



Asparagus (*Asparagus officinalis* L.) is a favorite home garden vegetable throughout Kansas. It is generally the first fresh vegetable harvested in the spring, which makes it a welcome addition to the garden. As a perennial crop, well cared for asparagus will last 15 years or more without replanting. It is not only well suited for fresh use but also for canning or freezing. Asparagus is an excellent source of vitamin A and it contains important amounts of calcium, phosphorus, riboflavin and vitamin C. The flavor of fresh-harvested, homegrown asparagus is superior to that of asparagus shipped to Kansas from other areas.

Varieties

Newer hybrids such as UC157, Jersey Giant, Ida Lea, Jersey Knight, Jersey Supreme, and others are highly productive and well worth the extra cost of the crowns. They are dark green, rust resistant, vigorous, and of high quality. Numerous other varieties or strains, including Waltham Washington, are improvements.

Establishing an Asparagus Planting

Because asparagus plantings remain in the same location many years, the soil should be prepared thoroughly before planting. Start by having a soil test done and adding nutrients in the proper amounts. Next, incorporate generous quantities of organic matter to the soil. Add barnyard manure, rotted sawdust, or compost to a depth of 2 inches over the area to be planted and work it into the soil by tilling or using a garden fork. Although organic matter is added in the fall, wait to apply fertilizer until the next spring before planting. Place the asparagus bed to the side of the garden as it will not be worked up from year to year.

Fertilization

New plantings: Fertilizer should be applied to the soil in the spring before planting to establish a new planting. Have soil tested the fall before planting and add fertilizer according to recommendations. If a soil test was not done, add a “starter” fertilizer to the soil at the rate recommended on the label. A starter fertilizer for lawns can be used as long as it does not contain a weed preventer or weed killer. If organic matter was applied generously in the fall, use only half as much fertilizer as indicated by the soil test or the fertilizer label.

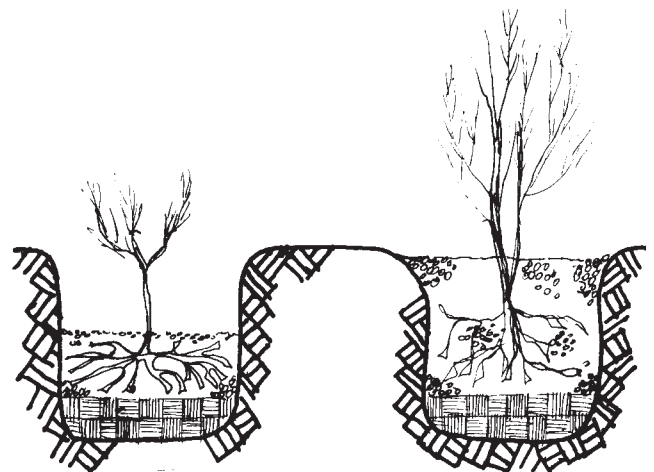
Established plantings: Fertilize once a year after harvest using a fertilizer and rate recommended by a soil test or a complete, balanced fertilizer (10-10-10, 12-12-12 or something similar) at the rate suggested on the bag.

Plants

Asparagus is planted by purchasing 1-year-old “crowns” or roots from a garden dealer, seed supplier or nurseryman. It is possible to start asparagus from seed, but takes an additional year to produce a crown ready to be transplanted. Starting from crowns rather than seed is recommended for most gardeners. Asparagus also can be started from seedling transplants that are set out in early May. Transplants should be 8 to 10 weeks old before transplanting.

Planting

Asparagus crowns should be planted between March 15 and April 15 in Kansas with crowns set deeply in the soil. Start by digging a trench 8 to 9 inches deep. Place the crowns about 18 to 24 inches apart in the bottom of the trench. Rows should be 4 to 5 feet apart if planting more than one, but one row usually suffices. Cover the crowns with 2 to 3 inches of soil initially, firming the soil well around the crowns. Do not fill in the entire trench at once, but add soil gradually, filling in the trench as the plant grows. Small weeds that are covered in the process will die for a lack of light. The trench should be completely filled in by the end of the first season.



Several weeks after planting

At the end of the first season

Harvesting

The vigor of an asparagus planting depends on the food reserves transported to the roots during the previous season, so asparagus should not be harvested the first year from crowns. The next season, harvest for only 3 to 4 weeks, or until spear size rapidly decreases in diameter.

Regular harvest can begin the third season and continue for 6 to 8 weeks in the spring. Newer hybrid varieties will be more productive the first and second cutting years. Most gardeners harvest young, tender spears 5 to 10 inches long. In Manhattan, Kansas, gardens, asparagus normally can be harvested by mid-April. Spear growth depends on the temperature. If it is warm, asparagus may need to be harvested every three days, and if hot, it may need to be harvested every day. Harvest while the tips of the spears are still tight. Spears that become too large should be cut and discarded, which allows new spears to emerge. Cut the spears or shoots with a sharp knife 1 to 2 inches below the soil surface, or cut or snap them off at the soil surface. Be careful to cut only the spear you want and not to damage other young spears just beneath the soil surface.

Trim and wash spears before eating. Asparagus can be prepared fresh, or it can be canned or frozen. A well-tended planting should yield 80 to 100 pounds of fresh asparagus each year from 1,000 square feet of bed space.

Care of a New or Established Planting

With little care, established asparagus beds remain productive many years, but certain practices should be followed for successful crops. Care is especially important during the first one or two growing seasons as plants are becoming established. It is important to control weeds in the planting. If using a hoe, cultivator, or rotary tiller, till no deeper than 2 to 3 inches to avoid root damage. Chemical weed control options for home gardeners include trifluralin, which should be applied to weed-free soil before and after the cutting season on established beds. Apply at least ¼ inch of water immediately to activate the product. Trifluralin is found in the following products:

- Hi-Yield Weed and Grass Preventer
- Monterey Vegetable and Ornamental Weeder
- Preen (some formulations, read the label)
- Miracle Gro Garden Weed Preventer
- Treflan

Though salt is sometimes suggested for weed control, it is not recommended. High salt levels can destroy soil structure, which reduces the rate of water infiltration and aeration and results in a less vigorous planting.

Once the planting is established, disc, rototill, or rake lightly to control established weeds. A second herbicide application or hoeing in the row and rototilling between rows is effective in reducing weed growth. As they grow, plants shade the ground, helping to control the weeds. Before applying any chemical weed control product, read and follow the instructions on the label.

The tops should not be removed from asparagus plants until after a killing freeze. The tops are essential in producing and transferring food to the roots, which is necessary for a vigorous crop the next spring. Some gardeners remove old tops at the end of the season to clean up the garden, and others leave them as a winter wind or snow barrier. An asparagus planting creates an attractive screen or enclosure for the garden. The tops grow 4 to 6 feet tall and act as a windbreak during the summer months. Grass clippings generated by mowing close to the bed work as a mulch and help to prevent weed growth. If you wish to keep asparagus plants from falling over, set posts 10 to 12 feet apart and pull the plants up straight with wire or cord tied to the posts.

Asparagus Problems

Asparagus rust. On asparagus, rust appears as small reddish-brown spots on stems. It can spread causing the leaves of young shoots to die and fall off. New rust-resistant strains of asparagus are available. Rust can be controlled in other varieties by applying a myclobutanil fungicide spray after the harvest season. Myclobutanil products include Immunox Multi-Purpose Fungicide for Gardens and F-Stop Lawn and Garden Fungicide.

Asparagus beetle. Beetles (¼ inch long) have a red thorax and blue wing covers with yellow spots. Larvae and adults eat asparagus stems and leaves. Dark eggs are conspicuous when laid on stems. The asparagus beetle has 2 to 4 generations per year. Permethrin products are labeled for use against beetles, but require a three-day waiting period between spraying and harvest.

Other problems. Several insect and disease problems occasionally affect asparagus plantings. Ask your local K-State Research and Extension agent for help with diagnosis and control recommendations.

Ward Upham, Horticulturist

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