



Asparagus

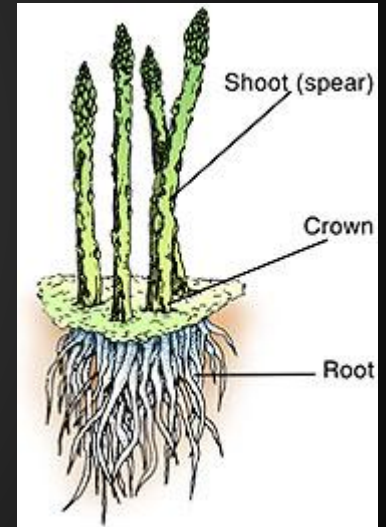
Asparagus officinalis

Asparagus officinalis

Asparagus Greek for “Shoot” *officinalis* latin meaning “Like a medicine”

Once classified in the Lily family with onions, garlic, leeks, turnips and gladioli
Liliaceae family was split and *Asparagus* is now in the family *Asparagaceae*

Asparagaceae is also broken into different subfamilies that contain species such as agave, yucca, joshua tree, hyacinths, and bluebells



Geography

Native to the Mediterranean and Asia Minor

Carved in stone as an offering in Egypt dating back to 3000 BC

Was prized and widely cultivated by the Romans
as well as the Greeks around 2000 years ago

Popularity spread to Europe in the 16th Century

Moved to the Americas by early British colonists



Morphology

Entire plant (fern) grows to around 1 meter in height (100-150cm)

Fasciculated roots in combination with rhizomes are known as the “crown”,
longer fibrous roots can grow to 2 meters

“V” shaped tips emerge to break through the ground

Stalk protected by scales

Needle shaped green branches and brown scaled branches (modified stems not leaves)

Flowers are dioecious yellow-green and look like hanging bells,
mostly insect/bee pollinated

Fruits are red berries and are poisonous to humans



Cultivation

Perennial

Sandy soils

Warm humid environments speeds growth. Cooler drier causes slower growth and more fibers (woody)

Growth begins around 12°C and ideal cultivation is around 20°C

Harvesting is still done by hand, young stalks are painstakingly harvested and the product is highly perishable.

Long, thick, dark green, glossy spears, with tightly closed heads are the best quality

Shoots are harvested every 24 hours during peak growing season, before the tips “fern out”

White Asparagus:

Traditionally cultivated by covering the shoots with soil so that they remain white, blocking photosynthesis

Now some farmers use black plastic to block the sunlight from the emerging shoots



Uses

Historically has been used as a vegetable and medicine. Readily found fresh, canned, and frozen.

Contains 93% Water and:

Protein

Sugar/carbs

Fat

Vit A,C,E,K

B1,2,3,5,6,9

Choline

Calcium

Iron

Magnesium

Manganese

Phosphorous

Potassium

Sodium

Zinc



History

Cultivated in Syria, Spain, and by Romans



Greeks and Romans ate Asparagus fresh when in season and dried the stalks for winter

Romans froze Asparagus in the Alps

A recipe for cooking Asparagus can be found in Apicius, which is thought to be the oldest recipe book finished around 400 AD

Medicinally used as a diuretic, believed to have been an aphrodisiac, used to counteract fatigue, to cure toothaches, for heart problems, and for bee stings.

Use in North America

When Asparagus was brought to North America by British colonists, Native Americans used dried Asparagus as medicine



Some people still believe in it's medicinal purposes

Fun Facts

It is considered polite and acceptable to eat Asparagus with your hands

Roman emperors had an “Asparagus Fleet” to fetch Asparagus, they also wrote down specific instructions on how to cultivate it

In China Asparagus is sometimes “candied” and served as a dessert or special treat

“Food of Kings”: French King Louis XIV had special greenhouses so he could enjoy Asparagus year round. Because of the difficulty in harvesting and the delicate nature of Asparagus it was expensive and only the wealthy could afford it during the Renaissance

Asparagusic acid is secreted to make Asparagus less vulnerable to pests, this is the compound which is the precursor to different thiol compounds which create an odor in urine. 1/2 of Caucasian people can smell the odor caused by the excretion of chemicals in urine from eating Asparagus, while 9/10 people with a Chinese background can smell the odor



Work cited

History of Asparagus. (n.d.). Retrieved January 25, 2015, from http://www.asparagus.com.au/index.php/about_asparagus/historyofasparag/

Asparagus. (n.d.). Retrieved January 25, 2015, from <http://en.wikipedia.org/wiki/Asparagus>

All About Flowers - Asparagus. (n.d.). Retrieved January 25, 2015, from <http://www284.pair.com/florists/all-about-flowers/Asparagus.htm>