Forsius, 1925). Host plant: Rosa spp. (Rosaceae). Russia: **FE** (KU). – China (Wei et al., 2006), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Sado, Awajishima, Oki).
- Macrophya esakii** (Takeuchi, 1923) [Pachyprotasis] (*M. exilis* Takeuchi, 1933). Russia: **FE** (SA). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Macrophya timida** F. Smith, 1874 (*M. nigra* Marlatt, 1898; *M. femorata* Marlatt, 1898; *M. nigrita* Enslin, 1910; *M. mikagei* Togashi, 2005). Host plant: Ligustrum spp., Syringa vulgaris (Oleaceae). Russia: **FE** (PR). – China (Shinohara, 2015), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Sado, Awajishima, Tsushima).
- Macrophya tristis** André, 1881. Russia: “Sibiria” (André, 1881), **FE** (AM).
- PACHYPROTASIS** Hartig, 1837 (*Lithracia* Cameron, 1902). Type species *Tenthredo rapae* Linnaeus, 1767. The genus is distributed in Holarctic, Oriental and Neotropical regions. Number of species: World – about 200; Palaearctic – about 165; Russia – 17.
- Pachyprotasis antennata** (Klug, 1817) [Tenthredo] (*P. antennata exannulata* Malaise, 1931). Host plant: Senecio spp. (Asteraceae), Filipendula spp. (Rosaceae), Fraxinus spp. (Oleaceae), Atropa spp. (Solana-ceae), etc. Russia: **EP** (N, C, E), **UR**, **WS** (NS, KM, AL), **ES** (IR, BR), **FE** (AM, PR, SA). – Europe (WE, EE, NE, SE), Mongolia, China (NE, NC), Korean Peninsula, Japan (Hok, Hon, Kyu, Sado).
- Pachyprotasis elegans** Takeuchi, 1956. Russia: **FE** (KU). – Japan (Hok).
- Pachyprotasis erratica erratica** F. Smith, 1874 (*M. flavoventralis* Matsumura, 1912). Russia: **FE** (SA, KU). – China (SE), Japan (Hok, Hon, Shi).
- Pachyprotasis glabrata** Malaise, 1931. Russia: **FE** (PR). – Korean Peninsula.
- Pachyprotasis laeviceps** Malaise, 1931. Russia: **FE** (PR). – Korean Peninsula.
- Pachyprotasis limitaris** Malaise, 1931. Russia: **FE** (PR).
- Pachyprotasis lineicoxis** Malaise, 1931. Russia: **WS** (Zhelochovtsev, Zinovjev, 1996), **FE** (PR). – China (SE), Japan.
- Pachyprotasis longicornis** Jakovlev, 1891 (*Macrophya nigrolineata* Matsumura, 1912; *Pachyprotasis longicornis kurilarum* Malaise, 1931). Russia: **FE** (SA, KU). – China (NC), Korean Peninsula, Japan (Hok, Hon).
- Pachyprotasis nigra** Strogonova, 1978. Russia: **FE** (CH).
- Pachyprotasis nigronotata** Kriechbaumer, 1874 (*P. formosa* Schmiedeknecht, 1881; *P. viridis* Brischke, 1883). Host plant: Plantago spp. (Plantaginaceae), Mentha spp. (Lamiaceae), Geum spp., Alchemilla spp. (Rosaceae), etc. Russia: **EP** (NW, C), **ES** (IR), **FE** (AM, KH, PR). – Europe (WE, EE, NE), China (SE), Korean Peninsula.
- Pachyprotasis pedatoria** (Malaise, 1931) [Macrophya]. Russia: **FE** (PR).
- Pachyprotasis rapae** (Linnaeus, 1767) [Tenthredo] (*Tenthredo leucomelas* Ström, 1768; *T. scripta* Gmelin, 1790; *T. luctuosa* Schrank, 1802; *T. floricola* Gravenhorst, 1807; *T. nigrofasciata* Eschscholtz, 1822; *T. duplex* Serville, 1823; *T. duplex* Lepeletier, 1823; *Macrophya omega* Norton, 1867; *Synairema americana* Provancher, 1885; *Rhogogaster sayi* Rohwer, 1908; *Macrophya obnata* MacGillivray, 1923; *Pachyprotasis rapae nigrosternum* Koch,

- 1984). Host plant: *Solidago* spp. (Asteraceae), *Scrophularia* spp. (Scrophulariaceae), *Fraxinus* spp. (Oleaceae), etc. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (NS, KM, AL), **ES** (BR, YA, ZB), **FE** (AM, PR, SA, KU, KA, MG). – Europe (WE, EE, NE, SE), Armenia, Turkey, Mongolia, China (Wei et al., 2006), Korean Peninsula, Japan (Hok, Hon), India, N America, Mexico.
- Pachyprotasis sejensis sejensis** Inomata, 1984. Russia: **FE** (KU). – Japan (Hon).
- Pachyprotasis simulans** (Klug, 1817) [Tenthredo] (*P. laevicollis* Thomson, 1871; *P. tenuis* Rudow, 1871). Host plant: *Scrophularia* spp. (Scrophulariaceae), *Solidago* spp., *Senecio* spp. (Asteraceae). Russia: **EP** (NW, C), **FE** (PR). – Europe (WE, EE, NE), Mongolia, China (NC).
- Pachyprotasis variegata** (Fallén, 1808) [Tenthredo] (*P. variegata tenebrosa* Malaise, 1931). Host plant: *Solanum tuberosum* (Solanaceae), *Digitalis* spp. (Plantaginaceae), *Leontodon* spp., *Leucanthemum* spp. (Asteraceae), etc. Russia: **EP** (N, C, E), **UR**, **ES** (BR), **FE** (AM, PR, SA, MG). – Europe (WE, EE, NE), Central Asia, Mongolia, China (NE), Korean Peninsula, Japan.
- Pachyprotasis vicaria** Malaise, 1931. Russia: **FE** (PR). – Japan (Hok).
- Pachyprotasis zukaensis** Inomata, 1970. Russia: **FE** (KU). – Japan (Hon).
- PERINEURA** Hartig, 1837 (*Synaerema* Hartig, 1837; *Synaerema* Agassiz, 1848; *Perinevra* Agassiz, 1848; *Synaerema* Schulz, 1906). Type species *Allantus rubi* Panzer, 1803. The genus is distributed in East Asia; one species in the west of Palaearctic and one species in Oriental region. Number of species: World – 11; Palaearctic – 10; Russia – 2.
- Perineura japonica** Malaise, 1931. Russia: **FE** (PR, SA). – Japan (Hok, Hon).
- Perineura rubi** (Panzer, 1803) [Tenthredo] (*Tenthredo lividiventris* Fallén, 1808; *T. elegantula* Fallén, 1808; *T. delicatula* Klug, 1817). Host plant: *Rubus* spp. (Rosaceae). Russia: **EP** (NW, C, E). – Europe (WE, EE, NE).
- RHOOGASTER** Konow, 1884 (*Rhogogastera* Konow, 1885; *Cytisodaster* Lacourt, 1997). Type species *Tenthredo viridis* Linnaeus, 1758. The larvae on the flowering plants. The genus is distributed in Holarctic and Oriental region. Number of species: World – 38; Palaearctic – about 35; Russia – 13.
- Rhogogaster chlorosoma** (Benson, 1943) [Tenthredo]. Host plant: Dennstaedtiaceae, Salicaceae, Betulaceae, Rosaceae. Russia: **EP** (C, E), **UR**, **WS** (AL), **ES** (IR, YA), **FE** (SA, KU). – Europe (WE, EE, NE, SE), Turkey, Mongolia, Japan.
- Rhogogaster convergens** Malaise, 1931. Russia: **ES** (IR), **FE** (AM, KH, PR). – China (NE), Korean Peninsula, Japan (Hok).
- Rhogogaster coryli** Muehe, 1973. Host plant: *Corylus* spp. (Betulaceae). Russia: **EP** (NC).
- Rhogogaster genistae** Benson, 1947 (*Rh. genistae viridifrons* Muehe, 1973). Host plant: *Genista* spp., *Sarothamnus* spp. (Fabaceae). Russia: **EP** (NC). – Europe (WE, EE, NE, SE), N Africa, Turkey.
- Rhogogaster magniserrula** Viitasaari, 2015. Russia: **EP** (N). – Europe (NE).
- Rhogogaster nigriventris** Malaise, 1931 (*Tenthredo varipes* W.F. Kirby, 1882). Host plant: *Geranium* spp. (Geraniaceae), *Rosa* spp. (Rosaceae). Russia: **ES** (IR), **FE** (AM, KH, PR, SA). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Rhogogaster picta** (Klug, 1817) [Tenthredo] (*Tenthredo breviuscula* Costa, 1859). Host plant: *Sarothamnus* spp., *Genista* spp., *Cytisus* spp. (Fabaceae). Russia: **EP** (C, E, S, NC), **ES** (TU, ZB). – Europe (WE, EE, NE, SE), N Africa, Georgia, Syria, Kazakhstan, Mongolia.
- Rhogogaster polaris** Lindqvist, 1964. Russia: **EP** (N), **ES** (IR, BR), **FE** (MG). – Europe (WE, NE).
- Rhogogaster punctulata** (Klug, 1817) [Tenthredo]. Host plant: Salicaceae, Betulaceae, Rosaceae, Oleaceae. Russia: **EP** (N, NW, C), **UR**, **WS** (NS), **ES** (KR, IR, BR, ZB). – Europe (WE, EE, NE, SE), Turkey, Mongolia, China (NC).
- Rhogogaster scalaris** (Klug, 1817) [Tenthredo] (*Rh. viridis* auct., nec Linnaeus; *Tenthredo pictipes* Förster, 1850; *Rhogogaster viridis melanonota* Enslin, 1912; *Rh. viridis nigroscutellata* Forsius, 1918; *Rh. viridis lapponica* Enslin, 1918; *Rh. chlorosoma podkumokensis* Muehe, 1973; *Tenthredo carpatica* Zhelochovtsev et Zinovjev, 1988). Host plant: polyphage. Russia: **EP** (C, NC), **UR**, **WS** (KM, AL), **ES** (TU, BR), **FE** (KA). – Europe (WE, EE, NE).
- Rhogogaster sibirica** Enslin, 1912 (*Rh. kudianus* Rohwer, 1925). Russia: **ES** (IR), **FE** (PR).
- Rhogogaster tsherepanovi** Stroganova, 1988. Russia: **EP** (C), **WS** (NS), **ES** (KR).

- Rhogogaster viridis** (Linnaeus, 1758) [Tenthredo] (*Tenthredo dryas* Benson, 1943; *Rhogogaster similis* Lindqvist, 1959). Host plant: Salicaceae, Betulaceae, Onagraceae, Fagaceae, Rhamnaceae, Rosaceae, Fabaceae. Russia: **EP** (N, NW, C, E), **WS** (NS, AL), **ES** (IR, BR, YA, ZB), **FE** (PR, KU, KA, MG). – Europe (WE, EE, NE), Kazakhstan, Mongolia, China (NC), Korean Peninsula, SE Asia.
- SCIAPTERYX** Stephens, 1835 (*Eniscia* Thomson, 1870; *Sciopteryx* Cameron, 1882; *Sciapterina* Ushinskij, 1940). Type species *Tenthredo costalis* Fabricius, 1775. The genus is distributed in Palaearctic. Number of species: World and Palaearctic – 16; Russia – 9.
- Sciopteryx caucasica** Dovnar-Zapolskij, 1930. Russia: **EP** (NC). – Turkey.
- Sciopteryx circassica** Dovnar-Zapolskij, 1930. Russia: **EP** (NC). – Georgia, Armenia, Turkey.
- Sciopteryx consobrina** (Klug, 1816) [Tenthredo] (*Eriocampa marginata* Puls, 1870; *Allantus consobrinus zwickoviensis* Schlechtendal, 1873). Host plant: Adoxa spp. (Adoxaceae), Anemone spp., Ranunculus spp. (Ranunculaceae). Russia: **EP** (NW, C, S, NC). – Europe (WE, EE, NE, SE), Georgia.
- Sciopteryx costalis costalis** (Fabricius, 1775) [Tenthredo]. Host plant: Ranunculus spp. (Ranunculaceae). Russia: **EP** (C). – Europe (WE, EE, NE, SE).
- Sciopteryx dovnari** Ushinskij, 1940. Russia: **EP** (NC). – Georgia, Armenia.
- Sciopteryx laeta** Konow, 1891 (*S. laeta antennata* Muehe, 1973). Host plant: Ranunculus spp. (Ranunculaceae). Russia: **EP** (NC). – Georgia, Turkey.
- Sciopteryx montana** Dovnar-Zapolskij, 1930. Russia: **EP** (NC).
- Sciopteryx semenowi** Jakovlev, 1886. Host plant: Euclidium spp., Capsella spp. (Brassicaceae). Russia: **EP** (S, CR). – Europe (EE).
- Sciopteryx verticalis** Muehe, 1973. Russia: **EP** (NC).
- SIOBLA** Cameron, 1877 (*Encarsioneura* Konow, 1890; *Megasiobla* Dovnar-Zapolskij, 1930). Type species *Siobla mooreana* Cameron, 1877. The genus is distributed in Palaearctic and Oriental region. Number of species: World – about 75; Palaearctic – about 55; Russia – 12.
- Siobla ferox** (F. Smith, 1874) [Macrophya] (*S. grandis* Matsumura, 1912). Host plant: Balsaminaceae, Polygonaceae, Amaranthaceae. Russia: **FE** (PR). – China (SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Tsushima).
- Siobla frigida** (Mocsáry, 1909) [Encarsioneura]. Russia: **FE** (KH). – China (NE, SE).
- Siobla grossa** Malaise, 1931. Russia: **FE** (AM, PR).
- Siobla jucunda** (Mocsáry, 1909) [Encarsioneura]. Russia: **FE** (KH, PR, SA, KU). – Japan (Hok, Hon, Shi).
- Siobla malaisei** Mallach, 1933. Russia: **FE** (PR). – China (NE, CC).
- Siobla ruficornis** (Gimmerthal, 1834) [Allantus] (*Eriocampa ruficornis* Cameron, 1876; *Siobla sibirica* Malaise, 1931; *S. sibirica bergmani* Malaise, 1931; *S. ruficornis albicornis* Malaise, 1931). Host plant: Epilobium angustifolium (Onagraceae). Russia: **EP** (NW, C, E), **UR**, **WS** (NS, AL), **ES** (IR, BR, YA), **FE** (KH, PR, SA, KU, KA). – Europe (NE), China (NE), Korean Peninsula, Japan (Hon).
- Siobla similis** (Mocsáry, 1909) [Encarsioneura]. Russia: **FE** (KH, SA).
- Siobla sturmii sturmii** (Klug, 1817) [Tenthredo] (*Macrophya castanea* Jakovlev, 1888; *M. pacifica* F. Smith, 1874). Host plant: Impatiens spp. (Balsaminaceae), Rubus spp., Rosa spp., Prunus spp. (Rosaceae). Russia: **EP** (NW, C), **WS** (NS), **ES** (YA), **FE** (AM, PR, SA, KU). – Europe (WE, EE, NE), Korean Peninsula, Japan (Hok, Hon, Kyu).
- Siobla takeuchii** Shinohara, Wei et Niu, 2013. Russia: **FE** (KU). – Japan (Hok, Hon, Kyu).
- Siobla venusta venusta** (Konow, 1903) [Encarsioneura]. Russia: **FE** (PR). – China (CC), Korean Peninsula.
- Siobla villosa** Malaise, 1931. Russia: **FE** (PR). – China (CC).
- Siobla zenaida** Dovnar-Zapolskij, 1930. Russia: **FE** (KH). – China (NE, CC), Korean Peninsula.
- TENTHREDO** Linnaeus, 1758 (*Allantus* Jurine, 1801; *Parastatis* W.F. Kirby, 1881; *Dipteromorpha* W.F. Kirby, 1882; *Labidia* Provancher, 1886; *Jermaquia* Jakovlev, 1891; *Ischyroceraea* Kiær, 1898; *Rethrax* Cameron, 1899; *Fethalia* Cameron, 1902; *Peus* Konow, 1903; *Clydostomus* Konow, 1908; *Tenthredella* Rohwer, 1910; *Tenthredina* Rohwer, 1910; *Zamacrophya* Rohwer, 1912; *Metallopeus* Malaise, 1934; *Jakovleviella* Malaise, 1937; *Adungia* Malaise, 1945; *Ebba* Malaise, 1945; *Propodea* Malaise, 1945; *Elinora* Benson, 1946; *Eurogaster* Zirngiebl, 1953; *Cuneala* Zirngiebl, 1956; *Elinopsis* Lacourt, 1986; *Cephaledo* Zhelochovtsev, 1988; *Maculedo* Zhelochovtsev, 1988; *Olivacedo* Zhelochovtsev,

- 1988; *Temuledo* Zhelochovtsev, 1988; *Zonuledo* Zhelochovtsev, 1988; *Murciana* Lacourt, 1988; *Absentia* Togashi, 1990; *Casipteryx* Taeger, 1991; *Paratenthredo* Taeger, 1991; *Dorhettenyx* Lacourt, 1997; *Endotethryx* Lacourt, 1997; *Sainiella* Lacourt, 1997; *Blankia* Lacourt, 1998). Type species *Tenthredo scrophulariae* Linnaeus, 1758. The larvae on various plants; often polyphages. Adults often found on the inflorescences of Apiaceae, Spiraea, and others; females of many species are predators. The genus is distributed in Holarctic, Oriental and Neotropical regions. Number of species: World – > 900; Palaearctic – about 655; Russia – 158 (+ 13 ssp.) from 14 subgenera.
- Tenthredo (Cephaledo) bifasciata diversipennis** (Mocsáry, 1891) [Allantus]. Host plant: Asteraceae. Russia: **EP** (NC). – Georgia, Armenia, SW Asia.
- Tenthredo (Cephaledo) bifasciata rossii** (Panzer, 1803) [Allantus] (*T. bifasciata* Klug, 1817; *T. scissa* Klug, 1819; *T. rossii pigeoti* Pic, 1948; *T. rossica laeviceps* Hellén, 1955). Host plant: Sonchus spp., Hieracium spp. (Asteraceae). Russia: **EP** (NW, C). – Europe (WE, EE, NE).
- Tenthredo (Cephaledo) bifasciata violacea** (André, 1881) [Allantus] (*T. interjecta* Kuznetzov-Ugamskij, 1924). Host plant: Asteraceae. Russia: **EP** (C, E, S), **WS** (AL). – Europe (EE, SE), Kazakhstan.
- Tenthredo (Cephaledo) caucasica caucasica** Eversmann, 1847 (*Allantus moestus* Mocsáry, 1883). Russia: **EP** (S, NC). – Georgia, Armenia, SW Asia.
- Tenthredo (Cephaledo) costata** Klug, 1817 (*T. sareptana* Eversmann, 1847; *Allantus faustus* W.F. Kirby, 1882; *A. subcostatus* Jakovlev, 1888; *A. graecus* Konow, 1888; *A. parnassius* Konow, 1888; *A. violaceipennis* Costa, 1890; *A. kiefferi* Konow, 1899; *A. kietteri cilix* Enslin, 1910; *Tenthredo kiefferi lugubrata* Enslin, 1914; *Allantus costatus obscurus* Zirngiebl, 1937). Host plant: Chondrilla spp. (Asteraceae), Euphorbia spp. (Euphorbiaceae). Russia: **EP** (S, NC). – Europe (EE, SE), Georgia, Armenia, SW Asia, Iran.
- Tenthredo (Cephaledo) excellens** (Konow, 1886) [Allantus] (*T. annulata* Klug, 1817; *Allantus persa* Konow, 1888; *A. persa mandibularis* Enslin, 1910; *Tenthredo persa caja* Enslin, 1912). Russia: **EP** (S, NC), **UR**. – Europe (EE), Georgia, Armenia, Turkey, Iran, Turkmenistan.
- Tenthredo (Cephaledo) neobesa** Zombori, 1980 (*T. zonata* Fallén, 1808; *Allantus obesus* Mocsáry, 1880; *Tenthredo pseudorossii* Taeger, 1985). Host plant: Hieracium spp., Sonchus spp. (Asteraceae). Russia: **EP** (E), **UR**, **WS** (NS, AL), **ES** (IR). – Europe (WE, EE, NE), Georgia.
- Tenthredo (Cephaledo) segmentaria** Fabricius, 1798 (*Allantus steckii* Konow, 1888; *A. stecki trimarginata* Pic, 1933; *A. stecki milliati* Pic, 1933). Russia: **ES** (TU, IR). – Europe (WE, EE).
- Tenthredo (Cephaledo) violascens** (Konow, 1886) [Allantus]. **EP** (NC). – Georgia, Armenia, Turkey.
- Tenthredo (Dorhettenyx) jozana** (Matsumura, 1912) [Tenthredopsis] (*T. fuscata* Enslin, 1920). Russia: **WS** (AL), **FE** (PR, SA, KU). – China (SE), Korean Peninsula, Japan (Hok, Hon, Shi).
- Tenthredo (Elinora) aulica** Enslin, 1912 (*Allantus nigritarsis* Konow, 1886). Russia: **EP** (NC).
- Tenthredo (Elinora) caspia** (André, 1881) [Allantus]. Russia: **EP** (S). – Europe (EE).
- Tenthredo (Elinora) dahlii** Klug, 1817 (*T. villosa* Brullé, 1832; *T. uncinata* Brullé, 1832; *Allantus xanthorius* Kriechbaumer, 1869; *Macrophya hartigii* W.F. Kirby, 1882). Russia: **EP** (S, NC, CR), **ES** (BR, ZB). – Europe (EE, SE), Uzbekistan.
- Tenthredo (Elinora) flaveola** Gmelin, 1790 (*T. flavipes* Geoffroy, 1785; *T. rubiginosa* Gmelin, 1790; *T. dispar* Klug, 1817; *T. grata* Lepeletier, 1823; *T. grata* Serville, 1823; *Allantus rufocingulatus* Tischbein, 1852; *A. orientalis* Kriechbaumer, 1869; *A. galiciensis* Niezabitowski, 1899; *A. flaveola delagrangei* Pic, 1925). Host plant: Bupleurum spp. (Apiaceae), Raphanus spp., Brassica spp., Sinapis spp. (Brassicaceae). Russia: **EP** (S, NC, CR), **WS** (Zhelochovtsev, Zinovjev, 1996). – Europe (WE, EE, NE), Armenia.
- Tenthredo (Elinora) koehleri** Klug, 1817 (*Allantus funereus* Palma, 1861; *A. koehleri scutellaris* Gregor, 1941). Host plant: Cardamine spp. (Brassicaceae), Geranium sanguineum, Robertianum spp. (Geraniaceae). Russia: **EP** (NC). – Europe (WE, EE, SE), Turkey.
- Tenthredo (Elinora) longipes** (Konow, 1886) [Allantus] (*Allantus shestoperovi* Ushinskij, 1936; *Cuneala tricolor* Zirngiebl, 1956). Russia: **EP** (NC). – Georgia, Armenia, Iran, Turkmenistan.
- Tenthredo (Elinora) ornata** (André, 1881) [Allantus] (*Allantus caucasicus* Mocsáry, 1880; *A. discolor* Konow, 1890; *A. mocsaryi* Enslin, 1910; *Tenthredo baja* Enslin, 1912; *T. camilla* Enslin, 1912). Russia: **EP** (NC). – Armenia, Turkey.
- Tenthredo (Elinora) persica** (André, 1882) [Allantus] (*T. coniensis* Enslin, 1914; *Allantus kareli* Muche,

- 1962; *A. kareli maculatus* Muche, 1962). Russia: **EP** (Lacourt, 1999). – Caucasus, Turkey, Iran.
- Tenthredo (Elinora) pubescens** (André, 1881) [Allantus]. Russia: **EP** (NC).
- Tenthredo (Elinora) radoszkowskii** (André, 1881) [Allantus] (*Allantus atratus* André, 1883; *A. confinis* Konow, 1886; *A. parviceps* Konow, 1898). Host plant: Geranium spp. (Geraniaceae). Russia: **EP** (S, NC). – Caucasus, Turkey, Iran.
- Tenthredo (Elinora) sabariensis** (Mocsáry, 1880) [Allantus] (*Allantus breviventris* Cameron, 1887; *A. morawitzi* Jakovlev, 1888; *A. sabariensis moravica* Gregor, 1941). Russia: **EP** (C, E, NC), **UR**. – Europe (EE).
- Tenthredo (Endotethryx) adusta** Motschulsky, 1866 (*T. fulva* Klug, 1817; *T. eversmanni* Ballion, 1869; *T. erratica* F. Smith, 1874; *T. fulva pallidiventrifera* Jakovlev, 1886; *Allantus moiwasanus* Matsumura, 1912; *Tenthredo urgaensis* Muche, 1965). Imago on Heracleum spp. and others Apiaceae. Russia: **EP** (C, E), **UR**, **WS** (NS, AL), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU). – Europe (EE, NE), Mongolia, China (NE), Korean Peninsula, Japan (Hok, Hon, Shi).
- Tenthredo (Endotethryx) campestris** Linnaeus, 1758 (*T. flava* Poda, 1761; *T. poecilechroa* Schrank, 1781; *T. flavicornis* Fabricius, 1781; *T. luteicornis* Fabricius, 1787; *T. mucronata* Gmelin, 1790; *T. flavida* Christ, 1791; *T. umbellatarum* Panzer, 1806; *Tenthredella flavicornis temporalis* Enslin, 1912; *T. flavicornis pallior* Forsius, 1918). Host plant: Aegopodium spp. (Apiaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (NS, AL). – Europe (WE, EE, NE), Turkey.
- Tenthredo (Endotethryx) crassa** Scopoli, 1763 (*T. impura* Scopoli, 1763; *T. albicornis* Fabricius, 1781; *T. dealbata* Gmelin, 1790; *T. albata* Turton, 1802; *T. nebulosa* Serville, 1823; *T. nebulosa* Lepeletier, 1823). Host plant: ?Archangelica spp. (Apiaceae). Russia: **EP** (NW, C, E), **UR**, **WS** (NS), **ES** (KR). – Europe (WE, EE, NE, SE), Georgia, Kazakhstan.
- Tenthredo (Eurogaster) aaliensis** (Strand, 1898) [Pachyprotasis] (*Rhogogaster arctica* Kizær, 1898; *Tenthredo microps* Konow, 1903; *Rhogogaster kaszabi* Zombori, 1973). Imago on Apiaceae. Russia: **UR**, **ES** (IR, BR, ZB), **FE** (AM, MG). – Europe (WE, NE), Kazakhstan, Mongolia.
- Tenthredo (Eurogaster) convergenata** (Takeuchi, 1955) [Tenthredella]. Russia: **FE** (KU). – Japan (Hok, Hon, Shi).
- Tenthredo (Eurogaster) dealbata** Mocsáry, 1909 (*Tenthredella deaurata* Enslin, 1912). Russia: **WS** (AL), **ES** (IR), **FE** (AM, KH, PR). – Korean Peninsula.
- Tenthredo (Eurogaster) maculiger diotrioides** (Jakovlev, 1891) [Allantus] (*Allantus rupico* Konow, 1908). Imago on Apiaceae, Ranunculus spp. (Ranunculaceae). Russia: **FE** (PR). – China (NC, SC), Nepal, India (NE).
- Tenthredo (Eurogaster) maculiger maculiger** (Jakovlev, 1891) [Allantus] (*Allantus incinctus* Konow, 1908; *Tenthredo maculigera camtschatica* Forsius, 1928). Imago on Apiaceae, Ranunculus spp. (Ranunculaceae). Russia: **WS** (AL), **ES** (TU, IR, BR), **FE** (KA, MG). – Mongolia, China (SW).
- Tenthredo (Eurogaster) mesomela** Linnaeus, 1758 (*T. annularis* Villers, 1789; *T. marginata* Christ, 1791; *T. explanata* Rudow, 1871; *T. bernardi* Konow, 1888; *Tenthredella mesomelas mesopleuralis* Enslin, 1912; *T. mesomelas atramentaria* Enslin, 1912; *Tenthredo mesomelas gigas* Malaise, 1931; *Tenthredella mesomelas reductealba* Pic, 1940; *T. mesomelas flavoscutellaris* Pic, 1940; *T. mesomelas mediorufescens* Pic, 1940; *Tenthredo kaszabi* Muche, 1965). Host plant: Polygonum spp. (Polyfonaceae), Heracleum spp. (Apiaceae), Ranunculus spp. (Ranunculaceae), etc. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TK, NS, KM, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG). – Europe (WE, EE, NE, SE), Armenia, Turkey, Mongolia, China (NE), Korean Peninsula, Japan (Hok, Hon, Shi).
- Tenthredo (Eurogaster) mioceras** (Enslin, 1912) [Tenthredella] (*T. mioceras* Benson, 1943; *T. mesomelas montana* Pasteels, 1946). Host plant: Ranunculus spp. (Ranunculaceae), Heracleum spp. (Asteraceae), Dryopteris spp. (Dryopteridaceae), etc. Russia: **EP** (NW, C, E), **UR**, **WS** (NS, AL), **ES** (BR). – Europe (WE, EE, SE), Kazakhstan, China (Wei et al., 2006).
- Tenthredo (Eurogaster) nitidiceps** (Takeuchi, 1955) [Tenthredella]. Russia: **FE** (KU). – Japan (Hok, Hon).
- Tenthredo (Eurogaster) obsoleta** Klug, 1817 (*T. arctica* Thomson, 1871). Host plant: Plantago spp. (Plantaginaceae). Russia: **EP** (C, E), **UR**, **WS** (KM, AL), **ES** (KR, IR, BR), **FE** (AM, PR). – Europe (WE, EE, NE, SE), China (Wei et al., 2006).
- Tenthredo (Eurogaster) opaciceps** (Takeuchi, 1955) [Tenthredella]. Russia: **FE** (SA, KU). – Japan (Hok, Hon).

- Tenthredo (Eurogaster) sibiricola** (Forsius, 1918) [Tenthredella]. Russia: **FE** (KA).
- Tenthredo (Eurogaster) stulta** Jakovlev, 1891 (*Rhogaster opacella* Mocsáry, 1909; *Tenthredella stulta bernardiformis* Enslin, 1927; *T. stulta temporalis* Enslin, 1927; *Tenthredo elisabethae* Muche, 1965). Host plant: probably polyphage. Russia: **WS** (AL), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG). – Mongolia, China (NC), Korean Peninsula, Japan (Hok, Hon, Kyu).
- Tenthredo (Eurogaster) tenuivaginata** (Takeuchi, 1955) [Tenthredella]. Russia: **FE** (SA, KU). – Japan (Hok).
- Tenthredo (Maculedo) cinctipleuris** (Enslin, 1910) [Allantus]. Russia: **EP** (NC). – Georgia, Armenia, Turkey, Iran.
- Tenthredo (Maculedo) maculata** Geoffroy, 1785 (*T. unifasciata* Geoffroy, 1785; *T. zonata* Panzer, 1799; *T. succincta* Donovan, 1808; *T. equestris* Panzer, 1809; *T. latizona* Lepeletier, 1823; *T. latizona* Serville, 1823; *T. semseyi* Mocsáry, 1883; *T. andrei* Mocsáry, 1883; *Tenthredella maculata atricollaris* Enslin, 1912; *Tenthredo maculata mediobinata* Pic, 1926; *T. maculata atroapicalis* Pic, 1926; *T. maculata quittardi* Pic, 1926; *T. maculata wagneri* Zirngiebl, 1940; *T. maculata collaris* Zirngiebl, 1940). Host plant: *Brachypodium* spp., *Dactylis* spp. (Poaceae). Russia: **EP** (C, S). – Europe (WE, EE, SE), Armenia, Turkey.
- Tenthredo (Maculedo) trabeata** Klug, 1817 (*T. palustris* Klug, 1817; *Perineura fulvitaris* André, 1881; *Tenthredo atra nigrifemur* Zilahi Kiss, 1927; *T. marinovi* Vassilev, 1978). Host plant: Asteraceae, *Impatiens* spp. (Balsaminaceae). Russia: **EP** (N, C). – Europe (WE, EE, NE, SE).
- Tenthredo (Maculedo) vestita** André, 1881 (*T. caspica* Mocsáry, 1883; *T. laeta* Konow, 1886; *Allantus limbiferus* Mocsáry, 1891; *Tenthredella celsia* Enslin, 1912; *Tenthredo vestita stria* Enslin, 1920; *T. vestita striata* Enslin, 1920; *T. vestita strigata* Enslin, 1920). Russia: **EP** (NC). – Azerbaijan.
- Tenthredo (Olivacedo) eduardi** (Forsius, 1919) [Tenthredella] (*Tenthredella enslini* Forsius, 1918; *T. viridans* Benson, 1930; *Tenthredo vivida* Malaise, 1931; *T. pappi* Zombori, 1978). Russia: **FE** (AM, PR). – China (Wei et al., 2006), Korean Peninsula, Japan (Hon, Kyu).
- Tenthredo (Olivacedo) fuscoterminata** Marlatt, 1898. Russia: **FE** (AM, KH, PR). – China (NE, SE), Korean Peninsula, Japan (Hon, Shi, Kyu).
- Tenthredo (Olivacedo) nigrolateralis** Malaise, 1931. Russia: **FE** (PR).
- Tenthredo (Olivacedo) olivacea olivacea** Klug, 1817 (*T. dissimulans* Kincaid, 1900; *Tenthredella olivacea nigrovittata* Enslin, 1912; *Rhogogastera reliqua* MacGillivray, 1919; *Rh. respersus* MacGillivray, 1923; *Rhogogaster viridis montana* Betrem, 1933; *Tenthredo olivacea sekerai* Gregor, 1941; *T. olivacea bohémica* Gregor, 1941). Host plant: *Ranunculus* spp. (Ranunculaceae), *Plantago* spp. (Plantaginaceae), *Rubus* spp. (Rosaceae), and others. Russia: **EP** (N, NW, C, E), **UR**, **WS** (NS, AL), **ES** (IR, BR, YA, ZB), **FE** (KA, MG). – Europe (WE, EE, NE), N Africa, Mongolia, China (NC), Korean Peninsula, N America.
- Tenthredo (Olivacedo) olivacea takedae** Matsumura, 1912. Host plant: *Ranunculus* spp. (Ranunculaceae), *Plantago* spp. (Plantaginaceae). Russia: **FE** (AM, PR, SA, KU, KA). – Korean Peninsula, Japan (Hok, Hon).
- Tenthredo (Olivacedo) sedankiana** Malaise, 1931. Russia: **FE** (PR). – China (NE).
- Tenthredo (Olivacedo) subolivacea** (Takeuchi, 1955) [Tenthredella]. Russia: **FE** (SA, KU). – Japan (Hok, Hon).
- Tenthredo (Olivacedo) tamanukii** (Takeuchi, 1936) [Tenthredella]. Russia: **FE** (SA, KU). – Japan (Hok, Hon).
- Tenthredo (Olivacedo) viridatrix nippon** Shinohara, 1994. Russia: **FE** (SA, KU). – Japan (Hok, Hon, Shi).
- Tenthredo (Olivacedo) viridatrix viridatrix** Malaise, 1931. Russia: **FE** (AM, KH, PR). – Korean Peninsula.
- Tenthredo (Paratenthredo) monozonus** (Kriechbaumer, 1869) [Allantus] (*Allantus dialeucus* Konow, 1898; *A. jugalis* Konow, 1898; *Tenthredo uncinata* Hellén, 1963). Russia: **EP** (NC, CR). – Europe (EE, SE), Caucasus, SW Asia.
- Tenthredo (Paratenthredo) shaposhnikovii** (Dovnar-Zapolskij, 1930) [Allantus]. Russia: **EP** (NC).
- Tenthredo (Paratenthredo) talyshensis** Zhelochovtsev, 1988. Russia: **EP** (NC). – Azerbaijan.
- Tenthredo (Propodea) fentoni** W.F. Kirby, 1882 (*Jermakia spinifera* Mocsáry, 1909; *Tenthredopsis hakiensis* Matsumura, 1912). Host plant: *Euptelea polyandra* (Eupteleaceae). Russia: **FE** (KH, KU). – China (NE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

- Tenthredo (Propodea) rufonotalis** Mallach, 1936 (*Dipteromorpha ussuriensis* Malaise, 1931). Russia: **FE** (PR). – China (NE, CC, SE), Japan (Hon).
- Tenthredo (Temuledo) brachycera** (Mocsáry, 1909) [Allantus] (*Allantus brachycerus guttator* Malaise, 1934; *Tenthredo daetekensis* Togashi, 1976). Russia: **FE** (AM, KH, PR). – China (NE, CC, SE), Korean Peninsula, Japan (Hon).
- Tenthredo (Temuledo) finschi finschi** W.F. Kirby, 1882 (*Allantus kohli* Konow, 1895; *Rhogogastera aenescens* Mocsáry, 1909). Imago on Apiaceae, Spiraea spp. (Rosaceae). Russia: **WS** (KM, AL), **ES** (IR, BR, YA), **FE** (AM, KH, PR, KA, MG). – China (NC, SW), Korean Peninsula, India, SE Asia.
- Tenthredo (Temuledo) finschi seguro** Takeuchi, 1956. Imago on Apiaceae, Spiraea spp. (Rosaceae). Russia: **FE** (SA, KU). – Japan (Hok, Hon, Shi, Sado).
- Tenthredo (Temuledo) flavipectus** (Matsumura, 1912) [Allantus] (*Allantus nigripictus* Matsumura, 1912; *Tenthredo xanthomelaena* Enslin, 1920). Russia: **FE** (KU). – Japan (Hok, Hon, Shi, Kyu).
- Tenthredo (Temuledo) hokkaidonis** (Malaise, 1931) [Allantus]. Russia: **FE** (KU). – Japan (Hok, Hon, Shi).
- Tenthredo (Temuledo) japonica** (Mocsáry, 1909) [Allantus] (*T. carpinata* Enslin, 1912). Russia: **FE** (KU). – China (Wei et al., 2006), Japan (Hon, Shi, Kyu).
- Tenthredo (Temuledo) kongauana** Rohwer, 1925 (*T. uchidae* Takeuchi, 1927). Russia: **FE** (PR). – China (Wei et al., 2006), Korean Peninsula, Japan (Hon).
- Tenthredo (Temuledo) kudiana** Rohwer, 1925. Russia: **FE** (AM, PR).
- Tenthredo (Temuledo) nigropicta** (F. Smith, 1874) [Macrophya] (*T. picta* Motschulsky, 1866; *Rhogogaster nipponica* Rohwer, 1910). Host plant: Pleioblastus spp. (Poaceae). Russia: **FE** (KU). – China (CC, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Tenthredo (Temuledo) notomelas** Enslin, 1920. Russia: **FE** (SA). – Japan (Hok, Hon).
- Tenthredo (Temuledo) uralensis** (André, 1881) [Allantus] (*Allantus uralensis* Dalla Torre, 1894; *A. glesicornis* Konow, 1899; *Tenthredo soyoensis* Togashi, 1973). Russia: **ES** (IR, BR), **FE** (AM, PR). – Turkey, Korean Peninsula.
- Tenthredo (Temuledo) sapporensis** (Matsumura, 1912) [Allantus] (*Allantus leucosternus* Malaise, 1934). Russia: **FE** (SA, KU). – China (NE, NC), Japan (Hok).
- Tenthredo (Temuledo) scutellata** (Mocsáry, 1909) [Allantus] (*Allantus temuloides* Zhelochovtsev, 1935). Russia: **WS** (NS), **FE** (AM, KH, PR).
- Tenthredo (Temuledo) temula** Scopoli, 1763 (*T. bincincta* Linnaeus, 1767; *T. semicincta* Schrank, 1781; *T. amoena* Marquet, 1879; *Allantus irkutensis* Jakovlev, 1888; *Tenthredella temula uberior* Enslin, 1912; *T. temula pauperior* Enslin, 1914; *Tenthredo temula xanthaspis* Enslin, 1920; *T. celtica* Benson, 1953). Host plant: Origanum spp. (Lamiaceae), Ligustrum spp. (Oleaceae). Russia: **EP** (NW, C, E, S, NC), **UR**, **WS** (NS, AL), **ES** (IR, BR), **FE** (AM, PR). – Europe (WE, EE, NE, SE), Georgia, Armenia, Kazakhstan.
- Tenthredo (Temuledo) ussuriensis ussuriensis** (Mocsáry, 1909) [Allantus] (*Allantus analis* André, 1881; *Tenthredo abjecta* Enslin, 1912). Host plant: Abelia spp. (Caprifoliaceae). Russia: **FE** (AM, KH, PR). – China (NE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Tenthredo (Tenthredella) alboannulata** (Takeuchi, 1933) [Tenthredella] (*Tenthredella alboannulata kanoi* Takeuchi, 1936). Russia: **FE** (KU). – Japan (Hon, Shi).
- Tenthredo (Tenthredella) albopicta** Puls, 1870 (*T. nigroclypeata* Mocsáry, 1909). Russia: **EP** (NC). – Georgia, Armenia, SW Asia.
- Tenthredo (Tenthredella) amurica** Dalla Torre, 1894 (*T. amurensis* Konow, 1891; *Tenthredella ussuriensis* Forsius, 1918; *T. fagi nigerrima* Forsius, 1918; *Tenthredo konowi* Enslin, 1920). Host plant: Petasites japonicus (Asteraceae). Russia: **EP** (NW), **ES** (BR), **FE** (AM, PR, SA). – Europe (WE, NE).
- Tenthredo (Tenthredella) atra** Linnaeus, 1758 (*T. rufipes* Poda, 1761; *T. fuscipes* Gmelin, 1790; *T. obscura* Gmelin, 1790; *T. plebeja* Klug, 1817; *T. dispar* Klug, 1817; *T. relictata* Lepeletier, 1823; *T. scopoli* Lepeletier, 1823; *T. rejecta* Dalla Torre, 1882; *T. scotica* Cameron, 1882; *Tenthredella atra pseudomandibularis* Enslin, 1918; *T. atra pseudoscotica* Enslin, 1918; *T. atra schirmeri* Enslin, 1918; *T. atra orbitalis* Forsius, 1918; *Tenthredo atra transigens* Enslin, 1920; *T. atra nigrifemur* Endre, 1927; *T. atra vagabundica* Malaise, 1931; *T. atra masculina* Gregor, 1941). Host plant: Mentha spp. (Lamiaceae), Plantago spp. (Plantaginaceae), Ranunculus spp. (Ranunculaceae), etc. Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (NS, AL), **ES** (IR, BR, YA), **FE** (KH, PR, KA, MG). – Europe (WE, EE, NE, SE), Kyrgyzstan, Kazakhstan, Mongolia.
- Tenthredo (Tenthredella) atrofasciata** Zhelochovtsev, 1939. Russia: **FE** (AM).

- Tenthredo (Tenthredella) balteata** Klug, 1817 (*T. soror* Zetterstedt, 1838; *Tenthredella balteata albimacula* Enslin, 1912; *Allantus surensis* Pic, 1939; *Tenthredo tschinggischanensis* Muche, 1965). Host plant: Hypericaceae, Rosaceae, Salicaceae, ferns and others. Russia: **EP** (N, NC), **UR**, **WS** (AL), **ES** (TU, KR, IR, BR), **FE** (KA, MG). – Europe (WE, EE, NE, SE), N Africa, Georgia, Armenia, SW Asia, Iran, Central Asia, Kazakhstan, Mongolia.
- Tenthredo (Tenthredella) basizonata** Malaise, 1938. Russia: **FE** (KU). – Japan (Hon, Shi, Kyu).
- Tenthredo (Tenthredella) bipunctula bipunctula** Klug, 1817. Host plant: Senecio spp. (Asteraceae). Russia: **EP** (NW), **WS** (NS). – Europe (WE, EE, NE, SE).
- Tenthredo (Tenthredella) bipunctula malaisei** (Takeuchi, 1933) [Tenthredella]. Host plant: Senecio spp. (Asteraceae). Russia: **FE** (SA, KU). – Japan (Hon).
- Tenthredo (Tenthredella) borea** Enslin, 1919 (*T. borea* Enslin, 1920; *T. stubbei* Koch, 1984). Russia: **EP** (N), **WS** (TM). – Mongolia.
- Tenthredo (Tenthredella) camtschatcalis** (Enslin, 1927) [Tenthredella]. Russia: **FE** (KA).
- Tenthredo (Tenthredella) cockerelli** (Rohwer, 1925) [Tenthredella] (*Tenthredella bituberculata* Takeuchi, 1940). Russia: **FE** (AM, PR). – China (NE, NC, CC), Korean Peninsula.
- Tenthredo (Tenthredella) colon** Klug, 1817 (*Allantus obscurus* Panzer, 1803; *Tenthredo rudowi* André, 1881; *T. nigricollis* W.F. Kirby, 1882; *T. punctulata* Konow, 1887; *T. semicornis* Harrington, 1889; *T. unifasciata* Mocsáry, 1909; *T. colon nigriventris* Enslin, 1912; *Tenthredella cucullata* Enslin, 1912). Host plant: Dennstaedtiaceae, Ranunculaceae, Geraniaceae, Onagraceae, Salicaceae, etc. Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (KM, AL), **ES** (IR, BR, YA), **FE** (AM, KH, PR, SA, KU, KA, MG). – Europe (WE, EE, NE, SE), Caucasus, SW Asia, Kyrgyzstan, Kazakhstan, Mongolia, Korean Peninsula, Japan (Hok, Hon, Sado), N America.
- Tenthredo (Tenthredella) contusa** (Enslin, 1912) [Tenthredella] (*T. lateralis* Mocsáry, 1909; *T. trialbata* Malaise, 1931). Russia: **FE** (AM, KH, PR). – Japan (Hon, Shi), SE Asia.
- Tenthredo (Tenthredella) crenata** (Enslin, 1912) [Tenthredella] (*T. fulvicornis* Mocsáry, 1909; *T. fulviventris* Mocsáry, 1909). Russia: **ES** (BR), **FE** (AM, KH, SA). – Mongolia.
- Tenthredo (Tenthredella) cunyi** Konow, 1886 (*T. chyzeri* Mocsáry, 1891; *Tenthredella cunyi pleuritica* Enslin, 1912; *T. cunyi alboplagiata* Enslin, 1912). Russia: **ES** (IR, BR). – Europe (WE, EE).
- Tenthredo (Tenthredella) decens** Zhelochovtsev, 1939. Russia: **EP** (NW), **ES** (IR, BR, ZB), **FE** (KA).
- Tenthredo (Tenthredella) duplicata** Enslin, 1920 (*T. bimaculata* Konow, 1886). Russia: **EP** (NC). – Georgia, Armenia.
- Tenthredo (Tenthredella) eburata** Konow, 1900 (*Tenthredella rubrocaudata* Takeuchi, 1936). Russia: **EP** (NW, C, E), **UR**, **WS** (NS), **ES** (IR, BR), **FE** (PR). – Europe (NE), China (NE, CC), Korean Peninsula.
- Tenthredo (Tenthredella) eburneifrons** W.F. Kirby, 1882 (*T. lichtwardti* Konow, 1899). Russia: **WS** (AL), **ES** (BR, ZB), **FE** (AM, PR). – Europe (WE, NE), Kazakhstan, Korean Peninsula.
- Tenthredo (Tenthredella) erudita** (Kuznetsov-Ugamskij, 1927) [Tenthredella]. Russia: **FE** (PR).
- Tenthredo (Tenthredella) fagi** Panzer, 1798 (*T. pellicida* Klug, 1817; *T. facigera* Konow, 1899; *Tenthredella fagi melanaspis* Enslin, 1912). Host plant: Pteridium aquilinum (Dennstaedtiaceae), Corylus spp. (Betulaceae), Sorbus spp. (Rosaceae), Angelica spp. (Asteraceae). Russia: **EP** (NW, C, E), **UR**, **WS** (NS, AL), **ES** (IR, BR, YA), **FE** (AM, PR, SA, KU). – Europe (WE, EE, NE), Armenia, China (Wei et al., 2006), Korean Peninsula, Japan (Hok, Hon).
- Tenthredo (Tenthredella) ferruginea** Schrank, 1776 (*T. ferruginea* O.F. Müller, 1776; *T. rufipennis* Fabricius, 1793; *T. rufiventris* Panzer, 1799; *T. conspicua* Klug, 1817; *T. schranckii* Lepelletier, 1823; *Allantus laticinctus* Stephens, 1835; *Tenthredo rubecula* Eversmann, 1847; *T. prospera* Erichson, 1851; *T. gynecandromorpha* Rudow, 1871; *T. leucocera* Mocsáry, 1909; *T. minuta* Mocsáry, 1909; *Tenthredella dentina* Enslin, 1912; *T. ferruginea leucaspis* Enslin, 1912; *Tenthredo ferruginea rufisternis* Enslin, 1920; *Tenthredella ferruginea frontalis* Pic, 1940; *Perineura sawai* Togashi, 2007). Host plant: Salicaceae, Betulaceae, Rosaceae, ferns, etc. Russia: **EP** (NW, C, E, NC), **UR**, **WS** (AL), **ES** (BR, YA), **FE** (AM, KH, PR, SA, KU, KA, MG). – Europe (WE, EE, NE), Armenia, Turkey, China (NE, CC, SE), Korean Peninsula, Japan (Hok, Hon, Sado), SE Asia.
- Tenthredo (Tenthredella) gifui** Marlatt, 1898 (*T. gifuensis* Konow, 1905; *T. filamentosa* Enslin, 1920). Host plant: Stellaria spp. (Caryophyllaceae). Russia: **FE** (SA). – Japan (Hok, Hon, Shi, Kyu).
- Tenthredo (Tenthredella) kurilensis** (Takeuchi, 1931) [Tenthredella]. Russia: **WS** (AL), **FE** (KU). – Japan (Hok, Hon).

- Tenthredo (Tenthredella) leleji** Taeger, Wei et Shinohara, 2016. Russia: **FE** (SA). – Japan (Hok, Hon).
- Tenthredo (Tenthredella) livida** Linnaeus, 1758 (*T. dubia* Ström, 1768; *T. lurida* Ph.L. Müller, 1775; *T. pellucida* O.F. Müller, 1776; *T. bipunctata* O.F. Müller, 1776; *T. annularis* Schrank, 1776; *T. albicornis* Geoffroy, 1785; *T. maura* Fabricius, 1793; *T. carpini* Panzer, 1799; *Allantus aterrimus* Stephens, 1835; *Tenthredella livida clara* Enslin, 1912; *T. livida rubripes* Forsius, 1918; *T. livida rubeola* Forsius, 1918). Host plant: Oleaceae, Lamiaceae, Salicaceae, Caprifoliaceae, Onagraceae, Rosaceae, Betulaceae, Plantaginaceae, etc. Russia: **EP** (NW, C, E, S, NC), **UR**, **WS** (Zhelochovtsev, 1988), **ES** (KR), **FE** (AM, KA). – Europe (WE, EE, NE, SE), Georgia, Armenia, Turkey.
- Tenthredo (Tenthredella) luteipennis** Eversmann, 1847 (*T. fallax* Mocsáry, 1880; *T. mocsaryi* André, 1882; *T. menetriesii* W.F. Kirby, 1882; *Tenthredella luteipennis obscuraria* Enslin, 1913). Russia: **EP** (S, NC). – Georgia, Armenia, SW Asia, Tadjikistan.
- Tenthredo (Tenthredella) mandibularis** Fabricius, 1804 (*T. rufipes* Gmelin, 1790). Host plant: *Tussilago farfara*, *Petasites* spp. (Asteraceae). Russia: **EP** (C, S), **WS** (NS). – Europe (WE, EE, NE, SE), Caucasus.
- Tenthredo (Tenthredella) moniliata** Klug, 1817 (*T. fuscicornis* Eschscholtz, 1822; *Allantus bimaculatus* Gimmerthal, 1836; *Tenthredo poecila* Eversmann, 1847; *T. flavilabris* Gimmerthal, 1847; *T. scita* Erichson, 1851; *T. lachlaniana* Cameron, 1878; *T. poecilopus* Mocsáry, 1880; *T. lachlaniana rubripes* Jakovlev, 1888; *T. lachlaniana immaculata* Jakovlev, 1888; *T. ruthena* Jakovlev, 1891; *T. forsii* Konow, 1908; *T. ruficornis* Mocsáry, 1909; *Tentredella fuscicornis norvegica* Forsius, 1918; *T. moniliata flavoscutellata* Forsius, 1918; *Tenthredo moniliata immaculosa* Enslin, 1920; *T. moniliata paria* Enslin, 1920; *T. moniliata menyanthidis* Torka, 1929). Host plant: Menyanthaceae, Ranunculaceae, Asteraceae, Rosaceae, Betulaceae, etc. Russia: **EP** (NW, C, E), **UR**, **WS** (AL), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG). – Europe (WE, EE, NE), Armenia, Mongolia, China (NE, NC, NE, SE), Korean Peninsula.
- Tenthredo (Tenthredella) oryssoides** Jakovlev, 1888 (*T. discophora* Konow, 1896; *T. discophora pullata* Konow, 1898; *T. bigemmis* Konow, 1903; *T. discophora rosea* Enslin, 1913). Russia: **EP** (NC). – Georgia, Armenia, Turkey.
- Tenthredo (Tenthredella) peninsularis** Malaise, 1931. Russia: **ES** (YA), **FE** (AM, KA).
- Tenthredo (Tenthredella) procera** Klug, 1817 (*T. griboi* Costa, 1894). Host plant: *Symphytum* spp. (Boraginaceae), *Petasites* spp. (Asteraceae). Russia: **EP** (C). – Europe (WE, EE).
- Tenthredo (Tenthredella) purpurea** Puls, 1870 (*T. koenigi* Konow, 1896). Russia: **EP** (NC). – Georgia, Armenia, SW Asia.
- Tenthredo (Tenthredella) rubricoxis** (Enslin, 1912) [Tenthredella] (*T. rufipes* Klug, 1817). Host plant: *Senecio* spp. (Asteraceae). Russia: **EP** (N), **WS** (TM, NS, KM), **FE** (PR, MG). – Europe (WE, EE).
- Tenthredo (Tenthredella) serradifera** Conde, 1935. Russia: **FE** (SA).
- Tenthredo (Tenthredella) silensis** Costa, 1859 (*T. limbata* Klug, 1817; *T. quadridens* Strobl, 1896; *T. limbata nigrifemur* Conde, 1934; *T. oraria* Zombori, 1973). Host plant: Lamiaceae, Ranunculaceae, Rosaceae, Liliaceae, etc. Russia: **EP** (NW, C, E), **UR**, **WS** (AL), **ES** (TU, IR, BR, YA), **FE** (KH, AM, SA, KU, KA, MG). – Europe (WE, EE, NE), Mongolia, Korean Peninsula, Japan (Hok, Hon, Sado).
- Tenthredo (Tenthredella) sobrina** Eversmann, 1847 (*Allantus semenowi* Jakovlev, 1891; *Tenthredo semenovi pleuronotata* Forsius, 1934). Russia: **EP** (C, E, S, NC), **UR**. – Europe (EE), Kazakhstan.
- Tenthredo (Tenthredella) solitaria solitaria** Scopoli, 1763 (*T. coryli* Panzer, 1799; *T. intermedia* Klug, 1817; *T. coryli albicolon* Klug, 1817; *T. ictERICA* Costa, 1894; *T. solitaria seeboldi* Konow, 1897; *Tenthredella solitaria rufoterminata* Enslin, 1912; *T. solitaria rhennensis* Koorneef, 1935; *Tenthredo saxonica* Muche, 1968; *T. solitaria vitoshensis* Vassilev, 1973). Host plant: *Euphorbia* spp. (Euphorbiaceae). Russia: **EP** (NC, C). – Europe (WE, EE, SE), Armenia.
- Tenthredo (Tenthredella) solitaria xylota** (Jakovlev, 1891) [Allantus]. Host plant: *Euphorbia* spp. (Euphorbiaceae). Russia: **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (IR, YA), **FE** (PR). – Kyrgystan.
- Tenthredo (Tenthredella) stigma** (Forsius, 1918) [Tenthredella] (*T. amplicapitata* Zombori, 1974). Russia: **FE** (AM, SA). – Korean Peninsula.
- Tenthredo (Tenthredella) velox nigrofemorata** (Takeuchi, 1955) [Tenthredella]. Host plant: *Geranium* spp. (Geraniaceae). Russia: **FE** (SA, KU). – Korean Peninsula, Japan (Hok, Hon).
- Tenthredo (Tenthredella) velox velox** Fabricius, 1798 (*T. biguttata* Hartig, 1837; *T. leucostoma* Rudow, 1871; *T. gracilentata* Mocsáry, 1879; *T. sylvia*

- W.F. Kirby, 1882; *T. velox sibirica* Konow, 1903; *T. velox bisignata* Konow, 1908; *Tenthredella velox colonoides* Forsius, 1918; *Tenthredo velox alpina* Zirngiebl, 1937; *T. velox nigripleuris* Zirngiebl, 1937). Host plant: Polygonum spp. (Polygonaceae), Alnus spp. (Betulaceae), Salix spp. (Salicaceae). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (NS, KM, AL), **ES** (IR, BR, YA), **FE** (AM, KH, PR, MG). – Europe (WE, EE, NE, SE), Mongolia.
- Tenthredo (Tenthredella) versuta** Mocsáry, 1909 (*Tenthredella hakonensis* Rohwer, 1910). Russia: **FE** (SA). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Tsushima).
- Tenthredo (Tenthredina) cylindrica** (Rohwer, 1911) [Tenthredina] (*Conospidia umbrosa* Matsumura, 1912). Russia: **FE** (PR). – China (SE), Japan (Hok, Hon, Shi, Kyu).
- Tenthredo (Tenthredo) alaskana** (Enslin, 1910) [Allantus] (*Allantus heraclei* Kincaid, 1900). Russia: **ES** (YA). – N America.
- Tenthredo (Tenthredo) albiventris albiventris** (Mocsáry, 1880) [Allantus] (*Allantus trivittatus* André, 1881; *A. kussariensis* Konow, 1888; *A. lederi* Konow, 1890; *Tenthredo albiventris hostia* Enslin, 1912; *T. pallidula* Benson, 1930; *T. kerketa* Dohnar-Zapolskij, 1930). Imago on Conium spp. (Asteraceae). Russia: **EP** (NC). – Europe (WE, SE), Georgia, Armenia, Turkey.
- Tenthredo (Tenthredo) arctica** (Thomson, 1870) [Eniscia] (*Ischyroceraea hyperborea* Kiær, 1898). Host plant: Trifolium repens (Fabaceae); imago on Apiaceae and others. Russia: **EP** (N), **WS** (TM), **ES** (KR, BR, YA), **FE** (CH). – Europe (NE), N America.
- Tenthredo (Tenthredo) arcuata** Förster, 1771 (*Allantus arcuatus alpigena* Heller et Dalla Torre, 1883; *A. clypealis* Konow, 1888). Host plant: Trifolium spp. (Fabaceae). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (TK, NS), **ES** (KR, YA, ZB). – Europe (WE, EE, NE, SE), Armenia, Turkey, Iran, Mongolia, China (Wei et al., 2006).
- Tenthredo (Tenthredo) arcuatoides** Muche, 1965. Russia: **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR).
- Tenthredo (Tenthredo) brevicornis** (Konow, 1886) [Allantus] (*T. cingulata* Fabricius, 1793; *Allantus arcuatus nitidior* Konow, 1888; *Tenthredo aegra* Enslin, 1912; *Allantus arcuatus vitosaensis* Gregor, 1932; *Tenthredo acerrima* Benson, 1952). Host plant: Lotus corniculatus (Fabaceae). Russia: **EP** (C, NC), **ES** (IR, BR), **FE** (PR, KA). – Europe (WE, EE, SE), Georgia, Armenia, Turkey, Mongolia, China (NC).
- Tenthredo (Tenthredo) calvaria** Enslin, 1912 (*Allantus lateralis* Mocsáry, 1909). Russia: **WS** (NS), **ES** (BR, ZB), **FE** (AM, KH, PR). – Mongolia.
- Tenthredo (Tenthredo) devia** (Konow, 1900) [Allantus]. Host plant: polyphage. Russia: **EP** (N), **WS** (TM, AL), **ES** (TU, KR, BR, YA, ZB), **FE** (KU, KA, MG). – Europe (NE), Mongolia, Korean Peninsula, Japan (Hok, Hon), N America.
- Tenthredo (Tenthredo) erasina** Malaise, 1945 (*T. flavipleuris* Muche, 1986). Russia: **ES** (ZB), **FE** (AM, PR). – Mongolia, China (NE).
- Tenthredo (Tenthredo) fuscocostalis** Rohwer, 1925. Russia: **FE** (AM, KH, PR, SA). – Korean Peninsula.
- Tenthredo (Tenthredo) jacutensis** (Konow, 1897) [Allantus]. Imago on various flowers. Russia: **EP** (N), **WS** (TM), **ES** (KR, BR, YA, ZB), **FE** (AM, KH, PR, SA, MG). – Mongolia, Japan (Hok).
- Tenthredo (Tenthredo) korabica** Taeger, 1985. Host plant: polyphage. Russia: **EP** (NC), “Siberia” (Lacourt, 1999). – Europe (WE, EE), Turkey, Mongolia.
- Tenthredo (Tenthredo) liturata** (Mocsáry, 1886) [Allantus] (*Allantus reitteri* Konow, 1886; *Tenthredo reitteri egregia* Enslin, 1914). Russia: **EP** (NC). – Georgia, Armenia, Turkey.
- Tenthredo (Tenthredo) luteocincta** Eversmann, 1847 (*T. luteocincta virago* Enslin, 1913). Russia: **EP** (S). – Georgia, Armenia, Turkey.
- Tenthredo (Tenthredo) marginella fuscipennis** (Konow, 1886) [Allantus] (*T. marginella nigrior* Enslin, 1912). Russia: **EP** (NC). – Armenia.
- Tenthredo (Tenthredo) marginella marginella** Fabricius, 1793 (*T. sigma* Schrank, 1802; *T. succincta* Lepeletier, 1823; *T. succincta* Serville, 1823; *Allantus decipiens* Förster, 1844; *A. heraclei* Rudow, 1872; *A. omissoides* Jakovlev, 1891; *A. amaenus sabandus* Pic, 1925; *A. marginellus nigroscutellatus* Zirngiebl, 1942; *A. marginellus melanomerus* Zirngiebl, 1942). Host plant: Mentha spp. (Lamiaceae), Plantago spp. (Plantaginaceae), etc. Russia: **EP** (C, E), **UR**, **WS** (TK, NS), **ES** (KR). – Europe (WE, EE, NE, SE), Kyrgyzstan, Kazakhstan.
- Tenthredo (Tenthredo) mongolica** (Jakovlev, 1891) [Allantus] (*T. coreana* Takeuchi, 1927; *T. coreana nigripes* Takeuchi, 1927; *T. erasa* Malaise, 1945). Russia: **WS** (AL), **ES** (TU, BR, ZB), **FE** (AM, KH, PR). – Mongolia, China (NE, NC, CC), Korean Peninsula.
- Tenthredo (Tenthredo) nigripleuris** (Enslin, 1910) [Allantus] (*T. nivalis* Lacourt, 1985). Russia: **EP**

- (N), **WS** (TM), **ES** (YA), **FE** (KA). – Europe (WE, EE), Japan (Hok, Hon).
- Tenthredo (Tenthredo) notha notha** Klug, 1817 (*Allantus perkinsi* Morice, 1919; *A. arcuatus niger* Zirngiebl, 1937). Host plant: *Trifolium* spp., *Vicia* spp. (Fabaceae). Russia: **EP** (N, C, E), **UR**, **WS** (TK, NS, KM, AL), **ES** (KR, IR, ZB). – Europe (WE, EE, NE, SE), Kazakhstan, China (Wei et al., 2006).
- Tenthredo (Tenthredo) notha titania** Benson, 1959. Host plant: *Trifolium* spp., *Vicia* spp. (Fabaceae). Russia: **EP** (NC). – Caucasus, Turkey, Iran.
- Tenthredo (Tenthredo) omissa** (Förster, 1844) [Allantus] (*T. omissa melanoceraea* Enslin, 1912; *T. omissa melanomeros* Enslin, 1912; *T. omissa schirmeri* Enslin, 1918). Host plant: *Plantago* spp. (Plantaginaceae). Russia: **EP** (NW, C, E, S), **WS** (TM, OM, TK, NS, KM), **ES** (KR, IR), **FE** (AM, PR). – Europe (WE, EE, NE, SE), Turkey, Kazakhstan.
- Tenthredo (Tenthredo) pamyrensis** Jakovlev, 1888. Russia: **ES** (KS). – Tadjikistan, Kyrgyzstan, Kazakhstan.
- Tenthredo (Tenthredo) propinqua** Klug, 1817. Russia: **EP** (CR). – Europe (WE, EE, SE), Caucasus, Turkey.
- Tenthredo (Tenthredo) schaefferi** Klug, 1817 (*Allantus costalis* Costa, 1858). Host plant: *Trifolium* spp., ?*Vicia* spp. (Fabaceae). Russia: **EP** (E), **UR**, **WS** (TK, NS, AL), **ES** (BR, ZB), **FE** (MG). – Europe (WE, EE, NE, SE).
- Tenthredo (Tenthredo) scrophulariae** Linnaeus, 1758 (*Allantus scrophulariae joannis* Pic, 1926; *A. scrophulariae repartitus* Pic, 1926; *A. scrophulariae moroandicus* Pic, 1926; *A. scrophulariae brannensis* Pic, 1926). Host plant: *Scrophularia* spp., *Verbascum* spp. (Scrophulariaceae). Russia: **EP** (NW, C, E, NC). – Europe (WE, EE, NE, SE), Armenia, Turkey.
- Tenthredo (Tenthredo) sulphuripes muchei** Koch, 1986. Russia: **ES** (IR, BR). – Mongolia, China (SW).
- Tenthredo (Tenthredo) sulphuripes sulphuripes** (Kriechbaumer, 1869) [Allantus] (*T. beaumonti* Benson, 1950). Host plant: *Bupleurum* spp. (Asteraceae). Russia: **EP** (NC). – Europe (WE, EE, SE).
- Tenthredo (Tenthredo) vespa** Retzius, 1783 (*T. viminalis* Schrank, 1796; *T. sexannulata* Schrank, 1802; *T. vespiformis* Latreille, 1804; *T. 3 cincta* Fabricius, 1804; *T. 4-cincta* Fallén, 1808; *Allantus multifasciatus* Rudow, 1872; *A. multicinctus* Rudow, 1872; *A. nigrilabris* Frivaldszky, 1877; *Tenthredo vespa stigmatica* Enslin, 1912; *T. vespa omnincincta* Enslin, 1912; *T. vespa vittozi* Pic, 1933; *Allantus vespa mequignoni* Pic, 1940; *A. vespa monetierensis* Pic, 1940; *Tenthredo vespa inaffectata* Muche, 1965). Host plant: *Spiraea* spp. (Rosaceae), *Lonicera* spp. (Caprifoliaceae), *Viburnum* spp. (Adoxaceae), *Syringa* spp. (Oleaceae), etc. Russia: **EP** (NW, C, E, NC), **UR**, **WS** (NS), **ES** (IR, BR). – Europe (WE, EE, NE, SE), Georgia, Armenia, Turkey, Mongolia, China (Wei et al., 2006).
- Tenthredo (Zonuledo) amoena** Gravenhorst, 1807 (*T. 2 cincta* Fabricius, 1798; *T. bicincta* Panzer, 1804; *T. cingulum* Klug, 1817; *Allantus quinquecinctus* Gimmerthal, 1834; *A. inversus* Costa, 1894; *A. amaenus lateniger* Pic, 1925; *A. amaenus seminiger* Pic, 1925; *A. amaenus breviniger* Pic, 1925; *A. amaenus lateluteus* Pic, 1925; *A. amaenus digoniensis* Pic, 1927; *A. amaenus mediomaculatus* Pic, 1927; *A. amaenus multiluteus* Pic, 1927; *A. amaena robustior* Pic, 1940). Host plant: *Hypericum maculatum*, *H. perforatum* (Hypericaceae). Russia: **EP** (NW, C, E). – Europe (WE, EE, NE, SE).
- Tenthredo (Zonuledo) flavipennis** Brullé, 1832 (*Allantus frivaldszkyi* Mocsáry, 1879; *A. lautus* Konow, 1891; *A. luminosus* Konow, 1899). Russia: **EP** (S, NC). – Europe (EE, SE), Caucasus, SW Asia.
- Tenthredo (Zonuledo) zonula** Klug, 1817 (*T. fasciata* Scopoli, 1763; *T. bifasciata* Geoffroy, 1785; *T. bicincta flava* Christ, 1791; *Allantus similis* Mocsáry, 1880; *A. calcaratus* André, 1881; *A. scutellaris* Konow, 1898). Host plant: *Hypericum perforatum* (Hypericaceae). Russia: **EP** (NW, C, E, S, NC). – Europe (WE, EE, NE, SE), N Africa, Armenia, SW Asia, Iran, Central Asia.
- Tenthredo abdominalis** (Marsumura, 1912) [Tenthredopsis] (*T. sortitor* Malaise, 1938). Russia: **FE** (SA, KU). – China (SE), Korean Peninsula, Japan (Hok, Hon), India, Sikkim.
- Tenthredo atroclypeata** Enslin, 1920. Russia: **ES** (IR).
- Tenthredo atra obscurata** Jakovlev, 1888. Russia: **ES** (IR).
- Tenthredo caligator** Eversmann, 1847 (*T. nigratarsis* Puls, 1870; *T. morawitzi* Jakovlev, 1888). Russia: **EP** (S, NC). – Georgia, Armenia, SW Asia.
- Tenthredo cingulifer** (Konow, 1899) [Allantus] (*Allantus almasyanus* Mocsáry, 1909). Russia: **WS** (AL), **ES** (TU). – Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NW).
- Tenthredo emphytiformis** Malaise, 1931. Russia: **FE** (KH, PR, KU, KA). – China (Wei et al., 2006), Japan (Hok, Hon, Shi), SE Asia.
- Tenthredo erebia** (Kuznetzov-Ugamskij, 1927) [Tenthredella]. Russia: **FE** (PR).

- Tenthredo flavomandibulata** (Matsumura, 1912) [Tenthredopsis]. Russia: **FE** (SA, KU). – Korean Peninsula, Japan (Hok, Hon).
- Tenthredo gracilis** (Forsius, 1918) [Tenthredella]. Russia: **FE** (PR).
- Tenthredo intercincta** (Malaise, 1934) [Allantus]. Russia: **FE** (PR). – China (NC).
- Tenthredo kotenkoi** Ermolenko, 1992. Russia: **ES** (ZB).
- Tenthredo longipennis** (Matsumura, 1912) [Allantus] (*T. grandiceps* Malaise, 1938). Russia: **FE** (SA, KU). – Japan (Hok, Hon, Shi).
- Tenthredo mitsuhashii** (Matsumura, 1912) [Macrophya]. Russia: **FE** (SA, KU). – Japan (Hok, Hon).
- Tenthredo omega** (Takeuchi, 1936) [Tenthredella]. Russia: **FE** (SA, KU). – Japan (Hok, Hon, Shi).
- Tenthredo provida** (F. Smith, 1878) [Allantus] (*T. providus concolor* Malaise, 1945; *T. providus fletcheri* Malaise, 1945; *T. providus altaica* Stroganova, 1980). Russia: **WS** (AL). – China (NW), India (NW).
- Tenthredo providens** F. Smith, 1874 (*T. providentia* Enslin, 1920). Host plant: Oenanthe spp., Cryptotaenia spp., Peucedanum spp., Angelica spp. (Apiaceae). Russia: **FE** (KU). – Japan (Hok, Hon, Shi, Kyu, Sado, Awashima).
- Tenthredo pseudolivacea** Malaise, 1931. Russia: **FE** (PR).
- Tenthredo sibirica** (Kriechbaumer, 1869) [Allantus] (*T. spectabilis* Mocsáry, 1878; *Allantus cephalotes* Jakovlev, 1888; *Jermakia japonica* Rohwer, 1910; *Allantus bicinctus* Matsumura, 1912; *A. bistriatus* Mallach, 1936). Host plant: Dasiphora spp. (Rosaceae), Ranunculus spp. (Ranunculaceae). Russia: **WS** (AL), **ES** (IR, ZB), **FE** (AM, PR, SA, KU). – Mongolia, China (NC, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu), SE Asia.
- Tenthredo tenuipennis** Malaise, 1931. Russia: **FE** (KH, PR). – China (NE, CC), Korean Peninsula.
- Tenthredo tumida tumida** (Mocsáry, 1909) [Allantus] (*Tenthredella excellens* Kuznetsov-Ugamskij, 1927). Russia: **FE** (AM, KH, PR). – China (NE, SE), Korean Peninsula.
- Tenthredo variicolor** Malaise, 1945. Russia: **FE** (PR). – China (SW), India.
- Tenthredo xanthotarsus** Cameron, 1876. Russia: **WS** (AL), **FE** (AM, SA, KU). – Japan (Hok, Hon, Shi).
- Tenthredo yezoensis** Kumamoto, 1987. Russia: **FE** (SA). – Japan (Hok).
- TENTHREDOPSIS** Costa, 1859 (*Ebolia* Costa, 1859; *Thomsonia* Konow, 1884; *Eutenthredopsis* Enslin, 1913). Type species *Tenthredo tessellata* Klug, 1817. The larvae on Poaceae, less often on Cyperaceae, Juncaceae, Acoraceae. The genus is distributed in Palaearctic, mainly in west part; two species in Oriental region. Number of species: World and Palaearctic – about 60; Russia – 30 (+ 1 ssp.).
- Tenthredopsis annuligera** (Eversmann, 1847) [Tenthredo] (*Tenthredo albopunctata* Tischbein, 1852; *T. picticornis* Mocsáry, 1880; *T. basimacula* Mocsáry, 1880; *Tenthredopsis casia* Konow, 1898; *T. triforis* Konow, 1898; *T. quadrannulata* Konow, 1898). Host plant: Poaceae. Russia: **EP** (S, CR). – Europe (EE, SE).
- Tenthredopsis auriculata** (Thomson, 1870) [Perineura] (*Tenthredo sachalinensis* Matsumura, 1911; *Tenthredopsis camtschatcalis* Enslin, 1927; *T. camtschatcalis lucens* Enslin, 1927; *T. auriculata camtschatica* Forsius, 1928; *T. sachalinensis nigrolineatus* Takeuchi, 1936). Host plant: Calamagrostis spp. (Poaceae). Russia: **EP** (N, NW, E), **UR**, **WS** (TM), **ES** (IR, BR), **FE** (AM, KH, PR, SA, KA). – Europe (NE).
- Tenthredopsis carinata carinata** Malaise, 1931. Host plant: Poaceae. Russia: **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (TU, IR), **FE** (KA). – Europe (NE).
- Tenthredopsis carinata japonica** Takeuchi, 1956. Host plant: Poaceae. Russia: **FE** (SA, KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Tenthredopsis coquebertii** (Klug, 1817) [Tenthredo] (*Tenthredo labiata* Serville, 1823; *T. labiata* Lepeletier, 1823; *T. rufimana* Spinola, 1843; *Perineura lusitanica* André, 1881; *Tenthredopsis nigricollis* Cameron, 1881; *T. conjungens* Kriechbaumer, 1884; *T. limbilabris* Kriechbaumer, 1884; *Thomsonia braunsii* Konow, 1884; *Tenthredopsis opulenta* Konow, 1887; *T. coqueberti brunnescens* Enslin, 1918; *T. coqueberti nigrata* Gregor, 1941). Host plant: Poaceae. Russia: **ES** (BR). – Europe (WE, EE, SE), China (Wei et al., 2006).
- Tenthredopsis discrepans** Konow, 1890. Russia: **EP** (NC). – Georgia, Armenia.
- Tenthredopsis festiva** Konow, 1890. Russia: **EP** (NC). – Armenia, Azerbaijan, Turkey.
- Tenthredopsis friesei** (Konow, 1884) [Thomsonia] (*Thomsonia laticeps* Konow, 1884; *Tenthredopsis korlevici* Konow, 1887; *T. arrogans* Konow, 1890; *T. nigroscutellata* Konow, 1904; *T. arrogans erythrocoele* Enslin, 1913). Host plant: Calamagrostis spp., Holcus spp. (Poaceae), Juncus spp. (Juncaceae).

- Russia: **EP** (NW, C, E, S, NC), **UR**, **WS** (TM, KM), **ES** (IR). – Europe (WE, EE, NE, SE), Kazakhstan.
- Tenthredopsis gracilis** Jakovlev, 1891. Russia: **ES** (KR).
- Tenthredopsis hungarica** (Klug, 1817) [Tenthredo] (*T. sareptana* Konow, 1894; *T. hungarica atrilobis* Enslin, 1913). Host plant: Poaceae. Russia: **EP** (C, E, S, NC), **UR**, **WS** (KM). – Europe (EE), Kazakhstan, Mongolia.
- Tenthredopsis jakowleffi** Konow, 1896. Russia: **ES** (IR, BR).
- Tenthredopsis kokuewi** Jakovlev, 1891. Russia: **EP** (C).
- Tenthredopsis lactiflua** (Klug, 1817) [Tenthredo] (*T. lactiflua plaga* Enslin, 1913; *T. lactiflua liturata* Enslin, 1913). Host plant: Poaceae. Russia: **EP** (S), **WS** (Zhelochovtsev, Zinovjev, 1996), **ES** (TU, IR). – Europe (WE, EE), Georgia, Kazakhstan.
- Tenthredopsis languida** (Erichson, 1851) [Tenthredo]. Russia: **ES** (IR), **FE** (KH).
- Tenthredopsis ligata** Konow, 1903. Russia: **EP** (NC, CR). – Europe (EE).
- Tenthredopsis litterata** (Geoffroy, 1785) [Tenthredo] (*Tenthredo carbonaria* Linnaeus, 1767; *T. cordata* Geoffroy, 1785; *T. thoracica* Geoffroy, 1785; *T. varia* Gmelin, 1790; *T. flavipes* Christ, 1791; *T. cruciata* Christ, 1791; *T. dimidiata* Fabricius, 1804; *T. rubiginosa* Drapiez, 1819; *T. microcephala* Lepeletier, 1823; *T. microcephala* Serville, 1823; *T. caliginosa* Stephens, 1835; *T. femoralis* Stephens, 1835; *T. analis* Stephens, 1835; *T. orbitalis* Dietrich, 1868; *Tenthredopsis nigriceps* Cameron, 1881; *T. nigronotatus* Cameron, 1881; *Thomsonia thomsoni* Konow, 1884; *Tenthredopsis thomsoni concolor* Konow, 1887; *T. thomsoni nigripes* Konow, 1890; *T. pallida* Konow, 1896; *T. litterata bicolor* Enslin, 1913; *T. litterata melaena* Enslin, 1918; *T. litterata variana* Enslin, 1918; *T. litterata subcarpathica* Gregor, 1927; *T. carbonaria medionotata* Pic, 1948). Host plant: Dactylis spp., Agrostis spp., Calamagrostis spp. (Poaceae). Russia: **EP** (NW, C, E, S, NC), **UR**, **WS** (OM). – Europe (WE, EE, NE, SE), N Africa, Georgia, Turkey.
- Tenthredopsis moscovita** (André, 1881) [Perineura]. Russia: **EP** (C).
- Tenthredopsis nassata** (Linnaeus, 1767) [Tenthredo] (*Tenthredo alneti* Schrank, 1781; *T. perlata* Geoffroy, 1785; *T. apicalis* Geoffroy, 1785; *T. subulata* Gmelin, 1790; *T. melanorhoea* Gmelin, 1790; *T. napata* Turton, 1802; *Allantus tiliae* Panzer, 1803; *Tenthredo ambigua* Klug, 1817; *T. instabilis* Klug, 1817; *T. fulviceps* Stephens, 1835; *T. tristis* Stephens, 1835; *Perineura brevispina* Thomson, 1870; *Tenthredopsis lividiventris* Cameron, 1881; *T. saundersi* Cameron, 1881; *T. inornatus* Cameron, 1881; *T. albomaculatus* Cameron, 1881; *T. dorsivittatus* Cameron, 1881; *Perineura scutellaris flavoguttata* Magretti, 1882; *Thomsonia josephi* Konow, 1884; *Th. obscura* Konow, 1884; *Th. raddatzi* Konow, 1884; *Th. elegans* Konow, 1884; *Tenthredopsis gibberosa* Konow, 1887; *T. fenestrata* Konow, 1890; *T. dorsalis biguttata* Konow, 1890; *T. dorsalis diluta* Konow, 1890; *T. raddatzi indocilis* Konow, 1890; *T. raddatzi dorsata* Konow, 1890; *T. raddatzi vittata* Konow, 1890; *T. raddatzi maura* Konow, 1890; *T. raddatzi inornata* Konow, 1890; *T. raddatzi sagmaria* Konow, 1890; *T. nassata rufata* Konow, 1890; *T. austriaca obscurata* Konow, 1890; *T. elegans nigronotata* Konow, 1890; *T. dorsalis tirolensis* Konow, 1892; *T. konowi* Strobl, 1896; *T. nassata pleurosternalis* Enslin, 1913; *T. parvula atripleuris* Enslin, 1913; *T. parvula atrilobis* Enslin, 1913; *T. parvula atrifemoribus* Enslin, 1913; *T. parvula rubriventris* Enslin, 1913; *T. parvula atramentaria* Enslin, 1913; *T. austriaca rufofemorata* Enslin, 1913; *T. austriaca albata* Enslin, 1913; *T. austriaca candida* Enslin, 1913; *T. nassata metapleuris* Enslin, 1913; *T. nassata trichroma* Enslin, 1913; *T. tristior* Morice, 1914; *T. inornata melanaspis* Enslin, 1918; *T. nassata nigerrima* Endre, 1927; *T. parvula nigriblobis* Zirngiebl, 1937; *T. fenestrata quadripunctata* Gregor, 1941; *T. dubia scutellaris* Gregor, 1941; *T. nassata martialis* Pic, 1948; *T. nassata buyssoni* Pic, 1948; *T. virgineus* Muche, 1965; *T. coqueberti ulanbatorensis* Muche, 1965). Host plant: Poaceae, Cyperaceae. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (NS), **ES** (BR, ZB), **FE** (AM, PR, SA, KU, MG). – Europe (WE, EE, NE, SE), Georgia, Armenia, Turkey, Central Asia, Mongolia, China (CC), Japan.
- Tenthredopsis nigella** Konow, 1891. Russia: **EP** (NC). – Europe (SE), Caucasus, Turkey.
- Tenthredopsis nigrescens** Konow, 1897. Russia: **EP** (Lacourt, 1999). – Armenia.
- Tenthredopsis ornata** (Serville, 1823) [Tenthredo] (*Tenthredo neglecta* Serville, 1823; *T. ornata* Lepeletier, 1823; *T. neglecta* Lepeletier, 1823; *Perineura excisa* Thomson, 1870; *Thomsonia excisa binotata* Konow, 1884; *Tenthredopsis excisa atriscutis* Enslin, 1918). Host plant: Poaceae. Russia: **EP** (N, NW, C, E, S, NC), **UR**. – Europe (WE, EE, NE, SE), Armenia.
- Tenthredopsis ornatrix** Konow, 1890. Russia: **EP** (NC). – Europe (EE), Armenia.

- Tenthredopsis rufa** Konow, 1890. Russia: **EP** (NC). – Georgia, Azerbaijan.
- Tenthredopsis scutellaris** (Fabricius, 1804) [Tenthredo] (*Tenthredo spreta* Serville, 1823; *T. dorsalis* Serville, 1823; *T. spreta* Lepeletier, 1823; *T. dorsalis* Lepeletier, 1823; *Tenthredopsis flavomaculatus* Cameron, 1881; *T. picticeps* Cameron, 1881; *Perineura scutellaris baldensis* Heller et Dalla Torre, 1883; *Tenthredopsis albipleuris* Konow, 1886; *T. puncticollis* Konow, 1890; *T. austriaca* Konow, 1890; *T. dubia* Konow, 1890; *T. parvula* Konow, 1890; *T. franki* Konow, 1890; *T. thornleyi* Konow, 1899; *T. puncticollis mediatra* Enslin, 1913; *T. flavomaculata centronigrata* Enslin, 1913; *T. nassata intermedia* Hellén, 1943). Host plant: Poaceae. Russia: **EP** (NC). – Europe (WE, EE, NE, SE).
- Tenthredopsis sordida** (Klug, 1817) [Tenthredo] (*T. sordida atriventris* Enslin, 1913; *T. sordida pleuritica* Enslin, 1913). Host plant: Arrhenatherum spp., Lolium spp., Calamagrostis spp., Dactylis spp. (Poaceae), Carex spp. (Cyperaceae). Russia: **EP** (S). – Europe (WE, EE, NE, SE), Turkey.
- Tenthredopsis sororia** Konow, 1898. Russia: **EP** (NC). – Armenia, Azerbaijan.
- Tenthredopsis stigma** (Fabricius, 1798) [Tenthredo] (*Tenthredo dorsalis* Spinola, 1808; *T. histrio* Klug, 1817; *Tenthredopsis stigma genualis* Konow, 1890; *T. churchvillei* Konow, 1897; *T. stigma albonotata* Pigeot, 1917). Host plant: Elymus hispidus (Poaceae). Russia: **EP** (NW, C, E, S, NC), **UR**. – Europe (WE, EE, NE, SE).
- Tenthredopsis tarsata** (Fabricius, 1804) [Tenthredo] (*T. opacipleuris* Stein, 1884; *Thomsonia hilleckeii* Konow, 1884; *Tenthredopsis wuestneii* Stein, 1884). Host plant: Brachypodium sylvaticum (Poaceae). Russia: **EP** (C, S). – Europe (WE, EE, NE, SE).
- Tenthredopsis tessellata** (Klug, 1817) [Tenthredo] (*Tenthredo ischiadica* Eversmann, 1847; *T. ischiadica* Eversmann, 1864; *Perineura cylindrica* Rudow, 1871; *Tenthredopsis tessellata alboplagiata* Konow, 1890; *T. albata* Konow, 1904; *T. tessellata nigratileuris* Enslin, 1913; *T. tessellata nigratilobis* Enslin, 1913; *T. tessellata nigratiscutis* Enslin, 1913). Host plant: Deschampsia spp., Dactylis spp., Lolium spp. (Poaceae), Aira spp. (Acoraceae). Russia: **EP** (C, E, S), **UR**, **WS** (TK, NS). – Europe (WE, EE, SE), Armenia, Turkey, Iran, Kazakhstan, Mongolia.
- Tenthredopsis tischbeinii** (Frivaldszky, 1877) [Tenthredo] (*Tenthredo hungarica* Tischbein, 1852; *Perineura konowi* Lethierry, 1887; *Tenthredopsis fischbeini exannulata* Strobl, 1901; *T. pisinna* Konow, 1903; *T. andrei atronotata* Pic, 1948). Host plant: Poaceae. Russia: **EP** (C, S), **WS** (AL), **ES** (TU, IR, BR), **FE** (AM, MG). – Europe (WE, EE, SE), Kazakhstan, Mongolia.
- Tenthredopsis viridis** Zhelochovtsev, 1941. Russia: **EP** (NC). – Armenia.
- TIANMUTHREDO** Wei, 1997. Type species *Tianmuthredo nigrodorsata* Wei, 1997. The genus is distributed in Oriental and Palaearctic regions. Number of species: World – 2; Palaearctic and Russia – 1.
- Tianmuthredo davei** Taeger et Kramp, 2017. Russia: **FE** (PR).
- USSURINUS** Malaise, 1931. Type species *Ussurinus insignicornis* Malaise, 1931. The genus is distributed in Palaearctic. Only two species.
- Ussurinus insignicornis** Malaise, 1931. Russia: **FE** (PR).
- Ussurinus nobilis** Saarinen, 1945. Russia: **EP** (N). – Europe (NE).

INFRAORDER SIRICOMORPHA

SUPERFAMILY PAMPHILIOIDEA

Head closed ventrally, the clypeus being folded back underneath and joined by its lateral arms to the post-genae behind; the result of this is a capsule with 4 holes in it. Mesosternum triangular in shape, clearly defined by sutures and with a presternal bridge in front. Abdomen strongly flattened dorsiventrally.

Male genitalia orthandrous (not twisted). Female sawsheath not exerted strongly. Larva oligopodous.

The superfamily is distributed in North hemisphere, mainly in Temperate zone. Number of taxa: World – 2 families, 2 subfamilies, 11 genera, more than 330 species; Palaeartic – 2/2/11/about 240; Russia – 2/2/10/111 (+ 3 ssp.).

8. FAMILY PAMPHILIIDAE

Very flat and broad species, 7-17 mm long, sun-loving and very fast on the wing. Antennae long, thread-like and many-segmented (18-24 segments). Fore wings with vein *Sc* free and *2r* present. At least the middle and hind tibiae have preapical spines.

The larvae lives solitarly or socially. The larvae of the subfamily Cephalciinae feed on conifers, lives in a web; the larvae of the subfamily Pamphiliinae feed on angiosperms, lives in a web, or in a tube of a rolled leaf held by silk.

The family is distributed in Holarctic, Oriental and Neotropical regions, mainly in Temperate zone. Number of taxa: World – 2 subfamilies, 10 genera, about 300 species; Palaeartic – 2/10/>200; Russia – 2/9/99 (+ 3 ssp.).

References. Dalla Torre, 1894; Konow, 1903; Dovnar-Zapolskij, 1930; Gussakovskij, 1935; Malaise, 1943; Zhelochovtsev, 1968, 1976, 1988; Ermolenko, 1969, 1973, 1976, 1984; Beneš, 1972a,b, 1974, 1976a,b, 2014b; Verzhutskii, 1974, 1981; Zhelochovtsev, Prochorova, 1976; Stroganova, 1978b; Shinohara, 1979, 1980, 1987, 1988a,b, 1992a, 1993, 1995a, 1997a,b, 1998, 2000, 2001a,b, 2002b, 2003, 2005a; Koch, 1982; Achterberg, Aarsten, 1986; Shinohara, Byun, 1993, 1996; Zhelochovtsev, Zinovjev, 1995; Shinohara, Zinovjev, 1996; Shinohara, Lee, 1997; Shinohara, Hara, 2000; Xiao, 2000; Viitasaari, 2002; Shinohara, Zombori, 2003; Shinohara, Vasilenko, 2005; Vasilenko, Dolgov, 2005; Liston et al., 2006, 2014a; Piotrowski et al., 2006; Shinohara, Zhou, 2006; Taeger et al., 2006, 2010; Wei

et al., 2006; Shinohara, Lelej, 2007; Shinohara, Taeger, 2007; Roller, Haris, 2008; Gurov, Battisti, 2009; Schedl, 2009; Sundukov, 2009, 2011b, 2013, 2015; Sundukov, Lelej, 2009, 2012; Hara, 2010; Vasilenko, 2009b, 2010b; Taeger, Blank, 2011; Macek, 2012; Vasilenko, Korshunov, 2012; Ahn et al., 2013; Kulagin, Simonenkova, 2014; Sokolov, 2014; Beneš, Holuša, 2015; Kostyunin, 2015; Popov, 2015; Noblecourt, 2016; Hara, Shinohara, 2017; Shinohara, Kato, 2017.

Subfamily CEPHALCINAE

ACANTHOLYDA A. Costa, 1894 (*Acanthocnema* Costa, 1859; *Itycorsia* Konow, 1897). **Type species** *Tenthredo erythrocephala* Linnaeus, 1758. The larvae feed on the Pinus, Larix, Picea, Abies, Tsuga, Pseudotsuga (Pinaceae); singly or in groups weave nests from the web. The genus is distributed in Holarctic, Oriental and Neotropical regions; mainly in Holarctic. Number of species: World – > 70; Palaeartic – about 30; Russia – 8 (+ 1 ssp.) from 2 subgenera.

Acantholyda (Acantholyda) erythrocephala (Linnaeus, 1758) [*Tenthredo*] (*A. erythrocephala vittata* Enslin, 1918; *A. grangeoni* Riou, 1999). Host plant: Pinus spp. (Pinaceae); live in groups, often harm. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TK, NS, KM), **ES** (KR, IR, BR), **FE** (AM). – Europe (WE, EE, NE, SE), Kazakhstan, China (NE, NC), Korean Peninsula, N America.

Acantholyda (Acantholyda) flaviceps (Retzius, 1783) [*Tenthredo*] (*Lyda cyanea* Klug, 1808). Host plant: Pinus spp. (Pinaceae). Russia: **EP** (NW, C, E), **UR**, **WS** (KM, AL), **ES** (KR). – Europe (WE, EE, NE, SE).

Acantholyda (Itycorsia) aglaia aglaia Zhelochovtsev, 1968 (*A. angarica* Ermolenko, 1969). Host plant: Picea spp. (Pinaceae). Russia: **WS** (KM), **ES** (KR, IR), **FE** (KH, PR). – Japan (Hon).

Acantholyda (Itycorsia) aglaia yezoensis Shinohara et Hara, 2000. Host plant: Picea spp. (Pinaceae). Russia: **FE** (KU). – Japan (Hok).

Acantholyda (Itycorsia) hieroglyphica (Christ, 1791) [*Tenthredo*] (*Lyda bimaculata* Taschenberg, 1861). Host plant: Pinus spp. (Pinaceae); live alone. Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (NS, KM), **ES** (IR). – Europe (WE, EE, NE, SE), Caucasus, Kazakhstan.

Acantholyda (Itycorsia) laricis (Giraud, 1861) [*Lyda*] (*A. parvula* Zirngiebl, 1937). Host plant: Larix spp.

- (Pinaceae); often harm. Russia: **EP** (N, C), **UR**, **WS** (TK, AL), **ES** (IR, YA), **FE** (AM). – Europe (WE, EE, SE), China (NC), Japan (Hon).
- Acantholyda (Itycorsia) parki** Shinohara et Byun, 1996. Host plant: *Pinus koraiensis* (Pinaceae). Russia: **FE** (PR). – Korean Peninsula.
- Acantholyda (Itycorsia) pirica** Shinohara, 2000. Host plant: ?*Pinus pumila* (Pinaceae). Russia: **FE** (SA). – Japan (Hok).
- Acantholyda (Itycorsia) posticalis pinivora** Enslin, 1918 (*Tenthredo stellata* Christ, 1791; *T. pratensis* Fabricius, 1793; *Acantholida nemoralis magnini* Pic, 1944). Host plant: *Pinus* spp. (Pinaceae); often harm. Russia: **EP** (C), **UR**, **WS** (TK, NS, KM, AL), **ES** (YA, ZB). – Europe (WE, EE, NE, SE), Kazakhstan, Mongolia, China (NE, SE).
- CAENOLYDA** Konow, 1897 (*Dictyolyda* Semenov, 1934). Type species *Tenthredo reticulata* Linnaeus, 1758. The larvae feed on the *Pinus* spp. (Pinaceae). The genus is distributed in West Palaearctic. Number of species: World and Palaearctic – 2; Russia – 1.
- Caenolyda reticulata** (Linnaeus, 1758) [Tenthredo] (*Cephaleia clarkii* Jurine, 1807). Host plant: *Pinus* spp. (Pinaceae). Russia: **EP** (NW, C, E). – Europe (WE, EE, NE, SE).
- CEPHALCIA** Panzer, 1803 (*Cephaleia* Jurine, 1807; *Liolyda* Ashmead, 1898). Type species *Cephaleia arvensis* Panzer, 1803. The larvae feed on the *Pinus*, *Larix*, *Picea*, *Abies*, *Cedrus* (Pinaceae); singly or in groups weave nests from the web. The genus is distributed in Holarctic and Oriental region, mainly in Holarctic. Number of species: World – 43; Palaearctic – 30; Russia – 13 (+ 1 sp.).
- Cephalcia abietis** (Linnaeus, 1758) [Tenthredo] (*Lyda hypothrophica* Hartig, 1834; *Cephaleia testacea* Gimmerthal, 1836; *Lyda klugii* Hartig, 1837; *L. scutellaris* Thomson, 1871; *L. semiflava* Matsumura, 1912; *Cephaleia mimica* Pic, 1948). Host plant: *Picea* spp. (Pinaceae); live in groups, harm. Russia: **EP** (N, NW, C, E), **UR**, **WS** (KM), **ES** (KR, BR, YA), **FE** (KH, PR, SA). – Europe (WE, EE, NE, SE), Mongolia, China (NE, NC), Japan (Hok).
- Cephalcia alashanica** (Gussakovskij, 1935) [Cephaleia] (*C. alashanica europaea* Beneš, 1976). Russia: **EP** (C). – Europe (WE, EE, NE), Mongolia, China (NC).
- Cephalcia alpina** (Klug, 1808) [Lyda] (*Lyda fallenii* Dalman, 1823; *L. abietina* Hartig, 1837; *L. annulata* Hartig, 1837). Host plant: *Picea* spp., *Larix* spp. (Pinaceae); live alone. Russia: **EP** (N, C), **WS** (TM, AL), **ES** (KR, IR, YA), **FE** (SA). – Europe (WE, EE, NE, SE), N Africa, China (NE), Korean Peninsula, Japan (Hok, Hon).
- Cephalcia arvensis** Panzer, 1803 (*Tenthredo signata* Fabricius, 1781; *Lyda irrorata* Dahlbom, 1835; *L. saxicola* Hartig, 1837; *L. adusta* Dietrich, 1868; *L. irrorata* Thomson, 1871). Host plant: *Picea* spp. (Pinaceae); live alone or in small groups. Russia: **EP** (N, NW, C, E), **UR**, **WS** (NS), **ES** (KR, IR, YA), **FE** (PR, SA, KU). – Europe (WE, EE, NE, SE), Mongolia, China (NE, NC).
- Cephalcia erythrogaster** (Hartig, 1837) [Lyda]. Host plant: *Picea* spp. (Pinaceae); live alone. Russia: **EP** (NW, C). – Europe (WE, EE, NE), China (Wei et al., 2006).
- Cephalcia hartigii** (Bremi-Wolf, 1849) [Lyda]. Host plant: *Abies* spp., *Picea* spp. (Pinaceae). Russia: **EP** (NC). – Europe (WE, EE, SE), N Africa, Georgia.
- Cephalcia intermedia** Hellén, 1948. Russia: **EP** (N). – Europe (NE).
- Cephalcia koebelei** (Rohwer, 1910) [Cephaleia] (*C. baikalica* Verzhutskii, 1973). Host plant: *Larix leptolepis* (Pinaceae). Russia: **ES** (IR, YA). – Japan (Hok, Hon).
- Cephalcia lariciphila japonica** Shinohara, 1997. Host plant: *Larix leptolepis* (Pinaceae). Russia: **FE** (KU). – Japan (Hok, Hon).
- Cephalcia lariciphila lariciphila** (Wachtl, 1898) [Cephaleia]. Host plant: *Larix* spp. (Pinaceae). Russia: **EP** (N, C), **WS** (KM, AL), **ES** (TU, KR, IR, BR, YA), **FE** (PR). – Europe (WE, EE, NE, SE), China (NE, CC), Korean Peninsula.
- Cephalcia nigricoxae** (Matsumura, 1912) [Lyda]. Host plant: *Picea jezoensis* (Pinaceae); harmful to spruce forests in Hokkaido. Russia: **FE** (KU). – Japan (Hok).
- Cephalcia pallidula** (Gussakovskij, 1935) [Cephaleia] (*C. flavistigma* Lindqvist, 1962). Host plant: *Picea* spp. (Pinaceae). Russia: **EP** (N), **ES** (IR, YA), **FE** (PR, SA, KU). – Europe (NE), China (NE).
- Cephalcia sachalinensis** (Matsumura, 1911) [Lyda]. Host plant: *Picea* spp. (Pinaceae). Russia: **FE** (SA).
- Cephalcia variegata** (Takeuchi, 1930) [Cephaleia]. Host plant: *Pinus pumila* (Pinaceae). Russia: **FE** (SA, KU). – Japan (Hok, Hon).

Subfamily PAMPHILIINAE

CHRYSOLYDA Shinohara, 2002. Type species *Pamphilus leucocephalus* Takeuchi, 1938.

The genus is distributed in East Asia. Number of species: one species.

Chrysolyda leucocephala (Takeuchi, 1938) [Pamphilius]. Russia: **FE** (PR). – Korean Peninsula, Japan (Hok, Hon, Kyu).

KELIDOPTERA Konow, 1897. Type species *Lyda maculipennis* J.P.E.F. Stein, 1876. The genus is distributed in West Palaearctic. Number of species: one species.

Kelidoptera maculipennis (J.P.E.F. Stein, 1876) [Lyda]. Russia: **EP** (E). – Turkey.

NEUROTOMA Konow, 1897 (*Gongylocorsia* Konow, 1897). Type species *Tenthredo flaviventris* Retzius, 1783. The larvae feed mainly on the tree and shrub Rosaceae and *Quercus* (Fagaceae); single or in groups of leaves feeding, weave a web. The genus is distributed in Holarctic and Oriental region, mainly in Holarctic. Number of species: World – 22; Palaearctic – 13; Russia – 7.

Neurotoma atrata Takeuchi, 1930. Host plant: *Quercus acutissima* Fagaceae). Russia: **FE** (PR). – China (SE), Korean Peninsula, Japan (Hon).

Neurotoma fausta (Klug, 1808) [Lyda]. Russia: **EP** (CR). – Europe (WE, EE, SE).

Neurotoma iridescens (André, 1882) [Lyda] (*Cephalia nigrocoerulea* Rohwer, 1910; *Neurotoma sorbi* Forsius, 1911; *Lyda nigricans* Matsumura, 1912; *Neurotoma nakayamai* Sugihara, 1933; *Pamphilius sajanicus* Stroganova, 1978). Host plant: *Prunus* spp., *Sorbus* spp., *Crataegus chlorosarca* (Rosaceae); live in groups. Russia: **EP** (N, NW), **ES** (KR, BR, YA), **FE** (PR, KU). – Europe (WE, NE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

Neurotoma mandibularis (Zaddach, 1866) [Lyda] (*Lyda parisiensis* Giraud, 1870). Host plant: *Quercus* spp. (Fagaceae). Russia: **EP** (CR). – Europe (WE, EE, SE).

Neurotoma nemoralis (Linnaeus, 1758) [Tenthredo] (*Tenthredo punctata* Fabricius, 1798; *Psen caprifolii* Schrank, 1802; *Lyda lucorum* Fallén, 1808; *L. drupacearum* Nördlinger, 1855; *L. maculifrons* Snellen van Vollenhoven, 1858). Host plant: *Prunus* spp. (Rosaceae); live in groups. Russia: **EP** (NW, C, E, S, NC), **UR**. – Europe (WE, EE, NE, SE), Kazakhstan.

Neurotoma saltuum (Linnaeus, 1758) [Tenthredo] (*Tenthredo flaviventris* Retzius, 1783; *Psen pyri*

Schrank, 1802; *Lyda albifrons* Fallén, 1808; *L. clypeata* Klug, 1808; *Tenthredo lutescens* Panzer, 1809; *Pamphilius dimidiatus* Latreille, 1812; *Lyda fasciata* Curtis, 1831; *L. fasciatipennis* Costa, 1864). Host plant: *Prunus* spp., *Malus* spp., *Crataegus* spp. and others Rosaceae; live in groups in a nest of cobwebs, sometimes harm. Russia: **EP** (C, S, NC, CR), **ES** (IR). – Europe (WE, EE, NE, SE), Armenia, Turkey, Korean Peninsula.

Neurotoma sibirica Gussakovskij, 1935 (*N. nemoralis obsoleta* Takeuchi, 1936). Host plant: *Sorbaria sorbifolia* (Rosaceae). Russia: **ES** (IR, YA, ZB), **FE** (AM, KH, PR, SA, KU). – China (NE), Korean Peninsula, Japan (Hok).

ONYCHOLYDA Takeuchi, 1938. Type species *Pamphilius viriditibialis* Takeuchi, 1930. The larvae feed on the *Rubus*, *Filipendula*, *Agrimonia* (Rosaceae), *Cornus* (Cornaceae); live alone and in groups, weave a web. The genus is distributed in Holarctic and Oriental region, mainly in Holarctic. Number of species: World – about 40; Palaearctic – 26; Russia – 11.

Onycholyda armata (Maa, 1949) [Pamphilius]. Russia: **WS** (TK), **FE** (KH, PR). – China (NE, SE), Korean Peninsula.

Onycholyda kumamotonis (Matsumura, 1912) [Lyda]. Host plant: *Filipendula kamtschatica* (Rosaceae). Russia: **FE** (SA, KU). – Japan (Hok, Hon, Kyu).

Onycholyda lucida (Rohwer, 1910) [Pamphilius]. Host plant: *Rubus* spp. (Rosaceae). Russia: **ES** (YA). – Japan (Hon, Shi, Kyu).

Onycholyda minomalis (Takeuchi, 1930) [Pamphilius]. Host plant: *Rubus parvifolius* (Rosaceae). Russia: without regions (Taeger, Blank, 2011). – Japan (Hok, Hon, Shi, Kyu).

Onycholyda nigroclypeata Shinohara, 1987. Russia: **FE** (KH, PR). – China (NE), Korean Peninsula.

Onycholyda rufofasciata (Norton, 1869) [Lyda] (*Lyda rufocincta* Cresson, 1880). Host plant: ?*Rosa* spp. (Rosaceae). Russia: **ES** (IR). – N America.

Onycholyda sertata (Konow, 1903) [Pamphilius] (*Pamphilius thomsoni* Malaise, 1921). Host plant: *Filipendula* spp. (Rosaceae). Russia: **EP** (NW, C, E), **UR**, **WS** (NS, AL), **ES** (YA), **FE** (AM, KH, PR). – Europe (NE), China (NE), Korean Peninsula.

Onycholyda trigaria (Konow, 1897) [Pamphilius]. Russia: **EP** (NC). – Armenia, Azerbaijan, Iran.

Onycholyda viriditibialis (Takeuchi, 1930) [Pamphilius] (*Pamphilius tsherskii* Gussakovskij, 1935).

- Host plant: *Rubus crataegifolius*, *R. microphyllus* (Rosaceae); live in groups. Russia: **FE** (PR). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Onycholyda yezoensis** Shinohara, 1987. Host plant: *Rubus parvifolius*, *R. idaeus* (Rosaceae). Russia: **FE** (SA, KU). – Japan (Hok).
- Onycholyda zinovjevi** Shinohara, 1987. Russia: **FE** (PR). – Korean Peninsula.
- PAMPHILIUS** Latreille, 1803 (*Lyda* Fabricius, 1804; *Anoplolyda* Costa, 1894; *Bactroceros* Konow, 1897). Type species *Tenthredo sylvatica* Linnaeus, 1758. The larvae feed mainly on Rosaceae and Betulaceae, others on Salicaceae, Sapindaceae, Caprifoliaceae, Fagaceae, Cornaceae and Juglandaceae; mostly monophages; live alone or in groups in rolled leaves. The genus is distributed in Holarctic and Oriental region, mainly in Holarctic. Number of species: World – about 115; Palearctic – about 95; Russia – 56 (+ 1 spp.).
- Pamphilius albopictus** (Thomson, 1871) [Lyda] (*Pamphilius altaicus* Gussakovskij, 1935; *P. viridipes* Achterberg et Aartsen, 1986). Host plant: *Prunus* spp. (Rosaceae). Russia: **EP** (N, C), **UR**, **WS** (KM, AL), **ES** (IR, YA), **FE** (KH, PR, KA). – Europe (WE, NE), Korean Peninsula.
- Pamphilius alnicola** Ermolenko, 1973. Host plant: *Alnus hirsuta* (Betulaceae). Russia: **FE** (PR, KU). – Japan (Hok, Hon).
- Pamphilius alnivorus** Shinohara, 2005. Host plant: *Alnus hirsuta* (Betulaceae). Russia: **ES** (YA), **FE** (KH, PR, SA, KU). – Japan (Hok, Hon).
- Pamphilius archiducalis** Konow, 1897. Host plant: *Alnus* spp. (Betulaceae). Russia: **FE** (SA, KU). – Japan (Hok, Hon).
- Pamphilius armeniacus** Shinohara, 1988. Russia: **EP** (NC). – Armenia.
- Pamphilius aucupariae** Vikberg, 1971. Host plant: *Sorbus* spp. (Rosaceae). Russia: **ES** (YA). – Europe (NE).
- Pamphilius balteatus** (Fallén, 1808) [Lyda] (*P. cingulatus* Latreille, 1812; *Lyda suffusa* Hartig, 1837). Host plant: *Rosa* spp., *Prunus* spp., *Spiraea* spp. (Rosaceae); live alone. Russia: **EP** (NW, C, E), **UR**, **WS** (NS), **ES** (IR, YA, ZB), **FE** (PR, SA, KU, KA, MG). – Europe (WE, NE, SE), Korean Peninsula, Japan (Hok).
- Pamphilius betulae** (Linnaeus, 1758) [Tenthredo] (*Tenthredo fulva* Retzius, 1783; *Lyda aurita* Klug, 1808). Host plant: *Populus* spp. (Salicaceae); live alone. Russia: **EP** (NW, C, E), **UR**, **WS** (NS), **ES** (KR, IR, YA). – Europe (WE, EE, NE, SE), Turkey.
- Pamphilius borisi** Beneš, 1972. Russia: **ES** (IR).
- Pamphilius brevicornis brevicornis** Hellén, 1948. Host plant: *Populus* spp. (Salicaceae). Russia: **EP** (N), **WS** (NS, KM), **ES** (IR), **FE** (PR, SA, KA). – Europe (WE, NE), Korean Peninsula.
- Pamphilius caucasicus** Gussakovskij, 1935. Russia: **EP** (NC). – Georgia.
- Pamphilius convexus** Shinohara, 1988. Russia: **FE** (KH, PR). – Korean Peninsula.
- Pamphilius coreanus** Takeuchi, 1938 (*Anoplolyda frontimacula* Malaise, 1943). Russia: **FE** (KH, PR). – Korean Peninsula.
- Pamphilius croceus** Shinohara, 1986. Russia: **FE** (PR). – Korean Peninsula.
- Pamphilius festivus** C. Pesarini et F. Pesarini, 1984. Host plant: *Populus* spp. (Salicaceae). Russia: **EP** (NW, C, S), **UR**, **WS** (NS, KM, AL), **ES** (KS, KR). – Europe (WE, EE, NE, SE).
- Pamphilius fumipennis** (Curtis, 1831) [Lyda] (*Lyda stigma* Stephens, 1835; *L. carpini* Brischke, 1892). Host plant: *Corylus* spp., *Alnus* spp. (Betulaceae). Russia: **EP** (N, NW, C, E). – Europe (WE, EE, NE, SE).
- Pamphilius gyllenhali** (Dahlbom, 1835) [Lyda]. Host plant: *Salix* spp. (Salicaceae); live alone. Russia: **EP** (N, NW, C, E), **UR**. – Europe (WE, NE, SE).
- Pamphilius heecheonparki** Shinohara, 1998. Russia: **ES** (IR, YA), **FE** (KH, PR). – Korean Peninsula.
- Pamphilius hilaris** (Eversmann, 1847) [Lyda]. Host plant: *Rosa* spp. (Rosaceae). Russia: **UR**, **WS** (TK), **FE** (PR, KA). – China (CC), Japan (Hon).
- Pamphilius histrio** Latreille, 1812. Host plant: *Populus* spp. (Salicaceae); live alone. Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (NS), **ES** (YA). – Europe (WE, EE, NE, SE), Kazakhstan, Korean Peninsula, Japan (Hok).
- Pamphilius hortorum** (Klug, 1808) [Lyda] (*P. hortorum bicinctus* Benson, 1945). Host plant: *Rubus* spp. (Rosaceae). Russia: **EP** (N, NW, C, E), **UR**, **WS** (NS, KM, AL), **ES** (IR, YA), **FE** (KH, PR, SA, KU, MG). – Europe (WE, EE, NE, SE), China (NE), Korean Peninsula, Japan (Hok, Hon).
- Pamphilius inanitus** (Villers, 1789) [Tenthredo] (*Tenthredo agrestis* Panzer, 1804; *Lyda fallax* Serville, 1823; *L. fallax* Lepeletier, 1823). Host plant: *Rosa* spp. (Rosaceae). Russia: **EP** (NW), **ES** (YA). – Europe (WE, EE, NE, SE).

- Pamphilius itoi** Shinohara, 1985. Host plant: *Alnus hirsuta* (Betulaceae). Russia: **FE** (PR, KU). – Japan (Hok, Hon).
- Pamphilius jucundus** (Eversmann, 1847) [Lyda] (*Lyda arbuti* Zaddach, 1866). Host plant: *Fragaria* spp. (Rosaceae). Russia: **EP** (NW, C, E), **UR**, **WS** (NS). – Europe (WE, EE, NE).
- Pamphilius kamikochensis** Takeuchi, 1930. Host plant: *Prunus ssiori* (Rosaceae). Russia: **FE** (KU). – Japan (Hok, Hon).
- Pamphilius kontuniemii** Shinohara, 2003. Russia: **EP** (N, NW, NC). – Europe (WE, EE, NE, SE), Georgia.
- Pamphilius kyutekparki** Shinohara, 1991. Russia: **FE** (PR). – Korean Peninsula.
- Pamphilius latifrons** (Fallén, 1808) [Lyda] (*Lyda maculosa* Zaddach, 1866). Host plant: *Populus* spp., *Salix* spp. (Salicaceae). Russia: **EP** (N, C), **WS** (KM), **ES** (IR, BR, ZB), **FE** (PR, MG). – Europe (WE, EE, NE, SE), Kazakhstan.
- Pamphilius leleji** Shinohara et Taeger, 2007. Russia: **FE** (PR).
- Pamphilius lethierryi** (Konow, 1887) [Lyda]. Russia: **EP** (NC). – Europe (WE, EE, SE), Georgia, Armenia.
- Pamphilius lobatus** Maa, 1950. Russia: **FE** (PR). – China (NE), Korean Peninsula, Japan (Hok, Hon).
- Pamphilius marginatus** (Serville, 1823) [Lyda] (*Lyda marginata* Lepeletier, 1823; *L. bicolor* Herrich-Schäffer, 1833; *Tenthredo ratzeburgii* Ratzeburg, 1844). Host plant: *Corylus* spp., *Carpinus* spp., *Ostrya* spp. (Betulaceae). Russia: **EP** (C). – Europe (WE, EE, NE, SE).
- Pamphilius masao** Shinohara, 2005. Host plant: *Betula ermanii*, *Alnus maximowiczii* (Betulaceae). Russia: **FE** (SA, KU). – Japan (Hok).
- Pamphilius maximus** Shinohara, 1995. Russia: **FE** (PR). – Korean Peninsula.
- Pamphilius montanus pulcher** Shinohara, 1988. Host plant: *Sorbus* spp. (Rosaceae). Russia: **ES** (YA). – Korean Peninsula, Japan (Hok).
- Pamphilius pallidus** Shinohara, 1988. Russia: **FE** (PR).
- Pamphilius pallipes** (Zetterstedt, 1838) [Lyda] (*Lyda flavipes* Zetterstedt, 1838; *L. variegata* Zaddach, 1866; *Pamphilius pallidipes* Dalla Torre, 1894). Host plant: *Betula* spp., *Alnus* spp. (Betulaceae). Russia: **EP** (N, NW, C, E), **WS** (TK, NS, KM, AL), **ES** (BR, YA), **FE** (AM, KH, PR, KU, KA, MG). – Europe (WE, EE, NE), Iran, Kazakhstan, Mongolia, China (NE, NC), Korean Peninsula.
- Pamphilius persicum** MacGillivray, 1907. Russia: **EP** (NC). – Armenia, N America.
- Pamphilius pictifrons** Gussakovskij, 1935. Host plant: ?*Rosa* spp. (Rosaceae). Russia: **ES** (YA), **FE** (MG).
- Pamphilius planifrons** Beneš, 1976. Russia: **FE** (PR). – Korean Peninsula.
- Pamphilius pugnax** Konow, 1897. Russia: **EP** (NC). – Azerbaijan.
- Pamphilius sapporensis** (Matsumura, 1912) [Lyda] (*P. rugosus* Beneš, 1976). Host plant: *Filipendula kamtschatica* (Rosaceae). Russia: **FE** (SA, KU). – Japan (Hok).
- Pamphilius stramineipes** (Hartig, 1837) [Lyda] (*P. facetus* Konow, 1898; *P. stramineipes medialis* Enslin, 1917). Host plant: *Rosa* spp. (Rosaceae). Russia: **EP** (N, C, E, NC), **UR**, **WS** (TM, OM, NS), **ES** (KR), **FE** (SA, KU). – Europe (WE, EE, NE), Armenia, Japan (Hok).
- Pamphilius sulphureipes sulphureipes** W.F. Kirby, 1882 (*Anoplolyda viriditibialis aino* Takeuchi, 1936). Host plant: *Rosa* spp. (Rosaceae). **FE** (AM, PR, SA). – Korean Peninsula.
- Pamphilius sylvaticus** (Linnaeus, 1758) [Tenthredo] (*Tenthredo fulvipes* Retzius, 1783; *Cephalcia nemorum* Panzer, 1803). Host plant: *Sorbus* spp., *Crataegus* spp., *Prunus* spp. (Rosaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (NS, KM), **ES** (YA). – Europe (WE, EE, NE, SE), Turkey.
- Pamphilius takeuchii** Beneš, 1972 (*P. jucundus* Takeuchi, 1930). Russia: **FE** (PR). – Japan (Hok, Hon, Shi, Kyu).
- Pamphilius tricolor** Beneš, 1974. Russia: **EP** (N), **WS** (TM), **ES** (TU, KR, ZB), **FE** (KH, PR, KA, MG). – Korean Peninsula, Japan (Hok, Hon).
- Pamphilius ussuriensis** Shinohara, 1988. Russia: **FE** (PR).
- Pamphilius vafer** (Linnaeus, 1767) [Tenthredo] (*Tenthredo depressa* Schrank, 1781; *Psen alni* Schrank, 1802). Host plant: *Alnus* spp., *Betula* spp. (Betulaceae). Russia: **EP** (N, NW, C, E), **UR**, **WS** (NS, AL), **ES** (TU, IR, YA). – Europe (WE, EE, NE, SE), Georgia, Kazakhstan.
- Pamphilius varius** (Serville, 1823) [Lyda] (*Lyda varia* Lepeletier, 1823; *L. infida* Zaddach, 1866; *Pamphilius flavifrons* W.F. Kirby, 1882; *Lyda konowi* Jakovlev, 1891; *Anoplolyda engelhardti* Dovnar-Zapolskij, 1930). Host plant: *Alnus* spp., *Betula* spp. (Betulaceae). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (NS, KM), **ES** (KR, BR, YA), **FE** (AM, PR, SA, KU, KA). – Europe (WE, EE, NE, SE), Georgia,

- Kazakhstan, Korean Peninsula, Japan (Hok, Hon, Kyu).
- Pamphilus venustus** (F. Smith, 1874) [Lyda]. Russia: **FE** (Shinohara, 1988b). – Japan (Hok, Hon, Shi).
- Pamphilus virescens** Malaise, 1931. Russia: **ES** (IR), **FE** (KA). – Korean Peninsula, Japan (Hok).
- Pamphilus viridulus** Shinohara, 2001. Host plant: Prunus spp., Crataegus chlorosarca (Rosaceae). Russia: **FE** (PR).
- Pamphilus volatilis** (F. Smith, 1874) [Lyda]. Host plant: Prunus spp., Crataegus chlorosarca (Rosaceae). Russia: **FE** (PR). – Korean Peninsula, Japan (Hok, Hon, Kyu).
- Pamphilus zhelochovtsevi zhelochovtsevi** Beneš, 1974. Host plant: Rosa spp. (Rosaceae). Russia: **FE** (KH, PR). – Korean Peninsula.
- Pamphilus zhelochovtsevi nipponicus** Shinohara, 1993. Host plant: Rosa spp. (Rosaceae). Russia: **FE** (KU). – Japan (Hon).
- Pamphilus zinovjevi** Shinohara, 1988. Russia: **FE** (AM, PR). – Korean Peninsula.
- PSEUDOCEPHALEIA** Zirngiebl, 1937. Type species *Pseudocephaleia brachycercus* Zirngiebl, 1937. The genus is distributed in Palaearctic. Number of species: World and Palaearctic – 2; Russia – 1.
- Pseudocephaleia praeteritorium** (Semenov, 1934) [Dictyolyda] (*P. brachycercus* Zirngiebl, 1937; *Cephalcia pseudoreticulata* Zombori, 1967). Russia: **WS** (AL). – Europe (EE, SE), Caucasus, Turkey, China (Wei et al., 2006).

9. FAMILY MEGALODONTESIDAE

Flat-bodied flower-haunting species, very fast on the wing. Characterized by their many-segmented flabellate antennae, with flattened prolongations from the apices of the flagellar segments. Body very broad and flat, pamphilioid in form, with wasp-like colouring and yellowish-brown marked wings. The larvae lives socially in webs on herbaceous plants – Apiaceae and Rutaceae.

The family is distributed in the Palaearctic and Oriental regions, but was rich and diverse group in the Mesozoic. Number of taxa: World and Palaearctic – 1 genus, 37 species; Russia – 1/12.

R e f e r e n c e s. Jakovlev, 1888; Gussakovskij, 1935; Maa, 1949b; Zombori, 1971; Togashi, 1973; Verzhutskii, 1973, 1974, 1981; Ermolenko, 1984; Zhelochovtsev, 1988; Zhelochovtsev, Zinovjev, 1995; Taeger, 1998, 2002; Vasilenko, Dolgov, 2005; Liston et al., 2006; Taeger et al., 2006, 2010; Wei et al., 2006; Roller, Haris, 2008; Schedl, 2009; Sundukov, Lelej, 2009, 2012; Taeger, Blank, 2011; Kostyunin, 2015; Noblecourt, 2016; Wang et al., 2016.

MEGALODONTES Latreille, 1803 (*Tarpa* Fabricius, 1804; *Megalodus* Rafinesque, 1815; *Melanopus* Konow, 1897; *Tristactus* Konow, 1897; *Rhipidioceros* Konow, 1897; *Forficulotarpa* Pic, 1918; *Tristactoides* Chevin, 1985). Type species *Tenthredo cephalotes* Fabricius, 1781. The larvae feed on the Apiaceae and Rutaceae; live in nests from cobwebs. The genus is distributed in Palaearctic and Oriental region. Number of species: World and Palaearctic – 37; Russia – 12.

Megalodontes cephalotes (Fabricius, 1781) [*Tenthredo*] (*Tarpa klugii* Leach, 1817; *T. spissicornis* Klug, 1824; *T. fuscipennis* Herrich-Schäffer, 1840). Host plant: *Laserpitium* spp., *Libanotis* spp., *Peucedanum* spp., *Seseli libanotis* (Apiaceae). Russia: **EP** (N, C, E), **UR**. – Europe (WE, EE, SE), Turkey.

Megalodontes eversmanni (Freymuth, 1870) [*Tarpa*] (*Tarpa loewii* J.P.E.F. Stein, 1876; *T. multicineta* Mocsáry, 1891). Russia: **EP** (NC). – Europe (SE), Caucasus, Turkey, Iran.

Megalodontes fabricii (Leach, 1817) [*Tarpa*] (*Tarpa megacephala* Klug, 1824; *T. redimita* Klug, 1824). Russia: **EP** (C, S, E, NC, CR), **UR**. – Europe (WE, EE, SE), Turkey.

Megalodontes flabellicornis (Germar, 1825) [*Tarpa*] (*Tarpa exornata* Zaddach, 1866; *T. coronata* Zaddach, 1866; *T. albicincta* J.P.E.F. Stein, 1876; *T. speciosa* Mocsáry, 1877). Russia: **EP** (C, NC). – Europe (EE, SE), Georgia, Turkey.

Megalodontes flavicornis (Klug, 1824) [*Tarpa*]. Russia: **EP** (C, S, NC, CR). – Europe (WE, EE, SE), Caucasus, Turkey, Iran, Turkmenistan.

Megalodontes interruptus Gussakovskij, 1935 (*M. antoniae* Zombori, 1971). Russia: **ES** (IR). – Mongolia, China (NE).

Megalodontes medius Konow, 1897. Russia: **EP** (S, NC, CR). – Europe (EE), Azerbaijan, Turkey.

Megalodontes plagiocephalus (Fabricius, 1804) [*Tarpa*] (*Tarpa flabellata* Eversmann, 1847; *T. plagiocephalata latialis* Manzone, 1893; *Megalodontes aquilus* Konow, 1902; *M. nigritegulis* Konow, 1904; *M. xanthocerus* Gussakovskij, 1935). Host plant: *Peucedanum alsaticum*, *Seseli libanotis* (Apiaceae). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (OM, NS, AL). – Europe (WE, EE, SE), Georgia, Armenia, Kazakhstan.

Megalodontes quinquecinctus (Klug, 1824) [*Tarpa*] (*M. nitidus* Maa, 1949; *M. tsunekii* Togashi, 1973; *M. apakensis* Togashi, 1973). Russia: **EP** (CR), **ES** (BR, ZB). – Mongolia, China (NE, NC).

Megalodontes scythicus Zhelochovtsev, 1988 (*M. eversmanni* Gussakovskij, 1935). Russia: **EP** (S, NC, CR), **UR**. – Europe (EE), Kazakhstan.

Megalodontes spiraeae (Klug, 1824) [*Tarpa*] (*Tarpa pectinicornis* Klug, 1824; *T. ruthena* Jakovlev, 1888; *T. borealis* Jakovlev, 1891; *Megalodontes siberiensis* Rohwer, 1925; *M. coreensis* Takeuchi, 1927). Host plant: *Sphallerocarpus gracilis* (Apiaceae), *Spiraea* spp. (Rosaceae). Russia: **UR**, **WS** (NS, AL), **ES** (KS, KR, IR, BR, ZB), **FE** (AM, KH, PR). – Mongolia, China (NE, NC, SW), Korean Peninsula.

Megalodontes thor Taeger, 2002. Host plant: *Peucedanum oreoselinum* (Apiaceae). Russia: **EP** (Taeger, 2002), **UR**, **WS** (AL). – Europe (WE, EE), Kazakhstan.

SUPERFAMILY CEPHOIDEA

One recent family: Cephidae.

10. FAMILY CEPHIDAE

Slender insects, with a long cylindrical or laterally compressed body. Slow on the wing.

Head with hypostomal bridge separating oral cavity from occipital foramen. Antenna long and thread-like or slightly clavate, 16-30-segmented. Hind margin of pronotum almost straight, being nearly the shortest distance between the tegulae; mesonotum short, never extending in front of the tegulae; cenchri absent. Tibiae usually with preapical spines on the hind and middle legs; fore tibia with only one modified apical spur. Fore wings with the vein *M* joining *Rs* after *Rs* has left *Sc+R*. Abdomen constricted slightly at the apex of the 1st segment. Female ovipositor exerted and clearly visible from above. Male often with some of the apical sternites fringed or with patches of modified setae; male genitalia orthandrous, parameres continuous with parameral plates, devoid of muscles and apical cupping discs, and with aedeagus tubular.

The larvae internal borers in stems or twigs of herbaceous plants, shrubs and trees; lead a secretive way of life.

The family is distributed worldwide. Number of taxa: World – 2 subfamilies, 24 genera, about 165 species; Palaearctic – 1/16/>120; Russia – 1/10/57.

R e f e r e n c e s. Dalla Torre, 1894; Konow, 1897; Kokujev, 1910; Dovnar-Zapolskij, 1926a, 1928, 1931a; Enslin, 1927; Gussakovskij, 1935; Takeuchi, 1955; Ermolenko, 1971b, 1984; Mucbe, 1971a, 1975b; Stroganova, 1976, 1981, 1982, 1987; Zhelochovtsev, Prochorova, 1976; Verzhutskii, 1981; Zhelochovtsev, 1988; Liston, 1995; Yang, 1995; Zhelochovtsev, Zinovjev, 1995; Ivie, Zinovjev, 1996; Wei, Nie, 1997a; Naito et al., 1998; Shinohara, 1999; Ivie, 2001; Smith, Shinohara, 2002; Chen et al., 2004; Taeger, 2005; Liston et al., 2006, 2014a; Pavlusenko, 2006; Taeger et al., 2006, 2010; Wei et al., 2006; Vasilenko, 2007, 2010b, 2011b; Roller, Haris, 2008; Humala, Polevoi, 2009; Schedl, 2009; Wei, Smith, 2010; Wu, 2010; Blank, Taeger, 2011; Taeger, Blank, 2011; Macek, 2012; Sundukov, Lelej, 2012; Vasilenko, Korshunov, 2012; Beneš, 2014b; Kostyunin, Efimov, 2014; Liston, Prous, 2014; Beneš, Holuša, 2015; Kostyunin, 2015; Niu et al., 2015; Sundukov, 2015, 2017; Lesieur et al., 2016; Noblecourt, 2016.

Subfamily CEPHINAE

CAENOCEPHUS Konow, 1896. Type species *Caenocephus jakowleffi* Konow, 1896. The genus is distributed in Holarctic and Oriental region. Number of species: World – 5; Palaearctic – 3; Russia – 2.

Caenocephus lunulatus (Strobl, 1895) [Cephus] (*C. jakowleffi* Konow, 1896). Russia: **ES** (IR). – Europe (WE, EE).

Caenocephus xanthopus Shinohara, 1999. Russia: **FE** (PR). – Korean Peninsula, Japan (Hon).

CALAMEUTA Konow, 1896 (*Monoplopus* Konow, 1896; *Haplocephus* Benson, 1935; *Ephemerocephus* Zhelochovtsev, 1968). Type species *Cephus filiformis* Eversmann, 1847. The larvae feed on the Poaceae. The genus is distributed in Holarctic and Oriental region. Number of species: World – 22; Palaearctic – 20; Russia – 10 from 2 subgenera.

Calameuta (Calameuta) bicornes Stroganova, 1976. Russia: **WS** (AL).

Calameuta (Calameuta) filiformis (Eversmann, 1847) [Cephus] (*Cephus elongatus* Snellen van Vollenhoven, 1858; *C. arundinis* Giraud, 1863; *C. marginatus* Kawall, 1864; *C. erberi* Damianitsch, 1866; *C. vagabundus* Mocsáry, 1886; *C. infernalis* Dovnar-Zapolskij, 1926; *Calameuta atrata* Dovnar-Zapolskij, 1931; *C. rugosa* Dovnar-Zapolskij, 1931; *C. amurensis* Gussakovskij, 1935). Host plant: Phragmites spp., Arrenatherum spp., Elytrigia spp., etc. (Poaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (NS, KM, AL), **ES** (IR), **FE** (KH, PR). – Europe (WE, EE, NE, SE), N Africa, Caucasus, Asia Minor, Iran, Kyrgyzstan, Kazakhstan, China (NW).

Calameuta (Calameuta) filum (Gussakovskij, 1935) [Cephus]. Host plant: Poaceae. Russia: **EP** (C, E, S, NC), **UR**, **WS** (NS, KM, AL), **ES** (KS, KR, IR). – Europe (WE, EE, NE, SE), Uzbekistan, Kazakhstan.

Clameuta (Calameuta) gracilicornis (Konow, 1896) [Cephus]. Russia: **EP** (NC). – Armenia, Azerbaijan.

Calameuta (Calameuta) haemorrhoidalis (Fabricius, 1781) [Tenthredo] (*Astutus analis* Klug, 1803; *A. floralis* Klug, 1803; *Trachelus haemorrhoidalis* Jurine, 1807; *Cephus atripes* Stephens, 1835; *C. quadriguttatus* Costa, 1882; *C. variabilis* Mocsáry, 1886; *C. quadriguttulatus* Dalla Torre, 1894; *C. quadrisignatus* Costa, 1894; *C. haemorrhoidalis signifer* Konow, 1896; *C. pseudotabidus* Kokujev, 1910; *C. diversipes* Ghigi, 1915; *Trachelus syriacus*

- Pic, 1917). Host plant: Poaceae. Russia: **EP** (S, NC, CR). – Europe (WE, EE, SE), Caucasus, Asia Minor, Turkmenistan.
- Calameuta (Calameuta) idolon** (Rossi, 1794) [Ichneumon] (*Cephus mittrei* Guérin, 1844; *C. bellieri* Sichel, 1860; *C. variegatus* J.P.E.F. Stein, 1876; *Monoplopus apicicornis* Pic, 1916). Host plant: species of Poaceae. Russia: **EP** (CR). – Europe (EE, SE), N Africa, Caucasus, Asia Minor.
- Calameuta (Calameuta) pallipes** (Klug, 1803) [Astatu] (*Cephus phthiscus* Fabricius, 1804; *C. pusillus* Stephens, 1835; *C. immaculatus* Stephens, 1835; *C. cultrarius* Hartig, 1837; *C. pallidipes* Dalla Torre, 1894). Host plant: Phleum spp. (Poaceae). Russia: **EP** (NW, C, S), **UR, ES** (KS). – Europe (WE, EE, NE), Asia Minor, Iran, Kazakhstan.
- Calameuta (Calameuta) punctata** (Klug, 1803) [Astatu] (*Cephus pravei* Dovnar-Zapolskij, 1926). Russia: **EP** (NC). – Europe (SE), Georgia, Turkmenistan.
- Calameuta (Calameuta) sachalinensis** (Takeuchi, 1938) [Cephus]. Russia: **FE** (SA). – China (SW).
- Calameuta (Ephemerocephus) kuzini** Zhelochovtsev, 1968. Russia: **WS** (AL). – Kazakhstan.
- CEPHUS** Latreille, 1803 (*Astutus* Jurine, 1801; *Peronistilus* Ghigi, 1905; *Pironistilomorphus* Pic, 1916; *Fossulocephus* Pic, 1917; *Pseudocephus* Dovnar-Zapolskij, 1931). Type species *Sirex pygmaeus* Linnaeus, 1767. The larvae feed on the Poaceae. The genus is distributed in Holarctic and Oriental region. Number of species: World – > 40; Palaeartic – about 40; Russia – 20.
- Cephus brachycercus** Thomson, 1871 (*C. punctulatus* Konow, 1896; *C. brachycercus tibialis* Dovnar-Zapolskij, 1926). Host plant: Poaceae. Russia: **EP** (NW, C, E, S, NC, CR), **UR, WS** (NS, KM, AL), **ES** (IR), **FE** (PR, SA, KU). – Europe (WE, EE, NE, SE), N Africa, Turkey, Uzbekistan, Kyrgyzstan, Kazakhstan, China (SW), Japan (Hon).
- Cephus camtschatcalis** Enslin, 1927. Russia: **FE** (KA).
- Cephus daghestanicus** (Dovnar-Zapolskij, 1931) [Pseudocephus]. Russia: **EP** (NC).
- Cephus excisus** (Dovnar-Zapolskij, 1931) [Pseudocephus]. Russia: **EP** (NC).
- Cephus filippovi** Zhelochovtsev, 1968. Russia: **ES** (ZB).
- Cephus fumipennis** Eversmann, 1847 (*C. carbonarius* Jakovlev, 1891). Host plant: Agropyron spp., ?Phalaris spp. (Poaceae). Russia: **EP** (NW, C, E, S, NC, CR), **UR, WS** (TK, NS, KM, AL). – Europe (WE, EE, NE, SE), N Africa, Caucasus, Turkey, Syria, Tadjikistan, Kazakhstan (SE), Mongolia, China (NW, CC, SW).
- Cephus gracilis** Costa, 1860 (*C. gracilis laterimaculatus* Strobl, 1901). Host plant: species of Poaceae. Russia: **EP** (S). – Europe (SE).
- Cephus hyalinatus** Konow, 1897. Host plant: species of Poaceae. Russia: **WS** (KM, AL), **ES** (KS, TU, KR, IR, BR), **FE** (AM, KH, PR, SA, KU, KA). – Mongolia, Korean Peninsula, Japan (Hok).
- Cephus infuscatus** Thomson, 1871 (*C. infuscatus* André, 1881; *C. andreae* W.F. Kirby, 1882). Host plant: Phalaris arundinacea (Poaceae). Russia: **EP** (NW, C). – Europe (WE, EE, NE), China (NE, CC).
- Cephus nigrinus** Thomson, 1871. Host plant: Milium spp., Poa spp. (Poaceae). Russia: **EP** (N, NW, C, E, NC), **UR, WS** (NS, KM, AL), **ES** (IR). – Europe (WE, EE, NE), Turkey, Syria, Iran, Kazakhstan.
- Cephus nigripennis** (Takeuchi, 1927) [Eumetabolus] (*Monoplopus japonicus* Forsius, 1928; *Cephus graminis* Maa, 1944). Host plant: Elytrigia spp., Agropyron spp. (Poaceae). Russia: **ES** (IR), **FE** (PR). – China (NE, CC, SE), Korean Peninsula, Japan (Hon, Shi, Tsushima).
- Cephus parvus** (Dovnar-Zapolskij, 1931) [Pseudocephus]. Russia: **EP** (NC).
- Cephus pseudopilosulus** Dovnar-Zapolskij, 1926. Russia: **EP** (NC), **WS** (AL).
- Cephus pulcher** Tischbein, 1852 (*C. luteomarginatus* Giraud, 1857). Host plant: Agropyron spp. and others (Poaceae). Russia: **EP** (S, NC, CR), **WS** (NS, KM, AL). – Europe (EE, SE), Turkey, Uzbekistan, Kazakhstan.
- Cephus pygmeus** (Linnaeus, 1767) [Sirex] (*Tenthredo polygona* Gmelin, 1790; *Banchus viridator* Fabricius, 1804; *Cephus subcylindricus* Gravenhorst, 1807; *C. leskii* Lepeletier, 1823; *C. flavisternum* Costa, 1882; *C. clypealis* Costa, 1894; *C. pygmaeus palaestinus* Pic, 1918; *C. tanaiticus* Dovnar-Zapolskij, 1926). Host plant: Agropyron spp., Avena spp., Phleum spp., Triticum spp., etc. (Poaceae). Russia: **EP** (C, NC, CR), **UR, WS** (NS, KM, AL). – Europe (WE, EE, NE, SE), N Africa, Caucasus, SW Asia, Iran, Central Asia, China (CC); introduced into N America.
- Cephus rjabovi** Dovnar-Zapolskij, 1926. Russia: **EP** (S, NC).
- Cephus sareptanus** Dovnar-Zapolskij, 1928. Russia: **EP** (S). – Kazakhstan.
- Cephus spinipes** (Panzer, 1800) [Banchus] (*C. cultratus* Eversmann, 1847; *C. pilosulus* Thomson, 1871;

- C. pumilus* André, 1881; *C. similis* Mocsáry, 1886; *C. affinis* Kokujev, 1910; *C. exilis* Kokujev, 1910; *C. pilosulus incompletus* Hellén, 1935). Host plant: Phleum spp., Dactylis spp. (Poaceae). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (NS, KM, AL). – Europe (WE, EE, NE, SE), N Africa, Armenia, Kyrgyzstan, Kazakhstan, China (NW).
- Cephus tshettui** Stroganova, 1981. Russia: **WS** (AL).
- Cephus zahaikevitchi** (Ermolenko, 1971) [Pseudocephus]. Russia: **EP** (CR).
- CHARACOPYGUS** Konow, 1899. Type species *Characopygus moricei* Konow, 1899. The larvae feed on the Asteraceae. The genus is distributed in West Palaeartic. Number of species: World and Palaeartic – 4; Russia – 2.
- Characopygus modestus** Dovnar-Zapolskij, 1931. Russia: **UR**, **WS** (KM), **ES** (IR).
- Characopygus scythicus** Dovnar-Zapolskij, 1931. Host plant: Centaurea spp. (Asteraceae). Russia: **EP** (S), **UR**. – Europe (EE), Armenia, Turkey.
- JANUS** Stephens, 1829 (*Phylloecus* Newman, 1838; *Ephippionotus* A. Costa, 1860). Type species *Janus connectens* Stephens, 1829. The larvae in the branches of trees and shrubs of Rosaceae, Salicaceae, Fagaceae, Adoxaceae. The genus is distributed in Holarctic and Oriental region. Number of species: World – 26; Palaeartic – 13; Russia – 4.
- Janus compressus** (Fabricius, 1793) [Sirex] (*Cephus flaviventris* Förster, 1844; *Ephippionotus luteiventris* Costa, 1860; *Phylloecus eburneus* André, 1881; *Cephus foersteri* André, 1881; *C. balearicus* Kriechbaumer, 1894; *Janus foersteri ulmi* Pic, 1918). Host plant: Pyrus spp., Crataegus spp., Malus spp. (Rosaceae). Russia: **EP** (NC). – Europe (WE, EE, SE), N Africa, Turkey.
- Janus cynosbati** (Linnaeus, 1758) [Tenthredo] (*Lyda geoffroyi* Lepeletier, 1823; *Cephus femoratus* Curtis, 1830; *Phylloecus faunus* Newman, 1838; *Ephippionotus cephalotes* Costa, 1860; *Cephus melanarius* Mocsáry, 1891; *C. niger* Brischke, 1892). Host plant: Quercus pubescens, Q. robur (Fagaceae). Russia: **EP** (NW, C). – Europe (WE, EE, NE, SE), Turkey.
- Janus formosus** (Zhelochovtsev, 1935) [Cephus] (*J. orientalis* Gussakovskij, 1935). Russia: **WS** (NS, AL), **FE** (PR). – China (NE).
- Janus luteipes** (Lepeletier, 1823) [Cephus] (*J. connectens* Stephens, 1829; *J. bifrons* Newman, 1838; *Cephus emichi* Mocsáry, 1886; *Janus luteipes diversipes* Pic, 1918). Host plant: Salix spp., Populus spp. (Salicaceae), ?Viburnum spp. (Adoxaceae). Russia: **EP** (NW, C), **FE** (PR). – Europe (WE, EE, NE, SE), N Africa, Georgia.
- PACHYCEPHUS** J.P.E.F. Stein, 1876. Type species *Pachycephus smyrnensis* J.P.E.F. Stein, 1876. The genus is distributed in West Palaeartic. Number of species: World and Palaeartic – 2; Russia – 2.
- Pachycephus cruentatus cruentatus** (Eversmann, 1847) [Cephus] (*P. caspicus* Dovnar-Zapolskij, 1931). Russia: **EP** (S, NC, CR). – Europe (EE), Caucasus, Turkey.
- Pachycephus smyrnensis smyrnensis** J.P.E.F. Stein, 1876 (*P. aeneovarius* Kohl, 1905; *P. brevis* Ghigi, 1915; *Spatulocephus sanctus* Pic, 1916). Russia: **EP** (NC). – Europe (WE, SE), N Africa, Armenia, Azerbaijan, SW Asia.
- PHYLLOECUS** Newman, 1838 (*Hartigia* Schiodte, 1839; *Cerobactrus* Costa, 1860; *Macrocephus* Schlechtendal, 1878; *Cephosoma* Gradl, 1881; *Adirus* Konow, 1899; *Paradirus* Dovnar-Zapolskij, 1931; *Hissarocephus* Gussakovskij, 1945). Type species *Phylloecus faunus* Newman, 1838. The larvae in the branches of Rosaceae. The genus is distributed in Holarctic, Oriental and Neotropical regions; mainly in Palaeartic. Number of species: World – about 30; Palaeartic – > 20; Russia – 9.
- Phylloecus agilis** (F. Smith, 1874) [Cephus] (*Hartigia draconis* Maa, 1944; *H. draconis bipunctata* Maa, 1944; *H. draconis collaris* Maa, 1944). Russia: **FE** (PR, SA). – China (CC, SE), Japan (Hon, Shi, Kyu).
- Phylloecus coreanus** (Takeuchi, 1938) [Hartigia]. Russia: **FE** (PR). – Korean Peninsula.
- Phylloecus etorofensis** (Takeuchi, 1955) [Hartigia]. Host plant: Rosa spp. (Rosaceae). Russia: **EP** (C, E), **WS** (NS, KM), **ES** (TU, YA), **FE** (KU). – Europe (NE).
- Phylloecus linearis** (Schrank, 1781) [Tenthredo] (*Cephus quinquefasciatus* Stephens, 1835; *C. major* Eversmann, 1847; *Macrocephus agrimoniae* Goury, 1912). Host plant: Agrimonia spp. (Rosaceae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (NS, KM, AL), **ES** (IR, ZB). – Europe (WE, EE, NE, SE), N Africa, Georgia, Turkey, Kyrgyzstan, Kazakhstan.
- Phylloecus niger** (M. Harris, 1779) [Sirex] (*Astatus satyrus* Panzer, 1801; *Cerobactrus major* Costa,

1860; *Cephus brachypterus* Damianitsch, 1866; *C. glabellifer* Thomson, 1871; *Cephosoma syringae* Gradl, 1881; *Phylloecus cruciatus* Costa, 1894). Host plant: Rubus spp. and others (Rosaceae). Russia: **EP** (S, NC, CR), **UR**, **WS** (NS, KM). – Europe (WE, EE, SE), N Africa, Armenia, Turkey, Syria, Iran, Kazakhstan, China (NC, CC).

Phylloecus pyrrrha (Zhelochovtsev, 1968) [Hartigia]. Russia: **ES** (ZB).

Phylloecus sibiricola Jakovlev, 1891 (*P. cylindricus* Jakovlev, 1891; *Hartigia affinis* Dovnar-Zapolskij, 1931). Host plant: Rosa spp. and others (Rosaceae). Russia: **WS** (TK, NS, KM, AL), **ES** (IR), **FE** (AM, PR). – Kazakhstan, Mongolia.

Phylloecus viator (F. Smith, 1874) [Cephus] (*Macrocephus japonicus* Ghigi, 1915). Host plant: Rubus spp., Rosa spp. (Rosaceae). Russia: **FE** (PR). – China (NE, NC, SE), Korean Peninsula, Japan (Hok, Hon).

Phylloecus xanthostoma (Eversmann, 1847) [Cephus] (*Cerobactrus facialis* Costa, 1864; *Macrocephus ulmariae* Schlechtendal, 1878; *Phyllaecus giraudi* Schlechtendal, 1880; *Hartigia semenovi* Dovnar-Zapolskij, 1931; *H. jakovlevi* Dovnar-Zapolskij, 1931). Host plant: Filipendula spp. (Rosaceae). Russia: **EP** (S, E), **UR**. – Europe (WE, EE, NE), N Africa, Turkey.

STENOCEPHUS Shinohara, 1999. Type species *Stenocephus oncogaster* Shinohara, 1999. The genus is distributed in Palaearctic and Oriental region. Number of species: World – 2; Palaearctic – 1; Russia – 1.

Stenocephus oncogaster Shinohara, 1999. Russia: **FE** (KU). – China (CC), Korean Peninsula, Japan (Hok, Hon).

SYRISTA Konow, 1896 (*Neosyrista* Benson, 1935). Type species *Cephus parreyssi* Spinola, 1843. The larvae in the branches of Rosaceae. The genus is distributed in Palaearctic and Oriental region. Number of species: World – 3; Palaearctic – 2; Russia – 2.

Syrista parreyssii (Spinola, 1843) [Cephus] (*Cephus orientalis* Tischbein, 1852; *C. spectabilis*

J.P.E.F. Stein, 1876; *Macrocephus robustus* Mocsáry, 1883; *Cephus parreyssi rufiventris* Jakovlev, 1888). Host plant: Rosa spp. (Rosaceae). Russia: **EP** (NC). – Europe (SE), Caucasus, SW Asia, Iran.

Syrista similis Mocsáry, 1904 (*Cephus subrufa* Matsu-mura, 1912; *Neosyrista japonica* Benson, 1935). Host plant: Rosa spp. (Rosaceae). Russia: **FE** (KU). – China (NC, CC), Japan (Hok, Hon, Shi, Kyu).

TRACHELUS Jurine, 1807 (*Astutus* Panzer, 1801; *Cepha* Billberg, 1820; *Ateuchopus* Konow, 1896; *Eumetabolus* Schulz, 1906; *Trachelastatus* Morice et Durrant, 1915; *Microcephus* Benson, 1935; *Neateuchopus* Benson, 1935). Type species *Sirex tabidus* Fabricius, 1775. The genus is distributed in Palaearctic; introduced into the Nearctic. Number of species: World and Palaearctic – 8; Russia – 5.

Trachelus libanensis (André, 1881) [Cephus] (*Cephus nigratarsis* André, 1881; *Ateuchopus armenius* Konow, 1896). Russia: **EP** (NC). – Georgia, Armenia, SW Asia.

Trachelus pallipes Stroganova, 1976. Russia: **UR**. – Kazakhstan (NW).

Trachelus tabidus (Fabricius, 1775) [Sirex] (*Sirex macilentus* Fabricius, 1793; *Cephus mandibularis* Serville, 1823; *C. nigratus* Serville, 1823; *C. mandibularis* Lepeletier, 1823; *C. nigratus* Lepeletier, 1823; *C. vittatus* Costa, 1875; *Calameuta johnsonii* Ashmead, 1903). Host plant: Triticum spp., Secale cereale, Hordeum spp., Avena spp. (Poaceae); dangerous pest. Russia: **EP** (S, NC, CR). – Europe (WE, EE, SE), N Africa, Caucasus, SW Asia; introduced into N America.

Trachelus tigris (Benson, 1935) [Neateuchopus]. Russia: **EP** (S).

Trachelus troglodyta (Fabricius, 1787) [Sirex] (*Cephus mocsaryi* W.F. Kirby, 1882; *Astutus tenuicornis* Konow, 1902). Host plant: Secale cereale (Poaceae); dangerous pest. Russia: **EP** (NW, C, E, S, NC). – Europe (WE, EE, NE, SE), N Africa, Georgia, SW Asia, Kazakhstan.

SUPERFAMILY SIRICOIDEA

Head with hypostomal bridge separating oral cavity from occipital foramen behind; labrum spatulate. Pronotum short medially and emarginate behind; mesosternum triangular, usually with presternal bridge in front, though the sutures are usually obsolete. Male genitalia orthandrious; parameres articulating on the parameral plates and moved by special muscles, and with apical cupping discs. Female ovipositor strongly exerted. Larva of reduced oligopod type. The superfamily is distributed worldwide. Number of taxa: World – 2 recent families, 4 subfamilies, 40 genera, about 260 species; Palaearctic – 2/3/21/about 105; Russia – 2/3/9/41 (+ 1 spp.).

11. FAMILY SIRICIDAE

Large insects, generally over 14 mm, with exerted ovipositors, and differing from all other Hymenoptera in their minute tegulae. Mouthparts with maxillary palp 1-segmented; labial palp 2- to 3-segmented, the last segment enlarged and bearing a large apical sensory cup, and the 1st segment not enlarged. Antennae setaceous, 17–30-segmented (4–8-segmented in *Teredon* Norton), with a long curved 1st segment at least as long as the 3rd. Neck short. Pronotum strongly emarginate behind. Mesonotum not divided transversely, but with a lateral lobe divided off each side of the scutum. Fore wings with the membrane corrugated at the apex and with a large apical appendicular cell. Tibiae without preapical spines, and front tibia with only one apical spur. Abdomen cylindrical and contracted at base of 1st segment, which is medially divided; last segment with a horn-like projection, called the cornus. The larvae are white with only vestigial thoracic legs. They live in the wood of coniferous and deciduous trees; generation is usually biennial. Many species are technical pests of wood.

The family is distributed worldwide. Number of taxa: World – 2 subfamilies, 11 genera, > 130 species; Palaearctic – 2/7/>75; Russia – 2/5/20 (+ 1 spp.).

R e f e r e n c e s. Jakovlev, 1900; Semenov, 1921; Gussakovskij, 1935; Semenov, Gussakovskij, 1935; Maa, 1949a; Benson, 1965a; Stroganova, 1968; Verzhutskii, 1981; Khomentovskij, 1983; Zhelochovtsev, 1988; Zhelochovtsev, Zinovjev, 1992, 1996; Blank, 1996; Vasilenko, 2004, 2011b; Liston et al., 2006, 2014a; Taeger et al., 2006, 2010; Wei et al., 2006; Lelej, Taeger, 2007a; Roller, Haris, 2008; Schedl, 2009; Taeger, Blank, 2011;

Schiff et al., 2012; Sundukov, Lelej, 2012; Vasilenko, Korshunov, 2012; Ahn et al., 2013; Beneš, 2014b; Goulet et al., 2015; Kostyunin, 2015; Sundukov, 2015; Noble-court, 2016.

Subfamily SIRICINAE

SIREX Linnaeus, 1760 (*Neuropachys* Heer, 1858; *Urocerites* Heer, 1867; *Paururus* Konow, 1896). **T y p e s p e c i e s** *Ichneumon juvencus* Linnaeus, 1758. The larvae feed on coniferous wood of Pinaceae. The genus is distributed in Holarctic and Oriental region; introduced into the Neotropical, Ethiopian and Australian regions. Number of species: World – 28; Palaearctic – 15; Russia – 6.

Sirex atricornis Kjellander, 1945. Russia: **WS** (NS). – Europe (NE).

Sirex cyaneus dux (Semenov, 1921) [Paururus]. Host plant: ?*Abies nordmanniana* (Pinaceae). Russia: **EP** (Benson, 1965a). – Europe (EE), Georgia, Armenia, Israel.

Sirex ermak (Semenov, 1921) [Paururus]. Host plant: *Pinus* spp., *Picea* spp., *Abies* spp., *Larix* spp. (Pinaceae). Russia: **EP** (C), **WS** (TK, NS, KM, AL), **ES** (KS, TU, IR, BR, YA, ZB), **FE** (AM, PR, SA, KU, KA). – Kazakhstan, Mongolia, China (NE).

Sirex juvencus juvencus (Linnaeus, 1758) [*Ichneumon*] (*Urocerus feisthamelei* Brullé, 1832; *Sirex dubia* W.F. Kirby, 1882; *S. australis* W.F. Kirby, 1882; *S. neglectus* W.F. Kirby, 1882; *S. hirsutus* W.F. Kirby, 1882; *S. leseleuci* Tournier, 1890; *Paururus juvencus virago* Enslin, 1918; *P. sucineiceps* Koorneef, 1935; *P. juvencus maculata* Hellén, 1935). Host plant: *Pinus* spp., *Picea* spp., *Abies* spp., *Larix* spp. (Pinaceae). Russia: **EP** (N, C, E, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (TU, KR, IR, BR), **FE** (KH, PR, SA, KA). – Europe (WE, EE, NE, SE), Georgia, Mongolia, China (NE, CC, SE), Japan (Hok, Hon), India; introduced into N America and Australia.

Sirex mongolorum (Semenov et Gussakovskij, 1935) [Paururus]. Host plant: *Abies* spp., *Pinus* spp., *Picea* spp. (Pinaceae). Russia: **ES** (BR, ZB). – Mongolia.

Sirex noctilio Fabricius, 1793 (*S. melanocerus* Thomson, 1871; *Paururus atlantidis* Ghigi, 1909). Host plant: *Pinus* spp., *Picea* spp., *Abies* spp., *Larix* spp. (Pinaceae). Russia: **EP** (N, NW, C, E, NC, CR), **UR**, **WS** (NS, KM, AL), **ES** (TU, KR, IR, BR, YA), **FE** (AM, KH, MG). – Europe (WE, EE, NE, SE), N

Africa, Turkey, Kazakhstan, Mongolia; introduced into N and S America, Australia, New Zealand, S Africa.

UROCERUS Geoffroy, 1762 (*Xanthosirex* Semenov, 1921; *Eosirex* Piton, 1940). Type species *Ichneumon gigas* Linnaeus, 1758. The larvae mainly feed on coniferous wood of Pinaceae. The genus is distributed in Holarctic and Oriental region; one species introduced into the Neotropical region. Number of species: World – 33; Palaeartic – 28; Russia – 6 (+ 1 ssp.).

Urocerus antennatus (Marlatt, 1898) [Sirex] (*Sirex ogumae* Matsumura, 1911; *S. antennatus immaculatus* Zirngiebl, 1937). Host plant: *Abies* spp., *Pinus* spp., *Picea* spp. (Pinaceae), *Cryptomeria* spp. (Cupressaceae). Russia: **ES** (ZB), **FE** (PR, SA, KU). – China (NE), Korean Peninsula, Japan (Hok, Hon, Shi).

Urocerus argonautarum (Semenov, 1921) [Sirex]. Host plant: *Abies nordmanniana*, *Picea* spp. (Pinaceae). Russia: **EP** (NC). – Georgia, Turkey.

Urocerus fantoma (Fabricius, 1781) [Sirex] (*Sirex tardigradus* Cederhjelm, 1798; *Xanthosirex phantasma* Semenov, 1921; *Sirex augur pallida* Ermolenko, 1957). Host plant: *Pinus* spp., *Picea* spp., *Abies* spp., *Larix* spp. (Pinaceae). Russia: **EP** (NW, C), **WS** (TM, KM), **ES** (KR, IR, ZB), **FE** (PR). – Europe (WE, EE, NE, SE), Kazakhstan, Mongolia.

Urocerus gigas gigas (Linnaeus, 1758) [Ichneumon] (*Sirex marisca* Linnaeus, 1760; *S. hungaricus* Christ, 1791; *S. psylluis* Fabricius, 1793; *Urocerus lefebvre* Guérin, 1833; *Sirex faustus* Costa, 1894; *Urocerus gigas taiganus* Benson, 1943; *U. gigas luteogaster* Berland, 1947; *Sirex gigas montana* Ermolenko, 1957). Host plant: *Pinus* spp., *Picea* spp., *Abies* spp. and others (Pinaceae), *Populus* spp., *Salix* spp. (Salicaceae), *Betula* spp. (Betulaceae), etc. Russia: **EP** (N, NW, C, S, NC, CR), **UR**, **WS** (TM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, SA, KA, MG, CH). – Europe (WE, EE, NE, SE), SW Asia, Kazakhstan, Mongolia, China (NC, NW), Korean Peninsula; introduced into S America.

Urocerus gigas orientalis Maa, 1949. Host plant: *Abies* spp., *Picea* spp. and others (Pinaceae). Russia: **ES** (ZB), **FE** (SA, KA). – China (CC), Korean Peninsula, Japan (Hok).

Urocerus sah (Mocsáry, 1881) [Sirex]. Host plant: *Juniperus* spp. (Cupressaceae). Russia: **EP** (NC,

CR). – Europe (EE, NE), Azerbaijan, Turkey, Afghanistan, Kazakhstan; introduced into N America.

Urocerus yasushii (Yano, 1917) [Sirex] (*Sirex umbra* Semenov, 1921; *Urocerus sachalinensis* Conde, 1935). Host plant: *Picea* spp. (Pinaceae). Russia: **ES** (ZB), **FE** (KH, PR, SA, KU). – China (NE), Korean Peninsula, Japan (Hon).

XOANON Semenov, 1921. Type species *Xoanon mysta* Semenov, 1921. The genus is distributed in East Asia and Oriental region. Number of species: World – 2; Palaeartic – 1; Russia – 1.

Xoanon matsumurae (Rohwer, 1910) [Sirex] (*X. mysta* Semenov, 1921). Host plant: *Pinus* spp., *Picea* spp., *Abies* spp. (Pinaceae). Russia: **ES** (BR, ZB), **FE** (PR, SA, KU). – China (NE, NC), Korean Peninsula, Japan (Hok, Hon, Shi).

Subfamily TREMICINAE

TREMEX Jurine, 1807 (*Xyloterus* Hartig, 1837; *Xyloecematium* Heyden, 1868). Type species *Sirex fuscicornis* Fabricius, 1787. The larvae feed the wood of deciduous trees. The genus is distributed in Holarctic and Oriental regions; one species was introduced into the Neotropical region. Number of species: World – 33; Palaeartic – 21; Russia – 5.

Tremex alchymista Mocsáry, 1886. Russia: **EP** (NC). – Europe (WE, EE).

Tremex apicalis Matsumura, 1912 (*T. propheta* Semenov, 1921). Host plant: *Acer* spp. (Sapindaceae), *Prunus* spp. (Rosaceae). Russia: **ES** (ZB), **FE** (SA). – China (NE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

Tremex fuscicornis (Fabricius, 1787) [Sirex] (*Sirex struthiocamelus* Villers, 1789; *S. camelogigas* Christ, 1791). Host plant: *Betula* spp. (Betulaceae), *Populus* spp. (Salicaceae), *Robinia* spp. (Fabaceae), *Acer* spp. (Sapindaceae), *Ulmus* spp. (Ulmaceae). Russia: **EP** (NW, C, E, S, NC, CR), **WS** (TM, TK, NS, KM, AL), **ES** (BR, ZB), **FE** (AM, PR, SA, KU). – Europe (WE, EE, NE, SE), Armenia, Kazakhstan, China (NE, NC, SW, SE), Korean Peninsula, Japan (Hok, Hon); introduced into S America.

Tremex magus magus (Fabricius, 1787) [Sirex] (*Sirex nigrita* Fabricius, 1787). Host plant: *Betula* spp. (Betulaceae), *Populus* spp. (Salicaceae). Russia: **EP** (C, E, S), **UR**, **WS** (KM, AL). – Europe (WE, EE, SE), Kazakhstan.

Tremex satanas Semenov, 1921. Russia: **ES** (BR), **FE** (PR).

XERIS Costa, 1894 (*Neoxeris* Saini et Singh, 1987).
Type species *Ichneumon spectrum* Linnaeus, 1758. The larvae feed on coniferous wood (Pinaceae, Cupressaceae). The genus is distributed in Holarctic, Oriental and Neotropical regions. Number of species: World – 16; Palaeartic – 8; Russia – 2.

Xeris malaisei Maa, 1949. Host plant: *Abies* spp. (Pinaceae), *Cryptomeria* spp. (Cupressaceae). Russia:

FE (PR). – China (NE), Korean Peninsula, Japan (Hok, Hon).

Xeris spectrum (Linnaeus, 1758) [Ichneumon] (*Sirex nanus* O.F. Müller, 1776; *S. emarginatus* Fabricius, 1793). Host plant: *Pinus* spp., *Picea* spp., *Abies* spp., *Larix* spp. (Pinaceae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (TM, NS, KM, AL), **ES** (TU, KR, BR, ZB), **FE** (AM, PR, SA, KU). – Europe (WE, EE, NE, SE), Georgia, SW Asia, Kazakhstan, Japan (Hok, Hon, Shi, Kyu).

12. FAMILY XIPHYDRIIDAE

Large or medium insects 7-20 mm long. Antennae setaceous and 13-19 segmented, with a long curved 1st segment at least as long as 3rd. Neck long; cervical sclerites viewed from the side appear longer than broad. Mesonotum with a transverse furrow. Fore wings corrugated apically, and without an appendiculate cell; vein *2r* present, and base of *Rs* not angled sharply near its base, so that its basal portion is not in a line with *M*. Tibiae without preapical spines; front tibia with only one apical spur. Last abdominal segment without an apical horn-like projection.

The larvae white with only vestigial thoracic legs; and they bore in the wood of deciduous trees, mainly Betulaceae, Salicaceae and Ulmaceae.

The family is distributed worldwide, except of Afro-tropical region. Number of taxa: World – 2 subfamilies, 29 genera, about 150 species; Palaeartic – 1/14/50; Russia – 1/4/21.

R e f e r e n c e s. Jakovlev, 1900; Takeuchi, 1938; Gussakovskij, 1947; Maa, 1949a; Stroganova, 1968; Zhelochovtsev, 1968, 1988; Ermolenko, 1979; Verzhutskii, 1981; Zhelochovtsev, Zinovjev, 1996; Togashi, 1998; Liston et al., 2006, 2014a; Taeger et al., 2006, 2010; Wei et al., 2006; Shcherbakov, 2008; Smith, 2008; Humala, Polevoi, 2009; Schedl, 2009; Smith et al., 2011; Smith, Shinohara, 2011; Sundukov, 2011a, 2015; Taeger, Blank, 2011; Vasilenko, 2011b; Sundukov, Lelej, 2012; Vasilenko, Korshunov, 2012; Beneš, 2014b; Kostyunin, 2015; Noblecourt, 2016.

Subfamily XIPHYDRIINAE

EUXIPHYDRIA Semenov et Gussakovskij, 1935.

Type species *Xiphydria potanini* Jakovlev, 1891. The larvae feed the wood of deciduous trees. The genus is distributed in East Asia and Oriental region. Number of species: World – 6; Palaeartic – 4; Russia – 2.

Euxiphydria amphybolia Sundukov, 2012. Host plant: Phellodendron amurense (Rutaceae), Betula mandshurica (Betulaceae), Acer ukurunduense (Sapindaceae). Russia: **FE** (PR, SA, KU).

Euxiphydria potanini (Jakovlev, 1891) [*Xiphydria*] (*Xiphydria ruficeps* Mocsáry, 1909; *X. ruficeps* Matsumura, 1912; *X. akazui* Matsumura, 1932; *X. maidli* Zirngiebl, 1937; *Euxiphydria subtrifida* Maa, 1944). Host plant: Acer mono, A. mayrii

(Sapindaceae), Betula ermanii (Betulaceae). Russia: **FE** (KH, PR, SA, KU). – China (NE, NC, SW, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Sado).

PLATYXIPHYDRIA Takeuchi, 1938. Type species *Platyxiphydria tiphiiiformis* Takeuchi, 1938. The larvae feed the wood of deciduous trees. The genus is distributed in East Asia; one species was introduced into the Oriental region. Number of species: World – 8; Palaeartic – 7; Russia – 1.

Platyxiphydria sikhotealinensis Sundukov, 2012. Host plant: Tilia amurensis (Tiliaceae). Russia: **FE** (PR).

XIPHYDRIA Latreille, 1803 (*Urocerus* Jurine, 1801; *Hybonotus* Klug, 1803; *Xiphydria* Panzer, 1806; *Xiphura* Fallén, 1813; *Xyphydria* Norton, 1869; *Xiphidion* Provancher, 1875; *Konowia* Brauns, 1884; *Pseudoxiphydria* Enslin, 1911; *Apoxyphia* Maa, 1949; *Nasoxiphia* Maa, 1949). Type species *Ichneumon camelus* Linnaeus, 1758. The larvae feed the wood of deciduous trees. The genus is distributed in Holarctic and Oriental regions. Number of species: World – 36; Palaeartic – 22; Russia – 17.

Xiphydria alnivora Matsumura, 1927. Host plant: Alnus hirsuta (Betulaceae). Russia: **FE** (PR, KU). – Japan (Hok, Hon).

Xiphydria annulitibia Takeuchi, 1936. Host plant: Alnus hirsuta (Betulaceae). Russia: **FE** (SA, KU). – Korean Peninsula, Japan (Hok, Hon, Shi).

Xiphydria betulae (Enslin, 1911) [*Pseudoxiphydria*] (*Pseudoxiphydria markewitschi* Ermolenko, 1960; *Konowia guntionensis* Zombori, 1960). Host plant: Betula spp. (Betulaceae). Russia: **EP** (C, E), **UR**, **WS** (NS, KM, AL), **ES** (KR), **FE** (AM, KH). – Europe (WE, EE, NE, SE).

Xiphydria buyssoni Konow, 1903. Host plant: Alnus hirsuta (Betulaceae). Russia: **ES** (ZB), **FE** (PR). – Japan (Hon, Shi, Kyu).

Xiphydria camelus (Linnaeus, 1758) [*Ichneumon*] (*X. eborata* Konow, 1899; *X. jozana* Matsumura, 1927; *X. kawakamii* Matsumura, 1927; *X. kuccharonis* Matsumura, 1927). Host plant: Alnus spp., Betula spp. (Betulaceae), Populus spp. (Salicaceae), Ulmus spp. (Ulmaceae) and others. Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, KR, IR), **FE** (AM, KH, PR, SA, KU, KA). – Europe (WE, EE, NE, SE), Turkey, Kazakhstan, China (NE, NC), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

- Xiphydria caucasica** Semenov et Gussakovskij, 1935. Russia: **EP** (NC). – Georgia.
- Xiphydria jakovlevi** Semenov et Gussakovskij, 1935. Host plant: *Alnus hirsuta* (Betulaceae). Russia: **FE** (PR, KU). – China (NE, CC, SE), Korean Peninsula.
- Xiphydria kastsheevi** Ermolenko, 1979. Russia: **FE** (PR).
- Xiphydria longicollis** (Geoffroy, 1785) [Tenthredo] (*Urocerus annulatus* Jurine, 1807). Host plant: *Quercus* spp. (Fagaceae), *Betula* spp. (Betulaceae), *Acer* spp. (Sapindaceae) and others. Russia: **EP** (C, CR). – Europe (WE, EE, SE).
- Xiphydria megapolitana** (Brauns, 1884) [Konowia]. Host plant: *Betula* spp. (Betulaceae). Russia: **EP** (NW, C), **ES** (BR), **FE** (PR). – Europe (WE, EE, NE, SE).
- Xiphydria ogasawarai** Matsumura, 1927. Host plant: *Acer mayrii*, *A. mono* (Sapindaceae). Russia: **FE** (PR, KU). – Japan (Hok, Hon).
- Xiphydria palaeanarctica** Semenov, 1921 (*X. jezoensis* Matsumura, 1927). Host plant: *Alnus* spp., *Betula* spp. (Betulaceae), *Acer* spp. (Sapindaceae), *Ulmus* spp. (Ulmaceae) and others. Russia: **ES** (IR), **FE** (PR, SA, KU). – China (NE), Korean Peninsula, Japan (Hok, Hon, Sado).
- Xiphydria picta** Konow, 1897 (*Konowia bifurcata* Maa, 1949). Host plant: *Alnus* spp. (Betulaceae). Russia: **EP** (NW, C, E, S, NC, CR). – Europe (WE, EE, NE, SE), Georgia, Kazakhstan.
- Xiphydria popovi** Semenov et Gussakovskij, 1935. Host plant: *Alnus* spp., *Betula* spp. (Betulaceae). Russia: **ES** (TU, ZB), **FE** (AM, KH, PR). – China (NE).
- Xiphydria prolongata** (Geoffroy, 1785) [Tenthredo] (*Sirex dromedarius* Fabricius, 1787; *Xyphidria fasciata* Lepeletier, 1823). Host plant: *Betula* spp. (Betulaceae), *Salix* spp., *Populus* spp. (Salicaceae), *Ulmus* spp. (Ulmaceae). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (TK, NS, KM, AL). – Europe (WE, EE, NE, SE), Azerbaijan, Turkmenistan, Kazakhstan, Mongolia.
- Xiphydria ribesii** (Zhelochovtsev, 1968) [Euxiphydria]. Host plant: *Ribes* spp. (Grossulariaceae). Russia: **WS** (TK).
- Xiphydria sulcata** Maa, 1949. Russia: **FE** (SA).
- XIPHYDRIOLA** Semenov, 1921. Type species *Xiphydriola amurensis* Semenov, 1921. The genus is distributed in East Asia. Number of species: World and Palearctic – 2; Russia – 1.
- Xiphydriola amurensis** Semenov, 1921. Russia: **FE** (PR). – China (NE), Korean Peninsula.

INFRAORDER ORUSSOMORPHA

SUPERFAMILY ORUSSOIDEA

One family: Orussidae.

13. FAMILY ORUSSIDAE

Very rare insects, characterized by the insetion of the antennae on the ventral aspect of the head, below the apparent clypeus and below the lower margins of the eyes; the antenna is 11-segmented and setiform in the male, but in the female is only 10-segmented, with the 9th segment unique in form, swollen and longer than any other segment; head behind with a hypostomal bridge separating the oral cavity from the occipital foramen; labrum spatulate. Pronotum strongly emarginate behind; mesosternum triangular without presternal bridge and with sutures obsolete. The wing-venation is reduced mostly to pigmented bands; there is no vein *2r* in the fore wing and no cross veins *r-m* or *m-cu* in the hind wings. Male genitalia orthandrious; parameres continuous with parameral plates, without muscles and without apical cupping discs; aedeagus trough-like. Female sawsheath leveled, not exerted.

The Orussidae is a small family of parasitic wasps. Their biology is incompletely known, but the majority of the evidence bearing on the lifestyle of Orussidae indicates that they are idiobiont ectoparasites of wood-boring beetle larvae, primarily Buprestidae and Siricidae and Xiphydriidae also (Vilhelmsen et al., 2013).

The family is distributed worldwide. Number of taxa: World – 2 subfamilies, 17 genera and about 90 species; Palaearctic – 2/5/about 20; Russia – 1/2/4.

References. Conde, 1935; Zhelochovtsev, 1988; Kraus, 1998; Blank et al., 2006; Taeger et al., 2006, 2010; Togashi, 2008; Schedl, 2009; Taeger, Blank, 2011; Zombori, 2013; Beneš, 2014b; Choi et al., 2014; Sundukov, 2014, 2017; Noblecourt, 2016.

Subfamily ORUSSINAE

ORUSSUS Latreille, 1797. Type species *Oryssus coronatus* Fabricius, 1798. The genus is distributed worldwide, except Neotropical region. Number of species: World – 28; Palaearctic – 14; Russia – 3.

Orussus abietinus (Scopoli, 1763) [Sphex] (*Tenthredo degener* Christ, 1791; *Sirex vespertilio* Fabricius, 1793; *Oryssus coronatus* Fabricius, 1798; *O. albopunctatus* Gimmerthal, 1836; *O. hyalinipennis* Costa, 1860). Parasite of *Buprestis* spp. (Buprestidae). Russia: **EP** (C, S, NC, CR), **UR**, **ES** (IR, ZB). – Europe (WE, EE, NE, SE), Georgia, SW Asia, Iran, Kazakhstan.

Orussus coreanus Takeuchi, 1938. Russia: **FE** (AM, KH, PR, SA). – China (NE), Korean Peninsula.

Orussus rufipes Tsuneki, 1963. Parasite of ?*Xiphydria ogasawarai* Matsumura, 1927 (Xiphydriidae). Russia: **FE** (KU). – Japan (Hok, Hon).

PSEUDORYSSUS Guiglia, 1954. Type species *Oryssus henschi* Mocsáry, 1910. The genus is distributed in Palaearctic. Number of species: World – 2; Palaearctic – 2; Russia – 1.

Pseudoryssus henschii (Mocsáry, 1910) [*Oryssus*] (*P. emanuelis* Guiglia, 1956). Russia: **EP** (Taeger et al., 2006). – Europe (WE, EE, SE), N Africa, NW Asia.

**SUBORDER APOCRITA
ACULEATA**

INFRAORDER VESPOMORPHA

SUPERFAMILY CHRYSIDOIDEA

57. FAMILY DRYINIDAE

A.S. LELEJ AND V.M. LOKTIONOV

Dryinids are relatively uncommon insects whose larvae are parasitoids of Hemiptera (Auchenorrhyncha): planthoppers (Fulgoroidea: Cixiidae, Delphacidae, Dictyopharidae, Issidae, Tropiduchidae), leafhoppers (Membracoidea: Cicadellidae), or treehoppers (Membracoidea: Membracidae). Small (most are 5–8 mm) black insects with a reduced wing venation. Antennae 10-segmented, rising low on face, and not distinctly elbowed. Hind wing with a jugal lobe. The two sexes are often quite different and can be associated only by rearing. Most females are remarkable in that the fore tarsi are developed into chelae used for grasping and holding the hoppers used as hosts. Female dryinids catch a host adult or nymph with their chelae, sting and temporarily paralyze it, and lay eggs between the two mesosomal and metasomal segments. The parasitoid larva feeds internally on the host, almost during most of its development being a part of the body of the larva protruding as a sac-like structure. The parasitoid when full grown, leaves the host and spins a silken cocoon nearby. Some species are polyembryonic, with 40 to 60 individuals developing from a single egg. They play important roles in the natural control of some insect pests, and have potential significance as biological control agents.

Cosmopolitan. Number of taxa: World – 15 subfamilies, 50 genera, 1827 species, Palaearctic – 9/24/257, Russia – 5/8/63.

R e f e r e n c e s. Kieffer, 1914; Haupt, 1941, 1944; Ponomarenko, 1965, 1966, 1970, 1972, 1975, 1978, 1979, 1992, 1995, 2000, 2007; Olmi, 1984, 2003, 2004; Lelej, Kurzenko, 2006; Ponomarenko, Olmi, 2007; Guglielmino et al., 2013; Xu et al., 2013; Olmi, Xu, 2015.

Subfamily APHELOPINAE

APHELOPUS Dalman, 1823 (*Antaphelopus* Benoit, 1951; *Gymnaphelopus* Benoit, 1951). Type species *Dryinus atratus* Dahlman, 1823. Parasitoids

of Cicadellidae (subfam. Typhlocybinae). The genus is distributed worldwide. Number of species: World – 78, Palaearctic – 18, Russia – 7.

Aphelopus atratus (Dalman, 1823) [Dryinus] (*A. holomelas* Richards, 1939). Parasitoid of Cicadellidae: Typhlocybinae. Russia: **EP** (Olmi, Xu, 2015), **FE** (PR). – Europe (WE, NE, SE, EE), Armenia, Kazakhstan, Japan (Hok, Hon).

Aphelopus bennetti Olmi, 2004. Russia: **FE** (SA). – Japan (Hok, Hon, Shi).

Aphelopus camus Richards, 1939 (*A. empoascae* Ponomarenko, 1970). Parasitoid of Cicadellidae: Typhlocybinae. Russia: **EP** (C), **ES** (IR), **FE** (PR). – Europe (WE, NE, SE, EE), Tunisia, Turkey, Japan (Hok).

Aphelopus maetoi Olmi, 1995. Russia: **FE** (PR, SA). – China (NE), Japan (Hok, Hon).

Aphelopus melaleucus (Dalman, 1818) [Gonatopus] (*Ceraphron albipes* Ratzeburg, 1848; *A. albipes* Kieffer, 1905; *A. trisulcatus* Kieffer, 1914). Parasitoid of Cicadellidae: Typhlocybinae. Russia: **EP** (N, NW, C), **ES** (IR), **FE** (SA, KU). – Europe (WE, NE, SE, EE), Turkey, Armenia, Lebanon, China (NC), Japan (Hok, Hon).

Aphelopus serratus Richards, 1939. Parasitoid of Cicadellidae: Typhlocybinae. Russia: **EP** (Olmi, Xu, 2015). – Europe (WE, NE, SE, EE), China (NC), Japan (Hok, Hon, Shi).

Aphelopus urbaini Olmi, 2003. Russia: **FE** (SA, KU). – China (NC), Japan (Hok, Hon).

Subfamily ANTEONINAE

ANTEON Jurine, 1807 (*Chelogyne* Haliday, 1838; *Neochelogyne* R. Perkins, 1905; *Paranteon* R. Perkins, 1905; *Prosanteon* R. Perkins, 1905; *Lasianteon* Kieffer, 1913; *Lasianteon* Kieffer, 1913; *Xenanteon* Kieffer, 1913; *Allanteon* Kieffer, 1914; *Hirtanteon* Benoit, 1951). Type species *Anteon jurineanum* Latreille, 1809. Parasitoid of Cicadellidae. The genus is distributed worldwide. Number of species: World – 423, Palaearctic – about 50, Russia – 16.

Anteon arcuatum Kieffer, 1905. Parasitoid of Cicadellidae: Idiocerinae. Russia: **EP** (C), **UR**. – Europe (WE, NE, SE, EE), Mongolia, China (NC).

Anteon brachycerum (Dalman, 1823) [Dryinus]. Parasitoid of Cicadellidae: Macropsinae. Russia: **EP** (C). – Europe (WE, NE, EE), Japan (Hon), Nepal.

Anteon ephippiger (Dalman, 1818) [Gonatopus] (*A. albidicollis* Kieffer, 1905; *Chelogyne albidicollis* (!):

- Ponomarenko, 1978; *A. pyonganensis* Móczár, 1983). Parasitoid of Cicadellidae: Deltocephalinae, Macropsinae. Russia: **EP** (NW, E, CR), **UR**, **ES** (YA), **FE** (PR, SA, KU). – Europe (WE, NE, SE, EE), Morocco, Turkey, Lebanon, Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NC), Korean Peninsula, Japan (Hok, Hon, Kyu).
- Anteon esakii** Yasumatsu, 1960. Parasitoid of Cicadellidae: Ledrinae. Russia: **FE** (PR). – China (NC), Korean Peninsula, Japan (Kyu).
- Anteon exiguum** (Haupt, 1941) [Chelogynus]. Russia: **FE** (PR). – Europe (WE, NE, EE), Korean Peninsula.
- Anteon fasciale** (Thomson, 1860) [Chelogynus]. Russia: **EP** (C). – Europe (WE, NE).
- Anteon flavicorne** (Dalman, 1818) [Gonatopus] (*A. sericeus* Kieffer, 1905; *A. subflavicornis* Haupt, 1941). Parasitoid of Cicadellidae: Deltocephalinae, Idiocerinae, Macropsinae. Russia: **EP** (NW, C, CR), **UR**, **FE** (PR). – Europe (WE, NE, SE, EE), Algeria, Kazakhstan, Mongolia, Korean Peninsula.
- Anteon fulviventre** (Haliday, 1828) [Dryinus] (*Chelogynus fulviventris*: Ponomarenko, 1978). Russia: **FE** (SA). – Europe (WE, NE, SE, EE), Morocco, Algeria, Kazakhstan.
- Anteon gaullei** Kieffer, 1905 (*A. cameroni* Kieffer, 1905; *Antaeon rufulocolis* Chitty, 1908; *Chelogynus rufulocolis*: Ponomarenko, 1978; *Ch. cameroni*: Ponomarenko, 1978). Parasitoid of Cicadellidae. Russia: **EP** (C), **ES** (IR). – Europe (WE, NE, SE, EE), Kyrgyzstan, Kazakhstan, Korean Peninsula.
- Anteon hikense** Olmi, 1995. Russia: **FE** (PR). – Korean Peninsula, Japan (Kyu).
- Anteon infectum** (Haliday, 1837) [Dryinus]. Parasitoid of Cicadellidae: Iassininae. Russia: **EP** (C), **FE** (PR). – Europe (WE, NE, SE, EE), Azerbaijan, Turkey, Japan (Hon).
- Anteon jurineanum** Latreille, 1809 (*Gonatopus brevicornis* Dalman, 1818; *A. brevicorne*: Ponomarenko, 1978). Parasitoid of Cicadellidae: Deltocephalinae, Macropsinae. Russia: **EP** (NW, C), **UR**, **WS** (AL), **FE** (PR, SA, KU, KA). – Europe (WE, NE, SE, EE), Turkey, Jordan, Turkmenistan, Kazakhstan, Mongolia, China (NE, NC, SW), Korean Peninsula, Japan (Hok, Hon, Kyu), Nepal.
- Anteon pubicorne** (Dalman, 1818) [Gonatopus] (*Chelogynus lucidus*: Ponomarenko, 1978; *A. mongolicum* Móczár, 1983). Parasitoid of Cicadellidae: Deltocephalinae, Macropsinae. Russia: **EP** (NW, C, E, S, CR), **UR**, **WS** (AL), **ES** (KR, IR), **FE** (PR, SA, KA, MG). – Europe (WE, NE, SE, EE), Morocco, Turkey, Armenia, Kazakhstan, Mongolia, China (NE, NC, NW), Korean Peninsula, Japan (Hok, Hon).
- Anteon scapulare** (Haliday, 1837) [Dryinus] (*A. carinatus* Kieffer, 1905; *A. longiforceps* Kieffer, 1905; *Chelogynus lanionis* Haupt, 1941). Parasitoid of Cicadellidae: Iassininae. Russia: **FE** (PR). – Europe (WE, EE), Turkey, Japan (Kyu).
- Anteon takenoi** Olmi, 1995. Russia: **FE** (PR). – China (NE, NC, SW), Korean Peninsula, Japan (Kyu).
- Anteon tripartitum** Kieffer, 1905 (*Chelogynus silvaticus* Ponomarenko, 1970). Parasitoid of Cicadellidae. Russia: **EP** (C), **UR**. – Europe (WE, NE, SE, EE), Japan (Hon).
- LONCHODRYINUS** Kieffer, 1905 (*Prenanteon* Kieffer, 1913; *Psilanteon* Kieffer, 1913). Type species *Lonchodryinus tricolor* Kieffer, 1905. Parasitoids of Cicadellidae. The genus is distributed worldwide. Number of species: World – 16, Palearctic – 4, Russia – 1.
- Lonchodryinus ruficornis** (Dalman, 1818) [Gonatopus] (*Prenanteon semenovi* Ponomarenko, 1970; *P. pektusanense* Móczár, 1983; *P. ruficorne*: Ponomarenko, 1978; *L. kotenkoi* Ponomarenko, 1992). Parasitoid of Cicadellidae (excluding Typhlocybinae). Russia: **EP** (N, C, S), **UR**, **WS** (AL), **ES** (IR, BR, YA, ZB), **FE** (KH, SA, KU, KA, MG). – Europe (WE, NE, SE, EE), Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NC, NW, WP), Korean Peninsula, Japan (Hok, Hon, Shi).

Subfamily BOCCHINAE

MYSTROPHORUS Förster, 1856. Type species *Mystrophorus formicaeformis* Ruthe, 1859. Parasitoids of Cicadellidae: Deltocephalinae. Palearctic genus with 2 species.

Mystrophorus formicaeformis Ruthe, 1859. Parasitoid of Cicadellidae: Deltocephalinae. Russia: **EP** (C). – Europe (WE, NE, SE, EE).

Mystrophorus apterus Ponomarenko, 2000. Parasitoid of Cicadellidae: Deltocephalinae. Russia: **EP** (C).

Subfamily DRYININAE

DRYINUS Latreille, 1804 (*Campylonyx* Westwood, 1835; *Chelothelius* Reinhard, 1863; *Chlorodryinus* R. Perkins, 1905; *Paradryinus* R. Perkins, 1905;

Mesodryinus Kieffer, 1906; *Plastodryinus* Kieffer, 1906; *Hesperodryinus* R. Perkins, 1907; *Pero-dryinus* R. Perkins, 1907; *Lestodryinus* Kieffer, 1911; *Tridryinus* Kieffer, 1913; *Bocchoides* Benoit, 1953; *Richardsidryinus* Móczár, 1965; *Avodryinus* Ponomarenko, 1981; *Alphadryinus* Olmi, 1984).

Type species *Dryinus formicarius* Latreille, 1804 = *Sphex collaris* Linnaeus, 1767. Parasitoids of Acanaloniidae, Cixiidae, Delphacidae, Dictyopharidae, Flatidae, Fulgoridae, Issidae, Lophopidae, Ricaniidae, Tropiduchidae. The genus is distributed worldwide. Number of species: World – 293, Palaearctic – 11, Russia – 2.

Dryinus albrechti (Olmi, 1984) [*Richardsidryinus*] (*Richardsidryinus albrechti*: Ponomarenko, 1992). Russia: **UR**. – Canary Islands.

Dryinus tarraconensis Marshall, 1868 (*D. szepligetii* Kieffer, 1905; *Lestodryinus gregori* Hoffer, 1936; *L. bidens* Haupt, 1937). Parasitoid of Dictyopharidae. Russia: **EP** (S), **FE** (PR). – Europe (WE, SE, EE), Morocco, Turkey, Iraq, Tajikistan.

Subfamily GONATOPODINAE

ECHTHRODELPHAX R. Perkins, 1903 (*Pterogonatopus* Abdul-Nour, 1976). Type species *Echthrodelpfax fairchildii* R. Perkins, 1903. Parasitoids of Delphacidae. The genus is distributed worldwide. Number of species: World – 12, Palaearctic – 2, Russia – 1.

Echthrodelpfax tauricus Ponomarenko, 1970. Russia: **EP** (CR).

GONATOPUS Ljungh, 1810 (*Dicondylus* Haliday, 1830; *Labeo* Haliday, 1833; *Labeola* Haldeman, 1842; *Chalcogonatopus* R. Perkins, 1905; *Eugonatopus* R. Perkins, 1905; *Neogonatopus* R. Perkins, 1905; *Pachygonatopus* R. Perkins, 1905; *Paragonatopus* R. Perkins, 1905; *Pseudogonatopus* R. Perkins, 1905; *Mercetia* Kieffer, 1906; *Platygonatopus* Kieffer, 1906; *Agonatopoides* R. Perkins, 1907; *Agonatopus* R. Perkins, 1907; *Apterodryinus* R. Perkins, 1907; *Cyrtogonatopus* Kieffer, 1907; *Pristogonatopus* Kieffer, 1907; *Digonatopus* Kieffer, 1913; *Trigonatopus* Kieffer, 1913; *Laberius* Kieffer, 1914; *Trichogonatopus* Hellen, 1930; *Laberinus* Ogloblin, 1932; *Metagonatopus* Ogloblin, 1932; *Allogonatopus* Haupt, 1938; *Donisthorpina* Richards, 1939; *Epigonatopoides* Richards, 1939; *Plectrogonatopus*

Richards, 1939; *Tetrodontocheilus* Richards, 1939; *Idologonatopus* Ogloblin, 1953; *Madecagonatopus* Benoit, 1953; *Rhynchogonatopus* Benoit, 1953; *Pseudogonatopoides* Williams, 1956; *Cyrtogonatopoides* Ponomarenko, 1966; *Plectrogonatopoides* Ponomarenko, 1975; *Acrodontocheilus* Currado, 1976; *Dolichocheilus* Olmi et Currado, 1976; *Megagonatopus* Olmi et Currado, 1976; *Neogonatopoides* Abdul-Nour, 1976; *Nogatopus* Ponomarenko, 1979; *Tetrodontocheilus* J. Perkins, 1976; *Paradicondylus* Olmi, 1986). Type species *Gonatopus formicarius* Ljungh, 1810. Parasitoids of Acanaloniidae, Cicadellidae (except for Typhlocybinae, Idiocerinae, Macropsinae), Delphacidae, Flatidae, Issidae, Lophopidae, Tropiduchidae. The genus is distributed worldwide. Number of species: World – 441, Palaearctic – more than 50, Russia – 20.

Gonatopus baeticus (Ceballos, 1927) [*Mercetia*] (*Dryinus victorovi* Ponomarenko, 1970). Parasitoid of Dictyopharidae. Russia: **EP** (E, CR). – Europe (WE, SE, EE), Morocco, Algeria, Turkey, Turkmenistan, Uzbekistan.

Gonatopus bicolor (Haliday, 1828) [*Dryinus*] (*Dicondylus bicolor*: Ponomarenko, 1978). Russia: **EP** (C), **FE** (KU). – Europe (WE, NE, SE, EE), Kazakhstan.

Gonatopus camelinus Kieffer, 1904 (*Pseudogonatopus camelinus*: Ponomarenko, 1992, 1995). Parasitoid of Delphacidae. Russia: **WS** (KM). – Europe (WE, SE), Morocco, Algeria, Egypt, Turkey, Iran, United Arab Emirates, Tajikistan, Turkmenistan, Uzbekistan, Japan (Kyu).

Gonatopus chersonensis Ponomarenko, 1970. Russia: **EP** (CR). – Kyrgyzstan, Kazakhstan, Mongolia.

Gonatopus clavipes (Thunberg, 1827) [*Gelis*] (*G. sepsoides* Westwood, 1833; *Labeo pusillus* Szépligeti, 1901; *G. borealis* Sahlberg, 1910; *G. campestris* Ponomarenko, 1965; *G. rhaensis* Ponomarenko, 1970; *G. sepsoides*: Ponomarenko, 1992, 1995). Parasitoid of Cicadellidae: Deltocephalinae. Russia: **EP** (N, C, E, S, NC, CR), **WS** (KM), **ES** (KR), **FE** (AM, PR, SA, KU). – Europe (WE, NE, SE, EE), Tunisia, Turkey, Azerbaijan, Iran, Uzbekistan, Kazakhstan, Mongolia, Korean Peninsula, Japan (Hok, Hon).

Gonatopus distinctus Kieffer, 1906 (*G. septemdentatus* J. Sahlberg, 1910; *Pseudogonatopus distinctus*: Ponomarenko, 1978). Parasitoid of Delphacidae. Russia: **EP** (N, S, CR), **FE** (KU). – Europe (WE, NE, SE, EE), Mongolia.

Gonatopus distinguendus Kieffer, 1905 (*G. excavatus* Sahlberg, 1910; *Allogonatopus procerus* Haupt,

- 1938; *G. thomsoni* Hellen, 1953; *G. rossicus* Ponomarenko, 1965). Parasitoid of Cicadellidae: Deltocephalinae. Russia: **EP** (NW, C, E, S, NC), **UR**, **ES** (IR), **FE** (PR). – Europe (WE, NE, SE, EE), Morocco, Tunisia, Turkey, Iran, Kyrgyzstan, Kazakhstan, Mongolia, China (NE).
- Gonatopus formicarius** Ljungh, 1810 (*G. formicinus* Krogerus, 1932). Parasitoid of Cicadellidae: Deltocephalinae. Russia: **EP** (C, E, S), **UR**, **FE** (PR). – Europe (WE, NE, SE, EE), Turkey, Uzbekistan, Kazakhstan.
- Gonatopus graecus** Olmi, 1984. Parasitoid of Cicadellidae: Deltocephalinae. Russia: **EP** (S). – Europe (SE).
- Gonatopus helleni** (Raatikainen, 1961) [*Dicondylus*] (*Dicondylus sibiricus* Ponomarenko, 1965; *Pseudogonatopus rufus* Ponomarenko, 1979; *Dicondylus helleni*: Móczár, 1983; *D. dichromus*: Ponomarenko, 1992, 1995). Parasitoid of Delphacidae. Russia: **EP** (S), **ES** (BR). – Europe (WE, NE, SE, EE), Mongolia.
- Gonatopus horvathi** Kieffer, 1906 (*Cyrtogonatopoides borealis* Ponomarenko, 1966). Parasitoid of Cicadellidae: Deltocephalinae. Russia: **UR**, **WS** (KM), **ES** (YA), **FE** (KH, SA). – Europe (WE, NE, SE, EE), Kazakhstan, Mongolia, Chian (NE).
- Gonatopus lunatus** Klug, 1810 (*Neogonatopus lunatus*: Ponomarenko, 1978). Parasitoid of Cicadellidae: Deltocephalinae. Russia: **EP** (C, E, S, NC), **UR**, **WS** (KM, AL), **ES** (IR, ZB). – Europe (WE, NE, SE, EE), Morocco, Turkey, Israel, Jordan, Lebanon, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, Korean Peninsula.
- Gonatopus nepalensis** (Olmi, 1984) [*Pseudogonatopus*] (*Pseudogonatopus nepalensis*: Ponomarenko, 1992, 1995). Russia: **ES** (ZB), **FE** (PR). – Nepal.
- Gonatopus pallidus** (Ceballos, 1927) [*Dicondylus*] (*Domistorpina pallida*: Ponomarenko, 1992, 1995). Russia: **FE** (PR). – Europe (NE, SE), Algeria.
- Gonatopus pedestris** Dalman, 1818 (*G. leucostomus* Sahlberg, 1910; *Pachygonatopus arnoldii* Ponomarenko, 1966; *Tetrodontocheilus pedestris*: Ponomarenko, 1992, 1995). Parasitoid of Cicadellidae: Deltocephalinae. Russia: **EP** (N, C, E, S, CR), **ES** (KR), **FE** (SA). – Europe (WE, NE, SE, EE), China (NE, CC), Japan (Hon, Kyu, Shi).
- Gonatopus planiceps** Kieffer, 1904. Parasitoid of Cicadellidae: Agalliinae. Russia: **EP** (S). – Europe (WE, SE, EE), Morocco, Algeria, Egypt, Turkey, United Arab Emirates, Turkmenistan, Kazakhstan.
- Gonatopus popovi** Ponomarenko, 1965. Parasitoid of Cicadellidae: Deltocephalinae. Russia: **EP** (E).
- Gonatopus solidus** (Haupt, 1938) [*Allogonatopus*] (*Agonatopoides johanna*e Currado et Olmi, 1975; *A. solidus*: Ponomarenko, 1992, 1995). Parasitoid of Delphacidae. Russia: **ES** (ZB), **FE** (PR). – Europe (WE, NE, SE, EE).
- Gonatopus spectrum** (Van Vollenhoven, 1874) [*Dryinus*] (*Neogonatopus albidus* auct.). Parasitoid of Cicadellidae. Russia: **EP** (Olmi, Xu, 2015). – Europe (WE, NE, SE, EE), Kyrgyzstan, Kazakhstan.
- Gonatopus striatus** Kieffer, 1905 (*Agonatopoides tauricus* Ponomarenko, 1965). Parasitoid of Cicadellidae. Russia: **EP** (CR). – Europe (WE, NE, SE, EE), Turkey, Mongolia.
- HAPLOGONATOPUS** R. Perkins, 1905 (*Monogonatopus* Richards, 1939; *Congodryinus* Benoit, 1950). Type species *Haplogonatopus apicalis* R. Perkins, 1905. Parasitoids of Delphacidae. The genus is distributed worldwide. Number of species: World – 7, Palaearctic – 2, Russia – 1.
- Haplogonatopus oratorius** (Westwood, 1833) [*Gonatopus*] (*H. atratus* Esaki et Hashimoto, 1932; *H. suchovi* Ponomarenko, 1970; *Monogonatopus oratorius*: Ponomarenko, 1978). Parasitoid of Cicadellidae, Delphacidae. Russia: **EP** (E), **WS** (OM), **ES** (KR). – Europe (WE, NE, SE, EE), Turkey, Lebanon, China (NE, NC, NW, SE), Korean Peninsula, Japan (Hon, Kyu, Shi, Ryukyu, Ogasawara), Northern Mariana Islands (Guam).

58. FAMILY EMBOLEMIDAE

S.A. BELOKOBYSKIJ

Small wasps parasitizing nymphs of plant hoppers (Hemiptera: Auchenorrhyncha) (Olm et al., 2014a, 2014b). Females of Embolemidae are micropterous, brachypterous or macropterous, but males are always macropterous; third segment of maxillary palp much larger than other palpal segments; antenna 10-segmented, with long (female) or short (male) scape, articulated on two prominent contiguous frontal processes far above the clypeus; in macropterous forms, fore wing with long tubular developed radial and distal abscissa of medial vein, second radiomedial vein usually present; tibial spurs 1, 1, 2. Three extant genera are known in this family: *Embolemus* Westwood, parasitoids of nymphs of Cixiidae, *Ampulicomorpha* Ashmead, parasitoids of nymphs of Achilidae, and *Troglomebolemus* Olmi, Mita et Guglielmino, 2014 with unknown biology. Also three fossil genera were described in Embolemidae: *Baissobius* Rasnitsyn, 1975, *Embolemopsis* Olmi, Rasnitsyn et Guglielmino, 2010 and *Cretomebolemus* Olmi, Rasnitsyn, Brothers et Guglielmino, 2014.

Number of taxa: World – 3 genera, 39 species, Palaearctic – 3/10, Russia – 2/5.

R e f e r e n c e s. Trjapitzin, 1978; Rasnitsyn, Matveev, 1989; Belokobylskij, 1990, 1995; Olmi, 1996; Belokobylskij, Lelej, 2012; Varrone, Olmi, 2012; Guglielmino, Buckle, 2013; Olmi et al., 2014a,b.

AMPULICOMORPHA Ashmead, 1893. Type species *Ampulicomorpha confusa* Ashmead, 1893. Small genus with worldwide distribution. parasitoids of the nymphs of Achilidae living in rotten logs

and feeding on hyphal sheets of shelf fungi (Olm et al., 2014a, 2014b). Number of species: World – 25 (including 1 fossil), Palaearctic – 2, Russia – 1.

Ampulicomorpha thaua Rasnitsyn et Matveev, 1989. Russia: **EP** (S), **FE** (KU). – Korean Peninsula, ?Japan.

EMBOLEMUS Westwood, 1833 (*Myrmecomorphus* Westwood, 1833; *Polyplanus* Nees, 1834; *Formila* de Romand, 1846; *Pedinomma* Forster, 1856). Type species *Embolemus ruddii* Westwood, 1833. Largest and worldwide distributed embolemid genus, which are most abundant in the tropical areas. The members of this genus are known as parasitoids of nymphs of Cixiidae living in the soil and feeding on roots (Varrone, Olmi, 2012; Olmi et al., 2014a,b). Number of species: World – 34 (including 1 fossil), Palaearctic – 7, Russia – 4.

Embolemus pecki Olmi, 1997. Russia: **FE** (PR). – Europe (SE), China (NO, NE, SE), Korean Peninsula, Vietnam, Indonesia.

Embolemus sensitivus Xu, Olmi et Guglielmino, 2012 (*E. ruddii* auct.). Russia: **FE** (AM, PR). – China (NO, SW, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu), Vietnam.

Embolemus ruddii Westwood, 1833 (*Myrmecomorphus rufescens* Westwood, 1833; *Pedinomma rufescens* var. *antennalis* Kieffer, 1906; *Pedinomma rufescens* var. *holochlora* Marshall, 1906; *Pedinomma rufescens* var. *hypochlora* Marshall, 1906; *Polyplanus sickershusanus* Nees, 1834; *Formila chevrolatii* de Romand, 1846). Russia: **EP** (NW, S), **ES** (IR). – Europe (WE, SE, NE, EE).

Embolemus tauricus Olmi, Belokobylskij et Guglielmino, 2014. Russia: **EP** (CR).

59. FAMILY BETHYLIDAE

A.S. LELEJ AND K.I. FADEEV

Small to medium sized, usually dark-colored wasps. Females of many species are wingless and antlike in appearance. In a few species, both winged and wingless forms occur in each sex. These wasps are parasitoids of the larvae of Lepidoptera and Coleoptera. Several species attack moths or beetles that infest grain or flour. A few species will sting people. Widely distributed in tropical and subtropical areas. Number of extant taxa: World – 84 genera, 2340 species, Palaearctic – 20 /244, Russia – 20/34.

R e f e r e n c e s. Kieffer, 1906, 1914; Evans, 1964; Nagy, 1968; Perkins, 1976; Trjapitsin, 1978; Móczár, 1984; Gordh, Móczár, 1990; Gorbatovsky, 1995, 1998; Argaman, 2003; Terayama, 2003a,b; Vargas-Rojas, Terayama, 2006; Macek et al., 2007; Polaszek, 2011; Lelej, 2012a; Humala, Polevoi, 2011, 2015; Kostjukov et al., 2014; Nakonechnaya et al., 2014; Zamprogno, Azevedo, 2014; Paukkunen, Kozlov, 2015; Terayama, 2016; Fadeev, 2017.

Subfamily PRISTOCERINAE

ACREPYRIS Kieffer, 1905 (*Neopristocera* Yasumatsu, 1955). Type species *Epyris reticulatus* Kieffer, 1904 (= *Pristocera armifera* Say, 1828). The genus is distributed in New World, Oriental region and Palaearctic. Number of species: World – 38, Palaearctic – 7, Russia – 1.

Acrepyris masii (Giordani Soika, 1933) [Pristocera]. Russia: **EP** (NC, CR). – Europe (SE).

PRISTOCERA Klug, 1808 (*Dicrogenium* Stadelmann, 1894, *Neurepyris* Kieffer, 1905; *Kathepyris* Kieffer, 1907; *Mangesia* Kieffer, 1911; *Nomineia* Kieffer, 1911; *Trichelobranchium* Kieffer, 1914; *Neodicrogenium* Benoit, 1957; *Diepyris* Benoit, 1957). Type species *Bethylus depressa* Fabricius, 1805. The genus is distributed in Afrotropical, Palaearctic and Oriental regions. Number of species: World – 124, Palaearctic – 2, Russia – 1.

Pristocera depressa (Fabricius, 1805) [Bethylus] (*Pseudisobranchium roubali* Menozzi, 1925). The parasite of larva of *Agriotes obscurus* L. (Elateridae). Russia: **EP** (S, CR). – Europe (SE, EE).

PSEUDISOBRACHIUM Kieffer, 1904 (*Monepyris* Kieffer, 1905; *Xestobethylus* Cameron, 1909;

Plutobethylus Kieffer, 1910; *Lyssepyris* Kieffer, 1913; *Xantepyrus* Kieffer, 1913; *Parisobranchium* Kieffer, 1914; *Afrisobranchium* Benoit, 1957; *Edapholigon* Ogloblin, 1963). Type species *Pseudisobranchium laticeps* Kieffer, 1904. The females are often found in ant nests, it is suggested that they are parasitoids of beetle larvae. The genus is distributed in worldwide except Australia. Number of species: World – 140, Palaearctic – 9, Russia – 2.

Pseudisobranchium belokobylskyi Gorbatovsky, 1995. Russia: **FE** (PR).

Pseudisobranchium subcyaneum (Haliday, 1838) [Epyris] (*P. carpentieri* Kieffer, 1906). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, EE).

Subfamily EPYRINAE

Tribe EPYRINI

EPYRIS Westwood, 1832 (*Calyoza* Westwood in Hope, 1837; *Dolus* Motschulsky, 1863; *Muellerella* de Saussure, 1892; *Homoglenus* Kieffer, 1904; *Paracalyoza* Cameron, 1909; *Artiepyris* Kieffer, 1913; *Psilepyris* Kieffer, 1913; *Parepyris* Kieffer, 1913; *Pseudocalyoza* Turner, 1915; *Calyozella* Enderlein, 1920). Type species *Epyris niger* Westwood, 1832. The parasitoids of larvae of Tenebrionidae. The genus is distributed worldwide. Number of species: World – 219, Palaearctic – 40, Russia – 6.

Epyris alius Gorbatovsky, 1995. Russia: **FE** (PR).

Epyris chasanicus Gorbatovsky, 1995. Russia: **FE** (PR).

Epyris erythrocerus Kieffer, 1906. Russia: **EP** (S). – Europe (EE), N Africa.

Epyris kurzenkoi Gorbatovsky, 1995. Russia: **FE** (PR).

Epyris leleji Gorbatovsky, 1995. Russia: **FE** (PR).

Epyris tardus Kieffer, 1906. Russia: **EP** (S). – Europe (EE).

HOLEPYRIS Kieffer, 1904 (*Rysepyris* Kieffer, 1906; *Misepyris* Kieffer, 1913; *Parepyris* Brèthes, 1913). Type species *Holepyris africanus* Kieffer, 1904. The parasitoids of larvae of beetles Cucujidae, Curculionidae, Tenebrionidae and moth Pyralidae. The genus is distributed worldwide. Number of species: World – 102, Palaearctic – 36, Russia – 1.

Holepyris kasparyani Gorbatovsky, 1995. Russia: **FE** (PR).

LAELIUS Ashmead, 1893 (*Paralaelius* Kieffer, 1905; *Allepyris* Kieffer, 1905). Type species *Laelius*

trogodermatis Ashmead, 1893. The parasitoids of larvae beetle Dermestidae, Bostrichidae, Anobiidae. The genus is distributed in Holarctic. Number of species: World – 23, Palaearctic – 15, Russia – 3.

Laelius antropovi Gorbatovsky, 1995. Russia: **FE** (PR).

Laelius femoralis (Förster, 1860) [Bethylus]. Russia: **EP** (C). – Europe (WE, NE).

Laelius foersteri Kieffer, 1914 (*Bethylus rufipes* Förster, 1860, nom. praecoc., nec Say, 1836). Russia: **EP** (N). – Europe (WE, EE).

Tribe SCLERODERMINI

SCLERODERMUS Latreille, 1809 (*Sclerochroa* Förster, 1850; *Scleroderma* Costa, 1864; *Neoscleroderma* Kieffer, 1905). Type species *Sclerodermus domesticus* Latreille, 1809. Number of species: World – 70, Palaearctic – 26, Russia – 1.

Sclerodermus domesticus Klug, 1809 (*Scleroderma fonscolombeii* Westwood, 1881). Russia: **EP** (C, S, NC, CR). – Europe (WE, EE).

Tribe CEPHALONOMIINI

CEPHALONOMIA Westwood, 1833 (*Holopedina* Förster, 1850; *Cephaloderma* Hoffer, 1936). Type species *Cephalonomia formiciformis* Westwood, 1833. Number of species: World – 33, Palaearctic – 19, Russia – 2.

Cephalonomia formiciformis Westwood, 1833 (*Holopedina polypori* Förster, 1850). The parasite of the beetles *Cis* Latr. and *Ennearthron* Mellié (Ciidae). Russia: **EP** (CR). – Europe (WE, EE).

Cephalonomia hammi Richards, 1939. Russia: **EP** (N). – Europe (WE, NE).

PARARHABDEPYRIS Gorbatovsky, 1995. Type species *Pararhabdepyris paradoxus* Gorbatovsky, 1995. The genus is distributed in Eastern Palaearctic, Oriental region (Thailand) and Australia. Number of species: World – 3, Palaearctic – 1, Russia – 1.

Pararhabdepyris paradoxus Gorbatovsky, 1995. Russia: **FE** (PR).

PLASTANOXUS Kieffer, 1905 (*Snappania* Hedqvist, 1975). Type species *Anoxus chittendenii* Ashmead, 1893. The parasitoids of larvae beetle Cucujidae. The genus is distributed worldwide. Number of species: World – 10, Palaearctic – 6, Russia – 1.

Plastanoxus evansi Gorbatovsky, 1995. Russia: **FE** (PR).

Subfamily MESITIINAE

CLYTROVORUS Nagy, 1972. Type species *Sclerodermus mutilloides* Costa, 1864. Monotypic Palaearctic genus.

Clytrovorus mutilloides Costa, 1864 [Sclerodermus] (*Mesitius fuscicornis* Kieffer, 1906; *M. horvathi* Kieffer, 1906; *M. zavadili* Hoffer, 1936; *M. viator* Nagy, 1968). Russia: **EP** (S), **UR**. – Europe (SE, EE).

GERBEKAS Argaman, 2003. Type species *Mesitius carcelii* Westwood, 1874. Monotypic Palaearctic genus.

Gerbekas carcelii (Westwood, 1874) [Mesitius] (*M. halidayellus* Westwood, 1874; *M. hungaricus* Kieffer, 1906; *M. gracilis* Kieffer, 1906; *M. nagy* Móczár, 1969). Russia: **EP** (S). – Europe (WE, SE, EE), Tunisia, Israel, North Kazakhstan.

METRIONOTUS Móczár, 1970. Type species *Metrionous pappi* Móczár, 1970 (= *Mesitius minimus* Kieffer, 1906). Monotypic genus is distributed in Palaearctic and Afrotropical regions.

Metrionotus minimus (Kieffer, 1906) [Mesitius] (*Mesitius minor* Benoit, 1968; *Metrionotus pappi* Móczár, 1970). Russia (Argaman, 2003). – Europe (WE, SE), Egypt, Cyprus, Turkey, Syria, Lebanon, Israel, Saudi Arabia, Yemen, Iraq, Afghanistan, South Africa, Namibia.

PARVOCULUS Móczár, 1970. Type species *Parvoculus myrmecophilus* Móczár, 1970 (= *Mesitius indicus* Kieffer, 1905). Number of species: World – 3, Palaearctic – 2, Russia – 1.

Parvoculus indicus Kieffer, 1905 [Mesitius] (*Mesitius pyrenaicus* Kieffer, 1906; *M. caspicus* Nagy, 1969, *M. brevispinosus* Benoit, 1968, *Incertosulcus krombeini* Móczár, 1970, *Metrionotus africanus* Móczár, 1970, *M. szelenyi* Móczár, 1970; *M. mocsaryi* Móczár, 1970; *M. yarrowi* Móczár, 1970; *Parvoculus myrmecophilus* Móczár, 1970). Russia: **EP** (S). – Europe (WE), Egypt, Jordan, Israel, Yemen, Iraq, India, Democratic Republic of Congo, South Africa, Botswana, Namibia.

SULCOMESITIUS Móczár, 1970 (*Topcobius* Nagy, 1972). Type species *Sulcomesitius longispinus*

Móczár, 1970. The genus is distributed in Europe, Asia, and Africa. Number of species: World – 54, Palaeartic – 2, Russia – 1.

Sulcomesitius moczari Gorbatovsky, 1995. Russia: **FE** (PR).

UKAYAKOS Argaman, 2003. Type species *Mesitius obscurus* Kieffer, 1906. Monotypic Palaeartic genus.

Ukayakos obscurus (Kieffer, 1906) [Mesitius] (*Metrionotus bekkeri* Móczár, 1984; *Heterocoelia nikolskajae* Móczár, 1984). Russia: **EP** (S). – Europe (WE), Tajikistan.

Subfamily BETHYLINAE

BETHYLUS Latreille, 1802 (*Perisemus* Förster, 1856; *Episemus* Thomson, 1862; *Anoxus* Thomson, 1862; *Digoniozus* Kieffer, 1905). Type species *Omalus fuscicornis* Jurine, 1807. The parasitoids of Lepidoptera larvae Tortricidae, Gelechiidae, Noctuidae. The genus is distributed in Holarctic. Number of species: World – 34, Palaeartic – 29, Russia – 2.

Bethylus fuscicornis (Jurine, 1807) [Omalus] (*B. syngenesiae* Haliday, 1834; *Perisemus triareolatus* Förster, 1851; *Episemus variabilis* Thomson, 1862, *B. berlandi* Arlé, 1929). The parasitoid of the larvae *Helicoverpa armigera* (Hübner) (Noctuidae). Russia: **EP** (N, NC), **ES** (YA), **FE** (AM, KH, PR, SA, KU, KA, MG). – Europe (WE, NE, EE), N Africa, Japan (Hok, Hon).

Bethylus cephalotes (Förster, 1860) [Perisemus]. The parasitoid of the larvae *Helicoverpa armigera* (Hübner) (Noctuidae). Russia: **EP** (NC). – Europe (WE).

GONIOZUS Förster, 1856 (*Parasierola* Cameron, 1883; *Progoniozus* Kieffer, 1905; *Perisierola* Kieffer, 1914). Type species *Bethylus claripennis* Förster, 1851. The parasitoids of Lepidoptera larvae Tortricidae, Gelechiidae, Pyralidae. The genus is distributed worldwide. Number of species: World – 142, Palaeartic – 12, Russia – 4.

Goniozus claripennis (Förster, 1851) [Bethylus] (*B. fuscipennis* Förster, 1851; *G. distigmus* Thomson,

1861; *Goniozus* (!) *flavipennis* (!): Nakonechnaya et al., 2014). The parasitoid of the larvae of *Sparganothis pilleriana* Den. et Schiff., *Eupoecilia ambiguella* Hb. (Tortricidae) and *Helicoverpa armigera* (Hübner) (Noctuidae). Russia: **EP** (N, NC), Siberia (Kieffer, 1914). – Europe (WE, NE, EE), Caucasus, Iran.

Goniozus gallicola (Kieffer, 1905) [Parasierola]. The parasitoid of the larvae *Lobesia botrana* (Den. et Schiff.) (Tortricidae), *Apomyelois ceratoniae* (Zeller), *Ephestia elutella* (Hübner), *Cryptoblabes gnidiella* Mill. (Pyralidae), *Borkhausenia* sp. (Oecophoridae) and *Helicoverpa armigera* (Hübner) (Noctuidae). Russia: **EP** (S, NC). – Europe (WE, SE, EE).

Goniozus japonicus Ashmead, 1904. The parasitoids of Lepidoptera larvae Gelechiidae, Gracillariidae, Pyralidae, Tortricidae, Glyphipterigidae. Russia: **ES** (YA), **FE** (KH, PR). – China (NC, CC, SE), Korean Peninsula, Japan (Hon, Shi, Kyu, Ryu).

Goniozus ussuricus (Gorbatovsky, 1995) [Parasierola] (*Parasierola ussurica*: Gorbatovsky, 1995). Russia: **FE** (PR).

ODONTEPYRIS Kieffer, 1904 (*Trissomalus* Kieffer, 1905; *Prosierola*: Gorbatovsky, 1995). Type species *Odontepyrus flavinervus* Kieffer, 1904. The genus is distributed in Old World and Australia. Number of species: World – 26, Palaeartic – 3, Russia – 2.

Odontepyrus orientalis (Gorbatovsky, 1995) [Prosierola]. Russia: **FE** (PR).

Odontepyrus erucarum (Szelényi, 1958) [Parasierola]. The parasitoid of the larvae *Helicoverpa armigera* (Hübner) (Noctuidae). Russia: **EP** (E, S, NC, CR). – Europe (EE).

SIEROLA Cameron, 1881 (*Lelejola* Gorbatovsky, 1998). Type species *Sierola testaceipes* Cameron, 1881. The genus is distributed in Eastern Palaeartic, Oriental region, Australia, and Hawaii. Number of species: World – 198, Palaeartic – 3, Russia – 1.

Sierola ashmeadi Gorbatovsky, 1995. Russia: **FE** (PR). – Japan (Hon).

60. FAMILY CHRYSIDIDAE – CUCKOO WASPS

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V.M. LOKTIONOV AND L.A. ZAYTSEVA

The Chrysididae, commonly known as cuckoo wasps, jewel wasps or ruby tail wasps (*осы-блестянки* or *золотые осы*) are a cosmopolitan family which include about 2.500 species in the world (Aguilar et al., 2013), subdivided into 92 genera. The Russian species belong to two subfamilies, Cleptinae and Chrysidinae, parasitoids or cleptoparasites of other Hymenoptera (sawflies, solitary wasps and bees) and Lepidoptera (Kimsey, Bohart, 1991). Another subfamily (Amiseginae), not yet recorded in the Palaearctic region with the exception of Japan, is likely to occur in Russian Far East (Kurzenko, Lelej, 2007) and members of this subfamily are known as egg parasitoids of walking sticks (Phasmatidae).

Like in Europe, the highest diversity of cuckoo wasps is found in the southern part of Russia and relatively few species have been observed in its northern part (Nikol'skaya, 1978). In fact, chrysidids are usually thermophilous and search for sandy sites, clay brick and stone walls, rocky steppes, deserts and semideserts; but they can be found also in forest margins, clearings with sun-exposed dead tree trunks and stumps and gardens with sun-exposed dead wood, on wooden walls, wood poles and fence posts and all places where their hosts live (Rosa, 2006; Paukkunen et al., 2015). In the highest latitude and on mountains they fly on rocky outcrops and alpine meadows (Rosa, 2006; Paukkunen et al., 2015). Adults can be often observed feeding on flowers as Apiaceae and Euphorbiaceae, but many other flowers are occasionally visited by chrysidids (Rosa, 2004).

Despite Russia being the largest country in the world, extending across the entirety of northern Asia and much of eastern Europe and incorporating a wide range of environments and landforms, studies on Chrysididae there are unexpectedly scarce. In fact, the only comprehensive catalogue dates back to Radoszkowski (1866) and the only key, restricted to the European part of the USSR, was compiled by Nikol'skaya (1978); it was mainly based on Linsenmaier (1959) and Móczár (1967) monographs, without adding new data or records. Nikol'skaya (1978) listed 99 species in the European part of USSR, which represent a small percentage compared with the European fauna, numbering about 600 species and subspecies (Linsenmaier, 1959; Soon, Rosa, 2015).

Even though the chrysidid fauna of few regions (the Caucasus, Crimea and Lower Volga) is well known, the species composition in large parts of Russia is almost unknown. Some administrative regions (Provinces and Territories) or Republics are too poorly studied. For example, no chrysidids have been recorded yet in the Provinces of Smolensk, Orel and Kaliningrad, even when the faunas of the adjacent countries (Poland, Lithuania and Belarus) are well studied. The Siberian fauna has been recently studied by Rosa et al. (2017b, c), while Rosa et al. (2017d) gave other Russian records from its Far East and the European part.

Number of taxa: World – 95 genera, about 2815 species, Palaearctic – 36/1557, Russia – 23/330.

R e f e r e n c e s. Pallas, 1771; Assmuss, 1862; Radoszkowski, 1866; Dalla Torre, 1892; Uchida, 1927; Kuznetsov-Ugamskij, 1927; Hammer, 1950; Tsuneki, 1947, 1948; 1950, 1953a,b, 1955, 1959, 1963, 1979; Linsenmaier, 1959, 1968, 1987; Móczár, 1967; Semenov, 1967; Nikol'skaya, 1978; Kimsey, Bohart, 1991; Terayama et al., 2005; Rosa, 2004, 2006; Kurzenko, Lelej, 2007; Paukkunen et al., 2014, 2015; Terayama et al., 2016; Rosa et al., 2015; 2017a, b, c, d.

Subfamily CLEPTINAE

Number of taxa: World – 3 genera, 163 species, Palaearctic – 1/92, Russia – 1/15.

CLEPTES Latreille, 1802 (*Holcocleptes* Móczár, 1962; *Leiocleptes* Móczár, 1962; *Zimmermannia* Móczár, 1962; *Melanocleptes* Móczár, 1962; *Chrysocleptes* Móczár, 1962; *Oxycleptes* Móczár, 1962; *Neocleptes* Kimsey, 1981; *Maculosicleptes* Móczár, 1988). Type species *Sphex semiaurata* Linnaeus, 1761. Parasitoids of sawflies *Neodiprion* sp. (Diprionidae), *Hoplocampa brevis* (Klug), *Nematulus hispidae* Smith, *N. ribesii* Scopoli, *Pristiphora* sp. (Tenthredinidae). Holarctic genus. Number of species: World – 92, Palaearctic – 71, Russia – 15.

Cleptes aerosus aerosus Förster, 1853. Russia: **EP** (CR). – Europe (SE, WE, EE), Georgia, Armenia, Turkey.

Cleptes dauriensis Móczár, 1997. Russia: **ES** (ZB).

Cleptes femoralis Mocsáry, 1890. Russia: **EP** (E). – Europe (SE), Caucasus, Turkey.

Cleptes halinae Kuznetsov-Ugamskii, 1927 (*C. hyalinae*: Kurzenko, Lelej, 2007; Lelej, Kurzenko, 2012). Russia: **FE** (PR).

- Cleptes ignitus** (Fabricius, 1787) [Ichneumon] (*C. ignita*: Radoszkowski, 1866; *C. igneta* (!): Radoszkowski, 1880; *C. ignites* (!): Shibaev, 2006). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, W Asia.
- Cleptes insidiosus** du Buysson, 1891. Russia: **EP** (NC).
- Cleptes nitidulus** (Fabricius, 1793) [Ichneumon] (*C. fallax* Mocsáry, 1889). Parasitoid of *Nematus* spp. and *Euura* spp. (Tenthredinidae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), Turkey.
- Cleptes obsoletus** Semenov, 1891. Russia: **EP** (S).
- Cleptes primorensis** Móczár, 2000. Russia: **FE** (PR).
- Cleptes putoni** du Buysson, 1886 (*C. saussurei* Mocsáry, 1889; *C. putonii* (!): Dalla Torre, 1892). Russia: **EP** (S). – Europe (WE, SE, EE), Turkey, Jordan.
- Cleptes radoszkowskii** Mocsáry, 1889. Russia: **EP** (E, NC). – Georgia, Azerbaijan, Uzbekistan.
- Cleptes semiauratus** (Linnaeus, 1761) [Spheg] (*C. pallipes* Lepelletier, 1806). Parasitoid of *Endelomyia aethiops* (Gmelin), *Euura ribesii* (Scopoli) and *Pristiphora incisa* (Lindqvist) (Tenthredinidae). Russia: **EP** (NW, C, E, CR), **UR**. – Europe (WE, NE, SE, EE), Caucasus, Turkey.
- Cleptes semicyaneus** Tournier, 1879 (*C. elegans* Mocsáry in Mocsáry et Szepligeti, 1901). Russia: **EP** (C, E, S, CR), **ES** (IR). – Europe (WE, EE).
- Cleptes splendidus** (Fabricius, 1794) [Ichneumon] (*C. consimilis* du Buysson, 1887; *C. caucasicus* Semenov, 1920). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Georgia, Turkey, Iran.
- Cleptes striatipleuris** Rosa, Forshage, Paukkunen et Soon, 2015 (*C. semiauratus* auct.). Russia: **EP** (C, E, NC, CR), **?WS**, **?ES**, **?FE**. – Europe (SE, EE), ?N America.

Subfamily CHRYSIDINAE

Number of taxa: World – 56 genera, 2,488 species, Palaeartic – 31/1,461, Russia – 22/315.

Tribe ELAMPINI

Number of taxa: World – 25 genera, 1706 species, Palaeartic – 14/518, Russia – 11/123.

- CHRYSSELLAMPUS** Semenov, 1932. Type species *Ellampus heros* Semenov, 1892 (*Parellampus* Semenov, 1932). Number of species: World – 11, Palaeartic – 10, Russia – 2.

- Chrysellampus duplipunctatus** Tsuneki, 1948 (*Philoctetes duplipunctatus*: Kurzenko, Lelej, 2007). Russia: **ES** (ZB), **FE** (KH, PR). – China (NE, NC), Korean Peninsula.

- Chrysellampus sculpticollis** (Abeille de Perrin, 1878) [Omalus]. Parasitoid of *Pemphredon rugifer* (Dahlbom) (Crabronidae). Russia: **EP** (CR). – Europe (WE, SE, EE), Caucasus, Turkmenistan.

- COLPOPYGA** Semenov, 1954. Type species *Hedychrum flavipes* Eversmann, 1858. Holarctic genus. Number of species: World – 7, Palaeartic – 4, Russia – 1.

- Colpopyga flavipes** (Eversmann, 1858) [Hedychrum] (*Spintharis pallipes*: Mocsáry, 1889; *Spintharina pallipes*: Zimmermann, 1950). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Middle East.

- ELAMPUS** Spinola, 1806 (*Ellampus* Agassiz, 1846; *Notozus* Förster, 1853). Type species *Chrysis panzeri* Fabricius, 1804. Nest parasites of Crabronidae. Distributed worldwide except Australian and Oriental regions. Number of species: World – 63, Palaeartic – 41, Russia – 21.

- Elampus agnolii** Rosa, 2017. Russia: **ES** (TU).

- Elampus albipennis** (Mocsáry, 1889) [Ellampus] (*E. ambiguus* (!): Radoszkowski, 1877; *Notozus viridis* Tournier, 1890, nom. praeocc., nec Cresson, 1865; *E. tournieri* Dalla Torre, 1892). Russia: **EP** (C, E, S, CR), **UR**, **ES** (IR, BR), **FE** (PR). – Europe (EE), Saudi Arabia, UAE, W Asia, Iran, Turkmenistan.

- Elampus assamensis** (Mocsáry, 1911) [Ellampus]. Russia: **FE** (PR). – India (Assam).

- Elampus bidens** (Förster, 1853) [Notozus] (*E. femoralis* Eversmann, 1858; *Omalus superbus* Abeille de Perrin, 1878; *Notozus superbus* var. *rufescens* du Buysson, 1896; *E. bidens tristis* Tsuneki, 1970). Russia: **EP** (C, E), **WS** (OM), **ES** (IR, BR), **FE** (AM). – Europe (WE, SE, EE), Caucasus, W Asia, Japan (Hok, Hon, Shi, Kyu).

- Elampus caeruleus** Dahlbom, 1854 (*Omalus viridiventris* Abeille de Perrin, 1878; *E. caeruleus* (!): Becker, 1880). Russia: **EP** (E, S, CR), **UR**, **ES** (KR), **FE** (PR). – Europe (WE, SE, EE), Caucasus, China (NE).

- Elampus coloratus** Rosa, 2017. Russia: **ES** (TU). – Mongolia.

- Elampus constrictus** (Förster, 1853) [Notozus] (*E. panzeri*: Eversmann, 1858, Trautmann, 1927; *E. productus*: Becker, 1869; *N. productus* var. *vulgatus*

- du Buysson, 1892; *N. angustatus*: du Buysson, 1896; *E. spina*: Sahlberg, 1910; *N. spina* ab. *prasina* Hélén, 1920; *N. panzeri*: Trautmann, 1927; *N. ambiguus*: Nikol'skaya, 1978; *Ellampus ambiguus*: Shibaev, 2006; *Ellampus constrictus*: Shibaev, 2006). Parasitoid of *Mimesa* spp. (Crabronidae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (BR, ZB), **FE** (AM, PR). – Europe (WE, NE, SE, EE), N Africa, China (NE, NC).
- Elampus eversmanni** (Mocsáry, 1889) [Ellampus] (*Elampus ambiguus* Eversmann, 1858, nom. praec., nec Dahlbom, 1854; *Notozus eversmanni*: du Buysson, 1892; *Ellampus eversmannii* (!): Dalla Torre, 1892). Russia: **EP** (E, S, NC, CR). – Caucasus, Iran, Central Asia, Kazakhstan.
- Elampus foveatus** (Mocsáry, 1914) [Ellampus] (*Elampus konowi*: Vinokurov, 2013). Russia: **EP** (NC), **ES** (IR). – Europe (WE, NE, SE, NE).
- Elampus pallasii** (Semenov, 1967) [Notozus]. Russia: **ES** (IR). – Kazakhstan.
- Elampus panzeri** (Fabricius, 1804) [Chrysis] (*Ch. scutellaris* Panzer, 1798, nom. praec., nec Fabricius, 1794; *Notozus panzeri*: Woldstedt, 1875; *Ellampus olgae* Semenov, 1891; *Notozus scutellaris*: Biscohoff, 1913; *Notozus constrictus*: Trautmann, 1927; *E. scutellaris*: Kurzenko, Lelej, 2007). Parasitoid of *Mimesa bicolor* (Jurine) *M. equestris* (Fabricius) and *M. lutaria* (Fabricius) (Crabronidae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (OM, AL), **ES** (IR, BR, YA, ZB), **FE** (PR). – Europe (WE, NE, SE, EE), Caucasus, W Asia, China (NE).
- Elampus petri** (Semenov, 1967) [Notozus]. Russia: **EP** (C), **ES** (TU, ZB).
- Elampus pliginskii** (Semenov, 1967) [Notozus]. Russia: **EP** (CR). – Georgia.
- Elampus pyrosomus** (Förster, 1853) [Notozus] (*E. chrysonotus*: Eversmann, 1858). Russia: **EP** (C, E, S, NC), **UR**. – Europe (SE, EE), Caucasus, Turkey.
- Elampus retusus** (Semenov, 1967) [Notozus]. Russia: **ES** (ZB), **FE** (AM).
- Elampus rufitarsis** (Tournier, 1879) [Notozus]. Russia: **EP** (S).
- Elampus sanzii** Gogorza, 1887. Russia: **EP** (C, E, S), **ES** (IR, BR). – Europe (SE), Turkey, Middle East.
- Elampus spina** (Lepeletier, 1806) [Hedychrum] (*E. productus*: Eversmann, 1858; *Ellampus frivalszkyi*: Mocsáry, 1882). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), North Africa, Georgia, W Asia.
- Elampus tauricus** (Semenov, 1967) [Notozus]. Russia: **EP** (CR).
- Elampus turcmenicus** (Linsenmaier, 1968) [Omalus]. Russia: **EP** (S). – Turkmenistan.
- Elampus ussuriensis** (Semenov, 1967) [Notozus]. Russia: **ES** (YA, ZB), **FE** (PR).
- HABA** Semenov, 1954. Type species *Holopyga almasyana* Mocsáry, 1911. Palaearctic genus. Number of species: World – 5, Palaearctic – 4, Russia – 1.
- Haba almasyana** (Mocsáry, 1911) [Holopyga]. Russia: **EP** (S). – Kyrgyzstan.
- HEDYCHRIDIUM** Abeille de Perrin, 1878 (*Euchrum* Semenov, 1954; *Euchridium* Semenov, 1954; *Zarudnium* Semenov, 1954; *Zarudnidium* Semenov, 1954; *Cyrteuchridium* Semenov, 1954). Type species *Hedychrum minutum* Lepeletier, 1806 [= *Hedychridium ardens* (Coquebert, 1801)]. Nest parasites of Crabronidae. Distributed worldwide except Australian region. Number of species: World – 290, Palaearctic – 200, Russia – 39.
- Hedychridium adventicium** Zimmermann, 1962. Russia: **EP** (C), **UR**. – Europe (WE, SE), Turkey.
- Hedychridium aheneum** (Dahlbom, 1854) [Hedychrum] (*Hedychrum callosum* Radoszkowski, 1877; *H. incrassatum*: De Stefani, 1888; *Holopyga ahe-nea*: Dalla Torre, 1892; *Z. icrassatum* (!): Vinokurov, 2006; *Hedychridium incrassatum*: Vinokurov, 2009). Russia: **EP** (S, NC, CR), **UR**. – Europe (SE, EE), Caucasus, Turkey, Middle East.
- Hedychridium ardens ardens** (Coquebert, 1801) [Chrysis] (*Hedychrum minutum*: Eversmann, 1858; *H. integrum*: Assmuss, 1862). Parasitoid of *Diodontus tristis* (Vander Linden), *Oxybelus bipunctatus* Olivier, *Tachysphex nitidus* (Spinola), *T. obscuripennis* (Schenck) and *T. pompiliiformis* (Panzer) (Crabronidae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (OM, TK, AL), **ES** (KS, TU, KR, IR, BR, ZB). – Europe (WE, NE, SE, EE), Caucasus.
- Hedychridium arensi** Rosa, 2017. Russia: **ES** (TU).
- Hedychridium asianum** Linsenmaier, 1997 (*H. integrum asianum* Linsenmaier, 1997). Russia: **WS** (AL), **ES** (TU, KR, IR, BR). – Mongolia, China (NW).
- Hedychridium belokobylskiji** Rosa, 2017. Russia: **ES** (KS, TU, KR).
- Hedychridium caputaureum** G. Trautmann et W. Trautmann, 1919 (*H. roseum* var. *caputaureum* G. Trautmann et W. Trautmann, 1919). Parasitoid of *Astata minor* Kohl (Crabronidae). Russia: **EP** (NW, NC), **UR**. – Europe (WE, NE, EE), W Asia.

- Hedychridium caucasicum** Trautmann, 1926 (*H. sculpturatum* var. *caucasicum* Trautmann, 1926). Russia: **EP** (NC). – Caucasus, Turkey.
- Hedychridium chloropygum chloropygum** du Buysson, 1888. Russia: **EP** (NC). – Europe (WE, SE).
- Hedychridium coriaceum coriaceum** (Dahlbom, 1854) [Hedychrum] (*Hedychrum coriaceum* (!): Eversmann, 1858; *Holopyga* (*Hedychridium*) *coriacea*: Mocsáry, 1889). Parasitoid of *Lindenius albilabris* (Fabricius) (Crabronidae). Russia: **EP** (N, NW, C, E, NC), **UR**. – Europe (WE, NE, SE, EE), Turkey.
- Hedychridium cupreum** (Dahlbom, 1845) [Hedychrum] (*Chrysis integra*: Nylander, 1859; *Holopyga integra*: Mocsáry, 1889, *Hedychridium integrum*: Hellén, 1920, Vorontsovskij, 1930, Nikol'skaya, 1978, Zvantsov, 1988, Vinokurov, 2006, 2009). Parasitoid of *Dryudella pinguis* (Dahlbom), *D. stigma* (Panzer), *Harpactus lunatus* (Dahlbom) and *H. tumidus* (Panzer) (Crabronidae). Russia: **EP** (N, NW, C, NC), **UR**, **ES** (KS, TU, IR). – Europe (WE, NE, EE), Mongolia, China (NC).
- Hedychridium elegantulum** du Buysson, 1887. Possible parasitoid of *Miscophus bicolor* (Jurine) (Crabronidae). Russia: **EP** (C, NC). – Europe (WE, SE, EE).
- Hedychridium erschovi** (Radoszkowski, 1877) [Hedychrum] (*Euchrum turanum* Semenov, 1954). Russia: **EP** (NC). – Iran, Central Asia, Kazakhstan.
- Hedychridium femoratum** (Dahlbom, 1854) [Hedychrum]. Parasitoid of *Dryudella stigma* (Panzer) (Crabronidae). Russia: **EP** (NC), **UR**, **ES** (KS, TU, KR). – Europe (WE, SE), Turkey.
- Hedychridium gabriellae** Rosa, 2017. Russia: **ES** (TU).
- Hedychridium jucundum** (Mocsáry, 1889) [Holopyga] (*Holopyga iucunda* Mocsáry, 1889). Russia: **EP** (C, S, NC), **UR**. – Europe (WE, SE, EE), Caucasus, Turkey.
- Hedychridium krajniki krajniki** Balthasar, 1946. Russia: **EP** (C), **UR**. – Europe (WE, SE, EE), Caucasus.
- Hedychridium leleji** Rosa, 2017. Russia: **ES** (TU).
- Hedychridium loktionovi** Rosa, 2017. Russia: **WS** (AL).
- Hedychridium longigena** Rosa, 2017. Russia: **ES** (IR).
- Hedychridium lucidiventre** Semenov, 1967. Russia: **EP** (NC). – Kazakhstan.
- Hedychridium mediocre** Linsenmaier, 1987 (*H. scutellare*: Linsenmaier, 1959; *H. mediocre* Kimsey in Kimsey et Bohart, 1991). Russia: **UR**. – Europe (WE, SE, EE).
- Hedychridium monochroum** du Buysson, 1888 (*Cyrtuchridium breviceps* Semenov, 1954; *C. pusio* Semenov et Nikol'skaya, 1954). Russia: **EP** (S), **UR**. – Europe (WE, SE, EE), Caucasus, Turkmenistan, Tajikistan, Uzbekistan. From Europe to India.
- Hedychridium moricei** du Buysson, 1904 (*H. flavipes* var. *moricei*: Trautmann, 1927; *Zarudnidium clarum* Semenov, 1967). Russia: **EP** (S). – Europe (SE), Azerbaijan, Turkey, Middle East.
- Hedychridium parkanense** Balthasar, 1946. Russia: **EP** (S). – Europe (SE, EE).
- Hedychridium propodeale** Rosa, 2017. Russia: **ES** (KS, TU, KR).
- Hedychridium proshchalykini** Rosa, 2017. Russia: **ES** (TU).
- Hedychridium purpurascens** (Dahlbom, 1854) [Hedychrum] (*H. purpurescens* (!): Vinokurov, 2007; *H. purpuressens* (!): Vinokurov, 2006). Russia: **EP** (NC), **WS** (TK). – Europe (WE, NE, EE).
- Hedychridium roseum** (Rossi, 1790) [Chrysis] (*Chrysis carnea* var. *rosea* Rossi, 1790; *Euchrum roseum*: Nikol'skaya, 1978; (!)*Chrysura simplex*: Leontiev, 2015; *Euchrum roseum nanum*: Vinokurov, 2013). Parasitoid of *Astata boops* (Schrank), *Tachysphex pompiliformis* (Panzer) and possibly *Dryudella stigma* (Panzer), *Tachysphex pectinipes* (Linnaeus), *T. pompiliformis* (Panzer), and *Harpactus tumidus* (Panzer) (Crabronidae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), Abkhazia, Georgia, Azerbaijan, China (NE).
- Hedychridium rossicum** Gussakovskij, 1948 (*H. valesiense* Linsenmaier, 1959). Parasitoid of *Astata boops* (Schrank) (Crabronidae). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Azerbaijan.
- Hedychridium satunini** Semenov, 1967 (*H. catunini* (!): Vinokurov, 2004). Russia: **EP** (NC). – Georgia, Azerbaijan.
- Hedychridium sculpturatum** (Abeille de Perrin, 1877) [Hedychrum] (*Euchrum sculpturatum*: Nikol'skaya, 1978; Vinokurov, 2006). Russia: **EP** (S, NC), **UR**, **WS** (TK). – Europe (WE, SE, EE), Caucasus.
- Hedychridium scutellare** (Tournier, 1878) [Hedychrum] (*H. mediocre* Linsenmaier, 1959). Russia: **EP** (NC). – Europe (WE, SE).
- Hedychridium sibiricum** Rosa, 2017. Russia: **ES** (TU).
- Hedychridium trossolus** (Semenov, 1954) [Euchridium]. Russia: **EP** (NC). – Tajikistan.
- Hedychridium tsunekii** Linsenmaier, 1959. Russia: **FE** (KH). – Korean Peninsula.
- Hedychridium turcicum** Arens, 2010 (*H. valesiense turcicum* Arens, 2010). Russia: **ES** (KR). – Turkey.

- Hedychridium uvarovi** Semenov, 1967. Russia: **EP** (NC).
- Hedychridium zelleri** (Dahlbom, 1845) [Hedychrum]. Parasitoid of *Miscophus niger* Dahlbom and *M. concolor* Dahlbom (Crabronidae). Russia: **EP** (C, E, NC). – Europe (WE, NE, EE).
- HEDYCHRUM** Latreille, 1802 (*Cymura* Dahlbom, 1845; *Wollmania* Mocsáry, 1902). Type species *Chrysis lucidula* Fabricius, 1775 [= *Hedychrum nobile* (Scopoli, 1763)]. Nest parasites of *Cerceris* spp. and *Philanthus* spp. (Crabronidae). Number of species: World – 129, Palaearctic – 59, Russia – 14.
- Hedychrum alexii** Semenov, 1967. Russia: **EP** (NC). – Kazakhstan.
- Hedychrum aureicolle** Mocsáry, 1889 (*H. aureicolle* (!): Vinokurov, 2006; *H. aureicollis* (!): Vinokurov, 2009). Russia: **EP** (NC). – Europe (SE), Abkhazia, Turkey, Cyprus, Palestine, Iran.
- Hedychrum chalybaeum** Dahlbom, 1854 (*H. coeruleascens*: Mocsáry, 1889; *H. szaboi* Mocsáry, 1889; *H. chalybeatum* (!): Kuznetsova, 1990; *H. cormescens* (!): Blagoveschenskaya, 1994). Parasitoid of *Cerceris interrupta* (Panzer) (Crabronidae). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (AL), **ES** (TU, KR, IR, BR, ZB), **FE** (AM, PR). – Europe (WE, NE, SE), Mongolia, China (NC, NE).
- Hedychrum cholodkovskii** Semenov, 1967. Russia: **EP** (NC), **UR**. – Kazakhstan.
- Hedychrum gerstaeckeri gerstaeckeri** Chevrier, 1869 (*H. marianum* Mocsáry, 1911; *H. gerstaeckeri japonicum*: Linsenmaier, 1959). Parasitoid of *Cerceris rybyensis* (Linnaeus) and *C. ruficornis* (Fabricius) (Crabronidae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (AL, TK), **ES** (KR, YA), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), Georgia, China (SE), Japan.
- Hedychrum gerstaeckeri plicatus** Kilimnik, 1993 (*H. gerstaeckeri plisatus* (!): Shibaev, 2006). Russia: **EP** (C, NC), **UR**. – Europe (EE).
- Hedychrum kozhantshikovi** Semenov, 1967. Russia: **EP** (NC). – Kazakhstan.
- Hedychrum longicolle** Abeille de Perrin, 1877 (*H. cololare* Semenov, 1892; *H. nobiliforme* Semenov, 1967; *H. trapezicolle* Semenov, 1967). Parasitoid of Crabronidae. Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (TK), **FE** (PR). – Europe (WE, SE), N Africa, Georgia, W Asia, Turkmenistan, Kazakhstan, China.
- Hedychrum niemelai** Linsenmaier, 1959 (?*H. semiviolaceum*: Vorontsovskij, 1930; *H. aureicolle*: Kurzenko, Lelej, 2007). Parasitoid of *Cerceris arenaria* (Linnaeus), *C. ruficornis* (Fabricius), *C. rybyensis* (Linnaeus), *C. quadrifasciata* (Panzer), and *C. quinquefasciata* (Rossi) (Crabronidae). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (NS), **ES** (KS, TU, KR, IR, BR, YA), **FE** (AM, PR). – Europe (WE, NE, SE, EE), China (NE).
- Hedychrum nobile** (Scopoli, 1763) [Sphex] (*H. lucidulum*: Eversmann, 1858, Assmuss, 1862; *H. lucidulum* var. *regium*: Eversmann, 1858; *Chrysis lucidula*: Nylander, 1859; *Ch. regia*: Nylander, 1859; *H. hediculum* (!): Radoszkowski, 1880; (!) *Ch. dichroa*: Leontiev, 2015). Parasitoid of *Cerceris arenaria* (Linnaeus), *C. rybyensis* (Linnaeus), *C. quadrifasciata* (Panzer), *C. quadricinta* (Panzer) (Crabronidae). Larvae of *H. nobile* can also feed on prey (Coleoptera, Curculionidae) stored in the nest. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TK, NS, AL), **ES** (KS, TU, KR, IR, BR, ZB). – Europe (WE, NE, SE, EE), Abkhazia, Caucasus.
- Hedychrum rutilans rutilans** Dahlbom, 1854 (*H. intermedium*: Nikol'skaya, 1978; (!) *Chrysura austriaca*: Leontiev, 2015). Parasitoid of *Philanthus triangulum* Fabricius and *P. coronatus* (Thunberg) (Crabronidae). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **ES** (KR, ZB). – Europe (WE, NE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey.
- Hedychrum rutilans ermak** Semenov, 1967. Russia: **WS** (AL), **ES** (KS, TU, KR, IR, BR, ZB), **FE** (AM, PR).
- Hedychrum simile** Mocsáry, 1889 (*H. cyaneum* Radoszkowski, 1889, nom. praeocc., nec Brullé, 1846; *H. simili* (!): Uchida, 1927; *H. simile* f. *pullatum* Tsuneki, 1953; *H. simile aereum* Tsuneki, 1970). Parasitoid of *Cerceris arenaria* (Linnaeus) (Crabronidae). Russia: **FE** (AM, PR). – Mongolia, China (NE, NC), Korean Peninsula, Japan (Hon).
- Hedychrum tobiasi** Kilimnik, 1993. Russia: **EP** (NC). – Europe (EE).
- Hedychrum virens virens** Dahlbom, 1854 (*H. grandis* Tournier, 1890; *H. grande*: Dalla Torre, 1892). Parasitoid of *Cerceris tuberculata* de Villers (Crabronidae). Russia: **EP** (C, S, NC, CR), **UR**, **WS** (TK). – Europe (WE, SE), Georgia, Azerbaijan, Turkey, Middle East.
- Hedychrum viridilineolatum** Kilimnik, 1993. Russia: **FE** (PR). – Europe (EE).
- HOLOPYGA** Dahlbom, 1854 (*Pseudbedychrum* Abeille de Perrin, 1879; *Oar* Semenov, 1954; *Psacas* Semenov, 1954). Type species *Holopyga amoenula*

Dahlbom, 1845. Parasitoids of Crabronidae. Distributed worldwide, mostly in the Palaearctic. Number of species: World – 110, Palaearctic – 88, Russia – 17.

Holopyga austrialis Linsenmaier, 1959. Russia: **EP** (S). – Europe (WE, SE, EE).

Holopyga amoenula amoenula Dahlbom, 1845 (*H. amoenella* (!): Vorontsovskij, 1930). Russia: **EP** (NC). – Europe (SE), Turkey.

Holopyga amoenula occidenta Linsenmaier, 1959. Russia: **ES** (KR). – Europe (WE, SE), Turkey.

Holopyga chrysonota chrysonota (Förster, 1853) [Ellampus]. Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (OM, AL), **ES** (KS, TU, KR, IR, YA). – Europe (WE, SE, EE), Caucasus, China (NC).

Holopyga fervida fervida (Fabricius, 1781) [Chrysis] (*H. chloroidea*: du Buysson, 1892, *H. curvata*: Bischoff, 1910; Blagoveschenskaya, 1994). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Turkey, Middle East, Iran.

Holopyga generosa asiatica Trautmann, 1926 (*H. amoenula*: Mocsáry, 1889; *H. gloriosa* var. *asiatica* Trautmann, 1926; *H. ovata proviridis* Linsenmaier, 1959; *H. gloriosa* var. *viridis*: du Buysson, 1892). Russia: **WS** (AL), **ES** (KS, TU, KR) – Caucasus.

Holopyga generosa generosa (Förster, 1853) [Ellampus] (*H. ovata* var. *b*: Eversmann, 1858; *H. ovata*: Assmuss, 1862; *H. gloriosa* var. *ovata*: du Buysson, 1892; *H. amoenula*: Zvantsov, 1988; (!) *Pseudospinolia neglecta*: Leontiev, 2015). Parasitoid of *Astata boops* (Schranck) (Crabronidae). The females lay their eggs in nymphs of Heteroptera before they have been captured and brought to the nest by the host. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TK, NS, AL), **ES** (KS, TU, KR, IR). – Europe (WE, NE, SE, EE), China, Korean Peninsula.

Holopyga ignicollis Dahlbom, 1854 (*H. ovata* var. *ignicollis* Dahlbom, 1854; *H. cingulata* Semenov, 1967; *H. aereomaculata* (!): Vinokurov, 2006; *H. cingulata* Semenov, 1967). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (KS, KR, IR). – Europe (WE, SE, EE), Caucasus, Middle East, Kyrgyzstan, Kazakhstan.

Holopyga inflammata inflammata (Förster, 1853) [Ellampus]. Russia: **EP** (C). – Europe (WE, NE, SE, EE), N Africa, W Asia.

Holopyga jurinei Chevriér, 1862. Russia: **EP** (S, NC). – Europe (WE, SE, EE), N Africa, Turkey, W Asia.

Holopyga lucida (Lepeletier, 1806) [Hedychrum]. Russia: **EP** (C, S), **UR**, **ES** (IR) – Europe (WE, SE), Turkey.

Holopyga medvedevi Semenov, 1967. Russia: **EP** (NC). – Kazakhstan.

Holopyga metallica (Dahlbom, 1854) [Hedychrum] (*H. sibirica* Semenov, 1967). Parasitoid of *Dryudella stigma* (Panzer) (Crabronidae). Russia: **EP** (N, NW), **ES** (IR). – Europe (NE).

Holopyga minuma Linsenmaier, 1959. Russia: **EP** (E), **ES** (KS, TU, KR). – Europe (SE, EE), Turkey, Middle East, Iran.

Holopyga mlokosiewitzi (Radoszkowski, 1877) [Hedychrum]. Russia: **EP** (NC). – Europe (SE), Caucasus, Turkey, Palestine.

Holopyga pavlovskii Semenov et Nikol'skaya, 1954. Russia: **EP** (NC). – Tajikistan.

Holopyga punctatissima punctatissima Dahlbom, 1854. Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE), Caucasus, Turkey, Iran.

Holopyga turkestanica Mocsáry, 1909 (*H. punctatissima* var. *turkestanica* Mocsáry, 1909; *H. crassepuncta* Semenov, 1954; *H. ovata crassepuncta*: Linsenmaier, 1968). Russia: **EP** (NC). – Caucasus, Turkey, Iran, Turkmenistan, Kazakhstan.

Holopyga vigora Linsenmaier, 1959. Russia: **EP** (NC). – Europe (SE), Turkey.

OMALUS Panzer, 1801. Type species *Chrysis aenea* Fabricius, 1787. Nest parasites of *Passaloecus* spp., *Pemphredon* spp., *Psenulus* spp. (Crabronidae). Number of species: World – 34, Palaearctic – 26, Russia – 5.

Omalus aeneus (Fabricius, 1787) [Chrysis] (*O. aeneus* var. *pygialis* du Buysson, 1887; *Ellampus zarudnyi* Semenov, 1932; *Ellampus aeneus* var. *chevrieri*: Bischoff, 1910). Parasitoids of *Passaloecus corniger* Shuckard, *P. eremita* Kohl, *P. gracilis* (Curtis), *P. singularis* Dahlbom, *P. turionum* Dahlbom, *Pemphredon lethifer* (Shuckard), *P. lugubris* (Fabricius), and *Psenulus pallipes* (Panzer) (Crabronidae). The females lay their eggs in live aphids and do not enter the host nest as in the case of *O. biaccinctus*. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TK, AL), **ES** (KS, TU, KR, IR, YA, ZB), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE, SE, EE), N Africa, Georgia, Uzbekistan, China (NC, SE), Japan (Hok, Hon, Kyu). Probably accidentally was introduced into N America.

Omalus berezovskii (Semenov, 1932) [Ellampus]. Russia: **ES** (KS, TU), **FE** (PR). – China (NC, SW).

Omalus biaccinctus (du Buysson, 1892) [Ellampus]. Parasitoids of *Passaloecus turionum* Dahlbom,

- P. gracilis* (Curtis), and *P. eremita* Kohl (Crabronidae). The females lay their eggs in living aphids at the hunting site of their host, and the egg is brought into the host's nest concealed in the aphid prey. Russia: **EP** (NW, C, NC, CR). – Europe (WE, NE, SE, EE), W Asia.
- Omalus hohlbecki** (Semenov, 1932) [Ellampus]. Russia: **EP** (NC). – Kazakhstan.
- Omalus stella** (Semenov et Nikol'skaya, 1954) [Ellampus]. Russia: **EP** (S, NC). – Tajikistan, Kazakhstan.
- PHILOCTETES** Abeille de Perrin, 1879 (*Diplorrhous* Aaron, 1885; *Dictenulus* Semenov, 1932). Type species *Holopyga cicatrix* Abeille de Perrin, 1879 [= *Philoctetes micans* (Klug, 1835)]. Nest parasites of Crabronidae. Number of species: World – 54, Palaeartic – 48, Russia – 12.
- Philoctetes bidentulus** (Lepelletier, 1806) [Hedychrum] (*Ellampus bidentatus* (!) Eversmann, 1858; *Ellampus wesmaeli*: De Stefani, 1888; *Ellampus appendicinus*: Dalla Torre, 1892). Parasitoid of *Pseun caliginosus* Westwood (Crabronidae). Russia: **EP** (C, E, S, NC), **UR**, **ES** (KS, IR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, W Asia.
- Philoctetes bogdanovii** (Radoszkowski, 1877) [Holopyga] (*Ellampus rudowi*: Mocsáry, 1889; *E. bogdanovi* (!): du Buysson, 1892; *E. bogdanovii* (!): Biscohoff, 1913; *Ph. bogdanovi* (!): Rosa, 2006). Russia: **EP** (C, S, CR), **UR**. – Europe (SE, EE), Azerbaijan, Turkey, W Asia, Iran.
- Philoctetes conifer** (Semenov, 1932) [Ellampus]. Russia: **EP** (NC).
- Philoctetes cynthiae** Rosa, 2017. Russia: **ES** (TU). – Mongolia.
- Philoctetes horvathi** (Mocsáry, 1889) [Ellampus] (*Ellampus wesmaeli* Mocsáry, 1882, nom. praecoc., nec Chevrier, 1862; *E. horváthii* (!): Dalla Torre, 1892). Russia: **EP** (S), **ES** (TU, KR). – Europe (WE, SE, EE), China (NC), Korean Peninsula.
- Philoctetes kuznetsovi** (Semenov, 1932) [Ellampus]. Russia: **EP** (E, NC), **ES** (IR). – Georgia.
- Philoctetes lyubae** Rosa, 2017. Russia: **ES** (TU).
- Philoctetes mongolicus** (du Buysson, 1901) [Ellampus] (*E. horvathi* var. *mongolicus* du Buysson, 1901). Russia: **EP** (S), **ES** (KS, TU, YA, ZB). – Central Asia, Mongolia, China (NC).
- Philoctetes pynovi** (Semenov, 1932) [Ellampus]. Russia: **UR**. – Uzbekistan.
- Philoctetes sareptanus** (Mocsáry, 1889) [Ellampus] (*E. schulthessi* Mocsáry, 1890; *E. schulthessi* var. *subauratus* Mocsáry, 1890; *Omalus sareptanus* var. *inflammatus*: Trautmann, 1927). Russia: **EP** (C, E, S, NC), **UR**, **ES** (IR), **FE** (KH). – Iran.
- Philoctetes stackelbergi** (Semenov, 1932) [Ellampus]. Russia: **WS** (AL).
- Philoctetes truncatus** (Dahlbom, 1831) [Chrysis]. Parasitoid of *Diodontus tristis* (Vander Linden) (Crabronidae). Russia: **EP** (C, E), **UR**, **WS** (TK), **ES** (TU, KR, IR). – Europe (WE, NE, SE, EE), N Africa.
- PROCHRIDUM** Linsenmaier, 1968. Type species *Holopyga hirtipes* Mocsáry, 1902. Number of species: World – 5, Palaeartic – 4, Russia – 1.
- Prochridium** sp. Russia: **EP** (S). Specimens of this genus have been recently collected in the south of European part and their description is in preparation.
- PSEUDOMALUS** Ashmead, 1902. Type species *Omalus semicircularis* Aaron, 1885 [= *Pseudomalus janus* (Haldeman, 1844)]. Nest parasites of Crabronidae that prey on aphids: *Passaloecus* spp., *Pemphredon* spp. and *Diodontus*. Number of species: World – 33, Palaeartic – 29, Russia – 10.
- Pseudomalus agnolii** Rosa, 2017. Russia: **EP** (C).
- Pseudomalus auratus auratus** (Linnaeus, 1758) [Sphex] (*Omalus curtiventris* Tournier, 1879; *Ellampus testaceicornis* du Buysson, 1892; *E. bergiellus* Semenov, 1932). Parasitoid of *Passaloecus corniger* Shuckard, *P. eremita* Kohl, *P. insignis* (Vander Linden), *P. gracilis* (Curtis), *P. monilicornis* Dahlbom, *P. singularis* Dahlbom, *P. turionum* Dahlbom, *Pemphredon inornata* Say, *P. lethifer* (Shuckard), *P. lugens* Dahlbom, *P. lugubris* (Fabricius), *P. rugifer* (Dahlbom), and *Diodontus tristis* (Vander Linden) (Crabronidae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TK, AL), **ES** (KS, TU, KR, IR, BR), **FE** (PR, KA). – Europe (WE, SE, NE, EE), N Africa, Caucasus, China (NE, NC), Korean Peninsula, Japan (Hok, Hon). Accidentally was introduced into N America.
- Pseudomalus auratus viridiventris** (Mocsáry, 1890) [Ellampus]. Russia: **EP** (NC). – Caucasus.
- Pseudomalus bergi** (Semenov, 1932) [Ellampus]. Russia: **EP** (NC). – Iran, Kazakhstan.
- Pseudomalus cupratus** (Mocsáry, 1889) [Ellampus] (*E. auratus* var. *cupratus* Mocsáry, 1889). Russia: **EP** (C, CR). – Europe (WE, SE, EE).
- Pseudomalus grandis** (Tsuneki, 1950) [Ellampus]. Russia: **FE** (PR). – Japan (Hon, Hon, Kyu).

- Pseudomalus nipponicus** (Tsuneki, 1970) [Omalus].
Russia: **ES** (KR), **FE** (PR). – Japan (Hok, Hon).
- Pseudomalus punctatus** (Uchida, 1927) [Philoctetes].
Russia: **ES** (KS, KR, YA), **FE** (AM, PR, SA, KA). – Korean Peninsula, Japan (Hok, Hon, Kyu).
- Pseudomalus pusillus pusillus** (Fabricius, 1804) [Chrysis] (*Elampus minutus* Dahlbom, 1854: Becker, 1865; *Omalus pusillum* (!): Becker, 1880; *Ellampus auratus* var. *virescens* Mocsáry, 1889; *E. borodini* Semenov, 1932; *E. ruthenus* Semenov, 1932; *E. pusillus* var. *schmiedeknechti*: du Buysson, 1896). Parasitoid of *Passaloecus eremita* Kohl, *P. insignis* (Vander Linden), and *Pemphredon lethifer* (Shuckard) (Crabronidae). Russia: **EP** (N, C, E, S, NC, CR), **UR**, **WS** (OM, AL), **ES** (KS, TU, KR, IR, YA, ZB). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Kazakhstan.
- Pseudomalus pusillus semicupreus** (Linsenmaier, 1959) [Omalus] (*P. pusillus* (!) *semicupreus*: Vinokurov, 2013). Russia: **EP** (NC). – Europe (SE).
- Pseudomalus triangulifer** (Abeille de Perrin, 1877) [Omalus] (*Ellampus auratus* var. *triangulifer*: du Buysson, 1892). Parasitoid of *Passaloecus insignis* (Vander Linden), *Pemphredon lugubris* (Fabricius), *P. lethifer* (Shuckard), *P. lugens* Dahlbom, *P. montana* Dahlbom, and *P. rugifer* (Dahlbom) (Crabronidae). Russia: **EP** (N, NW, C, NC), **UR**, **WS** (AL), **ES** (KS, TU, IR, YA, ZB), **FE** (KH, PR, KA, MG). – Europe (WE, NE, SE, EE), Caucasus, Turkey, China (NW).
- Pseudomalus violaceus** (Scopoli, 1763) [Sphex] (*Omalus coeruleus*: Eversmann, 1858; *Ellampus coeruleus*: Mocsáry, 1882; *E. violaceus*: De Stefani, 1888; *O. violaceus*: Trautmann, 1927 et auct.). Parasitoid of *Pemphredon lugubris* (Fabricius), *Passaloecus corniger* Shuckard and *P. eremita* Kohl (Crabronidae). Russia: **EP** (NW, C, E, NC), **UR**, **WS** (TK, AL), **ES** (IR, ZB), **FE** (PR). – Europe (WE, NE, SE, EE), Georgia, Middle East, China (NC).

Tribe CHRYSIDINI

Number of taxa: World – 28 genera, about 1700 species, Palaeartic – 15/934, Russia – 10/189.

- CHRYSIDEA** Bischoff, 1913. Type species *Chrysis pumila* Klug, 1845. Number of species: World – 22, Palaeartic – 4, Russia – 2.
- Chrysidea disclusa disclusa** (Linsenmaier, 1959) [Chrysis] (*Chrysis pumila disclusa* Linsenmaier, 1959). Russia: **EP** (NC). – Europe (WE, SE, EE).

Chrysidea pumila (Klug, 1845) [Chrysis] (*Chrysis assimilis* Abeille de Perrin, 1879; *Chrysidea pumilla* (!): Vinokurov, 2004; *Chrysidea persica* Radoszkowski, 1881). Russia: **EP** (C, S, NC), **UR**. – Europe (WE, SE, EE), N Africa.

CHRYSIS Linnaeus, 1761 (*Chrysozona* Förster, 1853; *Dichrysis* Lichtenstein, 1876; *Tetrachrysis* Lichtenstein, 1876; *Hexachrysis* Lichtenstein, 1876; *Cornuchrysis* Baltasar, 1953; *Gonodontochoyris* Semenov, 1954). Type species *Sphex ignita* Linnaeus, 1758. More than 80 species groups are known within *Chrysis* (Kimsey, Bohart, 1991; Linsenmaier, 1999; Tarbinsky, 2002; Rosa, 2005). Palaeartic species are parasitoids of solitary bees (Megachilidae) and solitary wasps (Sphecidae, Crabronidae, Vespidae (Eumeninae, Masarinae)). It is the largest genus in the Chrysididae, worldwide distributed. Number of species: World – about 1100, Palaeartic – 708, Russia – 140.

- Chrysis aello** Semenov et Nikol'skaya, 1954. Russia: **EP** (NC). – Tajikistan.
- Chrysis aestiva** Dahlbom, 1854 (*Ch. moczari*: Vinokurov, 2006). Russia: **EP** (NC). – Europe (SE), Caucasus, Turkey, Palestine, Iran.
- Chrysis albanica** Trautmann, 1927 (*Ch. succincta* var. *albanica* Trautmann, 1927). Russia: **EP** (S, NC, CR), **UR**. – Europe (SE, EE), Georgia.
- Chrysis ambigua** Radoszkowski, 1891 (*Ch. taczanovskiyi* (!) var. *ambigua*: Trautmann, 1927). Russia (Trautmann, 1927). – Europe (SE), Turkey, Palestine, Iran, Turkmenistan.
- Chrysis amneris** Balthasar, 1953 (*Ch. arnoldii* Semenov, 1967). Russia: **Southern Russia** (Strumia, 2008). – Sudan, Saudi Arabia, United Arab Emirates, Palestine, Turkmenistan.
- Chrysis amurensis** Semenov, 1967. Russia: **WS** (NS, AL), **ES** (KS), **FE** (AM, PR).
- Chrysis analis analis** Spinola, 1807 (*Ch. analis* var. *rubescens* Radoszkowski, 1880; *Ch. sybarita* (!) var. *rubescens*: Bischoff, 1910). Parasitoid of *Osmia andrenoides* Spinola (Megachilidae). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Caucasus.
- Chrysis angolensis** Radoszkowski, 1881 (*Ch. fuscipennis*: Mocsáry, 1889; *Ch. fuscipennis murasaki*: Tsuneki, 1953). Parasitoid of *Sceliphron* (Sphecidae) and *Eumenes* (Vespidae: Eumeninae). Russia: **ES** (ZB), **FE** (AM, KH, PR). – China (NE, NC, CC, SW, SE), Korean Peninsula, Japan (Hon, Shi, Kyu, Tsushima, Ryu). Worldwide except Europe (with exception of Cyprus).

- Chrysis angustifrons angustifrons** Abeille de Perrin, 1878 (*Ch. lagodechii* Radoszkowski, 1889; *Ch. pyrrrha* Semenov, 1967). Russia: **EP** (NC). – Europe (WE, SE, EE), Georgia.
- Chrysis angustula angustula** Schenck, 1856 (*Ch. ignita* var. *brevidens*: du Buysson, 1895). Parasitoid of *Ancistrocerus trifasciatus* (Müller), *Symmorphus bifasciatus* (Linnaeus), *S. allobrogus* (de Saussure), *S. connexus* (Curtis), and *S. debilitatus* (de Saussure) (Vespididae: Eumeninae). Russia: **EP** (N, NW, NC), **UR**, **ES** (IR). – Europe (WE, NE, SE, EE), Caucasus, W Asia, China (NE, NC).
- Chrysis auriceps** Linsenmaier, 1959. Russia: **UR**. – Europe (SE, EE), Turkey, Middle East.
- Chrysis bergi** Semenov, 1967. Russia: **EP** (NC). – Europe (EE).
- Chrysis bianchii** Semenov, 1892. Russia: **EP** (NC). – Caucasus, Turkmenistan.
- Chrysis bicolor** Lepeletier, 1806 (*Ch. succincta* var. *bicolor*: Mocsáry, 1889; *Ch. succincta* ab. *virideocincta* Hellén, 1920). Parasitoid of *Tachysphex obscuripennis* (Schenck), *T. pompiliformis* (Panzer), and *Dinetus pictus* (Fabricius) (Crabronidae). Russia: **ER** (N, NW, C, E, S, NC, CR), **UR**, **WS** (OM), **ES** (IR, YA), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE), N Africa, Caucasus.
- Chrysis bilobata** Balthasar, 1953. Russia: **EP** (NC). – Turkey, Middle East.
- Chrysis borealis** Paukkunen, Ødegaard et Soon, 2015. Possible parasitoid of *Ancistrocerus parietum* (Linnaeus) and *A. scoticus* (Curtis) (Vespididae: Eumeninae). Russia: **EP** (N, NW). – Europe (NE).
- Chrysis brevitarsis** Thomson, 1870. Parasitoid of *Discoelius zonalis* Panzer and *D. priesneri* Mader (Vespididae: Zethinae). Russia: **EP** (NC, CR), **ES** (TU). – Europe (WE, NE, SE, EE).
- Chrysis buda** Bohart, 1991. Russia: **ES** (BR). – China (NC, CC).
- Chrysis calimorpha calimorpha** Mocsáry, 1882. Russia: **EP** (C, S, NC). – Europe (WE, SE, EE).
- Chrysis carnifex** Mocsáry, 1889. Russia: **FE** (PR).
- Chrysis caspiensis** Linsenmaier, 1959. Russia: **EP** (S, NC). – Europe (EE).
- Chrysis castigata** Linsenmaier, 1951. Russia: **ES** (TU, BR). – Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan.
- Chrysis caucasicola** Balthasar, 1953 (*Ch. analis* var. *caucasica* Mocsáry, 1912, nom. praeocc., nec Radoszkowski, 1877; *Ch. analis caucasicola* Semenov, 1967, nom. praeocc., nec Balthasar, 1953; *Ch. analis caucasiensis* Linsenmaier, 1959). Russia: **EP** (NC). – Georgia, Azerbaijan.
- Chrysis cerastes** Abeille de Perrin, 1877 (!) *Ch. immaculata*: Leontiev, 2015). Parasitoid of *Syneuodynerus egregius* (Herrich-Schaeffer) (Vespididae: Eumeninae). Russia: **EP** (E, NC, CR), **WS** (AL). – Europe (WE, SE, EE), Azerbaijan, Caucasus.
- Chrysis chinensis** Mocsáry, 1912. Russia: **WS** (AL), **ES** (KS, ZB). – Europe (WE), Mongolia, China (NE, CC).
- Chrysis chosenensis** Tsuneki, 1950 (*Ch. nitidula chosenensis* Tsuneki, 1950; *Ch. chosenensis* f. *clariventris* Tsuneki, 1953; *Ch. chosensis* (!): Kurzenko, Lelej, 2007). Russia: **FE** (PR). – Korean Peninsula.
- Chrysis chrysoprasina** Förster, 1853. Russia: **EP** (C), **UR**. – Europe (WE, SE, EE), Armenia, W Asia.
- Chrysis chrysostigma** Mocsáry, 1889 (*Ch. ramburi*: Balthasar, 1953 et auct.). Russia: **EP** (C, NC). – Europe (WE, SE, EE), Caucasus, Turkey.
- Chrysis cingulicornis cingulicornis** Förster, 1853. Russia: **EP** (S, CR), **UR**, **ES** (KR). – Europe (WE, SE, EE), Georgia, Caucasus, Central Asia.
- Chrysis cingulicornis pseudopyrrha** Linsenmaier, 1959. Russia: **EP** (S).
- Chrysis circe** Mocsáry, 1889. Russia: **EP** (NC). – Europe (SE, EE), Caucasus, Turkey.
- Chrysis clarinicornis** Linsenmaier, 1951 (*Ch. ignita* var. *clarinicornis* Linsenmaier, 1951). Russia: **EP** (S), **UR**. – Europe (NE, WE, SE, EE), N Africa.
- Chrysis comparata** Lepeletier, 1806 (*Ch. distinguenda*: Radoszkowski, 1866; *Ch. chevrieri*: Mocsáry, 1882 et auct.; *Ch. chevrieri* var. *orientalis* Mocsáry, 1889). Russia: **EP** (C, S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Caucasus.
- Chrysis comta** Förster, 1853. Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), Caucasus, Turkey, Iran, China (NE, NC).
- Chrysis consanguinea consanguinea** Mocsáry, 1889. Russia: **WS** (AL), **ES** (KS, TU, IR). – Europe (WE, SE, EE), N Africa.
- Chrysis cyaneata** Mocsáry, 1909 (*Ch. uvarovi* Semenov, 1967). Russia: **EP** (NC). – Kazakhstan.
- Chrysis cylindrica** Eversmann, 1858 (*Ch. viridula* var. *integra*: De Stefani, 1888 et auct.; *Ch. viridula* var. *erythromelas* du Buysson, 1895). Parasitoid of *Tropidodynerus interruptus* (Brullé) (Vespididae: Eumenidae). Russia: **EP** (E, S, CR), **UR**, **ES** (YA). – Europe (WE, SE, EE), Caucasus.
- Chrysis daphne** Smith, 1874. Russia: **FE** (PR). – Japan (Hon).

- Chrysis daphnis daphnis** Mocsáry, 1889. Russia: **EP** (CR). – Europe (WE, SE, EE), N Africa.
- Chrysis daphnis syriensis** Linsenmaier, 1959. Russia: **EP** (NC). – Turkey, Syria, Palestine, Iran.
- Chrysis dauriana** Linsenmaier, 1959 (*Ch. mongolica* Semenov, 1967, nom. praeocc., nec Mocsáry, 1914; *Ch. mongoliana* Bohart, 1991). Russia: **WS** (AL), **ES** (TU, KR, BR, ZB), **FE** (PR). – Mongolia.
- Chrysis diacantha diacantha** Mocsáry, 1889 (*Ch. calypso* Semenov et Nikol'skaya, 1954). Russia: **EP** (NC). – Europe (SE), Caucasus, Middle East, Central Asia.
- Chrysis decora** Mocsáry, 1887 (*Ch. superba* Radoszkowski, 1877, nom. praeocc., nec Cresson, 1865; *Ch. rutilans* var. *asiatica* Mocsáry, 1889; *Ch. rutilans* var. *mesasiatica* Semenov, 1912). Russia: **EP** (E, S, NC, CR), **UR**, **WS** (TK), **ES** (ZB). – Turkey, Palestine, Iran, Turkmenistan, Kyrgyzstan, Kazakhstan.
- Chrysis distincta distincta** Mocsáry, 1887 (*Ch. analis* var. *incerta* Radoszkowski, 1880, nom. praeocc., nec Dahlbom, 1854). Russia: **EP** (S, NC, CR). – Georgia, Azerbaijan, Turkey, Cyprus, Palestine, Iran.
- Chrysis distincta thalhammeri** Mocsáry, 1889 (*Ch. distincta thalhammeri* (!): Vinokurov, 2013). Russia: **EP** (NC). – Europe (SE, EE), Caucasus, Middle East, Central Asia.
- Chrysis elegans** Lepeletier, 1806. Russia: **ER** (CR), **UR**. – Europe (WE, SE, EE), Caucasus.
- Chrysis equestris** Dahlbom, 1854. Parasitoid of *Discoelius dufourii* Lepeletier de Saint Fargeau and *D. zonalis* (Panzer) (Vespidae: Zethinae). Russia: **EP** (C, E), **UR**, **FE** (PR). – Europe (WE, NE, SE, EE).
- Chrysis fasciata** Olivier, 1791. Russia: **EP** (C, E, CR), **UR**, **WS** (TK), **ES** (IR), **FE** (AM, PR). – Europe (WE, NE, SE, EE), N Africa.
- Chrysis fouqueti csikiana** Mocsáry, 1912 (*Ch. nitidularia*: Vinokurov, 2006). Russia: **EP** (NC), **WS** (AL). – Kazakhstan.
- Chrysis frankenbergeri** Balthasar, 1953 (*Ch. frankenbergeri* (!): Vinokurov, 2006). Russia: **EP** (NC). – Europe (SE, EE), Armenia, Azerbaijan, Palestine.
- Chrysis frivaldszkyi frivaldszkyi** Mocsáry, 1882 (*Ch. frivaldszkyi* (!): Nikol'skaya, 1978; *Ch. frivaldszkii* (!): Vinokurov, 2006). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (KS, TU, KR, IR). – Europe (WE, SE, EE), Caucasus, Turkey.
- Chrysis fulgida** Linnaeus, 1761 (*Ch. cruenta* Mocsáry, 1883; *Ch. fulgida* var. *concolor* Mocsáry, 1912). Parasitoid of *Symmorphus allobrogus* (de Saussure), *S. bifasciatus* (Linnaeus), *S. crassicornis* (Panzer) and *S. murarius* (Linnaeus), and possibly *Ancistrocerus parietum* (Linnaeus) (Vespidae: Eumeninae). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (TM, TK, AL), **ES** (KS, TU, KR, IR, ZB), **FE** (AM, PR, KA). – Europe (WE, NE, SE, EE), Caucasus, China (NE).
- Chrysis galloisi** (du Buysson, 1908) [Tetrachrysis] (*Ch. rubrifasciata* Tsuneki, 1950; *Ch. galboisi* (!): Vinokurov, 2006). Russia: **ES** (BR), **FE** (PR). – China, Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Chrysis germari germari** Wesmael, 1839 (*Ch. nitidula* Germar, 1817, nom. praeocc., nec Fabricius, 1775; *Ch. succinctula*: Radoszkowski, 1866). Russia: **ER** (C, E), **UR**. – Europe (WE, SE, EE), Caucasus.
- Chrysis gertabi** Radoszkowski, 1891 (*Ch. taczanovskyi* (!) var. *germabi* (!): Trautmann, 1927). Russia (Trautmann, 1927). – Turkmenistan, Central Asia.
- Chrysis glasunovi** Semenov, 1967. Russia: **EP** (S, NC, CR). – Georgia, Caucasus.
- Chrysis gracillima gracillima** Förster, 1853 (*Ch. gracillima* (!): Vinokurov, 2006). Parasitoid of *Microdynerus exilis* (Herrich-Schäffer), *M. parvulus* (Herrich-Schäffer), *M. mugdunensis* (de Saussure) (Vespidae: Eumeninae). Russia: **EP** (C, S, NC), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), N Africa, Middle East, Iran.
- Chrysis graelsii graelsii** Guérin-Méneville, 1842 (*Ch. analis*: Eversmann, 1858; *Ch. sybarita*: Radoszkowski, 1889; *Ch. chevrieri*: du Buysson, 1895; *C. chevrieri* var. *pusilla* du Buysson, 1895; *Ch. sybarita pekinensis*: Vinokurov, 2006; *Ch. sybarita opaca*: Vinokurov, 2006). Parasitoid of *Euodynerus disconotatus* (Lichtenstein), *E. notatus* (Jurine), and *E. quadrifasciatus* (Fabricius) (Vespidae: Eumeninae). Russia: **EP** (N, C, NC, CR), **UR**, **WS** (NS), **ES** (KS, TU, KR, BR). – Europe (WE, NE, SE, EE), Caucasus, Asia Minor, China (NC).
- Chrysis grohmanni rkiana** Linsenmaier, 1959. Russia: **EP** (S, NC). – Europe (SE, EE).
- Chrysis grumorum** Semenov, 1892. Russia: **EP** (NC). – China (WP).
- Chrysis ignita ignita** (Linnaeus, 1758) [Sphex]. Parasitoid of *Ancistrocerus auctus* (Fabricius), *A. gazella* (Panzer), *A. nigricornis* (Curtis), *A. parietum* (Linnaeus), *A. parietinus* (Linnaeus), *A. scoticus* (Curtis), *A. trifasciatus* (Müller) and possibly *Gymnomerus laevipes* (Shuckard), *Euodynerus posticus* (Herrich-Schäffer), *Allodynerus delphinalis* (Giraud), *Symmorphus bifasciatus* (Linnaeus) (Vespidae: Eumeninae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TK, AL), **ES** (IR, BR, ZB), **FE** (AM, KH,

- PR, SA, KA). – Europe (WE, NE, SE, EE), N Africa, China (NE, NC), Korean Peninsula, India.
- Chrysis illigeri** Wesmael, 1839 (*Ch. succincta* ab. *chrysoprasina*: Hellén, 1920). Parasitoid of *Tachysphex pompiliformis* (Panzer) (Crabronidae). Russia: **EP** (NW, C, S, NC), **UR, WS** (AL), **ES** (TU, KR, IR, BR, YA), **FE** (PR). – Europe (WE, NE, SE, EE).
- Chrysis immaculata** du Buysson, 1898. Russia: **EP** (C, NC). – Europe (WE, SE, EE).
- Chrysis impressa** Schenck, 1856 (*Ch. valida*: Humala, Polevoi, 2009). Parasitoid of *Ancistrocerus parietinus* (Linnaeus), *A. claripennis* Thomson, *A. trifasciatus* (Müller) (Vespidae: Eumeninae). Russia: **EP** (N, NW, S, NC, CR). – Europe (WE, NE, SE, EE), Central Asia.
- Chrysis inaequalis inaequalis** Dahlbom, 1845 (*Ch. inaequalis* (!): Vorontsovskij, 1930). Parasitoid of *Eumenes coarctatus* (Linnaeus) (Vespidae: Eumeninae). Russia: **EP** (E, S, NC, CR), **UR, Siberia**. – Europe (WE, SE, EE), Central Asia, China (NE, NC).
- Chrysis inaequalis sapphirina** Semenov, 1912. Russia: **EP** (S). – Europe (SE), Cyprus, Palestine, Iran, Kyrgyzstan.
- Chrysis inaequipunctata** Bischoff, 1910. Russia: **EP** (E). – Uzbekistan.
- Chrysis inconsueta** Rosa, 2017. Russia: **WS** (AL). – Tajikistan.
- Chrysis indigotea** Dufour et Perris, 1840 (*Ch. zaitzevi* Semenov, 1967; *Ch. indogotea* (!): Bischoff, 1913; *Ch. indigotea* var. *Dagestanica* Mocsáry, 1889; *Ch. ignite* (!) *dagestanica* (!): Vinokurov, 2006). Parasitoid of Eumeninae (Vespidae), possibly *Gymnomeris laevipes* (Shuckard). Russia: **EP** (S, NC, CR), **Siberia, FE** (AM). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Central Asia.
- Chrysis insperata** Chevrier, 1870. Russia: **EP** (C, S, NC), **UR**. – Europe (WE, SE, EE), Azerbaijan, Caucasus.
- Chrysis interjecta interjecta** du Buysson, 1894 (*Ch. interjecta hemichlora*: Vinokurov, 2013). Russia: **EP** (NC), **UR**. – Europe (WE, SE, EE), Middle East.
- Chrysis io** Semenov, 1967. Russia: **EP** (CR).
- Chrysis iris** Christ, 1791 (*Ch. nitidula*: Assmuss, 1862 et auct.; *Ch. soluta*: Radoszkowski, 1866). Parasitoid of *Symmorphus allobrogus* (de Saussure), *S. crassicornis* (Panzer), and *S. murarius* (Linnaeus) (Vespidae: Eumeninae). Russia: **EP** (NW, C, E, NC), **UR, ES** (KS, TU). – Europe (WE, NE, SE, EE), Caucasus.
- Chrysis japonica** Cameron, 1887 (*Ch. daurica* Mocsáry, 1914; *Ch. japonica* var. *cyanea* Uchida, 1927). Russia: **ES** (ZB), **FE** (AM). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Tsushima, Ryu).
- Chrysis jaxartis** Semenov, 1910 (*Ch. sybarita* var. *jaxartis* Semenov, 1910; *Ch. valesiana perezi*: Vinokurov, 2006). Russia: **EP** (NC). – Europe (SE), Turkey, Iran, Kazakhstan.
- Chrysis karafutonis** Tosawa, 1932. Russia: **FE** (SA).
- Chrysis kolazyi** Mocsáry, 1889 (*Tetrachrysis grohmanni* var. *sareptana* Trautmann, 1926; *Ch. kolazyi*: Kimsey, Bohart, 1991). Russia: **EP** (S). – Europe (WE, SE).
- Chrysis lanata** Mocsáry, 1912 (*Ch. sapphirus* Semenov, 1967). Russia: **FE** (PR). – Uzbekistan.
- Chrysis lanceolata** Linsenmaier, 1959 (*Ch. lanciolata* (!): Vinokurov, 2013). Possibly Parasitoid of *Diodontus minutus* (Fabricius) and *Miscophus bicolor* Jurine (Crabronidae). Russia: **EP** (S, NC, CR), **UR**. – Europe (SE, EE).
- Chrysis leachii** Shuckard, 1837 (*Ch. leachi* (!): Nikol'skaya, 1978). Russia: **EP** (C, E, S, NC, CR), **WS** (AL). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Caucasus, Middle East, Iran.
- Chrysis leptomandibularis** Niehuis, 2000. Possibly parasitoid of *Symmorphus debilitatus* (de Saussure) (Vespidae: Eumeninae). Russia: **EP** (N, NW), **UR**. – Europe (WE, NE, SE, EE), Turkey.
- Chrysis longula longula** Abeille de Perrin, 1879 (*Ch. ignita* var. *longula* Abeille de Perrin, 1879; *Ch. longula aeneopaca* Linsenmaier, 1959). Parasitoid of *Ancistrocerus antilope* (Panzer), *Euodynerus posticus* (Herrich-Schäffer), *A. parietinus* (Linnaeus), *Symmorphus crassicornis* (Panzer), and *S. murarius* (Linnaeus) (Vespidae: Eumeninae). Russia: **EP** (N, NW, C, E, NC, CR), **UR, WS** (AL), **ES** (IR, BR). – Europe (WE, NE, SE, EE), Central Asia.
- Chrysis longula sublongula** Linsenmaier, 1951. Russia: **EP** (NC). – Europe (WE, NE, SE, EE).
- Chrysis lyda** Rosa, 2017. Russia: **EP** (NC). – Abkhazia.
- Chrysis maderi** Linsenmaier, 1959. Russia: **EP** (NC). – Europe (SE).
- Chrysis marginata marginata** Mocsáry, 1889. Russia: **EP** (NC), **UR**. – Europe (WE, SE, EE), Caucasus, Turkey, Middle East, Iran, Central Asia.
- Chrysis martinella martinella** du Buysson, 1900 (*Ch. satunini*: Vinokurov, 2006). Russia: **EP** (NC). – Europe (SE), Azerbaijan, Turkey.
- Chrysis mediadentata** Linsenmaier, 1951 (*Ch. ignita* var. *mediadentata* Linsenmaier, 1951; (!) *Ch. longula*: Leontiev, 2015). Parasitoid of *Odynerus spinipes* (Linnaeus) and *O. reniformis* (Gmelin) (Vespidae:

- Eumeninae). Russia: **EP** (E, NC), **ES** (IR). – Europe (WE, NE, SE, EE).
- Chrysis mediata mediata** Linsenmaier, 1951 (*Ch. ignita* var. *mediata* Linsenmaier, 1951). Parasitoid of *Odynerus spinipes* Linnaeus, *Ancistrocerus trifasciatus* (Müller) (Vespidae: Eumeninae). Russia: **EP** (NC), **WS** (TK), **ES** (YA), **FE** (PR). – Europe (WE, NE, SE, EE).
- Chrysis mirabilis** Radoszkowski, 1877 (*Ch. sinuosa*: Radoszkowski, 1866; *Ch. verae* Semenov, 1967). Russia: **EP** (CR). – Europe (SE), Georgia, Caucasus, Turkey.
- Chrysis mokrousovi** Rosa, 2017. Russia: **EP** (NC). – Abkhazia.
- Chrysis mutabilis mutabilis** du Buysson, 1887 (*Ch. mutabilis* var. *araxana*: du Buysson, 1895). Russia: **EP** (NC, CR). – Europe (SE), Georgia, Azerbaijan, Cyprus, Turkey, Middle East, Iran, Central Asia.
- Chrysis mysta** du Buysson, 1900. Russia: **Southern Russia** (Linsenmaier, 1969). – Turkey, Middle East, Syria, W Asia, Iran, Kazakhstan.
- Chrysis mysticalis** Linsenmaier, 1959 (*Ch. inaequalis*: Radoszkowski, 1889). Russia: **EP** (S, CR), **WS** (AL), **ES** (TU, KR, ZB). – Europe (WE, SE), Caucasus.
- Chrysis neobule** Semenov, 1954. Russia: **EP** (NC). – Caucasus, Tajikistan, Uzbekistan, Kazakhstan.
- Chrysis nevelskiana** Semenov, 1967. Russia: **FE** (PR).
- Chrysis nox** Semenov, 1954. Russia: **WS** (AL). – Tajikistan, Mongolia.
- Chrysis obtusidens** Dufour et Perris, 1840. Russia: **EP** (C, E, NC, CR), **WS** (TK). – Europe (WE, SE, EE), Caucasus.
- Chrysis pavesii** Rosa, 2017. Russia: **WS** (AL).
- Chrysis perrini** Radoszkowski, 1880 (*Ch. analis* var. β : Eversmann, 1858; *Ch. analis* var. *perrisi* Radoszkowski, 1880; *Ch. analis*: Mocsáry, 1889; *Ch. sybarita* (!) var. *perrini*: Bischoff, 1910). Russia: **EP** (NC), **UR**. – Caucasus.
- Chrysis phryne phryne** Abeille de Perrin, 1878. Russia: **EP** (NC). – Europe (WE, SE, EE).
- Chrysis placida** Mocsáry, 1879. Russia: **EP** (S, NC, CR), **UR**. – Europe (SE, EE), Caucasus, Turkey.
- Chrysis popovi** Semenov, 1954. Russia: **WS** (AL). – Tajikistan.
- Chrysis proauriceps** Rosa, 2017. Russia: **ES** (KR).
- Chrysis pseudobrevitarsis** Linsenmaier, 1951 (*Ch. ignita* var. *pseudobrevitarsis* Linsenmaier, 1951). Parasitoid of *Ancistrocerus antilope* (Panzer), *Euodynerus notatus* (Jurine), *E. quadrfasciatus* (Fabricius) (Vespidae: Eumeninae). Russia: **EP** (N, NW, NC, CR), **WS** (AL), **ES** (KS, TU, KR). – Europe (WE, NE, SE, EE), Mongolia.
- Chrysis pulchella pulchella** Spinola, 1807 (!) *Ch. pyrrhina*: Leontiev, 2015). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Iraq, Iran, Central Asia.
- Chrysis pushkiniana** Semenov, 1967 (*Ch. graeca* Arens, 2004). Russia: **EP** (CR). – Europe (SE).
- Chrysis ragusae** De Stefani, 1888 (*Ch. taurica* Mocsáry, 1889; *Ch. ragusai* (!): Linsenmaier, 1959). Russia: **EP** (CR). – Europe (WE, SE, EE), Asia Minor.
- Chrysis remota remota** Mocsáry, 1889 (*Ch. margiana*: Vinokurov, 2006). Russia: **EP** (NC). – Caucasus, Turkmenistan, Kyrgyzstan, Central Asia.
- Chrysis rubripyga** Tsuneki, 1950. Russia: **FE** (PR). – Japan (Hok, Hon, Shi, Kyu).
- Chrysis ruddii ruddii** Shuckard, 1837 (*Ch. auripes*: Radoszkowski, 1880; *Ch. ruhdi* (!): Levi et al., 1974). Parasitoid of *Eumenes coronatus* (Panzer), *Ancistrocerus oiventris* (Wesmael), *A. parietum* (Linnaeus), *A. scoticus* (Curtis), *Eumenes* spp., *Odynerus spinipes* (Linnaeus), and *O. reniformis* (Gmelin) (Vespidae: Eumeninae). Russia: **EP** (N, NW, C, NC, CR), **UR**. – Europe (WE, NE, SE, EE), Caucasus, Asia Minor.
- Chrysis rufitarsis** Brullé, 1833. Russia: **EP** (S). – Europe (WE, SE, EE), N Africa, Caucasus, Central Asia.
- Chrysis russica** Linsenmaier, 1959. Russia: **Southern Russia** (Linsenmaier, 1959).
- Chrysis rutilans extranea** Linsenmaier, 1959. Russia: **ES** (KS), **FE** (PR). – China (NE, SW), Japan.
- Chrysis rutilans rutilans** Olivier, 1791 ((?) *Ch. splendidula* var. *aurotecta*: Bischoff, 1910; *Ch. splendidula*: Humala, 1997). Parasitoid of *Gymnomerus laevipes* (Shuckard), *Jucancistrocerus caspicus* (Giordani Soika), *Katamenes flavigularis* (Blüthgen) (Vespidae: Eumeninae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (KS, TU, IR), **FE** (PR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, China, Japan.
- Chrysis rutiliventris rutiliventris** Abeille de Perrin, 1879. Russia: **EP** (NC), **Siberia**. – Europe (WE, SE, EE).
- Chrysis sardarica** Radoszkowski, 1890 (*Ch. sardarica lepidula* Linsenmaier, 1959; *Ch. sardarica perrecta*: Vinokurov, 2006; *Ch. cardarica* (!) *lepidula*: Vinokurov, 2006). Russia: **EP** (NC). – N Africa, Caucasus, Turkey, Middle East, Central Asia.

- Chrysis schencki** Linsenmaier, 1968 (*Ch. ignita schenckiana* Linsenmaier, 1959, nom. praeocc., nec Mocsáry, 1912; *Ch. ignita*: Humala, Polevoi, 2009). Parasitoid of *Ancistrocerus trifasciatus* (Müller), *A. gazella* (Panzer), and *A. nigricornis* (Curtis) (Vespidae: Eumeninae). Russia: **EP** (N, NW, NC), **WS** (TK). – Europe (WE, NE, SE), Central Asia, Japan.
- Chrysis sculpturata** Mocsáry, 1912 (*Ch. ignita* var. *sculpturata* Mocsáry, 1912). Russia: **EP** (NC). – Europe (WE, SE), Caucasus.
- Chrysis scutellaris** Fabricius, 1794. Possibly parasitoid of *Megachile leachella* Curtis and *Pseudanthidium lituratum* (Panzer) (Megachilidae). Russia: **EP** (C, E, S, NC). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey.
- Chrysis serena serena** Radoszkowski, 1891 (*Ch. pyrrhina* Dahlbom, 1845: Eversmann, 1858; *Ch. pyrrhina siciliaca* Linsenmaier, 1959: Vinokurov, 2006; *Ch. pyrrhina rhodesiaca*: Vinokurov, 2006). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Azerbaijan, Caucasus, Middle East, Syria, Iran, Chia (NE).
- Chrysis sexdentata** Christ, 1791 (*Ch. caucasica* Radoszkowski, 1877; *Ch. micans*: du Buysson, 1896). Parasitoid of *Ancistrocerus parietum* (Linnaeus), *Euodynerus dantici* (Rossi) (Vespidae: Eumeninae). Russia: **EP** (C, S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Caucasus, Iran, Central Asia.
- Chrysis sibirica** Rosa, 2017. Russia: **ES** (TU, BR).
- Chrysis singula** Radoszkowski, 1891. Russia: **EP** (S). – Caucasus, Turkmenistan.
- Chrysis solida** Haupt, 1957 (*Ch. mediata fenniensis* Linsenmaier, 1959; *Ch. scintillans* Valkeila, 1971). Parasitoid of *Ancistrocerus trifasciatus* (Müller), *Euodynerus notatus* (Jurine) and possibly *Symmorphus debilitatus* (de Saussure) (Vespidae: Eumeninae). Russia: **EP** (N, NW, NC), **ES** (KR), **FE** (KA). – Europe (WE, NE, EE), Caucasus, Japan.
- Chrysis sooni** Rosa, 2017. Russia: **FE** (PR).
- Chrysis soror** Dahlbom, 1854 (*Ch. ariadne* Mocsáry, 1889; *Ch. scutellaris* var. *ariadne*: Balthasar, 1954; *Ch. soror calandra* Semenov, 1967). Russia: **EP** (C, E, S, NC), **UR**, **ES** (KR, IR). – Europe (SE, EE), Caucasus, Middle East, Central Asia.
- Chrysis speciosa** Radoszkowski, 1877. Russia: **Western Siberia** (Bischoff, 1913). – Cyprus, Iran, Uzbekistan.
- Chrysis splendidula** Rossi, 1790 (*Ch. tamara* Semenov, 1967; *Ch. cyanopyga*: Eversmann, 1858; *Ch. splendidula abdominalata*: Vinokurov, 2006; *Ch. splendidula chlorisans*: Vinokurov, 2006). Parasitoid of *Eumenes coarctatus* (Linnaeus), *Eumenes mediterraneus* Kriechbaumer and *E. pomiformis* (Fabricius), *Gymnomerus laevipes* (Shuckard), *Symmorphus allobrogus* (de Saussure), *S. laevipes* (Shuckard) (Vespidae: Eumeninae). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), Caucasus, Central Asia, China (NE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Tsushima, Ryu).
- Chrysis subcoriacea** Linsenmaier, 1959. Possibly Parasitoid of *Ancistrocerus trifasciatus* (Müller) (Vespidae: Eumeninae). Russia: **EP** (N, NW, NC). – Europe (WE, NE, SE, EE), Central Asia, Japan.
- Chrysis subsinuata fallax** Marquet, 1882 (*Ch. mediocris*: Dalla Torre, 1892; *Ch. subsinuata unfauciata*: Vinokurov, 2006; *Ch. mochii*: Vinokurov, 2006; *Ch. subsinuata nochii* (!): Vinokurov, 2006; *Ch. subsinuata fallax* (!): Vinokurov, 2006). Russia: **EP** (NC, CR). – Europe (SE, EE), Armenia, Turkey.
- Chrysis succincta** Linnaeus, 1767 (*Ch. siccincta* (!): Buganin et al., 2000). Russia: **EP** (N, C, E, S), **UR**, **ES** (BR, ZB). – Europe (WE, NE, ?SE, EE), Caucasus.
- Chrysis taczanovskii** Radoszkowski, 1877 (*Ch. taczanowskyi* (!): Bischoff, 1910; *Ch. taczanowskyi* (!): Trautmann, 1927; *Ch. znojkoii* Semenov, 1967; *Ch. znojkoii* (!): Vinokurov, 2006). Parasitoid of *Euodynerus disconotatus* (Lichtenstein) (Vespidae: Eumeninae). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Azerbaijan, Caucasus, Palestine, Syria, Iran.
- Chrysis tenella** Mocsáry, 1889 (*Ch. tenella* var. *chalcophana*: du Buysson, 1894; *Ch. tenella* var. *mlokosiewitzii*: du Buysson, 1894). Russia: **EP** (NC). – Caucasus.
- Chrysis terminata** Dahlbom, 1854. Parasitoid of *Ancistrocerus nigricornis* (Curtis) (Vespidae: Eumeninae). Russia: **EP** (S), **UR**. – Europe (WE, NE, SE, EE), Central Asia.
- Chrysis tianshanica** Semenov, 1967. Russia: **EP** (NC). – Central Asia.
- Chrysis tragica** Semenov, 1967. Russia: **EP** (NC).
- Chrysis uljanini sickmanni** Mocsáry, 1892 (*Ch. uljaninini*: Bischoff, 1913; *Ch. sarafschana sickmanni*: Tsuneki, 1953; *Ch. uljanini*: Kurzenko, Lelej, 2007 et auct.). Russia: **FE** (AM, KH, PR).
- Chrysis valesiana** Frey-Gessner, 1887 (*Ch. sybarita* var. *valesiana* Frey-Gessner, 1887). Parasitoid of *Tropidodynerus interruptus* (Brullé), *Paravespa rex* (von Schulthess), *Paragymnomerus spiricornis*

- (Spinola) (Vespidae: Eumeninae). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE).
- Chrysis valida** Mocsáry, 1912 (*Ch. ignita* var. *valida* Mocsáry, 1912). Russia: **EP** (C, NC), **UR**, **WS** (TK, AL), **FE** (AM, PR). – Europe (WE, NE, EE), Turkey.
- Chrysis verna** Dahlbom, 1854. Russia: **EP** (CR). – Europe (SE, EE), Caucasus, Palestine.
- Chrysis vicana** Vinokurov, 2010. Russia: **EP** (NC).
- Chrysis vinokurovi** Rosa, 2017. Russia: **EP** (NC).
- Chrysis viridula** Linnaeus, 1761 (*Ch. bidentata* var. *gemma* du Buysson, 1895). Parasitoid of *Odynerus spinipes* (Linnaeus), *O. reniformis* (Gmelin) and *O. melanocephalus* (Gmelin) (Vespidae: Eumeninae). Russia: **EP** (N, C, NC, CR), **UR**, **WS** (AL), **ES** (TU, KR, IR), **FE** (KH, PR). – Europe (WE, NE, SE, EE), China (NE), Korean Peninsula, Japan.
- Chrysis westerlundi** Trautmann, 1927. Russia: **EP** (N). – Europe (NE).
- Chrysis zetterstedti** Dahlbom, 1845 (*C. fasciata*: Banaszak, 1980 et auct.). Possibly parasitoid of *Euodynerus notatus* (Jurine) (Vespidae: Eumeninae). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (IR), **FE** (PR). – Europe (NE, EE).
- CHRYSURA** Dahlbom, 1845 (*Olochrysis* Lichtenstein, 1876; *Monochrysis* Lichtenstein, 1876; *Holochrysis* Rye, 1878; *Arctochrysis* Haupt, 1956). Type species *Chrysis austriaca* Fabricius, 1804. Parasitoids of solitary bees (Megachilidae). Mostly Holarctic genus. Number of species: World – 124, Palaeartic – 113, Russia – 20.
- Chrysura alticola** (Semenov, 1912) [Chrysis]. Russia: **WS** (AL). – Tajikistan.
- Chrysura austriaca** (Fabricius, 1804) [Chrysis]. Parasitoid of bees *Hoplitis adunca* (Panzer), *H. anthocopoides* (Schenck), *Osmia parietina* Smith (Megachilidae). Russia: **EP** (C, E), **Siberia** (Radoszkowski, 1889). – Europe (WE, NE, SE, EE), N Africa.
- Chrysura cuprea** (Rossi, 1790) [Chrysis] (*Chrysis coeruleipes*: Radoszkowski, 1866). Parasitoid of *Osmia bicolor* Schranck, *O. versicolor* Latreille, *O. rufohirta* Latreille, *O. spinulosa* Trautmann, *O. andrenoides* Spinola (Megachilidae). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Caucasus, Abkhazia.
- Chrysura desertorum** (du Buysson, 1887) [Chrysis] (*Chrysis cyanocoelia*: Mocsáry, 1889). Russia: **Southern Russia** (Linsenmaier, 1969). – Georgia, Turkey, Israel.
- Chrysura dichroa** (Dahlbom, 1854) [Chrysis] (*Chrysis baeri* Radoszkowski, 1866). Parasitoid of *Osmia* (Megachilidae), which build nests in empty snail shells: *O. rufohirta* Lepeletier de Saint Fargeau, *O. andrenoides* Spinola, *O. aurulenta* Panzer, *O. caerulescens* (Linnaeus), *O. ferruginea* Latreille, *O. spinulosa* (Kirby), *O. versicolor* Latreille. Russia: **EP** (C, E, NC), **UR**, **WS** (TK). – Europe (WE, NE, SE, EE), Caucasus, Central Asia.
- Chrysura filiformis** (Mocsáry, 1889) [Chrysis]. Russia: **EP** (NC). – Europe (WE, SE, EE), Caucasus, Turkey.
- Chrysura hirsuta** (Gerstaecker, 1869) [Chrysis] (*Chrysis bicolor*: Assmuss, 1862; *Ch. osmia*: Westerlund, 1892). Parasitoid of solitary bees: *Osmia inermis* (Zetterstedt), *O. nigriventris* (Zetterstedt), *O. parietina* Curtis, *O. uncinata* Gerstaecker, and *Hoplitis tuberculata* (Nylander) (Megachilidae). Russia: **EP** (N, NW, C), **UR**, **ES** (IR, BR, YA). – Europe (WE, NE, SE, EE), Caucasus, China (NE, NC, SW), Korean Peninsula, Japan (Hon, Shi).
- Chrysura ignifrons** (Brullé, 1833) [Chrysis] (*Chrysis aurifrons*: du Buysson, 1894; *Ch. gnifrons* (!): Vinokurov, 2006). Russia: **EP** (NC). – Europe (WE, SE), N Africa, Middle East, Central Asia.
- Chrysura koma** (Tsuneki, 1950) [Chrysis]. Russia: **FE** (PR). – China, Korean Peninsula.
- Chrysura laevigata** (Abeille de Perrin, 1879) [Chrysis] (*Chrysis dichroa* var. *laevigata* (!): Trautmann, 1927). Russia: **EP** (NC), **UR**. – Europe (WE, SE, EE), N Africa, Azerbaijan, Middle East, Iran.
- Chrysura lydiae lydiae** (Mocsáry, 1889) [Chrysis]. Russia: **EP** (NC). – Europe (SE), Turkey, Middle East.
- Chrysura nikolaji** Rosa, 2017 (*Chrysis medea* Semenov, 1967, nom. praeocc., nec Balthasar, 1953). Russia: **EP** (NC). – Abkhazia.
- Chrysura oraniensis porphyrea** (Mocsáry, 1889) [Chrysis] (*Chrysis oraniensis*: du Buysson, 1894). Parasitoid of *Anthidium sticticum* (Fabricius) (Megachilidae). Russia: **EP** (NC). – Europe (SE), Turkey.
- Chrysura pseudodichroa** (Linsenmaier, 1959) [Chrysis]. Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Turkey, Middle East, Iran.
- Chrysura purpureifrons** (Abeille de Perrin, 1878) [Chrysis] (*Chrysis purpureifrons helleniensis* Linsenmaier, 1968). Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Iran, Central Asia.

- Chrysura radians** (Harris, 1776) [Chrysis] (*Chrysis bicolor*: Radoszkowski, 1880; *Ch. pustulosa*: Mocsáry, 1889). Parasitoid of solitary bees (Megachilidae), which usually nest in cavities in dead wood: *Hoplitis adunca* (Panzer), *H. anthocopoides* (Schenck), *Osmia caerulescens* (Linnaeus), *O. leaiana* (Kirby). Russia: **EP** (N, C, E, S, NC), **UR**, **ES** (IR, BR). – Europe (WE, NE, SE, EE), N Africa, Abkhazia, W Asia.
- Chrysura refulgens** (Spinola, 1806) [Chrysis]. Russia: **EP** (NC). – Europe (WE, SE, EE), N Africa, Caucasus, China (SE).
- Chrysura simplex simplex** (Dahlbom, 1854) [Chrysis]. Parasitoid of the solitary bee *Osmia caementaria* Gerstaecker (Megachilidae). Russia: **EP** (NC). – Europe (WE, SE, EE), N Africa, Caucasus.
- Chrysura trimaculata** (Förster, 1853) [Chrysis]. Parasitoid of solitary bees in the genus *Osmia* (Megachilidae). Russia: **ES** (TU). – Europe (WE, SE, EE), Caucasus, Turkey.
- Chrysura varicornis** (Spinola, 1838) [Chrysis] (*Chrysis sodalis* Mocsáry, 1892). Russia: **Southern Russia** (du Buysson, 1894). – Europe (WE, SE), N Africa, Turkey, Middle East, Central Asia.
- EUCHROEUS** Latreille, 1809 (*Brugmoia* Radoszkowski, 1877). Type species *Chrysis purpurata* Fabricius, 1775. The generic name *Euchroeus* Latreille, 1809 and the specific name *Chrysis purpurata* Fabricius, 1775 were conserved by ICZN (1998). As a result, the generic name *Brugmoia* Radoszkowski, 1877 (used by Kimsey and Bohart (1991)) is a junior synonym of *Euchroeus* Latreille, 1809, and the name *quadrata* is a junior synonym of *purpurata* Fabricius. Number of species: World – 26, Palaeartic – 22, Russia – 6.
- Euchroeus limbatus limbatus** Dahlbom, 1854. Russia: **EP** (S, NC), **UR**. – Caucasus, Turkey, Central Asia.
- Euchroeus mongolicus** Tsuneki, 1947. Russia: **ES** (BR). – China (NC).
- Euchroeus purpuratus purpuratus** (Fabricius, 1787) [Chrysis] (*Euchraeus* (!) *quadratus*: Assmuss, 1862; *E. purpuratus* var. *smaragdinus* Trautmann, 1926; *Brugmoia quadrata*: Kurzenko, Lelej, 2007). Recorded as a possible parasitoid of *Ammophila* Kirby and *Podalonia* Fernald (Sphecidae). Russia: **EP** (C, E, S), **UR**, **WS** (OM, AL), **ES** (KS, KR, BR). – Europe (WE, SE, EE), Central Asia.
- Euchroeus purpuratus irradians** (Semenov, 1910) [Pseudochrysis]. Russia: **UR**, **ES** (KR). – Kyrgyzstan.
- Euchroeus par** (Semenov, 1967) [Spinolia]. Russia: **ES** (BR).
- Euchroeus rugulosus** (Mocsáry, 1909) [Chrysis] (*E. doursi*: Trautmann, 1927; *Brugmoia rugulae* Kimsey, 1991). Russia: **ER** (S, CR), **UR**, **ES** (KR). – Uzbekistan, Kyrgyzstan, Kazakhstan.
- Euchroeus victorius** Rosa, 2017. Russia: **ES** (KS).
- PENTACHRYSIS** Lichtenstein, 1876. Type species *Chrysis amoena* Eversmann, 1857. Number of species: World – 6, Palaeartic – 5, Russia – 1.
- Pentachrysis amoena** (Eversmann, 1858) [Chrysis] (*Chrysis amöna* (!): Dalla Torre, 1892). Russia: **EP** (S), **WS** (OM). – Central Asia, Mongolia.
- PSEUDOCHRYSIS** Semenov, 1891 (*Pseudospinolia* Linsenmaier, 1951; *Neospinolia* Linsenmaier, 1968). Type species *Chrysura humboldti* Dahlbom, 1845. Nest parasitoids of potter wasps (Vespidae: Eumeninae). Number of species: World – 18, Palaeartic – 17, Russia – 7.
- Pseudochrysis aureicollis** (Abeille de Perrin, 1879) [Chrysis]. Russia: **EP** (NC). – Europe (SE), N Africa, Caucasus, Iran.
- Pseudochrysis fahringeri** Trautmann, 1926. Russia: **WS** (AL), **ES** (KS, KR). – Europe (WE).
- Pseudochrysis gengiskhan** Rosa, 2017. Russia: **ES** (TU).
- Pseudochrysis humboldti** (Dahlbom, 1845) [Chrysura] (*Chrysis cyanura* Dahlbom, 1854; *Ch. fedtchenkoi*: Radoszkowski, 1880). Parasitoid of *Paravespa grandis albida* Blütghen (Vespidae: Eumeninae). Russia: **EP** (E, S, NC, CR), **UR**, **ES** (IR). – Europe (WE, SE, EE), Caucasus, Azerbaijan, Iran, Central Asia, China (NC).
- Pseudochrysis incrassata** (Spinola, 1838) [Chrysis] (*Euchroeus graciosus minutus*: Linsenmaier, 1968). Russia: **EP** (S, NC). – Europe (WE, SE), Caucasus, Turkey.
- Pseudochrysis neglecta** (Shuckard, 1836) [Chrysis] (*Ch. austriaca* Dahlbom, 1829, nom. praeocc., nec Fabricius, 1804; *Ch. integrella* Dahlbom, 1854; *Ch. tadjhika* Semenov et Nikol'skaya, 1954). Nest parasite of *Odynerus spinipes* (Linnaeus) and *O. reniformis* (Gmelin) and possibly occasionally of *Ancistrocerus parietum* (Linnaeus) and *Gymnomerus laevipes* (Shuckard) (Vespidae: Eumeninae). Russia: **EP** (N, C, E, S, NC, CR), **UR**, **WS** (TK, AL), **ES** (KS, TU, KR, IR), **FE** (KH). – Europe (WE, NE, SE, EE), Turkey, Tajikistan, China (NW), N America.

- Pseudochrysis uniformis** (Dahlbom, 1854) [Chrysis] (*Chrysis fasciata* Spinola, 1805, nom. praeocc., nec Olivier, 1791). Russia: **EP** (E). – Europe (SE, EE), N Africa, Caucasus, Turkey, Asia, Iran.
- SPINOLIA** Dahlbom, 1854 (*Polyodontus* Radoszkowski, 1877; *Achrysis* Semenov, 1892). Type species *Spinolia magnifica* Dahlbom, 1854 [= *Spinolia lamprosoma* (Förster, 1853)]. Parasitoids of potter wasps (Vespidae: Eumeninae) and digger wasps (Crabronidae). Number of species: World – 19, Palaeartic – 19, Russia – 6.
- Spinolia chalcites** (Mocsáry, 1890) [Chrysis]. Russia: **EP** (E, S, NC). – Turkey, Iran.
- Spinolia dournovii** (Radoszkowski, 1866) [Chrysis] (*Ch. dournovoi* (!): Radoszkowski, 1880). Russia: **EP** (NC). – Europe (SE), N Africa, Turkey, Middle East, Iran.
- Spinolia lamprosoma** (Förster, 1853) [Chrysis] (*Spinolia* (!) *lamprosoma*: Vorontsovskij, 1930). Russia: **UR**. – Europe (WE, SE), Caucasus, Turkey.
- Spinolia morawitzii** (Mocsáry, 1889) [Chrysis] (*Ch. morawitzi* (!): Dalla Torre, 1892). Russia: **EP** (S). – Caucasus, Turkey, Turkmenistan.
- Spinolia stchurovskyi** (Radoszkowski, 1877) [Polyodontus] (*P. stchurovskyi* Radoszkowski, 1877). Russia: **EP** (S), **UR**. – Central Asia.
- Spinolia unicolor** (Dahlbom, 1831) [Chrysis]. Parasitoid of *Pterocheilus phaleratus* (Panzer) (Vespidae: Eumeninae) and possibly *Bembecinus hungaricus* (Fivaldszky) (Crabronidae). Russia: **EP** (C). – Europe (WE, NE, SE, EE), Mongolia.
- SPINTHARINA** Semenow, 1892. Type species *Chrysis vagans* Radoszkowski, 1877. Parasitoids of solitary wasps (Masarinae). Number of species: World – 26, Palaeartic – 21, Russia – 2.
- Spintharina mocsaryi** (Radoszkowski, 1890) [Spintharis] (*Chrysis cuprata*: Radoszkowski, 1880). Russia: **Southern Russia** (Linsenmaier, 1968). – Caucasus, Turkey, Middle East.
- Spintharina versicolor** (Spinola, 1808) [Chrysis] (*Ch. patriarchalis* Radoszkowski, 1880; *Ch. kuznetzovi* Semenov, 1967). Parasitoid of *Celonites abbreviatus* (Villers) (Vespidae: Masarinae). Russia: **EP** (CR). – Europe (WE, SE), Armenia, Iran.
- STILBUM** Spinola, 1806. Type species *Chrysis calens* Fabricius, 1781. Nest parasite of solitary wasps (Vespidae: Eumeninae; Sphecidae) and bees (Megachilidae). Number of species: World – 5, Palaeartic – 3, Russia – 2.
- Stilbum calens** (Fabricius, 1781) [Chrysis] (*Stilbum nobile*: Mocsáry, 1882). Parasitoid of *Katamenes flavigularis* Blüthgen, *K. arbustorum* (Panzer), *Delta uncuiculatum* (Villers) (Vespidae: Eumeninae), *Sceliphron madraspatanum tubifex* (Latreille) (Sphecidae) and possibly *Chalicodoma parietina* (Geoffroy) (Megachilidae). Russia: **EP** (S, NC, CR), **UR**, **ES** (BR, ZB). – Europe (WE, SE, EE), N Africa, Central Asia, China (NE, NC), Japan (Hon, Shi, Kyu).
- Stilbum cyanurum** (Forster, 1771) [Chrysis] (*S. splendidum*: Radoszkowski, 1866; *S. amethystinum*: Mocsáry, 1882; *S. pici*: Linsenmaier, 1959). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Caucasus, China (NE, NC, CC, SE). Worldwide except N and S America.
- TRICHRYSIS** Lichtenstein, 1876 (*Alocochrysis* Haupt, 1956). Type species *Sphex cyanea* Linnaeus, 1758. Nest parasites of solitary wasps (Crabronidae and Pompilidae). Number of species: World – 36, Palaeartic – 11, Russia – 3.
- Trichrysis cyanea** (Linnaeus, 1758) [Sphex]. Parasitoid of *Trypoxylon figulus* Linnaeus, *Pemphredon rugifer* (Dahlbom) (Crabronidae) and *Auplopus carbonarius* (Scopoli) and *Dipogon* sp. (Pompilidae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TK, AL), **ES** (KS, TU, KR, IR, BR, ZB), **FE** (AM, KH, PR, SA, KA). – Europe (WE, SE, NE, EE), N Africa, Central Asia, China (NE, NC), Korean Peninsula, Japan (Hok, Hon).
- Trichrysis lusca** (Fabricius, 1804) [Chrysis] (*Praestochrysis lusca*: Kurzenko, Lelej, 2007). Russia: **FE** (PR). – China (NC, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu), SE Asia, India, Papua-New Guinea, Australia. Accidentally was introduced into Europe.
- Trichrysis pellucida** (du Buysson, 1887) [Chrysis] (*Chrysis buyssoni* Mocsáry, 1899, replacement name for secondary homonym *Ch. pellucida* du Buysson, 1887, nec *Brugmoia pellucida* Radoszkowski, 1877, currently *Euchroeus pellucidus* (Radoszkowski, 1877); *T. buyssoni*: Kurzenko, Lelej, 2007). Russia: **FE** (KH, PR, SA). – Turkey, China (NC, CC), Korean Peninsula.

Tribe PARNOPINI

Number of taxa: World – 3 genera, 22 species, Palaearctic – 3/9, Russia – 1/3.

PARNOPES Latreille, 1797. Type species *Chrysis carnea* Fabricius, 1775 [= *Parnopes grandior* (Pallas, 1771)]. Holarctic genus. Parasitoids of digger wasps in the tribe Bembicini (Crabronidae). Number of species: World – 17, Palaearctic – 6, Russia – 3.

Parnopes glasunowi Semenov, 1901. Russia: **EP** (S). – Central Asia.

Parnopes grandior (Pallas, 1771) [*Chrysis*] (*Parnopes carnea*: Eversmann, 1858). Parasitoid of *Bembix rostrata* (Linnaeus) (Crabronidae). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (NS), **ES**. – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Caucasus, Central Asia.

Parnopes popovii Eversmann, 1857 (*Parnopes popovi* (!): Bischoff, 1913). Russia: **EP** (C), **UR**, **ES** (KS, TU, KR, IR, BR, ZB), **FE** (AM, PR). – Mongolia, China (NE, NC), Korean Peninsula.

Species erroneously reported for Russia and to be excluded from Russian fauna

The following records were originally described in ex Soviet countries (Kazakhstan, Uzbekistan, etc.), and later reported as “southern Russia” and “Russia” and to be excluded from the Russian fauna, till precise records and identifications are available. We also include species considered erroneously or doubtfully identified.

Cleptes afer Lucas, 1849. Northern African species (Linsenmaier, 1999). Distributional data from Crimea are datable and should be related to *Cl. ignitus* other species subsequently described in the *nitidulus* group.

Cleptes mocsaryi Semenov, 1891. Currently the species is known only on specimens from Montenegro (type locality) and Greece (Arens, 2014).

Hedychridium cupratum (Dahlbom, 1854). Endemic species which is living only on the Alps (Austria, France, Germany, Italy, Switzerland) (Rosa et al., 2017d).

Hedychridium ibericum Linsenmaier, 1959. Endemic of the Iberian peninsula (Mingo, 1994). The record is related to another species in the *H. ardens* species-group.

Hedychridium lampadum Linsenmaier, 1959. It is an unnecessary replacement name for *H. lampas*

(Christ, 1790) (Kimsey, Bohart, 1991). *H. lampadum* Linsenmaier includes females of different species (Rosa, 2006; Arens, 2010).

Hedychridium maculiventre Linsenmaier, 1959. It could be referable to *H. palestinense* Balthasar, 1953 (Arens, 2010) or other species in the *H. roseum* species-group with metallic reflections on the second sternite.

Hedychrum coelestinum Spinola, 1838. African species, also known from Saudi Arabia in the Palaearctic (Linsenmaier, 1999). The record from Russia is very likely a misidentification by Kirchner (1867).

Hedychrum sinicum Semenov, 1967. Described from Sichuan (China) and misidentified by Vinokurov (2006).

Hedychrum gerstaeckeriformes (nom. nudum). Kilimnik (1993) labeled the holotype in ZIN as *Hedychrum gerstaeckeriformes*, but later described this species as *H. tobiasi*. Vinokurov (2006, 2007, 2009, 2013) reported both *H. gerstaeckeriformes* and *H. tobiasi*, therefore one of the two identification is related to an unknown species.

Holopyga gloriosa (Fabricius, 1793) This name has been used for a long time, although mistakenly, till today; in particular many European and Russian species have been considered as varieties of *H. gloriosa*. Previous identifications of Russian chrysidids and identified as *H. gloriosa* must be referred to different species, in particular *H. inflammata*, *H. lucida*, *H. chrysonota* and females of *H. jurinei* and *H. ignicollis*. The name *Chrysis gloriosa* Fabricius, 1793 was suppressed by ICZN (1998, Opinion 1906).

Holopyga pulawskii Linsenmaier, 1968. This species described from Turkmenistan: Aşgabat, locality given as southern Russia by Kimsey and Bohart (1991).

Omalus imbecillus (Mocsáry, 1889). Citations of this species from Russia are related to specimens collected in Turkmenistan (Strumia, 2008).

Pseudomalus auratus virescens (Mocsáry, 1889). Móczár (1964) designated the lectotype and synonymised *P. auratus virescens* with *P. auratus* (Linnaeus). The type series includes specimens belonging to different species: *Pseudomalus auratus* (Linnaeus, 1758), *Omalus biaccinctus* du Buysson, 1893 and *Pseudomalus pusillus* (Fabricius, 1804).

Chrysis abeillei Gribodo, 1879. Balthasar's (1953) record of this species from Sarepta is based on Trautmann's (1927) wrong interpretation of *Chrysis abeillei*. The species is known only for Syria, so far.

- Chrysis altaica** Mocsáry, 1912. The holotype of this species originates from Kazakhstan: Semipalatinsk.
- Chrysis angustula gracilis** Schenck, 1856. Niehuis (2000), after type examination, synonymised *Chrysis gracilis* Schenck with *C. angustula* Schenck. Vinokurov (2010) listed both *C. angustula* and *C. angustula gracilis* for the same localities and his identification is possibly referable to *C. leptomandibularis* Niehuis, 2000 or *C. corusca* Valkeila, 1971.
- Chrysis aurotecta** Abeille de Perrin, 1878. It is an endemic species of Corsica and Sardinia which was misidentified by Vinokurov (2006).
- Chrysis bidentata** Linnaeus, 1767. It is a synonym of *Ch. viridula* Linnaeus, 1761. *Ch. bidentata* sensu Linsenmaier is a misidentification of *C. consanguinea* Mocsáry, 1889 (Linsenmaier, 1997). Specimens erroneously identified as *C. bidentata* usually belong to different species within the *Ch. viridula* species-group.
- Chrysis bihamata** Spinola, 1838. The record from Russia (Linsenmaier, 1969) is in error and referable to other species in the *C. bihamata* group.
- Chrysis distincta exigua** Mocsáry, 1889. The record from southern Russia (Linsenmaier, 1959) is related to Western Asian countries.
- Chrysis distinguenda** Spinola, 1838. It is a *nomen dubium* cited by Eversmann (1858).
- Chrysis gribodoi** Abeille de Perrin, 1877. The identification by Bischoff (1910) is doubtful and related to other species later described in the *Ch. succincta* species-group.
- Chrysis grohmanni grohmanni** Dahlbom, 1854. The distribution of this species is limited to western Mediterranean countries. Citations from Southern Russia, Middle East and central Asia are referable to other species or subspecies within the *Ch. succincta* species-group.
- Chrysis imperatrix** du Buysson, 1887. Dalla Torre (1892) reported "Russia" as type locality for *Chrysis imperatrix*, but the species was described from Turkmenistan and the species is not yet recorded for Russia.
- Chrysis ignita bischoffi** Linsenmaier, 1959. We examined some specimens identified by Vinokurov (2006) as *C. ignita bischoffi* who belong to different species and different subgroups within the *C. ignita* species-group, all with darkened colouration of metasoma.
- Chrysis ignita melaensis** Linsenmaier, 1968. It is an endemic subspecies restricted to the Corsica and Sardinia (Linsenmaier, 1987). The specimens examined (Vinokurov, 2010) belong to different taxa with darkened colouration of the metasoma.
- Chrysis mauritanica** Tratumann, 1927. This species is known only for NW Africa: Tunisia and Morocco (Linsenmaier, 1959, 1999; Kimsey, Bohart, 1991). Vinokurov's (2006, 2009) records are referable to other species in the *Ch. leachii* species-group.
- Chrysis mediata berberiana** Linsenmaier, 1959. This is a NW African species known from Algeria, Morocco and Tunisia (Linsenmaier, 1959, 1999). The identification (Vinokurov, 2010) is referable to other species in the *Ch. ignita* species-group.
- Chrysis pseudoignita** Linsenmaier, 1987. Species endemic of the Canary islands (Palma, Tenerife) and possibly conspecific with *C. magnidens* Pérez, 1895 also endemic of the Canary Islands. Vinokurov's identifications (2010) are referable to different species.
- Chrysis rutilans rigiana** Linsenmaier, 1951. It was found only in a small Swiss Valley (Wallis, Mt. Rigi) so far, and specimens from North Caucasus (Vinokurov, 2006) are related to other species in the *Ch. splendidula* species-group.
- Chrysis splendidula decora** Mocsáry, 1887. It is the replacement name for *Ch. superba* Radoszkowski, also named *Ch. rutilans mesasiatica* or *Ch. insperata mesasiatica*. It is a small and slender species, not related to *Ch. splendidula*. Vinokurov's (2004) identification is possibly related to a colour variation of *Ch. splendidula*.
- Chrysuria dichropsis** (du Buysson, 1894). Species known from Palestine and Syria. The record of this species from North Caucasus (Vinokurov, 2012) is referable to other species in the *Chrysuria dichroa* species-group.
- Chrysuria fulminatrix** (du Buysson, 1888). This species is known only on the holotype, collected in Algeria. The record from North Caucasus (Vinokurov, 2012) is referable to other species in the *Chrysuria dichroa* species-group.
- Chrysuria interdichroa** (Linsenmaier, 1959). This species is known only from specimens collected in Palestina, so far. The record of this species from North Caucasus (Vinokurov, 2012) is referable to other species in the *Chrysuria dichroa* species-group.
- Chrysuria prodichroa** (Linsenmaier, 1959). This is a synonym of *Chrysuria isabellae* (Trautmann, 1926) (*C. radians* species-group). Vinokurov's (2012) record is related to a species in the *C. dichroa* species-group.

Euchroeus orientis Semenov, 1910. The species described from Xinjiang (West China) and its record from East Russia (Linsenmaier, 1968) is erroneous.

Euchroeus purpuratus consularis du Buysson, 1896. This subspecies is known only for NW Africa:

Algeria, Morocco and Tunisia (Linsenmaier, 1999). Records from southern Russia (Trautmann, 1927) are doubtful and related to other species later described by Semenov-Tian-Shanskij.

SUPERFAMILY SCOLIOIDEA

61. FAMILY SAPYGIDAE

A.S. LELEJ AND N.V. KURZENKO

Small and medial size wasps. Their larvae are cleptoparasites in the cells of megachilid bees (Megachilidae: *Ashmeadiella* Cockerell, *Osmia* Panzer, *Heriades* Spinola, *Hoplitis* Klug, *Chelostoma* Latreille, *Dianthidium* Cockerell), apid bees (Apidae: *Anthophora* Latreille, *Xylocopa* Latreille), or colletid bees (Colletidae: *Hylaeus* Fabricius). Nearctic *Fedtschenkia anthracina* (Ashmead) is the parasitoid of *Pterocheilus trichogaster* Bohart (Vespidae: Eumeninae). On eclosion from its egg the first instar sapygid larva destroys and consumes the egg of the host; later instars consume the food supplied in the cells, some Nearctic species are ectoparasitoids on host larvae. Includes two recent subfamilies: Fedtschenkiinae (1 genus, 5 species from arid area of Central Asia and North America) and Sapyginae (11 genera, 66 species, distributed worldwide, except Australia).

Number of taxa: World – 12 genera, 66 species, Palaearctic – 6/31, Russia – 5/9.

R e f e r e n c e s. Dalla Torre, 1897; Gussakovskij, 1932; Sugihara, Kim, 1936; Yasumatsu, Sugihara, 1938; Yasumatsu, 1939; Pate, 1947a,b; Tobias, 1965b, 1978; Guiglia, 1969, 1971; Krombein, 1979; Kurzenko, 1986, 1995, 1996, 2004, 2009; Kurzenko, Gusenleitner, 1994; Kurzenko et al., 1995; Matsumoto et al., 2007; Kurzenko, 2012.

Subfamily SAPYGINAE

MONOSAPYGA Pic, 1920. Type species *Sapyga* (*Monosapyga*) *theresae* Pic, 1920. Number of species: World – 2, Palaearctic – 2, Russia – 1.

Monosapyga clavicornis (Linnaeus, 1758) [Apis] (*Scolia prisma* Fabricius, 1787; *Masaris crabroniformis* Panzer, 1797; *Sapyga theresae* Pic, 1920; *S. triinterrupta* Pic, 1920; *S. ininterrupta* Pic, 1920). Cleptoparasite of bees *Chelostoma florissomme* (Linnaeus) and *Osmia* Panzer (Megachilidae). Russia: **EP** (C, CR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Armenia, Azerbaijan, Turkey.

POLOCHRIDIUM Gussakovskij, 1932. Type species *Polochridium eoum* Gussakovskij, 1932. Monotypic genus.

Polochridium eoum Gussakovskij, 1932 (*P. koreanum* Sugihara et Kim, 1936). Russia: **FE** (PR). – China (NC), Korean Peninsula.

POLOCHRUM Spinola, 1805 (*Dimorpha* Panzer, 1806; *Aclastocera* Foerster, 1855). Type species *Polochrum repandum* Spinola, 1805. Number of species: World – 3, Palaearctic – 2, Russia – 1.

Polochrum repandum Spinola, 1805 (*Aclastocera friwaldskii* Förster, 1855). Cleptoparasite of *Xylocopa violacea* Linnaeus (Apidae). Russia: **EP** (CR). – Europe (WE, SE, EE), Caucasus, Azerbaijan, Turkey.

SAPYGA Latreille, 1796 (*Hellus* Fabricius, 1804). Type species *Scolia quinquepunctata* Fabricius, 1781. The genus includes four subgenera: *Arthrosapyga* Pic, 1920; *Polosapyga* Kurzenko, 1994; *Rectosapyga* Kurzenko, 1986, and *Sapyga* Latreille, 1796. Number of species: World – 28, Palaearctic – 17, Russia – 5.

Sapyga (Sapyga) caucasica schevyrevi Morawitz, 1889. Russia: **EP** (NC). – Caucasus, Turkey, Iran.

Sapyga (Sapyga) coma Yasumatsu et Sugihara, 1938. Cleptoparasite of *Osmia pedicornis* Cockerell and *O. cornifrons* Radoszkowski (Megachilidae). Russia: **FE** (PR). – China (CC), Korean Peninsula, Japan (Hon).

Sapyga (Sapyga) morawitzi Turner, 1911 (*S. gussakovskii* Kurzenko, 1986). Russia: **South Russia** (Gusenleitner, 2013c). – Europe (SE), Caucasus, Turkey, Iran.

Sapyga (Sapyga) quinquepunctata (Fabricius, 1781) [*Scolia*] (*Scolia quadriguttata* Fabricius, 1781; *Sphex tricolor* Schrank, 1781; *Sirex pacca* Fabricius, 1787; *Scolia sexguttata* Fabricius, 1793; *S. octoguttata* Fabricius, 1793; *Sapyga punctata* Klug, 1803; *Hellus sexpunctatus* Fabricius, 1804; *H. quadriguttatus* Fabricius, 1804; *Sapyga punctum* Lamarck, 1817; *S. varia* Lepeletier et Audinet-Serville, 1825; *S. decipiens* Lepeletier et Audinet-Serville, 1825; *S. quinquepunctata* var. *arvenica* Pic, 1925). Cleptoparasite of *Chalicodoma* Latreille, *Osmia* Panzer, *Heriades* Spinola, *Megachile* Latreille (Megachilidae). Russia: **EP** (C, S, CR). – Europe (WE, SE, NE, EE), N Africa, Caucasus, Turkey.

Sapyga (Sapyga) similis (Fabricius, 1793) [*Sirex*] (*Sapyga variegata* Dahlbom, 1844; *S. exornata* Gerstäcker, 1861; *S. pedestris* Gerstäcker, 1861; *S. rufipes* A. Costa, 1864). Cleptoparasite of *Osmia* Panzer, *Chelostoma* Latreille (Megachilidae). Russia:

EP (N, NW, C), **WS** (TK), **ES** (IR, BR, YA), **FE** (AM, KH, PR, SA, MG). – Europe (WE, NE, SE, EE). Kazakhstan, Mongolia, China (NC).

SAPYGINA A.Costa, 1887. Type species *Sapyga decemguttata* Jurine, 1807. The genus includes two subgenera: *Sapygina* Costa, 1887 and *Sapygella* Benoit, 1950. Number of species: World – 13, Palaeartic – 4, Russia – 1.

Sapygina decemguttata (Jurine, 1807) [Sapyga] (*Meria millefolii* Lepeleter et Audinet-Serville, 1825; *Sapyga chelostomae* Robineau-Desvoidy, 1836; *Myzine panzeri* Guérin-Méneville, 1837; *Polochrum cylindricum* Schenk, 1857; *Sapyga nigra* Tournier, 1889). Russia: **EP** (CR). – Europe (WE, SE, EE), Turkey, Israel.

62. FAMILY SCOLIIDAE

M.V. MOKROUSOV AND A.S. LELEJ

Large, robust, hairy wasps, mostly 20–30 mm, usually black with a yellow band on the metasoma. Larvae of these wasps are ectoparasitoids of the larvae of scarabaeid beetles (Scarabaeoidea). The adults are commonly found on flowers. The females burrow into the ground to locate a host and when they find the grub, they sting it and paralyze it, then burrow deeper into the soil and construct a cell around the grub. Number of taxa: World – 43(143) genera, 560 species, Palaearctic – 11/100, Russia – 5/20.

R e f e r e n c e s. Pallas, 1771; Eversmann, 1846, 1849; Erichson, 1849; Bischoff, Bradley, 1929; Steinberg, 1962; Bradley, 1972; Hamon, 1993; Argaman, 1996; Osten, 1999, 2005; Terayama, Nagase, 2016; Lelej, Mokrousov, 2017.

Subfamily SCOLIINAE

Tribe CAMPSOMERINI

COLPA Dufour, 1841 (*Trielis* de Saussure, 1863; *Campsoscolia* Betrem, 1933). Type species *Scolia interrupta* Fabricius, 1781 (= *Vespa galbula* Pallas, 1771). The genus includes four subgenera: *Colpa* Dufour, 1841; *Carbonelis* Betrem, 1972; *Crioscolia* Bradley, 1951; *Heterelis* Costa, 1887. Number of species: World – 31, Palaearctic – 12, Russia – 4.

Colpa (Colpa) galbula (Pallas, 1771) [Vespa] (*Scolia sexmaculata* Fabricius, 1781; *S. interrupta* Fabricius, 1781; *Sphex insubrica* Scopoli, 1786; *Scolia sareptana* Eversmann, 1849). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Algeria, Georgia, Azerbaijan, Cyprus, Turkey, W Kazakhstan.

Colpa (Colpa) klugii (Vander Linden, 1827) [Scolia]. Russia: **EP** (CR). – Europe (SE, EE), Turkey, Iran.

Colpa (Crioscolia) tartara (de Saussure, 1880) [Elis] (*Scolia mongolica* F. Morawitz, 1889). Russia: **EP** (NC). – Armenia, Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, China (NW).

Colpa (Heterelis) quinqueincta (Fabricius, 1793) [Scolia] (*Scolia rufiventris* Fischer von Waldheim, 1843, nom. praecox., nec Fabricius, 1804; *S. grisea* Eversmann, 1849; *S. vetula* Eversmann, 1849). Russia: **EP** (C, S, NC, CR), **UR**, **WS** (AL). – Europe (WE, SE, EE), N Africa, Georgia, Azerbaijan,

Turkey, Israel, Iraq, Iran, W Pakistan, Central Asia, Kazakhstan.

MEGACAMPSOMERIS Betrem, 1928 (*Fiharbuxa* Argaman, 1996). Type species *Tiphia grossa* Fabricius, 1804. Number of species: World – 40, Palaearctic – 6, Russia – 2.

Megacampsomeris grossa matsumurai (Betrem, 1941) [Campsomeris]. Russia: **FE** (PR). – Japan (Hon).

Megacampsomeris prismatica (Smith, 1855) [Scolia] (*Elis iris* Magretti, 1892; *Scolia simillima* Tullgren, 1904; *M. uchidai* Betrem, 1941). Russia: **FE** (PR). – China (NE, NC, CC, SW, SE), Korean Peninsula, Japan (Hon), SE Asia, India.

Tribe SCOLIINI

CARINOSCOLIA Betrem, 1927 (*Nokbibula* Argaman, 1996). Type species *Scolia opalina* Smith, 1857. Number of species: World – 8, Palaearctic – 2, Russia – 1.

Carinoscolia vittifrons (Sichel in de Saussure et Sichel, 1864) [Scolia] (*S. fascinata* Smith, 1873; *Discolia signatifrons* Pérez, 1905; *D. fasciata* Matsamura, 1917). Russia: **FE** (AM, KH, PR). – China (NE, SW, SE), Korean Peninsula, Japan (Hon, Kyu, Yakushima, Ryu).

MEGASCOLIA Betrem, 1928. Type species *Scolia procer* Illiger, 1802. The genus includes two subgenera: *Megascolia* Betrem, 1928 and *Regiscolia* Betrem et Bradley, 1964. Number of species: World – 15, Palaearctic – 3, Russia – 1.

Megascolia (Regiscolia) maculata (Drury, 1773) [Sphex] (*Scolia flavifrons* Fabricius, 1775; *S. haemorrhoidalis* Fabricius, 1787). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Abkhazia, Caucasus, Cyprus, Turkey, Syria, Israel, Iran, Turkmenistan, W Kazakhstan.

SCOLIA Fabricius, 1775 (*Lisoca* A. Costa, 1858; *Scolioides* Guiglia et Capra, 1934; *Kokarevta* Argaman, 1996; *Buzatlana* Argaman, 1996; *Orlovinga* Argaman, 1996; *Lisoca* Argaman, 1996; *Pardesiya* Argaman, 1996). Type species *Scolia quadripunctata* Fabricius, 1775 (= *Vespa sexmaculata* O.F. Müller, 1766). The genus includes two subgenera: *Discolia* de Saussure, 1863 and *Scolia* Fabricius, 1775. Number of species: World – more than 200, Palaearctic – 50, Russia – 12.

- Scolia (Discolia) hirta** (Schrank, 1781) [Apis] (*Discolia alutus* Nagy, 1967; *D. mongolina* Nagy, 1970). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (TM, AL), **ES** (KS, TU, KR, IR, BR, ZB). – Europe (WE, NE, SE, EE), Abkhazia, Caucasus, Cyprus, Turkey, Israel, Iran, Turkmenistan, Uzbekistan, Kazakhstan, Mongolia.
- Scolia (Discolia) histrionica** (Fabricius, 1787) [Tiphia] (*S. loebischii* Dalla Torre, 1897; *S. palaeanarctica* Gussakovskij, 1932; *S. decorata* auct.). Russia: **FE** (AM, KH, PR, KU). – Mongolia, China (NE, NC, CC, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Yakushima), SE Asia.
- Scolia (Discolia) oculata** (Matsumura, 1911) [Discolia] (*S. pseudounifasciata* Betrem, 1928). Russia: **FE** (KH, PR). – China (NC, CC, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Tsushima, Yakushima).
- Scolia (Discolia) schrenckii** Eversmann, 1846. Russia: **WS** (TM, AL), **ES** (IR). – Kazakhstan, Uzbekistan, Kyrgyzstan, Mongolia, China (NW).
- Scolia (Discolia) sinensis** de Saussure in de Saussure et Sichel, 1864 (*S. indica* Uchida, 1925). Russia: **FE** (KH, PR). – Pakistan, Central Asia, SE Kazakhstan, China (NE, NC, CC, SW, WP, SE), Korean Peninsula, Japan (Hon), India (Jammu and Kashmir).
- Scolia (Scolia) fallax fallax** Eversmann, 1849, nom. protectum (*Vespa tricolor* Pallas, 1771, nom. oblitum; *S. moreana* Muche, 1962; *S. galbula* auct.). Russia: **EP** (E, S, CR). – Europe (SE, EE), Azerbaijan, Kazakhstan.
- Scolia (Scolia) fallax syriacola** Betrem, 1935. Russia: **EP** (NC). – Georgia, Azerbaijan, Turkey, Syria, Lebanon, Israel, Iran, Turkmenistan.
- Scolia (Scolia) fuciformis** (Scopoli, 1786) [Sphex] (*Scolia insubrica* Rossi, 1790, nom. praeocc., nec *Sphex insubrica* Scopoli, 1786; *Scolia amabilis* Eversmann, 1849). Russia: **EP** (C, E, S, NC, CR), **ES** (IR). – Europe (WE, SE, EE), Azerbaijan, Cyprus, Turkey, Israel, Iran, Kazakhstan.
- Scolia (Scolia) garrula** Erichson in Ménétrés, 1849 (*S. laeta* Eversmann, 1849; *S. menetriesi* de Saussure, 1859). Russia: **EP** (S). – Central Asia, Kazakhstan.
- Scolia (Scolia) gussakovskii** Steinberg, 1953. Russia: **EP** (S). – Europe (EE), Turkmenistan, Uzbekistan, Kazakhstan.
- Scolia (Scolia) potanini** F. Morawitz, 1889. Russia: **ES** (BR), **FE** (AM). – Mongolia, China (NE, NC).
- Scolia (Scolia) quadricincta quadricincta** (Scopoli, 1787) [Sphex] (*Scolia dejeani* Vander Linden, 1829; *S. flaviceps* Eversmann, 1846; *S. galbula* auct.). Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), Georgia, Azerbaijan, Kyrgyzstan, Kazakhstan, W Mongolia.
- Scolia (Scolia) quadricincta mangichlakensis** Radoszkowski, 1879 (*S. flaviceps flaviceps*: Steinberg, 1962; *S. flaviceps mangichlakensis*: Steinberg, 1962). Russia: **EP** (NC). – Caucasus, Cyprus, Turkey, Israel, Iran, Turkmenistan, Tajikistan, Uzbekistan, S Kazakhstan.
- Scolia (Scolia) sexmaculata** (O.F. Müller, 1766) [Vespa] (*S. quadripunctata* Fabricius, 1775). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (TK), **ES** (KS, IR). – Europe (WE, SE, EE), N Africa, Abkhazia, Caucasus, Cyprus, Turkey, Syria, Lebanon, Israel, Iran, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan.

63. FAMILY TIPHIIDAE

M.V. MOKROUSOV AND A.S. LELEJ

Ectoparasitoids of beetles larva (Coleoptera). Distributed worldwide, mainly in arid, tropical and subtropical regions. Number of taxa: Word – 7 subfamilies, 120 genera, 2000 species; Palaeartic – 4/17/100; Russia – 3/6/28.

References. Tobias, 1978; Kimsey, 1991; Argaman, 1992, 1994; Agnoli, 2005; Boni Bartalucci, 2010, 2016; Terayama, 2016; Mokrousov, 2018.

Subfamily METHOCHINAE

Ectoparasitoids of subterranean tiger beetles larvae (Cicindelidae). The subfamily is distributed worldwide except Australian region. Number of taxa: Word – 2 genera, 75 species; Palaeartic – 1/10, Russia – 1/2.

METHOCHA Latreille, 1804 (*Methoca* Latreille, 1805; *Metocha* auct.; *Metoca* auct.). Type species *Mutilla articulata* Latreille, 1792. The genus includes three subgenera: *Methocha* Latreille, 1804, *Dryinopsis* Brues, 1910, and *Andreus* Ashmead, 1903. Number of species: World – 66, Palaeartic – 5, Russia – 2.

Methocha (Dryinopsis) picipes (F. Morawitz, 1890) [Methoca]. Russia: **EP** (C, NC), **ES** (IR, BR, ZB), **FE** (AM, KH, PR). – Europe (EE), Turkmenistan, Tajikistan, Uzbekistan.

Methocha (Methocha) articulata (Latreille, 1792) [Mutilla] (*Mutilla formicaria* Latreille, 1792; *Methoca ichneumonides* Latreille, 1805; *Methoca mutillaria* Latreille, 1806; *Tengyra sanvitali* Latreille, 1809; *Gonatopus mutillarius* Nees, 1834; *Spinolia italica* Costa, 1858; *Methoca ichneumonoides* auct.). Russia: **EP** (NW, C, E, S, NC), **ES** (IR, BR, ZB), **FE** (AM, PR, SA). – Europe (WE, NE, SE, EE), N Africa, Turkey, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.

Subfamily MYZININAE

Ectoparasitoids of subterranean beetle larvae of Scarabaeidae, Cerambycidae and Tenebrionidae. The subfamily is distributed worldwide. Number of taxa: Word – 24 genera; Palaeartic – 10; Russia – 3 genera, 12 species.

MERIA Illiger, 1807 (*Arapatka* Argaman, 1994; *Fukpokta* Argaman, 1994; *Tilkuya* Argaman, 1994; *Upaterka* Argaman, 1994). Type species *Tiphia tripunctata* Rossi, 1790. Parasitoids of tenebrionid larvae (Tenebrionidae). Widespread in the Palaeartic and Afrotropical regions. Number of species: World – 72, Palaeartic – 35, Russia – 6.

Meria askhabadensis Radoszkowski, 1886 (*Plesia baluchistanensis* Cameron, 1907). Russia: **EP** (S). – Armenia, Azerbaijan, Turkey, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NW).

Meria aurantiaca (Guérin-Méneville, 1837) [Myzine] (*Meria soikai* Guiglia, 1966; *M. thoracica*: Tobias, 1978). Russia: **EP** (S, NC). UR. – Europe (SE), Armenia, Azerbaijan, Turkey, Jordan, Iran, Turkmenistan, Kazakhstan.

Meria dorsalis (Fabricius, 1804) [Bethylus] (*Myzine polita* Tournier, 1889; *Meria cylindrica* auct.; *M. lineata* auct.). Russia: **EP** (E, S, NC, CR), **UR**, **ES** (TU, IR, BR, ZB). – Europe (WE, SE, EE), Armenia, Turkey, Kazakhstan, Mongolia.

Meria geniculata (Brullé, 1832) [Myzine] (*Pseudomeria graeca* S. Saunders, 1850; *P. swanetiae* Radoszkowski, 1861; *Myzine nigriceps* Mocsáry, 1883; *M. graeca* Mocsáry, 1883; *Tiphia picta* Schulthess, 1893; *Meria nigrigena* Guiglia, 1966). Russia: **EP** (S). – Europe (SE), Armenia, Azerbaijan, Turkey, Kazakhstan.

Meria nitidula Klug, 1810. Russia: **EP** (C, S, NC), **UR**, **ES** (BR). – Europe (WE, SE, EE), Turkey, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan.

Meria quadrimaculata Cameron, 1902 (*M. discussa* Guiglia, 1966; *M. investiganda* Guiglia, 1973; *M. perfecta* Guiglia, 1975; *M. similis* Guiglia, 1975). Russia: **EP** (S). – Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NW).

MYZINELLA Guiglia, 1959 (*Illoswia* Argaman, 1994). Type species *Myzinella patrizii* Guiglia, 1959. Hosts unknown. Palaeartic and Afrotropical regions. Number of species: World – 10; Palaeartic – 7; Russia – 1.

Myzinella flavicollis (F. Morawitz, 1896) [Meria]. Russia: **EP** (S). – Afghanistan, Turkmenistan, Uzbekistan, Kazakhstan, Mongolia.

POECILOTIPHIA Cameron, 1902 (*Dermasothos* Menozzi, 1940; *Fongiba* Argaman, 1994; *Hahiya* Argaman, 1994; *Ivazuga* Argaman, 1994; *Jurja* Argaman, 1994; *Nurmiya* Argaman, 1994). Type species

Poecilotiphia albomaculata Cameron, 1902. Palaearctic and Noth of Afrotropical region. Number of species: World – 48, Palaearctic – 39, Russia – 4.

Poecilotiphia brevicauda brevicauda (F. Morawitz, 1890) [Meria]. Russia: **EP** (S). – Kazakhstan.

Poecilotiphia brevicauda kaszabi (Guiglia, 1965) [Meria]. Russia: **WS** (AL), **ES** (TU, ZB). – Mongolia, China (NC).

Poecilotiphia caucasica Boni Bartalucci, 2016. Russia: **EP** (S, NC). – Azerbaijan, Turkey.

Poecilotiphia ciliata (F. Morawitz, 1894) [Meria]. Russia: **EP** (S). – Iran, Uzbekistan, Kazakhstan.

Poecilotiphia rugosopunctata (Tournier, 1889) [Myzine]. Russia: **EP** (S). – Kazakhstan.

Subfamily TIPHIINAE

Ectoparasitoids of subterranean scarab beetle larvae (Scarabaeidae). Distributed worldwide. Number of taxa: Word – 10 genera; Palaearctic – 5; Russia – 2 genera, 11 species.

PSEUDOTIPHIA Ashmead, 1903 (*Icronatha* Nagy, 1967; *Ludita* Nagy, 1967). Type species *Tiphia brevipennis* Lucas, 1846. Palaearctic and Afrotropical regions. Number of species: World – 20, Palaearctic – 16, Russia – 4.

Pseudotiphia beckeri (Tournier, 1889) [Tiphia]. Russia: **EP** (S).

Pseudotiphia caucasica (Mocsáry, 1883) [Tiphia]. Russia: **EP** (NC). – Europe (SE, EE), N Africa, Georgia, Armenia, Azerbaijan, Turkey, Syria, Jordan, Lebanon, Iran.

Pseudotiphia fulvipennis (F. Smith, 1879) [Tiphia]. Russia: **EP** (E, S, NC, CR). – Europe (SE, EE), Azerbaijan, Turkey.

Pseudotiphia villosa (Fabricius, 1793) [Tiphia] (*Tiphia major* Mocsáry, 1883; *T. olcese* Tournier, 1889; *T. rudepunctata* Tournier, 1901; *T. morio* auct.). Russia: **EP** (C, E, S, NC, CR). – Europe (WE, SE, EE), N Africa, Turkey, Iran, Kazakhstan.

TIPHIA Fabricius, 1775 (*Serpapinta* Argaman, 1992; *Sasmarila* Argaman, 1992). Type species *Tiphia femorata* Fabricius, 1775. Distributed worldwide. The genus includes four subgenera: *Tiphia* Fabricius, 1775, *Sierocolpa* Nagy, 1967, *Jaynesia* Allen, 1969, *Punctotiphia* Tsuneki, 1986. Number of species: World – more than 700 species, Russia – 11.

Tiphia (Sierocolpa) minuta Vander Linden, 1827. Russia: **EP** (N, NW, C, E, S, NC), **WS** (AL), **ES** (IR), **FE** (PR). – Europe (SE, EE), Armenia, Azerbaijan, Turkey, Iran, Tajikistan, Uzbekistan, Kyrgyzstan, Mongolia.

Tiphia (Tiphia) agilis Smith, 1873 (*T. asericcae* Allen et Jaynes, 1930). Russia: **FE** (AM, KH, PR). – China (NE, NC, CC, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu), N America (introduced).

Tiphia (Tiphia) femorata Fabricius, 1775 (*Sphex palmipes* Schrank, 1781; *Bethylus pilipennis* Klug, 1808; *B. ater* Klug, 1810; *S. nigripes* Costa, 1858; *S. rufipes* Costa, 1858; *Tiphia infima* Tournier, 1889; *T. lativentris* Tournier, 1889; *T. rugosa* Tournier, 1889; *T. tournieri* Dalla Torre, 1891). Russia: **EP**, **UR**, **ES** (BR, ZB), **FE** (AM). – Europe (WE, NE, SE, EE), N Africa, Turkey, Iran, Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia, N America (introduced).

Tiphia (Tiphia) ordinaria Smith, 1873 (*T. bicarinata* Cameron, 1902; *T. chosensis* Allen, 1969). Russia: **FE** (PR). – China (SE), Korean Peninsula, Japan (Hok, Hon, Kyu), India.

Tiphia (Tiphia) ovidorsalis Allen et Jaynes, 1930. Russia: **FE** (AM, PR). – China (NC), Korean Peninsula.

Tiphia (Tiphia) ovinigris Allen et Jaynes, 1930. Russia: **FE** (AM, KH, PR). – Korean Peninsula.

Tiphia (Tiphia) popilliavora Rohwer, 1924. Russia: **FE** (AM, PR). – China (NE, NC, CC, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu), N America (introduced).

Tiphia (Tiphia) sareptana Tournier, 1889. Russia: **EP** (C, E, S, NC, CR).

Tiphia (Tiphia) singularis Allen et Jaynes, 1930. Russia: **FE** (PR). – China (CC, SE).

Tiphia (Tiphia) unicolor Lepeletier de Saint Fargeau, 1845 (*Bethylus ruficornis* Klug, 1810; *Tiphia polita* Costa, 1858). Russia: **EP** (C, S, NC), **WS** (AL). – Europe (WE, SE, EE), Turkey.

Tiphia (Tiphia) vernalis Rohwer, 1924. Russia: **FE** (AM, PR). – China (CC, SE), Korean Peninsula, Japan (Hon, Kyu), N America (introduced).

Doubtful species

Meria sexpunctata Eversmann, 1849 “Cepi in promontoriis Uralensibus”.

64. FAMILY SIEROLOMORPHIDAE**A.S. LELEJ AND M.V. MOKROUSOV**

A small family which is known from three genera: *Sierolomorpha* Ashmead, 1903, *Proscleroderma* Kieffer, 1905 and fossil *Loreisomorpha* Rasnitsyn, 2000. *Sierolomorpha* comprises seven described species in North America, one in Hawaii and three in the Old World (Uzbekistan, Mongolia and Russian Far East). *Proscleroderma* comprises one subapterous species from Syria. The fossil *Loreisomorpha nascimbenei* Rasnitsyn, 2000 was described from Upper Cretaceous amber of New Jersey. Brothers considered Sierolomorphidae to be the sister-group of other vespoidea (Brothers, Carpenter, 1993, Brothers, 1999), while Rasnitsyn (2002) considered Sierolomorphidae to be the sister-group of the fossil Falsiformicidae within the superfamily Scolioidea. The larvae of sierolomorphids are probably ectoparasitoids of other insects, but nothing is known about their biology (Brothers, Finnermore, 1993). Three species of *Sierolomorpha* were recorded from the Old

World (Nagy, 1971; Lelej, Mokrousov, 2015). Sexual dimorphism slight to marked: both sexes usually macropterous but females sometimes brachypterous or apterous; brachypterous and apterous forms with mesosoma similar to that of in macropterous form with pronotum freely articulating, and with mesonotum, metanotum, and propodeum distinct.

Number of taxa: World – 2 genera, 13 species, Palearctic – 2/5, Russia – 1/2.

R e f e r e n c e s. Eversmann, 1849; Nagy, 1971; Argaman, 1990; Brothers, Carpenter, 1993; Brothers, Finnermore, 1993; Gorbatojskij, Lelej, 1998; Brothers, 1999; Rasnitsyn, 2002; Lelej, Mokrousov, 2015.

SIEROLOMORPHA Ashmead, 1903. Type species *Sierola ambigua* Ashmead, 1893. Number of species: World – 12, Palearctic – 4, Russia – 2.

Sierolomorpha abnormis (Eversmann, 1849) [Tiphia]. Russia: **UR, WS** (NS).

Sierolomorpha atropos Nagy, 1971. Russia: **FE** (PR). – Mongolia.

65. FAMILY MUTILLIDAE – VELVET ANTS

A.S. LELEJ

Mutillidae currently include 216 genera and about 4300 described species (Lelej, 2007; Lelej, Brothers, 2008; Aguiar et al., 2013, updated). In the Palaearctic region 525 species in 61 genera and in the Oriental region 640 species in 64 genera are reported (Lelej, 2002, updated; Lelej, 2005a), but the hosts information are known for only about 150 species and are mainly bees and wasps (Brothers, 1989). Because of extreme sexual dimorphism (female apterous, male macropterous, rare apterous), sex associations cannot be made on morphology alone; most species and even many genera are known from one sex only. This has resulted in many taxonomic challenges in trying to make associations, and resulted in many synonyms recognized through matching of males and females. The males is very much larger than the females in some species and may then carry the females before mating, or true phoretic copulation may occur. Most velvet ants are solitary ectoparasitoids of the enclosed immatures (usually larvae or pupae) of other insects: Hymenoptera, mainly aculeate (Brothers et al., 2000), Diptera (Amini et al., 2014), Lepidoptera, Coleoptera (Sergeev, Lelej, 2011), and Blattodea.

Number of taxa: World – 216 genera, about 4300 species, Palaearctic – 61/525, Russia – 20/74.

R e f e r e n c e s. Pallas, 1771, 1773; Nylander, 1847; Baer, 1848; Morawitz A., 1865; Radoszkowski, 1865, 1866; Sichel, Radoszkowski, 1869–1870; Morawitz F., 1891, 1893; André, 1902; Skorikov, 1927, 1935; Chen, 1957; Pulawski, 1963; Invrea, 1964; Tsuneki, 1972; Brorhens, 1975, Lelej, 1978, 1985, 2002, 2005, 2007, 2012b; Petersen, 1988; Suárez, 1988; Brothers, 1989; Lelej, Nemkov, 1997; Brothers et al., 2000; Lelej, Schmid-Egger, 2005; Bogusch, 2006; Pagliano, Strumia, 2007; Lelej, Brothers, 2008; Muskovitz, György, 2011; Sergeev, Lelej, 2011; Aguiar et al., 2013; Amini et al., 2014; Lelej et al., 2014, 2016, 2017; Lelej, Shlyakhtenok, 2015; Humala, Polevoi, 2015.

Subfamily MYRMOSINAE

Tribe KUDAKRUMIINI

Number of taxa: World – 5 genera, 16 species, Palaearctic – 1/4, Russia – 1/2.

PSEUDOMYRMOSA Suárez, 1980. Type species *Myrmosa minuta* Morawitz, 1894. Number of species: World – 5, Palaearctic – 5, Russia – 2.

Pseudomyrmosa gobicola Lelej, 1981. Collected in the nest aggregations of *Hylaeus* spp. (Colletidae) and small species of Crabronidae. Russia: **ES** (TU). – Mongolia.

Pseudomyrmosa minuta (Morawitz, 1894) [*Myrmosa*] (*Mutilla myrmosina* Dalla Torre, 1897). Russia: **EP** (S, NC). – Armenia, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan.

Tribe MYRMOSINI

Number of taxa: World – 7 genera, 40 species, Palaearctic – 6/32, Russia – 4/7.

KROMBEINELLA Pate, 1947 (*Paramyrmosa* Suárez, 1963, nom. praeocc., nec Saussure, 1880). Type species *Hylaeus thoracicus* Fabricius, 1793. Number of species: World – 17, Palaearctic – 17, Russia – 2.

Krombeinella longicollis (Tournier, 1889) [*Myrmosa*]. Russia: **EP** (S, NC, CR). – Europe (SE, EE), Turkey.

Krombeinella wolff (Invrea, 1963) [*Myrmosa*]. Russia: **EP** (CR). – Europe (SE, EE), Georgia, Azerbaijan, Turkey, Kazakhstan.

MYRMOSA Latreille, 1797 (*Ischioceras* Provancher, 1882). Type species *Myrmosa atra* Panzer, 1801. Number of species: World – 6, Palaearctic – 2, Russia – 1.

Myrmosa atra atra Panzer, 1801 (*Mutilla melanocephala* Fabricius, 1793, nom. praeocc., nec Schrank, 1781; *Myrmosa nigra* Latreille, 1809; *M. atra* Lepeletier, 1845, nom. preocc., nec Panzer, 1801; *M. nigra* Lepeletier, 1845, nom. praeocc., nec Latreille, 1809; *M. bicolor* Baer, 1848; *Mutilla melanaria* Blanchard, 1849; *Myrmosa melanocephala* f. *rufomaculata* Hoffer, 1938). Parasitoid of *Crabro peltarius* (Schreber), *Crossocerus palmipes* (L.), *C. wesmaeli* (Vander Linden), *Diodontus tristis* (Vander Linden), *Oxybelus unghumis* (L.), *Lindenius panzeri* (Vander Linden), and *L. albilabris* (F.) (Crabronidae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (KS, TU, KR, YA). – Europe (WE, NE, SE, EE), Turkey, ?Iran, Kyrgyzstan, Kazakhstan.

PARAMYRMOSA Saussure, 1880 (*Morysmula* Suárez, 1963). Type species *Myrmosa (Paramyrmosa)*

radoszkowskyi Saussure, 1880. Number of species: World – 8, Palaearctic – 8, Russia – 2.

Paramyrmosa brunripes (Lepeletier, 1845) [Myrmosa] (*Myrmosa cognata* Costa, 1858). Parasitoid of *Lasioglossum majus* Nylander, *L. pauxillum* Schenck, *L. morio* (F.) (Halictidae), *Crabro peltarius* (Schreber), *Cerceris rybyensis* (L.) (Crabronidae). Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), Armenia, Turkey.

Paramyrmosa pulla (Nylander, 1847) [Myrmosa] (*Myrmosa czerskii* Skorikov, 1929). Russia: **ES** (TU, BR, ZB), **FE** (AM, KH, PR). – Mongolia, China (NE).

TAIMYRMOSA Lelej, 2005. Type species *Myrmosa eos* Lelej, 1981. Number of species: World – 4, Palaearctic – 3, Russia – 2.

Taimyrmosa eos (Lelej, 1981) [Myrmosa]. Russia: **FE** (PR). – Korean Peninsula.

Taimyrmosa mongolica (Suárez, 1974) [Myrmosa] (*M. tsunekii* Haneda, 1979). Russia: **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR, SA). – Mongolia, China (NE), Korean Peninsula, Japan (Hon, Shi).

Subfamily SPHAEROPHTHALMINAE

Number of taxa: World – 63 genera, 1417 species, Palaearctic – 2/4, Russia – 1/1.

Tribe SPHAEROPHTHALMINI

CYSTOMUTILLA André, 1896. Type species *Mutilla ruficeps* Smith, 1855. Number of species: World – 2, Palaearctic – 2, Russia – 1.

Cystomutilla ruficeps (Smith, 1855) [Mutilla] (*M. erythrocephala* Lucas, 1849, nom. praeocc., nec Latreille, 1792; *M. parvula* Kriechbaumer, 1896). Parasitoid of *Ectemnius rubicola* (Dufour et Perris) and *Pemphredon rugifer* (Dahlbom) (Crabronidae). Russia: **EP** (S, CR). – Europe (WE, SE, EE), Algeria, Georgia.

Subfamily DASYLABRINAE

Tribe DASYLABRINI

Number of taxa: World – 8 genera, 324 species, Palaearctic – 4/110, Russia – 1/13.

DASYLABRIS Radoszkowski, 1885 (*Allomutilla* Ashmead, 1899). Type species *Mutilla arenaria* Fabricius, 1787. The genus includes four

subgenera: *Baltilla* Lelej, 1976, *Craspedopyga* Lelej, 1976, *Dasylabris* Radoszkowski, 1885, and *Inbaltilla* Lelej, 1976. Number of species: World – 151, Palaearctic – 63, Russia – 13.

Dasylabris (Baltilla) adversa Skorikov, 1935 (*D. italica* var. *adversa* Skorikov, 1935; *D. kaszabi* Suárez, 1974). Collected in the nest aggregations of *Colletes* spp. and *Hylaeus* spp. (Colletidae). Russia: **EP** (C, E, S, NC), **ES** (TU, BR, ZB). – Europe (EE), Mongolia, China (NO).

Dasylabris (Baltilla) bicolor (Pallas, 1771) [Mutilla] (*M. albeola* Pallas, 1773; *M. caspica* Kolenati, 1846; *M. funeraria* Erichson, 1849; *D. bergi* Skorikov, 1935). Russia: **EP** (S, NC). – Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NW).

Dasylabris (Baltilla) gobicola Skorikov, 1935 (*D. kaszabi funerula* Suárez, 1974). Collected in the nest aggregations of *Colletes* spp. and *Hylaeus* spp. (Colletidae). Russia: **WS** (AL), **ES** (TU). – Mongolia, China (NW, NO).

Dasylabris (Baltilla) kozlovi Skorikov, 1935. Collected in the nest aggregations of *Anthophora* spp. (Apidae). Russia: **ES** (TU). – Mongolia, China (NW, NO, WP).

Dasylabris (Craspedopyga) manderstiernii manderstiernii (Radoszkowski, 1865) [Mutilla] (*D. mauropsis* Skorikov, 1935; *D. mauropsis* var. *canonota* Skorikov, 1935). Russia: **EP** (NC, CR). – Caucasus, Turkey, Syria, Lebanon, Iran, Turkmenistan.

Dasylabris (Dasylabris) intermedia Skorikov, 1935 (*D. rubrosignata ypsilon* Chen, 1957). Russia: **ES** (BR, ZB). – Afghanistan, Mongolia, China (NO, CE, SE), Korean Peninsula.

Dasylabris (Dasylabris) maura maura (Linnaeus, 1758) [Mutilla] (*M. austriaca* Panzer, 1799; *M. rubricans* Lepeletier, 1845; *M. argenteofasciata* Costa, 1859; *M. trisinuosa* Costa, 1886; *D. maura* f. *nigrociliata* Hoffer, 1938). Parasitoid of *Katamenes arbustorum* (Panzer) (Vespidae), *Sphex occitanicus* (Lepeletier et Serville), *Ammophila heydeni* Dahlbom (Sphecidae). Russia: **EP** (CR). – Europe (WE, SE, EE), Caucasus.

Dasylabris (Dasylabris) maura sungora (Pallas, 1773) [Mutilla] (*M. quadrimaculata* Radoszkowski, 1865, nom. praeocc., nec Lucas, 1849; *D. maura nostras* Skorikov, 1935; *D. maura nostras* var. *argentata* Skorikov, 1935; *D. maura nostras* var. *argyrauxa* Skorikov, 1935; *D. maura nostras* var. *consueta* Skorikov, 1935; *D. maura nostras* var. *iberica*

Skorikov, 1935; *D. maura nostras* var. *infuscata* Skorikov, 1935; *D. maura nostras* var. *quinquemaculata* Skorikov, 1935; *D. maura nostras* var. *tricincta* Skorikov, 1935). Russia: **EP** (C, E, S, NC), **UR**, **WS** (AL). – Kyrgyzstan, Kazakhstan, China (NW).

Dasylabris (Dasylabris) maura armeniaca (Kolenati, 1846) [Mutilla] (*D. mlokosewiczii* Radoszkowski, 1885; *D. duplicolor* Skorikov, 1935). Russia: **EP** (NC). – Armenia, Azerbaijan, Turkey, ?Palestine, Iran, Turkmenistan.

Dasylabris (Dasylabris) mongolica (Radoszkowski, 1861) [Mutilla] (*D. exarenaria* Skorikov, 1935; *D. turana* Skorikov, 1935). Russia: **ES** (TU). – Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia, China (NW).

Dasylabris (Dasylabris) siberica (Christ, 1791) [Mutilla] (*M. rubrosignata* Radoszkowski, 1865; *M. maura* var. *quadrimaculata* Sichel et Radoszkowski, 1870, nom. praeocc., nec Lucas, 1848; *M. maura* var. *quadripunctata* Sichel et Radoszkowski, 1870, nom. praeocc., nec Olivier, 1811; *D. siberica* var. *insignata* Skorikov, 1935; *D. siberica* var. *incompleta* Skorikov, 1935). Collected in the nest aggregations of *Colletes* spp. (Colletidae) and *Anthophora* spp. (Apidae). Russia: **WS** (AL), **ES** (KS, TU, KR, BR, ZB), **FE** (AM, PR). – Mongolia, China (NO, CE), Korean Peninsula.

Dasylabris (Inbaltilla) petiolata (Baer, 1848) [Mutilla] (*D. italica* var. *miogramma* Skorikov, 1935). Russia: **EP** (NC, CR). – Europe (EE).

Dasylabris (Inbaltilla) regalis (Fabricius, 1793) [Mutilla] (*M. petiolaris* Radoszkowski, 1865; *M. concolora* Radoszkowski, 1865; *M. unipetiolaris* Radoszkowski, 1866; *D. italica* var. *triangulomaculata* Skorikov, 1935; *D. italica* f. *slovaca* Hoffer, 1938; *D. italica* f. *batai* Hoffer, 1938; *M. lugubris*: Sichel, Radoszkowski, 1870) Russia: **EP** (E, S, NC, CR), **UR**, **WS** (AL). – Europe (WE, SE, EE), Kazakhstan, China (NW).

Subfamily MYRMILLINAE

Number of taxa: World – 23 genera, 238 species, Palaearctic – 10/65, Russia – 1/8.

MYRMILLA Wesmael, 1851 (*Rudia* Costa, 1856). Type species *Mutilla distincta* Lepeletier, 1845 (= *M. calva* Villers, 1789). The genus includes three subgenera: *Eurygnathilla* Skorikov, 1927, *Myrmilla* Wesmael, 1851, and *Pseudomutilla* Costa, 1885.

Parasitoids of *Halictus* spp. (Halictidae). Number of species: World – 55, Palaearctic – 48, Russia – 8.

Myrmilla (Myrmilla) caucasica (Kolenati, 1846) [Mutilla] (*Mutilla corniculata* Sichel et Radoszkowski, 1869, part.; *Myrmilla jasonia* Skorikov, 1927; *M. kiritschenkoi* Skorikov, 1927; *Mutilla erythrocephala*: Radoszkowski, 1865; *M. cornuta*: Sichel, Radoszkowski, 1869). Russia: **EP** (S, NC, CR). – Europe (SE, EE), Caucasus, Turkey, Iran.

Myrmilla (Myrmilla) etzchmiadzini (Radoszkowski, 1885) [Mutilla] (*Myrmilla calva armeniaca* Skorikov, 1927). Russia: **EP** (NC). – Armenia, Azerbaijan, Iran.

Myrmilla (Myrmilla) lezginica (Radoszkowski, 1885) [Mutilla] (*Mutilla subcornuta* Morawitz, 1893; *Myrmilla kokujevi* Skorikov, 1927; *M. susiana* Skorikov, 1927). Russia: **EP** (NC, CR). – Europe (SE, EE), Georgia, Azerbaijan, Turkey, Syria, Palestine, Iran, Turkmenistan, Uzbekistan.

Myrmilla (Myrmilla) mutica (André, 1903) [Mutilla] (*Mutilla erythrocephala* var. *mutica* André, 1903). Russia: **EP** (CR). – Europe (SE, EE), Egypt.

Myrmilla (Pseudomutilla) glabrata (Fabricius, 1775) [Mutilla] (*Mutilla ciliata* Fabricius, 1793; *M. fraterna* Baer, 1848; *M. cephalica* Sichel et Radoszkowski, 1869; *Myrmilla sarmatica* Skorikov, 1927; *M. sarmatica* var. *beljgovskii* Skorikov, 1927). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Turkey, Syria, Uzbekistan, Kazakhstan.

Myrmilla (Pseudomutilla) meda Skorikov, 1927 (*M. appropinqua* Skorikov, 1927). Russia: **EP** (NC). – Azerbaijan, Iran, Turkmenistan.

Myrmilla (Pseudomutilla) skorikovi Lelej, 1985 (*M. meda caucasica* Skorikov, 1927, nom. praeocc., nec Kolenati, 1846). Russia: **EP** (S, NC). – Georgia, Azerbaijan, Iran.

Myrmilla (Pseudomutilla) vutshetitshi Skorikov, 1927 (*M. capitata kusdasi* Invrea, 1965). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Turkey, Syria.

Subfamily MUTILLINAE

Number of taxa: World – 98 genera, 2045 species, Palaearctic – 30/254, Russia – 12/42.

Tribe CTENOTILLINI

Number of taxa: World – 10 genera, 181 species, Palaearctic – 1/3, Russia – 1/1.

CTENOTILLA Bischoff, 1920 Type species *Mutilla pectinifera* André, 1893 (= *M. caeca* Radoszkowski, 1879). Number of species: World – 3, Palaeartic – 1, Russia – 1.

Ctenotilla caeca (Radoszkowski, 1879) [Mutilla] (*Mutilla pectinifera* André, 1893; *C. pectinifera* var. *obscura* Nonveiller, 1959. Russia: **EP** (CR). – Europe (SE, EE), Turkey, Armenia, Azerbaijan, Syria.

Tribe SMICROMYRMINI

Number of taxa: World – 27 genera, 449 species, Palaeartic – 13/190, Russia – 5/29.

EPHUTOMMA Ashmead, 1899 (*Eremomyrme* Suárez, 1965). Type species *Mutilla incerta* Radoszkowski, 1877 (= *M. turcestanica* Dalla Torre, 1897). Number of species: World – 16, Palaeartic – 15, Russia – 2.

Ephutomma angustata (Skorikov, 1935) [Smicromyrme] (*S. sogdiana* Lelej, 1971). Russia: **EP** (S). – Iran, Central Asia, Kazakhstan.

Ephutomma coronata (Lelej, 1976) [Eremomyrme]. Russia: **UR**. – Turkmenistan, Kazakhstan.

Ephutomma mongolensis (Suárez, 1974) [Smicromyrme]. Russia: **ES** (ZB). – Mongolia.

NEMKA Lelej, 1985 (*Horaia* Tsuneki, 1993). Type species *Mutilla viduata* Pallas, 1773. Number of species: World – 22, Palaeartic – 7, Russia – 1.

Nemka viduata viduata (Pallas, 1773) [Mutilla] (*Tiphia stridula* Rossi, 1790; *M. coronata* Rossi, 1792; *M. coronata* Fabricius, 1793, nom. praeocc., nec Rossi, 1792; *M. paedemontana* Fabricius, 1794; *M. togata* Ahrens, 1812; *M. simplicia* Radoszkowski, 1865; *M. pauperata* Sichel et Radoszkowski, 1869). Parasitoid of *Larra anathema* (Rossi), *Bembix* spp., *Bembecinus tridens* (Fabricius), *Gorytes* spp. (Crabronidae), *Dasypoda hirtipes* (Fabricius) (Melittidae). Russia: **EP** (E, S, NC, CR); **UR**, **WS** (AL). – Europe (WE, SE, EE), Caucasus, Turkey, Syria, Kazakhstan, Mongolia, China (NW).

PHYSETOPODA Schuster, 1949 (*Paramyrme* Lelej, 1977). Type species *Physetopoda insularis* Schuster, 1949. Number of species: World – 48, Palaeartic – 44, Russia – 8.

Physetopoda cingulata (Costa, 1858) [Mutilla] (*Smicromyrme rudolfae* Lelej, 1984). Russia: **EP** (S). – Europe (SE, EE), Kazakhstan.

Physetopoda daghestanica (Radoszkowski, 1885) [Mutilla] (*Smicromyrme montata* f. *moravica* Hoffer, 1936; *S. variabilis* Hoffer, 1938; *S. variabilis* f. *maculata* Hoffer, 1938; *S. variabilis* f. *lineata* Hoffer, 1938; *S. variabilis* f. *obenbergeri* Hoffer, 1938; *S. variabilis* f. *conversa* Hoffer, 1938). Russia: **EP** (S, CR), **WS** (AL). – Europe (WE, SE, EE), Turkey, Kazakhstan.

Physetopoda halensis (Fabricius, 1787) [Mutilla] (*M. ephippium* Fabricius, 1793, nom. praeocc., nec Rossi, 1792; *M. montana* Panzer, 1805; *M. schencki* Schmiedeknecht, 1907; *Smicromyrme punctata pseudomontana* Hoffer, 1936; *S. montana* f. *susteraei* Hoffer, 1936; *S. compacta* f. *melaclena* Invrea, 1958; *S. subalpina* Ressler, 1960). Parasitoid of chrysomelid beetles *Labidostomis hummeralis* (Schneider), *Clytra quadripunctata* Linnaeus (Chrysomelidae). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (KS). – Europe (WE, SE, EE), Kazakhstan.

Physetopoda oratoria (Chen, 1957) [Smicromyrme] (*S. oratoria vaticinia* Chen, 1957; *S. oratoria miscisis* Chen, 1957; *Glossotilla rectangulata* Chen, 1957; *S. eoa* Lelej, 1977). Russia: **ES** (KS, TU, IR, YA, ZB), **FE** (AM, KH, PR). – Mongolia, China (NE, NO).

Physetopoda portschinskii (Radoszkowski, 1888) [Mutilla]. Russia: **EP** (S, NC). – Armenia, Azerbaijan, Turkmenistan, Kazakhstan.

Physetopoda scutellaris (Latreille, 1792) [Mutilla] (*M. bimaculata* Jurine, 1807; *M. subcomata* Wesmael, 1851). Russia: **EP** (CR), **ES** (KS, TU). – Europe (WE, SE, EE), ?N Africa, Armenia, Turkey.

Physetopoda similis (Lelej, 1984) [Paramyrme]. Russia: **EP** (CR). – Europe (EE), Armenia, Azerbaijan, Turkey.

Physetopoda turgajensis (Lelej, 1984) [Paramyrme]. Russia: **EP** (S), **UR**. – Kazakhstan, Mongolia.

SKORIKOVIA Ovtchinnikov, 2002. Type species *Mutilla elongata* Radoszkowski, 1885. Number of species: World – 5, Palaeartic – 5, Russia – 3.

Skorikovia elongata (Radoszkowski, 1885) [Mutilla] (*M. elongata* var. *pura* André, 1901; *Smicromyrme ambigua* Skorikov, 1935; *S. baigacuma* Skorikov, 1935; *S. gracilis* Skorikov, 1935; *S. kuznetzovi* Skorikov, 1935). Russia: **EP** (S, NC). – Azerbaijan, Turkey, Iran, Afghanistan, Central Asia, Kazakhstan.

Skorikovia pliginskiji (Lelej, 1984) [Smicromyrme]. Russia: **EP** (E, S, CR), **UR**. – Europe (SE, EE).

Skorikovia radoszkovskii (Skorikov, 1935) [Smicromyrme]. Russia: **EP** (NC). – Georgia, Azerbaijan, Turkey.

- SMICROMYRME** Thomson, 1870. Type species *Mutilla rufipes* Fabricius, 1787. The genus includes five subgenera: *Astomyrme* Schwartz, 1984, *Eremotilla* Lelej, 1985, *Erimyrme* Lelej, 1985, *Rhombotilla* Nagy, 1966, and *Smicromyrme* Thomson, 1870. Number of species: World – 232, Palaearctic – 110, Russia – 15.
- Smicromyrme (Astomyrme) ausonius** Invrea, 1950 (*S. sabatia* Invrea, 1953; *S. ausonia* var. *etrusca* Invrea, 1950). Parasitoid of flies *Zeuxia cinerea* Meigen (Tachinidae), *Eumerus strigatus* (Fallén) (Syrphidae). Russia: **EP** (S, NC, CR), **UR**. – Europe (SE, EE), Cyprus, Turkmenistan, Kazakhstan.
- Smicromyrme (Eremotilla) coracinus** Lelej, 1985. Russia: **UR**, **WS** (AL). – Kyrgyzstan, Kazakhstan, Mongolia.
- Smicromyrme (Eremotilla) nigriceps** Nonveiller, 1959 (*S. orientalis* Nonveiller, 1959, nom. praec., nec Mickel, 1933; *S. orientalis* var. *maculata* Nonveiller, 1959, nom. praec., nec Hoffer, 1938; *S. orientalis* f. *afasciata* Nonveiller, 1972; *S. pseudo-orientalis* Nonveiller, 1979). Parasitoid of *Bembecinus tridens* (F.) (Crabronidae). Russia: **EP** (S, NC, CR). – Europe (SE), Caucasus, Iran, Turkmenistan.
- Smicromyrme (Eremotilla) novaki** Invrea, 1954 (*S. nonveilleri* Invrea, 1954; *S. curtiventris* var. *dalmatina* Invrea, 1954). Russia: **EP** (S, CR). – Europe (SE, EE). Azerbaijan.
- Smicromyrme (Eremotilla) schwarzi** Suárez, 1975. Russia: **EP** (NC, CR). – Europe (SE, EE), Georgia, Armenia, Azerbaijan, Turkey.
- Smicromyrme (Eremotilla) triangularis** (Radoszkowski, 1865) [Mutilla] (*S. pouzdranensis* Hoffer, 1936). Russia: **EP** (E, NC, CR), **UR**. – Europe (SE, EE).
- Smicromyrme (Erimyrme) bidenticulatus** Chen, 1957 (*S. hasanensis* Lelej, 1977; *S. hasanensis* f. *monopunctata* Lelej, 1977; *S. hasanensis* f. *apunctata* Lelej, 1977). Russia: **FE** (PR). – Mongolia, China (NO, CE), Korean Peninsula.
- Smicromyrme (Erimyrme) sicanus** (De Stefani, 1887) [Mutilla] (*S. pusilla septentrionalis* Hoffer, 1936; *S. pusilla septentrionalis* f. *gregory* Hoffer, 1936; *S. rufipes* var. *lutescens* Invrea, 1954). Parasitoid of *Cerceris arenaria* (L.), *Nitela spinolae* Latr., *Miscophus bicolor* Jutine, *Tachysphex pompiliformis* (Panzer), *Diodontus minutus* (F.) (Crabronidae). Russia: **EP** (S, CR), **UR**, **WS** (AL). – Europe (WE, SE, EE), Turkey, Syria, Kazakhstan.
- Smicromyrme (Erimyrme) stepposus** Lelej, 1984. Russia: **EP** (S, CR). Kazakhstan.
- Smicromyrme (Smicromyrme) lewisi** Mickel, 1935 (*Mutilla japonica* Cameron, 1900, nom. praec., nec Dalla Torre, 1897; *M. cameroni* Yano, 1932, nom. praec., nec Schulz, 1906; *S. lewisi yanoi* Mickel, 1935; *S. lewisi nigricula* Mickel, 1935; *S. momidziyama* Tsuneki, 1972). Collected in the nest aggregations of *Oxybelus bipunctatus* Olivier (Crabronidae), *Hylaeus* spp., *Colletes* spp. (Colletidae). Russia: **ES** (KS, KR, TU, IR, BR, ZB), **FE** (AM, KH, PR, SA, KU). – Mongolia, China (NO, CE, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Tsushima, Tanegashima).
- Smicromyrme (Smicromyrme) ruficollis ruficollis** (Fabricius, 1793) [Mutilla] (*S. kiritshenkoae* Skorikov, 1935). Russia: **EP** (S, CR), **WS** (AL). – Europe (WE, SE, EE), Turkey, Kazakhstan.
- Smicromyrme (Smicromyrme) rufipes** (Fabricius, 1787) [Mutilla] (*M. nigra* Rossi, 1792; *M. ephippium* Rossi, 1792; *M. sellata* Panzer, 1797; *M. nigrita* Panzer, 1801; *M. petiolaris* Fabricius, 1804; *M. gibba* Baer, 1848; *M. nemoralis* Baer, 1848; *M. rufipes* var. *fulvogastra* André, 1901; *Smicromyrme rufipes* var. *nigricollaris* Skorikov, 1935; *S. rufipes* f. *zavadili* Hoffer, 1938; *S. rufipes* f. *lidmilae* Hoffer, 1938; *S. kuehlhorni* Invrea, 1963; *S. globosa* Franz, 1982). Parasitoid of *Tachysphex* spp., *Oxybelus uniglumis* (L.), *O. bipunctatus* Olivier, *Miscophus spurius* (Dahlbom) (Crabronidae), *Halictus* spp. (Halictidae), *Andrena* spp. (Andrenidae). Russia: **EP** (N, NW, C, E, S, CR), **UR**, **WS** (AL), **ES** (YA). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan.
- Smicromyrme (Smicromyrme) sertus** (Radoszkowski, 1885) [Mutilla]. Russia: **UR**.
- Smicromyrme (Smicromyrme) tristis** Lelej, 1984. Russia: **EP** (CR), **UR**. – Europe (WE, EE), Kazakhstan.
- Smicromyrme (Smicromyrme) viktorovi** Lelej, 1984. Russia: **EP** (S). – Georgia, Azerbaijan.

Tribe MUTILLINI

Number of taxa: World – 23 genera, 592 species, Palaearctic – 6/28, Russia – 3/9.

MUTILLA Linnaeus, 1758. Type species *Mutilla europaea* Linnaeus, 1758. Parasitoids of the *Bombus* spp. (Apidae). Number of species: World – 157, Palaearctic – 11, Russia – 5.

Mutilla europaea Linnaeus, 1758 (*Apis aptera* Uddman, 1753; *M. similis* Harris, 1782; *M. schaefferi* Schrank, 1802; *M. coeruleans* Lepeletier, 1845; *M. cyanea* Lepeletier, 1845; *M. panzeri* Lepeletier, 1845; *M. obscura* Nylander, 1847; *M. kaschiriensis* Baer, 1848; *M. notomelas* André, 1902; *M. europaea* f. *rufula* Hoffer, 1938, nom. praeocc., nec André, 1901; *M. europaea* f. *nigrescens* Hoffer, 1938, nom. praeocc., nec André, 1901; *M. europaea* f. *ruficeps* Hoffer, 1938, nom. praeocc., nec Smith, 1855). Parasitoid of *Bombus* spp. (Apidae). Russia: **EP** (N, NW, C, E, NC, CR), **UR**, **WS** (AL, NS). – Europe (WE, NE, SE, EE), N Africa, Turkey, Kazakhstan.

Mutilla marginata Baer, 1848 (*M. trifasciata* Radoszkowski, 1865; *M. marginata* f. *insueta* Invrea, 1964). Parasitoid of *Bombus* spp. (Apidae). Russia: **EP** (N, NW, C, E, CR), **UR**. – Europe (WE, SE, EE), Georgia, Syria.

Mutilla mikado Cameron, 1900 (*M. maesta* Chen, 1957). Parasitoid of *Bombus ardens* Smith, *B. diversus* Smith (Apidae). Russia: **ES** (KS, IR, ZB), **FE** (AM, KH, PR, SA). – China (NO, NE, CE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

Mutilla quinque maculata Cyrillo, 1787 (*M. quinquepunctata* Olivier, 1811; *M. quadrinotata* Klug, 1829). Parasitoid of *Anthidium florentinum* (F.), *Osmia tricornis* Latreille (Megachilidae). Russia: **EP** (CR). – Europe (WE, SE), N Africa, Cyprus, Turkey, Palestine, Syria.

Mutilla saltensis Radoszkowski, 1885. Russia: **EP** (NC). – Caucasus, Iraq, Iran.

RONISIA Costa, 1858 (*Pycnotilla* Bischoff, 1920). Type species *Ronisia torosa* Costa, 1858 (= *Mutilla brutia* Petagna, 1787). Number of species: World – 29, Palaeartic – 8, Russia – 1.

Ronisia brutia brutia (Petagna, 1787) [Mutilla] (*M. sexmaculata* Cyrillo, 1787; *M. hungarica* Fabricius, 1793; *M. confusa* Lepeletier, 1845; *M. monspeliensis* Lepeletier, 1845; *M. sexmaculata* Baer, 1848, nom. praeocc., nec Cyrillo, 1787; *M. robusta* Smith, 1855; *Ronisia torosa* Costa, 1858; *Mutilla sericeiventris* Costa, 1864; *M. taurica* Radoszkowski, 1865, nom. praeocc., nec Gistel, 1857; *M. discoidalis* Radoszkowski, 1865; *M. morawitzii* Dalla Torre, 1897; *M. crimeae* Strand, 1917; *R. barbara minoensis* Nonveiller, 1972; *M. ghiliani*: Sichel, Radoszkowski, 1870). Parasitoid of *Polistes* Latreille (Vespidae), *Creightonella sericans* (Fonscolombe), *Chalicodoma parietinum* (Fourcroy), *Megachile albisecta*

(Klug) (Megachilidae). Russia: **EP** (E, S, NC, CR). – Europe (WE, SE, EE), Turkey, Kazakhstan.

TROPIDOTILLA Bischoff, 1920. Type species *Mutilla litoralis* Petagna, 1787. Number of species: World – 13, Palaeartic – 7, Russia – 3.

Tropidotilla grisescens (Lepeletier, 1845) [Mutilla] (*M. vulnericeps* Costa, 1860; *M. striligata* Sichel et Radoszkowski, 1870). Russia: **EP** (CR). – Europe (WE, SE, EE), Algeria, Turkey.

Tropidotilla litoralis (Petagna, 1787) [Mutilla] (*M. italica* Fabricius, 1793; *M. indigena* Illiger, 1807; *M. graeca* Lepeletier, 1845; *M. iberica* Kolenati, 1846; *M. salentina* Costa, 1858; *M. quinquefasciata*: Radoszkowski, 1865). Parasitoid of *Polistes* spp., especially *P. gallicus* (Linnaeus) (Vespidae). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Palestine, Syria, Iran, Turkmenistan.

Tropidotilla sareptana (André, 1901) [Mutilla]. Russia: **EP** (S, NC). – Armenia, Azerbaijan, Turkey.

Tribe TROGASPIDIINI

Number of taxa: World – 38 genera, 823 species, Palaeartic – 10/33, Russia – 3/3.

ARTIOTILLA Invrea, 1950 (*Glossomyrme* Suárez, 1979). Type species *Mutilla biguttata* Costa, 1859. Number of species: World – 3, Palaeartic – 3, Russia – 1.

Artiotilla biguttata (Costa, 1859) [Mutilla] (*Mutilla dalmatica* André, 1893; *M. mervensis* Radoszkowski, 1893; *Smicromyrme fertoni* Invrea, 1953; *A. biguttata* f. *palestinensis* Invrea, 1965). Russia: **EP** (NC). – Europe (SE), Azerbaijan, Cyprus, Turkey, Palestine, Iran, Turkmenistan.

NEOTROGASPIDIA Lelej, 1996. Type species *Mutilla pustulata* Smith, 1873. Number of species: World – 6, Palaeartic – 2, Russia – 1.

Neotrogaspidia hammeri (Suárez, 1959) [Trogaspidia]. Russia: **EP** (NC). – Europe (SE), Armenia, Azerbaijan, Turkey, Cyprus, Palestine, Iran, Turkmenistan.

TROGASPIDIA Ashmead, 1899. Type species *Mutilla medon* Smith, 1855. Number of species: World – 262, Palaeartic – 19, Russia – 1.

Trogaspidia catanensis (Rossi, 1794) [Mutilla] (*M. ballioni* Radoszkowski, 1866; *M. paripunctata*

Sichel et Radoszkowski, 1869; *M. interrupta*: Radoszkowski, 1865). Russia: **EP** (S, NC, CR). – Europe (SE, EE), Algeria, Armenia, Turkey, Kazakhstan.

Species *incertae sedis*

Mutilla taurica Gistel, 1857. Russia: **EP** (CR).

Species wrongly described from Russia

Mutilla aureomaculata Sichel et Radoszkowski, 1869.
Russia: **EP** (CR) [actually Africa].

66. FAMILY BRADYNOBAENIDAE**A.S. LELEJ AND M.V. MOKROUSOV**

A small family which is widespread (absent from the Australasian region) and includes four subfamilies: Typhoctinae Schuster, 1949 (=Eotillinae Schuster, 1949) (four genera, 10 species), which is distributed in Nearctic and Neotropical regions; Chyphotinae Bradley et Bequaert, 1928 (one genus, 55 species) – Nearctic region; Apterogyninae André, 1899 (four genera, 116 species) – Afrotropical, Palaearctic and Oriental regions; Bradynobaninae de Saussure, 1892 (one genus, seven species) – Neotropical region (Lelej, 2003). Sexual dimorphism is extreme: female apterous with pronotum freely articulated, male macropterous with reduced wing venation. All species are apparently solitary. Information on a single species indicates that the larvae are ectoparasitoids of Solifuga (Arachnida), pupation occurring within the shelter of the host.

Number of taxa: World – 10 genera, 188 species, Palaearctic – 4/43, Russia – 1/2.

R e f e r e n c e s. Radoszkowski, 1879; Morawitz, 1890; Brothers, Finnamore, 1993; Argaman, 1994a; Pagliano, 2002; Lelej, 2003; Lelej, Mokrousov, 2015.

APTEROGYNA Latreille, 1809 (*Icalantica* Argaman, 1994; *Utapitoca* Argaman, 1994; *Zarabayca* Argaman, 1994). Type species *Apterogyna olivieri* Latreille, 1809. Number of species: World – 31, Palaearctic – 15, Russia – 2.

Apterogyna lateritia Morawitz, 1890 (*A. judaica* Invrea, 1950; *A. taurica* Panfilov, 1954; *A. nonveileri* Invrea, 1957; *A. stancici* Invrea, 1959; *A. wahrmani* Invrea, 1965; *A. palestinensis* Invrea, 1965). Russia: **EP** (CR). – Europe (SE), Turkey, Israel, Turkmenistan, Tajikistan.

Apterogyna mlokosevitzii Radoszkowski, 1879 (*A. nigra* Dover, 1924; *A. volgensis* Panfilov, 1954; *A. mlokosevitzii* (!): Morawitz, 1894; *A. dorsostrata*: Skorikov, 1935; *Icalantica mlokosevitzii* (!): Argaman, 1994a). Russia: **EP** (S, NC). – Europe (SE), N Africa, Caucasus, Turkey, Syria, Jordan, Lebanon, Israel, Iran, Turkmenistan, Uzbekistan, Tajikistan, ?Pakistan.

SUPERFAMILY POMPILOIDEA

67. FAMILY POMPILIDAE – SPIDER WASPS

V.M. LOKTIONOV AND A.S. LELEJ

The family Pompilidae (spider wasps) is one of the largest families among the aculeate wasps. These wasps are distributed worldwide, but mostly in the tropical regions (Pitts et al., 2006). Five subfamilies (Ctenocerinae, Notocyphinae, Ceropalinae, Pepsinae, and Pompilinae) are now recognized for Pompilidae (Waichert et al., 2015), three latter are recorded from Russia. Spider wasps are parasitoids that use spiders as host provisioning each cell with a single paralyzed spider on which they lay an egg (Iwata, 1976). There are several genera (subfam. Ceropalinae entirely, genera *Poecilagenia* Haupt and *Nipponodipogon* Ishikawa from subfam. Pepsinae, and genus *Evagetes* Lepeletier de Sant Fargeau from subfam. Pompilinae), which have evolved a cleptoparasitic existence, with the modes of cleptoparasitism differing among them (Wasbauer, 1995; Shimizu, 2000; O'Neill, 2001; Shimizu et al., 2012). Number of the taxa: World – 254 genera, 4855 species, Palaearctic – about 65/ about 1000, Russia – 37/246.

R e f e r e n c e s. Pallas, 1771; Assmuss, 1859; Eversmann, 1846, 1849; Radoszkowski, 1887a,b, 1888; Morawitz, 1890, 1891, 1892, 1893; Westerlund, 1892; Haupt, 1927, 1959; Nordström, Forsius, 1928; Gussakovskij, 1930, 1932; Pate, 1946; Wolf, 1967, 1972; Day, 1981, 1988; Wahis, 1986, 2013; Tobias, 1978; Krombein, 1979; Dathe, 1980b; Shimizu, 1994; Lelej, 1995, 2000; Engel, Grimaldi, 2006; Pitts et al., 2006; Elliot, 2007; Wiśniowski, 2009; Lelej, Loktionov, 2012; Aguiar et al., 2013; Baghirov, 2014; Loktionov, Lelej, 2014, 2015; Waichert et al., 2015; Kochetkov, 2017; Loktionov, Lelej, 2017; Lelej et al., 2017.

Subfamily CEROPALINAE

CEROPALES Latreille, 1797 (*Agenioxenus* Ashmead, 1902; *Ceratopales* Schulz, 1906; *Hypsiceraeus* Morice, Durrant, 1914; *Aceropales* Priesner, 1969; *Priesnerius* Móczár, 1978). Type species *Evania maculata* Fabricius, 1775). Cleptoparasites of spider wasps (Pompilidae) and digger wasps (Crabronidae). The genus includes three subgenera: *Ceropales* Latreille, 1797, *Bifidoceropales* Wolf, 1965 and *Hemiceropales* Wolf, 1965. Distributed worldwide.

Number of species: World – 135, Palaearctic – about 35, Russia – 11.

Ceropales (Bifidoceropales) pygmaea appendiculata Yasumatsu, 1939 (*Bifidoceropales lehri* Lelej, 1985). Russia: **FE** (KH, PR). – China (NE).

Ceropales (Bifidoceropales) pygmaea tsunekii (Lelej, 1994) [Bifidoceropales]. Russia: **FE** (PR). – Korean Peninsula.

Ceropales (Ceropales) albicincta albicincta (Rossi, 1790) [Evania]. Russia: **EP** (C, S, NC, CR), **UR**, **ES** (ZB). – Europe (WE, SE, EE), Georgia, Armenia, Azerbaijan, Turkey, Cyprus, Israel, Lebanon, Jordan, Iran, Kyrgyzstan, Kazakhstan, Mongolia, ?Japan.

Ceropales (Ceropales) bicoloripes bicoloripes Móczár, 1967. Russia: **FE** (AM). – Europe (SE), Turkey, Israel, Turkmenistan, Mongolia.

Ceropales (Ceropales) bicoloripes dorni Móczár, 1987. Russia: **ES** (ZB). – Mongolia.

Ceropales (Ceropales) bogdanovii bogdanovii Radoszkowski, 1877. Russia: **EP** (S, NC). – Uzbekistan.

Ceropales (Ceropales) bogdanovii sabulosa F. Morawitz, 1891. Russia: **EP** (S). – Uzbekistan, Kazakhstan.

Ceropales (Ceropales) erythropoda Gussakovskij, 1926. Russia: **WS** (AL), **ES** (KR, IR, BR, ZB). – Tajikistan, Kazakhstan, Mongolia, China (NE).

Ceropales (Ceropales) helvetica helvetica Tournier, 1889. Russia: **EP** (S, NC, CR), **WS** (AL). – Europe (WE, SE, EE), Morocco, Algeria, Tunisia, Georgia, Azerbaijan, Turkey, Cyprus, Israel, Jordan, Syria, Iraq, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia.

Ceropales (Ceropales) maculata maculata (Fabricius, 1775) [Evania]. Russia: **EP** (N, NW, C, S, NC, CR), **UR**, **WS** (OM, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, MG, CH). – Europe (WE, SE, NE, EE), Northern Africa, Turkey, Cyprus, Georgia, Armenia, Azerbaijan, Lebanon, Syria, Israel, Jordan, Iran, Iraq, Turkmenistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NC, NE, CC, SW), Korean Peninsula, Japan (Hon).

Ceropales (Ceropales) magnifica Gussakovskij, 1926. Russia: **FE** (KH, PR). – China (NE).

Ceropales (Ceropales) sibirica Radoszkowski, 1888. Russia: **WS** (AL), **ES** (KR, IR, BR, ZB), **FE** (KH). – Mongolia.

Ceropales (Ceropales) variegata (Fabricius, 1798) [Evania] (*C. implicatus* Yasumatsu, 1939). Russia:

EP (C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (IR, BR, ZB), **FE** (KH). – Europe (WE, NE, SE, EE), Morocco, Algeria, Tunisia, Turkey, Georgia, Israel, Kyrgyzstan, Kazakhstan, China (NE).

Ceropales (Hemiceropales) cribrata cribrata Costa, 1881 (*C. versicolor* Gussakovskij, 1926). Russia: **EP** (S, CR), **ES** (ZB). – Europe (WE, SE, EE), North Africa, Turkey, Cyprus, Georgia, Azerbaijan, Israel, Saudi Arabia, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Africa.

Subfamily PEPSINAE

Tribe PEPSINI

CRYPTOCHEILUS Panzer, 1806 (*Cryptochilus* Rafinesque, 1815; *Calicurgus* Brullé, 1833; *Homonotus* Dahlbom, 1845, nom. praeocc., nec Dahlbom, 1843; *Stenoclavelia* Arnold, 1932; *Chilochares* Banks, 1941; *Adirostes* Banks, 1946; *Chlorocheilus* Wolf, 1965, nom. nudum; *Trachyocheilus* Wolf, 1965, nom. nudum; *Chyphonocheilus* Wolf, 1965, nom. nudum; *Ichneumocheilus* Wolf, 1965, nom. nudum; *Priocnemiocheilus* Wolf, 1970). Type species *Sphex annulata* Fabricius, 1798. Parasitoids of the spiders from the families Araneidae, Lycosidae, Pisauridae, Agelenidae, Amaurobiidae, Clubionidae, Gnaphosidae, Sparassidae and Thomisidae. The genus includes four subgenera: *Adonta* Billberg, 1820 (= *Salius* Fabricius, 1804, nom. praeocc., nec Schrank, 1798); *Chyphonocheilus* Wolf, 1970; *Cryptocheilus* Panzer, 1806, and *Ichneumocheilus* Wolf, 1970. Widely distributed in Palaearctic, Nearctic and Neotropical (Panama, Costa Rica) regions. Number of species: Palaearctic – more than 60, Russia – 23.

Cryptocheilus (Adonta) costae (Radoszkowski, 1888) [*Salius*]. Russia: **EP** (E, CR), **UR**. – Europe (SE, EE), Iran, Kazakhstan.

Cryptocheilus (Adonta) egregius (Lepelletier de Saint Fargeau, 1845) [*Calicurgus*]. Russia: **EP** (NC). – Europe (WE, SE, EE), Algeria, Caucasus, Turkey, Syria, Turkmenistan.

Cryptocheilus (Adonta) elegans (Spinola, 1806) [*Pompilus*] (*Pompilus tripunctatus* Spinola, 1807). Russia: **EP** (?Caucasus), **UR**. – Europe (WE, SE, EE), Turkey.

Cryptocheilus (Adonta) fabricii (Vander Linden, 1827) [*Pompilus*]. Russia: **EP** (NW, C, S, NC, CR), **UR**, **WS** (AL), **ES** (IR). – Europe (WE, NE, SE,

EE), Turkey, Caucasus, Jordan, Iran, Kyrgyzstan, Kazakhstan.

Cryptocheilus (Adonta) fischeri (Spinola, 1839) [*Pompilus*] (*C. confinis* Haupt, 1927; *C. fallax* Priesner, 1965). Russia: **EP** (S, CR). – Europe (WE, SE, EE), Morocco, Algeria, Egypt, Turkey, Cyprus, Syria, Israel, Iran, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan.

Cryptocheilus (Adonta) flavus (Eversmann, 1849) [*Priocnemis*] (*Salius desertorum* F. Morawitz, 1891). Russia: **EP** (S), **UR**. – Central Asia, Kazakhstan, Mongolia.

Cryptocheilus (Adonta) freygessneri (Kohl, 1883) [*Priocnemis*]. Russia: **EP** (S, NC, CR), **WS** (AL). – Europe (SE, EE), Turkey, Turkmenistan.

Cryptocheilus (Adonta) guttulatus (Costa, 1887) [*Priocnemis*]. Russia: **EP** (C), **UR**. – Europe (SE, EE), Turkey, Iran, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan.

Cryptocheilus (Adonta) gyrifrons (F. Morawitz, 1889) [*Salius*]. Russia: **ES** (KR, IR, BR), **FE** (AM, KH, PR). – Korean Peninsula, China (NC, CC).

Cryptocheilus (Adonta) manchurianus Yasumatsu, 1935. Russia: **ES** (IR, YA, ZB), **FE** (AM, PR). – Mongolia, China (NE), Korean Peninsula.

Cryptocheilus (Adonta) maruyamai Ishikawa, 1962. Russia: **FE** (AM, PR). – Japan (Hon, Shi, Kyu).

Cryptocheilus (Adonta) notatus (Rossi, 1792) [*Sphex*] (*Pompilus affinis* Vander Linden, 1827). Russia: **EP** (NC). – Europe (WE, NE, SE, EE), Morocco, Algeria, Turkey, Cyprus, Iran, Turkmenistan, Kyrgyzstan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia.

Cryptocheilus (Adonta) richardsi Móczár, 1953. Russia: **EP** (S, NC), **UR**. – Europe (WE, SE, EE), Turkey, Israel, Syria, Iran, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan.

Cryptocheilus (Adonta) strigosus (Eversmann, 1849) [*Pompilus*]. Russia: **UR**. – Eastern Kazakhstan.

Cryptocheilus (Adonta) transcausicus Šusterá, 1924. Russia: **EP** (NC). – Azerbaijan.

Cryptocheilus (Adonta) variabilis (Rossi, 1790) [*Sphex*] (*Pompilus decemguttatus* Jurine, 1807). Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), Algeria, Cyprus, Turkey, Iran, Uzbekistan, Kyrgyzstan, Kazakhstan.

Cryptocheilus (Adonta) variipennis Šusterá, 1924. Russia: **EP** (?S, NC). – Europe (WE, SE), Turkey, Jordan, Syria.

Cryptocheilus (Adonta) versicolor (Scopoli, 1763) [Sphex] (*Priocnemis variegatus*: Eversmann, 1849). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Cyprus, Turkey, Kyrgyzstan.

Cryptocheilus (Chyphonocheilus) rubellus (Eversmann, 1846) [Pompilius (!)]. Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), Morocco, Algeria, Tunisia, Turkey, Cyprus, Iran, Syria, Pakistan, Afghanistan, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan.

Cryptocheilus (Cryptocheilus) annulatus (Fabricius, 1798) [Sphex] (*Pompilus alternatus* Lepeletier de Saint Fargeau, 1845). Russia: **EP** (CR). – Europe (WE, SE, EE), Morocco, Algeria, Tunisia, Turkey, Cyprus, Lebanon, Israel, Saudi Arabia, Iran, Tajikistan, Kyrgyzstan.

Cryptocheilus (Cryptocheilus) discolor (Fabricius, 1793) [Sphex]. Russia: **EP** (NC). – Europe (SE, EE), North Africa, Turkey, Cyprus, Syria, Iran, Afghanistan, Uzbekistan, Turkmenistan, Tajikistan, Kyrgyzstan, Kazakhstan.

Cryptocheilus (Cryptocheilus) octomaculatus (Rossi, 1790) [Sphex]. Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Morocco, Algeria, Tunisia, Turkey, Cyprus, Syria, Israel, Iran, Kyrgyzstan, Turkmenistan, Tajikistan.

Cryptocheilus (Ichneumocheilus) ichneumonoides (Costa, 1874) [Priocnemis]. Russia: **EP** (Wahis, 2013). – Europe (WE, SE, EE), Turkey, Syria.

Tribe PRIOCNEMINI

CALIADURGUS Pate, 1946 (*Calicurgus* Lepeletier de Saint Fargeau, 1845, nom. praeocc., nec Brullé, 1833). Type species *Pompilus fasciatellus* Spinola, 1807. Parasitoids of the spiders from the families Tetragnathidae and Araneidae. Worldwide distributed genus. Number of species: Palaearctic – 2, Russia – 2.

Caliadurgus fasciatellus (Spinola, 1807) [Pompilus] (*Priocnemis fasciatellus*: Eversmann, 1849; *Calicurgus hyalinatus*: Tobias, 1978). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (AL), **ES** (IR, BR, YA), **FE** (AM, KH, PR, SA, KA). – Europe (WE, NE, SE, EE), Turkey, Cyprus, Kyrgyzstan, Kazakhstan, Mongolia, N America.

Caliadurgus ussuriensis (Gussakovskij, 1932) [Calicurgus] (*Calicurgus shirakii* Yasumatsu, 1943). Russia: **FE** (AM, KH, PR, SA, KU). – China (NC, CC, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Tsushima).

CTENOPRIOCNEMIS Ishikawa, 1962. Type species *Ctenopriocnemis filicornis* Ishikawa, 1962. Distributed in Eastern Palaearctic (south of the Russian Far East, Korean Peninsula and Japan). Number of species: World – 1.

Ctenopriocnemis filicornis Ishikawa, 1962. Russia: **FE** (PR, KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

EOPOMPILUS Gussakovskij, 1932 (*Sialus* Matsumura, 1911). Type species *Eopompilus orientalis* Gussakovskij, 1932 (= *Sialus* (!) *internalis* Matsumura, 1911). Parasitoids of the spiders from the family Theridiidae. Distributed in Eastern Palaearctic (south of the Russian Far East, China, Korean Peninsula and Japan) and Oriental region (China: Taiwan and Yunnan). Number of species: World – 5, Palaearctic – 4, Russia – 3.

Eopompilus internalis (Matsumura, 1911) [*Sialus* (!)] (*Sialus* (!) *bizonatus* Matsumura, 1912; *E. orientalis* Gussakovskij, 1932). Russia: **FE** (AM, KH, PR, SA, KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Tsushima, Tanegashima, Mishima).

Eopompilus luteus Lelej, 1986. Russia: **FE** (PR). – China (NC, NE).

Eopompilus minor Gussakovskij, 1932. Russia: **FE** (AM, PR, SA, KU). – China (NC, NE, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Tsushima, Yakushima).

PRIOCNEMIS Schiødte, 1837 (*Priocnecnemis* Burmeister, 1872; *Priocnecnemis* Kirby, 1884; *Hemipogonius* Saussure, 1892; *Myrmecosalius* Ashmead, 1903; *Priocnemis* Banks, 1917; *Maculipennis* del Junco y Reyes, 1947; *Ceratocnemis* Wolf, 1963). Type species *Sphex exaltata* Fabricius, 1775. Parasitoids of the spiders from the families Atypidae, Segestriidae, Linyphiidae, Tetragnathidae, Araneidae, Lycosidae, Pisauridae, Oxyopidae, Zoridae, Agelenidae, Dictynidae, Amaurobiidae, Anaphaenidae, Lio-cranidae, Clubionidae, Gnaphosidae, Thomisidae and Salticidae. The genus includes four subgenera: *Leptopriocnemis* Ishikawa, 1962; *Moczarellus* Wolf, 1963; *Priocnemis* Schiødte, 1837; *Umbripennis* del Junco y Reyes, 1947 (= *Priocnemissus* Haupt, 1949). Worldwide distributed genus. Number of species: Palaearctic – about 100, Russia – 39.

Priocnemis (Leptopriocnemis) cyphonota Pérez, 1905. Russia: **FE** (PR, KU). – Japan (Hok, Hon, Shi, Kyu).

- Priocnemis (Moczarellus) occipitalis** Gussakovskij, 1930 (*P. crassicapitis* Móczár, 1944). Russia: **EP** (S, NC). – Europe (EE).
- Priocnemis (Priocnemis) agenia** (Gussakovskij, 1926) [Salius]. Russia: **UR**.
- Priocnemis (Priocnemis) agilis** (Shuckard, 1837) [Pompilus] (*P. obtusiventris* Schiødte, 1837). Russia: **EP** (N, NW, C, S, NC, CR), **WS** (AL), **ES** (IR). – Europe (WE, NE, SE, EE), Turkey, Cyprus, Uzbekistan, Kyrgyzstan, Kazakhstan.
- Priocnemis (Priocnemis) amurensis** Lelej, 1988. Russia: **ES** (IR, BR), **FE** (AM, PR).
- Priocnemis (Priocnemis) belokobylskii** Lelej, 1988. Russia: **FE** (AM, KH, PR).
- Priocnemis (Priocnemis) cordivalvata** Haupt, 1927. Russia: **EP** (NW, C, NC), **ES** (KR, IR). – Europe (WE, NE, SE, EE), Mongolia.
- Priocnemis (Priocnemis) exaltata** (Fabricius, 1775) [Sphex] (*Priocnemis nudipes* Dahlbom, 1845; *P. gibbus*: Gussakovskij, 1930). Russia: **EP** (N, NW, C, E, CR), **UR**, **WS** (AL), **ES** (IR, ZB). – Europe (WE, NE, SE, EE), Turkey, Iran, Kyrgyzstan, Kazakhstan.
- Priocnemis (Priocnemis) fastigiata** Haupt, 1935. Russia: **EP** (S). – Europe (WE, SE, EE), Turkey.
- Priocnemis (Priocnemis) fenestrata** (Gussakovskij, 1926) [Salius]. Russia: **WS** (AL), **ES** (IR, YA), **FE** (AM, KH, PR). – Korean Peninsula.
- Priocnemis (Priocnemis) fennica** Haupt, 1927. Russia: **EP** (N, NW), **ES** (KS). – Europe (WE, NE, SE, EE), Turkey.
- Priocnemis (Priocnemis) ghilarovi** Lelej, 1988. Russia: **FE** (AM, PR).
- Priocnemis (Priocnemis) gracilis** (Gussakovskij, 1926) [Salius] (*P. festivus* Gussakovskij, 1930). Russia: **EP** (N, S).
- Priocnemis (Priocnemis) gussakovskiji** Wolf, 2004 (*P. confusor* Wahis, 2006). Russia: **EP** (C, ?S). – Europe (WE, NE, SE, EE), Turkey, Jordan, Kazakhstan.
- Priocnemis (Priocnemis) hyalinata** (Fabricius, 1793) [Sphex] (*Pompilus femoralis* Dahlbom, 1829). Russia: **EP** (NW, C, E, NC, CR), **UR**, **WS** (AL), **ES** (KR). – Europe (WE, NE, SE, EE), Turkey, Uzbekistan.
- Priocnemis (Priocnemis) kunashirensis** Lelej, 1988. Russia: **FE** (KU). – Japan (Hok, Hon).
- Priocnemis (Priocnemis) minuta** (Vander Linden, 1827) [Pompilus]. Russia: **EP** (C, E, NC, CR), **ES** (BR), **FE** (AM, PR). – Europe (WE, NE, SE, EE), Turkey, Cyprus, Turkmenistan, Kyrgyzstan, Kazakhstan.
- Priocnemis (Priocnemis) mitakensis** Ishikawa, 1954. Russia: **FE** (AM, PR). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Priocnemis (Priocnemis) nigricans** Gussakovskij, 1930 (*P. diversus*: Wolf, 1963; *P. parvulus parvulus*: Wolf, 1963). Russia: **EP** (NC, CR).
- Priocnemis (Priocnemis) parvula** Dahlbom, 1845 (*P. mocsaryi*: Gussakovskij, 1930; *P. minor*: Gussakovskij, 1930; Tobias, 1978). Russia: **EP** (N, NW, C, E, S, NC, CR), **WS** (OM, TK), **ES** (IR), **FE** (AM, KH, PR, SA, MG). – Europe (WE, NE, SE, EE), Turkey, Tunisia, Jordan, Uzbekistan, Kyrgyzstan.
- Priocnemis (Priocnemis) pseudopogonia** Gussakovskij, 1930. Russia: **ES** (BR), **FE** (KH, PR). – Korean Peninsula.
- Priocnemis (Priocnemis) punctatissimus** (F. Morawitz, 1891) [Salius]. Russia: **EP** (S).
- Priocnemis (Priocnemis) pusilla** (Schiødte, 1837) [Pompilus]. Russia: **EP** (N, NW, C, NC, CR), **WS** (OM), **ES** (KR). – Europe (WE, NE, SE, EE), Georgia, Turkey, Iran, Kyrgyzstan, Turkmenistan, Mongolia.
- Priocnemis (Priocnemis) schiødtei** Haupt, 1927. Russia: **EP** (N, NW, C, S, NC, CR). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan, Mongolia.
- Priocnemis (Priocnemis) shidai** Ishikawa, 1962. Russia: **FE** (KU). – Japan (Hon).
- Priocnemis (Priocnemis) sugonjaevi** Lelej et Loktionov, 2015. Russia: **FE** (AM).
- Priocnemis (Priocnemis) unicolor** (Gussakovskij, 1926) [Salius]. Russia: **ES** (KS, KR, IR), **FE** (AM, PR, KU). – Japan (Hok, Hon).
- Priocnemis (Priocnemis) yasumatsui** Ishikawa, 1954 (*P. yezoensis* Ishikawa, 1959). Russia: **FE** (KH, PR, SA). – Japan (Hok, Hon).
- Priocnemis (Umbripennis) coriacea** Dahlbom, 1843. Russia: **EP** (C, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), Turkey.
- Priocnemis (Umbripennis) enslini** Haupt, 1927. Russia: **EP** (CR). – Europe (WE, NE, SE, EE).
- Priocnemis (Umbripennis) fallax** Verhoeff, 1892 (*P. vulgaris*: Gussakovskij, 1930; Tobias, 1978). Russia: **EP** (C, E, S). – Europe (WE, SE, EE), Tunisia, Turkey, Kyrgyzstan, Uzbekistan, Kazakhstan.
- Priocnemis (Umbripennis) gussakovskii** Lelej, 1988. Russia: **FE** (AM, KH, PR). – Korean Peninsula.
- Priocnemis (Umbripennis) hankoi** Móczár, 1944 (*P. mimulus*: Gussakovskij, 1930). Russia: **EP** (?S, ?South-East). – Europe (WE, NE, SE, EE), Turkey, Uzbekistan, Turkmenistan, Kyrgyzstan, Tajikistan, Kazakhstan.

- Priocnemis (Umbripennis) japonica** Gussakovskij, 1930 (*P. fuscus orientalis* Gussakovskij, 1930). Russia: **FE** (AM, KH, PR, SA, KU, MG). – Korean Peninsula, Japan (Hok, Hon).
- Priocnemis (Umbripennis) perturbator** (Harris, 1780) [Sphex] (*P. fuscus*: Eversmann, 1849; Assmuss, 1859; Gussakovskij, 1930). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (IR). – Europe (WE, NE, SE, EE), Cyprus, Turkey, Georgia, Iran, Uzbekistan, Kyrgyzstan.
- Priocnemis (Umbripennis) pillichi** Priesner, 1960. Russia: **EP** (NC). – Europe (WE, EE), Turkey.
- Priocnemis (Umbripennis) pseudojaponica** Lelej, 1988. Russia: **FE** (PR).
- Priocnemis (Umbripennis) susterai** Haupt, 1927 (*P. clémenti* Haupt, 1927). Russia: **EP** (S, NC, CR). – Europe (WE, NE, SE, EE), Azerbaijan, Kazakhstan, Kyrgyzstan.
- Priocnemis (Umbripennis) ussuriensis** Lelej, 1988. Russia: **FE** (AM, PR, SA). – China (CC), Korean Peninsula.
- Priocnemis (Umbripennis) vulgaris** (Dufour, 1841) [Pompilus] (*P. mimulus*: Gussakovskij, 1930; *P. mimula*: Tobias, 1978). Russia: **EP** (NW, C, S, NC). – Europe (WE, SE, EE), Turkey, Iran, Uzbekistan, Kyrgyzstan, Tajikistan, Kazakhstan.

Tribe DEUTERAGENIINI

- DEUTERAGENIA** Šustera, 1912 (*Agenia* Schiødte, 1837, nom. praeocc., nec Descourtilz, 1825; *Pogonius* Dahlbom, 1845, nom. praeocc., nec Leach, 1815; *Anoplius* Lepeletier de Saint Fargeau, 1845, nom. praeocc., nec Dufour, 1834; *Adipogon* Banks, 1944; *Mesagenia* Haupt, 1959). Type species *Sphex variegata* Linnaeus, 1758. Parasitoids of the spiders from the families Segestriidae, Dysderidae, Oxyopidae, Agelenidae, Amaurobiidae, Clubionidae, Gnaphosidae, Thomisidae and Salticidae. Worldwide (except Australia) distributed genus. Number of species: World – 54, Palaeartic – about 25, Russia – 10.
- Deuteragenia albiclypeata** (Lelej, 1986) [Dipogon]. Russia: **FE** (PR, SA). – Korean Peninsula.
- Deuteragenia bifasciata** (Geoffroy, 1785) [Ichneumon] (*Pompilus hircanus* Fabricius, 1798; *Agenia intermedia* Dahlbom, 1843). Russia: **EP** (N, NW, C, E, NC, CR), **UR**, **WS** (AL), **ES** (IR, BR, ZB), **FE** (AM, KH, PR, SA, MG). – Europe (WE, SE, NE, EE), Georgia, Kyrgyzstan, Kazakhstan, Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Deuteragenia bokhaica** (Lelej, 1986) [Dipogon] (*Dipogon antropovi* Lelej, 1995). Russia: **FE** (PR).
- Deuteragenia immarginata** Gussakovskij, 1932. Russia: **FE** (PR, SA, KU). – Japan (Hok, Hon, Shi, Kyu).
- Deuteragenia lehri** Loktionov et Lelej, 2014. Russia: **FE** (PR).
- Deuteragenia nipponica** Yasumatsu, 1939. Russia: **FE** (AM, KH, PR). – Japan (Hok, Hon, Shi).
- Deuteragenia romankovae** (Lelej, 1986) [Dipogon]. Russia: **FE** (AM, PR). – Japan (Hok, Hon).
- Deuteragenia subintermedia** (Magretti, 1886) [Pogonius] (*D. nitida* Haupt, 1927). Russia: **EP** (C, E, NC). – Europe (WE, NE, SE, EE).
- Deuteragenia variegata** (Linnaeus, 1758) [Sphex] (*Agenia variegata*: Assmuss, 1859). Russia: **EP** (C, NC). – Europe (WE, NE, SE, EE), North Africa, Caucasus, Turkey, Cyprus, Iran, Turkmenistan.
- Deuteragenia vechti** (Day, 1979) [Dipogon] (*Dipogon bifasciatum*: Tobias, 1978). Russia: **EP** (N, NW, C, E, S), **UR**, **WS** (TK, KM, AL), **ES** (IR, BR, ZB), **FE** (AM, KH, PR, SA, KU, MG, CH). – Europe (WE, NE, EE), Kyrgyzstan, Kazakhstan, Japan (Hok, Hon).
- KURILOAGENIA** Loktionov et Lelej, 2014. Type species *Kurilogenia ermolenkoi* Loktionov et Lelej, 2014. Distributed in Eastern Palaeartic (Russia: Kuril Islands). Number of species: World – 1.
- Kurilogenia ermolenkoi** Loktionov et Lelej, 2014. Russia: **FE** (KU).
- NIPPONODIPOGON** Ishikawa, 1965. Type species *Dipogon iwatai* Ishikawa, 1965. The cleptoparasites of the spider wasps (Pompilidae) from the genera *Auplopus* Spinola and *Deuteragenia* Šustera. Distributed in Eastern Palaeartic (south of the Russia Far East, Japan) and Oriental region (China: Guangdong, Yunnan, Hainan and Taiwan). Number of species: World – 9, Palaeartic – 7, Oriental – 2, Russia – 2.
- Nipponodipogon kurilensis** (Lelej, 1986) [Dipogon]. Russia: **FE** (KU).
- Nipponodipogon rossicus** (Lelej, 1986) [Dipogon]. Russia: **FE** (AM, PR).
- STIGMATODIPOGON** Ishikawa, 1965. Type species *Dipogon macrostigmatus* Ishikawa, 1959.

Distributed in Eastern Palaearctic (south of the Russian Far East and Japan). Number of species: World – 4, Palaearctic – 4, Russia – 2.

- Stigmatodipogon budrisi** Loktionov et Lelej, 2014. Russia: **FE** (KU).
Stigmatodipogon petiolatus (Lelej, 1986) [Dipogon]. Russia: **ES** (IR), **FE** (AM, PR).

Tribe AGENIELLINI

Subtribe AGENIELLINA

- POECILAGENIA** Haupt, 1927 (*Meragenia* Banks, 1934; *Poecilageniella* Ishikawa, 1965; *Taiwagenia* Tsuneki, 1989; *Trachyglyptus*: Arnold, 1959). Type species *Calicurgus rubricans* Lepeletier de Saint Fargeau, 1845. The cleptoparasites of the spider wasps (Pompilidae) from the genus *Auplopus* Spinola. Distributed in Palaearctic, Afrotropical and Oriental regions. Number of species: World – 22, Palaearctic – 6, Russia – 4.
- Poecilagenia hirashimai** (Ishikawa, 1965) [Poecilageniella]. Russia: **FE** (AM, PR). – Japan (Hok, Hon).
- Poecilagenia rubricans** (Lepeletier de Saint Fargeau, 1845) [Calicurgus]. Russia: **EP** (NC), **FE** (AM, PR). – Europe (WE, SE, EE), Turkey.
- Poecilagenia sculpturata** (Kohl, 1898) [Pseudagenia]. Russia: **EP** (NC), **FE** (KH, PR). – Europe (WE, SE), Turkey, China (NE, CC), Japan (Hon, Shi, Kyu).
- Poecilagenia shimizui** Lelej, 2000. Russia: **FE** (PR).

Subtribe AUPLOPODINA

- AUPLOPUS** Spinola, 1842 (*Aoplopus* Agassiz, 1846; *Pilpomus* Costa, 1859; *Pseudagenia* Kohl, 1884; *Stenagenia* Saussure, 1892; *Schizagenia* Cameron, 1908; *Tumagenia* Banks, 1934; *Calagenia* Banks, 1934; *Lophagenia* Banks, 1934). Type species *Pompilus femoratus* Fabricius, 1804. Parasitoids of the spiders from the families Segestriidae, Dysderidae, Tetragnathidae, Araneidae, Lycosidae, Pisauridae, Oxyopidae, Agelenidae, Anyphaenidae, Clubionidae, Sparassidae, Gnaphosidae, Thomisidae and Salticidae. The genus includes two subgenera: *Auplopus* Spinola, 1842 and *Conagenia* Banks, 1934 Worldwide distributed genus. Number of species: Palaearctic – about 30, Russia – 10.

Auplopus (Auplopus) albifrons (Dalman, 1823) [Pompilus] (*Agenia fallax* Eversmann, 1849). Russia: **EP** (S, NC), **UR**. – Europe (WE, NE, SE, EE), Turkey, Iran.

Auplopus (Auplopus) carbonarius carbonarius (Scopoli, 1763) [Sphex] (*Agenia carbonaria*: Assmuss, 1859). Russia: **EP** (N, NW, C, E, S, NC, CR), **WS** (AL), **ES** (IR, BR), **FE** (AM, KH, PR, MG). – Europe (WE, SE, NE, EE), Morocco, Algeria, Turkey, Cyprus, Jordan, Israel, Lebanon, Iran, Tajikistan, Kazakhstan, Mongolia, China (NC), Korean Peninsula, Japan (Hok, Non, Shi, Kyu, Tsushima).

Auplopus (Auplopus) mama Loktionov et Lelej, 2014. Russia: **FE** (PR).

Auplopus (Auplopus) mandshuricus Lelej, 1990. Russia: **FE** (AM, PR). – Mongolia, China (NC).

Auplopus (Auplopus) pacificus Lelej, 1990. Russia: **FE** (AM, KH, PR). – Korean Peninsula.

Auplopus (Auplopus) pygialis (Pérez, 1905) [Pseudagenia]. Russia: **ES** (IR, BR), **FE** (AM, KH, PR, SA, KU). – Eastern Kazakhstan, Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Tsushima, Yakushima).

Auplopus (Auplopus) rectus (Haupt, 1927) [Pseudagenia]. Russia: **EP** (S, NC). – Europe (WE, SE, EE), Turkey, Cyprus, Lebanon, Jordan, Iran, Turkmenistan, Uzbekistan, Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia.

Auplopus (Auplopus) takachihoi (Yasumatsu, 1943) [Pseudagenia]. Russia: **FE** (PR, SA). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

Auplopus (Auplopus) yasumatsui Lelej, 1995. Russia: **FE** (PR).

Auplopus (Conagenia) constructor (Smith, 1873) [Agenia]. Russia: **FE** (AM, KH, PR). – China (CC, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Tsushima).

MACHAEROTHRIX Haupt, 1938. Type species *Machaerothrix coactifrons* Haupt, 1938. Distributed in Eastern Palaearctic (south of the Russian Far East, Japan, China) and Oriental region (Sri Lanka; China: Guangdong; Philippines: Mindanao). Number of species: World – 6, Palaearctic – 3, Russia – 1.

Machaerothrix ussuriensis Lelej, 1986. Russia: **FE** (PR, KU).

Subfamily POMPILINAE

Tribe APORINI

Subtribe APORINA

APORUS Spinola, 1807 (*Actenopoda* Ashmead, 1902; *Melanaporus* Ashmead, 1902; *Odontaporus* Bradley, 1944). Type species *Aporus bicolor* Spinola, 1807. Parasitoids of the spiders from the family Atypidae. The genus includes two subgenera: *Aporus* Spinola, 1807 and *Cosmiaporus* Bradley, 1944. Worldwide (except Australia) distributed genus. Number of species: Palaeartic – 7, Russia – 3.

Aporus (Aporus) bicolor Spinola, 1807 (*Planiceps fulviventris* Costa, 1882). Russia: **EP** (NC). – Europe (WE, SE, EE), Cyprus, Turkey, Iran, Kazakhstan, Mongolia.

Aporus (Aporus) pollux (Kohl, 1888) [Pompilus]. Russia: **EP** (C). – Europe (WE, SE, EE), Tunisia, Turkey, Iran, Kyrgyzstan.

Aporus (Aporus) unicolor Spinola, 1807 (*A. femoralis* Vander Linden, 1827). Russia: **UR**, **ES** (?), **FE** (AM, PR, KU). – Europe (WE, SE, EE), Korean Peninsula, Japan (Hon).

Subtribe HOMONOTINA

HOMONOTUS Dahlbom, 1843 (*Isonotus* Dahlbom, 1842, nom. praeocc., nec Lepeletier de Saint Fargeau, Audinet-Serville, 1828; *Homotus* Smith, 1855; *Wesmaelinus* Costa, 1886; *Hemisalius* Saussure, 1892; *Wesmaelinus* de Dalla Torre, 1897; *Gilbertella* Turner, 1917, nom. praeocc., nec Waite, 1902; *Gilbertellana* Pate, 1946). Type species *Sphex sanguinolenta* Fabricius, 1793. Parasitoids of the spiders from the family Miturgidae. Widely distributed in the Palaeartic, Oriental and Afrotropical regions. Number of species: Palaeartic – 5, Russia – 2.

Homonotus iwatai Yasumatsu, 1932. Russia: **FE** (AM, PR, SA, KU). – Japan (Hon).

Homonotus sanguinolentus (Fabricius, 1793) [Sphex] (*Homonotus nasutus* F. Morawitz, 1888; *Salius sanguinolentus*: Assmuss, 1859). Russia: **EP** (NW, C, E, S, CR), **ES** (IR), **FE** (MG). – Europe (WE, NE, SE, EE), Cyprus, Turkey, Syria, Iran, Turkmenistan, Kyrgyzstan, Kazakhstan.

Subtribe FERREOLINA

FERREOLA Lepeletier de Saint Fargeau, 1845 (*Platyderes* Guérin-Méneville, 1844, nom. praeocc., nec Stephens, 1828; *Pseudoferreola* Radoszkowski, 1888; *Aporinus* Ashmead, 1902; *Prosalius* Aurivillius, 1907). Type species *Ferreola algira* Lepeletier de Saint Fargeau, 1845. Parasitoids of the spiders from the families Eresidae and Clubionidae. Distributed in the Palaeartic (North Africa, Europe, Russia, Central Asia), Afrotropical (Eritrea, Yemen) and Australian regions. Number of species: Palaeartic – about 10, Russia – 1.

Ferreola diffinis (Lepeletier de Saint Fargeau, 1845) [Anoplius] (*Homonotus rectangulatus* F. Morawitz, 1888). Russia: **EP** (N, NC), **ES** (IR). – Europe (WE, NE, SE, EE), Turkey, Afghanistan, Turkmenistan, Kyrgyzstan.

Tribe EPISYRONINI

BATOZONELLUS Arnold, 1937. Type species *Pompilus fuliginosus* Klug, 1834. Parasitoids of the spiders from the family Araneidae. Distributed in the Palaeartic (from European part of Russia in the west to Japan in the east), Afrotropical and Oriental regions. Number of species: Palaeartic – 2, Russia – 1.

Batozonellus truchmenus (F. Morawitz, 1888) [Pompilus]. Russia: **EP** (S). – Azerbaijan, Turkmenistan, Kyrgyzstan, Kazakhstan.

EPISYRON Schiødte, 1837 (*Epizuron* Ashmead, 1902; *Spilopompilus* Ashmead, 1902). Type species *Sphex rufipes* Linnaeus, 1758. Parasitoids of the spiders from the families Tetragnathidae, Lycosidae and Amaurobiidae. Worldwide distributed genus. Number of species: Palaeartic – about 40, Russia – 6.

Episyron albonotatum (Vander Linden, 1827) [Pompilus]. Russia: **EP** (N, NW, C, S, NC), **WS** (AL), **ES** (KR, IR, BR, ZB), **FE** (AM, KH, SA). – Europe (WE, NE, SE, EE), Morocco, Turkey, Syria, Iran, Turkmenistan, Uzbekistan, Kyrgyzstan, Tajikistan, Kazakhstan, Mongolia.

Episyron arrogans (Smith, 1873) [Pompilus] (*Pompilus funereipes* Costa, 1874; *P. sapporensis* Matsu-mura, 1912; *E. tripunctatus*: Gussakovskij, 1932). Russia: **EP** (C, NC), **ES** (IR), **FE** (AM, KH, PR,

KU). – Europe (WE, SE, EE), Turkey, China (NE, CC, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Tsushima, Izu, Ryukyu), Philippines.

Episyron candiotum Wahis, 1966. Russia: **EP** (S), **WS** (AL), **ES** (IR), **FE** (AM, PR). – Europe (SE, EE), Turkey, Syria, Transcaucasia, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE), Korean Peninsula.

Episyron gallicum (Tournier, 1889) [Pompilus]. Russia: **EP** (NC). – Europe (WE, NE, SE, EE), Turkey, Jordan, Syria, Iran, Uzbekistan, Kyrgyzstan, Kazakhstan.

Episyron kurilense Lelej, 1990. Russia: **FE** (KU). – Japan (Hok, Hon, Kyu, Tanegashima).

Episyron rufipes (Linnaeus, 1758) [Sphex] (*Pompilus karafutonis* Matsumura, 1911). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **ES** (IR, BR, ZB), **FE** (AM, KH, PR, SA, KA, MG). – Europe (WE, SE, NE, EE), Morocco, Turkey, Cyprus, Jordan, Syria, Saudi Arabia, Iran, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Yemen, Sudan, Ethiopia.

PARABATOZONUS Yasumatsu, 1936. Type species *Pompilus hakodadi* de Dalla Torre, 1897 (= *Pompilus jankowskii* Radoszkowski, 1887). Parasitoids of the spiders from the family Araneidae. Widely distributed in Palaearctic (from Europe and North Africa in the west to Japan in the east). Number of species: Palaearctic – 3, Russia – 2.

Parabatozonus jankowskii (Radoszkowski, 1887) [Pompilus] (*Pompilus bilunatus* Smith, 1873, nom. praeocc., nec Haliday, 1836; *P. hakodadi* de Dalla Torre, 1897; *P. fallaciosus* Matsumura, 1911). Russia: **FE** (PR). – China (NC), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Tsushima, Yakushima).

Parabatozonus lacerticida (Pallas, 1771) [Sphex]. Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR). – Europe (WE, SE, NE, EE), Morocco, Turkey, Cyprus, Georgia, Syria, Iran, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE), Korean Peninsula, Japan (Hok, Hon).

Tribe POMPILINI

AGENIOIDEUS Ashmead, 1902 (*Aporoideus* Ashmead, 1902; *Agenioideus* Banks, 1917; *Gymnochares* Banks, 1917; *Pseudevagetes* Wolf, 1970; *Rufopompilus* Wolf, 1970; *Alloridestus* Wolf, 1979; *Alloridestus* Wolf, 1985; *Sericopompilus*: Gussakovskij,

1932). Type species *Pompilus humilis* Cresson, 1867. Parasitoids of the spiders from the families Segestriidae, Dysderidae, Linyphiidae, Araneidae, Pisauridae, Agelenidae, Thomisidae and Salticidae. The genus includes two subgenera: *Agenioideus* Ashmead, 1902 and *Schizanoplius* Cameron, 1904 (= *Ridestus* Banks, 1912, = *Galactopterus* Arnold, 1937; = *Eggyssomma* Haupt, 1962). Worldwide distributed genus. Number of species: Palaearctic – more than 100, Russia – 12.

Agenioideus (Agenioideus) amurensis (Gussakovskij, 1932) [Psammochares]. Russia: **FE** (AM, KH, PR).

Agenioideus (Agenioideus) cinctellus (Spinola, 1807) [Pompilus]. Russia: **EP** (N, NW, C, E, S, NC, CR). – Europe (WE, NE, SE, EE), Turkey, Cyprus, Kyrgyzstan, Mongolia, Japan (Hon).

Agenioideus (Agenioideus) haupti Loktionov et Lelej, 2014 (*Psammochares cinctellus* f. *rufa* Haupt, 1938, nom. praeocc., nec *Psammochares rufus* Haupt, 1927; *A. cinctellus*: Lelej, 1990, part.; Shimizu, Wahis, 2009, part.; Lelej, Loktionov, 2012, part.). Russia: **FE** (AM). – China (CC, SE), Korean Peninsula, Japan (Hon).

Agenioideus (Agenioideus) nubecula (Costa, 1874) [Pompilus]. Russia: **EP** (S, NC). – Europe (WE, NE, SE, EE), Tunisia, Turkey, Cyprus, Jordan, Iran, Kyrgyzstan, Tajikistan, Kazakhstan.

Agenioideus (Agenioideus) pacificus Lelej, 1994 (*A. cinctellus*: Lelej, 1990, part.; Shimizu, Wahis, 2009, part.). Russia: **FE** (AM, PR, SA).

Agenioideus (Agenioideus) sericeus (Vander Linden, 1827) [Pompilus]. Russia: **EP** (C, S, NC), **UR**. – Europe (WE, SE, EE), Turkey, Jordan, Iran, Uzbekistan, Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia, China (?).

Agenioideus (Schizanoplius) ciliatus (Lepelletier de Saint Fargeau, 1845) [Pompilus] (*Psammochares rubigidorsum* Haupt, 1929). Russia: **EP** (S, CR). – Europe (WE, SE, EE), Turkey, Cyprus, Jordan, Syria, Uzbekistan, Turkmenistan, Kyrgyzstan, Kazakhstan.

Agenioideus (Schizanoplius) excisus (F. Morawitz, 1890) [Pompilus]. Russia: **EP** (S, NC). – Europe (SE, EE), Morocco, Algeria, Tunisia, Egypt, Turkey, Cyprus, Israel, Jordan, Iraq, Iran, Syria, Afghanistan, Turkmenistan, Kyrgyzstan, Kazakhstan.

Agenioideus (Schizanoplius) kohlii (Radoszkowski, 1888) [Pompilus] (*Pompilus ruficornis* F. Morawitz, 1890). Russia: **EP** (NC). – Iran, Turkmenistan, Kazakhstan.

- Agenioideus (Schizanoplius) puniceus** (Haupt, 1927) [Psammochares]. Russia: **EP** (S).
- Agenioideus (Schizanoplius) ruficeps** (Eversmann, 1849) [Pompilus]. Russia: **EP** (S). – Europe (WE, SE, EE), Morocco, Algeria, Azerbaijan, Turkey, Cyprus, Libya, Israel, Syria, Iran, Western Kazakhstan.
- Agenioideus (Schizanoplius) udegeicus** Lelej, 1990. Russia: **FE** (PR).
- AMBLYELLUS** Day, 1981. Type species *Pompilus hasdrubal* Kohl, 1894. Distributed in the Palaearctic (Western, Eastern and South Europe, North Africa, Russia, Near East, Central Asia) and Afrotropical (Yemen, South Africa) regions. Number of species: Palaearctic – 4, Russia – 2.
- Amblyellus hasdrubal** (Kohl, 1894) [Pompilus] (*Pompiloides obtusus* Gussakovskij, 1935; *Aporinellus hanibal*: Tobias, 1978). Russia: **EP** (S, CR), **UR**. – Europe (WE, SE, EE), North Africa, Turkey, Armenia, Iran, Kyrgyzstan, Turkmenistan.
- Amblyellus kiritschenkoi** (Gussakovskij, 1930) [Sophropompilus]. Russia: **EP** (NC). – Turkmenistan.
- ANOSPILUS** Haupt, 1929. Type species *Pompilus orbitalis* Costa, 1863. Parasitoids of the spiders from the family Nemesiidae. Widely distributed in the Palaearctic region. Number of species: Palaearctic – about 20, Russia – 1.
- Anospilus (Anospilus) carbonicolor** (Gussakovskij, 1932) [Psammochares] (*Anoplius yamamotoi* Ishikawa, 1958; *Dicyrtomellus atratinus* Wolf et Móczár, 1972). Russia: **FE** (AM, PR). – Europe (SE), Mongolia, Korean Peninsula, Japan (Hok, Hon, Kyu, Tsushima).
- APORINELLUS** Banks, 1912 (*Ferreoloides* Haupt, 1929; *Eupompiloides* Gussakovskij, 1935; *Ceratopompilus* Bradley, 1944). Type species *Aporus fasciatus* Smith, 1855. Parasitoids of the spiders from the families Oxyopidae, Philodromidae, Salticidae and Thomisidae. Worldwide (except Australia) distributed genus. Number of species: World – about 17, Palaearctic – about 5, Russia – 2.
- Aporinellus (Aporinellus) moestus** (Klug, 1834) [Pompilus] (*Pompilus sericeomaculata* Kohl, 1888). Russia: **EP** (NC, S, CR). – Europe (WE, SE, EE), Tunisia, Azerbaijan, Turkey, Cyprus, Georgia, Turkmenistan, Syria, Jordan, Uzbekistan, Kyrgyzstan, Tajikistan, Kazakhstan.
- Aporinellus (Aporinellus) sexmaculatus** (Spinola, 1805) [Pompilus] (*Pompiloides sexmaculatus asiaticus* Gussakovskij, 1935; *Pompilus sexnotatus*: Radoszkowski, 1888). Russia: **EP** (E, S, NC, CR), **WS** (AL). – Europe (WE, SE, NE, EE), Egypt, Turkey, Armenia, Azerbaijan, Israel, Jordan, Lebanon, Syria, Iran, Iraq, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan.
- ARACHNOSPILA** Kincaid, 1900 (*Pycnopompilus* Ashmead, 1902). Type species *Arachnospila septentrionalis* Kincaid, 1900. Parasitoids of the spiders from the families Segestriidae, Lycosidae, Pisauridae, Agelenidae, Amaurobiidae, Anyphaenidae, Clubionidae, Gnaphosidae, Thomisidae, Salticidae and Philodromidae. The genus includes three subgenera: *Ammosphex* Wilcke, 1942 (= *Anopompilinus* Dreisbach, 1949; = *Aridopompilus* Wolf, 1965; = *Boreopompilus* Wolf, 1965; = *Holarctopompilus* Wolf, 1965; = *Saxatilibompilus* Wolf, 1965); *Anoplochaes* Banks, 1939; *Arachnospila* Kincaid, 1900. Worldwide (except Australia) distributed genus. Number of species: Palaearctic – about 90, Russia – 47.
- Arachnospila (Ammosphex) abnormis** (Dahlbom, 1842) [Pompilus]. Russia: **EP** (NW, C, S), **WS** (AL), **ES** (KS, TU, IR, BR), **FE** (AM, KH, PR, SA, KA, MG, CH). – Europe (WE, NE, SE, EE), Kyrgyzstan, Kazakhstan, Mongolia, China (NE).
- Arachnospila (Ammosphex) alvarabnormis** (Wolf, 1965) [Pompilus]. Russia: **EP** (?). – Europe (WE, EE), Cyprus.
- Arachnospila (Ammosphex) anceps** (Wesmael, 1851) [Pompilus] (*Sphex vagus* Harris, 1780, nom praeocc., non *Sphex vaga* Linnaeus, 1758; *Pompilus unguicularis* Thomson, 1870; *A. anceps serica* Wolf et Móczár, 1972). Russia: **EP** (N, NW, C, E, S, NC, CR), **WS** (AL), **ES** (KS, TU, KR, ZB), **FE** (AM, KA, MG, CH). – Europe (WE, NE, SE, EE), Turkey, Syria, Iran, Kyrgyzstan, Kazakhstan, Mongolia.
- Arachnospila (Ammosphex) ausa** (Tournier, 1890) [Pompilus]. Russia: **EP** (?). – Europe (WE, SE, EE), Tunisia, Turkey, Kyrgyzstan.
- Arachnospila (Ammosphex) belokobylskii** Loktionov et Lelej, 2011. Russia: **FE** (PR).
- Arachnospila (Ammosphex) colpostoma** (Kohl, 1886) [Pompilus]. Russia: **EP** (?). – Europe (WE, SE), Turkey, Kazakhstan.
- Arachnospila (Ammosphex) consobrina** (Dahlbom, 1843) [Pompilus]. Russia: **EP** (NW, C, E,

- NC). – Europe (WE, NE, SE, EE), Turkey, Israel, Syria, Iran, Turkmenistan, Uzbekistan, Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia, China (?).
- Arachnospila (Ammosphex) dschingis** Wolf et Móczár, 1972. Russia: **ES** (KS, TU, IR, BR). – Kyrgyzstan, Mongolia, China (NC).
- Arachnospila (Ammosphex) eoabnormis** Lelej, 1995. Russia: **ES** (TU, KR), **FE** (AM, PR).
- Arachnospila (Ammosphex) gibbomima** (Haupt, 1929) [Psammochares]. Russia: **EP** (S). – Europe (EE), Turkey, Kyrgyzstan, Tajikistan, Kazakhstan, Mongolia.
- Arachnospila (Ammosphex) hedickei** (Haupt, 1929) [Psammochares] (*Pompilus pseudabnormis* Wolf, 1965; *Arachnospila pseudabnormis*: Dathe, 1980b). Russia: **EP** (N, NW, NC). – Europe (WE, NE, SE, EE), Turkey, Tajikistan, Kyrgyzstan.
- Arachnospila (Ammosphex) kasparyani** Loktionov et Lelej, 2015. Russia: **ES** (TU).
- Arachnospila (Ammosphex) kaszabi** Wolf, Móczár et 1972. Russia: **ES** (TU, KR, BR). – Mongolia.
- Arachnospila (Ammosphex) kurentzovi** Lelej, 1995. Russia: **ES** (BR), **FE** (AM, KH, PR, MG, CH).
- Arachnospila (Ammosphex) kurzenkoi** Lelej, 1995. Russia: **WS** (AL), **ES** (KS, TU, KR, IR, BR).
- Arachnospila (Ammosphex) kuwayamai** (Ishikawa, 1966) [Pompilus] (*Pompilus hirsutifrons* Ishikawa, 1966). Russia: **FE** (SA, KU). – Japan (Hok, Hon).
- Arachnospila (Ammosphex) maxim** Loktionov et Lelej, 2015. Russia: **ES** (KS, TU).
- Arachnospila (Ammosphex) moczari** Loktionov et Lelej, 2015. Russia: **WS** (AL), **ES** (TU).
- Arachnospila (Ammosphex) mongolica** Móczár, 1968. Russia: **ES** (KS, TU, KR, IR, BR, ZB), **FE** (AM, PR, SA). – Kyrgyzstan, Kazakhstan, Mongolia.
- Arachnospila (Ammosphex) mongolopinata** Wolf, 1981. Russia: **WS** (AL), **ES** (KS, TU), **FE** (AM, PR, SA). – Mongolia.
- Arachnospila (Ammosphex) nivalabnormis** (Wolf, 1965) [Pompilus]. Russia: **EP** (?). – Europe (WE, NE, SE, EE).
- Arachnospila (Ammosphex) opinata** (Tournier, 1890) [Pompilus] (*Pompilus carinatus* F. Morawitz, 1893). Russia: **EP** (N, NW). – Europe (WE, NE, SE, EE), Tunisia, Kyrgyzstan, Kazakhstan.
- Arachnospila (Ammosphex) orientausa** Loktionov et Lelej, 2011. Russia: **ES** (KR), **FE** (AM, PR).
- Arachnospila (Ammosphex) rasnitsyni** Loktionov et Lelej, 2011. Russia: **ES** (TU, BR).
- Arachnospila (Ammosphex) scythia** Loktionov et Lelej, 2015. Russia: **ES** (TU).
- Arachnospila (Ammosphex) sibirica** Loktionov et Lelej, 2015. Russia: **WS** (AL), **ES** (TU).
- Arachnospila (Ammosphex) subvittata** (F. Morawitz, 1889) [Pompilus] (*Pompilus nagasei* Ishikawa, 1966). Russia: **ES** (KS, TU, KR, IR, ZB), **FE** (AM, KH, PR, KU). – China (NC), Korean Peninsula, Japan (Hon, Kyu).
- Arachnospila (Ammosphex) tobiasi** Loktionov et Lelej, 2011. Russia: **ES** (BR).
- Arachnospila (Ammosphex) trivialis** (Dahlbom, 1843) [Pompilus] (*Psammochares gibbus*: Gussakovskij, 1932). Russia: **EP** (N, NW, C, S, NC), **WS** (AL), **FE** (AM, KA, MG, CH). – Europe (WE, NE, SE, EE), Turkey, Near East, Kyrgyzstan, Tajikistan, Kazakhstan, Mongolia.
- Arachnospila (Ammosphex) wesmaeli** (Thomson, 1870) [Pompilus]. Russia: **EP** (N, NW, C, ?S), **ES** (KR). – Europe (WE, NE, SE, EE), Kyrgyzstan, Mongolia.
- Arachnospila (Ammosphex) westerlundii** (F. Morawitz, 1893) [Pompilus] (*Pompilus guentheri* F. Morawitz, 1893). Russia: **EP** (N, NW). – Europe (WE, NE, SE, EE), Cyprus.
- Arachnospila (Ammosphex) wolfi** Lelej, 1995. Russia: **FE** (PR).
- Arachnospila (Ammosphex) yasumatsui** Wolf et Móczár, 1972. Russia: **ES** (KS, TU, KR, IR, BR). – Mongolia, China (NC).
- Arachnospila (Ammosphex) zonsteini** Loktionov et Lelej, 2011. Russia: **ES** (BR).
- Arachnospila (Anoplochaes) ainu** Lelej, 1995. Russia: **FE** (AM, PR, SA, KU). – Japan (Hok).
- Arachnospila (Anoplochaes) fuscomarginata** (Thomson, 1870) [Pompilus] (*Pompilus signaticeps* F. Morawitz, 1893). Russia: **EP** (N, NW, C, S, NC, CR), **UR**, **WS** (AL), **ES** (BR, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), Turkey, Iran, Uzbekistan, Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia.
- Arachnospila (Anoplochaes) minutula** (Dahlbom, 1842) [Pompilus] (*Pompilus minutus* Dahlbom, 1829, nom. praeocc., nec Vander Linden, 1827; *A. minutula mongolominutula* Wolf et Móczár, 1972). Russia: **EP** (N, NW, C, S, NC, CR), **UR**, **WS** (AL), **ES** (BR, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), Turkey, Near East, Kyrgyzstan, Kazakhstan, Mongolia.
- Arachnospila (Anoplochaes) mongolospissa** Wolf et Móczár, 1972. Russia: **WS** (AL), **ES** (IR, ZB), **FE** (AM, PR). – Mongolia, China (NC).

- Arachnospila (Anoplochares) spissa** (Schiodte, 1837) [Pompilus]. Russia: **EP** (N, NW, C, S, NC), **WS** (AL), **ES** (IR, YA, ZB), **FE** (AM, SA, MG). – Europe (WE, NE, SE, EE), Turkey, Near East, Turkmenistan, Uzbekistan, Kyrgyzstan, Tajikistan, Kazakhstan, Mongolia, China (NC).
- Arachnospila (Anoplochares) ussuriensis** (Gussakovskij, 1932) [Psammochares] (*Pompilus hokkaidensis* Ishikawa, 1966). Russia: **FE** (AM, KH, PR, SA, KU). – Japan (Hok).
- Arachnospila (Anoplochares) usurata** (Blüthgen, 1957) [Pompilus] (*A. asiatica*: Lelej, 1995; Wolf, Sorg, 2007; Wiśniowski, 2009; Wahis, 2013). Russia: **EP** (S), **ES** (IR), **FE** (AM, KH, PR); Europe (WE, SE, EE), Kazakhstan, Mongolia.
- Arachnospila (Arachnospila) amurensis** (Motschulsky, 1860) [Pompilus]. Russia: **ES** (BR, ZB), **FE** (AM, KH, PR).
- Arachnospila (Arachnospila) clericalis** (F. Morawitz, 1889) [Pompilus] (*A. mongolorufa* Wolf et Móczár, 1972). Russia: **WS** (AL), **ES** (TU, IR, BR, ZB). – Turkey, Kazakhstan, Mongolia, China (NC).
- Arachnospila (Arachnospila) eisukei** (Ishikawa, 1969) [Pompilus] (*Psammochares herbignadus* (!): Kobayashi, 1931). Russia: **FE** (SA, KU). – Japan (Hok, Hon).
- Arachnospila (Arachnospila) fumipennis** (Zetterstedt, 1838) [Pompilus] (*Psammochares malaisei* Nordström, Forsius, 1930). Russia: **EP** (N, C, NC, CR), **UR**, **WS** (AL), **ES** (KS, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KA, MG, CH). – Europe (WE, SE, NE, EE), North Africa, Turkey, Israel, Iran, Kyrgyzstan, Tajikistan, Kazakhstan, Mongolia, Japan (Hok, Hon), N America.
- Arachnospila (Arachnospila) rufa** (Haupt, 1927) [Psammochares]. Russia: **EP** (N, NW, C, S), **UR**, **WS** (OM, AL), **ES** (TU). – Europe (WE, NE, SE, EE), Turkey, Near East, Kyrgyzstan, Kazakhstan, Mongolia.
- Arachnospila (Arachnospila) sogdianoides** (Wolf, 1964) [Pompilus] (*A. malaisei*: Lelej, 2000, 2005b; Loktionov, Lelej, 2010; Loktionov, 2011; *A. sogdiana*: Tobias, 1978; Dathe, 1980b; Wahis, 1986). Russia: **EP** (N, C, NC), **ES** (KS, TU, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KA, MG). – Europe (WE, NE, SE, EE), Turkey, Near East, Uzbekistan, Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia.
- DICYRTOMELLUS** Gussakovskij, 1935. Type species *Spheg cingulata* Rossi, 1790 (nom. praeocc., nec Fabricius, 1775, replaced by *Pompilus luctuosus* Mocsáry, 1879, nom. praeocc., nec Cresson, 1865; replaced by *Dicyrtomellus argenteus* Wahis, 1983 = *Arachnospila tingitana* Wolf, 1966). Distributed in the Palaearctic region (Western, Eastern and South Europe, North Africa, Near East, European part of Russia, Central Asia, Kazakhstan, Mongolia). Number of species: Palaearctic – about 20, Russia – 3.
- Dicyrtomellus kizilkumii** (Radoszkowski, 1877) [Pompilus]. Russia: **EP** (NC). – Turkey, Iran, Afghanistan, Turkmenistan, Kazakhstan.
- Dicyrtomellus litatus** (Tournier, 1889) [Pompilus] (*Pompilus brevigena* F. Morawitz, 1891; *D. wolffi* Móczár, 1968). Russia: **EP** (S). – Kazakhstan, Mongolia.
- Dicyrtomellus tingitanus** (Wolf, 1966) [Arachnospila] (*Pompilus luctuosus* Mocsáry, 1879, nom. praeocc., nec Cresson, 1865; *Dicyrtomellus argenteus* Wahis, 1983). Russia: **EP** (NC). – Europe (WE, SE, EE), Morocco, Turkey, Israel, Jordan, Syria, Iran, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan.
- EVAGETES** Lepeletier de Saint Fargeau, 1845 (*Eyagates* Lucas, 1852; *Evagethes* Smith, 1858; *Sophropompilus* Howard, 1901; *Sophropompilus* Ashmead, 1902, nom. praeocc., nec Howard, 1901; *Nannopompilus* Ashmead, 1902; *Nanopompilus* Banks, 1914; *Trichosyron* Haupt, 1930; *Leuchimon* Haupt, 1930; *Asthenoctenus* Arnold, 1937, nom. praeocc., nec Simon, 1897; *Asthenoctenidia* Pate, 1946; *Psammocharoides* Móczár, 1946; *Streptosella* Dreisbach, 1950; *Streptosella* Evans, 1951; *Carinevagetes* Wolf, 1970; *Contemptevagetes* Wolf, 1970). Type species *Evagetes bicolor* Lepeletier de Saint Fargeau, 1845 (= *Aporus dubius* Vander Linden, 1827). The cleptoparasites of spider wasps (*Anoplius* Dufour, *Arachnospila* Kincaid, *Pompilus* Fabricius, *Aporinellus* Banks, *Parabatozonus* Yasumatsu, *Episyron* Schiodte, *Aporus* Spinola). Distributed mainly in Palaearctic (from Europe and North Africa in the west to Japan in the east), but also occur in Nearctic, Neotropical and Oriental regions. Number of species: World – 64, Palaearctic – 51, Russia – 20.
- Evagetes alamannicus** (Blüthgen, 1944) [Pompilus]. Russia: **EP** (N, NC, CR). – Europe (WE, NE, SE, EE).
- Evagetes crassicornis crassicornis** (Shuckard, 1837) [Pompilus]. Russia: **EP** (N, NW, C, E), **WS** (AL), **ES** (IR, BR, YA, ZB), **FE** (AM, SA, MG, CH). – Europe

- (WE, SE, NE, EE), Morocco, Turkey, Georgia, Kyrgyzstan, Kazakhstan, Mongolia, Canada, N America.
- Evagetes deirambo** Ishikawa, 1960 (*E. yezoensis* Ishikawa, 1960). Russia: **ES** (IR, BR), **FE** (AM, KH, PR, SA, MG). – Korean Peninsula, Japan (Hok, Hon).
- Evagetes dubius** (Vander Linden, 1827) [Aporus]. Russia: **EP** (NW, C, E, S, NC, CR), **ES** (IR, BR), **FE** (AM, PR). – Europe (WE, NE, SE, EE), Turkey, Cyprus, Turkmenistan, Kyrgyzstan, Tajikistan, Kazakhstan, Mongolia.
- Evagetes elongatus** (Lepelletier de Saint Fargeau, 1845) [Anoplius] (*Pompilus magretti* Kohl, 1886). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Morocco, Algeria, Turkey, Georgia, Syria, Kyrgyzstan, Kazakhstan.
- Evagetes gibbulus** (Lepelletier de Saint Fargeau, 1845) [Pompilus] (*Pompilus pectinipes* var. *pilosellus* Wesmael, 1851; *Evagetes pilosellus*: Dathe, 1980b). Russia: **EP** (NW, C, S, NC), **WS** (AL). – Europe (WE, NE, SE, EE), Turkey, Kyrgyzstan, Kazakhstan, Mongolia.
- Evagetes iconionus** Wolf, 1970. Russia: **EP** (C, CR). – Europe (WE, SE, EE), Morocco, Turkey, Georgia, Kyrgyzstan, Kazakhstan, China (?).
- Evagetes ishikawai** Lelej, 1995. Russia: **ES** (IR, BR, ZB), **FE** (AM, PR).
- Evagetes littoralis** (Wesmael, 1851) [Pompilus]. Russia: **EP** (NW, C, E, S, NC), **ES** (IR, BR, ZB), **FE** (AM, KH, PR). – Europe (WE, SE, EE), Kyrgyzstan.
- Evagetes orientalis** Lelej et Loktionov, 2009 (*Evagetes sahlbergi*: Lelej, 1992, part.; 1995: 248, part.; 2005b, part.). Russia: **FE** (AM, KH, PR, SA, KU).
- Evagetes pectinipes** (Linnaeus, 1758) [Sphex]. Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (TK), **ES** (IR, BR, ZB), **FE** (AM, PR, SA). – Europe (WE, NE, SE, EE), North Africa, Turkey, Uzbekistan, Kyrgyzstan, Kazakhstan.
- Evagetes pontomoravicus** (Šustera, 1938) [Psammochares] (*Evagetes atratulus* Tobias, 1978, part.). Russia: **EP** (S, NC, CR), **ES** (BR, ZB). – Europe (SE, EE), North Africa, Turkey, Cyprus, Turkmenistan, Kyrgyzstan, Kazakhstan, Mongolia.
- Evagetes proximus** (Dahlbom, 1845) [Pompilus] (*E. daisetsuzanus* Ishikawa, 1960; *E. proximus mongoloproximus* Wolf et Móczár, 1972). Russia: **EP** (NW, C, NC, CR), **WS** (AL), **ES** (IR, BR, ZB), **FE** (AM, KH, PR, MG). – Europe (WE, NE, SE, EE), Turkey, Iran, Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NC), Japan (Hok).
- Evagetes sahlbergi** (F. Morawitz, 1893) [Pompilus]. Russia: **EP** (N, NW, C, NC), **FE** (PR, KA, MG, CH). – Europe (WE, NE, SE, EE), Kyrgyzstan, Tajikistan, Mongolia.
- Evagetes siculus** (Lepelletier de Saint Fargeau, 1845) [Pompilus] (*Pompilus contemptus* Tournier, 1889). Russia: **EP** (S, NC, CR). – Europe (WE, NE, SE, EE), North Africa, Turkey, Cyprus, Syria, Kyrgyzstan, Turkmenistan, Uzbekistan.
- Evagetes sikhotealinensis** (Lelej, 1990) [Anospilus] (*Evagetes proximus* part.). Russia: **ES** (IR, ZB), **FE** (AM, KH, PR, SA, KA). – Kazakhstan, Mongolia, China (NC).
- Evagetes subglaber** (Haupt, 1941) [Psammochares] (*Psammochares subnudus* Haupt, 1941). Russia: **EP** (C, NC, CR), **WS** (AL). – Europe (WE, NE, SE, EE), Turkmenistan, Kyrgyzstan, Western Mongolia.
- Evagetes transbaicalicus** Lelej, 1995. Russia: **ES** (BR, ZB).
- Evagetes trispinosus** (Kohl, 1886) [Pompilus]. Russia: **WS** (AL). – Europe (WE, SE, EE), Tunisia, Armenia, Azerbaijan, Georgia, Turkey, Cyprus, Israel, Jordan, Lebanon, Syria, Iraq, Iran, Kyrgyzstan, Kazakhstan, Mongolia.
- Evagetes tumidosus** (Tournier, 1890) [Pompilus] (*Pompilus pedicellaris* F. Morawitz, 1891). Russia: **EP** (S, CR), **ES** (IR, ZB), **FE** (PR). – Europe (WE, SE, EE), Turkey, Kyrgyzstan, Turkmenistan, Tajikistan, Kazakhstan.
- POMPILUS** Fabricius, 1798 (*Chionopompilus* Priesner, 1955). Type species *Pompilus pulcher* Fabricius, 1798. Parasitoids of the spiders from the families Atypidae, Araneidae, Lycosidae, Pisauridae, Zoropsidae, Zoridae, Ctenidae, Clubionidae, Gnaphosidae, Thomisidae and Salticidae. Widely distributed in Palaearctic, Afrotropical, Oriental and Australian regions. Number of species: World – 7, Palaearctic – 1.
- Pompilus cinereus** (Fabricius, 1775) [Sphex] (*Sphex plumbea* Fabricius, 1787; *Pompilus pulcher* Fabricius, 1798). Russia: **EP** (N, NW, C, E, S, NC, CR), **FE** (AM, PR). – Europe (WE, SE, NE, EE), Cyprus, Algeria, Tunisia, Egypt, Turkey, Israel, Pakistan, China (NC, SE), Korean Peninsula, Japan (Hon, Kyu, Ryukyu). Widely distributed in Afrotropical, Oriental and Australian regions.
- SCHISTONYX** Saussure, 1887. Type species *Cyphononyx velutinus* Saussure, 1887. Distributed in Palaearctic (South Europe, North Africa, Central

Asia) and Afrotropical regions. Number of species: Palaearctic – about 10, Russia – 1.

Schistonyx umbrosus (Klug, 1834) [Pompilus]. Russia: **EP** (NC). – Europe (WE), Morocco, Tunisia, Egypt, Syria, Israel, Jordan, Iran, Central Asia, Mauritania.

Tribe ANOPLIINI

ANOPLIUS Dufour, 1834 (*Pompilioides* Radoszkowski, 1887; *Pompiliodes* Ashmead, 1902; *Aphilocstenus* Ashmead, 1902; *Paranoplius* Haupt, 1929). Type species *Sphex nigerrima* Scopoli, 1763. Parasitoids of the spiders from the families Lycosidae, Pisauridae, Oxyopidae, Ctenidae, Agelenidae, Amaurobiidae, Liocranidae, Gnaphosidae, Thomisidae, Salticidae and Philodromidae. The genus includes two subgenera: *Anoplius* Dufour, 1834 and *Arachnoproctonus* Howard, 1901 (= *Psammochares* Latreille, 1797; = *Arachnophila* Ashmead, 1902, nom. praeocc., nec Salvadori, 1874; = *Pompilinus* Ashmead, 1902; = *Anoplinellus* Banks, 1934; = *Arachnodaicter* Pate, 1946). Worldwide distributed genus. Number of species: Palaearctic – about 30, Russia – 15.

Anoplius (Anoplius) aberrans Gussakovskij, 1932 (*Paranoplius separatus* Haupt, 1929, nom. praeocc. nec *Pompilus separatus* Taschenberg, 1869; *A. luzonicus* Tsuneki, 1988). Russia: **WS** (AL), **ES** (IR, BR), **FE** (AM, KH, PR, SA, KU, KA, MG). – Uzbekistan, Korean Peninsula, China (SE), Japan (Hok, Hon, Shi, Kyu), Philippines (Luzon), Indonesia (Celebes).

Anoplius (Anoplius) alpinobalticus Wolf, 1965. Russia: **EP** (C, E), **FE** (PR). – Europe (WE, NE, SE, EE), ?Mongolia.

Anoplius (Anoplius) caviventris (Aurivillius, 1907) [Pompilus]. Russia: **EP** (C, E). – Europe (WE, NE, SE, EE), Turkey.

Anoplius (Anoplius) concinnus (Dahlbom, 1843) [Pompilus] (*Pompilus bifidus* F. Morawitz, 1891; *P. distinguendus* F. Morawitz, 1891). Russia: **EP** (N, NW, C, E, S, NC), **WS** (AL), **ES** (KS, IR, BR), **FE** (AM, KH, PR). – Europe (WE, SE, NE, EE), Turkey, Cyprus, Israel, Iran, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia.

Anoplius (Anoplius) fratellus (Pérez, 1905) [Pompilus] (*A. aberrans* Gussakovskij, 1932, part.; *Anoplius (Anoplius) saigusai* Lelej in Lelej, Yamane, 1994). Russia: **FE** (AM, KH, PR). – Korean Peninsula, Japan (Hon, Kyu).

Anoplius (Anoplius) iwatai Yasumatsu, 1939. Russia: **FE** (AM, KH, PR, SA, KU). – Mongolia, Japan (Hon, Kyu).

Anoplius (Anoplius) nigerrimus (Scopoli, 1763) [Sphex] (*Pompilus niger*: Eversmann, 1849, Assmuss, 1859). Russia: **EP** (N, NW, C, E, NC, CR), **UR**, **WS** (AL), **ES** (IR, BR, YA), **FE** (AM, KH, PR, SA, KU, KA). – Europe (WE, SE, NE, EE), Turkey, Iran, Uzbekistan, Tajikistan, N America.

Anoplius (Anoplius) petiolaris Gussakovskij, 1932. Russia: **FE** (KH, PR, SA, KU). – Mongolia, Japan (Hok, Hon, Kyu).

Anoplius (Anoplius) ryukyuensis Tsuneki, 1990. Russia: **FE** (AM, KH, PR, KU). – China (SE), Japan (Hok, Kyu, Tsushima, Ryukyu).

Anoplius (Anoplius) sachalinensis Lelej, 1994. Russia: **FE** (AM, KH, PR, SA, KU). – Japan (Hok).

Anoplius (Anoplius) sundukovi Loktionov et Lelej, 2014 (*A. eous*: Loktionov, 2010, part.; Loktionov, 2011, part.; Lelej, Loktionov, 2012, part.; Shlyakhtenok et al., 2012, part.). Russia: **FE** (PR).

Anoplius (Anoplius) tenuicornis (Tournier, 1889) [Pompilus]. Russia: **EP** (N, NW, NC), **WS** (AL), **ES** (KR, IR), **FE** (AM, KH, PR, SA, KA, MG). – Europe (WE, NE, SE, EE), Central Asia, Mongolia, North America.

Anoplius (Arachnoproctonus) aeruginosus (Tournier, 1890) [Pompilus] (*Pompilus dispar* Dahlbom, 1843, nom. praeocc., nec Latreille, 1809). Russia: **EP** (NW, C, NC), **ES** (KR). – Europe (WE, NE, SE, EE), Morocco, Turkey, Central Asia.

Anoplius (Arachnoproctonus) infuscatus (Vander Linden, 1827) [Pompilus] (*Pompilus reflexus* Smith, 1873; *A. infuscatus mongolinfuscatus* Wolf, 1981; *A. esakii* Ishikawa, 1958). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **ES** (IR), **FE** (AM, KH, PR, SA, KU). – Europe (WE, SE, NE, EE), Algeria, Egypt, Cyprus, Jordan, Iran, Turkmenistan, Uzbekistan, Kyrgyzstan, Mongolia, China (NC), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryukyu).

Anoplius (Arachnoproctonus) viaticus (Linnaeus, 1758) [Sphex] (*Pompilus ogumae* Matsumura, 1911). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, SE, NE, EE), Egypt, Georgia, Turkey, Cyprus, Jordan, Iran, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NC), ?Korean Peninsula, Japan (Hok, Hon, Kyu).

LOPHOPOMPILUS Radoszkowski, 1887 (*Pompilogaster* Howard, 1901; *Pompilogastra* Ashmead, 1902). Type species *Pompilus grandis* Eversmann, 1846. Parasitoids of the spiders from the families Araneidae, Lycosidae, Pisauridae, Gnaphosidae and Sparassidae. Distributed in Palaearctic and Nearctic regions. Number of species: World – 9, Palaearctic – 4, Russia – 2.

Lophopompilus grandis (Eversmann, 1846) [*Pompilus* (!)]. Russia: **EP** (S, CR), **UR**, **WS** (AL), **ES** (TU), **FE** (AM, PR). – Kazakhstan, Mongolia, China (NW).

Lophopompilus samariensis (Pallas, 1771) [Sphex] (*Pompilus zelleri* Dahlbom, 1843). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (OM, AL), **ES** (TU, IR, BR, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, SE, EE), Turkey, Iran, Kyrgyzstan, Kazakhstan, Japan (Hok, Hon, Shi, Kyu, Tsushima, Yakushima).

Tribe PSAMMODERINI

ARACHNOTHEUTES Haupt, 1927 (*Microdrapetes* Arnold, 1937; *Phauloclavelia* Haupt, 1962; *Chionopterus* Priesner, 1965). Type species *Pompilus rufithorax* Costa, 1881. Distributed in Palaearctic (from Europe in the west to Mongolia in the east). Number of species: Palaearctic – 12, Russia – 1.

Arachnotheutes rufithorax (Costa, 1881) [*Pompilus*] (*Pompilus affinis* Eversmann, 1849, nom. praeocc., nec Vander Linden, 1827; *P. galactopterus* Kohl, 1888; *P. breviscapus* F. Morawitz, 1891; *P. cardinalis* F. Morawitz, 1891; *P. leucurus* Morawitz, 1891; *Agenioideus europaeus* Priesner, 1965; *Phauloclavelia rufipes* Priesner, 1966). Russia: **EP** (S). – Europe (WE, SE, EE), Turkey, Kyrgyzstan, Kazakhstan, Mongolia.

EOFERREOLA Arnold, 1935 (*Paraferreola* auct., nec Šusterka, 1912; *Tea* Pate, 1946). Type species *Anoplius soleanus* Cameron, 1905. Parasitoids of the spiders from the family Eresidae. Distributed in Palaearctic (from Europe and North Africa in the west to the Russian Far East in the east), Nearctic and Afrotropical regions. Number of species: Palaearctic – 8, Russia – 4.

Eoferreola erythraea (Pallas, 1773) [Sphex]. Russia: **EP** (E, S, NC), **UR**, **ES** (KR). – Turkey, Kyrgyzstan, Turkmenistan, Kazakhstan.

Eoferreola manticata (Pallas, 1771) [Sphex] (*Salus hellmanni* Eversmann, 1849; *Ferreola caucasica* Radoszkowski, 1888; *F. rossica* Radoszkowski, 1888). Russia: **EP** (E, S, NC, CR), **UR**, **WS** (AL), **FE** (PR). – Europe (WE, SE, EE), Morocco, Algeria, Tunisia, Egypt, Azerbaijan, Turkey, Israel, Jordan, Lebanon, Syria, Iran, Uzbekistan, Turkmenistan, Tajikistan, Kyrgyzstan, Kazakhstan.

Eoferreola rhombica (Christ, 1791) [Sphex] (*Pompilus fasciatus* Eversmann, 1849). Russia: **EP** (S, NC, CR), **UR**, **WS** (AL), **ES** (KR, IR, BR), **FE** (AM). – Europe (WE, SE, EE), Azerbaijan, Turkey, Uzbekistan, Kyrgyzstan, Tajikistan, Kazakhstan, Mongolia.

Eoferreola variabilis (Eversmann, 1849) [*Pompilus*] (*Ferreola distincta* Smith, 1855; *Salus grandis* Radoszkowski, 1887). Russia: **EP** (S, NC, CR), **UR**. – Europe (SE), Algeria, Egypt, Turkey, Syria, Iran, Uzbekistan, Kyrgyzstan, Kazakhstan.

Tribe EIDOPOMPILINI

MICROPHADNUS Cameron, 1905 (*Plagioceps* Haupt, 1930). Type species *Microphadnus bicolor* Cameron, 1905. Distributed in Palaearctic (from Europe and North Africa in the west to Mongolia in the east), Afrotropical (South Africa, Madagascar) and Australian regions. Number of species: Palaearctic – 4, Russia – 1.

Microphadnus pumilus (Costa, 1886) [*Aporus*]. Russia: **EP** (NC). – Europe (WE, SE), Morocco, Tunisia, Egypt, Turkey, Lebanon, Israel, Syria, Afghanistan, Uzbekistan, Kyrgyzstan, Tajikistan, Kazakhstan, Mongolia.

STIGMAPORUS Zonstein, 2001. Type species *Gonaporus wolfi* Zonstein, 2001. Distributed in Palaearctic (European part of Russia, Central Asia, Kazakhstan, Mongolia and China: Xinjiang). Number of species: World – 4, Palaearctic – 4, Russia – 1.

Stigmaporus volgodon Loktionov et Lelej, 2016. Russia: **EP** (S).

TACHYAGETES Haupt, 1930 (*Pareiaxenus* Haupt, 1962; *Dasyagetes* Priesner, 1955; *Exagetes* Priesner, 1955; *Epagetes* Priesner, 1955). Type species *Evagetes filicornis* Tournier, 1889. Parasitoids of the spiders from the families Lycosidae, Clubionidae, Gnaphosidae and Salticidae. Distributed in Palaearctic region (from Europe and North Africa

in the west to Mongolia in the east). Number of species: Palaearctic – about 90, Russia – 6.

Tachyagetes (Tachyagetes) argentatus Haupt, 1930. Russia: **UR**. – Turkmenistan, Uzbekistan.

Tachyagetes (Tachyagetes) consimilis Tobias, 1978. Russia: **EP (S)**.

Tachyagetes (Tachyagetes) dudichi Móczár, 1944. Russia: **EP (NC)**. – Europe (EE).

Tachyagetes (Tachyagetes) filicornis (Tournier, 1889) [Evagetes]. Russia: **EP (S, NC)**. – Europe (WE, SE, EE), Morocco, Turkey, Cyprus, Iran, Uzbekistan, Tajikistan, Kyrgyzstan, Turkmenistan, Kazakhstan, Mongolia.

Tachyagetes (Tachyagetes) grandis (Tournier, 1889) [Evagetes]. Russia: **EP (S, NC, CR)**. – Kyrgyzstan, Turkmenistan, Kazakhstan.

Tachyagetes (Tachyagetes) graciosus (Radoszkowski, 1893) [Aporus]. Russia: **EP (NC)**. – Turkey, Iran, Turkmenistan, Uzbekistan, Tajikistan, Kyrgyzstan, Kazakhstan.

TELOSTEGUS Costa, 1887 (*Elaphrosyron* Haupt, 1929; *Protelostegus* Priesner, 1955). Type species *Aporus major* Costa, 1886 (= *Aporus inermis* Brullé, 1833). Distributed in Palaearctic (from Europe and North Africa in the west to Mongolia in the east), Afrotropical and Australian regions. Number of species: Palaearctic – about 20, Russia – 1.

Telostegus inermis (Brullé, 1833) [Aporus] (*Aporus major* Costa, 1886). Russia: **EP (S, NC)**. – Europe (WE, SE, EE), Morocco, Algeria, Turkey, Cyprus, Iran, Kyrgyzstan, Tajikistan, Kazakhstan.

XENAPORUS Ashmead, 1902 (*Taeniaporus* Haupt, 1930). Type species *Pompilus amoenus* Klug, 1834. The genus includes two subgenera: *Baguenaia* Giner Mari, 1942 (= *Nannaporus* Priesner, 1966; = *Melanaporus* Priesner, 1967; = *Ciliaporus* Wahis, 1972) and *Xenaporus* Ashmead, 1902. Distributed in Palaearctic (from Europe and North Africa in the west to Mongolia in the east) and Nearctic regions. Number of species: Palaearctic – about 35, Russia – 1.

Xenaporus (Baguenaia) eremocanus Wolf, 1990. Russia: **ES (TU)**. – Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia.

Doubtful or wrongly recorded taxa

Ceropales pygmaea pygmaea Kohl, 1880. Russia: “Eastern Siberia”.

Ceropales ruficornis Gussakovskij, 1931. Russia: “Russian (Asia)”, “Russian SSR”.

Eoferreola anatolica Priesner, 1973. Russia: “Russia: Kulp”; “Russia”.

Hemipepsis sinensis (Smith, 1855). Russia: “Russia”.

Pompilus trivialis var. **maris** Eversmann, 1849. Doubtful taxon, probably belongs to the *Arachnospila (Ammosphex)* spp.

Telostegus nigrutilus (Klug, 1834). Russia: “in provinciis Orenburg., Saratov. et Astrachanensi” [actually North Africa].

SUPERFAMILY VESPOIDEA

68. FAMILY VESPIDAE

A.V. ANTROPOV AND A.V. FATERYGA

Vespidae are the wasps of predominantly medium size, though rarely relatively small (2.5 mm) to very large (up to 50 mm). Their most distinct differences are the inner eye orbits with more or less pronounced notches, the pronotum laterally extending back to the tegulae and with deep oval or triangular dorsal emargination, and the forewings folding longitudinally at rest (except Stenogastrinae, Euparagiinae, and part of Masarinae), with discoidal cell 1 longer than half the wing length. The body of vespids has usually typical “wasp” coloration, consisting of more or less regular yellow or white spots and bands on black background, but it may be black with reddish markings, or completely black-brown or yellow, while some species of *Ropalidia* Guérin-Méneville, 1831 may be even green.

The family includes six extant subfamilies: Euparagiinae, Masarinae, Eumeninae, Stenogastrinae, Polistinae, and Vespinae. The first three groups include only solitary insects, while the last three demonstrate the gradual development of sociality. Russian fauna is represented only by the subfamilies Eumeninae (potter wasps), Masarinae (pollen wasps), Polistinae (paper wasps), and Vespinae (yellowjackets and hornets). There are also two subfamilies known only by fossil records: Priorvespinae and Protovespinae.

The subfamily Euparagiinae is a small group of relic vespids containing the single extant genus *Euparagia* Cresson, 1879 with 10 species, which are known only from the southwest of North America. These wasps have habits similar to the eumenine genus *Odynerus*. Their females excavate vertical burrows in ground and surmount them by mud turrets (or “chimneys”); the nest contains several cells provisioned with larvae of Curculionidae.

The members of the subfamily Masarinae are most diverse and abundant in arid regions of the World. They are present in all zoogeographical regions, however only one species of the genus *Quartinia* André, 1884 is known from the Oriental region. This subfamily includes two tribes: Gayellini, with two Neotropical genera, and Masarini, which is additionally divided on three subtribes: Priscomasarina, with one monotypic Afrotropical genus, Paragiina, with two Australian genera, and Masarina, with nine genera distributed

in the Nearctic (1), the Neotropical (2), the Palaearctic (1), the Afrotropical (1), and both Palaearctic and Afrotropical (4) region. Masarines are unique among solitary vespids in feeding their larvae exclusively with pollen and nectar. They nest in ground and excavate burrows surmounted by mud entrance turrets or build aerial nests consisted of several ovoid (*Gayella* Spinola, 1851) or cylindrical (*Celonites* and *Pseudomasaris* Ashmead, 1902) cells usually covered with additional mud layer. Nectar is used by females as bonding agent in nests of *Celonites* and *Pseudomasaris*, while ground nesting masarines usually use water during the nest construction. Species of the genus *Quartinia*, nesting in friable soil, use silk to confirm the inner walls of the nest burrow and the cells as well as to construct the turret. All masarines lay an egg into empty cell prior to its provisioning; an egg is usually not suspended by a filament (except *Gayella*). **Number of taxa** of Masarinae: World – 14 genera, 371 species, Palaearctic – 5/115, Russia – 1/2.

The members of the subfamily Eumeninae are also solitary wasps, except just several species that demonstrate a primitively social behavior (nest-sharing, reuse of brood cells, progressive provisioning, and strong aggressive competition among resident females for empty cells). This is the most divers subfamily distributed worldwide. It contains three tribes: Zethini (18 genera, 354 species), Eumenini (20/365), and Odynerini (167/3039). The nesting habits of the eumenines are extremely diverse. Species of the tribe Zethini usually build nests in preexisting cavities and use pressed pith or leaf cuts as building material for partitions between nest cells. However some species in the genera *Zethus* Fabricius, 1804 and *Calligaster* de Saussure, 1852 build aerial nests of leaf cuts. Species of the tribe Eumenini build nest cells in the shape of juglike pots with narrow collar, these cells are made usually of mud (mix of dry ground and water) or rarely (*Katamenes*) of pebbles confirmed with mud. Each nest can contain one or several cells and is usually covered with additional layer of mud (or pebbles with mud in *Katamenes*). Tribe Odynerini has the most diverse nesting habits. Some genera nest in ground and excavate vertical or horizontal burrows surmounted by nest turrets, others nest in preexisting cavities (hollow stems, galls, beetle burrows in wood, snail shells and abandoned nests of other wasps and bees), and the rest build aerial nests consisting of several cells, usually with additional cover. Building material in Odynerini is generally mud made of dry ground mixing with water. However, species

in the genera *Pterocheilus* and *Onychopterocheilus* nest in friable soil and do not use water to construct their nests; species of the genus *Leptochilus* and some species of *Odynerus* nesting in preexisting cavities use dry pressed pith, ground particles or gravel. One species of Odynerini, *Pseudabispa paragioides* Meade-Waldo, 1910 is known as the cleptoparasite of *Abispa ephippium* Fabricius, 1775. In most cases the females of Eumeninae lay an egg into empty cell prior to its provisioning; an egg is usually suspended to cell wall or sealing by a filament. However, some species of *Synagris* Latreille, 1802, *Calligaster*, *Paraleptomenes* Girdani Soika, 1970, *Paravespa*, and *Tropidodynerus* do not attach their eggs. The cells of eumenine wasps are provisioned with paralyzed caterpillars or larvae of beetles (usually Curculionidae or Chrysomelidae) or sawflies. Most species are mass provisioning, while about two tens species are progressively provisioning. **Number of taxa** of Eumeninae: World – 205 genera, 3758 species, Palaearctic – 78/963, Russia – 33/158.

Social vespids form more or less numerous families, including one to several fertile “queens” laying eggs, and “workers”, which are their offspring, performing the auxiliary duties of guarding and building the nest and feeding the larvae. The “workers” are sterile females, as a rule not laying eggs.

The subfamily Stenogastrinae (hover wasps), containing 7 genera and 63 medium-sized (11–21 mm long) slender species with a very long and narrow metasomal segment 1, is known only from the Oriental region and the island of New Guinea. Unlike other social vespids their nests has no primary petiole, and the ventrally open cells are attached directly to the substratum – thin branches of trees, vine tendrils, loose strands of thatch under the roofs of houses, or rarely under stones. The cells are made of chewed plants in composition with the material of the previous cells and sometimes with more or less amount of wet clay. The wasps increase the length of each cell as far as the larvae grow. Individual families of stenogastrine species are very small, but sometimes they form nesting clusters, where the “workers” may move between multiple nests.

The subfamilies Polistinae and Vespinae are distributed worldwide, though the first is most variable in the New World (21 genus among 25 of the World fauna), while the second is mostly represented in the Old World, mainly in the Oriental region. The combs and walls of the cells are made of chewed wooden fibers, sometimes mixed with wet soil and sand.

Subfamily Polistinae includes four tribes. The members of Epiponini (19 genera, 242 species) and Mischocyttarini (1/249) exclusively inhabit subtropical and tropical regions of the New World, those of Ropalidiini (4/288, including 3/34 in Palaearctic) inhabit the same regions of the Old World, and only the species of Polistini, including the single genus *Polistes*, are distributed worldwide (World – 224 species, Palaearctic – 33, Russia – 14). Typically Polistinae form eusocial families consisting of a “queen” and more or less numerous “workers”, which are not distinctly differ in size. The vast majority of polistines build the nests consisting of the single comb fasten to substratum with a firm petiole and lacking in outer envelope. They usually feed larvae with masticated caterpillars. At the same time, some representatives of Epiponini demonstrate high diversity in behavior and construction of nests. The species of *Apoica* Lepeletier de Saint Fargeau, 1836 are truly nocturnal wasps. Some species of *Agelaia* Lepeletier de Saint Fargeau, 1836 build giant nests, containing several combs without envelope, and their colonies may number more than a million stinging wasps. Finally, some species of Epiponini cover their combs with an outer envelope, which may be soft in *Polybia* Lepeletier de Saint Fargeau, 1836 or *Synoeca* de Saussure, 1852, but hard cartoon-like in *Chartergus* Lepeletier de Saint Fargeau, 1836 and *Brachygastra* Perty, 1833. The last genus is also known as a honey producer. The Old World members of Polistinae build nests with the cells disposed in one flat comb or sometimes in vertical rows along the pendent shoots of plants, but always without envelopes. **Number of taxa** of Polistinae: World – 25 genera, 1003 species, Palaearctic – 4/67, Russia – 1/14.

The nests of Vespinae built of masticated wooden fibers, usually consist of several combs, connected by columns and covered with outer envelope with the entrance in the lower part. Such nests may be free and attached to the tree branches or placed in various shelters from the hollows of the tree-trunks and underground cavities to human buildings. Vespinae feed their larvae with various masticated insects and spiders, though some species use all accessible sources of proteins, including dead invertebrates and vertebrates. Vespinae are usually active during day-light hours, and only three species of the genus *Provespa* Ashmead, 1903 and the East Asian hornet *Vespa binghami* are truly nocturnal wasps. **Number of taxa** of Vespinae: World – 4 genera, 69 species, Palaearctic – 3/36, Russia – 3/23.

The life cycle of the families of social wasps in the moderate climate (though often also in tropics) is annual. After wintering the females inseminated in the end of the previous season build new nests and feed the first generation of “workers”. After that, all the care to bring the materials for the construction of new cells, and food for the larvae becomes the responsibility of “workers”. The “queens” of Vespinae, with the rare exceptions (for example, in *Vespa ducalis*), differ by distinctly larger size, and they completely dominate “workers”. New generation of females and males appears in the end of active season. After copulation young females look for the places for wintering, while the rest members of the family die.

Among social vespids there are several obligate nesting parasites (in Russia these are *Vespula austriaca*, *Dolichovespula adulterina*, *D. omissa*, *Polistes atrimandibularis*, and *P. sulcifer*), who do not build their own nests, but usurp the nests of the allied species. Obligate parasites have not “workers”, and their first generation consists of capable to copulate males and females. Other species (*Vespa dybowskii* and *Polistes nimpha*) may be facultative nesting parasites, which can usurp the nests of the allied species, though are able to form their own families and build the nests.

Many species of Vespidae are important regulators of quantity of various harmful insects, such as Lepidoptera, Orthoptera, and Diptera, and may be effective pollinators. *Brachygastra mellifica* (Say, 1837) is a traditional source of honey in Central America, while some species of *Belonogaster* de Saussure, 1854 are used in traditional medicine in Africa, and the larvae and pupae of *Vespa* are the parts of nourishing diet of the local inhabitants in the South Eastern Asia. At the same time, some species of *Vespa* which hunt honey bees may cause serious damage to apiculture, and species of *Vespa* and *Vespula* sometimes cause severe damage to the harvests of sweet fruit, particularly to grapes and pears, in the period of their ripening. Finally, some species of Polistinae and Vespinae represent certain medical problem, because their attacks, which are usually caused by the carelessness of people, annually lead to hundreds of lethal outcomes in different countries.

Number of taxa of Vespidae: World – 256 genera, 5274 species; Palaeartic – 90/1181; Russia – 38/197.

References. Morawitz, 1867, 1895; Horne, Smith, 1872; André, 1881–1886; Mocsáry, Szépligeti, 1901; Alfken, 1915; Birula, 1925, 1927, 1930a,b; Białynicki-Birula, 1926; Kostylev, 1928, 1929, 1940a,b; Bequaert,

1930; Zimmermann, 1930; Gussakovskij, 1932; de Beaumont, 1944; Guiglia, 1948; Cavro, 1950; Richards O., Richards M., 1951; Giordani Soika, 1958, 1976; Blüthgen, 1961; Richards O., 1962, 1973; Løken, 1964; Gusenleitner, 1966a,b, 1972a,b, 1977, 1981, 1991, 2004, 2007a,b, 2013a,b; Kemper, Döhring, 1967; van der Vecht, Fischer, 1972; Spradbery, 1973; Yamane Sk., 1975; Kurzenko, 1977a,b, 1978a,b, 1981, 1995, 2004, 2012; Tobias, Kurzenko, 1978; Day, 1979; Archer, 1980, 1981a,b, 1982, 1989a,b, 1992, 1995, 1997, 1998a,b, 1999a,b, 2006, 2008; Dathe, 1980b; Yamane Sk. et al., 1980; Akre, 1982; Carpenter, 1986, 1996, 2001; Lee, 1986; Cumming, 1989; Scobiola-Palade, 1989; van der Vecht, Carpenter, 1990; Turillazzi, 1991; Kim et al., 1994; Gess, 1996; Carpenter, Kojima, 1996, 1997, 2002; Ono, 1997; Dubatolov, 1998, 1999, 2011; Dubatolov et al., 2002; Castro, 2003; Carpenter, Nguyen, 2003; Dubatolov, Novomodnyi, 2005; Cervo, 2006; Dvořák, Roberts, 2006; Dvořák, Castro, 2007; Castro et al., 2008; Ebrahimi, Carpenter, 2008; Gereys, 2008; Amolin, 2009; Castro, Dvořák, 2009, 2010; Dubatolov, Dolgikh, 2009; Aliyeva, 2010; Carpenter, Glare, 2010; Carpenter et al., 2011; Rudoiskatel et al., 2011; Abasheev, 2012; Archer, Penney, 2012; Hoa et al., 2012; Kim, 2012, 2013; Mahmood et al., 2012; Malikova, 2012; Shibaev, Polumordvinov, 2012; Yildirim, Gusenleitner, 2012; Zhou et al., 2012; Abasheev, Dabaev, 2014; Amolin, Artokhin, 2014; Antropov, Proshchalykin, 2014; Hermes et al., 2014; Li, Chen, 2014; Abasheev, Buyanjargal, 2015; Knyazev et al., 2015; Neumeyer, Praz, 2015; Yamane, Terayama, 2016; Abasheev, 2016; Buyanjargal et al., 2016; Ma et al., 2016; Mauss et al., 2016; Pham, Kumar, 2016; Ruchin, Antropov, 2016; Fateryga, 2017, 2018; Fateryga et al., 2017; Fateryga, Popov, 2017; Kumar et al., 2017; Perrard et al., 2017.

Subfamily MASARINAE – POLLEN WASPS

A.V. FATERYGA

CELONITES Latreille, 1802 (*Chelonites* (!): Leach, 1815; *Coelonites* (!): Blanchard, 1840; *Eucelonites* Richards, 1962). Type species *Masaris apiformis* Fabricius, 1793. Females build aerial mud nests consisted of cylindrical cells usually covered with additional mud layer; nests are usually attached to stones or twigs (some Afrotropical species place their nest cells within excavated or preexisting holes in ground). The genus is distributed in the Palaeartic and Afrotropical regions. Number of species: World – 61; Palaeartic – 39; Russia – 2.

Celonites sibiricus Gusenleitner, 2007. Russia: **WS** (AL).

Celonites tauricus Kostylev, 1935 (*C. abbreviatus*: Kostylev, 1928, 1929; *C. abbreviatus tauricus* Kostylev, 1935; *C. spinosus* Gusenleitner, 1966; *C. abbreviatus invitus* Gusenleitner, 1973; *C. abbreviatus invitus* (!): Schmidt, 1984). On flowers of *Teucrium*, *Thymus*, and *Ziziphora* (Lamiaceae). Russia: **EP** (CR). – Europe (SE: Greece), Armenia, Azerbaijan, Turkey, Cyprus, Syria, Iran.

Subfamily EUMENINAE – POTTER WASPS

A.V. FATERYGA

ALASTOR Lepeletier de Saint Fargeau, 1841 (*Antalastor* de Saussure, 1856; *Eualastor* Dalla Torre, 1904; *Belalastor* Atanassov, 1967). Type species *Alastor atropos* Lepeletier de Saint Fargeau, 1841. Females nest in preexisting cavities such as hollow stems or empty snail shells; partitions between cells are made of gravel and mud; provision is larvae of Curculionidae. The genus is distributed in the Palaearctic, Afrotropical, and Oriental regions and includes four subgenera: *Alastor* s.str.; *Alastorellus* Giordani Soika, 1991; *Megalastor* Blüthgen, 1951; *Parastalor* Blüthgen, 1939. Number of species: World – 79; Palaearctic – 28; Russia – 1.

Alastor (Alastor) mocsaryi (André, 1884) [Odynerus] (*A. atropos*: Morawitz, 1895, Kostylev, 1928; *A. biegelebeni* Giordani Soika, 1942; *A. biegelebeni pannonicus* Blüthgen, 1956; *A. kuehlhorni* Giordani Soika, 1958; *A. biegelebeni* (!): Tobias, Kurzenko, 1978). Russia: **EP** (E, S, NC, CR). – Europe (WE, SE, EE), Caucasus, Turkey, Syria, Lebanon.

ALLODYNERUS Blüthgen, 1938 (*Delphinaloides* Bohart, 1951; *Acarepipona* Giordani Soika, 1985). Type species *Odynerus floricola* de Saussure, 1853. Females nest in preexisting cavities such as beetle burrows in wood or hollow stems; partitions between cells are made of mud; provision is caterpillars, mainly of Gelechiidae. The genus is distributed in the Palaearctic, Afrotropical and Oriental regions. Number of species: World – 11; Palaearctic – 9; Russia – 4.

Allodynerus delphinalis (Giraud, 1866) [Odynerus] (*O. tristis* Thomson, 1870; *O. novellus* Morawitz, 1895; *Allodynerus delphinalis fallax* Blüthgen, 1953;

A. delphinalis sardous Blüthgen, 1953). Russia: **EP** (E, S, NC, CR), **UR**, **WS** (AL), **FE** (AM, PR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Lebanon, Iran, Central Asia, Kazakhstan, China (NE), Korean Peninsula, Japan (Hok, Hon).

Allodynerus floricola (de Saussure, 1853) [Odynerus] (*Odynerus floricola* ab. *immaculata* Mader, 1936; *Allodynerus floricola inaequalis* Giordani Soika, 1970). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Armenia, Turkey, Cyprus, Jordan.

Allodynerus mandschuricus Blüthgen, 1953. Russia: **ES** (BR), **FE** (PR). – Mongolia, China (NE), Korean Peninsula, Japan (Hon).

Allodynerus rossii (Lepelletier de Saint Fargeau, 1841) [Odynerus] (?*Odynerus hospes* Dufour et Perris, 1840; *O. notabilis* Morawitz, 1895, nom. praeocc., nec Walker, 1871; *O. umbilicalis* Dalla Torre, 1904). Russia: **EP** (C, ?E, S, NC, CR), **ES** (?BR, ?ZB). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Iran, Turkmenistan.

ANCISTROCERUS Wesmael, 1836 (*Aucistrocerus* (!): Rudow, 1876; *Ancistrocerus* (!): Dalla Torre, 1894; *Euancistrocerus* Dalla Torre, 1904). Type species *Vespa parietum* Linnaeus, 1758. Females nest in various preexisting cavities: hollow stems, beetle burrows in wood, abandoned nests of other wasps and bees; several species (*A. densipilosellus*, *A. japonicus*, *A. oviventris*) build aerial nests consisted of mud cells attached to stones and covered with additional layer of mud. Provision is caterpillars of various Lepidoptera or rarely larvae of beetles (Chrysomelidae or Curculionidae) or sawflies (Tenthredinidae). The genus is distributed worldwide except Australia. Number of species: World – 116; Palaearctic – 57; Russia – 19.

Ancistrocerus antilope (Panzer, 1798) [Vespa] (?*Vespa insolens* Harris, 1780; *Odynerus pictus* Curtis, 1826; *O. capra* de Saussure, 1857; *Ancistrocerus nearcticus* Cameron, 1906; *A. lecontei* Cameron, 1908; *A. navajo* Bequaert, 1925; *A. antilope allegrus* Bequaert, 1943; *A. antilope spenceri* Bequaert, 1943). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TK, NS, AL), **ES** (KR, IR, BR, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Afghanistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE), Japan (Hok, Hon), N America, India.

Ancistrocerus auctus (Fabricius, 1793) [Vespa]. Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), Caucasus, Turkey, Syria, Jordan, Israel, Iraq, Iran, Central Asia, Kazakhstan.

- Ancistrocerus claripennis** Thomson, 1874 (?*Vespa quadrata* Panzer, 1799; *Ancistrocerus claripennis* var. *subrenimacula* Blüthgen, 1938; *A. claripennis ponticus* Giordani Soika, 1970). Russia: **EP** (N, NW, C, NC). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Tajikistan, China (NC).
- Ancistrocerus densepilosellus** Cameron, 1911. Russia: **WS** (NS, AL), **ES** (IR, BR), **FE** (AM, KH, PR, KU). – Mongolia, ?China (NE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu).
- Ancistrocerus dusmetiolus** (Strand, 1914) [Odynerus] (*Odynerus sociabilis* Dusmet, 1903, nom. praeocc., nec Perkins, 1899; *O. alius* Kostylev, 1935). Russia: **WS** (AL), **ES** (KR). – Europe (WE, SE, EE), Turkey, Afghanistan, Central Asia, Kazakhstan.
- Ancistrocerus gazella** (Panzer, 1798) [*Vespa*] (?*Vespa emarginata* Fabricius, 1793; *Ancistrocerus pictipes* Thomson, 1874; *Odynerus parietum*: Kostylev, 1928; *A. verhaereni* Bondroit, 1943; *A. claripennis*: Tobias, Kurzenko, 1978). Russia: **EP** (C, E, S, NC, CR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Cyprus, Israel, Iran, Afghanistan, ?Pakistan, N America (introduced), New Zealand (introduced).
- Ancistrocerus hangaicus** Kurzenko, 1977. Russia: **WS** (AL), **ES** (IR, BR, ZB), **FE** (MG). – Mongolia.
- Ancistrocerus ichneumonideus** (Ratzeburg, 1844) [*Vespa*] (*A. thomsoni* Blüthgen, 1938; *A. ichneumonideus kaszabi* Giordani Soika, 1970). Russia: **EP** (NW, C, NC), **UR**, **WS** (AL), **ES** (KR, IR, BR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Kazakhstan, Mongolia.
- Ancistrocerus japonicus** (von Schulthess, 1908) [Odynerus]. Russia: **FE** (PR). – Korean Peninsula, Japan (Hon, Shi, Kyu, Ryu).
- Ancistrocerus kazbekianus** (Kostylev, 1940) [Odynerus]. Russia: **EP** (NC). – Georgia.
- Ancistrocerus leleji** Kurzenko, 1995. Russia: **FE** (PR).
- Ancistrocerus mongolicus** (Kostylev, 1940) [Odynerus]. Russia: **WS** (AL), **ES** (?KR, IR), **FE** (AM, KH, PR). – Mongolia, Korean Peninsula.
- Ancistrocerus nigricornis** (Curtis, 1826) [Odynerus] (?*Vespa sexpunctata* Christ, 1791; *Odynerus callosus* Thomson, 1870; *O. excisus* Thomson, 1870; *Ancistrocerus nigricornis* var. *polonica* Blüthgen, 1952). Russia: **EP** (NW, C, ?E, S, NC, CR), **UR**, **WS** (NS, KM, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (KH, PR, SA). – Europe (WE, NE, SE, EE), N Africa, Turkey, Iran, Central Asia, Kazakhstan, Mongolia, China (NE), Japan (Hok, Hon), India.
- Ancistrocerus oviventris** (Wesmael, 1836) [Odynerus] (*Odynerus constans* Herrich-Schäffer, 1839; *O. viduus* Herrich-Schäffer, 1839; *O. pictus* var. *hibernica* Blüthgen, 1937; *O. oviventris* var. *rufipes* Blüthgen, 1938; *A. oviventris sculus* Blüthgen, 1955; *A. yamanei* Giordani Soika, 1986; *A. oviventris caucasicus* Gusenleitner, 1994). Russia: **EP** (N, NW, C, S, NC, CR), **UR**, **WS** (TK, AL), **ES** (IR, BR, YA, ZB), **FE** (KH, PR, SA, MG). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Central Asia, Kazakhstan, Mongolia, China (NE), Korean Peninsula, Japan (Hok, Hon).
- Ancistrocerus parietinus** (Linnaeus, 1761) [*Vespa*] (*Sphex domestica* Christ, 1791; *Odynerus affinis* Herrich-Schäffer, 1839; *O. thuringiacus* Blüthgen, 1937). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (TK, NS, AL), **ES** (KR, IR, BR, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Iran, Kazakhstan, Mongolia, Korean Peninsula, Japan (Hok).
- Ancistrocerus parietum** (Linnaeus, 1758) [*Vespa*] (?*Vespa parietum* β *nigra* Poda, 1761; ?*V. aeneipennis* Christ, 1791; ?*Odynerus geoffroyanus* Spinola, 1808; ?*V. angulata* Donovan, 1810; *O. flavipes* Curtis, 1826; ?*O. similis* Curtis, 1826; *O. ochlerus* de Saussure, 1852; *O. parietum* var. *incisoides* Verhoeff, 1890; *O. parietum* var. *incisus* Verhoeff, 1890; *O. parietum* var. *parietoides* Verhoeff, 1890). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (OM, TK, NS, AL), **ES** (KR, IR, BR, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, ?Iran, Central Asia, Kazakhstan, Mongolia, China (NE, NC), Korean Peninsula, N America (introduced).
- Ancistrocerus raddei** (Kostylev, 1940) [Odynerus]. Russia: **WS** (AL), **ES** (ZB). – Mongolia, China (NC, NW).
- Ancistrocerus scoticus** (Curtis, 1826) [Odynerus] (*Odynerus albotricinctus* Zetterstedt, 1838; *O. albotricinctus* (!): Dalla Torre, 1894; *Ancistrocerus scoticus iberogallicus* Blüthgen, 1956; *A. scoticus meridianus* Gusenleitner, 1977). Russia: **EP** (N, NW, NC), **UR**, **WS** (TK, NS, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KA, MG). – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Iran, Kazakhstan, Mongolia, China (NE, NC), Korean Peninsula.
- Ancistrocerus trifasciatus** (Müller, 1776) [*Vespa*] (*Vespa trifasciata* Fabricius, 1787; ?*V. iuncea* Christ, 1791; *Odynerus trimarginatus* Zetterstedt, 1838;

O. tricinctus Herrich-Schäffer, 1839; *O. trifasciatus orientalis* Kostylev, 1938, nom. praeocc., nec *O. orientalis* Dalla Torre, 1889; *O. shibuyai* Yasumatsu, 1938; *Ancistrocerus trifasciatus* var. *moeschleri* Blüthgen, 1938; *A. trifasciatus kostylevi* van der Vecht, 1972). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Kyrgyzstan, Kazakhstan, Mongolia, China (NE), Korean Peninsula, Japan (Hok, Hon).

ANTEPIPONA de Saussure, 1855 (*Antepiponus* (!): de Saussure, 1875; *Antepipone* (!): Dalla Torre, 1894; *Odontodynerus* Blüthgen, 1938; *Dichodynerus* Blüthgen, 1938; *Metastenancistrocerus* Blüthgen, 1938; *Mehelyella* Bohart, 1951). Type species *Odynerus silaos* de Saussure, 1853. Females nest in ground, often on vertical cliffs, and excavate burrows surmounted by turrets; provision is caterpillars of Psychidae, Tortricidae and Gelechiidae. The genus is distributed in the Palaearctic, Afrotropical, and Oriental regions. Number of species: World – 165; Palaearctic – 54; Russia – 4.

Antepipona cribrata (Morawitz, 1885) [Lionotus] (*Odynerus biarcuatus* Morawitz, 1895). Russia: **EP** (NC). – Armenia, Azerbaijan, Turkey, Afghanistan.

Antepipona deflenda (S. Saunders, 1853) [Ancistrocerus] (*Odynerus parvulus* Lepeletier de Saint Fargeau, 1841; *O. parvulus* var. *ruthenicus* Morawitz, 1867; *O. bidenticulatus* Maidl, 1922; *Odontodynerus deflendus lepeletieri* Blüthgen, 1961). Russia: **EP** (?E, S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Cyprus, Jordan, Lebanon, Israel, Iraq, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, China (?NC).

Antepipona nigricornis (Morawitz, 1885) [Lionotus] (*Nannodynerus binominatus* Blüthgen, 1939; *Alloodynerus hispanicus* Gusenleitner, 1993; *Antepipona gusenleitneri* Tussac, 1996). Russia: **EP** (NC, CR). – Europe (WE, SE), Turkey, Turkmenistan.

Antepipona orbitalis (Herrich-Schäffer, 1839) [Odynerus] (*Odynerus ballioni* Morawitz, 1867; *O. rubripes* André, 1884; *O. parvulus* var. *alpicola* Berland, 1928). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (NS), **ES** (IR, BR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Kazakhstan, Mongolia.

BRACHYODYNERUS Blüthgen, 1938. Type species *Odynerus magnificus* Morawitz, 1867. Females

excavate nest burrows in lateral walls of ground cracks; provision is caterpillars of Coleophoridae. The genus is distributed in the Palaearctic. Number of species: Palaearctic – 9; Russia – 2.

Brachyodynerus magnificus (Morawitz, 1867) [Odynerus] (*Odynerus morawitzi* André, 1884; *O. magnificus luxorius* Kostylev, 1929). Russia: **EP** (S, NC, CR). – Europe (EE), Armenia, Azerbaijan, Turkey, Turkmenistan, Kazakhstan.

Brachyodynerus quadrimaculatus (André, 1884) [Odynerus]. Russia: **EP** (S, NC, CR). – Europe (SE: Greece), Azerbaijan, Turkey.

BRACHYPIPONA Gusenleitner, 1967 (*Desertodynerus* Kurzenko, 1977). Type species *Pseudepipona schmidti* Gusenleitner, 1967. Bionomics of the genus is unknown. The genus is distributed in the Palaearctic. Number of species: Palaearctic – 7; Russia – 1.

Brachypipona laticeps (Morawitz, 1895) [Odynerus]. Russia: **EP** (S). – Kazakhstan.

CHLORODYNERUS Blüthgen, 1951. Type species *Odynerus chloroticus* Spinola, 1838. Bionomics of the genus is unknown. The genus is distributed in the Palaearctic, Afrotropical, and Oriental regions. Number of species: World – 26; Palaearctic – 19; Russia – 1.

Chlorodynerus ypsilon (Kostylev, 1929) [Odynerus] (*Euodynerus ypsilon rhodius* Blüthgen, 1954). Russia: **EP** (NC). – Europe (SE), Caucasus, Turkey, Cyprus, Syria, Israel.

DELTA de Saussure, 1855 (*Phi* de Saussure, 1855, nec 1854; *Alferia* Giordani Soika, 1934; *Alferia* (!): Neave, 1939; *Erinyes* Zirngiebl, 1953, nec Rye, 1876). Type species *Vespa maxillosa* De Geer, 1773. Females build aerial nests consisted of several juglike mud cells covered with additional mud layer; provision is caterpillars of Geometridae, Noctuidae, Lyceanidae and Pieridae. The genus is distributed worldwide. Number of species: World – 48; Palaearctic – 13; Russia – 1.

Delta unguiculatum (Villers, 1789) [Vespa] (*V. coangustata* Rossi, 1790; *Sphex cursor* Christ, 1791; *S. lapicida* Christ, 1791; *V. infundibuliformis* Olivier, 1791, nom. praeocc., nec Geoffroy, 1785; *V. dumetorum* Panzer, 1799; *Eumenes olivieri* Lepeletier de Saint Fargeau, 1841; *E. huberti* de Saussure,

1852; *E. aschabadensis* Radoszkowski, 1893; *E. unguiculatus* (!) var. *sporadensis* von Schulthess, 1929; ?*E. tadhicorum* Gussakovskij, 1935; *E. unguiculatus* var. *libanicus* Giordani Soika, 1941; *E. unguiculatus* var. *mauritanicus* Giordani Soika, 1941). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Cyprus, Syria, Lebanon, Israel, Saudi Arabia, Iran, Central Asia.

DISCOELIUS Latreille, 1809 (*Discaelias* (!): Leach, 1815; *Discaelius* (!): Leach, 1815; *Dicoelius* (!): Haliday, 1836; *Discollius* (!): Froggatt, 1892; *Tritodiscoelius* Dalla Torre, 1904). Type species *Vespa zonalis* Panzer, 1801. Females nest in preexisting cavities such as beetle burrows in wood or hollow stems; partitions between cells are made of partially masticated leaf cuts; provision is caterpillars of various Microlepidoptera or rarely larvae of Pamphiliidae. The genus is distributed in the Palaearctic and Oriental regions. Number of species: World – 11; Palaearctic – 3, Russia – 2.

Discoelius dufourii Lepeletier de Saint Fargeau, 1841 (*D. manchurianus* Yasumatsu, 1934; *D. priesneri* Mader, 1936; *D. dufourii atripes* Giordani Soika, 1970; *D. planiventris* Giordani Soika, 1971). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (TM, TK, NS, AL), **ES** (BR, YA, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Kazakhstan, Mongolia, China (NE, SE), Korean Peninsula.

Discoelius zonalis (Panzer, 1801) [*Vespa*] (*D. naryschkini* Morawitz, 1894; *D. japonicus* Pérez, 1905). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (TM, NS, AL), **ES** (BR, ZB), **FE** (PR, KU). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Mongolia, China (NE, CC, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu).

EUMENES Latreille, 1802 (*Alpha* de Saussure, 1855, nec 1854; *Eumenis* (!): Kriechbaumer, 1879; *Eumenes* (!): Fox, 1899; *Eumes* (!): Bertoni, 1910; *Eumenidion* von Schulthess, 1913; *Eumenidium* (!): Sharp, 1915). Type species *Vespa coarctata* Linnaeus, 1758. Females build aerial nests consisted of one or several juglike mud cells sometimes covered with additional mud layer or rarely placed within preexisting cavities; provision is usually caterpillars of Geometridae or various Microlepidoptera. The genus is distributed worldwide and includes two subgenera: *Eumenes* s.str.; *Zeteumenoidea* Giordani

Soika, 1972. Number of species: World – 107; Palaearctic – 43; Russia – 23.

Eumenes (Eumenes) affinis de Saussure, 1852 (*E. coelestimoniana* Kostylev, 1940; ?*E. solidus* Gusenleitner, 1972). Russia: **WS** (AL). – Pakistan, Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia, China, SE Asia, India.

Eumenes (Eumenes) aquilonius Sk. Yamane, 1977 (*E. rubronotatus aquilonius* Sk. Yamane, 1977). Russia: **FE** (PR). – Korean Peninsula, Japan (Hok).

Eumenes (Eumenes) coarctatus (Linnaeus, 1758) [*Vespa*] (*E. lunulata* Fabricius, 1804; *E. pomiformis dernaensis* Blüthgen, 1938; *E. pomiformis limissicus* Blüthgen, 1938; *E. pomiformis ordubadensis* Blüthgen, 1938; *E. pomiformis barbatulus* Blüthgen, 1943; *E. pedunculata* var. *punctata* Hellén, 1944; *E. pedunculatus* var. *turaniformis* Blüthgen, 1959; *E. coarctatus corsicus* Gusenleitner, 1972; *E. coarctatus maroccanus* Gusenleitner, 1972; *E. lunulatus* var. *tenebricosus* Gusenleitner, 1972; *E. lunulatus* var. *balcanicus* Gusenleitner, 1972; *E. coarctatus nugaricus* Giordani Soika, 1986; *E. coarctatus dernansis* (!): Gusenleitner, 1999). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, NS, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, MG). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Cyprus, Syria, Jordan, Israel, Iran, Central Asia, Kazakhstan, Mongolia, China (NE, NC, NW, CC, SW), Japan (Hon, Shi, Kyu).

Eumenes (Eumenes) coronatus (Panzer, 1799) [*Vespa*] (*E. atricornis* Fabricius, 1804; *E. costata* (!): Luciani, 1845; *Eumenis* (!) *mediterranea* var. *neesii* Kriechbaumer, 1879; *Eumenes coarctatus* var. *opulenta* Blüthgen, 1938; *E. coarctatus detonsus* Blüthgen, 1943; *E. coarctatus* ab. *nigrotibia* Hellén, 1944; *E. coarctatus* var. *niger* Szulczewski, 1950; *E. coarctatus ibericus* Blüthgen, 1956; *E. coronatus corruetus* Gusenleitner, 1972). Russia: **EP** (NW, C, E, NC, CR), **UR**, **WS** (AL), **ES** (IR, BR, ZB), **FE** (AM, KH, PR, KU). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Israel, Iran, Central Asia, Kazakhstan, Mongolia, China (NE, SW), Korean Peninsula, Japan (Kyu).

Eumenes (Eumenes) crimensis Blüthgen, 1938 (*E. dubius crimensis* Blüthgen, 1938; *E. sareptanus scabrosus* Gusenleitner, 1972). Russia: **EP** (CR). – Iran, Turkmenistan, Uzbekistan, Kazakhstan.

Eumenes (Eumenes) dubius de Saussure, 1852 (*E. dubius dubius* var. *palaestinensis* Blüthgen, 1938;

- E. dubius dubius* var. *macedonica* Blüthgen, 1952). Russia: **EP** (NC, CR). – Europe (WE, EE, SE), N Africa, Caucasus, Turkey, Cyprus, Syria, Jordan, Lebanon, Israel, Iraq, Iran, Turkmenistan, Tajikistan, Kazakhstan, S America (introduced).
- Eumenes (Eumenes) fraterculus** Dalla Torre, 1894 (*E. fraterna* Smith, 1873, nom. praeocc., nec Say, 1824). Russia: **FE** (AM, KH, PR). – China (NE, CC), Japan (Hon, Shi, Kyu, Ryu).
- Eumenes (Eumenes) glacialis** Giordani Soika, 1940. Russia: **ES** (IR). – Mongolia.
- Eumenes (Eumenes) kiangsuensis** Giordani Soika, 1941. Russia: **FE** (PR). – China (NE, CC, SE), Korean Peninsula.
- Eumenes (Eumenes) mediterraneus** Kriechbaumer, 1879 [Eumenis] (*E. affinissima* race *quettaensis* Cameron, 1907; *Labus superbus* Meade-Waldo, 1910; *E. mediterraneus bengasinus* Blüthgen, 1938; *E. mediterraneus cypricus* Blüthgen, 1938; *E. houskai* Giordani Soika, 1952; *E. mediterraneus anatolicus* Giordani Soika, 1952; *E. mediterraneus manchurianus* Giordani Soika, 1971; *E. mediterraneus* var. *opacus* Gusenleitner, 1972). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Cyprus, Syria, Jordan, Lebanon, Israel, Saudi Arabia, Yemen, UAE, Oman, Iraq, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NE, NC, NW, CC), Korean Peninsula, Tahiti (introduced).
- Eumenes (Eumenes) micado** Cameron, 1904 (*E. samuray* von Schulthess, 1908; *E. samurayi* (!) *rufescens* Giordani Soika, 1973). Russia: **FE** (KU). – ?China (NC), Japan (Hok, Hon, Shi, Kyu, Ryu).
- Eumenes (Eumenes) mongolicus** Morawitz, 1889 (*E. coarctatus* var. *mongolicus* Morawitz, 1889). Russia: **WS** (AL), **ES** (IR, BR, ZB). – Kyrgyzstan, Mongolia, China (NC, WP).
- Eumenes (Eumenes) papillarius** (Christ, 1791) [Sphex] (*E. bipunctis* de Saussure, 1852; *E. bimaculatus* André, 1884; *E. papillarius* var. *baltica* Blüthgen, 1938; *E. papillarius monticola* Blüthgen, 1956; *E. papillarius rubricornis* Gusenleitner, 1972). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), Caucasus, Turkey, Syria, Lebanon, Israel, Iran, Pakistan, Central Asia, Kazakhstan, Mongolia.
- Eumenes (Eumenes) pedunculatus** (Panzer, 1799) [Vespa] (*E. eburneopictus* Giordani Soika, 1940; *E. pedunculatus turanus* Blüthgen, 1943; *E. pedunculatus* var. *lapponica* Hellén, 1944; *E. karafutonis* Sk. Yamane, 1977). Russia: **EP** (NW, C, E), **UR**, **WS** (OM, TK, NS, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (PR, SA). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan, Mongolia, China (SW).
- Eumenes (Eumenes) pomiformis** (Fabricius, 1781) [Vespa] (*Eumenis* (!) *mediterranea* var. *heri* Kriechbaumer, 1879; *Eumenes fastidiosissimus* Giordani Soika, 1943; *E. pomiformis turcicus* Giordani Soika, 1952). Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Lebanon, UAE, Pakistan, Central Asia, Kazakhstan, China (SW), Korean Peninsula, India.
- Eumenes (Eumenes) punctaticlypeus** Giordani Soika, 1943 (*E. robustus* Kostylev, 1940, nom. praeocc., nec Isely, 1917; *E. calabricus* Giordani Soika, 1943; *E. kostylevi* Kurzenko, 1976). Russia: **EP** (CR), **WS** (AL). – Europe (WE, SE, EE), Turkey, Iran, Central Asia, Kazakhstan.
- Eumenes (Eumenes) punctatus** de Saussure, 1852 (*E. formosensis nigrior* Giordani Soika, 1973; *E. asioboreus* Kim et Sk. Yamane, 2001). Russia: **FE** (KH, PR). – Pakistan, Mongolia, China (NE, NC, CC, SW, SE), Korean Peninsula, Japan (Tsushima), India, Sri Lanka.
- Eumenes (Eumenes) rubronotatus** Pérez, 1905 (*E. dimidiaticlypeus* Giordani Soika, 1973). Russia: **FE** (PR). – China (NE, CC, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu), SE Asia.
- Eumenes (Eumenes) sareptanus** André, 1884 (*E. pomiformis* f. *insolata* Müller, 1923; *E. dubius sareptanus* var. *germanica* Blüthgen, 1938). Russia: **EP** (E, S, NC, CR), **UR**, **WS** (OM, NS, AL). – Europe (WE, SE, EE), Caucasus, Turkey, Central Asia, Kazakhstan.
- Eumenes (Eumenes) septentrionalis** Giordani Soika, 1940 (*E. septentrionalis khangmarensis* Giordani Soika, 1966; *E. glacialis*: Kurzenko, 1995). Russia: **ES** (IR, BR, ZB), **FE** (AM, KH, PR). – Mongolia, China (NE, WP).
- Eumenes (Eumenes) subpomiformis** Blüthgen, 1938 (*E. subpomiformis crassipunctatus* Blüthgen, 1956). Russia: **EP** (NC). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Lebanon, Israel, Central Asia, Kazakhstan.
- Eumenes (Eumenes) transbaicalicus** Kurzenko, 1984. Russia: **ES** (BR). – Mongolia, China (NE).
- Eumenes (Eumenes) tripunctatus** (Christ, 1791) [Sphex] (*E. venusta* Fischer-Waldheim, 1843). Russia: **EP** (E, S, NC, CR), **UR**. – Europe (EE), Iran, Turkmenistan, Kazakhstan, Mongolia, China (NC, NW, WP).

EUODYNERUS Dalla Torre, 1904. Type species *Vespa dantici* Rossi, 1790. Females nest mainly in various preexisting cavities: hollow stems, beetle burrows in wood and abandoned nests of other wasps and bees, partitions between cells are made of mud; several Nearctic species excavate nest burrows in ground and surmount them by turrets; provision is various caterpillars (mainly of Microlepidoptera) or rarely larvae of Chrysomelidae. The genus is distributed worldwide and includes three subgenera: *Euodynerus* s.str.; *Incolepipona* Giordani Soika, 1995; *Pareuodynerus* Blüthgen, 1938. Number of species: World – 104; Palaearctic – 44; Russia – 9.

Euodynerus (Euodynerus) caspicus (Morawitz, 1873) [*Leionotus*] (*Lionotus cardinalis* Morawitz, 1885; *E. caspicus astrachanensis* Blüthgen, 1942). Russia: **EP** (S). – Armenia, Azerbaijan, Iran, Turkmenistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NC, NW).

Euodynerus (Euodynerus) dantici (Rossi, 1790) [*Vespa*] (*Odynerus postscutellatus* Lepeletier de Saint Fargeau, 1814; *O. tinctus* Walker, 1871; *O. dantici brachytomus* Kostylev, 1940; *E. dantici iberogallicus* Blüthgen, 1942; *E. dantici pamiricus* Blüthgen, 1942; *O. dantici* var. *lagostae* Giordani Soika, 1942; *E. espanyoli* Vergés, 1965; *O. dantici violaceipennis* Giordani Soika, 1973; *E. dantici nigrescens* Gusenleitner, 1979; *O. dantici poggii* Giordani Soika, 1986). Russia: **EP** (S, NC, CR), **UR**, **ES** (BR, ZB), **FE** (PR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Syria, Jordan, Lebanon, ?Israel, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia, China (NE, NC, NW, CC, SE), Korean Peninsula, Japan (Hon, Shi, Kyu, Ryu), SE Asia.

Euodynerus (Euodynerus) disconotatus (Lichtenstein, 1884) [*Odynerus*] (*Lionotus sulfuripes* Morawitz, 1885; *Odynerus kokpeticus* Radoszkowski, 1886; *O. collariventris* Giordani Soika, 1942; *E. disconotatus albidus* Blüthgen, 1951; *E. disconotatus laniensis* Giordani Soika, 1979). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Caucasus, Turkey, Cyprus, Jordan, Saudi Arabia, Iraq, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan.

Euodynerus (Euodynerus) fastidiosus (de Saussure, 1853) [*Odynerus*] (*Odynerus germabicus* Radoszkowski, 1893; *O. garmabicus* (!): Dalla Torre, 1904). Russia: **EP** (S, NC, CR). – Europe (WE, SE), N Africa, Caucasus, Turkey, Syria, Lebanon, Oman, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, China (NC).

Euodynerus (Euodynerus) velutinus Blüthgen, 1951 (*Odynerus curictensis*: Kostylev, 1940). Russia: **EP** (CR). – Europe (SE: Greece), Caucasus, Turkey.

Euodynerus (Pareuodynerus) nipanicus (von Schulthess, 1908) [*Lionotus*] (*Lionotus tomentosus* var. *nipanicus* von Schulthess, 1908; ?*Rhynchium seuli* Radoszkowski, 1890; *Odynerus micado* (!): Matsu-mura, 1911; *O. flaviclypeatus* Sonan, 1930; *Rh. satsumanus* Sonan, 1930; *Euodynerus notatus tonkinensis* Giordani Soika, 1973; *E. nipanicus* (!): Giordani Soika, 1982; *E. notatus flavicornis* Sk. Yamane, 1987; *E. notatus ryukyuensis* Tano, 1987; *E. notatus*: Kurzenko, 1995, 2012). Russia: **ES** (ZB), **FE** (AM, KH, PR, SA, MG). – ?Mongolia, China (NE, NC, CC, SW, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu), SE Asia.

Euodynerus (Pareuodynerus) notatus (Jurine, 1807) [*Vespa*] (?*Odynerus bisstrigatus* Spinola, 1808; *O. nigripes* Herrich-Schäffer, 1839; ?*O. maculatus* Lepeletier de Saint Fargeau, 1841; *O. clypealis* Thomson, 1870; *O. pubescens* Thomson, 1870; *O. unguularis* Thomson, 1870; ?*O. pubescens* var. *cupreus* von Schulthess, 1897; *Euodynerus notatus* var. *pernotata* Blüthgen, 1938; *E. notatus cyrenai-cus* Giordani Soika, 1986). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (IR, BR, YA, ZB), ?**FE** (AM, KH, PR, SA, MG). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Iran, Kazakhstan, Mongolia, ?China (NC).

Euodynerus (Pareuodynerus) posticus (Herrich-Schäffer, 1841) [*Odynerus*] (*Odynerus innumera-bilis* de Saussure, 1853; *O. graphicus* de Saussure, 1853; *O. differens* Morawitz, 1895; *Euodynerus cephalicus* Blüthgen, 1944; *Pseudepipona postica punctatissima* Giordani Soika, 1952; *E. posticus posticus* var. *notatiformis* Blüthgen, 1955; *E. posticus punctatissimus* var. *nahariensis* Blüthgen, 1955). Russia: **EP** (S, NC, CR). – Europe (WE, EE, SE), N Africa, Caucasus, Turkey, Israel, Iran.

Euodynerus (Pareuodynerus) quadrifasciatus (Fabricius, 1793) [*Vespa*] (*Vespa quadricincta* Fabricius, 1793; *V. simplex* Fabricius, 1793; *Odynerus lindemii* Lepeletier de Saint Fargeau, 1841; *O. tomentosus* Thomson, 1870; *Pseudepipona sachalinensis* Yasumatsu, 1938; *Euodynerus quadrifasciatus* var. *pseudonotata* Blüthgen, 1939; *E. quadrifasciatus atripes* Giordani Soika, 1976; *E. quadrifasciatus rubrosignatus* Gusenleitner, 1984; *E. quadrifasciatus rufipes* Gusenleitner, 1984; *E. quadrifasciatus eburnus* Sk. Yamane, 1987). Russia: **EP** (N, NW, C,

E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, MG). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Kazakhstan, Mongolia, China (NE), Korean Peninsula, Japan (Hok, Hon).

EUSTENANCISTROCERUS Blüthgen, 1938. Type species *Odynerus blanchardianus* de Saussure, 1855. Females nest in ground and excavate burrows surmounted by turrets; provision is caterpillars of Coleophoridae. The genus is distributed in the Palaearctic and Afrotropical regions and includes three subgenera: *Eustenancistrocerus* s.str.; *Hemistenancistrocerus* Blüthgen, 1938; *Parastenancistrocerus* Blüthgen, 1938. Number of species: World – 20; Palaearctic – 17; Russia – 2.

Eustenancistrocerus (Eustenancistrocerus) tegularis (Morawitz, 1885) [Lionotus]. Russia: **EP** (NC). – ?Europe (SE: Greece), Caucasus, ?Iran, Central Asia, Kazakhstan.

Eustenancistrocerus (Parastenancistrocerus) amadanensis (de Saussure, 1855) [Odynerus] (*Odynerus turca* de Saussure, 1863; *O. transitorius* Morawitz, 1867; *O. lobatus* André, 1883; *Ancistrocerus iranensis* Giordani Soika, 1943; *Eustenancistrocerus transitorius hoberlandti* Giordani Soika, 1952; *E. transitorius mauritaniensis* Giordani Soika, 1953; *E. lobatus flavellus* Giordani Soika, 1952). Russia: **EP** (S, NC, CR). – Europe (EE, SE), N Africa, Caucasus, Turkey, Cyprus, Syria, Israel, Saudi Arabia, Iraq, Iran, Pakistan, Central Asia, Kazakhstan.

GYMNOMERUS Blüthgen, 1938. Type species *Odynerus laevipes* Shuckard, 1837. Females nest in hollow stems where they build a compact row of cylindrical mud cells without plugs, the nest is stopped by an empty final cell filled with particles of soil and various plant material; provision is larvae of *Hypera* Germar (Curculionidae). The monotypic Palaearctic genus.

Gymnomerus laevipes (Shuckard, 1837) [Odynerus] (*Odynerus cognatus* Dufour, 1839; *O. rubicola* Dufour, 1839; *Pterochilus simplicipes* Herrich-Schäffer, 1839; *O. scandinavus* de Saussure, 1856; *O. sibiricus* Mocsáry, 1883; *O. levipes* (!): Dalla Torre, 1894; *O. algeriensis* Dusmet, 1928). Russia: **EP** (NW, C, E, ?S, NC, CR), **UR**, **WS** (TM, NS, AL), **ES** (BR, YA), **FE** (AM, PR, SA). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Iran, Kazakhstan, Mongolia.

HEMIPTEROCHILUS Ferton, 1909 (*Pseudopterochilus* van der Vecht, 1972). Type species *Odynerus terricola* Mocsáry, 1883. Females nest in ground and excavate vertical burrows surmounted by a small collar; provision is caterpillars of Noctuidae and Pyraustidae. The genus is distributed in the Palaearctic. Number of species: Palaearctic – 12; Russia – 1.

Hemipterochilus bembeciformis (Morawitz, 1867) [Odynerus] (*Odynerus terricola* Mocsáry, 1883; *O. sinuatofasciatus* Costa, 1888; *Hoplomerus tinniens*: Białynicki-Birula, 1926; *H. tinniens* var. *rubromaculatus* Białynicki-Birula, 1926; *Hoplomerus tinniens turcestanicus* Białynicki-Birula, 1926; *Pterochilus bembeciformis* var. *circensis* Giordani Soika, 1942). Russia: **EP** (E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Caucasus, Turkey, Central Asia, Kazakhstan.

JUCANCISTROCERUS Blüthgen, 1938 (*Jucancistrocerus* (!): Blüthgen, 1951). Type species *Odynerus jucundus* Mocsáry, 1883. Females nest in vertical clay cliffs and excavate burrows surmounted by turrets; provision is larvae of Curculionidae. The genus is distributed in the Palaearctic and includes two subgenera: *Eremodynerus* Blüthgen, 1939; *Jucancistrocerus* s.str. Number of species: Palaearctic – 13; Russia – 2.

Jucancistrocerus (Jucancistrocerus) caspicus Giordani Soika, 1970. Russia: **EP** (S, NC). – Europe (EE: Ukraine), Caucasus, Turkey, Iran, Kazakhstan.

Jucancistrocerus (Jucancistrocerus) minutepunctatus Giordani Soika, 1970. Russia: **EP** (S). – Armenia, Azerbaijan.

KATAMENES Meade-Waldo, 1910. Type species *Katamenes watsoni* Meade-Waldo, 1910. Females build aerial nests attached to stones and consisted of one or several juglike cells build of pebbles confirmed and covered with mud, the nest is usually covered by additional layer of pebbles confirmed with mud; provision is caterpillars of Noctuidae, Pieridae, Lyceanidae and Pterophoridae. The genus is distributed in the Palaearctic, Afrotropical, and Oriental regions. Number of species: World – 14; Palaearctic – 13; Russia – 5.

Katamenes arbustorum (Panzer, 1799) [Vespa] (*Eumenes amedei* Lepelletier de Saint Fargeau, 1841; *E. friwaldszkyi* Herrich-Schäffer, 1841; *E. tabida* Eversmann, 1854; *E. arbustorum* var. *burlinii* Giordani

Soika, 1949; *K. arbustorum soikai* Borsato, 1993). Russia: **EP** (E), **UR**. – Europe (WE, SE, EE), ?Kazakhstan.

Katamenes dimidiatus (Brullé, 1832) [Eumenes] (*?E. fulva* var. β Eversmann, 1854; *E. montana* Nurse, 1904; *K. watsoni* Meade-Waldo, 1910; *E. arbustorum*: Kostylev, 1928, 1929; *?K. sesquicinctus radoszkowskii* Blüthgen, 1962; *K. dimidiatus arrectus* Giordani Soika, 1970). Russia: **EP** (S, CR), **UR**. – Europe (SE, EE), Caucasus, Turkey, Cyprus, Syria, Israel, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NC).

Katamenes flavigularis (Blüthgen, 1951) [Eumenes] (*E. arbustorum flavigularis* Blüthgen, 1951; *E. arbustorum* var. *tabidus*: Kostylev, 1928; *K. arbustorum*: Tobias, Kurzenko, 1978). Russia: **EP** (NC, CR). – Europe (SE, EE), ?Caucasus, Turkey, Syria, Lebanon, Iran, Afghanistan, Tajikistan.

Katamenes sichelii (de Saussure, 1852) [Eumenes] (*?Eumenes fluctuans* de Saussure, 1852; *E. fulva* Eversmann, 1854; *E. baerii* Radoszkowski, 1865; *E. sichelii* var. *biblicus* Giordani Soika, 1935; *E. sichelii* var. *fulvoides* Giordani Soika, 1949; *E. sichelii* var. *luristanensis* Giordani Soika, 1949; *E. sichelii tauriae* Giordani Soika, 1960; *K. sichelii hispanicus* Giordani Soika, 1966; *K. sichelii pseudofulvus* Giordani Soika, 1966; *K. sichelii coranicus* Giordani Soika, 1970; *K. sichelii timanensis* Giordani Soika, 1986). Russia: **EP** (S), **UR**. – Europe (SE), N Africa, Caucasus, Turkey, Jordan, Israel, Saudi Arabia, UAE, Iraq, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia, China (WP), India.

Katamenes tauricus (de Saussure, 1855) [Eumenes] (*E. latipes* Sickmann, 1894; *E. arbustorum* var. *baicalensis* Kokujev, 1927; *E. latipes* var. *viratus* Giordani Soika, 1949; *E. sesquicinctus viratus* var. *caspica* Blüthgen, 1952). Russia: **EP** (CR), **WS** (AL), **ES** (TU, IR, BR). – Iran, Afghanistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NC), India.

LEPTOCHILUS de Saussure, 1853. Type species *Pterochilus mauritanicus* Lepeletier de Saint Fargeau, 1841. Females nest in various preexisting cavities: hollow stems, beetle burrows in wood or empty snail shells; partitions between cells are made of sand or gravel, several species use also macerated pith in addition to mineral material or build partitions of shell bits and sand confirmed with mud or resin; provision is caterpillars of various Microlepidoptera or beetle larvae (usually Curculionidae

or Chrysomelidae). The genus is distributed worldwide except Australia and includes six subgenera: *Euleptochilus* Blüthgen, 1943; *Leptochilus* s.str.; *Lionotulus* Blüthgen, 1938; *Neoleptochilus* Blüthgen, 1961; *Sarochilus* Gusenleitner, 1970; *Zendalia* Robertson, 1928. Number of species: World – 197; Palaearctic – 137; Russia – 6.

Leptochilus (Euleptochilus) limbiferus (Morawitz, 1867) [Odynerus] (*L. limbiferus anatolicus* Blüthgen, 1955; *L. limbiferus achaeus* Gusenleitner, 1970). Russia: **EP** (NC). – Europe (SE, EE), Armenia, Turkey.

Leptochilus (Lionotulus) alpestris (de Saussure, 1855) [Odynerus] (*O. trinacriae* André, 1883; *Leptochilus alpestris* var. *grandii* Giordani Soika, 1947; *L. alpestris alpestris* var. *bulsanensis* Blüthgen, 1953; *L. alpestris iberobarbarus* Blüthgen, 1953; *L. alpestris iberobarbarus* var. *rufina* Blüthgen, 1953; *L. guichardi* Giordani Soika, 1973; *L. astrictus* Giordani Soika, 1986). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Jordan, Turkmenistan.

Leptochilus (Lionotulus) ergenicus (Kostylev, 1940) [Odynerus]. Russia: **EP** (S). – Kazakhstan.

Leptochilus (Lionotulus) membranaceus (Morawitz, 1867) [Odynerus] (*L. membranaceus luxuriosus* Blüthgen, 1955). Russia: **EP** (E, S, NC, CR). – Europe (SE, EE), Caucasus, Turkey, Israel, Iran, Turkmenistan, Uzbekistan, Kazakhstan.

Leptochilus (Lionotulus) signatus Gusenleitner, 1995 (*L. signatus gueruensis* Gusenleitner, 1995). Russia: **EP** (NC). – Turkey.

Leptochilus (Neoleptochilus) regulus (de Saussure, 1855) [Odynerus] (*O. gallicus* de Saussure, 1855; *?O. calabricus* Gribodo, 1881; *O. siculus* De Stefani, 1883; *O. costae* Costa, 1884; *O. buyssoni* Medina, 1891; *?O. pauli* Medina, 1892; *O. perforatus* Dusmet, 1903; *O. obtusidentatus* Maidl, 1922; *Microdynerus wuczetici* Kostylev, 1928). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Cyprus, Syria, Jordan, Iran.

MICRODYNERUS Thomson, 1874. Type species *Odynerus exilis* Herrich-Schäffer, 1839. Females of the nominotypical subgenus nest in preexisting cavities (hollow stems or beetle burrows in wood), partitions between cells are made of mud; species of the subgenus *Pseudomicrodynerus* excavate burrows in pith of plant stems and braches; nesting of the subgenus *Alastorynerus* is unknown;

provision is larvae of Curculionidae or caterpillars of Microlepidoptera. The genus is distributed in the Holarctic and includes three subgenera: *Alastorynerus* Blüthgen, 1938; *Microdynerus* s.str.; *Pseudomicrodynerus* Blüthgen, 1938. Number of species: World – 53; Palaearctic – 37; Russia – 7.

Microdynerus (Alastorynerus) microdynerus (Dalla Torre, 1889) [Odynerus] (*M. alastoroides* Morawitz, 1885, nom. praeocc., nec de Saussure, 1852; *M. tridentatus* Kostylev, 1935). Russia: **EP** (S, CR). – Europe (SE, EE), Caucasus, Turkey, Jordan, Iran, Tajikistan, Kazakhstan.

Microdynerus (Microdynerus) exilis (Herrich-Schäffer, 1839) [Odynerus] (*O. bivittatus* Lapeletier de Saint Fargeau, 1841). Russia: **EP** (E, ?S, NC). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey.

Microdynerus (Microdynerus) longicollis Morawitz, 1895 (*Odynerus patagiatus* von Schulthess, 1897; *Microdynerus patagiatus sicanius* Blüthgen, 1964). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Turkey, Turkmenistan.

Microdynerus (Microdynerus) mirandus (Giordani Soika, 1947) [Leptochilus]. Russia: **EP** (CR). – Europe (SE, EE), Turkey.

Microdynerus (Microdynerus) nugdunensis (de Saussure, 1855) [Odynerus] (*M. nugdunensis sicelis* Blüthgen, 1964; *Leptochilus micans* Giordani Soika, 1986). Russia: **EP** (E, NC, CR). – Europe (WE, SE, EE), Azerbaijan, Turkey.

Microdynerus (Microdynerus) timidus (de Saussure, 1856) [Odynerus] (*Vespa minuta* Fabricius, 1798, nom. praeocc., nec Linnaeus, 1767; ?*Odynerus ruskysky* Dusmet, 1917; *Microdynerus timidus adustus* Gusenleitner, 1977). Russia: **EP** (CR). – Europe (WE, NE, SE, EE), N Africa.

Microdynerus (Pseudomicrodynerus) parvulus (Herrich-Schäffer, 1838) [Odynerus] (*O. helveticus* de Saussure, 1855; *Microdynerus bifidus* Morawitz, 1885). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL). – Europe (WE, SE, EE), Caucasus, Turkey, Iran, Uzbekistan, Kazakhstan.

ODYNERUS Latreille, 1802 (*Odynera* (!): Illiger, 1807; *Epipone* Kirby et Spence, 1815, nec Latreille, 1804; *Oplopus* Wesmael, 1836, nec Laporte, 1832; *Oplomerus* Westwood, 1840, nec Dejean, 1833; *Hoplomerus* (!): Agassiz, 1846; *Hoplopus* (!): Agassiz, 1846; *Epiponus* (!): de Saussure, 1875; *Hoplonus* (!): Dalla Torre, 1889; *Euepipona* Dalla Torre, 1904;

Odynerus (!): Wolcott, 1924). Type species *Vespa spinipes* Linnaeus, 1758. Females of most species nest in ground (on both vertical and horizontal surfaces) and excavate burrows (containing several cells) surmounted by turrets; provision is larvae of *Hypera* Germar (Curculionidae) or rarely larvae of Tenthredinidae (in subgenus *Monoplomerus*). Some Nearctic species nest in preexisting holes in ground and use pressed soil to make partitions between cells (they do not construct turrets and do not use water during the building works); their provision is caterpillars of Gelechiidae. The genus is distributed in the Holarctic and Afrotropical regions and includes three subgenera: *Monoplomerus* Blüthgen, 1941; *Odynerus* s.str.; *Spinicoxa* Blüthgen, 1938. Number of species: World – 45; Palaearctic – 39; Russia – 12.

Odynerus (Odynerus) alpinus von Schulthess, 1897 (*O. spinipes* var. *alpinus* von Schulthess, 1897). Russia: **EP** (NC), **WS** (AL), **ES** (KR, IR, BR, YA, ZB), **FE** (KH, MG). – Europe (WE, SE, EE), Turkey, Tajikistan, Mongolia.

Odynerus (Odynerus) femoratus de Saussure, 1856 (*O. duskei* Morawitz, 1895). Russia: **EP** (S, NC, CR), **ES** (IR, BR). – Europe (WE, SE, EE), Caucasus, Turkey, Syria, Israel, Iran.

Odynerus (Odynerus) melanocephalus (Gmelin, 1790) [Vespa] (*Pterochelilus dentipes* Herrich-Schäffer, 1839; *P. serripes* Taschenberg, 1866; *O. sareptanus* André, 1884; *Hoplomerus armeniacus* Morawitz, 1885; *H. melanocephalus* var. *combinata* Blüthgen, 1940; *H. armeniacus* var. *plurinotata* Blüthgen, 1941; *H. melanocephalus tadschicus* Blüthgen, 1941; *H. melanocephalus melanocephalus* var. *luxuriosa* Blüthgen, 1955; *O. melanocephalus robustus* Eck, 1971; *O. melanocephalus cypriacus* Eck, 1971; *O. melanocephalus latus* Eck, 1971). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (NS, KM, AL). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Cyprus, Syria, Jordan, Israel, Iraq, Iran, Afghanistan, Central Asia, Kazakhstan.

Odynerus (Odynerus) poecilus de Saussure, 1856 (*O. ruficornis* Rudow, 1876). Russia: **EP** (NC). – Europe (WE, SE, EE), Azerbaijan, Turkey.

Odynerus (Odynerus) serricus (Blüthgen, 1961) [Oplomerus] (*Odynerus serripes* Morawitz, 1867, nom. praeocc., nec *Pterochelilus serripes* Taschenberg, 1866). Russia: **EP** (C, E, S), ?**WS** (OM, TK, AL). – ?Europe (EE), Turkey, Kyrgyzstan, Kazakhstan.

Odynerus (Odynerus) spinipes (Linnaeus, 1758) [Vespa] (*V. quinquefasciata* Fabricius, 1793; *Odynerus muticus* Zetterstedt, 1838; *O. spinipes* ab. *flaviscapus* Mader, 1936; *Hoplomerus spinipes* var. *scutellaris* Blüthgen, 1940; *H. spinipes amurensis* Blüthgen, 1941). Russia: **EP** (NW, C, E, NC), **UR**, **WS** (TK, AL), **ES** (IR, BR), **FE** (KH, PR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Tajikistan, Kazakhstan, Mongolia.

Odynerus (Odynerus) tristis (Blüthgen, 1939) [Hoplomerus] (*O. tristis tianschanicus* Kurzenko, 1977). Russia: **EP** (NC). – Tajikistan, Kyrgyzstan, Kazakhstan, China (NW).

Odynerus (Spinicoxa) albopictus de Saussure, 1856 (*Hoplomerus calcaratus* Morawitz, 1885; *H. rufospinosus* Morawitz, 1895; *Odynerus rufospinosus* var. *argivus* von Schulthess, 1924; *O. albopictus kazakhstanicus* Kurzenko, 1977). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), ?N Africa, Caucasus, Turkey, Syria, Jordan, Israel, Iraq, Iran, Turkmenistan, Uzbekistan, Kazakhstan.

Odynerus (Spinicoxa) cuneiformis Kostylev, 1940. Russia: **ES** (TU, BR), **FE** (AM, KH). – Mongolia.

Odynerus (Spinicoxa) fulvitaris (Morawitz, 1895) [Hoplomerus]. Russia: **EP** (S, NC). – Caucasus, Turkey, Turkmenistan, Uzbekistan, Kazakhstan.

Odynerus (Spinicoxa) reniformis (Gmelin, 1790) [Vespa] (?*Vespa sexfasciata* Fabricius, 1781; *V. melanochra* Gmelin, 1790; *Pterochelus coxalis* Herich-Schäffer, 1839; *Odynerus reaumurii* Dufour, 1839; *O. dufourii* Lapeletier de Saint Fargeau, 1841; *O. velox* de Saussure, 1853; ?*O. depressus* André, 1883; *Hoplomerus reniformis balcanicus* Blüthgen, 1960). Russia: **EP** (NW, C, E), **UR**, **WS** (TK, AL), **ES** (TU, BR, YA, ZB). – Europe (WE, NE, SE, EE), N Africa, Turkey, Israel, Kazakhstan.

Odynerus (Spinicoxa) simillimus Morawitz, 1867 (*O. dentifer* Drogoszewski, 1934). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (NS, AL), **ES** (KR, IR, YA). – Europe (WE, EE), Caucasus, Turkey, Israel, Turkmenistan, Kazakhstan, Mongolia.

ONYCHOPTEROCHEILUS Blüthgen, 1955. Type species *Odynerus daw* Dusmet, 1903. Females excavate nest burrows in friable soil without using water; provision is caterpillars. The genus is distributed in the Palaearctic and includes five subgenera: *Acutopterocheilus* Kurzenko, 1988; *Asiapterocheilus* Kurzenko, 1988; *Ghilarocheilus* Kurzenko, 1988; *Neopterocheilus* Kurzenko, 1988;

Onychopterocheilus s.str. Number of species: Palaearctic – 60; Russia – 4.

Onychopterocheilus (Acutopterocheilus) sareptanus (Kurzenko, 1976) [Pterochelus]. Russia: **EP** (S).

Onychopterocheilus (Onychopterocheilus) crabroniformis (Morawitz, 1867) [Odynerus] (*Pterochilus albopictus*: Morawitz, 1895, Kostylev, 1940). Russia: **EP** (S), **UR**, **WS** (AL), **ES** (KR). – Kazakhstan.

Onychopterocheilus (Onychopterocheilus) eckloni (Morawitz, 1885) [Pterochilus]. Russia: **ES** (TU, IR, BR, ZB). – Mongolia, China (NC).

Onychopterocheilus (Onychopterocheilus) pallasii (Klug, 1805) [Pterochelus] (*P. latipalpis* Lapeletier de Saint Fargeau, 1841). Russia: **EP** (E, S, NC, CR), **UR**, **WS** (OM, NS, AL). – Europe (EE), Turkey, Kazakhstan, Mongolia.

PARAGYMNOMERUS Blüthgen, 1938. Type species *Odynerus spiricornis* Spinola, 1808. Females nest in ground (on both vertical and horizontal surfaces) and excavate burrows contained several cells and surmounted by turrets; provision is larvae of Pamphiloidea. The genus is distributed in the Palaearctic. Number of species: Palaearctic – 7; Russia – 1.

Paragymnomerus signaticollis (Morawitz, 1888) [Hoplomerus] (*H. semenowi* Morawitz, 1895; *H. signaticollis semenovi* (!): Białynicki-Birula, 1926; *H. signaticollis* var. *lutescens* Białynicki-Birula, 1926; *Odynerus signaticollis tauricus* Kostylev, 1940). Russia: **EP** (CR). – Europe (EE), Azerbaijan, Turkey, Turkmenistan, Tajikistan, Uzbekistan.

PARARRHYNCHIUM de Saussure, 1855 (*Prorrhynchium* de Saussure, 1855; *Prorrhynchium* (!): de Saussure, 1856; *Pararrhynchium* (!): de Saussure, 1862; *Parrhynchium* (!): Dalla Torre, 1894). Type species *Rhynchium ornatum* Smith, 1852. Females nest in preexisting cavities such as hollow stems, partitions between cells are made of mud; provision is caterpillars. The genus is distributed in the Palaearctic and Oriental regions. Number of species: World – 11; Palaearctic – 4; Russia – 1.

Pararrhynchium paradoxum (Gussakovskij, 1932) [Odynerus] (?*Pararrhynchium* (!) *paradoxum laetum* Giordani Soika, 1986). Russia: **FE** (PR). – China (CC, SE), Korean Peninsula, ?India.

PARAVESPA Radoszkowski, 1886 (*Theletor* Kokujev, 1913). Type species *Paravespa komarowii*

Radoszkowski, 1886. Females nest in ground and excavate vertical burrows surmounted by turrets; provision is caterpillars of Noctuidae. The genus is distributed in the Palaearctic and Afrotropical regions and includes two subgenera: *Gestrodynerus* Giordani Soika, 1961; *Paravespa* s.str. Number of species: World – 17; Palaearctic – 4; Russia – 1.

Paravespa (Paravespa) rex (von Schulthess, 1924) [Odynerus] (*O. rex* var. *clarior* von Schulthess, 1924; *O. rex* var. *obscurior* von Schulthess, 1924; *Hoplomerus jakobsoni* Białynicki-Birula, 1926; *P. regina* (!): Blüthgen, 1939; *P. rex* var. *rufina* Blüthgen, 1955; *P. rex* var. *submimetica* Blüthgen, 1955). Russia: **EP** (CR). – Turkey, Iran, Uzbekistan, Kyrgyzstan, Kazakhstan.

PARODONTODYNERUS Blüthgen, 1938 (*Parodontodynerus* (!): Blüthgen, 1961). Type species *Eumenes ephippium* Klug, 1817. Females build nests consisted of several barrel-shaped mud cells often placed within preexisting cavities such as hollow stems of caverns in stones; provision is beetle larvae (Coleoptera). The genus is distributed in the Palaearctic. Number of species: Palaearctic – 5; Russia – 1.

Parodontodynerus ephippium (Klug, 1817) [Eumenes] (*?Pterocheilus laetus* Herrich-Schäffer, 1839; *Odynerus dubius* de Saussure, 1852; *O. opacus* Morawitz, 1867; *O. schulthessi* Dusmet, 1903; *Odontodynerus ephippium anatoliae* Giordani Soika, 1951; *Parodontodynerus ephippium dalanicus* Kurzenko, 1976). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Caucasus, Turkey, Lebanon, Iran, Turkmenistan, Uzbekistan, Kazakhstan.

PSEUDEPIPONA de Saussure, 1856 (*Leptepipona* Blüthgen, 1951; *Metepipona* Blüthgen, 1951; *Trichepipona* Blüthgen, 1951; *Pseudopipona* (!): Giordani Soika, 1952; *Pseudepipone* (!): Bytinski-Salz, Gusenleitner, 1971). Type species *Odynerus herrichii* de Saussure, 1856. Females excavate nests in ground, on horizontal surfaces; provision is caterpillars of Microlepidoptera (mainly Gelechiidae). The genus is distributed in the Holarctic and Afrotropical regions and includes two subgenera: *Deuterepipona* Blüthgen, 1951; *Pseudepipona* s.str. Number of species: World – 34; Palaearctic – 32; Russia – 10.

Pseudepipona (Deuterepipona) niveopicta Giordani Soika, 1970. Russia: **EP** (NC). – Turkey.

Pseudepipona (Deuterepipona) superba (Morawitz, 1867) [Odynerus] (*O. hyalinipennis* André, 1884). Russia: **EP** (S, CR). – ?Azerbaijan.

Pseudepipona (Deuterepipona) tricolor Gusenleitner, 1976. Russia: **EP** (NC). – Iran, Kazakhstan.

Pseudepipona (Pseudepipona) augusta (Morawitz, 1867) [Odynerus] (*O. aurantiacus* Mocsáry, 1877). Russia: **EP** (?E, S, NC, CR), **UR**, **WS** (AL), **ES** (KR). – Europe (EE), Caucasus, Turkey, Kazakhstan, Mongolia, China (NC).

Pseudepipona (Pseudepipona) beckeri (Morawitz, 1867) [Odynerus] (*O. falsus*: Kostylev, 1928; *Pseudepipona lativentris*: Tobias, Kurzenko, 1978). Russia: **EP** (?E, S, CR). – Kazakhstan.

Pseudepipona (Pseudepipona) herrichii (de Saussure, 1856) [Odynerus] (*O. variegatus* Herrich-Schäffer, 1839, nom. praeocc., nec Fabricius, 1793; *O. basalis* Smith, 1857; *O. aldrichi* Fox, 1892; *Pseudepipona herrichii* var. *derufata* Blüthgen, 1951; *P. variegata mongolica* Giordani Soika, 1970; *P. herrichii afromontana* Gusenleitner, 1977). Russia: **EP** (E, S, NC, CR), **UR**, **WS** (OM, NS, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, PR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Syria, Central Asia, Kazakhstan, Mongolia, China (NE, NC, SW), N America.

Pseudepipona (Pseudepipona) peculiarus (Morawitz, 1895) [Odynerus]. Russia: **EP** (S). – Iran, Kazakhstan.

Pseudepipona (Pseudepipona) rubiginosa (André, 1884) [Odynerus]. Russia: **EP** (S). – ?Georgia.

Pseudepipona (Pseudepipona) sellata (Morawitz, 1885) [Lionotus]. Russia: **EP** (S, NC). – Azerbaijan, Turkey, Iran, Turkmenistan, Kazakhstan.

Pseudepipona (Pseudepipona) tricarinata (Kokujev, 1912) [Odynerus] (*O. herrichii* var. *tricarinatus* Kokujev, 1912). Russia: **EP** (S, NC). – Azerbaijan, Turkey, Kazakhstan, China (NC).

PSILIGLOSSA S. Saunders, 1872 (*Stenoglossa* de Saussure, 1852, nec Chaudoir, 1848; *Psiloglossa* (!): Dalla Torre, 1894). Type species *Raphiglossa odyneroides* S. Saunders, 1850. Females nest in hollow stems, partitions between cells are made of plant pith, soil particles or other pressed material; provision is beetle larvae (Coleoptera). The genus is distributed in the Palaearctic. Number of species: Palaearctic – 4; Russia – 1.

Psiliglossa odyneroides (S. Saunders, 1850) [Raphiglossa] (*P. odyneroides kozhantshikovi* Kostylev,

1940). Russia: **EP** (NC). – Europe (EE, SE), Caucasus, Turkey, Turkmenistan.

PTEROCHEILUS Klug, 1805 (*Pterochilus* (!): Illiger, 1807; *Pterochile* (!): Blanchard, 1840; *Pterochylus* (!): de Saussure, 1853; *Odontopterochilus* van der Vecht, 1971; *Nannopterochilus* Blüthgen, 1961). Type species *Vespa phalerata* Panzer, 1797. Females excavate nest burrows in friable soil without using water; provision is caterpillars (Psychidae and Noctuidae). The genus is distributed in the Holarctic and Afrotropical regions and includes four subgenera: *Megapterocheilus* Bohart, 1940; *Micropterocheilus* Bohart, 1940; *Onchopterocheilus* Bohart, 1940; *Pterocheilus* s.str. Number of species: World – 85; Palaeartic – 32; Russia – 2.

Pterocheilus (Pterocheilus) phaleratus (Panzer, 1797) [*Vespa*] (*P. interruptus* Klug, 1805; *P. klugii* Panzer, 1809; *Pterochilus* (!) *chevrieranus* de Saussure, 1856; *Pterochilus* (!) *formosus* Frivaldski, 1876; *Pterochilus* (!) *bezzii* Cobelli, 1892; *Pterochilus* (!) *phaleratus yeguasicus* Blüthgen, 1951; *Pterocheilus phaleratus tuberculatus* Blüthgen, 1955; *P. phaleratus kaszabi* Giordani Soika, 1970; *P. phaleratus luteiscapus* Gusenleitner, 1979; *P. phaleratus tibialis* Gusenleitner, 1991; *P. phaleratus suarezi* Gusenleitner, 1994; *P. phaleratus boreoibericus* Castro, 2003). Russia: **EP** (C, ?E, S, CR), **UR**, **WS** (NS, AL). – Europe (WE, NE, SE, EE), Georgia, Azerbaijan, Turkey, Kazakhstan, Mongolia.

Pterocheilus (Pterocheilus) sibiricus (Morawitz, 1867) [*Odynerus*] (*P. sibiricus* var. *fulvuleja* Blüthgen, 1955). Russia: **ES** (TU, BR, ZB). – Mongolia, China (NC).

RHYNCHIUM Spinola, 1806 (*Rygchium* (!) Spinola, 1806; *Rhynchium*: Billberg, 1820, emend. supported by ICZN, 1965, Opinion 747; *Rychium* (!): Billberg, 1820; *Rynchium* (!): Sturm, 1829; *Rhygchium* (!): de Saussure, 1853; *Rhynchiuum* (!): de Saussure, 1863; *Eurrhynchium* Dalla Torre, 1904; *Rygohium* (!): Willink, 1982). Type species *Rygchium europaeum* Spinola, 1806. Females nest in various pre-existing cavities: hollow stems, beetle burrows in wood and abandoned nests of other wasps and bees, partitions between cells are made of mud; provision is various caterpillars (mainly of Microlepidoptera). The genus is distributed in the Palaeartic, Afrotropical, Oriental, and Australian regions. Number of species: World – 21; Palaeartic – 5; Russia – 1.

Rhynchium quinquecinctum (Fabricius, 1787) [*Vespa*] (*Rh. tahitense* de Saussure, 1867; *Rh. fukaii* Cameron, 1911; *Rh. haemorrhoidale samurayi* Giordani Soika, 1973; *Rh. quinquecinctum murotai* Tano, 1983; *Rh. quinquecinctum nambui* Sk. Yamane, 1983). Russia: **FE** (KH, PR). – China (NE, NC, SE), Korean Peninsula, Japan (Hon, Shi, Kyu, Ryu), New Caledonia, Tahiti.

STENANCISTROCERUS de Saussure, 1863 (*Stenancistrocerus* (!): Dalla Torre, 1894; *Atropancistrocerus* Blüthgen, 1938). Type species *Odynerus atropos* Lepeletier de Saint Fargeau, 1841. Females build nests in vertical loam cliffs; provision is larvae of Curculionidae. The genus is distributed in the Palaeartic and Oriental regions and includes two subgenera: *Paratropancistrocerus* Blüthgen, 1938; *Stenancistrocerus* s.str. Number of species: World – 9; Palaeartic – 8; Russia – 1.

Stenancistrocerus (Paratropancistrocerus) obstrictus (Morawitz, 1895) [*Odynerus*]. Russia: **EP** (S, NC). – Caucasus.

STENODYNERUS de Saussure, 1863 (*Stemodynerus* (!): Rohwer, 1913; *Nannodynerus* Blüthgen, 1938; *Parhypodynerus* Giordani Soika, 1974). Type species *Odynerus chinensis* de Saussure, 1863. Females nest mainly in various pre-existing cavities such as hollow stems, galls and abandoned nests of other wasps and bees, partitions between cells are made of mud; several Nearctic species excavate nest burrows in ground and surmount them by turrets; provision is various caterpillars (mainly of Microlepidoptera) or rarely larvae of Chrysomelidae. The genus is distributed in the Holarctic, Oriental, and Neotropical regions. Number of species: World – 166; Palaeartic – 44; Russia – 16.

Stenodynerus aequisculptus (Kostylev, 1940) [*Odynerus*] (*Nannodynerus meyeri* Blüthgen, 1952; *Pseudepipona constrictiventris* Giordani Soika, 1952; *N. aequisculptus taurus* Gusenleitner, 1966; *S. aequisculptus inaequisculptus* Giordani Soika, 1979; *S. aequisculptus cretensis* Gusenleitner, 1985). Russia: **EP** (NC). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Cyprus, Syria, Lebanon, Israel, Pakistan, Central Asia, Kazakhstan.

Stenodynerus bluethgeni van der Vecht, 1971 (*Odynerus pictus* Herrich-Schäffer, 1839, nom. praecoc., nec Curtis, 1826; *O. dentisquama*: Morawitz, 1895, Kostylev, 1928). Russia: **EP** (NW, S, NC, CR), **UR**,

- WS** (NS), **ES** (KR, IR). – Europe (WE, SE, EE), Caucasus, Turkey, Iran, Turkmenistan, Kazakhstan, China (NE, NC).
- Stenodynerus chevrieranus** (de Saussure, 1855) [Odynerus] (*O. dufourianus* de Saussure, 1855; *O. germanicus*: Kostylev, 1928; *O. germanicus ponticus* Kostylev, 1928; *Nannodynerus chevrieranus* var. *eximia* Blüthgen, 1953). Russia: **EP** (C, ?E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Caucasus, Turkey, Iran, Central Asia, Kazakhstan.
- Stenodynerus clypeopictus** (Kostylev, 1940) [Odynerus] (*O. japonicus* Matsumura, 1926, nom. praecoc., nec von Schulthess, 1908; *Nannodynerus hungaricus* Blüthgen, 1961). Russia: **EP** (NC), **FE** (KH, PR). – Europe (WE, SE, EE), Caucasus, Turkey, Kyrgyzstan, Kazakhstan, Mongolia, China (NC), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu).
- Stenodynerus fastidiosissimus** (de Saussure, 1855) [Odynerus] (*O. difficilis* Morawitz, 1867; *O. proximus* Morawitz, 1867, nom. praecoc., nec de Saussure, 1857; *O. laborans* Costa, 1882; *O. insularis* André, 1883, nom. praecoc., nec Smith, 1857; *O. maroccanus* Dalla Torre, 1889; *O. ferrugineitarsis* De Stefani, 1889; *O. insulicola* Dalla Torre, 1894; *O. punctuosus* Ferton, 1901; *Nannodynerus vergesi* Giordani Soika, 1961; *Stenodynerus difficilis judaicus* Gusenleitner, 1970; *S. fastidiosissimus rufescens* Giordani Soika, 1977). Russia: **EP** (S, NC, CR), **UR**, **WS** (AL). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iraq, Iran, Central Asia, Kazakhstan.
- Stenodynerus frauenfeldi** (de Saussure, 1867) [Odynerus] (*O. nigriclypeatus* Sonan, 1930). Russia: **FE** (PR, SA, KU). – China (NE, NC, CC, SW), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu).
- Stenodynerus funebris** (André, 1884) [Odynerus] (*O. limbonotatus* Kostylev, 1940). Russia: **ES** (BR, YA), **FE** (AM, KH, PR). – China (NE, NC), Korean Peninsula.
- Stenodynerus orenburgensis** (André, 1884) [Odynerus] (*Lionotus orbitalis* Thomson, 1874, nom. praecoc., nec *Odynerus orbitalis* Herrich-Schäffer, 1839). Russia: **EP** (C, S, NC, CR), **UR**, **WS** (OM, AL), **ES** (IR, BR, YA). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Kyrgyzstan, Kazakhstan, Mongolia, China (NE).
- Stenodynerus pappi** Giordani Soika, 1976 (*Parancistrocerus ussuriensis* Kurzenko, 1982; *S. pappi luteifasciatus* Kim et Sk. Yamane, 2004). Russia: **FE** (PR). – China (NE, NC, CC, SW, SE), Korean Peninsula.
- Stenodynerus picticus** (Thomson, 1874) [Lionotus]. Russia: **EP** (N, NW, C), **UR**, **WS** (TK, AL), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KA, MG). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan, Mongolia.
- Stenodynerus pullus** Gusenleitner, 1981. Russia: **ES** (BR, ZB), **FE** (AM, PR). – Turkey, Mongolia, China (NC), Korean Peninsula.
- Stenodynerus punctifrons** (Thomson, 1874) [Lionotus]. Russia: **EP** (C), **UR**, **WS** (OM, NS, AL), **ES** (TU, IR, BR, YA, ZB), **FE** (AM, PR). – Europe (WE, SE, EE), Caucasus, Turkey, ?Iran, Kyrgyzstan, Kazakhstan, Mongolia.
- Stenodynerus sapidus** Giordani Soika, 1970. Russia: **EP** (S, NC). – Iran.
- Stenodynerus steckianus** (von Schulthess, 1897) [Odynerus] (*O. dentisquama* var. *steckianus* von Schulthess, 1897; *O. teutonicus* Blüthgen, 1937). Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), Azerbaijan, Turkey, Kazakhstan.
- Stenodynerus tokyanus** (Kostylev, 1940) [Odynerus] (*S. tokyanus flavoscutellatus* Sk. Yamane et Gusenleitner, 1982). Russia: **FE** (PR). – Korean Peninsula, Japan (Hon, Shi, Kyu, Ryu).
- Stenodynerus xanthomelas** (Herrich-Schäffer, 1839) [Odynerus] (*O. germanicus* de Saussure, 1855). Russia: **EP** (C, E, S, NC, CR), **WS** (AL). – Europe (WE, SE, EE), Caucasus, Turkey, Iran, China (NE).
- SYMMORPHUS** Wesmael, 1836 (*Protodynerus* de Saussure, 1855; *Synomorphus* (!): Rohwer, 1917; *Odynerus*: Blüthgen, 1938; *Koptodynerus* Blüthgen, 1943). Type species *Odynerus elegans* Wesmael, 1833. Females nest in various preexisting cavities (hollow stems, galls, beetle burrows in wood, abandoned nests of other wasps and bees), partitions between cells are made of mud; provision is generally larvae of Chrysomelidae, some species hunt for caterpillars of Microlepidoptera (*S. debilitatus*) or larvae of *Cionus* Clairville (Curculionidae) (*S. gracilis*). The genus is distributed in the Holarctic, Oriental, and Neotropical regions and includes two subgenera: *Parasymmorphus* Cumming et van der Vecht, 1986; *Symmorphus* s.str. Number of species: World – 48; Palaearctic – 27; Russia – 14.
- Symmorphus (Symmorphus) allobrogus** (de Saussure, 1855) [Odynerus] (*S. bifasciatus*: Tobias, Kurzenko, 1978). Russia: **EP** (N, NW, C, NC), **UR**, **WS** (TK, NS, KM, AL), **ES** (KR, BR, YA, ZB), **FE** (PR, MG). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Kyrgyzstan, Kazakhstan, China (NC).

- Symmorphus (Symmorphus) angustatus** (Zetterstedt, 1838) [Odynerus] (*Odynerus alternanus* Zetterstedt, 1838; *O. suecicus* de Saussure, 1855; *O. laeiventrtris* Thomson, 1874; *Symmorphus hakutozamus* Tsuneki, 1986; *S. nansetsurei* Tsuneki, 1986; *S. iwatai* Sk. Yamane, 1990). Russia: **EP** (N, NW, C), **UR**, **WS** (TK, AL), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KA, MG). – Europe (WE, NE, SE, EE), Caucasus, Kazakhstan, Mongolia, China (NE), Korean Peninsula, Japan (Hon).
- Symmorphus (Symmorphus) apiciornatus** (Cameron, 1911) [Ancistrocerus] (*S. seoulensis* Tsuneki, 1986). Russia: **FE** (PR). – China (NE, NC, CC, SW, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Symmorphus (Symmorphus) bifasciatus** (Linnaeus, 1761) [Vespa] (*Vespa sinuata* Fabricius, 1793, nom. praecoc., nec Geoffroy, 1785; *Odynerus sinuatus* var. *mutinensis* Baldini, 1894; *Symmorphus sparsus* Morawitz, 1895; *S. sinuatissimus* Richards, 1935; *S. mutinensis auster* Giordani Soika, 1975; *S. mutinensis yezoanus* Tsuneki, 1977). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (NS, AL), **ES** (KR, IR, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Central Asia, Kazakhstan, Mongolia, China (NE, NC, CC, SW), Korean Peninsula, Japan (Hok, Hon).
- Symmorphus (Symmorphus) connexus** (Curtis, 1826) [Odynerus]. Russia: **EP** (C, NC), **WS** (AL). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Kazakhstan.
- Symmorphus (Symmorphus) crassicornis** (Panzer, 1798) [Vespa] (*Odynerus arcticus* de Saussure, 1855; *O. herrichianus* de Saussure, 1855; *O. nursei* Bingham, 1898; *O. hospes* Nurse, 1902, nom. praecoc., nec Dufour et Perris, 1840; *O. hospitans* Dalla Torre, 1904; *O. crassicornis* var. *baltica* Blüthgen, 1937). Russia: **EP** (N, NW, C, S, NC, CR), **UR**, **WS** (NS, AL), **ES** (KR, IR, ZB). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Central Asia, Kazakhstan, Mongolia, ?China (NE), India.
- Symmorphus (Symmorphus) debilitatus** (de Saussure, 1855) [Odynerus]. Russia: **EP** (C, E, NC, CR). – Europe (WE, NE, SE, EE), Turkey.
- Symmorphus (Symmorphus) decens** (Kostylev, 1940) [Odynerus]. Russia: **FE** (PR). – Korean Peninsula, Japan (Hon, Shi, Kyu).
- Symmorphus (Symmorphus) foveolatus** Gussakovskij, 1932. Russia: **FE** (KH, PR, SA). – China (SW), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu).
- Symmorphus (Symmorphus) fuscipes** (Herrich-Schäffer, 1838) [Odynerus] (*S. karelicus* Morawitz, 1895). Russia: **EP** (N, NW, C), **UR**, **WS** (TK, NS, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, PR, SA, MG). – Europe (WE, NE, EE), Azerbaijan, Kazakhstan, Mongolia, China (NE).
- Symmorphus (Symmorphus) gracilis** (Brullé, 1832) [Odynerus] (*O. elegans* Wesmael, 1833; *Symmorphus elegans libanicus* Giordani Soika, 1963). Russia: **EP** (C, E, S, NC, CR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Syria, Lebanon, Israel, Iran, Turkmenistan, Tajikistan, Kazakhstan.
- Symmorphus (Symmorphus) lucens** (Kostylev, 1938) [Odynerus] (*S. ishikawai* Giordani Soika, 1975). Russia: **UR**, **WS** (AL), **ES** (IR, BR, ZB), **FE** (AM, KH, PR, SA). – Mongolia, China (NC), Korean Peninsula, Japan (Hon).
- Symmorphus (Symmorphus) mizuhonis** Tsuneki, 1977 (*S. kurentzovi* Kurzenko, 1982; *S. iiyamai* Tsuneki, 1986; *S. shiroyamai* Tsuneki, 1986; *S. piceanus* Tsuneki, 1986; *S. sassai* Tsuneki, 1986). Russia: **WS** (AL), **ES** (IR, BR, ZB), **FE** (KH, PR, SA). – Kazakhstan, China (NE, NC, CC, SW, SE), Korean Peninsula, Japan (Hon).
- Symmorphus (Symmorphus) murarius** (Linnaeus, 1758) [Vespa] (*Odynerus nidulator* de Saussure, 1855). Russia: **EP** (NW, C, NC, CR), **UR**, **WS** (TM), **ES** (KR, IR, BR, ZB), **FE** (PR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Iran, Central Asia, Kazakhstan, Korean Peninsula.
- SYNEUDYNERUS** Blüthgen, 1951 (*Syneodynerus* (!): Kurzenko, 1981). Type species *Odynerus egregius* Herrich-Schäffer, 1839. Females nest in preexisting cavities such as hollow stems or beetle burrows in wood, partitions between cells are double and made of mud; provision is caterpillars of Pyraustidae. The genus is distributed in the Palearctic, Afrotropical, and Australian region. Number of species: World – 11; Palearctic – 5; Russia – 1.
- Syneodynerus egregius** (Herrich-Schäffer, 1839) [Odynerus] (*O. bohemani* de Saussure, 1855; *O. unimaculatus* Moidl, 1922; *O. egregius* var. *discosignatus* Mader, 1936; *Euodynerus egregius barbarus* Blüthgen, 1942; *E. egregius arzhakanensis* Giordani Soika, 1970; *E. egregius egregior* Gusenleitner, 1970). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Cyprus, Syria, Jordan, Israel, Iran, Turkmenistan.
- TROPIDODYNERUS** Blüthgen, 1939. Type species *Polistes interrupta* Brullé, 1832. Females

excavate vertical nest burrows on horizontal ground surface, each nest contains one cell; nest entrance is obstructed by the female with mud pellets before each her departure from the nest; provision is larvae of Curculionidae. The genus is distributed in the Palaearctic and Oriental regions and includes two subgenera: *Tropidepipona* Giordani Soika, 1995; *Tropidodynerus* s.str. Number of species: World – 7; Palaearctic – 5; Russia – 1.

Tropidodynerus (Tropidodynerus) interruptus (Brullé, 1832) [Polistes] (*Pterocheilus interruptus* Herrich-Schäffer, 1839, nom. praeocc., nec Klug, 1805; *Odynerus bulgaricus* Mocsáry, 1883; *Hoplomerus mandibularis* Morawitz, 1885; *Tropidodynerus interruptus tricolor* Blüthgen, 1956; *T. interruptus hispanicus* Giordani Soika, 1966). Russia: **EP** (E, S, NC, CR). – Europe (WE, SE, EE), Armenia, Azerbaijan, Turkey, Kazakhstan.

Subfamily POLISTINAE – PAPER WASPS

A.V. ANTROPOV

POLISTES Latreille, 1802 (*Polystes*: Palisot de Beauvois, 1818, lapsus calami; *Polistes* (*Eupolistes*) Dalla Torre, 1904; *Pseudopolistes* Weyrauch, 1937, unavailable name, Art. 13.3 (ICZN, 1999); *Polistes* (*Sulcopolistes*) Blüthgen, 1938; *Polistula* Weyrauch, 1938, unavailable name, Art. 13.3 (ICZN, 1999); *Polistula* Weyrauch, 1939, *Pseudopolistes* Weyrauch, 1939, *Polistes* (*Leptopolistes*) Blüthgen, 1943. Type species “*Polistes gallica*, Fab.” [= *Vespa gallica* Linnaeus, 1767]. The genus includes four subgenera: *Gyrostoma* Kirby, 1828 (*Cyclostoma* Kirby, 1826, nom. praeocc., nec Lamarck, 1779; *Megapolistes* van der Vecht, 1968; *Nygmopolistes* Richards, 1973; *Megapostes* [!]: Lee, 1982), *Polistella* Ashmead, 1904 (*Stenopolistes* van der Vecht, 1972), *Polistes* s.str., *Aphanilopterus* Meunier, 1888 (*Polistoides* Dalla Torre, 1904, nom. praeocc., nec Loew, 1873; *Onerarius* Richards, 1973; *Fuscopolistes* Richards, 1973; *Polistarchus* Richards, 1973; *Palisotius* Richards, 1973; *Epicnemius* Richards, 1973). Number of species: World – 224; Palaearctic – 33; Russia – 14.

Polistes (Gyrostoma) rothneyi Cameron, 1900 (*P. rufolineatus* Cameron, 1900; *P. rothneyi yayeyamae* Matsumura, 1908; *P. rothneyi grahami* van der Vecht, 1968; *P. rothneyi hainanensis* van der

Vecht, 1968; *P. rothneyi iwatai* van der Vecht, 1968; *P. rothneyi gressitti* van der Vecht, 1968; *P. rothneyi tibetanus* van der Vecht, 1968; *P. rothneyi koreanus* van der Vecht, 1968; *P. rothneyi sikkimensis* van der Vecht, 1968). Russia: **FE** (PR). – Pakistan, China (WP, SE), Korean Peninsula, Japan (Ryu), Nepal, Bhutan, SE Asia, India.

Polistes (Polistella) diakonovi Kostylev, 1940. Russia: **FE** (PR). – Korean Peninsula.

Polistes (Polistella) snelleni de Saussure, 1862 (*P. puncticollis* F. Morawitz, 1892; *P. snelleni* f. *nigrihumerus* Uchida, 1936). Russia: **ES** (BR, ZB), **FE** (AM, KH, PR). – Mongolia, China (NE), Korean Peninsula, Japan (Hok, Hon, Kyu).

Polistes (Polistes) albellus Giordani Soika, 1976 (*P. foederatus albellus* Giordani Soika, 1976; *P. bischoffi* Weyrauch, 1937, part.; *P. helveticus* Neumeyer, 2014). Russia: **EP** (C, E, S), **UR**, **WS** (NS, AL), **ES** (KS, TU, IR, BR, ZB), ?**FE** (PR). – Europe (WE, SE, EE), Kazakhstan, Mongolia.

Polistes (Polistes) associus Kohl, 1898 (*P. associa* Kohl, 1898). Russia: **EP** (S, NC). – Europe (WE, SE, EE), Azerbaijan, Turkey, Israel, Iran, Pakistan, Tajikistan, India, China (NW).

Polistes (Polistes) atrimandibularis Zimmermann, 1930 (*P. atrimandibularis albidus* Blüthgen, 1957). Russia: **EP** (S, NC). – Europe (SE, EE), Egypt, Armenia, Turkey, Iran.

Polistes (Polistes) biglumis (Linnaeus, 1758) [Vespa] (*V. rupestris* Linnaeus, 1758; *V. bimaculata* Geoffroy in Fourcroy, 1785; *P. Geoffroyi* Lepeletier de Saint Fargeau et Audinett-Serville, 1825; *P. dubia* Kohl, 1898, nom. praeocc., nec de Saussure, 1867; *P. Kohli* Dalla Torre, 1904, replacement name for *P. dubia* Kohl, 1898; *V. bimacula* [!] “Fourcroy”: Dalla Torre, 1904; *P. bimaculatus* var. *Arduinoi* Guiglia, 1948; *P. pamirensis* Soika: Zirngiebl, 1955; *P. pamirensis* var. *soikai* Zirngiebl, 1955; *P. pamirensis* var. *interruptus* Zirngiebl, 1955; *P. bimaculatus* var. *nigrinotum* Zirngiebl, 1955; *P. biglumis alpium* Blüthgen, 1957; *P. geoffroyi* [!]: Das, Gupta, 1984). Russia: **EP** (C, S, NC). – Europe (WE, NE, SE, EE), N Africa, Abkhasia, Azerbaijan, Turkey, Syria, Israel, Iraq, Iran, Pakistan, Kyrgyzstan, Kazakhstan, Mongolia, Korean Peninsula, India.

Polistes (Polistes) bischoffi Weyrauch, 1937 (*P. Bischoffi* Weyrauch, 1937). Russia: **EP** (C, S, NC), **FE** (AM, KU). – Europe (WE, NE, SE, EE), N Africa, Turkey, Kazakhstan, Iran, Mongolia.

Polistes (Polistes) chinensis (Fabricius, 1793) [Vespa] (*P. biglumis* var. *antennalis* Pérez, 1905; *P. insepultus* Giordani Soika, 1976; *P. caspicus* Yoshikawa, 1962, nom. nud.). Russia: **WS** (AL), **ES** (TU, BR, ZB), **FE** (AM, KH, PR, ?KA). – Turkey, Kazakhstan, Iran, Mongolia, China (SE), Korean Peninsula, Japan (Hok, Hoh, Kyu, Ryu). Introduced into New Zealand.

Polistes (Polistes) dominula (Christ, 1791) [Vespa] (*P. italica* Herrich-Schäffer, 1840, nom. nud.; *P. pectoralis* “Meg.” Herrich-Schäffer, 1841; *P. gallica* var. *Lefebvrei* Guérin-Méneville, 1844; *P. Bucharensis* Erichson, 1849; *P. Lefebvrii* [!]: de Saussure, 1853; *P. maculatus* Rudow, 1889; *P. Merceti* Dusmet, 1903; *P. gallicus* var. *rufescens* du Buysson, 1912; *P. gallica* var. *ornata* Weyrauch, 1938, nom. praeocc., nec *Polistes ornata* Lepeletier de Saint Fargeau, 1836; *P. gallica* var. *pacifica* Weyrauch, 1939, nom. praeocc., nec *P. pacifica* Fabricius, 1804; *P. gallicus pseudopacificus* Giordani Soika, 1970, replacement name for *P. gallica* var. *pacifica* Weyrauch, 1939; *P. gallicus muchei* Gusenleitner, 1976; *Vespa dominula* [!]: Das, Gupta, 1984). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), N Africa, Armenia, Georgia, Turkey, Syria, Jordan, Israel, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NW), India. Introduced into the Canary Islands, Australia, N and S America.

Polistes (Polistes) gallicus (Linnaeus, 1767) [Vespa] (*P. pictior* Radoszkowski, 1872, nom. nud.; *P. foederata* Kohl, 1898; *P. gallicus* var. *mongolicus* du Buysson, 1911; *P. foederata* var. *obscuricornis* Mader, 1936; *Polistula omissa* Weyrauch, 1938; *Polistes omissus* var. *ordubadensis* Zirngiebl, 1955; *P. gallicus* var. *monogolicus* [!]: Yoshikawa, 1962; *P. omissus kaszabi* Giordani Soika, 1970). Russia: **EP** (C, S, NC, CR), **WS** (AL). – Europe (WE, SE, EE), N Africa, Ethiopia, Israel, Jordan, Turkey, Iran, Afghanistan, Pakistan, Armenia, Azerbaijan, Turkmenistan, Kyrgyzstan, Kazakhstan, Mongolia.

Polistes (Polistes) nimpha (Christ, 1791) [Vespa] (*V. diadema* Latreille, 1802, nom. praeocc., nec Christ, 1791; *Polistes opinabilis* Kohl, 1898; *P. nimpha* [!]: Weyrauch, 1939; *P. nimpha* var. *Moltonii* Guiglia, 1944; *P. nimpha* var. *molotnii* [!]: Yoshikawa, 1962; *P. nimpha irakensis* Gusenleitner, 1976). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (TM, KM, AL), **ES** (KS, TU, KR, BR, YA, ZB), **FE** (AM, KH). – Europe (WE, NE, SE, EE), N Africa, Israel, Jordan, Turkey, Georgia, Armenia, Azerbaijan, Iraq,

Iran, Pakistan, Kazakhstan, Kyrgyzstan, Mongolia, China (NE), India.

Polistes (Polistes) riparius Sk. Yamane et S. Yamane, 1987. Russia: **EP** (C), **UR**, **WS** (TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU). – Mongolia, Kazakhstan, Mongolia, China (NE), Korean Peninsula, Japan (Hok, Hon).

Polistes (Polistes) sulcifer Zimmermann, 1930 (*P. sulcifer* [!]: Guiglia, Capra, 1933; *Pseudopolistes sulcifer* var. *similator* Zirngiebl, 1955). Russia: **EP** (NC). – Europe (WE, SE, EE), N Africa, Armenia, Azerbaijan, Egypt, Israel, Turkey, Iran.

Subfamily VESPINAE – HORNETS AND JELLOW JACKETS

A.V. ANTROPOV

VESPA Linnaeus, 1758 – Hornets (*Macrovespa* Dalla Torre, 1904; *Nyctovespa* van der Vecht, 1959). Type species “*Vespa crabro* Fab.” [= *Vespa crabro* Linnaeus, 1758]. Number of species: World – 22; Palaearctic – 15; Russia – 8.

Vespa analis Fabricius, 1775 – Yellow-tailed Hornet (*V. Crabro sphinx* Christ, 1791; *V. tyrannica* F. Smith, 1857; *V. japonica* F. Smith, 1868, nom. praeocc., nec Radoszkowski, 1857, nec de Saussure, 1858; *V. parallela* André, 1884; *V. insularis* Dalla Torre, 1894, replacement name for *V. japonica* F. Smith, 1868; *V. tridentata* Cameron, 1903; *V. nigrans* du Buysson, 1903; *V. parallela* var. *Biroi* du Buysson, 1905; *V. analis* var. *tenebrosa* du Buysson, 1905; *V. analis* var. (subsp.) *barbouri* Bequaert, 1939; *V. analis* var. (subsp.) *kuangsiana* Bequaert, 1939; *V. analis eisa* Sk. Yamane, 1987; *V. analis nagatomii* Sk. Yamane, 1987; *V. maguanensis* Dong, 2001; *V. hekouensis* Dong et Wang, 2003). Russia: **FE** (AM, KH, PR). – China (NE, CC, SW, SE), Korean Peninsula, Japan (Hok. Hon, Ryu), Nepal, SE Asia, India.

Vespa binghami du Buysson, 1905 – Hornet of Bingham (*V. Binghami* du Buysson, 1905; *V. suprunenkoi* Birula, 1925). Russia: **FE** (KH, PR, SA). – China (CC, SW, WP,), Korean Peninsula, SE Asia, India.

Vespa crabro Linnaeus, 1758 – Common Hornet (*V. Crabro* Linnaeus, 1758; *V. vexator* Harris, 1776; *V. Crabro major* Retzius, 1783; ?*V. pratensis* Geoffroy in Fourcroy, 1785; *V. Crabro germana* Christ, 1791; *V. Crabroniformis* F. Smith, 1852; *V. crabro* var. *borealis* Radoszkowski, 1863, nom. praeocc.,

nec *V. borealis* Kirby, 1837, nec *V. borealis* Zetterstedt, 1838, nec *V. borealis* Zetterstedt, 1840, nec *V. borealis* F. Smith, 1843; *V. crabro* var. *anglica* Gribodo, 1892, nom. praeocc., nec *V. anglica* F. Smith, 1843; *V. oberthuri* du Buysson, 1902; *V. flavofasciata* Cameron, 1903; *V. crabro* var. *tartarea* du Buysson, 1905; *V. Crabro* var. *Altaica* Pérez, 1910; *V. Crabro* var. *Caspica* Pérez, 1910; *V. crabro nigra* Birula, 1925, nom. praeocc., nec *V. nigra* Geoffroy, 1785; *V. crabro vulgata* Birula, 1925; *V. crabro meridionalis* Birula, 1925; *V. crabro chinensis* Birula, 1925, nom. praeocc., nec *V. chinensis* Fabricius, 1793; *V. crabro* var. *birulai* Bequaert, 1931, replacement name for *V. crabro chinensis* Birula, 1925; *V. crabro* var. *gribodoi* Bequaert, 1931, replacement name for *V. crabro* var. *anglica* Gribodo, 1892). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE), Georgia, Azerbaijan, Turkey, Turkmenistan, Kazakhstan, Iran, Mongolia, China (NE, CC, SW, SE), Korean Peninsula, Japan (Hok, Hon). Introduced into N America and Guatemala.

Vespa ducalis F. Smith, 1852 – Black-tailed Hornet (*V. ducalis* var. *pulchra* du Buysson, 1905; *V. matsumurai* Sonan, 1935; *V. esakii* Sonan, 1935; *V. tropica loochooensis* Bequaert, 1936; *V. tropica pseudosoror* van der Vecht, 1959). Russia: **ES** (ZB), **FE** (AM, KH, PR). – China (NE, NC, CC, SW, SE), Korean Peninsula, Japan (Hok, Hon, Ryu), Nepal, SE Asia, India.

Vespa dybowskii André, 1884 – Hornet of Dybowski (*Vespa Dybowskii* “Rad. in litt.” André, 1884; *V. Dubowskii*: Dalla Torre, 1904; *V. Walkeri* du Buysson, 1905; *V. dybowskii mutata* Ma, 1937). Russia: **ES** (ZB), **FE** (AM, KH, PR). – China (NW, CC), Korean Peninsula, Japan (Hok, Hon, Ryu), Myanmar, Thailand.

Vespa mandarinia F. Smith, 1852 – Asian Giant Hornet (*V. Mandarinia* F. Smith, 1852; *V. magnifica* F. Smith, 1852; *V. japonica* Radoszkowski in Motschulsky, 1857; *V. bellona* F. Smith, 1871; *V. magnifica* var. *latilineata* Cameron, 1903; *V. mandarina*: Dalla Torre, 1894; *V. magnifica* var. *nobilis* Sonan, 1929; *V. magnifica sonani* Matsumura, 1930). Russia: **FE** (AM, KH, PR). – China (NW, CC, SW, SE), Korean Peninsula, Japan (Hok, Hon, Kyu, Ryu), Nepal, Bhutan, SE Asia, India, Sri Lanka.

Vespa orientalis Linnaeus, 1771 – Oriental Hornet (*V. turcica* Drury, 1773; *V. quadripunctata* Forskål, 1775; *V. Crabro fusca* Christ, 1791; *V. Aegyptiaca*

Vallot, 1802; *V. Nilotica* Vallot, 1802; *V. Jurinei* de Saussure, 1854; *V. orientalis* var. *Aegyptiaca* André, 1884, nom. praeocc., nec *V. Aegyptiaca* Vallot, 1802; *V. indica*: Wroughton, 1889; *V. orientalis* var. *Zavattarii* Guiglia et Capra, 1933; *V. orientalis* var. *somalica* Giordani Soika, 1934; *V. orientalis arabica* Giordani Soika, 1957). Russia: **EP** (S, NC, CR). – Europe (SE, EE), N Africa, Georgia, Armenia, Turkey, Syria, Jordan, Lebanon, Israel, Saudi Arabia, Bahrein, Yemen, UAE, Oman, Iraq, Iran, Afghanistan, Pakistan, Turkmenistan, Tajikistan, Uzbekistan, Nepal, India. Introduced into China (SE), Madagascar, and Mexico.

Vespa simillima F. Smith, 1868 – Japanese Hornet (*V. mongolica* André, 1884; *V. xanthoptera* Cameron, 1903; *V. micado* Cameron, 1903; *V. Mongolica* var. *Sexpunctata* Pérez, 1905; *V. Mongolica* var. *flavata* Pérez, 1910). Russia: **FE** (AM, KH, PR, SA, KU, KA). – China (NE), Korean Peninsula, Japan (Hok, Hon, Kyu, Ryu). Introduced into Canada (BC) but has apparently not become established.

DOLICHOVESPULA Rohwer, 1916 – “Long-cheeked” Jellow Jackets [*Pseudovespa* (*Pseudovespula*) Bischoff, 1931; *Dolichovespula* (*Boreovespula*) Blüthgen, 1943; *Dolichovespula* (*Metavespula*) Blüthgen, 1943]. Type species *Vespa maculata* Linnaeus, 1763. Number of species: World – 19; Palaearctic – 10; Russia – 8.

Dolichovespula adulterina (du Buysson, 1905) [*Vespa*] – False wasp (*V. norvegica* var. *adulterina* du Buysson, 1905; *V. norvegica saxonica natio colchica* Birula, 1930, unavailable name, Art. 45.5, 45.5.1 (ICZN, 1999); *D. adulterina montivaga* Sk. Yamane, 1982). Russia: **EP** (N, NW, C, E, NC), **WS** (TK, NS, AL), **ES** (KM, TM, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG, CH). – Europe (WE, NE, SE, EE), Georgia, Kyrgyzstan, Kazakhstan, Turkey, Mongolia, China (SW, ?SE), Korean Peninsula, Japan (Hok, Hon). All records of this species from North America should be referred to *D. arcatica* (Rohwer, 1916) (*Vespa borealis* Lewis, 1897).

Dolichovespula intermedia (Birula, 1930) [*Vespula*] (*Vespula sylvestris* var. *intermedia* Birula, 1930; *D. asiatica* Archer, 1981, unnecessary replacement name for *Vespula sylvestris* var. *intermedia* Birula, 1930, nec *Vespa rufa* var. *intermedia* du Buysson, 1905). Russia: **WS** (AL). – Central Asia, Kazakhstan, Afghanistan, Pakistan, Mongolia, China (NC, NW, SE), Japan (Hok, Hon), India.

- Dolichovespula media** (Retzius, 1783) [Vespa] – Medium wasp (*V. Crabro medius* Retzius, 1783; *V. Geerii* Lepeletier de Saint Fargeau, 1836; *V. crassa* Herrich-Schäffer, 1841; *V. similis* Schenck, 1853; *V. rufoscutellata* Schenck, 1853; *V. flavicincta* Schenck, 1853, nom. praeocc., nec Gravenhorst, 1807; *V. Geeri*: Dalla Torre, 1904; *V. media* var. *lineolata* Pérez, 1910; *Vespula media media* var. *lugubris* Birula, 1927, unavailable name, Art. 45.5, 45.5.1 (ICZN, 1999); *D. media* var. *conjugens* Paul, 1943; *D. media sugare* Ishikawa, 1969; *D. borealis* Lee, 1986, nom. praeocc., nec *V. borealis* Kirby, 1837, nec *V. borealis* Zetterstedt, 1838, nec *V. borealis* Lewis, 1897). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, ?KA). – Europe (WE, NE, SE, EE), Morocco, Georgia, Turkey, Syria, Kazakhstan, Mongolia, China (NE), Korean Peninsula, Japan (Hok, Hon). Occasionally introduced into New Zealand.
- Dolichovespula norvegica** (Fabricius, 1781) [Vespa] – Norwegian wasp (*V. britannica* Leach, 1814; *V. marginata* Kirby, 1837, nom. praeocc., nec Gmelin, 1790; *V. borealis* Zetterstedt, 1838, nom. praeocc., nec Kirby, 1837; *V. norvegica*: Olivier, 1792; *V. peruana* de Saussure, 1867; *V. saxonica* var. *arctica* Friese, 1919, nec *Vespula arctica* Rohwer, 1916; *D. norvegica* var. *Zetterstedti* Blüthgen, 1937, replacement name for *V. saxonica* var. *arctica* Friese, 1919). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (TM, OM, NS, TK, AL), **ES** (KS, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KA, MG, CH). – Europe (WE, NE, EE), Georgia, Turkey, Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NW). All records of this species from North America should be referred to *D. albida* (Sladen, 1918).
- Dolichovespula omissa** (Bischoff, 1931) [Vespa] – Carefree wasp [*V. tripunctata* Schenck, 1861, nom. praeocc., nec Fabricius, 1787; *Vespula norvegica saxonica* morpha *ingrica* Birula, 1930, unavailable name, Art. 45.5, 45.5.1 (ICZN, 1999); *Vespula ingrica* Bequaert, 1932, available name, Art. 45.5.1 (ICZN, 1999)]. Russia: **EP** (NW, C, E), **UR**, **WS** (AL), **ES** (KS). – Europe (WE, NE, EE), Georgia, Turkey; Iran, Kazakhstan.
- Dolichovespula pacifica** (Birula, 1930) [Vespula] – Pacific wasp (*V. norvegica pacifica* Birula, 1930; *D. loekenae* Eck, 1980). Russia: **EP** (N, NW, C), **UR**, **WS** (TM, OM, NS, TK, AL), **ES** (TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, MG, KA). – Europe (NE), Kazakhstan, Korean Peninsula, Japan (Hok, Hon, Shi).
- Dolichovespula saxonica** (Fabricius, 1793) [Vespa] – Saxonian wasp (*V. bavarica* von Schrank, 1802; *V. tridens* Schenck, 1853; *Vespula norvegica saxonica* morpha *monticola* Birula, 1930, unavailable name, Art. 45.5, 45.5.1 (ICZN, 1999); *D. saxonica nipponica* Sk. Yamane, 1975; *D. saxonica kamtschatkensis* Eck, 1983; *D. saxonica nigrescens* Eck, 1983). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KH, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG, CH). – Europe (WE, NE, SE, EE), Turkey, Iran, Kazakhstan, Mongolia, China (NE, NC, NW, SW), Korean Peninsula, Japan (Hok, Hon).
- Dolichovespula sylvestris** (Scopoli, 1763) [Vespa] – Forest wasp (*V. parietum* Harris, 1776, nom. praeocc., nec Linnaeus, 1758; *V. holsatica* Fabricius, 1793; *V. frontalis* Latreille, 1802; *V. campanaria* Fowler, 1833; *V. anglica* "Leach" F. Smith, 1843, available name, Art. 11.6.1 (ICZN, 1999); *V. pilosella* A. Costa, 1858, nom. praeocc., nec Gravenhorst, 1807; *V. sylvestris*: Dalla Torre, 1894; *V. sylvestris* var. *sumptuosa* du Buysson, 1905; *D. xinjiangensis* Lee, 1986). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, AL), **ES** (KS, TU, KR, IR, BR, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), Morocco, Georgia, Armenia, Turkey, Syria, Iran, Afghanistan, Pakistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NC, NW, CC, SE), India.
- VESPULA** Thomson, 1869 – "Short-cheeked" Jellow Jackets [*Vespa (Pseudovespa)* Schmiedeknecht, 1881; *Dolichovespula (Paravespula)* Blüthgen, 1938; *Paravespula (Allovespula)* Blüthgen, 1943; *Vespula (Rugovespula)* Archer, 1982]. Type species *Vespa austriaca* Panzer, 1799. Number of species: World – 25; Palaeartic – 11; Russia – 7.
- Vespula austriaca** (Panzer, 1799) [Vespa] – Austrian wasp (*V. borealis* F. Smith, 1843, nom. praeocc., nec Kirby, 1837, nec Zetterstedt, 1840; *V. arborea* F. Smith, 1849, replacement name for *V. borealis* F. Smith, 1843; *V. biloba* Schilling, 1850; *V. arborea* "Ross" Dalla Torre, 1894, nom. praeocc., nec F. Smith, 1849; *Vespula shinanoensis* Takamizawa, 2005, nom. nud.). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (TM, NS, AL), **ES** (KS, KR, IR, BR, YA), **FE** (AM, KH, PR, SA, KU, KA). – Europe (WE, NE, EE), Georgia, Azerbaijan, Turkey, Pakistan,

Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NW), Korean Peninsula, Japan (Hok, Hon), India. All records of this species from North America should be referred to *V. infernalis* (de Saussure, 1854).

Vespula flaviceps (F. Smith, 1870) [Vespa] – Yellow-fronted wasp (*V. japonica* de Saussure, 1858, nom. praeocc., nec Radoszkowski, 1857; “*V. Lewisii*, Sauss. Guepes Soc. (MS.)” F. Smith, 1873, nom. nud.; *V. “lewisii*, Saus. MS.” Cameron, 1903, available name, Art. 11.6.1.(ICZN, 1999); *V. Saussurei* Schulz, 1906, replacement name for *V. japonica* de Saussure, 1858; *V. karenkona* Sonan, 1929; *V. 4-maculata* Sonan, 1929; *V. vulgaris* var. *flavior* Stolfa, 1934; *Vespula japonica pionganensis* Giordani Soika, 1976; *Vespa vulgaris* var. *flavitor*: Das, Gupta, 1984; *Vespula gracilia* Lee, 1986). Russia: **FE** (AM, KH, PR). – China (NE, NW, CC, SW, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu), Nepal, SE Asia, India.

Vespula germanica (Fabricius, 1793) [Vespa] – German wasp (?*V. maculata* Scopoli, 1763, nom. praeocc., nec Linnaeus, 1763; ?*V. macularis* Olivier, 1792). Russia: **EP** (C, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, AL), **ES** (KS, TU, KR, BR, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE), N Africa, Israel, Jordan, Lebanon, Georgia, Armenia, Turkey, Syria, Iran, Iraq, Afghanistan, Pakistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NE, NC, NW, SW, WP, SE), Korean Peninsula, India. Introduced into Iceland, Madeira, Azores, Canaries, South Africa, Australia, Tasmania, New Zealand, Ascension Is., Norfolk Is., Hawaiian Is., N America, S America (Argentina, Chile).

Vespula koreensis (Radoszkowski, 1887) [Vespa] – Korean wasp (*V. Koreensis* Radoszkowski, 1887; *V. germanica* var. *stizoides* du Buysson, 1905; ?*V. orbata* var. *aurulenta* du Buysson, 1905; *Pseudovespa birulai* Gussakovskii, 1932; *Vespula koreensis salebrosa* Archer, 1982; *V. hainanensis* Lee,

1986). Russia: **FE** (AM, KH, PR). – China (NE, CC, SW, SE), Korean Peninsula, Thailand, Laos, India.

Vespula rufa (Linnaeus, 1758) [Vespa] – Red wasp (*V. Schrenckii* Radoszkowski, 1861; *V. Sibirica* André, 1884; *V. schrenki*: Dalla Torre, 1904; *Vespula rufa grahami* Archer, 1981; *V. obscura* Lee, 1986; *V. yichunensis* Lee, 1986; *V. yulongensis* Dong et Wang, 2002; *V. gongshanensis* Dong, 2005). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG, CH). – Europe (WE, NE, SE, EE), Turkey, Georgia, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Iran, Mongolia, China (NE, NW, SW, SE), Korean Peninsula, Japan (Hok, Hon, Shi), Nepal. All records of this species from North America should be referred to *V. intermedia* (du Buysson, 1905).

Vespula shidai Ishikawa, Sk. Yamane et Wagner, 1980 – Wasp of Shida (*V. shidai amamiana* Sk. Yamane, 1987). Russia: **FE** (AM, KH, PR, KU). – China (NE), Korean Peninsula, Japan (Hok, Hon, Shik, Kyu, Ryu).

Vespula vulgaris (Linnaeus, 1758) [Vespa] – Common wasp (*V. sexcincta* Panzer, 1799; *V. communis* de Saussure, 1857, nom. praeocc., nec von Schrank, 1785; *V. vulgaris* var. *pseudogermanica* Stolfa, 1932; *V. mixta* “Schenck” Edwards, 1980, nom. nud.; *Vespula rufosignata* Eck, 1998; *V. rufosignata vetus* Eck, 1999; *V. yunlongensis* Dong et Wang, 2003). Russia: **EP** (NW, N, C, E, S, NC, CR), **UR**, **WS** (TM, TK, NS, KM, AL), **ES** (TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG, CH). – Europe (WE, NE, SE, EE), Turkey, Georgia, Kyrgyzstan, Kazakhstan, Iran, Mongolia, China (NE, SW), Korean Peninsula, Japan (Hok, Hon), India. Introduced into Iceland, New Zealand, Australia, and occasionally into Maui and Hawaii. All records of this species from North America should be referred to *V. alascensis* (Packard, 1870).

SUPERFAMILY FORMICOIDEA

Subfamily DOLICHODERINAE

69. FAMILY FORMICIDAE – ANTS

D.A. DUBOVIKOFF AND Z.M. YUSUPOV

Ants are eusocial aculeate hymenopterous insects and currently include 13240 extant species belongs to 334 genera of 17 subfamilies and 738 fossil species from 151 genera of 14 subfamilies (3 subfamilies are known only by fossils) (Bolton, 2016). There are 1777 species in 97 genera of 11 subfamilies in the Palaearctic region (AntWeb, 2017). Ants, as eusocial insects, have a clear cast differentiation, e.g. sexual (females (queens) and males) and workers (or also soldiers). Colonies include one (or more in polyginous colonies) queen and from dozens to millions of workers. Ants are one of the most evolutionarily successful groups of invertebrates. They are of great importance in various ecosystems, primarily as effective predators, but also as consumers and distributors of plant seeds, play a significant role in soil formation and much more. Ants nesting is much different: in soil, leaf litter, dead wood, in epiphytes, different plants and with different special constructions like mounds. Synonymic and nomenclature data are given according to «An online catalog of the ants of the world» (Bolton, 2016). The total number of taxa is given excluding fossil and infraspecific taxa, unless explicitly indicated.

Sections for the genera *Leptothorax*, *Myrmica*, *Temnothorax* and most part of *Tetramorium* species were prepared by Z.M. Yusupov, the rest of the text was prepared by D.A. Dubovikoff.

Number of taxa: World – 485 genera, 13978 species (including fossils), Palaearctic – 94/1350, Russia – 44/264.

R e f e r e n c e s. Ruzsky, 1905, 1907; Karawajew, 1926; Kuznetsov-Ugamsky, 1929; Dlussky, Soyunov, Zabelin, 1990; Kupianskaya, 1990, 1995, 2012; Radchenko, 1991, 1992, 1996a, 1996b, 1997a,b,c,d, 2004, 2005a,b, 2016; Seifert, 1992, 2000, 2003, 2007, 2012; Arakelian, 1994; Czechowski et al., 2002; Dubovikoff, 2002, 2005; Csösz et al., 2007, 2010, 2015; Pfeiffer et al., 2007; Seifert, Schultz, 2009; Yusupov, 2009, 2014; Radchenko, Elmes, 2010; Czechowski et al., 2012; Douwes et al., 2012; Guénard, Dunn, 2012; Radchenko, Yusupov, 2012, 2017; Borowiec, 2014; Radchenko, Scupola, 2015; Radchenko et al., 2015; Bolton, 2016; Radchenko et al., 2016; Ward et al., 2016; AntWeb, 2017; Grebennikov, Zryanin, 2017; Dubovikoff, Yusupov, 2017.

Number of taxa: World – 28 genera, 707 species, Palaearctic – 8/53, Russia – 4/16.

BOTHRIOMYRMEX Emery, 1869. **Type species** *Bothriomyrmex costae* Emery, 1869. Temporary social parasites of *Tapinoma* species. Number of species: World – 24, Palaearctic – 22, Russia – 5.

Bothriomyrmex anastasiae Dubovikoff, 2002. Russia: **EP** (NC).

Bothriomyrmex communista Santschi, 1919 (*B. meridionalis* var. *communista* Santschi, 1919). Russia: **EP** (NC, CR). – Europe (WE, SE, EE).

Bothriomyrmex corsicus Santschi, 1923 (*B. meridionalis* var. *corsica* Santschi, 1923; *B. gallicus* Emery, 1925; *B. gibbus* Soudek, 1925; *B. menozzii* Emery, 1925). Russia: **EP** (NC, CR). – Europe (WE, SE, EE).

Bothriomyrmex modestus Radchenko, 1985. Russia: **EP** (S). – Europe (EE).

Bothriomyrmex turcomenicus Emery, 1925 (*B. syrius turcomenicus* Emery, 1925). Russia: **EP** (S, NC). – Turkmenistan, Kazakhstan.

DOLICHODERUS Lund, 1831 (*Hypoclinea* Mayr, 1855). **Type species** *Formica attelaboides* Fabricius, 1775. Number of species: World – 131, Palaearctic – 2, Russia – 2.

Dolichoderus quadripunctatus (Linnaeus, 1771) [*Formica*] (*Hypoclinea quadripunctata* (Linnaeus, 1771), auct.). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), Armenia, Iran.

Dolichoderus sibiricus Emery, 1889 (*D. quadripunctatus sibiricus* Emery, 1889). Russia: **ES** (KS, KR, BR), **FE** (AM, KH, PR, KU). – Mongolia, China (NE, NC), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

LIOMETOPUM Mayr, 1861. **Type species** *Formica microcephala* Panzer, 1798. Number of species: World – 7, Palaearctic – 3, Russia – 2.

Liometopum microcephalum (Panzer, 1798) [*Formica*]. Russia: **EP** (S, NC). – Europe (WE, SE, EE).

Liometopum orientale Karawajew, 1927 (*L. microcephalum* var. *orientalis* Karawajew, 1927). Russia: **FE** (PR). – Korean Peninsula.

TAPINOMA Förster, 1850. **Type species** *Tapinoma collina* Förster, 1850 = *T. erraticum* (Latreille, 1798). Number of species: World – 69, Palaearctic – 18, Russia – 7.

- Tapinoma christophi** Emery, 1925. Russia: **EP** (S).
Tapinoma emeryanum Kuznetsov-Ugamsky, 1927 (*T. emeryanum dagestanicum* Kuznetsov-Ugamsky, 1927). Russia: **EP** (NC). – Turkmenistan, Kazakhstan.
Tapinoma erraticum (Latreille, 1798) [Formica] (*T. breve* Emery, 1925; *T. tauridis* Emery, 1925). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Caucasus, Turkmenistan, Kazakhstan.
Tapinoma kinburni Karawajew, 1937. Russia: **EP** (C, S). – Europe (EE).
Tapinoma melanocephalum (Fabricius, 1793) [Formica]. Tramp species. Russia: **EP** (Moscow, introduced). – Cosmopolitan.
Tapinoma sinense Emery, 1925. Russia: **ES** (IR), **FE** (KH, PR). – Mongolia, China (NE, NC, NW, CC, SW, WP, SE), Korean Peninsula.
Tapinoma subboreale Seifert, 2012 (*T. erraticum ambiguum* Emery, 1925; *T. ambiguum* Emery, 1925, auct.). Russia: **EP** (C, S, NC). – Europe (WE, NE, SE, EE).

Subfamily FORMICINAE

Number of taxa: World – 51 genera, 3050 species, Palaeartic – 23/382, Russia – 12/98.

- CAMPONOTUS** Mayr, 1861. Type species *Formica ligniperda* Latreille, 1802. Number of species: World – 1021, Palaeartic – 113, Russia – 16.
Camponotus (Camponotus) herculeanus (Linnaeus, 1758) [Formica] (*C. herculeanus* var. *shitkovi* Ruzsky, 1904; *C. herculeanus* var. *altaica* Ruzsky, 1915; *C. herculeanus caucasicus* Arnoldi, 1967). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (TM, OM, NS). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Kyrgyzstan, Kazakhstan.
Camponotus (Camponotus) japonicus Mayr, 1866 (*C. herculeanus* var. *aterrima* Emery, 1894; *C. herculeanus japonicus* var. *manczhuricus* Ruzsky, 1915; *C. japonicus* var. *sanguinea* Karawajew, 1929; *C. japonica* var. *miltotus* Wheeler, 1929; *C. japonica wui* Wheeler, 1929; *C. aterrimus* Emery, 1895; Kupianskaya, 2012). Russia: **ES** (KS, KR, IR, BR, ZB), **FE** (AM, KH, PR, SA, KU). – Mongolia, China (NE, NC, NW), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
Camponotus (Camponotus) ligniperda (Latreille, 1802) [Formica]. Russia: **EP** (N, NW, C, NC), **UR**. – Europe (WE, NE, SE, EE), Caucasus, Turkey.

- Camponotus (Camponotus) obscuripes** Mayr, 1879 (*C. herculeanus ligniperda* var. *obscuripes* Mayr, 1879). Russia: **FE** (SA, KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
Camponotus (Camponotus) sachalinensis Forel, 1904 (*C. herculeanus* var. *sachalinensis* Forel, 1904; *C. herculeanus* var. *wymperi* Forel, 1904; *C. herculeanus* var. *montana* Ruzsky, 1905 (part); *C. herculeanus* var. *altaica* Ruzsky, 1915; *C. herculeanus* var. *eudokiae* Ruzsky, 1926; *C. herculeanus* var. *jacutica* Karawajew, 1929). Russia: **WS** (AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (KH, PR, SA, KU, KA, MG). – Mongolia, China (NE), Korean Peninsula, Japan (Hok, Hon, Shi).
Camponotus (Camponotus) saxatilis Ruzsky, 1895 (*C. herculeanus saxatilis* Ruzsky, 1895; *C. pennsylvanicus saxatilis* Ruzsky, 1905). Russia: **EP** (E, S), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, MG). – Mongolia, China (NE), Korean Peninsula.
Camponotus (Camponotus) vagus (Scopoli, 1763) [Formica] (*C. vagus* var. *kodorica* Forel, 1913). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL). – Europe (WE, NE, SE, EE), N Africa, Turkey, Kazakhstan.
Camponotus (Myrmentoma) atricolor (Nylander, 1849) [Formica] (*C. merula* Losana, 1834; *C. piceus* (Leach, 1825), part, auct.). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Iran, Kazakhstan.
Camponotus (Myrmentoma) fallax (Nylander, 1856) [Formica] (*C. marginatus* Latreille, 1798 (part, auct.); *C. marginatus* var. *ruzskyi* Emery, 1898; *C. marginatus* var. *kamensis* Ruzsky, 1903). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Kazakhstan.
Camponotus (Myrmentoma) quadrinotatus Forel, 1886 (*C. marginatus* var. *quadrinotatus* Forel, 1886; *C. marginatus* var. *rubicolor* Ruzsky, 1925; *C. maculatus quadrinotatus* var. *nigricolor* Ruzsky, 1925; *C. marginatus brunni* Ruzsky, 1926). Russia: **FE** (KH, PR). – China (NC, NW, CC, SW, WP, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
Camponotus (Myrmentoma) interjectus Mayr, 1877. Russia: **EP** (NC). – Israel, Iraq, Iran, Afghanistan, Central Asia.
Camponotus (Myrmentoma) lateralis (Olivier, 1792) [Formica]. Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Iran, Turkmenistan.

- Camponotus (Tanaemyrmex) aethiops** (Latreille, 1798) [Formica] (*F. nigrata* Nylander, 1849; *Camponotus aethiops* var. *glaber* Emery, 1925). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, Afghanistan, Central Asia, Kazakhstan.
- Camponotus (Tanaemyrmex) fedtschenkoi** Mayr, 1877 (*C. tichomirovi* Ruzsky, 1905; *C. fedtschenkoi* var. *adi* Stitz, 1930). Russia: **EP** (S, NC). – Armenia, Azerbaijan, Syria, Iran, Afghanistan, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan.
- Camponotus (Tanaemyrmex) turkestanicus** Emery, 1887 (*C. sylvaticus* st. *turkestanicus* Emery, 1887; *C. attila* Stårcke, 1935). Russia: **EP** (S, NC). – Iran, Afghanistan, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan.
- Camponotus (Tanaemyrmex) turkestanus** André, 1881 (*C. sylvaticus* var. *turkestanus* André, 1882; *C. ferganensis* Pisarski, 1967). Russia: **EP** (S, NC). – Israel, Iran, Afghanistan, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan.
- CATAGLYPHIS** Förster, 1850. Type species *Cataglyphis fairmairei* Förster, 1850. Number of species: World – 91, Palaeartic – 65, Russia – 3.
- Cataglyphis aenescens** (Nylander, 1849) [Formica] (*Myrmecocystus cursor* r. *tancrei* Forel, 1901; *M. cursor* var. *caspius* Ruzsky, 1902; *M. altisquamis* var. *jakobsoni* Ruzsky, 1905; *Cataglyphis aenescens aterrima* Pisarski, 1967; *C. aenescens georgica* Arnoldi, 1968; *C. aenescens chatkalensis* Tarbinsky, 1976). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (OM, NS, AL), **ES** (KS, TU, BR). – Europe (SE, EE), Caucasus, Turkey, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia, China (NE, NC, NW).
- Cataglyphis nodus** (Brullé, 1833) [Formica] (*Cataglyphis nodus caucasicola* Arnoldi, 1964). Russia: **EP** (NC). – Europe (SE, EE), Caucasus, Turkey, Israel, Saudi Arabia, Iran, United Arab Emirates, Afghanistan, Central Asia.
- Cataglyphis pallida** Mayr, 1877. Russia: **EP** (S, NC). – Afghanistan, Central Asia, Kazakhstan.
- COLOBOPSIS** Mayr, 1861. Type species *Formica truncata* Spinola, 1808. Number of species: World – 94, Palaeartic – 1, Russia – 1.
- Colobopsis truncatus** (Spinola, 1808) [Formica] (*Camponotus (Colobopsis) truncatus* (Mayr, 1861), auct.). Russia: **EP** (C, E, S, NC, CR). – Europe (WE, SE), N Africa, Caucasus, Turkey, Turkmenistan.
- FORMICA** Linnaeus, 1758. Type species *Formica rufa* Linnaeus, 1761. Number of species: World – 176, Palaeartic – 53, Russia – 32.
- Formica (Coptoformica) exsecta** Nylander, 1846 (*F. exsecta* var. *rubens* Forel, 1874; *F. nemoralis* Dlussky, 1964). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (IR, BR, ZB), **FE** (AM, KH, SA, KA, MG). – Europe (WE, NE, SE, EE), Mongolia, China (NE).
- Formica (Coptoformica) fennica** Seifert, 2000. Russia: **EP** (N, NC). – Europe (NE).
- Formica (Coptoformica) foreli** Bondroit, 1918 (*F. exsecta pressilabris* var. *foreli* Bondroit, 1918; *F. tamarae* Dlussky, 1964). Russia: **EP** (C, NC). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan.
- Formica (Coptoformica) forsslundi** Lohmander, 1949 (*F. brunneonitida* Dlussky, 1964; *F. fossilabris* Dlussky, 1965). Russia: **EP** (N, C, NC), **ES** (TU). – Europe (WE, NE, EE).
- Formica (Coptoformica) manchu** Wheeler, 1929 (*F. exsecta* var. *manchu* Wheeler, 1929; *F. longiceps* Dlussky, 1964, nom. praeocc., nec Smith, 1863; *F. dlusskyi* Bolton, 1995). Russia: **ES** (BR, YA, ZB), **FE** (AM, PR). – Mongolia, China (NE), Korean Peninsula.
- Formica (Coptoformica) pisarskii** Dlussky, 1964. Russia: **ES** (BR, YA, ZB), **FE** (AM). – Mongolia.
- Formica (Coptoformica) pressilabris** Nylander, 1846 (*F. exsecta pressilabris* var. *rufomaculata* Ruzsky, 1895; *F. exsecta pressilabris* Kuznetsov-Ugamsky, 1928; *F. rufomaculata*: Kupianskaya, 1995). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (AL), **ES** (IR, BR, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), Turkey, Mongolia, China (NE), Korean Peninsula.
- Formica (Coptoformica) suecica** Adlerz, 1902. Russia: **EP** (N), **WS** (OM). – Europe (NE).
- Formica (Formica) aquilonia** Yarrow, 1955. Russia: **EP** (N, NW, C), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, KR, IR, BR, YA, ZB), **FE** (KH, PR, SA, MG). – Europe (WE, NE, SE, EE), Mongolia, China (NE), Korean Peninsula.
- Formica (Formica) kupyanskayae** Bolton, 1995 (*F. opaca* Kupianskaya, 1980, nom. praeocc., nec Nylander, 1856). Russia: **FE** (AM, KH, PR, SA). – Korean Peninsula.
- Formica (Formica) lugubris** Zetterstedt, 1838 (*F. congerens* Nylander, 1846; *F. rufa* var. *rufo-pratensis* Forel, 1874; *F. pratensis unicolor* Ruzsky, 1926; *F. rufa* var. *nylanderi* Bondroit, 1919). Russia: **EP** (N, NW, C), **UR**, **WS** (TM, OM, TK, NS, KM, AL),

- ES** (KR, IR, BR, YA, ZB), **FE** (KH, PR, KA, MG). – Europe (WE, NE, SE, EE), Mongolia, China (NE), Korean Peninsula.
- Formica (Formica) polycytena** Förster, 1850. Russia: **EP** (N, NW, C, E, S), **UR, WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, KR, IR, BR, YA, ZB). – Europe (WE, NE, SE, EE), Kazakhstan.
- Formica (Formica) pratensis** Retzius, 1783 (*F. pratensis* var. *ciliata* Ruzsky, 1926). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR, WS** (TM, OM, TK, NS, AL), **ES** (KR, IR, BR, ZB), **FE** (AM). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Central Asia, Kazakhstan, Mongolia, China (NE).
- Formica (Formica) rufa** Linnaeus, 1761 (*F. rufa* var. *meridionalis* Nasonov, 1889). Russia: **EP** (N, NW, C, E, S), **UR, WS** (TM, OM, NS, AL), **ES** (KS, KR, IR). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan.
- Formica (Formica) truncorum** Fabricius, 1804 (*F. truncicola* Nylander, 1846; *F. rufa* var. *rufotruncicola* Ruzsky, 1896; *F. truncorum* var. *menozzii* Krausse, 1926). Russia: **EP** (N, NW, C, E, S, NC), **UR, WS** (TM, NS, AL), **ES** (KS, TU, KR, IR, BR, ZB), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Afghanistan, Central Asia, Kazakhstan, Mongolia, China (NE), Korean Peninsula, Japan (Hok).
- Formica (Formica) yessensis** Forel, 1901 (*F. truncicola* var. *yessensis* Forel, 1901). Russia: **FE** (PR). – China (NW, SE), Korean Peninsula, Japan (Hok, Hon).
- Formica (Raptiformica) sanguinea** Latreille, 1798 (*F. dominula* Nylander, 1846; *F. sanguinea* var. *fuscipes* Emery, 1895; *F. sanguinea* var. *mollesonae* Ruzsky, 1903; *F. sanguinea* var. *clarior* Ruzsky, 1905; *F. sanguinea arenicola* Kuznetsov-Ugamskij, 1928). Russia: **EP** (NW, C, E, S, NC, CR), **UR, WS** (OM, TK, NS, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, MG). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Afghanistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NW, CC), Korean Peninsula, Japan (Hok, Hon).
- Formica (Serviformica) candida** F. Smith, 1878 (*F. fusca picea* var. *inplana* Ruzsky, 1914; *F. fusca picea* var. *orientalis* Ruzsky, 1914; *F. picea* auct.). Russia: **WS** (AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, MG). – Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NW, CC), Korean Peninsula, Japan (Hok, Hon, Kyu).
- Formica (Serviformica) cinerea** Mayr, 1853 (*F. cinerea* var. *armenica* Ruzsky, 1905; *F. imitans* Ruzsky, 1902, auct.). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR, WS** (TM, AL). – Europe (WE, NE, SE, EE), Caucasus, Kazakhstan.
- Formica (Serviformica) cinereofusca** Karawajew, 1929 (*F. cinerea* var. *cinereofusca* Karawajew, 1929). Russia: **EP** (NC). – Europe (SE, EE), Caucasus.
- Formica (Serviformica) clarissima** Emery, 1925 (*F. rufibarbis subpilosa* var. *clarior* Ruzsky, 1914, nom. praecox., nec Ruzsky, 1905; *F. rufibarbis* var. *clarissima* Emery, 1925; *F. subpilosa ruzskyi* Dlussky, 1965; Kupianskaya, 2012). Russia: **ES** (BR, ZB), **FE** (AM, KH). – Mongolia, China (NE).
- Formica (Serviformica) cunicularia** Latreille, 1798 (*F. cunicularia fuscooides* Dlussky, 1967). Russia: **EP** (C, E, S, NC, CR), **UR, WS** (OM, TK, NS, AL). – Europe (SE, EE), Caucasus, Turkey, Iran, Central Asia, Kazakhstan.
- Formica (Serviformica) fusca** Linnaeus, 1758. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR, WS** (OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, ZB). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Central Asia, Kazakhstan, Mongolia, China (NE), N America (introduced).
- Formica (Serviformica) gagates** Latreille, 1798. Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), Georgia, Turkey.
- Formica (Serviformica) gagatoides** Ruzsky, 1904 (*F. fusca* var. *gagatoides* Ruzsky, 1904). Russia: **EP** (N, NW), **UR, WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (KH, KA, MG). – Europe (NE), Japan (Hon).
- Formica (Serviformica) glauca** Ruzsky, 1896 (*F. rufibarbis* var. *glauca* Ruzsky, 1896; *F. rufibarbis* var. *katuniensis* Ruzsky, 1915). Russia: **EP** (C, E, S, NC, CR), **UR, WS** (OM, TK, NS, KM, AL), **ES** (KS, KR, IR). – Europe (SE, EE), Caucasus, Turkey, Central Asia, Kazakhstan, Mongolia.
- Formica (Serviformica) japonica** Motschulsky, 1866 (*F. fusca* var. *nipponensis* Forel, 1901; *F. fusca* var. *japonica* Wheeler, 1913). Russia: **FE** (AM, PR, SA, KU). – Mongolia, China (NE, NC, NW, CC, SW, WP, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Formica (Serviformica) lemani** Bondroit, 1917 (*F. fusca* var. *borealis* Waschkevitich, 1924). Russia: **EP** (N, NW, NC), **UR, WS** (TM, OM, TK, NS, KM, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG, CH). – Europe (WE, NE, SE, EE), Mongolia, China (NE), Korean Peninsula, Japan (Hok, Hon, Shi).

- Formica (Serviformica) picea** Nylander, 1846 (*F. transcaucasica* Nasonov, 1889). Russia: **EP** (N, NW, C, E, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL). – Europe (WE, NE, SE, EE), Georgia, Armenia, Turkey, Kazakhstan.
- Formica (Serviformica) rufibarbis** Fabricius, 1793. Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (OM, TK, NS, KM, AL). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran.
- Formica (Serviformica) subpilosa** Ruzsky, 1902 (*F. rufibarbis subpilosa* Ruzsky, 1902; *F. cinerea* var. *bipilosa* Karawajew, 1926). Russia: **EP** (S, NC). – Caucasus, Central Asia.
- Formica (Serviformica) uralensis** Ruzsky, 1895. Russia: **EP** (C, NC), **UR**, **WS** (OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, ZB), **FE** (AM, PR, SA, KU). – Europe (WE, NE, EE), Mongolia, China (NE), Korean Peninsula.
- LASIVS** Fabricius, 1804. Type species *Formica nigra* Linnaeus, 1758. Number of species: World – 112, Palearctic – 55, Russia – 31.
- Lasius (Austrolasius) carnolicus** Mayr, 1861. Russia: **EP** (C, S), **UR**, **WS** (Radchenko, 2016), **ES** (Radchenko, 2016), **FE** (PR, SA). – Europe (WE, NE, SE, EE), Kazakhstan.
- Lasius (Cautolasius) flavus** (Fabricius, 1782) [Formica] (*L. flavus* var. *fuscoides* Ruzsky, 1902; *L. flavus odoratus* Ruzsky, 1905; *L. flavus* var. *olivacea* Karawajew, 1926). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE, SE, EE), Caucasus, Iran, Kazakhstan, Korean Peninsula, Japan (Hok, Hon, Shi, Kyu), N America.
- Lasius (Chthonolasius) bicornis** (Förster, 1850) [Formica]. Russia: **EP** (C, E, S, NC). – Europe (WE, NE, SE, EE), Caucasus.
- Lasius (Chthonolasius) citrinus** Emery, 1922 (*L. affinis* Schenck, 1852, nom praeocc., nec Leach, 1825; *L. bicornis* var. *citrine* Emery, 1922; *L. affinis* auct.). Russia: **EP** (C, E, S, NC, CR), **ES** (BR), **FE** (AM, KH, PR, SA, KU). – Europe (WE, SE, EE), Caucasus, Kazakhstan, Korean Peninsula.
- Lasius (Chthonolasius) distinguendus** (Emery, 1916) [Formicina] (*F. umbrata distinguenda* Emery, 1916; *Lasius hybrida* (Bondroit, 1918)). Russia: **EP** (C, E, S, NC), **ES** (ZB), **FE** (AM, PR). – Europe (WE, SE, EE), Georgia, Armenia, Kazakhstan, Mongolia, Korean Peninsula.
- Lasius (Chthonolasius) jensi** Seifert, 1982 (*L. umbratus*: Kupianskaya, 1995). Russia: **FE** (AM, PR). – Europe (WE, EE), Armenia, Korean Peninsula.
- Lasius (Chthonolasius) longiceps** Seifert, 1988. Russia: **EP** (C, S), **UR**. – Europe (EE), Kazakhstan.
- Lasius (Chthonolasius) meridionalis** (Bondroit, 1920) [Formicina]. Russia: **EP** (C, S, NC), **FE** (PR). – Europe (WE, NE, SE, EE), Georgia, Armenia, Kazakhstan, Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Lasius (Chthonolasius) mixtus** (Nylander, 1846) [Formica]. Russia: **EP** (NW, C, E, S, NC, CR), **WS** (TM, OM, TK, NS, KM, AL), **ES** (ZB), **FE** (AM, KH, PR). – Europe (WE, SE, EE), Georgia, Armenia, Kazakhstan, Korean Peninsula.
- Lasius (Chthonolasius) sabularum** (Bondroit, 1918) [Formicina]. Russia: **EP** (C, S, NC), **ES** (IR). – Europe (WE, NE, SE, EE).
- Lasius (Chthonolasius) umbratus** (Nylander, 1846) [Formica] (*L. umbratus* var. *exacutus* Ruzsky, 1902). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (ZB), **FE** (AM, PR, SA, KU). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Kazakhstan, Korean Peninsula, Japan (Hok, Hon, Shi, Kyu), N America.
- Lasius (Dendrolasius) capitatus** (Kuznetsov-Ugamsky, 1928) [Acanthomyops] (*A. fuliginosus capitatus* Kuznetsov-Ugamsky, 1928). Russia: **FE** (PR). – Japan (Hok, Hon, Shi).
- Lasius (Dendrolasius) fuji** Radchenko, 2005 (*L. fuliginosus*: Kupianskaya, 1995). Russia: **FE** (AM, KH, PR, SA, KU). – China (NE), Korean Peninsula, Japan (Hok, Hon, Shi).
- Lasius (Dendrolasius) fuliginosus** (Latreille, 1798) [Formica]. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (OM, TK, NS, KM, AL). – Europe (WE, NE, SE, EE), Caucasus, Kazakhstan.
- Lasius (Dendrolasius) morisitai** Yamauchi, 1978. Russia: **FE** (PR). – Korean Peninsula, Japan (Hon).
- Lasius (Dendrolasius) nipponensis** Forel, 1912 (*L. fuliginosus* var. *nipponensis* Forel, 1912; *L. crispus* Wilson, 1955). Russia: **FE** (PR). – Korean Peninsula, Japan (Hok, Hon, Shi).
- Lasius (Dendrolasius) orientalis** Karawajew, 1912 (*L. fuliginosus* var. *orientalis* Karawajew, 1912; *L. teranishii* Wheeler, 1928; *L. ouchii* Teranishi, 1940). Russia: **FE** (AM, PR, SA, KU). – Korean Peninsula, Japan (Hok, Hon).
- Lasius (Dendrolasius) spathepus** Wheeler, 1910. Russia: **FE** (PR). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

- Lasius (Lasius) alienus** (Förster, 1850) [Formica]. Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (OM, TK, NS, KM, AL), **ES** (BR, ZB), **FE** (AM, KH, PR, SA). – Europe, Caucasus, Turkey, Israel, Iran, Kazakhstan, Mongolia, Japan (Hok, Hon, Shi, Kyu), N America.
- Lasius (Lasius) brunneus** (Latreille, 1798) [Formica]. Russia: **EP** (C, E, S, NC, CR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Israel, Iran.
- Lasius (Lasius) emarginatus** (Olivier, 1792) [Formica] (*L. alienus* var. *pontica* Stårcke, 1944). Russia: **EP** (C, S, NC, CR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Israel, Iran.
- Lasius (Lasius) hayashi** Yamauchi et Hayashida, 1970. Russia: **FE** (KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Lasius (Lasius) japonicus** Santschi, 1941 (*L. emarginatus* var. *japonicus* Santschi, 1941; *L. niger*: Kupianskaya, 1995). Russia: **FE** (AM, KH, PR, SA, KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Lasius (Lasius) neglectus** Van Loon, Boomsma et Andrasfalvy, 1990. Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Turkey, Israel, Iran, Uzbekistan, Kyrgyzstan.
- Lasius (Lasius) niger** (Linnaeus, 1758) [Formica] (*L. niger* var. *alienonigra* Forel, 1874). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (BR, ZB). – Europe (WE, NE, SE, EE), Kazakhstan, Mongolia, N America.
- Lasius (Lasius) koreanus** Seifert, 1982. Russia: **FE** (KU). – Korean Peninsula.
- Lasius (Lasius) obscuratus** Stitz, 1930 (*L. brunneus* var. *obscurata* Stitz, 1930). Russia: **EP** (NC). – Tajikistan.
- Lasius (Lasius) paralienus** Seifert, 1992. Russia: **EP** (C, S, NC, CR). – Europe (WE, NE, SE, EE), Turkey.
- Lasius (Lasius) platythorax** Seifert, 1991. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL). – Europe (WE, NE, SE, EE), Iran.
- Lasius (Lasius) psammophilus** Seifert, 1992. Russia: **EP** (C, S, NC, CR). – Europe (WE, NE, SE, EE).
- Lasius (Lasius) turcicus** Santschi, 1921. Russia: **EP** (NC). – Europe (WE, SE, EE), Georgia, Turkey, Iran.
- LEPISIOTA** Santschi, 1926 (*Acantholepis* Mayr, 1861). Type species *Plagiolepis rothneyi* Forel, 1894. Number of species: World – 83, Palaeartic – 25, Russia – 1.
- Lepisiota semenovi** Ruzsky, 1905 [*Acantholepis*] (*Acantholepis frauenfeldi* var. *semenovi* Ruzsky, 1905). Russia: **EP** (NC). – Europe (SE, EE), Caucasus, Turkey, Iran, Central Asia, Kazakhstan.
- NYLANDERIA** Emery, 1906. Type species *Formica vividula* Nylander, 1846. Number of species: World – 110, Palaeartic – 9, Russia – 3.
- Nylanderia colchica** (Pisarski, 1960) [Paratrechina]. Russia: **EP** (NC). – Abkhazia, Georgia.
- Nylanderia flavipes** (Smith, 1874) [Tapinoma]. Russia: **EP** (NC, introduced), **FE** (KU). – Abkhazia (introduced), China (NE, NC, CC, SW, WP, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu).
- Nylanderia vividula** (Nylander, 1846) [Formica]. Russia: **EP** (C, S, NC, CR) (introduced). – Tramp species. Copsopolitan.
- PLAGIOLEPIS** Mayr, 1861. Type species *Formica pygmaea* Latreille, 1798. Number of species: World – 62, Palaeartic – 14, Russia – 3.
- Plagiolepis karawajewi** Radchenko, 1989. Russia: **EP** (CR).
- Plagiolepis pallescens** Forel, 1889. Russia: **EP** (NC). – Europe (SE, EE), N Africa, Caucasus, Turkey, Central Asia.
- Plagiolepis taurica** Santschi, 1920 (*P. maura* var. *taurica* Santschi, 1920; *P. barbara* var. *pyrenaica* Emery, 1921; *P. satunini* Karawajew, 1931). **EP** (C, E, S, NC, CR). – Europe (WE, SE, EE), Caucasus, Iran, Central Asia, Kazakhstan.
- POLYERGUS** Latreille, 1804. Type species *Formica rufescens* Latreille, 1798. Number of species: World – 14, Palaeartic – 3, Russia – 3.
- Polyergus nigerrimus** Marikovskiy, 1963. Russia: **ES** (TU, BR), **FE** (KH). – Mongolia.
- Polyergus rufescens** (Latreille, 1798) [Formica]. Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (OM, AL). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Kyrgyzstan, Kazakhstan.
- Polyergus samurai** Yano, 1911. Russia: **FE** (AM, PR). – China (NE, NC, CC, SW, WP, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- PRENOLEPIS** Mayr, 1861. Type species *Tapinoma nitens* Mayr, 1853. Number of species: World – 13, Palaeartic – 1, Russia – 1.
- Prenolepis nitens** (Mayr, 1853) [Tapinoma]. Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Georgia, Turkey.

PROFORMICA Ruzsky, 1902. Type species *Formica nasuta* Nylander, 1856. Number of species: World – 25, Palaeartic – 25, Russia – 3.

Proformica epinotalis Kuznetsov-Ugamsky, 1927. Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (EE), Iran, Turkmenistan, Kyrgyzstan, Kazakhstan.

Proformica mongolica (Emery, 1901) [Formica]. Russia: **ES** (KS, TU, KR, IR, BR, ZB). – Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NC, NW), Korean Peninsula.

Proformica ossetica Dubovikoff, 2005. Russia: **EP** (NC).

ROSSOMYRMEX Arnoldi, 1928. Type species *Rossomyrmex proformicarum* Arnoldi, 1928. Number of species: World – 4, Palaeartic – 4, Russia – 1.

Rossomyrmex proformicarum Arnoldi, 1928. Russia: **EP** (S, NC). – Kazakhstan.

Subfamily MYRMICINAE

Number of taxa: World – 142 genera, 6605 species, Palaeartic – 34/1000, Russia – 23/142.

ANERGATES Forel, 1874. Type species *Myrmica atratula* Schenck, 1852. The social parasites of *Tetramorium* species. Number of species: World – 1, Palaeartic – 1, Russia – 1.

Anergates atratulus (Schenck, 1852) [Myrmica]. The social parasite of *Tetramorium caespitum*. Russia: **EP** (C, S, NC, CR). – Europe (WE, NE, SE, EE), Armenia, Turkey, Kazakhstan, N America (introduced).

APHAENOGASTER Mayr, 1853. Type species *Aphaenogaster sardoa* Mayr, 1853. Number of species: World – 187, Palaeartic – 78, Russia – 8.

Aphaenogaster famelica (Smith, 1874) [Ischnomyrmex] (*A. famelica frontosa* Wheeler, 1928; *A. famelica ruida* Wheeler, 1928; *A. vapida* Wheeler, 1928). Russia: **FE** (KU). – China (CC, SW, WP, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

Aphaenogaster gibbosa (Latreille, 1798) [Formica] (*A. striola* (Roger, 1859); *A. gibbosa muschtaidica* Emery, 1908). Russia: **EP** (NC). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iraq, Iran, Turkmenistan.

Aphaenogaster japonica Forel, 1911 (*A. schmitzi japonica* Forel, 1911; *A. smythiesii sinensis* Wheeler,

1928; *A. sinensis*: Kupianskaya, 1995). Russia: **FE** (KU). – China (CC, SW, WP, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

Aphaenogaster kurdica Ruzsky, 1905 (*A. subterranea* var. *kurdica* Ruzsky, 1905). Russia: **EP** (NC). – Georgia, Turkey.

Aphaenogaster obsidiana (Mayr, 1861) [Atta]. Russia: **EP** (NC). – Europe (SE), Georgia, Turkey.

Aphaenogaster splendida (Roger, 1859) [Atta] (*Aphaenogaster splendida transcaucasica* Karawajew, 1926). Russia: **EP** (NC, CR). – Europe (SE), N Africa, Armenia, Azerbaijan, Turkey, Israel, Iran.

Aphaenogaster subterranea (Latreille, 1798) [Formica]. Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey.

Aphaenogaster subterraneoides Emery, 1881 (*A. pallida* var. *subterraneoides* Emery, 1881). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey.

CARDIOCONDYLA Emery, 1869. Type species *Cardiocondyla elegans* Emery, 1869. Number of species: World – 70, Palaeartic – 31, Russia – 5.

Cardiocondyla koshewnikovi Ruzsky, 1902. Russia: **EP** (S, NC). – Kyrgyzstan, Kazakhstan, Mongolia, China (NW).

Cardiocondyla mauritanica Forel, 1890 (*C. nuda* var. *mauritanica* Forel, 1890). Russia: **EP** (CR). – Europe (SE), N Africa, Afghanistan, Turkey, introduced into many countries.

Cardiocondyla sahlbergi Forel, 1913 (*C. elegans* var. *sahlbergi* Forel, 1913). Russia: **EP** (NC). – Europe (EE), N Africa, Caucasus, Turkey, Israel, Iran, Uzbekistan.

Cardiocondyla stambuloffii Forel, 1892 (*C. bogdanovi* Ruzsky, 1905; *C. stambuloffii taurica* Karawajew, 1927). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (SE, EE), Armenia, Turkey, Iran.

Cardiocondyla ulianini Emery, 1889 (*C. elegans* Emery, 1869, auct.; *C. elegans* var. *ulianini* Emery, 1889; *C. elegans schkaffi* Arnoldi, 1928). Russia: **EP** (E, S, NC, CR). – Europe (EE), Caucasus, Saudi Arabia, Iran, Afghanistan, Kyrgyzstan, Kazakhstan, Mongolia.

CHALEPOXENUS Menozzi, 1923 (*Leonomyrma* Arnoldi, 1968). Type species *Chalepoxenus gribodoi* Menozzi, 1923. The social parasites of *Temnothorax* species. Number of species: World – 9, Palaeartic – 9, Russia – 1.

- Chalepoxenus tauricus** Radchenko, 1989. The social parasite of *Temnothorax tauricus*. Russia: **EP** (CR).
- CREMATOGASTER** Lund, 1831. Type species *Formica scutellaris* Olivier, 1792. Number of species: World – 506, Palaeartic – 36, Russia – 3.
- Crematogaster schmidti** (Mayr, 1853) [Acrocoelia]. Russia: **EP** (CR, NC). – Europe (WE, SE, EE), Caucasus, Turkey, Iran, Turkmenistan.
- Crematogaster sordidula** (Nylander, 1849) [Myrmica] (*C. sordidula* var. *caspiica* Emery, 1912). Russia: **EP** (NC). – Europe (WE, SE, EE), Caucasus, Turkey, Israel, Iran, Turkmenistan.
- Crematogaster subdentata** Mayr, 1877. Russia: **EP** (S introduced, NC, CR introduced). – Caucasus, Turkey, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia.
- FORMICOXENUS** Mayr, 1855. Type species *Myrmica nitidula* Nylander, 1846. The social parasite species, in nest of *Formica* s. str. (xenobiotic). Number of species: World – 7, Palaeartic – 2, Russia – 2.
- Formicoxenus nitidulus** (Nylander, 1846) [Myrmica] (*F. laeviuscula* Förster, 1850). Russia: **EP** (NW, C, E, NC), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (IR, YA, ZB), **FE** (KH, PR). – Europe (WE, NE, SE, EE), Turkey.
- Formicoxenus sibiricus** (Forel, 1899) [Leptothorax] (*F. orientalis* Dlussky, 1963). Russia: **ES** (BR, ZB), **FE** (PR).
- HARPAGOXENUS** Forel, 1893 (*Tomognathus* Mayr, 1861). Type species *Myrmica sublaevis* Nylander, 1849. The social parasites of *Leptothorax* species (dulosis). Number of species: World – 3, Palaeartic – 1, Russia – 1.
- Harpagoxenus sublaevis** (Nylander, 1852) [Myrmica] (*M. hirtula* Nylander, 1849). The social parasite of *Leptothorax acervorum*. Russia: **EP** (N, NW, C, E, NC), **UR**, **ES** (BR, ZB), **FE** (PR). – Europe (WE, NE, SE, EE).
- LEPTOTHORAX** Mayr, 1855. Type species *Formica acervorum* Fabricius, 1793. Number of species: World – 19, Palaeartic – 9, Russia – 6.
- Leptothorax acervorum** (Fabricius, 1793) [Formica] (*L. acervorum* var. *superus* Ruzsky, 1905; *L. acervorum* var. *nigrescens* Ruzsky, 1905; *L. acervorum kamtschaticus* Ruzsky, 1920; *Mychothorax acervorum orientalis* Kuznetzov-Ugamsky, 1928). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Central Asia, Kazakhstan, Mongolia, China (NE, NC), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Leptothorax grederi** Mayr, 1855. Russia: **EP** (NC). – Europe (WE, NE, SE, EE).
- Leptothorax muscorum** (Nylander, 1846) [Myrmica] (*L. muscorum* var. *fagi* Ruzsky, 1905; *L. muscorum* var. *betulae* Ruzsky, 1916). Russia: **EP** (N, NW, C, E, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Mongolia, China (NE, NC).
- Leptothorax oceanicus** (Kuznetzov-Ugamsky, 1928) [Mychothorax] (*L. muscorum oceanicum*: Kupianskaya, 1990). Russia: **FE** (AM, KH, PR). – China (NE), Korean Peninsula.
- Leptothorax pacis** (Kutter, 1945) [Doronomyrmex]. Russia: **EP** (N), **WS** (KM). – Europe (WE, NE, SE).
- Leptothorax scamni** Ruzsky, 1905 (*L. muscorum* var. *scamni* Ruzsky, 1905). Russia: **EP** (NC). – Caucasus, Turkey.
- MANICA** Jurine, 1807. Type species *Formica rubida* Latreille, 1802. Number of species: World – 6, Palaeartic – 2, Russia – 1.
- Manica rubida** (Latreille, 1802) [Formica]. Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Georgia, Armenia, Turkey.
- MESSOR** Forel, 1890. Type species *Formica barbara* Linnaeus, 1767. Number of species: World – 106, Palaeartic – 69, Russia – 4.
- Messor aciculatus** (Smith, 1874) [Aphaenogaster]. Russia: **FE** (PR). – Mongolia, China (NE, NC, NW), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Messor denticulatus** Kuznetzov-Ugamsky, 1927 (*M. barbarus meridionalis* var. *denticulatus* Kuznetzov-Ugamsky, 1927). Russia: **EP** (S, NC). – Caucasus, Iran, Central Asia, Kazakhstan.
- Messor kasakorum** Arnoldi, 1970 (*M. kasakorum nadezhdae* Arnoldi, 1970). Russia: **EP** (S). – Kazakhstan.
- Messor structor** (Latreille, 1798) [Formica] (*Myrmica mutica* Nylander, 1849; *Messor structor* var. *clivorum* Ruzsky, 1905; *M. tataricus* Ruzsky, 1905; *M. structor turanicus* Kuznetzov-Ugamsky, 1927;

M. rufitarsis jakowlevi Arnoldi, 1977; *M. clivorum* auct., *M. rufitarsis* auct.). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Caucasus, Israel, Iran, Afghanistan, Central Asia, Kazakhstan.

MONOMORIUM Mayr, 1855. Type species *Monomorium monomorium* Bolton, 1987, replacement name for *Monomorium minutum* Mayr, 1855. Number of species: World – 358, Palaeartic – 76, Russia – 2.

Monomorium barbatulum Mayr, 1877. Russia: **EP** (S). – Israel, Saudi Arabia, Iran, Oman, United Arab Emirates, Afghanistan, Turkmenistan, Kyrgyzstan, Kazakhstan.

Monomorium pharaonis (Linnaeus, 1758) [Formica]. Synanthropic species with cosmopolitan distribution, in Russia only in heated rooms. Russia, introduced. – Cosmopolitan.

MYRMECINA Curtis, 1829. Type species *Myrmecina latreillii* Curtis, 1829. Number of species: World – 53, Palaeartic – 7, Russia – 2.

Myrmecina graminicola (Latreille, 1802) [Formica] (*Myrmica striatula* Nylander, 1849). Russia: **EP** (C, E, S, NC, CR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel.

Myrmecina nipponica Wheeler, 1906 (*M. graminicola nipponica* Wheeler, 1906; *M. graminicola*: Kupianskaya, 1995). Russia: **FE** (AM, KH, PR, KU). – China (SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

MYRMICA Latreille, 1804. Type species *Formica rubra* Linnaeus, 1758. Number of species: World – 188, Palaeartic – 75, Russia – 44.

Myrmica ademonia Bolton, 1995 (replacement name for *M. aspersa* Kupianskaya, 1990). Russia: **FE** (KH, PR, KU). – Korean Peninsula.

Myrmica angulinodis Ruzsky, 1905 (*M. scabrinodis angulinodis* Ruzsky, 1905; *M. incurvata* Collingwood, 1976; *M. baikalensis* Dmitrienko, 1979; *M. kasczenkoi*: Kupianskaya, 1979; *M. forcipata*: Kupianskaya, 1990). Russia: **WS** (NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, MG). – Mongolia, China (NE), Korean Peninsula.

Myrmica arnoldii Dlussky, 1963. Russia: **ES** (TU, KR, IR, BR, ZB). – Mongolia.

Myrmica bakurianica Arnoldi, 1970 (*M. pilosiscapus bakurianica* Arnoldi, 1970). Russia: **EP** (NC). – Georgia.

Myrmica bergi Ruzsky, 1902 (*M. rugosa* var. *kirgisisa* Ruzsky, 1903; *M. bergi* var. *barchanica* Ruzsky, 1905; *M. bergi* var. *fortior* Crawley, 1920; *M. kamyshiensis* Arnoldi, 1934; *M. bergi persiana* Weber, 1947). Russia: **EP** (S, NC, CR), **WS** (AL). – Europe (EE), Azerbaijan, Iran, Central Asia.

Myrmica commarginata Ruzsky, 1905. Russia: **ES** (KR, BR, ZB). – Mongolia.

Myrmica deplanata Emery, 1921 (*M. lobicornis* var. *deplanata* Emery, 1921; *M. moravica* Soudek, 1922; *M. lobicornis* var. *plana* Karawajew, 1927; *M. moravica* var. *dagmarae* Sadil, 1939). Russia: **EP** (C, S, NC, CR), **WS** (AL). – Europe (WE, SE, EE), Caucasus, Iran, Central Asia.

Myrmica displicentia Bolton, 1995 (*M. bicolor* Kupianskaya, 1986). Russia: **FE** (MG, KA).

Myrmica divergens Karawajew, 1931 (*M. bergi* var. *divergens* Karawajew, 1931). Russia: **WS** (AL), **ES** (KR, IR, BR, YA, ZB). – Mongolia.

Myrmica eidmanni Menozzi, 1930 (*M. lobicornis littoralis* Weber, 1948). Russia: **WS** (AL), **ES** (KS, TU, KR, IR, BR, ZB), **FE** (AM, KH, PR). – Mongolia, China (NE), Korean Peninsula.

Myrmica elbrusi Radchenko et Yusupov, 2012. Russia: **EP** (NC).

Myrmica excelsa Kupianskaya, 1990 (*M. sinica* Wu et Wang, 1995; *M. cadusa* B. Kim, Park et J. Kim, 1997). Russia: **FE** (PR). – China (NE), Korean Peninsula, Japan (Hok, Hon).

Myrmica forcipata Karawajew, 1931. Russia: **ES** (KR, IR, BR, YA, ZB). – Mongolia.

Myrmica gallienii Bondroit, 1920 (*M. rugulosa limanica* Arnoldi, 1934; *M. jacobsoni* Kutter, 1963; *M. limanica obensis* Arnoldi, 1970). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (Radchenko, Elmes, 2010). – Europe (WE, NE, EE).

Myrmica hellenica Finzi, 1926 (*M. rugulosa* var. *hellenica* Finzi, 1926; *M. rugulosa* var. *rugulososcabrinodis* Karawajew, 1929; *M. rugulosa caucasica* Arnoldi, 1934). Russia: **EP** (NC, CR). – Europe (SE, EE), Caucasus, Turkey.

Myrmica hirsuta Elmes, 1978. Russia: **EP** (C). – Europe (WE, NE, SE, EE).

Myrmica jennyae Elmes, Radchenko et Aktac, 2002. Russia: **EP** (NC). – Turkey.

Myrmica kamtschatica Kupianskaya, 1986 (*M. aboriginica* Zhigulskaya, 1991). Russia: **WS** (KM, AL), **ES** (Radchenko, Elmes, 2010), **FE** (AM, KH, PR, MG, KA). – Mongolia, Korean Peninsula.

- Myrmica karavajevi** (Arnoldi, 1930) [Symbiomyrma] (*Sifolinia karavajevi* Arnoldi, 1930). Russia: **EP** (NW, C). – Europe (WE, NE, SE, EE).
- Myrmica kasczenkoi** Ruzsky, 1905 (*M. scabrinodis kasczenkoi* Ruzsky, 1905). Russia: **WS** (KM, AL), **ES** (KS, TU, KR, IR, BR, ZB). – Mongolia.
- Myrmica koreana** Elmes, Radchenko et Kim, 2001. Russia: **WS** (KM, AL), **ES** (KS, TU, KR, IR, BR, ZB), **FE** (AM, KH, PR). – Kazakhstan, Mongolia, China (NE), Korean Peninsula.
- Myrmica kotokui** Forel, 1911 (*M. rubra kotokui* Forel, 1911; *M. ruginodis orientalis* Karawajew, 1926; *M. orientalis*: Kupianskaya, 1990). Russia: **FE** (PR). – China (NE), Korean Peninsula, Japan (Hok, Hon).
- Myrmica kozakorum** Radchenko et Elmes, 2010. Russia: **EP** (S, NC, CR). – Europe (EE).
- Myrmica kurokii** Forel, 1907 (*M. rubra kurokii* Forel, 1907). Russia: **FE** (PR). – China (NE, NC), Korean Peninsula, Japan (Hok, Hon).
- Myrmica lobicornis** Nylander, 1846 (*M. lobicornis alpestris* Arnoldi, 1934). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (Radchenko, 2016), **ES** (KS, TU, KR, IR, BR, YA, ZB). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Kazakhstan, Mongolia.
- Myrmica lonae** Finzi, 1926 (*M. scabrinodis lonae* Finzi, 1926). Russia: **EP** (N, NW, C, E), **UR**, **WS** (Radchenko, 2016), **ES** (BR). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan.
- Myrmica luteola** Kupianskaya, 1990. Russia: **FE** (PR). – China (NE), Korean Peninsula, Japan (Hok, Hon).
- Myrmica pisarskii** Radchenko, 1994. Russia: **WS** (KM, AL), **ES** (KS, TU, KR, IR, BR, ZB). – Mongolia.
- Myrmica ravasinii** Finzi, 1923. Russia: **EP** (NC). – Europe (SE), Georgia, Armenia, Turkey.
- Myrmica rubra** (Linnaeus, 1758) [Formica] (*M. laevinodis* Nylander, 1846; *M. longiscapus* Curtis, 1854; *M. laevinodis* var. *europa* Finzi, 1926; *M. laevinodis* var. *bruesi* Weber, 1947; *M. microrubra* Seifert, 1993). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Central Asia.
- Myrmica ruginodis** Nylander, 1846 (*M. diluta* Nylander, 1849). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Kazakhstan, Mongolia, China (NE, NC), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Myrmica rugulosa** Nylander, 1849. Russia: **EP** (NW, C, E, NC, CR), **UR**. – Europe (WE, NE, SE, EE), Caucasus.
- Myrmica sabuleti** Meinert, 1861. Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (Radchenko, 2016). – Europe (WE, NE, SE, EE), Caucasus, Turkey.
- Myrmica salina** Ruzsky, 1905 (*M. scabrinodis* var. *salina* Ruzsky, 1905). Russia: **UR**, **WS** (Radchenko, Elmes, 2010). – Kazakhstan.
- Myrmica scabrinodis** Nylander, 1846 (*M. scabrinodis* var. *rugulosoides* Forel, 1915; *M. scabrinodis* var. *ahngeri* Karawajew, 1926). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (Radchenko, 2016), **ES** (KR, BR, ZB). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Kazakhstan.
- Myrmica schencki** Viereck, 1903 (*M. rubra* var. *schencki* Viereck, 1903; *M. schenckioides* Boer, Noordijk, 2005). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (Radchenko, 2016), **ES** (KR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Central Asia.
- Myrmica slovaca** Sadil, 1952 (*M. curvithorax* Bondroit, 1920). Russia: **EP** (C, S, NC, CR), **UR**, **WS** (Radchenko, 2016). – Europe (WE, SE, EE), Caucasus, Turkey, Kazakhstan.
- Myrmica specioides** Bondroit, 1918 (*M. scabrinodis* var. *sancta* Karawajew, 1926; *M. sancta tshuliensis* Arnoldi, 1976). Russia: **EP** (C, S, NC, CR), **UR**, **WS** (Radchenko, Elmes, 2010). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Turkmenistan, Kazakhstan.
- Myrmica stangeana** Ruzsky, 1902 (*M. bergi stangeana* Ruzsky, 1902; *M. stangeana medvedevi* Arnoldi, 1970). Russia: **EP** (E, S), **UR**, **WS** (AL). – Europe (EE), Kazakhstan.
- Myrmica sulcinodis** Nylander, 1846 (*M. sulcinodis* var. *nigripes* Ruzsky, 1895; *M. myrmecophila* Wasmann, 1910; *M. sulcinodis* var. *sulcinodoscabrinodis* Forel, 1915). Russia: **EP** (N, NW, C, NC, CR), **UR**, **WS** (Radchenko, 2016), **ES** (Radchenko, 2016), **FE** (AM, KH, PR, SA, MG). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Kazakhstan, Mongolia, Korean Peninsula.
- Myrmica transsibirica** Radchenko, 1994 (*M. taediosa* Bolton, 1995). Russia: **WS** (KM, AL), **ES** (Radchenko, Elmes, 2010), **FE** (AM, KH, PR, SA). – China (NE), Korean Peninsula, Japan (Hok).
- Myrmica tschekanovskii** Radchenko, 1994. Russia: **ES** (KR, YA).
- Myrmica vandeli** Bondroit, 1920 (*M. scabrinodis* var. *vandeli* Bondroit, 1920). Russia: **EP** (NC). – Europe (WE, NE, SE, EE).

- Myrmica zojæ** Radchenko, 1994. Russia: **UR, WS** (AL).
- MYRMOXENUS** Ruzsky, 1902 (*Epimyrmica* Emery, 1915). Type species *Myrmoxenus gordiagini* Ruzsky, 1902. The social parasites of *Temnothorax* species. Number of species: World – 12, Palaearctic – 12, Russia – 2.
- Myrmoxenus gordiagini** Ruzsky, 1902 (*Myrmetaerus microcellatus* Soudek, 1925). Russia: **WS** (TK, NS, AL). – Europe (SE, EE), Kazakhstan.
- Myrmoxenus ravouxi** (André, 1896) [Formicoxenus] (*Epimyrmica goesswaldi* Menozzi, 1930). Russia: **EP** (NC, CR). – Europe (WE, SE, EE).
- PHEIDOLE** Westwood, 1839. Type species *Atta providens* Sykes, 1835. Number of species: World – 1004, Palaearctic – 19, Russia – 2.
- Pheidole fervida** Smith, 1874. Russia: **FE** (PR, KU). – China (CC, SW, WP, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Pheidole pallidula** (Nylander, 1849) [Myrmica] (*Ph. pallidula* var. *arenarum* Ruzsky, 1905; *Ph. pallidula koshewnikovi* Ruzsky, 1905). Russia: **EP** (S, NC). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, Afghanistan, Central Asia, Kazakhstan.
- SOLENOPSIS** Westwood, 1840 (*Diplorhoptrum* Mayr, 1855). Type species *Solenopsis mandibularis* Westwood, 1840. Number of species: World – 195, Palaearctic – 33, Russia – 5.
- Solenopsis deserticola** Ruzsky, 1905 [Diplorhoptrum] (*D. deserticola* auct.). Russia: **EP** (S, NC). – Caucasus, Central Asia, Kazakhstan.
- Solenopsis fugax** (Latreille, 1798) [Formica] (*Myrmica flavidula* Nylander, 1849; *Solenopsis fugax orientalis* Ruzsky, 1905; *S. orbula* var. *latroides* Ruzsky, 1905; *S. (Diplorhoptrum) fugax* var. *pontica* Santschi, 1934; *Diplorhoptrum fugax* auct.). Russia: **EP** (C, E, S, NC, CR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, Afghanistan, Central Asia, Kazakhstan.
- Solenopsis ilinei** Santschi, 1936 (*S. orbula* var. *oculata* Karawajew, 1926; *S. (Diplorhoptrum) orbula* var. *ilinei* Santschi, 1936). Russia: **EP** (CR). – Azerbaijan.
- Solenopsis japonica** Wheeler, 1928 (*S. fugax* var. *japonica* Wheeler, 1928; *Diplorhoptrum japonica*: Kupianskaya, 1995). Russia: **FE** (KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Solenopsis juliae** (Arakelian, 1991) [Diplorhoptrum]. Russia: **EP** (NC). – Armenia.
- STENAMMA** Westwood, 1839. Type species *Stenamma westwoodi* Westwood, 1839. Number of species: World – 84, Palaearctic – 14, Russia – 6.
- Stenamma debile** (Förster, 1850) [Myrmica] (*S. westwoodii* Westwood, 1839, auct.; *S. golosejevi* Karawajew, 1926; *S. ucrainicum* Arnoldi, 1928). Russia: **EP** (C, E, S, NC, CR). – Europe (WE, NE, SE, EE), Armenia, Turkey.
- Stenamma georgii** Arnoldi, 1975. Russia: **EP** (NC). – Abkhazia, Georgia.
- Stenamma kurilense** Arnoldi, 1975. Russia: **FE** (KU).
- Stenamma lippulum** (Nylander, 1849) [Myrmica] (*S. westwoodi* var. *hirtula* Emery, 1898; *S. caucasicum* Arnoldi, 1975). Russia: **EP** (NC). – Abkhazia, Georgia, Azerbaijan.
- Stenamma striatulum** Emery, 1895 (*S. westwoodi* var. *striatulum* Emery, 1895; *S. westwoodi* var. *tscherkesicum* Arnoldi, 1928). Russia: **EP** (NC). – Europe (SE, EE), Turkey.
- Stenamma ussuriense** Arnoldi, 1975. Russia: **FE** (PR). – Korean Peninsula.
- STRONGYLOGNATHUS** Mayr, 1853. Type species *Eciton testaceum* Schenck, 1852. The social parasites of *Tetramorium* species (dulosis). Number of species: World – 24, Palaearctic – 24, Russia – 5.
- Strongylognathus arnoldii** Radchenko, 1985. Russia: **EP** (CR).
- Strongylognathus christophi** Emery, 1889 (*S. huberi ruzskyi* Emery, 1909). Russia: **EP** (E, S, NC, CR), **UR**. – Caucasus, Kazakhstan.
- Strongylognathus karawajewi** Pisarski, 1966. Russia: **EP** (S, NC, CR). – Caucasus, Turkmenistan.
- Strongylognathus rehbinderi** Forel, 1904. Russia: **EP** (S, NC). – Abkhazia.
- Strongylognathus testaceus** (Schenck, 1852) [Eciton] (*Myrmus emarginatus* Schenck, 1853; *Strongylognathus diveri* Donisthorpe, 1936). Russia: **EP** (C, E, S, NC, CR), **UR, WS** (NS, AL). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Kazakhstan.
- STRUMIGENYS** Smith, 1860 (*Pyramica* Roger, 1862; *Epitritus* Emery, 1869). Type species *Strumigenys mandibularis* Smith, 1860. Number of species: World – 837, Palaearctic – 19, Russia – 1.
- Strumigenys argiola** (Emery, 1869) [Epitritus] (*Pyramica argiola* auct.). Russia: **EP** (NC). – Europe (WE, SE), N Africa, Caucasus, Turkey, Israel.

- TELEUTOMYRMEX** Kutter, 1950. Type species *Teleutomyrmex schneideri* Kutter, 1950. Number of species: World – 2, Palaeartic – 2, Russia – 1.
- Teleutomyrmex schneideri** Kutter, 1950. Russia: **EP** (S). – Europe (WE), Turkmenistan.
- TEMNOTHORAX** Mayr, 1861. Type species *Myrmica recedens* Nylander, 1856. Number of species: World – 390, Palaeartic – 200, Russia – 29.
- Temnothorax affinis** (Mayr, 1855) [Leptothorax]. Russia: **EP** (C, E, S, NC, CR). – Europe (WE, NE, SE, EE), Caucasus, Turkey.
- Temnothorax alinae** (Radchenko, 1994) [Leptothorax]. Russia: **FE** (PR).
- Temnothorax alpinus** (Ruzsky, 1902) [Leptothorax] (*L. wernerii* (Radchenko, 1994)). Russia: **EP** (NC). – Georgia.
- Temnothorax arnoldii** Radchenko et Fedoseeva, 2015. Russia: **EP** (NC).
- Temnothorax brauneri** (Ruzsky, 1905) [Leptothorax] (*L. servicus* var. *brauneri* Ruzsky, 1905). Russia: **EP** (NC). – Georgia.
- Temnothorax clypeatus** (Mayr, 1853) [Myrmica]. Russia: **EP** (CR). – Europe (WE, SE, EE).
- Temnothorax congruus** (Smith, 1874) [Leptothorax]. Russia: **FE** (PR, KU). – China (NE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Temnothorax corticalis** (Schenck, 1852) [Myrmica]. Russia: **EP** (S, NC, CR). – Europe (WE, NE, SE, EE), N Africa, Caucasus.
- Temnothorax crasecundus** Seifert et Csósz, 2015. Russia: **EP** (NC, CR). – Europe (SE, EE), Caucasus, Turkey.
- Temnothorax crassispinus** (Karawajew, 1926) [Leptothorax] (*L. nylanderi* var. *crassispinus* Karawajew, 1926; *L. nylanderi slavonicus* Seifert, 1995). Russia: **EP** (C, E, S). – Europe (WE, SE, EE).
- Temnothorax discoloratus** (Arnoldi, 1977) [Leptothorax]. Russia: **EP** (NC).
- Temnothorax dluskyi** Radchenko, Yusupov et Fedoseeva, 2015. Russia: **EP** (NC).
- Temnothorax interruptus** (Schenck, 1852) [Myrmica]. Russia: **EP** (NC). – Europe (WE, NE, SE, EE).
- Temnothorax jailensis** (Arnoldi, 1977) [Leptothorax]. Russia: **EP** (CR).
- Temnothorax kaszabi** (Pisarski, 1969) [Leptothorax] (*L. tuberosum sachalinensis* Kupianskaya, 1990). Russia: **WS** (AL), **ES** (TU, YA, ZB), **FE** (SA). – Mongolia, Korean Peninsula.
- Temnothorax knipovitschi** (Karawajew, 1916) [Leptothorax] (*L. tuberosum knipovitschi* Karawajew, 1916; *L. nikitae* Arnoldi, 1977; *L. junipereti* Arnoldi, 1977). Russia: **EP** (E, S, NC, CR), **UR**. – Europe (EE), Caucasus, Kazakhstan.
- Temnothorax kurilensis** (Radchenko, 1994) [Leptothorax]. Russia: **FE** (KU).
- Temnothorax mongolicus** (Pisarski, 1969) [Leptothorax] (*L. servicus mongolicus* Pisarski, 1969). Russia: **ES** (ZB), **FE** (AM). – Mongolia, Korean Peninsula.
- Temnothorax nassonovi** (Ruzsky, 1895) [Leptothorax] (*L. nassonovi* var. *subnudus* Ruzsky, 1905; *L. galeatus* Wheeler, 1927; *L. nassonovi firsovi* Kuznetsov-Ugamsky, 1928). Russia: **EP** (E, S), **UR**, **WS** (OM, TK, NS, AL), **ES** (BR, ZB), **FE** (AM, KH, PR, SA). – Europe (EE), Kazakhstan, Mongolia, China (NE, NC), Korean Peninsula.
- Temnothorax parvulus** (Schenck, 1852) [Myrmica]. Russia: **EP** (NC). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Iran, Turkmenistan.
- Temnothorax recedens** (Nylander, 1856) [Myrmica]. Russia: **EP** (S, NC, CR). – Europe (SE), N Africa, Caucasus, Turkey, Iran, Turkmenistan.
- Temnothorax satunini** (Ruzsky, 1902) [Leptothorax]. Russia: **EP** (NC). – Caucasus, Turkey.
- Temnothorax semenovi** (Ruzsky, 1903) [Leptothorax]. Russia: **EP** (S, NC, CR). – Central Asia.
- Temnothorax servicus** (Ruzsky, 1902) [Leptothorax]. Russia: **EP** (E, S), **UR**, **WS** (Radchenko, 1996b), **ES** (Radchenko, 1996b). – Kazakhstan, Mongolia.
- Temnothorax tauricus** (Ruzsky, 1902) [Leptothorax] (*L. unifasciatus* var. *tauricus* Ruzsky, 1902; *L. pithysae* Arnoldi, 1977; *L. pithysae babuganicus* Arnoldi, 1977). Russia: **EP** (NC, CR). – Europe (EE).
- Temnothorax tembotovi** Radchenko et Yusupov, 2015. Russia: **EP** (NC).
- Temnothorax tuberosum** (Fabricius, 1775) [Formica] (*F. tuberosa* Latreille, 1802; *Leptothorax tuberosum stipaceus* Ruzsky, 1905; *L. tuberosum* var. *nigricephala* Karawajew, 1930; *L. tuberosum alaicus* Tarbinsky, 1976; *L. pratostepposus* Arnoldi, 1977; *L. tuberosum acutinodis* Arnoldi, 1977; *L. tuberosum ciscaucasicus* Arnoldi, 1977). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (NS, AL). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Central Asia.
- Temnothorax unifasciatus** (Latreille, 1798) [Formica] (*Leptothorax tuberosum kirillovi* Ruzsky, 1905; *L. tuberosum* var. *salina* Karawajew, 1937; *L. unifasciatus*

- ucrainicus* Arnoldi, 1977). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Iran, Turkmenistan.
- Temnothorax volgensis** (Ruzsky, 1905) [Leptothorax] (*L. nassonovi volgensis* Ruzsky, 1905). Russia: **EP** (C, E, S), **UR**. – Europe (EE), Kazakhstan.
- TETRAMORIUM** Mayr, 1855. Type species *Formica caespitum* Linnaeus, 1758. Number of species: World – 564, Palaeartic – 120, Russia – 10.
- Tetramorium caespitum** (Linnaeus, 1758) [Formica]. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (OM, TK, NS, AL), **ES** (KS, TU, KR, IR, BR, ZB). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Syria, Lebanon, Central Asia.
- Tetramorium chefketi** Forel, 1911 (*T. caespitum* var. *chefkети* Forel, 1911; *T. caespitum* var. *sarkissiani* Forel, 1911; *T. caespitum* st. *turcomanicum* Santschi, 1921; *T. taurocausicum* Arnoldi, 1968). Russia: **EP** (S, NC), **UR**, **WS** (AL). – Europe (SE, EE), Caucasus, Turkey, Iran, Central Asia, Kazakhstan.
- Tetramorium densopilosum** Radchenko et Arakelian, 1990. Russia: **EP** (S, NC). – Georgia, Armenia, Turkey.
- Tetramorium ferox** Ruzsky, 1903 (*T. caespitum* var. *ferox* Ruzsky, 1903; *T. caespitum* st. *ferox* var. *perspicax* Santschi, 1921; *T. confinis* Radchenko et Arakelian, 1990; *T. perspicax* Radchenko, 1992). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Caucasus, Turkey.
- Tetramorium feroxoides** Dlussky et Zabelin, 1985 (*T. bursakovi* Radchenko, 1992). Russia: **EP** (S, NC). – Caucasus, Turkey, Iran, Central Asia, Kazakhstan.
- Tetramorium hungaricum** Rösler, 1935 (*T. caespitum hungarica* Rösler, 1935). Russia: **EP** (S, CR). – Europe (WE, EE).
- Tetramorium impurum** (Förster, 1850) [Myrmica] (*T. caespitum* var. *penninum* Santschi, 1927; *T. staerckei* Kratochvíl, 1944). Russia: **EP** (S, NC). – Europe (WE, NE, SE, EE).
- Tetramorium inerme** Mayr, 1877 (*T. caespitum* var. *inermis* Mayr, 1877). Russia: **EP** (S, NC). – Iran, Central Asia, Kazakhstan.
- Tetramorium moravicum** Novák et Sadil, 1941 (*T. rhenanum* Schulz, 1996). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Caucasus, Turkey.
- Tetramorium tsushimae** Emery, 1925 (*T. caespitum jacoti* Wheeler, 1927). Russia: **FE** (AM, KH, PR, KU). – China (NE), Korean Peninsula, Japan (Hok, Hon, Shi, Tsushima, Kyu, Yakushima).
- TRICHOMYRMEX** Mayr, 1865. Type species *Trichomyrmex rogeri* Mayr, 1865. Number of species: World – 24, Palaeartic – 10, Russia – 1.
- Trichomyrmex perplexus** (Radchenko, 1997) [Monomorium]. Russia: **EP** (NC). – Europe (SE), Caucasus, Turkey, United Arab Emirates, Iran.

Subfamily PONERINAE

Number of taxa: World – 142 genera, 6605 species, Palaeartic – 12/33, Russia – 4/7.

BRACHYPONERA Emery, 1900. Type species *Euponera (Brachypone) croceicornis* Emery, 1900. Number of species: World – 19, Palaeartic – 2, Russia – 1.

Brachypone chinensis (Emery, 1895) [Ponera] (*P. nigrita chinensis* Emery, 1895). Russia: **EP** (NC introduced), **?FE** (PR). – Abkhazia (introduced), Georgia (introduced), China (CC, SW, WP, SE), Korean Peninsula, Japan (Hon, Shi, Kyu, Ryu).

CRYPTOPONE Emery, 1893. Type species *Cryptopone testacea* Emery, 1893. Number of species: World – 24, Palaeartic – 1, Russia – 1.

Cryptopone ochracea (Mayr, 1855) [Ponera]. Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Saudi Arabia.

HYPOPONERA Santschi, 1938. Type species *Ponera abeillei* André, 1881. Number of species: World – 152, Palaeartic – 9, Russia – 2.

Hypoponera eduardi (Forel, 1894) [Ponera]. Russia: **EP** (NC). – Europe (WE, SE, EE), N Africa, Turkey, Israel, Saudi Arabia, Iran, United Arab Emirates.

Hypoponera punctatissima (Roger, 1859) [Ponera]. Tramp species. Russia, in heated buildings. – Cosmopolitan.

PONERA Latreille, 1804. Type species *Formica coarctata* Latreille, 1802. Number of species: World – 57, Palaeartic – 5, Russia – 3.

Ponera coarctata (Latreille, 1802) [Formica] (*P. coarctata* var. *lucida* Emery, 1898; *P. coarctata coarctata colchica* Arnoldi, 1932; *P. taurica* Arnoldi, 1932). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, Kyrgyzstan, Kazakhstan.

Ponera japonica Wheeler, 1906 (*P. japonica* var. *crocea* Santschi, 1941). Russia: **FE** (PR, KU). – China

(SW, WP, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

Ponera testacea Emery, 1895 (*P. coarctata* var. *testacea* Emery, 1895). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE).

Subfamily PROCERATIINAE

Number of taxa: World – 3 genera, 144 species, Palaeartic – 1/7, Russia – 1/1.

PROCERATIUM Roger, 1863. Type species *Proceratium silaceum* Roger, 1863. Number of species: World – 83, Palaeartic – 7, Russia – 1.

Proceratium melinum (Roger, 1860) [*Ponera*] (*Syphingta europaea* Forel, 1886; *S. fialai* Kratochvíl, Novák et Snoflák, 1944, *S. rossica* Arnoldi, 1930). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Turkey.

SUPERFAMILY APOIDEA

SECTION SPHECIFORMES – DIGGER WASPS

Number of taxa: World – 4 families, 276 genera, 9889 species, Palaeartic – 4/101/2302, Russia – 3/87/684.

70. FAMILY AMPULICIDAE – AMPULICID DIGGER WASPS

YU.N. DANILOV

The cockroach wasps are a small, mainly tropical group. These wasps hunt cockroaches. The wasps may enter houses in search of domestic roaches. After a cockroach is captured and weakly paralyzed, the wasp grasps it by the antennal bases with her mandibles and walking back-wards drags the prey to any suitable niche. The nest is stoppered with bits of leaves, grass, and other debris.

The family is distributed mainly in tropical and subtropical regions. Number of taxa: World – 6 genera and 202 species, Palaeartic – 3/38, Russia – 2/4.

References. Bohart, Menke, 1976; Mokrousov, 2009; Kolesnikov, 1977; Mokrousov, 2010; Mokrousov, Popov, 2016; Shorenko, 2007.

Subfamily AMPULICINAE

AMPULEX Jurine, 1807 (*Pronaeus* Latreille, 1809; *Lorrhoeum* Shuckard, 1837; *Rhinopsis* Westwood, 1844; *Waagenia* Kriechbaumer, 1874; *Chlorampulex* de Saussure, 1892). Type species *Chlorion compressum* of Latreille and of Fabricius (= *Chlorion compressum* (Fabricius, 1804) = *Sphex compressus* Fabricius, 1781). Number of species: World – 132, Palaeartic – 21, Russia – 1.

Ampulex fasciata Jurine, 1807 (*A. europaea* Giraud, 1858). Russia: **EP** (CR). – Europe (WE, SE, EE).

DOLICHURUS Latreille, 1809 (*Thyreosphex* Ashmead, 1904). Type species *Pompilus corniculus* Spinola, 1808. Number of species: World – 50, Palaeartic – 16, Russia – 3.

Dolichurus bicolor Lepeletier de Saint Fargeau, 1845. Russia: **EP** (CR). – Europe (WE, NE, SE, EE), Turkey.

Dolichurus corniculus (Spinola, 1808) [*Pompilus*] (*Pompilus clavipes* Dahlbom, 1829; *D. dahlbomii* Tischbein, 1852). Russia: **EP** (NW, C, E, NC). – Europe (WE, NE, SE, EE), Turkey.

Dolichurus haemorrhous A. Costa, 1886. Russia: **EP** (NC, CR). – Europe (WE, SE), N Africa.

71. FAMILY SPHECIDAE – SPHECID DIGGER WASPS

YU.N. DANILOV

Sphecidae - mainly large, actively flying, clearly visible insects. Sphecid wasps characterized by caring of posterity. The females make the nests and provide it by provision – paralyzed or dead insects from the orders of Orthoptera, Dytioptera, Lepidoptera, Hymenoptera, and spiders. The adult insects feed on nectar and pollinating the flowering plants. The elongated mouthparts of most Sphecidae allows them to visit flowers with deeply located nectaries. Sphecidae make their nests in the ground, often in sandy soils; the females of *Sceliphron* make the mud-nests and *Chalybion* arrange nests in the ready cavities. Most of Sphecidae prefer the open landscapes; they are rare in forests.

The family is distributed worldwide, mainly in arid, semiarid and tropical regions. Number of taxa: Word – 19 genera and 779 species, Palaearctic – 13/260, Russia – 11/68.

References. Bohart, Menke, 1976; Danilov, 2012; Danilov, 2014; Dollfuss, 2010, 2013; Menke, Pulawski, 2000; Nemkov, 2009; Nemkov, 2012.

Subfamily AMMOPHILINAE

AMMOPHILA W. Kirby, 1798 (*Miscus* Jurine, 1807; *Coloptera* Latreille, 1845; *Argyramphila* Gussakovskij, 1928; *Apynemia* Leclercq, 1961). Type species *Sphex sabulosus* Linnaeus, 1758. Number of species: World – 234, Palaearctic – 103, Russia – 23.

Ammophila adelpha Kohl, 1884. Russia: **EP** (S). – Iran, Uzbekistan, Kyrgyzstan, Kazakhstan, China (NW).

Ammophila asiatica Tsuneki, 1971. Russia: **WS** (AL), **ES** (TU, BR, ZB). – Mongolia.

Ammophila campestris Latreille, 1809. Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (OM, TK, NS, AL), **ES** (TU, KR, IR), **FE** (AM, PR). – Europe (WE, NE, SE, EE), N Africa, Turkey, Central Asia, Kazakhstan, Mongolia, China (NE, NC, NW), Korean Peninsula.

Ammophila deserticola Tsuneki, 1971. Russia: **UR**, **WS** (OM, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR). – Kyrgyzstan, Mongolia, China (NC).

Ammophila elongata Fischer de Waldheim, 1843. Russia: **EP** (S), **UR**, **FE** (AM). – Turkey, Iran, Turkmenistan, Kazakhstan, Mongolia.

Ammophila gracillima Taschenberg, 1869 (*A. longicollis* Kohl, 1884; *A. debilis* F. Morawitz, 1889). Russia: **EP** (S). – N Africa, Turkey, Syria, Jordan, Israel, Iran, Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NE, NC, WP), India, Africa.

Ammophila haladai Dollfuss, 2013. Russia: **WS** (OM, NS), **ES** (KS). – Turkey.

Ammophila heydeni Dahlbom, 1845. Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (OM, NS, AL). – Europe (WE, SE, EE), N Africa, Armenia, Turkey, Syria, Jordan, Israel, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia, China (NW).

Ammophila hungarica Mocsáry, 1883 (*A. fallax* Kohl, 1884). Russia: **EP** (NC, CR), **WS** (OM, NS, AL). – Europe (WE, SE, EE), N Africa, Armenia, Turkey, Syria, Jordan, Iran, Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.

Ammophila infesta F. Smith, 1873. Russia: **FE** (PR). – China (NE, NC, CC), Korean Peninsula, Japan (Hon).

Ammophila mongolensis Tsuneki, 1971. Russia: **WS** (AL), **ES** (KS, BR, YA, ZB). – Turkey, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NC).

Ammophila occipitalis F. Morawitz, 1890 (*A. ruficollis* F. Morawitz, 1890). Russia: **EP** (S, NC). – Jordan, Iraq, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.

Ammophila pubescens Curtis, 1836 (*Miscus arvensis* Dahlbom, 1843; *A. arnaudi* Tsuneki, 1976). Russia: **EP** (N, NW, C, E, NC, CR), **UR**, **WS**, **ES**, **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), Turkey, Iran, Kazakhstan, Mongolia, China (NE, NC, NW, SW), N America.

Ammophila sabulosa (Linnaeus, 1758) [*Sphex*] (*A. sabulosa kamtschatica* Gussakovskij, 1932). Russia: **EP**, **UR**, **WS**, **ES**, **FE** (KA, MG). – Europe (WE, NE, SE, EE), N Africa, Turkey, Syria, Iran, Central Asia, Kazakhstan, Mongolia, China (NC).

Ammophila sareptana Kohl, 1884. Russia: **EP** (S, NC, CR). – Europe (EE), Turkey, Kyrgyzstan, Kazakhstan.

Ammophila separanda F. Morawitz, 1891. Russia: **EP** (S, NC). – Azerbaijan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.

Ammophila sickmanni Kohl, 1901. Russia: **ES** (ZB), **FE** (AM, PR). – Mongolia, China (NE, NC, NW, CC, SW, SE), Korean Peninsula.

- Ammophila sinensis** Sickmann, 1894. Russia: **EP** (NC), **WS** (NS, AL), **ES** (TU, KR, BR, ZB). – Turkey, Iran, Kazakhstan, Mongolia, China (NC, SE).
- Ammophila striata** Mocsáry, 1879. Russia: **ES**, **FE** (PR). – Turkey, Kazakhstan. Records in Russia doubtful.
- Ammophila tekkensis** Gussakovskij, 1930. Russia: **EP** (S). – Iran, Turkmenistan, Uzbekistan, Kazakhstan.
- Ammophila terminata** F. Smith, 1856 (*A. apicalis* Brullé, 1839; *A. mocsaryi* Frivaldszky, 1876; *A. kirgisica* F. Morawitz, 1891; *A. gegen* Tsuneki, 1971). Russia: **EP** (C, E, S, CR), **UR**, **WS** (OM, NS, AL), **ES** (TU, KR, IR, BR, ZB). – Europe (WE, NE, SE, EE), N Africa, Turkey, Central Asia, Kazakhstan, Mongolia, China (NC, NW).
- Ammophila vagabunda** F. Smith, 1856 (*A. solowiyofkae* Matsumura, 1911; *A. sabulosa nipponica* Tsuneki, 1967). Russia: **FE** (AM, KH, PR, SA, KU). – Mongolia, China (NE, NC, NW, CC, SW, WP, SE), Korean Peninsula, Japan (Hon, Kyu), SE Asia, India.
- Ammophila vetuberosa** Q. Li et J. Yang, 1994. Russia: **ES** (IR). – Mongolia, China (NC, NW).
- EREMOCHARES** Gribodo, 1882. Type species *Eremochares doriae* Gribodo, 1882 (= *Ammophila dives* Brullé, 1833). Number of species: World – 5, Palaearctic – 5, Russia – 1.
- Eremochares dives** (Brullé, 1833) [Ammophila] (*Parapsammophila retowskii* Konow, 1887). Russia: **EP** (S, NC, CR). – Europe (SE), N Africa, Azerbaijan, Turkey, Syria, Lebanon, Israel, Iraq, Iran, Afghanistan, Pakistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, China (NW), India.
- HOPLAMMOPHILA** de Beaumont, 1960 (*Micadophila* Tsuneki, 1962). Type species *Ammophila armata* (Illiger, 1807) (= *Sphex armatus* Illiger, 1807). Number of species: World – 4, Palaearctic – 4, Russia – 1.
- Hoplammophila aemulans** (Kohl, 1901) [Ammophila] (*Ammophila rhinoceros* Strand, 1913). Russia: **FE** (PR). – China (NE, NC, CC, SW, SE), Korean Peninsula, Japan (Hon, Kyu), SE Asia.
- PODALONIA** Fernald, 1927 (*Psammophila* Dahlbom, 1842). Type species *Ammophila violaceipennis* Lepeletier de Saint Fargeau, 1845. Number of species: World – 66, Palaearctic – 42, Russia – 15.
- Podalonia affinis** (W. Kirby, 1798) [Ammophila] (*Ammophila nigriventris* Gussakovskij, 1934). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (OM, NS, AL), **ES** (KS, TU, KR, IR, BR, ZB), **FE** (AM, KH, PR). – Europe (NE, EE), N Africa, Caucasus, Turkey, Jordan, Israel, Iran, Central Asia, Kazakhstan, Mongolia, China (NE, NC, SW), Korean Peninsula.
- Podalonia alpina** (Kohl, 1888) [Ammophila]. Russia: **EP** (NC), **WS** (AL), **ES** (TU). – Europe (WE, SE, EE), N Africa, Turkey, Iran, Afghanistan, Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NC).
- Podalonia altaiensis** (Tsuneki, 1971) [Ammophila]. Russia: **ES** (TU). – Mongolia.
- Podalonia asiatica** Danilov, 2017. Russia: **ES** (TU, BR). – Mongolia, China (NC, NW, WP).
- Podalonia atrocyanea** (Eversmann, 1849) [Psammophila]. Russia: **EP** (CR), **UR**, **ES** (KS, TU, ZB). – N Africa, Jordan, Israel, Turkmenistan, Uzbekistan, Kazakhstan, Mongolia, China (NC).
- Podalonia caucasica** (Mocsáry, 1883) [Psammophila]. Russia: **WS** (OM, NS, AL), **ES** (TU, KR, IR, BR, ZB). – Europe (EE), Georgia, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NC, NW), India.
- Podalonia chalybea** (Kohl, 1906) [Ammophila]. Russia: **ES** (IR). – Mongolia, China (NC).
- Podalonia ebenina** (Spinola, 1839) [Ammophila] (*Psammophila micipsa* Morice, 1900). Russia: **EP** (NC). – Europe (WE, SE), N Africa, Caucasus, Turkey, Syria, Jordan, Lebanon, Israel, Iraq, Iran, Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Podalonia fera** (Lepeletier de Saint Fargeau, 1845) [Ammophila] (*Psammophila polita* Mocsáry, 1883; *Ammophila morawitzi* Ed. André, 1886). Russia: **EP** (C, S, NC, CR), **UR**. – Europe (WE, SE, EE), Armenia, Turkey, Syria, Iran, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan.
- Podalonia flavida** (Kohl, 1901) [Ammophila] (*Ammophila rothi* de Beaumont, 1951; *A. obo* Tsuneki, 1971). Russia: **EP** (E, S, NC), **WS** (OM, NS, AL), **ES** (KS, TU, IR, BR, ZB), **FE** (PR, SA). – Europe (SE), N Africa, Turkey, Uzbekistan, Kazakhstan, Mongolia, China (NC).
- Podalonia gobiensis** (Tsuneki, 1971) [Ammophila]. Russia: **ES** (TU, ZB). – Mongolia, China (NC, NW).
- Podalonia hirsuta** (Scopoli, 1763) [Sphex] (*Ammophila mervensis* Radoszkowski, 1887). Russia: **EP**, **UR**, **WS**, **ES** (TU, IR, BR, ZB). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Lebanon, Israel, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NC, NW, WP), India.

Podalonia hirsutaffinis (Tsuneki, 1971) [Ammophila]. Russia: **ES** (TU). – Kyrgyzstan, Kazakhstan, Mongolia, China (WP).

Podalonia luffii (E. Saunders, 1903) [Ammophila] (*Psammophila arenaria* Lüderwaldt, 1897). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (NS, AL), **ES** (TU, KR, BR). – Europe (WE, NE, SE, EE), Turkey, Syria, Central Asia, Kazakhstan, Mongolia.

Podalonia tydei (Le Guillou, 1841) [Ammophila]. Russia: **EP** (C, E, S, NC, CR). – Europe (WE, SE, EE), N Africa, Turkey, Syria, Jordan, Israel, Iraq, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia, China (NW), India, Africa, Australia.

Subfamily SCELIPHRINAE

CHALYBION Dahlbom, 1843 (*Hemichalybion* Kohl, 1918). Type species “*Chalybion caeruleum*” (= *Sphex caeruleus* Linnaeus, 1767 = *S. caeruleus* Linnaeus, 1763 (nec *S. caeruleus* Linnaeus, 1758) = *S. cyaneus* Fabricius, 1775 (nec *S. cyaneus* Linnaeus, 1758) = *Pelopeus* (sic) *californicus* de Saussure, 1867). Number of species: World – 46, Palearctic – 11, Russia – 3.

Chalybion japonicum (Gribodo, 1883) [Pelopaeus] (*Sceliphron inflexum* Sickmann, 1894). Russia: **FE** (PR). – China (NE, NC, CC, SE), Korean Peninsula, Japan (Hon, Kyu, Ryu), SE Asia, India.

Chalybion turanicum (Gussakovskij, 1935) [Sceliphron]. Russia: **WS** (AL). – Iran, Central Asia, Kazakhstan.

Chalybion walteri (Kohl, 1889) [Pelopoeus]. Russia: **EP** (NC). – Europe (SE), N Africa, Turkey, Syria, Jordan, Iran, Central Asia, Kazakhstan.

SCELIPHRON Klug, 1801 (*Pelopoeus* Latreille, 1802; *Prosceliphron* van der Vecht in van der Vecht et van Breugel, 1968; *Hensenia* Pagliano et Scaramozzino, 1990). Type species *Sphex spirifex* Linnaeus, 1758. Number of species: World – 36, Palearctic – 13, Russia – 6.

Sceliphron caementarium (Drury, 1773) [Sphex]. Russia: **EP** (CR). – Europe (WE, SE, EE), Iran, China (SW), Korean Peninsula, Japan (Hon), N America, India, S America, Australia.

Sceliphron curvatum (F. Smith, 1870) [Pelopaeus]. Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Georgia, Turkey, Iraq, Afghanistan, Tajikistan, Uzbekistan, Kyrgyzstan, Japan (Ryu), India, S America.

Sceliphron deforme (F. Smith, 1856) [Pelopaeus] (*Pelopoeus atripes* F. Morawitz, 1888). Russia: **EP** (C, E, NC), **WS** (NS), **ES** (KR), **FE** (AM, KH, PR). – Europe (SE), Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NC, CC, SW, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu), SE Asia, India.

Sceliphron destillatorium (Illiger, 1807) [Pepsis]. Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (ZB). – Europe (WE, SE, EE), N Africa, Turkey, Syria, Israel, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia, China (NC, NW, CC, WP).

Sceliphron madraspatanum (Fabricius, 1781) [Sphex] (*Pelopaeus tubifex* Latreille, 1809). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), N Africa, Turkey, Syria, Israel, Iraq, Iran, Afghanistan, Central Asia, Kazakhstan, China (NE, NC, CC, SW, WP, SE), Korean Peninsula, Japan (Hon, Kyu, Ryu), SE Asia, India, Africa.

Sceliphron spirifex (Linnaeus, 1758) [Sphex]. Russia: **EP** (CR). – Europe (WE, SE, EE), N Africa, Georgia, Turkey, Lebanon, Israel, Iran, Turkmenistan, India, Africa.

Subfamily SPHECINAE

Tribe PRIONYCHINI

CHIOSPHEX Menke in R. Bohart et Menke, 1976. Type species *Sphex argyrius* Brullé, 1833. Number of species: World – 2, Palearctic – 2, Russia – 1.

Chiosphex argyrius (Brullé, 1833) [Sphex] (*Sphex emarginatus* Brullé, 1833). Russia: **EP** (NC). – Europe (WE, SE, EE), N Africa, Turkey, Israel, Iraq, Iran, Turkmenistan.

PALMODES Kohl, 1890. Type species *Chlorion occitanicum* (Lepeletier de Saint Fargeau et Audinet-Serville, 1828) (= *Sphex occitanicus* Lepeletier de Saint Fargeau et Audinet-Serville, 1928). Number of species: World – 20, Palearctic – 9, Russia – 4.

Palmodes melanarius (Mocsáry, 1883) [Sphex] (*Sphex anatolicus* Kohl, 1888; *S. picicornis* F. Morawitz, 1890). Russia: **EP** (E, S, NC, CR). – Europe (SE), N Africa, Georgia, Azerbaijan, Turkey, Syria, Iraq, Iran, Central Asia, Kazakhstan, China (NW), India.

Palmodes occitanicus (Lepeletier de Saint Fargeau et Audinet-Serville, 1828) [Sphex]. Russia: **EP** (C,

S, NC, CR), **WS** (AL), **ES** (KS, TU, IR, BR, YA, ZB), **FE** (AM). – Europe (WE, SE, EE), N Africa, Turkey, Syria, Israel, Iran, Central Asia, Kazakhstan, Mongolia, China (NE, NC, CC), Korean Peninsula.

Palmodes orientalis (Mocsáry, 1883) [Sphecx]. Russia: **EP** (E, S, NC, CR), **UR**, **WS** (AL), **ES** (TU, KR, BR, ZB). – Turkey, Iran, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NW, SW).

Palmodes strigulosus (A. Costa, 1861) [Sphecx]. Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Georgia, Armenia, Turkey, Israel, Iran, Central Asia, Kazakhstan.

PRIONYX Vander Linden, 1827 (*Priononyx* Dahlbom, 1843; *Enodia* Dahlbom, 1843; *Harpactopus* F. Smith, 1856; *Parasphecx* F. Smith, 1856; *Gastro-sphaeria* A. Costa, 1858; *Calosphecx* Kohl, 1890). Type species *Ammophila kirbii* Vander Linden, 1827. Number of species: World – 56, Palaearctic – 28, Russia – 6.

Prionyx kirbii (Vander Linden, 1827) [Ammophila] (*Sphecx albisectus* Lepeletier de Saint Fargeau et Audinet-Serville, 1828). Russia: **EP** (C, S, NC, CR), **WS** (AL). – Europe (WE, SE, EE), N Africa, Georgia, Turkey, Syria, Israel, Iran, Central Asia, Kazakhstan, China (NC, SE), Africa.

Prionyx lividocinctus (A. Costa, 1861) [Enodia]. Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), N Africa, Turkey, Central Asia, Kazakhstan, Mongolia, China (NC).

Prionyx niveatus (Dufour, 1854) [Sphecx] (*Podium maracandicum* Radoszkowski, 1877; *Sphecx suavis* F. Morawitz, 1893; *S. afghaniensis* de Beaumont, 1970). Russia: **EP** (S). – Europe (SE), N Africa, Turkey, Jordan, Israel, Iran, Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, Africa.

Prionyx nudatus (Kohl, 1885) [Sphecx]. Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (NS, AL), **ES** (TU). – Europe (SE, EE), N Africa, Turkey, Iran, Afghanistan, Central Asia, Kazakhstan, China (NC).

Prionyx subfuscatus (Dahlbom, 1845) [Sphecx] (*Sphecx desertorum* Eversmann, 1849). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (TU, IR, BR), **FE** (PR). – Europe (WE, SE, EE), N Africa, Georgia, Turkey, Israel, Iran, Central Asia, Kazakhstan, Mongolia, China (NE, NC, NW, CC, SW, WP, SE), Korean Peninsula, India, Africa.

Prionyx viduatus viduatus (Christ, 1791) [Sphecx] (*Sphecx micans* Eversmann, 1849; *S. leuconotus* F. Morawitz, 1890). Russia: **EP** (C, S, NC, CR), **UR**, **WS** (OM). – Europe (WE, SE, EE), N Africa, Turkey, Israel, Iran, Afghanistan, Central Asia, Kazakhstan, China (NE, NC, NW, SE), Japan (Ryu), SE Asia, India, Africa.

Prionyx viduatus mocsaryi (Kohl, 1883) [Sphecx] (*Enodia argentata* Mocsáry, 1883; *Sphecx gobiensis* Tsuneki, 1971). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (TU). – Europe (SE, EE), N Africa, Turkey, Turkmenistan, Tajikistan, Kazakhstan, Mongolia, China (NC).

Tribe SPHECINI

ISODONTIA Patton, 1880. Type species *Isodontia philadelphica* (Lepeletier de Saint Fargeau, 1845) (= *Sphecx philadelphicus* Lepeletier de Saint Fargeau, 1845). Number of species: World – 62, Palaearctic – 6, Russia – 3.

Isodontia mexicana (de Saussure, 1867) [Sphecx] (*Sphecx apicalis* de Saussure, 1867). Russia: **EP** (CR). – Europe (WE, SE, EE), Iran, N America.

Isodontia nigella (F. Smith, 1856) [Sphecx]. Russia: **FE** (PR). – China (NE, NC, CC, SW, SE), Korean Peninsula, Japan (Hon, Shi, Kyu, Ryu), India, Australia.

Isodontia paludosa (Rossi, 1790) [Sphecx]. Russia: **EP** (NC). – Europe (WE, SE, EE), N Africa, Turkey, Jordan, Iran, Turkmenistan.

SPHECX Linnaeus, 1758. Type species *Sphecx flavipennis* Fabricius, 1793. Number of species: World – 130, Palaearctic – 20, Russia – 5.

Sphecx atopilosus Kohl, 1885 (*Sphecx atrohirtus* Kohl, 1890). Russia: **EP** (C, E, S, NC), **WS** (NS). – Europe (WE, SE, EE), N Africa, Turkey, Turkmenistan, Tajikistan, Kazakhstan.

Sphecx flavipennis Fabricius, 1793 (*Sphecx rufocinctus* Brullé, 1833). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), N Africa, Georgia, Turkey, Syria, Israel, Iran, Afghanistan, Central Asia, Kazakhstan, China (NW).

Sphecx funerarius Gussakovskij, 1934 (*Sphecx maxillosus* Fabricius, 1793). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (OM, TK, NS, AL), **ES** (TU, KR, IR, BR, ZB), **FE** (KH). – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Syria, Israel, Iran,

Afghanistan, Central Asia, Kazakhstan, Mongolia, China (NC, NW).

Sphex leuconotus Brullé, 1833 (*Sphex afer* Lepeletier de Saint Fargeau, 1845; *S. sordidus* Dahlbom, 1845; *S. tristis* Kohl, 1885; *S. plumipes* Radoszkowski, 1886; *S. pachysoma* Kohl, 1890). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), N Africa, Azerbaijan,

Turkey, Syria, Jordan, Israel, Iraq, Iran, Afghanistan, Central Asia, Kazakhstan.

Sphex pruinosus Germar, 1817. Russia: **EP** (S, NC). – Europe (WE, SE, EE), N Africa, Turkey, Syria, Lebanon, Israel, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, India, Africa.

72. FAMILY CRABRONIDAE – CRABRONID DIGGER WASPS

A.V. ANTROPOV

The family Crabronidae contains a large variety of species, which are very diverse externally – from robust Oxybelini to slender forms with strongly elongated abdomen in Trypoxylini. The body size is also variable from 2 mm in Miscophini, Ammoplanini, or Eremiaspheciinae to 50 mm in Bembicini. Their color varies from completely black or black with red elements to completely light yellow. Such diverse, from the first view, composition of the family is not a sign of artificiality of the taxon, but might speak of its relatively long evolution preserving some basal representatives. Proceeding from the latest data, the family Crabronidae is a monophyletic taxon, a sister-group of “bees” (Apidae s.lat.), with which they, obviously, have a common ancestor. An analysis of the structure of mouthparts and internal skeleton, and the discovery of representatives of the group in the fossil deposits and resins of different ages, starting at least from the Cretaceous, confirm this viewpoint.

The characteristic feature of Crabronidae consists in taking care of the offspring, usually expressed in building the nests before provisioning and oviposition. However, the commonly used name of the family - “sand wasps”, does not reflect the whole diversity of their nesting places. Only a part of species dig nests in the soil, while the majority uses hollow stems of reeds and grasses, thin branches with a soft core, abandoned nests of other Hymenoptera in ground and wood, galls, and abandoned burrows of xylophages in dead wood. Some Crabronidae are capable to gnaw burrows in rotten or even hard wood, and others build separate or combined in groups cells or galleries using wet clay and even the plant fluff. Moreover, among both tercolous and xylicolous Crabronidae there are species with presocial behavior, uniting in nesting clusters, and even using a common entrance to the complex of independent nests. Perhaps the most interesting features of crabronid biology is the nesting behavior including the guarding nesting sites by the males of *Oxybelus* and *Palarus* and directly the nests by the youngest generation in *Cerceris* and by males in some *Pison* and *Trypoxylon*. The latter can even participate in nest building. Finally, the species of the genus *Microstigmus* demonstrate eusocial behavior, forming the families with the division of functions between their

members. At the same time, the species of *Larra* does not build nests, temporarily paralyzing their victims (mole crickets), and their larvae develop as ectoparasites on a living host.

The vast majority of crabronids is active hunters, which ensure the development of their larvae with paralyzed, usually juvenile, insects of almost all free-living orders, as well as spiders. The degree of specialization in the choice of prey in various groups of Crabronidae varies from orders and families to genera, and only in rare cases to species or certain sex. Usually each cell in the nest contains a number of prey, sufficient for the full development of the larva, but the progressive feeding of each larva to its pupation is characteristic for some species. Finally, an unusual and unique among apoid wasps *Krombeinictus nordenae* Leclercq, 1996 from Sri Lanka is coadapted with internodes of acacia *Humboldtia laurifolia* Vahl (Fabaceae), and its female rears one larva at a time and feeds it progressively with clumped masses of fine-grained pollen rather than paralyzed arthropods.

The main enemies of crabronids are their nest parasites – flies (Anthomyiidae, Asilidae, Bombyliidae, Milichiidae, Phoridae, Sarcophagidae, Tachinidae), hymenopterans (Braconidae, Chrysididae, Eulophidae, Eurytomidae, Mutillidae, Pteromalidae, Torymidae), beetles (Cleridae, Dermestidae, Meloidae, Rhipiphoridae), and ticks (Winterschmidtidae). Sometimes the larvae may be destroyed by various Ichneumonidae, who are usually the parasites of the provisioned prey. At the same time, several nyssonins and bembicins are the cleptoparasites of the related or remote crabronid genera: *Epinysson* of *Hoplisoides* (Bembicini), *Nysson* of *Gorytes*, *Argogorytes*, *Oryttus*, *Dienoplus*, *Hoplisoides*, and *Lestiphorus* (Bembicini), *Brachystegus* and *Zanysson* of *Tachytes* (Larrini), *Acanthostethus* of *Sericophorus* (Miscophini), *Metanysson* of *Cerceris* (Cercerini), and *Stizoides* of *Palmodes*, *Prionyx* (Prionychini), *Sphex* (Sphecini), and *Bembix* (Bembicini). Adults of many crabronids may be the victims of the crabronid wasps *Palarus* and *Philanthus*. *Palarus variegatus* (Fabricius, 1781) can even successfully attack the females of bee-wolves as it is the only wasp known to be immune to the venom of *Philanthus triangulum* (Fabricius, 1775).

Many species of Crabronidae are effective regulators of quantity of various harmful insects, such as Homoptera, Orthoptera, and Diptera. At the same time, some species of *Palarus* and *Philanthus* which hunt honey bees may cause serious damage to apiculture.

Palarus species may also be harmful when hunting various pollinators and entomophagous wasps.

Crabronidae is distributed worldwide, mainly in tropical and subtropical regions. Crabronids, including 90 percentages of apoid wasps, is the largest group of insects among all families of wasps. Number of taxa: World – 250 genera, about 8900 species; Palaearctic – 84/2000; Russia – 74/613.

R e f e r e n c e s. Brothers, 1975; Bohart, Menke, 1976; Lomholdt, 1982; Gauld, Bolton, 1988; Alexander, 1990, 1992; Melo, 1999; Pulawski, 2016.

Subfamily ASTATINAE

P.G. NEMKOV

- ASTATA** Latreille, 1796 (*Astatus* Latreille, 1796; *Dimorpha* Panzer, 1806). Type species *Tiphia abdominalis* Panzer, 1798 (= *Sphex boops* Schrank, 1781). Number of species: World – 82, Palaearctic – 35, Russia – 11.
- Astata apostata** Mercet, 1910. Russia: **EP** (C, S). – Europe (WE, SE, EE), N Africa, Turkey, Iran, Kazakhstan.
- Astata boops boops** (Schrank, 1781) [*Sphex*] (*Tiphia abdominalis* Panzer, 1798; *Dimorpha oculata* Jurine, 1807; *Astata victor* Curtis, 1829; *A. vanderlindeni* Robert, 1833; *A. fuscipes* Robert, 1833, unavailable (ICZN, 1999, Art. 11.5); *A. agilis* F. Smith, 1875). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **ES** (TK, NS, AL), **WS** (KR, IR, YA, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Abkhazia, Turkey, Israel, Yemen, Oman, Iraq, Iran, Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NE, NC), Korean Peninsula, India.
- Astata brevitarsis** Pulawski, 1958. Russia: **EP** (S, CR). – Europe (SE, EE), Turkey.
- Astata costae costae** A. Costa, 1867 (*Astatus gracilis* Gussakovskij, 1927). Russia: **EP** (S, CR), **ES** (ZB). – Europe (WE, SE, EE), N Africa, Turkey, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Astata jucunda** Pulawski, 1959. Russia: **EP** (S, NC, CR), **WS** (AL). – Europe (SE, EE), Turkey, Iran.
- Astata kashmirensis kashmirensis** Nurse, 1909 (*A. stecki* de Beaumont, 1942). Russia: **EP** (C, S, NC, CR), **WS** (AL), **FE** (PR). – Europe (WE, SE, EE), N Africa, Turkey, Iran, Turkmenistan, Uzbekistan, Kazakhstan, China (NE), India.
- Astata miegii scapularis** (Kohl, 1889) [*Astatus*] (*Astatus pelops* Morice, 1902). Russia: **EP** (S, CR). – Europe (SE, EE), Armenia, Turkey.
- Astata minor** Kohl, 1885. Russia: **EP** (N, NW, C, E, S, CR), **WS** (NS, AL), **ES** (IR), **FE** (AM, PR). – Europe (WE, NE, SE, EE), N Africa, Turkey, Israel, Iran, Turkmenistan, Uzbekistan, Kazakhstan.
- Astata quettae** Nurse, 1903 (*Dimorpha fletcheri* R. Turner, 1917; *Astatus hirsutulus* Gussakovskij, 1927; *A. tibialis* Gussakovskij, 1927; *Astata hungarica* Pulawski, 1958). Russia: **EP** (S), **WS** (AL). – Europe (EE), Turkey, Iran, Pakistan, Kazakhstan, Mongolia, China (NW), India.
- Astata pontica** Pulawski, 1958. Russia: **EP** (S). – Europe (SE, EE), Turkey.
- Astata rufipes rufipes** Mocsáry, 1883 (*Astatus sareptanus* Gussakovskij, 1927). Russia: **EP** (S, CR). – Europe (WE, SE, EE), Turkey, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- DIPLOPLECTRON** W. Fox, 1893. Type species *Liris brunneipes* Cresson, 1881. Number of species: World – 20, Palaearctic – 4, Russia – 2.
- Diploplectron asiaticum** Pulawski, 1965. Russia: **EP** (S). – Israel, Turkmenistan, Kazakhstan, Mongolia.
- Diploplectron pulawskii** Kazenas, 1975. Russia: **EP** (S). – Kazakhstan.
- DRYUDELLA** Spinola, 1843. Type species *Dryudella ghilianii* Spinola, 1843 (= *Astata tricolor* Vander Linden, 1829). Number of species: World – 57, Palaearctic – 45, Russia – 7.
- Dryudella lineata** Mocsáry, 1879. Russia: **EP** (C, E, S). – Europe (EE), Kazakhstan.
- Dryudella picticornis** (Gussakovskij, 1927) [*Astatus*]. Russia: **EP** (S), **UR**. – Europe (EE), Turkey, Kazakhstan.
- Dryudella pinguis** (Dahlbom, 1832) [Larra] (*Larra pinguis* Zetterstedt, 1838, nom. praeocc., nec *L. pinguis* Dahlbom, 1832; *Astata jaculator* F. Smith, 1845). Russia: **EP** (C, E), **WS** (AL), **ES** (IR, YA), **FE** (SA, KA). – Europe (WE, NE, EE), Kazakhstan, N America.
- Dryudella pseudofemoralis** Nemkov, 1990. Russia: **ES** (ZB).
- Dryudella similis** (Gussakovskij, 1927) [*Astatus*]. Russia: **EP** (E, S). – Kazakhstan, China (NW).
- Dryudella stigma stigma** (Panzer, 1809) [*Dimorpha*] (*Astata intermedia* Dahlbom, 1843; *A. stigma major* Grönblom, 1946). Russia: **EP** (N, NW, C, E), **WS**

(AL), **ES** (KR, IR, BR, YA, ZB), **FE** (PR). – Europe (WE, NE, SE, EE), Kazakhstan.

Dryudella tricolor tricolor (Vander Linden, 1829) [Astatata] (*D. ghilianii* Spinola, 1843; *Dimorpha cincta* Spinola, 1834; *Dryudella spinolae* A. Costa, 1867; *Astatata calopteryx* Gussakovskij, 1952). Russia: **EP** (C, E, S, NC), **WS** (AL), **ES** (KR, ZB). – Europe (WE, SE, EE), N Africa.

Subfamily BEMBICINAE

P.G. NEMKOV

Tribe ALYSSONTINI

ALYSSON Panzer, 1806 (*Alysson* Jurine in Panzer, 1801, suppressed by ICZN, 1939 (Opinion 135); *Alyson* Jurine, 1807). Type species *Pompilus spinosus* Panzer, 1801. Number of species: World – 39, Palaeartic – 14, Russia – 7.

Alysson cameroni Yasumatsu et Masuda, 1932. Russia: **FE** (KU). – Japan (Hok, Hon).

Alysson monticola ezoensis Tsuneki, 1977. Russia: **FE** (KU). – Japan (Hok).

Alysson pertheesi pertheesi Gorski, 1852 (*A. festivus* Mocsáry, 1879; *A. fuscatus jaroslavensis* Kokujev, 1906; *A. harbinensis* Tsuneki, 1967; *A. pertheesi typica* Tsuneki et Itami, 1973; *A. pertheesi nigra* Tsuneki et Itami, 1973). Russia: **EP** (NW, E, S), **WS** (AL), **ES** (KR, IR, BR), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE, EE), Mongolia, China (NE), Korean Peninsula, Japan (Hon).

Alysson ratzeburgi Dahlbom, 1843. Russia: **EP** (N, NW, E), **WS** (TM), **ES** (KS, KR, IR, ZB), **FE** (PR). – Europe (WE, NE, SE, EE), Korean Peninsula, Japan (Hon).

Alysson spinosus (Panzer, 1801) [Pompilus] (*Sphex bimaculatus* Panzer, 1798; *A. katkovi* Kokujev, 1906). Russia: **EP** (NW, C, E, S, NC). – Europe (WE, NE, SE, EE), Georgia, Turkey, Kazakhstan.

Alysson tricolor Lepeletier de Saint Fargeau et Audinet-Serville, 1825. Russia: **EP** (C). – Europe (WE, SE, EE), Turkey.

Alysson verhoeffi Tsuneki, 1967. Russia: **FE** (AM, KH, PR). – China (NE), Korean Peninsula.

DIDINEIS Wesmael, 1852. Type species *Alyson lunicornis* of Vander Linden, 1829 (= *Pompilus lunicornis* Fabricius, 1798). Number of species: World – 24, Palaeartic – 14, Russia – 7.

Didineis bactriana Gussakovskij, 1937 (*D. ogloblini* Gussakovskij, 1937). Russia: **EP** (S). – Turkmenistan, Uzbekistan, Mongolia.

Didineis bucharica Gussakovskij, 1937 (*D. zimini* Gussakovskij, 1937). Russia: **EP** (S, NC), **UR**. – United Arab Emirates, Uzbekistan.

Didineis clavimana Gussakovskij, 1937 (*D. turanica* Gussakovskij, 1937). Russia: **EP** (S, CR). – Europe (SE, EE), Israel, Uzbekistan.

Didineis crassicornis Handlirsch, 1888. Russia: **EP** (C, NC). – Europe (WE, SE, EE), N Africa, Turkey.

Didineis lunicornis (Fabricius, 1798) [Pompilus] (*Alysson kennedii* Curtis, 1836; *Didineis kozhevnikovi* Kokujev, 1906; *D. ruthenica* Gussakovskij, 1937). Russia: **EP** (C, E, S), **UR**. – Europe (WE, NE, SE, EE), N Africa, Abkhazia.

Didineis sibirica Gussakovskij, 1937 (*Alysson sibiricus nipponicus* Tsuneki, 1968). Russia: **ES** (IR, BR, ZB), **FE** (PR). – Japan (Hon).

Didineis wuestneii Handlirsch, 1888. Russia: **EP** (S). – Europe (SE, EE), Azerbaijan, Turkey.

Tribe NYSSONINI

BRACHYSTEGUS A. Costa, 1859. Type species *Nysson dufouri* Lepeletier, 1845 (= *Nysson scalaris* Illiger, 1807). Number of species: World – 21, Palaeartic – 4, Russia – 1.

Brachystegus scalaris (Illiger, 1807) [Nysson] (*Nysson interruptus* Latreille, 1803, nom. praeocc., nec *N. interruptus* (Fabricius, 1798); *N. rufipes* Olivier, 1812; *N. auratus* Schummel, 1834; *N. dufourii* Dufour, 1841; *N. dufourii* Lepeletier de Saint Fargeau, 1845, nom. praeocc., nec *N. dufourii* Dufour, 1841; *N. dufouri* Dahlbom, 1845, nom. praeocc., nec *N. dufourii* Dufour, 1841; *N. dufourianum* Blanchard, 1849; *N. transcaspicus* Radoszkowski, 1893). Russia: **EP** (C, E, S, NC, CR), **WS** (AL). – Europe (WE, SE, EE), N Africa, Georgia, Turkey, Yemen, Iran, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan.

NIPPONONYSSON Yasumatsu et Maidl, 1936. Type species *Nippononysson rufopictus* Yasumatsu et Maidl, 1936. Number of species: World – 3, Palaeartic – 2, Russia – 1.

Nippononysson rufopictus Yasumatsu et Maidl, 1936. Russia: **FE** (AM, PR, KU). – Japan (Hon, Kyu, Ryu).

NYSSON Latreille, 1802, validated by ICZN, 1979 (Opinion 1115) (*Nysson* Latreille, 1796, rejected by

- ICZN, 1979 (Opinion 1115); *Nyssonus* Rafinesque, 1815; *Synnevrus* A. Costa, 1859; *Synnevrus* Gerstaecker, 1867). Type species *Crabro spinosus* Fabricius, 1775 (= *Sphex spinosus* J. Forster, 1771). Number of species: World – 101, Palaeartic – 59, Russia – 19.
- Nysson amurensis** Nemkov, 199. Russia: **FE** (AM, PR).
- Nysson decemmaculatus** Spinola, 1807 (*N. variolatus* A. Costa, 1867; *N. variolatus* A. Costa, 1869; *N. curtulus* F. Morawitz, 1892; *N. mopsus* Handlirsch, 1898). Russia: **EP** (CR). – Europe (WE, SE, EE), Azerbaijan, Turkey, Jordan, Israel, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Nysson dimidiatus** Jurine, 1807 (*N. wesmaeli* Lepeletier de Saint Fargeau, 1845; *N. distinguendus* Chevrier, 1867; *N. nigrina* Barovskij, 1929; *N. susterai* Zavadil in Zavadil et Šnoflák, 1948; *N. susterai* Zavadil, 1951). Russia: **EP** (N, NW, C, S, NC), **WS** (AL), **ES** (IR, ZB), **FE** (AM, SA, MG). – Europe (WE, NE, SE, EE), Armenia, Central Asia, Kazakhstan, Mongolia.
- Nysson epeoliformis epeoliformis** F. Smith, 1856 (*Synnevrus procerus* A. Costa, 1859; *Nysson notabilis* Handlirsch, 1895). Russia: **EP** (CR). – Europe (SE), Armenia, Azerbaijan, Turkey, Turkmenistan.
- Nysson fulvipes** A. Costa, 1859. Russia: **EP** (C, S, NC). – Europe (WE, SE, EE), N Africa, Turkey, Israel, Abkhazia, Kazakhstan.
- Nysson fulviventris** Tsuneki, 1971. Russia: **ES** (ZB). – Mongolia.
- Nysson guichardi** de Beaumont, 1967. Russia: **EP** (S, CR). – Europe (SE), Turkey.
- Nysson harveyi** de Beaumont, 1967. Russia: **EP** (NC). – Turkey, Uzbekistan.
- Nysson interruptus** (Fabricius, 1798) [Mellinus] (*Ceropales spinosus* Fabricius, 1804; *N. panzeri* Lepeletier de Saint Fargeau, 1845; *N. shukardi* Wesmael, 1852). Russia: **EP** (N, NW, C, E, CR), **UR**, **WS** (NS). – Europe (WE, NE, SE, EE), N Africa, Turkey, Israel, Armenia, Kazakhstan.
- Nysson maculosus** (Gmelin, 1790) [Sphex] (*Sphex maculatus* Fabricius, 1787; *Mellinus dissectus* Panzer, 1800; *N. guttatus* Olivier, 1812; *N. omissus* Dahlbom, 1845; *N. lineolatus* Schenck, 1857; *N. dubius* A. Costa, 1859). Russia: **EP** (N, NW, C, E, CR), **UR**, **WS** (TM, KM, AL), **ES** (KR, IR, YA, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE), N Africa, Georgia, Armenia, Turkey, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NE, NC), Korean Peninsula.
- Nysson militaris** Gerstaecker, 1867. Russia: **EP** (S, NC, CR). – Europe (SE, EE), Turkey, Israel.
- Nysson mimulus** Valkeila, 1964 (*N. handlirschi* West-erlund, 1896, nom. nud.; *N. handlirschi* Hellén, 1955). Russia: **EP** (NW). – Europe (WE, NE, EE).
- Nysson niger niger** Chevrier, 1868. Russia: **EP** (N, NW, C, E), **WS** (TM). – Europe (WE, NE, SE, EE), Tajikistan, Kazakhstan.
- Nysson quadriguttatus** Spinola, 1807 (?*N. quadriguttatus* Olivier, 1812). Russia: **EP** (C, E, S), **WS** (AL). – Europe (WE, SE, EE), Uzbekistan, Kyrgyzstan, Kazakhstan.
- Nysson roubali** Zavadil, 1937. Russia: **EP** (S). – Europe (SE, EE).
- Nysson spinosus** (J. Forster, 1771) [Sphex] (?*Vespa bidens* Linnaeus, 1767; *Sphex spinosus* J. Forster, 1770, nom. nud.; *Crabro spinosus* Fabricius, 1775; *Mellinus tricinctus* Fabricius, 1793; *Vespa trilineata* Turton, 1802; *N. geniculatus* Lepeletier de Saint Fargeau, 1845; *N. malaisei* Gussakovskij, 1932). Russia: **EP** (N, NW, C, E, NC), **WS** (TM, NS, AL), **ES** (KR, IR), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE, SE, EE), Azerbaijan, Turkey, Iran, Kazakhstan, Japan (Hon).
- Nysson tridens** Gerstaecker, 1867 (*N. melas* Müller, 1918; *N. fraterculus* Gussakovskij, 1932; *N. bohemicus* Zavadil in Zavadil et Šnoflák, 1948; *N. bohemicus* Zavadil, 1951). Russia: **EP** (C, S), **WS** (TM, AL), **FE** (AM, PR). – Europe (WE, NE, SE, EE), Turkey, Tajikistan, Uzbekistan, Kazakhstan, Mongolia.
- Nysson trimaculatus trimaculatus** (Rossi, 1790) [Crabro] (*N. nigripes* Spinola, 1807; *N. geniculatus* Olivier, 1812). Russia: **EP** (C, E, S), **WS** (AL), **ES** (KR, IR), **FE** (PR, KU). – Europe (WE, NE, SE, EE), Abkhazia, Azerbaijan, Kazakhstan.
- Nysson variabilis** Chevrier, 1867 (?*N. friesei* Handlirsch, 1887). Russia: **EP** (S). – Europe (WE, SE, EE), Turkey, Kazakhstan.

Tribe BEMBICINI

- AMMATOMUS** A. Costa, 1859. Type species *Gorytes coarctatus* Spinola, 1808. Number of species: World – 30, Palaeartic – 5, Russia – 3.
- Ammatomus coarctatus** (Spinola, 1808) [Gorytes] (*Gorytes handlirschi* F. Morawitz, 1890; *G. mavromoustakisi* Balthasar, 1954; *G. mitjaevi* Kazenas, 1972). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Syria,

Israel, Yemen, Iran, Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.

Ammatomus mesostenus (Handlirsch, 1888) [Gorytes] (*Gorytes rhopalocerus* Handlirsch, 1895; *G. nikolajevskii* Gussakovskij, 1928). Russia: **EP** (S, NC). – N Africa, Israel, United Arab Emirates, Oman, Iraq, Iran, Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, China (NW).

Ammatomus rogenhoferi (Handlirsch, 1888) [Gorytes] Russia: **EP** (E, S, CR). – Europe (SE, EE), Georgia, Armenia, Azerbaijan, Turkey, Jordan, Israel, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, China (NW).

ARGOGORYTES Ashmead, 1899 (*Archarpactus* Pate, 1937, suppressed by the ICN, 1939 (Opinion 135); *Malaygorytes* Nemkov, 1999). Type species *Gorytes carbonarius* F. Smith, 1856. Number of species: World – 31, Palaearctic – 5, Russia – 3.

Argogorytes fargeii (Shuckard, 1837) [Gorytes] (*Gorytes croceipes* Eversmann, 1849; *A. mongolensis* Tsuneki, 1971; *A. przewalskyi* Kazenas, 1971; *A. przewalskyi* Kazenas, 1972). Russia: **EP** (N, C, E, S, CR), **UR**, **WS** (NS, AL), **ES** (KR, IR, BR, YA, ZB). – Europe (WE, NE, SE, EE), Armenia, Turkey, Israel, Kazakhstan, Mongolia, China (NE).

Argogorytes mystaceus grandis (Gussakovskij, 1932) [Gorytes]. Russia: **ES** (ZB), **FE** (AM, KH, PR, SA, KU). – China (NE), Korean Peninsula, Japan (Hok, Hon).

Argogorytes mystaceus mystaceus (Linnaeus, 1761) [Sphex] (*Vespa campestris* Linnaeus, 1761; *V. inimicus* Harris, 1782; *Sphex longicornis* Rossi, 1790; *Crabro bicinctus* Fabricius, 1793; *Mellinus arpactus* Fabricius, 1804; *Vespa flavicincta* Donovan, 1808; *Gorytes tonsus* (Bondroit, 1933)). Russia: **EP** (N, C, E), **UR**, **WS** (AL), **ES** (KR, IR). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan.

Argogorytes nipponis Tsuneki, 1963. Russia: **FE** (PR, KU). – Japan (Hok, Hon).

BEMBECINUS A. Costa, 1859 (*Stizomorpha* A. Costa, 1859; *Gorystizus* Minkiewicz, 1934, not available (ICZN, 1999, Article 13.3); *Gorystizus* Pate, 1937; *Lavia* Rayment, 1953, nomen nudum). Type species *Bembecinus meridionalis* A. Costa, 1859. Number of species: World – 186, Palaearctic – 49, Russia – 2.

Bembecinus hungaricus hungaricus (Frigivaldszky, 1876) [Larra]. Russia: **EP** (E, S, NC, CR). – Europe (WE, SE, EE), Abkhazia, Turkey, Kazakhstan.

Bembecinus hungaricus sibiricus (Mocsáry in Mocsáry et Szépligeti, 1901) [Stizus]. Russia: **WS** (TK, AL), **ES** (KR, BR, ZB), **FE** (AM, KH, PR). – Mongolia, China (NC, NW).

Bembecinus tridens tridens (Fabricius, 1781) [Vespa] (*Crabro cinctus* Rossi, 1790; *Mellinus repandus* Panzer, 1800; *Stizus sinuatus* Latreille, 1805; *S. errans* Kohl: Ferton, 1912, nomen nudum; *S. tridens errans* de Beaumont, 1950). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL). – Europe (WE, SE, EE), N Africa, Abkhazia, Georgia, Armenia, Azerbaijan, Turkey, Syria, Jordan, Lebanon, Israel, Oman.

BEMBIX Fabricius, 1775 (*Bembyx* Fabricius, 1775; *Bembex* Fabricius, 1777; *Apobembex* Pate, 1937; *Epibembex* Pate, 1937). Type species *Bembex rostrata* Fabricius, 1781 (= *Apis rostrata* Linnaeus, 1758). Number of species: World – 328, Palaearctic – 74, Russia – 16.

Bembix bicolor Radoszkowski, 1877 (*B. femoralis* Radoszkowski, 1877; *B. bipunctata* Radoszkowski, 1877; *B. barbiventris* F. Morawitz, 1889). Russia: **EP** (C). – Europe (SE, EE), Turkey, Israel, Oman, Iraq, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia, China (NC, NW).

Bembix bidentata Vander Linden, 1829 (*B. dalmatica* Kriechbaumer, 1869). Russia: **EP** (C, S, NC, CR), **WS** (AL). – Europe (WE, SE, EE), Abkhazia, Azerbaijan, Turkey, Iran, Kazakhstan.

Bembix canescens (Gmelin, 1790) [Apis]. Russia: **UR**.

Bembix cinctella cinctella Handlirsch, 1893. Russia: **EP** (CR). – Europe (SE), Turkey.

Bembix diversipes F. Morawitz, 1889. Russia: **WS** (AL), **ES** (KR, IR, BR), **FE** (PR). – Turkey, Iran, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NC, NW).

Bembix eburnea Radoszkowski, 1877 (*B. weberi* Handlirsch, 1893; *B. subeburnea* Tsuneki, 1971; *B. lama* Tsuneki, 1971). Russia: **EP** (S, CR). – Turkey, Iran, Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NE, NC).

Bembix integra Panzer, 1801, nom. praeocc., nec *B. integra* Fabricius, 1793 (now in *Stizus*) (*B. cristata* Mocsáry, 1883; *B. dubia* Gussakovskij, 1933; *B. iliensis* Kazenas, 1978; *B. iliensis* Kazenas, 1980). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Iran, Turkmenistan, Kazakhstan.

Bembix lutescens Radoszkowski, 1877 (*B. gracilis* Handlirsch, 1893). Russia: **EP** (S, CR). – Europe

- (EE), Armenia, Azerbaijan, Turkey, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Bembix megerlei** Dahlbom, 1845 (?*B. undata* Dahlbom, 1845; *B. sarafschani* Radoszkowski, 1877). Russia: **EP** (C, S, NC, CR). – Europe (C, EE), Turkey, Uzbekistan, Kazakhstan.
- Bembix niponica** F. Smith, 1873 (*B. picticollis* F. Morawitz, 1889; *B. miserabilis* J. Parker, 1929). Russia: **ES** (KR, BR), **FE** (AM, KH, PR). – Turkmenistan, Uzbekistan, Kazakhstan, Mongolia, China (NE, NC, NW), Korean Peninsula, Japan (Hon, Kyu, Ryu).
- Bembix oculata oculata** Panzer, 1801 (?*Vespa pallescens* Giorna, 1791; *B. latreillii* Lepeletier de Saint Fargeau, 1845; *B. neglecta* Dahlbom, 1845; *B. ocellata* Dahlbom, 1845; ?*B. rossii* Dahlbom, 1845; *B. panzeri* Handlirsch, 1893; *B. hispanica* Mercet, 1904; *B. ebusiana* Giner Marí, 1934; *B. oculata mongolica* Tsuneki, 1971; *B. oculata gegen* Tsuneki, 1971). Russia: **EP** (C, S, NC, CR), **UR**, **WS** (AL). – Europe (WE, SE, EE), N Africa, Abkhazia, Azerbaijan, Syria, Jordan, Lebanon, Israel, Saudi Arabia, United Arab Emirates, Oman, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NC).
- Bembix olivacea olivacea** Fabricius, 1787 (?*Vespa clipeata* Christ, 1791; ?*V. apilinguaria* Christ, 1791; *B. senilis* Fabricius, 1804; ?*B. octopunctata* Donovan, 1810; *B. notata* Dahlbom, 1845; *B. mediterranea* Handlirsch, 1893; *B. maroccana* Mercet, 1905; *B. pardoi* Giner Marí, 1945). Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Israel, Saudi Arabia, Yemen, Iran, Turkmenistan, Kazakhstan, Africa, Madagascar.
- Bembix pallida** Radoszkowski, 1877. Russia: **EP** (C, S, CR). – Europe (SE, EE), Turkey, Israel, Tajikistan, Uzbekistan.
- Bembix portchinskii** Radoszkowski, 1884 (*B. seminigra* F. Morawitz, 1889; *B. kirgisica* F. Morawitz, 1891; *B. ganglbaueri* Handlirsch, 1893; *B. trimaculata* Kazenas, 1978; *B. trimaculata* Kazenas, 1980). Russia: **EP** (S). – N Africa, Turkey, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia, China (NC, NW).
- Bembix rostrata rostrata** (Linnaeus, 1758) [*Apis*] (*Vespa armata* Sulzer, 1776; *Apis rostrata* Gmelin, 1790, nom. praeocc., nec *A. rostrata* Linnaeus, 1758; *B. vidua* Lepeletier de Saint Fargeau, 1845; *B. dissecta* Dahlbom, 1845; *B. gallica* Mocsáry, 1883; *B. paradoxa* Giner Marí, 1943). Russia: **EP** (NW, C, E, S, NC), **UR**, **WS** (TK, NS, AL), **ES** (KR, IR). – Europe (WE, NE, SE, EE), Azerbaijan, Turkey, Iran, Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NC).
- Bembix turca** Dahlbom, 1845 (*B. melaena* F. Smith, 1856; *B. melanura* F. Morawitz, 1889; *B. asiatica* Radoszkowski, 1893; *B. gobiensis* Tsuneki, 1971; *B. atra* Kazenas, 1978; *B. atra* Kazenas, 1980). Russia: **EP** (S, CR). – Europe (SE, EE), N Africa, Turkey, Iran, Afghanistan, Turkmenistan, Tajikistan, Kazakhstan, Mongolia, China (NW).
- GORYTES** Latreille, 1805 (*Arpactus* Panzer, 1805; *Arpactus* Panzer, 1806, nom. praeocc., nec *Arpactus* Panzer, 1805; *Euzonia* Stephens, 1829; *Hoplissus* Lepeletier de Saint Fargeau, 1932; *Euspongus* Lepeletier de Saint Fargeau, 1832; *Pseudoplissus* Ashmead, 1899; *Laevigorytes* Zavadil in Zavadil et Šnoflák, 1948; *Leiogorytes* Bohart, 2000). Ty p e s p e c i e s *Mellinus quinquecinctus* Fabricius, 1793. Number of species: World – 73, Palaearctic – 25, Russia – 18.
- Gorytes aino** Tsuneki, 1963. Russia: **ES** (BR), **FE** (PR, SA, KU). – China (NC), Japan (Hok, Hon).
- Gorytes albidulus** (Lepeletier de Saint Fargeau, 1832) [*Hoplissus*] (*Mellinus dissectus* Panzer, 1801; *Euspongus albilabris* Lepeletier de Saint Fargeau, 1832; *G. elegans* F. Smith, 1856). Russia: **EP** (C, S, CR), **WS** (AL). – Europe (WE, SE, EE), N Africa, Azerbaijan, Turkey, Iran, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia.
- Gorytes ambiguus** Handlirsch, 1888 (*G. sogdianus* Gussakovskij, 1952; *G. verhoeffi* Tsuneki, 1967; *G. heptapotamiensis* Kazenas, 1972; *G. zaysanicus* Kazenas, 1987; *G. nobilis* Nesterov, 1993). Russia: **WS** (AL), **ES** (KR, IR), **FE** (KH, PR). – Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NE).
- Gorytes fallax** Handlirsch, 1888. Russia: **EP** (C, E, CR), **WS** (AL), **ES** (KR, IR). – Europe (WE, SE, EE), Kazakhstan.
- Gorytes foveolatus foveolatus** Handlirsch, 1888. Russia: **EP** (NC, CR). – Europe (SE, EE), Turkey, Syria, Jordan.
- Gorytes kohlii** Handlirsch, 1888 (*G. kozlovi* Nesterov, 1993). Russia: **EP** (NC, CR). – Europe (SE, EE), Turkey, Syria, Turkmenistan, Kazakhstan.
- Gorytes laticinctus koreanus** Handlirsch, 1888 (*G. radoszkowskyi* Handlirsch, 1888). Russia: **ES** (ZB), **FE** (KH, PR, SA, KU). – Korean Peninsula, Japan (Hok).

- Gorytes laticinctus laticinctus** (Lepeletier de Saint Fargeau, 1832) [Euspongius]. Russia: **EP** (N, NW, C, E, CR), **WS** (AL). – Europe (WE, NE, SE, EE), N Africa, Turkey, Uzbekistan, Kazakhstan.
- Gorytes maculicornis** (F. Morawitz, 1889) [Hoplisius] (*G. eous* Gussakovskij, 1932; *G. harbinensis* Tsuneki, 1967). Russia: **ES** (ZB), **FE** (AM, KH, PR). – China (NE, NC), Korean Peninsula, Japan (Hok, Hon).
- Gorytes neglectus** Handlirsch, 1895 (*G. hakutozanus* Tsuneki, 1963). Russia: **EP** (N, NW, C), **WS** (TM, NS, KM, AL), **ES** (KR, IR, BR), **FE** (KH, PR, SA). – Europe (NE), Turkey, Kazakhstan, Korean Peninsula.
- Gorytes nigrifacies** (Mocsáry, 1879) [Hoplisius]. Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Georgia, Azerbaijan, Turkey, Jordan, Israel.
- Gorytes pieli** Yasumatsu, 1943 (*G. takeuchii* Tsuneki, 1963). Russia: **ES** (ZB), **FE** (KH, PR). – Mongolia, China (NE, NC), Korean Peninsula.
- Gorytes pleuripunctatus pleuripunctatus** (A. Costa, 1859) [Hoplisius] (*Hoplisius tirolensis* Kohl, 1880). Russia: **EP** (C, S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Georgia, Armenia, Azerbaijan, Turkey, Syria, Israel, Kazakhstan.
- Gorytes procrustes** Handlirsch, 1888. Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL). – Europe (WE, SE, EE), Georgia, Turkey, Kazakhstan.
- Gorytes quadrifasciatus** (Fabricius, 1804) [Mellinus] (*Euspongius vicinus* Lepeletier de Saint Fargeau, 1832; *Hoplisius montivagus* Mocsáry, 1878). Russia: **EP** (N, C, E, S, NC, CR), **UR**, **WS** (TM, NS, KM, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, MG). – Europe (WE, NE, SE, EE), N Africa, Turkey, Kyrgyzstan, Kazakhstan, Mongolia, Korean Peninsula.
- Gorytes quinquecinctus quinquecinctus** (Fabricius, 1793) [Mellinus] (*Crabro calceatus* Rossi, 1794; *Mellinus arenarius* Panzer, 1798; *G. ruficornis* Latreille, 1805; *G. proximus* Handlirsch, 1893). Russia: **EP** (N, C, E, S, NC, CR), **UR**, **WS** (TM, NS, KM, AL), **ES** (TU, KR, IR, ZB). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Syria, Iran, Uzbekistan, Kyrgyzstan, Kazakhstan.
- Gorytes quinquefasciatus quinquefasciatus** (Panzer, 1798) [Mellinus] (*Hoplisius lacordairei* Lepeletier de Saint Fargeau, 1832; *H. anceps* Mocsáry, 1879; *H. geminatus* A. Costa, 1867; *H. geminatus* A. Costa, 1869). Russia: **EP** (C, E, NC, CR), **UR**, **WS** (AL), **ES** (KR, IR, BR), **FE** (PR). – Europe (WE, SE, EE).
- Gorytes schmiedeknechti** Handlirsch, 1888. Russia: **EP** (NC). – Europe (SE, EE), Azerbaijan, Turkey, Syria.
- Gorytes sulcifrons mongolicus** Tsuneki, 1971. Russia: **WS** (AL), **ES** (KR, IR, BR, ZB). – Azerbaijan, Kazakhstan, Mongolia, China (NC).
- Gorytes sulcifrons sulcifrons** (A. Costa, 1867) [Hoplisius] (*Hoplisius sulcifrons* A. Costa, 1869). Russia: **EP** (E, S, CR). – Europe (WE, SE, EE), N Africa, Armenia, Turkey, Lebanon, Central Asia, Kazakhstan.
- HARPACTUS** Shuckard, 1837 (*Arpactus* Jurine, 1807, nom. praeocc., nec *Arpactus* Panzer, 1805; *Harpactes* Dahlbom, 1843; *Dienoplus* W. Fox, 1894). Type species *Arpactus formosus* Jurine, 1807. Number of species: World – 72, Palaearctic – 54, Russia – 11.
- Harpactus affinis** (Spinola, 1808) [Gorytes] (*Arpactus carceli* Lepeletier de Saint Fargeau, 1832; *A. tricolor* Lepeletier de Saint Fargeau, 1832). Russia: **EP** (C, S, NC), **WS** (AL). – Europe (WE, SE, EE), Turkey, Kazakhstan.
- Harpactus annulatus** Eversmann, 1849 (*Dienoplus varipes* Tsuneki, 1971). Russia: **EP** (S), **UR**. – Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia.
- Harpactus elegans elegans** (Lepeletier de Saint Fargeau, 1832) [Arpactus] (*H. vedicus* Nesterov, 1994). Russia: **EP** (C, E, S, NC, CR), **WS** (AL), **ES** (KR). – Europe (WE, NE, SE, EE), Armenia, Azerbaijan, Kazakhstan.
- Harpactus formosus formosus** (Jurine, 1807) [Arpactus]. Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), N Africa, Turkey, Israel, Saudi Arabia, Kuwait, Oman, Iran, Kyrgyzstan, Kazakhstan.
- Harpactus laevis laevis** (Latreille, 1792) [Mutilla] (*Sphex cruentus* Fabricius, 1798; *Evania ruficollis* Fabricius, 1798; *H. caucasicus* Radoszkowski, 1884; *Dienoplus dzhingis* Tsuneki, 1971). Russia: **EP** (C, S, CR), **WS** (AL), **ES** (IR, BR, ZB), **FE** (AM). – Europe (WE, SE, EE), Turkey, Iran, Kazakhstan, Mongolia, China (NE, NC).
- Harpactus lunatus** (Dahlbom, 1832) [Larra] (*Arpactus belgicus* Wesmael, 1839). Russia: **EP** (N, C, E), **WS** (AL), **ES** (KR, IR, YA). – Europe (WE, NE, SE, EE), Kazakhstan.
- Harpactus morawitzi** Radoszkowski, 1884 (*Gorytes moravicus* Šnoflák, 1943). Russia: **EP** (C, S, NC), **ES** (IR, BR, ZB). – Europe (WE, SE, EE), Turkey, Turkmenistan, Kazakhstan.

- Harpactus tauricus** Radoszkowski, 1884 (*Gorytes sareptanus* Handlirsch, 1888; *H. turcmenicus* Radoszkowski, 1893). Russia: **EP** (S, CR). – Europe (SE, EE), Turkey, Iran, Turkmenistan, Tajikistan, Kazakhstan.
- Harpactus transbaicalicus** Nemkov, 1994. Russia: **ES** (BR).
- Harpactus transiens** A. Costa, 1887 (*H. transiens* A. Costa, 1888; *Gorytes consanguineus* Handlirsch, 1888; *H. chosrovicus* Nesterov, 1994). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Armenia, Turkey, Kazakhstan.
- Harpactus tumidus tumidus** (Panzer, 1801) [Pompilus] (*Dienoplus japonensis* Tsuneki, 1963; *H. transiliensis* Kazenas, 1989). Russia: **EP** (N, C, E), **WS** (TK, AL), **ES** (IR, BR, ZB), **FE** (AM, KH, PR, SA, KA, MG). – Europe (WE, NE, SE, EE), N Africa, Kyrgyzstan, Kazakhstan, Japan (Hon).
- HOPLISOIDES** Gribodo, 1884 (*Icuma* Cameron, 1905). Type species *Hoplisoides intricans* Gribodo, 1884. Number of species: World – 79, Palaeartic – 6, Russia – 4.
- Hoplisoides craverii craverii** (A. Costa, 1867) [Hoplisus] (*Hoplisus craverii* A. Costa, 1869; *H. ottomanus* Mocsáry, 1879). Russia: **EP** (S, NC), **UR**. – Europe (WE, SE, EE), Armenia, Azerbaijan, Turkey, Turkmenistan, Uzbekistan, Kazakhstan, Mongolia.
- Hoplisoides gazagnairei distinguendus** (Yasumatsu, 1939) [Gorytes]. Russia: **FE** (PR). – Kazakhstan, Mongolia, China (NE, NC), Korean Peninsula.
- Hoplisoides latifrons** (Spinola, 1808) [Gorytes] (*Hoplisus pulchellus* Wesmael, 1852; *H. minutus* Mocsáry, 1879). Russia: **EP** (E, S, CR), **UR**. – Europe (WE, SE, EE), N Africa, Turkey, Tajikistan, Uzbekistan, Kazakhstan.
- Hoplisoides punctuosus punctuosus** (Eversmann, 1849) [Hoplisus] (*Hoplisus punctatus* Kirschbaum, 1853; *H. crassicornis* A. Costa, 1859; *H. maculipennis* Giraud in von Frauenfeld, 1861; *Gorytes ibericus* Mercet, 1906). Russia: **EP** (C, S, NC, CR), **UR**, **WS** (NS, KM, AL). – Europe (WE, SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Syria, Israel, Central Asia, Kazakhstan, Mongolia.
- LESTIPHORUS** Lepeletier de Saint Fargeau, 1832 (*Lestiphorus* Agassiz, 1847; *Hypomellinus* Ashmead, 1899; *Mellinogastra* Ashmead, 1899). Type species *Crabro bicinctus* Rossi, 1794. Number of species: World – 18, Palaeartic – 8, Russia – 3.
- Lestiphorus bicinctus** (Rossi, 1794) [Crabro], validated by ICZN, 1963 (Opinion 675). Russia: **EP** (C, CR), **WS** (AL). – Europe (WE, SE, EE), Turkey.
- Lestiphorus bilunulatus bilunulatus** A. Costa, 1867 (*L. bilunulatus* A. Costa, 1869; *Gorytes semistriatus* Schmiedeknecht, 1881). Russia: **WS** (KM, AL), **ES** (KR, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, SE, EE), Kazakhstan.
- Lestiphorus pacificus** (Gussakovskij, 1932) [Gorytes]. Russia: **FE** (PR).
- OLGIA** Radoszkowski, 1877 (*Kaufmannia* Radoszkowski, 1877). Type species *Olgia modesta* Radoszkowski, 1877. Number of species: World – 6, Palaeartic – 6, Russia – 1.
- Olgia helena** de Beaumont, 1953. Russia: **EP** (CR). – Europe (SE), Turkey.
- ORYTTUS** Spinola, 1836 (*Agraptus* Wesmael, 1852; *Arcesilas* Pate, 1938). Type species *Sphex concinnus* Rossi, 1790. Number of species: World – 14, Palaeartic – 5, Russia – 2.
- Oryttus concinnus concinnus** (Rossi, 1790) [Sphex]. Russia: **EP** (C, CR). – Europe (WE, SE, EE).
- Oryttus kazabi** Tsuneki, 1971 (*Gorytes kostjuki* Nesterov, 1993). Russia: **WS** (AL), **ES** (TU, ZB). – Kyrgyzstan, Kazakhstan, Mongolia.
- PSAMMAECIUS** Lepeletier de Saint Fargeau, 1832. Type species *Gorytes punctulatus* Vander Linden, 1829. Number of species: World – 5, Palaeartic – 5, Russia – 1.
- Psammaecius punctulatus** (Vander Linden, 1829) [Gorytes]. Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), N Africa, Armenia, Azerbaijan, Israel, Central Asia, Kazakhstan.
- SPHECIUS** Dahlbom, 1843 (*Hogardia* Dufour, 1841, not available (ICZN, 1999, Art. 11.5); *Hogardia* Lepeletier de Saint Fargeau, 1845; *Sphecienuus* Patton, 1879; *Nothosphecius* Pate, 1936). Type species *Sphecius speciosus* Dahlbom, 1843 (= *Sphex speciosus* Drury, 1773). Number of species: World – 21, Palaeartic – 10, Russia – 2.
- Sphecius antennatus** (Klug, 1845) [Larra] (*Stizus aberrans* Eversmann, 1849; *Sphecius impressus* Kokujev, 1909). Russia: **EP** (S, NC, CR), **UR**, **WS** (AL). – Europe (WE, SE, EE), Azerbaijan, Turkey, Syria, Israel, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NC).

Sphecius conicus conicus (Germar, 1817) [Stizus] (*Stizus luniger* Eversmann, 1849). Russia: **EP** (S, CR), **UR**, **WS** (AL). – Europe (SE, EE), Turkey, Kazakhstan.

STIZOIDES Guérin-Méneville, 1844 (*Omphalius* Vachal, 1900, nom. praeocc., nec *Omphalius* Philippi, 1847 (Gastropoda); *Scotomphales* Vachal, 1900; *Tachystizus* Minkiewicz, 1934, not available (ICZN, 1999, Art. 13.3); *Tachystizus* Pate, 1937). Type species *Larra fasciata* Fabricius, 1798 (= *Sphex assimilis* Fabricius, 1787). Number of species: World – 30, Palaeartic – 10, Russia – 3.

Stizoides crassicornis (Fabricius, 1787) [Tiphia] (*Bembex rufipes* Olivier, 1789; *Pompilus alienus* Fischer de Waldheim, 1843; *Stizus fulvipes* Eversmann, 1846). Russia: **EP** (C, E, S, NC, CR). – Europe (WE, SE, EE), N Africa, Azerbaijan, Turkey, Israel, Iran, Central Asia, Kazakhstan.

Stizoides melanopterus (Dahlbom, 1845) [Stizus] (*Stizus concolor* Eversmann, 1849). Russia: **EP** (S, CR). – Europe (SE), Armenia, Turkey, Lebanon, Israel, Iraq, Central Asia, Kazakhstan.

Stizoides tridentatus tridentatus (Fabricius, 1775) [Crabro] (*Larra bifasciata* Fabricius, 1798). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Syria, Israel, Kazakhstan, Mongolia.

STIZUS Latreille, 1802 (*Megastizus* Patton, 1879; *Stizolarra* de Saussure, 1887; *Megalostizus* W. Schulz, 1906). Type species *Bembex ruficornis* Fabricius, 1787 (= *Vespa ruficornis* J. Forster, 1771). Number of species: World – 105, Palaeartic – 54, Russia – 6.

Stizus annulatus (Klug, 1845) [Larra] (*Larra subapicalis* Walker, 1871; *S. eversmanni* Radoszkowski, 1877; *S. kizilkumii* Radoszkowski, 1877; *S. picticornis* F. Morawitz, 1891; *S. pygidialis* Handlirsch, 1892; *S. gracilipes* Handlirsch, 1892; *S. hebraeus* Balthasar, 1954; *S. gobiensis* Tsuneki, 1971). Russia: **EP** (S). – Europe (SE), N Africa, Armenia, Turkey, Syria, Israel, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia.

Stizus bipunctatus (F. Smith, 1856) [Larra] (*S. eugeniae* Gussakovskij, 1935). Russia: **EP** (CR). – Europe (SE, EE), Turkey, Iran, Afghanistan, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan.

Stizus fasciatus (Fabricius, 1781) [Bembex] (*Bembex integra* Fabricius, 1793; *S. terminalis* Dahlbom, 1845;

S. mongolicus Tsuneki, 1971). Russia: **EP** (C, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Turkey, Israel, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NW).

Stizus perrisi perrisi Dufour, 1838 (*S. perrisi* Lepeletier de Saint Fargeau, 1845; *Larra pulcherrima* F. Smith, 1856; *S. pluschtschewskii* Radoszkowski, 1888). Russia: **EP** (C, E, S, CR), **UR**, **WS** (AL), **ES** (ZB), **FE** (PR). – Europe (WE, NE, SE, EE), Armenia, Turkey, Uzbekistan, Kyrgyzstan, Kazakhstan, China (NE, NC, NW), Korean Peninsula, Japan (Hon).

Stizus ruficornis ruficornis (J. Forster, 1771) [Vespa] (*Bembex ruficornis* Fabricius, 1787, nom. praeocc., nec *Vespa ruficornis* J. Forster, 1771; *Vespa gaditana* Gmelin, 1790; *S. ornatus* Lepeletier de Saint Fargeau, 1845; *Larra ferruginea* F. Smith, 1856; *S. komarovi* Radoszkowski, 1888; ?*S. ritsemae* Handlirsch, 1895; *S. ritsemae* Handlirsch, 1896; *S. scutellaris* W.F. Kirby, 1900; *S. distinguendus* Handlirsch, 1901). Russia: **EP** (S, CR), **UR**. – Europe (WE, SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Jordan, Saudi Arabia, United Arab Emirates, Yemen, Oman, Iran, Central Asia, Kazakhstan, Mongolia, Africa.

Stizus rufiventris rufiventris Radoszkowski, 1877 (*S. sarmaticus* F. Morawitz, 1891; *S. kaszabi* Tsuneki, 1971). Russia: **EP** (S, CR). – N Africa, Turkey, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NW).

Subfamily CRABRONINAE

A.V. ANTROPOV

Tribe CRABRONINI

CRABRO Fabricius, 1775 (*Crabro* Fabricius, 1775, nom. praeocc., nec *Crabro* Geoffroi de Saint Hilaire, 1762, which was suppressed by ICZN (1943, Opinion 144; 1994, Opinion 1754); *Carabro* Say, 1823, lapsus for *Crabro* Fabricius, 1775; *Pemphilis* Risso, 1826, nom. nud.; *Thyreopus* Lepeletier de Saint Fargeau et Brullé, 1835, objective synonym of *Crabro* Fabricius, 1775; *Thyreocnemus* A. Costa, 1867; *Paranothyreus* Kohl, 1897, unavailable under ICZN, 1961; available under ICZN, 1985, 1999; *Paranothyreus* Ashmead, 1899; *Dyscolocrabro* Kohl, 1915, unavailable under ICZN, 1961; available under ICZN, 1985, 1999; *Paranothyreus* Kohl, 1915, unavailable under ICZN, 1961; available under ICZN, 1985, 1999; *Parathyreopus* Kohl, 1915, unavailable under ICZN, 1961; available under ICZN, 1985, 1999; *Agnosicrabro*

- Pate, 1944, validation of *Agnosicrabro* Kohl, 1915; *Dyscolocrabro* Pate, 1944, validation of *Dyscolocrabro* Kohl, 1915; *Paranothyreus* Pate, 1944, validation of *Paranothyreus* Kohl, 1915; *Parathyreopus* Pate, 1944, validation of *Parathyreopus* Kohl, 1915; *Pemphilis* Pate, 1944, validation of *Pemphilis* Risso, 1826, objective synonym of *Crabro* Fabricius, 1775). Type species *Vespa cribraria* Linnaeus, 1758. The genus includes eight subgenera: *Crabro* Fabricius, 1775, *Anothyreus* Dahlbom, 1845, *Synothyreopus* Ashmead, 1899, *Dyscolocrabro* Pate, 1944, *Hemithyreopus* Pate, 1944, *Paranothyreus* Pate, 1944, *Norumbega* Pate, 1947, and *Othyreus* Marshakov, 1977. Number of species: World – 88, Palaearctic – 26, Russia – 18.
- Crabro (Anothyreus) lapponicus** Zetterstedt, 1838 (*C. biguttatus* F. Morawitz, 1892). Russia: **EP** (N, NW), **ES** (BR, KR, IR), **FE** (AM, PR). – Europe (WE, NE, EE).
- Crabro (Anothyreus) maeklini** A. Morawitz, 1866 (*C. Mäklini* A. Morawitz, 1866a; *C. Mäklini* A. Morawitz, 1866b, objective synonym of A. Morawitz, 1866a). Russia: **EP** (N, NW), **UR**, **ES** (IR, YA, ZB), **FE** (KH, PR). – Europe (NE, EE), Kazakhstan, Mongolia.
- Crabro (Crabro) alpinus** Imhoff, 1863 (*Thyreopus interruptus* Lepeletier de Saint Fargeau et Brullé, 1835, junior secondary homonym of *Crabro interruptus* Fabricius, 1787; *Th. lactarius* Chevrier, 1867; *C. interruptulus* Dalla Torre, 1897, substitute name for *C. interruptus* Lepeletier de Saint Fargeau et Brullé, 1835). Russia: **EP** (S, NC). – Europe (WE, SE, EE), Turkey.
- Crabro (Crabro) altaicus** F. Morawitz, 1892. Russia: **WS** (AL), **ES** (TU). – Central Asia, Kazakhstan, Mongolia, China (NW).
- Crabro (Crabro) cribrarius** (Linnaeus, 1758) [*Vespa*] (*Vespa cribraria* Linnaeus, 1758; *Sphex patellarius* Schreber, 1784; *S. Cribraria Argus* Christ, 1791; *S. cribraria longa* Christ, 1791; *S. cribraria lunata* Christ, 1791, nom. praeocc., nec *S. lunatus* Fabricius, 1775; *C. palmatus* Panzer, 1797; *C. interruptus* Stephens, 1829, nom. praeocc., nec Fabricius, 1787 (now in *Palarus*), substitute name for *C. clypeatus* Panzer, 1804; *C. cribrarius inornatus* Mocsáry in Mocsáry et Szépliget, 1901; *C. cribrarius hypotheticus* Kokujev, 1927). Russia: **EP** (N, NW, C, E, NC, CR), **UR**, **WS** (NS, AL), **ES** (KM, TM, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE), N Africa, Turkey, Iran, Kazakhstan, Mongolia, Korean Peninsula.
- Crabro (Crabro) ingricus** (F. Morawitz, 1888) [*Thyreopus*]. Russia: **EP** (N, NW, C), **UR**, **WS** (AL), **FE** (PR, KA). – Europe (WE, NE, SE, EE).
- Crabro (Crabro) mocsaryi** Kohl, 1915 (*C. Mocsáryi* Kohl, 1915). Russia: **WS** (AL). – Tadjikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NW).
- Crabro (Crabro) peltarius** (Schreber, 1784) [*Sphex*] (*Sphex peltaria* Schreber, 1784; *C. patellatus* Panzer, 1797; *C. dentipes* Panzer, 1797; *C. mediatius* Fabricius, 1798). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (OM, NS, AL), **ES** (BR, KR, IR), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan, Mongolia, Korean Peninsula.
- Crabro (Crabro) scutellatus** (von Scheven, 1781) [*Sphex*] (*Sphex scutellata* von Scheven, 1781; *S. scutularia* Schreber, 1784; *S. scutellata quatuor maculata* Christ, 1791; *C. pterotus* Panzer, 1801; *C. geniculatus* Stephens, 1829, nom. nud.; *C. phaeopterus* Stephens, 1829, nom. nud.). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, NS, AL), **ES** (KR, BR, IR, YA), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE), Kazakhstan, Mongolia, China (CE).
- Crabro (Crabro) sibiricus** A. Morawitz, 1866. Russia: **WS** (OM, NS, KM, AL), **ES** (TU, KR, IR, BR, ZB), **FE** (AM, PR). – Kazakhstan, Mongolia, China (NE).
- Crabro (Crabro) signaticrus** F. Morawitz, 1893. Russia: **WS** (AL). – Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia.
- Crabro (Crabro) ussuriensis** Gussakovskij, 1932 (*C. koreanus* Tsuneki, 1947). Russia: **ES** (BR, ZB), **FE** (AM, KH, PR). – China (NE), Korean Peninsula.
- Crabro (Crabro) werestschagini** Gussakovskij, 1932 (*C. okabei* Yasumatsu, 1944). Russia: **ES** (BR, ZB), **FE** (AM, KH, PR). – China (NE).
- Crabro (Hemithyreopus) caspicus** (F. Morawitz, 1888) [*Blepharipus*]. Russia: **UR**. – Kazakhstan, Turkmenistan.
- Crabro (Hemithyreopus) femoralis** F. Morawitz, 1892. Russia: **EP** (S, NC), **ES** (BR, IR, KR, BR, ZB), **FE** (PR). – Mongolia, China (NE).
- Crabro (Hemithyreopus) loewi** Dahlbom, 1845 (*C. Loewi* Dahlbom, 1845; *C. Jaroszewskyi* F. Morawitz, 1892). Russia: **EP** (C, S), **UR**, **WS** (AL), **ES** (IR, ZB). – Europe (WE, SE, NE, EE), Turkmenistan, Kazakhstan.
- Crabro (Hemithyreopus) malyshevi** L. Ahrens, 1933. Russia: **EP** (C), **ES** (ZB). – Kazakhstan.

Crabro (Synothyreopus) pubens Marshakov, 1976. Russia: **EP** (S). – Turkmenistan.

CROSSOCERUS Lepeletier de Saint Fargeau et Brullé, 1835 (*Coelocrabro* Thomson, 1874; *Dolichocrabro* Ashmead, 1899; *Stenocrabro* Ashmead, 1899; *Synorhopalum* Ashmead, 1899; *Ischnolynthus* Holmberg, 1903; *Yuchiha* Pate, 1944; *Fentis* Tsuneki, 1971; *Corenocrabro* Tsuneki, 1991, nom. nud., nom. praeocc., nec Tsuneki, 1974). Type species *Crabro scutatus* Fabricius, 1787 (= *Sphex palmipes* Linnaeus, 1767). The genus includes 23 subgenera: *Crossocerus* Lepeletier de Saint Fargeau et Brullé, 1835, *Blepharipus* Lepeletier de Saint Fargeau et Brullé, 1835, *Cuphopterus* A. Morawitz, 1874, *Hoplocrabro* Thomson, 1874, *Microcrabro* de Saussure, 1892, *Epicrossocerus* Ashmead, 1899, *Ablepharipus* Perkins, 1913, *Acanthocrabro* Perkins, 1913, *Apocrabro* Pate, 1944, *Nothocrabro* Pate, 1944, *Stictoptila* Pate, 1944, *Ainocrabro* Tsuneki, 1954, *Oxy-crabro* Leclercq, 1961, *Paroxycrabro* Leclercq, 1963, *Alicrabro* Tsuneki, 1968, *Apoides* Tsuneki, 1968, *Neoblepharipus* Leclercq, 1968, *Towada* Tsuneki, 1970, *Bnunius* Tsuneki, 1971, *Ormicrabro* Leclercq, 1973, *Thao* Tsuneki, 1982, *Orthocrabro* Tsuneki, 1990, and *Yambal* Tsuneki, 1990. Number of species: World – 249, Palearctic – 78, Russia – 39.

Crossocerus (Ablepharipus) assimilis (F. Smith, 1856) [Crabro] (*Crabro affinis* Wesmael, 1852, nom. praeocc., nec Rossi, 1792, non *Crossocerus affinis* Lepeletier de Saint Fargeau et Brullé, 1835; *C. socius* Thomson, 1870; *C. Tirolensis* Kohl, 1878). Russia: **EP** (C, E, S, NC), **UR**, **WS** (AL), **ES** (IR, ZB), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE, EE), Turkey, Kazakhstan, Mongolia, Korean Peninsula, Japan (Hon).

Crossocerus (Ablepharipus) congener (Dahlbom, 1844) [Crabro]. Russia: **EP** (C, E, NC), **UR**, **WS** (AL), **FE** (PR, KU). – Europe (WE, NE, SE, EE), Kazakhstan, Mongolia, Japan (Hon).

Crossocerus (Ablepharipus) podagricus (Vander Linden, 1829) [Crabro] (*Crabro tibialis* Stephens, 1829, nom. nud., nom. praeocc., nec *Vespa (Crabro) tibialis* Gmelin, 1790; *Crossocerus vicinus* Dahlbom, 1842; *Crabro Snoflaki* Zavadil in Zavadil et Šnoflak, 1948; *C. podagricus punctata* Šnoflak in Zavadil et Šnoflak, 1948). Russia: **EP** (N, C, E, NC, CR), **UR**, **WS** (AL), **FE** (PR, SA, KU). – Europe (WE, NE, SE, EE), N Africa, Turkey, Iran, Kazakhstan, Mongolia, Korean Peninsula, Japan (Hok, Hon).

Crossocerus (Ablepharipus) shibuyai (Iwata, 1934) [Crabro]. Russia: **FE** (PR, SA, KU). – Korean Peninsula, Japan (Hok, Hon).

Crossocerus (Acanthocrabro) vagabundus (Panzer, 1799) [Crabro] (*Crabro bojus* Schrank, 1802; *Blepharipus 5 maculatus* Lepeletier de Saint Fargeau et Brullé, 1835; *Crossocerus lefebvrei* Lepeletier de Saint Fargeau et Brullé, 1835; *Crabro vagabundus fasciatus* A. Costa, 1871; *C. vagabundus melanotica* Bischoff, 1921; *Corenocrabro ectemiformis* Tsuneki, 1974; *C. ectemiformis* Tsuneki, 1991, nom. nud., nom. praeocc., nec Tsuneki, 1974). Russia: **EP** (N, NW, C, E, NC, CR), **UR**, **WS** (TK, AL), **ES** (KR, IR, ZB), **FE** (AM, KH, PR, SA, KA). – Europe (WE, NE, SE, EE), N Africa, Turkey, Uzbekistan, Kazakhstan, Mongolia, China (NE, NC, NW, SW, CE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu), India.

Crossocerus (Ainocrabro) malaisei (Gussakovskij, 1932) [Crabro] (*Crabro aino* Tsuneki, 1947). Russia: **FE** (AM, PR, SA, KU). – Mongolia, Korean Peninsula, Japan (Hok, Hon, Shi).

Crossocerus (Blepharipus) annulipes annulipes (Lepeletier de Saint Fargeau et Brullé, 1835) [Blepharipus] (*C. gonager* Lepeletier de Saint Fargeau et Brullé, 1835; *Crabro nigrinus* Gimmerthal, 1836, nom. praeocc., nec *Blepharipus nigrinus* Lepeletier de Saint Fargeau et Brullé, 1835; *C. ambiguus* Dahlbom, 1842; *C. Capito* Dahlbom, 1845; *B. parkeri* Banks, 1921; *Crabro davidsoni* Sandhouse, 1938). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (AL), **ES** (IR), **FE** (AM, PR). – Europe (WE, NE, SE, EE), N Africa, Abkhazia, Turkey, Israel, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, N America.

Crossocerus (Blepharipus) annulipes hokkaidoensis Tsuneki, 1954. Russia: **FE** (SA, KU). – China (NE, CE), Korean Peninsula, Japan (Hok, Hon).

Crossocerus (Blepharipus) barbipes Dahlbom, 1845 (*Crabro ater* Cresson, 1865, nom. praeocc., nec Olivier, 1792; *C. hirtipes* A. Morawitz, 1866; *C. hirtipes* A. Morawitz, 1866, nom. praeocc., nec A. Morawitz, 1866; *Dolichocrabro Wickhamii* Ashmead, 1899; *D. Wickhamii* Ashmead, 1902, nom. praeocc., nec Ashmead, 1899; *D. wickhami* Ashmead, 1910, nom. praeocc., nec Ashmead, 1899; *Crossocerus pammelas* Pate, 1944, substitute name for *Crabro ater* Cresson, 1865). Russia: **EP** (NW, C, E), **UR**, **WS** (TK, AL), **ES** (KR, IR, ZB), **FE** (KH, PR, SA, KU). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan, Mongolia, China (SW), Korean Peninsula, Japan (Hok, Hon, Yakushima, Ryu), N America.

- Crossocerus (Blepharipus) capitosus** (Shuckard, 1837) [Crabro] (*Crabro annulus* Dahlbom, 1839; *Crossocerus capitosus yezo* Tsuneki, 1960). Russia: **EP** (NW, C, E, S, NC, CR), **WS** (AL), **FE** (PR, SA, KU). – Europe (WE, NE, SE, EE), Georgia, Kazakhstan, Mongolia, China (CE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Crossocerus (Blepharipus) cetratus** (Shuckard, 1837) [Crabro] (*Crabro van der Lindeni* Dahlbom, 1839; *C. dilatatus* Herrich-Schaeffer, 1841; *C. inornatus* Matsumura, 1912; *Crossocerus dentsukanus* Tsuneki, 1976). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (IR), **FE** (PR, SA, KU). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan, Mongolia, China (SW), Korean Peninsula, Japan (Hok, Hon).
- Crossocerus (Blepharipus) cinxius** (Dahlbom, 1839) [Crabro] (*Crossocerus capitosus yamato* Tsuneki, 1960). Russia: **EP** (N, C), **UR**, **WS** (AL), **ES** (IR), **FE** (PR, SA, KU, MG). – Europe (WE, NE, SE, EE), Turkey, Tajikistan, Kazakhstan, Mongolia, China (SW), Korean Peninsula, Japan (Hok, Hon).
- Crossocerus (Blepharipus) heydeni** Kohl, 1880 (*Crabro sutshanicus* Gussakovskij, 1932; *C. hedgreni* Kjellander, 1954; *Crossocerus heydeni nipponis* Tsuneki, 1966; *C. murotai* Tsuneki, 1992). Russia: **EP** (CR), **UR**, **WS** (AL), **FE** (PR, SA). – Europe (SE, NE, EE), Turkey, Kazakhstan, Mongolia, Korean Peninsula, Japan (Hon).
- Crossocerus (Blepharipus) leucostoma** (Linnaeus, 1758) [Sphex] (*Crabro carbonarius* Dahlbom, 1839; *Crossocerus Rugosus* Herrich-Schaeffer, 1840, nom. nud.; *Crabro rugosus* Herrich-Schaeffer, 1841; *C. melanarius* Wesmael, 1852; *Blepharipus cinctipes* Provancher, 1882; *B. cinctipes* Provancher, 1883, objective synonym of Provancher, 1882; *Crabro niger* Provancher, 1888, nom. praeocc., nec *Crossocerus niger* Lepeletier de Saint Fargeau et Brullé, 1835; *Crabro nigror* W. Fox, 1895; *C. nigror* W. Fox, 1896, emendation of *C. nigror* W. Fox, 1895; *C. servus* Dalla Torre, 1897, substitute name for *C. niger* Provancher, 1888; *Stenocrabro cinctitarsis* Ashmead, 1901; *B. columbiae* Bradley, 1906; *Thyreopus stygius* Mickel, 1916; *Th. utensis* Mickel, 1916). Russia: **EP** (N, NW, C, E), **UR**, **WS** (AL), **ES** (IR), **FE** (KH, PR, SA, KA, MG). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan, Mongolia, Korean Peninsula, Japan (Hok, Hon), N America.
- Crossocerus (Blepharipus) megacephalus** (Rossi, 1790) [Crabro] (*Crabro aterrimus* Stephens, 1829, nom. nud.; *C. spiniceps* Stephens, 1829, nom. nud.; *C. tarsalis* Stephens, 1829, nom. nud.; *Crabro bidens* Haliday, 1833, nom. praeocc., nec Schrank, 1802; *Crossocerus niger* Lepeletier de Saint Fargeau et Brullé, 1835; *C. rufipes* Lepeletier de Saint Fargeau et Brullé, 1835; *Crabro laeviceps* F. Smith, 1856; *C. bison* A. Costa, 1884; *Crossocerus bison* A. Costa, 1884, objective synonym of *Crabro bison* A. Costa, 1884; ?*Crabro zaidamensis* Radoszkowski, 1887; *Coelocrabro leucostomoides* Richards, 1935, substitute name for *Crabro leucostoma* of Kohl, 1915 and authors, nec Linnaeus, 1758). Russia: **EP** (N, C, E, S, NC, CR), **UR**, **WS** (TK, AL), **ES** (IR), **FE** (AM, PR). – Europe (WE, NE, SE, EE), N Africa, Turkey, Iran, Tajikistan, Kazakhstan, Mongolia, China (NW), Japan (Hok), India.
- Crossocerus (Blepharipus) minamikawai** Tsuneki, 1966. Russia: **FE** (PR). – Japan (Hon).
- Crossocerus (Blepharipus) nigratus** (Lepeletier de Saint Fargeau et Brullé, 1835) [Blepharipus] (*Blepharipus nigrita* Lepeletier de Saint Fargeau et Brullé, 1835; *Crabro pubescens* Shuckard, 1837; *Crossocerus diversipes* Herrich-Schaeffer, 1841; *Crabro tischbeini* Dahlbom: Tischbein, 1850, nom. nud.; *C. inermis* Thomson, 1870; *Crossocerus melanogaster* Kohl, 1880; *B. nigricornis* Provancher, 1888; *Crabro sambucicola* C.Verhoeff, 1891; *C. pubescens daisetsuzanus* Tsuneki, 1947; *Crossocerus verhoeffi* Tsuneki, 1967; *C. verhoeffi sudai* Tsuneki, 1976; *C. babai* Tsuneki, 1979). Russia: **EP** (N, NW, C, E), **UR**, **WS** (AL), **ES** (IR), **FE** (PR, SA, KU, KA). – Europe (WE, NE, SE, EE), N Africa, Kazakhstan, Mongolia, China (NE), Korean Peninsula, Japan (Hok, Hon), N America.
- Crossocerus (Blepharipus) styrius** (Kohl, 1892) [Crabro] (*Crabro pauxillus* Gussakovskij, 1932; *C. sugiharai* Iwata, 1938; *Crossocerus pilicornis* Tsuneki, 1977). Russia: **EP** (E), **FE** (PR, SA, KU). – Europe (WE, NE, SE, EE), Korean Peninsula, Japan (Hok, Hon, Kyu).
- Crossocerus (Blepharipus) takeuchii** Tsuneki, 1957 (*C. etizenensis* Tsuneki, 1992). Russia: **FE** (PR). – Korean Peninsula, Japan (Hon, Kyu).
- Crossocerus (Blepharipus) tanakai** Tsuneki, 1954. Russia: **FE** (KH, PR, SA, KU). – Korean Peninsula, Japan (Hok, Hon).
- Crossocerus (Blepharipus) tyuzendzianus** Tsuneki, 1954. Russia: **EP** (C), **FE** (PR). – Korean Peninsula, Japan (Hok, Hon).
- Crossocerus (Blepharipus) walkeri** (Shuckard, 1837) [Crabro] (*Crabro Walkeri* Shuckard, 1837;

- C. geniculatus* Shuckard, 1837, nom. praeocc., nec Olivier, 1792, non Fabricius, 1793; *Crossocerus scaposus* Zetterstedt: Dahlbom, 1844, nom. nud.; *Crabro clypearis* Schenck, 1857; *C. clypearis* Schenck, 1860, nom. nud.; *C. cloëvorax* Nielson, 1901). Russia: **EP** (C, E, S, CR), **UR**, **WS** (AL), **ES** (IR, ZB), **FE** (PR, SA, KU). – Europe (WE, NE, EE), Turkey, Kazakhstan, Mongolia, Korean Peninsula, Japan (Hok, Hon).
- Crossocerus (Crossocerus) denticoxa** (Bischoff, 1932) [Crabro] (*Crabro denticornis* Gussakovskij, 1932, nom. praeocc., nec F. Smith, 1879; *Crossoce-
rus republicus* Leclercq, 1954, substitute name for *Crabro denticornis* Gussakovskij, 1932). Russia: **EP** (NC), **WS** (AL), **ES** (IR), **FE** (AM, PR). – Europe (WE, SE, EE), Kazakhstan, Mongolia, China (CE), Korean Peninsula.
- Crossocerus (Crossocerus) denticrus** Herrich-Schaeffer, 1841 (*C. Denticrus* Herrich-Schaeffer, 1840, nom. nud.). Russia: **WS** (AL), **FE** (PR, SA, KU). – Europe (WE, NE, EE), Mongolia, Korean Peninsula, Japan (Hok, Hon).
- Crossocerus (Crossocerus) distinguendus** (A. Morawitz, 1866) [Crabro] (*Crabro mucronatus* Thomson, 1870, nom. praeocc., nec Fabricius, 1793). Russia: **EP** (C, E, NC, CR), **WS** (AL). – Europe (WE, NE, SE, EE), Kazakhstan, Mongolia.
- Crossocerus (Crossocerus) elongatulus annulatus** Lepeletier de Saint Fargeau et Brullé, 1835 (*C. annulatus* Lepeletier de Saint Fargeau et Brullé, 1835; *Crabro proximus* Shuckard, 1837; *C. hyalinus* Shuckard, 1837; *C. transversalis* Shuckard, 1837; *C. obliquus* Shuckard, 1837; *C. propinquus* Shuckard, 1837). Russia: **EP** (S), **UR**. – Europe (WE, SE, EE), Turkey.
- Crossocerus (Crossocerus) elongatulus elongatulus** (Vander Linden, 1829) [Crabro] (*Crabro Stigma* Stephens, 1829, nom. nud.; *Crossocerus varipes* Lepelletier de Saint Fargeau et Brullé, 1835; *C. affinis* Lepeletier de Saint Fargeau et Brullé, 1835; *C. luteipalpis* Lepeletier de Saint Fargeau et Brullé, 1835; *C. morio* Lepeletier de Saint Fargeau et Brullé, 1835; *C. pallidipalpis* Lepeletier de Saint Fargeau et Brullé, 1835; *Crabro brevis* Eversmann, 1849, nom. praeocc., nec Vander Linden, 1829; *C. scutellaris* F. Smith, 1851, nom. praeocc., nec Gimmerthal, 1836; *C. sulcus* W. Fox, 1895; *Stenocrabro plesius* Rohwer, 1912; *Crabro elongatulus Berlandi* Richards, 1928). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (KR, IR), **FE** (PR, SA, KU). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Iran, Turkmenistan, Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia, Japan (Hok), N America, S America.
- Crossocerus (Crossocerus) emarginatus** (Kohl, 1899) [Crabro] (*Crabro pacificus* Gussakovskij, 1932). Russia: **ES** (IR, BR, ZB), **FE** (AM, KH, PR, SA, KU). – Kazakhstan, Mongolia, China (CE), Korean Peninsula, Japan (Hok, Hon, Shi, Yakushima, Ryu).
- Crossocerus (Crossocerus) exiguus** (Vander Linden, 1829) [Crabro] (*C. aphidum* Lepeletier de Saint Fargeau et Brullé, 1835). Russia: **EP** (N, NW, C, E), **UR**, **WS** (NS, AL), **ES** (IR, YA, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Turkmenistan, Kazakhstan, Mongolia, China (NE), Korean Peninsula.
- Crossocerus (Crossocerus) kohli** (Bischoff, 1921) [Crabro] (*Crabro diacanthus* Gussakovskij, 1930). Russia: **WS** (AL), **ES** (ZB), **FE** (PR). – Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NW), India.
- Crossocerus (Crossocerus) lundbladi** (Kjellander, 1954a) [Crabro]. Russia: **EP** (N). – Europe (NE).
- Crossocerus (Crossocerus) ovalis** Lepeletier de Saint Fargeau et Brullé, 1835 (*Crabro punctum* Zetterstedt, 1838; *C. anxius* Wesmael, 1852; *C. Shuckardi* F. Smith, 1856, nom. praeocc., nec Dahlbom, 1838; *C. ovatus* W. Schulz, 1906, emendation of Lepeletier de Saint Fargeau et Brullé, 1835). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), Kazakhstan, Mongolia.
- Crossocerus (Crossocerus) palmipes chosensensis** Tsuneki, 1957. Russia: **ES** (ZB), **FE** (AM, KH, PR). – Korean Peninsula.
- Crossocerus (Crossocerus) palmipes palmipes** (Linnaeus, 1767) [Sphex] (*Sphex palmaria* Schreber, 1784; *Crabro scutatus* Fabricius, 1787; *Crossocerus ornatus* Lepeletier de Saint Fargeau et Brullé, 1835; *Crabro scutellaris* Gimmerthal, 1836; *C. gracilis* Eversmann, 1849). Russia: **EP** (N, NW, C, E), **UR**, **WS** (NS, AL), **ES** (KR, IR, BR). – Europe (WE, NE, SE, EE), N Africa, Turkey, Kazakhstan, Mongolia.
- Crossocerus (Crossocerus) pullulus** (A. Morawitz, 1866) [Crabro] (*Crabro imitans* Kohl, 1915). Russia: **EP** (C, E, S), **WS** (AL), **ES** (YA, IR, BR, ZB), **FE** (AM, KH, PR, SA, KA, MG). – Europe (WE, NE, SE, EE), Kazakhstan, Mongolia.
- Crossocerus (Crossocerus) tarsatus** (Shuckard, 1837) [Crabro] (*C. palmatus* De Stefani Perez, 1884, nom. praeocc., nec Panzer, 1797). Russia: **EP** (C, E, NC, CR), **WS** (AL), **FE** (PR, KA). – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Iran, Kazakhstan, Mongolia, Korean Peninsula, N America.

- Crossocerus (Crossocerus) ungyo** Terayama, 2017 (*C. ungyo* Terayama in Terayama et Takahashi, 2017, substitute name for *Crabro uchidai* Tsuneki, 1947, nom. praeocc., nec Takeuchi, 1931 = *Cimbex femorata* (Linnaeus, 1758)). Russia: **ES** (IR, YA, ZB), **FE** (AM, KH, PR, KU, KA, MG, CH). – Mongolia, Japan (Hok).
- Crossocerus (Crossocerus) varus** Lepeletier de Saint Fargeau et Brullé, 1835, nom. praeocc., nec *Crabro varus* Panzer, 1799 (now in *Tracheliodes* A. Morawitz); (*C. pusillus* Lepeletier de Saint Fargeau et Brullé, 1835; *C. striatulus* Lepeletier de Saint Fargeau et Brullé, 1835; *Crabro scutellatus* Stephens, 1829, nom. nud., nom. praeocc., nec *Sphex scutellata* von Scheven, 1781 (now in *Crabro*); *Crabro spinipectus* Shuckard, 1837; *Crossocerus striatus* Lepeletier de Saint Fargeau, 1845, lapsus for or emendation of *C. striatulus* Lepeletier de Saint Fargeau et Brullé, 1835; *C. varius* Lepeletier de Saint Fargeau, 1845, emendation of *C. varus* Lepeletier de Saint Fargeau et Brullé, 1835; *Crabro intricatus* F. Smith, 1856, substitute name for *C. striatus* Lepeletier de Saint Fargeau, 1845; *C. Lepeletieri* F. Smith, 1856, substitute name for *C. striatulus* Lepeletier de Saint Fargeau et Brullé, 1835). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (AL), **ES** (KR, IR), **FE** (PR, SA, KU, KA). – Europe (WE, NE, SE, EE), N Africa, Turkey, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (SW), Korean Peninsula, Japan (Hok, Hon).
- Crossocerus (Crossocerus) wesmaeli parvicorpus** Tsuneki, 1974 (*C. wesmaeli parvicorpus* Tsuneki, 1991, nom. nud.). Russia: **FE** (PR). – China (NE), Korean Peninsula, Japan (Hon).
- Crossocerus (Crossocerus) wesmaeli wesmaeli** (Vander Linden, 1829) [*Crabro*] (*Ceratocolus maurus* Lepeletier de Saint Fargeau et Brullé, 1835; *C. zieglerei* Lepeletier de Saint Fargeau et Brullé, 1835). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (TM, AL), **ES** (IR), **FE** (AM, PR, SA, KU, KA). – Europe (WE, NE, EE), N Africa, Turkey, Tajikistan, Uzbekistan, Kazakhstan, N America.
- Crossocerus (Crossocerus) yasumatsui** (Tsuneki, 1947) [*Crabro*] (*Crabro yasumatsui mongolensis* Tsuneki, 1972; *C. nambui* Tsuneki, 1982). Russia: **WS** (AL), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, MG, CH). – Kyrgyzstan, Kazakhstan, Mongolia, Japan (Hok, Hon, Shi), SE Asia.
- Crossocerus (Cuphopteris) binotatus** Lepeletier de Saint Fargeau et Brullé, 1835 (*Crabro signatus* Panzer, 1798, nom. praeocc., nec Olivier, 1792; *C. monstrosus* Dahlbom, 1845; *C. confusus* Schulz, 1906, substitute name for *C. signatus* Panzer, 1798). Russia: **EP** (N, C, E, NC, CR), **UR**, **FE** (PR). – Europe (WE, NE, EE), N Africa, Iran, Kazakhstan, India.
- Crossocerus (Cuphopteris) dimidiatus dimidiatus** (Fabricius, 1781) [*Crabro*] (*Crabro subpunctatus* Rossi, 1790; *C. signatus* Olivier, 1792; *C. sexmaculatus* Olivier, 1792; *C. serripes* Panzer, 1797; *C. notatus* Illiger in Rossi, 1807; *C. analis* Stephens, 1829, nom. nud.; *C. consobrinus* Stephens, 1829, nom. nud.; *Blepharipus pauperatus* Lepeletier de Saint Fargeau et Brullé, 1835; *Crabro armipes* von Siebold, 1844). Russia: **EP** (N, C, E, CR), **UR**, **WS** (AL), **ES** (TU, IR), **FE** (AM, PR, KA, MG, CH). – Europe (WE, NE, SE, EE), N Africa, Turkey, Kyrgyzstan, Kazakhstan, Mongolia, China (SW).
- Crossocerus (Cuphopteris) dimidiatus agyo** Terayama et Takahashi, 2017, substitute name for *Crabro dimidiatus sapporoensis* Kohl, 1915 (*Crabro serripes sapporoensis* Kohl, 1915, nom. praeocc., nec *C. sapporoensis* Matsumura, 1911 (= *Ectemnius fossorius* (Linnaeus, 1758))). Russia: **FE** (SA, KU). – Korean Peninsula, Japan (Hok, Hon).
- Crossocerus (Cuphopteris) hakusanus** Tsuneki, 1954. Russia: **FE** (PR, SA, KU). – Korean Peninsula, Japan (Hok, Hon, Kyu, Ryu), SE Asia.
- Crossocerus (Cuphopteris) subulatus** (Dahlbom, 1845) [*Crabro*]. Russia: **EP** (N, NW, C, E), **UR**, **WS** (AL), **FE** (AM, PR, SA, KU). – Europe (WE, NE, EE), Kazakhstan, Mongolia, Japan (Hok, Hon, Shi).
- Crossocerus (Cuphopteris) suzukii** (Matsumura, 1912) [*Crabro*] (*Crabro monstrosus suzukii* Matsumura, 1912). Russia: **FE** (PR, SA, KU). – Korean Peninsula, Japan (Hok, Hon, Shi).
- Crossocerus (Cuphopteris) yanoi** (Tsuneki, 1947) [*Crabro*]. Russia: **FE** (SA, PR, KU). – Korean Peninsula, Japan (Hok, Hon, Shi).
- Crossocerus (Hoplocrabro) pseudopalmaris** (Gusakovskij, 1932) [*Crabro*] (*C. asiaticus* Tsuneki, 1967). Russia: **FE** (AM, KH, PR). – China (NE), Korean Peninsula.
- Crossocerus (Hoplocrabro) quadrimaculatus** (Fabricius, 1793) [*Crabro*] (*Crabro 4punctatus* Fabricius, 1793; *C. murorum* Latreille, 1805; *C. levipes* Vander Linden, 1829; *Crossocerus bimaculatus* Lepeletier de Saint Fargeau et Brullé, 1835; *Crabro 5-maculatus* [sic] Dahlbom, 1838; *C. rotundarius* Dahlbom, 1838). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (TM, AL), **ES** (TU, KR, IR, BR, ZB), **FE** (AM, PR). – Europe

(WE, NE, SE, EE), N Africa, Turkey, Iran, Tajikistan, Uzbekistan, Kazakhstan, Mongolia.

Crossocerus (Neoblepharipus) amurensis (Kohl, 1892) [Crabro]. Russia: **FE** (AM, KH, PR, SA, KU). – Mongolia, China (CE), Korean Peninsula, Japan (Hok, Hon).

Crossocerus (Ornicrabro) flavissimus Leclercq, 1973. Russia: **FE** (PR). – SE Asia.

Crossocerus (Oxycrabro) acanthophorus (Kohl, 1892) [Crabro] (*Crabro pavlovskii* Gussakovskij, 1952). Russia: **EP** (S, NC), **WS** (AL). – Europe (WE, NE, SE, EE), N Africa, Turkey, Syria, Israel, Tadjikistan, Kazakhstan, Mongolia.

Crossocerus (Towada) flavitarsus (Tsuneki, 1947) [Crabro] (*C. leclercqi* Tsuneki, 1959). Russia: **FE** (PR, SA, KU). – Korean Peninsula, Japan (Hok, Hon, Kyu).

Ectemnius Dahlbom, 1845 (*Mesocrabro* C. Verhoeff, 1892; *Pseudocrabro* Ashmead, 1899; *Xestocrabro* Ashmead, 1899; *Xylocrabro* Ashmead, 1899; *Hylocrabro* R. Perkins, 1902; *Melanocrabro* R. Perkins, 1902; *Xenocrabro* R. Perkins, 1902; *Lophocrabro* Rohwer, 1916; *Ceratocrabro* Tsuneki, 1970; *Papuacrabro* Tsuneki, 1983; *Metactemnius* Tsuneki, 1984; *Spadicocrabro* Tsuneki, 1990). Type species “*E. guttatus*, Dahlb.”: Ashmead, 1899 (= *Crabro guttatus*: Dahlbom, 1845 = *C. guttatus* Vander Linden, 1829). The genus includes 16 subgenera: *Ectemnius* Dahlbom, 1845, *Clytochrysus* A. Morawitz, 1864, *Thyreocerus* A. Costa, 1871, *Hypocrabro* Ashmead, 1899, *Metacrabro* Ashmead, 1899, *Protothyreopus* Ashmead, 1899, *Nesocrabro* R. Perkins, 1899, *Oreocrabro* R. Perkins, 1902, *Merospis* Pate, 1941, *Apocnemnius* Leclercq, 1950, *Cameronitus* Leclercq, 1950, *Protoctemnius* Leclercq, 1951, *Yanonius* Tsuneki, 1956, *Policrabro* Leclercq, 1958, *Iwataia* Tsuneki, 1959, and *Leocrabro* Leclercq, 1968. Number of species: World – 188; Palaearctic – 44; Russia – 27.

Ectemnius (Cameronitus) nigratarsus (Herrich-Schaeffer, 1841) [Crabro] (*Crabro Nigratarsus* Herrich-Schaeffer, 1840, nom. nud.; *C. trinotatus* A. Costa, 1867). Russia: **EP** (C, E, CR), **UR**, **WS** (KM, AL), **FE** (AM, PR). – Europe (WE, NE, SE, EE), Georgia, Turkey, Korean Peninsula, Japan (Hok, Hon), India, Sri Lanka, SE Asia, Australia.

Ectemnius (Cameronitus) radiatus (Pérez, 1905) [Crabro] (*Crabro nigratarsus mizuho* Tsuneki, 1947; *E. mizuho* Tsuneki, 1952). Russia: **FE** (PR). – Korean Peninsula, Japan (Hok, Hon, Kyu).

Ectemnius (Clytochrysus) cavifrons (Thomson, 1870) [Crabro]. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (KM, AL), **ES** (KR, IR, ZB), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE, SE, EE), N Africa, Tajikistan, Kazakhstan, Mongolia, Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu), SE Asia.

Ectemnius (Clytochrysus) lapidarius (Panzer, 1803) [Crabro] (*Crabro sinuatus* Fabricius, 1804; *C. chrysoctomus* Lepeletier de Saint Fargeau et Brullé, 1835, nom. praeocc., nec Gmelin, 1790; *C. comptus* Lepeletier de Saint Fargeau et Brullé, 1835; *C. duodecimguttatus* Stephens, 1829, nom. nud.; *C. xylurgus* Shuckard, 1837; *C. interstinctus* F. Smith, 1851; *C. obscurus* F. Smith, 1856; *C. gracilissimus* Packard, 1866; *C. denticulatus* Packard, 1866; *C. effusus* Packard, 1866; *C. papagorum* Viereck, 1908). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (NS, KM, AL), **ES** (IR, BR, ZB), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Iran, Kyrgyzstan, Kazakhstan, Mongolia, China (NE), Korean Peninsula, Japan (Hok, Hon), Africa, N America.

Ectemnius (Clytochrysus) ruficornis (Zetterstedt, 1838) [Crabro] (*Crabro aurilabris* Herrich-Schaeffer, 1841; *C. nigrifrons* Cresson, 1865; *C. contiguus* Cresson, 1865; *C. septentrionalis* Packard, 1866; *C. planifrons* Thomson, 1870; *C. longipalpis* C. Verhoeff, 1892; *C. lineatotsaris* Matsumura, 1911; *C. chipsani* Matsumura, 1912). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (KM, AL), **ES** (KR, IR, BR, ZB), **FE** (AM, KH, PR, SA, KU, KA). – Europe (WE, NE, EE), Turkey, Kazakhstan, Mongolia, Korean Peninsula, Japan (Hok, Hon, Ryu), SE Asia, N America.

Ectemnius (Clytochrysus) sexcinctus (Fabricius, 1775) [Crabro] (*Crabro quadricinctus* Fabricius, 1787; *Sphex interrupte-fasciata* Retzius, 1783; *S. cribraria quatuorcincta* Christ, 1791; *Crabro tibialis* Olivier, 1792; *C. 8 maculata* Preyßler, 1793; *C. zonatus* Panzer, 1797; *C. vespiiformis* Panzer, 1798; *C. cinctus* Spinola, 1806, nom. praeocc., nec Rossi, 1790; *C. flavipes* Lepeletier de Saint Fargeau et Brullé, 1835, nom. praeocc., nec Fabricius, 1781; *C. tetraedrus* Blanchard, 1840; *C. saundersi* R. Perkins, 1899; *E. yosemite* Pate, 1946). Russia: **EP** (NW, C, CR), **WS** (KM, AL), **ES** (TU, BR), **FE** (PR). – Europe (WE, NE, SE, EE), N Africa, Turkey, Iran, Afghanistan, Pakistan, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, China (CE), Mongolia, India, N America.

- Ectemnius (Ectemnius) borealis** (Zetterstedt, 1838) [Crabro] (*Crabro borealis* Zetterstedt, 1838; *C. bipunctatus* Zetterstedt, 1838, nom. praeocc., nec Fabricius, 1787; *C. nigrinus* Herrich-Schaeffer, 1840, nom. nud.; *C. nigrinus* Herrich-Schaeffer, 1841; *C. parvulus* Packard, 1866, nom. praeocc., nec Herrich-Schaeffer, 1841; *Lindenius Gredleri* Kohl, 1878; *Crabro proletarius* Mickel, 1916). Russia: **EP** (N, C, E, S, NC, CR), **UR, WS** (AL), **ES** (KR, IR, BR, ZB), **FE** (AM, PR, SA, KU, KA). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan, Mongolia, Korean Peninsula, Japan (Hok), N America.
- Ectemnius (Ectemnius) dives** (Lepeletier de Saint Fargeau et Brullé, 1835) [Solenius] (*S. 8-notatus* Lepeletier de Saint Fargeau et Brullé, 1835; *S. octavonotatus* Lepeletier de Saint Fargeau et Brullé, 1835; *Crabro alatulus* Dahlbom, 1839; *C. Pictipes* Herrich-Schaeffer, 1840, nom. nud.; *C. pictipes* Herrich-Schaeffer, 1841; *C. auratus* F. Smith, 1856, substitute name for *Solenius dives* Lepeletier de Saint Fargeau et Brullé, 1835; *C. montanus* Cresson, 1865, nom. praeocc., nec Gistel, 1857; *C. cristatus* Packard, 1866; *C. cubiceps* Packard, 1866; *C. heraclei* Rohwer, 1908; *C. montivagans* Strand, 1916). Russia: **EP** (N, C, E, S, NC, CR), **UR, WS** (NS, KM, AL), **ES** (IR, BR, ZB), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Israel, Kazakhstan, China (SW), Korean Peninsula, Japan (Hok, Hon) N America.
- Ectemnius (Ectemnius) guttatus** (Vander Linden, 1829) [Crabro] (*Crabro laportei* Lepeletier de Saint Fargeau et Brullé, 1835; *C. Spinicollis* Herrich-Schaeffer, 1840, nom. nud.; *C. spinicollis* Herrich-Schaeffer, 1841; *C. parvulus* Herrich-Schaeffer, 1841; *C. pictus* Schenck, 1857, nom. praeocc., nec Fabricius, 1793 (now in *Dinetus*); *C. pictus* Schenck, 1860, nom. nud.; *C. divitoides* C. Verhoeff, 1892; *C. verhoeffi* Dalla Torre, 1897, substitute name for *C. parvulus* of C. Verhoeff, 1892; *C. dives schencki* Cockerell, 1907, substitute name for *C. pictus* Schenck, 1857). Russia: **EP** (N, NW, C, E, NC, CR), **UR, WS** (AL), **ES** (IR, ZB). – Europe (WE, NE, SE, EE), Kazakhstan.
- Ectemnius (Ectemnius) rugifer** (Dahlbom, 1845) [Crabro]. Russia: **EP** (C, E, S, CR), **UR, WS** (AL). – Europe (WE, NE, SE, EE), Turkey.
- Ectemnius (Hypocrabro) confinis** (Walker, 1871) [Crabro] (*E. laevigatus* De Stefani Perez, 1884; *Crabro flavicollis* F. Morawitz, 1892; *C. Hannonis* Gribodo, 1896; *C. subtilis* Pérez: Antiga, Bofill, 1904, nom. nud.; *C. subtilis* Pérez, 1905). Russia: **EP** (C, S, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Turkey, Jordan, Israel, Iraq, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, China (NE), Korean Peninsula, Japan (Ryu), India.
- Ectemnius (Hypocrabro) continuus** (Fabricius, 1804) [Crabro] (*Crabro 6-maculatus* Say, 1824, nom. praeocc., nec Olivier, 1792; *C. agrestis* Stephens, 1829, nom. nud.; *C. divisus* Stephens, 1829, nom. nud.; *C. fuscitarsus* Herrich-Schaeffer, 1840, nom. nud.; *C. fuscitarsis* Herrich-Schaeffer, 1841; *C. vagatus* F. Smith, 1869; *C. granulatus* Walker, 1871; *C. rugosopunctatus* Taschenberg, 1875; *C. validus* De Stefani Perez, 1884; *C. vagans* Fokker, 1887; *Xylocrabro slossonae* Ashmead: Slosson, 1902: 5, nom. nud.; *C. bisex-maculatus* Viereck in J. Smith, 1910, substitute name for *Crabro 6-maculatus* Say, 1824; *C. sayi* Cockerell, 1910, substitute name for *Crabro 6-maculatus* Say, 1824; *Solenius giffardi* Rohwer, 1917). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR, WS** (TM, TK, NS, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA). – Europe (WE, NE, SE, EE), N Africa, Georgia, Azerbaidjan, Turkey, Syria, Jordan, Israel, Iraq, Central Asia, Kazakhstan, Mongolia, China (NW, NE, SW), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu), N America, Cuba, Guatemala, Venezuela.
- Ectemnius (Hypocrabro) hypsae** (De Stefani Perez, 1884) [Crabro] (*Crabro Hypsae* De Stefani Perez, 1884; *C. serotinus* De-Stefani, 1894; *C. laetus* Pérez: Antiga et Bofill, 1904, nom. nud.; *C. loetus* Pérez, 1905). Russia: **EP** (S). – Europe (WE, SE, EE), N Africa, Turkey, Israel.
- Ectemnius (Hypocrabro) meridionalis** (A. Costa, 1867) [Crabro] (*Crabro finitimus* F. Morawitz, 1894). Russia: **EP** (S, CR). – Europe (WE, SE, EE), N Africa, Turkey, Syria, Jordan, Israel, Iran, Afghanistan, Central Asia, Kazakhstan.
- Ectemnius (Hypocrabro) pedicellaris** (F. Morawitz, 1889) [Crabro] (*Crabro Nielsenii* Kohl, 1915). Russia: **ES** (ZB), **FE** (AM, KH, PR). – Mongolia, China (NE, NC, CE), Korean Peninsula.
- Ectemnius (Hypocrabro) rubicola** (Dufour et Perris, 1840) [Solenius] (*Crabro Microstictus* Herrich-Schaeffer, 1840, nom. nud.; *C. microstictus* Herrich-Schaeffer, 1841; *C. larvatus* Wesmael, 1852; *C. pumilus* A. Costa, 1871). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR, WS** (AL), **ES** (KM, IR), **FE** (AM, PR, SA, KU). – Europe (WE, NE, SE, EE), Turkey, Iran, Kazakhstan, Japan (Hok, Hon, Shi, Kyu).
- Ectemnius (Hypocrabro) schlettereri** (Kohl, 1888) [Crabro] (*Crabro Schlettereri* Kohl, 1888). Russia:

- EP** (S), **UR**, **WS** (AL), **ES** (KR, IR, BR, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, SE, EE), Iran, Kazakhstan, China (NE, CE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu), India, SE Asia.
- Ectemnius (Hypocrabro) varentzowi** F. Morawitz, 1894 [Crabro] (*Crabro Varentzowi* F. Morawitz, 1894). Russia: **UR**, **WS** (NS), **ES** (IR). – Turkmenistan, Uzbekistan, Kazakhstan.
- Ectemnius (Hypocrabro) walteri** (Kohl, 1889) [Crabro] (*Crabro Walteri* Kohl in Kohl et Handlirsch, 1889). Russia: **EP** (S). – Turkey, Turkmenistan, Kazakhstan.
- Ectemnius (Metacrabro) cephalotes** (Olivier, 1792a) [Crabro] (*Crabro cephalotes* Olivier, 1792; *C. floralis* Olivier, 1792; *C. geniculatus* Olivier, 1792; *C. tibialis* Olivier, 1792; *C. cephalotes* Panzer, 1799, nom. praeocc., nec Olivier, 1792; *C. subinterruptus* Stephens, 1829, replacement name for *C. lituratus* of Panzer, 1804; *C. striatus* Lepeletier de Saint Fargeau et Brullé, 1835; *C. ornatus* Lepeletier de Saint Fargeau et Brullé, 1835; *Ceratocolus striatus* Lepeletier de Saint Fargeau et Brullé, 1835, nom. praeocc., nec *Crabro striatus* Lepeletier de Saint Fargeau et Brullé, 1835; *Blepharipus striatulus* Lepeletier de Saint Fargeau et Brullé, 1835; *Crabro Lindenius* Shuckard, 1837; *C. Shuckardi* Dahlbom, 1839; *C. interruptus* Dahlbom, 1845, nom. praeocc., nec Fabricius, 1787 (now in *Palarus*); *C. Fargeii* Smith, 1856, substitute name for *Ceratocolus striatus* Lepeletier de Saint Fargeau et Brullé, 1835; *Crabro aciculatus* Provancher, 1882; *C. aciculatus* Provancher, 1883, objective synonym of Provancher, 1882; *C. ruthenicus* F. Morawitz, 1892). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (AL), **FE** (PR). – Europe (WE, NE, SE, EE), N Africa, Turkey, Syria, Kazakhstan, N America.
- Ectemnius (Metacrabro) chrysites** (Kohl, 1892) [Crabro] (*Crabro auricomus* Bingham, 1897; *C. khasianus* Cameron, 1902; *E. butuani* Leclercq, 1963). Russia: **FE** (PR). – China (NE, CE, SW, SE), Korean Peninsula, Japan (Hon, Ryu), SE Asia, India.
- Ectemnius (Metacrabro) fossorius** (Linnaeus, 1758) [Sphex] (*Sphex fossoria* Linnaeus, 1758; *S. scutellata* *Bucephalus* Christ, 1791; *Crabro aspidiphorus* Schrank, 1802; *Solenius fuscipennis* Lepeletier de Saint Fargeau et Brullé, 1835: 714, nom. praeocc., nec Lepeletier de Saint Fargeau et Brullé, 1835: 710; *S. grandis* Lepeletier de Saint Fargeau et Brullé, 1835; *S. tetraedrus* Dahlbom, 1845; *C. fumipennis* F. Smith, 1856, substitute name for *Solenius fuscipennis* Lepeletier de Saint Fargeau et Brullé, 1835:714, nec Lepeletier de Saint Fargeau et Brullé, 1835:710; *C. montanus* Gistel, 1857; *C. Konowi* Kohl, 1905; *C. sapporoensis* Matsumura, 1911; *C. rubropictus* Matsumura, 1912). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (NS, KM, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE, SE, EE), N Africa, Turkey, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE), Korean Peninsula, Japan (Hok, Hon).
- Ectemnius (Metacrabro) iridifrons** (Pérez, 1905) [Crabro] (*E. iridifrons* [sic] *meridionalis* Tsuneki, 1984, nom. praeocc., nec *Crabro meridionalis* A. Costa, 1871). Russia: **FE** (PR). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu), SE Asia.
- Ectemnius (Metacrabro) lituratus** (Panzer, 1803) [Crabro] (*Solenius petiolatus* Lepeletier de Saint Fargeau et Brullé, 1835; *Ceratocolus fasciatus* Lepeletier de Saint Fargeau et Brullé, 1835; *Ceratocolus* [lapsus calami] *reticulatus* Lepeletier de Saint Fargeau et Brullé, 1835; *Crabro Kollari* Dahlbom, 1845; *C. argenteus* Schenck, 1857; *C. vestitus* F. Smith, 1858; *C. intermedius* A. Morawitz, 1866; *C. intermedius* A. Morawitz, 1866: 339, objective synonym of A. Morawitz, 1866: 264; *C. luxuriosus* A. Costa, 1871; *C. kollari Dallatorreanus* Kohl, 1880; *C. transiens* Kohl, 1915). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Turkey, Iran, Kazakhstan.
- Ectemnius (Metacrabro) spinipes** (A. Morawitz, 1866) [Crabro] (*Crabro spinipes* A. Morawitz, 1866b:341, objective synonym of A. Morawitz, 1866a:265; *C. Bulsanensis* Kohl, 1879). Russia: **EP** (C, E, NC, CR), **UR**, **WS** (TK, NS, AL), **ES** (KR, IR), **FE** (AM, KH, PR, SA). – Europe (WE, NE, C, EE), Azerbaijan, Turkey, Turkmenistan, Kazakhstan, Mongolia, China (NE), Korean Peninsula, Japan (Hok, Hon).
- Ectemnius (Thyreocerus) crassicornis** (Spinola, 1808) [Crabro] (*Crabro hybridus* Eversmann, 1849; *E. punctulatus* De-Stefani, 1884; *E. Siculus* De Stefani Perez, 1884). Russia: **EP** (E, S, NC, CR), **UR**, **WS** (AL), **ES** (KR, IR), **FE** (PR, SA, KU). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Syria, Jordan, Israel, Iraq, Iran, Central Asia, Kazakhstan.
- Ectemnius (Yanonius) martjanowi** (F. Morawitz, 1892) [Crabro] (*Crabro Martjanowi* F. Morawitz, 1892; *Clytochrysus dubiosus* Ashmead, 1904). Russia: **WS** (NS, AL), **ES** (KR, IR), **FE** (AM, KH, PR, SA, KU). – Mongolia, China (SW), Korean Peninsula, Japan (Hok, Hon), India.

- ENTOMOGNATHUS** Dahlbom, 1844 (*Florkinus* Leclercq, 1956). Type species *Crabro brevis* Vander Linden, 1829. The genus includes four subgenera: *Entomognathus* Dahlbom, 1844, *Koxinga* Pate, 1944, *Mashona* Pate, 1944, and *Toncahua* Pate, 1944. Number of species: World – 64, Palaearctic – 11, Russia – 4.
- Entomognathus brevis** (Vander Linden, 1829) [Crabro] (*Lindenius apicalis* Lepeletier de Saint Fargeau et Brullé, 1835; *L. nasutus* Gribodo, 1884). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (IR, BR, YA), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), NW Africa, Georgia, Turkey, Syria, Israel, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NE, NC), Japan (Hok, Hon).
- Entomognathus dentifer** (Noskiewicz, 1929) [Crabro] (*E. permixtus* Nouvel et Ribaut, 1956). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Turkey.
- Entomognathus sahlbergi** (A. Morawitz, 1866) [Crabro] (*C. sahlbergi* A. Morawitz, 1866). Russia: **FE** (KH). – Mongolia.
- Entomognathus schmiedeknechti** (Kohl, 1905) [Crabro] (*C. schmiedeknechti* Kohl, 1905). Russia: **EP** (C, S, NC, CR). – Europe (SE, EE), Turkey.
- LESTICA** Billberg, 1820 (*Solenius* Lepeletier de Saint Fargeau et Brullé, 1835; *Ceratocolus* Lepeletier de Saint Fargeau et Brullé, 1835; *Thyreus* Lepeletier de Saint Fargeau et Brullé, 1835, nom. praeocc., nec Panzer, 1806, non Swainson, 1821; *Hypothyreus* Ashmead, 1899; *Clypeocrabro* Richards, 1935; *Ptyx* Pate, 1947). Type species *Crabro subterraneus* Fabricius, 1775. Number of species: World – 44, Palaearctic – 12, Russia – 9.
- Lestica alata** (Panzer, 1797) [Crabro] (*Crabro basalis* F. Smith, 1856; *C. alatus japonicus* Schulz, 1904; *C. alatus rubidus* Schirmer, 1915; *L. spinicollis* Tsuneki, 1976). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (NS, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Turkey, Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NC, CE), Korean Peninsula, Japan (Hok), N India.
- Lestica camelus** (Eversmann, 1849) [Crabro] (*Crabro sapporensis* Matsumura, 1912). Russia: **EP** (C, E), **UR**, **WS** (NS, KM, AL), **ES** (KR, IR, BR, YA), **FE** (AM, KH, PR, SA). – Turkey, Kazakhstan, Mongolia, China (NE, SW), Korean Peninsula, Japan (Hok, Hon).
- Lestica clypeata** (Schreber, 1759) [Apis] (*Sphex clypearia* Schreber, 1784, misspelling or substitute name for *Apis clypeata* Schreber, 1759; *S. clypeata ovata* Christ, 1791; *Crabro vexillatus* Panzer, 1797; *C. lapidarius* Fabricius, 1804, nom. praeocc., nec Panzer, 1804; *Philanthus clypeatus* Thunberg, 1815, nom. praeocc., nec *Apis clypeata* Schreber, 1759; *Crabro Nigridens* Herrich-Schaeffer, 1840, nom. nud.; *C. nigridens* Herrich-Schaeffer, 1841; *C. quadrifer* Dufour, 1841). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, KM, AL), **ES** (IR, BR), **FE** (PR). – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Syria, Lebanon, Israel, Iraq, Iran, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan.
- Lestica collaris** (Matsumura, 1912) [Crabro] (*Crabro aberrans* Gussakovskij, 1932). Russia: **FE** (KH, PR). – Korean Peninsula, Japan (Hok, Hon, Kyu).
- Lestica constricta** Krombein, 1949. Russia: **FE** (PR). – China (SE), SE Asia.
- Lestica heros** (Kohl, 1915) [Crabro]. Russia: **FE** (PR). – China (SE), Korean Peninsula, Japan (Hok, Hon).
- Lestica pluschtschevskiyi** (F. Morawitz, 1891) [Crabro] (*Crabro Pluschtschevskiyi* F. Morawitz, 1891). Russia: **UR**, **WS** (AL). – Spain, Turkey, Kazakhstan.
- Lestica reiteri** (Kohl, 1915) [Crabro] (*Crabro Reiteri* Kohl, 1915; *C. reiteri kuramaensis* Iwata, 1938). Russia: **FE** (KH, PR). – Korean Peninsula, Japan (Hok, Hon).
- Lestica subterranea ochotica** (A. Morawitz, 1866) [Crabro] (*Crabro ochoticus* A. Morawitz, 1866a; *C. ochoticus* A. Morawitz, 1866b: 337, objective synonym of *C. ochoticus* A. Morawitz, 1866a: 128). Russia: **WS** (AL), **ES** (KR, BR, YA, ZB), **FE** (KH, PR). – Mongolia, China (CE).
- Lestica subterranea subterranea** (Fabricius, 1775) [Crabro] (*Crabro philanthoides* Panzer, 1801). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), N Africa, Turkey, Iran, Tajikistan, Kyrgyzstan, Kazakhstan, China (NC).
- LINDENIUS** Lepeletier de Saint Fargeau et Brullé, 1835 (*Chalcolamprus* Wesmael, 1852; *Trachelosimus* A. Morawitz, 1866). Type species *Crabro albilabris* Fabricius, 1793. Number of species: World – 64, Palaearctic – 53, Russia – 13.
- Lindenius aegyptius** (Kohl, 1888) [Crabro]. Russia: **EP** (S, NC). – Europe (WE), N Africa, Jordan, United Arab Emirates, Pakistan, Uzbekistan, Kazakhstan.
- Lindenius albilabris** (Fabricius, 1793) [Crabro] (*Crabro aenescens* Dahlbom, 1839). Russia: **EP** (N, NW, C,

- E, S, NC, CR), **UR**, **WS** (TK, KM, AL), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Syria, Israel, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, Korean Peninsula.
- Lindenius altaicus** Mokrousov, 2016. Russia: **WS** (AL).
- Lindenius gussakovskii** Marshakov, 1973. Russia: **EP** (S). – Uzbekistan, Kyrgyzstan, Kazakhstan.
- Lindenius ibex** Kohl, 1883. Russia: **EP** (C), **WS** (AL). – Greece, Bulgaria, Turkey, Syria, Israel.
- Lindenius laevis** A. Costa, 1867 (*Crabro rhaibopus* Kohl, 1915). Russia: **EP** (C, S, NC), **UR**. – Europe (SE, EE), Turkey, Kazakhstan.
- Lindenius latitarsis** Marshakov, 1973. Russia: **EP** (S, CR), **UR**. – Europe (EE), Turkey, Kazakhstan.
- Lindenius mesopleuralis** (F. Morawitz, 1890) [Crabro]. Russia: **EP** (E, S, NC, CR), **UR**, **WS** (NS, AL), **ES** (ZB), **FE** (PR). – Europe (WE, SE, EE), Turkey, Turkmenistan, Kazakhstan, Mongolia, China (NC, NW).
- Lindenius panzeri** (Vander Linden, 1829) [Crabro] (*L. venustus* Lepeletier de Saint Fargeau et Brullé, 1835; *Crabro latebrosus* Kohl, 1905; *L. harbinensis* Tsuneki, 1967; *L. panzeri mongolicus* Tsuneki, 1972). Russia: **EP** (C, E, S, NC), **UR**, **WS** (TM, AL), **ES** (IR, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Turkey, Iran, Afghanistan, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE).
- Lindenius parkanensis** (Zavadil, 1948) [Crabro] (*Crabro parkanensis* Zavadil in Zavadil et Šnoflak, 1948; *L. ponticus* de Beaumont, 1956). Russia: **EP** (C, S), **UR**, **WS** (AL). – Europe (SE, EE), Kazakhstan.
- Lindenius pygmaeus** (Rossi, 1794) [Crabro]. Russia: **EP** (C, E, S, NC), **UR**. – Europe (WE, NE, SE, EE), N Africa, Turkey, Syria, Jordan, Israel, Iran, Afghanistan, Central Asia, Kazakhstan.
- Lindenius satschouanus** (Kohl, 1915) [Crabro] (*Crabro satschouanus* Kohl, 1915; *L. kaszabi* Tsuneki, 1972). Russia: **EP** (S). – Turkey, Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (CE).
- Lindenius subaeneus** Lepeletier de Saint Fargeau et Brullé, 1835. Russia: **EP** (S), **WS** (AL). – Europe (WE, SE, EE), N Africa, Kazakhstan.
- ODONTOCRABRO** Tsuneki, 1971. Type species *Odontocrabro abnormis* Tsuneki, 1971. Number of species: World – 8, Palaearctic – 6, Russia – 1.
- Odontocrabro antropovi** Leclercq, 1991. Russia: **FE** (PR).
- RHOPALUM** Stephens, 1829 (*Euphilis* Risso, 1826, suppressed by ICZN (1978, Opinion 1106); *Rhopalum* Stephens, 1829, conserved by ICZN (1978, Opinion 1106); *Physoscelus* Lepeletier de Saint Fargeau et Brullé, 1835; *Physoscelis* Westwood, 1839, lapsus or emendation of *Physoscelus* Lepeletier de Saint Fargeau et Brullé, 1835; *Dryphus* Herrich-Schaeffer, 1840; *Alliognathus* Ashmead, 1899). Type species *Crabro rufiventris* Panzer, 1799. The genus includes seven subgenera: *Rhopalum* Stephens, 1829, *Corynopus* Lepeletier de Saint Fargeau et Brullé, 1835, *Calceorhopalum* Tsuneki, 1952, *Latrorhopalum* Tsuneki, 1952, *Aporhopalum* Leclercq, 1955, *Zelorhopalum* Leclercq, 1955, and *Notorhopalum* Leclercq, 1979. Number of species: World – 287, Palaearctic – 21, Russia – 12.
- Rhopalum (Calceorhopalum) pygidiale** Bohart in Bohart et Menke, 1976, (substitute name for *Crabro calceatus* Tsuneki, 1947, nom. praeocc., nec Rossi, 1794). Russia: **FE** (AM, PR, SA, KU). – Korean Peninsula, Japan (Hok, Hon).
- Rhopalum (Calceorhopalum) watanabei** Tsuneki, 1952 (*Rh. arasianum* Tsuneki, 1972). Russia: **FE** (PR, SA, KU). – Japan (Hok, Hon), SE Asia.
- Rhopalum (Corynopus) coarctatum** (Scopoli, 1763) [Sphex] (*Crabro crassipes* Fabricius, 1798; *C. tibialis* Fabricius, 1798, nom. praeocc., nec Olivier, 1792; *Rh. modestum* Rohwer, 1908). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (TK, NS, AL), **ES** (IR), **FE** (AM, KH, PR, KA, MG). – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Iran, Kazakhstan, China (CE), Korean Peninsula, Japan (Hok, Hon), N America.
- Rhopalum (Corynopus) gracile** Wesmael, 1852 (*Rh. nigrinum* Kiesenwetter, 1849, nom. praeocc., nec *Crabro nigrinus* Herrich-Schaeffer, 1841; *Rh. Gracile* Wesmael, 1852; *Crabro Kiesenwetteri* A. Morawitz, 1866, substitute name for *C. nigrinus* (Kiesenwetter, 1849); *Corynopus simplicipes* F. Morawitz, 1888). Russia: **EP** (C, S, NC), **UR**, **WS** (AL), **FE** (KH, PR, SA, KU, MG, KA). – Europe (WE, NE, SE, EE), Turkey, Uzbekistan, Kazakhstan, Korean Peninsula, Japan (Hok, Hon), N America.
- Rhopalum (Corynopus) kawabatai** Marshakov, 1976. Russia: **FE** (AM, KH, PR, SA).
- Rhopalum (Latrorhopalum) laticorne** (Tsuneki, 1947) [Crabro]. Russia: **ES** (IR, ZB), **FE** (AM, KH, PR, SA). – China (NE), Korean Peninsula.

Rhopalum (Latrorhopalum) latronum (Kohl, 1915) [Crabro]. Russia: **ES** (ZB), **FE** (KH, PR, SA, KU). – China (NC), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

Rhopalum (Rhopalum) austriacum (Kohl, 1899) [Crabro]. Russia: **EP** (CR), **FE** (PR, SA). – Europe (WE, SE, EE), N Africa, Abkhazia, Turkey, Israel.

Rhopalum (Rhopalum) clavipes (Linnaeus, 1758) [Sphex] (*Crabro rufiventris* Panzer, 1799). Russia: **EP** (N, C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (IR), **FE** (PR, KU, KA). – Europe (WE, NE, EE), N Africa, Uzbekistan, Kazakhstan, Mongolia, Korean Peninsula, Japan (Hok), N America.

Rhopalum (Rhopalum) jessonicum (Bischoff, 1921) [Crabro] (*Rh. ebetsuense* Tsuneki, 1952). Russia: **FE** (PR, SA, KU). – Korean Peninsula, Japan (Hok, Hon).

Rhopalum (Rhopalum) kuwayamai Tsuneki, 1952. Russia: **FE** (PR, SA, KU). – China (CE), Korean Peninsula, Japan (Hok, Hon).

Rhopalum (Rhopalum) mushaense Tsuneki, 1971. Russia: **FE** (PR). – SE Asia.

TRACHELIODES A. Morawitz, 1866 (*Brachymerus* Dahlbom, 1845, nom. praeocc., nec Chevolet in Dejean, 1835; *Fertonius* Pérez in Ferton, 1892). Type species *Crabro megerlei* Dahlbom, 1845. Number of species: World – 17, Palaearctic – 5, Russia – 2.

Tracheliodes alinae Nemkov, 1988. Russia: **FE** (PR).

Tracheliodes ghilarovi Nemkov, 1988. Russia: **FE** (PR).

TSUNEKIOLA Antropov, 1986. Type species *Tsunekiola tracheliformis* Antropov, 1986. Monotypic Palaearctic genus.

Tsunekiola tracheliformis Antropov, 1986. Russia: **FE** (PR).

Tribe LARRINI

GASTROSERICUS Spinola, 1839 (*Eparmatostethus* Kohl, 1907; *Paralellopsis* Maidl, 1914; *Dinetomorpha* Gussakovskij, 1931, unavailable under ICZN (1999, Article 13.3); *Gastrargyron* Gussakovskij, 1931, unavailable under ICZN (1999, Article 13.3); *Dinetomorpha* Pate, 1937, validation of *Dinetomorpha* Gussakovskij, 1931 under ICZN (1999, Article 13.1.2); *Gastrargyron* Pate, 1937:28, validation of *Gastrargyron* Gussakovskij, 1931 under ICZN (1999, Article 13.1.2)). Type species

Gastrosericus waltlii Spinola, 1839. Number of species: World – 61, Palaearctic – 14, Russia – 1.

Gastrosericus waltlii Spinola, 1839 (*Dinetus niger* Dufour, 1854; *G. Maracandicus* Radoszkowski, 1877; *G. rufiventris* F. Morawitz, 1889; *G. rufitarsis* Cameron, 1902; *G. lanuginosus* Arnold, 1922; *G. maracandicus dubius* Gussakovskij, 1931; *G. aiunensis* Giner Marí, 1945). Russia: **EP** (S, NC). – Europe (SE), N Africa, Armenia, Turkey, Cyprus, Syria, Jordan, Israel, Oman, Qatar, Saudi Arabia, United Arab Emirates, Yemen, Iraq, Iran, Pakistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, China (NC), India, Africa.

LARRA Fabricius, 1793 (*Larrana* Rafinesque, 1815, emendation or substitute name for *Larra* Fabricius, 1793; *Lara* Drapiez, 1819, lapsus or emendation of *Larra* Fabricius, 1793; *Monomatium* Shuckard, 1840; *Lyrops* Dahlbom, 1843, nom. praeocc., nec Illiger, 1807; *Larraxena* F. Smith, 1851; *Lara* LeConte, 1852, nom. praeocc., nec Drapiez, 1819; *Larrada* F. Smith, 1856). The genus includes two subgenera: *Larra* Fabricius, 1793 and *Cratolarra* Cameron, 1900. Type species *Larra ichneumoniformis* Fabricius, 1793 (= *Sphex anathema* Rossi, 1790). Number of species: World – 65, Palaearctic – 9, Russia – 1.

Larra anathema (Rossi, 1790) [Sphex] (*L. ichneumoniformis* Fabricius, 1793; *Pompilus teutonius* Fabricius, 1804; *Tachytes grandis* Chevrier, 1872). Russia: **EP** (C, E, S, NC, CR), **WS** (NS). – Europe (WE, SE, EE), N Africa, Georgia, Turkey, Syria, Iraq, Iran, Saudi Arabia, Bahrain, Israel, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, China (NE).

LARROPSIS Patton, 1892. Type species *Larrada tenuicornis* F. Smith, 1856. The genus includes two subgenera: *Larropsis* Patton, 1892 and *Ancistromma* Fox, 1893. Number of species: World – 40, Palaearctic – 4, Russia – 1.

Larropsis (Ancistromma) asiatica (Gussakovskij, 1935) [Ancistromma] (*Ancistromma shestakovi* Gussakovskij, 1935). Russia: **EP** (S). – Turkey, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.

LIRIS Fabricius, 1804 (*Liris* Rafinesque, 1815, emendation or substitute name for *Liris* Fabricius, 1804; *Notogonia* A. Costa, 1867, nom. praeocc., nec Perty, 1850 [Crustacea]; *Caenolarra* Cameron, 1900; *Spanolarra* Cameron, 1900; *Notogonius* Howard, 1901, lapsus for *Notogonia* A. Costa, 1867; *Chrysolarra*

- Cameron, 1901; *Notogonidea* Rohwer, 1911; *Dociliris* Tsuneki, 1967; *Nigiliris* Tsuneki, 1967; *Colloliris* Tsuneki, 1974). The genus includes four subgenera: *Liris* Fabricius, 1804, *Motes* Kohl, 1897, *Leptolarra* Cameron, 1900, and *Pitaliris* Tsuneki, 1982. Type species *Sphex auratus* Fabricius, 1787, nom. praec., nec Linnaeus, 1758 (= *Sphex aurulentus* Fabricius, 1787). Number of species: World – 314, Palaearctic – 17, Russia – 6.
- Liris atratus** (Spinola, 1805) [Larra] (*Larra micans* Spinola, 1806, unjustified emendation of *Larra atrata* Spinola, 1905; *Tachytes nigrita* Lepeletier de Saint Fargeau, 1845; *Notogonia pharaonum* Kohl, 1906). Russia: **UR**. – Europe (WE, SE), N Africa, United Arab Emirates, Kuwait, Turkey, Jordan, Israel, Iraq, Iran, Afghanistan, Pakistan, Kazakhstan.
- Liris festinans preaetermissus** (Richards, 1928) [Notogonia] (*Leptolarra schulthessi* Giner Marí, 1942). Russia: **EP** (NC). – Europe (WE, SE, EE), N Africa, Oman, United Arab Emirates, Saudi Arabia, Israel, Abkhasia, Turkey, Iran, Afghanistan, Uzbekistan.
- Liris inopinatus** de Beaumont, 1961. Russia: **EP** (S). – Europe (SE), Turkey, Syria, Israel.
- Liris niger** (Fabricius, 1775) [Sphex] (*Sphex nigra* Fabricius, 1775; *Larra pompiliformis* Panzer, [1807-1809], nom. praec., nec Panzer, 1804; *Anoplius uniocellatus* Dufour, 1833; *Larra confusa* Radoszkowski, 1887; *L. nigriventris* Cameron, 1889; *Tachytes germabensis* Radoszkowski, 1893; *Larra nana* Bingham, 1897; *L. iridipennis* Cameron, 1900; *Notogonidea baguenai* Giner Marí, 1934). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), N Africa, Yemen, Turkey, Jordan, Iran, Iraq, Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NE, CE), SE Asia, India.
- Liris nigricans** (Walker, 1871) [Larrada] (*Notogonia argyropyga* A. Costa, 1875; *N. sculpturata* Kohl, 1892; *N. reticulata* de Saussure, 1892; *Larra Jugurthae* Gribodo, 1894; *L. palumbula* Kohl, 1894; *N. mahensis* Cameron, 1907; *N. punctipleura* Cameron, 1908). Russia: **EP** (NC). – Europe (WE, SE, EE), N Africa, Yemen (Socotra), Oman, United Arab Emirates, Turkey, Israel, Iraq, Iran, Afghanistan, Tajikistan, Uzbekistan, Kazakhstan, China (CE), Japan (Kyu), India, Africa.
- Liris opalipennis** (Kohl, 1898) [Notogonia]. Russia: **EP** (S). – N Africa, United Arab Emirates, Turkmenistan, Tajikistan, Kazakhstan.
- PARAPIAGETIA** Kohl, 1897a (*LirospheX* Brèthes, 1913; *PsammospheX* Gussakovskij, 1952). Type species *Piagetia odontostoma* Kohl, 1884. Number of species: World – 29, Palaearctic – 17, Russia – 2.
- Parapiagetia kaszabi** Tsuneki, 1972. Russia: **EP** (S). – Turkmenistan, Kazakhstan, Mongolia, China (NW).
- Parapiagetia tridentata** Tsuneki, 1972. Russia: **EP** (S). – Iran, Pakistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NW).
- PROSOPIGASTRA** A. Costa, 1867 (*Homogambrus* Kohl, 1889; *Hologambrus* Morice, 1897, lapsus or emendation of *Homogambrus* Kohl, 1889). Type species *Prosopigastra punctatissima* A. Costa, 1867. Number of species: World – 36, Palaearctic – 22, Russia – 5.
- Prosopigastra bulgarica** Pulawski, 1958. Russia: **EP** (S). – Europe (SE, EE), Turkey, Iran, Kazakhstan.
- Prosopigastra globiceps** (F. Morawitz, 1889) [Tachysphex]. Russia: **EP** (S). – N Africa, United Arab Emirates, Turkmenistan, Kazakhstan, Mongolia, China (NC).
- Prosopigastra latifrons** Gussakovskij, 1933. Russia: **EP** (S). – Turkmenistan, Kazakhstan.
- Prosopigastra orientalis** de Beaumont, 1954 (*P. punctatissima orientalis* de Beaumont, 1947). Russia: **EP** (S, NC, CR). – Europe (SE, EE), Turkey, Israel, Tajikistan, Uzbekistan, Kazakhstan.
- Prosopigastra zalinda** de Beaumont, 1955. Russia: **EP** (S, NC). – Europe (WE, SE, EE), N Africa, Turkey, Israel, Kazakhstan, Mongolia.
- TACHYSPHEX** Kohl, 1883 (*Schistosphex* Arnold, 1922; *Atelosphex* Arnold, 1923). Type species *Tachysphex filicornis* Kohl, 1883. Number of species: World – 446, Palaearctic – 136, Russia – 38.
- Tachysphex angustatus** Pulawski, 1967. Russia: **EP** (S). – Europe (SE), Turkey, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NC).
- Tachysphex argentatus** Gussakovskij, 1952. Russia: **EP** (S). – N Africa, Israel, Saudi Arabia, Turkey, Syria, Turkmenistan, Tajikistan, Kazakhstan.
- Tachysphex blattivorus** Gussakovskij, 1952. Russia: **EP** (S). – Europe (WE), Tajikistan, Uzbekistan, Kazakhstan.
- Tachysphex brevipennis** Mercet, 1909 (*T. minutus* Nurse, 1909; *T. lilliputianus* R. Turner, 1917; *Atelosphex miscophoides* Arnold, 1923; *A. lugubris*

- Arnold, 1924; *T. imperfectus* de Beaumont, 1940; *T. rugosus* Gussakovskij, 1952; *T. heterochromus* de Beaumont, 1955; *T. rhodius* de Beaumont, 1960; *T. sinaiticus* Pulawski, 1964; *T. convexus* Pulawski, 1971). Russia: **EP** (S, CR). – Europe (WE, SE, EE), N Africa, Turkey, Syria, Jordan, Israel, Saudi Arabia, United Arab Emirates, Oman, Iran, Turkmenistan, Tajikistan, Kazakhstan, India, Sri Lanka, Africa.
- Tachysphex brullii** (F. Smith, 1856) [Tachytes] (*Tachytes bicolor* Brullé, 1833, nom. praeocc., nec *Larra bicolor* Fabricius, 1804; *T. Brullii* F. Smith, 1856, substitute name for *T. bicolor* Brullé, 1833; *T. spoliata* Giraud, 1863; *T. Brulléi* Kirchner, 1867, emendation of *T. brullii* F. Smith, 1856; *T. rufipes* von Aichinger, 1870; *T. montanus* Radoszkowski, 1886, nom. praeocc., nec *Larrada montana* Cresson, 1865; *T. monticola* Dalla Torre, 1897, substitute name for *T. montanus* Radoszkowski, 1886). Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), N Africa, Turkey, Israel, Turkmenistan, Kazakhstan.
- Tachysphex consocius** Kohl, 1892 (*T. Cabrerae* Mercet, 1909; *T. minutulus* Arnold, 1923; *T. grandii* de Beaumont, 1965). Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), N Africa, Abkhazia, Azerbaijan, Turkey, Syria, Iran, Afghanistan, Saudi Arabia, Oman, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, India, Africa.
- Tachysphex coriaceus** (A. Costa, 1867) [Tachytes] (*Tachytes coriacea* A. Costa, 1867b; *Tachysphex coriaceus* A. Costa, 1867c, objective synonym of *T. coriaceus* A. Costa, 1867b; *T. Reiseri* Kohl, 1901). Russia: **EP** (S). – Europe (WE, SE, EE), Turkey.
- Tachysphex costae** (De Stefani Perez, 1882) [Tachytes] (*Tachytes Costae* De Stefani Perez, 1882; *Tachysphex laticeps* Arnold, 1924; *T. zarudnyi* Gussakovskij, 1933; *T. tadzhikus* Gussakovskij, 1952; *T. costai canariensis* de Beaumont, 1968; *T. costai fertoni* Pulawski, 1971). Russia: **EP** (S, CR). – Europe (WE, SE, EE), N Africa, Turkey, Israel, Iran, Turkmenistan, Tajikistan, Kazakhstan, Africa.
- Tachysphex ctenophorus** Pulawski, 1971. Russia: **EP** (S), **ES** (BR), **FE** (PR). – Kazakhstan.
- Tachysphex erythropus** (Spinola, 1839) [Lyrops] (*Tachytes Maracandica* Radoszkowski, 1877, *T. flavogeniculatus* Taschenberg, 1880; *Tachysphex heliopolites* Morice, 1897; *T. inventus* Nurse, 1903; *T. mantivora* de Beaumont, 1940). Russia: **EP** (S, NC). – Europe (WE, SE, EE), N Africa, Saudi Arabia, United Arab Emirates, Oman, Turkey, Israel, Iran, Pakistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, China (NW), India, Sri Lanka.
- Tachysphex excelsus** R. Turner, 1917 (*T. mysticus* Pulawski, 1971). Russia: **WS** (AL). – Europe (WE, SE), Turkey, Pakistan, Kazakhstan, Mongolia, China (NW).
- Tachysphex ferrugineus** Pulawski, 1971. Russia: **EP** (C, NC). – Europe (EE), Turkey, Kazakhstan.
- Tachysphex fugax** (Radoszkowski, 1877) [Tachytes] (*T. filicornis* Kohl, 1883; *T. micromegas* de Saussure, 1892; *T. sikorae* de Saussure, 1892; *T. filicornis excerptus* R. Turner, 1917). Russia: **EP** (S, NC). – Europe (WE, SE, EE), N Africa, Turkey, Syria, Saudi Arabia, Oman, Yemen, Israel, Uzbekistan, Kazakhstan, Africa.
- Tachysphex fulvitaris** (A. Costa, 1867) [Tachytes] (*Tachytes fulvitaris* A. Costa, 1867c, objective synonym of A. Costa, 1867b; *T. acrobates* Kohl, 1878; *T. strigosus* Mocsáry, 1879; *T. erythrogastra* A. Costa, 1882; *T. erythrogastra* A. Costa, 1884, objective synonym of A. Costa, 1882; *T. dubius* Radoszkowski, 1886; *Tachysphex bipunctatus* F. Morawitz, 1891). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (NS, AL), **ES** (BR, YA, ZB), **FE** (AM, PR). – Europe (WE, NE, SE, EE), N Africa, Turkey, Syria, Jordan, Israel, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Tachysphex gibbus** Kohl, 1885 (*T. lativalvis gibba* Kohl, 1885; *T. philippi* S. Saunders, 1910). Russia: **EP** (NC, CR). – Europe (WE, SE), N Africa.
- Tachysphex gussakovskii** Pulawski, 1971. Russia: **EP** (S). – Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Tachysphex helveticus** Kohl, 1885. Russia: **EP** (C, E, S, NC), **UR**, **WS** (AL), **ES** (KR, IR, BR, ZB), **FE** (PR). – Europe (WE, NE, SE, EE), N Africa, Turkey, Jordan, Tajikistan, Kazakhstan, Mongolia.
- Tachysphex incertus** (Radoszkowski, 1877) [Tachytes] (*Tachytes incerta* Radoszkowski, 1877; *T. panzeri geniculata* A. Costa, 1867b, nom. praeocc., nec *Lyrops geniculata* Spinola, 1839; *T. panzeri geniculata* A. Costa, 1867c, objective synonym of A. Costa, 1867b; *Tachysphex pygidialis* Kohl, 1883; *T. ruftventralis* Ferton, 1905; *T. incertus kallipygus* Pulawski, 1971). Russia: **EP** (S, NC, CR), **UR**, **WS** (AL). – Europe (WE, SE, EE), Turkey, Oman, Yemen, Israel, Jordan, Lebanon, Iran, Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, China (NW).
- Tachysphex julliani** Kohl, 1883 (*T. julliani* Kohl, 1883; *T. semenovi* Gussakovskij, 1933; *T. julliani africanus* Pulawski, 1971). Russia: **EP** (S, CR). – Europe (WE,

- SE, EE), N Africa, Turkey, Lebanon, Israel, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Tachysphex latifrons** Kohl, 1884 (*T. cyrenaicus* de Beaumont, 1947). Russia: **EP** (S, CR), **WS** (AL). – Europe (SE, EE), N Africa, Azerbaijan, Turkey, Israel, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, China (NC).
- Tachysphex mediterraneus** Kohl, 1883 (*T. mediterranea* Kohl, 1883; *T. collaris* Kohl, 1898; *T. lanatus* Arnold, 1947). Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), Turkey, Israel, Kazakhstan, India, Sri Lanka, Africa.
- Tachysphex melas** Kohl, 1898. Russia: **EP** (S), **WS** (AL), **ES** (IR), **FE** (PR). – N Africa, Turkey, Jordan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia.
- Tachysphex micans** (Radoszkowski, 1877) [Tachytes]. Russia: **EP** (S). – N Africa, Oman, United Arab Emirates, Turkmenistan, Tajikistan, Kazakhstan, Mongolia.
- Tachysphex mocsaryi** Kohl, 1884 (*T. Mocsaryi* Kohl, 1884; *T. algira* Kohl, 1892; *T. mocsaryi maroccana* de Beaumont, 1947). Russia: **EP** (S, CR), **UR**. – Europe (WE, SE, EE), N Africa, Turkey, Israel, Jordan, Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Tachysphex moczari** Tsuneki, 1972. Russia: **ES** (ZB), **FE** (PR). – Mongolia, China (NC).
- Tachysphex nigricolor** (Dalla Torre, 1897) [Larra] (*Larrada nigricans* F. Smith, 1873, nom. praeocc., nec Walker, 1871; *Larra nigricolor* Dalla Torre, 1897, substitute name for *Larrada nigricans* F. Smith, 1873; *T. japonicus* Iwata, 1933). Russia: **FE** (AM, KH, PR, KU). – China (NE, SE), Korean Peninsula, Japan (Hon, Kyu, Ryu), SE Asia.
- Tachysphex nitidior** de Beaumont, 1940. Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), N Africa, Turkey, Israel, Lebanon, Iran, Turkmenistan, Uzbekistan, Kazakhstan, Mongolia, SE Asia.
- Tachysphex nitidus** (Spinola, 1805) [Astata] (*Tachytes ibericus* de Saussure, 1867; *Tachysphex ibericus borealis* Pulawski, 1971). Russia: **EP** (N, C, E, S, NC, CR), **WS** (NS, AL). – Europe (WE, NE, SE, EE), N Africa, Turkey, Israel, Kuwait, Oman, Turkmenistan, Tajikistan, Kazakhstan, China (NC).
- Tachysphex obscuripennis** (Schenck, 1857) [Tachytes] (*Tachytes obscuripennis* Scheck, 1860, nom. nud.; *T. laticalvis* Thomson, 1870). Russia: **EP** (N, C, E, S, NC), **WS** (AL). – Europe (WE, NE, SE, EE), Morocco, Turkey, Lebanon.
- Tachysphex panzeri** (Vander Linden, 1829) [Tachytes] (*Lyrops rufiventris* Spinola, 1839; *L. haemorrhoea* Spinola, 1843, unavailable under ICZN (1999, Article 11.6); *Tachytes Oraniensis* Lepeletier de Saint Fargeau, 1845; *T. aurifrons* Lucas, 1849; *T. discolor* Frivaldszky, 1877; *T. pulverosus* Radoszkowski, 1886; *T. ceylonica* Cameron, 1900; *T. aurifrons* Cameron, 1900, junior primary homonym of Lucas, 1849; *Tachysphex ablatatus* Nurse, 1909; *T. panzeri fortunatus* de Beaumont, 1968; *T. panzeri cyprius* Pulawski, 1971; *T. panzeri sareptanus* Pulawski, 1971). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Turkey, Syria, Israel, Jordan, Saudi Arabia, Yemen, Bahrain, United Arab Emirates, Djibouti, Iran, Pakistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, India, Sri Lanka.
- Tachysphex pompiliformis** (Panzer, 1804) [Larra] (*Larrada parvula* Cresson, 1865; *Larra Quebecensis* Provancher, 1882; *L. Quebecensis* Provancher, 1883, objective synonym of Provancher, 1882; *T. decorus* W. Fox, 1894; *T. tenuipunctus* W. Fox, 1894; *T. consimilis* W. Fox, 1894; *T. rufo-niger* Bingham, 1897; *T. projectus* Nurse, 1903; *T. argyrotrichus* Rohwer, 1911; *T. granulatus* Mickel, 1916; *T. erythraeus* Mickel, 1916; *T. angularis* Mickel, 1916). Russia: **EP** (N, C, E, S, NC, CR), **UR**, **WS** (NS, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, MG, KA). – Europe (WE, NE, SE, EE), N Africa, Turkey, Iran, Pakistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NC), Korean Peninsula, India, N America.
- Tachysphex psammobius** (Kohl, 1880) [Tachytes] (*Tachytes psammobia* Kohl, 1880; *Tachysphex asperatus* W. Fox, 1894; *T. sculptilis* W. Fox, 1894; *T. nigrescens* Rohwer, 1908; *T. sphecodoides* Rohwer, 1911). Russia: **EP** (C, S, NC, CR), **UR**, **WS** (TM, AL), **ES** (IR, BR), **FE** (PR). – Europe (WE, SE, EE), N Africa, Turkey, Israel, Kazakhstan, China, N America.
- Tachysphex schmiedeknechti** Kohl, 1883 (*T. Schmiedeknechti* Kohl, 1883; *T. psilopus* Kohl, 1884; *T. heliophilus* Nurse, 1909; *T. ornatipennis* Gussakovskij, 1933; *T. fasciipennis* Gussakovskij, 1933; *T. calopteryx* Gussakovskij, 1933; *T. schmiedeknechti satanas* Pulawski, 1971). Russia: **EP** (E, S). – Europe (WE, SE), Saudi Arabia, United Arab Emirates, Oman, Yemen, Turkey, Syria, Jordan, Israel, Iran, Afghanistan, Turkmenistan, Uzbekistan, Kazakhstan, India, Sri Lanka, Africa.

- Tachysphex speciosissimus** Morice, 1897 (*T. redivivus* Kohl, 1901). Russia: **EP** (S). – N Africa, Syria, Israel, Iran, Uzbekistan.
- Tachysphex stachi** de Beaumont, 1936. Russia: **EP** (S). – Georgia, Turkey, Israel, Turkmenistan, Uzbekistan, Kazakhstan.
- Tachysphex subdentatus** F. Morawitz, 1893. Russia: **EP** (S), **WS** (AL). – Europe (SE, EE), Turkey, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Tachysphex tarsinus** (Lepeletier de Saint Fargeau, 1845) [Tachytes] (*Tachytes tarsina* Lepeletier de Saint Fargeau, 1845). Russia: **EP** (C, S, NC), **WS** (NS, AL). – Europe (WE, SE, EE), N Africa, Turkey, Saudi Arabia, Oman, Israel, Lebanon, Iran, Tajikistan, Uzbekistan, Kazakhstan, China (NC).
- Tachysphex unicolor** (Panzer, 1807-1809) [Larra] (*Larra jurinii* Drapiez, 1819). Russia: **EP** (N, C, E, S). – Europe (WE, NE, SE, EE), N Africa, Turkey, Israel, Lebanon, Afghanistan, Turkmenistan, Kazakhstan, Mongolia, China (NE).
- TACHYTES** Panzer, 1806 (*Lyrops* Illiger, 1807; *Tachyptera* Dahlbom, 1843, nom. praeocc., nec Berge, 1842; *Holotachytes* R. Turner, 1917; *Calotachytes* R. Turner, 1917; *Tachyoides* Banks, 1942; *Tachyplena* Banks, 1942, substitute name for *Tachyptera* Dahlbom, 1843; *Tachynana* Banks, 1942). Type species *Pompilus tricolor* of Fabricius, 1798 (= *Sphex tricolor* Fabricius, 1793, nom. praeocc., nec Schrank, 1781; = *Sphex tricoloratus* Turton, 1801). Number of species: World – 297, Palaeartic – 58, Russia – 8.
- Tachytes ambidens** Kohl, 1884 (*T. caucasicus* Radoszkowski, 1886). Russia: **EP** (S, NC). – Europe (SE), N Africa, Georgia, Armenia, Turkmenistan, Tajikistan, Kazakhstan, China (NW).
- Tachytes argyreus** (F. Smith, 1856) [Larrada] (*L. argyrea* F. Smith, 1856; *T. melanopyga* A. Costa, 1893a; *T. melanopyga* A. Costa, 1893b, objective synonym of A. Costa, 1893a; *Tachysphex debilis* Pérez, 1907). Russia: **EP** (S, NC). – N Africa, Turkey, Israel, Saudi Arabia, United Arab Emirates, Bahrain, Iraq, Iran, Pakistan, Turkmenistan, Tajikistan, India.
- Tachytes bidens** Gussakovskij, 1952. Russia: **EP** (S). – Iran, Turkmenistan, Uzbekistan, Kazakhstan.
- Tachytes etruscus etruscus** (Rossi, 1790) [Andrena] (*A. Etrusca* Rossi, 1790; *T. argentata* Brullé, 1832). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL). – Europe (WE, SE, EE), N Africa, Turkey, Syria, Israel, Saudi Arabia, Iran, Turkmenistan, Kazakhstan, Mongolia, Africa.
- Tachytes etruscus sibiricus** Gussakovskij, 1932 (*T. sibirica* Gussakovskij, 1932; *T. nipponicus* Tsuneki, 1964). Russia: **FE** (KH, PR). – China (NE), Korean Peninsula, Japan (Hon).
- Tachytes freygessneri** Kohl, 1881 (*Apis hispanica* Linnaeus in Kirby, 1802, nom. praeocc., nec Fabricius, 1787; *T. Frey-Gessneri* Kohl, 1881). Russia: **EP** (S). – Europe (WE, NE, SE, EE), N Africa, Turkey, Iraq, Iran, Tajikistan, Uzbekistan, Kazakhstan, China (NC, NW).
- Tachytes latifrons** Tsuneki, 1964. Russia: **FE** (PR). – Korean Peninsula, Japan (Hok, Hon).
- Tachytes obsoletus** (Rossi, 1792) [Apis] (*Apis Obsoleta* Rossi, 1792). Russia: **EP** (S, NC), **UR**, **WS** (NS, AL). – Europe (WE, SE, EE), N Africa, Turkey, Israel, Iraq, Tajikistan, Uzbekistan, Kazakhstan, China (NE, NC).
- Tachytes panzeri orientis** Pulawski, 1962. Russia: **FE** (AM, KH, PR). – China (NE, NC).
- Tachytes panzeri panzeri** (Dufour, 1841) [Lyrops] (*Lyrops Panzeri* Dufour, 1841, substitute name for *Pompilus tricolor* of Panzer, 1801, nom. praeocc., nec *Tachytes panzeri* Vander Linden, 1829 (now in *Tachysphex*); *Tachytes europaea* Kohl, 1883). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (NS, AL), **ES** (IR). – Europe (WE, SE, EE), N Africa, Turkey, Israel, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.

Tribe MISCOPHINI

- LYRODA** Say, 1837 (*Morphota* F. Smith, 1856; *Odonotolarra* Cameron, 1900; *Lyrodon* Howard, 1901, lapsus pro *Lyroda* Say, 1837, nom. praeocc., nec *Lyrodon* Goldfuss, 1837). Type species *Lyroda subita* Say, 1837. Number of species: World – 25, Palaeartic – 2, Russia – 1.
- Lyroda nigra japonica** Iwata, 1933 (*L. japonica* Iwata, 1933). Russia: **FE** (KH, PR). – China (NE), Korean Peninsula, Japan (Hon, Kyu, Ryu).
- MISCOPHUS** Jurine, 1807 (*Nitelopterus* Ashmead, 1897; *Hypomiscophus* Cockerell, 1898; *Miscophinus* Ashmead, 1898). Type species *Miscophus bicolor* Jurine, 1807. Number of species: World – 184, Palaeartic – 131, Russia – 14.
- Miscophus albufeirae** de Andrade, 1952. Russia: **EP** (NC). – Europe (WE, SE), Turkey.
- Miscophus ater** Lepeletier de Saint Fargeau, 1845 (*M. maritimus* F. Smith, 1858). Russia: **EP** (C, S), **WS**

- (AL), **ES** (IR), **FE** (AM, PR). – Europe (WE, NE, EE), N Africa, Azerbaijan, Turkey, Iran, Kazakhstan.
- Miscophus bicolor** Jurine, 1807 (*Larra dubia* Panzer, 1807-1809; *M. metallicus* C. Verhoeff, 1890; *M. tsunekii* de Andrade, 1960). Russia: **EP** (C, E, S, NC), **UR**, **WS** (AL), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE), N Africa, Abkhasia, Turkey, Syria, Iran, Kazakhstan, Mongolia, Korean Peninsula.
- Miscophus concolor** Dahlbom, 1844 (*M. moravicus* Balthasar, 1957). Russia: **EP** (C, E). – Europe (WE, NE, SE, EE).
- Miscophus gegensumus** Tsuneki, 1971 (*M. angarensis* Nemkov, 1985). Russia: **ES** (IR, BR). – China (NC).
- Miscophus gussakovskiji** de Andrade, 1954. Russia: **EP** (S). – Uzbekistan.
- Miscophus helveticus** Kohl, 1883 (*M. gallicus* Kohl, 1884; *M. rubriventris* Ferton, 1896; *M. deserti* Berland, 1943; *M. gallicus rufus* Giner Mari, 1943; *M. cypriacus* de Andrade, 1953; *M. cypriacus obscurus* de Andrade, 1954). Russia: **EP** (C, E). – Europe (WE, SE, EE), N Africa, United Arab Emirates, Turkey, Israel.
- Miscophus johni** Mokrousov, 2004. Russia: **EP** (C). – Europe (SE).
- Miscophus niger** Dahlbom, 1844. Russia: **EP** (N, C, E, S), **UR**, **ES** (IR), **FE** (AM, PR, SA). – Europe (WE, NE, SE, EE), N Africa, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Miscophus percitus** Mokrousov, 2004. Russia: **EP** (C).
- Miscophus rufiventris** Tsuneki, 1972. Russia: **ES** (BR). – Mongolia.
- Miscophus spurius** (Dahlbom, 1832) [Larra] (*Larra spuria* Dahlbom, 1832). Russia: **EP** (N, S), **UR**, **ES** (IR, YA), **FE** (AM, PR, SA). – Europe (WE, NE, SE), N Africa Kazakhstan.
- Miscophus transcaspicus** de Andrade, 1960. Russia: **ES** (BR). – Turkmenistan, Kasakhstan.
- Miscophus tricolor** Kazenas, 1992. Russia: **EP** (S). – Kasakhstan.
- NITELA** Latreille, 1809 (*Rhinonitela* F. Williams, 1928). Type species *Nitela spinolae* Latreille, 1809. The genus includes two subgenera: *Nitela* Latreille, 1809 and *Tenila* Brèthes, 1913. Number of species: World – 66, Palaeartic – 14, Russia – 5.
- Nitela (Nitela) borealis** Valkeila, 1974. Russia: **EP** (C, E, S), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), Georgia, Turkey, Kazakhstan.
- Nitela (Nitela) fallax** Kohl, 1884. Russia: **EP** (C, E, S), **UR**. – Europe (WE, SE, EE), Turkey.
- Nitela (Nitela) koreana** Tsuneki, 1982. Russia: **FE** (PR). – Korean Peninsula.
- Nitela (Nitela) lucens** Gayubo et Felton, 2000. Russia: **EP** (C). – Europe (WE, SE), N Africa.
- Nitela (Nitela) spinolae** Latreille, 1809. Russia: **EP** (N, C, E, NC). – Europe (WE, NE, SE, EE), N Africa, Turkey, Japan (Hok.).
- PLENOCULUS** W. Fox, 1893 (*Ptygosphex* Gussakovskij, 1928; *Ptigosphex* Gussakovskij, 1928, lapsus for *Ptygosphex* Gussakovskij, 1928; *Pavlovskia* Gussakovskij, 1935). Type species *Plenoculus davisi* W. Fox, 1893. Number of species: World – 21, Palaeartic – 2, Russia – 1.
- Plenoculus murgabensis** (Gussakovskij, 1928) [Ptygosphex] (*Pavlovskia tadzhika* Gussakovskij, 1935). Russia: **EP** (S). – Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- SOLIERELLA** Spinola, 1851 (*Syloa* Piccioli, 1869; *Syloa* Piccioli, 1869, lapsus or emendation of *Syloa* Piccioli, 1869; *Niteliopsis* S. Saunders, 1873; *Ammosphacidium* Kohl, 1878; *Lautara* Herbst, 1920). Type species *Solierella miscophoides* Spinola, 1851. Number of species: World – 113, Palaeartic – 34, Russia – 5.
- Solierella bactriana** Gussakovskij, 1930. Russia: **EP** (S). – Iran, Tadjikistan, Turkmenistan, Uzbekistan.
- Solierella compedita** (Piccioli, 1869) [Silaon] (*Syloa compeditus* Piccioli, 1869; *Ammosphacidium Helleri* Kohl, 1877; *Syloa Xambeui* Er. André, 1896). Russia: **EP** (C, S, CR). – Europe (WE, SE, EE), N Africa, Turkey, Syria, Jordan, Israel, Kazakhstan.
- Solierella pisonoides** (S. Saunders, 1873) [Niteliopsis] (*Solierella paradoxa* Gussakovskij, 1930). Russia: **EP** (C, CR). – Europe (WE, SE, EE), Turkey, Syria, Israel, Turkmenistan, Kazakhstan.
- Solierella seabrai** de Andrade, 1950. Russia: **EP** (S). – Europe (WE, SE, EE), N Africa.
- Solierella zimini** Gussakovskij, 1928. Russia: **EP** (S). – Uzbekistan, Turkmenistan.

Tribe OXYBELINI

BELOMICRUS A. Costa, 1871b (*Oxybeloides* Radoszkowski, 1877). Type species *Belomicrus italicus*

- A. Costa, 1817. Number of species: World – 101, Palaearctic – 61, Russia – 8.
- Belomicrus antennalis** Kohl, 1899. Russia: **EP** (S), **WS** (AL), **ES** (IR). – Europe (SE), Kazakhstan, Mongolia.
- Belomicrus borealis** Forsius, 1923. Russia: **EP** (NW, E). – Europe (NE).
- Belomicrus corniger** Kazenas, 1995. Russia: **EP** (S). – Kazakhstan.
- Belomicrus odontophorus** (Kohl, 1892) [Oxybelus] (*B. odontomorphus*: von Schulthess, 1926, lapsus pro *B. odontophorus* (Kohl, 1892)). Russia: **EP** (S). – Europe (EE), Armenia, Turkey, Turkmenistan, Kazakhstan, Mongolia.
- Belomicrus parvulus** (Radoszkowski, 1877) [Oxybelus] (*B. femoralis* Kohl, 1899). Russia: **UR**. – Turkmenistan, Uzbekistan, Kazakhstan.
- Belomicrus schulthessii** Kohl, 1924 (*B. Schulthessii* Kohl, 1924). Russia: **EP** (S). – N Africa, Saudi Arabia, United Arab Emirates, Iran, Turkmenistan, Kazakhstan.
- Belomicrus tricolor** Kazenas, 1991. Russia: **EP** (S). – Kazakhstan.
- Belomicrus ussuriensis** Antropov, 1993. Russia: **FE** (PR).
- OXYBELUS** Latreille, 1796 (*Notoglossa* Dahlbom, 1845; *Alepidaspis* A. Costa, 1882; *Anoxybelus* Kohl, 1924; *Gonioxybelus* Minkiewicz, 1934, unavailable under ICZN (1999, Article 13.3); *Orthoxybelus* Minkiewicz, 1934, unavailable under ICZN (1999, Article 13.3); *Gonioxybelus* Pate, 1937, validation of *Gonioxybelus* Minkiewicz, 1934; *Orthoxybelus* Pate, 1937, validation of *Orthoxybelus* Minkiewicz, 1934; *Euoxybelus* Noskiewicz et Chudoba, 1950, unavailable under ICZN (1999, Article 13.3); *Latroxybelus* Noskiewicz et Chudoba, 1950). **Type species** *Crabro uniglumis* of Fabricius, 1775 (= *Vespa uniglumis* Linnaeus, 1758). Number of species: World – 264, Palaearctic – 86, Russia – 16.
- Oxybelus argentatus** Curtis, 1833 (?*Vespa decimmaculata* Donovan, 1806; *O. ferox* Shuckard, 1837; *O. nigricornis* Shuckard, 1837). Russia: **EP** (N, C, E, S), **UR**, **WS** (AL), **ES** (IR, ZB), **FE** (PR). – Europe (WE, NE, SE, EE), Mongolia.
- Oxybelus aurantiacus** Mocsáry, 1883 (*O. rufitarsis* F. Morawitz, 1894). Russia: **EP** (S), **WS** (AL). – Europe (WE, SE, EE), N Africa, Yemen, Saudi Arabia, Turkey, Syria, Jordan, Israel, Pakistan, Central Asia, Kazakhstan, Mongolia.
- Oxybelus bipunctatus** Olivier, 1812 (*O. nigroaeneus* Shuckard, 1837; *O. laevigatus* Schilling, 1848). Russia: **EP** (N, C, E, S), **UR**, **WS** (AL), **ES** (IR, BR), **FE** (AM, PR, SA). – Europe (WE, NE, SE, EE), N Africa, Turkey, Syria, Iran, Turkmenistan, Uzbekistan, Kazakhstan, Mongolia, Korean Peninsula, N America.
- Oxybelus dissectus dissectus** Dahlbom, 1845 (*O. monachus* Gerstaecker, 1867). Russia: **EP** (C). – Europe (WE, NE, SE, EE), N Africa, Kuwait, Turkey, Syria, Iran, Turkmenistan, Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia.
- Oxybelus dissectus eburneofasciatus** Dahlbom, 1845 (*O. eburneo-fasciatus* Dahlbom, 1845; *O. dufouri* Marquet, 1896). Russia: **UR**. – Europe (WE, SE).
- Oxybelus dissectus elegans** Mocsáry, 1879. Russia: **EP** (S). – Europe (WE, SE, EE), N Africa, Turkey, Israel, Mongolia.
- Oxybelus haemorrhoidalis** Olivier, 1812 (*O. victor* Lepeletier de Saint Fargeau, 1845; *O. dubius* Dahlbom, 1845; *O. fasciatus* Dahlbom, 1845; *O. simplex* Dahlbom, 1845; *O. bicolor* Schilling, 1848; *O. elegantulus* Gerstaecker, 1867; *O. incomptus* Gerstaecker, 1867; *O. analis* Gerstaecker, 1867; *O. melancholicus* Chevrier, 1868). Russia: **EP** (NW, C, E, S), **UR**, **WS** (NS, AL), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Syria, Israel, Iran, Afghanistan, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NC), Korean Peninsula, Japan (Hon).
- Oxybelus lamellatus** Olivier, 1811 (*O. Savignyi* Spinola, 1839; *Notoglossa sagittata* Dahlbom, 1845; *O. squamosus* F. Smith, 1875; *O. rufipes* Taschenberg, 1880; *O. forticarinatus* Cameron, 1908; *O. ceylonicus* Cameron, 1897). Russia: **EP** (S). – Europe (WE, SE), N Africa, Cyprus, Turkey, Syria, Jordan, Israel, Iraq, Iran, Saudi Arabia, Kuwait, Oman, United Arab Emirates, Afghanistan, Pakistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, China (SW, SE), SE Asia, India, Africa.
- Oxybelus latro** Olivier, 1812 (*O. armiger* Olivier, 1812; *O. affinis* Marquet, 1881; *O. opacus* Tournier, 1901; *O. latro rugulosus* Móczár, 1957). Russia: **EP** (NC, E, S, CR), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), N Africa, Turkey, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia, China (NC).
- Oxybelus lineatus** (Fabricius, 1787) [Nomada] (*Nomada lineata* Fabricius, 1787; *O. bellicosus* Olivier, 1812). Russia: **EP** (C, E, S), **UR**, **ES** (KR). – Europe (WE, NE, SE, EE), N Africa, Turkey.

- Oxybelus maculipes** F. Smith, 1856 (*O. Solskii* Radzskowski, 1877, *O. acuticornis* F. Morawitz, 1891, *O. pictipes* F. Morawitz, 1891). Russia: **EP** (C, S), **UR**. – Europe (SE, EE), Turkey, Iran, Tajikistan, Kyrgyzstan, Kazakhstan, China (SW).
- Oxybelus mandibularis** Dahlbom, 1845 (*O. sericatus* Gerstaecker, 1867). Russia: **EP** (C, E, S), **UR**, **WS** (TM, AL), **ES** (IR, BR), **FE** (AM, PR, SA). – Europe (WE, NE, SE, EE), N Africa, Turkey, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia.
- Oxybelus mucronatus** (Fabricius, 1793) [Crabro] (*O. pugnax* Olivier, 1812; *O. ambiguus* Gerstaecker, 1867; *O. scutellaris* A. Costa, 1867; *O. meridionalis* Mocsáry, 1879; *O. maculiventris* Tournier, 1901; *O. nigriventris* Tournier, 1901; *O. nigripes immaculatus* Guiglia, 1944; *O. pugnax bistillatus* Balthasar, 1972, unavailable under ICZN (1999, Articles 1.3.4, 15.2)). Russia: **EP** (NW, C, E, S, CR), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), N Africa, Turkey, Syria, Jordan, Lebanon, Israel, Iraq, Iran, Central Asia, Kazakhstan, China (NE).
- Oxybelus quatuordecimnotatus** Jurine, 1807 (*O. 14 notatus* Jurine, 1807; *Crabro crassipes* Walckenaer, 1817, nom. praeocc., nec Fabricius, 1798; *C. punctatus* Walckenaer, 1817; *C. parisinus* Kittel, 1828; *Oxybelus bellus* Dahlbom, 1844; *O. furcatus* Lepeletier de Saint Fargeau, 1845; *O. raptor* Lepeletier de Saint Fargeau, 1845; *O. timidus* Chevrier, 1868; *O. venustus* Sickmann, 1894; *O. maritimus* Marquet, 1896). Russia: **EP** (NW, C, E, S, CR), **UR**, **WS** (TM, AL), **ES** (KR, IR), **FE** (KH, PR). – Europe (WE, NE, SE, EE), N Africa, Saudi Arabia, Oman, Yemen, Turkey, Syria, Jordan, Israel, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NE, SW).
- Oxybelus subspinus** Klug in Waltl, 1835 (*O. fissus* Lepeletier de Saint Fargeau, 1845; *O. latidens* Gerstaecker, 1867; *O. psammobius* Kohl, 1884). Russia: **EP** (C, E, S, CR), **WS** (AL), **ES** (IR), **FE** (PR). – Europe (WE, NE, SE, EE), N Africa, Armenia, Saudi Arabia, Turkey, Syria, Jordan, Israel, Iran, Afghanistan, Central Asia, Kazakhstan, China (NC).
- Oxybelus trispinosus** (Fabricius, 1787) [Apis] (*Apis trispinosa* Fabricius, 1787; *O. nigripes* Olivier, 1812). Russia: **EP** (C, NC), **UR**, **WS** (AL), **ES** (IR, BR), **FE** (KH, PR). – Europe (WE, NE, SE, EE), N Africa, Turkey, Kazakhstan.

- Oxybelus uniglumis** (Linnaeus, 1758) [Vespa] (*Nomada punctata* Fabricius, 1793; *Crabro tridens* Fabricius, 1798; ?*Vespa decim-maculata* Donovan, 1806; *O. pygmaeus* Olivier, 1812; *O. 4-notatus* Say, 1824; *O. impatiens* F. Smith, 1856; *O. interruptus* Cresson, 1865; *O. fallax* Gerstaecker, 1867; *O. Brodiei* Provancher, 1883a; *O. Brodiei* Provancher, 1883b, objective synonym of Provancher, 1883a; *O. quadrinotatus montanus* Robertson, 1889; *O. hispanicus* García Mercet: Dusmet y Alonso, 1935, nom. nud.; *O. hispanicus* Giner Marí, 1943). Russia: **EP** (N, NW, C, E, S, CR), **UR**, **WS** (NS, AL), **ES** (KR, IR, BR, ZB), **FE** (SA, KU, KA). – Europe (WE, NE, SE, EE), N Africa, Turkey, Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE), N America.
- Oxybelus variegatus** Wesmael, 1852 (*O. pulchellus* Gerstaecker, 1867). Russia: **EP** (C, E, S, CR), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), Turkey, Iran, Afghanistan, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan.

Tribe PALARINI

- PALARUS** Latreille, 1802 (*Gonius* Panzer, 1806; *Gonius* Jurine, 1807, nom. praeocc., nec Panzer, 1806). Type species *Tiphia flavipes* Fabricius, 1793. Number of species: World – 34, Palaearctic – 18, Russia – 2.
- Palarus funerarius** F. Morawitz, 1889 (*P. gracilis* Kohl in Kohl et Handlirsch, 1889; *P. seraxensis* Radzskowski, 1893; *P. incertus* Radzskowski, 1893; *P. quiescens* Nurse, 1903; *P. nursei* R. Turner, 1911; *P. beaumonti* Bytinski-Salz, 1957). Russia: **EP** (S, NC). – Greece (Rhodes), Armenia, Turkey, Iran, Pakistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NC), India.
- Palarus variegatus variegatus** (Fabricius, 1781) [Tiphia] (*Tiphia variegata* Fabricius, 1781; *Crabro flavipes* Fabricius, 1781; *P. auriginosus* Eversmann, 1849; *P. affinis* F. Morawitz, 1893; *P. fortistriolatus* Cameron, 1907). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (KR, ZB). – Europe (WE, SE, EE), N Africa, Georgia, Armenia, Turkey, Afghanistan, Pakistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NC, NW), India.
- Palarus variegatus varius** Sickmann, 1894 (*P. flavipes varius* Sickmann, 1894; *P. saishiuensis* Okamoto, 1924). Russia: **FE** (AM, PR). – Korean Peninsula, China (NE).

Tribe TRYPOXYLINI

- PISON** Jurine, 1808 (*Pison* Jurine in Spinola, 1808; *Tachybulus* Latreille, 1809; *Nephridia* Brullé, 1833; *Pisonitus* Shuckard, 1838; *Pisum* Agassiz, 1846, nom. praeocc., nec Megerle, 1811, unjustified emendation of *Pison* Jurine, 1808; *Pisonoides* F. Smith, 1858; *Parapison* F. Smith, 1869; *Pseudo-Nysson* Radoszkowski, 1876; *Taranga* W.F. Kirby, 1883; *Paraceramius* Radoszkowski, 1887, nom. praeocc., nec de Saussure, 1854; *Pisum* W. Schulz, 1906, nom. praeocc., nec Megerle, 1811, non Agassiz, 1846, unjustified emendation of *Pison* Jurine, 1808; *Krombeiniellum* Richards, 1962, substitute name for *Paraceramius* Radoszkowski, 1887). Type species *Pison Jurini* Spinola, 1808 (= *Alyson ater* Spinola, 1808). Number of species: World – 183, Palaeartic – 11, Russia – 6.
- Pison atrum** (Spinola, 1808) [*Alyson*] (*Alyson ater* Spinola, 1808; *P. Jurini* Spinola, 1808; *Tachybulus niger* Latreille, 1809; *P. montanus* Cameron, 1908). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), N Africa, Georgia, Turkey, Oman, Iran, Kazakhstan, Africa.
- Pison fasciatum** (Radoszkowski, 1876) [*Pseudonysson*] (*P. suspicax* Kokujev, 1912). Russia: **EP** (NC). – Europe (SE), Azerbaidjan, Turkey, Kazakhstan.
- Pison insigne** Sickmann, 1894. Russia: **FE** (PR). – China (NE, NC, CE), Korean Peninsula, Japan (Hok).
- Pison koreense** (Radoszkowski, 1887) [*Paraceramius*]. Russia: **FE** (PR). – China (CE), Korean Peninsula, Japan (Hon), N America, SE Asia.
- Pison sericeum** Kohl, 1888. Russia: **EP** (S, NC). – Europe (SE, EE), Turkey, Israel.
- Pison strandi** Yasumatsu, 1935 (*P. iwatai* Yasumatsu, 1935; *P. ussuriense* Gussakovskij, 1937). Russia: **FE** (PR). – Korean Peninsula, Japan (Hon, Kyu, Tsushima).
- TRYPOXYLON** Latreille, 1796 (*Tripoxilon* Spinola, 1806, lapsus or emendation of *Trypoxylon* Latreille, 1796; *Apius* Panzer, 1806; *Apius* Jurine, 1807, nom. praeocc., nec Panzer, 1806; *Trypoxilon* Jurine, 1807, lapsus or emendation of *Trypoxylon* Latreille, 1796; *Trypoxylum* Agassiz, 1846, unjustified emendation of *Trypoxylon* Latreille, 1796; *Trypoxylum* W. Schulz, 1906, nom. praeocc., nec Agassiz, 1846, unjustified emendation of *Trypoxylon* Latreille, 1796; *Asaconoton* Arnold, 1959). Type species
- Sphex figulus* Linnaeus, 1758. The genus includes two subgenera: *Trypoxylon* Latreille, 1796 and *Trypargilum* Richards, 1934. Number of species: World – 631, Palaeartic – 54, Russia – 28.
- Trypoxylon (Trypoxylon) ambiguum** Tsuneki, 1956. Russia: **FE** (KU). – Japan (Hon).
- Trypoxylon (Trypoxylon) attenuatum** F. Smith, 1851 (*T. hannibalis* Gribodo, 1894). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), N Africa, Turkey, Israel, Afghanistan, Uzbekistan, Kazakhstan, ?China (NW), N America.
- Trypoxylon (Trypoxylon) beaumonti** Antropov, 1991. Russia: **EP** (NC). – Europe (WE, SE, EE).
- Trypoxylon (Trypoxylon) clavicerum** Lepeletier de Saint Fargeau et Audinet-Serville, 1828 (*T. tibiale* Zetterstedt, 1840; *T. batumicum* Antropov, 1985). Russia: **EP** (N, NW, C, E, S, NC, CR), **WS** (AL), **ES** (IR). – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Israel, Iran, Kazakhstan, Japan (Hachijo-jima), N America.
- Trypoxylon (Trypoxylon) deceptorium** Antropov, 1991. Russia: **EP** (E, S, NC, CR), **WS** (AL). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Syria, Lebanon, Israel, Iran, Central Asia, Kazakhstan, Mongolia.
- Trypoxylon (Trypoxylon) exiguum exiguum** Tsuneki, 1956 (*T. clavicerum exiguum* Tsuneki, 1956). Russia: **FE** (SA, KU). – Japan (Hok, Hon, Shi, Kyu).
- Trypoxylon (Trypoxylon) exiguum gussakovskiji** Tsuneki, 1974 (*T. pygmaeum* Gussakovskij, 1933, nom. praeocc. nec Cameron, 1900; *T. clavicerum gussakovskiji* Tsuneki, 1974; *T. exiguum gussakovskiji*: Antropov, 1986; *T. clavicerum gussakovskiji* Tsuneki, 1991). Russia: **FE** (PR). – Korean Peninsula.
- Trypoxylon (Trypoxylon) figulus** (Linnaeus, 1758) [*Sphex*] (*Sphex figulus* Linnaeus, 1758; *T. figulus major* Kohl, 1883; *T. apicalis* W. Fox, 1891; *T. figulus yezo* Tsuneki, 1956; *T. figulus barbarum* de Beaumont, 1957; *T. fieuzeti* Giner Marí, 1959). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, TK, NS, KM, AL), **ES** (KS, KR, IR, BR, ZB), **FE** (PR). – Europe (WE, NE, SE, EE), N Africa, Turkey, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE, CE), Japan (Hok, Hon), N America.
- Trypoxylon (Trypoxylon) frigidum cornutum** Gussakovskij, 1932 (*T. cornutum* Gussakovskij, 1932; *T. frigidum chongar* Tsuneki, 1956; *T. frigidum yamatonis* Tsuneki, 1981). Russia: **WS** (AL), **ES** (BR, ZB), **FE** (AM, KH, PR, SA, KU, MG, KA). – Korean Peninsula, Japan (Hon, Kyu).

- Trypoxylon (Trypoxylon) fronticorne fronticorne** Gussakovskij, 1936. Russia: **EP** (C, E, NC), **ES** (KR, IR). – Europe (WE, NE, SE, EE), Armenia, Azerbaidjan, Turkey, Kazakhstan, India.
- Trypoxylon (Trypoxylon) fronticorne japonense** Tsuneki, 1956 (*T. fronticorne japonense*: Nemkov, 2009, 2012, lapsus pro *T. fronticorne japonense* Tsuneki, 1956). Russia: **WS** (AL), **ES** (BR, ZB), **FE** (AM, KH, PR, SA, KU, KA). – China (NE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Trypoxylon (Trypoxylon) imayoshii** Yasumatsu, 1938. Russia: **FE** (PR). – Japan (Hon, Kyu).
- Trypoxylon (Trypoxylon) inopinatum** Antropov, 1986. Russia: **EP** (NC).
- Trypoxylon (Trypoxylon) koikense** Tsuneki, 1956. Russia: **FE** (PR, KU). – Japan (Hon, Shi).
- Trypoxylon (Trypoxylon) kolazyi** Kohl, 1893a (*T. Kolazyi* Kohl, 1893; *T. backi* Sandhouse, 1940). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Georgia, Turkey, Uzbekistan, Kazakhstan, N America.
- Trypoxylon (Trypoxylon) koma** Tsuneki, 1956g (*T. figulus koma* Tsuneki, 1956). Russia: **FE** (AM, KH, PR). – Korean Peninsula.
- Trypoxylon (Trypoxylon) konosuense** Tsuneki, 1968. Russia: **FE** (KH, PR). – Japan (Hon).
- Trypoxylon (Trypoxylon) koreanum** Tsuneki, 1956 (*T. mowchowense* Tsuneki, 1981; *T. okeanskayanum* Tsuneki, 1981). Russia: **EP** (C), **FE** (PR, SA). – China (NC, SW), Korean Peninsula.
- Trypoxylon (Trypoxylon) kostylevi** Antropov, 1985. Russia: **EP** (NC). – Europe (SE, NE, EE), Abkhazia, Turkey.
- Trypoxylon (Trypoxylon) malaisei** Gussakovskij, 1932. Russia: **FE** (PR). – China (CE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu), SE Asia, N America.
- Trypoxylon (Trypoxylon) medium** de Beaumont, 1945 (*T. figulus minus rubi* Wolf, 1959). Russia: **EP** (C, E, S, NC), **WS** (AL), **ES** (KR). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan.
- Trypoxylon (Trypoxylon) minus** de Beaumont, 1945 (*T. figulus minor* de Beaumont, 1945; *T. figulus koma* Tsuneki, 1956). Russia: **EP** (C, E, S, NC, CR), **WS** (AL). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan.
- Trypoxylon (Trypoxylon) pacificum** Gussakovskij, 1932. Russia: **FE** (PR). – China (CE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Trypoxylon (Trypoxylon) regium regium** Gussakovskij, 1932. Russia: **FE** (PR).

- Trypoxylon (Trypoxylon) rubiginosum** Gussakovskij, 1936 (*T. adzharicum* Antropov, 1984). Russia: **EP** (NC, CR). – Abkhazia, Georgia, Azerbaijan.
- Trypoxylon (Trypoxylon) rufimaculatum** Antropov, 1987 (*T. rufomaculatum*: Haneda et al., lapsus pro *T. rufimaculatum* Antropov, 1987). Russia: **FE** (KH, PR). – China (NE, NC, SW), Korean Peninsula, Japan (Hon, Kyu, Ryu).
- Trypoxylon (Trypoxylon) scutatum scutatum** Chevrier, 1867 (*T. ammophiloides* A. Costa, 1867; *T. quartinae* Gribodo, 1884; *T. scutigerum* Taschenberg, 1881). Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Turkey, Syria, Israel, Iran, Afghanistan, Turkmenistan, Tajikistan, Kazakhstan.
- Trypoxylon (Trypoxylon) shimoyamai** Tsuneki, 1958. Russia: **FE** (PR). – China (SW), Japan (Hon).
- Trypoxylon (Trypoxylon) ussuriense** Kazenas, 1980. Russia: **FE** (PR).
- Trypoxylon (Trypoxylon) varipes** Pérez, 1905 (*T. monticola* Tsuneki, 1956, *T. varipes nasutum* Tsuneki, 1974, *T. varipes nasutum* Tsuneki, 1991, nom. nud.). Russia: **FE** (PR, KU). – Korean Peninsula, Japan (Hon, Kyu, Ryu).

Subfamily DINETINAE

P.G. NEMKOV

- DINETUS** Panzer, 1806 (*Dinetus* Jurine, 1807, nom. praeocc., nec *Dinetus* Panzer, 1806). Type species *Crabro pictus* Panzer, 1794 (= *Crabro pictus* Fabricius, 1793). Number of species: World – 12, Palaeartic – 11, Russia – 1.
- Dinetus pictus** Fabricius, 1793 [*Crabro*] (*Sphex guttatus* Fabricius, 1793, nom. praeocc., nec *S. guttatus* Gmelin, 1790; *Crabro ceraunius* Rossi, 1794). Russia: **EP** (N, C, E, S, NC), **WS** (AL). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan.

Subfamily EREMIASPHECIINAE

M.V. MOKROUSOV

- EREMIASPHECIUM** Kohl, 1897 (*Shetakovia* Gussakovskij, 1930; *Xanthosphecium* Simon Thomas, 1994). Type species *Eremiasphecium schmiedeknechtii* Kohl, 1897. Number of species: World – 16; Palaeartic – 16; Russia – 2.

Eremiasphecium bicolor (Gussakovskij, 1930) [Shestakovia]. Russia: **EP** (S). – Turkmenistan, Uzbekistan, Kazakhstan.

Eremiasphecium desertorum (Gussakovskij, 1930) [Shestakovia]. Russia: **EP** (S). – Turkmenistan, Uzbekistan.

Subfamily MELLININAE

P.G. NEMKOV

MELLINUS Fabricius, 1790 (*Trachogorytes* R. Bohart, 2000). Type species *Vespa arvensis* Linnaeus, 1758. Number of species: World – 16, Palearctic – 3, Russia – 3.

Mellinus arvensis (Linnaeus, 1758) [Vespa] (*Sphex vagus* Linnaeus, 1758; *Crabro bipunctatus* Fabricius, 1787; *Philanthus quinque maculatus* Fabricius, 1793; *M. pratensis* Jurine, 1807; *M. compactus* Handlirsch, 1888). Russia: **EP** (NW, C, E, NC, CR), **UR**, **WS** (AL), **ES** (IR). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan.

Mellinus crabroneus (Thunberg, 1791) [Sphex] (*Crabro sabulosus* Fabricius, 1787, nom. praeocc., nec *Sphex sabulosus* Linnaeus, 1758; *M. ruficornis* Fabricius, 1793; *M. fulvicornis* Fabricius, 1804). Russia: **EP** (NW, C, E, S), **UR**, **WS** (AL), **ES** (IR, BR, ZB), **FE** (AM, PR). – Europe (WE, NE, SE, EE), Turkey, Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NC), Korean Peninsula.

Mellinus obscurus Handlirsch, 1888 (*M. tristis* Pérez, 1905). Russia: **FE** (AM, KH, PR, SA, KU). – Mongolia, China (NC, NE, SE), Korean Peninsula, Japan (Hon), Nepal.

Subfamily PEMPHREDONINAE

M.V. MOKROUSOV

The subfamily is distributed worldwide, mainly in humid regions. Number of taxa: World 43 genera, more than 1100 species, Palearctic – 22/310, Russia – 17/127.

Tribe ENTOMOSERICINI

ENTOMOSERICUS Dahlbom, 1845. Type species *Entomericus* [sic] *concinus* Dahlbom, 1845. Number of species: World – 3; Palearctic – 3; Russia – 1.

Entomosericus concinnus Dahlbom, 1845. Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Georgia, Armenia, Turkey, Syria, Israel, Turkmenistan, Kazakhstan.

Tribe PEMPHREDONINI

AMMOPLANELLUS Gussakovskij, 1931. Type species *Ammoplanus chorasmius* Gussakovskij, 1931. Number of species: World – 17; Palearctic – 6; Russia – 2.

Ammoplanellus chorasmius (Gussakovskij, 1931) [Ammoplanus]. Russia: **EP** (S). – Turkmenistan, Uzbekistan.

Ammoplanellus simplex (Gussakovskij, 1951) [Ammoplanus] (*Ammoplanus orbiculatus* Tsuneki, 1972). Russia: **EP** (S). – Europe (SE), N Africa, Israel, Iran, United Arab Emirates, Tajikistan, Kazakhstan, Mongolia, India.

AMMOPLANUS Giraud, 1869 (*Hoplocrabron* De Stefani Perez, 1887; *Ceballosia* Giner Marí, 1943, nom. praeocc., nec Mercet, 1921). Type species *Ammoplanus perrisi* Giraud, 1869. Number of species: World – 49; Palearctic – 32; Russia – 6.

Ammoplanus gegen Tsuneki, 1972. Russia: **EP** (S). – Europe (WE, EE), Cyprus, Jordan, Turkmenistan, Tajikistan, Mongolia.

Ammoplanus kaszabi Tsuneki, 1972 (*A. crudelis* Marshakov, 1976). Russia: **ES** (S), **UR**, **ES** (IR), **WS** (AL), **FE** (KH). – Europe (WE SE), Turkey, Kazakhstan, Mongolia.

Ammoplanus marathroicus (De Stefani Perez, 1887) [Hoplocrabron] (*A. handlirschi* Gussakovskij, 1931; *A. metatarsalis* Gussakovskij, 1931; *A. sibiricus* Gussakovskij, 1931; *A. mongolensis* Tsuneki, 1972). Russia: **EP** (C, E, NC, CR), **UR**, **WS** (AL), **ES** (KR, IR). – Europe (WE, SE, EE), N Africa, Turkey, Syria, Jordan, Israel, Iraq, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NC).

Ammoplanus perrisi Giraud, 1869 (*A. wesmaeli* Giraud, 1869; *A. maidli* Gussakovskij, 1931). Russia: **EP** (C, NC). – Europe (WE, SE, EE), N Africa, Turkey, Jordan, Israel, Pakistan.

Ammoplanus rjabovi Gussakovskij, 1931. Russia: **EP** (NC). – Europe (SE), Israel.

Ammoplanus serratus Tsuneki, 1972. Russia: **WS** (AL). – Mongolia.

CARINOSTIGMUS Tsuneki, 1954 (*Perissostigmus* Krombein, 1984). Type species *Stigmus*

congruus Walker, 1860. Number of species: World – 35; Palaeartic – 5; Russia – 1.

Carinostigmus filippovi (Gussakovskij, 1934) [Stigmus]. Russia: **FE** (KH, PR). – China (SW), Korean Peninsula, Japan (Hok, Hon, Shi).

CERATOPHORUS Shuckard, 1837 (*Pemphredon* auct.). Type species *Pemphredon morio* Vander Linden, 1829. Number of species: World – 2; Palaeartic – 2; Russia – 2.

Ceratophorus clypeata (Thomson, 1870) [Pemphredon] (*Pemphredon morio* auct.). Russia: **EP** (N, C). – Europe (WE, NE, EE).

Ceratophorus morio (Vander Linden, 1829) [Pemphredon] (*C. anthracinus* F. Smith, 1851; *Pemphredon carinata* Thomson, 1870; *P. intermedia* Tsuneki, 1951). Russia: **EP** (N, NW, C, E, NC), **UR**, **FE** (PR, MG). – Europe (WE, NE, SE, EE), Turkey, Iran, Uzbekistan, Kazakhstan, Korean Peninsula, Japan (Hok), N America.

DIODONTUS Curtis, 1834 (*Xylocelia* Rohwer, 1915; *Neodiodontus* Tsuneki, 1972; *Corenius* Tsuneki, 1974; *Corenius* Tsuneki, 1991). Type species *Pemphredon tristis* Vander Linden, 1829. Number of species: World – 76; Palaeartic – 47; Russia – 18.

Diodontus brevilabris de Beaumont, 1967. Russia: **EP** (C, S, E, NC). – Europe (SE, EE), Turkey, Kyrgyzstan.

Diodontus changaiensis Tsuneki, 1972. Russia: **WS** (AL). – Mongolia.

Diodontus collaris Tsuneki, 1972. Russia: **WS** (AL), **ES** (KR, IR, ZB). – Kazakhstan, Mongolia.

Diodontus dziuroo Tsuneki, 1972 (*D. pygmaeus* Tsuneki, 1972). Russia: **ES** (ZB), **FE** (PR). – Kazakhstan, Mongolia.

Diodontus gegen Tsuneki, 1972. Russia: **ES** (BR, ZB). – Mongolia.

Diodontus handlirschi Kohl, 1888. Russia: **WS** (AL), **FE** (MG). – Europe (WE, SE), Kyrgyzstan, Kazakhstan, Mongolia.

Diodontus hyalipennis Kohl, 1892 (*D. friesei* Kohl, 1901; *D. major gobiensis* Tsuneki, 1972; *D. mongolicus* Tsuneki, 1972; *D. insidiosus* auct.). Russia: **EP** (S, NC), **WS** (AL), **ES** (TU). – Europe (SE, EE), N Africa, Azerbaijan, Iran, Kazakhstan, Mongolia.

Diodontus insidiosus Spooner, 1938. Russia: **EP** (C, S), **UR**. – Europe (WE, NE, SE, EE).

Diodontus kaszabi Tsuneki, 1972 (*D. monticola* Tsuneki, 1972; *D. obo* Tsuneki, 1972). Russia: **WS** (AL), **ES** (IR, ZB), **FE** (AM, KA, MG). – Mongolia.

Diodontus kohli Tsuneki, 1972. Russia: **EP** (S). – Kazakhstan, Mongolia.

Diodontus kuroo Tsuneki, 1972. Russia: **EP** (S). – Kazakhstan, Mongolia.

Diodontus luperus Shuckard, 1837. Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (KR, IR, YA, ZB). – Europe (C, SE, EE), N Africa, Turkey, Kazakhstan, Mongolia.

Diodontus major Kohl, 1901. Russia: **EP** (C, S). – Europe (C, SE, EE).

Diodontus medius Dahlbom, 1844 (*D. dahlbomi* A. Morawitz, 1864). Russia: **EP** (N, C, E), **UR**, **WS** (TM, AL), **ES** (IR), **FE** (AM, PR, SA, KA, MG). – Europe (C, NE, SE, EE), Turkey.

Diodontus minutus (Fabricius, 1793) [Crabro] (*Xylocelia franclemonti* Krombein, 1939). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, AL), **ES** (KR, IR, ZB), **FE** (PR). – Europe (WE, NE, SE, EE), N Africa, Turkey, Syria, Israel, Iraq, Iran, Kuwait, Afghanistan, Central Asia, Kazakhstan, Mongolia, China (NC), Korean Peninsula, N America.

Diodontus parvulus (Radoszkowski, 1877) [Passaloeus]. Russia: **EP** (S). – Central Asia, Kazakhstan.

Diodontus spinicollis Gussakovskij, 1933. Russia: **EP** (S). – Iran.

Diodontus tristis (Vander Linden, 1829) [Pemphredon]. Russia: **EP** (N, NW, C, E, S), **UR**, **WS** (AL), **ES** (IR, YA, ZB), **FE** (AM). – Europe (WE, NE, SE, EE), Turkey, Iran, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia.

PASSALOEUCUS Shuckard, 1837 (*Xyloeus* Shuckard, 1837, nom. praeocc., nec Déjean, 1833; *Coeloeus* C. Verhoeff, 1890; *Heroeus* C. Verhoeff, 1890). Type species *Pemphredon insignis* Vander Linden, 1829. Number of species: World – 40; Palaeartic – 24; Russia – 17.

Passaloeus borealis Dahlbom, 1844. Russia: **EP** (N, NW), **WS** (AL), **ES** (IR), **FE** (KH, PR, SA, MG). – Europe (WE, NE, SE, EE), Kazakhstan, N America. Records in **EP** (C, E) and **UR** erroneous.

Passaloeus brevilabris Wolf, 1958. Russia: **EP** (C, CR). – Europe (WE, NE, SE, EE).

Passaloeus clypealis Faester, 1947 (*P. angustus* Gussakovskij, 1952). Russia: **EP** (N, C, E, NC), **UR**, **WS** (AL), **ES** (IR), **FE** (AM, KH, PR, SA, KU, KA). – Europe (WE, NE, SE, EE), Tajikistan, Uzbekistan,

- Kyrgyzstan, Kazakhstan, China (NC, CC, SE), Korean Peninsula, Japan (Hok, Hon).
- Passaloecus corniger** Shuckard, 1837. Russia: **EP** (N, C, E, S, NC, CR). – Europe (WE, NE, SE, EE), N Africa, Turkey, Kazakhstan, Japan (Hon).
- Passaloecus eremita** Kohl, 1893. Russia: **EP** (N, C, E). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan.
- Passaloecus gracilis** (Curtis, 1834) [Diodontus] (*P. brevicornis* A. Morawitz, 1864). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), N Africa, Abkhazia, Turkey, Iran, Uzbekistan, Kazakhstan, N America.
- Passaloecus hinganicus** Merisuo, 1976. Russia: **ES** (ZB).
- Passaloecus insignis** (Vander Linden, 1829) [Pemphredon] (*P. roettgeni* C. Verhoeff, 1890; *P. shuckardi* Yasumatsu, 1934). Russia: **EP** (NC, CR), **WS** (AL), **FE** (AM, PR). – Europe (WE, NE, SE, EE), Abkhazia, Turkey, Kazakhstan, China (CC, SW), Korean Peninsula, Japan (Hok, Hon). Records in **EP** (N, C, E) and **UR** doubtful.
- Passaloecus koreanus** Tsuneki, 1974 (*P. iwatai* Merisuo, 1976). Russia: **FE** (PR). – Korean Peninsula, Japan (Hok, Hon).
- Passaloecus longiceps** Merisuo, 1973. Russia: **EP** (N).
- Passaloecus mongolicus** Tsuneki, 1972 (*P. altaicus* Merisuo, 1976). Russia: **WS** (AL), **ES** (IR, ZB), **FE** (KH, PR, SA). – Kazakhstan, Mongolia, Japan (Hok, Hon).
- Passaloecus monilicornis** Dahlbom, 1842. Russia: **EP** (N, NW, C, E), **UR**, **WS** (TK, AL), **ES** (KR, IR, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG). – Europe (WE, NE, SE, EE), Kazakhstan, Mongolia, China (NE, SW, WP, SE), Korean Peninsula, Japan (Hok, Hon, Kyu), N America.
- Passaloecus nipponicola** Tsuneki, 1955. Russia: **FE** (KH, PR). – Japan (Hon).
- Passaloecus pictus** Ribaut, 1952. Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Abkhazia, Georgia, Turkey, Syria, Iran, S America.
- Passaloecus ribauti** Merisuo, 1974. Russia: **EP** (CR). – Europe (WE, SE), N Africa, Turkey, Syria.
- Passaloecus singularis** Dahlbom, 1844 (*P. tenuis* A. Morawitz, 1864; *P. gertrudis* Krombein, 1938; *P. gracilis* auct.). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **FE** (PR). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan, Japan (Hon), N America.
- Passaloecus turionum** Dahlbom, 1844 (*P. borealis* auct.). Russia: **EP** (NW, C, E, NC), **UR**. – Europe (WE, NE, SE, EE), Turkey, Tajikistan, Kyrgyzstan, Kazakhstan.
- PEMPHREDON** Latreille, 1796 (*Cemonus* Panzer, 1806; *Cemonus* Jurine, 1807; *Dineurus* Westwood, 1837; *Diphlebus* Westwood, 1840; *Chevrieria* Kohl, 1883; *Susanowo* Tsuneki, 1972; *Sinostigma* Hong, 1984). Type species *Crabro lugubris* Fabricius, 1793. Number of species: World – 44; Palaearctic – 28; Russia – 16.
- Pemphredon austriaca** (Kohl, 1888) [Diphlebius] (*P. coracina* Valkeila, 1972; *P. tenera* Valkeila, 1972; *P. nescia* Merisuo, 1972). Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), N Africa, Abkhazia, Azerbaijan, Turkey.
- Pemphredon baltica** Merisuo, 1972 (*P. fennica* Merisuo, 1972). Russia: **EP** (N, C), **UR**, **WS** (AL), **FE** (KH, PR, KA). – Europe (WE, SE, NE), N America.
- Pemphredon enslini** (Wagner, 1932) [Dineurus] (*P. austriaca* auct.). Russia: **EP** (C, E). – Europe (WE, SE).
- Pemphredon fabricii** (M. Müller, 1911) [Cemonus] (*P. lethifer* auct.). Russia: **EP** (C, S, NC). – Europe (WE, SE), Turkey, Kazakhstan, Japan (Hon).
- Pemphredon flavistigma** Thomson, 1874. Russia: **EP** (NW, C, E), **UR**, **ES** (KR, IR, BR), **FE** (KH, PR, SA). – Europe (WE, NE, SE, EE), Korean Peninsula, Japan (Hok, Hon).
- Pemphredon inornata** Say, 1824 (*Cemonus shuckardi* A. Morawitz, 1864; *C. dentatus* Puton, 1871; *P. tenax* W. Fox, 1892). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TK, KM, AL), **ES** (KR, IR, BR, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG). – Europe (WE, NE, SE, EE), N Africa, Turkey, Abkhazia, Central Asia, Kazakhstan, Mongolia, China (NE, NC, CC), Korean Peninsula, Japan (Hok, Hon), N America.
- Pemphredon japonica** Matsumura, 1912. Russia: **FE** (PR, SA, KU). – Nepal, Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Pemphredon krombeini** Tsuneki, 1960 (*P. mandibularis* Tsuneki, 1951, nom. praeocc., nec Cresson, 1865). Russia: **FE** (SA). – Japan (Hok, Hon).
- Pemphredon lethifer** (Shuckard, 1837) [Cemonus] (*Cemonus strigatus* Chevrier, 1870; *Diphlebus fuscatus* A. Wagner, 1918; *D. littoralis* A. Wagner, 1918; *D. neglectus* A. Wagner, 1918; *D. minutus* A. Wagner, 1918; *P. brevipetiolata* A. Wagner, 1932; *P. gemina* Valkeila, 1972; *P. trichogastor* Valkeila, 1972). Russia: **EP** (N, C, E, S, NC, CR), **UR**, **WS** (NS, AL), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE,

SE, EE), N Africa, Abkhazia, Azerbaijan, Turkey, Israel, Iraq, Iran, Tajikistan, Uzbekistan, Kyrgyzstan, Afghanistan, Kazakhstan, Mongolia, China (NE, NC, CC, SE), Korean Peninsula, Japan (Hok, Hon), N America.

Pemphredon lugens Dahlbom, 1842. Russia: **EP** (N, NW, C, E), **UR**, **WS** (AL), **ES** (KR, IR), **FE** (MG). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan.

Pemphredon lugubris (Fabricius, 1793) [Crabro] (*P. concolor* Say, 1824; *P. fuscipennis* Stephens, 1829; *P. nitida* Stephens, 1829; *P. ocellaris* Gimmerthal, 1836; *P. luctuosa* Shuckard, 1837; *P. morio* Cresson, 1865, nom. praeocc., nec Vander Linden, 1829; *P. cressoni* Dalla Torre, 1897; *P. provancheri* Dalla Torre, 1897; *P. provancheri* Ashmead, 1899, nom. praeocc., nec Dalla Torre, 1897; *P. tinctipennis* Cameron, 1908; *P. shawii* Rohwer, 1917; *P. pacifica* Gussakovskij, 1932). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (TK, AL), **ES** (IR, ZB), **FE** (KH, PR, SA, KU, KA, MG). – Europe (WE, NE, SE, EE), Turkey, Iran, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE, CC), Korean Peninsula, Japan (Hok, Hon), N America.

Pemphredon montana Dahlbom, 1844 (*P. angularis* W. Fox, 1892). Russia: **EP** (N, NW, C, E), **UR**, **ES** (KR, IR, BR, YA), **FE** (AM, KH, PR, SA, KU, KA, MG). – Europe (WE, NE, SE, EE), Kazakhstan, China (NE), Korean Peninsula, Japan (Hok, Hon), N America.

Pemphredon mortifer Valkeila, 1972 (*P. bipartior* W. Fox, 1892; *P. harbecki* Rohwer, 1910; *P. rugifer* auct.). Russia: **EP** (NW, C, E, S, NC), **UR**, **ES** (IR), **FE** (KH, PR, SA). – Europe (WE, NE, SE, EE), Azerbaijan, Turkey, Korean Peninsula, Japan (Hok), N America.

Pemphredon podagrica Chevrier, 1870 (*P. laeviceps* Gussakovskij, 1932). Russia: **FE** (PR, SA). – Europe (WE, SE, EE), Japan (Hok, Hon).

Pemphredon rugifer (Dahlbom, 1844) [Cemonus] (*Sphex unicolor* Panzer, 1798, nom. praeocc., nec Fabricius, 1787; *Cenonmus* [sic] *pilosus* Gimmerthal, 1836, nom. oblitum; *Cemonus solivagus* Bondroit, 1932; *P. cythica* Valkeila, 1972; *P. punctifer* Merisuo, 1972). Russia: **EP** (C, E, S, NC), **UR**, **WS** (NS, AL), **ES** (KR), **FE** (SA). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan, China (NE, SW), Korean Peninsula, Japan (Hon), N America.

Pemphredon wesmaeli (A. Morawitz, 1864) [Cemonus] (*P. scotica* Perkins, 1929; *P. rugifer* auct.).

Russia: **EP** (N, NW, C, E), **UR**. – Europe (WE, NE, SE, EE), Kazakhstan.

POLEMISTUS de Saussure, 1892. Type species *Polemistus macilentus* de Saussure, 1892. Number of species: World – 37; Palaearctic – 2; Russia – 1.

Polemistus abnormis (Kohl, 1888) [Passalocus]. Russia: **EP** (C), **WS** (AL), **FE** (KH, PR). – Europe (WE, SE), Kazakhstan, China (CC), Korean Peninsula, Japan (Hok, Hon), SE Asia.

SPILOMENA Shuckard, 1838 (*Celia* Shuckard, 1837, nom. praeocc., nec Zimmermann, 1832; *Microglossa* Rayment, 1930, nom. praeocc., nec Voight, 1831; *Microglossella* Rayment, 1935; *Taialia* Tsuneki, 1971). Type species *Stigmus troglodytes* Vander Linden, 1829. Number of species: World – 87; Palaearctic – 22; Russia – 7.

Spilomena beata Blüthgen, 1953 (*S. expectata* Valkeila, 1957). Russia: **EP** (C, S), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), Georgia, Kazakhstan.

Spilomena curruca (Dahlbom, 1844) [Celia] (*Spilomena pulawskii* Dollfuss, 1983; *S. nikkoensis* Tsuneki, 1971). Russia: **EP** (N, E), **UR**, **WS** (AL), **FE** (AM, PR, KU). – Europe (WE, NE, SE, EE), Japan (Hon).

Spilomena dedzeli Tsuneki, 1971. Russia: **FE** (KU). – Japan (Hon).

Spilomena differens Blüthgen, 1953. Russia: **EP** (N). – Europe (WE, NE, EE), Estonia.

Spilomena enslini Blüthgen, 1953. Russia: **EP** (E), **UR**, **WS** (AL). – Europe (WE, NE, EE), Kazakhstan.

Spilomena mocsaryi Kohl, 1898 (*S. capitata* Gussakovskij, 1931; *S. zavadili* Šnoflák, 1942). Russia: **EP** (C, S, CR), **UR**. – Europe (C, SE, EE), Georgia, Cyprus, Turkey, Syria, Jordan, Izrael, United Arab Emirates, Central Asia.

Spilomena troglodytes (Vander Linden, 1829) [Stigmus] (*Stigmus minutissimus* Radoszkowski, 1877; *Spilomena vagans* Blüthgen, 1953). Russia: **EP** (NW, C, NC, CR), **UR**, **FE** (PR). – Europe (WE, NE, SE, EE), N Africa, Abkhazia, Georgia, Turkey, Israel, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, N America.

STIGMUS Panzer, 1804 (*Antronius* Zetterstedt, 1838; *Gonostigmus* Rohwer, 1911; *Atopostigmus* Krombein, 1973). Type species *Stigmus pendulus* Panzer, 1804. Number of species: World – 25; Palaearctic – 9; Russia – 7.

Stigmus convergens Tsuneki, 1954 (*S. solskyi*: Nemkov, 1986; *S. pendulus*: Mokrousov, 2009). Russia: **FE** (KU). – Japan (Hok, Hon).

Stigmus eurasiaticus Mokrousov, 2017. Russia: **EP** (N, C, E), **UR**, **WS** (AL), **ES** (IR), **FE** (KH, PR). – China (SE), Korean Peninsula.

Stigmus japonicus Tsuneki, 1954. Russia: **FE** (AM, KH, PR, SA, KU). – Korean Peninsula, Japan (Hok, Hon).

Stigmus munakatai Tsuneki, 1954. Russia: **FE** (PR). – Japan (Hok, Hon, Kyu).

Stigmus pendulus Panzer, 1804 (*S. ater* Jurine, 1807). Russia: **EP** (C, E, NC), **UR**. – Europe (WE, NE, SE, EE).

Stigmus quadriceps Tsuneki, 1954. Russia: **FE** (KU). – Japan (Hok, Hon).

Stigmus solskyi A. Morawitz, 1864 (*S. europaeus* Tsuneki, 1954; *S. verhoeffi* Tsuneki, 1954). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), N Africa, Turkey, Kazakhstan.

TZUSTIGMUS Finnamore, 1995. Type species *Tzustigmus syam* Finnamore, 1995. Number of species: World – 8; Palaearctic – 3; Russia – 1.

Tzustigmus rhinocerus (Budrys, 1987) [Carinostigmus]. Russia: **FE** (KH, PR). – Korean Peninsula.

Tribe PSENINI

MIMESA Shuckard, 1937 (*Aporia* Wesmael, 1852, nom. praeocc., nec Hübner, 1819; *Aporina* Gussakovskij, 1937, nom. praeocc., nec Fuhrmann, 1902). Type species *Trypoxylon equestre* Fabricius, 1804. Number of species: World – 76; Palaearctic – 40; Russia – 15.

Mimesa beckeri Tournier, 1889. Russia: **EP** (S). – Kazakhstan, Mongolia.

Mimesa bicolor (Jurine, 1807) [Psen]. Russia: **EP** (N, NW, C, E, S, CR), **UR**, **WS** (NS, AL), **ES** (KR, IR, ZB), **FE** (PR, SA). – Europe (WE, NE, SE, EE), Israel, Kyrgyzstan, Kazakhstan, China (NC).

Mimesa breviventris F. Morawitz, 1891. Russia: **EP** (S). – Kazakhstan, China (NE).

Mimesa bruxellensis Bondroit, 1934 (*Psen rossicus* Gussakovskij, 1937). Russia: **EP** (NW, C, E), **UR**. – Europe (WE, NE, SE, EE), Kazakhstan.

Mimesa caucasica Maidl, 1914. Russia: **EP** (C, S, NC), **UR**. – Europe (EE), Georgia, Azerbaijan, Iran, Central Asia, Kazakhstan, Mongolia, China (NC).

Mimesa crassipes A. Costa, 1871 (*M. carbonaria* A. Costa, 1867, nom. praeocc., nec F. Smith, 1865; *M. ochroptera* A. Costa, 1871; *M. costae* Ed. André, 1888; *M. helvetica* Tournier, 1889; *M. lixivia* Tournier, 1889; *M. pannonica* Maidl, 1914). Russia: **EP** (C, E, S, NC, CR), **WS** (AL). – Europe (WE, SE, EE), Georgia, Turkey, Iran, Kyrgyzstan, Kazakhstan, China (NW).

Mimesa equestris (Fabricius, 1804) [Trypoxylon] (*Psen basalis* Stephens, 1829). Russia: **EP** (N, NW, C, E), **UR**, **WS** (NS, AL), **ES** (KR, IR, YA, ZB), **FE** (KH, PR, SA, KA, MG). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan, Korean Peninsula.

Mimesa grandii Maidl, 1933 (*Psen carinatus* Gussakovskij, 1937; *P. sciaphilus* Arcidiacono, 1965). Russia: **EP** (S). – Europe (WE, SE, EE), N Africa, Turkey, Iran, Turkmenistan, Kazakhstan, China (NC).

Mimesa gussakovskiji (de Beaumont, 1941) [Psen] (*Psen costae*: Gussakovskij, 1937). Russia: **EP** (E, S). – Europe (SE, EE), Kazakhstan.

Mimesa kurzenkoi Budrys, 1988. Russia: **FE** (PR, KU).

Mimesa lutaria (Fabricius, 1787) [Sphex] (*M. shuckardi* Wesmael, 1852; *M. basirufa* Packard, 1867; *M. nebrascensis* H. Smith, 1908; *Psen dispar* Gussakovskij, 1937; *M. mallochi* Finnamore, 1980). Russia: **EP** (NW, C, E), **UR**, **WS** (AL), **ES** (KR, IR, YA), **FE** (AM, KH, PR, SA, KU, KA, MG). – Europe (WE, NE, SE, EE), Turkey, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE), Korean Peninsula, Japan (Hok, Hon, Shi), N America.

Mimesa nigrita Eversmann, 1849 (*M. brevis* Maidl, 1914). Russia: **EP** (S), **UR**, **WS** (AL), **ES** (KR, IR). – Europe (WE, SE, EE), Turkey, Syria, Uzbekistan, Kazakhstan, Mongolia.

Mimesa punctipleuris (Gussakovskij, 1937) [Psen] (*Psen angulicollis* Tsuneki, 1972). Russia: **WS** (AL), **ES** (KR, ZB), **FE** (PR). – Kyrgyzstan, Kazakhstan, Mongolia.

Mimesa sibirica (de Beaumont, 1937) [Psen] (*Psen albopilosus* Tsuneki, 1972). Russia: **ES** (IR, BR, ZB). – Kazakhstan, Mongolia, China (NC).

Mimesa vindobonensis Maidl, 1914 (*Psen bidentatus* Gussakovskij, 1937, nom. praeocc., nec Cameron, 1908). Russia: **EP** (C, S), **WS** (AL), **ES** (KR, BR, ZB). – Europe (WE, EE), Turkey, Kazakhstan, Mongolia, China (NC).

MIMUMESA Malloch, 1933. Type species *Psen niger* Packard, 1867. Number of species: World – 32; Palaearctic – 13 (1 introduced); Russia – 7.

- Mimumesa atratina** (F. Morawitz, 1891) [Mimesa] (*Mimesa carbonaria* Tournier, 1889, nec F. Smith, 1865; *M. belgica* Bondroit, 1932; *M. longula* Gussakovskij, 1932; *Psen sameshimai* Yasumatsu, 1937). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (TM, AL), **ES** (KR, BR, ZB), **FE** (KH, PR, SA, KU, KA, MG). – Europe (WE, NE, SE, EE), Turkey, Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NC, NW), Korean Peninsula, Japan (Hon, Kyu), N America.
- Mimumesa beaumonti** (van Lith, 1949) [Psen]. Russia: **EP** (N, NW, C, E), **UR**, **WS** (TK), **ES** (IR), **FE** (PR). – Europe (WE, NE, EE), Kazakhstan.
- Mimumesa dahlbomi** (Wesmael, 1852) [Mimesa]. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (IR), **FE** (AM, KH, PR, SA, KU, KA, MG). – Europe (WE, NE, SE, EE), Turkey, Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NC, NW, CC, WP), Korean Peninsula, Japan (Hon).
- Mimumesa littoralis** (Bondroit, 1934) [Mimesa] (*Psen fulvitaris* Gussakovskij, 1934; *Mimesa celtica* Spooner, 1948). Russia: **EP** (N, NW, C, S, NC), **UR**, **WS** (AL), **ES** (TU, IR, ZB), **FE** (AM, KH, PR, SA, MG). – Europe (WE, NE, SE, EE), Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE), Korean Peninsula, Japan (Hok, Hon), India.
- Mimumesa sibiricana** R. Bohart, 1976 (*Psen sibiricus* Gussakovskij, 1937, nom. praeocc., nec de Beaumont, 1937). Russia: **WS** (AL), **ES** (IR, YA, ZB), **FE** (KA). – Europe (WE, Mongolia). Record in **UR** doubtful.
- Mimumesa spooneri** (Richards, 1948) [Mimesa]. Russia: **EP** (C). – Europe (WE, NE, EE).
- Mimumesa unicolor** (Vander Linden, 1829) [Psen] (*Mimesa borealis* Dahlbom, 1842; *M. palliditarsis* E. Saunders, 1904; *Psen oresterus* van Lith, 1976). Russia: **EP** (N, C, E, S, NC), **UR**, **WS** (NS, AL), **ES** (KR, IR, YA, ZB). – Europe (WE, NE, SE, EE), Azerbaijan, Turkey, Israel, Iraq, Afghanistan, Pakistan, Central Asia, Kazakhstan, China (NE, NC, NW, WP).
- PSEN** Latreille, 1796 (*Psenus* Rafinesque, 1815; *Psenia* Stephens, 1829; *Dahlbomia* Wissmann, 1849; *Mesopora* Wesmael, 1852; *Caenopsen* Cameron, 1899). Type species *Crabro ater* Olivier, 1792. Number of species: World – 95; Palaeartic – 25; Russia – 9.
- Psen affinis** Gussakovskij, 1937 (*P. hakusanus* Tsuneki, 1959). Russia: **FE** (AM, PR, SA, KU). – China (SW, SE), Korean Peninsula, Japan (Hok, Hon, Shi).
- Psen ater** (Olivier, 1792) [Crabro] (*Sphex ater* Fabricius, 1794; *Pelopoeus unicolor* Fabricius, 1804; *Pelopoeus compressicornis* Fabricius, 1804; *Psen atratus* Jurine, 1807; *Psen serraticornis* Jurine, 1807). Russia: **EP** (C, S, CR), **UR**, **WS** (AL), **ES** (KR, IR, BR, ZB), **FE** (AM, KH, PR, KU). – Europe (WE, NE, SE, EE), Turkey, Uzbekistan, Kazakhstan, Mongolia, China (NE, NW), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Psen aurifrons** Tsuneki, 1959 (secondary homonym of *P. aurifrons* (Taschenberg, 1875), now in *Pseneo Malloch*; *P. caocinnus* Tsuneki, 1973). Russia: **FE** (AM, KH, PR, SA, KU). – China (NC), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu).
- Psen bettoh** Tsuneki, 1977. Russia: **FE** (KU). – China (SE), Japan (Hok, Hon).
- Psen foveolatus** Budrys, 1986. Russia: **FE** (PR).
- Psen koreanus** Tsuneki, 1959 (*P. ohnonis* Tsuneki, 1973). Russia: **FE** (PR). – China (SE), Korean Peninsula, Japan (Hon, Ryu).
- Psen miyagino** Tsuneki, 1983 (*P. exorientis* Budrys, 1988). Russia: **FE** (PR). – Japan (Hon).
- Psen seminitidus** van Lith, 1965 (*Mimesa kohli* Gussakovskij, 1934, secondary homonym of *Psen kohli* W. Fox, 1898; *P. alticola* Tsuneki, 1977; *P. takanensis* Tsuneki, 1978). Russia: **ES** (ZB), **FE** (AM, PR, SA, KU). – China (NC, NW, WP, SW, SE), Korean Peninsula, Japan (Hok, Hon).
- Psen ussuriensis** van Lith, 1959 (*Mimesa orientalis* Gussakovskij, 1932, secondary homonym of *Psen orientalis* Cameron, 1890; *P. mandibularis* Tsuneki, 1959; *P. tsunekii* van Lith, 1965). Russia: **FE** (AM, PR). – China (NE), Korean Peninsula, Japan (Hok, Hon, Shi).
- PSENEO** Malloch, 1933 (*Punctipsen* van Lith, 1968). Type species *Psen kohli* W. Fox, 1898. Number of species: World – 26; Palaeartic – 1.
- Pseneo exaratus** (Eversmann, 1849) [Mimesa] (*Mimesa superba* Tournier, 1889; *M. picicornis* F. Morawitz, 1892). Russia: **EP** (C, E, NC), **UR**, **WS** (TK, KM, AL), **ES** (IR), **FE** (AM, PR). – Europe (WE, SE, EE), Abkhazia, Georgia, Kazakhstan, China (SE), Korean Peninsula, Japan (Hok, Hon, Shi, Ryu), India.
- PSENULUS** Kohl, 1897 (*Neofoxia* Viereck, 1901; *Stenomellinus* W. Schulz, 1911; *Eopsenus* Gussakovskij, 1934; *Nipponopsen* Yasumatsu, 1938). Type species *Psen fuscipennis* Dahlbom, 1843.

Number of species: World – 160; Palaearctic – 34; Russia – 15.

- Psenulus anomoneuræ** (Yasumatsu, 1938) [Nipponopsen] (*P. mandibularis* Tsuneki, 1959). Russia: **FE** (KH, PR, SA, KU). – Korean Peninsula, Japan (Hon, Kyu).
- Psenulus carinifrons** (Cameron, 1902) [Psen]. Russia: **EP** (NC). – Europe (SE), Turkey, Pakistan, China (SW), Korean Peninsula, Japan (Hon, Ryu), SE Asia, India, Australia.
- Psenulus chevrieri** (Tournier, 1889) [Psen] (*P. brevitaris* Merisuo, 1937; *P. pallipes* auct.). Russia: **EP** (C, E, S, CR), **UR**. – Europe (WE, NE, SE, EE), Armenia.
- Psenulus concolor** (Dahlbom, 1843) [Psen] (*Psen intermedius* Schenck, 1857; *P. ambiguus* Schenck, 1857). Russia: **EP** (N, C, E, NC, CR). – Europe (WE, NE, SE, EE), Turkey. Records in **UR** and Japan (Hok, Hon) doubtful.
- Psenulus fulvicornis** (Schenck, 1857) [Psen] (*P. schencki* auct.). Russia: **EP** (NC). – Europe (WE, C, SE, EE), N Africa, Turkey, Syria.
- Psenulus fuscipennis** (Dahlbom, 1843) [Psen] (*Psen nylanderi* Dahlbom, 1845; *P. dufouri* Dahlbom, 1845; *P. nigratus* Brischke, 1862; *P. procerus* A. Costa, 1867). Russia: **EP** (N, C, E, S, NC, CR), **UR**, **FE** (PR). – Europe (WE, NE, SE, EE), Georgia, Turkey, Korean Peninsula, Japan (Hok, Hon), India.
- Psenulus ghilarovi** Budrys, 1988. Russia: **FE** (KH, PR).
- Psenulus laevigatus** (Schenck, 1857) [Psen] (*Psen distinctus* Chevrier, 1870; *Psenulus fuscipes* Tsuneki, 1959). Russia: **EP** (C, E, NC, CR), **ES** (ZB), **FE** (PR, SA, KU). – Europe (WE, SE, EE), Turkey, Korean Peninsula, Japan (Hok, Hon).
- Psenulus lubricus** (Pérez, 1905) [Psen]. Russia: **FE** (SA, KU). – China (SW), Japan (Hok, Hon, Shi).
- Psenulus maculipes** Tsuneki, 1959. Russia: **FE** (KU). – Japan (Hon).
- Psenulus meridionalis** de Beaumont, 1937. Russia: **EP** (C, E, S, NC). – Europe (WE, SE, EE), Armenia, Turkey, Syria, Jordan, Iraq, Iran, Turkmenistan.
- Psenulus nikkoensis** Tsuneki, 1959. Russia: **FE** (KU). – Japan (Hok, Hon, Kyu).
- Psenulus pallipes** (Panzer, 1798) [Sphex] (*Trypoxylon atratum* Fabricius, 1804; *Psen montanus* A. Costa, 1861; *P. haemorrhoidalis* A. Costa, 1867; *P. minutus* Tournier, 1889; *P. nigricornis* Tournier, 1889; *P. pygmaeus* Tournier, 1889; *Psenulus rubicola* Harttig, 1931; *P. puncticeps* Gussakovskij, 1932, secondary

homonym of *Psen puncticeps* Cameron, 1907; *P. gussakovskij* van Lith, 1973). Russia: **EP** (N, C, E, S, NC, CR), **UR**, **WS** (TK, AL), **ES** (IR), **FE** (AM, KH, PR, SA, KU, KA). – Europe (WE, NE, SE, EE), Abkhazia, Armenia, Turkey, Iran, Kazakhstan, China (NC, SW), Korean Peninsula, Japan (Hok, Hon), N America.

Psenulus schencki (Tournier, 1889) [Psen] (*Psen simplex* Tournier, 1889; *P. longulus* Tournier, 1889). Russia: **EP** (C, E, S, NC, CR). – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey. Records in **WS** (AL) doubtful.

Psenulus tanakai Tsuneki, 1959. Russia: **FE** (PR). – Japan (Hon).

Subfamily PHILANTHINAE

YU.N. DANILOV AND M.V. MOKROUSOV

Tribe CERCERINI

CERCERIS Latreille, 1802 (*Apiraptrix* Shestakov, 1923; *Bucerceris* Minkiewicz, 1934; *Stercobata* Gussakovskij, 1935; *Apicerceris* Pate, 1937). Type species *Philanthus ornatus* Fabricius, 1790 [= *Sphex rybyensis* Linnaeus, 1771]. Number of species: World – about 860; Palaearctic – about 270; Russia – 62.

Cerceris adelpha Kohl in Schletterer, 1887 (*C. associa* Kohl, 1898). Russia: **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR). – Mongolia, China (NE, NC), Korean Peninsula.

Cerceris albicolor Shestakov, 1918. Russia: **EP** (S), **WS** (AL). – Europe (EE), Azerbaijan, Turkey, Turkmenistan, Kazakhstan.

Cerceris albofasciata Rossi, 1790 [Vespa] (*C. lucuosa* A. Costa, 1867; *C. navitatis* F. Smith, 1873; *C. cribrata* Mocsáry, 1879). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (NS, AL), **ES** (KS, KR, BR, ZB), **FE** (PR). – Europe (WE, SE, EE), Turkey, Iran, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NC, SE), Korean Peninsula, Japan (Hok, Hon, Kyu, Ryu).

Cerceris angelica Kazenas, 1977. Russia: **EP** (S). – Turkmenistan, Uzbekistan, Kazakhstan.

Cerceris angustirostris Shestakov, 1918. Russia: **EP** (CR), **WS** (AL). – Europe (EE), Kazakhstan.

Cerceris apakensis Tsuneki, 1961. Russia: **ES** (ZB). – Mongolia, China (NC).

- Cerceris arenaria** (Linnaeus, 1758) [Sphex] (*C. striolata* Schletterer, 1887; *C. flavescens* Schletterer, 1889; *C. stecki* Schletterer, 1889). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR, WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, ZB), **FE** (AM, PR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, Central Asia, Kazakhstan, Mongolia, China (NE), Korean Peninsula, Japan (Hon, Ryu).
- Cerceris bicincta** Klug in Waltl, 1835 (*C. quadrimaculata* Dufour, 1849; *C. leucozonica* Schletterer, 1887; *C. schulthessi* Schletterer, 1889). Russia: **EP** (C, S, CR), **UR, WS** (OM, NS, AL), **ES** (KS), **FE** (KH, PR). – Europe (WE, SE, EE), N Africa, Turkey, Israel, Afghanistan, Pakistan, Central Asia Kazakhstan, Mongolia, China (NE, NC), Korean Peninsula.
- Cerceris bracteata** Eversmann, 1849 (*C. penicillata* Mocsáry, 1879; *C. mirabilis* Shestakov, 1927). Russia: **EP** (C, E, S, CR), **UR, WS** (OM, NS, AL). – Europe (WE, SE, EE), Turkey, Iran, Turkmenistan, Uzbekistan, Kazakhstan, China (NW).
- Cerceris bupresticida** Dufour, 1841 (*C. argentifrons* Lepeletier de Saint Fargeau, 1845; *C. mixta* Radoszkowski, 1877; *C. quadripunctata* Radoszkowski, 1877). Russia: **EP** (E, S, NC, CR), **UR, WS** (AL). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Jordan, Lebanon, Israel, Iraq, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia, China (NE, NC).
- Cerceris circularis** (Fabricius, 1804) [Philanthus] (*C. dacica* Schletterer, 1887). Russia: **EP** (C, S, NC, CR), **UR, WS** (AL). – Europe (WE, SE, EE), N Africa, Armenia, Turkey, Syria, Israel, Iran, Turkmenistan, Uzbekistan, Kazakhstan, Mongolia.
- Cerceris conica** Shestakov, 1918. Russia: **EP** (NC). – Armenia, Turkey, Turkmenistan.
- Cerceris coreensis** Tsuneki, 1961. Russia: **FE** (PR). – Korean Peninsula.
- Cerceris cupes** Shestakov, 1918 (*C. pulawskii* Kazenas, 1972, nom. praeocc., nec Tsuneki, 1971; *C. kazenasi* Pulawski, 1976). Russia: **WS** (AL). – Turkey, Central Asia, Kazakhstan.
- Cerceris dorsalis** Eversmann, 1849 (*C. solskii* Radoszkowski, 1877; *C. nobilis* Radoszkowski, 1877; *C. excavata* Schletterer, 1889; *C. caspica* F. Morawitz, 1891). Russia: **EP** (C, S, NC), **UR, WS** (AL). – Europe (EE), Armenia, Turkey, Iran, Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NC).
- Cerceris elegans** Evermann, 1849. Russia: **UR**. – Kazakhstan.
- Cerceris errata** Shestakov, 1918. Russia: **EP** (S). – Turkmenistan, Uzbekistan, Kazakhstan.
- Cerceris eryngii** Marquet, 1875 (*C. haueri* Schletterer, 1887; *C. robusta* Shestakov, 1915; *C. prahenda* Kazenas, 1978). Russia: **EP** (S, CR), **UR, WS** (AL). – Europe (WE, SE, EE), N Africa, Turkey, Israel, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Cerceris eversmanni** W. Schulz, 1912 (*C. cornuta* Eversmann, 1849, secondary homonym of *C. cornuta* (Fabricius, 1787); *C. caucasica* Shestakov, 1915). Russia: **EP** (NC, CR), **UR, WS** (TK, NS, KM, AL), **ES** (TU, KR, IR). – Europe (WE, SE, EE), Georgia, Azerbaijan, Turkey, Kazakhstan, Mongolia, China (NE).
- Cerceris falcifera** Tsuneki, 1961. Russia: **ES** (ZB). – China (NC).
- Cerceris fimbriata** (Rossi, 1790) [Crabro] (*C. pallidopicta* Radoszkowski, 1877; *C. polita* Schletterer, 1889; *C. cogens* Kohl, 1916). Russia: **EP** (C, S), **UR**. – Europe (WE, SE, EE), N Africa, Georgia, Armenia, Turkey, Syria, Israel, Afghanistan, Pakistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia.
- Cerceris flavicornis** Brullé, 1833 (*C. conigera* Dahlbom, 1845). Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), Georgia, Turkey, Israel, Central Asia, Kazakhstan, Mongolia, China (NW).
- Cerceris flavilabris** (Fabricius, 1793) [Hylaeus] (*C. aurita* Latreille, 1805; *C. ferreri* Vander Linden, 1829; *C. laminata* Eversmann, 1849). Russia: **EP** (C, E, S, NC, CR), **UR, WS** (OM, NS, AL), **ES** (KS). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, China (NC).
- Cerceris fodiens** Eversmann, 1849 (*C. charusini* F. Morawitz, 1891; *C. sareptana* Schletterer, 1887; *C. opalipennis* Kohl, 1888; *C. shur* Shestakov, 1918). Russia: **EP** (S, NC, CR), **UR, WS** (AL). – Europe (EE), Azerbaijan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Cerceris fulvipes** Eversmann, 1849 (*C. shaman* Shestakov, 1918). Russia: **ES** (KR, IR, ZB). – Kazakhstan, China (WP).
- Cerceris hohlbecki** Shestakov, 1914 (*C. fragosa* Kohl, 1916). Russia: **EP** (S, NC). – Armenia, Central Asia, Kazakhstan.
- Cerceris hortivaga** Kohl, 1880. Russia: **FE** (AM, PR, KU). – Europe (WE, SE, EE), China (NE, NC), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu).

- Cerceris impercepta** de Beaumont, 1950. Russia: **EP** (S), **WS** (AL). – Europe (C, E), Kazakhstan.
- Cerceris interrupta** (Panzer, 1799) [Philanthus] (*C. labiata* (Fabricius, 1793), secondary homonym of *C. labiata* (Olivier, 1792); *C. peninsularis* Mercet, 1903). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (NS, AL), **ES** (KR). – Europe (WE, SE, EE), Turkey, Kazakhstan.
- Cerceris jakowleffi** Kohl, 1898 (*C. pulawskii* Tsuneki, 1971). Russia: **ES** (IR, BR, ZB). – Mongolia, China (NC)
- Cerceris kaszabi** Tsuneki, 1971. Russia: **ES** (KR, IR, BR, YA, ZB), **FE** (AM, PR, SA). – Mongolia, China (NE).
- Cerceris kuznetzovi** Kazenas, 1984. Russia: **EP** (S). – Uzbekistan, Kazakhstan.
- Cerceris lunata** A. Costa, 1867 (*C. dorsalis* Dufour, 1849, nom. praeocc., nec Eversmann, 1849; *C. funerea* A. Costa, 1867). Russia: **EP** (C, S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Armenia, Turkey, Syria, Israel, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Cerceris manchuriana** Tsuneki, 1961. Russia: **FE** (PR). – China (NE).
- Cerceris manflava** Tsuneki, 1971 (*C. flava* Tsuneki, 1961, nom. praeocc., nec Mochi, 1939). Russia: **FE** (AM, PR). – Mongolia, China (NC).
- Cerceris media** Klug, 1835 (*C. capitata* F. Smith, 1856). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Turkey, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Cerceris micropunctata** Shestakov, 1918. Russia: **WS** (AL), **ES** (KS, KR, IR, BR, YA, ZB).
- Cerceris odontophora** Schletterer, 1887. Russia: **EP** (S, NC). – Europe (SE, EE), Azerbaijan, Turkey, Iran, Tajikistan, Kazakhstan, China (NW).
- Cerceris pedetes** Kohl, 1887 (*C. bicornuta* F. Smith, 1856, nom. praeocc., nec Guérin-Méneville, 1844; *C. smithii* Dalla Torre, 1897). Russia: **ES** (ZB), **FE** (AM, PR). – China (NE), Korean Peninsula, Japan (Hon).
- Cerceris pucilii** Radoszkowski, 1869 (*C. poutziloi* W. Schulz, 1906; *C. nupta* Shestakov, 1918). Russia: **ES** (TU, BR, ZB), **FE** (AM, KH, PR). – Mongolia, China (NE, NC, NW).
- Cerceris quadricincta** (Panzer, 1799) [Philanthus]. Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iraq, Iran, Afghanistan, Central Asia, Kazakhstan.
- Cerceris quadricolor** F. Morawitz, 1889. Russia: **ES** (BR). – Mongolia, China (NE, NC).
- Cerceris quadrifasciata** (Panzer, 1799) [Philanthus] (*C. truncatula* Dahlbom, 1844). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (NS, AL), **ES** (KS, KR, IR, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE), Abkhazia, Georgia, Armenia, Turkey, Kazakhstan, China (NE), Korean Peninsula.
- Cerceris quinquefasciata quinquefasciata** (Rossi, 1792) [Crabro] (*C. nasuta* Dahlbom, 1844). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (OM, NS, KM, AL), **ES** (KS, TU, KR). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Kazakhstan.
- Cerceris quinquefasciata seoulensis** Tsuneki, 1961. Russia: **ES** (ZB), **FE** (AM, PR). – China (NE), Korean Peninsula.
- Cerceris rossica** Shestakov, 1914. Russia: **EP** (S, CR). – Europe (EE), Kazakhstan.
- Cerceris rubida** (Jurine, 1807) [Philanthus] (*C. albonotata* Vander Linden, 1829). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (NS, AL), **FE** (PR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Syria, Jordan, Israel, Iraq, Iran, Afghanistan, Central Asia, Kazakhstan, China (NE, NC, NW), Korean Peninsula.
- Cerceris ruficornis** (Fabricius, 1793) [Philanthus] (*C. cunicularia* (Schrank, 1802); *C. labiata* auct.). Russia: **EP** (N, C, E, S, CR), **UR**, **WS** (TM, NS, AL), **ES** (IR, BR, YA), **FE** (KH, SA). – Europe (WE, NE, SE, EE), N Africa, Turkey, Iran, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, China (NE, NW), Korean Peninsula.
- Cerceris rybyensis** (Linnaeus, 1771) [Sphex] (*C. ornata* (Fabricius, 1790); *C. variabilis* (Schrank, 1802); *C. jacobsoni* Shestakov, 1923). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, KR, IR, BR, YA, ZB), **FE** (PR, SA). – Europe (WE, NE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Syria, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Korean Peninsula, Japan (Hon), India.
- Cerceris sabulosa** (Panzer, 1799) [Philanthus] (*C. emarginata* Panzer, 1799; *C. subgibbosa* Yasumatsu, 1935). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (OM, NS, AL). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Lebanon, Israel, Iraq, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NE, NC, NW, WP), Korean Peninsula.

- Cerceris scutifera** Shestakov, 1914 (*C. tadjhika* Gussakovskij, 1952). Russia: **EP** (NC), **WS** (AL). – Turkmenistan, Tadjikistan, Uzbekistan, Kazakhstan.
- Cerceris semilunata** Radoszkowski, 1870. Russia: **ES** (KR, IR, BR, ZB), **FE** (AM, PR). – Mongolia, China (NE), Korean Peninsula.
- Cerceris shestakoviana** Gussakovskij, 1952. Russia: **EP** (S). – Turkmenistan, Tadjikistan, Uzbekistan, Kazakhstan.
- Cerceris sibirica** F. Morawitz, 1892. Russia: **ES** (KR, BR, ZB), **FE** (AM). – China (NE).
- Cerceris somotorensis** Balthasar, 1956. Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, EE), Kazakhstan.
- Cerceris specularis** A. Costa, 1867. Russia: **EP** (S, CR), **UR**. – Europe (WE, SE, EE), N Africa, Georgia, Turkey, Syria, Jordan, Israel, Iran, Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Cerceris spinipectus** F. Smith, 1856 (*C. prisca* Schletterer, 1887; *C. accola* Kohl, 1916). Russia: **EP** (S). – Europe (SE, EE), N Africa, Georgia, Armenia, Turkey, Jordan, Israel, Saudi Arabia, Yemen, Iraq, Iran, Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Cerceris stratiotes** Schletterer, 1887. Russia: **EP** (NC, CR), **UR**, **WS** (AL). – Europe (SE, EE), Armenia, Azerbaijan, Turkey, Kyrgyzstan.
- Cerceris tenuivittata** Dufour, 1849. Russia: **EP** (S, CR). – Europe (WE, SE, EE), Turkey, Syria, Israel, Central Asia, Kazakhstan.
- Cerceris tuberculata** (de Villers, 1789) [Crabro] (*C. rufipes* (Fabricius, 1787); *C. caspia* (Gmelin, 1790); *C. semirufa* F. Smith, 1856; *C. evecta* Shestakov, 1918). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (OM, NS, AL), **ES** (KR, BR, ZB). – Europe (WE, SE, EE), Georgia, Armenia, Azerbaijan, Turkey, Israel, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NE, NC), Korean Peninsula.
- Cerceris vagans** Radoszkowski, 1877 (*C. rufonodis* Radoszkowski, 1877, nom. praeocc., nec *C. rufinodis* F. Smith, 1856; *C. turkestanica* Radoszkowski, 1893). Russia: **EP** (S, NC). – Turkey, United Arab Emirates, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan.
- Cerceris verhoeffi** Tsuneki, 1961. Russia: **FE** (AM, PR). – China (NE).
- Cerceris vitticollis** F. Morawitz, 1894. Russia: **EP** (S, CR). – Turkmenistan, Tadjikistan, Uzbekistan, Kazakhstan.

Tribe PHILANTHINI

- PHILANTHINUS** de Beaumont, 1949 (*Shestakoviel-la* Gussakovskij, 1952). Type species *Philanthus integer* de Beaumont, 1949. Number of species: World – 4; Palaearctic – 4; Russia – 1.
- Philanthinus quattuordecimpunctatus** (F. Morawitz, 1888) [Anthophilus] (*Anthophilus elegans* F. Morawitz, 1888; *Philanthus eximius* F. Morawitz, 1894). Russia: **EP** (C, CR), **WS** (AL). – Turkey, Turkmenistan, Kazakhstan, China (NW).
- PHILANTHUS** Fabricius, 1790 (*Anthophilus* Dahlbom, 1844). Type species *Philanthus coronatus* Fabricius, 1790 (= *Sphex coronatus* Thunberg, 1784). Number of species: World – 133; Palaearctic – 32; Russia – 8.
- Philanthus coronatus** (Thunberg, 1784) [Sphex] (*Ph. coronatus* Fabricius, 1790, secondary homonym of *Ph. coronatus* (Thunberg, 1784)). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (NS, AL), **ES** (KR). – Europe (WE, SE, EE), N Africa, Turkey, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NC, NW), Korean Peninsula.
- Philanthus decemmaculatus** Eversmann, 1849 (*Ph. angustifrons* Kohl, 1891). Russia: **EP** (C, CR), **UR**, **WS** (TK). – Europe (WE), N Africa, Armenia, Turkey, Syria, Kyrgyzstan, Kazakhstan.
- Philanthus desertorum** (F. Morawitz, 1890). Russia: **EP** (S). – Turkmenistan, Uzbekistan.
- Philanthus glaber** Kohl, 1891 (*Ph. rubriventris* Kazenas, 1970; *Ph. kaszabi* Tsuneki, 1971). Russia: **WS** (AL), **ES** (BR, ZB). – Kazakhstan, Mongolia, China (NC).
- Philanthus hellmanni** (Eversmann, 1849) [Anthophilus] (*Ph. sibiricus* Radoszkowski, 1888). Russia: **WS** (AL), **ES** (KR, IR, BR, ZB), **FE** (AM, PR). – Tajikistan, Kazakhstan, Mongolia, China (NC).
- Philanthus triangulum** (Fabricius, 1775) [Vespa]. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (NS, KM, AL). – Europe (WE, NE, SE, EE), N Africa, Abkhazia, Georgia, Azerbaijan, Turkey, Syria, Jordan, Israel, Saudi Arabia, Yemen, Iraq, Iran, Afghanistan, Central Asia, Kazakhstan, Africa.
- Philanthus variegatus** Spinola, 1839 (*Ph. kizilkumi* Radoszkowski, 1877). Russia: **EP** (S). – N Africa, Armenia, Azerbaijan, Turkey, Syria, Israel, Saudi Arabia, Kuwait, United Arab Emirates, Oman, Iraq, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, China (NC).

Philanthus venustus (Rossi, 1790) [Crabro]. Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Turkey, Syria, Israel, Kazakhstan, Mongolia.

Tribe PSEUDOSCOLIINI

PSEUDOSCOLIA Radoszkowski, 1876 (*Philoponus* Kohl, 1889; *Acolpus* Vachal, 1893; *Philoponidea* Pate, 1937; *Philoponoides* Giner Marí, 1945). Ty p e s p e c i e s *Pseudoscolia maculata* Radoszkowski, 1876. Number of species: World – 49; Palaearctic – 48; Russia – 5.

Pseudoscolia corporica Kazenas, 1994. Russia: **EP** (S). – Turkmenistan.

Pseudoscolia diversicornis (F. Morawitz, 1894) [Philanthus]. Russia: **EP** (CR). – Turkmenistan, Tajikistan, Uzbekistan.

Pseudoscolia frontalis Kazenas, 1994. Russia: **EP** (S). – Turkmenistan, Kazakhstan.

Pseudoscolia marshakovi Kazenas, 1994. Russia: **EP** (S). – Turkmenistan.

Pseudoscolia simplicicornis (F. Morawitz, 1894) [Philanthus] (*Philanthus variegatus* (F. Morawitz, 1889), secondary homonym of *Ph. variegatus* Spinola, 1839). Russia: **EP** (S, NC), **ES** (ZB). – Europe (EE), Turkmenistan, Uzbekistan, Kazakhstan, Mongolia.

SECTION APIFORMES – BEES

73. FAMILY COLLETIDAE

M.YU. PROSHCHALYKIN

The family contains perhaps 2600 species around the world. There are five subfamilies: Colletinae, Hylaeinae, Diphaglossinae, Xeromelissinae, and Euryglossinae. The subfamily Hylaeinae is found on all continents except Antarctica but is most abundant and diverse in Australia. It is represented in Palaearctic region by the genus *Hylaeus*, which contains small, slender, black species with two submarginal cells, usually with yellow markings at least on the face. Females lack external pollen-carrying apparatus (scopa), they carry pollen in their crops. Most species nest in dead hollow or pithy stems. The subfamily Colletinae occurs around the world but it is diverse only in the southern continents. It is represented in Palaearctic region only by genus *Colletes*. Females carry pollen externally, on the well-developed scopa of the hind legs (trochanter to tibia). Nests are in burrows in the ground. Number of taxa: World – 86 genera, 2630 species; Palaearctic – 2/432; Russia – 2/100.

References. Eversmann, 1852; Morawitz, 1874; Radoszkowski, 1891; Noskiewicz, 1936; Nikiforuk, 1957; Osytshnjuk, 1970; Blagoveshchenskaya, 1970; Warncke, 1972, 1978; Sedykh, 1974; Osytshnjuk et al., 1978; Dathe, 1980a, b; Sitdikov, 1986; Ikudome, 1989; Osytshnjuk, Romankova, 1995; Proshchalykin, 2004, 2007a, 2008a, 2010, 2012a, 2014a, 2017; Humala, 2006; Kuhlmann, Quest, 2006; Levchenko, 2009; Kuhlmann, Proshchalykin, 2011, 2013a, b, 2014, 2016; Proshchalykin, Kuhlmann, 2012, 2015a, b; Proshchalykin, Dathe, 2012, 2016a, b, 2017; Shibaev, Polumordvinov, 2012; Levchenko, Yuferev, 2013; Proshchalykin, Lelej, 2013; Paukkunen, Kozlov, 2015; Dathe, Proshchalykin, 2016, 2017; Proshchalykin, Astafurova, 2016; Ascher, Pickering, 2017; Kuhlmann et al., 2017.

Subfamily COLLETINAE

COLLETES Latreille, 1802 (*Evodia* Panzer, 1806; *Monia* Westwood, 1875; *Monidia* Cockerell, 1905).
Type species *Apis succincta* Linnaeus, 1758.
Number of species: World – 500; Palaearctic – 212; Russia – 43.

Colletes albomaculatus (Lucas, 1849) [*Halictus*] (*C. spectabilis* Morawitz, 1868; *C. niveofasciatus*

Dours, 1872). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Syria, Jordan, Iran, Tajikistan, Kyrgyzstan.

Colletes alini Kuhlmann, 2000. Russia: **ES** (KS, TU, KR, BR, ZB), **FE** (PR). – Mongolia, China (NE, NC, NW).

Colletes anceps Radoszkowski, 1891 (*C. caspicus anceps*: Warncke, 1978). Russia: **EP** (NC). – Turkey, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, China (NW).

Colletes arsenjevi Kuhlmann, 2006. Russia: **FE** (PR). – Kazakhstan, Mongolia, China (NC, NW).

Colletes caspicus Morawitz, 1874 (*C. balticus* Alfken, 1912). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (OM, AL), **ES** (TU, KR). – Europe (WE, NE, EE), Georgia, Azerbaijan, Central Asia, Kazakhstan.

Colletes chengtehensis Yasumatsu, 1935 (*C. pallescens* Noskiewicz, 1936; *C. tsunekii* Yasumatsu, 1948; *C. marginatus pallescens*: Warncke, 1978). Russia: **EP** (NW, S, NC, CR), **UR**, **WS** (OM, NS, KM, AL), **ES** (KS, TU, KR, BR, ZB). – Europe (WE, SE, EE), Georgia, Azerbaijan, Iran, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NC, NW).

Colletes cinerascens Morawitz, 1893. Russia: **ES** (TU). – Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NW, WP).

Colletes collaris Dours, 1872 (*C. incerta* Radoszkowski, 1891; *C. frigidus* Pérez, 1903; *Andrena riukiensis* Matsumura, 1926). Russia: **EP** (C, E), **WS** (KM, AL), **ES** (TU, KR, IR, BR, ZB), **FE** (KH, PR, SA, KU). – Europe (WE, SE, EE), Kazakhstan, Mongolia, China (NE, NC, CC, SW, WP).

Colletes cunicularius (Linnaeus, 1761) [*Apis*] (*Apis cinerea* Geoffroy, 1785; *Colletes hirtus* Lepeletier de Saint Fargeau, 1825; *C. pilosus* Spinola, 1838; *C. cunicularius infuscatus* Noskiewicz, 1936; *C. c. celticus* O'Tolle, 1974; *C. c. tauricus* Warncke, 1978; *C. c. khasanensis* Osytshnjuk, 1995). Russia: **EP** (NW, C, E, S, CR), **UR**, **WS** (TK, KM, AL), **ES** (KR, IR, BR), **FE** (KH, PR). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan, Mongolia, China (NE, NC).

Colletes daviesanus Smith, 1846 (?*Apis canus* Gmelin, 1790; *Colletes daviesanus signatus* Verhoeff, 1890). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (OM, TK, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH). – Europe (WE, NE, SE, EE), Georgia, Armenia, Turkey, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE, WP).

Colletes ebmeri Kuhlmann, 2002. Russia: **ES** (BU). – Kazakhstan, Mongolia.

- Colletes eous** Morice, 1904 (*C. cecrops* Morice, 1904; *C. porosicus* Strand, 1921; *C. illyricus* Noskiewicz, 1936; *C. dimidiatus eous*: Warncke, 1978). Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), N Africa, Azerbaijan, Georgia, Turkey, Lebanon, Iran, Central Asia, Kazakhstan, India.
- Colletes floralis** Eversmann, 1852 (*C. alpinus* Morawitz, 1872; *C. montana* Morawitz, 1876; *C. suecica* Aurivillius, 1903; *C. kudiensis* Cockerell, 1924; *C. yasumatsui* Hirashima et Ikudome, 1989). Russia: **EP** (N, C, E, S, NC), **UR**, **WS** (TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE, SE, EE), Georgia, Turkey, Iran, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, Japan (Hok, Hon), India.
- Colletes fodiens** (Fourcroy, 1785) [Apis] (?*Apis fosorius* Razoumowsky, 1789; *A. pallidicincta* Kirby, 1802; *Colletes kirgisica* Radoszkowski, 1867; *C. fodiens hispanicus* Noskiewicz, 1936). Russia: **EP** (NW, C, S, NC, CR), **UR**, **WS** (OM, KM, AL), **ES** (KS, TU, KR). – Europe (WE, NE, SE, EE), Azerbaijan, Turkey, Iran, Pakistan, Kyrgyzstan, Kazakhstan, Mongolia.
- Colletes friesei** Cockerell, 1918 (*C. mongolicus* Friese, 1913, nom. praeocc., nec Pérez, 1903). Russia: **ES** (BU). – Tajikistan, China (NC).
- Colletes fulvicornis** Noskiewicz, 1936. Russia: **WS** (AL), **ES** (TU, ZB). – Mongolia, China (NW, WP).
- Colletes hakkari** Kuhlmann, 2002. Russia: **EP** (NC). – Turkey, Iran.
- Colletes hederæ** Schmidt et Westrich, 1993. Russia: **EP** (CR). – Europe (WE, SE).
- Colletes hylaeiformis** Eversmann, 1852 (*C. chobauti* Pérez, 1903). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Georgia, Azerbaijan, Tajikistan, Uzbekistan, Kazakhstan.
- Colletes impunctatus** Nylander, 1852. Russia: **EP** (N, NW, E), **WS** (AL), **ES** (KS, TU, IR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA). – Europe (WE, NE, SE, EE), Kazakhstan, Mongolia, China (NC).
- Colletes inexpectatus** Noskiewicz, 1936. Russia: **EP** (C, S), **UR**. – Europe (WE, SE, EE), Turkey, Central Asia, Kazakhstan, Mongolia.
- Colletes jankowskyi** Radoszkowski, 1891 (*C. ventralis* Pérez, 1903; *C. ventraliformis* Cockerell, 1924). Russia: **WS** (AL), **ES** (KS, TU, KR, IR, BR, ZB), **FE** (AM, KH, PR). – Tajikistan, Mongolia, China (NE, NC, SW).
- Colletes kaszabi** Kuhlmann, 2002. Russia: **ES** (TU, BR). – Mongolia, China (NC).
- Colletes kozlovi** Friese, 1913. Russia: **EP** (S, NC), **ES** (TU, BR). – Azerbaijan, Central Asia, Kazakhstan, Mongolia, China (NW).
- Colletes laevifrons** Morawitz, 1893. Russia: **WS** (AL). – Iran, Tajikistan, Kyrgyzstan, Kazakhstan.
- Colletes maidli** Noskiewicz, 1936 (*C. lebedewi* Noskiewicz, 1936). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Syria, Israel, Iran, Kazakhstan.
- Colletes marginatus** Smith, 1846 (*C. thomsoni* Alfken, 1899). Russia: **EP** (NW, C, E, S), **UR**, **WS** (OM, TK, KM, AL), **ES** (TU, KR). – Europe (WE, NE, SE, EE), Georgia, Turkey.
- Colletes mlokoszewiczi** Radoszkowski, 1891 (*C. brevicornis* Pérez, 1903, nom. praeocc., nec Robertson, 1897; *C. brachycerus* Swenk, 1906). Russia: **EP** (N, C, S, NC, CR), **UR**. – Europe (WE, SE, EE), Georgia, Azerbaijan, Turkey, Central Asia, Kazakhstan.
- Colletes nasutus** Smith, 1853. Russia: **EP** (S, NC). – Europe (WE, SE, EE), Armenia, Azerbaijan, Turkey, Syria, Iran.
- Colletes patellatus** Pérez, 1905 (*C. kobensis* Cockerell, 1926). Russia: **ES** (ZB). – China (NC, CC, SW, SE), Korean Peninsula, Japan (Hon, Shi, Kyu).
- Colletes perforator** Smith, 1869 (*C. vogti* Pérez, 1905). Russia: **ES** (ZB), **FE** (AM, PR). – Mongolia, China (NE, NC, CC), Japan (Hok, Hon, Shi, Kyu).
- Colletes pseudocinerascens** Noskiewicz, 1936. Russia: **WS** (AL), **ES** (TU, YA). – Mongolia.
- Colletes ravulus** Noskiewicz, 1936. Russia: **ES** (TU, BR). – Mongolia, China (NC, NW).
- Colletes roborovskyi** Friese, 1913. Russia: **EP** (E, S), **ES** (BR). – Georgia, Azerbaijan, Turkey, Iran, Pakistan, Turkmenistan, Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia.
- Colletes senilis** (Eversmann, 1852) [Andrena] (*C. juvenculus* Eversmann, 1852). Russia: **EP** (E, S), **UR**. – Europe (SE, EE), Azerbaijan, Turkey, Iran, Kazakhstan.
- Colletes sidemii** Radoszkowski, 1891 (*C. mongolicus* Pérez, 1903). Russia: **EP** (E), **UR**, **WS** (AL), **ES** (KS, TU, KR, IR, BR, ZB), **FE** (AM, PR). – Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NC, NW, SW, WP), Nepal.
- Colletes similis** Schenck, 1853 (*C. picistigma* Thomson, 1872). Russia: **EP** (C, S, NC, CR), **UR**, **WS** (TM, NS, KM, AL), **ES** (KS, KR, IR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Syria, Jordan, Israel, Central Asia, Kazakhstan, China (NW).

- Colletes subnitens** Noskiewicz, 1936. Russia: **EP** (S). – Iran, Kazakhstan.
- Colletes succinctus** (Linnaeus, 1758) [Apis] (*Apis glutinans* Cuvier, 1798; *A. calendarum* Panzer, 1806; *Colletes balteatus* Nylander, 1852; *Andrena xanthothorax* Eversmann, 1852). Russia: **EP** (N, NW, C, E, NC), **UR**. – Europe (WE, NE, SE, EE), Georgia, Kazakhstan.
- Colletes tuberculatus** Morawitz, 1893 (*C. tuberculatus siculus* Noskiewicz, 1959; *C. t. anatolicus* Noskiewicz, 1959; *C. daviesanus tuberculatus*: Warncke, 1978). Russia: **EP** (C, S, CR). – Europe (SE, EE), N Africa, Georgia, Armenia, Turkey, Jordan, Israel, Iran, Pakistan, Central Asia, Kazakhstan.
- Colletes ulrikae** Kuhlmann, 2002. Russia: **FE** (MG).
- Colletes wacki** Kuhlmann, 2002. Russia: **EP** (S), **ES** (TU). – Kazakhstan, Mongolia, China (NC).
- Colletes warnckei** Kuhlmann, 2002. Russia: **EP** (NC). – Turkey, Iran.

Subfamily HYLAEINAE

- HYLAEUS** Fabricius, 1793 (*Prosopis* Fabricius, 1804).
Type species *Prosopis annulata* Fabricius, 1804. Number of species: World – 760; Palaearctic – 220; Russia – 57.
- Hylaeus (Abrupta) cornutus** Curtis, 1831 (*H. cornutus* Smith, 1842; *H. plantaris* Smith, 1842; *H. plumicornis* Costa, 1884). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Syria, Israel, Iran.
- Hylaeus (Dentigera) brevicornis** Nylander, 1852 (*Prosopis pygmaea* Schenck, 1853; *P. rubicola* Smith, 1869, nom. praeocc., nec Saunders, 1850; *Hylaeus discretus* Förster, 1871; *H. atratulus* Förster, 1871, nom. praeocc., nec Schenck, 1853; *H. suspectus* Förster, 1871; *Prosopis brevicornis sardoa* Alfken, 1934; *Hylaeus parvulus* Janvier, 1972, nom. praeocc., nec Schenck, 1853). Russia: **EP** (NW, C, E, S, NC, CR), **WS** (KM, AL), **ES** (KR). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Israel, Iran, Central Asia.
- Hylaeus (Dentigera) gredleri** Förster, 1871 (*H. fumipennis* Förster, 1871; *H. brevialpis* Förster, 1871; *H. confinis* Förster, 1871; *H. rotundatus* Förster, 1871). Russia: **EP** (C, S, NC), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Lebanon.
- Hylaeus (Dentigera) pallidicornis** Morawitz, 1876 (*Prosopis breviceps* auct., nec Morawitz, 1876). Russia: **EP** (NC, CR). – Europe (EE), Uzbekistan, Kyrgyzstan.
- Hylaeus (Hylaeus) aborigensis** Dathe, 1994 (*Prosopis chasanensis* Romankova, 1995; *Hylaeus chasanensis negoroi* Ikudome, 2004). Russia: **WS** (AL), **ES** (KS, TU, YA), **FE** (AM, KH, PR, SA, KU, MG). – Mongolia, Japan (Hon).
- Hylaeus (Hylaeus) altaicus** Dathe, 1986. Russia: **WS** (AL), **ES** (TU, IR, ZB). – Mongolia.
- Hylaeus (Hylaeus) angustatus** (Schenck, 1861) [Prosopis] (*H. subexcisus* Förster, 1871; *H. subtilis* Förster, 1871; *H. subpunctatus* Förster, 1871; *H. submarginatus* Thomson, 1872; *Prosopis punctifrons* Pérez, 1903; *Hylaeus pauperculus* Cockerell, 1931; *Prosopis curviscapa* Benoist, 1960). Russia: **EP** (NW, C, S, NC, CR), **WS** (AL), **ES** (KS, TU). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Lebanon, Iran, Mongolia.
- Hylaeus (Hylaeus) annulatus** (Linnaeus, 1758) [Apis] (*Apis xanthometopa* Preyßler, 1793; *Prosopis elliptica* Kirby, 1827; *P. patellata* Eversmann, 1852; *P. varifrons* Cresson, 1869; *P. antennata* Cresson, 1869; *Hylaeus barbatus* Förster, 1871; *Prosopis tamanukii* Yasumatsu, 1939). Russia: **EP** (NW, C, E, CR), **UR**, **WS** (TM, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, MG, CH). – Europe (WE, NE, SE, EE), Armenia, Azerbaijan, Mongolia, N America.
- Hylaeus (Hylaeus) cardioscapus** Cockerell, 1924 (*Prosopis vallei* Niemelä, 1947). Russia: **EP** (C, E), **WS** (TM, KM, AL), **ES** (KS, TU, KR, IR, ZB), **FE** (AM, KH, PR, SA, KA, MG). – Europe (WE, NE, SE, EE), Azerbaijan, Mongolia.
- Hylaeus (Hylaeus) communis** Nylander, 1852 (?*Vespa minuta* Rossi, 1790, nom. praeocc., nec Linné, 1767; ?*Hylaeus triangulus* Fabricius, 1793; *H. communis* Nylander, 1852; *Prosopis ciliata* Eversmann, 1852; *Hylaeus alienatus* Förster, 1871; *H. marginatus* Förster, 1871, nom. praeocc., nec Thomson, 1870; *H. ebeninus* Förster, 1871; *H. nigricornis* Förster, 1871, nom. praeocc., nec Schenck, 1853; *H. nitidulus* Förster, 1871, nom. praeocc., nec Fabricius, 1804; *Prosopis rupestris* Smith, 1872; *P. annulata* var. *tristis* Dalla Torre, 1877; *P. foersteri* Dalla Torre et Friese, 1895; *P. annulata* var. *nigrifacies* Alfken, 1913; *P. communis* var. *reiecta* Stoeckhert, 1954). Russia: **EP** (NW, C, E, NC, CR), **UR**, **WS** (TM, KM, AL), **ES** (IR, ZB), **FE** (AM, KH, PR, SA, KA, MG). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Lebanon, Iran, Central Asia, Kazakhstan.

- Hylaeus (Hylaeus) dolichocephalus** Morawitz, 1876 (*Prosopis plurifasciata* Alfken, 1931; *P. heliaca* Warncke, 1992). Russia: **ES** (TU). – Turkey, Afghanistan, Tajikistan, Kazakhstan, Mongolia, China (NW).
- Hylaeus (Hylaeus) dorni** Dathe, 1986. Russia: **ES** (TU). – Mongolia.
- Hylaeus (Hylaeus) gracilicornis** (Morawitz, 1867) [Prosopis] (*H. nigrolineatus* Cockerell, 1924). Russia: **EP** (NW, C, E, NW, NC), **WS** (TM, NS, KM, AL), **ES** (KS, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KM, MG). – Europe (WE, NE, SE, EE), Azerbaijan, Turkey, Syria, Iran, Mongolia, China (SW).
- Hylaeus (Hylaeus) hungaricus** (Alfken, 1905) [Prosopis] (*H. affinis* Morawitz, 1876, nom. praeocc., nec Smith, 1853; *Prosopis morawitzi* Dalla Torre, 1896, nom. praeocc., nec Radoszkowski, 1893). Russia: **WS** (AL). – Iran, Afghanistan, Turkmenistan, Tajikistan, Mongolia, China (NW).
- Hylaeus (Hylaeus) leleji** Proshchalykin et Dathe, 2016. Russia: **WS** (AL).
- Hylaeus (Hylaeus) leptocephalus** (Morawitz, 1871) [Prosopis] (*H. bisinuatus* Förster, 1871; *Prosopis discrepans* Schenck, 1875; *P. incompleta* Alfken, 1937; *P. stevensi* Crawford, 1913). Russia: **EP** (C, E, S, NC), **UR**, **WS** (TM, KM), **ES** (TU), **FE** (KH). – Europe (WE, NE, SE, EE), Armenia, Azerbaijan, Iran.
- Hylaeus (Hylaeus) montivagus** Dathe, 1986. Russia: **WS** (AL), **ES** (TU), **FE** (KH, PR). – Mongolia.
- Hylaeus (Hylaeus) moricei** (Friese, 1898) [Prosopis] (*Prosopis gracilicornis* var. *luteifrons* Strand, 1909; *P. moricella* Bischoff, 1954; *P. m. f. atricallosa* Bischoff, 1954; *P. nigrifacies rhenana* Warncke, 1986). Russia: **EP** (C, S, NC), **ES** (KS). – Europe (WE, SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Iran.
- Hylaeus (Hylaeus) nigritus** (Fabricius, 1798) [Melittinus] (*Prosopis atrata* Fabricius, 1804; *P. laevigata* Eversmann, 1852; *Hylaeus propinquus* Nylander, 1852; *Prosopis nitidiuscula* Schenck, 1853; *P. tuberculata* Smith, 1853). Russia: **EP** (C, E), **UR**. – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Iran.
- Hylaeus (Hylaeus) nimbatus** Dathe, 1986. Russia: **WS** (AL), **ES** (TU). – Mongolia.
- Hylaeus (Hylaeus) oehlkei** Dathe, 2010. Russia: **WS** (AL), **ES** (TU, KR). – Mongolia.
- Hylaeus (Hylaeus) paulus** Bridwell, 1919 (*H. lepidulus* Cockerell, 1924). Russia: **EP** (C), **WS** (AL), **ES** (KS, TU, YA), **FE** (AM, KH, PR, SA, KU, KA). – Europe (WE, NE, SE, EE), Azerbaijan, Mongolia, China (NE, NC), Japan (Hok, Hon, Kyu).
- Hylaeus (Hylaeus) pesenkoi** Proshchalykin et Dathe, 2016. Russia: **ES** (TU). – Mongolia.
- Hylaeus (Hylaeus) scutellaris** Morawitz, 1874 (*H. flavipes* Morawitz, 1876, nom. praeocc., nec Smith, 1853; *Prosopis morawitzi* Radoszkowski, 1893; *P. turcestanica* Dalla Torre, 1896). Russia: **EP** (S, NC). – Azerbaijan, Afghanistan, Turkmenistan, Uzbekistan.
- Hylaeus (Hylaeus) sibiricus** (Strand, 1909) [Prosopis] (*Prosopis sjoestedti* Alfken, 1936; *Hylaeus communis excurrens* Cockerell, 1937). Russia: **WS** (AL), **ES** (TU, IR, BR), **FE** (KH, PR). – Mongolia, China (NE, NC).
- Hylaeus (Hylaeus) stubbei** Dathe, 1986 (*H. peregrinus* Dathe, 1986). Russia: **WS** (AL). – Mongolia.
- Hylaeus (Hylaeus) telmenicus** Dathe, 1986. Russia: **WS** (AL). – Mongolia.
- Hylaeus (Hylaeus) tsingtauensis** (Strand, 1915) [Prosopis] (*H. pallescens* Cockerell, 1924; *H. stentoriscapus* Dathe, 1986). Russia: **WS** (TM, KM, AL), **ES** (KS, TU, KR, IR, BR, ZB), **FE** (AM, KH, PR). – Mongolia.
- Hylaeus (Koptogaster) punctulatissimus** Smith, 1842 (*Prosopis obscurata* Schenck, 1853; *P. quadrimaculata* Schenck, 1861). Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), N Africa, Azerbaijan, Turkey, Israel.
- Hylaeus (Lambdopsis) dilatatus** (Kirby, 1802) [Melitta] (*Melitta annularis* Kirby, 1802; *Prosopis varians* Spinola, 1806; *Hylaeus distans* Eversmann, 1852; *Prosopis cervicornis* Costa, 1858; *Hylaeus compar* Förster, 1871; *H. smithii* Förster, 1871; *H. oculatus* Förster, 1871; *H. schenckii* Förster, 1871; *Prosopis consobrina* Schenck, 1874; *Hylaeus strigulosus* Costa, 1884; *Prosopis annularis elbursa* Warncke, 1981). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (TM, KM, AL), **ES** (KS, TU, KR, IR). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Kazakhstan.
- Hylaeus (Lambdopsis) euryscapus** Förster, 1871 (*H. rimosus* Förster, 1871). Russia: **EP** (CR). – Europe (WE, SE, EE), N Africa, Turkey.
- Hylaeus (Lambdopsis) pfankuchi** (Alfken, 1919) [Prosopis] (*H. nipponicus* Bridwell, 1919; *H. polevoiae* Cockerell, 1924; *Prosopis nigrifacies* Gussakovskij, 1932). Russia: **WS** (KM, AL), **ES** (KS, TU, KR), **FE** (KH, PR, SA, KU). – Europe (WE, NE, SE, EE), Azerbaijan, Mongolia, China (NE).
- Hylaeus (Lambdopsis) rinki** (Gorski, 1852) [Prosopis] (*Prosopis gerstaeckeri* Hensel, 1870; *Hylaeus*

- clathratus* Thomson, 1870; *H. immaculatus* Förster, 1871; *H. atromicans* Cockerell, 1924; *H. sinicola* Cockerell, 1924). Russia: **EP** (NW, C, E), **WS** (TM, NS, KM, AL), **ES** (KS, TU, KR, IR, YA, ZB), **FE** (AM, KH, PR, SA, KU). – Europe (WE, SE, EE), Azerbaijan, Central Asia, Mongolia.
- Hylaeus (Nesohylaeus) niger** Bridwell, 1919. Russia: **FE** (KU). – China (CC), Japan (Hok, Hon).
- Hylaeus (Nesoprosopis) floralis** (Smith, 1873) [Prosopis]. Russia: **FE** (SA). – China (CC, SW, SE), Japan (Hok, Hon, Shi, Kyu).
- Hylaeus (Nesoprosopis) globulus** (Vachal, 1903) [Prosopis]. Russia: **FE** (PR, SA). – Japan (Hok, Hon, Shi, Kyu).
- Hylaeus (Nesoprosopis) noomen** Hirashima, 1977. Russia: **FE** (KH). – Japan (Hok, Hon, Shi, Kyu).
- Hylaeus (Nesoprosopis) pectoralis** Förster, 1871 (*H. kriechbaumeri* Förster, 1871; *Prosopis palustris* Perkins, 1900). Russia: **EP** (NW), **WS** (TM, KM, AL), **ES** (KS), **FE** (PR, SA, KU). – Europe (WE, NE, SE, EE), Azerbaijan, Turkey, Mongolia, Japan (Hok, Hon).
- Hylaeus (Nesoprosopis) transversalis** Cockerell, 1924 (*Prosopis transversalis* Gussakovskij, 1932; *P. sericata* Warncke, 1972; *Hylaeus nippon* Hirashima, 1977). Russia: **FE** (PR, KU). – Japan (Hok, Hon, Shi, Kyu, Tsu).
- Hylaeus (Paraprosopis) clypearis** (Schenck, 1853) [Prosopis] (*Prosopis angulata* Smith, 1853; *Hylaeus floricola* Förster, 1871; *H. siculus* Förster, 1871; *H. blandus* Förster, 1871; *H. opacus* Förster, 1871; *H. moniliatus* Förster, 1871; *Prosopis subopaca* Pérez, 1905; *P. clypearis* var. *genimaculata* Strand, 1909; *Hylaeus lineolellus* Cockerell, 1938). Russia: **EP** (E, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey.
- Hylaeus (Paraprosopis) concinnus** Cockerell, 1924 (*H. monostictus* Cockerell, 1924). Russia: **FE** (PR). – China (NE, NC).
- Hylaeus (Paraprosopis) lineolatus** (Schenck, 1861) [Prosopis] (*H. inaequalis* Förster, 1871; *Prosopis lineolata* var. *nigrifacis* Alfken, 1913; *P. cretica* Strand, 1915; *P. lineolata rudis* Pittioni, 1950; *P. l. ferina* Warncke, 1992). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), N Africa, Azerbaijan, Turkey, Jordan, Lebanon, Israel.
- Hylaeus (Paraprosopis) pictipes** Nylander, 1852 (*Sphex annulata* Panzer, 1798, nom. praeocc., nec Linnaeus, 1758; *Prosopis varipes* Smith, 1853; *P. excisa* Schenck, 1853; *Hylaeus vicinus* Förster, 1871, nom. praeocc., nec Sichel, 1867; *H. melanarius* Förster, 1871; *H. claripennis* Förster, 1871; *H. panzeri* Förster, 1871; *Prosopis trimaculata* Schenck, 1875; *P. aquisgranensis* Dalla Torre, 1896; *P. pictipes* var. *nigriscutum* Alfken, 1913). Russia: **EP** (CR). – Europe (WE, NE, SE, EE), Azerbaijan.
- Hylaeus (Paraprosopis) sinuatus** (Schenck, 1853) [Prosopis] (*Prosopis minuta* var. *nana* Alfken, 1927, nom. praeocc., nec Friese, 1924). Russia: **EP** (C, E, NC, CR). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Iraq, Iran.
- Hylaeus (Paraprosopis) styriacus** Förster, 1871 (*Prosopis tristis* Frey-Gessner, 1900, nom. praeocc., nec Dalla Torre, 1870; *P. styriaca* var. *nigroelypeata* Alfken, 1913). Russia: **EP** (C, S, NC, CR), **WS** (AL). – Europe (WE, NE, SE, EE), Armenia, Azerbaijan, Turkey, Lebanon, Iran.
- Hylaeus (Patagiata) difformis** (Eversmann, 1852) [Prosopis] (*Prosopis subfasciata* Schenck, 1868, nom. praeocc., nec Imhoff, 1832, nec Schenck, 1861; *Hylaeus marginatus* Thomson, 1870; *Prosopis difformis hispanica* Warncke, 1972). Russia: **EP** (C, E, NC, CR), **UR**, **WS** (TM, KM), **FE** (PR). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Iran, China (NW, SW).
- Hylaeus (Patagiata) nigrocuneatus** Cockerell, 1924 (*H. nigrocuneatus* var. *rufipennis* Cockerell, 1924; *H. brevicuneatus* Cockerell, 1924; *H. laurushini* Cockerell, 1924; *H. paradifformis* Ikudome, 1989). Russia: **WS** (KM, AL), **ES** (TU, KR, IR, YA, ZB), **FE** (AM, KH, PR, SA). – Mongolia, China (NE, CC), Japan (Hok, Hon, Kyu).
- Hylaeus (Prosopis) confusus** Nylander, 1852 (*Prosopis sublaevis* Schenck, 1853; *Hylaeus xanthocnemis* Förster, 1871; *H. nigriceps* Förster, 1871; *H. similatus* Förster, 1871; *Prosopis pallididens* Dalla Torre, 1896; *Hylaeus monticola* Bridwell, 1919; *H. wilmatatae* Cockerell, 1924). Russia: **EP** (NW, C, E, NC, CR), **WS** (TM, KM, AL), **ES** (KS, TU, KR, YA, ZB), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE, SE, EE), Armenia, Azerbaijan, Turkey, Central Asia, Mongolia, China (NE, NW, WP), Japan (Hok, Hon).
- Hylaeus (Prosopis) gibbus** Saunders, 1850 (*Prosopis mixta* Schenck, 1861, nom. praeocc., nec Smith, 1852; *Hylaeus kirschbaumi* Förster, 1871; *H. aemulus* Förster, 1871; *H. genalis* Thomson, 1872). Russia: **EP** (C, E, NC, CR). – Europe (WE, SE, EE), N Africa, Azerbaijan, Turkey, Iraq, Iran.
- Hylaeus (Prosopis) hyrcanius** Dathe, 1980. Russia: **EP** (S, NC). – Azerbaijan, Iran.

- Hylaeus (Prosopis) incongruus** Förster, 1871 (*H. genalis* Thomson, 1872; *H. biareolatus* Morawitz, 1876). Russia: **EP** (S, NC), **ES** (BR). – Europe (WE, SE, EE), Uzbekistan, Kazakhstan.
- Hylaeus (Prosopis) meridionalis** Förster, 1871 (*Prosopis variegata* var. *brevimaculata* Strand, 1909; *P. maculiscutum* Alfken, 1928; *P. effasciata* Alfken, 1930). Russia: **EP** (S, NC). – Europe (WE, SE), N Africa, Azerbaijan, Turkey, Jordan, Israel.
- Hylaeus (Prosopis) rugicollis** Morawitz, 1874. Russia: **EP** (NC). – Europe (SE), Caucasus, Turkey, Lebanon, Israel, Iran.
- Hylaeus (Prosopis) signatus** (Panzer, 1798) [Sphex] (*Vespa pratensis* Geoffroy, 1785, nom. praeocc., nec Miller, 1759; *Mellinus bipunctatus* Fabricius, 1798; ?*Philanthus bilineatus* Gravenhorst, 1807; *Prosopis albinasata* Strand, 1912; *P. pratensis* var. *nigrifacies* Alfken, 1913; *P. berlandi* Benoist, 1943). Russia: **EP** (C, E, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Iran, Uzbekistan.
- Hylaeus (Prosopis) variegatus** (Fabricius, 1798) [Mellinus] (*Mellinus labiatus* Fabricius, 1798; *Philanthus analis* Fabricius, 1804; *Prosopis colorata* Panzer, 1805; *P. coriacea* Pérez, 1895; *P. variegata* var. *obscura* Höppner, 1901; *Hylaeus hookeri* Cockerell, 1931; *Prosopis impressifrons* Gussakovskij, 1932; *P. rufithorax* Alfken, 1933; *P. variegata relicta* Warncke, 1981). Russia: **EP** (C, E, NC, CR), **UR**, **WS** (OM, TM, KM, AL), **ES** (KS, TU, KR, IR, BR, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Syria, Lebanon, Iran, Central Asia, Mongolia, China (NC).
- Hylaeus (Spatulariella) hyalinatus** Smith, 1842 (*Vespa bipunctata* Fabricius, 1798, nom. praeocc., nec Fabricius, 1798; *Hylaeus hyalinatus* Smith, 1842; *H. ormilatus* Nylander, 1848; *Prosopis longicornis* Schenck, 1853; *P. similis* Schenck, 1853, nom. praeocc., nec Smith, 1853, nec Fabricius, 1793; *Hylaeus decipiens* Förster, 1871; *H. tricuspis* Förster, 1871; *H. miscellus* Förster, 1871; *Prosopis hyalinata* var. *lugubris* Dalla Torre, 1877; *Spatidariella hyalinata montebovensis* Pittioni, 1950; *S. h. aragonensis* Pittioni, 1950; *Prosopis hyalinata minos* Warncke, 1981). Russia: **EP** (C, NC, CR). – Europe (WE, NE, SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Iran.
- Hylaeus (Spatulariella) punctatus** (Brülle, 1832) [Prosopis] (*H. subquadratus* Förster, 1871; *H. insignis* Förster, 1871; *H. corvinus* Förster, 1871; *Prosopis sinuata* var. *atrifacialis* Strand, 1909). Russia: **EP** (CR). – Europe (WE, SE, EE), Azerbaijan, Turkey.

74. FAMILY ANDRENIDAE

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The family Andrenidae is one of the largest bee families, colonizing all continents except Australia. They are also almost absent from the tropical Asian region. Similarly, in sub-Saharan Africa there are only a few genera and species. The Andrenidae are divided into four subfamilies, two of them are widely distributed, in the Palaearctic (Andreninae and Panurginae), and two Neotropical (Alocandreninae and Oxaeinae). Most species belong to the genus *Andrena*, which is ubiquitous in the north temperate areas. All species nest in the ground and most of them are strictly solitary, although they often nest in large aggregations (Michener, 2007; Osytshnjuk et al., 2005). Number of taxa: World – 77 genera, 2917 species; Palaearctic – 13/1100; Russia – 5/244.

References. Lebedev, 1932; Popov, 1940, 1949, 1958b; Warncke, 1967; Osytshnjuk, 1977, 1982, 1983, 1984, 1986a,b, 1993, a,b, 1994a,b, 1995; Tadauchi, Xu, 1995, 1999, 2002, 2003; Xu, Tadauchi, 1999, 2005, 2006, 2009a,b, 2011, 2012; Xu et al., 2000; Gusenleitner, Schwarz, 2002; Davydova, Pesenko, 2002; Gusenleitner et al., 2005; Osytshnjuk et al., 2005, 2008; Schmid-Egger, 2005; Tadauchi, 2006, 2008; Proshchalykin, 2007b, 2009; 2010, 2012a; Shebl, Tadauchi, 2009; 2011; Scheuchl, 2010; Romankova, Astafurova, 2011; Astafurova, Romankova, 2012; Proshchalykin, Lelej, 2013; Shebl, Li, 2013; Proshchalykin, Astafurova, 2017; Aliyev et al., 2017; Ascher, Pickering, 2017; Kuhlmann et al., 2017; Levchenko, 2017; Sidorov, Proshchalykin, 2017a, b; Sidorov et al., 2017.

Subfamily ANDRENINAE

ANDRENA Fabricius, 1775. Type species *Apis helvola* Linnaeus, 1758. Genus is distributed throughout the Holarctic region, south in the Western Hemisphere to Panama, where one species occurs in the tropical lowlands, in Africa through the East African highlands and south to the Cape of Good Hope, and in Asia to the mountains of southern India and of Malaysia. Number of species: World – 1500; Palaearctic – 950; Russia – 225.

Andrena (Aciandrena) aciculata Morawitz, 1886 (*A. tenuis* sensu E. Stoeckhert, 1930, nom. praeocc., nec Morawitz, 1878; *A. tenuicula* E. Stoeckhert,

1950; *A. strymonia* Pittioni, 1950). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Azerbaijan, Turkey, Iran.

Andrena (Aciandrena) chersona Warncke, 1972. Russia: **EP** (CR). – Europe (EE), Azerbaijan.

Andrena (Aciandrena) tenuis Morawitz, 1877. Russia: **EP** (S). – Europe (EE), Georgia, Azerbaijan, Turkey, Iran, Turkmenistan.

Andrena (Aciandrena) volgensis Osytshnjuk, 1994. Russia: **EP** (S). – Kazakhstan.

Andrena (Aenandrena) aeneiventris Morawitz, 1872 (*A. locularoides* Strand, 1915; *A. aeneiventris* var. *punctata* Jaeger, 1934). Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Jordan, Israel, Iraq, Iran, Turkmenistan, Tajikistan, Kazakhstan.

Andrena (Aenandrena) bisulcata Morawitz, 1877 (*A. echimulata* Pérez, 1903; *A. doderoi* Jaeger, 1934). Russia: **EP** (CR). – Europe (WE, SE, EE), Georgia, Azerbaijan, Turkey, Lebanon, Iran.

Andrena (Aenandrena) hedikae Jaeger, 1934 (*A. hedikae* ssp. *inexpectata* Warncke, 1975). Russia: **EP** (S). – Europe (WE, SE, EE), N Africa, Azerbaijan, Turkey, Iran.

Andrena (Aenandrena) hystrix Schmiedeknecht, 1883 (*A. opaciventris* Friese, 1921, nom. praeocc., nec Cockerell, 1916; *A. hystrix* var. *lateritia* Benoist, 1961; *A. h.* ssp. *rufilata* Warncke, 1975). Russia: **EP** (CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Turkmenistan.

Andrena (Andrena) aino Tadauchi, Hirashima et Matsumura, 1987. Russia: **ES** (BR, YA, ZB), **FE** (AM, KH, PR, SA, MG). – Japan (Hok).

Andrena (Andrena) apicata Smith, 1847 (*A. batava* Pérez, 1902; *A. apicata* var. *tristis* Alfken, 1904; *A. a.* var. *kamtschatica* Alfken, 1929). Russia: **EP** (NW, C), **UR**, **FE** (KA). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan.

Andrena (Andrena) benefica Hirashima, 1962. Russia: **FE** (KH, PR). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

Andrena (Andrena) brevihirtiscopa Hirashima, 1962. Russia: **FE** (KH, PR). – Korean Peninsula, Japan (Hok, Hon, Kyu).

Andrena (Andrena) bulgariensis Warncke, 1965. Russia: **EP** (CR). – Europe (EE).

Andrena (Andrena) clarkella (Kirby, 1802) [Melitta]. Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (TM, NS, KM), **ES** (KR, BR, YA, ZB), **FE** (AM, KH, PR, SA, MG, CH). – Europe (WE, NE, SE, EE), N America.

- Andrena (Andrena) fucata** Smith, 1847 (*A. clypearis* Nylander, 1848; *A. norvegica* Strand, 1910). Russia: **EP** (NW, C, E, S, NC, CR), **UR, WS** (TK, KM, AL), **ES** (KS, TU, KR). – Europe (WE, NE, SE, EE), Armenia, Turkey, Kazakhstan.
- Andrena (Andrena) helvola** (Linnaeus, 1758) [Apis] (*Melitta subdentata* Kirby, 1802; ?*Andrena incerta* Eversmann, 1852; *A. helvola* var. *concolor* Blüthgen, 1919, nom. praeocc., nec Robertson, 1898, nec Alfken, 1914). Russia: **EP** (C, E, S), **UR, WS** (TK, NS, KM). – Europe (WE, NE, SE, EE), Armenia, Turkey, Kazakhstan, China (NE).
- Andrena (Andrena) hondoica** Hirashima, 1962. Russia: **FE** (KH, PR, SA). – Korean Peninsula, Japan (Hok, Hon).
- Andrena (Andrena) ishiharai** Hirashima, 1962. Russia: **ES** (BR), **FE** (PR). – Korean Peninsula, Japan (Hok, Hon, Kyu).
- Andrena (Andrena) kamtschatkaensis** Friese, 1914. Russia: **FE** (KA).
- Andrena (Andrena) lapponica** Zetterstedt, 1838 (*A. alpina* Zetterstedt, 1838, nom. praeocc., nec Morawitz, 1872; *A. shirozui* Hirashima, 1962; *A. lapponica* ssp. *sumizome* Tadauchi, Hirashima et Matsumura, 1987). Russia: **EP** (N, NW, C), **UR, WS** (TM, TK), **ES** (IR, BR, YA, ZB), **FE** (PR, SA, KU, KA, MG). – Europe (WE, NE, SE, EE), Georgia, Kyrgyzstan, Kazakhstan, Japan (Hok, Hon).
- Andrena (Andrena) maukensis** Matsumura, 1911. Russia: **WS** (KM), **ES** (IR, YA, ZB), **FE** (KH, PR, SA, KU, KA). – Japan (Hok, Hon, Kyu).
- Andrena (Andrena) mitis** Schmiedeknecht, 1883 (*A. palumboi* Destefani, 1889). Russia: **EP** (C, CR). – Europe (WE, SE, EE), Azerbaijan, Turkey.
- Andrena (Andrena) nawai** Cockerell, 1913. Russia: **FE** (KH, PR). – China (NC), Japan (Hok, Hon, Kyu).
- Andrena (Andrena) nycthemera** Imhoff, 1868 (*A. nycthemera* var. *tergestensis* Alfken, 1904). Russia: **EP** (C, E), **UR**. – Europe (WE, NE, SE, EE), Kazakhstan.
- Andrena (Andrena) praecox** (Scopoli, 1763) [Apis] (*Melitta smithella* Kirby, 1802; *Andrena flavescens* Schenck, 1853; *A. clypeata* Smith, 1855, nom. praeocc., nec Illiger, 1806, nec Brullé, 1832, nec Smith, 1853, nec Schenck, 1853; *A. torkai* Alfken, 1913). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR, WS** (TK, NS, KM), **ES** (IR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Kazakhstan.
- Andrena (Andrena) sakagamii** Tadauchi, Hirashima et Matsumura, 1987. Russia: **ES** (BR), **FE** (AM, KH, SA). – Korean Peninsula, Japan (Hok, Hon).
- Andrena (Andrena) varians** (Kirby, 1802) [Melitta] (*Melitta angulosa* Kirby, 1802; *Andrena mesoxantha* Imhoff, 1834; *A. longula* Eversmann, 1852; *A. mixta* Schenck, 1853; *A. rectangula* Schenck, 1853; *A. varians* var. *conjungens* Blüthgen, 1916). Russia: **EP** (N, NW, C, E, S, CR), **UR**. – Europe (WE, NE, SE, EE), Kazakhstan.
- Andrena (Brachyandrena) colletiformis** Morawitz, 1874 (*Colletes parvula* Morawitz, 1871, nom. praeocc., nec Kirby, 1802; *Andrena dissidens* Schmiedeknecht, 1884; *A. colletiformis* ab. *gandzhensis* Lebedev, 1933; *A. c.* ssp. *insulana* Pittioni, 1950; *A. c.* var. *sardinica* Strand, 1915; *A. nanana* Strand, 1915; *A. subsquamularis* Noskiewicz, 1960). Russia: **EP** (S, NC, CR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, Turkmenistan, Kazakhstan.
- Andrena (Brachyandrena) limonii** Osytschnjuk, 1983. Russia: **EP** (S). – Kazakhstan.
- Andrena (Calomelissa) tsukubana** Hirashima, 1957. Russia: **FE** (AM, KH, PR). – Korean Peninsula, Japan (Hon, Shi, Kyu).
- Andrena (Campylogaster) erberi** Morawitz, 1871 (*Campylogaster fulvo-crustatus* Dours, 1873; *Andrena amasia* Radoszkowski, 1876; *A. squamigera* Bramson, 1879, nom. praeocc., nec Schenck, 1874; ?*A. kozarowi* Nedialkov, 1914; *A. erberi* var. *sanguiniventris* Friese, 1921; *A. e.* ssp. *migrans* Warncke, 1967). Russia: **EP** (CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Syria, Iran.
- Andrena (Campylogaster) incisa** Eversmann, 1852 (*A. gracilis* Eversmann, 1852, nom. praeocc., nec Schenck, 1869; *A. punctatissima* Morawitz, 1866, nom. praeocc., nec Kriechbaumer, 1873). Russia: **EP** (S, CR), **UR, WS** (AL), **ES** (KS, KR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Tajikistan, Kyrgyzstan, Kazakhstan.
- Andrena (Campylogaster) nova** Popov, 1940. Russia: **ES** (BR, ZB), **FE** (AM, PR).
- Andrena (Campylogaster) phaneroleuca** Cockerell, 1929. Russia: **ES** (IR).
- Andrena (Carandrena) semiflava** Lebedev, 1932. Russia: **EP** (S, NC). – Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Andrena (Charitandrena) hattorfiana** (Fabricius, 1775) [Nomada] (*Apis splendida* Müller, 1776; *A. marginata* Müller, 1776, nom. praeocc., nec Fabricius, 1776, nec Torka, 1913; *Andrena rubida* Olivier, 1789; *Apis fuscicornis* Gmelin, 1790; *A. plumosa* Christ, 1791, nom. praeocc., nec Kim et Kim, 1989,

- nec Christ, 1791; *Andrena equestris* Panzer, 1797; *Apis florum* Cuvier, 1798; *Melitta lathamana* Kirby, 1802; *Andrena quadripunctata* Fabricius, 1804; *A. clypeata* Illiger, 1806, nom. praeocc., nec Brullé, 1832, nec Smith, 1853, nec Smith, 1855; *A. labialis* Gravenhorst, 1807, nom. praeocc., nec Kirby, 1802; *A. dimidiata* Brullé, 1832; *A. elongata* Imhoff, 1834, nom. praeocc., nec Radoszkowski, 1871, nec Radoszkowski, 1876; *A. gravida* Eversmann, 1852, nom. praeocc., nec Imhoff, 1832, nec Dours, 1872; *A. clypeata* Schenck, 1853, nom. praeocc., nec Illiger, 1806, nec Brullé, 1832, nec Smith, 1853, nec Smith, 1855; *A. fischeri* Verhoeff, 1890; *A. hattorfiana* var. *rufa* Torka, 1913; *A. h.* var. *punctulata* Torka, 1913, nom. praeocc., nec Schenck, 1853; *A. h.* var. *marginata* Torka, 1913, nom. praeocc., nec Müller, 1776, nec Fabricius, 1776; *A. haemorrhoidula* Viereck, 1916; *A. hattorfiana* ab. *deandrenalis* Strand, 1922). Russia: **EP** (NW, C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey.
- Andrena (Chlorandrena) cinereophila** Warncke, 1965. Russia: **EP** (NC). – Europe (SE, EE), Turkey, Israel, Afghanistan.
- Andrena (Chlorandrena) humilis** Imhoff, 1832 (*A. fulvescens* Smith, 1847; *A. cinerascens* Nylander, 1848, nom. praeocc., nec Eversmann, 1852; *A. scabrosa* Morawitz, 1866; *A. nasalis* Thomson, 1870; *A. nudigastra* Alfken, 1914; ?*A. nudigastra* ssp. *nudigastroides* Yasumatsu, 1935; *A. humilis* ssp. *ardeola* Warncke, 1975; *A. h.* ssp. *cucullata* Warncke, 1975; *A. h.* ssp. *hiaticula* Warncke, 1975; *A. h.* ssp. *indigena* Warncke, 1975). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TK, KM, AL), **FE** (PR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Iran, Kyrgyzstan, Kazakhstan.
- Andrena (Chlorandrena) panurgimorpha** Mavromoustakis, 1957. Russia: **EP** (CR). – Europe (WE, SE, EE), Georgia, Turkey, Israel, Iran.
- Andrena (Chlorandrena) taraxaci** Giraud, 1861 (*A. curtivalvis* Morice, 1899; *A. truncata* Pérez, 1903, nom. praeocc., nec Viereck, 1903; *A. humilis* var. *orienticola* Strand, 1915; *A. truncatiformis* Cockerell, 1922; *A. taraxaci* ssp. *chikuzenensis* Hirashima, 1957). Russia: **EP** (S, NC, CR), **UR**, **FE** (PR). – Europe (WE, SE, EE), N Africa, Georgia, Turkey, Lebanon, Israel, Iran, Turkmenistan, Tajikistan, Kazakhstan, China (NE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Andrena (Chlorandrena) tricuspidata** Scheuchl, 2010. Russia: **EP** (CR).
- Andrena (Chrysandrena) colonialis** Morawitz, 1886. Russia: **EP** (S), **WS** (NS, AL). – Europe (EE), Azerbaijan.
- Andrena (Chrysandrena) fulvago** (Christ, 1791) [Apis] (*A. constrictus* Smith, 1849). Russia: **EP** (C, E, CR), **UR**, **WS** (KM, AL), **ES** (BR). – Europe (WE, NE, SE, EE), Georgia, Armenia, Turkey.
- Andrena (Chrysandrena) hesperia** Smith, 1853 (*A. opacicollis* Morawitz, 1886; *A. marcescens* Pérez, 1895; *A. freya* Strand, 1915; *A. asunica* Strand, 1921). Russia: **EP** (CR). – Europe (WE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Israel, Iran, Turkmenistan, Tajikistan.
- Andrena (Chrysandrena) khankensis** Osytshnjuk, 1995. Russia: **FE** (AM, PR), **ES** (ZB).
- Andrena (Cnemidandrena) albicaudata** Hirashima, 1966. Russia: **FE** (PR). – Mongolia, Japan (Hon).
- Andrena (Cnemidandrena) denticulata** (Kirby, 1802) [Melitta] (*Melitta listerella* Kirby, 1802; *Andrena edentata* Friese, 1922; *A. archanensis* Cockerell, 1929; *A. baicaliella* Cockerell, 1929; *A. epimelaena* Cockerell, 1924; *A. seneciorum* Hirashima, 1964). Russia: **EP** (NW, C, E), **UR**, **WS** (TK, KM), **ES** (IR, ZB), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE, SE, EE), Georgia, Kazakhstan, Mongolia, China (NE, NC, NW), Korean Peninsula, Japan (Hok, Hon, Shi).
- Andrena (Cnemidandrena) fuscipes** (Kirby, 1802) [Melitta] (*Melitta pubescens* Kirby, 1802, nom. praeocc., nec Olivier, 1789; *Andrena cincta* Nylander, 1848, nom. praeocc., nec Fabricius, 1781; *A. germanica* Verhoeff, 1890). Russia: **EP** (NW, C, E), **UR**. – Europe (WE, NE, SE, EE), Kazakhstan.
- Andrena (Cnemidandrena) maetai** Hirashima, 1964. Russia: **FE** (PR). – Korean Peninsula, Japan (Kyu, Tsu).
- Andrena (Cnemidandrena) nigriceps** (Kirby, 1802) [Melitta] (*Melitta lanifrons* Kirby, 1802; *Andrena jagnobensis* Morawitz, 1894; *A. nigriceps* var. *hispanica* Friese, 1922, nom. praeocc., nec Alfken, 1927; *A. n.* ssp. *pamirensis* Alfken, 1931; *A. marchica* Alfken, 1939; *A. nigriceps* ssp. *comata* Warncke, 1974). Russia: **EP** (NW, C, E), **UR**, **ES** (YA). – Europe (WE, NE, SE, EE), Armenia, Azerbaijan, Turkey, Tajikistan, Uzbekistan.
- Andrena (Cnemidandrena) rufoclypeata** Alfken, 1936. Russia: **WS** (AL), **ES** (TU). – Mongolia, China (NW).
- Andrena (Cnemidandrena) simillima** Smith, 1851 (*Anthrena* (!) *baicalica* Kokujev, 1927; *Andrena*

- bremensis* Alfken, 1900; *A. similima* ssp. *sischkai* Warncke, 1988). Russia: **EP** (NW, C, E, S), **UR**, **WS** (TK, KM, AL), **ES** (KS, BR, YA). – Europe (WE, NE, SE, EE), Azerbaijan, Iran, Mongolia.
- Andrena (Cnemidandrena) tridentata** (Kirby, 1802) [Melitta] (*Melitta rufitarsis* Kirby, 1802, nom. praeocc., nec Zetterstedt, 1838). Russia: **EP** (NC), **UR**, **WS** (NS, KM, AL). – Europe (WE, SE, EE).
- Andrena (Cordandrena) cordialis** Morawitz, 1877. Russia: **EP** (S, NC, CR), **UR**, **ES** (ZB). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Central Asia, Kazakhstan, China (NW).
- Andrena (Cryptandrena) ventricosa** Dours, 1873 (*A. ventricosa* ssp. *ridibundus* Warncke, 1975). Russia: **EP** (NC). – Europe (WE, SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Israel.
- Andrena (Didonia) stepposa** Osytshnjuk, 1977. Russia: **EP** (C). – Europe (EE).
- Andrena (Euandrena) allosa** Warncke, 1975 (*A. allosa* ssp. *canigica* Warncke, 1975; *A. a.* ssp. *pileata* Warncke, 1975). Russia: **EP** (S, NC), **UR**. – Europe (SE), Caucasus, Kazakhstan.
- Andrena (Euandrena) asperula** Osytshnjuk, 1977. Russia: **EP** (S, CR). – Europe (EE), Azerbaijan.
- Andrena (Euandrena) bicolor** Fabricius, 1775 (*Apis icterica* Christ, 1791; *A. fuliginosa* Christ, 1791, nom. praeocc., nec Scopoli, 1770, nec Panzer, 1798; *Andrena lucida* Panzer, 1798, nom. praeocc., nec Lepeletier de Saint-Fargeau, 1841; *Melitta picicornis* Kirby, 1802; *M. pilosula* Kirby, 1802; *M. gwynana* Kirby, 1802; *Apis ephippiata* Schrank, 1802; *Andrena oraniensis* Lepeletier de Saint-Fargeau, 1841; *A. proxima* Smith, 1847, nom. praeocc., nec Kirby, 1802; *A. aestiva* Smith, 1849; *A. consimilis* Smith, 1849, nom. praeocc., nec Smith, 1847, nec Alfken, 1900; *A. nigrifrons* Eversmann, 1852, nom. praeocc., nec Smith, 1853, nec Smith, 1855, nec Cresson, 1878; *A. laeviuscula* Schenck, 1853; *A. fuscocirta* Schenck, 1853; *A. distinguenda* Schenck, 1853, nom. praeocc., nec Schenck, 1871; *A. marginalis* Schenck, 1861; *A. violascens* Thomson, 1870; *A. beuthini* Schenck, 1876; *A. gwynana* var. *testacea* Dalla Torre, 1877, nom. praeocc., nec Warncke, 1975; *A. croatica* Friese, 1887; *A. lavandulae* Pérez, 1902; *A. nigrosterna* Pérez, 1902; *A. nigriventris* Pérez, 1902, nom. praeocc., nec Gmelin, 1790, nec Saunders, 1908; *A. fervida* Pérez, 1902; *A. heterodoxa* Pérez, 1903, nom. praeocc., nec Cockerell, 1930; *A. phaneromelas* Cockerell, 1929; *A. baleina* Cockerell, 1929; *A. bicolor* ssp. *agraria* Warncke, 1974; *A. b.* ssp. *apricaria* Warncke, 1975). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (TK, KM, AL), **ES** (KS, TU, IR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, Mongolia, China (NW).
- Andrena (Euandrena) capillosa** Morawitz, 1876. Russia: **UR**. – Uzbekistan, Kazakhstan.
- Andrena (Euandrena) chrysopus** Pérez, 1903 (*A. doborowlanensis* Noskiewicz, 1923). Russia: **EP** (C, E, S, CR). – Europe (WE, SE, EE), Turkey, Kazakhstan.
- Andrena (Euandrena) fulvida** Schenck, 1853 (*A. fasciatella* Schenck, 1853; *A. jasnitzkii* Cockerell, 1929). Russia: **EP** (NW, C), **WS** (TK, KM, AL), **ES** (KR, IR, BR, YA), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE).
- Andrena (Euandrena) glabriventris** Alfken, 1935. Russia: **EP** (CR). – Caucasus, Turkey.
- Andrena (Euandrena) hebes** Pérez, 1905 (*A. praecociformis* Cockerell, 1911). Russia: **FE** (SA). – Japan (Hon, Shi, Kyu).
- Andrena (Euandrena) khabarovi** Osytshnjuk, 1986. Russia: **FE** (AM, KH, PR).
- Andrena (Euandrena) kudiana** Cockerell, 1924. Russia: **FE** (PR).
- Andrena (Euandrena) mutini** Osytshnjuk, 1986. Russia: **FE** (AM, KH, PR).
- Andrena (Euandrena) orientaliella** Osytshnjuk, 1986. Russia: **ES** (TU, IR, BR, YA, ZB), **FE** (AM, KH, PR, MG). – Mongolia.
- Andrena (Euandrena) roscipes** Alfken, 1933. Russia: **EP** (S, NC). – Europe (EE).
- Andrena (Euandrena) rudolfae** Osytshnjuk, 1986. Russia: **UR**, **ES** (KS, BR, ZB). – Kazakhstan.
- Andrena (Euandrena) ruficrus** Nylander, 1848. Russia: **EP** (N, NW, C, E), **UR**, **WS** (TK, KM), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE), Turkey, Kyrgyzstan, Kazakhstan, Korean Peninsula, Japan (Hok, Hon).
- Andrena (Euandrena) symphyti** Schmiedeknecht, 1883 (*A. bothriorhina* Pérez, 1902; *A. furcata* Friese, 1921; *A. furcata* var. *amaniensis* Friese, 1921). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Georgia, Azerbaijan, Turkey, Iran.
- Andrena (Euandrena) verae** Osytshnjuk, 1986 (*A. verae* ssp. *nikiforuki* Osytshnjuk, 1986). Russia: **EP** (S), **UR**. – Europe (EE), Kazakhstan.
- Andrena (Euandrena) vulpecula** Kriechbaumer, 1873. Russia: **FE** (AM, PR). – Europe (WE, SE, EE), N Africa.
- Andrena (Graecandrena) hyemala** Warncke, 1973 (*A. hyemala* ssp. *repressa* Warncke, 1975; *A. h.* ssp.

- kushkia* Osytshnjuk, 1994). Russia: **EP** (S, NC). – Europe (SE, EE), Turkey, Israel, Turkmenistan.
- Andrena (Graecandrena) impunctata** Pérez, 1895 (*A. contusa* Pérez, 1895; *A. paula* Noskiewicz, 1939). Russia: **EP** (S, CR). – Europe (WE, SE, EE), N Africa, Azerbaijan, Turkey, Israel, Iran.
- Andrena (Graecandrena) schwarzi** Warncke, 1975 (*A. schwarzi* ssp. *walishanovi* Osytshnjuk, 1994). Russia: **EP** (S, CR). – Europe (EE), Turkey, Kazakhstan.
- Andrena (Holandrena) decipiens** Schenck, 1861 (*Apis albifrons* Christ, 1791, nom. praeocc., nec Förster, 1771, nec Rossi, 1790; *Andrena strigosa* Dours, 1872, nom. praeocc., nec Panzer, 1799; *A. insolita* Dours, 1872; ?*A. flavilabris* Schenck, 1874; *A. deceptor* Schmiedeknecht, 1883; *A. fimbriata paganettii* Alfken, 1904, nom. praeocc., nec Strand, 1921, nec Maidl, 1922; *A. decipiens* ssp. *capta* Warncke, 1974). Russia: **EP** (S, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Iran.
- Andrena (Holandrena) labialis** (Kirby, 1802) [Melitta] (*A. succinata* Imhoff, 1832; *A. separata* Smith, 1847; *A. albipes* Schenck, 1853; *A. fulvipes* Schenck, 1853; *A. lutescens* Schenck, 1853; *A. trachyderma* Dours, 1872; *A. nigro-stincta* Dours, 1872; *A. succinctula* Viereck, 1916; *A. labialis* ssp. *megala* Warncke, 1975; *A. l.* ssp. *stenura* Warncke, 1975). Russia: **EP** (NW, C, E, S, CR), **UR**, **WS** (OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Syria, Iran, Afghanistan, Kyrgyzstan, Tajikistan, Uzbekistan, Kazakhstan.
- Andrena (Holandrena) labiatula** Osytshnjuk, 1993. Russia: **EP** (CR).
- Andrena (Holandrena) valeriana** Hirashima, 1957. Russia: **ES** (BR), **FE** (AM, KH, PR). – Mongolia, China (NC, NW, WP), Korean Peninsula, Japan (Hok, Hon, Kyu).
- Andrena (Holandrena) variabilis** Smith, 1853 (?*A. kirbyi* Curtis, 1826; *A. calabra* Costa, 1863; *A. fonscolombii* Dours, 1872; *A. picciolii* Dours, 1872; *A. piceicornis* Dours, 1872; *A. pulcherrima* Schmiedeknecht, 1884; *A. macedonica* Strand, 1919, nom. praeocc., nec Friese, 1923). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), N Africa, Azerbaijan, Turkey, Lebanon, Israel, Iran, Turkmenistan, Kazakhstan.
- Andrena (Hoplendrena) carantonica** Pérez, 1902 (?*Apis sabulosa* Scopoli, 1763; ?*A. degener* Scopoli, 1770; ?*A. acris* Harris, 1776; ?*A. lutulenta* Gmelin, 1790; *Andrena carantonica* Pérez, 1902; *A. trimmerana* var. *scotica* Perkins, 1917; *A. jacobi* Perkins, 1921; *A. jacobi* var. *johnsoni* Perkins, 1921). Russia: **EP** (N, NW, C, E, CR), **UR**. – Europe (WE, NE, SE, EE), Armenia, Azerbaijan, Iran.
- Andrena (Hoplendrena) dentata** Smith, 1879. Russia: **WS** (TK, KM), **FE** (AM, KH, PR, KU). – China (NE, NC, SW, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Andrena (Hoplendrena) ferox** Smith, 1847 (*A. ferox* Smith, 1847; *A. distincta* Smith, 1847, nom. praeocc., nec Lucas, 1849, nec Schenck, 1861; *A. obscurata* Smith, 1853). Russia: **EP** (CR). – Europe (WE, SE, EE), Armenia, Turkey.
- Andrena (Hoplendrena) miyamotoi** Hirashima, 1964. Russia: **FE** (PR, KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu).
- Andrena (Hoplendrena) romankovae** Osytshnjuk, 1995. Russia: **ES** (BR), **FE** (PR).
- Andrena (Hoplendrena) rosae** Panzer, 1801 (*Melitta zonalis* Kirby, 1802; *Andrena postica* Imhoff, 1832; *A. coarctata* Imhoff, 1832, nom. praeocc., nec Pérez, 1902; *A. austriaca* var. *incompta* Schmiedeknecht, 1883; *A. rosae* var. *alfkeni* Friese, 1914; *A. florea* ssp. *sachalinensis* Yasumatsu, 1939; *A. austriaca* auct., nec Panzer, 1798). Russia: **EP** (NW, C, E, S, CR), **UR**, **WS** (TK, NS, KM, AL), **ES** (KS, TU, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE, SE, EE), Armenia, Azerbaijan, Turkey, Iran, Kyrgyzstan, Kazakhstan, Mongolia, China (NE), Korean Peninsula, Japan (Hok).
- Andrena (Hoplendrena) trimmerana** (Kirby, 1802) [Melitta] (*Melitta spinigera* Kirby, 1802; *Andrena fusca* Lepeletier de Saint-Fargeau, 1841; *A. arietina* Dours, 1872; *A. ustulata* Dours, 1872; *A. lombardica* Schmiedeknecht, 1883; *A. dragana* Friese, 1887; *A. anglica* Alfken, 1911). Russia: **EP** (C, NC, CR), **UR**, **ES** (KR). – Europe (WE, NE, SE, EE), N Africa, Turkey, Turkmenistan,
- Andrena (Larandrena) sericata** Imhoff, 1868 (*A. favosa* Morawitz, 1872). Russia: **EP** (E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Georgia, Armenia, Turkey, Turkmenistan, Kazakhstan.
- Andrena (Larandrena) ventralis** Imhoff, 1832 (?*Apis tenella* Christ, 1791; ?*Andrena analis* Fabricius, 1804; *A. ventralis* Imhoff, 1832; *A. rufiventris* Eversmann, 1852; *A. mutabilis* Morawitz, 1866, nom. praeocc., nec Pérez, 1895; *A. fukuiana* Hirashima et Haneda, 1973). Russia: **EP** (N, C, E, S, CR), **UR**, **WS** (OM, TK, KM), **ES** (IR, BR). – Europe (WE, SE, EE), Caucasus, Turkey, Central Asia, Kazakhstan, China (NC), Korean Peninsula, Japan (Hon, Shi).

- Andrena (Lepidandrena) caprimulga** Warncke, 1975. Russia: **EP** (CR). – Azerbaijan, Turkey.
- Andrena (Lepidandrena) curvungula** Thomson, 1870 (?*A. pictipes* Giraud, 1861; *A. squamigera* Schenck, 1874, nom. praeocc., nec Bramson, 1879). Russia: **EP** (C, S, CR), **UR**, **WS** (OM, TK, KM, AL). – Europe (WE, SE, EE), Georgia, Azerbaijan, Turkey, Kazakhstan.
- Andrena (Lepidandrena) florivaga** Eversmann, 1852 (*A. molhusina* Blüthgen, 1914). Russia: **EP** (C, S, NC, CR), **UR**, **WS** (NS, KM). – Europe (WE, NE, SE, EE), Turkey, Iran, Kazakhstan.
- Andrena (Lepidandrena) paucisquama** Noskiewicz, 1924 (*A. paucisquama* ssp. *curonica* Warncke, 1975). Russia: **EP** (C, NC, CR), **UR**. – Europe (WE, SE, EE), Caucasus, Turkey.
- Andrena (Lepidandrena) rufizona** Imhoff, 1834 (*A. alpina* Morawitz, 1872, nom. praeocc., nec Zetterstedt, 1838; *A. pretiosa* Schmiedeknecht, 1880, nom. praeocc., nec Morawitz, 1894). Russia: **EP** (C, E, NC), **UR**, **WS** (TK, NS, KM, AL), **ES** (KS, KR). – Europe (WE, SE, EE), Caucasus, Kazakhstan.
- Andrena (Leucandrena) argentata** Smith, 1844. Russia: **EP** (NW, C, E), **UR**, **WS** (TK, NS, AL), **ES** (KS, BR), **FE** (AM, PR). – Europe (WE, NE, SE, EE), Georgia, Turkey, Kazakhstan.
- Andrena (Leucandrena) barbilabris** (Kirby, 1802) [Melitta] (*Apis sericea* Christ, 1791, nom. praeocc., nec Förster, 1771; ?*Hylaeus similis* Fabricius, 1793, nom. praeocc., nec Smith, 1849; *Melitta albicrus* Kirby, 1802; *Andrena albocincta* Zetterstedt, 1838; *A. barbatula* Zetterstedt, 1838, nom. praeocc., nec Kirby, 1802; *A. parumpunctata* Schenck, 1853; *A. placida* Smith, 1853; *A. angustipes* Schenck, 1866; *A. ciliata* Schenck, 1869, nom. praeocc., nec Gmelin, 1790; *A. macilenta* Provancher, 1888, nom. praeocc., nec Pérez, 1895; *A. macgillivrayi* Cockerell, 1897; *A. salicacea* Robertson, 1900; *A. sapellonis* Cockerell, 1900; *A. pauperata* Pérez, 1902; *A. ciliatula* Viereck, 1916; *A. sericea* var. *malaisei* Alfken, 1929). Russia: **EP** (NW, C, E, S), **UR**, **WS** (TM, TK, AL), **ES** (BR, YA, ZB), **FE** (AM, PR, KA, MG). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan, Mongolia, China (NE, NC), Japan (Hok, Hon), N America.
- Andrena (Leucandrena) parviceps** Kriechbaumer, 1873 (*A. parviceps* var. *basalis* Kriechbaumer, 1873, nom. praeocc., nec Dours, 1872; *A. lederi* Morawitz, 1886; *A. basilaris* Viereck, 1918). Russia: **EP** (C, CR). – Europe (WE, SE, EE), Georgia, Azerbaijan, Turkey, Iran, Turkmenistan.
- Andrena (Margandrena) marginata** Fabricius, 1776 (?*Apis obscura* Linné, 1764, nom. praeocc., nec Müller, 1776, nec Robertson, 1902, nec Friese, 1914; *Nomada cingulata* Fabricius, 1775; *Apis cetii* Schrank, 1781; *Andrena suecica* Gmelin, 1790; *Apis marginella* Gmelin, 1790; *A. sphegoides* Panzer, 1798, nom. praeocc., nec Schrank, 1781; *Melitta schrankella* Kirby, 1802; *M. affinis* Kirby, 1802; *Andrena frontalis* Smith, 1849; *A. fulva* Eversmann, 1852, nom. praeocc., nec Müller, 1766, nec Schrank, 1781; *A. hyalinella* Costa, 1888; *A. marginata* var. *nigrescens* Aurivillius, 1903; *A. m.* var. *absoluta* Friese, 1914; *A. eversmanniana* Osytschnjuk, 1994). Russia: **EP** (NW, C, E, S, NC), **UR**, **WS** (TM, KM), **ES** (KS, KR, IR, BR, ZB), **FE** (AM, PR). – Europe (WE, NE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Kazakhstan, Turkmenistan.
- Andrena (Melandrena) albopunctata** (Rossi, 1792) [Apis] (*A. funebris* Panzer, 1798; *A. lugubris* Lepeletier de Saint-Fargeau, 1841, nom. praeocc., nec Erichson, 1841; *A. nigrobarbata* Morawitz, 1871; *A. macularis* Kriechbaumer, 1873; *A. lugubrescens* Cockerell, 1917; *A. albopunctata* ssp. *melona* Warncke, 1967). Russia: **EP** (E, S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iraq, Iran, Afghanistan, Pakistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Andrena (Melandrena) comta** Eversmann, 1852 (*A. orenburgensis* Schmiedeknecht, 1884; *Anthrena* (!) *csikiana* Mocsáry, 1901; *Andrena wulungshanensis* Yasumatsu, 1935). Russia: **EP** (C), **UR**, **WS** (NS, KM, AL), **ES** (KS, TU, IR, BR, ZB), **FE** (AM, PR). – Europe (WE, EE), Kazakhstan, Mongolia, China (NE, NC, NW), Japan (Hon).
- Andrena (Melandrena) cineraria** (Linnaeus, 1758) [Apis] (*Apis atra* Scopoli, 1763, nom. praeocc., nec Müller, 1776, nec Smith, 1847, nec Popov, 1940; *Lamprocolletes peregrinus* Smith, 1878; *Andrena cineraria* var. *nigrifacies* Alfken, 1913; *A. danuvia* E. Stoeckhert, 1950; *A. barbareae* auct., partim, nec Panzer, 1805). Russia: **EP** (N, NW, C, E), **UR**, **WS** (OM, TK, NS, KM, AL), **ES** (KS, TU, IR, BR, YA, ZB), **FE** (KH). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, Afghanistan, Pakistan, Turkmenistan, Kazakhstan, Mongolia, China (NC, NW, WP).
- Andrena (Melandrena) cussariensis** Morawitz, 1886 (*A. cussariensis* var. *kohatensis* Cockerell, 1917). Russia: **EP** (S, NC, CR), **UR**. – Georgia, Azerbaijan, Turkey, Iran, Tajikistan, Kazakhstan, Mongolia.

- Andrena (Melandrena) gallica** Schmiedeknecht, 1883 (*A. gallica* ssp. *alpicola* Bischoff, 1922; *A. g.* ssp. *fulvitegularis* Bischoff, 1922; *A. g.* ssp. *taurica* Bischoff, 1922; *A. g.* ssp. *iberica* Bischoff, 1922). Russia: **EP** (C, NC, CR), **UR**, **WS** (OM, KM, AL), **ES** (KS, IR, BR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Kazakhstan.
- Andrena (Melandrena) gussakovskii** Lebedev, 1932. Russia: **WS** (AL). – Iran, Central Asia.
- Andrena (Melandrena) limata** Smith, 1853 (*A. lucida* Lepeletier de Saint-Fargeau, 1841, nom. praeocc., nec Panzer, 1798; *A. pectoralis* Schmiedeknecht, 1883; *A. batesiae* Cockerell, 1910; *A. bateiae* Cockerell, 1914; *A. nitida* var. *algeriensis* Alfken, 1914; *A. thoracica* var. *secunda* Friese, 1922; *A. nitida* var. *aestivalis* Friese, 1922; *A. pectoralis* var. *alemannia* Alfken, 1927; *A. nitida* var. *hispanica* Alfken, 1927, nom. praeocc., nec Friese, 1922; *A. nitida* ssp. *hispaniola* Warncke, 1967; *A. limata* ssp. *mixtura* Warncke, 1967). Russia: **EP** (C, E, S, CR). – Europe (WE, NE, SE, EE), N Africa, Georgia, Armenia, Turkey, Israel, Iran, Uzbekistan, Kyrgyzstan, Kazakhstan.
- Andrena (Melandrena) magna** Warncke, 1965. Russia: **EP** (CR). – Europe (SE, EE), Georgia, Armenia, Turkey.
- Andrena (Melandrena) metallescens** Cockerell, 1906 (*A. metallica* Radoszkowski, 1876, nom. praeocc., nec Fabricius, 1793). Russia: **EP** (S). – Azerbaijan, Kazakhstan.
- Andrena (Melandrena) morio** Brullé, 1832 (*A. lugubris* Erichson, 1841; *A. holomelana* Lepeletier de Saint-Fargeau, 1841; *A. collaris* Lepeletier de Saint-Fargeau, 1841; *A. violaceipennis* Dufour, 1841, nom. praeocc., nec Cameron, 1902; ?*A. phaeoptera* Gistel, 1857; *A. rhodia* Kriechbaumer, 1873; *A. occipitalis* Pérez, 1895, nom. praeocc., nec Gistel, 1857; *A. asterabadiae* Strand, 1921; *A. ephippium* var. *scopipes* Friese, 1923, nom. praeocc., nec Friese, 1923; *A. e.* var. *albicollis* Friese, 1923; *A. morio* var. *scopipes* Friese, 1923, nom. praeocc., nec Friese, 1923; *A. m.* ssp. *athalassae* Pittioni, 1950). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Israel, Iran, Kazakhstan.
- Andrena (Melandrena) nigroaenea** (Kirby, 1802) [Melitta] (*Apis obscura* Müller, 1776, nom. praeocc., nec Linné, 1764, Robertson, 1902, nec Friese, 1914; *Andrena splendens* Imhoff, 1832; *A. bipartita* Lepeletier de Saint-Fargeau, 1841, nom. praeocc., nec Brullé, 1839; *A. aprilina* Smith, 1848; *A. nigrosericea* Dours, 1872; *A. serotina* Destefani, 1889, nom. praeocc., nec Robertson, 1893; *A. lepeletieri* Dalla Torre, 1896, nom. praeocc., nec Lucas, 1849; *A. candiae* Strand, 1915; *A. nigroaenea* var. *fasciculata* Friese, 1922; *A. melandura* Cockerell, 1922; *A. aemula* Alfken, 1926, nom. praeocc., nec Alfken, 1926; *A. nigroaenea sarnia* Richards, 1979; *A. n. corsa* Tkalcú, 1984). Russia: **EP** (NC, CR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel, Syria, Iran, Afghanistan.
- Andrena (Melandrena) nitida** (Müller, 1776) [Apis] (?*Apis assiduus* Harris, 1776; ?*A. fortis* Harris, 1776; *Andrena pubescens* Olivier, 1789, nom. praeocc., nec Kirby, 1802; *Apis nigriventris* Gmelin, 1790, nom. praeocc., nec Pérez, 1902, nom. praeocc., nec Saunders, 1908; *Andrena velutina* Lepeletier de Saint-Fargeau, 1841; *A. consimilis* Smith, 1847, nom. praeocc., nec Smith, 1849, nec Alfken, 1900; *A. nitens* Schenck, 1869; *A. pectoraloides* Verhoeff, 1890; *A. denticornis* Verhoeff, 1890; *A. nitida baltica* Alfken, 1913; *A. pubescens* ssp. *omissa* Valkeila, 1954). Russia: **EP** (NW, C, NC, CR), **UR**, **WS** (TK, KM). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Iran, Central Asia, Kazakhstan.
- Andrena (Melandrena) parathoracica** Hirashima, 1957. Russia: **FE** (PR, KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Andrena (Melandrena) pyropygia** Kriechbaumer, 1873. Russia: **EP** (NC, CR). – Europe (SE), Georgia, Azerbaijan, Turkey, Syria, Israel, Iran.
- Andrena (Melandrena) senex** Eversmann, 1852 (*A. ovinella* Friese, 1914). Russia: **UR**, **ES** (TU, IR, BR). – Kazakhstan, Mongolia, China (NE).
- Andrena (Melandrena) stigmatica** Morawitz, 1895. Russia: **EP** (CR). – Turkmenistan.
- Andrena (Melandrena) thoracica** (Fabricius, 1775) [Apis] (*Melitta melanocephala* Kirby, 1802; *Andrena sinensis* Cockerell, 1910; *A. thoracica* ssp. *melanoptera* Hedicke, 1934; *A. th.* ssp. *kotschyi* Mavromoustakis, 1953). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (OM, TK, NS, KM, AL), **ES** (KS, TU, IR, BR, ZB), **FE** (AM, KH, PR, SA, KA, MG). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel, Jordan, Lebanon, Iran, Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, Mongolia, China (NE, NC, NW), Korean Peninsula.
- Andrena (Melandrena) vaga** Panzer, 1799 (*Apis pratensis* Müller, 1776; *Andrena ovina* Klug, 1810; *A. nitidiventris* Blanchard, 1840, nom. praeocc., nec Dufour, 1841; *A. nitidiventris* Dufour, 1841, nom.

- praeocc., nec Blanchard, 1840; *A. atricula* Biscoff, 1922). Russia: **EP** (NW, C, E, S), **UR**, **WS** (OM, TM, KM), **ES** (IR, BU, YA, ZB). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Kyrgyzstan, Kazakhstan.
- Andrena (Melandrena) watasei** Cockerell, 1913 (*A. azalearum* Cockerell, 1930). Russia: **FE** (PR, SA). – Japan (Hok, Hon, Shi, Kyu).
- Andrena (Melanapis) fuscata** Erichson, 1835 (?*Andrena aethiops* Imhoff, 1832; *A. rutila* Spinola, 1838, nom. praeocc., nec Pérez, 1895; *A. ephippium* Spinola, 1838; *A. xanthoscelis* Brullé, 1839; *A. dorsalis* Lepeletier de Saint-Fargeau, 1841, nom. praeocc., nec Brullé, 1832; *A. lepeletieri* Lucas, 1849, nom. praeocc., nec Dalla Torre, 1896; *A. ruficornis* Smith, 1853; *A. atrocoerulea* Giraud, 1863; *A. dagestanica* Radoszkowski, 1867; *A. turcestanica* Morawitz, 1876; *A. dilecta* Mocsáry, 1879; *A. lepeletieri* var. *aschabadensis* Radoszkowski, 1893, nom. praeocc., nec Friese, 1922; *A. jucunda* Pérez, 1895; *A. ephippium* var. *cleopatra* Friese, 1899; *Melanapis violaceipennis* Cameron, 1902, nom. praeocc., nec Dufour, 1841; *M. rufifrons* Nurse, 1904; *Andrena cyprica* Cockerell, 1910; *A. ephippium* var. *flavipennis* Friese, 1914; *A. e.* var. *pallipes* Friese, 1914; *A. e.* var. *rufocincta* Friese, 1914, nom. praeocc., nec Ashmead, 1890; *A. e.* var. *rubriventris* Friese, 1922; *A. dorsatula* Viereck, 1918; *A. rutila* ab. *carnea* Lebedev, 1933; *A. rutila* ab. *zonaria* Lebedev, 1933; *A. ankarae* Alfken, 1935; *A. rutila* ssp. *mauritanica* Patiny, 1997; *A. canariensis* Patiny, 1997). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Jordan, Lebanon, Israel, Iran, Afghanistan, Central Asia, Kazakhstan, India.
- Andrena (Micrandrena) alfkenella** Perkins, 1914 (*A. moricella* Perkins, 1914; *A. pillichii* Noskiewicz, 1939; *A. alfkenella* ssp. *sunna* Warncke, 1975). Russia: **EP** (C, E, S, CR). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey.
- Andrena (Micrandrena) enslinella** Stoeckhert, 1924 (*A. chimaera* Blüthgen, 1949). Russia: **EP** (C, E, S, NC), **UR**, **WS** (KM). – Europe (WE, SE, EE), Azerbaijan, Turkey, Iran.
- Andrena (Micrandrena) falsifica** Perkins, 1915. Russia: **EP** (C, E, NC, CR), **UR**, **WS** (KM), **ES** (IR). – Europe (WE, NE, SE, EE), Georgia, Azerbaijan.
- Andrena (Micrandrena) falsificissima** Hirashima, 1966. Russia: **FE** (KH, PR). – Korean Peninsula, Japan (Hok, Hon).
- Andrena (Micrandrena) floricola** Eversmann, 1852 (*A. punctulata* Schenck, 1853, nom. praeocc., nec Torka, 1913; *A. ochropyga* Alfken, 1916). Russia: **EP** (C, E, NC, CR), **UR**, **WS** (TK). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran.
- Andrena (Micrandrena) hikosana** Hirashima, 1957. Russia: **FE** (PR). – Korean Peninsula, Japan (Hok, Hon, Kyu, Shi).
- Andrena (Micrandrena) lazoiana** Osytshnjuk, 1995. Russia: **FE** (PR).
- Andrena (Micrandrena) magunta** Warncke, 1965. Russia: **EP** (NC, CR). – Europe (SE), Georgia, Azerbaijan, Turkey.
- Andrena (Micrandrena) minutissima** Osytshnjuk, 1995. Russia: **FE** (AM, KH, PR, SA).
- Andrena (Micrandrena) minutula** (Kirby, 1802) [Melitta] (*Melitta parvula* Kirby, 1802, nom. praeocc., nec Morawitz, 1871; *Andrena nigrifrons* Smith, 1855, nom. praeocc., nec Eversmann, 1852, nec Smith, 1853, nec Cresson, 1878; *A. gilvifrons* Pérez, 1903; *A. lenis* Pérez, 1903; *A. minutula* ssp. *alga* Warncke, 1974). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, China (NE, NC, NW), Japan (Hok, Hon, Shi, Kyu).
- Andrena (Micrandrena) minutuloides** Perkins, 1914 (*A. parvuloides* Perkins, 1914; *A. sparsiciliata* Alfken, 1925). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (TK, KM, AL), **ES** (KS, KR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran.
- Andrena (Micrandrena) nana** (Kirby, 1802) [Melitta] (*A. schenkella* Pérez, 1903; *A. nana* var. *taorminae* Strand, 1921; *A. asuniensis* Strand, 1921). Russia: **EP** (C). – Europe (WE, NE, SE, EE), N Africa.
- Andrena (Micrandrena) nanaeformis** Noskiewicz, 1925. Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (KM, AL), **ES** (KS, IR). – Europe (WE, EE), Azerbaijan, Kazakhstan.
- Andrena (Micrandrena) nanula** Nylander, 1848. Russia: **EP** (NW, C, E), **UR**, **WS** (KM, AL), **ES** (KS, IR, BR, ZB), **FE** (PR). – Europe (WE, NE, SE, EE), Azerbaijan.
- Andrena (Micrandrena) niveata** Friese, 1887 (*A. niveata* ssp. *bubulca* Warncke, 1975; *A. n.* ssp. *haloga* Warncke, 1980; *A. n.* ssp. *lecana* Warncke, 1975). Russia: **EP** (C, CR), **UR**. – Europe (WE, NE, SE, EE), Turkey.
- Andrena (Micrandrena) roripae** Osytshnjuk, 1993. Russia: **EP** (S, CR).
- Andrena (Micrandrena) rugulosa** Stoeckhert, 1935. Russia: **EP** (CR). – Europe (WE, SE, EE), Turkey.

- Andrena (Micrandrena) rugulosella** Osytshnjuk, 1993. Russia: **EP** (S). – Kazakhstan.
- Andrena (Micrandrena) semilaevis** Pérez, 1903 (*A. saundersella* Perkins, 1914). Russia: **EP** (NW, C, E, S, CR). – Europe (WE, NE, SE, EE), Azerbaijan.
- Andrena (Micrandrena) semirugosa** Cockerell, 1924 (*A. brassicae* Hirashima, 1957, nom. praeocc., nec Mitchell, 1960). Russia: **FE** (AM, KH, PR, SA, KU). – China (NE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu).
- Andrena (Micrandrena) sillata** Warncke, 1975 (*A. sillata* ssp. *histrionica* Warncke, 1975). Russia: **EP** (NC, CR). – Europe (SE), Turkey.
- Andrena (Micrandrena) stoeckhertella** Pittioni, 1948. Russia: **EP** (S, NC, CR). – Azerbaijan, Turkey.
- Andrena (Micrandrena) subopaca** Nylander, 1848. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TK, KM, AL), **ES** (KR, IR, BR, ZB), **FE** (AM, KH, PR, SA, KU, KA). – Europe (WE, NE, SE, EE), Georgia, Azerbaijan, Kazakhstan, China (NE, SW), Japan (Hok, Hon, Shi, Kyu).
- Andrena (Micrandrena) tringa** Warncke, 1973. Russia: **EP** (C, S, NC, CR). – Europe (EE), Azerbaijan, Turkey.
- Andrena (Nobandrena) anatolica** Alfken, 1935. Russia: **EP** (S). – Europe (SE, EE), Azerbaijan, Turkey, Syria, Lebanon.
- Andrena (Nobandrena) athenensis** Warncke, 1965. Russia: **EP** (NC, CR). – Europe (SE, EE), Caucasus, Turkey.
- Andrena (Nobandrena) flavobila** Warncke, 1965 (*A. flavobila* ssp. *albicilla* Warncke, 1975). Russia: **EP** (CR). – Europe (SE, EE), Turkey.
- Andrena (Nobandrena) fratercula** Warncke, 1975. Russia: **EP** (NC). – Turkey.
- Andrena (Nobandrena) nobilis** Morawitz, 1874 (*A. paliuri* Morawitz, 1877). Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), Caucasus, Turkey, Iran, Turkmenistan.
- Andrena (Notandrena) chrysosceles** (Kirby, 1802) [Melitta] (*Melitta connectens* Kirby, 1802; *Andrena fallax* Eversmann, 1852; *A. erythrocnemis* Morawitz, 1870, nec auct.). Russia: **EP** (C, E, S, NC), **UR**, **WS** (OM, TK, KM, AL). – Europe (WE, NE, SE, EE), Georgia, Turkey, Kazakhstan.
- Andrena (Notandrena) minor** (Radoszkowski, 1891) [Cilissa] (*A. kurdistanica* Engel, 2005). Russia: **FE** (PR).
- Andrena (Notandrena) nitidiuscula** Schenck, 1853 (?*A. xanthopyga* Illiger, 1806; *A. fulvicornis* Schenck, 1853; *A. fulvicornis* Schenck, 1861; *A. lucens* Imhoff, 1868; *A. nigellata* Pérez, 1895; *A. gascheti* Pérez, 1903; *A. petroselini* Pérez, 1903; *A. divergens* Pérez, 1903; *A. rostellata* Pérez, 1903; *A. rubrosignata* Saunders, 1908; *A. lucens* var. *algira* Friese, 1922; *A. franconica* E. Stoeckhert, 1922). Russia: **EP** (C, E, S, NC, CR), **WS** (TK, KM), **ES** (TU, IR, BR, ZB), **FE** (KH). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Syria, Israel, Iran, Mongolia, China (NE, NW, WP), Japan (Hok, Hon, Kyu).
- Andrena (Notandrena) pallitarsis** Pérez, 1903. Russia: **UR**, **WS** (KM). – Europe (WE, SE, EE).
- Andrena (Opandrena) schencki** Morawitz, 1866 (*A. labiata* sensu E. Stoeckhert, 1930, nom. praeocc., nec Fabricius, 1781; *A. bipustulata* Friese, 1921). Russia: **EP** (NC), **UR**. – Europe (WE, NE, SE, EE), Caucasus, Turkey, Israel, Iran, Turkmenistan.
- Andrena (Orandrena) oralis** Morawitz, 1876 (*A. sogdiana* Morawitz, 1876; *A. sisymbrii* Friese, 1887). Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), Turkey, Uzbekistan, Kazakhstan.
- Andrena (Oreomelissa) coitana** (Kirby, 1802) [Melitta] (*Melitta shawella* Kirby, 1802; *Andrena nylanderi* Morawitz, 1864; *A. amaguensis* Cockerell, 1924; *A. coitana* var. *pilosodorsata* Alfken, 1929; *A. c.* ssp. *xema* Warncke, 1975). Russia: **EP** (NW, C, E, NC, CR), **UR**, **WS** (TK, KM, AL), **ES** (KS, TU, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Kyrgyzstan, Kazakhstan, China (NW), Korean Peninsula, Japan (Hok).
- Andrena (Oreomelissa) kamikochiana** Hirashima, 1963. Russia: **FE** (PR). – Mongolia, China (NE, NC), Korean Peninsula, Japan (Hon).
- Andrena (Oreomelissa) media** (Radoszkowski, 1891) [Cilissa] (*A. amurensis* Friese, 1922, nom. praeocc., nec Radoszkowski, 1891; *A. amurica* Engel, 2005). Russia: **FE** (PR). – China (NE), Korean Peninsula.
- Andrena (Oreomelissa) mitakensis** Hirashima, 1963. Russia: **FE** (SA, KU). – China (NC), Japan (Hok, Hon).
- Andrena (Pallandrena) braunsiana** Friese, 1887 (*A. braunsiana* ssp. *detorta* Warncke, 1975). Russia: **EP** (C, S, CR). – Europe (WE, SE, EE), Azerbaijan, Turkey.
- Andrena (Parandrenella) atrata** Friese, 1887 (*A. bicarinata* auct., nec Morawitz, 1876). Russia: **EP** (C, S, NC, CR), **UR**, **WS** (NS, KM), **ES** (KS). – Europe (WE, SE, EE), Azerbaijan, Kazakhstan.

- Andrena (Parandrenella) dentiventris** Morawitz, 1874. Russia: **EP** (S, NC). – Georgia, Azerbaijan, Turkey, Iran, Kazakhstan.
- Andrena (Parandrenella) figurata** Morawitz, 1866. Russia: **EP** (E, S, NC, CR), **UR**. – Europe (SE, EE), Caucasus, Turkey, Iran, Kazakhstan.
- Andrena (Plastandrena) bimaculata** (Kirby, 1802) [Melitta] (*A. decorata* Smith, 1847; *A. conjuncta* Smith, 1847; *A. articulata* Smith, 1847; *A. vitrea* Smith, 1847; *A. consobrina* Eversmann, 1852, nom. praeocc., nec Schenck, 1861; *A. vitreipennis* Costa, 1861; *A. mystacea* Dours, 1861; *A. intermedia* Morawitz, 1870, nom. praeocc., nec Thomson, 1870; *A. morawitzi* Thomson, 1872; *A. atro-rubricata* Dours, 1872; *A. aulica* Morawitz, 1876; *A. comparata* Morawitz, 1876; *A. melanura* Morawitz, 1877; *A. paveli* Schmiedeknecht, 1883; *A. magrettiana* Schmiedeknecht, 1884; *A. germabica* Radoszkowski, 1893; *A. vitrea* var. *tenebrosa* Gribodo, 1894; *A. atrorubricata* var. *concolor* Alfken, 1914, nom. praeocc., nec Robertson, 1898, nec Blüthgen, 1919; *A. bimaculata* var. *mondaensis* Friese, 1922; *A. bimaculata* var. *serotinella* Friese, 1922; *A. morawitzi* var. *hirtella* Friese, 1922; *A. tibialis* var. *tricolorata* Friese, 1922; *A. florea* var. *clavipes* Friese, 1924; *A. blüthgeni* Stoeckhert, 1930; *A. bimaculata* ssp. *oligotricha* Mavromoustakis, 1952; *A. gaetula* Benoist, 1961; *A. bimaculata* ssp. *lichata* Warncke, 1967). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (OM, TK, KM), **ES** (KR, IR, BR). – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Syria, Israel, Iraq, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia.
- Andrena (Plastandrena) dzynnanica** Popov, 1949. Russia: **ES** (TU, IR, BR, ZB), **FE** (KH, PR). – Mongolia, China (NE, NC).
- Andrena (Plastandrena) eversmanni** Radoszkowski, 1867 (*A. fasciata* Radoszkowski, 1876, nom. praeocc., nec Fabricius, 1775, nec Imhoff, 1832, nec Nylander, 1852; *A. radoszkowskyi* Schmiedeknecht, 1884, nom. praeocc., nec Dalla Torre, 1896; *A. eversmanni* ssp. *ciscaspica* Popov, 1949). Russia: **EP** (NC). – Azerbaijan, Kazakhstan.
- Andrena (Plastandrena) khasania** Osytshnjuk, 1995. Russia: **FE** (AM, PR).
- Andrena (Plastandrena) pilipes** Fabricius, 1781 (?*Apis riparia* Scopoli, 1763; *A. atra* Müller, 1776, nom. praeocc., nec Scopoli, 1763, nec Smith, 1847, nec Popov, 1940; *A. ciliata* Gmelin, 1790, nom. praeocc., nec Schenck, 1869; *Andrena aterrima* Panzer, 1799; *Nomada nigrita* Panzer, 1800, nom. praeocc., nec Fabricius, 1775, nec Morawitz, 1876; *Andrena atra* Smith, 1847, nom. praeocc., nec Müller, 1776, Scopoli, 1763, nec Popov, 1940; *A. spectabilis* Smith, 1853; *A. elongata* Radoszkowski, 1871, nom. praeocc., nec Imhoff, 1834, nec Radoszkowski, 1876; *A. nigrospina* Thomson, 1872; *A. praetexta* Smith, 1872; *A. dolorosa* Nurse, 1904; *A. carbonaria* var. *autumnalis* Friese, 1922, nom. praeocc., nec Viereck et Cockerell, 1914; *A. c.* var. *claripennis* Friese, 1922; *A. c.* ssp. *iliensis* Alfken, 1938; *A. c.* ssp. *imamiana* Osytshnjuk, 1994; *Apis carbonaria* auct., nec Linné, 1967). Russia: **EP** (N, NW, C, E, S, CR), **UR**, **WS** (NS, KM, AL), **ES** (KS, TU, IR, BR, ZB), **FE** (AM, PR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Syria, Israel, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NC, NW, WP), India.
- Andrena (Plastandrena) tibialis** (Kirby, 1802) [Melitta] (*Melitta mouffetella* Kirby, 1802; *M. atriceps* Kirby, 1802; *Andrena fulvitaris* Eversmann, 1852, nom. praeocc., nec Brullé, 1832; *A. ambigua* Eversmann, 1852, nom. praeocc., nec Perkins, 1895; *A. subfasciata* Schenck, 1853; *A. indobonensis* Stoeckhert, 1950; *A. tibialis* ssp. *concreta* Warncke, 1975; *A. t.* ssp. *corvina* Warncke, 1967; *A. t.* ssp. *porzana* Warncke, 1975). Russia: **EP** (NW, C, E, S, CR), **UR**, **WS** (OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR), **FE** (PR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Kyrgyzstan, Kazakhstan, China (NC).
- Andrena (Plastandrena) transbaicalica** Popov, 1949 (*A. astragalina* Hirashima, 1957). Russia: **WS** (TK, NS, KM), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR). – Korean Peninsula, Japan (Hok, Hon, Kyu).
- Andrena (Poecilandrena) fukuokensis** Hirashima, 1952 (*A. leleji* Osytshnjuk, 1982). Russia: **ES** (ZB), **FE** (PR). – China (NE, NC, CC), Korean Peninsula, Japan (Hon, Shi, Kyu, Tsu).
- Andrena (Poecilandrena) hybrida** Warncke, 1975 (*A. hybrida* ssp. *tauriensis* Warncke, 1975; *A. h.* ssp. *uralskia* Warncke, 1975). Russia: **EP** (S, CR). – Europe (SE), Turkey.
- Andrena (Poecilandrena) labiata** Fabricius, 1781 (*Apis fusciventris* Gmelin, 1790; *A. maculosa* Gmelin, 1790; *A. albilabris* Panzer, 1798; *Andrena divisa* Imhoff, 1834; *A. ferruginata* Schenck, 1853; *A. regina* Friese, 1921; *A. labiata* ssp. *bellina* Warncke, 1967; *A. cingulata* auct., nec Fabricius). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (TK, KM, AL), **ES** (KS, IR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Kyrgyzstan, Kazakhstan.

- Andrena (Poecilandrena) potentillae** Panzer, 1809 (*A. genevensis* Schmiedeknecht, 1884). Russia: **EP** (E, S), **UR**. – Europe (WE, SE, EE).
- Andrena (Poecilandrena) seminuda** Friese, 1896 (*A. setigera* Alfken, 1911). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Georgia, Azerbaijan, Turkey.
- Andrena (Poecilandrena) semirubra** Morawitz, 1876. Russia: **EP** (S, NC, CR). – Caucasus, Turkey, Israel.
- Andrena (Poecilandrena) sphecodimorpha** Hedicke, 1942 (*A. potentillae* ssp. *pendelica* Mavromoustakis, 1958). Russia: **EP** (S, CR). – Europe (SE, EE), Israel.
- Andrena (Poliandrena) altaica** Lebedev, 1932. Russia: **WS** (NS). – Kazakhstan.
- Andrena (Poliandrena) caspica** Morawitz, 1886 (*A. unifasciata* Friese, 1899). Russia: **EP** (NC). – Europe (SE), Azerbaijan, Turkey, Lebanon.
- Andrena (Poliandrena) florea** Fabricius, 1793 (*A. austriaca* Panzer, 1798; *A. rubricata* Smith, 1847; *A. globulilabris* Pérez, 1895; *A. florea* var. *obscura* Friese, 1914, nom. praeocc., nec Linné, 1764, nec Müller, 1776, Robertson, 1902; *A. f.* var. *rubra* Friese, 1914; *A. f. f. haslauica* Strand, 1921; *A. f.* ssp. *anhinga* Warncke, 1975; *A. f.* ssp. *corsica* Warncke, 1975). Russia: **EP** (C, S, CR), **UR**. – Europe (WE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Iran, Turkmenistan.
- Andrena (Poliandrena) limbata** Eversmann, 1852 (*A. squamea* Giraud, 1863; *A. limbata* ssp. *dusmeti* Warncke, 1967). Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, NE, EE), Georgia, Azerbaijan, Turkey, Syria, Iran, Turkmenistan.
- Andrena (Poliandrena) ornata** Morawitz, 1866. Russia: **EP** (E, S, CR), **UR**. – Azerbaijan, Kazakhstan.
- Andrena (Poliandrena) polita** Smith, 1847 (*A. ochracea* Morawitz, 1872; *A. pseudopolita* Alfken, 1939). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Iran, Kazakhstan.
- Andrena (Poliandrena) tatjanae** Osytshnjuk, 1995. Russia: **FE** (PR).
- Andrena (Proxiandrena) alutacea** E. Stoeckhert, 1942. Russia: **EP** (C, E). – Europe (WE, NE, SE, EE), Azerbaijan, Turkey, Iran, Turkmenistan.
- Andrena (Proxiandrena) proxima** (Kirby, 1802) [Melitta] (*Melitta digitalis* Kirby, 1802). Russia: **EP** (C, E, NC, CR), **UR**, **WS** (TK, KM). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Central Asia.
- Andrena (Ptilandrena) vetula** Lepeletier de Saint-Fargeau, 1841 (*A. megacephala* Smith, 1853; *A. opaca* Morawitz, 1868, *A. tyrrhena* Alfken, 1938. Russia: **EP** (NC). – Europe (WE, SE), N Africa, Caucasus, Turkey, Lebanon, Israel, Iraq, Iran.
- Andrena (Scitandrena) scita** Eversmann, 1852 (*A. obscuricanda* Costa, 1861; *A. transcaspica* Radoszkowski, 1886, nom. praeocc., nec Radoszkowski, 1893; *A. mesopyrrha* Dours, 1872; *A. scita* var. *nigra* Friese, 1914, nom. praeocc., nec Provancher, 1895, nec Saunders, 1908, nec Wu, 1982; *A. scita* var. *nigrofasciata* Friese, 1914). Russia: **EP** (E, S, NC, CR). – Europe (WE, SE, EE), Caucasus, Turkey, Iran, Afghanistan, Turkmenistan, Kazakhstan.
- Andrena (Simandrena) combinata** (Christ, 1791) [Apis] (*A. candens* Eversmann, 1852; *A. albibarbis* Schenck, 1853; *A. sahlbergi* Morawitz, 1888; *A. mehelyi* Alfken, 1936; *A. combinata* ssp. *crudelis* Warncke, 1967). Russia: **EP** (C, E, CR), **UR**, **WS** (TK, NS, KM, AL), **ES** (KS, IR, BR, YA, ZB), **FE** (MG). – Europe (WE, SE, EE), N Africa, Georgia, Armenia, Turkey, Syria, Kyrgyzstan, Kazakhstan, Mongolia, China (NW).
- Andrena (Simandrena) congruens** Schmiedeknecht, 1884 (*A. dallatorrei* Clément, 1922; *A. confinis* E. Stoeckhert, 1930). Russia: **EP** (C, E), **UR**. – Europe (WE, NE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Syria.
- Andrena (Simandrena) dorsata** (Kirby, 1802) [Melitta] (?*Apis transfuga* Christ, 1791; *Melitta lewinella* Kirby, 1802; *M. collinsonana* Kirby, 1802; *M. nudiuscula* Kirby, 1802; *M. subincana* Kirby, 1802; *Andrena propinqua* Schenck, 1853; *A. cognata* Schenck, 1853; *A. griseola* Schenck, 1861; *A. dubitata* Schenck, 1870; *A. connexa* Pérez, 1895; *A. alliarria* Pérez, 1903; *A. thomsoni* Aurivillius, 1903, nom. praeocc., nec Ducke, 1898). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (TK). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel, Lebanon, Iran, Turkmenistan, Kazakhstan.
- Andrena (Simandrena) kerriae** Hirashima, 1965. Russia: **WS** (KM), **ES** (BR, ZB), **FE** (AM, PR). – China (NE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Andrena (Simandrena) lepida** Schenck, 1861 (*A. separanda* Schmiedeknecht, 1884; *A. ardens* Pérez, 1895; *A. lepida* ssp. *eleonorae* Warncke, 1967). Russia: **EP** (C, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Syria, Israel, Iran.
- Andrena (Simandrena) nippon** Tadauchi et Hirashima, 1983. Russia: **WS** (TK, KM), **ES** (KS, BR, ZB), **FE** (PR). – China (NE), Korean Peninsula, Japan (Hon),

- Andrena (Simandrena) susterai** Alfken, 1914. Russia: **EP** (NC, CR). – Europe (WE, SE, EE).
- Andrena (Simandrena) opacifovea** Hirashima, 1952. Russia: **FE** (KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu).
- Andrena (Simandrena) transitoria** Morawitz, 1871 (*A. basalis* Dours, 1872, nom. praeocc., nec Kriechbaumer, 1873; *A. aurora* Friese, 1922; *A. transitoria* ssp. *schmidti* Alfken, 1936). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Georgia, Azerbaijan, Turkey, Israel, Jordan, Syria, Iran, Afghanistan, Central Asia.
- Andrena (Stenomelissa) halictoides** Smith, 1869. Russia: **FE** (PR). – China (NE), Korean Peninsula, Japan (Hok, Hon).
- Andrena (Taeniandrena) aberrans** Eversmann, 1852 (*A. ratisbonensis* Stoeckert, 1924). Russia: **EP** (S). – Europe (WE, SE, EE), Azerbaijan.
- Andrena (Taeniandrena) callopyrrha** Cockerell, 1929 (*A. callopyrrha* ssp. *kozlovi* Osytshnjuk, 1994). Russia: **WS** (AL). – Kazakhstan, Mongolia, China (NC).
- Andrena (Taeniandrena) ezoensis** Hirashima, 1965. Russia: **ES** (YA), **FE** (SA, KU). – Kazakhstan, China (NE, NC), Korean Peninsula, Japan (Hok, Hon).
- Andrena (Taeniandrena) gelriae** van der Vecht, 1927 (*A. podolica* Noskiewicz, 1930; *A. gelriae karelica* Niemel, 1949; *A. g. k. f. fuscata* Niemel, 1949; *A. g. gredana* Warncke, 1975; *A. g. vocifera* Warncke, 1975). Russia: **EP** (N, NW, C, E, NC, CR), **UR**, **WS** (OM, TK, KM, AL), **ES** (KS, IR, YA, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), Caucasus, Turkey.
- Andrena (Taeniandrena) lathyri** Alfken, 1899. Russia: **EP** (C, E, S, CR), **WS** (TK, NS, KM), **ES** (IR), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), Azerbaijan, Turkey.
- Andrena (Taeniandrena) intermedia** Thomson, 1870. Russia: **EP** (NW, C, E). – Europe (WE, NE, SE, EE), Turkey, Iran.
- Andrena (Taeniandrena) similis** Smith, 1849 (?*Apis ocreata* Christ, 1791; *Andrena croceiventris* Morawitz, 1871; *A. rufohispida* Dours, 1872; *A. stefanii* Pérez, 1895; *A. ocreata* ssp. *cyprisina* Warncke, 1975; *A. similis* ssp. *caraimica* Osytshnjuk, 1994). Russia: **EP** (CR). – Europe (WE, NE, SE, EE), N Africa, Armenia, Turkey, Iran, Afghanistan, Kazakhstan, China (NW).
- Andrena (Taeniandrena) ovatula** (Kirby, 1802) [*Melitta*] (*Melitta afzeliella* Kirby, 1802; *M. fuscata* Kirby, 1802, nom. praeocc., nec Niemalä, 1949; *M. picipes* Kirby, 1802; *M. barbata* Kirby, 1802; *Andrena hirticeps* Eversmann, 1852, nom. praeocc., nec Smith, 1853; *A. interrupta* Eversmann, 1852, nom. praeocc., nec Schenck, 1869; *A. octostrigata* Schenck, 1853; *A. gibba* Schenck, 1853; *A. ovata* Schenck, 1853; *A. plantaris* Schenck, 1853; *A. canescens* Schenck, 1853; *A. albofimbriata* Schenck, 1853; *A. distincta* Schenck, 1861, nom. praeocc., nec Smith, 1847, nec Lucas, 1849; *A. albofasciata* Thomson, 1870; ?*A. turbida* Walker, 1871; *A. poupillieri* Dours, 1872; *A. meliloti* Verhoeff, 1890; *A. afzeliella* var. *heliopolis* Friese, 1914; *A. pseudovatula* Alfken, 1926; *A. lecerfi* Benoist, 1961; *A. poupillieri* ssp. *incana* Warncke, 1975; *A. ovatula* ssp. *transcaspiensis* Osytshnjuk, 1994). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (OM, TK, NS, KM, AL), **ES** (KS, IR, BR, YA, ZB), **FE** (AM, KH, PR, KA). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel, Syria, Iraq, Iran, Afghanistan, Central Asia, Kazakhstan, China (NW).
- Andrena (Taeniandrena) wilkella** (Kirby, 1802) [*Melitta*] (*Melitta xanthura* Kirby, 1802; *M. convexiuscula* Kirby, 1802; *M. barbatula* Kirby, 1802, nom. praeocc., nec Zetterstedt, 1838; *Andrena convexa* Schenck, 1853, nom. praeocc., nec Schrank, 1781, nec Provancher, 1888; *A. quadristrigata* Schenck, 1853; *A. winkleyi* Viereck, 1907; *A. meraca* Cockerell, 1924; *A. beaumonti* Benoist, 1961). Russia: **EP** (NW, C, S, NC, CR), **UR**, **WS** (TK, NS, KM), **ES** (IR, BR, YA, ZB), **FE** (AM, PR). – Europe (WE, NE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Kyrgyzstan, Kazakhstan, China (NC, NW, CC), N America.
- Andrena (Tarsandrena) angarensis** Cockerell, 1929. Russia: **WS** (TK, KM, AL), **ES** (KS, TU, IR, BR, ZB), **FE** (AM, KH, PR). – Kyrgyzstan, Mongolia.
- Andrena (Tarsandrena) bonivuri** Osytshnjuk, 1984. Russia: **ES** (ZB), **FE** (PR).
- Andrena (Tarsandrena) ehnergi** Morawitz, 1888 (*A. belicovi* Cockerell, 1929). Russia: **UR**, **WS** (OM, KM, AL), **ES** (KS, TU, KR, IR, BR, ZB), **FE** (AM, PR). – Mongolia, China (NC, NW).
- Andrena (Tarsandrena) tarsata** Nylander, 1848 (*A. basilinea* Kriechbaumer, 1873; *A. gentianae* Vachal, 1906; *A. baicalensis* Cockerell, 1929; *A. universitatis* Cockerell, 1929). Russia: **EP** (NW, C, NC), **UR**, **WS** (KM, AL), **ES** (KS, TU, IR, BR, YA, ZB), **FE** (MG). – Europe (WE, NE, SE, EE), Georgia, Azerbaijan, Turkey, Mongolia, China (NW, SW).
- Andrena (Thysandrena) hypopolia** Schmiedeknecht, 1884 (*A. consobrina* Schenck, 1861, nom. praeocc., nec Eversmann, 1852; *A. inconspicua* Morawitz, 1871; ?*A. holosericea* Bramson, 1879; *A. interrogationis* Dalla Torre, 1884, nom. praeocc., nec Viereck

- et Cockerell, 1914; *A. setosa* Pérez, 1903). Russia: **EP** (S, NC, CR), **WS** (NS). – Europe (WE, SE, EE).
- Andrena (Thysandrena) ranunculorum** Morawitz, 1877. Russia: **EP** (S, NC, CR), **UR**, **WS** (NS, KM, AL), **ES** (TU, BR, ZB). – Europe (SE), Georgia, Azerbaijan, Turkey, Iran, Turkmenistan.
- Andrena (Trachandrena) haemorrhoea** (Fabricius, 1781) [*Apis*] (?*Apis sordida* Scopoli, 1763, nom. praeocc., nec Gmelin, 1790, nec Morawitz, 1876; ?*A. tranquilla* Müller, 1776; ?*A. hiberus* Harris, 1776; *A. haemorrhoea* Fabricius, 1781; *A. convexa* Schrank, 1781, nom. praeocc., nec Schenck, 1853, nec Provancher, 1888; *A. nebulosa* Gmelin, 1790; *A. haemorrhoidalis* Christ, 1791, nom. praeocc., nec Fabricius, 1775; *Andrena salicis* Verhoeff, 1890, nom. praeocc., nec Robertson, 1891; *A. haemorrhoea* ssp. *japonibia* Hirashima, 1957; *Apis albicans* auct., nec Müller, 1776). Russia: **EP** (N, NW, C, E, S, CR), **UR**, **WS** (TK, NS, KM, AL), **ES** (KS, TU, KR, IR, YA, ZB), **FE** (AM, KH, PR, KA). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Syria, Iran, Turkmenistan, Kazakhstan, Mongolia, China (NE), Korean Peninsula, Japan (Hok, Hon, Kyu, Shi, Tsu).
- Andrena (Truncandrena) derbentina** Morawitz, 1886. Russia: **EP** (NC). – N Africa, Azerbaijan, Turkey, Israel, Iran.
- Andrena (Truncandrena) rufomaculata** Friese, 1921 (*A. paramythensis* Mavromoustakis, 1957; *A. rufomaculata* ssp. *optata* Warncke, 1975). Russia: **EP** (CR). – Europe (SE, EE), Caucasus, Turkey, Syria, Israel.
- Andrena (Truncandrena) truncatilabris** Morawitz, 1877 (*A. truncatilabris* ssp. *espanola* Warncke, 1967; *A. t.* ssp. *nigropilosa* Warncke, 1967). Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Israel, Syria, Iran, Kazakhstan.
- Andrena (Ulandrena) combaella** Warncke, 1966 (*A. leucorhina* auct., part., nec Morawitz, 1876). Russia: **EP** (S). – Europe (WE, SE, EE), Georgia, Azerbaijan, Turkey, Israel.
- Andrena (Ulandrena) elegans** Giraud, 1863 (*Apis grisea* Fabricius, 1798, nom. praeocc., nec Gmelin, 1790). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Turkey, Kazakhstan.
- Andrena (Ulandrena) fulvitaris** Brullé, 1832 (*Campylogaster subglobosus* Dours, 1873; *Andrena carinula* Pérez, 1895). Russia: **EP** (CR). – Europe (SE, EE), Turkey, Israel.
- Andrena (Ulandrena) osychniukae** Osytshnjuk, 1977 (*A. abbreviata* ssp. *osychniuki* Warncke, 1973; *A. osychniuki* Osytshnjuk, 1977; *A. abbreviata* ssp. *osychniukae* Osytshnjuk, 1977). Russia: **EP** (CR). – Europe (SE, EE), Caucasus, Turkey.
- Andrena (Zonandrena) chrysopyga** Schenck, 1853 (*A. integra* Thomson, 1870, nom. praeocc., nec Smith, 1853; *A. chrysopyga* var. *stefaniana* Schmiedeknecht, 1884). Russia: **EP** (C, E, S, NC), **UR**, **WS** (OM, TK, KM, AL), **ES** (KS, KR, IR). – Europe (WE, NE, SE, EE), Georgia, Azerbaijan, Turkey, Kyrgyzstan, Kazakhstan.
- Andrena (Zonandrena) flavipes** Panzer, 1799 (*Apis sordida* Gmelin, 1790, nom. praeocc., nec Scopoli, 1763, nec Morawitz, 1876; *Melitta fulvicrus* Kirby, 1802, nom. praeocc., nec Dufour, 1841; *Melitta contigua* Kirby, 1802; *Andrena quadricincta* Brullé, 1832, nom. praeocc., nec Eversmann, 1852; *A. tricincta* Brullé, 1832; *A. fasciata* Imhoff, 1832, nom. praeocc., nec Fabricius, 1775, nec Nylander, 1852, nec Radoszkowski, 1876; *A. puber* Erichson, 1835; *A. mactae* Lepeletier de Saint-Fargeau, 1841; *A. fulvicrus* Dufour, 1841, nom. praeocc., nec Kirby, 1802; *A. cinerascens* Eversmann, 1852, nom. praeocc., nec Nylander, 1848; *A. capitalis* Smith, 1853; *A. interrupta* Schenck, 1869, nom. praeocc., nec Eversmann, 1852; *A. problematica* Pérez, 1903; *A. levilabris* Cameron, 1908; *A. punjaubensis* Cameron, 1909; *A. interruptula* Viereck, 1916; *A. quadricinctula* Viereck, 1916; *A. kraussei* Strand, 1921; *A. kengracensis* Cockerell, 1930; *A. flavipes* ssp. *alexandrina* Warncke, 1966; *A. flavipes* ssp. *ibizensis* Warncke, 1984). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel, Syria, Jordan, Iraq, Iran, Afghanistan, Central Asia, Kazakhstan, China (NW, WP), Nepal, India, N America.
- Andrena (Zonandrena) sibirica** Morawitz, 1888. Russia: **UR**, **WS** (NS, KM, AL), **ES** (KS, KR, IR, BR, ZB), **FE** (AM, KH, PR). – Kazakhstan, Mongolia, China (NE, NC).
- Andrena (?) pseudothoracica** Engel, 2005 (*Cilissa thoracica* Radoszkowski, 1891, nom. praeocc., nec Fabricius, 1775). Russia: **FE** (PR).

Subfamily PANURGINAE

Tribe PANURGINI

CAMPTOPOEUM Spinola, 1843. Type species *Prosopis frontalis* Fabricius, 1804. Genus is distributed only in the Palaearctic region. Number of species: World – 30; Palaearctic – 30; Russia – 2.

- Camptopoeum (Camptopoeum) friesei** Mocsáry, 1894 (*C. friesei* var. *disparilis* Alfken, 1934; *C. f.* var. *intermedius* Alfken, 1934; *C. f.* var. *subinterruptus* Alfken, 1934). Russia: **EP** (S, CR), **UR**. – Europe (WE, SE, EE), Georgia, Turkey, Iran, Turkmenistan.
- Camptopoeum (Camptopoeum) frontale** (Fabricius, 1804) [Prosopis] (*Panurgus fasciatus* Giraud, 1857; *Camptopoeum altaicum* Morawitz, 1892). Russia: **EP** (C, S, CR). – Europe (WE, SE, EE), Azerbaijan, Turkey, Israel, Iran, Pakistan, Turkmenistan, Kazakhstan.
- PANURGINUS** Nylander, 1848 (*Scapteroides* Gribov, 1894; *Greeleyella* Cockerell, 1904; *Birkmanina* Viereck, 1909). Type species *Panurginus niger* Nylander, 1848. Genus is distributed in the Holarctic region. Number of species: World – 53; Palaearctic – 31; Russia – 13.
- Panurginus alpotanini** Romankova et Astafurova, 2011. Russia: **FE** (KH). – Mongolia.
- Panurginus alticolus** Morawitz, 1876. Russia: **EP** (E, S, NC). – Georgia, Kazakhstan.
- Panurginus arsenievi** Romankova et Astafurova, 2011. Russia: **FE** (PR).
- Panurginus crawfordi** Cockerell, 1914. Russia: **FE** (PR). – Korean Peninsula, Japan (Hon, Shi, Kyu).
- Panurginus herzi** Morawitz, 1891 (*P. tyrolensis* Richards, 1932; *Panurgus montanus tyrolensis* Warncke, 1972; *P. m. herzi* Warncke, 1972). Russia: **WS** (KM, AL), **ES** (TU, YA). – Europe (NE), Mongolia.
- Panurginus kropotkini** Romankova et Astafurova, 2011. Russia: **FE** (PR).
- Panurginus labiatus** (Eversmann, 1852) [*Panurgus*] (*Panurgus clypeatus* Eversmann, 1852; *Panurginus arenarius* Schenck, 1861). Russia: **EP** (C, E, S), **UR**, **ES** (IR). – Europe (WE, SE, EE), Georgia, Azerbaijan, Kazakhstan.
- Panurginus lactipennis** Friese, 1897. Russia: **EP** (C, S, NC, CR). – Europe (SE), Azerbaijan, Turkey, Syria, Jordan.
- Panurginus mikhno** Romankova et Astafurova, 2011. Russia: **WS** (AL), **ES** (ZB).
- Panurginus muraviovi** Romankova et Astafurova, 2011. Russia: **WS** (KM, AL). – Mongolia.
- Panurginus niger** Nylander, 1848 (*P. dubius* Osytshnjuk, 1995). Russia: **ES** (IR, BR, ZB), **FE** (AM, KH, PR). – Mongolia, China (NC).
- Panurginus romani** Aurivillius, 1914. Russia: **EP** (N), **WS** (KM, AL), **ES** (TU, KR, IR, BR, ZB), **FE** (AM, KH, PR, SA, KA, MG). – Europe (NE).
- Panurginus sculpturatus** Morawitz, 1872. Russia: **EP** (E, S, CR), **UR**. – Europe (EE).
- PANURGUS** Panzer, 1806 (*Eriops* Klug, 1807). Type species *Andrena lobata* Panzer, 1799 = *Apis calcarata* Scopoli, 1763. Genus is distributed only in the Palaearctic region. Number of species: World – 35; Palaearctic – 35; Russia – 1.
- Panurgus calcaratus** (Scopoli, 1763) [*Apis*] (*Apis calcarata* Scopoli, 1763; *A. denticulata* Gmelin, 1790; *A. ursina* Gmelin, 1790; *Philanthus ater* Fabricius, 1793; *Andrena lobata* Panzer, 1799; *Apis linnaeella* Kirby, 1802; *Panurgus unicolor* Spinola, 1808; *P. calcaratus* var. *nigricornis* Dalla Torre, 1877; *P. c.* var. *macrocephalus* Friese, 1897). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (TM, KM, AL), **ES** (KS, KR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Kazakhstan.

Tribe MELITTURGINI

- MELITTURGA** Latreille, 1809. Type species *Eucera clavicornis* Latreille, 1806. Genus is distributed in the Palaearctic and the Afrotropical regions. Number of species: World – 17; Palaearctic – 14; Russia – 3.
- Melitturga clavicornis** (Latreille, 1806) [*Eucera*] (*Macrocera nasalis* Eversmann, 1852; *Melitturga clavicornis* var. *thuringiaca* Friese, 1895). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (KS, TU, KR, IR, BR). – Europe (WE, SE, EE), Caucasus, Turkey, Iran, Central Asia, Kazakhstan, China (NW).
- Melitturga mongolica** Alfken, 1936. Russia: **ES** (BR, ZB), **FE** (AM, PR). – Turkey, Armenia, Iran, Afghanistan, Kyrgyzstan, Mongolia, China (NE, NC, NW, WP).
- Melitturga praestans** Giraud, 1861 (*M. caucasica* Morawitz, 1877). Russia: **UR**. – Europe (WE, SE, EE), Georgia, Turkey, Syria, Lebanon, Israel, Kazakhstan.

75. FAMILY HALICTIDAE

YU.V. ASTAFUROVA AND M.YU. PROSHCHALYKIN

The family Halictidae is a very large and nearly cosmopolitan group of bees, often dominate other bees in numbers of individuals. This family is monophyletic unit and belongs to generalised group conditionally named short-tongued bees. Number of taxa: World – the number of halictid genera varies in classifications by different authors, 4000 species; Palaeartic – 23 genera, 950 species; Russia – 13 genera, 263 species.

The classification of Halictini and Nomioidinae follows that of Michener (2007) and Nomiinae and Rophitinae that of Astafurova (2014).

R e f e r e n c e s. Morawitz, 1865, 1869; Mocsáry, Szépligeti, 1901; Blüthgen, 1923, 1924, 1925, 1931, 1935, 1955; Popov, 1935; Nikiforuk, 1957; Elfving, 1968; Ebmer, 1972, 1974, 1975, 1978, 1980, 1986, 1988a, b, 1995; 1998, 2000, 2004, 2005; Pesenko, 1972, 1985, 1986, 2005a, b, 2006a, b, 2007a, b; Bytinski-Salz, Ebmer, 1974; Sedykh, 1974; Warncke, 1975, 1982a, 1992; Dathe, 1980b; Ebmer, Sakagami, 1990; Fan, 1991; Rasmont et al., 1995; Pesenko et al., 2000; Niu et al., 2004; Murao, Tadauchi, 2007; Kuznetsova, 2009; Proshchalykin, 2009b, 2012a, 2014b; Bogusch, Straka, 2012; Proshchalykin, Astafurova, 2012, 2016; Levchenko, Yuferev, 2013; Mitai, Tadauchi, 2013; Astafurova, 2014; Astafurova, Proshchalykin, 2014, 2015, 2016, 2017a, b, c; Levchenko, 2014, 2015; Murao, 2015, 2017; Sidorov et al., 2016; Astafurova et al., 2017.

Subfamily HALICTINAE

This is an enormous and nearly cosmopolitan subfamily. Halictinae is subdivided by into two tribes: Augochlorini and Halictini. The tribe Augochlorini with more than 500 species is distributed in Western Hemisphere. The tribe Halictini is cosmopolitan group and includes more than 2500 species. Most of Halictini nest in burrows in banks or flat soil, except for a few groups that nest in rotting wood. The Halictinae exhibit both solitary behaviour and nearly every degree of sociality, ranging from subsocial to eusocial behaviour. Some augochlorini genera and halictini subtribe Sphecodina are cleptoparasites in nests of halictids and other bees. The majority of species are polilectic.

HALICTUS Latreille, 1804. Type species *Apis quadricincta* Fabricius, 1776. Widely distributed in the World (except Australia), but most of species

occur in northern hemisphere. Number of taxa: World – about 200 species and 15 subgenera, Palaeartic – more 150 species, Russia – 48.

Halictus (Argalictus) cochlearitarsis (Dours, 1872) [Lucasius] (*H. cochlearitarsis* Dalla Torre, 1896; *H. anomalipes* Lebedev, 1911). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Armenia, Azerbaijan, Turkey.

Halictus (Argalictus) luganicus Blüthgen, 1936. Russia: **EP** (S, NC, CR). – Europe (EE), Georgia, Azerbaijan, Turkey, Kazakhstan.

Halictus (Argalictus) senilis (Eversmann, 1852) [Hylaeus] (*H. fucosus* Morawitz, 1876; *H. albarius* Pérez, 1895; *H. albarius* Pérez, 1895; *H. bivinctus* Vachal, 1902; *H. aegypticola* Strand, 1909). Russia: **EP** (S, NC), **UR**. – Europe (SE, EE), N Africa, Caucasus, Turkey, Near East, Iraq, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia, China (NC, NW, SW).

Halictus (Halictus) brunescens (Eversmann, 1852) [Hylaeus] (*H. quadricinctus maximus* Friese, 1916; *H. quadricinctus aegyptiacus* Friese, 1916). Russia: **EP** (S, NC, CR), **UR**, **ES** (BR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Syria, Israel, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NC, NW, WP), N India.

Halictus (Halictus) quadricinctus (Fabricius, 1776) [Apis] (*Apis hortensis* Geoffroy, 1785; *Halictus quadricinctus* Latreille, 1805; *Hylaeus grandis* Illiger, 1806; *Halictus ecaphosus* Walckenaer, 1817; *H. chaharensis* Yasumatsu, 1940). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (OM, TK, NS, AL), **ES** (KR, IR, BR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Israel, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia, China (NE, NC, NW, WP).

Halictus (Hexataenites) resurgens Nurse, 1903 (*H. turkomannus* Pérez, 1903; *H. holtzi* Schulz, 1906; *H. asiaeminoris* Strand, 1921). Russia: **EP** (S, NC, CR). – Europe (SE, EE), N Africa, Caucasus, Turkey, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, China (NW), N India.

Halictus (Hexataenites) sexcinctus (Fabricius, 1775) [Apis] (*Apis ichneumonea* Christ, 1791; *Hylaeus arbustorum* Panzer, 1797; *Andrena rufipes* Spinola, 1806). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE).

Halictus (Monilapis) adjikenticus Blüthgen, 1923 (*H. scardicus* Blüthgen, 1936). Russia: **EP** (S, NC). – Europe (WE, SE), Armenia, Azerbaijan, Turkey.

- Halictus (Monilapis) compressus compressus** (Walckenaer, 1802) [Andrena] (*Apis flavipes* Panzer, 1798; *Hylaeus tomentosus* Herrich-Schäffer, 1840; *H. senex* Förster, 1860; *Halictus eurygnathus* Blüthgen, 1931; *H. eurygnathopsis* Blüthgen, 1936; *H. veneticus* Ebmer, 1969). Russia: **EP** (N, NW, C, E, S, NC, CR). – Europe (WE, NE, SE, EE), Georgia, Azerbaijan, Turkey, Near East.
- Halictus (Monilapis) compressus transvolgensis** Pesenko, 1985. Russia: **EP** (E), **UR**, **WS** (OM, TK, KM, AL), **ES** (KR, IR, BR, ZB). – Kyrgyzstan, Kazakhstan, China (NW).
- Halictus (Monilapis) patellatus patellatus** Morawitz, 1874 (*H. wagneri* Blüthgen, 1937). Russia: **EP** (NC). – Iran, Turkmenistan.
- Halictus (Monilapis) patellatus taorminicus** Strand, 1921. Russia: **EP** (C, E, S, NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Syria, Iran.
- Halictus (Monilapis) ponticus** Blüthgen, 1934. Russia: **EP** (NC). – Europe (EE), Turkey.
- Halictus (Monilapis) rossicus** Ebmer, 1978 (*H. samarensis* Blüthgen, 1936). Russia: **EP** (C, E, NC, CR), **UR**. – Europe (EE), Azerbaijan.
- Halictus (Monilapis) sajoi** Blüthgen, 1923 (*H. veneticus* Móczár, 1967; *H. bifidus* Warncke, 1975). Russia: **EP** (C, S, CR), **UR**. – Europe (WE, SE, EE), Azerbaijan, Armenia, Turkey, Iran, Turkmenistan, Kyrgyzstan, Kazakhstan.
- Halictus (Monilapis) simplex** Blüthgen, 1923 (*H. ibex* Warncke, 1973). Russia: **EP** (NW, C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Kazakhstan.
- Halictus (Monilapis) tetrazonianellus** Strand, 1909 (*H. leucognathus* Morice, 1921; *H. apatellatus* Strand, 1921; *H. gusenleitneri* Ebmer, 1975). Russia: **EP** (S, NC, CR). – Europe (SE, EE), Caucasus, Turkey, Iraq, Iran, Turkmenistan.
- Halictus (Monilapis) tetrazonius** (Klug, 1817) [Hylaeus] (*H. furcatus* Blüthgen, 1925; *H. galileus* Blüthgen, 1955; *H. pannonicus* Ebmer, 1969). Russia: **EP** (S, E, CR). – Europe (WE, SE, EE), Georgia, Azerbaijan, Turkey, Israel, Iran, Turkmenistan.
- Halictus (Monilapis) tsingtauensis** Strand, 1910 (*H. tsingtauensis* Blüthgen, 1923). Russia: **WS** (AL), **ES** (KR, IR, ZB), **FE** (AM, KH, PR, SA, KU). – China (NE, CC, SE), Korean Peninsula, Japan (Hok, Hon).
- Halictus (Platyhalictus) alfkenellus cedens** Strand, 1909 (*H. posthumus* Blüthgen, 1925; *H. subalfkenellus* Blüthgen, 1936). Russia: **EP** (S, NC). – Europe (WE, SE), Azerbaijan, Turkey, Lebanon, Israel, Iran, Kazakhstan.
- Halictus (Platyhalictus) graecus** Blüthgen, 1933. Russia: **EP** (CR). – Europe (SE, EE), Armenia, Azerbaijan, Turkey.
- Halictus (Platyhalictus) lussinicus** Blüthgen, 1936. Russia: **EP** (S, NC). – Europe (SE).
- Halictus (Platyhalictus) minor** Morawitz, 1876 (*H. altaicus* Pérez, 1903; *H. jarkandensis* Strand, 1909). Russia: **WS** (AL). – Azerbaijan, Iran, Pakistan, Central Asia, Kazakhstan, China (NE, NC), N India.
- Halictus (Protohalictus) hedini hedini** Blüthgen, 1934. Russia: **WS** (KM, AL), **ES** (TU, KR, IR, BR, ZB), **FE** (AM, KH, PR, SA, KU). – Kazakhstan, Mongolia, China (NE, NC, NW), Korean Peninsula, Japan (Hok).
- Halictus (Protohalictus) rubicundus** (Christ, 1791) [Apis] (*H. nidulans* Walckenaer, 1817; *H. lerouxi* Lapeletier de Saint Fargeau, 1841; *H. quadrifasciatus* Smith, 1870; *H. lerouxi ruborum* Cockerell, 1898; *H. rubicundus nesiotis* Perkins, 1922; *H. r. laticincta* Blüthgen, 1923; *H. r. mongolensis* Blüthgen, 1936; *H. lupinelli* Cockerell, 1939; *H. frater* Pesenko, 1984). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (OM, TK, KM, AL), **ES** (TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KA). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Kazakhstan, Mongolia, China (NE, NC, NW), Korean Peninsula, Japan (Hok), N America.
- Halictus (Seladonia) aerarius** Smith, 1873 (*H. confluens* Morawitz, 1889; *H. alexoides* Strand, 1910; *H. pseudoconfluens* Strand, 1910; *H. nikkoensis* Cockerell, 1911; *H. leucopogon* Strand, 1914; *H. tsushimae* Friese, 1916; *H. eruditus* Cockerell, 1924). Russia: **FE** (AM, KH, PR). – Mongolia, China (NE, NC, CC, SW, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Tsu, Yak).
- Halictus (Seladonia) cephalicus** Morawitz, 1874 (*H. conjungens* Blüthgen, 1921; *H. neuter* Blüthgen, 1923). Russia: **EP** (S, NC, CR). – Europe (SE, EE), Caucasus, Turkey, Syria, Israel, Iraq, Iran, Afghanistan.
- Halictus (Seladonia) confusus pelagius** Ebmer, 1996. Russia: **WS** (AL), **ES** (KS, KR, BR, YA), **FE** (AM, KH, PR, SA, KU, MG). – Mongolia, China (NC).
- Halictus (Seladonia) confusus perkinsi** Blüthgen, 1926. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), Georgia, Turkey, Kazakhstan.

- Halictus (Seladonia) gavarnicus** Pérez, 1903 (*H. tataricus* Blüthgen, 1933; *H. gavarnicus delphinalis* Blüthgen, 1935; *H. g. longigenae* Warncke, 1988). Russia: **EP** (C, NC, CR), **UR**, **WS** (AL), **FE** (PR). – Europe (WE, SE, EE), Caucasus, Turkey, Mongolia, China (NC).
- Halictus (Seladonia) kessleri** Bramson, 1879 (*Osmia pannonica* Zilahi-Kiss, 1915; *Halictus kessleri nebulosus* Warncke, 1975; *H. k. hakkarius* Warncke, 1984). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (SE, EE), Caucasus, Turkey.
- Halictus (Seladonia) leleji** (Pesenko, 2006) [Seladonia]. Russia: **FE** (PR).
- Halictus (Seladonia) leucaheneus arenosus** Ebmer, 1976 (*H. fasciatus* auct.). Russia: **EP** (NW, C, E), **UR**. – Europe (WE, NE, SE, EE).
- Halictus (Seladonia) leucaheneus leucaheneus** Ebmer, 1972. Russia: **WS** (AL), **ES** (BR, IR, YA, ZB), **FE** (AM, KH, PR). – Kazakhstan, Kyrgyzstan, Mongolia, China (NE, NC, NW).
- Halictus (Seladonia) mondaensis** Blüthgen, 1923. Russia: **ES** (TU, BR, YA), **FE** (MG). – Mongolia.
- Halictus (Seladonia) mongolicus** Morawitz, 1880. Russia: **ES** (BR). – Mongolia, China (NW, WP).
- Halictus (Seladonia) nikolskayae** (Pesenko, 2006) [Seladonia]. Russia: **FE** (PR).
- Halictus (Seladonia) seladonius** (Fabricius, 1794) [Apis] (*H. geminatus* Pérez, 1903). Russia: **EP** (E, S), **UR**, **ES** (AL). – Europe (WE, SE, EE), Caucasus, Turkey, Israel, Iran, Afghanistan, Turkmenistan.
- Halictus (Seladonia) semitectus** Morawitz, 1874. Russia: **EP** (C, S, NC, CR), **UR**, **WS** (AL), **ES** (BR, ZB), **FE** (KH, PR). – Europe (WE, NE, SE, EE), Armenia, Afghanistan, Mongolia, China (NC, NW).
- Halictus (Seladonia) subauratus subauratus** (Rossi, 1792) [Apis] (*H. virescens* Lepeletier de Saint Fargeau, 1841; *H. gramineus* Smith, 1849; *H. meridionalis* Morawitz, 1874; *H. subauratus syrius* Blüthgen, 1933). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, Central Asia, Pakistan, China (NW), N India.
- Halictus (Seladonia) submediterraneus** (Pauly, 2015) [Seladonia]. Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), Turkey, Iran.
- Halictus (Seladonia) transbaikalensis** Blüthgen, 1933. Russia: **ES** (IR, ZB). – Mongolia, China (NC).
- Halictus (Seladonia) tumulorum ferripennis** Cockerell, 1929 (*H. tumulorum higashi* Sakagami et Ebmer, 1979). Russia: **WS** (AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, PR, SA, MG). – Mongolia, China (NE, NC), Korean Peninsula, Japan (Hok, Hon).
- Halictus (Seladonia) tumulorum tumulorum** (Linnaeus, 1758) [Apis] (*Apis flavipes* Fabricius, 1787; *Halictus fasciatus* Nylander, 1848; *H. tumulorum deviridatus* Strand, 1910). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TK, AL). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Syria, Israel, Iran, Central Asia.
- Halictus (Tytthalictus) asperulus** Pérez, 1895 (*H. rugosulus* Pérez, 1895). Russia: **EP** (S, NC, CR). – Europe (SE, EE), Caucasus, Turkey, Syria, Israel, Iran.
- Halictus (Tytthalictus) maculatus maculatus** Smith, 1848 (*H. interruptus* Lepeletier de Saint Fargeau, 1841). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (TM, TK, KM, AL), **ES** (KR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Afghanistan, Central Asia, Kazakhstan, China (NW).
- Halictus (Vestitohalictus) mucoreus** (Eversmann, 1852) [Hylaeus]. Russia: **EP** (S, NC), **UR**. – Georgia, Iran, Afghanistan, Central Asia, Kazakhstan.
- Halictus (Vestitohalictus) pollinosus cariniventris** Morawitz, 1876 (*H. carinaeventris* Fahringer et Friese, 1921; *H. c. cretica* Strand, 1921; *H. c. flavotectus* Cockerell, 1922; *H. pollinosus limissicus* Blüthgen, 1937). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Turkey, Israel, Iran, Afghanistan, Pakistan, Central Asia, Mongolia, China (NC, NW).
- Halictus (Vestitohalictus) pseudomucoreus** Ebmer, 1975. Russia: **EP** (S). – Azerbaijan, Turkey, Turkmenistan, Kazakhstan, China (NW).
- Halictus (Vestitohalictus) pulvereus** Morawitz, 1874 (*H. sogdianus* Morawitz, 1876; *Nomioides aenescens* Radoszkowski, 1893). Russia: **EP** (S, NC, CR). – Cyprus, Turkey, Iran, Afghanistan, Central Asia, Mongolia, China (NW).
- Halictus (Vestitohalictus) radoszkovskii** Vachal, 1902 (*H. rufus* Friese, 1916). Russia: **EP** (NC). – Armenia, Turkmenistan, Uzbekistan, Iran, Afghanistan.
- Halictus (Vestitohalictus) tectus** Radoszkowski, 1876 (*H. vestitus* auct.). Russia: **EP** (S, CR), **UR**. – Europe (WE, SE, EE), Caucasus.
- Halictus (Vestitohalictus) tuberculatus** Blüthgen, 1925. Russia: **EP** (E, S, NC, CR). – Europe (EE), Armenia, Turkey, Syria, Israel.
- LASIOGLOSSUM** Curtis, 1833. Type species *Lasioglossum tricingulum* Curtis, 1833 (= *Melitta*

- xanthopus* Kirby, 1802). Widely distributed in the World, but most of species occur in Holarctic region. Number of taxa: World – about 1200 species, Palaearctic – about 450, Russia – 148.
- Lasioglossum (Ctenonomia) blakistoni** Sakagami et Munakata, 1990. Russia: **FE** (PR). – Japan (Hok).
- Lasioglossum (Lasioglossum) aegyptiellum** (Strand, 1909) [Halictus] (*Halictus divergens* Pérez, 1911; *H. orontis* Cockerell, 1918; *H. tripolitanus* Blüthgen in Schulthess, 1924; *Lasioglossum aegyptiellum dalmaticum* Ebmer, 1970). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Near East, Iraq, Iran, Turkmenistan.
- Lasioglossum (Lasioglossum) agelastum** Fan et Ebmer, 1992 (*L. koreanum*: Pesenko, 1986; *L. nipponicola* Sakagami et Tadauchi, 1995). Russia: **FE** (PR, KU). – China (NE, NC, CC, SW), Korean Peninsula, Japan (Hok, Hon).
- Lasioglossum (Lasioglossum) alinense** (Cockerell, 1924) [Halictus] (*Halictus lutzenkoi* Cockerell, 1925; *H. gorkiensis* Blüthgen, 1931). Russia: **WS** (AL), **ES** (IR), **FE** (AM, KH, PR). – Europe (NE, EE), China (NE, NC, CC, SW).
- Lasioglossum (Lasioglossum) bicallosum** (Morawitz, 1874) [Halictus] (*Halictus dmitrijewi* Morawitz, 1891; *H. dmitrijewii* Dalla Torre, 1896). Russia: **EP** (S, NC, CR). – Europe (SE, EE), Caucasus, Turkey, Israel, Iran.
- Lasioglossum (Lasioglossum) caspicum** (Morawitz, 1874) [Halictus] (*Halictus emesianus* Pérez, 1911). Russia: **EP** (NC). – Caucasus, Turkey, Near East, Iran, Afghanistan, Turkmenistan.
- Lasioglossum (Lasioglossum) chloropus** (Morawitz, 1894) [Halictus] (*L. aksuense* Ebmer, 1972). Russia: **ES** (IR). – Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NW).
- Lasioglossum (Lasioglossum) costulatum** (Kriechbaumer, 1873) [Halictus] (*Andrena campestris* Eversmann, 1852; *Halictus alpestris* Morawitz, 1877). Russia: **EP** (C, E), **UR**, **WS** (AL), **ES** (KR, IR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Syria, Iran, Central Asia, Kazakhstan.
- Lasioglossum (Lasioglossum) cristula** (Pérez, 1895) [Halictus] (*Halictus korbi* Blüthgen, 1929; *H. mesoleus* Cockerell, 1938; *H. cristula donatus* Warncke, 1975). Russia: **EP** (NC, CR). – Europe (WE, SE), N Africa, Caucasus, Turkey, Syria, Israel, Iran.
- Lasioglossum (Lasioglossum) denticolle** (Morawitz, 1891) [Halictus] (*Halictus glycybromifer* Strand, 1915; *H. laevifrons* Blüthgen, 1923 *H. morbillosus* r. *orientis* Cockerell, 1924). Russia: **ES** (KR, BR), **FE** (AM, KH, PR). – China (NE, NC, NW, CC, SW, WP), Korean Peninsula.
- Lasioglossum (Lasioglossum) discum** (Smith, 1853) [Halictus] (*Halictus morbillosus* Kriechbaumer, 1873; *H. major*: Morawitz, 1876; *H. fertoni* Vachal, 1895; *H. morbillosus* r. *glasunovi* Cockerell, 1924; *H. platyceustus* auct.; *Lasioglossum pseudomorbillosum* Ebmer, 1970). Russia: **EP** (C, S, NC, CR), **UR**, **ES** (TU). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, Afghanistan, Central Asia, Kazakhstan, China (NW).
- Lasioglossum (Lasioglossum) eos** Ebmer, 1978 (*L. kaspariani* Pesenko, 1986; *L. kerzhneri* Pesenko, 1986). Russia: **ES** (TU, IR, BR), **FE** (AM, PR). – Mongolia, China (NE, NC, NW).
- Lasioglossum (Lasioglossum) exiliceps** (Vachal, 1903) [Halictus]. Russia: **FE** (KH, PR). – Korean Peninsula, Japan (Hok, Hon, Kyu, Ryu).
- Lasioglossum (Lasioglossum) euxinicum euxinicum** Ebmer, 1972. Russia: **EP** (CR). – Azerbaijan, Iran.
- Lasioglossum (Lasioglossum) fallax fallax** (Morawitz, 1874) [Halictus]. Russia: **EP** (S, NC, CR), **UR**. – Georgia, Turkey, Iran, Turkmenistan.
- Lasioglossum (Lasioglossum) harmandi** (Vachal, 1903) [Halictus] (*L. nipponense*: Pesenko, 1986). Russia: **FE** (KU). – Japan (Hok, Hon, Ryu).
- Lasioglossum (Lasioglossum) kansuense** (Blüthgen, 1934) [Halictus] (*L. esoense* Hirashima et Sakagami, 1966). Russia: **ES** (BR), **FE** (AM, KH, PR, KU). – China (NE, NC, CC, SW, WP), Korean Peninsula, Japan (Hokk, Hon, Ryu).
- Lasioglossum (Lasioglossum) korbi** (Blüthgen, 1929) [Halictus] (*Halictus haesitans* Blüthgen, 1931). Russia: **EP** (NC). – Azerbaijan, Turkey.
- Lasioglossum (Lasioglossum) kussariense** (Blüthgen, 1925) [Halictus]. Russia: **EP** (NC, CR). – Europe (SE, EE), Caucasus, Turkey.
- Lasioglossum (Lasioglossum) laevigatum** (Kirby, 1802) [Melitta] (*Melitta lugubris* Kirby, 1802; *Halictus levigatus* Lepelletier de Saint Fargeau, 1841; *Hylaeus semicinctus* Förster, 1860). Russia: **EP** (C), **UR**. – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran.
- Lasioglossum (Lasioglossum) lativentre** (Schenck, 1853) [Hylaeus] (*Hylaeus bisbistrigatus* Schenck, 1853; *Halictus bicinctus* Schenck, 1874; *H. decipiens* Perkins, 1913; *H. lativentris sotschica* Blüthgen, 1931). Russia: **EP** (NW, C, E, NC, CR). – Europe

- (WE, NE, SE, EE), Caucasus, Turkey, Near East, Iran.
- Lasioglossum (Lasioglossum) leviventre** (Pérez, 1905) [Halictus]. Russia: **FE** (PR, KU). – Japan (Hok, Hon, Izu, Shi, Ryu).
- Lasioglossum (Lasioglossum) leucozonium** (Schrank, 1781) [Apis] (*Apis leucostoma* Schrank, 1781; *Halictus similis* Smith, 1853; *H. bifasciatellus* Schenck, 1875; *H. leucozonius nigrotibialis* Dalla Torre, 1877; *H. deiphobus* Bingham, 1908; *H. tadshicus* Blüthgen, 1929; *H. satschauensis* Blüthgen, 1934; *H. leucozonius clusius* Warncke, 1975; *Lasioglossum leucozonium cedri* Ebmer, 1976; *L. zonulum elysium* Ebmer, 1979; *L. satschauense mandschuricum* Ebmer, 1978; *L. zonulum xylopedis* Ebmer, 1978). Russia: **EP** (N, NW, C, E, S, CR), **UR, ES** (TU, KS, IR, BR), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Near East, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NE, NC, CC, SW, WP), N India, N America.
- Lasioglossum (Lasioglossum) niveocinctum** (Blüthgen, 1923) [Halictus]. **EP** (S, NC). – Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NC, NW).
- Lasioglossum (Lasioglossum) occidens** (Smith, 1873) [Halictus] (*Halictus quadraticollis* Vachal, 1903; *Lasioglossum koreanum* Ebmer, 1978). Russia: **FE** (SA, KU). – China (NC, CC, SW, WP, SE), Japan (Hok, Hon, Izu, Kyu).
- Lasioglossum (Lasioglossum) pallens** (Brullé, 1932) [Halictus] (*Halictus lineolatus* Lepeletier de Saint Fargeau, 1841; *H. cirrhosonius* Vachal, 1895; *H. pallens kantarae* Warncke, 1982). Russia: **EP** (NC). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Iran.
- Lasioglossum (Lasioglossum) proximatium** (Smith, 1879) [Halictus] (*Halictus discrepans* Pérez, 1905; *H. moltrechti* Cockerell, 1925; *H. kraloffi* Cockerell, 1925; *H. emelianoffi* Cockerell, 1925; *Lasioglossum acuticrista* Pesenko, 1986). Russia: **FE** (AM, KH, PR, KU). – China (NE, NC, CC, SW, WP), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu).
- Lasioglossum (Lasioglossum) quadrinotatum** (Kirby, 1802) [Melitta]. Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Kazakhstan.
- Lasioglossum (Lasioglossum) rostratum** (Eversmann, 1852) [Hylaeus] (*Halictus chlapovskii* Vachal, 1902). Russia: **UR, WS** (TM, TK, OM, AL), **ES** (TU, KR, IR, ZB), **FE** (AM, KH, PR). – Kazakhstan, Mongolia, China (NE, NC, NW, WP).
- Lasioglossum (Lasioglossum) scitulum** (Smith, 1873) [Halictus] (*Halictus japonicola* Strand, 1910; *H. basicirus* Cockerell, 1919). Russia: **FE** (AM, KH, PR, SA, KU). – China (NE, NC, NW, CC, SW), Korean Peninsula, Japan (Hok, Hon, Ryu).
- Lasioglossum (Lasioglossum) sexnotatum** (Nylander, 1852) [Halictus]. Russia: **EP** (N, NW, C, E), **UR, WS** (OM). – Europe (WE, NE, SE, EE), Kazakhstan.
- Lasioglossum (Lasioglossum) sexnotatum** (Kirby, 1802) [Melitta] (*Andrena nitida* Panzer, 1798). Russia: **EP** (NW, C, E, NC, CR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Mongolia.
- Lasioglossum (Lasioglossum) sutshanicum** Pesenko, 1986. Russia: **FE** (PR). – China (SE), Korean Peninsula.
- Lasioglossum (Lasioglossum) tungusicum** Ebmer, 1978 (*Halictus tinnunculus* Warncke, 1982; *Lasioglossum sexmaculatum*: Pesenko, 1986). Russia: **EP** (NW, C, E, S), **UR, WS** (TM, AL), **ES** (IR, YA), **FE** (AM). – Caucasus, Turkey, Iran, Kazakhstan, Mongolia, China (NW, SW, WP).
- Lasioglossum (Lasioglossum) upinense** (Morawitz, 1889) [Halictus] (*Halictus carbonarius* Blüthgen, 1923; *H. tacitus* Cockerell, 1924; *H. carbonatus* Blüthgen, 1925; *H. wittenbourgi* Cockerell, 1925). Russia: **FE** (AM, KH, PR). – China (NE, NC, NW, SW, WP), Korean Peninsula.
- Lasioglossum (Lasioglossum) xanthopus** (Kirby, 1802) [Melitta] (*Apis emarginata* Christ, 1791; *Hylaeus derasus* Imhoff, 1832; *Lasioglossum tricingulum* Curtis, 1833; *Hylaeus fulvicrus* Eversmann, 1852; *Halictus soreli* Dours, 1872). Russia: **EP** (N, C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NW).
- Lasioglossum (Lasioglossum) zeyanense** Pesenko, 1986 (*L. acervolum* Fan et Ebmer, 1992). Russia: **ES** (BR, YA, ZB), **FE** (AM, KH, PR). – China (NC, CC, SW, WP).
- Lasioglossum (Lasioglossum) zonulum** (Smith, 1848) [Halictus] (*Hylaeus trifasciatus* Schenck, 1853; *Halictus rhenanus* Verhoeff, 1890; *H. recepticius* Vachal, 1902; *H. craterus* Lovell, 1908; *H. zonulus sinister* Blüthgen, 1934; *H. z. dexter* Blüthgen, 1934; *Lasioglossum zonulum euronotum* Ebmer, 1998). Russia: **EP** (N, NW, C, E, S), **UR, WS** (TM), **ES** (KR, IR, BR). – Europe (WE, NE, SE, EE),

- Caucasus, Turkey, Iran, Central Asia, Kazakhstan, China (NC, NW, SW), N America.
- Lasioglossum (Evylaeus) aeratum** (Kirby, 1802) [Melitta] (*Halictus semiaeneus* Brullé, 1832; *H. viridiaeneus* Blüthgen, 1918; *H. aeratus caudatus* Warncke, 1982). Russia: **EP** (NW, C, E, S, NC). – Europe (WE, NE, SE, EE), Turkey, Syria, Iran, Central Asia, Kazakhstan.
- Lasioglossum (Evylaeus) affine** (Smith, 1853) [Halictus] (*Halictus leoninus* Vachal, 1903; *H. mandarinus* Strand, 1910; *H. nagasakiensis* Strand, 1910; *H. investigator* Strand, 1910; *H. investigatoris* Strand, 1915). Russia: **FE** (KH, PR). – China (NE, NC, CC, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu, Tsu).
- Lasioglossum (Evylaeus) albipes albipes** (Fabricius, 1781) [Apis] (*Hylaeus abdominalis* Panzer, 1798; *Halictus malachurellus* Strand, 1909; *H. albipes alpicola* Blüthgen, 1921; *H. a. rubelloides* Blüthgen, 1924). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (KM, AL), **ES** (BR, KR, IR, ZB), **FE** (KH, PR, SA, KU). – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Iran, Central Asia, Mongolia, China (NE, NC), Korean Peninsula, Japan (Hok, Hon).
- Lasioglossum (Evylaeus) albipes villosum** Ebmer, 1995. Russia: **FE** (AM, PR). – Korean Peninsula.
- Lasioglossum (Evylaeus) allodalum** Ebmer et Sakagami, 1985. Russia: **FE** (AM, KH, PR). – China (NC, SW), Korean Peninsula, Japan (Hok, Hon).
- Lasioglossum (Evylaeus) amurense** (Vachal, 1902) [Halictus]. Russia: **WS** (KM), **FE** (KH, PR). – China (NE, NC).
- Lasioglossum (Evylaeus) anellum** (Vachal, 1905) [Halictus] (*Halictus schelkownikovi* Kokujev, 1912). Russia: **EP** (S, NC). – Europe (SE, EE), Caucasus, Turkey, Syria, Jordan, Israel, Iran.
- Lasioglossum (Evylaeus) angaricum** (Cockerell, 1937) [Halictus]. Russia: **ES** (ZB), **FE** (AM, PR). – Mongolia.
- Lasioglossum (Evylaeus) annulipes** (Morawitz, 1876) [Halictus] (*Halictus metopias* Vachal in Kohl, 1903). Russia: **EP** (NC). – Armenia, Turkey, Afghanistan, Pakistan, Tajikistan, Uzbekistan, Kazakhstan.
- Lasioglossum (Evylaeus) apristum** (Vachal, 1903) [Halictus] (*Sphecodes pallidulus* Matsumura, 1912). Russia: **FE** (PR, KU). – China (SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu).
- Lasioglossum (Evylaeus) baleicum baleicum** (Cockerell, 1937) [Halictus]. Russia: **ES** (IR, ZB), **FE** (PR). – China (NE), Korean Peninsula.
- Lasioglossum (Evylaeus) baleicum insulicolum** (Pesenko, 2007) [Evylaeus]. Russia: **FE** (SA, KU). – Japan (Hok, Hon, Kyu, Ryu).
- Lasioglossum (Evylaeus) bavaricum olympicum** (Warncke, 1982) [Halictus]. Russia: **EP** (CR). – Europe (SE).
- Lasioglossum (Evylaeus) bluethgeni** (Ebmer, 1971) [Halictus] (*Halictus hirtiventris* Blüthgen, 1923). Russia: **EP** (NC). – Europe (WE, SE, EE), Georgia, Turkey.
- Lasioglossum (Evylaeus) brachycephalum** (Cockerell, 1925) [Halictus]. Russia: **FE** (PR).
- Lasioglossum (Evylaeus) briseis briseis** Ebmer, 2005. Russia: **ES** (TU). – Mongolia.
- Lasioglossum (Evylaeus) briseis eomontanum** Ebmer, 2006. Russia: **ES** (IR, YA), **FE** (PR, MG, CH).
- Lasioglossum (Evylaeus) brevicorne brevicorne** (Schenck, 1869) [Halictus] (*Halictus lucidicollis* Pérez, 1895; *H. analis* Pérez, 1903; *H. brevicornis aciculatus* Blüthgen in Schmiedeknecht, 1930; *H. optimellus* Cockerell, 1938). Russia: **EP** (C, E, S). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Israel, Iran, Afghanistan.
- Lasioglossum (Evylaeus) buccale** (Pérez, 1903) [Halictus]. Russia: **EP** (S), **UR**. – Europe (WE, SE, EE), Turkey, Iran.
- Lasioglossum (Evylaeus) calceatum** (Scopoli, 1763) [Apis] (*Hylaeus cylindricus* Fabricius, 1793; *Melitta fulvocincta* Kirby, 1802; *M. obovata* Kirby, 1802; *Andrena vulpina* Fabricius, 1804; *Halictus terebrator* Walckenaer, 1817; *Hylaeus rubellus* Eversmann, 1852; *H. bipunctatus* Schenck, 1853; *Halictus rubens* Smith, 1854; *H. rufiventris* Giraud, 1861; *H. cylindricus rhodostoma* Dalla Torre, 1877; *H. calceatus ulterior* Cockerell, 1929). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Iran, Central Asia, Kazakhstan, Mongolia, China (NE, NC), Korean Peninsula, Japan (Hok, Hon, Kyu).
- Lasioglossum (Evylaeus) caliginosum** Murao, Ebmer et Tadauchi, 2006 (*L. nemorae* Ebmer, 2006). Russia: **ES** (IR), **FE** (AM, KH, PR). – Mongolia, China (NE), Japan (Hok, Hon, Kyu).
- Lasioglossum (Evylaeus) clypeare** (Schenck, 1853) [Hylaeus]. Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), Turkey, Iran, Kyrgyzstan, Kazakhstan.
- Lasioglossum (Evylaeus) convexiusculum** (Schenck, 1853) [Hylaeus] (*Halictus appropinquans* Schenck,

- 1869; *H. clypeatus* Schenck, 1869; *H. porcus* Morawitz, 1872; *H. puncticollis genevensis* Frey-Gessner, 1903). Russia: **EP** (C, S), **UR**. – Europe (WE, NE, SE, EE), Turkey, Iran.
- Lasioglossum (Evylaeus) corvinum** (Morawitz, 1877) [Halictus]. Russia: **EP** (S, NC, CR). – Europe (WE, EE, SE), N Africa, Caucasus, Turkey, Iran.
- Lasioglossum (Evylaeus) crassepunctatum** (Blüthgen, 1923) [Halictus]. Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), Azerbaijan, Turkey, Jordan, Israel, Iran.
- Lasioglossum (Evylaeus) damascenum** (Pérez, 1911) [Halictus] (*Halictus semitomentosus* Blüthgen, 1923). Russia: **EP** (CR). – Europe (SE, EE), Armenia, Turkey, Syria, Israel, Iran.
- Lasioglossum (Evylaeus) duckei duckei** (Alfken, 1909) [Halictus]. Russia: **EP** (S, CR). – Europe (SE, EE), Turkey.
- Lasioglossum (Evylaeus) dybowskii** (Radoszkowski, 1877) [Halictus] (*Halictus dubowskii* Dalla Torre, 1896; *H. griseipennis* Cockerell, 1924). Russia: **FE** (AM, KH, PR, SA). – China (NE), Korean Peninsula.
- Lasioglossum (Evylaeus) elegans** (Lepelletier de Saint Fargeau, 1841) [Halictus] (*Halictus rubellus* Giraud, 1861; *H. giraudii* Dalla Torre et Friese, 1895). Russia: **EP** (S). – Europe (WE, SE, EE), N Africa, Georgia, Turkey, Iran, Turkmenistan.
- Lasioglossum (Evylaeus) ellipticeps** (Blüthgen, 1923) [Halictus] (*Halictus permicus* Blüthgen, 1923; *H. mayacensis* Cockerell, 1924). Russia: **UR**, **ES** (IR, YA), **FE** (KH, PR). – Mongolia, Korean Peninsula.
- Lasioglossum (Evylaeus) epiphron** Ebmer, 1982. Russia: **ES** (IR), **FE** (AM, KH, PR). – Mongolia.
- Lasioglossum (Evylaeus) eriphyle** Ebmer, 1996. Russia: **FE** (AM, KH, PR, KU). – China (CC).
- Lasioglossum (Evylaeus) euboense** (Strand, 1909) [Halictus] (*Halictus furnasensis* Strand, 1909; *H. kirschbaumi* Blüthgen, 1919; *H. euboensis anatolica* Blüthgen, 1931). Russia: **EP** (NW, E, S, NC). – Europe (WE, SE, EE), N Africa, Azerbaijan, Turkey, Iran.
- Lasioglossum (Evylaeus) fratellum betulae** Ebmer, 1978 (*Lasioglossum nupricola* Sakagami, 1988). Russia: **ES** (YA), **FE** (AM, KH, PR, KA, SA, KU). – Mongolia, Korean Peninsula, Japan (Hok, Hon).
- Lasioglossum (Evylaeus) fratellum fratellum** (Pérez, 1903) [Halictus] (*Halictus subfasciatus* Nylander, 1848; *H. freydessneri* Alfken, 1905; *H. norvegicus* Strand, 1910; *H. niger* auct.; *Lasioglossum nigrum* auct.). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (KM, AL), **ES** (KR, IR, ZB). – Europe (WE, NE, SE, EE).
- Lasioglossum (Evylaeus) fulvicorne fulvicorne** (Kirby, 1802) [Melitta] (*Hylaeus laeviusculus* Schenck, 1853; *H. albitarsis* Schenck, 1853; *H. bisbimaculatus* Schenck, 1853; *Halictus opacifrons* Pérez, 1911). Russia: **EP** (N, NW, C, E, NC, CR), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Turkmenistan.
- Lasioglossum (Evylaeus) fulvicorne melanocorne** Ebmer, 1988. Russia: **WS** (AL), **ES** (KR, IR, YA), **FE** (AM, PR, SA, KU). – Mongolia.
- Lasioglossum (Evylaeus) gilanum** (Blüthgen, 1931) [Halictus]. Russia: **EP** (CR). – Iran.
- Lasioglossum (Evylaeus) gorge** Ebmer, 1982. Russia: **WS** (AL), **ES** (YA). – Mongolia.
- Lasioglossum (Evylaeus) glabriusculum glabriusculum** (Morawitz, 1872) [Halictus] (*Halictus leucopygus* Pérez, 1903; *H. truncatus* Alfken, 1905; *H. granulatus* Alfken, 1906). Russia: **EP** (S, NC). – Europe (WE, SE, EE), Georgia, Turkey, Syria, Jordan, Israel, Iran.
- Lasioglossum (Evylaeus) griseolum griseolum** (Morawitz, 1872) [Halictus] (*Halictus labrosus* Vachal, 1895; *H. misellus* Pérez, 1903; *H. dubitabilis* Saunders, 1904). Russia: **EP** (S, NC). – Europe (WE, SE), Georgia, Turkey, Israel, Iran, Afghanistan.
- Lasioglossum (Evylaeus) hoffmanni** (Strand, 1915) [Halictus] (*Halictus atropis* Strand, 1915; *H. shishkini* Cockerell, 1925; *H. suprafulgens* Cockerell, 1925; *H. speculicaudatus* Cockerell, 1931). Russia: **FE** (KH, AM, PR). – China (NE, NC), Korean Peninsula, Japan (Hon, Hon, Shi, Kyu, Tsu).
- Lasioglossum (Evylaeus) intermedium** (Schenck, 1869) [Halictus] (*Halictus melanoproctus* Pérez, 1903; *H. servulellus* Strand, 1909). Russia: **EP** (NC). – Europe (WE, NE, SE, EE), Turkey, Iran.
- Lasioglossum (Evylaeus) interruptum interruptum** (Panzer, 1798) [Hylaeus] (*Apis basimacula* Schrank, 1802; *Hylaeus geminus* Erichson, 1835; *H. quadrimaculatus* Schenck, 1853). Russia: **EP** (C, E, S). – Europe (SE, WE, NE, EE), N Africa.
- Lasioglossum (Evylaeus) interruptum trispinosus** (Alfken, 1907) [Halictus]. Russia: **EP** (CR). – Europe (EE), Georgia, Armenia, Turkey, Iran.
- Lasioglossum (Evylaeus) kankaucharis** (Strand, 1914) [Halictus]. Russia: **FE** (PR). – China (SE), Korean Peninsula, Japan (Hon).
- Lasioglossum (Evylaeus) kiautschouense** (Strand, 1910) [Halictus]. Russia: **FE** (KH, PR). – China (NE, NC), Korean Peninsula, Japan (Hok).

- Lasioglossum (Evylaeus) kirgisticum** Ebmer, 1972. Russia: **WS** (AL). – Europe (EE), Turkey, Kazakhstan.
- Lasioglossum (Evylaeus) kozlovi** (Friese, 1913) [Halictus]. Russia: **ES** (BR). – China (NC, NW).
- Lasioglossum (Evylaeus) laeve** (Kirby, 1802) [Melitta] (*Hylaeus convexus* Schenck, 1853; *Halictus nigriventris* Arnold, 1894; *H. levis* Dalla Torre, 1896; *H. kriegeri* Alfken, 1897). Russia: **EP** (C, E), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), Georgia, Armenia, Turkey, Syria, Israel, Iran.
- Lasioglossum (Evylaeus) laevoides** Ebmer, 2005. Russia: **ES** (IR, BR). – Mongolia, China (NE), Korean Peninsula.
- Lasioglossum (Evylaeus) laticeps laticeps** (Schenck, 1869) [Halictus] (*Hylaeus affinis* Schenck, 1853; *H. nigricornis* Schenck, 1853; *Halictus mendax* Alfken, 1912). Russia: **EP** (C, E, NC, CR), **UR**. – Europe (WE, NE, SE, EE).
- Lasioglossum (Evylaeus) leucopum** (Kirby, 1802) [Melitta]. Russia: **EP** (N, NW, C, E, NC, CR), **UR**, **WS** (OM, KM), **ES** (KR, IR, BR, YA). – Europe (WE, NE, SE, EE), Turkey, Iran.
- Lasioglossum (Evylaeus) lineare** (Schenck, 1869) [Halictus] (*Halictus longuloides* Strand, 1909; *H. smyrnae* Strand, 1909; *H. aeginus* Strand, 1921; *Lasioglossum sublineare* Ebmer, 1974). Russia: **EP** (C, E, NC, CR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Syria, Israel, Iran, Turkmenistan.
- Lasioglossum (Evylaeus) limbellum** (Morawitz, 1876) [Halictus] (*Halictus limbellus dongarica* Blüthgen, 1934). Russia: **EP** (NC). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, Afghanistan, Tajikistan, Uzbekistan, China (NC).
- Lasioglossum (Evylaeus) lissonotum** (Noskiewicz, 1926) [Halictus]. Russia: **EP** (C, E). – Europe (WE, SE, EE).
- Lasioglossum (Evylaeus) littorale colchicum** Ebmer, 1972. Russia: **EP** (CR). – Europe (SE), Turkey.
- Lasioglossum (Evylaeus) lucidulum** (Schenck, 1861) [Hylaeus] (*Hylaeus tenellus* Schenck, 1861; *Halictus gracilis* Morawitz, 1865; *H. unguinosus* Pérez, 1903; *H. chotanensis* Strand, 1909). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (KR). – Europe (WE, NE, SE, EE), Georgia, Turkey, Israel, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NC, NW).
- Lasioglossum (Evylaeus) malachurum** (Kirby, 1802) [Melitta] (*Halictus longulus* Smith, 1848; *Hylaeus apicalis* Schenck, 1853; *H. coriarius* Schenck, 1853; *Halictus malachuroides* Strand, 1909; *H. malachurus sharificus* Cockerell, 1937). Russia: **EP** (E, S, CR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, Turkmenistan.
- Lasioglossum (Evylaeus) mandibulare** (Morawitz, 1866) [Halictus] (*Halictus coloratus* Morawitz, 1874; *H. czekelii* Friese, 1916; *H. sareptanus* Blüthgen, 1923). Russia: **EP** (S, NC). – Europe (WE, SE, EE), Armenia, Turkey, Israel.
- Lasioglossum (Evylaeus) marginatum** (Brullé, 1832) [Halictus] (*Halictus fasciatellus* Schenck, 1869; *H. gribodoi* Kriechbaumer, 1873; *H. riparius* Morawitz, 1874; *H. vulgaris* Morawitz, 1876; *H. kervilleanus* Pérez, 1910). Russia: **EP** (E, NC). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Syria, Jordan, Israel, Iraq, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, NW India, Nepal.
- Lasioglossum (Evylaeus) marginellum** (Schenck, 1853) [Halictus] (*Halictus marqueti* Pérez, 1903). Russia: **EP** (S, CR). – Europe (WE, SE, EE).
- Lasioglossum (Evylaeus) matianense pluto** Ebmer, 1980. Russia: **FE** (PR). – Uzbekistan, Kyrgyzstan, Kazakhstan.
- Lasioglossum (Evylaeus) mesosclerum** (Pérez, 1903) [Halictus] (*Halictus rhodosianus* Strand, 1909; *H. mesoclerus* Blüthgen, 1935; ?*Lasioglossum balnearum* Ebmer, 1974; *Halictus bubulcus* Warncke, 1982). Russia: **EP** (S, NC). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Syria, Jordan, Israel, Iran, Afghanistan, Central Asia, Kazakhstan.
- Lasioglossum (Evylaeus) minutissimum** (Kirby, 1802) [Melitta] (*Hylaeus exilis* Schenck, 1861; *Halictus hollandi* Saunders, 1904; *H. costiferellus* Strand, 1909; *H. kosensis* Strand, 1909; *H. xanthosensis* Strand, 1909; *H. arnoldi* Saunders, 1910; *H. lucidellus* Cockerell, 1937; *H. lilliput* Benoist, 1962). Russia: **EP** (C, E, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel.
- Lasioglossum (Evylaeus) minutuloides** Ebmer, 1978. Russia: **FE** (PR). – China (NE).
- Lasioglossum (Evylaeus) miyabei** Murao, Ebmer et Tadauchi, 2006. Russia: **FE** (PR, KU). – Korean Peninsula, Japan (Hok, Hon, Kyu).
- Lasioglossum (Evylaeus) monstificum** (Morawitz, 1891) [Halictus]. Russia: **ES** (IR).
- Lasioglossum (Evylaeus) morio** (Fabricius, 1793) [Hylaeus] (*Halictus morio basalis* Dalla Torre, 1877; *H. balticus* Blüthge, 1919). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Israel.

- Lasioglossum (Evylaeus) nigripes** (Lepeletier de Saint Fargeau, 1841) [Halictus] (*Halictus vulpinus* Nylander, 1852; *H. vulpinus nigrochrypeata* Dalla Torre, 1877; *H. cylindricus orientalis* Magretti, 1890; *H. vulpinus nigrichrypeatus* Dalla Torre, 1896; *H. nylanderi* Pérez, 1903; *H. pharaonis* Strand, 1909; *H. syriacus* Pérez, 1910). Russia: **EP** (S, NC, CR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Jordan, Israel, Iran, Turkmenistan.
- Lasioglossum (Evylaeus) nipponense** (Hirashima, 1953) [Halictus]. Russia: **FE** (AM, KH, PR, SA, KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu).
- Lasioglossum (Evylaeus) nitidiusculum nitidiusculum** (Kirby, 1802) [Melitta] (*Hylaeus rugosula* Schenck, 1853; *H. rugosula* Schenck, 1853; *H. pusillus* Schenck, 1853; *Halictus nitidulus* Pérez, 1903; *H. arnoldi* Saunders, 1910; *H. obsoletus* Warncke, 1975). Russia: **EP** (N, NW, C, E, NC), **UR**. – Europe (WE, NE, SE, EE), N Africa, Turkey, Iran.
- Lasioglossum (Evylaeus) nitidulum nitidulum** (Fabricius, 1804) [Prosopis] (*Halictus aeneidorsum* Alfken, 1920; *H. fudakowskii* Noskiewicz, 1926; *H. smeathmanellus* auct.; *H. continentalis* Blüthgen, 1944). Russia: **EP** (NW, C, S.), **UR**. – Europe (WE, NE, SE, EE), Turkey.
- Lasioglossum (Evylaeus) nodicorne** (Morawitz, 1889) [Halictus]. Russia: **ES** (IR, ZB). – Mongolia, China (NC).
- Lasioglossum (Evylaeus) obscuratum obscuratum** (Morawitz, 1876) [Halictus]. Russia: **EP** (NC). – Azerbaijan, Turkey, Syria, Jordan, Israel, Iran, Afghanistan, Central Asia, Kazakhstan.
- Lasioglossum (Evylaeus) obscuratum acerbum** (Warncke, 1975) [Halictus]. Russia: **EP** (S, CR). – Europe (WE, SE, EE).
- Lasioglossum (Evylaeus) pallidum** (Radoszkowski, 1888) [Nomioides] (*Halictus sahlbergi* Friese, 1916). Russia: **EP** (S). – Afghanistan, Turkmenistan.
- Lasioglossum (Evylaeus) pallilomum** (Strand, 1914) [Halictus]. Russia: **FE** (KH, PR). – China (NE, SE), Korean Peninsula, Japan (Hok, Hon, Shi).
- Lasioglossum (Evylaeus) parvulum** (Schenck, 1853) [Hylaeus] (*Melitta minuta*: Kirby, 1802; *Halictus striatus* Schenck, 1869; *H. striatus* Schenck, 1869; *H. ferrugineipes* Schenck, 1869; *H. minutus* auct., before 1974; *Lasioglossum minutum*: Ebmer, 1971). Russia: **EP** (N, NW, C, NC), **UR**. – Europe (WE, NE, SE, EE), Armenia, Turkey, Iran.
- Lasioglossum (Evylaeus) pauxillum** (Schenck, 1853) [Hylaeus] (*Hylaeus fulvicornis*: Schenck, 1851; *H. similis* Schenck, 1853; *H. immarginatus* Schenck, 1853; *H. flavicornis* Schenck, 1853; *H. immarginatus fuscitarsis* Schenck, 1853; *Halictus delicatus* Pérez, 1903; *H. algericolellus* Strand, 1909; *H. luteostigmatellus* Strand, 1909; *H. pseudopunctulatus* Strand, 1909; *H. schulthessi* Blüthgen in Schulthess, 1924). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (KM). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Turkmenistan.
- Lasioglossum (Evylaeus) peregrinum** (Blüthgen, 1923) [Halictus]. Russia: **EP** (CR). – Europe (WE, SE, EE), Caucasus, Turkey, Israel, Iran.
- Lasioglossum (Evylaeus) perplexans** (Cockerell, 1925) [Halictus]. Russia: **FE** (KH, PR).
- Lasioglossum (Evylaeus) podolicum podolicum** (Noskiewicz, 1925) [Halictus] (*Halictus smeathmanellus nucleolus* Warncke, 1982; *H. smeathmanellus petrosus* Warncke, 1975). Russia: **EP** (C, CR). – Europe (WE, SE, EE), Turkey.
- Lasioglossum (Evylaeus) politum politum** (Schenck, 1853) [Hylaeus] (*Hylaeus nanulus* Schenck, 1853; *Halictus granulatus* Alfken, 1906). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE).
- Lasioglossum (Evylaeus) problematicum** (Blüthgen, 1923) [Hylaeus]. Russia: **FE** (SA, KU). – Korean Peninsula, Japan (Hok, Hon).
- Lasioglossum (Evylaeus) punctatissimum punctatissimum** (Schenck, 1853) [Hylaeus] (*Hylaeus flavitarsis* Schenck, 1853; *Halictus simillimus* Schenck, 1869; *H. porcus* Morawitz, 1872; *H. griseescens* Schenck, 1873; *H. longiceps* Saunders, 1879; *H. tinitinensis* Cockerell, 1938). Russia: **EP** (N, NW, C, E, NC), **UR**. – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran.
- Lasioglossum (Evylaeus) puncticolle** (Morawitz, 1872) [Halictus] (*Halictus puncticollis* Saunders, 1879; *H. saundersii* Dalla Torre et Friese, 1895). Russia: **EP** (C, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Syria, Iran.
- Lasioglossum (Evylaeus) pygmaeum patulum** (Vachal, 1905) [Halictus] (*Halictus spretus* Pérez, 1911; *H. denislucis*: Blüthgen, 1925; *H. andinus* Warncke, 1982). Russia: **EP** (S, CR). – Europe (SE, EE), Caucasus, Turkey, Syria, Jordan, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan.
- Lasioglossum (Evylaeus) quadrinotatum** (Schenck, 1861) [Halictus] (*Halictus pallipes* Morawitz, 1865; *H. megacephalus* Schenck, 1869; *H. sexsignatus*

- Schenck, 1869; *H. pallidipes* Dalla Torre, 1896). Russia: **EP** (N, NW, C, E, S), **UR, ES** (KR, BR, YA, ZB). – Europe (WE, NE, SE, EE), Turkey, China (NC).
- Lasioglossum (Evylaeus) quadrisignatum** (Schenck, 1853) [*Hylaeus*] (*Hylaeus rufipes* Schenck, 1853; *H. atratulus* Schenck, 1853; *Halictus pleuralis* Morawitz, 1872; *H. nigerrimus* Schenck, 1875; *H. commixtus* Dalla Torre et Friese, 1895). Russia: **EP** (C, S, E, CR). – Europe (WE, SE, EE), Caucasus, Turkey, Iran.
- Lasioglossum (Evylaeus) rufitarse** (Zetterstedt, 1838) [*Halictus*] (*Halictus parumpunctatus* Schenck, 1869; *H. lucidus* Schenck, 1869; *H. atricornis* Smith, 1870). Russia: **EP** (N, NW, C, E, NC), **UR, WS** (TM, KM, AL), **ES** (IR, YA, ZB), **FE** (AM, PR, KA, SA, KU, MG). – Europe (WE, NE, SE, EE), Caucasus, Iran, Kazakhstan, Mongolia, China (NE, SE), Korean Peninsula
- Lasioglossum (Evylaeus) sabulosus** (Warncke, 1986) [*Halictus*]. Russia: **EP** (C, E). – Europe (WE, NE, SE, EE).
- Lasioglossum (Evylaeus) sakagami** Ebmer, 1978. Russia: **FE** (KH, PR). – Mongolia, China (NE, NC, NW), Korean Peninsula, Japan (Hok, Hon).
- Lasioglossum (Evylaeus) samaricum** (Blüthgen, 1935) [*Halictus*] (*L. pendschakenticum*: Ebmer, 1974). Russia: **EP** (E, CR). – Europe (EE), Turkey, Turkmenistan.
- Lasioglossum (Evylaeus) scirpaceum** (Warncke, 1975) [*Halictus*]. Russia: **EP** (NC). – Turkey, Iran.
- Lasioglossum (Evylaeus) semilaeve** (Blüthgen, 1923) [*Halictus*] (*Halictus minutulus speculiferus* Cockerell, 1937; *H. minutulus speculigerus* Cockerell, 1938). Russia: **WS** (AL), **ES** (IR), **FE** (AM, KH, PR). – Mongolia, China (NE).
- Lasioglossum (Evylaeus) semilucens** (Alfken, 1914) [*Halictus*] (*Hylaeus pygmaeus* Schenck, 1861). Russia: **EP** (C, E, NC). – Europe (WE, NE, SE, EE), Azerbaijan, Afghanistan, Tajikistan, Kyrgyzstan.
- Lasioglossum (Evylaeus) setulellum** (Strand, 1909) [*Halictus*] (*Halictus foveolatus* Blüthgen, 1924; *H. cinclus* Warncke, 1984). Russia: **EP** (E, S, CR), **UR**. – Europe (WE, SE, EE), Armenia, Turkey, Syria, Iran.
- Lasioglossum (Evylaeus) sexstrigatum** (Schenck, 1869) [*Halictus*]. Russia: **EP** (C, E), **UR**. – Europe (WE, NE, SE, EE), Armenia, Turkey.
- Lasioglossum (Evylaeus) sibiriacum** (Blüthgen, 1923) [*Halictus*] (*Halictus solovieffi* Cockerell, 1925). Russia: **FE** (PR). – China (NE), Korean Peninsula, Japan (Hok, Hon, Kuy, Shi, Izu, Tsu, Ryu).
- Lasioglossum (Evylaeus) simplicior** (Cockerell, 1931) [*Halictus*]. Russia: **FE** (KH, PR). – China (SE), Korean Peninsula, Japan (Izu)
- Lasioglossum (Evylaeus) speculinum** (Cockerell, 1925) [*Halictus*] (*Halictus pallilomus* Strand, 1914; *H. perplexans speculinus* Cockerell, 1925). Russia: **FE** (PR). – China (NE), Korean Peninsula.
- Lasioglossum (Evylaeus) subaenescens subaenescens** (Pérez, 1895) [*Halictus*] (*Lasioglossum illyricum* Ebmer, 1971). Russia: **EP** (CR). – Europe (WE, SE, EE).
- Lasioglossum (Evylaeus) subfulvicorne austriacum** Ebmer, 1974. Russia: **EP** (NC). – Europe (WE, SE, EE), Georgia, Turkey, Kyrgyzstan, Kazakhstan.
- Lasioglossum (Evylaeus) subfulvicorne subfulvicorne** (Blüthgen, 1934) [*Halictus*]. Russia: **WS** (KR, YA, ZB), **FE** (AM, PR, KA, SA, KU). – Mongolia, China (NC, NW), Korean Peninsula.
- Lasioglossum (Evylaeus) sulcatulum longifacies** Sakagami et Tadauchi, 1995. Russia: **FE** (KU). – Japan (Hok, Hon, Tsu).
- Lasioglossum (Evylaeus) sulcatulum sulcatulum** (Cockerell, 1925) [*Halictus*]. Russia: **FE** (AM, KH, PR). – Korean Peninsula.
- Lasioglossum (Evylaeus) tarsatum** (Schenck, 1869) [*Halictus*] (*Halictus berolinensis* Strand, 1909). Russia: **EP** (NW, C, E, S). – Europe (WE, NE, SE, EE), Afghanistan.
- Lasioglossum (Evylaeus) tauricum** Ebmer, 1972. Russia: **EP** (NC, CR).
- Lasioglossum (Evylaeus) transpositum** (Cockerell, 1925) [*Halictus*] (*Halictus tutihensis* Cockerell, 1925). Russia: **FE** (AM, KH, PR). – Korean Peninsula, Japan (Hok, Hon, Kyu).
- Lasioglossum (Evylaeus) trichorhinum** (Cockerell, 1925) [*Halictus*]. Russia: **FE** (PR). – Mongolia, China (NC).
- Lasioglossum (Evylaeus) tricinctum tricinctum** (Schenck, 1874) [*Halictus*] (*Halictus delmasi* Pérez, 1903). Russia: **EP** (E, S, CR). – Europe (WE, SE, EE).
- Lasioglossum (Evylaeus) trispine** (Vachal, 1903) [*Halictus*]. Russia: **FE** (PR). – Korean Peninsula, Japan (Hok, Hon, Shi, Ryu).
- Lasioglossum (Evylaeus) truncaticolle** (Morawitz, 1877) [*Halictus*] (*Halictus brevithorax* Pérez, 1903; *H. blidahensis* Strand, 1909; *H. sudaghensis* Strand, 1909). Russia: **EP** (S, CR). – Europe (WE, SE, EE), Caucasus, Turkey, Syria, Israel, Iran, Kazakhstan.

Lasioglossum (Evylaeus) villosulum (Kirby, 1802) [Melitta] (*Melitta punctulata* Kirby, 1802; *Halictus hirtellus* Schenck, 1869; *H. medinai* Vachal, 1895; *H. pauperatulellus* Strand, 1909; *H. trichopsis* Strand, 1909; *H. melanomitratatus* Strand, 1914; *H. m. mitratolus* Strand, 1914; *H. villosulopsis* Blüthgen, 1926; *H. pahanganus* Blüthgen, 1928; *H. barkensis* Blüthgen, 1930; *H. villosulus perlautus* Cockerell, 1938; *H. rufotegularis* Cockerell, 1938; *H. villiersi* Benoist, 1941; *H. berberus* Benoist, 1941). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **ES** (IR), **FE** (AM, PR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Syria, Israel, Iran, Afghanistan, Tajikistan, Mongolia, China (NE, NC, SE), Korean Peninsula, Japan (Hok, Hon, Ryu, Izu), E India, Nepal, Malaysia.

Lasioglossum (Evylaeus) virideglaucum Ebmer et Sakagami, 1994. Russia: **FE** (KH, PR). – China (NC, SW, SE), Korean Peninsula.

Lasioglossum (Evylaeus) viridellum (Cockerell, 1931) [Halictus]. Russia: **FE** (KH, PR). – China (NE, CC), Korean Peninsula.

Lasioglossum (Evylaeus) vulsum (Vachal, 1903) [Halictus] (*Halictus trispinis* Vachal, 1903). Russia: **ES** (KR), **FE** (AM, PR, KU). – Mongolia, Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu).

Lasioglossum (Evylaeus) yakuticum (Pesenko et Davydova, 2004) [Evylaeus]. Russia: **ES** (KR, YA, ZB), **FE** (AM).

SPHECODES Latreille, 1804. Type species *Nomada gibba* Fabricius, 1804 (= *Sphex gibba* Linnaeus, 1758). Species of this cosmopolitan bees are notable cleptoparasites in the nests of wide variety of short-tongued bees, particularly species of *Lasioglossum* Curtis and *Halictus* Latreille. Number of species: World – about 300 species, Palaearctic – about 70 species, Russia – 37.

Sphecodes albilabris (Fabricius, 1793) [Nomada] (*Dichroa fuscipennis* Germar, 1822; *Sphecodes latreillei* Wesmael, 1835; *S. rubripes* Spinola, 1838; *S. africanus* Lepeletier de Saint Fargeau, 1841; *S. nigripes* Lepeletier de Saint Fargeau, 1841; *S. rugosus* Smith, 1848; *S. nodicornis* Gistel, 1857; *S. fuscipennis basalis* Dalla Torre, 1877; *Sabulicola cirsii* Verhoeff, 1890; *Sphecodes grandis* Meyer, 1922; *S. rufipennis* Cockerell, 1931; *S. atrescens* Cockerell, 1931). Cleptoparasite of *Colletes cunicularius* (L.) (Colletidae), *Halictus quadricinctus* (F.) (Halictidae), *Melitturga clavicornis* (Latr.) (Andrenidae), *Dasygaster hirtipes*

(F.) (Melittidae). Russia: **EP** (NE, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, KM, AL), **ES** (KR, BR), **FE** (PR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Syria, Israel, Central Asia, Kazakhstan, India.

Sphecodes alternatus Smith, 1853 (*S. gibbus similis scariosus* Sichel, 1865; *S. punctiventris* Hagens, 1882; *S. gracilior* Morawitz, 1893; *S. antigae* Tournier, 1901; *S. reticulatus algeriensis* Alfken, 1914; *S. alternatus lindbergi* Pittioni, 1950). Cleptoparasite of *Halictus compressus* (Walckener), *H. longobardicus* Blüthgen, *H. patellatus* Mor. (Halictidae). Russia: **EP** (S, NC, CR), **UR**, **WS** (AL), **ES** (KR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Iran, Central Asia, Kazakhstan.

Sphecodes crassus Thomson, 1870 (*S. variegatus* Hagens, 1874; *S. divisus* Hagens, 1882; *S. valesianus* Frey-Gessner, 1903; *S. dyozankeanus* Tsuneki, 1983; *S. ohdeyamanus* Tsuneki, 1984). Cleptoparasite of *Lasioglossum pauxillum* (Schenck), *L. punctatissimum* (Schenck), *L. quadrinotatum* (Schenck), *L. nitidiusculum* (Kirby), *L. prasinum* (Smith) (Halictidae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KA). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Iran, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, Japan (Hok, Hon).

Sphecodes cristatus Hagens, 1882. Cleptoparasite of *Halictus confusus* Smith, *H. leucaheneus* Ebmer, *H. seladonius* (F.), *H. subauratus* (Rossi), *Lasioglossum nigripes* (Lep.) (Halictidae). Russia: **EP** (C, E, S, NC), **UR**, **WS** (OM, KM, AL), **ES** (KS, TU, KR, BR, ZB), **FE** (AM, KH, PR). – Europe (WE, SE, EE), Caucasus, Turkey, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE).

Sphecodes croaticus Meyer, 1922. Cleptoparasite of *Lasioglossum interruptum* (Panz.) (Halictidae). Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), Caucasus, Turkey, Turkmenistan.

Sphecodes ephippius (Linnaeus, 1767) [Sphex] (*Apis minimus* Harris, 1776; *A. rufescens* Geoffroy in Fourcroy, 1785; *A. obscura* Geoffroy in Fourcroy, 1785; *A. rufescens* Gmelin, 1790; *A. labiata* Fabricius, 1793; *Melitta divisa* Kirby, 1802; *Andrena minuta* Fabricius, 1804; *Sphecodes similis* Wesmael, 1835; *S. zablockii* Blüthgen, 1924). Cleptoparasite of *Halictus tumulorum* (L.), *H. maculatus* Smith, *H. rubicundus* (Christ), *Lasioglossum laticeps* (Schenck), *L. leucozonium* (Schrank), *L. malachurum*

- (Kirby), *L. pauxillum* Schenck, *L. quadrinotatum* (Schenck), *L. fratellum* (Pérez), *L. lativentre* (Schenck), *L. prasinum* (Smith) (Halictidae), *Andrena argentata* Smith, *A. barbilabris* (Kirby), *A. flavipes* Panzer, *A. chrysopyga* Schenck, *A. labialis* (Kirby), *A. minutula* (Kirby), *A. wilkella* (Kirby) (Andrenidae). Russia: **EP** (NW, C, E, S, NC, CR), **UR, WS** (OM, TK, NS, KM, AL), **ES** (KR, IR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Central Asia, Kazakhstan, Mongolia.
- Sphecodes ferruginatus** Hagens, 1882 (*S. rufescens alpestris* Frey-Gessner, 1903; *S. koikensis* Tsuneki, 1983; *S. hanedai* Tsuneki, 1983; *S. baratonis* Tsuneki, 1983; *S. sudai* Tsuneki, 1983; *S. chibaensis* Tsuneki, 1984; *S. izumindus* Tsuneki, 1986). Cleptoparasite of *Lasioglossum fulvicorne* (Kirby), *L. laticeps* (Schenck), *L. pauxillum* Schenck, *L. vulsum* (Vachal) (Halictidae). Russia: **EP** (N, NW, C, E, NC, CR), **UR, WS** (TK, NS, KM, AL), **ES** (IR), **FE** (AM, KH, PR, KU). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Kyrgyzstan, Kazakhstan, Japan (Hok, Hon, Shi, Kyu).
- Sphecodes geoffrellus** (Kirby, 1802) [Melitta] (*S. affinis* Hagens, 1882; *S. fasciatus* Hagens, 1882; *S. rimalis* Pérez, 1903; *S. impunctatus* Meyer, 1922; *S. silvicola* Tsuneki, 1983; *S. shirozui* Tsuneki, 1983; *S. kitamius* Tsuneki, 1983). Cleptoparasite of *Lasioglossum leucopus* (Kirby), *L. morio* (F.), *L. nitidiusculum* (Kirby), *L. pauxillum* Schenck, *L. fratellum* (Pérez), *L. marginellum* (Schenck), *L. rufitarse* (Zetterstedt), *L. sexstrigatum* (Schenck) (Halictidae). Russia: **EP** (N, NW, C, E, NC), **UR, WS** (TK, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, KU). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Near East, Central Asia, Kazakhstan, Japan (Hok, Hon, Shi, Kyu).
- Sphecodes gibbus** (Linnaeus, 1758) [Sphex] (*Apis glabra* Füssli, 1775; *Nomada gibba* Fabricius, 1775; *Andrena ferruginea* Olivier, 1789; *Apis gibbosa* Christ, 1791; *Melitta sphecoidea* Kirby, 1802; *M. picea* Kirby, 1802; *Sphecodes apicatus* Smith, 1853; *S. nigripennis* Morawitz, 1876; *S. sutor* Nurse, 1903; *S. gibbus rufispinosus* Meyer, 1919; *S. g. turkestanicus* Meyer, 1919; *S. castilianus* Blüthgen, 1924; *S. pergibbus* Blüthgen, 1937; *S. lustrans* Cockerell, 1931; *S. angarensis* Cockerell, 1937). Cleptoparasite of *Halictus maculatus* Smith, *H. quadricinctus* (F.), *H. rubicundus* (Christ), *H. sexcinctus* (F.), *H. simplex* Blüthgen, *Lasioglossum malachurum* (Kirby) (Halictidae), *Andrena vaga* Panz. (Andrenidae), *Colletes cunicularius* (L.) (Colletidae). Russia: **EP** (N, NW, C, E, N, NC, CR), **UR, WS** (OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, YA). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NW), India.
- Sphecodes hyalinatus** Hagens, 1882. Cleptoparasite of *Lasioglossum fratellum* (Pérez), *L. fulvicorne* (Kirby) (Halictidae). Russia: **EP** (N, NW, C, E, NC, CR), **UR, WS** (KM, AL), **ES** (KS, TU, IR), **FE** (AM, KH, PR, KA, KU, MG). – Europe (WE, NE, SE, EE), Caucasus, Kazakhstan.
- Sphecodes intermedius** Blüthgen, 1923 (*S. lactipennis* Meyer, 1924). Parasite of *Halictus kessleri* Bramson (Halictidae). Russia: **EP** (C, S, CR), **UR**. – Europe (SE, EE), N Africa, Caucasus, Turkey, Central Asia, Kazakhstan.
- Sphecodes laticaudatus** Tsuneki, 1983. Russia: **FE** (KH, PR, SA, KU). – Japan (Hon).
- Sphecodes longulus** Hagens, 1882 (*S. longulus eupidus* Hagens, 1882; *S. nitidulus* Hagens, 1882; *S. amakusensis* Yasumatsu et Hirashima, 1951; *S. sabulosus* Tsuneki, 1983; *S. crassicornis* Tsuneki, 1983; *S. tsuneki* Haneda, 1994). Cleptoparasite of *Lasioglossum leucopus* (Kirby), *L. minutissimum* (Kirby), *L. punctatissimum* (Schenck), *L. semilucens* (Alfken), *L. zonulum* (Smith), *L. lucidulum* (Schenck), *L. sexstrigatum* (Schenck) (Halictidae). Russia: **EP** (NW, C, E, S, NC), **UR, WS** (KM), **ES** (KS, KR, IR), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Syria, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Japan.
- Sphecodes majalis** Pérez, 1903 (*S. gracilior* Pérez, 1903; *S. opacifrons* Pérez, 1903; *S. problematicus* Schulz, 1906). Cleptoparasite of *Lasioglossum pallens* (Brullé) (Halictidae). Russia: **EP** (C, NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Iran.
- Sphecodes maruyamanus** Tsuneki, 1983 (*S. convergens* Tsuneki, 1983). Russia: **FE** (PR). – Japan (Hok, Hon).
- Sphecodes miniatus** Hagens, 1882 (*S. dimidiatus* Hagens, 1882; *S. murithianus* Frey-Gessner, 1903; *S. pilicornis* Meyer, 1922). Cleptoparasite of *Lasioglossum nitidiusculum* (Kirby), *L. morio* (F.), *L. pauxillum* Schenck, *L. politum* Schenck, *L. punctatissimum* (Schenck), *L. sexstrigatum* (Schenck) (Halictidae). Russia: **EP** (NW, C, E, S, NC, CR), **UR, WS** (TM, KM, AL), **ES** (KS, TU, BR), **FE**

- (KH). – Europe (WE, NE, SE, EE), Caucasus, Kyrgyzstan, Kazakhstan, Mongolia.
- Sphecodes monilicornis** (Kirby, 1802) [Melitta] (*S. maculatus* Lepeletier de Saint Fargeau, 1841; *S. subquadratus* Smith, 1845; *S. gibbus ephippium rufipes* Sichel, 1865; *S. g. e. dubious* Sichel, 1865; *S. g. e. incertus* Sichel, 1865; *S. g. e. nigrescens* Sichel, 1865; *S. g. e. testaceipes* Sichel, 1865; *S. ruficrus* Dalla Torre, 1896; *S. hanuman* Nurse, 1903; *S. monilicornis nigerrima* Blüthgen, 1927; *S. cephalotes* Meyer, 1920; *S. smyrnensis* Meyer, 1920; *S. monilicornis quadratus* Meyer, 1920; *S. m. berberus* Warncke, 1992; *S. quadratus cephalotiformis* Pittoni, 1950). Cleptoparasite of *Halictus maculatus* Smith, *H. rubicundus* (Christ), *H. tumulorum* (L.), *Lasioglossum albipes* (F.), *L. calceatum* (Scop.), *L. leucozonium* (Schrank), *L. malachurum* (Kirby), *L. quadrinotatum* (Schenck), *L. zonulum* (Smith), *L. laticeps* (Schenck), *L. paucillum* Schenck, *L. prasinum* (Smith), *L. villosulum* (Kirby) (Halictidae), *Andrena flavipes* Panz. (Andrenidae). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, AL), **ES** (KS, TU, KR, IR, BR, YA), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Pakistan, Central Asia, Kazakhstan, Mongolia.
- Sphecodes murotai** Tsuneki, 1983 (*S. akitanus* Tsuneki, 1983; *S. kaiensis* Tsuneki, 1983; *S. mutsuoides* Tsuneki, 1984; *S. maetai* Tsuneki, 1984). Cleptoparasite of *Lasioglossum baleicum* (Cockerell) (Halictidae). Russia: **FE** (PR). – Japan (Hon, Shi, Kyu).
- Sphecodes niger** Hagens, 1874. Cleptoparasite of *Lasioglossum morio* (F.), *L. lucidulum* (Schenck) (Halictidae). Russia: **EP** (C, E, S, NC). – Europe (WE, NE, SE, EE), Turkey.
- Sphecodes nippon** Meyer, 1922 (*S. aino* Tsuneki, 1983; *S. awaensis* Tsuneki, 1983; *S. gibbus*: Warncke, 1992). Cleptoparasite of *Lasioglossum sakagamii* Ebmer (Halictidae). Russia: **ES** (BR, ZB), **FE** (AM, KH, PR, SA, KU). – Mongolia, Japan (Hok, Hon, Shi, Kyu).
- Sphecodes nomioideis** Pesenko, 1979. Russia: **EP** (C). – Europe (WE, SE, EE), Turkey, Jordan.
- Sphecodes okuyetsu** Tsuneki, 1984 (*S. duplipunctatus* Tsuneki, 1983; *S. hasshanus* Tsuneki, 1983; *S. etizenensis* Tsuneki, 1983; *S. sapporoensis* Tsuneki, 1983; *S. brevichypeatus* Tsuneki, 1984). Cleptoparasite of *Lasioglossum allodalum* Ebmer et Sakagami (Halictidae). Russia: **FE** (KH, PR, SA, KU). – Japan (Hok, Hon, Shi, Kyu).
- Sphecodes olivieri** Lepeletier de Saint Fargeau, 1825 (*S. collaris* Spinola, 1843; *S. hispanicus abyssinicus* Sichel, 1865; *S. ruficornis* Sichel, 1865; *S. punctulatus* Sichel, 1865; *S. subpunctulatus* Sichel, 1865; *S. rufithorax* Morawitz, 1876; *S. verticalis* Hagens, 1882; *S. desertus* Nurse, 1903; *S. chionospilus* Cockerell, 1911; *S. ch. sanguinatus* Cockerell, 1911; *S. tenuis* Meyer, 1919; *S. olivieri niveatus* Meyer, 1924). Cleptoparasite of *Lasioglossum aegyptiellum* (Strand), *L. vagans* (Smith) (Halictidae). Russia: **EP** (S, NC). – Europe (SE), N Africa, Caucasus, Turkey, Israel, UAE, Qatar, Iran, Pakistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, India.
- Sphecodes orientalis** Astafurova et Proshchalykin, 2014. Russia: **FE** (KH, PR, SA).
- Sphecodes pellucidus** Smith, 1845 (*S. pilifrons* Thomson, 1870; *S. brevicornis* Hagens, 1874; *S. volatilis* Smith, 1879; *S. pellucidus algerus* Alfken, 1914; *S. p. hybridus* Blüthgen, 1924; *S. p. niveipennis* Meyer, 1924). Cleptoparasite of *Lasioglossum leucozonium* (Schrank), *L. prasinum* (Smith) (Halictidae), *Andrena barbilabris* (Kirby), *A. nycthemera* Imhoff, *A. argentata* Smith, *A. bicolor* F., *A. humilis* Imhoff, *A. ventralis* Imhoff, *A. wilkella* (Kirby) (Andrenidae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Iran, Central Asia, Kazakhstan, Mongolia, China (NW, WP).
- Sphecodes pinguiculus** Pérez, 1903 (*S. sareptensis* Meyer, 1922; *S. excellens* Meyer, 1922; *S. punctatissimus* Meyer, 1922; *S. hungaricus* Blüthgen, 1923; *S. coelebs* Blüthgen, 1923; *S. consobrinus* Blüthgen, 1923; *S. persicus* Blüthgen, 1924; *S. capverdensis* Pauly et La Roche, 2002). Cleptoparasite of *Halictus lucidipennis* Smith, *H. smaragdulus* Vachal (Halictidae). Russia: **EP** (S, CR), **ES** (TU, BR). – Europe (SE, EE), N Africa, Caucasus, Turkey, Israel, UAE, Iran, Central Asia, Kazakhstan, Mongolia.
- Sphecodes pseudofasciatus** Blüthgen, 1924. Russia: **EP** (C, NC). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey.
- Sphecodes puncticeps** Thomson, 1870 (*S. opacifrons* Pérez, 1903; *S. bituberculatus* Pérez, 1903; *S. puncticeps cretanus* Strand, 1921). Cleptoparasite of *Lasioglossum villosulum* (Kirby), *L. brevicorne* (Schenck), *L. politum* Schenck, *L. sabulosum* (Warncke) (Halictidae). Russia: **EP** (NW, C, E, S, NC, CR), **WS** (AL), **FE** (PR). – Europe (WE, NE,

SE, EE), N Africa, Caucasus, Turkey, Central Asia, Kazakhstan, Mongolia.

Sphecodes reticulatus Thomson, 1870 (*S. distinguendus* Hagens, 1874). Cleptoparasite of *Andrena barbibris* (Kirby), *A. argentata* Smith, *A. wilkella* (Kirby) (Andrenidae), *Lasioglossum leucozonium cedri* Ebmer, *L. prasinum* (Smith) (Halictidae). Russia: **EP** (NW, C, E, S, NC, CR), **WS** (OM, NS, KM), **ES** (KS, TU, KR, IR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Tajikistan, Kyrgyzstan, Kazakhstan.

Sphecodes rubicundus Hagens, 1875. Cleptoparasite of *Andrena labialis* (Kirby), *A. agilissima* (Scopoli), *A. nigroaenea* (Kirby) (Andrenidae). Russia: **EP** (E, S, NC), **UR**. – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey.

Sphecodes rufiventris (Panzer, 1798) [Tiphia] (*S. subovalis* Schenck, 1853; *S. brevis* Hagens, 1875; *S. singularis* Meyer, 1919; *S. combinatus* Blüthgen, 1927; *S. subovalis austrius* Erlandsson, 1979; *S. s. austrius balcanicus* Erlandsson, 1979; *S. rufiventris hethiticus* Warncke, 1992). Cleptoparasite of *Halictus maculatus* Smith (Halictidae). Russia: **EP** (C, E, S, NC), **UR**, **WS** (TK, MS, KM, AL), **ES** (KS). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.

Sphecodes scabricollis Wesmael, 1835 (*S. perversus* Ritsema, 1879; *S. japonicus* Cockerell, 1911; *S. sibiricus* Cockerell, 1924; *S. utinamius* Tsuneki, 1983; *S. asakura* Tsuneki, 1983; *S. hatogayuu* Tsuneki, 1983; *S. taicho* Tsuneki, 1983; *S. daisi* Tsuneki, 1983). Cleptoparasite of *Lasioglossum zonulum* (Smith), *L. prasinum* (Smith), *Halictus compressus* (Walkener), *H. quadricinctus* (F.) (Halictidae). Russia: **EP** (NW, C, E, S, CR), **UR**, **WS** (NS, KM, AL), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Kazakhstan, Korean Peninsula, Japan (Hok, Hon, Shi, Kyu), India.

Sphecodes schenckii Hagens, 1882. Cleptoparasite of *Lasioglossum discum* (Smith), *Halictus simplex* Blüthgen (Halictidae). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Caucasus, Turkey, Israel, Iran.

Sphecodes schwarzi Astafurova et Proshchalykin, 2014 Russia: **ES** (TU). – Kazakhstan, Mongolia.

Sphecodes spinulosus Hagens, 1875. Cleptoparasite of *Lasioglossum xanthopus* (Kirby) (Halictidae). Russia: **EP** (C, E, S, CR), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Central Asia, Kazakhstan.

Sphecodes simillimus Smith, 1873 (*S. esakii* Strand et Yasumatsu, 1938). Cleptoparasite of *Lasioglossum duplex* (Dalla Torre) (Halictidae). Russia: **FE** (KH, PR, SA, KU). – Japan (Hok, Hon, Shi, Kyu).

Sphecodes tanoi Tsuneki, 1983 (*S. coptis* Tsuneki, 1983; *S. mutsu* Tsuneki, 1983; *S. fukuensis* Tsuneki, 1983; *S. fudzi* Tsuneki, 1983; *S. chichibuus* Tsuneki, 1984; *S. kamafuse* Tsuneki, 1983; *S. ohtsukius* Tsuneki, 1984; *S. chichibuensis* Tsuneki, 1986). Russia: **FE** (PR, KU). – Japan (Hok, Hon, Kyu).

Subfamily ROPHITINAE

The overwhelming majority of rophitine species occur in the Holarctic region, only a few species also inhabit Afrotropical, Oriental, and Neotropical regions; no species are recorded from Australia. Many species of Rophitinae are montane, the majority of species are oligo- or monolectic. All rophitines are nesting species (non-parasitic), constructing their nests in soil; all behaviourally known species are solitary (not even subsocial).

DUFOUREA Lepeletier de Saint Fargeau, 1841. Type species *Dufourea minuta* Lepeletier de Saint Fargeau, 1841. Number of species: World – 130; Palaearctic – 82; Russia – 8.

Dufourea (Cephalictoides) paradoxa sibirica Pesenko, 1998. Russia: **WS** (AL), **ES** (TU, YA). – Mongolia.

Dufourea (Cyprirophites) coeruleocephala Morawitz, 1872 (*D. caeruleocephala* Dalla Torre, 1896). Russia: **EP** (C, S). – Europe (EE).

Dufourea (Dufourea) halictula (Nylander, 1852) [Rophites] (*D. minuta* auct.). Russia: **EP** (NW, C, CR). – Europe (WE, NE, SE, EE).

Dufourea (Dufourea) minuta Lepeletier de Saint Fargeau, 1841 (*D. vulgaris* Schenck, 1861). Russia: **EP** (N, NW, C, E, NC), **UR**. – Europe (WE, NE, SE, EE), China (WP).

Dufourea (Halictoides) carinata (Popov, 1959) [Halictoides]. Russia: **ES** (BR, ZB), **FE** (AM, KH, PR). – China (NE, NC).

Dufourea (Halictoides) dentiventris (Nylander, 1841) [Halictoides] (*D. dejeanii* Lepeletier de Saint Fargeau, 1841; *Rophites bispinosa* Eversmann, 1852; *Dufourea putoniana* Dours, 1873; *D. odontogastra* Ebmer, 1978). Russia: **EP** (NW, C, E, NC), **UR**, **ES** (IR). – Europe (WE, NE, SE, EE), China (WP), Korean Peninsula.

Dufourea (Halictoides) graeca dubiosa (Warncke, 1979) [Rophites]. Russia: **EP** (NC). – Georgia, Armenia, Turkey.

Dufourea (Halictoides) inermis (Nylander, 1848) [Halictoides]. Russia: **EP** (NW, C, E, NC), **UR**, **WS** (TK, AL), **ES** (IR, YA), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), Uzbekistan, China (NE, WP).

FLAVODUFOUREA Ebmer, 1984. Type species *Dufourea flavicornis* Friese, 1914. Number of species: World – 2; Palaearctic – 2; Russia – 1.

Flavodufourea flavicornis (Friese, 1914) [Dufourea]. Russia: **WS** (BR). – China (WP).

RHOPHITOIDES Schenck, 1861. Type species *Rhophitoides distinguendus* Schenck, 1861 (= *Rophites cana* Eversmann, 1852). Number of species: World – 4; Palaearctic – 4; Russia – 1.

Rhophitoides canus (Eversmann, 1852) [Rophites] (*Rhophites bifoveolatus* Sichel, 1854; *Rhophitoides distinguendus* Schenck, 1861). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, KM, AL), **ES** (KR, TU, BR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Central Asia, Kazakhstan, Mongolia, China (NW), Korean Peninsula.

ROPHITES Spinola, 1808. Type species *Rophites quinquespinosus* Spinola, 1808. Number of species: World – 16; Palaearctic – 16; Russia – 6.

Rophites algirus montanus Ebmer, 1978 (*R. algirus hethiticus* Warncke, 1980). Russia: **EP** (NC). – Caucasus, Turkey, Iran.

Rophites algirus trispinosus Pérez, 1903. Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE).

Rophites caucasicus Morawitz, 1876. Russia: **EP** (NC). – Caucasus, Turkey.

Rophites clypealis stepposus Astafurova, 2011. Russia: **EP** (S, CR). – Europe (EE), Kazakhstan.

Rophites gruenwaldti Ebmer, 1978. Russia: **FE** (AM). – Mongolia, China (NE, NC).

Rophites hartmanni Friese, 1902 (*R. bistrispinosus* Lebedev, 1931). Russia: **EP** (C, E, S, NC, CR). – Europe (WE, SE, EE), Turkey, Israel.

Rophites quinquespinosus Spinola, 1808 (*R. pilichi* Moczar, 1967; *R. moeschleri* Schwammberger, 1971; *R. bluethgeni* Benedek, 1973). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (TK, NS, KM, AL), **ES** (KS, KR, IR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Uzbekistan, Kyrgyzstan, Kazakhstan, China (NW).

SYSTROPHA Illiger, 1806. Type species *Andrena spiralis* Olivier, 1789 (= *Eucera curvicornis* Scopoli, 1770). Number of species: World – 28; Palaearctic – 13; Russia – 2.

Systropha curvicornis (Scopoli, 1770) [Eucera] (*Tenthredo convolvuli* Pallas, 1773; *Andrena spiralis* Olivier, 1789; *A. labrosa* Eversmann, 1852). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (NS, AL). – Europe (WE, NE, SE, EE), Armenia, Azerbaijan, Turkey, Iran, Uzbekistan, Kazakhstan, China (NW, WP).

Systropha planidens Giraud, 1861 (*S. chrysur* Pérez, 1905; ?*S. grandimargo* Pérez, 1905; *S. planidens anatolica* Warncke, 1977). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Kazakhstan.

Subfamily NOMIINAE

The subfamily Nomiinae is nearly cosmopolitan group of bees (absent in South America). Many species of Nomiinae are plain, the majority of species are polylectic. All species of the subfamily make nests; there are no cleptoparasitic forms. All species, well studied in relation their biology, are solitary (sometimes subsocial). They nest in the ground, usually on exposed warm dry areas. Females of many species form communal nests.

LIPOTRICHES Gerstaecker, 1858. Type species *Lipotriches abdominalis* Gerstaecker, 1858 (= *Sphcodes cribrosa* Spinola, 1843). Number of species: World – 270; Palaearctic – 9; Russia – 1.

Lipotriches (Austronomia) fruhstorferi (Pérez, 1905) [Nomia]. Russia: **ES** (ZB), **FE** (AM, KH, PR). – Mongolia, China (NE), Japan (Hok, Kyu, Tsu).

NOMIAPIS Cockerell, 1919. Type species *Nomia diversipes* Latreille, 1806. Number of species: World – 14; Palaearctic – 11; Russia – 6.

Nomiapis armata (Olivier, 1812) [Nomia] (*Nomia monstrosa* Costa, 1861; *N. rumelica* Friese, 1923). Russia: **EP** (CR). – Europe (SE, EE), Armenia, Azerbaijan, Turkey, Israel.

Nomiapis bispinosa (Brulle, 1832) [Nomia] (*Nomia rufiventris* Spinola, 1839; *N. ruficornis* Spinola, 1839; *N. perforata* Lucas, 1849; *N. albocincta* Lucas, 1849; *N. aureocincta* Costa, 1861; *N. polita* Costa, 1861; *N. basalis* Smith, 1875; *N. aureocincta turcomanica* Radoszkowski, 1893; *N. fletcheri* Cockerell,

1920; *N. basalicincta* Cockerell, 1922; *N. unidentata* auct.). Russia: **EP** (E, S, NC, CR). – Europe (SE, EE), N Africa, Caucasus, Turkey, Israel, Iraq, Afghanistan, Pakistan, Central Asia, Kazakhstan, China (NW), N India.

Nomiapis diversipes (Latreille, 1806) [Nomia] (*Andrena humeralis* Jurine, 1807; *Nomia hungarica* Förster, 1853). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (NS, AL). – Europe (WE, SE, EE), Caucasus, Turkey, Israel, Iran, Pakistan, Central Asia, Kazakhstan, Mongolia.

Nomiapis femoralis (Pallas, 1773) [Apis] (*Lasius difformis* Panzer, 1805; *Andrena brevitarsis* Eversmann, 1852). Russia: **EP** (C, E, S, NC), **UR**, **WS** (AL), **ES** (KS, TU, KR, IR, BR). – Europe (WE, SE, EE), Central Asia, Kazakhstan, Mongolia, China (NW).

Nomiapis fugax (Morawitz, 1877) [Nomia]. Russia: **EP** (S, NC), **ES** (IR). – N Africa, Armenia, Azerbaijan, Turkey, Iran, Pakistan, Central Asia, Kazakhstan, China (NW).

Nomiapis mandschurica (Hedicke, 1940) [Nomia]. Russia: **ES** (BR), **FE** (AM, PR). – Mongolia, China (NE, NC), Korean Peninsula, Japan (Hok, Hon, Kyu).

PSEUDAPIS Kirby, 1900. Type species *Pseudapis anomala* W.F. Kirby, 1900. Number of species: World – 41; Palaearctic – 24; Russia – 2.

Pseudapis anatolica (Warncke, 1976) [Nomia]. Russia: **EP** (NC). – Armenia, Turkey.

Pseudapis elegantissima (Popov, 1949) [Nomia]. Russia: **EP** (S, NC). – Azerbaijan, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.

Subfamily NOMIOIDINAE

The subfamily Nomioidinae is represented by small (body length at most 5 mm) and usually brightly colored forms and overwhelming majority of species occur in the Old World. The most of species inhabit deserts and semi-desert and are polytactic. All nomioides are

nesting species (non-parasitic), constructing their nests in soil, preferring sandy and stony soils; all behaviourally known species are solitary or subsocial (not eusocial).

CEYLALICTUS Strand, 1913 (*Eunomioides* Blüthgen, 1937). Type species *Halictus horni* Strand, 1913. Number of species: World – 28; Palaearctic – 1; Russia – 1.

Ceylalictus (Ceylalictus) variegatus (Olivier, 1789) [Apis] (*Andrena pulchella* Jurine, 1807; *A. flavopicta* Dours, 1873; *A. flavopicta* Dours, 1873; *Nomioides jucunda* Morawitz, 1874; *N. fasciatus* Friese, 1898; *N. fasciatus intermedius* Alfken, 1924; *N. variegata simplex* Blüthgen, 1925; *N. variegata unifasciata* Blüthgen, 1925; *N. labiatarum* Cockerell, 1931; *N. variegata nigrita* Blüthgen, 1934; *N. variegata pseudocerea* Blüthgen, 1934; *N. variegata nigri-ventris* Blüthgen, 1934). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Arabian Peninsula, Israel, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NW), NW India.

NOMIOIDES Schenck, 1866. Type species *Apis minutissima* Rossi, 1790. Number of species: World – 62; Palaearctic – 39; Russia – 2.

Nomioides (Nomioides) minutissimus minutissimus (Rossi, 1790) [Apis] (?*Apis parvula* Fabricius, 1798; *Nomioides minutissima obscurata* Blüthgen, 1925; *N. m. versicolor* Blüthgen, 1925; *N. m. violascens* Blüthgen, 1925; *N. m. schencki* Blüthgen, 1925; *N. m. tristis* Blüthgen, 1934; *N. m. fusca* Blüthgen, 1934). Russia: **EP** (E, S, NC, CR). – Europe (WE, SE, EE), Caucasus, Turkey, Near East, Iraq, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NW), NW India.

Nomioides (Nomioides) pulverosus Handlirsch, 1888 (*N. subgalerita* Blüthgen, 1933). Russia: **EP** (S, NC). – Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia.

76. FAMILY MELITTIDAE

M.YU. PROSHCHALYKIN AND YU.V. ASTAFUROVA

Melittid bees occur in temperate and xeric ecosystems of the Nearctic and the Old World. Ethiopian region shows the maximum of generic diversity but the maximum of species diversity is reached in the Palearctic region. The African continent lumps clearly the maximum of both generic and specific diversity. Melittids are typically small to moderate-sized bees, which are well known for their specialist and oligolectic foraging habits. Nests in burrows on the soil. Number of taxa: World – 15 genera, 198 species; Palearctic – 5/85; Russia – 3/25.

R e f e r e n c e s. Warncke, 1973; Dathe, 1980b; Sitdikov, 1986; Radchenko, Pesenko, 1989; Michez et al., 2004, 2012; Celary, 2005; Michez, Patiny, 2005; Michez, Eardley, 2007; Proshchalykin, 2007c, 2008b; 2010; 2012a; 2014a; Levchenko, 2009; Radchenko, 2009; 2016; Levchenko, Yuferev, 2013; Levchenko, Tomkovich, 2014.

Subfamily DASYPODAINAE

Tribe DASYPODAINI

DASYPODA Latreille, 1802 (*Podasys* Rafinesque, 1815; *Microdasypoda* Michez, 2004; *Megadasypoda* Michez, 2004; *Heterodasypoda* Michez, 2004). Type species *Andrena hirtipes* Fabricius, 1793. The genus is widespread in the Palearctic and only 2 species known in Afrotropical region. Number of taxa: World – 39; Palearctic – 37; Russia – 8.

Dasypoda argentata Panzer, 1809 (*D. villipes* Eversmann, 1852, nom. praeocc., nec Lepeletier de Saint Fargeau, 1841; *D. thoracica* Baer, 1853; *D. palleola* Baer, 1853; *D. decora* Baer, 1853; *D. nigrans* Baer, 1853; *D. italica* Radoszkowski, 1876; *D. rhodo-daetyla* Dalla Torre, 1881; *D. canescens* De Stefani, 1887; *D. mlokoszewiczi* Radoszkowski, 1890; *D. wankowiczi* Radoszkowski, 1891; *D. carinata* Pérez, 1895; *D. argentata rufipes* Friese, 1901; *D. a. nigricans* Friese, 1901; *D. a. cinerascens* Friese, 1901; *D. a. griseithorax* Müller, 1923; *D. a. spadix* Müller, 1923; *D. thoracica*: Radchenko, Pesenko, 1989). Russia: **EP** (C, S, E, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Lebanon, Iran.

Dasypoda braccata Eversmann, 1852 (*D. tschertkoviana* Baer, 1853; *D. melanopleura* Baer, 1853).

Russia: **EP** (E, NC), **UR**. – Europe (WE, SE, EE), Turkey, Kazakhstan.

Dasypoda hirtipes (Fabricius, 1793) [*Andrena*] (?*Apis altercator* Harris, 1776; *Andrena hirtipes* Fabricius, 1793; *Apis hirta* Fabricius, 1793, nom. praeocc., nec Schrank, 1781; *Andrena plumipes* Panzer, 1797; *Melitta swammerdamella* Kirby, 1802; *Dasypoda villosa* Lepeletier de Saint Fargeau, 1841; ?*D. germanica* Gistel, 1848; *D. palleola* Baer, 1853; *D. nemorialis* Baer, 1853; ?*D. rudis* Gistel, 1857; *D. plumipes nigrescens* Friese, 1901; *D. minor* Pérez, 1903, nom. praeocc., nec Morawitz, 1874; *D. illegalis* Schulz, 1906; *D. altercator* auct.). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (NS), **ES** (BR), **FE** (PR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Iran, Kazakhstan, Mongolia, China (NE, NC).

Dasypoda japonica Cockerell, 1911. Russia: **ES** (BR), **FE** (KH, PR). – China (NC), Korean Peninsula, Japan (Hon, Kyu).

Dasypoda morawitzi Radchenko, 2016 (?*D. hirtipes minor* Morawitz, 1874). Russia: **EP** (NW, E, S, NC, CR), **UR**. – Europe (EE), Turkey, Kazakhstan.

Dasypoda spinigera Kohl, 1905. Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Armenia, Turkey.

Dasypoda suripes (Christ, 1791) [*Apis*] (*Apis laniger* Christ, 1791; *Dasypoda speetabilis* Rudow, 1881; *D. aurata* Rudow, 1881; *D. leueoura* Rudow, 1882; *D. mixta* Radoszkowski, 1887; *D. thomsoni* Schletterer, 1890). Russia: **EP** (C, E, NC, CR), **UR**. – Europe (WE, NE, SE, EE), Turkey.

Dasypoda toroki Michez, 2004. Russia: **EP** (CR). – Turkey, Syria, Israel.

Subfamily MELITTINAE

MACROPIS Panzer, 1809. Type species *Megilla labiata* Fabricius, 1805 (= *Megilla fulvipes* Fabricius, 1804). The Holarctic genus *Macropis* Panzer comprises 16 recognized species of bees (Michez, Patiny, 2005). All species of the genus are believed to be strictly oligolectic and are specialized in collecting pollen exclusively from flowers of *Lysimachia* (Primulaceae). Number of taxa: World – 16; Palearctic – 13; Russia – 4.

Macropis (Macropis) dimidiata amurensis Popov, 1958 (*M. fulvipes amurensis* Popov, 1958). Russia: **ES** (BR, ZB), **FE** (AM, KH, PR).

Macropis (Macropis) europaea Warncke, 1973 (*M. labiata* auct., nec Fabricius, 1804). Russia: **EP** (NW, C,

- E, S, NC, CR), **UR, WS** (TM, AL). – Europe (WE, NE, SE, EE), Turkey.
- Macropis (Macropis) fulvipes** (Fabricius, 1804) [Megilla] (*Megilla labiata* Fabricius, 1805). Russia: **EP** (NW, C, E, S, NC, CR), **UR, WS** (TM, AL), **ES** (KS, KR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Kazakhstan, Mongolia.
- Macropis (Paramacropis) ussuriana** (Popov, 1936) [Ctenoplectra]. Russia: **FE** (KH, PR). – China (NE).
- MELITTA** Kirby, 1802 (*Cilissa* Leach, 1812; *Kirbya* Lepeletier de Saint Fargeau, 1841; *Pseudocilissa* Radoszkowski, 1891; *Brachycephalapis* Viereck, 1909). Type species *Melitta tricincta* Kirby, 1802. The most of species occur in the Palaearctic and a few species in southern and East Africa, and in the Nearctic; nest in the soil and many species are oligolectic. Number of taxa: World – 48; Palaearctic – 30; Russia – 13.
- Melitta budashkini** Radchenko et Ivanov, 2012. Russia: **EP** (CR).
- Melitta budensis** (Mocsáry, 1878) [Cilissa]. Russia: **EP** (S, CR). – Europe (SE, EE), Armenia, Turkey, Kazakhstan.
- Melitta ezoana** Yasumatsu et Hirashima, 1956 (*M. sinensis* Wu, 1978). Russia: **FE** (PR). – China (NE, NC), Korean Peninsula, Japan (Hok, Hon).
- Melitta dimidiata** Morawitz, 1876 (*Cilissa robusta* Radoszkowski, 1876; *C. dimidiata* var. *hungaria* Mocsáry, 1883). Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), Caucasus, Turkey, Iran, Central Asia, Kazakhstan.
- Melitta haemorrhoidalis** (Fabricius, 1775) [Andrena] (*Apis dichroa* Gmelin, 1790; *Melitta chrysur* Kirby, 1802; *Cilissa nigra* Friese, 1885). Russia: **EP** (NW, C, E, NC, CR), **UR**. – Europe (WE, NE, SE, EE), Armenia, Turkey.
- Melitta japonica** Yasumatsu et Hirashima, 1956 (*M. taishanensis* Wu, 1978). Russia: **WS** (NS), **ES** (ZB), **FE** (PR). – China (NC), Japan (Hok, Hon).
- Melitta latronis** Cockerell, 1924. Russia: **FE** (PR). This species even not mentioned since description and requires the revision.
- Melitta leporina** (Panzer, 1799) [Apis] (*Andrena fortipes* Imhoff, 1832; *Cilissa ruthenica* Radoszkowski, 1891; *Melitta centaureae* Torka, 1922; *M. leporina* var. *nigrinotum* Alfken, 1927; *M. sinkiangensis* Wu, 1978). Russia: **EP** (NW, C, E, NC, CR), **UR, WS** (AL). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia, China (NW).
- Melitta melanura** (Nylander, 1852) [Kirbya] (*Cilissa wankowiczi* Radoszkowski, 1891). Russia: **EP** (C, S, NC, CR), **UR**. – Europe (WE, NE, EE), Armenia, Turkey, Mongolia.
- Melitta nigricans** Alfken, 1905. Russia: **EP** (C, S, CR), **UR**. – Europe (WE, SE, EE), N Africa, Turkey.
- Melitta sibirica** (Morawitz, 1888) [Cilissa] (*M. albofasciata* Friese, 1900; *Cilissa alticola* Hedicke, 1938; *Melitta borealis* Wu, 2000; *M. quinghaiensis* Wu, 2000). Russia: **EP** (E), **ES** (KR). – Tajikistan, Kyrgyzstan, Mongolia, China (NC), India.
- Melitta tricincta** Kirby, 1802 (*Andrena microstigma* Eversmann, 1852; *A. quadricincta* Eversmann, 1852; *Melitta meridionalis* Hedicke, 1933). Russia: **EP** (C, E, S, NC, CR), **UR, ES** (IR, BR, YA, ZB), **FE** (KH). – Europe (WE, NE, SE, EE), Kazakhstan, China (WP).
- Melitta udmurtica** Sitdikov, 1986. Russia: **EP** (E), **UR**. – Europe (EE).

77. FAMILY MEGACHILIDAE

M.YU. PROSHCHALYKIN AND A.V. FATERYGA

The family Megachilidae is one of the largest families of the bees. Megachilid bees are found in a wide diversity of habitats on all continents except Antarctica, ranging from lowland tropical rain forests to deserts or alpine environments. Bees of this family have high morphological diversity, broad range of trophic links, and extreme diversity of nesting behavior among all bee families. These solitary bees are both ecologically and economically relevant; they include many pollinators of natural, urban and agricultural vegetation. For example, *Megachile rotundata* has been introduced into many parts of the world as a pollinator of alfalfa (*Medicago sativa*, Fabaceae); several species of the genus *Osmia* is widely used for pollination of orchards (*Prunus* s. l., Malus, and Pyrus, Rosaceae) and some warmhouse plants (*Fragaria ananassa*, Rosaceae; *Cucumis sativus*, Cucurbitaceae). Megachilidae also contains a large number of cleptoparasitic bees (19 genera, including the entire tribe Dioxyini). Number of taxa: World – 76 genera, 4096 species; Palaearctic – 36/1100; Russia – 18/198.

References. Popov, 1933b; Nikiforuk, 1957; Pesenko, 1971; Sedykh, 1974; Osytshnjuk et al., 1978; Dathe, 1980b; Warncke, 1980; Sitdikov, 1986; Romanova, 1995a; Banaszak, Romasenko, 2001; Proshchalykin, Lelej, 2004; Humala, 2006; Proshchalykin, 2006, 2007d,f, 2009a, 2012a,b, 2013a,b, 2014b; Levchenko, 2007; Michener, 2007; Praz et al., 2008; Kuznetsova, 2009; Aguib et al., 2010; Humala, Polevoi, 2011; Gonzalez et al., 2012; Levchenko, Tomkovich, 2014; Kasperek, 2015; Paukkunen, Kozlov, 2015; Yakovleva, 2015; Litman et al., 2016; Trunz et al., 2016; Ascher, Pickering, 2017; Fateryga, 2017b; Fateryga, Popov, 2017; Johansson, Paukkunen, 2017; Kuhlmann et al., 2017; Müller, 2017; Praz, 2017; Rasmont et al., 2017; Proshchalykin et al., 2017a; Fateryga et al., 2018.

Subfamily MEGACHILINAE

Tribe LITHURGINI

LITHURGUS Berthold, 1827 (*Lithurge* Latreille, 1825; *Liturgus* (!): Ashmead, 1899). Type species *Andrena cornuta* Fabricius, 1787. The genus is widely distributed in the Palaearctic, Neotropical, Oriental, and Australian regions. Species of the subgenus *Lithurgus* s. str. are floral specialists,

some on Malvaceae, others on Asteraceae. Number of taxa: World – 26; Palaearctic – 15; Russia – 2.

Lithurgus (Lithurgus) chrysurus Fonscolombe, 1834 (*L. analis* Lepeletier de Saint-Fargeau, 1841; *L. haemorrhoidalis* Lepeletier de Saint-Fargeau, 1841; *L. sublaevis* Pérez, 1897; *L. cornutus* auct.). Russia: **EP** (C, CR), **UR**. – Europe (WE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Syria, Israel, Iran, ?Central Asia, N America (introduced).

Lithurgus (Lithurgus) cornutus (Fabricius, 1787) [*Andrena*] (*L. umbraculatus* Lepeletier de Saint-Fargeau, 1841; *L. fuseipennis* Lepeletier de Saint-Fargeau, 1841; *L. nasutus* Dufour, 1849; *Megachile monoceros* Eversmann, 1852; *M. dohrni* Radoszkowski, 1862; *Lithurgus maximus* Radoszkowski, 1872; *L. cornutus* var. *obscurus* Cockerell, 1931). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (KM, AL), **ES** (KS, KR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, Uzbekistan, Kyrgyzstan, Kazakhstan, N America (introduced).

Tribe OSMIINI

CHELOSTOMA Latreille, 1809. Type species *Apis maxillosa* Linnaeus, 1767. The genus is widespread in the Holarctic region, ranging across North America and western and central Eurasia, but is unknown in Japan. It extends south to northern Mexico, northern Africa, and into the montane tropics in northeast India, Burma, and Thailand. Many and perhaps all species are oligolectic on particular floral taxa. Number of species: World – 54; Palaearctic – 45; Russia – 6.

Chelostoma (Chelostoma) florisonne (Linnaeus, 1758) [*Apis*] (*Apis maxillosa* Linnaeus, 1767; *Chelostoma culmorum* Lepeletier de Saint-Fargeau, 1841; *Heriades parumcristatus* Alfken, 1932). Russia: **EP** (NW, C, E, NC, CR), **UR**. – Europe (WE, NE, SE, EE), Georgia, Armenia, Turkey.

Chelostoma (Chelostoma) mocsaryi Schletterer, 1889. Russia: **EP** (CR). – Europe (WE, SE, EE), Caucasus, Turkey, Lebanon, Israel.

Chelostoma (Foveosmia) campanularum (Kirby, 1802) [*Apis*] (*Apis florisonnis minima* Christ, 1791, nom. praecoc., nec Poda, 1761; *Chelostoma florisonne* auct.). Russia: **EP** (C, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, N America (introduced).

- Chelostoma (Foveosmia) distinctum** (Stoeckhert, 1929) [Eriades] (*Heriades cantabrica* Benoist, 1935). Russia: **EP** (C, S, CR), **UR**. – Europe (WE, SE, EE), Azerbaijan, Turkey, Israel, Iran.
- Chelostoma (Foveosmia) foveolatum** (Morawitz, 1868) [Eriades]. Russia: **EP** (S, NC, ?CR), **ES** (KR), **FE** (AM, MG). – Europe (WE, SE, EE), Georgia, Turkey, Iran.
- Chelostoma (Gyrodromella) rapunculi** (Lepeletier de Saint-Fargeau, 1841) [Eriades] (*Apis fuliginosa* Panzer, 1798, nom. praeocc., nec Scopoli, 1770, nec Christ, 1791; *Heriades nigricornis* Nylander, 1848; *Chelostoma inerme* Eversmann, 1852; *Heriades casularum* Chevrier, 1872; *Chelostoma proximum* Schletterer, 1889; *Osmia archanensis* Cockerell, 1928; *O. platyodontia* Cockerell, 1928; *Heriades confusa* Benoist, 1934). Russia: **EP** (N, C, E, S, NC, CR), **UR**, **WS** (TK, KM, AL), **ES** (KS, KR, IR, BR), **FE** (AM, KH, SA). – Europe (WE, NE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Syria, Jordan, Israel, Iran, Central Asia, Kazakhstan, Mongolia, China (NE), N America (introduced).
- HERIADES** Spinola, 1808 (*Trypetes* Schenck, 1861; *Eriades* Spinola, 1895; *Orientalheriades* Gupta, 1987). Type species *Apis truncorum* Linnaeus, 1758. The genus has a wide distribution, it occurs in the Palaearctic, Nearctic, Afrotropical, and Oriental regions. The great majority of species nest in preexisting cavities, mainly in insect burrows in dead wood or in hollow stems. Number of species: World – 137; Palaearctic – 22; Russia – 3.
- Heriades (Heriades) crenulata** Nylander, 1856. Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Kazakhstan.
- Heriades (Heriades) rubicola** Pérez, 1890 (*H. copeitica* Morawitz, 1892; *H. crenulatus aurantifer* Cockerell, 1931; *H. hierosolomita* Benoist, 1935). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Turkey, Syria, Jordan, Israel, Turkmenistan, Kyrgyzstan, Kazakhstan.
- Heriades (Heriades) truncorum** (Linnaeus, 1758) [Apis] (*Apis xanthogastria* Schrank, 1802; *Heriades sinuata* Spinola, 1808; *Osmia punctatissima* Lepeletier de Saint-Fargeau, 1841; *Heriades mordax* Schletterer, 1889). Russia: **EP** (N, C, E, S, NC, CR), **UR**, **FE** (AM, PR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Syria, Lebanon, Israel, Iran, Uzbekistan, Kyrgyzstan, Kazakhstan, N America (introduced).
- HOPLITIS** Klug, 1807 (*Ctenosmia* Thomson, 1872; *Bytinskia* Mavromoustakis, 1954; *Annosmia* Warncke, 1991; *Coloplitis* Griswold, 1998). Type species *Apis aduncta* Panzer, 1798. The genus is distributed in the Palaearctic, Nearctic, and Afrotropical regions, a few species also occur in the Oriental region. Number of species: World – 376; Palaearctic – 300; Russia – 28.
- Hoplitis (Alcidamea) acuticornis** (Dufour et Perris, 1840) [Osmia] (*Osmia dentiventris* Morawitz, 1877). Russia: **EP** (E, NC, CR), **UR**, **WS** (KM), **ES** (KR). – Europe (WE, SE, EE), N Africa, Armenia, Turkey, Syria, Jordan, Israel, Iran, Turkmenistan, Tajikistan, Kyrgyzstan, Kazakhstan.
- Hoplitis (Alcidamea) caularis** (Morawitz, 1875) [Osmia] (*Osmia proxima* Morawitz, 1875; *O. turcestanica* Dalla Torre, 1896). Russia: **EP** (NC, CR), **UR**. – Europe (EE), Turkey, Syria, Central Asia, Kazakstan, China.
- Hoplitis (Alcidamea) claviventris** (Thomson, 1872) [Osmia] (*Osmia interrupta* Schenck, 1861, nom. praeocc., nec Latreille, 1811; *O. foveolata* Schenck, 1873, nom. praeocc., nec Morawitz, 1868; *Hoplitis leucomelana* auct.). Russia: **EP** (C, CR), **WS** (KM). – Europe (WE, NE, SE, EE), Turkey, Kazakhstan, Mongolia, China.
- Hoplitis (Alcidamea) fulva** (Eversmann, 1852) [Osmia] (*Osmia grandis* Morawitz, 1872). Russia: **EP** (E, CR), **UR**, **ES** (TU, IR, ZB). – Europe (EE), Armenia, Azerbaijan, Turkey, Syria, Jordan, Kazakhstan, Mongolia, China (NE).
- Hoplitis (Alcidamea) laboriosa** (Smith, 1878) [Osmia] (*Osmia maculata* Morawitz, 1880; *O. magretti* Ducke, 1899). Russia: **EP** (Müller, 2017). – Kazakhstan, Mongolia, China (WP).
- Hoplitis (Alcidamea) leucomelana** (Kirby, 1802) [Osmia] (*Apis caulicola* Schrank, 1802; *A. zonata* Gravenhorst, 1807; *Osmia parvula* Dufour et Perris, 1840; *Heriades bidenticulata* Costa, 1863; *Hoplitis leucomelaena* (!): Romankova, 1995a). Russia: **EP** (N, C, E, S, NC, CR), **UR**, **WS** (KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Iran, Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia, China (SW).
- Hoplitis (Alcidamea) mitis** (Nylander, 1852) [Osmia] (*Osmia montivaga* Morawitz, 1872; *O. laevifrons* Pérez, 1879, nom. praeocc., nec Morawitz, 1872). Russia: **EP** (CR), **UR**, **WS** (KM), **ES** (KR). – Europe (WE, SE, EE), Armenia, Kazakhstan, Mongolia.

- Hoplitis (Alcidamea) praestans** (Morawitz, 1893) [Osmia] (*Osmia lineola* Pérez, 1895). Russia: **EP** (S, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Jordan, Israel, Iran, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan.
- Hoplitis (Alcidamea) princeps** (Morawitz, 1872) [Osmia]. Russia: **EP** (S, CR), **UR**, **ES** (BR). – Europe (EE), Kazakhstan, Mongolia, China (NW, WP).
- Hoplitis (Alcidamea) scita** (Eversmann, 1852) [Osmia] (*Osmia rubripes* Smith, 1879). Russia: **ES** (TU, IR, BR), **FE** (AM, KH, PR). – Kyrgyzstan, Mongolia, China (NW).
- Hoplitis (Alcidamea) tridentata** (Dufour et Perris, 1840) [Osmia] (*Osmia melanoleuca* Benoist, 1934; *Hoplitis tridentata asensioi* Tkalců, 1975). Russia: **EP** (C, E, NC, CR), **UR**, **WS** (KM, AL). – Europe (WE, SE, EE), N Africa, Georgia, Armenia, Turkey, Syria, Israel, Iran, Uzbekistan, Kyrgyzstan, Kazakhstan.
- Hoplitis (Alcidamea) tuberculata** (Nylander, 1848) [Osmia] (*Osmia hamata* Eversmann, 1852; *Chelostoma signatum* Eversmann, 1852, nom. praecoc., nec Erichson, 1835; *Osmia macrodonta* Cockerell, 1924; *O. amaguensis* Cockerell, 1924). Russia: **EP** (N, C, E), **UR**, **WS** (TM, KM), **ES** (IR, YA, ZB), **FE** (MG, AM, KH). – Europe (WE, NE, SE, EE), Mongolia, China.
- Hoplitis (Anthocopa) caucasicola** Müller, 2012. Russia: **EP** (S). – Georgia, Turkey.
- Hoplitis (Anthocopa) daurica** (Radoszkowski, 1887) [Osmia]. Russia: **ES** (BR).
- Hoplitis (Anthocopa) jakovlevi** (Radoszkowski, 1874) [Pseudosmia] (*Osmia serrilabris* Morawitz, 1875; *O. quadridentata* Fonscombe, 1879). Russia: **EP** (S, CR). – Europe (WE, SE), N Africa, Armenia, Azerbaijan, Turkey, Iran, Turkmenistan, Tajikistan, Kyrgyzstan, Kazakhstan, China.
- Hoplitis (Anthocopa) mocsaryi** (Friese, 1895) [Osmia]. Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Armenia, Turkey, Israel, Iran.
- Hoplitis (Anthocopa) papaveris** (Latreille, 1799) [Apis] (*Osmia hyalinipennis* Lepeletier de Saint-Fargeau, 1841). Russia: **EP** (C, NC, CR), **UR**, **ES** (BR). – Europe (WE, SE, EE), Caucasus, Turkey, Kazakhstan, China.
- Hoplitis (Anthocopa) saxialis** (van der Zanden, 1994) [Anthocopa]. Russia: **EP** (NC). – Europe (SE), Turkey, Iran.
- Hoplitis (Anthocopa) taurica** (Radoszkowski, 1874) [Pseudosmia]. Russia: **EP** (CR). This species was even not mentioned since description and requires the revision.
- Hoplitis (Anthocopa) villosa** (Schenck, 1853) [Megachile] (*Osmia platycera* Gerstäcker, 1869). Russia: **EP** (Müller, 2017). – Europe (WE, SE, EE).
- Hoplitis (Formicapis) maritima** (Romankova, 1985) [Formicapis]. Russia: **FE** (PR). – Mongolia.
- Hoplitis (Formicapis) robusta** (Nylander, 1848) [Heriades] (*Osmia rhinoceros* Giraud, 1861; *Heriades trinacria* Morawitz, 1869; *Formicapis clypeata* Sladen, 1916). Russia: **ES** (IR, YA, ZB), **FE** (AM, MG, CH). – Europe (WE, NE, SE, EE), Mongolia, China (NE), N America.
- Hoplitis (Hoplitis) adunca** (Panzer, 1798) [Apis] (*Osmia spinolae* Lepeletier de Saint-Fargeau, 1841; *O. aduncoides* Strand, 1910; *O. adunca contrario* Tkalců, 1974). Russia: **EP** (C, S, NC, ?CR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Turkmenistan, Kyrgyzstan.
- Hoplitis (Hoplitis) anthocopoides** (Schenck, 1853) [Osmia] (*Osmia caementaria* Gerstäcker, 1869; *O. hybrida* Pérez, 1879; *O. romana* Morice, 1901; *Fertonella algerica* Benoist, 1969). Russia: **EP** (S, NC, CR). – Europe (WE, NE, SE, EE), N Africa, Armenia, N America (introduced).
- Hoplitis (Hoplitis) manicata** Morice, 1901. Russia: **EP** (CR). – Europe (WE, SE, EE), ?N Africa, Caucasus, Turkey.
- Hoplitis (Hoplitis) ravouxi** (Pérez, 1902) [Osmia] (*Osmia rhinotropis* Pérez, 1902; *O. brachyceros* Blüthgen, 1920; *Hoplitis ebmeri* van der Zanden, 1989). Russia: **EP** (CR). – Europe (WE, SE, EE).
- Hoplitis (Pentadentosmia) laevifrons** (Morawitz, 1872) [Osmia]. Russia: ?**EP**, **UR**. – Europe (WE, SE, EE), Armenia, Turkey, Pakistan, India.
- Hoplitis (Pentadentosmia) nitidula** (Morawitz, 1877) [Osmia] (*Osmia transcaspica* Morawitz, 1888). Russia: **EP** (S). – Armenia, Iran, Pakistan, Kazakhstan.
- OSMIA** Panzer, 1806 (*Amblys* Klug, 1807; *Ceratosmia* Thomson, 1872; *Aceratosmia* Schmiedeknecht, 1885; *Pachyosmia* Ducke, 1900; *Monosmia* Tkalců, 1974; *Orientosmia* Peters, 1978). Type species *Apis bicornis* Linnaeus, 1758. The genus is distributed in the Palaearctic and Nearctic regions, a few species also occur in the Oriental and Neotropical regions. Number of species: World – 339; Palaearctic – 204; Russia – 44.
- Osmia (Allosmia) rufohirta** Latreille, 1811 (*O. fulvohirta* Lepeletier de Saint-Fargeau, 1841;

- O. spineventris* Giraud, 1857). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Georgia, Armenia, Turkey, Syria, Jordan, Israel, Iran, China.
- Osmia (Erythrosmia) andreoides** Spinola, 1808. Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Georgia, Turkey, Syria, Jordan, Israel, Iran.
- Osmia (Helicosmia) aurulenta** (Panzer, 1799) [Apis] (*Apis haematopoda* Panzer, 1801; *Osmia marginella* Lepeletier de Saint-Fargeau, 1841). Russia: **EP** (C, E, S, NC, CR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Lebanon, Iran.
- Osmia (Helicosmia) caerulescens** (Linnaeus, 1758) [Apis] (*Apis aenea* Linnaeus, 1761; *A. superbus* Harris, 1776; *A. muraria* Retzius, 1783, nom. praeocc., nec Geoffroy, 1785, nec Olivier, 1789; *A. cuprea* Geoffroy, 1785; *Andrena cupraria* Walckenaer, 1802; *Osmia rustica* Cresson, 1864, nom. praeocc., nec Geoffroy, 1785; *O. purpurea* Cresson, 1864). Russia: **EP** (C, E, S, NC, CR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Syria, Jordan, Israel, Iran, Central Asia, Kazakhstan, China, India, N America (introduced), New Zealand (introduced).
- Osmia (Helicosmia) cyanescens** Morawitz, 1875. Russia: **EP** (Müller, 2017). – Kyrgyzstzn, Tajikistan, Kazakhstan.
- Osmia (Helicosmia) dimidiata** Morawitz, 1870. Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Lebanon, Israel, Iran, Turkmenistan, Kyrgyzstan.
- Osmia (Helicosmia) leaiana** (Kirby, 1802) [Apis] (*Apis hirta* Geoffroy, 1785, nom. praeocc., nec Schrank, 1781; *Osmia atra* Schenck, 1853; *O. confusa* Morawitz, 1869; *O. solskyi* Morawitz, 1870; *O. truncatula* Thomson, 1872; *O. bidens* Pérez, 1879; *O. forsii* Alfken, 1924). Russia: **EP** (C, E, NC, CR), **UR**, **WS** (KM), **ES** (IR, YA, ZB), **FE** (KH, SA). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Iran, Kazakhstan.
- Osmia (Helicosmia) melanogaster** Spinola, 1808 (*O. aterrima* Morawitz, 1872; *O. carniolica* Morawitz, 1872; *O. incerta* Radoszkowski, 1876). Russia: **EP** (NC, CR). – Europe (WE, NE, SE, EE), N Africa, Georgia, Armenia, Turkey, Syria, Jordan, Israel, Iran, ?China.
- Osmia (Helicosmia) niveata** (Fabricius, 1804) [Anthophora] (*Apis fulviventris* Panzer, 1798, nom. praeocc., nec Scopoli, 1763; *Osmia minuta* Branson, 1879; *O. sieversi* Morawitz, 1886; *O. carneiventris* Dours, 1887; *O. fulviventris albiscopa* Alfken, 1914). Russia: **EP** (C, S, NC, CR). – Europe (WE, NE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Syria, Jordan, Lebanon, Israel, Iran, ?China.
- Osmia (Helicosmia) orientalis** Benoist, 1929. Russia: **FE** (AM, KH, PR, SA). – Japan (Hon, Shi, Kyu).
- Osmia (Helicosmia) signata** Erichson, 1835 (*O. jucunda* Smith, 1853; *O. vidua* Gerstäcker, 1869; *O. cincta* Dours, 1873; *O. laticincta* Pérez, 1879; *O. atriventris* Costa, 1883, nom. praeocc., nec Cresson, 1864; *O. costaniana* Dalla Torre et Friese, 1895). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Turkey, Syria, Jordan, Israel, Iran, Turkmenistan, China.
- Osmia (Hemiosmia) difficilis** Morawitz, 1875 (*O. falcata* Morawitz, 1875; *O. alborufa* Alfken, 1935). Russia (Müller, 2017). – Turkey, Israel, Iran, Central Asia, Kazakhstan.
- Osmia (Hoplosmia) bidentata** Morawitz, 1876 (*O. affinis* Frivaldsky, 1877). Russia: **EP** (S, CR). – Europe (WE, SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Syria, Jordan, Israel, Iran.
- Osmia (Hoplosmia) scutellaris** Morawitz, 1868 (*Heriades integra* Benoist, 1934). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Syria, Jordan, Israel, Iran.
- Osmia (Hoplosmia) spinulosa** (Kirby, 1802) [Apis] (*O. euchreiformis* Radoszkowski, 1882). Russia: **EP** (C, S, NC, CR), **UR**, **WS** (KM, AL), **ES** (KS). – Europe (WE, SE, EE), Armenia, Turkey, Kyrgyzstan, Kazakhstan.
- Osmia (Melanosmia) disjuncta** Tkalců, 1995. Russia: **EP** (N). – Europe (NE), Mongolia.
- Osmia (Melanosmia) ephippiata** Smith, 1879. Russia: **ES** (IR). – Central Asia.
- Osmia (Melanosmia) inermis** (Zetterstedt, 1838) [Anthophora] (*O. globosa* Cresson, 1864; *O. vulpecula* Gerstäcker, 1869; *O. globosiformis* Cockerell, 1910). Russia: **EP** (N, C). – Europe (WE, NE, SE, EE), China, N America.
- Osmia (Melanosmia) laticeps** Thomson, 1872 (*O. hyperborea* Tkalců, 1983). Russia: **EP** (N). – Europe (WE, NE, EE), N America.
- Osmia (Melanosmia) maritima** Friese, 1885. Russia: **EP** (N, C, E), **ES** (TU, KR, BR, YA, ZB), **FE** (KH, PR, SA, KA, CH). – Europe (WE, NE, EE), Mongolia, N America.
- Osmia (Melanosmia) nigriventris** (Zetterstedt, 1838) [Anthophora] (*O. baicalensis* Radoszkowski, 1867; *O. corticalis* Gerstäcker, 1869). Russia: **EP** (N, E, NC), **UR**, **WS** (TM), **ES** (BR, YA), **FE** (AM, KH, PR, SA, KA, MG, CH). – Europe (WE, NE, EE), Mongolia, China, N America.

- Osmia (Melanosmia) parietina** Curtis, 1828 (*Anthophora angustula* Zetterstedt, 1838; *Osmia vankovitzii* Radoszkowski, 1887). Russia: **EP** (C), **UR**, **WS** (TM, KM), **FE** (MG). – Europe (WE, NE, SE, EE), Caucasus, Turkey.
- Osmia (Melanosmia) pilicornis** Smith, 1846. Russia: **EP** (C, E), **UR**, **WS** (KM). – Europe (WE, NE, SE, EE), ?China (NE).
- Osmia (Melanosmia) uncinata** Gerstäcker, 1869. Russia: **EP** (N, C, E), **WS** (TM, KM), **ES** (IR, YA, ZB), **FE** (AM, KH, PR, MG, CH). – Europe (WE, NE, SE, EE).
- Osmia (Melanosmia) xanthomelana** (Kirby, 1802) [Apis] (*O. fuciformis* Latreille, 1811; *O. chrysolelina* Panzer, 1812). Russia: **EP** (N), **UR**. – Europe (WE, NE, SE, EE).
- Osmia (Metallinella) brevicornis** (Fabricius, 1798) [Eucera] (*O. atrocaerulea* Schilling, 1849; *O. panzeri* Morawitz, 1869). Russia: **EP** (S, NC, CR). – Europe (WE, NE, SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Iran, Afghanistan, Central Asia, Kazakhstan.
- Osmia (Neosmia) bicolor** (Schrank, 1781) [Apis] (*Apis rustica* Geoffroy, 1785; *A. fusca* Christ, 1971; *A. hirundinaria* Christ, 1791; *Osmia pyrenaica* Lepelletier de Saint-Fargeau, 1841; *O. fusca* Gistel, 1857; *O. rufitarsis* Smith, 1879). Russia: **EP** (C, E), **WS** (KM), **ES** (IR). – Europe (WE, NE, SE, EE), Central Asia.
- Osmia (Osmia) apicata** Smith, 1853 (*O. macroglossa* Gerstäcker, 1869). Russia (Müller, 2017). – Europe (WE, NE, EE), Georgia, Armenia, Turkey, Syria, Jordan, Lebanon, Israel, Iran.
- Osmia (Osmia) bicornis** (Linnaeus, 1758) [Apis] (*Apis rufa* Linnaeus, 1758). Russia: **EP** (N, C, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Syria, Israel, Iran, Turkmenistan, Kyrgyzstan, Kazakhstan.
- Osmia (Osmia) cerinthidis** Morawitz, 1876. Russia: **EP** (S, NC, CR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, ?China.
- Osmia (Osmia) cornifrons** (Radoszkowski, 1887) [Clalicodoma]. Russia: **FE** (KH, PR). – China, Korean Peninsula, Japan (Hok, Hon), N America (introduced).
- Osmia (Osmia) cornuta** (Latreille, 1805) [Megachile]. Russia: **EP** (S, CR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Syria, Iran, Central Asia, Kazakhstan.
- Osmia (Osmia) melanocephala** Morawitz, 1875. Russia (Müller, 2017). – Central Asia, Kazakhstan, Mongolia, China (NW).
- Osmia (Osmia) mustelina** Gerstäcker, 1869. Russia: **EP** (CR). – Europe (WE, SE, EE), N Africa, Georgia, Armenia, Turkey, Lebanon, Israel, Iran.
- Osmia (Osmia) opima** Romankova, 1985. Russia: **FE** (KH, PR). – China (NE, NC), Korean Peninsula.
- Osmia (Osmia) pedicornis** Cockerell, 1920. Russia: **FE** (KH, PR). – China (CE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Osmia (Osmia) taurus** Smith, 1873 (*O. matsumurae* Cockerell, 1911). Russia: **FE** (KH, PR). – China (NE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Osmia (Pyrosmia) cephalotes** Morawitz, 1870 (*O. longiceps* Morawitz, 1876; *O. bacillus* Pérez, 1879; *O. pulsata* Buysson, 1899). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Syria, Jordan, Israel, Iran, Turkmenistan, Uzbekistan.
- Osmia (Pyrosmia) gallarum** Spinola, 1808 (*O. ruborum* Dufour et Perris, 1840). Russia: **EP** (CR). – Europe (WE, SE, EE), N Africa, Turkey.
- Osmia (Pyrosmia) nana** Morawitz, 1874 (*O. tetradonta* Benoist, 1934). Russia: **EP** (S, NC). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Syria, Jordan, Lebanon, Israel, Turkmenistan.
- Osmia (Pyrosmia) submicans** Morawitz, 1870 (*O. giraudi* Schmiedeknecht, 1886). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Turkey, Syria, Jordan, Lebanon, Israel, Kazakhstan.
- Osmia (Pyrosmia) versicolor** Latreille, 1811. Russia: **EP** (CR). – Europe (WE, SE, EE), N Africa, Georgia, Turkey, Syria, Jordan, Lebanon, Israel.
- Osmia (Pyrosmia) viridana** Morawitz, 1874 (*O. angulata* Pérez, 1896; *O. veridata mulleolus* van der Zanden, 1984). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Syria, Jordan, Lebanon, Israel, Iran, Central Asia, Kazakhstan.
- Osmia (Tergosmia) tergestensis** Ducke, 1897 (*O. ononides* Fertton, 1897; *O. rondoui* Pérez, 1902; *O. wolhynica* Noskiewicz, 1922; *O. atlantica* Benoist, 1934; *Anthocopa tergestensis remota* Tkalců, 1979). Russia: **EP** (CR). – Europe (WE, SE, EE), N Africa, Turkey, Kazakhstan.
- PROTOSMIA** Ducke, 1900 (*Rhodosmia* Michener, 1943). Type species *Heriades glutinosus* Giraud, 1871. The genus is mainly distributed in the

Palearctic region with one species each occurring in the Nearctic and Oriental regions. Number of species: World – 27; Palearctic – 25; Russia – 2.

Protosmia (Protosmia) tauricola Popov, 1961. Russia: **EP** (CR). – Europe (SE, EE), Turkey.

Protosmia (Protosmia) tiflensis (Morawitz, 1876) [Osmia] (*Osmia graeffei* Schmiedeknecht, 1890). Russia: **EP** (CR). – Europe (SE, EE), Georgia, Turkey, Jordan, Israel.

Tribe ANTHIDIINI

ANTHIDIELLUM Cockerell, 1904 (*Cerianthidium* Friese, 1923). Type species *Trachusa strigata* Panzer, 1805. The genus is widely distributed in the Palearctic, Neotropical, Oriental, and Australian regions. Number of species: World – 61; Palearctic – 7; Russia – 1.

Anthidiellum (Anthidiellum) strigatum (Panzer, 1805) [Trachusa] (*Anthidium minusculum* Nylander, 1852; *A. decoratum* Chevrier, 1972; *Dianthidium leucorhinum* Cockerell, 1924; *Anthidiellum pauperulum* Cockerell, 1928). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (NS, KM, AL), **ES** (IR, BR, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Syria, Lebanon, Israel, Iraq, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Korean Peninsula.

ANTHIDIUM Fabricius, 1804 (*Stenanthidium* Moure, 1947; *Tetranthidium* Moure, 1947; *Melanthidium* Cockerell, 1947; *Melanoanthidium* Tkalců, 1967; *Echinanthidium* Pasteels, 1969; *Pontanthidium* Pasteels, 1969; *Ardenthidium* Pasteels, 1969; *Morphanthidium* Pasteels, 1969). Type species *Apis manicata* Linnaeus, 1758. The genus is distributed worldwide except Australia. Number of species: World – 186; Palearctic – 90; Russia – 11.

Anthidium (Anthidium) amurensis Radoszkowski, 1876 (*A. comatum* Morawitz, 1896). Russia: **ES** (KH, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR). – China (NW, NC).

Anthidium (Anthidium) cingulatum Latreille, 1809 (*A. oraniense* Lepeletier de Saint-Fargeau, 1841; *A. dissectum* Eversmann, 1852; *A. rufispinum* Costa, 1883; *A. manicatum* var. *undulatafasciatum* Friese, 1917). Russia: **EP** (C, S, CR), **UR**. – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Iran, Kyrgyzstan, Uzbekistan, Kazakhstan, China (NW), India.

Anthidium (Anthidium) diadema Latreille, 1809 (*A. albiventre* Lepeletier de Saint-Fargeau, 1841; *A. ornatum* Lepeletier de Saint-Fargeau, 1841; *A. radoszkowskyi* Mocsáry, 1887; *A. seraxense* Radoszkowski, 1893; *A. terminale* Morawitz, 1894; *A. diadema* var. *caucasicum* Friese, 1897; *A. diadema* var. *turcestanicum* Friese, 1897; *A. diadema* var. *obscurum* Friese, 1897). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Israel, Iran, Central Asia, Kazakhstan.

Anthidium (Anthidium) florentinum (Fabricius, 1775) [Apis] (*A. subspinosum* Klug, 1832; *A. caucasicum* Radoszkowski, 1862; *A. florentinum* var. *hispanicum* Mocsáry, 1884; *A. florentinum* var. *ruiescente* Dusmet, 1908; *A. florentinum* var. *kissi* Alfken, 1935; *A. florentinum cypriacum* Mavromoustakis, 1949). Russia: **EP** (C, S, NC, CR), **WS** (NS, AL), **ES** (BR), **FE** (PR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Syria, Lebanon, Israel, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, China (NW).

Anthidium (Anthidium) loti Perris, 1852 (*Apis variegata* Fabricius, 1781, nom. praeocc., nec Linnaeus, 1758; *A. varia* Gmelin, 1790, nom. praeocc., nec Olivier, 1789; *Anthidium regulare* Eversmann, 1852; *A. mosaicum* Costa, 1863; *A. meridionale* Glraud, 1863; *A. quadriseriatum* Kriechbaumer, 1873; *A. quadriseriatum* var. *circumcinctum* Kriechbaumer, 1873; *A. variegatum* var. *incisum* Friese, 1917). Russia: **EP** (CR), **UR**. – Europe (WE, SE, EE), Azerbaijan, Turkey, Syria, Lebanon, Israel, Iran, Turkmenistan, Kazakhstan.

Anthidium (Anthidium) manicatum (Linnaeus, 1758) [Apis] (?*Apis pervigil* Harris, 1776; *A. maculata* Fabricius, 1781; *A. fulvipes* Vllers, 1789, nec Fabricius, 1793; *A. modesta* Christ, 1791; *A. amoenita* Christ, 1791; *A. uncata* Schrank, 1802; *Anthidium marginatum* Latreille, 1809; *A. obtusatum* Lepeletier de Saint-Fargeau, 1841; *A. manicatum* var. *nigrithorax* Dalla Torre, 1877; *A. manicatum* var. *fasciatum* Schirmer, 1915; *A. manicatum* var. *nasicolle* Friese, 1917). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (NS, KM, AL), **ES** (KS, TU, BR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Lebanon, Israel, Iran, Central Asia, Kazakhstan, China, N and S America (introduced), New Zealand (introduced).

Anthidium (Anthidium) montanum Morawitz, 1865 (*A. montanum* var. *flavomaculatum* Friese, 1897).

Russia: **EP** (CR). – Europe (WE, SE, EE), Tajikistan, Kyrgyzstan, China (NW, WP).

Anthidium (Anthidium) punctatum Latreille, 1809 (*A. minus* Nylander, 1848; *A. senile* Eversmann, 1852; *A. greyi* Radoszkowski, 1862; *A. albidulum* Chevrier, 1872; *A. nigrinum* Morawitz, 1893; *A. nitidulum* Morawitz, 1893; *A. mayeti* Pérez, 1895; *A. kohlii* Friese, 1897; *A. punctatum* var. *fulvipes* Friese, 1897; *A. punctatum* var. *albofasciatum* Friese, 1897; *A. punctatum* var. *bequaerti* Alfken, 1914; *A. amanusense* Dusmet, 1915; *A. punctatum* var. *ariasi* Dusmet, 1915; *A. kohlii* var. *nigritulum* Friese, 1917; *A. punctatum* var. *suecicum* Alfken, 1927). Russia: **EP** (C, E, NC), **UR**, **WS** (KM, AL), **ES** (KS, TU, KR, IR, YA, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Syria, Israel, Iran, Uzbekistan, Kyrgyzstan, Kazakhstan, China (NW, NC).

Anthidium (Anthidium) septemspinosum Lepeletier de Saint-Fargeau, 1841 (*A. nigripes* Eversmann, 1852; *A. nigriceps* Smith, 1854; *A. septemspinosum* var. *flavoguttatum* Friese, 1917; *A. dinurum* Cockerell, 1928). Russia: **EP** (C, E, S, CR), **UR**, **WS** (NS, KM, AL), **ES** (KS, TU, KR, IR, BR), **FE** (AM, KH, PR). – Europe (WE, SE, EE), Turkey, Afghanistan, Kazakhstan, Mongolia, China (CC, SW, SE), Korean Peninsula, Japan (Hon).

Anthidium (Proanthidium) fulviventre Friese, 1917. Russia: **ES** (IR). This species was even not mentioned since description and requires the revision.

Anthidium (Proanthidium) oblongatum (Illiger, 1806) [Anthophora] (*A. trochantericum* Morawitz, 1893; *A. oblongatum* var. *nigrum* Friese, 1897; *A. oblongatum xanthurum* Cockerell, 1925; *A. oblongatum australe* Alfken, 1937; *A. oblongatum* var. *flavens* Moczar, 1956; *Proanthidium tornense* Tkalců, 1966). Russia: **EP** (C, NC, CR), **UR**, **ES** (TU). – Europe (WE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Iran, Turkmenistan, Tajikistan, Kyrgyzstan, Kazakhstan, N America (introduced).

BATHANTHIDIUM Mavromoustakis, 1953 (*Dianthidium*: Romankova, 1995a; *Lasanthidium* Romanova, 1995). Type species *Dianthidium bifoveolatum* Alfken, 1937. The genus is distributed in the Palaearctic and Oriental regions. Number of species: World – 13; Palaearctic – 11; Russia – 2.

Bathanthidium (Stenanthidiellum) malaisei (Popov, 1941) [Stelis]. Russia: **FE** (PR). – Korean Peninsula.

Bathanthidium (Stenanthidiellum) sibiricum (Eversmann, 1852) [Anthidium]. Russia: **UR**, **WS** (KM, AL), **ES** (BR, ZB), **FE** (AM, KH, PR). – Korean Peninsula, China (NE, NC, CC, SW).

EOANTHIDIUM Popov, 1950 (*Eoanthidiellum* Pasteels, 1969). Type species *Anthidium insulare* Morawitz, 1873. The genus is distributed in the Palaearctic, Oriental, and African regions. Number of species: World – 17; Palaearctic – 5; Russia – 1.

Eoanthidium (Eoanthidium) clypeare (Morawitz, 1874) [Anthidium] (*Anthidium elongatum* Friese, 1897; *Dianthidium hoplostomum* Mavromoustakis, 1945). Russia: **EP** (NC). – Europe (SE), Turkey, Syria, Jordan, Lebanon.

ICTERANTHIDIUM Michener, 1948. Type species *Anthidium limbiferum* Morawitz, 1875. The genus is distributed in the Palaearctic, Oriental, and African regions. Number of species: World – 24; Palaearctic – 20; Russia – 3.

Icteranthidium fedtschenkoi (Morawitz, 1875) [Anthidium] (*Anthidium transcaspicum* Lebedev, 1923). Russia: **ES** (TU). – Turkey, Israel, Iran, Pakistan, Central Asia, Kazakhstan.

Icteranthidium grohmanni (Spinola, 1838) [Anthidium] (*Anthidium latreillii* Lepeletier de Saint-Fargeau, 1841; *A. rubiginosum* Lepeletier de Saint-Fargeau, 1841; *A. provinciale* Lepeletier de Saint-Fargeau, 1841; *A. comptum* Lepeletier de Saint-Fargeau, 1841; *A. numida* Lepeletier de Saint-Fargeau, 1841; *A. lepeletieri* Fonscolombe, 1846; *A. klugi* Lucas, 1849; *A. coronatum* Smith, 1854; *A. latreillei* var. *obscurum* Dusmet, 1908; *Icteranthidium tergalis* Pasteels, 1969). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Armenia, Turkey, Syria, Lebanon, Israel, Iran, Kyrgyzstan.

Icteranthidium laterale (Latreille, 1809) [Anthidium] (*Anthidium quadrilobum* Lepeletier de Saint-Fargeau, 1841; *A. auripes* Eversmann, 1852; *A. annulare* Schenck, 1870; *A. sexmaculatum* Chevrier, 1872; *A. perrisii* Dours, 1873). Russia: **EP** (C, S, CR), **UR**, **WS** (NS, AL), **ES** (TU, KR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Iran, Turkmenistan, Kyrgyzstan, Kazakhstan, China (NW).

PSEUDOANTHIDIUM Friese, 1898 (*Paranthidiellum* Michener, 1948; *Paraanthidiellum* (!): Pasteels, 1969; *Carinellum* Pasteels, 1969; *Orientotrachusa* Gupta, 1993). Type species *Anthidium alpinum*

Morawitz, 1874. The genus is distributed in the Palaearctic, Oriental, and African regions. Number of species: World – 36; Palaearctic – 20; Russia – 8.

Pseudoanthidium (Pseudoanthidium) alpinum (Morawitz, 1874) [Anthidium] (*Anthidium alpinum* Morawitz, 1874; *A. barbatum* Mocsáry, 1884; *A. serraticeps* Friese, 1917; *Pseudoanthidium alpinum gregoriense* Nobile, 1990). Russia: **EP** (NC). – Europe (SE, EE), Turkey.

Pseudoanthidium (Pseudoanthidium) eversmanni (Radoszkowski, 1886) [Anthidium]. Russia: **UR**. This species requires the revision; it was previously synonymized with “*Anthidium lituratum*” (Warncke, 1980) which is actually an unclear complex of different species (Aguib et al., 2010).

Pseudoanthidium (Pseudoanthidium) floripetum (Eversmann, 1852) [Anthidium]. Russia: **UR**. This species requires the revision; it was previously synonymized with “*Anthidium lituratum*” (Warncke, 1980) which is actually an unclear complex of different species (Aguib et al., 2010).

Pseudoanthidium (Pseudoanthidium) nanum (Mocsáry, 1881) [Anthidium] (*Apis liturata* Panzer, 1801, nom. praeocc., nec Gmelin, 1790; ?*Anthidium sinuatum* Lepeletier de Saint-Fargeau, 1841). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Caucasus, Turkey, Israel, Iran, Pakistan, N America (introduced).

Pseudoanthidium (Pseudoanthidium) reptans (Eversmann, 1852) [Anthidium]. Russia: **UR**. This species requires the revision; it was previously synonymized with “*Anthidium lituratum*” (Warncke, 1980) which is actually an unclear complex of different species (Aguib et al., 2010).

Pseudoanthidium (Pseudoanthidium) tenellum (Mocsáry, 1881) [Anthidium]. Russia: **EP** (CR). – Europe (WE, EE), N Africa.

Pseudoanthidium (Royanthidium) melanurum (Klug, 1832) [Anthidium] (*Anthidium nigricolle* Morawitz, 1876; *A. dilobum* Pérez, 1895; *A. moricei* Friese, 1911; *A. royoi* Dusmet, 1915; *A. nigricolle* var. *flaviventre* Friese, 1917; *A. nigricolle* var. *flavicolle* Friese, 1917). Russia: **EP** (NC). – Europe (WE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Syria, Lebanon, Israel, Iran.

Pseudoanthidium (Royanthidium) reticulatum (Mocsáry, 1884) [Anthidium] (*Anthidium tegulare* Morawitz, 1886; *A. moscaryi* Friese, 1897; *A. reticulatum kindenmani* Mavromoustakis, 1954). Russia:

EP (CR). – Europe (WE, SE, EE), N Africa, Azerbaijan, Turkey, Lebanon, Israel, Iran.

STELIS Panzer, 1806 (*Gyrodroma* Klug, 1807; *Gymnus* Spinola, 1808; *Ceraplastes* Gistel, 1848; *Ghelynia* Provancher, 1888; *Melanostelis* Ashmead, 1898; *Stelidium* Robertson, 1902; *Microstelis* Robertson, 1903; *Pavostelis* Sladen, 1916; *Stelidina* Timberlake, 1941; *Stelidiella* (!): Timberlake, 1941; *Leucostelis* Noskiewicz, 1961). Type species *Apis aterrima* Panzer, 1798. Cleptoparasites of *Megachile*, *Osmia*, *Chelostoma*, *Heriades*, *Anthidium*, *Anthidiellum*, *Trachusa* (Megachilidae), *Ceratina*, *Anthophora* (*Chisodon*) (Apidae). The genus is distributed worldwide except Australia. Number of species: World – 118; Palaearctic – 30; Russia – 14.

Stelis (Heterostelis) annulata (Lepeletier de Saint-Fargeau, 1841) [Anthidium] (*S. freygessneri* Friese, 1885; *S. hispanica* Dusmet, 1921; ?*S. hungarica* Noskiewicz, 1962). Russia: **EP** (CR). – Europe (WE, SE, EE), N Africa, Turkey, Lebanon.

Stelis (Protostelis) signata (Latreille, 1809) [Anthidium] (*Anthidium parvulum* Lepeletier de Saint-Fargeau, 1841; *Stelis strigata* Kriechbaumer, 1874; *S. signata flavescens* Friese, 1925). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Syria, Lebanon, Israel, Iraq, Iran, Kazakhstan.

Stelis (Stelidomorpha) nasuta (Latreille, 1809) [Anthidium] (*Anthidium nasale* Latreille, 1809). Russia: **EP** (S, CR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Syria, Lebanon, Israel, Iraq, Iran, Tajikistan, Uzbekistan, Kazakhstan.

Stelis (Stelis) aculeata Morawitz, 1880. Russia: **EP** (CR), **ES** (TU, BR). – Turkey, Central Asia, Kazakhstan, Mongolia, China (NE, NW).

Stelis (Stelis) breviscula (Nylander, 1848) [Heriades] (*S. pygmaea* Schenck, 1853; *Heriades paxillorum* Chevrier, 1872). Russia: **EP** (NW, C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Turkmenistan, China (NW, WP).

Stelis (Stelis) melanura Cockerell, 1924. Russia: **ES** (IR, BR), **FE** (KH, PR). – Mongolia, China (NC, NW, WP), Korean Peninsula.

Stelis (Stelis) odontopyga Noskiewicz, 1926. Russia: **EP** (CR). – Europe (WE, SE, EE), Azerbaijan, Turkey.

Stelis (Stelis) ornatula (Klug, 1807) [*Gyrodroma*] (*Trachusa sexpunctata* Stschegloff, 1826; *Stelis octomaculata* Smith, 1843; *S. sexsignata* Costa, 1858;

S. ornatula var. *immaculata* Noskiewicz, 1926). Russia: **EP** (NW, C, E, NC, CR), **UR**, **WS** (KM), **ES** (KR, IR, YA), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Turkey, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.

Stelis (Stelis) phaeoptera (Kirby, 1802) [Apis] (*Apis stigma* Christ, 1791; *A. aterrima* Christ, 1791, nom. praeocc., nec Panzer, 1798). Russia: **EP** (NW, C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, Uzbekistan, Kyrgyzstan, Kazakhstan.

Stelis (Stelis) punctulatifissima (Kirby, 1802) [Apis] (*Apis aterrima* Panzer, 1798, nom. praeocc., nec Christ, 1791; *Stelis moravica* Tkalců, 1971). Russia: **EP** (NW, C, E, NC, CR), **UR**, **WS** (NS, KM, AL). – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Syria, Kazakhstan.

Stelis (Stelis) scutellaris Morawitz, 1894 (*S. scutellaris inamoena* Popov, 1933). Russia: **EP** (S, NC). – Europe (EE), Armenia, Azerbaijan, Turkey, Iran, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NE, NC, CC).

Stelis (Stelis) simillima Morawitz, 1876 (*S. cognata* Kohl, 1892; *S. genalis* Pasteels, 1969). Russia: **EP** (CR), **UR**, **WS** (TK, KM). – Europe (WE, SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Syria, Israel, Iran, Turkmenistan.

Stelis (Pseudostelis) minima Schenck, 1861 (*S. minima* f. *unicolor* Alfken, 1944). Russia: **EP** (NW, C, NC), **UR**. – Europe (WE, NE, EE).

Stelis (Pseudostelis) minuta Lepeletier de Saint-Fargeau et Audinet-Serville, 1825 (*S. nana* Schenck, 1853). Russia: **EP** (N, NW, C, E, NC), **UR**. – Europe (WE, NE, SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Lebanon.

TRACHUSA Panzer, 1804 (*Diphysis* Lepeletier de Saint-Fargeau, 1841; *Megachileoides* Radoszkowski, 1874; *Megachiloides* (!): de Saussure, 1890). Type species *Trachusa serratulae* Panzer, 1804. The genus is distributed worldwide except Australia. Number of species: World – 48; Palaeartic – 12; Russia – 3.

Trachusa (Archianthidium) pubescens (Morawitz, 1872) [Anthidium] (*Anthidium pubescens* var. *maximum* Friese, 1931; *Archianthidium pubescens verhoeffi* Mavromoustakis, 1955). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Georgia, Turkey, Syria, Lebanon, Israel, Iran, Turkmenistan.

Trachusa (Paraanthidium) interrupta (Fabricius, 1781) [Apis] (*Apis rufipes* Fabricius, 1787, nom.

praeocc., nec Fabricius, 1781; *A. varia* Olivier, 1789, nom. praeocc., nec Gmelin, 1790; *A. erythropus* Gmelin, 1790; *A. fulvipes* Fabricius, 1793, nom. praeocc., nec Villers, 1789; *Anthidium flavilabre* Latreille, 1809; *A. luteipes* Lepeletier de Saint-Fargeau, 1841; *A. dufourii* Lepeletier de Saint-Fargeau, 1841; *A. integrum* Eversmann, 1852; *A. curvipes* Schmid, 1872; *A. melanostomum* Costa, 1884; *A. foliivolutor* Fertton, 1921). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), N Africa, Azerbaijan, Turkey, Syria.

Trachusa (Trachusa) byssina (Panzer, 1798) [Apis] (*T. serratulae* Panzer, 1805; *Diphysis pyrenaica* Lepeletier de Saint-Fargeau, 1841; *Megachile resinana* Schilling, 1849; *M. rotundiventris* Perris, 1852; *Osmia bluethgeni* Maidl, 1922; *Trachusa byssina* var. *seitzii* Cockerell, 1925; *Megachile kythacensis* Cockerell, 1928). Russia: **EP** (C, E, NC, ?CR), **UR**, **WS** (TK, KM), **ES** (KS, TU, KR, IR, ZB), **FE** (AM, KH). – Europe (WE, NE, SE, EE), Georgia, Armenia, Turkey, Mongolia.

Tribe DIOXYINI

AGLAOAPIS Cameron, 1901 (*Dioxoides* Popov, 1947). Type species *Aglaoapis brevipennis* Cameron, 1901. Cleptoparasites of *Hoplitis*, *Osmia*, and *Megachile* (Megachilidae). The distribution of the genus is disjunct: Europe and western Asia, western India, and South Africa. Number of species: World – 3; Palaeartic – 1; Russia – 1.

Aglaoapis tridentata (Nylander, 1848) [Coelioxys] (*Dioxys fasciata* Schenck, 1861; *D. kuntzei* Noskiewicz, 1940; *Dioxoides tridentata limassolica* Mavromoustakis, 1949). Russia: **EP** (C, E, S, CR), **UR**, **WS** (KM), **ES** (KS, TU, IR, BR, ZB), **FE** (KH, PR). – Europe (WE, NE, SE, EE), Azerbaijan, Turkey, Kyrgyzstan, Kazakhstan.

DIOXYS Lepeletier de Saint-Fargeau and Audinet-Serville, 1825 (*Hoploparasites* Ashmead, 1898; *Chrysopheon* Titus, 1901). Type species *Trachusa cincta* Jurine, 1807. Cleptoparasites of *Hoplitis*, *Osmia*, and *Megachile* (Megachilidae). The genus is distributed in the Holarctic region. Number of species: World – 18; Palaeartic – 12; Russia – 1.

Dioxys cinctus (Jurine, 1807) [Trachusa] (*D. pyrenaica* Lepeletier de Saint-Fargeau, 1841; *D. maura* Lepeletier de Saint-Fargeau, 1841; *D. cruenta* Gerstaecker, 1869; *D. spinigera* Pérez, 1884; *D. cincta jucunda* Mocsáry, 1894; *D. cincta* ab. *friederikae* Mader,

1933). Russia: **EP** (CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Israel, ?Central Asia.

Tribe MEGACHILINI

COELIOXYS Latreille, 1809 (*Paracoelioxys* Gribodo, 1884). Type species *Apis conica* Linnaeus, 1758. Cleptoparasites of *Hoplitis*, *Osmia*, and *Megachile* (Megachilidae), *Anthophora* (Apidae). The genus is distributed worldwide except Australia. Number of species: World – 474; Palaearctic – 150; Russia – 23.

Coelioxys (Allocoelioxys) afer Lepeletier de Saint-Fargeau, 1841 (*C. coronata* Förster, 1853; *C. mandibularis* Chevroler, 1872, nom. praeocc., nec Nylander, 1848; *C. afra* var. *tunensis* Gribodo, 1894). Russia: **EP** (S, NC, CR), **WS** (KM), **ES** (BR), **FE** (KH). – Europe (WE, NE, SE, EE), N and S Africa, Georgia, Armenia, Turkey, Israel, Saudi Arabia, Iran, Turkmenistan, Kyrgyzstan, Kazakhstan, China (NE, NC, NW, CC, SE), Indonesia.

Coelioxys (Allocoelioxys) brevis Eversmann, 1852 (*C. erythropyga* Förster, 1853; *C. erythropyga* var. *rubida* Gribodo, 1894; *C. inflatus* Alfken, 1933; *C. brevis armeniaca* Hedicke, 1938). Russia: **EP** (NC, CR), **UR**, **ES** (TU). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Israel, Tajikistan, Uzbekistan, Kazakhstan, China (NC, NW, CC, SW), Japan (Hon).

Coelioxys (Allocoelioxys) caudatus Spinola, 1838 (*C. foersteri* Morawitz, 1871). Russia: **EP** (S, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, Central Asia, China (NW).

Coelioxys (Allocoelioxys) conspersus Morawitz, 1874. Russia: **EP** (NC).

Coelioxys (Allocoelioxys) echinatus Förster, 1853. Russia: **EP** (C, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Iraq, Iran.

Coelioxys (Allocoelioxys) elsei Schwarz, 2001. Russia: **EP** (CR). – Europe (SE, EE), Turkey, Jordan.

Coelioxys (Allocoelioxys) emarginatus Förster, 1853 (*C. minuta* Gistel, 1857; *C. robusta* Morawitz, 1875). Russia: **EP** (S, CR), **UR**, **WS** (NS, KM), **ES** (TU, BR), **FE** (AM, PR). – Europe (WE, SE, EE), N Africa, Armenia, Turkey, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan, China (NC, CC, SE), India.

Coelioxys (Allocoelioxys) formosicola Strand, 1913 (*C. taiwanensis* Cockerell, 1927; *C. manchurica*

Proshchalykin et Lelej, 2004). Russia: **FE** (PR). – China (SE), Japan (Hon, Kyu), Sri Lanka.

Coelioxys (Allocoelioxys) haemorrhoea Förster, 1853 (*C. pulchella* Morawitz, 1874). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Israel, Pakistan, Central Asia, China (NE), Korean Peninsula, India.

Coelioxys (Allocoelioxys) obtusus Pérez, 1884. Russia: **EP** (S, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Iraq, Iran, Turkmenistan.

Coelioxys (Allocoelioxys) polycentris Förster, 1853 (*C. conspersa* Morawitz, 1874; *C. orientalis* Friese, 1925). Russia: **EP** (CR), **ES** (BR). – Europe (WE, SE, EE), Turkey, Iran, Pakistan, China (NC).

Coelioxys (Boreocoelioxys) alatus Förster, 1853 (*C. montandoni* Gribodo, 1884). Russia: **EP** (C, E), **UR**, **WS** (KM), **ES** (IR, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), Turkey, China (NE), Japan (Hok, Hon).

Coelioxys (Boreocoelioxys) inermis (Kirby, 1802) [Apis] (*C. acuminata* Nylander, 1852, nom. praeocc., nec Gmelin, 1790; *C. divergens* Förster, 1853; *C. microdonta* Förster, 1853). Russia: **EP** (NW, N, C, E, S, CR), **UR**, **WS** (TM, OM, TK, KM), **ES** (BR, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Kyrgyzstan, China (NE, NC), Japan (Hok, Hon).

Coelioxys (Boreocoelioxys) mandibularis Nylander, 1848 (*C. mandibularis olgae* Cockerell, 1924; *C. mandibularis jeholensis* Yasumatsu, 1935). Russia: **EP** (C, E, CR), **UR**, **WS** (KM, AL), **ES** (KS, TU, KR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU). – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Kyrgyzstan, Mongolia, China (NE).

Coelioxys (Boreocoelioxys) rufescens Lepeletier de Saint-Fargeau et Audinet-Serville, 1825 (*C. umbrina* Smith, 1843; *C. hebescens* Nylander, 1848; *C. apiculata* Nylander, 1848; *C. trinacria* Förster, 1853; *C. diglypha* Förster, 1853; *C. carinata* Schenck, 1855, nom. praeocc., nec Smith, 1854; *C. longiuscula* Schenck, 1855; *C. obtusata* Schenck, 1855, nom. praeocc., nec Magretti, 1895; *C. parvula* Schenck, 1855; *C. fallax* Mocsáry, 1881; *C. rufescens* var. *agona* Alfken, 1912; *C. rufescens nigrescens* Cockerell, 1924; *C. rufescens* var. *turanica* Friese, 1925; *C. rufescens* var. *gigantea* Friese, 1925, nom. praeocc., nec Friese, 1922). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (KM), **ES** (KR, IR, YA, ZB), **FE** (AM, KH, PR, KU). – Europe (WE, NE, SE, EE), N Africa, Georgia, Armenia, Azerbaijan,

- Turkey, Iran, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NW), Japan (Hon).
- Coelioxys (Coelioxys) aurolimbatus** Förster, 1853 (*C. apiculata* Förster, 1853, nom. praeocc., nec Nylander, 1848; *C. recurva* Schenck, 1853; *C. reflexa* Schenck, 1855; *C. ogivalis* Pérez, 1895; *C. aurolimbata* var. *algeriensis* Friese, 1895). Russia: **EP** (C, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Georgia, Armenia, Turkey, Lebanon, Iran, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NW).
- Coelioxys (Coelioxys) conoideus** (Illiger, 1806) [Anthophora] (*C. vectis* Curtis, 1831; *C. decempunctata* Spinola, 1838; *C. punctata* Lepeletier de Saint-Fargeau, 1841; *C. temporalis* Nylander, 1848; *C. ambigua* Schenck, 1855; *C. aegyptiaca* Radoszkowski, 1876; *C. spissicauda* Pasteels, 1968). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (KM, AL), **ES** (TU, KR, BR), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey.
- Coelioxys (Coelioxys) elongatus** Lepeletier de Saint-Fargeau, 1841 (*C. simplex* Nylander, 1852, nom. praeocc., nec Gmelin, 1790; *C. tricuspadata* Förster, 1853; *C. denticulata* Schenck, 1855; *C. stigmatica* Schenck, 1855; *C. distincta* Schenck, 1855; *C. sponsa* Smith, 1855; *C. tridenticulata* Schenck, 1861; *C. gracilis* Schenck, 1861; *C. obscura* Schenck, 1861; *C. claripennis* Schenck, 1870; *C. kudiana* Cockerell, 1924; *C. popovici* Friese, 1925). Russia: **EP** (C, E, CR), **UR**, **WS** (KM, AL), **ES** (BR, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Iran.
- Coelioxys (Coelioxys) lanceolatus** Nylander, 1852 (*C. patula* Pérez, 1884). Russia: **EP** (N, C), **ES** (IR, BR, YA, ZB), **WS** (KM), **FE** (AM, KA). – Europe (WE, NE, SE, EE).
- Coelioxys (Coelioxys) quadridentatus** (Linnaeus, 1758) [Apis] (*Apis conica* Linnaeus, 1758; ?*A. agilis* Harris, 1776; *A. acuminata* Gmelin, 1790; *A. bidentata* Panzer, 1798; *Coelioxys acuta* Nylander, 1848; *C. fissidens* Förster, 1853; *C. fraterna* Förster, 1853; *C. convergens* Schenck, 1855; *C. truncata* Höppner, 1901). Russia: **EP** (C, E, CR), **UR**, **WS** (KM), **ES** (BR, YA, ZB), **FE** (AM, KH, PR, SA, KA, MG). – Europe (WE, NE, SE, EE), Turkey, Iran, China (NE, NW).
- Coelioxys (uncertain) obtusispina** Thomson, 1872. Russia: **FE** (AM, PR). – Europe (NE).
- Coelioxys (uncertain) pielianus** Friese, 1935. Russia: **ES** (BR), **FE** (AM, PR). – China (CC).
- Coelioxys (uncertain) ruficinctus** Cockerell, 1931 (*C. rufocincta* (!): Romankova, 1995a). Russia: **FE** (KH, PR). – China (CC).
- MEGACHILE** Latreille, 1802 (*Eumegachile* Friese, 1898; *Megalochila* Schulz, 1906; *Anthemois* Robertson, 1903; *Cyphopyga* Robertson, 1903; *Grosapis* Mitchell, 1980). Type species *Apis centuncularis* Linnaeus, 1758. The genus is distributed worldwide. Number of species: World – 1500; Palaearctic – 300; Russia – 45.
- Megachile (Aethomegachile) remota** Smith, 1879. Russia: **FE** (KH, PR). – China (NE, CC), Korean Peninsula, Japan (Hon, Kyu).
- Megachile (Chalicodoma) desertorum** Morawitz, 1875. Russia: **ES** (TU, BR). – Turkmenistan, Uzbekistan, Kazakhstan, Mongolia, China (NC).
- Megachile (Chalicodoma) lefebvrei** (Lepeletier de Saint-Fargeau, 1841) [Chalicodoma] (*Chalicodoma luctuosa* Dours, 1873; *Megachile lefebvrei* var. *albida* Prez, 1897; *M. lefebvrei* var. *albomaculata* Friese, 1898; *M. muraria* var. *variabilis* Friese, 1920). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Georgia, Iran.
- Megachile (Chalicodoma) parietina** (Geoffroy, 1785) [Apis] (*Apis muraria* Olivier, 1789, nom. praeocc., nec Retzius, 1783; ?*A. picea* Christ, 1791; *A. varians* Rossi, 1792; *Megachile nestorea* Brülle, 1832; *M. affnis* Brülle, 1832; *M. aegyptica* Lepeletier de Saint-Fargeau, 1841; *Chalicodoma leueopogonata* Dours, 1873; *Megachile savignyi* Radoszkowski, 1874; *Chalicodoma valesina* Alfken, 1931; *Megachile transitoria* Benoist, 1934; *Chalicodoma parietina carpathia* Tkalců, 1992). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Syria, Jordan, Israel, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan.
- Megachile (Creightonella) albisecta** (Klug, 1817) [Anthophora] (*M. sericans* Fonscolombe, 1832; *M. caucasica* Lepeletier de Saint-Fargeau, 1841; *M. dufouri* Lepeletier de Saint-Fargeau, 1841; *M. odontura* Smith, 1849; *M. carinulata* Costa, 1882; *M. gerszabiensis* Radoszkowski, 1886; *M. germabensis* Radoszkowski, 1893). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Syria, Israel, Iran, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan.
- Megachile (Eutricharaea) apicalis** Spinola, 1808 (*M. mixta* Costa, 1863; *M. dimidiativentris* Dours, 1873; *M. massiliensis* Pérez, 1902). Russia: **EP** (C, S, NC, CR). – Europe (WE, NE, SE, EE), N Africa,

- Georgia, Azerbaijan, Turkey, Israel, Iran, Pakistan, Tajikistan, Uzbekistan, Kazakhstan, China (NW), N America (introduced).
- Megachile (Eutricharaea) deceptoria** Pérez, 1890 (*M. mogadorensis* Benoist, 1934). Russia: **EP** (S, CR), **ES** (YA). – Europe (WE, SE, EE), N Africa, Azerbaijan, Turkey, Pakistan, Turkmenistan, Kazakhstan.
- Megachile (Eutricharaea) giraudi** Gerstäcker, 1869 (*M. vicina* Morawitz, 1894, nom. praeocc., nec Mocsáry, 1879; *M. intermixta* Gerstäcker, 1869; *M. bicoloriventris* Mocsáry, 1878; *M. giraudi erzurumensis* Tkalců, 1980; *Chalicodoma atropyga* van der Zanden, 1995). Russia: **EP** (CR). – Europe (WE, SE, EE), Armenia, Turkey, Uzbekistan.
- Megachile (Eutricharaea) leachella** Curtis, 1828 (*M. dorsalis* Pérez, 1879; *M. argentata* var. *fossoria* Ferton, 1909; *M. leachella maadiensis* van der Zanden, 1986; *M. argentata* auct.). Russia: **EP** (S, NC, CR), **UR**, **WS** (KM), **ES** (BR, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Iran, China (NC, NW).
- Megachile (Eutricharaea) leucomalla** Gerstäcker, 1869 (*M. excellens* Morawitz, 1872; *M. laevifrons* Morawitz, 1878; *M. sedilloti* Pérez, 1895; *M. leucomalla* var. *panzeri* Friese, 1899). Russia: **EP** (CR). – Europe (WE, SE, EE), N Africa, Georgia, Turkey, Jordan, Kazakhstan.
- Megachile (Eutricharaea) marginata** Smith, 1853 (*M. picicornis* Morawitz, 1877; *M. albocineta* Pérez, 1879, nom. praeocc., nec Radoszkowski, 1874; *M. perezi* Mocsáry, 1887; *M. provincialis* Pérez, 1890; *Stelis megachiloides* Alfken, 1942). Russia: **EP** (CR). – Europe (WE, SE), N Africa, Azerbaijan, Turkey, Iraq, Iran, Afghanistan, Pakistan, Tajikistan, Kyrgyzstan.
- Megachile (Eutricharaea) melanogaster** Eversmann, 1852 (*M. sexmaculata* Alfken, 1942; *M. sexmaculata thracia* Tkalců, 1979; *M. pilicrus flavida* van der Zanden, 1998). Russia: **EP** (CR), **UR**. – Europe (WE, SE, EE), N Africa, Turkey, Kazakhstan.
- Megachile (Eutricharaea) pilidens** Alfken, 1924 (*M. argyrea* Cockerell, 1931). Russia: **EP** (C, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Georgia, Armenia, Turkey, Jordan, Kazakhstan.
- Megachile (Eutricharaea) rotundata** (Fabricius, 1787) [Apis] (*Apis pacifica* Panzer, 1798; *Megachile imbecilla* Gerstäcker, 1869; ?*M. nadia* Nurse, 1903). Russia: **EP** (C, S, NC, CR), **UR**, **WS** (KM), **ES** (KR, BR, YA, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Israel, Iran, Pakistan, Turkmenistan, Kazakhstan, Mongolia, China (NE, NW), Japan (Hok), India, Africa, N and S America (introduced), Australia (introduced), New Zealand (introduced).
- Megachile (Eutricharaea) rubrimana** Morawitz, 1893. Russia: **FE** (PR). – Europe (SE, EE), Turkey, Tajikistan.
- Megachile (Eutricharaea) semicircularis** auct., nec van der Zanden, 1996. Russia: **EP** (CR). – Europe (SE), Turkey, Iran. The description of *M. semicircularis* by van der Zanden clearly points to this species, however the type series is composed of several taxa and the male holotype does not belong to this species but belongs to *M. apicalis* (Kuhlmann et al., 2017; C. Praz, in litt.).
- Megachile (Megachile) alpicola** Alfken, 1924 (*M. rubtzeni* Cockerell, 1928; *M. alpicola loeckemiana* Tkalců, 1977). Russia: **EP** (NW, C, E), **WS** (NS, KM), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR, SA). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Kazakhstan, Korean Peninsula.
- Megachile (Megachile) bombycina** Radoszkowski, 1874 (*M. maxillosa* Eversmann, 1852, nom. praeocc., nec Guerin, 1845). Russia: **EP** (C, E, S), **UR**, **WS** (TK, NS, KM, AL), **ES** (KS, BR, ZB), **FE** (AM, KH). – Europe (WE, NE, SE, EE), Georgia, China (NW).
- Megachile (Megachile) centuncularis** (Linnaeus, 1758) [Apis] (*M. parvula* Lepeletier de Saint-Fargeau, 1841; *M. appia* Nurse, 1903; *M. centuncularis theryi* Cockerell, 1931; *M. centuncularis nesiotica* Mavromoustakis, 1953). Russia: **EP** (N, C, E, S, NC, CR), **UR**, **WS** (KM), **ES** (BR, ZB), **FE** (AM, KH, PR, SA, MG). – Europe (WE, NE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Israel, Iran, Kazakhstan, China (NE, NC), Japan (Hok), India, Malaysia, N America.
- Megachile (Megachile) dacica** Mocsáry, 1879. Russia: **ES** (BR). – Europe (EE). The status of this species remains in doubt, it may be a subspecies of *M. lapponica* (Praz, 2017).
- Megachile (Megachile) genalis** Morawitz, 1880 (*M. villosa* Henschel, 1888, nom. praeocc., nec Fabricius, 1775, nec Schenck, 1853; *M. buyssoni* Pérez, 1890; *M. henschelii* Dalla Torre, 1896; *M. genalis tortumensis* Tkalců, 1980). Russia: **EP** (C, E, S, NC, CR), **WS** (KM), **FE** (AM, PR, SA). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Tajikistan, Kazakhstan, Mongolia, China (NW), Japan (Hok).

- Megachile (Megachile) lapponica** Thomson, 1872 (*M. melanopyga amaguella* Cockerell, 1924; *M. lapponica baicalica* Cockerell, 1928, nom. praeocc., nec *M. baicalica* Kokujev, 1927; *M. lapponica* var. *kurbati* Cockerell, 1928; *M. lapponica fuscifrons* Cockerell, 1930; *M. lapponica ishikawa* Hirashima, 1974). Russia: **EP** (N, C, E), **UR, WS** (TM, OM, NS, KM, AL), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG). – Europe (WE, NE, SE, EE), Kazakhstan, Korean Peninsula, Japan (Hok), N America.
- Megachile (Megachile) ligniseca** (Kirby, 1802) [Apis] (*M. lignisecula* Cockerell, 1924; *M. ligniseca* var. *borealis* Niemelä, 1936). Russia: **EP** (N, C, E, NC, CR), **UR, WS** (KM), **ES** (IR, YA), **FE** (AM, KH, PR, SA, KU, KA). – Europe (WE, NE, SE, EE), Caucasus, Turkey, China (WP), Japan (Hok, Hon).
- Megachile (Megachile) manipula** Romankova, 1983. Russia: **FE** (KH, PR).
- Megachile (Megachile) melanopyga** Costa, 1863 (*M. vestita* Giraud, 1863, nom. praeocc., nec Smith, 1853; *M. hymenaea* Gerstäcker, 1869; *M. melanopyga vulpecolor* Hedicke, 1938; *M. melanopyga zakakica* Mavromoustakis, 1957). Russia: **EP** (NC, CR), **WS** (KM), **ES** (BR). – Europe (WE, SE, EE), Azerbaijan, Turkey, Jordan, Israel, China, Korean Peninsula, Japan.
- Megachile (Megachile) nipponica** Cockerell, 1914. Russia: **FE** (AM, KH, PR). – China (NE, NC), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Megachile (Megachile) octosignata** Nylander, 1852. Russia: **EP** (CR). – Europe (WE, SE, EE), Georgia, Turkey.
- Megachile (Megachile) pilicrus** Morawitz, 1877. Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Georgia, Turkey, Iran, Kyrgyzstan, China (NW).
- Megachile (Megachile) versicolor** Smith, 1844 (*M. rufiventris* Schenck, 1851; *M. distincta* Pérez, 1897; *M. semiplea* Cockerell, 1921; *M. versicolor* var. *hiberniae* Perkins, 1925; *M. pilicuriformis* Cockerell, 1928). Russia: **EP** (N, C, S, NC, CR), **UR, WS** (TM, KM), **ES** (YA, ZB), **FE** (AM, KH, PR, KA). – Europe (WE, NE, SE, EE), Azerbaijan, Turkey, Kazakhstan, Mongolia.
- Megachile (Pseudomegachile) ericetorum** Lepeletier de Saint-Fargeau, 1841 (*M. cristata* Dufour, 1841; *M. fasciata* Smith, 1844; *M. rufitarsis* Smith, 1844; *M. pyrina* Nylander, 1852, nom. praeocc., nec Lepeletier de Saint-Fargeau, 1841; *M. senex* Smith, 1853; *M. tsingtauensis* Strand, 1915; *M. ericetorum euroa* Tkalců, 1988; *M. ericetorum oraniensis* van der Zanden, 1989; *M. ericetorum melaleuca* van der Zanden, 1989). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Armenia, Turkey, Syria, Kazakhstan, China (NW, CC, SE), N America (introduced).
- Megachile (Pseudomegachile) saussurei** Radoszkowski, 1874 (*M. multispinosa* Morawitz, 1875). Russia: **EP** (E, S). – Europe (SE), Turkey, Central Asia, Kazakhstan.
- Megachile (Xanthosarus) analis** Nylander, 1852 (*M. albicilla* Eversmann, 1852; *M. obscura* Eversmann, 1852; *M. kuennemanni* Alfken, 1897; *M. kuennemanni* var. *obscura* Alfken, 1897, nom. praeocc., nec *M. obscura* Eversmann, 1852; *M. analis* var. *albida* Friese, 1898; *M. analis chionura* Cockerell, 1924; *M. angarensis* Cockerell, 1928; *M. analis cana* Alfken, 1930; *M. analis* var. *holsatica* Alfken, 1936; *M. analis ulangomensis* Tkalců, 1988; *M. analis turgensis* Tkalců, 1988; *M. analis batsumerensis* Tkalců, 1988). Russia: **EP** (N, C, E, NC), **UR, WS** (KM), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KA, MG). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Turkmenistan, Tajikistan, Mongolia, China (NC, NW, CC, WP), Korean Peninsula.
- Megachile (Xanthosarus) circumcincta** (Kirby, 1802) [Apis] (*M. circumcincta* var. *griseohirta* Alfken, 1929; *M. circumcincta* var. *fennica* Niemelä, 1936; *M. circumcincta* var. *insidiosa* Benoist, 1940; *M. circumcincta ozbeki* Tkalců, 1977; *M. circumcincta numidica* Tkalců, 1988; *M. circumcincta etnaensis* van der Zanden, 1989). Russia: **EP** (C, E, S, NC, CR), **UR, WS** (KM), **ES** (IR, BR, YA, ZB), **FE** (KH, PR, SA, KU, KA, MG). – Europe (WE, NE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Iran, N America.
- Megachile (Xanthosarus) fulvimana** Eversmann, 1852 (*M. baicalica* Kokujev, 1927; *M. dybowski* Cockerell, 1928). Russia: **ES** (KS, KR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KA). – Europe (EE), Kazakhstan, Mongolia.
- Megachile (Xanthosarus) lagopoda** (Linnaeus, 1761) [Apis] (*M. pyrina* Lepeletier de Saint-Fargeau, 1841, nom. praeocc., nec Nylander, 1852; *M. lagopoda* var. *nigricans* Alfken, 1914; *M. baleina* Cockerell, 1928; *M. lagopoda albohirta* Alfken, 1930; *M. lagopoda pieli* Cockerell, 1931; *M. lagopoda* var. *fulvohirta* Alfken, 1935, nom. praeocc., nec Alfken, 1926; *M. furukawai* Yasumatsu, 1938; *M. lagopoda aljkeni* van der Zanden, 1988). Russia: **EP** (C, E, S, NC, CR), **UR, WS** (NS, KM, AL), **ES** (KS, KR,

- BR, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Israel, Iran, Tajikistan, Kyrgyzstan, Kazakhstan, China (NW, CC, WP, SE), Korean Peninsula, Japan (Hok, Hon).
- Megachile (Xanthosarus) maackii** Radoszkowski, 1874. Russia: **EP** (N), **ES** (IR, BR, YA), **WS** (KM), **FE** (AM, KH, PR, MG). – Europe (WE, EE), Mongolia. The status of this species remains in doubt, it may be a subspecies of *M. nigriventris* (Praz, 2017).
- Megachile (Xanthosarus) maritima** (Kirby, 1802) [Apis] (*M. flaviventris* Schenck, 1853; *M. fuhescens* Smith, 1853, nom. praeocc., nec Walker, 1871; *Phyllotoma manicata* Dumeril, 1860, nom. praeocc., nec Giraud, 1861; *M. kashgarensis* Cockerell, 1913; *M. maritima continentalis* Hedicke, 1938). Russia: **EP** (C, S, NC, CR), **WS** (NS), **ES** (BR), **FE** (AM, KH, PR, CH). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Iran, Kyrgyzstan, Kazakhstan, China (CC), Korean Peninsula.
- Megachile (Xanthosarus) nigriventris** Schenck, 1870 (*M. curvicrus* Thomson, 1872; *M. hasticornis* Cockerell, 1924). Russia: **EP** (N), **UR**, **WS** (TU), **FE** (AM, MG). – Europe (WE, NE, SE, EE), Iran.
- Megachile (Xanthosarus) willughbiella** (Kirby, 1802) [Apis] (*M. atriventris* Schenck, 1853; *M. willughbiella kudiensis* Cockerell, 1924; *M. willughbiella provecta* Cockerell, 1924; *M. willughbiella* var. *hibernica* Perkins, 1925; *M. centuncularis* var. *janssoni* Alfken, 1926; *M. korotnevi* Cockerell, 1928; *M. willughbiella munakatai* Hlrashima, 1974; *M. willughbiella zeraldae* Tkalčú, 1988). Russia: **EP** (N, C, E, S, NC, CR), **UR**, **WS** (TM, KM), **ES** (IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, MG). – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Israel, Kyrgyzstan, China (NE, NC, NW), Japan (Hok, Hon).
- Megachile (?) epovae** Cockerell, 1928. Russia: **ES** (IR). This species was even not mentioned since description and requires the revision.
- Megachile (?) ferritincta** Cockerell, 1924. Russia: **FE** (PR). This species was even not mentioned since description and requires the revision.
- Megachile (?) lucidula** Mocsáry, 1901. Russia: **ES** (KR). This species was even not mentioned since description and requires the revision.
- Megachile (?) scheviakovi** Cockerell, 1928. Russia: **ES** (IR). This species was even not mentioned since description and requires the revision.
- Megachile (?) sichotana** Cockerell, 1924. Russia: **FE** (PR). This species was even not mentioned since description and requires the revision.
- Megachile (?) polita** Cockerell, 1924. Russia: **FE** (PR). This species was even not mentioned since description and requires the revision.

78. FAMILY APIDAE

T.V. LEVCHENKO, A.M. BYVALTSEV
AND M.YU. PROSHCHALYKIN

The most widespread family of bees, presenting by *Bombus* species even in Arctic island. Apidae includes many parasitic and nesting bees, both solitary (*Anthophora*, singly or in aggregations), communal (some *Eucera*) and social from primitive (*Ceratina*) to eusocial (*Apis*). Nests are builded mostly in ground, rare in stems, wood, empty holes or on open surface. Solitary species have one generation per year, cleptoparasites (*Nomada* and many other) have one or two generations depend on host life cycle. Larva of single nest parasites (*Melecta*) eats host egg and than host provision. Social parasites (*Psithyrus*) female drives out host queen and lives in her nest with workers. The family is the most reach represented in New World, especially parasitic tribes. Many species are important orchard and crop pollinators. Beekeeping products of stingless bees (Meliponini) and honey bees (Apini) take significant role in human life and culture. Number of taxa: World – 176 genera, 5614 species; Palaearctic – 33/1358 species; Russia – 25/385 species.

References. Eversmann, 1852; Morawitz, 1874; Radoszkowski, 1888, 1893; Friese, 1895, 1896, 1897, 1901; Mocsáry, Szépliget, 1901; Maidl, 1912; Kerenkij, 1919; Skorikov, 1922, 1931; Alfken, 1927, 1931; Lavrov, 1927; Wnukowski, 1927; Bischoff, 1930; Gurvich, 1931; Popov, 1931, 1933a, 1947, 1948, 1950, 1951, 1954, 1956, 1958a, 1967a, b; Popov, Yasumatsu, 1935; Möschler, 1938; Stöckhert, 1944; Panfilov, 1951, 1956, 1957; 1981, 1982, 1984; Lith, 1956; Priesner, 1957; Iuga, 1958; Panfilov et al., 1961; Popov, Ponomareva, 1961; Schwarz, 1965, 1967a, b, 1980, 1981; Ponomareva, 1966, 1967; Elfving, 1968; Lieftinck, 1968, 1974, 1980; Løken, 1973; Pesenko, 1974; Tkalčú, 1961, 1974a, b; 1978, 1979, 1984a, b; Marikovskaya, 1979, 1982, 2001; Warncke, 1979, 1982b, 1983; Dathe, 1980b, 2009; Skhirtladze, 1981; Shumakova et al., 1982; Daly, 1983; Banaszak, 1984; Løken, 1984; Ito, 1985; Brooks, 1988; Pesenko, Sitdikov, 1988; Sitdikov, 1986, 1988; Sitdikov, Pesenko, 1988; Kuznetsova, 1990; Williams, 1991, 1998; Banaszak, Ortiz-Sánchez, 1993; Alexander, Schwarz, 1994; Blagoveshchenskaya, Popova, 1994; Pagliano, 1994; Celary, 1995; Monsevičius, 1995; Rasmont, 1995; Rasmont et al., 1995; Terzo, Rasmont, 1997, 2004; Gogala, 1999; Kholodov, 1999; Risch, 1999, 2001; Konusova, Yanushkin, 2000; Lykov, 2000; Wu, 2000; Gusenleitner,

Schwarz, 2001; Schwarz, Gusenleitner, 2001, 2013, 2015, 2017; Davydova, Pesenko, 2002; Filatov, 2003, 2006, 2013, 2015; Iwata, 2003; Proshchalykin, 2004, 2007e, 2012a, b, 2013a; Sapaev, 2004; Chenikalova, 2005; Lopatin, Dobrynin, 2005; Proshchalykin, Kupianskaya, 2005, 2009; Ban-Calefariu, 2006; Danilov, 2006; Filatov et al., 2006; Amiet et al., 2007; Filatov, Ivanov, 2007; Michener, 2007; Ortiz-Sánchez, Roberts, 2007; Standfuss, Schwarz, 2007; Straka et al., 2007; Byvaltsev, 2008, 2013; Engel, 2008, 2009; Mitai, Tadauchi, 2008; Rightmyer, 2008; Schaefer, Renner, 2008; Scheuchl, 2008; Sidorov, Eremeeva, 2008; Williams et al., 2008, 2009, 2011, 2012, 2013, 2015, 2016; Ivanov et al., 2009, 2011; Quest, 2009; Sung et al., 2009; Aliev, Qamarli, 2010; Eardley, Urban, 2010; Grace, 2010; Konovalova, 2010; Proshchalykin, Lelej, 2010, 2013, 2014; Aliev, 2011; An et al., 2011; Ebmer, 2011; Lecocq et al., 2011, 2013, 2014, 2015; Levchenko, 2011, 2013; Szentgyörgyi et al., 2011; Guerschon, Ionescu-Hirsch, 2012; Long et al., 2012; Shibaev, Polumordvinov, 2012; Straka, Rozen, 2012; Byvaltsev et al., 2013, 2016; Levchenko, Yuferev, 2013; Danilov, Byvaltsev, 2014; Kupianskaya et al., 2014; Levchenko, Tomkovich, 2014; Maharramov, Bayramov, 2014; Proshchalykin et al., 2014, 2017b; Tadauchi, Muraio, 2014; Polumordvinov, Shibaev, 2015; Rasmont et al., 2015, 2017; Proshchalykin, Schwarz, 2017; Levchenko et al., 2017.

Subfamily XYLOCOPINAE

Tribe XYLOCOPINI

XYLOCOPA Latreille, 1802 (*Xilocopa* Latreille, 1802). Type species *Apis violacea* Linnaeus, 1758. Polylectic bees, borrowing nests in ground or wood, mostly tropical species. Number of taxa: World – 469; Palaearctic – 49; Russia – 6.

Xylocopa (Alloxylocopa) appendiculata Smith, 1852 (*Coptorthsoma appendiculata*: Popov, Ponomareva, 1961). Russia: **FE** (PR). – China (NE, NC, CC, SW, WP, SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

Xylocopa (Copoxylo) iris (Christ, 1791) [*Apis*] (?*Apis nasuta* Christ, 1791; *Xylocopa cyanescens* Brülle, 1832; *X. minuta* Lepeletier de Saint-Fargeau, 1841; *X. canuta* Rondani, 1874). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Syria, Lebanon, Israel, Jordan, Iran, Afghanistan, Turkmenistan, Tajikistan, Kazakhstan.

- Xylocopa (Proxylocopa) olivieri** Lepeletier de Saint-Fargeau, 1841 (*X. binominata* Gribodo, 1894; *X. fuscata* Smith, 1854; *X. hellenica* Spinola, 1843; *X. lanata* Smith, 1854; *X. lunata* Klug, 1807). Russia: **EP** (S, NC). – Europe (SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Cyprus, Syria, Iraq, Iran, Turkmenistan.
- Xylocopa (Proxylocopa) altaica** Popov, 1947 (*X. nitidiventris altaica* Popov, 1947). Russia: **WS** (AL). – China (NC, NW).
- Xylocopa (Xylocopa) valga** Gerstäcker, 1872 (*X. ramulorum* Rondani, 1874; *X. convexa* Smith, 1878). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (KM, AL), **ES** (KS, TU, KR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Iraq, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NW, WP).
- Xylocopa (Xylocopa) violacea** (Linnaeus, 1758) [Apis] (*Apis insubrica* Müller, 1766; *Xylocopa femorata* Fabricius, 1804; *X. violacea* ab. *heteropennis* Vicidomini, 2003). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Lebanon, Syria, Iraq, Iran, Turkmenistan.

Tribe CERATININI

- CERATINA** Latreille, 1802 (*Clavicera* Latreille, 1802; *Ceratinidia* Cockerell et Porter, 1899). Type species *Hylaeus albilabris* Fabricius, 1793. Polylectic bees, nesting in pithy dead stems or twigs, mostly tropic and subtropic species. Number of taxa: World – 199; Palaearctic – 67; Russia – 14.
- Ceratina (Ceratina) cucurbitina** (Rossi, 1792) [Apis] (*Hylaeus albilabris* Fabricius, 1793; *Ceratina decolorans* Brullé, 1832). Russia: **EP** (C, NC, CR). – Europe (WE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Israel, Jordan, China (CC).
- Ceratina (Ceratina) satoi** Yasumatsu, 1936. Russia: **ES** (ZB), **FE** (AM, PR). – China (NC), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu, Ryu).
- Ceratina (Ceratinidia) flavipes** Smith, 1879 (*C. flavovaria* Gussakovskij, 1932; *Ceratinidia flavipes*: Romankova, 1995b). Russia: **FE** (KH, AM, PR, SA). – China (NE, NC, CC, SW), Japan (Hok, Hon, Shi, Kyu).
- Ceratina (Euceratina) acuta** Friese, 1896. Russia: **EP** (S, CR), **UR**. – Europe (WE, SE, EE), Georgia, Azerbaijan, Turkey, Israel, Iran, Kazakhstan.
- Ceratina (Euceratina) cyanea** (Kirby, 1802) [Apis] (*C. nitidula* Spinola, 1806; *C. coerulea* Chevrier,

1872, nom. praeocc., nec Villers, 1789; *C. chevrieri* Tournier, 1876; *C. cyanea* var. *imitatrix* Markowsky, 1938). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (NS, KM), **ES** (KR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Cyprus, Iran, Turkmenistan, Kazakhstan, China (NW).

- Ceratina (Euceratina) chalcites** Germar, 1839 (*C. aenea* Brülle, 1832, nom. praeocc., nec Fabricius, 1798; *C. egregia* Gerstäcker, 1869). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Caucasus, Turkey, Iran, Turkmenistan.
- Ceratina (Euceratina) chalybea** Chevrier, 1872 (*C. hungarica* Mocsáry, 1881; *C. callosa algeriensis* Friese, 1896; *C. c. cephalica* Cockerell, 1931; *C. callosa* auct., nec Fabricius, 1794). Russia: **EP** (C, E, S, NC, CR). – Europe (WE, SE, EE), N Africa, Abkhazia, Georgia, Azerbaijan, Turkey, Jordan, Kazakhstan.
- Ceratina (Euceratina) chrysomalla** Gerstäcker, 1869. Russia: **EP** (S). – Europe (SE), Azerbaijan, Turkey, Cyprus, Iran.
- Ceratina (Euceratina) dallatorreana** Friese, 1896. Russia: **EP** (CR). – Europe (WE, SE, EE), N Africa, Abkhazia, Turkey, Syria, Palestine, Israel, Central Asia, introduced into N America (California).
- Ceratina (Euceratina) gravidula** Gerstäcker, 1869. Russia: **EP** (CR). – Europe (WE, SE, EE), Georgia, Azerbaijan.
- Ceratina (Euceratina) laevifrons** Morawitz, 1894. Russia: **UR**. – Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan.
- Ceratina (Euceratina) nigroaenea** Gerstäcker, 1869. Russia: **EP** (S, NC, CR). – Europe (SE), Azerbaijan, Turkey, Israel.
- Ceratina (Euceratina) nigrolabiata** Friese, 1896. Russia: **EP** (CR). – Europe (WE, SE, EE), Azerbaijan, Turkey, Syria, Lebanon, Israel.
- Ceratina (Euceratina) zwakhalsi** Terzo et Rasmont, 1997. Russia: **EP** (NC). – Azerbaijan, Turkey, Iran, Turkmenistan, Kazakhstan.

Subfamily NOMADINAE

Tribe NOMADINI

- NOMADA** Scopoli, 1770 (*Hypochrotaenia* Holmberg, 1886; *Nomadita* Mocsáry, 1894; *Lamproapis* Cameron, 1902; *Centrias* Robertson, 1903; *Cephen* Robertson, 1903; *Gnathias* Robertson, 1903; *Holonomada* Robertson, 1903; *Xanthidium* Robertson,

1903; *Phor* Robertson, 1903; *Nomadosoma* Rohwer, 1911; *Polybiapis* Cockerell, 1916; *Acanthonomada* Schwarz, 1966). Type species *Apis ruficornis* Linnaeus, 1758. Cleptoparasites of *Andrena*, rarely *Panurgus* (Andrenidae), *Halictus*, *Lasioglossum* (Halictidae), *Eucera* (Apidae), *Melitta* (Melitidae) and *Colletes* (Colletidae). The only genus of Nomadini with the greatest diversity presented in Holarctic. Number of taxa: World – more than 800, Palaearctic – 280; Russia – 116.

- Nomada albidemaculata** Łoziński, 1922. Russia: **ES** (IR, BR, ZB).
- Nomada alboguttata** Herrich-Schäffer, 1839 (*N. ochrostoma* Zetterstedt, 1838, nom. praeocc., nec Kirby, 1802; *N. baccata* Smith, 1844; *N. quinquespinosa* Thomson, 1870; *N. laeta* Thomson, 1870; *N. alboguttata* var. *liburnica* Friese, 1921; *N. alboguttata* var. *suerinensis* Friese, 1921). Cleptoparasite of *Andrena argentata* Sm., *A. barbilabris* (Kby.) and probably of *A. ventralis* Imh. (Andrenidae). Russia: **EP** (N, NW, C, E, S, CR), **UR**, **ES** (KR), **FE** (KA). – Europe (WE, NE, SE, EE), Georgia, Azerbaijan, Japan (Hok, Hon, Kyu).
- Nomada amurensis** Radoszkowski, 1876 (*N. esakii* Yasumatsu et Hirashima, 1953; *N. sudai* Tsuneki, 1976). Russia: **WS** (AL), **ES** (KS, IR), **FE** (PR). – Kazakhstan, Japan (Hok, Hon, Shi, Kyu).
- Nomada argentata** Herrich-Schäffer, 1839 (*N. atrata* Smith, 1846; *N. brevicornis* Schmiedeknecht, 1882). Cleptoparasite of *Andrena argentata* (H.-Sch.) (Andrenidae). Russia: **EP** (NW, C). – Europe (WE, NE, SE, EE).
- Nomada armata** Herrich-Schäffer, 1839 (*N. rostrata* Lepeletier de Saint-Fargeau, 1841, nom. praeocc., nec Herrich-Schäffer, 1839; *N. lanceolata* Lepeletier de Saint-Fargeau, 1841; *N. compta* Lepeletier de Saint-Fargeau, 1841; *N. kirbyella* Stephens, 1846; *N. cineticornis* Nylander, 1848). Cleptoparasite of *Andrena hattofiana* (F.) (Andrenidae). Russia: **EP** (N, NW, C, E, CR), **UR**. – Europe (WE, NE, SE, EE), Georgia, Azerbaijan.
- Nomada arrogans** Schmiedeknecht, 1882. Russia: **EP** (CR). – Europe (EE, SE), Turkey, Israel, Tajikistan.
- Nomada atroscutellaris** Strand, 1921. Cleptoparasite of *Andrena viridescens* Vier. (Andrenidae). Russia: **EP** (C, CR). – Europe (WE, SE, EE), Turkey.
- Nomada basalis** Herrich-Schäffer, 1839 (*N. rubra* Smith, 1849; *N. flavomaculata* Lucas, 1849; *N. bimaculata* Eversmann, 1852, nom. praeocc., nec Schilling, 1849; *N. regalis* Morawitz, 1870; *N. tripunetata* Morawitz, 1872; *N. andalusica* Schmiedeknecht, 1882; *N. astarte* Pérez, 1895; *N. emendata* Schulz, 1906; *N. flavomaculata* var. *carnica* Friese, 1921; *N. grossa* Friese, 1921; *N. regalis* var. *inderskiana* Łoziński, 1922). Cleptoparasite of *Andrena truncatilabris* Mor. (Andrenidae). Russia: **EP** (S, CR), **UR**, **WS** (NS). – Europe (WE, SE, EE), N Africa, Armenia, Turkey, Syria, Palestine, Israel, Iraq, Iran, Turkmenistan, Kazakhstan.
- Nomada bifasciata** Olivier, 1811 (*N. zonata* Panzer in Lepeletier de Saint-Fargeau, 1841; *N. lepeletieri* Pérez, 1884; *N. navasi* Dusmet, 1913; *N. pusilla* auct., nec Lepeletier de Saint-Fargeau, 1841). Cleptoparasite of *Andrena gravida* Imh. (Andrenidae). Russia: **EP** (CR). – Europe (WE, SE, EE), N Africa, Turkey.
- Nomada bispinosa** Mocsáry, 1883 (*N. excisa* Pérez, 1890). Probably cleptoparasite of *Andrena hypopolia* Schmied. (Andrenidae). Russia: **EP** (CR). – Europe (WE, SE, EE), Azerbaijan, Turkey.
- Nomada blepharipes** Schmiedeknecht, 1882. Russia: **UR**, **ES** (IR). – Europe (WE, SE, EE), Turkey, Kazakhstan.
- Nomada bluethgeni** Stoeckhert, 1944. Cleptoparasite of *Lasioglossum marginellum* (Schck.) (Halictidae). Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), Azerbaijan.
- Nomada braunsiana** Schmiedeknecht, 1882. Cleptoparasite of *Andrena pandellei* (Pér.) and probably of *A. curvungula* Thoms. (Andrenidae). Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), Turkey, Jordan.
- Nomada calimorpha** Schmiedeknecht, 1882 (*N. copeitica* Morawitz, 1894). Russia: **EP** (E, S, CR). – Europe (WE, SE, EE), Turkey.
- Nomada castellana** Dusmet, 1913 (*N. baeri* E. Stoeckhert, 1930). Probably cleptoparasite of *Andrena semilaevis* Pér. (Andrenidae). Russia: **EP** (C, E, S), **ES** (IR). – Europe (WE, NE, SE, EE), Azerbaijan, Kazakhstan.
- Nomada comparata** Cockerell, 1911 (*N. maculifrons* var. *comparata* Cockerell, 1911). Probably cleptoparasite of *Andrena mikado* Strand et Yasumatsu and *A. richardsi* Hirashima (Andrenidae). Russia: **FE** (PR). – Japan (Hok, Hon, Shi, Kyu).
- Nomada conjungens** Herrich-Schäffer, 1839 (*N. dailatorreana* Schmiedeknecht, 1882; *N. bipunetis* Pérez, 1902). Cleptoparasite of *Andrena proxima* (Kby.) (Andrenidae). Russia: **EP** (NW, C, E, S). – Europe (WE, SE, EE), N Africa, Turkey, Kazakhstan.

- Nomada corcyraea** Schmiedeknecht, 1882 (*N. transitoria* Schmiedeknecht, 1882). Russia: **EP** (S). – Europe (SE, EE), Azerbaijan, Turkey.
- Nomada coxalis** Morawitz, 1877. Russia: **EP** (CR), **UR**. – Europe (SE), Azerbaijan, Turkey, Israel, Iran, Turkmenistan.
- Nomada cruenta** Schmiedeknecht, 1882 (*N. sexspinosa* Friese, 1921; *N. chrysopyga* var. *rubescens* Lozinski, 1922). Cleptoparasite of *Andrena scita* Ev. (Andrenidae). Russia: **EP** (S, CR). – Europe (WE, SE, EE), Azerbaijan, Turkey.
- Nomada diacantha** Schwarz, 1981. Russia: **EP** (S, CR). – Europe (SE, EE), Turkey, Syria.
- Nomada distinguenda** Morawitz, 1874 (*N. rugithorax* Pépez, 1902). Cleptoparasite of *Lasioglossum villosulum* (Kby.) and probably of *L. parvulum* (Schck.) (Halictidae). Russia: **EP** (C, S, NC, CR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Syria, Afghanistan, Turkmenistan.
- Nomada dybovskij** Radoszkowski, 1876. Russia: **ES** (IR).
- Nomada ecarinata** Morawitz, 1888 (*N. munakatai* Tsuneki, 1973). Russia: **EP** (C), **UR**, **WS** (TK, AL), **ES** (KS, KR, IR, BR, ZB), **FE** (PR). – Mongolia, China (NE), Japan (Hok, Hon).
- Nomada emarginata** Morawitz, 1877. Cleptoparasite of *Melitta haemorrhoidalis* (F.) (Melittidae). Russia: **EP** (C, S, NC), **UR**. – Europe (WE, NE, SE, EE), Georgia, Azerbaijan.
- Nomada errans** Lepeletier de Saint-Fargeau, 1841 (*N. errans* var. *korleviciana* Friese, 1921; *N. errans* var. *sibirica* Friese, 1921; *N. transsylvatica* Zilahi-Kiss, 1927). Cleptoparasite of *Andrena nitidiuscula* Schck. and *A. pallitarsis* Pér. (Andrenidae). Russia: **EP** (C, E), **UR**, **ES** (IR). – Europe (WE, SE, EE), Kazakhstan.
- Nomada erythrocephala** Morawitz, 1871. Russia: **EP** (S, NC). – Europe (WE, SE, EE), Armenia, Turkey, Cyprus.
- Nomada esana** Tsuneki, 1973. Russia: **FE** (AM, KH, PR). – Korean Peninsula, Japan (Hok, Hon).
- Nomada fabriciana** (Linnaeus, 1767) [Apis] (*N. germanica* Panzer, 1799, nom. praeocc., nec Fabricius, 1804; *Apis fabriciella* Kirby, 1802; *A. quadri-notata* Kirby, 1802; *Nomada nigricornis* Olivier, 1811; *N. nigrita* Schenck, 1861, nom. praeocc., nec Fabricius, 1775, nec Panzer, 1800, nec Pérez, 1895; *N. fabriciana* var. *aestivalis* Friese, 1921; *N. fabriciana* var. *ruficrus* E. Stoeckhert, 1930). Cleptoparasite of *Andrena bicolor* F., *A. chrysosceles* (Kby.), *A. angustior* (Kby.) and probably of *A. nigroaenea* (Kby.) (Andrenidae). Russia: **EP** (NW, C, E, CR), **UR**, **WS** (TK), **ES** (KS, IR). – Europe (WE, NE, SE, EE), Azerbaijan.
- Nomada facilis** Schwarz, 1967. Probably cleptoparasite of *Andrena humilis* Imh. (Andrenidae). Russia: **EP** (C). – Europe (WE, NE, SE, EE), Azerbaijan, Kazakhstan.
- Nomada femoralis** Morawitz, 1869 (*N. dentipes* Rudow, 1879; *N. femoralis* var. *flavopunctata* Friese, 1921). Cleptoparasite of *Andrena humilis* Imh. (Andrenidae). Russia: **EP** (C, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Syria, Palestine, Iran.
- Nomada ferruginata** (Linnaeus, 1767) [Apis] (*Apis xanthosticta* Kirby, 1802; *Nomada lateralis* Panzer, 1804; *N. bridgmaniana* Smith, 1876; *N. lateralis* var. *blancoburgensis* Schmiedeknecht, 1882; *N. lateralis* var. *megapolitana* Schmiedeknecht, 1882). Cleptoparasite of *Andrena praecox* (Scop.) (Andrenidae). Russia: **EP** (NW, C, E, S), **UR**. – Europe (WE, NE, SE, EE), Caucasus, Uzbekistan.
- Nomada flava** Panzer, 1798 (*N. intermedia* Imhoff, 1834; *N. proteus* Lepeletier de Saint-Fargeau, 1841; *N. hirsuta* Verhoeff, 1890). Cleptoparasite of *Andrena carantonica* (Pér.), *A. nitida* (Müll.), *A. fulva* (Müll.) and probably of *A. nigroaenea* Kby. (Andrenidae). Russia: **EP** (C, E, S), **UR**. – Europe (WE, NE, SE, EE), Caucasus, Kazakhstan.
- Nomada flavoguttata** (Kirby, 1802) [Apis] (*Apis rufocincta* Kirby, 1802; *Nomada minuta* Fabricius, 1804, nom. praeocc., nec Swenk, 1913; *N. nana* Schenck, 1874; *N. pygmaea* Schenck, 1874, nom. praeocc., nec Cresson, 1863; *N. flavoguttata* var. *serotina* Schmiedeknecht, 1882; *N. flavoguttata* var. *hoepfneri* Alfken, 1898; *N. aljkeni* Cockerell, 1907, nom. praeocc., nec Gaunitz, 1935, nec Noskiewicz, 1939; *N. kurilensis* Yasumatsu, 1939; *N. flavoguttata japonensis* Tsuneki, 1973; *N. tridentata* Tsuneki, 1986). Cleptoparasite of *Andrena minutula* (Kirby), *A. minutuloides* Perkins, *A. falsifica* Perkins, *A. subopaca* Nylander and *A. semilaevis* Pérez (Andrenidae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, TK, AL), **ES** (KS, TU, IR, YA), **FE** (PR, KU). – Europe (WE, NE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Iran, Turkmenistan, Tajikistan, Kazakhstan, China (SE), Korean Peninsula, Japan (Hok, Hon, Shi, Kyu), India.
- Nomada flavopicta** (Kirby, 1802) [Apis] (*N. jacobaeae* var. *miranda* Schmiedeknecht, 1882; *N. jacobaeae*

var. *haematodes* Schmiedeknecht, 1882; *N. jacobaeae* var. *konowiana* Friese, 1921; *N. jacobaeae* var. *parva* Friese, 1921, nom. praeocc., nec Robertson, 1900; *N. jasnitskii* Cockerell, 1928). Cleptoparasite of *Melitta leporina* (Pz.), *M. haemorrhoidalis* (F.), *M. tricincta* Kby. and probably of *M. nigricans* Alf. (Melittidae). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (OM, TK, AL), **ES** (KS, TU, KR, IR, BR, ZB). – Europe (WE, NE, SE, EE), Georgia, Azerbaijan, Tajikistan, Uzbekistan, Kazakhstan.

Nomada fucata Panzer, 1798 (*N. varia* Panzer, 1798; *N. fucata* var. *taeniata* Gribodo, 1894; *N. f.* var. *iberica* Dalla Torre et Friese, 1894; *N. f.* var. *pretiosa* Friese, 1921; *N. f.* var. *flavescens* Friese, 1921, nom. praeocc., nec Friese, 1916; *N. f.* var. *caucasica* Lozinski, 1922). Cleptoparasite of *Andrena flavipes* Pz. (Andrenidae). Russia: **EP** (NW, C, S, NC, CR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Iraq, Afghanistan, Pakistan, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan.

Nomada fulvicornis Fabricius, 1793 (*N. lineola* Panzer, 1798; *Apis sexcincta* Kirby, 1802, nom. praeocc., nec Fabricius, 1775; *A. capreae* Kirby, 1802; *A. cornigera* Kirby, 1802, nom. praeocc., nec Rossi, 1790; *A. subcornuta* Kirby, 1802; *Nomada ventralis* Imhoff, 1834; *N. rubra* Eversmann, 1852, nom. praeocc., nec Geoffrey, 1785, nom. praeocc., nec Provancher, 1888, nec Smith, 1849; *N. robusta* Morawitz, 1871; *N. aurantiaca* Morawitz, 1875; *N. schmiedeknechti* Schmiedeknecht, 1882; *N. lineola* var. *aurigena* Schmiedeknecht, 1882; *N. l.* var. *melanothorax* Schmiedeknecht, 1882; *N. l.* var. *meridionalis* Schmiedeknecht, 1882; *N. l.* var. *flavolimbata* Schmiedeknecht, 1882; *N. l.* var. *latistriga* Schmiedeknecht, 1882; *N. l.* var. *rossica* Schmiedeknecht, 1882; *N. l.* var. *sagemehli* Schmiedeknecht, 1882; *N. pallidenotata* Schmiedeknecht, 1882; *N. l.* var. *diluta* Gribodo, 1893, nom. praeocc., nec Pérez, 1884; *N. l.* var. *melanocera* Gribodo, 1893; *N. l.* var. *sagemehlii* Dallatorre, 1896; *N. lineola* var. *sibirica* Mocsáry, 1901; *N. l.* var. *bremensis* Alfken, 1913; *N. l.* var. *erubescens* Friese, 1921; *N. rakosiensis* Friese, 1921; *N. lineola* var. *nigrina* Lozinski, 1922; *N. l.* var. *aurolimbata* Lozinski, 1922; *N. l.* var. *brunneofasciata* Lozinski, 1922; *N. l.* var. *rufomaculata* Lozinski, 1922; *N. l.* var. *quadrivittata* Lozinski, 1922; *N. l.* var. *eversmanni* Lozinski, 1922; *N. belikovi* Cockerell, 1928; *N. lineola* var. *decorata* Markowsky, 1939, nom. praeocc., nec Smith, 1854). Cleptoparasite of *Andrena tibialis* (Kby.), *A. agilissima* (Scop.), *A. pilipes* F.,

A. bimaculata (Kby.) and *A. thoracica* (F.) (Andrenidae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (OM, TK, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (PR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, UAE, Pakistan, Turkmenistan, Uzbekistan, Japan (Hon, Hok).

Nomada furva Panzer, 1798. Cleptoparasite of *Lasioglossum leucopus* (Kby.), *L. morio* (F.), *L. punctatissimum* (Schck.) (Halictidae). Russia: **EP** (C, E, S, NC), **UR**, **WS** (TK), **FE** (PR). – Europe (WE, SE, EE), N Africa, Georgia, Turkey, Turkmenistan, Uzbekistan, Kazakhstan.

Nomada furvoides Stoechert, 1944. Cleptoparasite of *Lasioglossum politum* (Schck.) and probably of *L. semilucens* (Alfk.) (Halictidae). Russia: **EP** (S). – Europe (WE, SE, EE), Turkey.

Nomada fusca Schwarz, 1986. Russia: **EP** (NW, C), **WS** (AL), **ES** (KS, IR, YA), **FE** (KH, PR). – Europe (NE), Japan (Hok, Hon).

Nomada fuscicornis Nylander, 1848 (*N. megacephala* Schenck, 1874). Cleptoparasite of *Panurgus calceatus* (Scop.) (Andrenidae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (TK, AL). – Europe (WE, NE, SE, EE).

Nomada ginran Tsuneki, 1973 (*N. yasha* Tsuneki, 1986). Russia: **FE** (PR). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).

Nomada glaberrima Schmiedeknecht, 1882 (*N. graja* Mocsáry, 1883). Russia: **EP** (C, S, CR). – Europe (SE), Turkey, Lebanon, Syria.

Nomada glaucopsis Pérez, 1890. Russia: **UR**. – Europe (WE, SE, EE), N Africa, Israel, Kazakhstan.

Nomada goodeniana (Kirby, 1802) [*Apis*] (*Apis alternata* Kirby, 1802; *Nomada Integra* Imhoff, 1834, nom. praeocc., nec Brülle, 1832, nec Robertson, 1893; *N. cineta* Herrich-Schäffer, 1839, nom. praeocc., nec Rossi, 1792, nec Lepeletier de Saint-Fargeau, 1841; *Nomada batava* Vollenhoven, 1858; *N. succineta* var. *lineolata* Friese, 1921; *N. scheviakovi* Cockerell, 1928; *N. goodeniana danuvia* Pittioni, 1951). Cleptoparasite of *Andrena nitida* (Müll.), *A. nigroaenea* (Kby.), *A. cineraria* (L.), *A. tibialis* (Kby.) and *A. thoracica* (F.) (Andrenidae). Russia: **EP** (N, NW, C, E, S, CR), **UR**, **WS** (TM, AL), **ES** (IR). – Europe (WE, NE, SE, EE), Azerbaijan, Turkey, Kyrgyzstan, Kazakhstan.

Nomada guttulata Schenck, 1861 (*N. rufilabris* Thomson, 1870; *N. mishimana* Tsuneki, 1976). Cleptoparasite of *Andrena labiata* F. and probably of *A. potentillae* Pz. (Andrenidae). Russia: **EP** (C, E, S), **UR**,

- ES** (KS), **FE** (PR). – Europe (WE, NE, SE, EE), Kazakhstan, Japan (Hon, Kyu).
- Nomada hakusana** Tsuneki, 1973. Russia: **FE** (KH, SA, KU). – Japan (Hok, Hon).
- Nomada hammarstroemi** Morawitz, 1888. Russia: **WS** (AL), **ES** (KR, IR, BR).
- Nomada hera** Schwarz, 1965. Russia: **EP** (NC). – Europe (SE), Turkey.
- Nomada hungarica** Dalla Torre et Friese, 1894 (*N. scita* Schmiedeknecht, 1882, nom. praeocc., nec Cresson, 1878; *N. lagrecai* Nobile, 1990). Russia: **EP** (S), **UR**. – Europe (SE, EE), Turkey.
- Nomada immaculata** Morawitz, 1874. Russia: **EP** (S, NC). – Europe (SE, EE), Armenia, Cyprus, Afghanistan, Pakistan.
- Nomada imperialis** Schmiedeknecht, 1882. Probably cleptoparasite of *Eucera pannonica* Mocs. (Apidae). Russia: **EP** (NC, CR). – Europe (SE), Turkey.
- Nomada incisa** Schmiedeknecht, 1882. Russia: **EP** (S). – Europe (WE, SE, EE), Cyprus.
- Nomada integra** Brülle, 1832 (*N. germanica* Fabricius, 1804, nom. praeocc., nec Panzer, 1799; *N. ferruginata* var. *cinctiventris* Friese, 1921; *N. stigma* auct., nec Fabricius, 1805; *N. ferruginata* auct., nec Linnaeus, 1767). Cleptoparasite of *Andrena humilis* Imh. and *A. taraxaci* Gir. (Andrenidae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **ES** (KR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Cyprus, Israel, Kazakhstan.
- Nomada irkutskiensis** Proshchalykin et Schwarz, 2017. Russia: **ES** (IR, BR).
- Nomada italica** Dalla Torre et Friese, 1894. Cleptoparasite of *Andrena assimilis* Rad. (Andrenidae). Russia: **EP** (C), **UR**, **WS** (AL), **ES** (KS, KR, BR). – Europe (WE, SE, EE), Azerbaijan, Turkey, Kazakhstan.
- Nomada issikii** Yasumatsu, 1939. Russia: **FE** (AM, KH, PR, SA, KU). – Japan (Hok, Hon, Kyu, Shi).
- Nomada japonica** Smith, 1873. Cleptoparasite of *Eucera spurcatipes* Pér., *E. nipponensis* Pér., *E. longicornis* (L.) (Apidae). Russia: **FE** (PR). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Nomada kohli** Schmiedeknecht, 1882 (*N. hipponensis* Saunders, 1908). Cleptoparasite of *Lasioglossum puncticolle* (Mor.) (Halictidae). Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE) N Africa.
- Nomada koikensis** Tsuneki, 1973 (*N. buyoo* Tsuneki, 1976). Russia: **FE** (PR). – Japan (Hok, Hon).
- Nomada lathburiana** (Kirby, 1802) [Apis] (*Apis rufiventris* Kirby, 1802). Cleptoparasite of *Andrena vaga* Pz. and *A. cineraria* (L.) (Andrenidae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (TM, TK, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB). – Europe (WE, NE, SE, EE), Caucasus, Kazakhstan.
- Nomada laticrus** Mocsáry, 1883 (*N. erythrosoma* Mocsáry, 1883). Russia: **EP** (S). – Turkey.
- Nomada leucophthalma** (Kirby, 1802) [Apis] (*N. borealis* Zetterstedt, 1838; *N. inquilina* Smith, 1844; *N. kuro* Tsuneki, 1986; *N. muinensis* Tsuneki, 1986). Cleptoparasite of *Andrena nycthemera* Imh., *A. apicata* Sm., *A. clarckella* (Kby.) (Andrenidae). Russia: **EP** (N, NW, C, E, S), **WS** (TK), **ES** (YA), **FE** (PR, KA). – Europe (WE, NE, SE, EE), Kazakhstan, Mongolia, Japan (Hok, Hon, Kyu).
- Nomada lutea** Eversmann, 1852 (*N. rubricosa* Eversmann, 1982; *N. fasciculata* Morawitz, 1888). Russia: **EP** (CR), **UR**. – Kazakhstan.
- Nomada maculifrons** Smith, 1869. Russia: **FE** (SA, KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Nomada margelanica** Schwarz, 1987. Russia: **ES** (KS, BR, YA). – Uzbekistan, Kazakhstan.
- Nomada marshamella** (Kirby, 1802) [Apis] (*N. marshamella* var. *dubia* Schmiedeknecht, 1882; *N. m.* var. *modesta* Schmiedeknecht, 1882, nom. praeocc., nec Cresson, 1863, nec Herrich-Schäffer, 1839). Cleptoparasite of *Andrena carantonica* Pér., *A. nigroaenea* (Kby.), *A. trimmerana* (Kby.), *A. rosae* Pz., *A. ferox* Sm. or probably *A. nitida* (Müll.) (Andrenidae). Russia: **EP** (N, NW, C, E, CR), **UR**. – Europe (WE, NE, SE, EE), Azerbaijan, Kazakhstan.
- Nomada mauritanica** Lepelletier de Saint-Fargeau, 1841 (*N. chrysopyga* Morawitz, 1872; *N. mephisto* Schmiedeknecht, 1882; *N. speciosissima* Schmiedeknecht, 1882; *N. superba* Pérez, 1902, nom. praeocc., nec Cresson, 1863; *N. sericultorum* Schulz, 1906; *N. syriaca* Friese, 1921). Cleptoparasite of *Andrena fuscata* Erichson and probably of *A. pilipes* F. Russia: **EP** (S, CR), **ES** (TU, BR). – Europe (WE, SE, EE), N Africa, Azerbaijan, Turkey, Cyprus, Syria, Israel, Iraq, UAE.
- Nomada mitaii** Proshchalykin, 2010. Russia: **ES** (KS, IR, ZB), **FE** (AM, KH, PR). – Mongolia.
- Nomada mocsaryi** Schmiedeknecht, 1882. Russia: **EP** (CR). – Europe (SE, EE), Turkey, Iran.
- Nomada moeschleri** Alfken, 1913. Russia: **EP** (NW, C, E), **UR**, **ES** (KR, IR, ZB). – Europe (WE, NE, EE), Azerbaijan, Uzbekistan, Kazakhstan.
- Nomada mutabilis** Morawitz, 1871 (*N. mutabilis* var. *lucifera* Schmiedeknecht, 1882; *N. antigana*

- Pérez, 1895). Cleptoparasite of *Andrena chrysoptera* Schck. and probably of *A. labialis* (Kby.) (Andrenidae). Russia: **EP** (C, E, S, CR), **UR**, **ES** (KS, IR). – Europe (WE, NE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Iran, Turkmenistan, Kyrgyzstan, Kazakhstan, Nepal, India.
- Nomada mutica** Morawitz, 1872. Cleptoparasite of *Andrena ferox* Sm. (Andrenidae). Russia: **EP** (NC). – Europe (WE, SE, EE), Turkey, Azerbaijan.
- Nomada nobilis** Herrich-Schäffer, 1839 (*N. aberrans* Eversmann, 1852; *N. calabra* Morawitz, 1872; *N. nobilis* var. *magrettiana* Schmiedeknecht, 1882). Cleptoparasite of *Andrena nasuta* Gir. (Andrenidae). Russia: **EP** (C, S, CR), **UR**. – Europe (WE, SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Israel.
- Nomada noskiewiczzi** Schwarz, 1966 (*N. aljkeni* Noskiewicz, 1939, nom. praeocc., nec Cockerell, 1907, nec Gaunitz, 1935). Russia: **EP** (E, NC). – Europe (WE, EE).
- Nomada obscura** Zetterstedt, 1838 (*N. obscura* var. *bitineta* Alfken, 1924; *N. o.* var. *alfkeni* Gaunitz, 1935, nom. praeocc., nec Cockerell, 1907, nec Noskiewicz, 1939). Cleptoparasite of *Andrena ruficrus* Nyl. (Andrenidae). Russia: **EP** (N, NW, C, E), **UR**, **WS** (TK), **ES** (IR, BR, ZB), **FE** (PR). – Europe (WE, NE, EE).
- Nomada obscuriceps** Schwarz et Levchenko, 2017. Russia: **EP** (E), **ES** (IR).
- Nomada obtusifrons** Nylander, 1848 (*N. mistura* Smith, 1851; *N. robertjeotiana* var. *alpina* Morawitz, 1867). Cleptoparasite of *Andrena coitana* (Kby.) and probably of *A. tarsata* Nyl. (Andrenidae). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (AL), **ES** (IR). – Europe (WE, NE, SE, EE), Kazakhstan.
- Nomada oculata** Friese, 1821. Russia: **EP** (NC, CR). – Europe (SE), Azerbaijan, Turkey, Syria, Israel.
- Nomada okamotonis** Matsumura, 1912 (*N. okamotonis kaiensis* Tsuneki, 1976). Cleptoparasite of *Andrena valeriana* Hirashima (Andrenidae). Russia: **FE** (AM, PR). – Japan (Hok, Hon, Kyu).
- Nomada opaca** Alfken, 1913. Cleptoparasite of *Andrena fulvida* Schck. (Andrenidae). Russia: **EP** (N, NW), **ES** (IR), **FE** (PR). – Europe (WE, NE, EE).
- Nomada pacifica** Tsuneki, 1973. Russia: **FE** (PR). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Nomada pallispinosa** Schwarz, 1967. Russia: **EP** (NC). – Europe (SE), Turkey, Cyprus, Israel.
- Nomada palmeni** Morawitz, 1888. Russia: **ES** (KR, IR), **FE** (KH).
- Nomada panzeri** Lepelletier de Saint-Fargeau, 1841 (*N. glabella* Thomson, 1870; *N. ruficornis* var. *phoenicia* Schmiedeknecht, 1882; *N. ruficornis* var. *incompleta* Schmiedeknecht, 1882; *N. ruficornis* var. *hybrida* Schmiedeknecht, 1882; *N. diluta* Pérez, 1884, nom. praeocc., nec Gribodo, 1893; *N. ruficornis* var. *fasciata* Friese, 1921). Cleptoparasite of *Andrena helvola* (L.), *A. synadelpha* Perk., *A. lapponica* Zett., *A. varians* (Kby.), *A. fucata* Sm. and *A. lapponica* Zett. (Andrenidae). Russia: **EP** (N, NW, C, E, S), **UR**, **WS** (TM, TK, AL), **ES** (TU, IR, BR, YA, ZB), **FE** (AM, PR, SA, KU, KA, MG). – Europe (WE, NE, SE, EE), N Africa, Japan (Hok, Hon, Shi, Kyu), Korean Peninsula.
- Nomada pastoralis** Eversmann, 1852. Russia: **UR**. – Europe (SE), Turkey.
- Nomada pectoralis** Morawitz, 1877 (*N. difficilis* Friese, 1921; *N. pectoralis* var. *atroflava* Friese, 1921). Russia: **EP** (C, S, NC), **UR**. – Azerbaijan, Turkmenistan.
- Nomada piliventris** Morawitz, 1877. Russia: **EP** (NC). – Azerbaijan, Turkey.
- Nomada pilosa** Schwarz et Gusenleitner, 2017. Russia: **EP** (S, CR). – Turkey.
- Nomada piccioliana** Magretti, 1883 (*N. piccioliana* Magretti, 1883; *N. novioregensis* Pérez, 1902; *N. piccioliana jurassica* E. Stoeckert, 1941). Cleptoparasite of *Andrena combinata* Christ (Andrenidae). Russia: **EP** (C, CR). – Europe (WE, SE, EE).
- Nomada posthuma** Blüthgen, 1949 (*N. mixtella* Noskiewicz, 1959). Cleptoparasite of *Lasioglossum glabriusculum* (Mor.) (Halictidae). Russia: **EP** (C), **ES** (IR), **FE** (PR). – Europe (WE, EE), Nepal.
- Nomada pulchra** Arnold, 1888 (*N. olhae* Cockerell, 1928). Probably cleptoparasite of *Melitta melanura* Nyl. (Melittidae). Russia: **EP** (C), **UR**, **WS** (AL), **ES** (TU, IR, ZB). – Europe (WE, NE, EE), Kazakhstan.
- Nomada pygidialis** Schwarz, 1981. Russia: **EP** (S). – Europe (SE, EE), Georgia, Turkey.
- Nomada radoszkowskii** Łoziński, 1922. Russia: **EP** (NC), **ES** (BR). – Europe (SE), Turkey, Armenia, Azerbaijan.
- Nomada rhenana** Morawitz, 1872 (*N. rufipes* Schenck, 1870, nom. praeocc., nec Fabricius, 1793). Cleptoparasite of *Andrena ovatula* (Kby.) (Andrenidae). Russia: **EP** (C, S), **UR**. – Europe (WE, NE, SE, EE), N Africa.
- Nomada roberjeotiana** Panzer, 1799 (*N. panzeriana* Walckenaer, 1802; *N. neglecta* Herrich-Schäffer, 1839; *Nomadita montana* Mocsáry, 1894, nom. praeocc., nec Scopoli, 1763; *Nomadita roberjeotiana tormentillae* Alfken, 1901). Cleptoparasite of *Andrena*

- tarsata* Nyl., and probably of *A. fuscipes* (Kby.) and *A. coitana* (Kby.) (Andrenidae). Russia: **EP** (N, NW, C, E, NC), **UR, WS** (TK, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, EE), Azerbaijan, Kyrgyzstan, Mongolia, Japan (Hok, Hon).
- Nomada rubricollis** Schwarz, 1966. Russia: **EP** (NC). – Europe (SE), Turkey, Syria, Jordan, Israel.
- Nomada rubricosa** Eversmann, 1852. Russia: **EP** (S), **UR**. – Kazakhstan.
- Nomada ruficornis** (Linnaeus, 1758) [Apis] (*N. bifida* Thomson, 1872; *N. bifida orenburgensis* Łoziński, 1922). Cleptoparasite of *Andrena haemorrhoea* F. (Andrenidae). Russia: **EP** (N, NW, C, E, S, CR), **UR, WS** (TK, AL), **ES** (KR, IR, BR, YA), **FE** (AM, SA, KU). – Europe (WE, NE, SE, EE), Azerbaijan, Turkey, Uzbekistan, Kazakhstan.
- Nomada rufipes** Fabricius, 1793 (*N. vaga* Panzer, 1798; *N. solidaginis* Panzer, 1799; *Apis picta* Kirby, 1802; *A. rufopicta* Kirby, 1802; *Nomada solidaginis* var. *punctulifera* Friese, 1921; *N. s.* var. *minutula* Friese, 1921; *N. fennica* Alfken, 1924; *N. rufipes nigriventris* Alfken, 1926). Cleptoparasite of *Andrena denticulata* (Kby.), *A. fuscipes* (Kby.), probably of *A. nigriceps* (Kby.) (Andrenidae) and *Colletes cinicularius* (L.) (Colletidae). Russia: **EP** (N, NW, C, E, NC), **UR, WS** (AL), **ES** (KS, YA), **FE** (AM). – Europe (WE, NE, SE, EE), N Africa, Kazakhstan.
- Nomada setteri** Proshchalykin, 2010. Russia: **ES** (IR), **FE** (PR).
- Nomada sexfasciata** Panzer, 1799 (*Apis connexa* Kirby, 1802; *A. schaefferella* Kirby, 1802). Cleptoparasite of *Eucera longicornis* (L.) and *E. nigrescens* Pér. (Apidae). Russia: **EP** (C, E, NC, CR), **UR, WS** (TK, AL), **ES** (KS, IR, BR, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Israel, Iran, Turkmenistan, Kazakhstan, Korean Peninsula.
- Nomada sheppardana** (Kirby, 1802) [Apis] (*N. dali* Curtis, 1832; *N. minuscula* Noskiewicz, 1930; *N. microstieta* Cockerell, 1931). Cleptoparasite of *LasioGLOSSUM nitidiusculum* (Kby.) and *L. sexstrigatum* (Schck.) (Halictidae). Russia: **EP** (C, E, S). – Europe (WE, NE, SE, EE), N Africa.
- Nomada silvicola** Tsuneki, 1973 (*N. hangani* Tsuneki, 1973; *N. diervillae* Tsuneki, 1973). Russia: **FE** (PR). – Japan (Hok, Hon).
- Nomada stigma** Fabricius, 1804 (*N. stigma* Fabricius, 1804; *N. cinnaberina* Morawitz, 1871; *N. cinnabarina* Morawitz, 1872; *N. austriaca* Schmiedeknecht, 1882; *N. stigma villipes* Stoeckhert, 1930; *N. cinnabarina* var. *slovakica* Mavromoustakis, 1955). Cleptoparasite of *Andrena labialis* (Kby.), *A. schencki* Mor. and *A. decipiens* Schck. (Andrenidae). Russia: **EP** (N, C, E, S, NC, CR), **UR, WS** (TK, AL), **ES** (KR, IR, YA). – Europe (WE, NE, SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Cyprus, Uzbekistan, Kazakhstan.
- Nomada striata** Fabricius, 1793 (*Apis hillana* Kirby, 1802; *A. ochrostoma* Kirby, 1802, nom. praeocc., nec Zetterstedt, 1838; *Nomada vidua* Smith, 1844; *N. punetiscuta* Thomson, 1870; *N. simillima* Pérez, 1913; *N. dzieduszyckii* Noskiewicz, 1924). Cleptoparasite of *Andrena wilkella* (Kby.), *A. aberrans* Ev., *A. similis* Sm., *A. gelriae* van der Vecht and probably of *A. pandellei* Pér., *A. intermedia* Thoms. (Andrenidae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR, WS** (TK, AL), **ES** (BR, YA, ZB), **FE** (PR). – Europe (WE, NE, SE, EE), Cyprus, Kazakhstan.
- Nomada stoeckherti** Pittioni, 1951. Russia: **EP** (S, CR). – Europe (WE, EE), Afghanistan.
- Nomada succincta** Panzer, 1798 (*N. succineta* var. *mixta* Dalla Torre, 1877; *N. succineta* var. *rufula* Friese, 1921; *N. fidvicornis* auct., nec Fabricius, 1793). Cleptoparasite of *Andrena nigroaenea* (Kby.), *A. nitida* (Müll.), *A. cineraria* (L.), *A. tibialis* (Kby.), *A. thoracica* (F.) or probably *A. carantonica* Pér. (Andrenidae). Russia: **FE** (PR). – Europe (WE, NE, SE, EE), N Africa, Azerbaijan, Turkey, Jordan.
- Nomada sybarita** Schmiedeknecht, 1882. Russia: **UR, WS** (TK). – Europe (WE, SE, EE), Azerbaijan.
- Nomada tenella** Mocsáry, 1883. Russia: **EP** (E, S, NC, CR), **UR, ES** (BR, YA). – Azerbaijan, Iran, Turkmenistan, Kazakhstan.
- Nomada thersites** Schmiedeknecht, 1882. Russia: **EP** (S). – Europe (EE), Cyprus, Israel, Kyrgyzstan, Kazakhstan.
- Nomada trapeziformis** Schmiedeknecht, 1882 (*N. ruficornis* var. *auctumnalis* Ducke, 1900). Probably cleptoparasite of *Andrena nitida limata* Sm. (Andrenidae). Russia: **EP** (C, E), **WS** (TK), **ES** (KS, KR, IR, BR). – Europe (WE, NE, EE).
- Nomada tridentirostris** Dours, 1873 (*N. cyphognatha* Pérez, 1884; *N. amblystoma* Pérez, 1884). Russia: **EP** (NC). – Europe (WE, SE, EE), N Africa, Turkey, Israel.
- Nomada trispinosa** Schmiedeknecht, 1882. Cleptoparasite of *Andrena taraxaci* Gir. (Andrenidae).

Russia: **EP** (CR). – Europe (WE, SE, EE), Cyprus, Azerbaijan.

Nomada yarrowi Schwarz, 1981. Russia: **EP** (S). – Turkey.

Nomada zonata Panzer, 1798 (*N. bofillana* Pérez, 1913; *N. banatica* Zilahi-Kiss, 1915; *N. zonata sarmatica* Stoeckert, 1941). Cleptoparasite of *Andrena congruens* Schmied. and *A. dorsata* (Kby.) (Andrenidae). Russia: **EP** (C, E, S), **UR**, **ES** (KS, IR). – Europe (WE, NE, SE, EE), N Africa, Armenia, Azerbaijan, Turkey, Iran, Turkmenistan, Uzbekistan, Kazakhstan.

Tribe EPEOLINI

EPEOLUS Latreille, 1802 (*Trophocleptria* Holmberg, 1886; *Pyrrhomelecta* Ashmead, 1899; *Argyrosele-nis* Robertson, 1903; *Oxybiastes* Mavromoustakis, 1854). Type species *Apis variegata* Linnaeus, 1758. Species with known biology are nest parasites of *Colletes* (Colletidae). Number of taxa: World – 109, absent in Australasia; Palaearctic – 35; Russia – 12.

Epeolus alpinus Friese, 1893 (*E. glacialis* Alfken, 1913; *E. montanus* Bischoff, 1930; *E. pilosus* Bischoff, 1930; *E. alpinus* Bischoff, 1930). Cleptoparasite of *Colletes floralis* Ev. and *C. impunctatus* Nyl. (Colletidae). Russia: **EP** (N, NW, C), **ES** (IR). – Europe (WE, NE, SE).

Epeolus coreanus Yasumatsu, 1933. Russia: **FE** (PR, SA). – Korean Peninsula, Japan (Hon, Kyu).

Epeolus cruciger (Panzer, 1799) [*Nomada*] (*E. rufipes* Thomson, 1870; *E. similis* Höppner, 1899; *E. cruciger* var. *elegans* Müller, 1921; *E. c.* var. *rufiventris* Müller, 1921, nom. praecoc., nec Friese, 1908; *E. laevifrons* Bischoff, 1930; *E. marginatus* Bischoff, 1930). Cleptoparasite of *Colletes marginatus* Sm. and *C. succinctus* (L.) (Colletidae). Russia: **EP** (NW, C, E, S), **WS** (NS, TK, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (SA). – Europe (WE, NE, SE, EE), Iran.

Epeolus fasciatus Friese, 1895. Cleptoparasite of *Colletes punctatus* Mocs. (Colletidae). Russia: **EP** (S, CR). – Europe (WE, SE, EE), Caucasus, Turkey.

Epeolus julliani Pérez, 1884. Russia: **EP** (S). – Europe (WE, SE), Georgia.

Epeolus laticauda Bischoff, 1930. Probably cleptoparasite of *Colletes anceps* Rad. (Colletidae). Russia: **ES** (BR). – Turkmenistan, Uzbekistan, Tajikistan.

Epeolus melectiformis Yasumatsu, 1938. Cleptoparasite of *Colletes esakii* Hirashima (Colletidae). Russia: **ES** (BR), **FE** (PR). – Japan (Hok, Hon, Shi, Kyu, Ryu).

Epeolus productulus Bischoff, 1930. Russia: **EP** (S). – Europe (WE, SE), Turkey, Syria.

Epeolus schummeli Schilling, 1849 (*E. ruthenicus* Radoszkowski, 1891). Cleptoparasite of *Colletes nasutus* Sm. (Colletidae). Russia: **EP** (S). – Europe (WE, SE, EE), Turkey.

Epeolus tarsalis Morawitz, 1874 (*E. praeustus* Pérez, 1884; *E. rozenburgensis* van Lith, 1949; *E. tarsalis tirolensis* van Lith, 1956). Cleptoparasite of *Colletes collaris* Dours and probably of *C. halophilus* Verhoeff (Colletidae). Russia: **EP** (S, NC), **ES** (ZB, BR), **FE** (AM, KH, PR). – Europe (WE, EE), Mongolia, Korean Peninsula, Japan (Hon, Shi).

Epeolus transitorius Eversmann, 1852 (*E. transitorius* var. *seraxensis* Radoszkowski, 1893). Russia: **EP** (S), **UR**. – Europe (SE), Georgia, Iran, Turkmenistan, Uzbekistan, Kazakhstan.

Epeolus variegatus (Linnaeus, 1758) [*Apis*] (*Apis muscaria* Christ, 1791; *Epeolus pictus* Nylander, 1848; *E. productus* Thomson, 1870; *Apis murcaria* Christ, 1791 in Friese, 1895; *Epeolus variegatus* var. *rossicus* Friese, 1925). Cleptoparasite of *Colletes daviesanus* Sm., *C. fodiens* (Geoffr.), *C. similis* Schck. and *C. halophilus* Verhoeff (Colletidae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (TK, KM), **ES** (IR, YA). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Central Asia.

TRIEPEOLUS Robertson, 1901 (*Doeringiella* Holmberg, 1886). Type species *Epeolus concavus* Cresson, 1878. American cleptoparasitic genus with only 2 Old World species. Hosts – various Apiformes, especially Eucerini (Apidae). Number of taxa: World – 103; Palaearctic – 2; Russia – 2.

Triepeolus tristis (Smith, 1854) [*Epeolus*] (*Epeolus luctuosus* Eversmann, 1852, nom. praecoc., nec Spinola, 1851; *E. speciosus* Gerstäcker, 1869). Probably cleptoparasite of *Tetralonia malvae* (Rossi) and *Tetraloniella nana* (Mor.) (Apidae). Russia: **EP** (C, E, S), **UR**, **WS** (AL). – Europe (WE, SE, EE), Turkey, Kazakhstan.

Triepeolus ventralis (Meade-Waldo, 1913) [*Epeolus*] (*T. signatus* Hedicke, 1940). Cleptoparasite of *Tetraloniella mitsukurii* (Cock.) (Apidae). Russia: **WS** (AL), **ES** (BR), **FE** (AM, KH, PR). – China (NE, NC, CC, SE), Japan (Hon, Kyu, Shi).

Tribe AMMOBATOIDINI

AMMOBATOIDES Radoszkowski, 1867 (*Phiarus* Gerstäcker, 1869; *Euglages* Gerstäcker, 1869; *Paidia* Radoszkowski, 1872; *Paedia* Dalla Torre, 1891). Type species *Phileremus abdominalis* Eversmann, 1852. Cleptoparasites in nests of *Melitturga* and *Melitturgula* (Andrenidae). Number of taxa: World – 8, includes 1 in S Africa; Palaearctic – 7; Russia – 2.

Ammobatoides abdominalis (Eversmann, 1852) [*Phileremus*] (*Phileremus hirsutulus* Eversmann, 1852; *Ammobates extraneus* Förster, 1855; *A. rufitarsis* Smith, 1879; *Phiarus abdominalis* var. *sanguineus* Friese, 1911; *Ph. a.* var. *rufus* Friese, 1911; *Ph. angarensis* Cockerell, 1928; *Ammobatoides abdominalis* ssp. *marchicus* Bischoff, 1952; *A. lebanensis* Mavromoustakis, 1959). Cleptoparasite of *Melitturga clavicornis* (Latr.), *M. praestans* Gir. and *M. pictipes* Mor. (Andrenidae). Russia: **EP** (C, E, S, CR), **UR**, **WS** (OM, NS, TK, KM, AL), **ES** (KS, TU, KR, IR). – Europe (WE, SE, EE), Caucasus, Turkey, Syria, Lebanon, Iran, Central Asia, Kazakhstan, China (NW).

Ammobatoides radoszkowskii Proshchalykin et Lelej, 2014. Probably cleptoparasite of *Melitturga mongolica* Alfken (Andrenidae). Russia: **ES** (BR), **FE** (AM, PR). – China (NC).

Tribe BIASTINI

BIASTES Panzer, 1806 (*Rhineta* Illiger, 1807; *Melittoxena* Morawitz, 1873; *Biastoides* Schenck, 1874). Type species *Tiphia brevicornis* Panzer, 1798. Parasites in nests of *Dufourea*, *Rophites* and *Systropha* (Halictidae). Number of taxa: World – 5 Palaearctic species, including 1 Eastern Palaearctic and 1 Transpalaearctic species; Russia – 4.

Biastes brevicornis (Panzer, 1798) [*Tiphia*] (*Nomada atrata* Fabricius, 1804; *N. schottii* Fabricius, 1804; *Pasites unicolor* Jurine, 1807; *P. ater* Spinola, 1808; *Stelis aberrans* Eversmann, 1852; *Pasites fasciatus* Eversmann, 1852). Cleptoparasite of *Systropha curvicornis* (Scop.) and *S. planidens* Gir. (Halictidae). Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Armenia, Azerbaijan, Turkey, Syria, Iran, Kazakhstan.

Biastes emarginatus (Schenck, 1853) [*Phileremus*] (*Phileremus nasutus* Gerstäcker, 1869; *Pasites*

punctatus Schenck, 1870). Cleptoparasite of *Rophites algirus* Pér. and *R. quinquespinosus* (Halictidae). Russia: **EP** (C, E, S, CR), **UR**, **WS** (KM), **ES** (KR, IR). – Europe (WE, NE, SE, EE), Armenia, Azerbaijan, Turkey, Kazakhstan.

Biastes popovi Proshchalykin et Lelej, 2004. Probably cleptoparasite of *Dufourea carinata* Popov and *D. inermis* (Nyl.) (Halictidae). Russia: **FE** (AM, KH).

Biastes truncatus (Nylander, 1848) [*Nomada*] (*Phileremus punetatus* Gerstäcker, 1869; *Pasites rostratus* Zilahi-Kiss, 1927). Cleptoparasite of *Dufourea inermis* (Nyl.) and *D. dentiventris* (Nyl.) (Halictidae). Russia: **EP** (NW, C), **WS** (NS, AL), **ES** (KR, ZB), **FE** (PR). – Europe (WE, NE, SE, EE), Turkey.

Tribe AMMOBATINI

AMMOBATES Latreille, 1809 (*Phileremus* Latreille, 1809; *Ammobatoides* Schenck, 1869, nom. praec., nec Radoszkowski, 1867). Type species *Ammobates rufiventris* Latreille, 1809. Cleptoparasites of *Tetraloniella*, *Anthophora* and, with high probability, *Ancyla*. Number of taxa: World – 50, including 1 Afrotropic and 1 Oriental species; Palaearctic – 48; Russia – 4.

Ammobates (Ammobates) opacus Popov, 1951 (*A. armeniacus*: Popov, 1951). Russia: **EP** (S). – Europe (EE), Azerbaijan, Kazakhstan.

Ammobates (Ammobates) punctatus (Fabricius, 1804) [*Epeolus*] (*Epeolus kirbienus* Latreille, 1805; *Phileremus dufourii* Latreille, 1809; *Ammobates bicolor* Lepeletier de Saint-Fargeau, 1825; *A. apunctatus* var. *atratus* Mocsáry, 1894). Cleptoparasite of *Anthophora bimaculata* (Pz.) (Apidae). Russia: **EP** (C), **UR**. – Europe (WE, SE, EE), N Africa.

Ammobates (Ammobates) vinctus Gerstäcker, 1869 (*A. setosus* Morawitz, 1870). Cleptoparasite of *Tetraloniella dentata* (Germ.) and *T. ruficornis* (F.) (Apidae). Russia: **EP** (C, S, CR), **UR**. – Europe (WE, SE, EE), N Africa, Turkey, Kazakhstan.

Ammobates (Euphileremus) oraniensis (Lepeletier de Saint-Fargeau, 1841) [*Phileremus*] (*Phileremus melectoides* Smith, 1854; *Ammobates oraniensis* var. *manni* Friese, 1895; *A. o. tenuicornis* Popov, 1951; *Pasites oraniensis anatolicus* Warncke, 1983). Cleptoparasite of *Eucera armeniacae* (Mor.) (Apidae). Russia: **EP** (CR). – Europe (SE, EE), N Africa, Armenia, Turkey, Jordan, Israel, Turkmenistan.

PARAMMOBATODES Popov, 1951. Type species *Phiarus minutus* Mocsáry, 1878(=*Ammobates rufiventris* Latreille, 1809). Cleptoparasites of *Camptopoeum* (Andrenidae) and probably of *Nomioides* (Halictidae). Number of taxa: World – 6, including 1 Oriental species; Palaearctic – 5 Westpalaearctic species; Russia – 1.

Parammobatodes minutus (Mocsáry, 1878) [*Phiarus*] (*Parammobatodes schmidti* Alfken, 1936). Cleptoparasite of *Camptopoeum friesei* Mocs. and *C. frontale* (F.) (Andrenidae). Russia: **EP** (NC). – Europe (WE, SE, EE), Turkey.

PASITES Jurine, 1807 (*Morgania* Smith, 1854; *Omachthes* Gerstäcker, 1869; *Homachthes* Dalla Torre, 1896; *Pasitomachthes* Bischoff, 1923). Type species *Pasites maculata* Jurine, 1807. Species with known biology are cleptoparasites of *Pseudapis* and *Nomiapis* (Halictidae). Number of taxa: World – 29 in Old World, including 23 Afrotropic species; Palaearctic – 2; Russia – 2.

Pasites esakii Popov et Yasumatsu, 1935 (*P. maculatus esakii* Popov, Yasumatsu, 1935). Cleptoparasite of *Nomiapis mandschurica* (Hedicke) (Halictidae). Russia: **FE** (PR). – China (NE), Korean Peninsula, Japan (Kyu).

Pasites maculatus Jurine, 1807 (*Phileremus kirbyanus* Latreille, 1809; *Nomada albomaculatus* Lucas, 1849; *Pasites schottii* Eversmann, 1852; *Ammobates variegatus* Smith, 1854; *Phileremus rufiventris* Förster, 1855, nom. praeocc., nec Latreille, 1809; *Phiarus maculatus* var. *pusillus* Radoszkowski, 1872; *Pasites maculatus* var. *aschabadensis* Radoszkowski, 1893; *P. maculatus* var. *brunneus* Friese, 1895; *Pasites comptus* Alfken, 1929). Cleptoparasite of *Pseudapis bispinosa* (Brull.), *P. femoralis* (Pall.) and *P. diversipes* Latr. (Halictidae). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL), **ES** (KS, IR, BR, ZB), **FE** (AM). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Cyprus, Israel, Iraq, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NE, NC, NW).

Subfamily APINAE

Tribe OSIRINI

EPEOLOIDES Giraud, 1863 (*Viereckella* Swenk, 1907). Type species *Epeoloides ambiguus* Giraud, 1863

= *Apis coecutiens* Fabricius, 1775. Cleptoparasites of *Macropis* (Melittidae). Number of taxa: World – 2 Holarctic species; Palaearctic – 1; Russia – 1.

Epeoloides coecutiens (Fabricius, 1775) [*Apis*] (*Saropoda fulva* Eversmann, 1852; *Epeoloides ambiguus* Giraud, 1863; *E. fulviventris* Schenck, 1866). Cleptoparasite of *Macropis europaea* Warncke and *M. fulvipes* (F.) (Melittidae). Russia: **EP** (NW, C, E, CR), **UR**, **WS** (KM), **ES** (KR). – Europe (WE, NE, SE, EE), Kazakhstan.

Tribe ANCYLINI

ANCYLA Lapeletier de Saint-Fargeau, 1841 (*Plistotrichia* Morawitz, 1873). Type species *Ancyla oraniensis* Lapeletier de Saint-Fargeau, 1841. Ground nesting summer oligolects, possible hosts of *Ammobates* (Apidae). Number of taxa: World – 8 West Palaearctic species; Russia – 1.

Ancyla asiatica Friese, 1922 (*Plistotrichia flavilabris*: Morawitz, 1874). Oligolect on *Daucus* (Apiaceae). Russia: **EP** (NC). – Turkey, Lebanon.

Tribe CTENOPLECTRINI

CTENOPLECTRA Kirby, 1826. Type species *Ctenoplectra chalybea* Smith, 1857. Wood holes nesting and oil-collecting oligolects on Cucurbitaceae. Number of taxa: World – 24 in the Old World, mostly Afrotropic and Oriental species; Palaearctic – 2 East Palaearctic; Russia – 1.

Ctenoplectra davidi Vachal, 1903 (*Scapter simpliciceps* Strand, 1913). Russia: **FE** (PR). – China (NE, NC, SW, SE).

Tribe EUCERINI

CUBITALIA Friese, 1911. Type species *Eucera breviceps* Friese, 1911. Summer or spring-summer oligo- and polylect species. Nesting unknown. Number of taxa: World – 8 West Palaearctic species; Russia – 3.

Cubitalia (Cubitalia) morio (Friese, 1911) [*Eucera*]. Oligolect on *Onosma* (Boraginaceae). Russia: **EP** (NC, CR). – Europe (SE), Turkey.

Cubitalia (Cubitalia) tristis (Morawitz, 1876) [*Eucera*]. Russia: **EP** (NC, CR). – Georgia, Turkey.

- Cubitalia (Pseudoeucera) parvicornis** (Mocsáry, 1878) [Eucera]. Polylect, prefer Boraginaceae. Russia: **EP** (NC). – Europe (WE, SE, EE).
- EUCERA** Scopoli, 1770 (*Tetralonia* Spinola, 1839, part.). Type species *Apis longicornis* Linnaeus, 1758. Summer or spring-summer oligo- and polylect ground nesting species. Number of taxa: World – 223, overwhelming majority in Holarctic; Palaearctic – 173; Russia – 34.
- Eucera (Eucera) chrysopyga** Pérez, 1879 (*E. pollinosa* Smith, 1854, nom. praeocc., nec Lepeletier de Saint-Fargeau, 1841; *E. favosa* Mocsáry, 1879; *E. polonica* Ruszkowski, 1994). Oligolect on Fabaceae. Russia: **EP** (S, CR), **UR**. – Europe (WE, SE, EE), N Africa, Caucasus, Iran, Kazakhstan, China (NC).
- Eucera (Eucera) dalmatica** Lepeletier de Saint-Fargeau, 1841 (*E. robusta* Baer, 1850; *E. echii* Mocsáry, 1878; *E. flabellifera* Mocsáry, 1879). Polylect, prefer Boraginaceae. Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Azerbaijan, Armenia, Turkey, Cyprus, Iran.
- Eucera (Eucera) interrupta** Baer, 1850 (*E. semistri-gosa* Dours, 1873; *E. confusa* Gribodo, 1881). Oligolect on Fabaceae. Russia: **EP** (C, E, S, CR), **UR**, **WS** (AL). – Europe (WE, SE, EE), Caucasus, Turkey, China (NC, NW).
- Eucera (Eucera) kullenbergi** Tkalčú, 1984. Polylect, prefer Boraginaceae. Russia: **EP** (CR). – Europe (SE, EE), Azerbaijan, Turkey, Iran.
- Eucera (Eucera) longicornis** (Linnaeus, 1758) [Apis] (*Apis linguaria* Fabricius, 1775; *A. tuberculata* Fabricius, 1793; *Eucera difficilis* Pérez in Friese, 1896; *E. atricollis* Friese, 1922; *E. pillichii* Alfken, 1932). Oligolect on Fabaceae. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (OM, TK, KM), **ES** (IR, BR, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Kazakhstan, China (NE, NC, SW).
- Eucera (Eucera) nigrescens** Pérez, 1879 (*E. tuberculata* auct., nec Fabricius, 1793). Oligolect on Fabaceae. Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Caucasus, Turkey, Jordan, Iran, Turkmenistan.
- Eucera (Eucera) nigrilabris** Lepeletier de Saint-Fargeau, 1841 (*E. melanostoma* Morawitz, 1875; *E. terminalis* Smith, 1879; *Macrocera grisea*: Eversmann, 1852; *Eucera nigrilabris rufitarsis* Tkalčú, 1984; *E. n. orientalis* Tkalčú, 1984). Russia: **EP** (NC), **UR**. – Europe (WE, SE, EE), N Africa, Azerbaijan, Turkey, Israel, Palestine, Iran, Turkmenistan, Uzbekistan, Tajikistan, Kazakhstan.
- Eucera (Eucera) proxima** Morawitz, 1875 (*E. graeca* Radoszkowski, 1876; *E. nitidiventris* Mocsáry, 1879; *E. bipartita* Pérez, 1911). Russia: **EP** (E, S, NC, CR), **UR**. – Europe (WE, SE, EE), Azerbaijan, Turkey, Syria, Iran, Tajikistan.
- Eucera (Eucera) rufipes** Smith, 1879 (*E. platyrhina* Pérez, 1902). Oligolect on Fabaceae. Russia: **EP** (C, S, CR), **UR**, **WS** (KM, AL), **ES** (KR, YA). – Europe (EE), Kazakhstan, Mongolia, China (NC).
- Eucera (Eucera) sociabilis** Smith, 1873 (*E. andreae* Friese, 1910). Oligolect on Fabaceae. Russia: **FE** (PR). – China (NC, SW, SE), Japan (Hon, Hok).
- Eucera (Heteroeucera) atriceps** Morawitz, 1878. Russia: **EP** (CR). – Armenia, Kazakhstan.
- Eucera (Heteroeucera) caspica** Morawitz, 1874 (*E. al-bopunctata* Dours, 1873; *E. frivaldskyyi* Mocsáry, 1877; *E. perézi* Mocsáry, 1878; *E. amplitarsis* Mocsáry, 1878; *E. caspica* var. *pallida* Kerenskij, 1919). Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), Azerbaijan, Turkey.
- Eucera (Heteroeucera) cineraria** Eversmann, 1852 (*?E. cinerea* Lepeletier de Saint-Fargeau, 1841 (patrie inconnue); *?E. cana* Baer, 1850; *?E. cantatrix* Baer, 1850; *?E. crinita* Baer, 1850, nom. praeocc., nec Klug, 1845; *E. concinna* Gribodo, 1873; *?E. consimilis* Dours, 1873; *E. nigrifrons* Smith, 1879; *Tetralonia tarsata* Mocsáry, 1879). Polylect, prefers Fabaceae. Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), Caucasus, Turkey, Iran, Afghanistan, China (NE).
- Eucera (Heteroeucera) clypeata** Erichson, 1835 (*E. clypeata* Erichson, 1835; *E. similis* Lepeletier de Saint-Fargeau, 1841; *E. punctilabris* Lepeletier de Saint-Fargeau, 1841; *E. coarcata* Eversmann, 1852; *E. medusa* Nurse, 1904). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL). – Europe (WE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Syria, Israel, Palestine, Jordan, Iraq, Iran, Afghanistan, Pakistan, Turkmenistan, Uzbekistan, Tajikistan, Kazakhstan.
- Eucera (Heteroeucera) curvitaris** Mocsáry, 1879. Russia: **EP** (S, CR). – Europe (SE, EE), Turkey.
- Eucera (Heteroeucera) excisa** Mocsáry, 1879. Russia: **EP** (E, NC). – Europe (SE), Azerbaijan, Turkey.
- Eucera (Heteroeucera) ferghanica** Morawitz, 1875 (*E. tomentosa* Morawitz, 1875). Russia: **EP** (S). – Iran, Uzbekistan.
- Eucera (Heteroeucera) nigrita** Friese, 1895 (*?E. nigra* Lepeletier de Saint-Fargeau, 1841, nom. praeocc., nec Lepeletier de Saint-Fargeau, 1841; *E. caspica* var. *nigrita* Friese, 1895; *E. albofasciata* Friese, 1895).

- Russia: **EP** (S, NC, CR). – Europe (SE), N Africa, Azerbaijan, Turkey, Syria, Lebanon, Jordan, Israel.
- Eucera (Heterocera) pannonica** Mocsáry, 1878. Russia: **EP** (CR). – Europe (EE).
- Eucera (Heterocera) paraclypeata** Sitdikov, 1988. Russia: **EP** (NC, CR). – Europe (SE), Turkey, Syria, Israel, Jordan.
- Eucera (Heterocera) taurica** Morawitz, 1870 (?*E. pulveracea* Dours, 1873; *E. spectabilis* Mocsáry, 1881; *E. asiatica* Alfken, 1936; *E. hispana* auct., nec Lepeletier de Saint-Fargeau, 1841). Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Iran, China (NW).
- Eucera (Heterocera) seminuda** Brülle, 1832 (*E. trivittata* Brülle, 1832; *E. paradoxa* Mocsáry, 1878). Russia: **EP** (C, S, CR). – Europe (WE, SE, EE), N Africa, Azerbaijan, Turkey.
- Eucera (Heterocera) sogdiana** Morawitz, 1875 (*E. kouchkiana* Radoszkowski, 1886; *E. melanosoma* Morawitz, 1875). Russia: **EP** (S). – Europe (SE), Turkey, Turkmenistan, Uzbekistan, Tajikistan, Afghanistan.
- Eucera (Heterocera) vittulata** Noskiewicz, 1936 (*E. parvula* Friese, 1895; *E. cineraria* Eversmann, 1852). Russia: **EP** (C, S, NC). – Europe (WE, SE, EE), Azerbaijan, Armenia, Turkey.
- Eucera (Pteneucera) eucnemidea** Dours, 1873. Russia: **EP** (S, NC). – Europe (SE), N Africa, Armenia, Turkey, Syria, Kazakhstan.
- Eucera (Pteneucera) nigrifacies** Lepeletier de Saint-Fargeau, 1841 (*E. caucasica* Morawitz, 1874; *E. sedula* Mocsáry, 1879; *E. cornuta* Stefani, 1882). Russia: **EP** (S, NC, CR), **WS** (AL). – Europe (WE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Syria, Israel, Jordan, Iran, Uzbekistan, Tajikistan, Kazakhstan.
- Eucera (Synhalonia) alborufa** (Radoszkowski, 1871) [Tetralonia] (*Tetralonia amoena* Walker, 1871; *T. rufescens* Morawitz, 1875; *T. radoszkowskii* Morawitz, 1875; *Macrocera clypeata* Radoszkowski, 1893; *Eucera sarachensis* Dalla Torre, 1896; *E. turcestanica* Dalla Torre, 1895). Russia: **EP** (E, S). – N Africa, Azerbaijan, Iran, Turkmenistan, Uzbekistan, Kazakhstan.
- Eucera (Synhalonia) alternans** Brullé, 1832 [Macrocer] Russia: **EP** (S, CR). – Europe (WE, SE, EE), N Africa, Azerbaijan, Turkey, Iran, Kazakhstan.
- Eucera (Synhalonia) armeniaca** (Morawitz, 1877) [Tetralonia]. Russia: **EP** (C, S, CR). – Europe (EE), Armenia, Turkmenistan.
- Eucera (Synhalonia) chinensis** (Smith, 1854) [Tetralonia]. Russia: **FE** (PR). – China (NE, NC, CC, SW, SE), Japan (Ryu), N Vietnam.
- Eucera (Synhalonia) hungarica** Friese, 1895. Polylect, prefer Fabaceae. Russia: **EP** (C, E, S, CR), **UR**. – Europe (WE, SE, EE), N Africa, Armenia, Kazakhstan.
- Eucera (Synhalonia) ruficollis** (Brullé, 1832) [Macrocer] (*E. atricornis*: Eversmann, 1852). Russia: **EP** (S, NC), **UR**. – Europe (SE, EE), N Africa, Caucasus, Turkey, Syria, Iran, Turkmenistan, Uzbekistan, Tajikistan, Kazakhstan.
- Eucera (Synhalonia) tricineta** Erichson, 1835. Russia: **EP** (S, NC, CR). – Europe (WE, SE, EE), N Africa, Azerbaijan, Israel, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.
- Eucera (Synhalonia) velutina** (Morawitz, 1874) [Tetralonia]. Visit *Rindera tetraspis* (Boraginaceae). Russia: **EP** (S, NC), **UR**. – Turkey, Israel.
- TETRALONIA** Spinola, 1839 (*Macrocera* Latreille, 1810, nom. praeocc., nec Meigen, 1803). Type species *Apis malvae* Rossi, 1790. Oligolect ground-nesting bees. Number of taxa: World – 18, mostly Afrotropic species; Palaearctic – 1; Russia – 1.
- Tetralonia malvae** (Rossi, 1790) [*Eucera*] (*Eucera antennata* Fabricius, 1793; *E. macroglossa* Illiger, 1806). Oligolect on Malvaceae. Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (AL). – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Syria, Iran, Uzbekistan, Tajikistan, Kazakhstan, China (NW).
- TETRALONIELLA** Ashmead, 1899 (*Xenoglossodes* Ashmead, 1899; *Melissina* Cockerell, 1911; *Tetralonia* part.: Proshchalykin, 2007e). Type species *Macrocera graja* Eversmann, 1852. Oligolect or polylect ground-nesting bees. Number of taxa: World – 137, mostly in Old World; Palaearctic – 50; Russia – 14 species of subgenus *Tetraloniella* s. str.
- Tetraloniella alticineta** (Lepeletier de Saint-Fargeau, 1841) [Macrocer]. Russia: **EP** (CR). – Europe (WE, SE, EE).
- Tetraloniella dentata** (Germar, 1839) [*Eucera*] (*Tetralonia dentata* Klug, 1835; *Macrocera tricineta* Lepeletier de Saint-Fargeau, 1841; *M. nigricornis* Lepeletier de Saint-Fargeau, 1841). Oligolect on Asteraceae. Russia: **EP** (NW, C, E, S, NC), **UR**, **WS** (OM). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Syria, Iran, Uzbekistan, Kazakhstan, China (NW, NC).

Tetraloniella fulvescens (Giraud, 1863) [Tetralonia] (*Tetralonia acutangula* Morawitz, 1876; *Macrocera dufouri* Pérez, 1879). Oligolect on *Inula* (Asteraceae). Russia: **EP** (C, S, NC), **UR**, **WS** (KM). – Europe (WE, SE, EE), N Africa, Turkey, Azerbaijan, Kazakhstan, China (NE, NC, NW).

Tetraloniella graja (Eversmann, 1852) [Macrocera] (*Macrocera ruficornis* Lepeletier de Saint-Fargeau, 1841, nom. praeocc., nec Fabricius, 1804). Polylect, prefer Asteraceae. Russia: **EP** (C, S, NC, CR), **UR**. – Europe (WE, SE, EE), Azerbaijan, Turkey, Syria, Iran, Kazakhstan.

Tetraloniella inulae (Tkalců, 1979) [Tetralonia]. Oligolect on *Inula* (Asteraceae). Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), Cyprus, Iran.

Tetraloniella julliani (Pérez, 1879) [Tetralonia] (*Tetralonia julliani biroj* Mocsáry, 1879). Russia: **EP** (S, CR). – Europe (WE, SE, EE), Turkey, Iran, Turkmenistan.

Tetraloniella lyncea Mocsáry, 1879 (*Tetralonia lyncea*: Chenikalova, 2005). Russia: **EP** (S, NC, CR). – Europe (SE, EE).

Tetraloniella mitsukurii (Cockerell, 1911) [Tetralonia]. Oligolect on Fabaceae. Russia: **FE** (AM, KH, PR). – China (NE, NC, CC), Korean Peninsula, Japan (Hon, Shi, Kyu.).

Tetraloniella nana (Morawitz, 1874) [Tetralonia] (*Macrocera griseola* Pérez, 1879; *Tetralonia tenella* Mocsáry, 1879). Russia: **EP** (C, S, NC), **UR**. – Europe (WE, SE, EE), Azerbaijan, Turkmenistan, Kazakhstan.

Tetraloniella pollinosa (Lepeletier de Saint-Fargeau, 1841) [Macrocera] (*Macrocera mediocris* Eversmann, 1853; *Eucera canescens* Dours, 1873; *Tetralonia fossulata* Morawitz, 1874; *T. adusta* Mocsáry, 1877). Russia: **EP** (C, S, NC), **UR**. – Europe (WE, SE, EE), N Africa, Georgia, Armenia.

Tetraloniella salicariae (Lepeletier de Saint-Fargeau, 1841) [Macrocera] (*Macrocera meridiana* Dufour, 1841; *Tetralonia lythri* Schenck, 1870; *T. basalis* Morawitz, 1871; *T. salicariae* var. *albiclypeata* Dalla Torre, 1877; *T. s.* var. *flavichlypeata* Dalla Torre, 1877). Collect polen exclusively on *Lythrum* (Lythraceae) and *Melilotus* (Fabaceae). Russia: **EP** (C, E, S, NC), **UR**. – Europe (WE, SE, EE), N Africa, Caucasus, Uzbekistan, Kazakhstan.

Tetraloniella scabiosae (Mocsáry, 1881) [Eucera]. Possible oligolect on Dipsacaceae. Russia: **EP** (S). – Europe (WE, SE, EE).

Tetraloniella strigata (Lepeletier de Saint-Fargeau, 1841) [Macrocera]. Russia: **EP** (S). – Europe (WE, SE).

Tetraloniella vicina (Morawitz, 1876) [Tetralonia]. Russia: **EP** (S). – Europe (WE, EE), Georgia.

Tribe ANTHOPHORINI

AMEGILLA Friese, 1897 (*Alfkenella* Börner, 1919; *Asaropoda* Cockerell, 1926). Type species *Apis quadrifasciata* Villers, 1789. Mostly polylects, fly at summer in temperate zone. Number of taxa: World – 253 Old World species, mostly Afrotropic and Oriental; Palaearctic – 47; Russia – 9.

Amegilla (Amegilla) garrula (Rossi, 1790) [Apis]. Russia: **EP** (NC). – Europe (WE, SE, EE), Abkhasia, Georgia, Iran, Turkmenistan, Kazakhstan.

Amegilla (Amegilla) ochroleuca (Pérez, 1879) [Anthophora]. Russia: **EP** (S, CR). – Europe (WE, SE, EE), N Africa.

Amegilla (Amegilla) quadrifasciata (de Villers, 1789) [Apis] (*Apis nidulans* Fabricius, 1793; *Anthophora quadrifasciata* var. *albescens* Dours, 1869; *A. q.* var. *nana* Radoszkowski, 1869; *A. maderae* Sichel, 1868; *A. mervensis* Radoszkowski, 1893; *A. mediterranea* Alfken, 1927; *A. quadrifasciata* var. *teneriffensis* Cockerell, 1930; *A. klugi* Priesner, 1957; *A. litorana* Priesner, 1957). Russia: **EP** (C, E, S, CR), **UR**, **FE** (PR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Cyprus, Syria, Lebanon, Iran, Central Asia, Kazakhstan, Mongolia, China (NC, NW), Japan (Hon, Shi, Kyu), India.

Amegilla (Glossamegilla) florea (Smith, 1879) [Anthophora] (*Anthophora tushimensis* Cockerell, 1926). Russia: **FE** (PR). – China (NC, CC, SE), Korean Peninsula, Japan (Hon, Shi, Kyu).

Amegilla (Micramegilla) nigricornis (Morawitz, 1872) [Anthophora] (*Anthophora picicornis* Fedtschenko, 1875). Probably polylect, prefer Alhagi (Fabaceae). Russia: **EP** (S, NC). – N Africa, Azerbaijan, Iran, Turkmenistan, Uzbekistan, Tajikistan, Mongolia, China (NC, NW).

Amegilla (Micramegilla) velocissima (Fedtschenko, 1875) [Anthophora]. Russia: **EP** (S). – Europe (EE), Armenia, Azerbaijan, Iran, Pakistan, Turkmenistan, Uzbekistan, Tajikistan, Kazakhstan, Mongolia, China (NC, NW, WP).

Amegilla (Zebramegilla) albigena (Lepeletier de Saint-Fargeau, 1841) [Anthophora] (*Anthophora*

- binotata* Lepeletier de Saint-Fargeau, 1841; *A. albigena* var. *albida* Dours, 1869; *A. quadrifasciata* var. *nana* Radoszkowski, 1870; *Podalirhis albigena* var. *nigrithorax* Dalla Torre, 1877; *P. pyramidalis* Kirby, 1900; *Anthophora albigena quadrata* Cockerell, 1911; *A. a. afra* Priesner, 1957). Polylect, prefer Lamiaceae and Fabaceae. Russia: **EP** (C, S, NC, CR). – Europe (WE, SE, EE), N Africa, Georgia, Armenia, Turkey, Cyprus, Syria, Jordan, Iran, Central Asia, Kazakhstan, China (NC, NW), India.
- Amegilla (Zebramegilla) magnilabris** (Fedtschenko, 1875) [Anthophora]. Russia: **EP** (S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Turkey, Syria, Turkmenistan, Uzbekistan.
- Amegilla (Zebramegilla) salviae** (Morawitz, 1876) [Anthophora] (*Anthophora pipiens* Mocsáry, 1879). Russia: **EP** (NC, CR). – Europe (SE, EE), N Africa, Armenia, Cyprus, Turkey, Iran, China (NC, NW).
- ANTHOPHORA** Latreille, 1803 (*Podalirius* Latreille, 1802; *Lasius* Panzer, 1804; *Megilla* Fabricius, 1804). Type species *Apis pilipes* Fabricius, 1775. Polylects or olicolects, fly at spring or summer in temperate zone. Nests in ground or rotten wood (*Clisodon*). Number of taxa: World – 348, mostly Holarctic species; Palaearctic – 203; Russia – 42.
- Anthophora (Anthomegilla) arctica** Morawitz, 1883. Russia: **ES** (YA, ZB), **FE** (AM). – Tajikistan, China (NW).
- Anthophora (Anthophora) fulvitaris** Brullé, 1832 (*Megilla personata* Erichson, 1835; *Anthophora nasuta* Lepeletier de Saint-Fargeau, 1841; *A. personata* var. *euris* Dours, 1870; *A. arietina* Dours, 1870). Russia: **EP** (S, NC), **UR**, **WS** (TK, KM). – Europe (WE, SE, EE), N Africa, Georgia, Turkey, Israel, Kazakhstan, China (NC, WP).
- Anthophora (Anthophora) plumipes** (Pallas, 1772) [Apis] (*Apis pilipes* Fabricius, 1775; *Andrena hirsuta* Fabricius, 1787; *Apis rufipes* Christ, 1791, nom. praecoc., nec Fabricius, 1781, nec Christ, 1791; *A. cochlearipes* Christ, 1791; *A. palmipes* Rossi, 1792; *Anthophora pennata* Lepeletier de Saint-Fargeau, 1841; *A. nigrofulva* Lepeletier de Saint-Fargeau, 1841; *A. sicula* Smith, 1854; *A. villosula* Smith, 1854; *A. personata* var. *squalens* Dours, 1869; *Podalirius acervorum* var. *niger* Friese, 1896; *P. a.* var. *nigripes* Friese, 1896; *P. acervorum* var. *albipes* Friese, 1896; *Anthophora soror* Pérez, 1905; *A. acervorum* var. *dimidiata* Alfken, 1913; *A. pingshiangensis* Strand, 1913; *A. acervorum* var. *intermixta* Alfken, 1913; *A. a.* var. *varians* Friese, 1922; *A. a.* var. *lisbonensis* Cockerell, 1922; *A. a. palestinensis* Hedicke, 1936; *A. a. cypriaca* Mavromoustakis, 1957; *Apis acervorum* auct., nec Linnaeus, 1758). Russia: **EP** (N, NW, C, E, S, NC, CR), **FE** (PR). – Europe (WE, NE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Israel, Iran, Kazakhstan, China (NE, NC, NW, CC, SW, WP, SE), Japan (Hon, Shi, Kyu).
- Anthophora (Anthophora) salviae** (Panzer, 1804) [Lasius] (*A. senescens* Lepeletier de Saint-Fargeau, 1841; *A. ephippium* Lepeletier de Saint-Fargeau, 1841; *A. crinipes* Smith, 1854). Russia: **EP** (NC). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, China (CC).
- Anthophora (Caranthophora) dufourii** Lepeletier de Saint-Fargeau, 1841. Russia: **EP** (S, CR). – Europe (SE), Georgia, Turkey, Syria, Israel, Iran, Turkmenistan.
- Anthophora (Caranthophora) pubescens** (Fabricius, 1781) [Apis] (*A. flabellifera* Lepeletier de Saint-Fargeau, 1841). Russia: **EP** (S). – Europe (WE, SE, EE), N Africa, Israel, China (NW).
- Anthophora (Clisodon) furcata** (Panzer, 1798) [Apis] (*Apis dumetorum* Panzer, 1798; *Megilla furcata* var. *norvegica* Nylander, 1852; *Podalirius furcata* var. *caucasicus* Friese, 1897, nom. praecoc., nec Radoszkowski, 1874; *P. furcatus montislinguarum* Schulz, 1906; *Anthophora furcata* f. *atrata* Hedicke, 1929; *A. f. caucasicola* Hedicke, 1929; *A. f.* var. *obscurcula* Alfken, 1926). Oligolect on Lamiaceae. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TK, KM, AL), **ES** (TU, IR, BR, YA). – Europe (WE, NE, SE, EE), Abkhasia, Georgia, Turkey, Iran, Kazakhstan, China (NE, NC, CC, SW, WP).
- Anthophora (Clisodon) terminalis** Cresson, 1869. Prefer Lamiaceae. Russia: **UR**, **WS** (KM), **ES** (TU, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA). – Mongolia, China (NE, NC, CC, SW, WP), N America.
- Anthophora (Dasymegilla) quadrimaculata** (Panzer, 1798) [Apis] (*Apis vulpina* Panzer, 1798, nom. praecoc., nec Christ, 1791; *A. subglobosa* Kirby, 1802; *Anthophora vara* Lepeletier de Saint-Fargeau, 1841; *A. mixta* Lepeletier de Saint-Fargeau, 1841; *A. segusina* Gribodo, 1873; *A. vulpina paehypoda* Cockerell, 1924; *A. v. alticola* Hedicke, 1931). Oligolect on Lamiaceae. Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (OM). – Europe (WE, NE, SE, EE), Georgia, Turkey, Tajikistan, Kazakhstan, China (NC, CC).
- Anthophora (Heliophila) bimaculata** (Panzer, 1798) [Apis] (*Apis rotundata* Panzer, 1798, nom. praecoc.,

- nec Fabricius, 1787; *Anthophora saropoda* Lamarck, 1817; *A. squalida* Lepeletier de Saint-Fargeau, 1841; *A. albifrons* Eversmann, 1852). Polylect, prefer Asteraceae. Russia: **EP** (NW, C, E, S). – Europe (WE, NE, SE, EE), Georgia, Turkey, Iran, Uzbekistan, Tajikistan, Kazakhstan, China (NW).
- Anthophora (Lophanthophora) affinis** Brullé, 1832 (*A. biciliata* Lepeletier de Saint-Fargeau, 1841; *A. caucasica* Radoszkowski, 1874; *A. morawitzi* Alfken et Blüthgen, 1937). Polylect, prefer Fabaceae. Russia: **EP** (CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Israel, Iran, Uzbekistan, Kazakhstan, China (NW).
- Anthophora (Lophanthophora) atricilla** Eversmann, 1846 (*A. atricilla aegyptorum* Priesner, 1957). Russia: **EP** (E, S, NC, CR). – N Africa, Caucasus, Turkey, Pakistan, Turkmenistan, Tajikistan, Kazakhstan, China (NW).
- Anthophora (Lophanthophora) robusta** (Klug, 1845) [Megilla] (*Megilla caliginosa* Klug, 1845; *Anthophora nigromaculata* Lucas, 1846; *A. oxygona* Dours, 1870; *A. atroferruginea* Dours, 1870; *A. robusta atra* Friese, 1919; *A. r. atratula* Friese, 1919; *A. r. atrosopacea* Friese, 1919; *A. fuliginosa pamirica* Hedicke, 1931). Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Georgia, Azerbaijan, Turkey, Syria, Israel, Iran, Turkmenistan.
- Anthophora (Lophanthophora) rutilans** Dour, 1870 (*A. moderna* Morawitz, 1877). Russia: **EP** (NC). – Europe (SE), Armenia, Turkey, Cyprus, Israel, Palestine.
- Anthophora (Melea) plagiata** (Illiger, 1806) [Megilla] (*Apis parietina* Fabricius, 1793, nom. praeocc., nec Fourcroy, 1785; *Anthophora villosa* Herrich-Schffer, 1840; *A. parietina* var. *fulvocinerea* Dours, 1870; *A. turanica* Fedtschenko, 1875; *A. parietina* var. *schenkii* Dalla Torre, 1877; *A. simplicipes* Morawitz, 1880; *A. mlokosewitzi* Radoszkowski, 1884; *A. nigripes* Morawitz, 1887, nom. praeocc., nec Pérez, 1879; *Podalirius simplicipes semiater* Friese, 1896; *Anthophora pulcherrima* Bingham, 1897; *Podalirius parietinus nigrescens* Friese, 1897; *Anthophora filchnerae* Friese, 1908; *A. khambana* Cockerell, 1910; *A. khambana* var. *atramentata* Cockerell, 1911; *A. pilosella* Friese, 1919; *A. semenovi* Kuznetzov-Ugamsky, 1927; *A. parietina pamiricola* Hedicke, 1931; *A. khambana* f. *chodjana* Hedicke, 1938; *A. parietina balistanica* Hedicke, 1940; *A. parietina ladakhana* Hedicke, 1940; *A. pulcherrima himalayaensis* Wu, 1982). Polylect, prefer Lamiaceae. Russia: **EP** (NC), **UR**. – Europe (WE, NE, SE, EE), N Africa, Georgia, Turkey, Iran, Tajikistan, Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NC, NW, CC, SW, WP).
- Anthophora (Mystacanthophora) borealis** Morawitz, 1865. Russia: **EP** (NW, C, E), **UR**, **WS** (OM, KM, AL), **ES** (IR, BU, YA, ZB), **FE** (AM, KH). – Europe (WE, SE, EE), Armenia, Turkey, Tajikistan, Kazakhstan, Mongolia, China (NE).
- Anthophora (Paramegilla) aeneiventris** Hedicke, 1931. Prefer Fabaceae. Russia: **FE** (PR). – Kazakhstan, Mongolia, China (NW, NC).
- Anthophora (Paramegilla) astragali** Morawitz, 1878. Russia: **EP** (S). – Georgia, Armenia.
- Anthophora (Paramegilla) balassogloi** (Radoszkowski, 1877) [Habropoda] (*A. christofi* Morawitz, 1880). Russia: **EP** (E, NC), **UR**. – Armenia, Turkmenistan.
- Anthophora (Paramegilla) deserticola** Morawitz, 1872. Russia: **EP** (E, S), **UR**, **WS** (TK), **ES** (KS, KR, ZB, BR). – Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China (NW, NC).
- Anthophora (Paramegilla) dubia** Eversmann, 1852 (*A. albomaculata* Radoszkowski, 1874; *A. saussurei* Fedtschenko, 1875; *A. semperi* Fedtschenko, 1875; *A. carbonaria* Morawitz, 1876; *A. faddei* Radoszkowski, 1882; *A. semperi cerberus* Friese, 1919). Probably polylect, prefer Fabaceae. Russia: **EP** (NC), **UR**. – Armenia, Azerbaijan, Turkey, Iran, Central Asia, Kazakhstan, Mongolia, China (NE, NC, NW, WP).
- Anthophora (Paramegilla) fulvipes** Eversmann, 1846 (*Podalirius larvata* Giraud, 1863; *Anthophora croceipes* Morawitz, 1876). Russia: **EP** (C, E, S), **UR**. – Europe (SE, EE), Armenia, Turkey, China (NW, NC).
- Anthophora (Paramegilla) gracilipes** Morawitz, 1872. Russia: **EP** (S, NC). – Caucasus, Iran, Turkmenistan, Uzbekistan, Tajikistan, Kazakhstan, Mongolia, China (NW).
- Anthophora (Paramegilla) ireos** (Pallas, 1773) [Apis] (*A. lepida* Pallas, 1773). Oligolect on Phlomis tuberosa (Lamiaceae). Russia: **EP** (S), **UR**. – Iran, Kazakhstan.
- Anthophora (Paramegilla) podagra** Lepeletier de Saint-Fargeau, 1841 (*A. rufa* Lepeletier de Saint-Fargeau, 1841; *A. segnis* Eversmann, 1852; *A. cinerea* Eversmann, 1852; *A. tomentosa* Mocsáry, 1878; *A. taurica* Friese, 1922). Polylect, prefer Asteraceae. Russia: **EP** (C, E, S, CR), **UR**. – Europe (WE, SE,

- EE), Armenia, Turkey, Iran, Turkmenistan, Tajikistan, Kazakhstan, China (NC, NW).
- Anthophora (Paramegilla) ponomarevae** Brooks, 1988 (*A. morawitzi* Ponomareva, 1966, nom. praeocc., nec Alfken et Blüthgen, 1937). Russia: **EP** (S, CR). – Israel, Turkmenistan.
- Anthophora (Paramegilla) prshewalskii** Morawitz, 1880 (*A. pilosa* Morawitz, 1880; *A. przewalskii*: Osytsnjuk et al., 1978). Russia: **EP** (CR). – Turkey, Turkmenistan, Kazakhstan, China (NW, SW).
- Anthophora (Paramegilla) raddei** Morawitz, 1876. Russia: **EP** (NC). – Europe (EE), Armenia, Iran.
- Anthophora (Petalosternon) crassipes** Lepeletier de Saint-Fargeau, 1841 (*A. quadristrigata* Dours, 1870; *A. denticrus* Morawitz, 1872; *A. perplexa* Radoszkowski, 1884). Russia: **UR**. – Europe (WE, SE, EE), N Africa, Turkey, Israel.
- Anthophora (Petalosternon) hanseni** Morawitz, 1883. Russia: **ES** (IR).
- Anthophora (Petalosternon) radoszkowskyi** Fedtschenko, 1875. Russia: **EP** (E, S, CR). – Caucasus, Tajikistan, Kyrgyzstan, Kazakhstan.
- Anthophora (Pyganthophora) aestivalis** (Panzer, 1801) [Apis] (*A. intermedia* Lepeletier de Saint-Fargeau, 1841). Russia: **EP** (C, E), **UR**, **ES** (ZB). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Israel, Jordan, Iran.
- Anthophora (Pyganthophora) altaica** Radoszkowski, 1882 (*Megilla tersa* Erichson, 1849). Russia: **UR**, **WS** (AL). – Mongolia, China (NC).
- Anthophora (Pyganthophora) cinereus** (Friese, 1896) [Podalirius] (*Podalirius cinereus* Friese, 1897). Russia: **EP** (S, NC), **UR**. – Caucasus, Kazakhstan, Turkmenistan.
- Anthophora (Pyganthophora) erschowi** Fedtschenko, 1875. Russia: **EP** (S, NC, CR), **UR**. – Europe (EE), N Africa, Georgia, Azerbaijan, Turkey, Israel, Iran, Turkmenistan, Uzbekistan, Tajikistan, Kazakhstan, China (NC, NW).
- Anthophora (Pyganthophora) nigriceps** Morawitz, 1886. Russia: **EP** (NC). – Azerbaijan, Syria, Lebanon, Israel.
- Anthophora (Pyganthophora) orientalis** Morawitz, 1878. Russia: **EP** (S, NC). – Europe (SE), N Africa, Caucasus, Turkey, Syria, Israel.
- Anthophora (Pyganthophora) pedata** Eversmann, 1852. Polylect, prefer Astragalus (Fabaceae). Russia: **EP** (S, NC), **UR**. – Azerbaijan, Turkey, Uzbekistan, Kazakhstan, China (NW).
- Anthophora (Pyganthophora) retusa** (Linnaeus, 1758) [Apis] (*Apis haworthana* Kirby, 1802; *A. pennipes* Kirby, 1802; *Anthophora intermedia* Lepeletier de Saint-Fargeau, 1841, part.; *Megilla monacha* Erichson, 1849; *Anthophora hispanica*: Eversmann, 1852; *A. ruthenica* Morawitz, 1870; *A. retusa* var. *meridionalis* Pérez, 1879; *Podalirius retusus sareptanus* Friese, 1896; *Anthophora retusifformis* Cockerell, 1911; *A. retusa fasciata* Alfken, 1913; *A. aestivalis baicalensis* Hedicke, 1929; *A. retusa seminigra* Benoist, 1930; *A. aestivalis alaica* Hedicke, 1931; *A. monacha tschelcarica* Ponomareva, 1967; *A. rudolphae* Romankova, 2003). Polylect, prefer Lamiaceae. Russia: **EP** (C, E, S), **UR**, **WS** (TK, AL), **ES** (KR, IR, BR, YA), **FE** (AM, PR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Central Asia, Kazakhstan, Mongolia, China (NC, NW).
- Anthophora (Pyganthophora) sichelii** Radoszkowski, 1869. Russia: **EP** (S). – Europe (WE, SE), N Africa, Caucasus, Turkmenistan, Uzbekistan.
- Anthophora (Pyganthophora) testaceipes** Morawitz, 1888. Oligolect on Fabaceae. Russia: **UR**, **ES** (BR). – Uzbekistan, Kazakhstan.
- Anthophora (Pyganthophora) vernalis** Morawitz, 1877 (*A. atricilla*: Eversmann, 1852). Russia: **EP** (NC), **UR**. – Israel, Uzbekistan, Kazakhstan.
- HABROPODA** Smith, 1854 (*Habrophora* Smith, 1854, nom. praeocc., nec Erichson, 1846; *Emphoropsis* Ashmead, 1899; *Meliturgopsis* Ashmead, 1899). Type species *Habropoda ezonata* Smith, 1854 = *Tetralonia tarsata* Spinola, 1838. Early summer, summer or autumn species, probably polylects, nests in borrows in soil. Number of taxa: World – 50; Palaeartic – 17; Russia – 1.
- Habropoda zonatula** Smith, 1854. Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Azerbaijan, Turkey, Syria.

Tribe MELECTINI

- MELECTA** Latreille, 1802 (*Symmorpha* Klug, 1807; *Bombomelecta* Patton, 1879). Type species *Apis punctata* Fabricius, 1775. Cleptoparasites of *Anthophora* and *Habropoda* (Apidae). Number of taxa: World – 59 in Holarctic; Palaeartic – 54; Russia – 11.
- Melecta (Melecta) albifrons** (Förster, 1771) [Apis] (*Apis punctata* Fabricius, 1775; *Andrena armata*

- Panzer, 1799; *Melecta nigra* Spinola, 1806; *M. fasciculata* Spinola, 1806; *Crocisa atra* Jurine, 1807; *Melecta tisiphone* Newman, 1835; *M. alecto* Newman, 1835; *M. clotho* Newman, 1835; *M. megaera* Newman, 1835; *M. albovaria* Erichson, 1841; *M. bipunctata* Lepeletier de Saint-Fargeau, 1841; *M. atcrrima* Lepeletier de Saint-Fargeau, 1841; *M. calabrina* Radoszkowski, 1876; *M. pseudoarmata* Radoszkowski, 1893; *M. armata* var. *mediterranea* Gribodo, 1893; *M. novellai* Dusmet, 1915; *M. armata* var. *gigantea* Friese, 1925; *M. luctuosa* var. *minima* Friese, 1925). Cleptoparasite of *Anthophora plumipes* (Pall.), *A. plagiata* (Ill.) and *A. fulvitaris* Brull. (Apidae). Russia: **EP** (NW, C, E, CR), **UR**. – Europe (NE, SE, EE), N Africa, Caucasus, Turkey, Cyprus, Syria, Lebanon, Palestine, Israel, Iran.
- Melecta (Melecta) amanda** Lieftinck, 1980. Russia: **EP** (S). – Kazakhstan.
- Melecta (Melecta) baerii** (Radoszkowski, 1865) [Pseudomelecta]. Russia: **UR**, **WS** (AL). – Caucasus, Kazakhstan.
- Melecta (Melecta) diacantha** Eversmann, 1852. Russia: **EP** (C), **UR**.
- Melecta (Melecta) duodecimmaculata** (Rossi, 1790) [Nomada] (*M. plurinotata* Brullé, 1832; *M. quatuordecimpunctata* Fischer de Waldheim, 1843; *M. soederbomi* Alfken, 1936; *M. jakovlewii* Radoszkowski, 1877). Russia: **EP** (S, CR), **UR**, **ES** (KR). – Europe (WE, SE, EE), N Africa, Turkey, Iraq, Iran, Central Asia, Kazakhstan, China (NE, NC, NW).
- Melecta (Melecta) eversmanni** Radoszkowski, 1893. Russia: **EP** (S), **UR**. – Uzbekistan.
- Melecta (Melecta) festiva** Lieftinck, 1980. Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Georgia, Armenia, Turkey, Palestine, Israel, Turkmenistan, Uzbekistan.
- Melecta (Melecta) luctuosa** (Scopoli, 1770) [Apis] (*M. lachesis* Newman, 1835; *M. atropos* Newman, 1835; *M. fasciculata* Fischer de Waldheim, 1843, nom. praeocc., nec Spinola, 1806; *M. eversmanni* Radoszkowski, 1893; *M. eczmiadzini* Radoszkowski, 1893). Cleptoparasite of *Anthophora aestivalis* (Pz.), *A. retusa* (L.), *A. plagiata* Ill. and *A. crinipes* Sm. (Apidae). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (OM, TK, KM, AL), **ES** (TU, IR, BR, YA, ZB), **FE** (AM). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Cyprus, Lebanon, Israel, Jordan, Iraq, Iran, Turkmenistan, Uzbekistan, Tajikistan, Kazakhstan.
- Melecta (Melecta) mundula** Lieftinck, 1983 (*M. megaera* sensu Lieftinck, 1980, non Newman, 1835; *M. cypriaca* Schwarz, 1999). Russia: **EP** (S). – Europe (SE), Turkey, Palestine, Israel, Iran.
- Melecta (Melecta) sibirica** Radoszkowski, 1891. Russia: **ES** (IR). – Afghanistan, Turkmenistan, Tajikistan, Kyrgyzstan.
- Melecta (Melecta) tuberculata** Lieftinck, 1980. Russia: **EP** (NC). – Europe (WE, SE, EE), Turkey, Cyprus, Lebanon, Israel.
- THYREOMELECTA** Rightmyer et Engel, 2003. Type species *Thyreomelecta kirghisia* Rightmyer et Engel, 2003. Nest parasites of *Anthophora* (Apidae). Number of taxa: World – 7 Palearctic species; Russia – 2.
- Thyreomelecta propinqua** (Lieftinck, 1968) [Thyreus]. Russia: **ES** (TU, BR), **FE** (PR). – China (NE), Korean Peninsula.
- Thyreomelecta sibirica** (Radoszkowski, 1893) [Crocisa] (*Thyreus sibirica*: Romankova, 1995b). Russia: **ES** (IR, KR, BR, YA, ZB), **FE** (AM, MG). – Armenia, China (NE).
- THYREUS** Panzer, 1806 (*Crocisa* Jurine, 1807). Type species *Nomada scutellaris* Fabricius, 1781. Cleptoparasites of *Amegilla*, some species of *Anthophora* and *Eucera* subgen. *Synchalonia* (Apidae). Number of taxa: World – 123 species in Old World, mostly Indo-Australian; Palearctic – 40; Russia – 10.
- Thyreus aberrans** (Morawitz, 1875) [Crocisa]. Russia: **EP** (S). – Uzbekistan, Tajikistan.
- Thyreus affinis** (Morawitz, 1874) [Crocisa] (*Crocisa portchinski* Radoszkowski, 1893; *C. transcaspica* Radoszkowski, 1893; *C. tunensis* Pérez, 1895; *C. affinis* var. *villosa* Meyer, 1921). Cleptoparasite of *Amegilla salvia* (Mor.) (Apidae). Russia: **EP** (C, S, NC, CR), **UR**. – Europe (WE, SE, EE), N Africa, Azerbaijan, Armenia, Turkey, Cyprus, Pakistan, Iran, Uzbekistan, Kyrgyzstan, Kazakhstan.
- Thyreus altaicus** (Radoszkowski, 1893) [Crocisa]. Russia: **WS** (AL), **ES** (KS, KR, BR, ZB), **FE** (PR). – Kazakhstan, Mongolia, China (NE, NC).
- Thyreus decorus** (Smith, 1852) [Crocisa] (*Crocisa japonica* Friese, 1905; *C. kanshireana* Cockerell, 1911; *C. pallescens* Cockerell, 1927). Russia: **FE** (PR). – China (SE), Korean Peninsula, Japan (Hon, Shi, Kyu), Thailand, Malaysia.

- Thyreus hirtus** (de Beaumont, 1940) [Crocisa]. Russia: **EP** (S). – Europe (WE, SE), N Africa, Turkey.
- Thyreus histrionicus** (Illiger, 1806) [Melecta] (*Crocisa major* Morawitz, 1875; *C. divisa* Pérez, 1905; *C. histrionica* var. *alboscuteolata* Meyer, 1921; *C. rimosiscutum* Alfken, 1927). Cleptoparasite of *Amegilla quadrifasciata* (de Villers) (Apidae). Russia: **EP** (C, E, S, CR), **UR**, **WS** (KM). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Cyprus, Yemen, Iran, Central Asia, Kazakhstan, China (NW).
- Thyreus orbatus** (Lepeletier de Saint-Fargeau, 1841) [Crocisa] (*Crocisa scutellaris* auct., nec Fabricius, 1781). Cleptoparasite of *Anthophora parietina* Mor. and *A. quadrimaculata* (Pz.) (Apidae). Russia: **EP** (S). – Europe (WE, SE, EE), N Africa, Turkey.
- Thyreus ramosus** (Lepeletier de Saint-Fargeau, 1841) [Crocisa] (*Crocisa rufa* Radoszkowski, 1886; *C. ashabadensis* Radoszkowski, 1893; *C. caucasica* Radoszkowski, 1893; *C. ramosa* var. *albociliata* Meyer, 1921; *C. affinis* var. *minor* Friese, 1925; *C. circulata* Alfken, 1927). Cleptoparasite of *Amegilla albigena* (Lep.) and possible of *Anthophora pubescens* (F.) (Apidae). Russia: **EP** (C, E, S, CR). – Europe (WE, SE, EE), N Africa, Caucasus, Turkey, Cyprus, Syria, Palestine, Israel, Iraq, Saudi Arabia, Yemen, Iran, Afghanistan, Turkmenistan, Uzbekistan, Kazakhstan, China (NE, NC, WP).
- Thyreus scutellaris** (Fabricius, 1781) [Nomada] (*Crocisa crassicornis* Morawitz, 1890). Cleptoparasite of *Anthophora borealis* Mor. (Apidae). Russia: **EP** (C, S, NC), **UR**, **WS** (TK, KM), **ES** (ZB), **FE** (AM, PR). – Europe (SE, EE), N Africa, Armenia, Turkey, Syria, Iran, Afghanistan, Turkmenistan, Kazakhstan, China (NC).
- Thyreus truncatus** (Pérez, 1883) [Crocisa] (*Crocisa ramosa* var. *mucoarea* Friese, 1925; *C. nadigi* Alfken, 1933; *C. curviscutum* Alfken, 1934). Cleptoparasite of *Amegilla garrula* (Rossi) (Apidae). Russia: **EP** (C, CR), **UR**. – Europe (WE, SE, EE), N Africa, Georgia, Azerbaijan, Turkey, Palestine, Kuwait, Iran, Tajikistan.

Tribe BOMBINI

- BOMBUS** Latreille, 1802 (*Psithyrus* Lepeletier de Saint-Fargeau, 1833). Type species *Apis terrestris* Linnaeus, 1758. Almost worldwide distributed genus, absent in Afrotropics and Oceania and most reachly represented in highland Palaeartic. Some species were introduced into New Zealand and Australia. Most species are social insects with annual colonies, some species are cleptoparasitic, including subgenus *Psithyrus*. Number of taxa: World – 264 species, Palaeartic – 121 species, Russia – 90.
- Bombus (Alpigenobombus) wurflenii** Radoszkowski, 1859. Russia: **EP** (NC), **UR**. – Europe (WE, NE, SE, EE), Caucasus, Turkey.
- Bombus (Alpinobombus) alpinus** (Linnaeus, 1758) [Apis]. Russia: **EP** (N). – Europe (WE, NE, SE, EE).
- Bombus (Alpinobombus) balteatus** Dahlbom, 1832 (*B. balteatus lysholmi* Friese, 1905; *B. kirbyellus friesei* Skorikov, 1908; *Alpinobombus kirbyellus gmelini* Skorikov, 1914; *A. k. subbalteatus* Skorikov, 1914; *A. k. subcollaris* Skorikov, 1914; *A. k. appropinquans* Skorikov, 1914). Russia: **EP** (N), **WS** (TM), **ES** (KR, YA), **FE** (KH, KU, KA, MG, CH). – Europe (NE), Mongolia.
- Bombus (Alpinobombus) hyperboreus** Schönherr, 1809. Facultative inquiline in nests *Bombus pyrrhopygus* Friese and *B. jonellus* (Kirby) (Apidae). Russia: **EP** (N), **WS** (TM), **ES** (KR, YA), **FE** (KA, MG, CH). – Europe (NE).
- Bombus (Alpinobombus) pyrrhopygus** Friese, 1902 (*B. polaris* auct., nec Curtis, 1835). Russia: **EP** (N), **WS** (TM), **ES** (KR, YA), **FE** (KA, CH). – Europe (NE).
- Bombus (Bombias) confusus confusus** Schenck, 1859. Russia: **EP** (NW, C, E, S), **UR**. – Europe (WE, NE, SE, EE).
- Bombus (Bombias) confusus paradoxus** Dalla Torre, 1882. Russia: **EP** (C, E, S), **UR**, **WS** (OM, TK, NS, KM, AL), **ES** (KS, KR). – Europe (WE, NE, SE, EE), Kazakhstan.
- Bombus (Bombus) cryptarum** (Fabricius, 1775) [Apis] (*B. lucorum albocinctus* Smith, 1854; *B. florilegus* Panfilov, 1956). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (TM, NS, AL), **ES** (KS, KR, IR, BR, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG, CH). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Kyrgyzstan, Kazakhstan, Mongolia, China (NW, NC), Japan (Hok), India, Nepal, N America.
- Bombus (Bombus) hypocrita** Pérez, 1905 (*B. sapporoensis* Cockerell, 1911; *B. jesoensis* Matsumura, 1911; *B. ikonnikovi* Skorikov, 1914; *B. i. mariae* Skorikov, 1914; *B. i. catagraphus* Skorikov, 1914; *B. i. invitabilis* Skorikov, 1914; *B. i. vanus* Skorikov, 1914). Russia: **FE** (KH, PR, SA, KU). – Korean Peninsula, Japan (Hok, Hon, Shi).

BOMBUS Latreille, 1802 (*Psithyrus* Lepeletier de Saint-Fargeau, 1833). Type species *Apis terrestris* Linnaeus, 1758. Almost worldwide distributed genus, absent in Afrotropics and Oceania and most reachly represented in highland Palaeartic. Some species were introduced into New Zealand

- Bombus (Bombus) ignitus** Smith, 1869 (*B. ignitus subcollaris* Skorikov, 1914). Russia: **FE** (PR, SA). – China (NE, NC, NW, SW, WP), Korean Peninsula, Japan (Hon, Kyu).
- Bombus (Bombus) lucorum** (Linnaeus, 1761) [Apis]. Russia: **EP** (N, NW, C, E, S, NC), **UR, WS** (NS, AL), **ES** (KS, YA, ZB). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Kyrgyzstan, Mongolia, China (NE, NW, NC).
- Bombus (Bombus) magnus** Vogt, 1911. Russia: **EP** (N, NW, C). – Europe (WE, NE, SE, EE).
- Bombus (Bombus) patagiatus** Nylander, 1848. Russia: **EP** (N, NW, C, E), **UR, WS** (TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, MG). – Europe (NE), Mongolia, China (NE, NC, CC, WP), Korean Peninsula.
- Bombus (Bombus) sporadicus** Nylander, 1848 (*B. terrestris czerskianus* Vogt, 1911; *Terrestribombus terrestris malaisei* Bischoff, 1930; *Bombus sporadicus sachalinensis* Krüger, 1956). Russia: **EP** (N, NW, C), **UR, WS** (TM, TK, NS, KM, AL), **ES** (TU, KR, IR, BR, YA, ZB), **FE** (KH, PR, SA, KA, MG). – Europe (NE), Mongolia, China (NC, NW, WP), Korean Peninsula.
- Bombus (Bombus) terrestris** (Linnaeus, 1758) [Apis]. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR, WS** (OM, NS, AL). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Syria, Jordan, Lebanon, Israel, Iraq, Iran, Central Asia, Kazakhstan, China (NW), Japan (introduced), N and S America (introduced), Australia (introduced), New Zealand (introduced).
- Bombus (Cullumanobombus) cullumanus apollineus** Skorikov, 1910. Russia: **EP** (NC). – Caucasus, Turkey, Iran.
- Bombus (Cullumanobombus) cullumanus serrisquama** Morawitz, 1888 (*B. silantjewi* Morawitz, 1891; *B. praemarinus* Panfilov, 1951). Russia: **EP** (C, E, S, NC), **UR, WS** (TM, OM, NS, KM, AL), **ES** (KS, KR, IR), **FE** (PR). – Europe (WE, SE, EE), Caucasus, Turkey, Iran, Afghanistan, Central Asia, Kazakhstan, China (NW).
- Bombus (Cullumanobombus) semenoviellus** Skorikov, 1910. Russia: **EP** (N, NW, C, E), **UR, WS** (TM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB). – Europe (WE, NE, SE, EE), Kazakhstan.
- Bombus (Cullumanobombus) unicus** Morawitz, 1883 (*B. jankowskii* Radoszkowski, 1888; *B. controversus* Skorikov, 1910). Russia: **FE** (AM, KH, PR).
- Bombus (Kallobombus) soroensis** (Fabricius, 1777) [Apis] (*B. proteus* Gerstcker, 1869). Russia: **EP** (N, NW, C, E, S, NC), **UR, WS** (OM, TK, NS, KM, AL), **ES** (KS, TU, KR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Syria, Iraq, Iran, Central Asia, Kazakhstan, Mongolia.
- Bombus (Megabombus) argillaceus** (Scopoli, 1763) [Apis]. Russia: **EP** (C, E, S, NC, CR). – Europe (WE, SE, EE), Turkey, Lebanon, Iraq, Iran, Turkmenistan.
- Bombus (Megabombus) consobrinus** Dahlbom, 1832 (*Hortobombus consobrinus wittenburgi* Vogt, 1911, *H. consobrinus subvinogradovi* Vogt, 1911; *H. c. nigroventralis* Vogt, 1911; *Bombus solowiyofkae* Matsumura, 1911; *Hortobombus consobrinus ochroleucus* Skorikov, 1914; *H. c. submonochromos* Skorikov, 1914; *H. c. derzhavini* Skorikov, 1914; *H. c. nigrociliatus* Skorikov, 1914; *H. c. albociliatus* Skorikov, 1914; *H. c. bianchii* Skorikov, 1914; *H. c. diana* Skorikov, 1914; *H. c. ferrugineociliatus* Skorikov, 1914; *Bombus yezoensis* Matsumura, 1932). Russia: **EP** (N, NW, C, E), **UR, WS** (TM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG). – Europe (NE), Kazakhstan, Mongolia, China (NW, WP, N), Korean Peninsula, Japan (Hon).
- Bombus (Megabombus) czerskii** Skorikov, 1910 (*B. czerskii suberiophoroides* Skorikov, 1915). Russia: **ES** (BR), **FE** (PR). – Mongolia, China (NC, NW), Korean Peninsula.
- Bombus (Megabombus) diversus** Smith, 1869 (*B. ussurensis atrocaudatus* Vogt, 1911). Russia: **FE** (PR, SA, KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Bombus (Megabombus) gerstaeckeri** Morawitz, 1881. Russia: **EP** (NC). – Europe (WE, SE, EE), Georgia.
- Bombus (Megabombus) hortorum** (Linnaeus, 1761) [Apis]. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR, WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA), **FE** (PR). – Europe (WE, NE, SE, EE), Turkey, Iran, Central Asia, Kazakhstan, Mongolia, New Zealand (introduced).
- Bombus (Megabombus) portchinsky** Radoszkowski, 1883. Russia: **EP** (NC). – Caucasus, Turkey, Iran.
- Bombus (Megabombus) ruderatus** (Scopoli, 1763) [Apis]. Russia: **EP** (NW, C, E, S, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, S America (introduced).
- Bombus (Megabombus) saltuarius** (Skorikov, 1931) [Hortobombus]. Russia: **EP** (N), **WS** (TM, NS), **ES** (KS, KR, TU), **FE** (MG).
- Bombus (Megabombus) tichenkoi** (Skorikov, 1926) [Hortobombus] (*Hortobombus tichenkoi*

- pseudoligusticus* Skorikov, 1926; *Bombus tersatus kurilensis* Sakagami, 1954). Russia: **FE** (KU, KA).
- Bombus (Megabombus) ussurensis** Radoszkowski, 1877 (*Diversobombus ussuriensis postzonatus* Skorikov, 1915; *D. u. olivaceus* Skorikov, 1915). Russia: **FE** (AM, KH, PR, SA). – China (NE, NC), Korean Peninsula, Japan (Hon).
- Bombus (Melanobombus) eriophorus** Klug, 1807 (?*B. caucasicus* Radoszkowski, 1860). Russia: **EP** (NC). – Caucasus, Turkey.
- Bombus (Melanobombus) keriensis** Morawitz, 1887 (*B. alagesianus* Reinig, 1930). Russia: **EP** (NC), **WS** (AL), **ES** (TU). – Caucasus, Turkey, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China (NC, NW, SW, WP), India.
- Bombus (Melanobombus) lapidarius** (Linnaeus, 1758) [Apis]. Russia: **EP** (N, NW, C, E, S, CR), **UR**. – Europe (WE, NE, SE, EE), N Africa, Turkey, New Zealand (introduced).
- Bombus (Melanobombus) sichelii** Radoszkowski, 1860 (*Lapidariobombus sicheli czerskiae* Vogt, 1911). Russia: **EP** (N, C, E, NC), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG). – Europe (WE, SE, EE), Caucasus, Turkey, Kazakhstan, Mongolia, China (NE, NC, NW, WP), Korean Peninsula.
- Bombus (Mendacibombus) margreiteri** Skorikov, 1910 (*B. altaicus* Skorikov, 1910). Russia: **WS** (AL), **ES** (TU, IR, BR, ZB), **FE** (KA). – Kyrgyzstan, Kazakhstan, Mongolia, China (NW, WP).
- Bombus (Mendacibombus) handlirschianus** Vogt, 1909 (*B. shaposhnikovii* Skorikov, 1910). Russia: **EP** (NC). – Caucasus, Turkey, Iraq, Iran.
- Bombus (Psithyrus) barbutellus** (Kirby, 1802) [Apis] (*B. maxillosus* Klug, 1817). Parasite in nests of *Bombus hortorum* (L.) and *B. hypnorum* (L.) (Apidae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, BR, YA, ZB), **FE** (PR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Kyrgyzstan, Kazakhstan, Mongolia, China (NC).
- Bombus (Psithyrus) bohemicus** Seidl, 1837 (*Psithyrus distinctus* Pérez, 1884; *P. vestalis* auct., nec Fourcroy, 1785; *Bombus naiptchianus* Matsumura, 1911). Parasite in nests of *Bombus lucorum* (L.) (Apidae). Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA, CH). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Central Asia, Kazakhstan, Mongolia, China (NW, NC, NE, SE), India, N America.
- Bombus (Psithyrus) branickii** (Radoszkowski, 1893) [Psithyrus] (*Apathus chloronotus* Morawitz, 1893; *Psithyrus rupestris eriophoroides* Reinig, 1930; *P. r. elisabethae* Reinig, 1940). Host is unknown. Russia: **WS** (AL), **ES** (ZB). – Afghanistan, Pakistan, Central Asia, Mongolia, China (NC, NW, SW, WP), Korean Peninsula, India.
- Bombus (Psithyrus) campestris** (Panzer, 1801) [Apis]. Parasite in nests of *Bombus pascuorum* (Scop.), *B. humilis* Illiger, *B. pomorum* (Panz.) and *B. pratorum* (L.) (Apidae). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA), **FE** (AM, PR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Uzbekistan, Kazakhstan, Mongolia, China (NW, NC).
- Bombus (Psithyrus) flavidus** Eversmann, 1852 (*Psithyrus flavidus frisoni* Popov, 1931). Parasite in nests of *Bombus jonellus* (Kirby) (Apidae). Russia: **EP** (N, NW), **WS** (TM), **ES** (KS, KR, BR, YA), **FE** (SA, KU, KA, MG). – Europe (WE, NE, SE, EE), N America.
- Bombus (Psithyrus) norvegicus** (Sparre-Schneider, 1918) [Psithyrus]. Parasite in nests of *Bombus hypnorum* (L.) (Apidae). Russia: **EP** (N, NW, C, E), **UR**, **WS** (TM, TK, NS, KM, AL), **ES** (KS, KR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KA). – Europe (WE, NE, SE, EE), Kazakhstan, Mongolia, China (NC, NE, SE), Japan (Hok, Hon), N America.
- Bombus (Psithyrus) quadricolor** (Lepelletier de Saint-Fargeau, 1832) [Psithyrus]. Parasite in nests of *Bombus soroensis* (F.) (Apidae). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (TM, TK, NS, KM, AL), **ES** (KR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran.
- Bombus (Psithyrus) rupestris** (Fabricius, 1793) [Apis] (*Psithyrus rupestris buyssoni* Vogt, 1911). Parasite in nests of *Bombus lapidarius* (L.), *B. sichelii* Rad., *B. sylvarum* (L.) and *B. pascuorum* (Scop.) (Apidae). Russia: **EP** (N, NW, C, E, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, MG). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Mongolia, China (NW, NC, NE, SE).
- Bombus (Psithyrus) sylvestris** (Lepelletier de Saint-Fargeau, 1832) [Psithyrus]. Parasite in nests of *Bombus pratorum* (L.), *B. jonellus* (Kirby) and *B. schrencki* Mor. (Apidae). Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (TM, TK, NS, KM, AL), **ES** (KS,

- KR, YA), **FE** (AM, KH, PR, SA, MG). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Kazakhstan, Mongolia, China (NC, NE), Korean Peninsula.
- Bombus (Psithyrus) vestalis** (Fourcroy, 1785) [Apis]. Parasite in nests of *Bombus terrestris* (L.) (Apidae). Russia: **EP** (N, C, E, NC, CR). – Europe (WE, NE, SE, EE), N Africa, Caucasus, Turkey, Iran.
- Bombus (Pyrobombus) ardens** Smith, 1879 (*B. ardens sakagami* Tkalců, 1962). Russia: **FE** (SA, KU). – Korean Peninsula, Japan (Hok, Hon, Shi, Kyu).
- Bombus (Pyrobombus) beaticola** (Tkalců, 1968) [Pyrobombus] (*B. beaticola moshkarareppus* Sakagami et Ishikawa, 1969; *B. b. shikotanensis* Ito et Sakagami, 1980). Russia: **FE** (SA, KU). – Japan (Hok, Hon).
- Bombus (Pyrobombus) biro**i Vogt, 1911. Russia: **WS** (AL). – Afghanistan, Central Asia, Kazakhstan, Mongolia, India.
- Bombus (Pyrobombus) brodmannicus** Vogt, 1909. Russia: **EP** (NC). – Europe (WE, SE), Caucasus, Turkey.
- Bombus (Pyrobombus) cingulatus** Wahlberg, 1854 (*B. hypnorum tilingi* Morawitz, 1881; *B. cingulatus pseudocalidus* Reinig, 1936). Russia: **EP** (N), **UR**, **WS** (TM), **ES** (KS, KR, YA), **FE** (KH, PR, SA, KU, KA, CH, MG). – Europe (NE).
- Bombus (Pyrobombus) glacialis** Friese, 1902 (*B. glacialis* Sparre-Schneider, 1909). Russia: **EP** (N), **FE** (KA).
- Bombus (Pyrobombus) haematurus** Kriechbaumer, 1870. Russia: **EP** (NC, CR). – Europe (SE, EE), Azerbaijan, Turkey, Iran, Turkmenistan.
- Bombus (Pyrobombus) hypnorum** (Linnaeus, 1758) [Apis] (*B. calidus* Erichson, 1851; *Pratobombus hypnorum klutschianis* Bischoff, 1930; *Bombus koropokkrus* Sakagami and Ishikawa, 1972). Russia: **EP** (N, NW, C, E, NC, CR), **UR**, **WS** (TM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (KH, PR, SA, KU, KA, MG, CH). – Europe (WE, NE, SE, EE), Georgia, Kazakhstan, Mongolia, China (NE, NC, NW, CC, SW, WP, SE), Korean Peninsula, Japan (Hok), Nepal, Myanmar, India.
- Bombus (Pyrobombus) jonellus** (Kirby, 1802) [Apis]. Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (TM, TK, NS, AL), **ES** (TU, KR, IR, BR, YA, ZB), **FE** (KH, SA, KA, MG, CH). – Europe (WE, NE, SE, EE), Georgia, Mongolia, N America.
- Bombus (Pyrobombus) lapponicus** (Fabricius, 1793) [Apis] (*B. lapponicus kamtshaticus* Skorikov, 1912; *B. l. obscurus* Skorikov, 1912; *B. l. occultodistinctus* Skorikov, 1912; *B. l. rarior* Skorikov, 1912; *B. l. karaginus* Skorikov, 1912; *B. l. commutabilis* Skorikov, 1912; *B. l. virgatus* Skorikov, 1912; *B. l. korjak* Skorikov, 1912; *B. l. ceciliae* Skorikov, 1912; *B. l. pallidocaudatus* Skorikov, 1912; *B. l. cecilioides* Skorikov, 1912; *B. l. simius* Skorikov, 1912). Russia: **EP** (N), **WS** (TM, AL), **ES** (KR, BR, YA), **FE** (KH, KA, MG, CH). – Europe (NE), Kyrgyzstan.
- Bombus (Pyrobombus) modestus** Eversmann, 1852 (*B. nymphae* Skorikov, 1910; *Pratobombus modestus krylovi* Skorikov, 1915). Russia: **EP** (N, C, E), **UR**, **WS** (TM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KA, MG). – Kazakhstan, Mongolia, China (NC), Korean Peninsula.
- Bombus (Pyrobombus) monticola** Smith, 1849. Russia: **EP** (N). – Europe (WE, SE, NE).
- Bombus (Pyrobombus) oceanicus** Friese, 1909. Russia: **FE** (KU).
- Bombus (Pyrobombus) pratorum** (Linnaeus, 1761) [Apis]. Russia: **EP** (N, NW, C, E, NC, CR), **UR**, **WS** (TM, TK, KM, AL), **ES** (KR, YA). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Australia (introduced).
- Bombus (Sibiricobombus) asiaticus** Morawitz, 1875. Russia: **WS** (AL), **ES** (TU). – Afghanistan, Pakistan, Central Asia, Mongolia, China (NW, NC, WP), India, Nepal.
- Bombus (Sibiricobombus) niveatus** Kriechbaumer, 1870. Russia: **EP** (NC). – Europe (SE, EE), Turkey, Syria, Lebanon, Iran, Turkmenistan.
- Bombus (Sibiricobombus) sibiricus** (Fabricius, 1781) [Apis]. Russia: **ES** (KS, TU, KR, IR, BR, ZB). – Kazakhstan, Mongolia, China (NE, NC, NW, WP), Korean Peninsula.
- Bombus (Subterraneobombus) amurensis** Radozkowski, 1862 (*B. fragrans mongol* Skorikov, 1931). Russia: **ES** (KS, KR, BR, ZB). – Kazakhstan, Mongolia, China (NC, NW).
- Bombus (Subterraneobombus) distinguendus** Morawitz, 1869. Russia: **EP** (N, NW, C, E, S, NC), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (KH, PR, SA, KA, MG). – Europe (WE, NE, SE, EE), Uzbekistan, Kazakhstan, Mongolia, N America.
- Bombus (Subterraneobombus) fragrans** (Pallas, 1771) [Apis]. Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (OM, NS, AL), **ES** (KS, TU, KR, BR). – Europe (WE, SE, EE), Caucasus, Turkey, Iran, Kyrgyzstan, Kazakhstan, China (NW).

- Bombus (Subterraneobombus) melanurus** Lepeletier de Saint-Fargeau, 1836. Russia: **WS** (AL), **ES** (TU). – Caucasus, Turkey, Lebanon, Iran, Afghanistan, Central Asia, Mongolia, China (NC, NW, WP), India, Nepal.
- Bombus (Subterraneobombus) subterraneus** (Linnaeus, 1758) [Apis]. Russia: **EP** (N, NW, C, E, NC, CR), **UR**, **WS** (OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, ZB). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Kyrgyzstan, Kazakhstan, Mongolia, China (NC, NW), New Zeland (introduced).
- Bombus (Subterraneobombus) tshitscherini** Radoszkowski, 1862. Russia: **WS** (AL), **ES** (TU, BR, ZB). – Mongolia, China (NC, NW).
- Bombus (Thoracobombus) anachoreta** (Skorikov, 1914) [Agrobombus] (*Agrobombus anachoreta czer-skiellus* Skorikov, 1914). Russia: **FE** (PR). – China (NE, NC), Korean Peninsula.
- Bombus (Thoracobombus) armeniacus** Radoszkowski, 1877 (*B. dumoucheli* auct., nec Radoszkowski, 1884; *Fervidobombus scythes* Skorikov, 1925). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (OM, NS, KM, AL), **ES** (KS, TU, KR). – Europe (SE, EE), Caucasus, Turkey, Iraq, Iran, Central Asia, Kazakhstan, China (WP).
- Bombus (Thoracobombus) deuteronymus** Schulz, 1906 (*B. subbaicalensis* auct., nec. Vogt, 1911; *B. humilis* Illiger, 1806; *Agrobombus superequester* Skorikov, 1926). Russia: **EP** (NW, C, E), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KR, IR, BR, YA, ZB), **FE** (AM, PR, SA). – Europe (SE, EE), Kazakhstan, Mongolia, China (NE, NC, WP), Korean Peninsula, Japan (Hok).
- Bombus (Thoracobombus) exil** Skorikov, 1922 (*B. nymphae* Skorikov, 1910). Russia: **ES** (TU, IR, YA, ZB). – Mongolia, China (NC).
- Bombus (Thoracobombus) filchnerae** Vogt, 1908 (*Agrobombus adventor* Skorikov, 1914; *A. a. ermola-jevi* Skorikov, 1914; *A. a. napalkovi* Skorikov, 1914). Russia: **WS** (AL), **ES** (KS, TU, KR). – Mongolia, China (N).
- Bombus (Thoracobombus) humilis** Illiger, 1806 (*B. solstitialis* Panzer, 1806; *B. helferanus* Seidl, 1838; *B. tristis* Seidl, 1838; *B. variabilis* Schmiedeknecht, 1878; *B. helferanus subbaicalensis* Vogt, 1911). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Kazakhstan, Mongolia, China (NW, NC, NE, SE), Korean Peninsula.
- Bombus (Thoracobombus) laesus** Morawitz, 1875 (*B. laesus ferrugifer* Skorikov, 1909). Russia: **EP** (C, E, S, NC, CR), **UR**, **WS** (OM, NS, AL), **ES** (KR). – Europe (WE, SE, EE), Caucasus, Turkey, Iran, Central Asia, Kazakhstan.
- Bombus (Thoracobombus) mesomelas** Gerstäcker, 1869. Russia: **EP** (NC, CR). – Europe (WE, SE, EE), Caucasus, Turkey, Iran.
- Bombus (Thoracobombus) mlokosievitzii** Radoszkowski, 1877. Russia: **EP** (NC). – Europe (SE), Caucasus, Turkey, Iran.
- Bombus (Thoracobombus) mocsaryi** Kriechbaumer, 1877 (*B. mocsaryi sidemii* Radoszkowski, 1888; *Agrobombus maculidorsis* Skorikov, 1922; *Bombus maculidorsis angarensis* Panfilov, 1956). Russia: **EP** (N, NW, C, E), **UR**, **WS** (TM, OM, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, ZB), **FE** (PR). – Europe (WE, NE, SE, EE), N Africa Kazakhstan, Mongolia, China (NE, NC, SE), Korean Peninsula.
- Bombus (Thoracobombus) muscorum** (Linnaeus, 1758) [Apis]. Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Kyrgyzstan, Kazakhstan, Mongolia, China (NE, NC).
- Bombus (Thoracobombus) pascuorum** (Scopoli, 1763) [Apis] (*Apis agrorum* Fabricius, 1787; *Bombus agrorum flavobarbatus* sensu Skorikov, 1915). Russia: **EP** (N, NW, C, E, S, NC, CR), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA), **FE** (AM, KH, PR, SA, KA, MG). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Syria, Iran, Kazakhstan, Mongolia, China (NC, NW), Korean Peninsula.
- Bombus (Thoracobombus) persicus** Radoszkowski, 1881. Russia: **EP** (NC). – Caucasus, Turkey, Iran.
- Bombus (Thoracobombus) pomorum** (Panzer, 1805) [Bremus]. Russia: **EP** (C, E, S, NC, CR), **UR**. – Europe (WE, NE, SE, EE), Caucasus, Turkey.
- Bombus (Thoracobombus) pseudobaicalensis** Vogt, 1911 (*Agrobombus gilvus* Skorikov, 1925). Russia: **WS** (TM, TK, NS, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU). – Mongolia, China (N), Korean Peninsula, Japan (Hok, Hon).
- Bombus (Thoracobombus) ruderarius** (Müller, 1776) [Apis]. Russia: **EP** (N, NW, C, E, NC), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR, BR, YA, ZB). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Iran, Central Asia, Kazakhstan.
- Bombus (Thoracobombus) schrencki** Morawitz, 1881 (*Agrobombus schrencki mironowianus* Vogt, 1911;

A. schrencki albidopleuralis Skorikov, 1915; *Bombus konakovi* Panfilov, 1956; *B. schrencki kuwayamai* Sakagami et Ishikawa, 1969). Russia: **EP** (N, NW, C, E), **UR**, **WS** (TM, OM, TK, NS, KM, AL), **ES** (KS, TU, KR, BR, YA, ZB), **FE** (AM, KH, PR, SA, KU, KA, MG). – Europe (NE, EE), Kazakhstan, China (NC), Korean Peninsula, Japan (Hok).

Bombus (Thoracobombus) sylvarum (Linnaeus, 1761) [Apis] (*B. daghestanicus* Radoszkowski, 1877). Russia: **EP** (NW, C, E, S, NC, CR), **UR**, **WS** (OM, NS, AL). – Europe (WE, NE, SE, EE), Caucasus, Turkey, Syria, Iran, Kazakhstan.

Bombus (Thoracobombus) tricornis Radoszkowski, 1888 (*B. tricornis biciliatus* Skorikov, 1915; *B. t. triciliatus* Skorikov, 1915). Russia: **FE** (AM, KH, PR). – China (NE, NC), Korean Peninsula.

Bombus (Thoracobombus) velox (Skorikov, 1914) [Agrobombus]. Russia: **EP** (NC). – Turkey.

Bombus (Thoracobombus) veteranus (Fabricius, 1793) [Apis] (*B. equestris* auct., nec Fabricius, 1793). Russia: **EP** (N, NW, C, E), **UR**, **WS** (OM, TK, NS, KM, AL), **ES** (KS, TU, KR, IR). – Europe (WE, NE, SE, EE), Central Asia, Kazakhstan, Mongolia.

Bombus (Thoracobombus) zonatus Smith, 1854. Russia: **EP** (S, NC, CR). – Europe (SE, EE), Caucasus, Turkey, Iran.

Tribe APINI

APIS Linnaeus, 1758 (*Apicula* Rafineque, 1814; *Apiarus* Rafineque, 1815; *Megapis* Ashmead, 1904; *Hauffapis* Armbruster, 1938). Type species *Apis mellifera* Linnaeus, 1761. Live in huge family in wax nest with honey reserve. Number of taxa: World – 11 originally Old World and mostly Oriental species; Palaearctic – 3; Russia – 2.

Apis cerana Fabricius, 1793 (*A. indica* Fabricius, 1798; *A. sinensis* Smith, 1865; *A. mellifera* var. *japonica* Radoszkowski, 1887; *A. johni* Skorikov, 1929; *A. indica sinensis ussuriensis* Goetze, 1964). Russia: **FE** (KH, AM, PR). – Afghanistan, Pakistan, India, Sri-Lanka, Nepal, China, Korean Peninsula, Japan, N Vietnam, Thailand, Philippines, Malaysia, Indonesia.

Apis mellifera Linnaeus, 1758. Cosmopolitan all-world cultivated species.

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