

Asparagus in the Home Garden

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This publication offers basic instructions for successfully growing asparagus, from choosing transplants to maintaining beds.

MT198365AG Revised 5/08

ASPARAGUS GROWS BEST AT ELEVATIONS BELOW

5,500 feet on sites with moist soil and full sun. Asparagus beds reach full production after three years and peak production in about eight years, when the yield of spears can reach five pounds per 100 square feet. A properly managed bed remains productive for 12 to 15 years. Some over 30 years old are still fairly productive. Asparagus tolerates higher soil salinity than most other garden plants and can be planted in low, wet areas where other crops will not grow.

Establishing a Bed

Stock

Start by purchasing two-year-old crowns, by direct seeding, or by dividing and transplanting old crowns, leaving one bud per division. An old clump can be divided into as many as 50 new plants. Use of transplanted crowns is the most popular way to start a bed.

Be sure crowns for planting are dormant, have large, fleshy, whitish-tan roots without mold or rot, and are labeled by cultivar.

Soil Preparation

Destroy all perennial weeds by mulching or cultivating. Then spade or till the soil deeply, working in 50 to 100 pounds of rotted organic matter or compost per 100 square feet.

Apply fresh or highly nitrogenous manure (like poultry manure) at one fourth that rate. Like other

plants, asparagus needs ample supplies of phosphorus, potassium, calcium and other minerals as well as nitrogen.

Apply fertilizer at planting (see "Maintaining Established Beds," back page). Most Montana soils contain adequate calcium, but acid soils in the high mountain valleys and some sandy soils in other areas may need additional calcium. Supply it with wood ashes, ground limestone, or gypsum according to soil test recommendations.

Planting

Use the trench method to plant or dig individual holes. Dig your trench 10 inches deep by 10 inches in diameter. Place crowns on 18 inch centers with the roots spread out. Leave 2 1/2 to 3 feet between rows. Or, dig holes about 10 inches deep and 10 to 12 inches in diameter. Place a transplant into each hole with the central bud pointing upward. For either method, cover crowns with about three inches of topsoil. As the tips of the young shoots extend above the soil, add additional soil to the hole. Finish filling the hole when the tip of the shoots extend above the ground level.

Keep new asparagus beds watered and weed free and take care to control insects and diseases.

To control spacing in older beds, see "Maintaining Established Beds" on the back page.

Cultivars

Mary Washington' is the most time-proven cultivar. It yields well, survives under our conditions, and is rust resistant. Other cultivars for Montana include 'Martha Washington,' 'Waltham Washington,' 'Paradise,' 'California 500,' 'Roberts Superior Strain,' 'Wisconsin,' and 'Viking.' The all-male strains 'Jersey Giant,' 'Jersey Prince' and 'Jersey Knight' are high-yielding. Be sure the cultivar or strain you choose is rust-resistant.

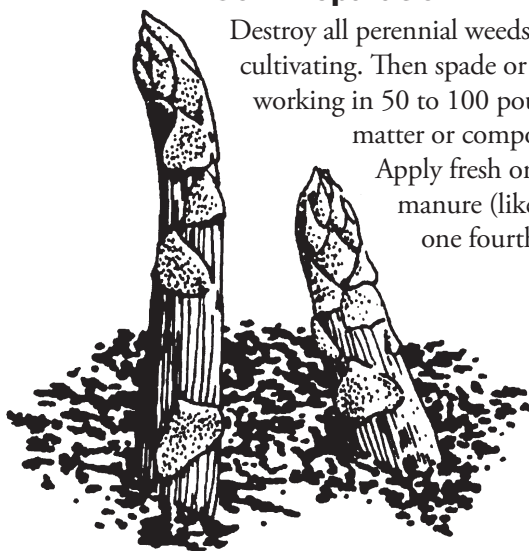


Figure 1: Destroy perennial weeds and spade or till the soil deeply. Asparagus needs ample supplies of phosphorus, potassium, calcium and other minerals as well as nitrogen.

Weed Control

We recommend no herbicide be used in the home asparagus patch. You can control some weeds early in the spring before spears come up by hoeing or by very shallow tilling. Later, after the cutting season, hoe or cultivate again to destroy broad-leaved weeds. We no longer recommend common table salt for controlling weeds in asparagus beds.

Insect Control

Asparagus beetle. This insect resembles a ladybug but is considerably more elongate and can defoliate large areas in a short time. Handpick the insects or use an appropriate insecticide registered for their control.

Cutworms. Cutworms cut off shoots underground and feed on tips of new shoots, causing crooked spears. Remove injured spears. Scuff some of the soil away from around the injured plant and destroy the worm. Placing a ring of wood ashes around your plants can deter cutworms, but don't let the ashes contact green plant tissue.

Diseases

Asparagus rust. This disease is more likely found in high rainfall and high humidity areas. Nevertheless, it does occur in Montana. Small, reddish-yellow spots appear on the main stem near the ground and on the slender branches of the stalks which grow up after the cutting season. Plant resistant cultivars such as 'Mary Washington' and 'Viking.'

Harvesting

The first harvest begins in the third season after planting. Harvest time varies by season and area. In an early spring in warmer areas or at lower elevations, spears may be ready for harvest by late April. Gardeners in higher areas in a cool spring may not harvest spears before mid-June. Harvest can last up to July 1, but not in every area every year.

Spears are ready to cut when they are eight to 10 inches tall. Cutting too soon reduces yield; cutting too late increases spear toughness.

Remove the spears by snapping them off at the soil line or by cutting them with a sharp knife at or just below the soil line. Don't cut deep enough to damage the crown.

Avoid Over-Harvest

No hill of asparagus will last long if you remove all spears every season. Cut spears for no more than the first six weeks. Stop harvesting when the spear diameter becomes noticeably smaller. Then let all remaining spears grow to build a vigorous root system and form buds for next year's crop.

Maintaining Established Beds

Fertilizer. Water and minerals used by the plants need replenishing. Unless the soil is high in organic matter, apply nitrogen early each spring at the rate of 1 to 2 1/2 pounds of actual nitrogen per 1,000 square feet. Every three to five years apply 2 to 3 1/2 pounds of actual phosphate (P_2O_5) per 1,000 square feet and work it into the soil between hills.

If the soil is deficient in potash, apply it at the same rate and time as the phosphate.

Mulching. Remove and destroy all canes at the end of the season when the fronds have begun to turn color but before the berries ripen. Leaving old canes standing or on the ground can increase the incidence of pests next year.

Apply an insulating mulch of straw or similar material to the bed in late November and remove it in early spring when danger of severe cold has passed. If not removed it will keep the ground cool and delay emergence of the spears. This is especially important in cool mountain valleys.

Asparagus hills extend roots and crowns horizontally, making it difficult to keep the hills in a straight line. Harvest all spears off the row to keep the bed neat and inbounds.



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File under: Yard and Garden (Vegetables)
Reprinted May 2008 500-508SA