Asparagus a perennial powerhouse

By Liz Gnecco

Asparagus is a nutrient-dense food that is high in folic acid and is a good source of potassium, fiber, vitamin B6, vitamins A and C, and Thiamin. It has no fat, contains no cholesterol and is low in sodium. Asparagus is a long-lived perennial vegetable crop. A healthy plant can generally produce for about 15 years without being replanted. Once established, each crown can produce a half-pound of spears per year.

An asparagus planting is usually not harvested for the first three years after the crowns are planted. The postponed harvesting allows the crown to develop a strong fibrous root system. According to Ohio State University, harvesting after one year actually encourages new crown development.

In selecting a plant, buy 1-year-old, healthy, disease-free crowns from a reputable crown grower. A crown is the root system of a 1-year-old asparagus plant that is grown from seed. It is best to use male plants. Female plants produce seeds, which become weedy. Also, their yield is lower than on a male plant as much energy is used to produce seeds. Some suggested male cultivars include Jersey Giant, Jersey Prince and Jersey Knight.

Asparagus will grow in many types of soil. It grows best in a soil with good drainage and has a pH range of 6.5 to 7.5. Asparagus can be planted in mid-spring when the soil temperature reaches 50 degrees Fahrenheit. In choosing a site location for planting, the west or north ends of a garden are best so the plant won’t shade other vegetables.

To plant asparagus, dig a furrow that is 5 to 6 inches deep. Apply one pound of 0-46-0 (triple superphosphate) or two pounds of 0-20-0 (superphosphate) fertilizer per 50 feet of row in the bottom of the furrow before planting. This will make phosphorus immediately available to the crowns. Toss the crowns into the furrow on top of the fertilizer. The fertilizer will not burn the crowns, and the plants will grow regardless of how they land, so don’t bother to spread the roots. Space the crowns 11/2 feet apart in the row. If more than one row is planted, space the

After planting, back fill the furrow to its original soil level. It isn’t necessary to gradually cover the crowns with a few inches of soil until the furrow is filled in. However, do not compact the soil over the newly filled furrow or the emergence of the asparagus will be severely reduced. Spears should emerge within one week in moist soils.

Do not harvest the asparagus during the planting year. Spears will be produced from expanded buds on the crown. As the spears elongate and reach a height of about 8 to 9 inches, the tips will open. The spear will become woody to support the small branchlets that become plants. The plants produce food for the plant and then move it down to the crown for next year’s spear production.

Asparagus is very drought tolerant and can usually grow without supplemental watering because it seeks moisture deep in the soil. However, it is beneficial to irrigate the crowns, if rainfall is insufficient when planting or afterward.

Inspect the plants throughout the season for insect feeding and plant dieback. Asparagus beetles chew on the plant, causing the stem to turn brown and reducing the yield the next year. Spray the plants with an approved insecticide when beetles are seen. For disease prevention, spray with an approved fungicide on a seven-to 14-day schedule beginning when the plants reach a 3- to 4-foot height and continuing until mid-September.

Do not cut down the plant growth at the end of the growing season. The all-male hybrids stay green until frost, enabling photosynthesis to occur longer throughout the season. Leave the dead plant growth intact over the winter. This catches snow for additional soil moisture and keeps the soil temperature about 5 degrees F cooler than bare soil with no covering of dead plant.

The cooler soil temperature is helpful in delaying the early emergence of asparagus in the spring, when air temperatures might rise prematurely and then fall again, predisposing the spears to frost damage. Frost-damaged spears should be snipped and discarded. Remove the old plant growth by cutting or mowing as low as possible during the first week of April.

Harvest asparagus by snapping 7- to 9-inch spears with tight tips. There is no need to cut asparagus below the soil with a knife.

As the tips of the spears start to loosen (known as “ferning out”), fiber begins to develop at the base of the spears, causing them to become tough. The diameter of the spear has no bearing on its toughness.

When harvesting, the asparagus patch should be picked clean, never allowing any spears to fern out, as this gives asparagus beetles an excellent site to lay their eggs.

The year after planting, asparagus can be harvested several times throughout a three-week period, depending on air temperatures. Growth of asparagus is dependent on air temperature. Early in the season, 7- to 9-inch spears might be harvested every two to four days. As air temperatures increase, harvesting frequencies will increase to once or twice per day, harvesting 5- to 7-inch spears before the tips start to fern out and lose quality.

The second year after planting, the length of harvest can increase to about four to six weeks. The third year after planting and thereafter, harvesting can continue for six to eight weeks. As the length of harvest season will vary from year-to-year depending on air temperature, stop the harvest when the diameter of three-quarters of the spears becomes small (less than three eighths of an inch). Experience gained by growing the crop will make it easier for the gardener to know when to discontinue the harvest.

When harvest is finished, snap all the spears off at ground level. Apply a half pound of ammonium nitrate fertilizer per 50 feet of row. At this time, a home garden formulation of glyphosate non-selective herbicide (such as Roundup) can be sprayed on the asparagus patch. This will kill any existing weeds. New spears will then emerge, fern out, and provide a large canopy to cover the space between the rows. Once a dense “fern” canopy is formed, weed growth will be shaded out.

Asparagus is very perishable and should be harvested in the morning when air temperatures are cool. After picking, immerse the spears in ice-cold water to remove the heat; then drain the water and place the spears in plastic bags. Store in the refrigerator at 38 to 40 degrees F. Asparagus will keep for one to two weeks with little loss of quality.

Editor’s note: Liz Gnecco, a Magnolia resident, was a member of the Kent County Master Gardener class of 2009. For more information on this topic, she can be reached at gnecco@live.com. For more information on the Master Gardener program of Delaware State University, visit www.gardeningde.com.