

Home Gardening Series
Asparagus

Craig R. Andersen
Associate Professor

Environment

Light – sunny
Soil – well-drained, deep
Fertility – medium-rich
pH – 6.0 to 7.0
Temperature – cool
Moisture – average

Culture

Planting – one-year-old crowns,
spring
Spacing – 18 x 60 inches
Hardiness – hardy perennial
Fertilizer – medium-rich, summer

Asparagus – *Asparagus officinalis atilis*

Asparagus is a native of temperate Europe and western Asia and still grows in a wild state in saline areas. It has been known to and prized by epicures since Roman times. It is widely grown and used throughout Europe and was introduced early into the United States.

Asparagus is a perennial vegetable that produces spears each year without replanting. A well-planned row or bed can last for 20 to 30 years. Therefore, plant asparagus at the side or end of the garden where it is not disturbed by day-to-day gardening activities. Asparagus is one of the earliest vegetables harvested in the spring.



Cultural Practices

Planting Time

Asparagus crowns can be planted as early as the ground can be worked in the spring and as late as June 1. Use one-year-old crowns or plants because it takes one to two years longer to produce asparagus from seed. Purchase the plants from a garden store, nursery or through a seed catalog. The young plants have compact buds in the center (crown) with dangling, pencil-sized storage

*Arkansas Is
Our Campus*

Visit our web site at:
<http://www.uaex.edu>

Cultivars

Cultivar	Days to Maturity	Plants/ 100 Ft of Row	Disease Resistance or Tolerance	Remarks
Mary Washington	Perennial	50 crowns	Rust	Good quality.
UC157-F ₂	Perennial	50 crowns	Rust, fusarium rot	Good quality and yield.
Jersey Knight	Perennial	50 crowns	Rust, fusarium rot	All male hybrids, large uniform spears.
Jersey Gem	Perennial	50 crowns	Fusarium, cercospora	All male hybrids, large spears, purple bracts.
Jersey Giant	Perennial	50 crowns	Rust, fusarium rot	All male hybrid.
Purple Passion	Perennial	50 crowns		Large purple spears turn green when cooked.

roots. Thick, firm storage roots indicate a healthy crown.

Spacing and Depth of Planting

Place the plants in a trench 12 to 18 inches wide and 9 to 12 inches deep. Space the crowns 18 to 24 inches apart. Spread the roots out uniformly with the crowns in an upright, centered position. Cover the crowns with 2 inches of soil. Gradually fill the remaining portion of the trench during the first summer. Asparagus tends to “RISE” as the plants mature; during the winter, many gardeners apply an additional 1 or 2 inches of soil over the rows in later years.

Care

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

Asparagus plants are dioecious (either male or female). The male plant develops more spears or stems than the female plant, but the stems are smaller in diameter. Gardeners plant both the male and female plants in an approximate ratio of 1:1. Yields are not appreciably different between the sexes. After the first year, small red berries form on the female plants in late summer.

Fertilize asparagus the same way as the rest of the garden during the first three years. In spring, apply a complete fertilizer such as 13-13-13 at the rate of 3 to 4 pounds per 100 feet of row and incorporate with cultivation. Starting the fourth year and after, apply the same amount of fertilizer but delay application until after harvest in June or July.

Weeds can be a major problem for asparagus. They compete with developing spears and decrease yield and quality. Start frequent, light cultivation in the spring in both young plantings and patches that are being harvested.

Harvesting

Harvest asparagus in the second year after planting crowns, but do not harvest for more than one month the first time. When the diameter of the spears is less than the size of a pencil, cease harvesting. The plant is still expanding its feeder roots and storage root system, and excessive removal of spears weakens the plant. Starting the fourth year, spears may be harvested from April into June.

Harvest spears that are 5 to 8 inches in length by cutting or snapping. To cut a spear, run a knife under the ground where the spear is emerging. Since the spear will be cut below the point of fiber development, snapping the stem is necessary. Cutting may damage some spear tips that have not yet emerged from the ground. To snap a spear, bend it from the top toward the ground. The spear breaks at the point where it is free of fiber.

Asparagus deteriorates rapidly after harvest. If it is not eaten immediately, it should be processed or refrigerated.

Common Problems

Asparagus beetles are common in home plantings. They may be controlled by using a suggested insecticide or by hand picking.

disease – rust, fusarium crown rot

insects – asparagus beetles, cutworms

cultural – weak, spindly plants and/or too few spears caused by harvesting the first year after planting or too heavy a harvest in later years; crown rot or poor production from inadequately prepared, heavy soil

Harvesting and Storage

days to maturity – 2 to 3 years

harvest – third-year spears; snap off just under soil surface when 6 to 8 inches tall, before tips begin to separate; use or refrigerate immediately

approximate yields (per 10 feet of row) – 3 to 4 pounds per year

amount to raise per person – 6 pounds

storage – process or refrigerate immediately in plastic bags

preservation – can or freeze

Frequently Asked Questions

Q. What causes my asparagus to have loose heads?

A. When the weather turns hot, the growing point expands rapidly and the bracts (green modified leaves) are spread by the early development of the stems and ferns.

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

A. Frozen tips should be harvested and thrown away. These spears, although not poisonous, will be 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 seed in the spring when the soil temperature has reached 60 degrees F. Dig the plants the following spring and transplant them to the permanent bed as soon as the garden can be worked. Growing your own plants delays the establishment of your bed an additional year.

Q. I have just purchased some asparagus plants. How should I plant them?

A. Prepare planting bed by digging out unsuitable soil. Replace it with an organic mixture of one-third sand, one-third soil and one-third sphagnum moss, compost or potting soil. Plant the asparagus 18 to 24 inches apart in a trench, with the crowns 9 inches below ground level.

Cover the crowns about 2 inches and gradually fill in the trench as the season progresses.

Q. When should asparagus plantings be divided?

A. Divide asparagus crowns during the late winter after the tops have been removed. The crowns can be divided easily into individual plants for replanting.

Q. How long after planting asparagus can I harvest the first spears?

A. Wait three years before the first harvest if you plant from seed. If you start from one-year-old crowns, harvest can begin on a limited basis the next year. Harvesting early reduces yield and quality of home-grown asparagus.

Q. How long can I harvest asparagus in the spring?

A. Generally, harvest should extend four to six weeks from the first harvest in early spring. Stop harvesting when the diameter of the spears is less than that of a pencil. Complete harvest in late spring. Harvest selectively afterwards to allow a few spears to develop into ferns.

Q. When I finish harvesting asparagus spears, how should I care for the plants during the rest of the year?

A. Allow the remaining spears to develop into ferns. Occasional fertilizing and adequate moisture help the plants develop sufficient top growth for good spear production the next year.

Q. Each year my asparagus produces quite well, but many of the spears are bent and crooked. What causes this?

A. Asparagus spears grow fast and are highly sensitive to mechanical injury from cultivation, insect feeding or wind-blown soil particles. Injured spears grow slowly. The noninjured side of the spears grows rapidly causing them to curve and bend toward the injured side.

Q. Can table salt be used for weed control in my asparagus bed?

A. Yes, in limited amounts. Asparagus is more salt tolerant than most vegetable plants. Use salt to control weeds. Asparagus plants and later spear production will be reduced by excessive

amounts of salt usage in any one season or salt accumulation over the years.

Q. What causes my asparagus spears to get smaller and smaller each year?

- A. This condition occurs in warmer areas. Spear production is mainly the result of food accumulated in the root system the previous year. The amount of food stored decreases with high

temperatures during fall or poor growing conditions. Spears will be smaller the next spring. Water the asparagus bed in July and August. Do not cut down the ferns until late September. Remember to stop harvesting asparagus when the diameter of the spears is less than that of a pencil. If poor growing conditions prevail, smaller and smaller spears will result each year.

Printed by University of Arkansas Cooperative Extension Service Printing Services.

DR. CRAIG R. ANDERSEN is associate professor, Department of Horticulture, University of Arkansas Division of Agriculture, Fayetteville.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Director, Cooperative Extension Service, University of Arkansas. The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status, and is an Affirmative Action/Equal Opportunity Employer.