

Asparagus

Asparagus is a hardy perennial. It is the only common vegetable that grows wild along roadsides and railroad tracks over a large part of the country. Although establishing a good asparagus bed requires considerable work, your efforts will be rewarded. A well-planned bed can last from 20 to 30 years. For this reason, asparagus should be planted at the side or end of the garden, where it will not be disturbed by normal garden cultivation. Asparagus is one of the first vegetables ready to harvest in the spring. Asparagus is native to the Mediterranean and was eaten by the ancient Greeks.



Recommended Varieties

The list of commonly available varieties has significantly changed in recent years. Standard varieties like Mary Washington, Martha Washington and Waltham Washington are still being offered; but a number of new varieties that are either predominantly or all male recently have been introduced in to common usage. Asparagus plants are naturally either male or female. The female plants bear seeds, which take considerable energy from the plant and sprout new seedlings, which cause overcrowding in the bed. Male plants produce thicker, larger spears because they put no energy into seeds and have no weedy seedling problem. A line that produces only male plants was discovered and has been incorporated into some truly amazing varieties. Jersey Giant, Jersey Knight, Jersey Prince, Syn 53, Syn 4-362, UC 157 and Viking KBC are new hybrids with larger yields. It is advisable to plant the best variety available, as an asparagus bed should remain productive for at least 15 to 20 years. If you are starting a new bed, you may never get to choose a variety again if your bed produces that long. All the newer varieties are cold tolerant and are resistant to rust and fusarium.

When to Plant

Asparagus should be planted as soon as the ground can be worked in the spring. One-year-old crowns or plants are preferred. Seeds are sown in a production bed and allowed to grow for a year. The young plants have compact buds in the center (crown), with numerous dangling, pencil-sized roots. Adventurous gardeners can start their own plants from seed. Although this adds a year to the process of establishing the bed, it does ensure fresh plants and the widest possible variety selection.

Spacing & Depth

Place the plants in a trench 12 to 18 inches wide and a full six inches deep. The crowns should be spaced 9 to 12 inches apart. Spread the roots out uniformly, with the crown bud side up, in an upright, centered position, slightly higher than the roots.

Cover the crown with two inches of soil. Gradually fill the remaining portion of the trench during the first summer as the plants grow taller. Asparagus has a tendency to "rise" as the plants mature, the crowns gradually growing closer to the soil surface. Many gardeners apply an additional 1 to 2 inches of soil from between the rows in later years.

Care

As asparagus plants grow, they produce a mat of roots that spreads horizontally rather than vertically. In the first year, the top growth is spindly. As the plants become older, the stems become larger in diameter.

As noted, asparagus plants are dioecious (either solely male or solely female). The female plants develop more spears or stems than the male plants, but the stems are smaller in diameter. With normal open-pollinated varieties, gardeners plant both male and female plants in an approximate ration of 1:1. After the first year, small red berries form on the female plants in late summer. These then fall to the ground, sprouting plants that essentially become perennial weeds in the asparagus bed.

Following freezing weather in the fall, the asparagus tops should be removed to decrease the chances of rust disease overwintering on the foliage.

Because asparagus remain in place for years, advance soil preparation helps future production greatly. Working green manure crops, compost, manure, or other organic materials into the proposed bed well in advance of planting is a good approach. Asparagus should be fertilized in the same way as the rest of the garden the first 3 years. In the spring, apply 10-10-10, 12-12-12 or 15-15-15 fertilizer at the rate of 20 to 25 pounds per 1,000 square feet of area or 2 pounds per 100 square feet and incorporate with soil tillage. Starting in the fourth year, apply the same amount of fertilizer but delay application until June or July (immediately after the final harvest). This approach encourages vigorous growth of the "fern," which produces and stores nutrients in the roots for next year's production season.

Weeds and grasses are the worse problems with asparagus. They compete with the developing spears, make an unsightly area in the garden and significantly decrease yield and quality. Start frequent, light, shallow cultivation early in the spring in both young plantings and mature patches that are being harvested.

Harvesting

Asparagus can be harvested the third year after planting crowns, but for no more than one month the first season. The plant is still expanding its root storage system and excessive removal of spears weakens the plants. During the fourth year and thereafter, the spears may be harvested from their first appearance in the spring through May or June (as long as 8 to 10 weeks).

Harvest spears 5 to 8 inches in length by cutting or snapping. To cut a spear, run a knife into the soil at the base of the spear and carefully sever it. Because the spear is cut below the point where fiber develops, it becomes necessary to remove the fibrous base from the tender stalk. Cutting may damage some spear tips that have not yet emerged from the ground. To snap a spear, grasp it near the base and bend it toward the ground. The spear breaks at the lowest point where it is free of fiber.

Either method is acceptable. Cutting is often preferred by commercial growers and snapping by home gardeners. Asparagus deteriorates rapidly after harvest. If it is not eaten immediately, it should be processed or refrigerated.

Common Problems

Asparagus beetles are commonly found in home plantings. If numerous, they may be controlled by a suggested insecticide or by handpicking.

Asparagus rust can be a problem in the Midwest. Moisture left on the plant for 10 hours can help to spread the disease. Plant resistant varieties.

Questions & Answers

Q. What causes my asparagus spears to have loose heads?

A. When the weather turns hot, the growing point expands rapidly and the bracts (modified green leaves) are spread by the early development of the stems and ferns. The asparagus is safe to eat because only the appearance is affected.

Q. Early spring freezes caused the asparagus spears in my garden to turn brown and wither. Are they safe to eat?

A. Frozen tips should be picked and thrown away. These spears, although not poisonous, are off-flavor.

Q. Can I start asparagus from seed?

A. Yes. You can grow your own plants by planting seeds 1/2 inch deep and 2 inches apart in the row. Start the seeds in the spring when the soil temperatures have reached 60°F. Dig the plants the following spring, before growth begins and transplant them to the permanent bed as soon as the garden can be worked. Growing your own plants delays establishment of your bed an additional year, but it ensures that you are starting with freshly dug crowns that have not lost vigor by being dug, stored and shipped. Also, variety selection is usually much greater when shopping for seeds rather than crowns.

Q. What causes crooked spears?

A. Asparagus spears grow quickly and are sensitive to mechanical injury from cultivation or cutting tools, insects or wind-blown soil particles. Injured areas grow slowly so that the rapid growth on the opposite side causes spears to curve toward the injured side. The cause of flattened (faciated) spears is unknown.

Selection & Storage

Asparagus is spring's most luxurious vegetable. It was once cultivated for medicinal purposes as a natural remedy for blood cleansing and diuretic properties. During the Renaissance, asparagus was also promoted as an aphrodisiac and banned from the tables of most nunneries.

Botanically, asparagus is a member of the lily family, closely related to onions and leeks, though it bears no resemblance to them in appearance or flavor. It is a finicky plant, harvested by hand and requiring much attention during the brief growing season. Left to mature it will sprout into beautiful feathery ferns that are often used in floral arrangements.

While Europeans prize white asparagus, Americans tend to prefer the green or violet-green varieties. When buying asparagus look for compact tips and smooth green stems that are uniform in color down the length of the stem. Check the cut stem end for any signs of drying and always avoid withered spears.

Pencil thin or thick stems can be equally delicious. Contrary to popular belief, thinner stems are not an indication of tenderness. Thick stems are already thick when they poke their heads out of the soil and thin stems do not get thicker with age. Tenderness is related to maturity and freshness.

Asparagus comes in a variety of colors including white, violet-green, pink and purple. If you must store any variety of asparagus, treat it as you would treat a cut flower. Trim the stems and stand them in a glass with one to two inches of water. Cover with a plastic bag and refrigerate for 2 to 3 days or until ready to use.

Nutritional Value & Health Benefits

Asparagus is low in calories and provides substantial amounts of two antioxidants—vitamin A and C. It truly shines as a source of folate and has a goodly amount of fiber.

Nutrition Facts

(Serving size, 1/2 cup cooked)

Calories 90

Protein 2 grams

Carbohydrates 4 grams

Dietary Fiber 1.5 grams

Potassium 144 mg

Vitamin C 10 mg

Folate 131 mcg

Vitamin A 485 IU

Preparation & Serving

Cook asparagus as soon as possible to ensure peak flavor. Spears start to lose flavor and moisture as soon as they are harvested. For this reason, imported asparagus, while still good, tends to lack flavor, making home grown Michigan and Illinois spring crops most desirable.

To prepare, wash under cool running water and trim an inch from the stem end. Use a vegetable peeler to peel an inch or two off the bottom end, if desired. The peelings can be added to the cooking water which, can be refrigerated and reused. The water becomes quite flavorful and is excellent in stock and soup.

Peeling asparagus can be tedious and many cooks prefer breaking the tough ends. To use this method, hold the top half of an asparagus spear in one hand and the bottom half between the thumb and forefinger of the other hand. Bend each spear until it snaps in two pieces. The spears will naturally break where the tender part meets the tough end. Although this method produces a lot of waste, the tougher bottoms can be saved for soup or stock, if desired.

Asparagus can be eaten raw, steamed, boiled, grilled, roasted or incorporated into casseroles and salads. Tall narrow asparagus kettles are designed to cook the spears upright, immersing the stems while the tender heads steam. It is not necessary to purchase an asparagus kettle in order to cook asparagus properly. The key

to perfectly cooked asparagus is "cook it briefly."

The flavor of asparagus marries well with many ingredients and it is equally delicious dressed simply with olive oil, lemon juice, salt and pepper. Raw asparagus is also tasty served as crudité's with a flavorful dipping sauce. When using asparagus as a salad, always wait until serving time to add the dressing as the high acid content of most dressings will turn the spears yellow. Add fresh chives, savory, thyme, and tarragon to enhance the flavor of cooked asparagus.

SOURCE: <http://urbanext.illinois.edu/veggies/asparagus.cfm>