

Asparagus

Asparagus (*Asparagus officinalis*) is a member of the Lily Family and is a perennial vegetable that can thrive in the home garden for 25 years or more when properly cared for.

Because an asparagus bed will last for many years, it is wise to plant only carefully selected, disease-free roots. Check with your supplier for new varieties.

Soil Preparation:

Asparagus can be grown in a variety of soil types but best results are generally obtained on well-drained, sandy loam soils. Frost and light freezes injure emerged spears, therefore, locate the crop in areas that are as frost-free as possible.

Because of the length of time the land is occupied by an asparagus bed, it is very important that the soil be of high fertility and in good physical condition before the plants are set.

Lime & Fertilizing

Asparagus will not tolerate extreme acidity, and should be grown on soil with a pH range of 6.5 – 7.0. Have your soil tested by the UMass Soil and Tissue Testing Lab (www.umass.edu/soiltest) and follow the recommendations given. Strongly acid soils should be limed according to recommendations.

In addition to organic matter and lime, 1.2 pounds of 10-10-10 fertilizer should be broadcast per 100 square feet prior to planting.

Natural Fertilizers

Natural fertilizers can be effective when the right choice is made from the many types available.

Planting

Asparagus plants or crowns are grown from seed. However, the home gardener will usually find it best to grow asparagus from one-year-old crown bought from a reputable grower.

Never use two or three-year-old crowns. Two-year-old crops may have been over-crowded in the nursery with intertwined roots and are much more subject to injury when dug and sorted. Therefore, use only one-year-old plants. The crowns should have large, well developed root systems with large, well developed buds.

Asparagus should be planted with other perennial crops on the north or east side of the garden so it will not shade other vegetables or low-growing fruits.

Follow these steps for planting asparagus:

- Apply recommended amounts of lime and fertilizer to the asparagus bed.
- Rototill into the soil.
- Make a 6-inch deep, V-shaped furrow.
- Place crowns at the bottom of the furrow with the buds on top and the roots spread out.

Space crowns twelve inches apart within the row and allow four to five feet between rows. If only one asparagus row is planted, allow at least three feet between the asparagus and the closest other vegetable crop.

- Cover the crowns with one or two inches of soil and firm over the roots.

As soon as the young shoots (spears) appear, carefully add more soil around plants in furrow, but avoid covering asparagus foliage. When spears grow 10 to 12 inches high cultivate or hoe beds in order to partially fill the trench and control weeds. Repeat this procedure two or three more times until the trench is finally filled. The furrow should be filled level by the end of the first growing season.

Watering

Adequate soil moisture is important during the first growing season. Water thoroughly once a week until the soil is moistened 8 to 12 inches deep.

After the first growing season, asparagus plants do not require frequent irrigation because of the deep and extensive root system. They should be watered if long, dry periods occur, however.

Annual Maintenance

For the first and second year after planting do not cut any spears in order to allow the plants to become well established. Early in the spring of the second growing season, remove the old stalks and overwintering weeds. Broadcast lime as needed to maintain the proper soil pH. Before the spears appear, apply 1.2 pounds of 10-10-10 fertilizer per 100 square feet and cultivate lightly into the soil.

In July of the second growing season, sidedress with another 1.2 pounds of 10-10-10 fertilizer per 20 linear feet of row. Prevent burning the roots by applying it three to four inches away from the plants.

Remove brush during each succeeding spring before the asparagus emerges and broadcast lime if needed. At the same time, spread 2.5 pounds of 10-10-10 fertilizer per 100 square feet. Rake the fertilizer and lime one to two inches into the soil, taking care to avoid damage to the asparagus crowns.

Weed Control

Weeds shade asparagus, compete for water and nutrients, and reduce yield. Cultivate to control weeds when the weeds are small, in order to avoid damage to crowns.

Asparagus can always be mulched to control weeds. Use organic materials such as leaves and straw.

It is important to control weeds right from the start to prevent problems in the future.

Pests

The principal insect pests are cutworms and asparagus beetles. Common disease include fusarium root-rot and asparagus rot. Avoid fusarium root-rot by planting only disease-free seeds or crowns and never plant in beds that previously grew asparagus.

Other Problems

Problem: Asparagus tough and pithy

Cause: Insufficient fertilizer; poor soil preparation, low pH; spears are getting to old before cutting.

Problem: Crooked spears

Cause: Injury to buds and immature shoots underground; careless cutting; or cutworms

Problem: Plant vigor declines, spear size decreases, feeder roots are reddish brown color

Cause: Fusarium root-rot

Problem: Tips soft and whitish in color

Cause: Frost or light freeze injury

Harvesting

Asparagus must be grown in a permanent bed for two full growing seasons before harvest begins. This is necessary to allow the plants to develop an adequate storage root system to produce spears during the first harvest season and beyond. Any harvesting or damage to the brush during the first two growing seasons dwarfs the plants and can be reduce yields for the life of the bed.

A good general rule for length of harvest season is the 2-4-6 week sequence. Harvest for two weeks the third year the plants are in the garden, four weeks the fourth year, and six weeks the fifth and following years.

When the first spears emerge in the spring, merely snap off the spears with tight heads, 7 to 10 inches long, leaving the tough stub on the plant. The upper portion that snaps off should be green and tender. Harvest all spears that come up during the harvest season.

Two to three weeks after beginning harvest, 5 to 6 inches of soil may be carefully ridged over the row. This lowers the temperature around the crown and increases spear size. The ridge should be raked level right after the last harvest.

It is best to prepare and use asparagus as soon as possible after harvesting. However, asparagus will maintain fairly good quality for several days if the spears are kept at 35-40F. To store, was the spears, place the cut ends in a shallow pan of water and immediately put them in the refrigerator.

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