



Asparagus

Asparagus officinalis

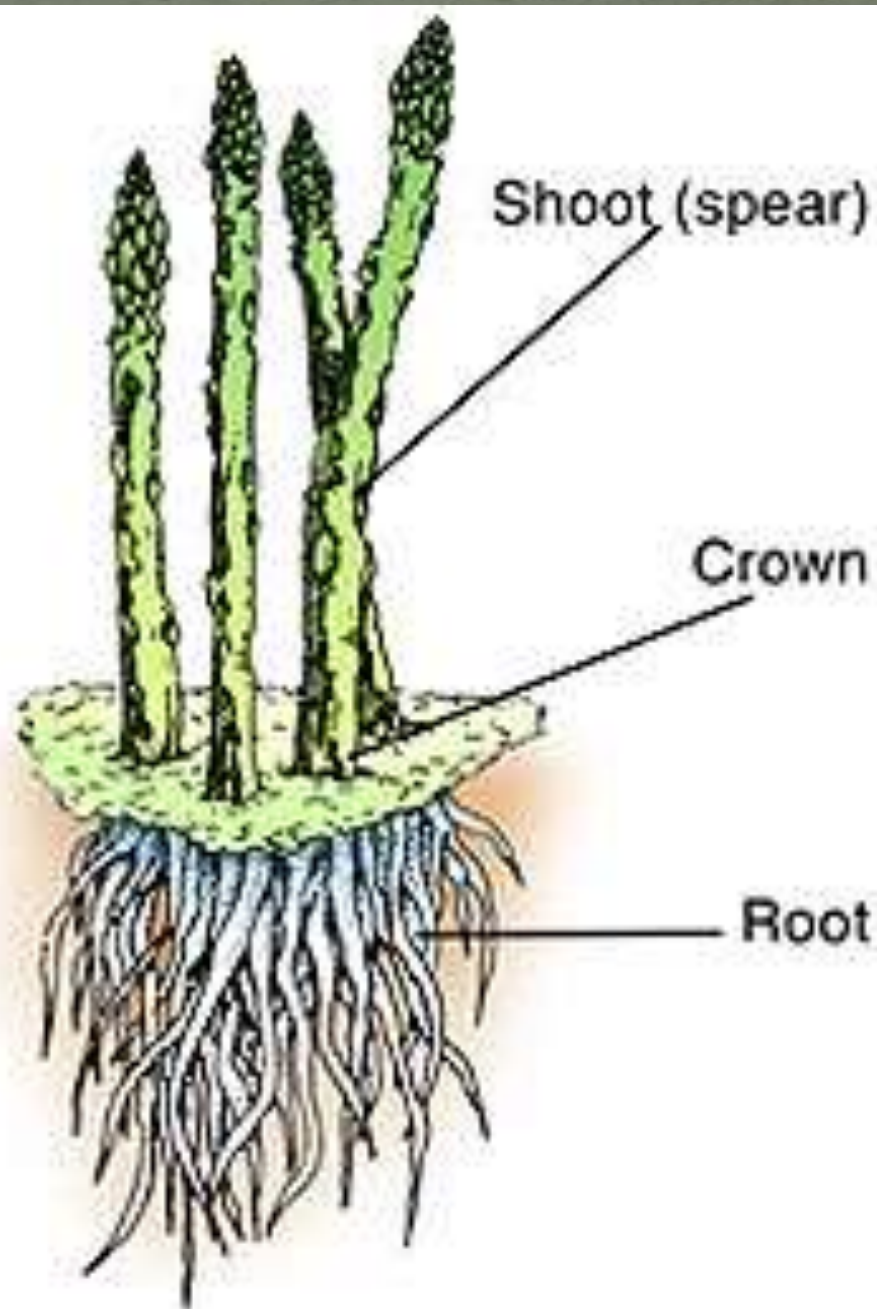
Taxonomy

- Kingdom: Plantae
- (unranked): Angiosperms
- (unranked): Monocots
- Order: Asparagales
- Family: Asparagaceae
- Genus: Asparagus
- Species: *A. officinalis*

Biology

- Herbaceous, perennial plant
- Adventitious root system and fasciculated root type.
- Stout stems with much-branched feathery foliage.
- Stems are tall, can grow up to 60 inches (5 feet).
- The leaves are needle-like cladodes (modified stems) in the axils of scale leaves.
- Flowers are bell-shaped, greenish-white to yellowish.
- It is usually dioecious, with male and female flowers on separate plants, but sometimes hermaphrodite flowers are found.
- Fruits are small red berries, which are poisonous to humans.

- Asparagus was once a member of the Lily family, but now is apart of the Asparagaceae family.
- Asparagus spears grow from a crown that is planted about a foot deep in sandy soils
- Under ideal conditions, an asparagus spear can grow 10" in a 24-hour period.
- Each crown will send spears up for about 6-7 weeks during the spring and early summer.
- The outdoor temperature determines how much time will be between each picking. Early in the season, there may be 4-5 days between pickings and as the days and nights get warmer, a particular field may have to be picked every 24 hours.

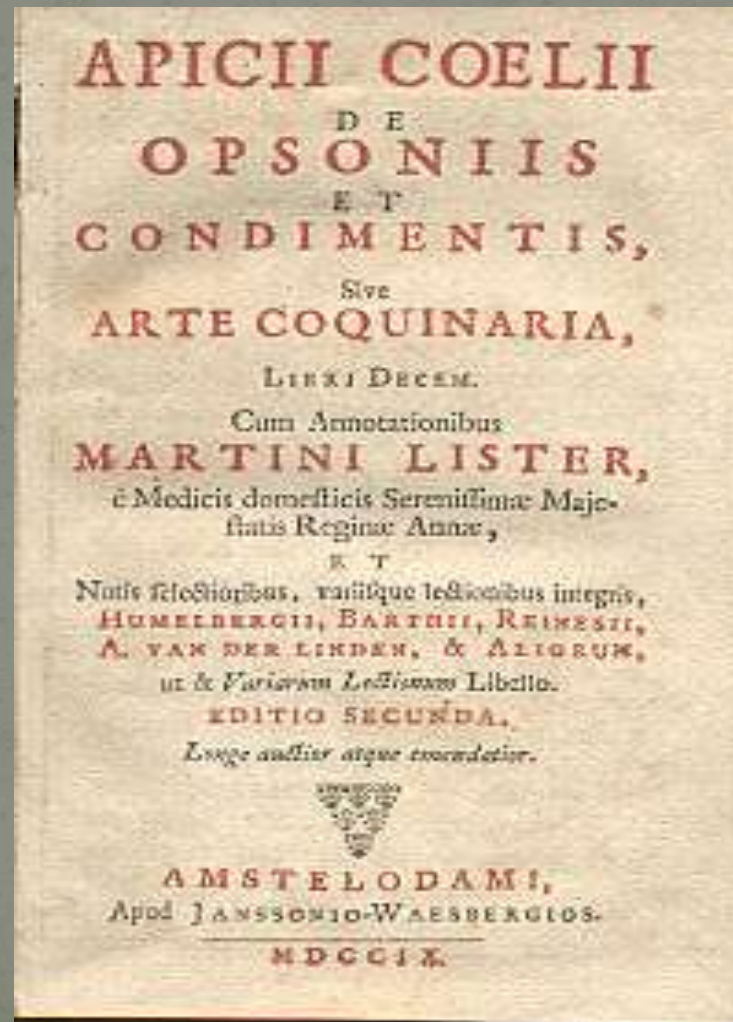


- After harvesting is done the spears grow into ferns, which produce red berries and the food and nutrients necessary for a healthy and productive crop the next season.
- An asparagus planting is usually not harvested for the first 3 years after the crowns are planted allowing the crown to develop a strong fibrous root system.
- A well cared for asparagus planting will generally produce for about 15 years without being replanted.
- The larger the diameter, the better the quality!
- Asparagus is a nutrient-dense food which is high in Folic Acid and is a good source of potassium, fiber, vitamin B6, vitamins A and C, and thiamin.
- Asparagus has No Fat, contains No Cholesterol and is low in Sodium.

History

- Asparagus has been used from early times as a vegetable and medicine.
- There is a recipe for cooking asparagus in the oldest surviving book of recipes, Apicius's third century AD *De re coquinaria*, Book III.
- Cultivated by the ancient Egyptians, Greeks, and Romans.
- Lost its popularity in the Middle Ages, but returned to favor in the seventeenth century.

De re coquinaria



Centers of Origin



Europe, Northern Africa, Western Asia

China - the largest producer of Asparagus



Peru is the second largest producer(206,030 tonnes) and the U.S. is the third largest (90,200 tonnes).

Medicinal Properties

- Nutrition studies have shown asparagus is a low-calorie source of folate and potassium.
- Folate is key in slowing the production of homocysteine, a substance implicated in heart disease and critical for pregnant women, since it protects against neural tube defects in babies.
- Its stalks are high in antioxidants.
- Six spears contain some 135 micrograms of folate, almost half the adult RDI (recommended daily intake) and 20 milligrams of potassium.
- Also may have some important properties that help prevent cancer.
- Asparagus is a good source of vitamin C. Vitamin C helps the body produce and maintain collagen, the major structural protein component of the body's connective tissues.

Types

- White (spargel) asparagus, is cultivated by denying the plants light while they are being grown. Less bitter than the green variety, it is very popular in the Netherlands, France, Belgium and Germany.
- Purple asparagus differs from its green and white counterparts, having high sugar and low fibre levels. Developed in Italy and has spread now to New Zealand and the U.S.
- Green asparagus is eaten worldwide, though the availability of imports throughout the year has made it less of a delicacy than it once was. Green asparagus is the most common type.

Companion Plant

- Asparagus is a useful companion plant for tomatoes. The tomato plant repels the asparagus beetle, as do several other common companion plants of tomatoes.
- Asparagus may repel some harmful root nematodes that affect tomato plants.

Other Important Facts

- The amino acid asparagine gets its name from asparagus, the asparagus plant being rich in this compound.
- The fertility of the soil is a large factor when growing asparagus.
- Asparagus contains substances that act as a diuretic, neutralize ammonia that makes us tired, and protect small blood vessels from rupturing. Its fiber content makes it a laxative as well.