
Plant Families: Visual Guide

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Draft

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On the cover: Haptanthus hazlettii (Buxaceae, boxwood family) from Atlantida province, Honduras.

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Foreword

How to know plant families? Famous American botanist Amos Eaton (Manual of Botany for North America, 1833) wrote about plant families: “The Natural Method should engage the attention of the student, after he has become acquainted with about 400 species of plants...”. Learning 400 species is not easy. This is exactly what this book wants to help with.

Why to learn plant families? If the goal is to know plants, plant families are extremely important. There are roughly 300,000 species of plants but only several hundred families. Consequently, the knowledge of families will greatly simplify the plant identification. Families are also *natural units* of plant diversity. This means that if the family is known, it is possible to guess correctly the unknown features of any plant.

Which families are here? Only those families which are important worldwide. Most frequent families come first.

What is not covered? Many small families of flowering plants, and (at the moment) most of spore plants and gymnosperms.

How to learn with this book? The best way is just go through photographs of one family and try to understand what all of them have in common. Then check the description to compare. Next, compare with neighbor families and understand how they are actually different. Then open the “mixture” page and guess the family—answer is provided on the next page.

There are actually **three books**, not one. Each of them have the same structure but different set and arrangement of photographs. You can use all three to make learning even more effective!

There are also “hidden exercises”: sometimes, I place 1–2 alien photographs among the proper ones; you may want to find them.

This work is under development, therefore please check for the updates. Version date is located on the on most pages.

Chapter 1

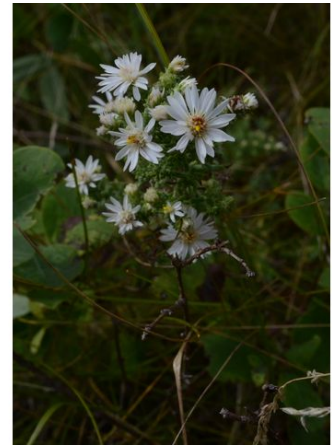
Three which conquered the Earth

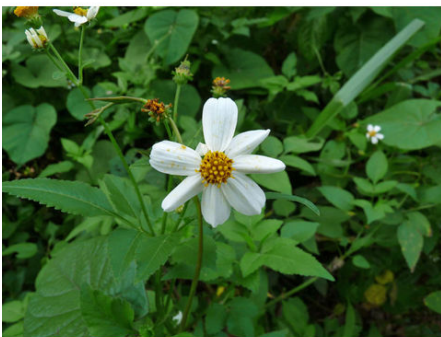
1.1 Compositae







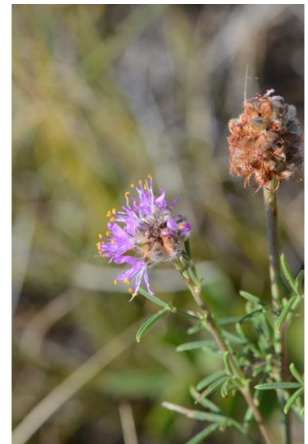






1.2 Leguminosae







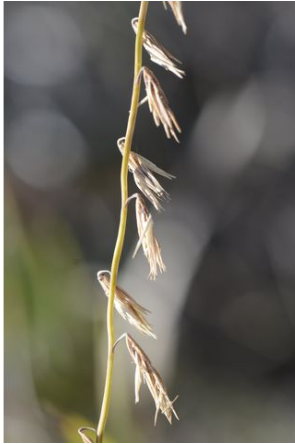






1.3 Gramineae and other graminoids

1.3.1 Gramineae







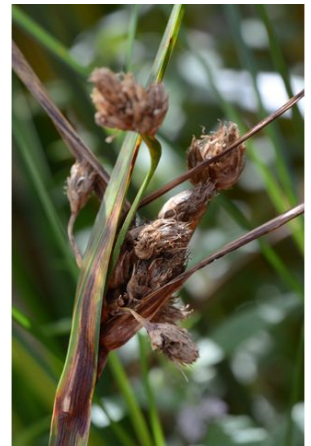


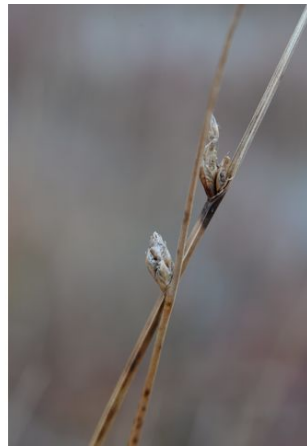




1.3.2 Cyperaceae





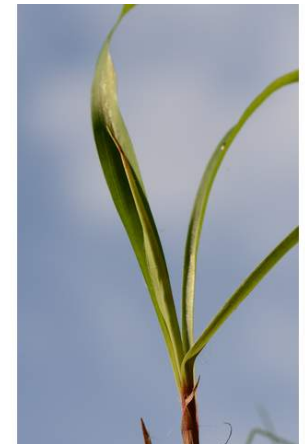
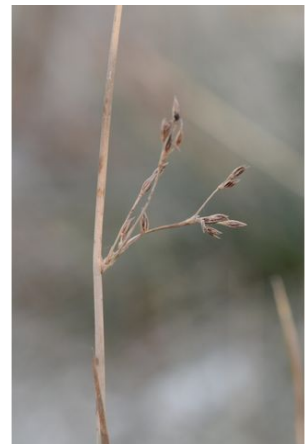
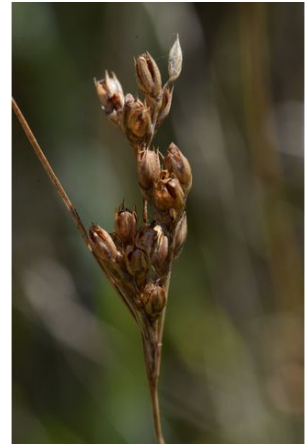




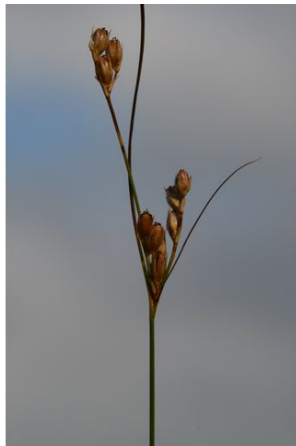




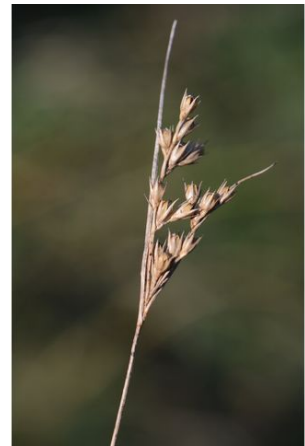
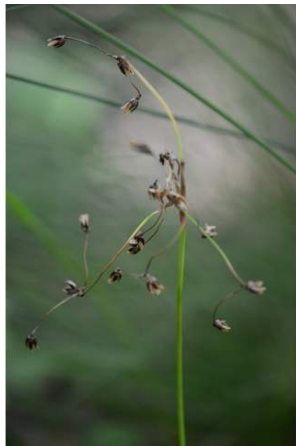
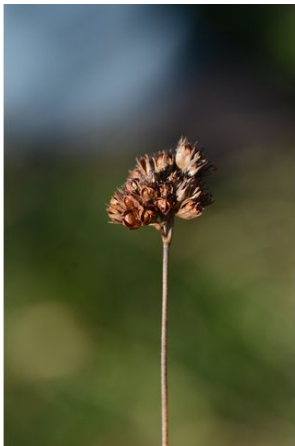
1.3.3 Juncaceae









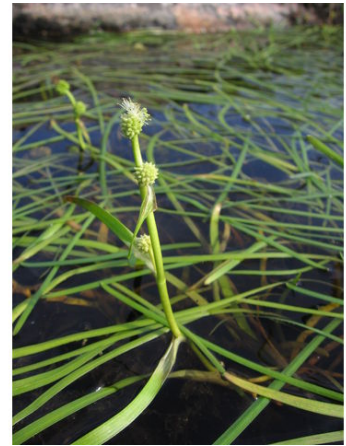
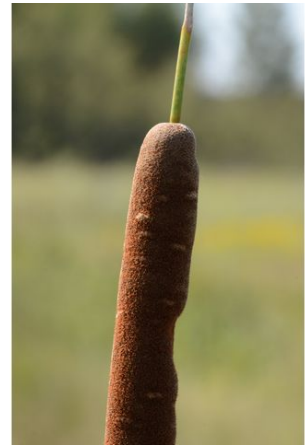




1.3.4 Typhaceae







1.4 Mixtures

1.4.1 Compositae, Leguminosae, Gramineae



Gramineae	Compositae	Compositae
Gramineae	Compositae	Compositae
Leguminosae	Compositae	Compositae

1.4.2 Gramineae, Cyperaceae, Juncaceae, Typhaceae



Gramineae	Gramineae	Gramineae
Cyperaceae	Cyperaceae	Cyperaceae
Cyperaceae	Cyperaceae	Gramineae

Chapter 2

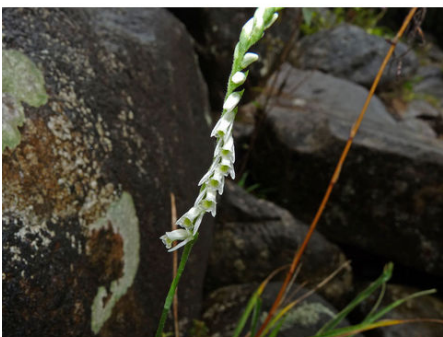
Magnificent Seven

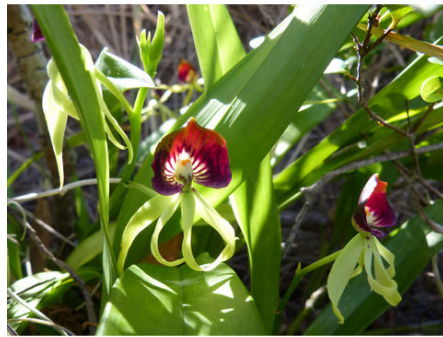
2.1 Orchidaceae













2.2 Labiatae, in a really broad sense

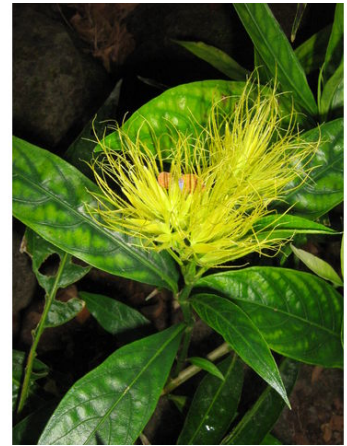






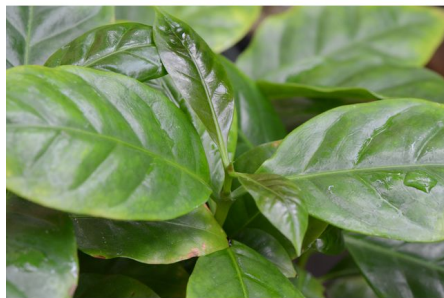


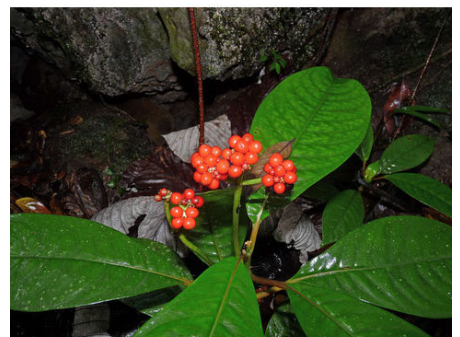
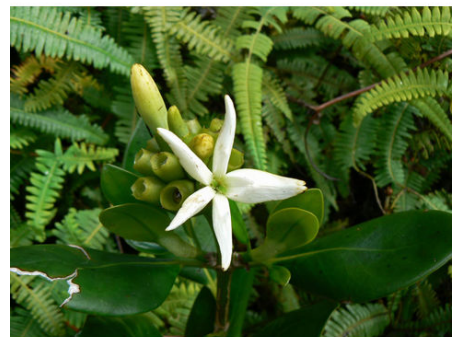


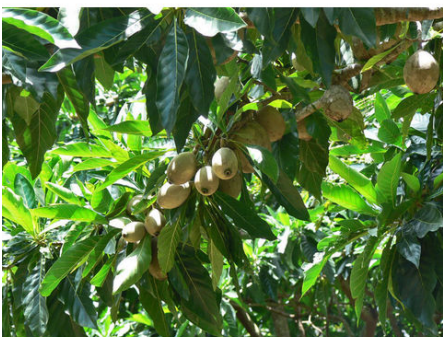


2.3 Rubiaceae





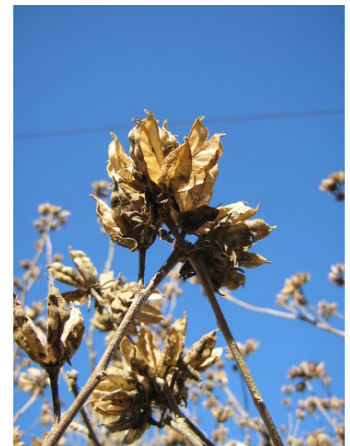




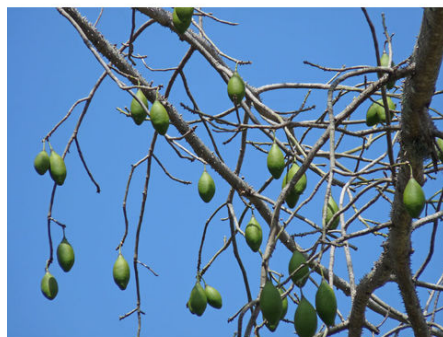
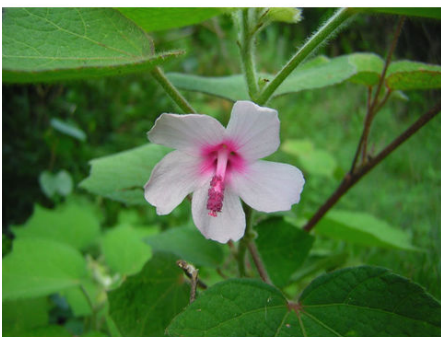
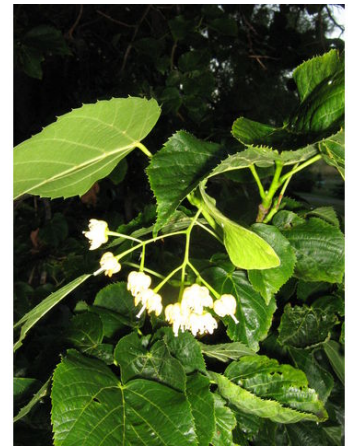


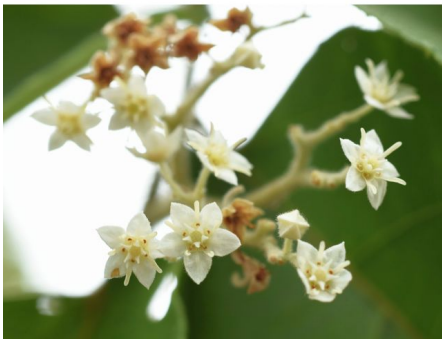
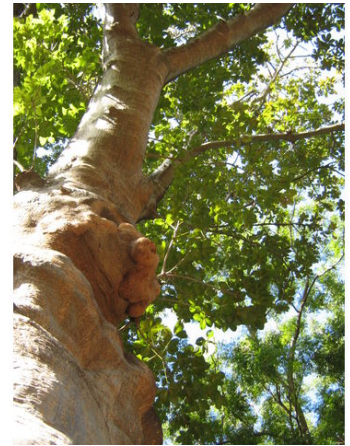


2.4 Malvaceae









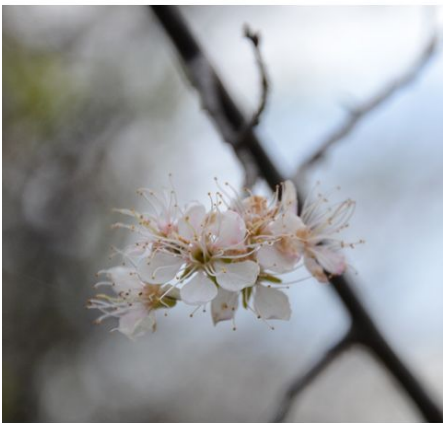




2.5 Rosaceae

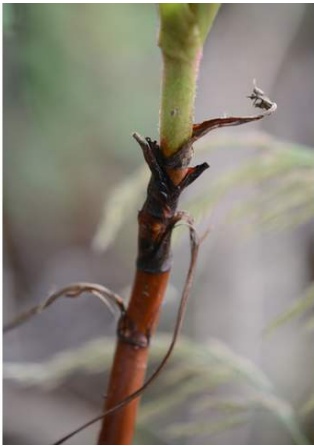












2.6 Umbelliferae





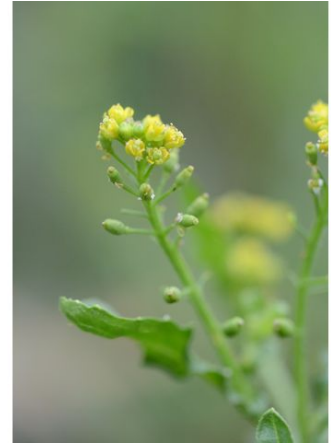


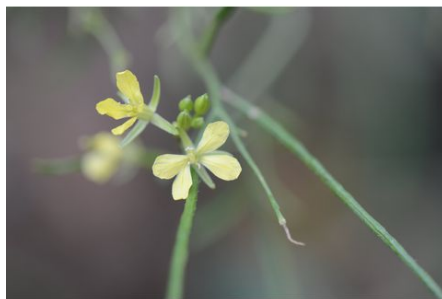




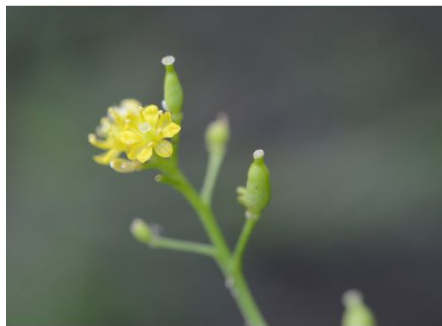
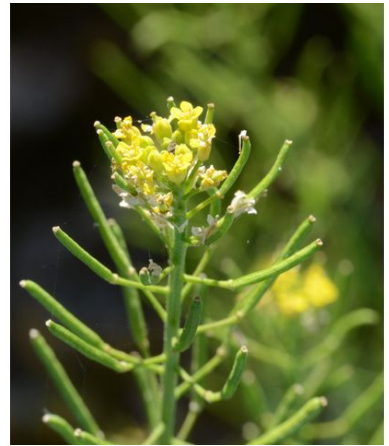


2.7 Cruciferae













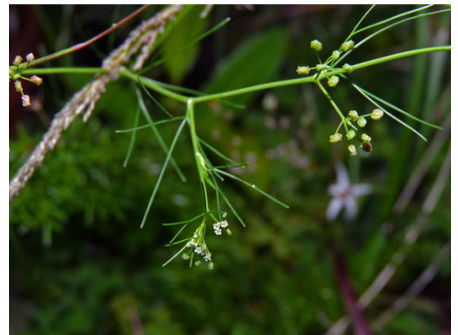
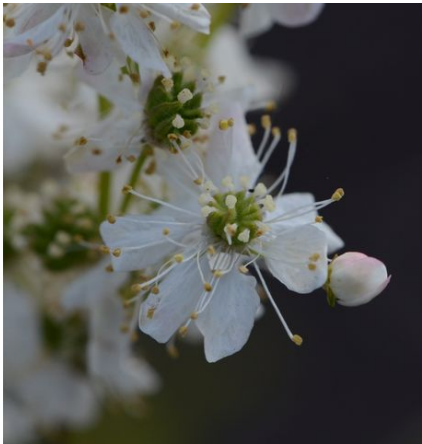
2.8 Mixtures

2.8.1 Orchidaceae, Labiatae, Rubiaceae



Orchidaceae	Labiatae	Labiatae
Orchidaceae	Labiatae	Labiatae
Labiatae	Labiatae	Labiatae

2.8.2 Malvaceae, Rosaceae, Umbelliferae, Cruciferae



Rosaceae	Cruciferae	Rosaceae
Rosaceae	Rosaceae	Rosaceae
Malvaceae	Umbelliferae	Umbelliferae

2.8.3 Orchidaceae, Labiatae, Rubiaceae, Malvaceae, Rosaceae, Umbelliferae, Cruciferae



Malvaceae	Labiatae	Labiatae
Rosaceae	Rubiaceae	Malvaceae
Labiatae	Orchidaceae	Orchidaceae

2.8.4 Compositae, Leguminosae, Gramineae, Cyperaceae, Juncaceae, Typhaceae, Orchidaceae, Labiatae, Rubiaceae, Malvaceae, Rosaceae, Umbelliferae, Cruciferae

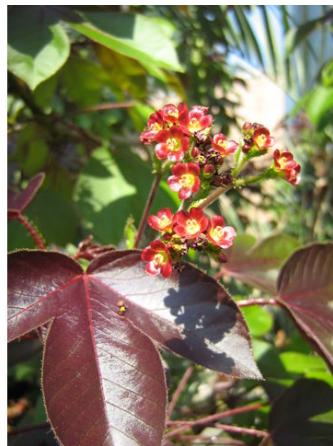
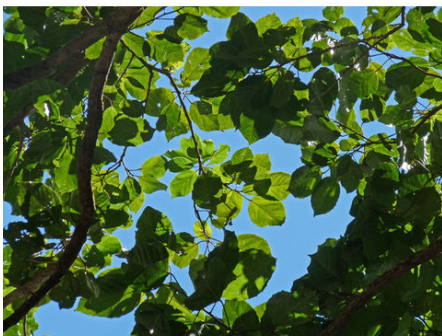


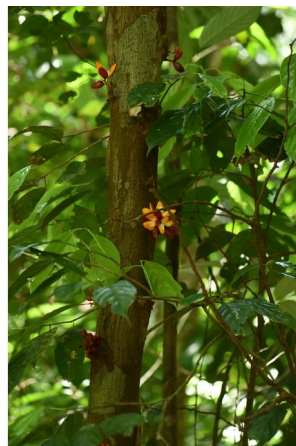
Compositae	Malvaceae	Rubiaceae
Gramineae	Orchidaceae	Umbelliferae
Compositae	Rosaceae	Compositae

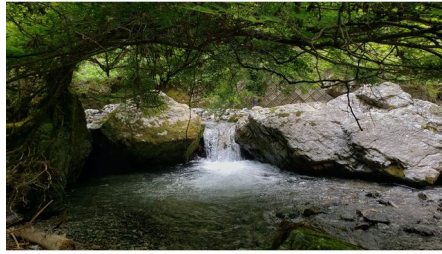
Chapter 3

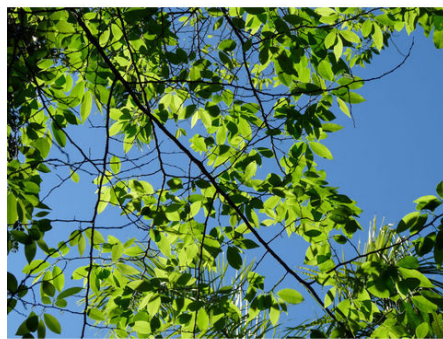
Twelve Good

3.1 Euphorbiaceae and allies





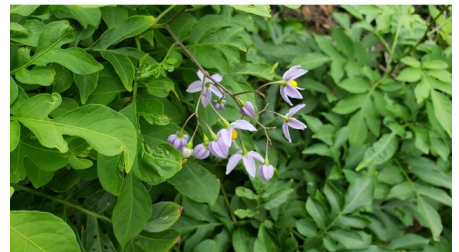








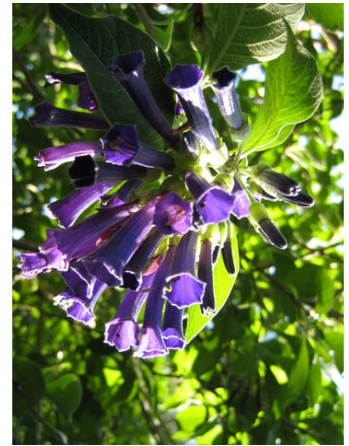
3.2 Solanaceae













3.3 Amaranthaceae







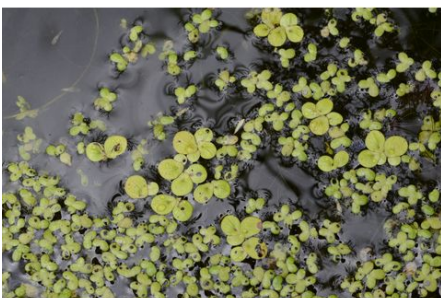


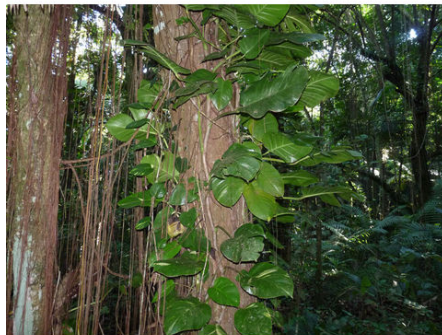
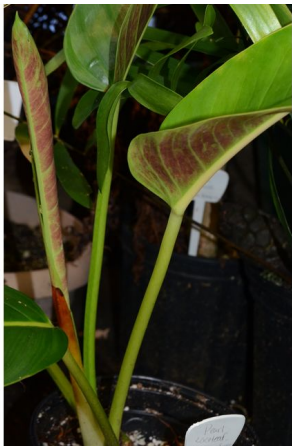
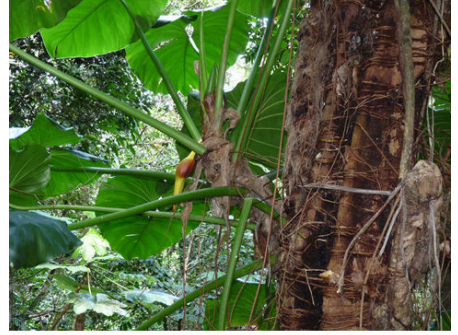


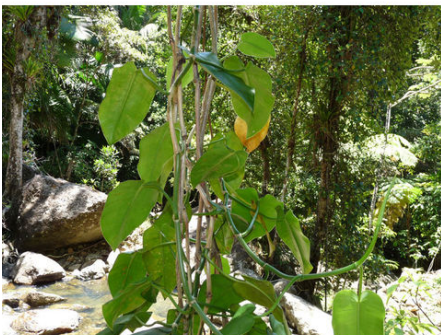
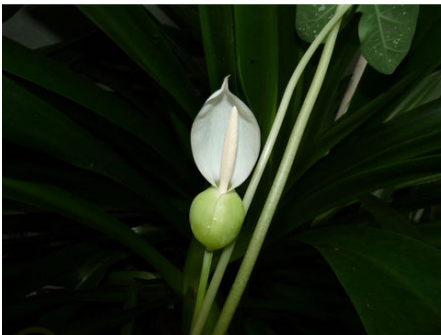


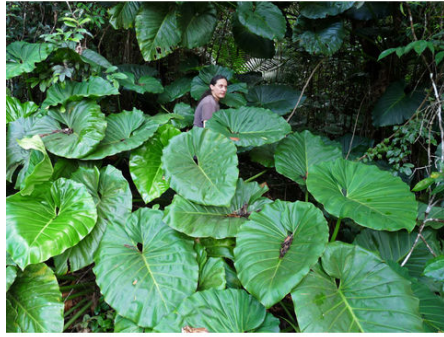
3.4 Araceae

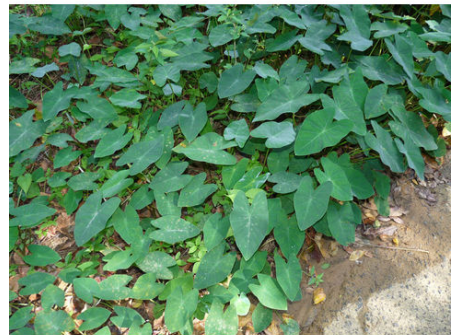




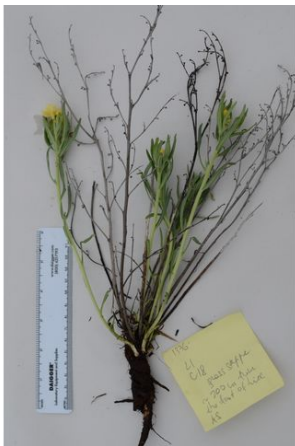






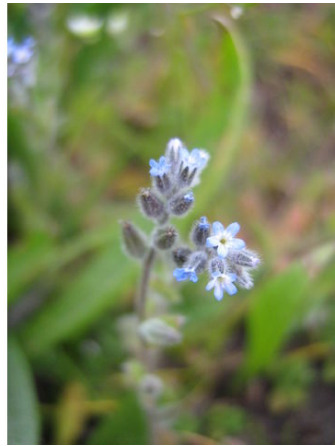


3.5 Boraginaceae











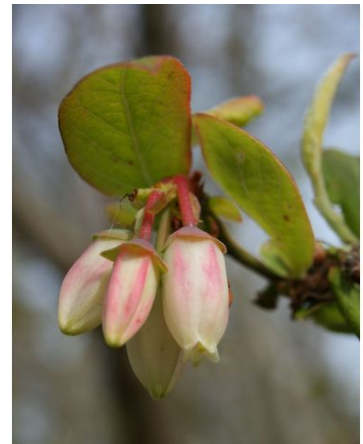


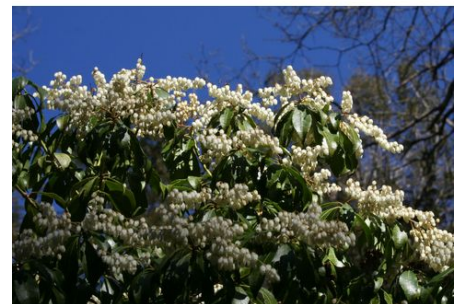
3.6 Cucurbitaceae

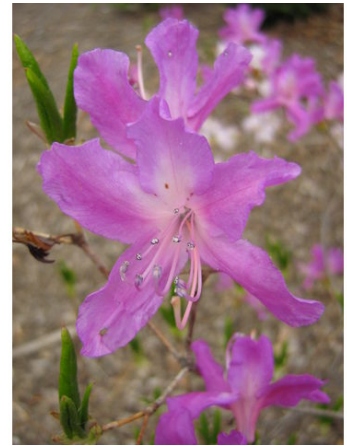


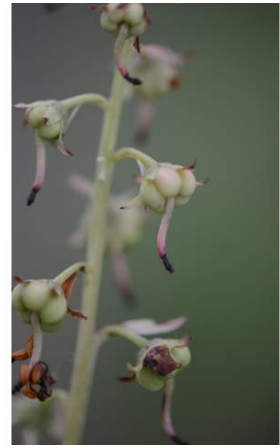


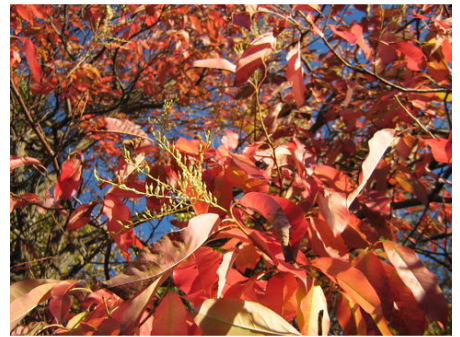
3.7 Ericaceae







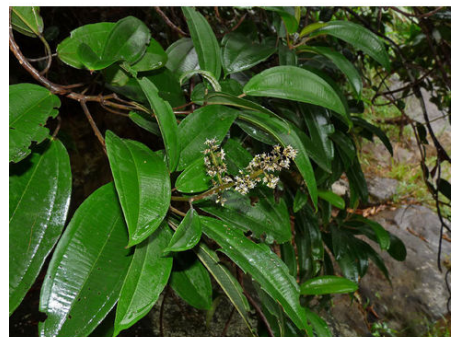
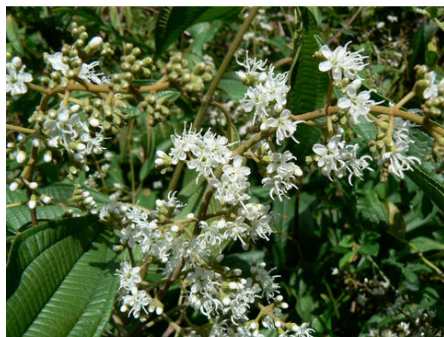


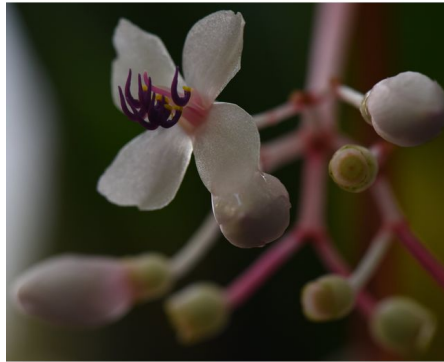


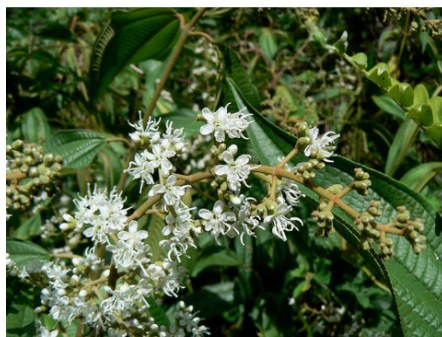
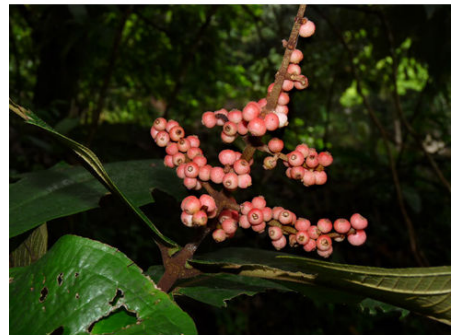


3.8 Melastomataceae







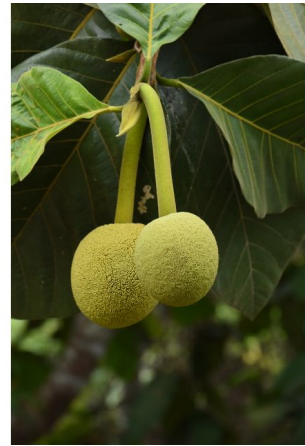


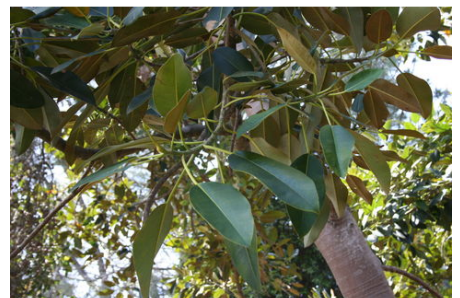




3.9 Moraceae

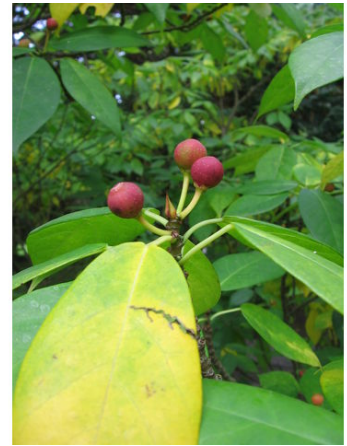






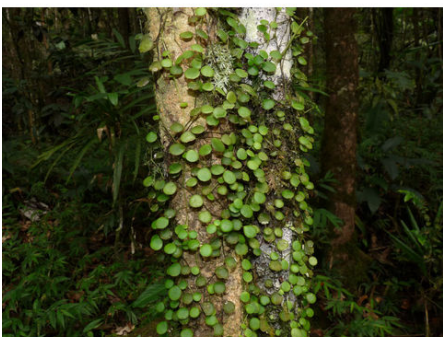
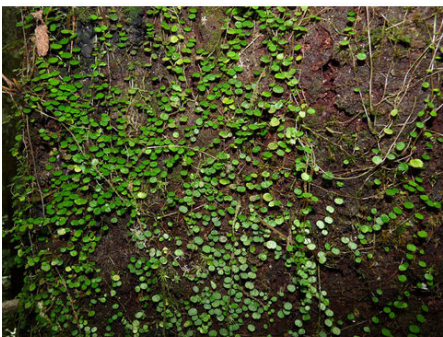






3.10 Piperaceae





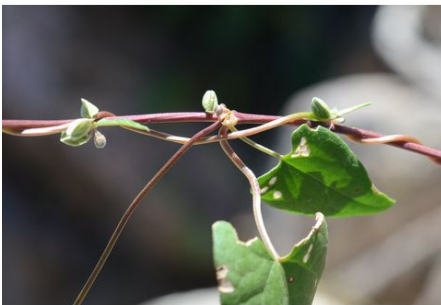








3.11 Polygonaceae











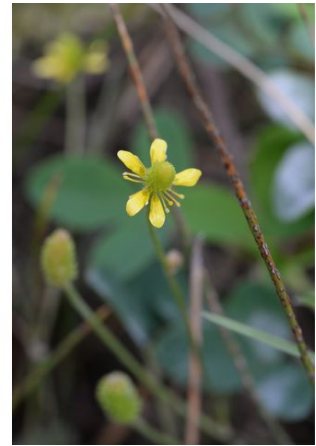


3.12 Ranunculaceae













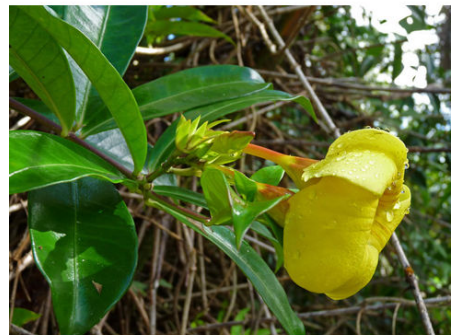
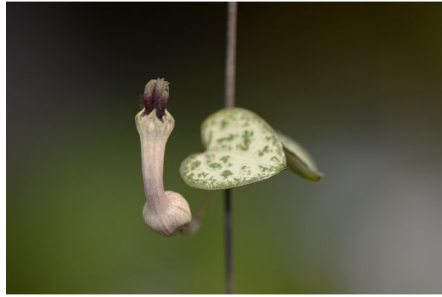
Chapter 4

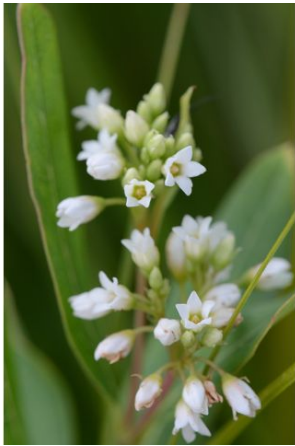
And some more, great and small

4.1 Apocynaceae





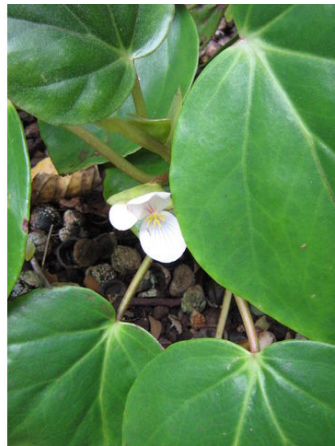


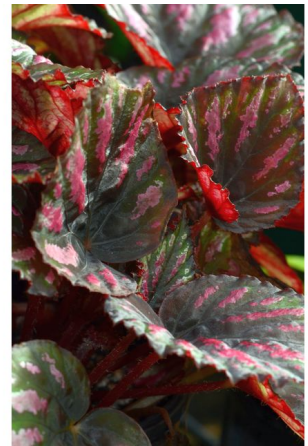






4.2 Begoniaceae

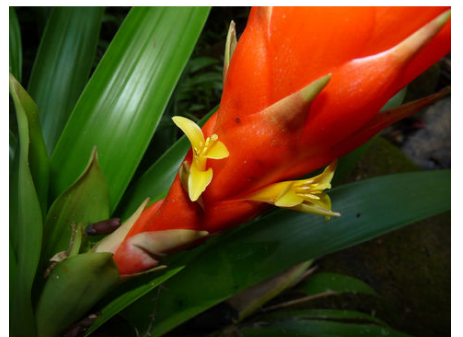


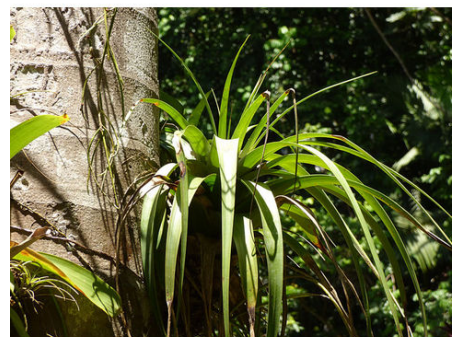
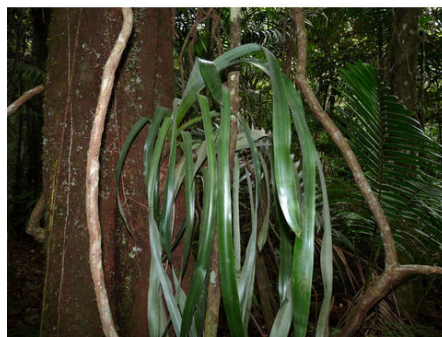
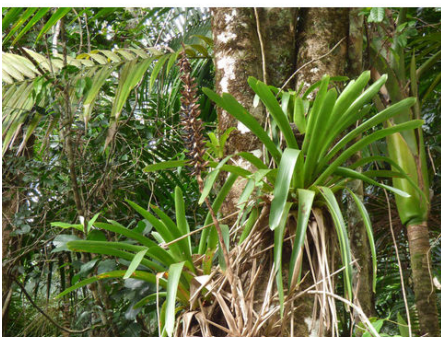




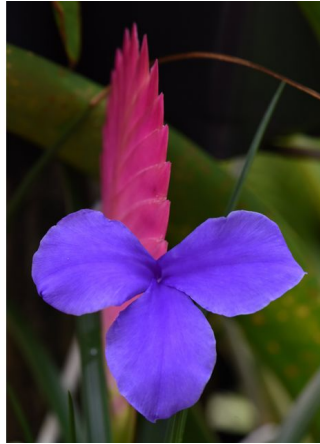
4.3 Bromeliaceae



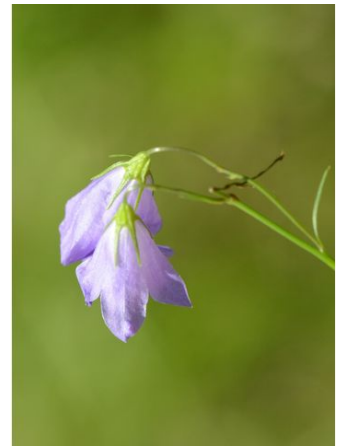
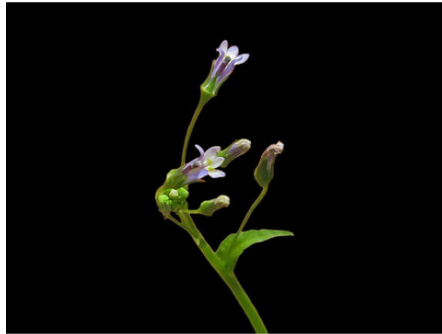


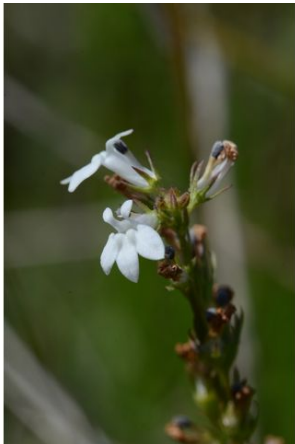


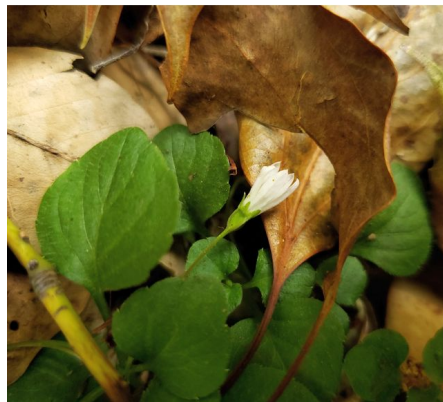




4.4 Campanulaceae





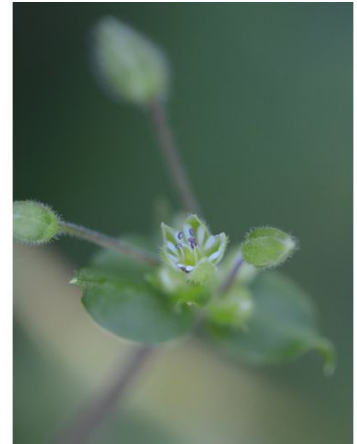


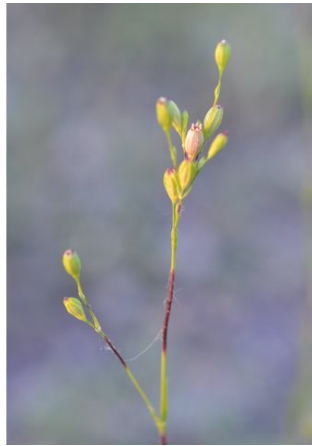




4.5 Caryophyllaceae







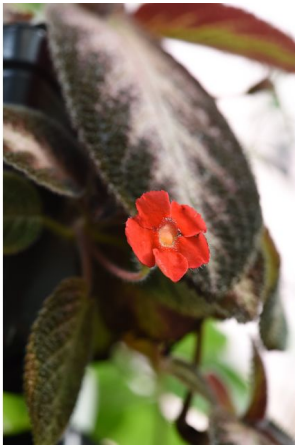






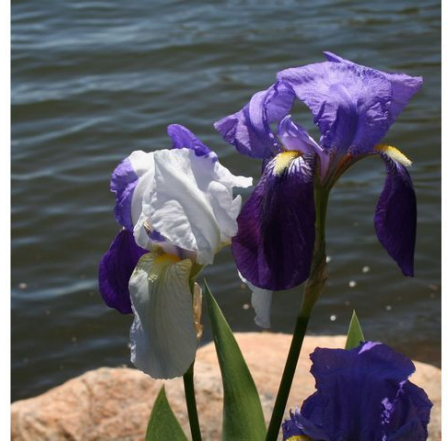
4.6 Gesneriaceae

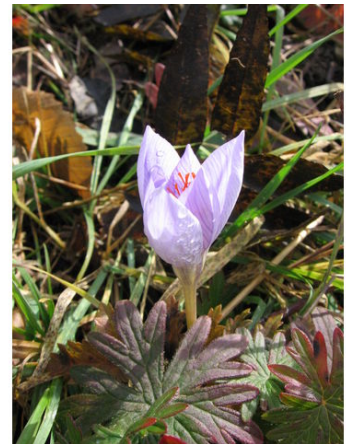






4.7 Iridaceae



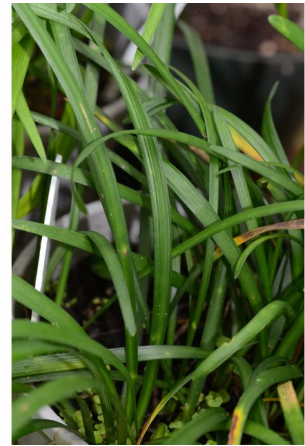




4.8 “Lilies”

4.8.1 Liliaceae





4.8.2 Melanthiaceae

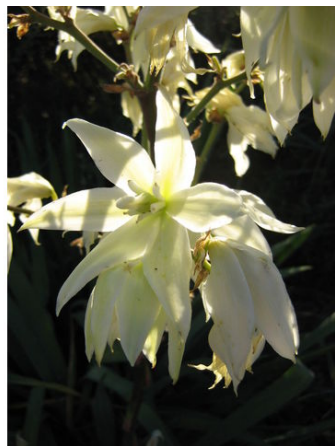
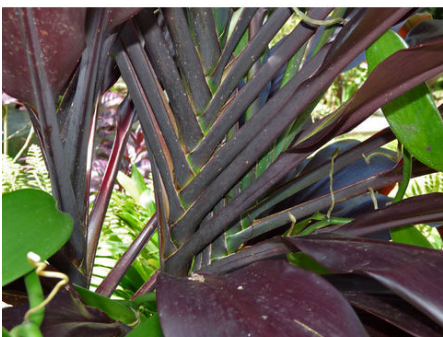
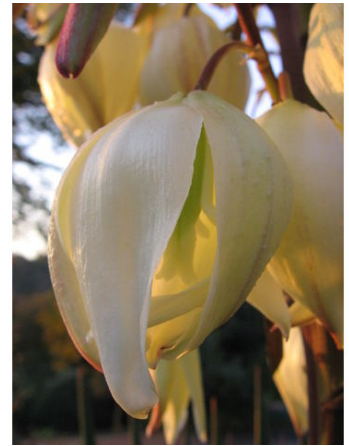
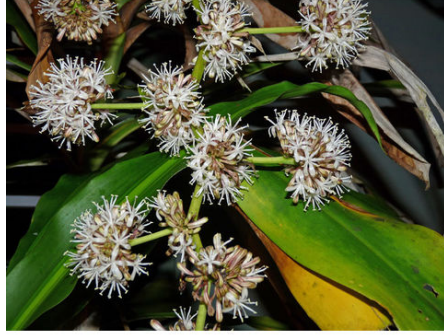


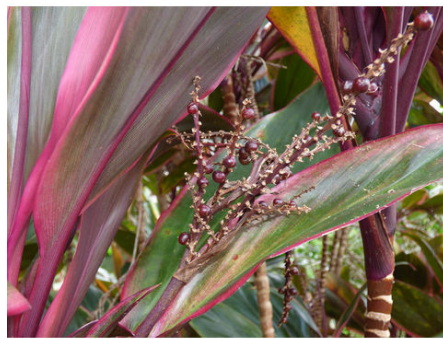
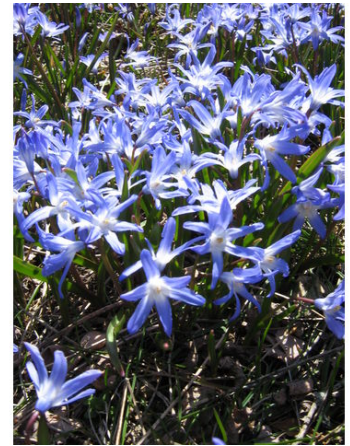


4.8.3 Asparagaceae

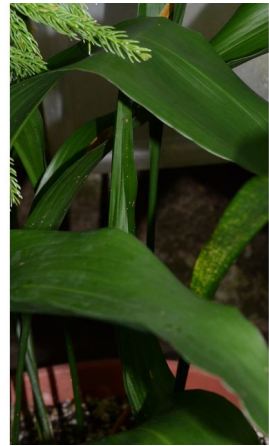




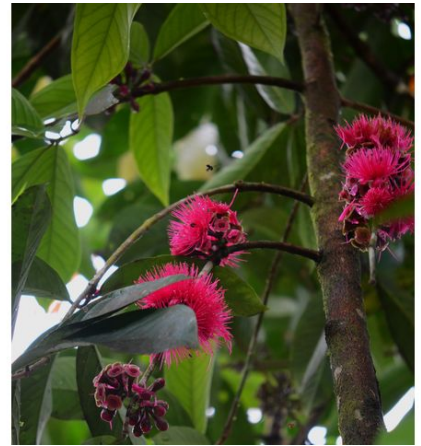


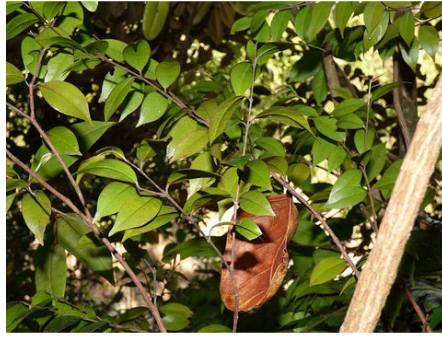




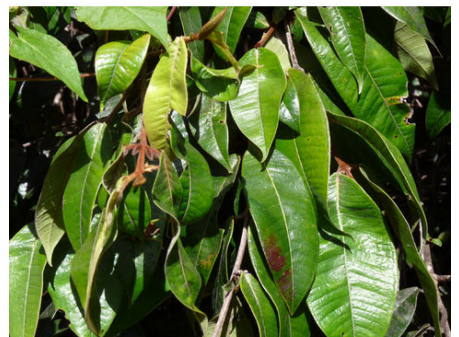


4.9 Myrtaceae







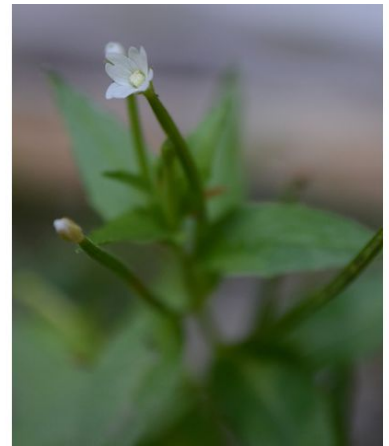






4.10 Onagraceae







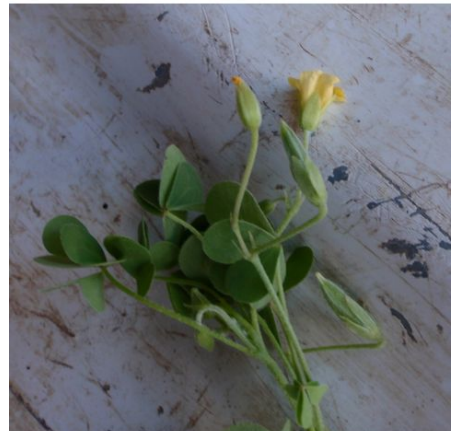




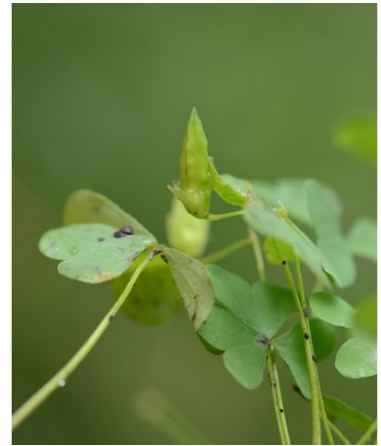


4.11 Oxalidaceae







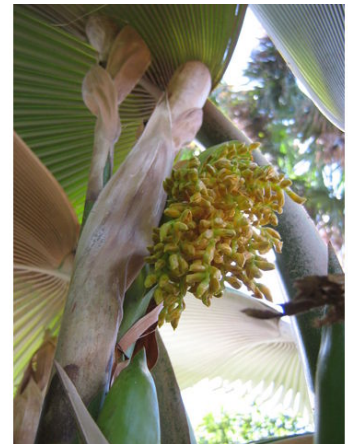


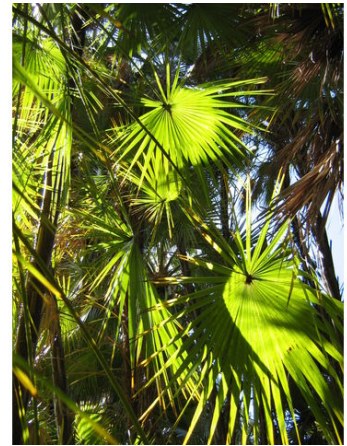


4.12 Palms and tree ferns

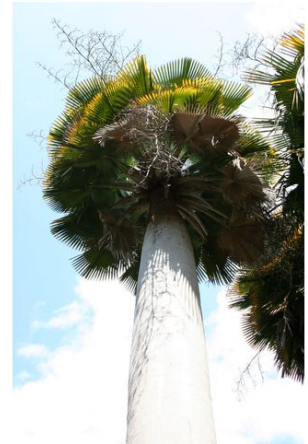
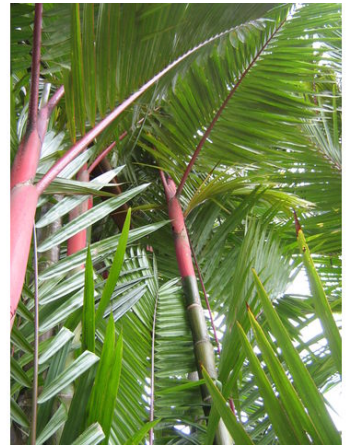
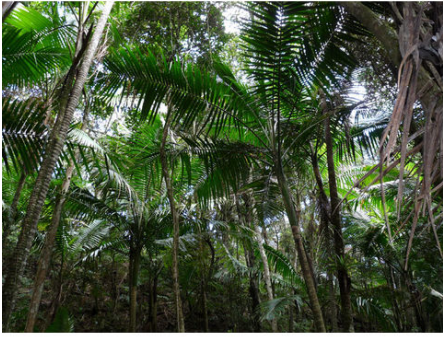
4.12.1 Palmae













4.12.2 Cyatheaceae







4.13 Polemoniaceae



