Asparagus prefers a sunny location and fertile, well drained soils. Incorporate plenty of organic matter and phosphorus fertilizer into the area before planting. Plant asparagus crowns 12 inches apart in 8 inch deep furrows in early spring. Cover the crowns with 2 inches of soil and slowly fill the furrows over the rest of the summer. Fertilize the plants with nitrogen after the fern is established and water regularly throughout the summer. Control all pests during the establishment years.

Harvest all emerging asparagus spears for 4 weeks beginning 2 years after planting. Harvest can be 6-8 weeks in following years. After harvest, fertilize and water the plants to encourage good fern growth and control pests. When fern die in the fall, mow and mulch them on the beds. Newer all male varieties like Jersey Giant and Jersey Knight perform well in Utah.

**Recommended Varieties**

Try these newer asparagus varieties which are very productive. Mary Washington is no longer recommended.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Yield</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jersey Giant</td>
<td>Excellent</td>
<td>Large, dark green spears, good disease resistance, all-male variety</td>
</tr>
<tr>
<td>Jersey Knight</td>
<td>Excellent</td>
<td>Large, dark green spears, good disease resistance, all-male variety</td>
</tr>
<tr>
<td>UC 157 F1</td>
<td>Excellent</td>
<td>Large, pale green spears, good disease resistance, male/female plants. Better adapted to warmer areas of Utah</td>
</tr>
<tr>
<td>Purple Passion</td>
<td>Good</td>
<td>Large, dark purple spears, male/ female plants</td>
</tr>
</tbody>
</table>


How to Grow

Soils

Asparagus prefers organic, rich, well-drained, sandy soils for best growth. Most soils will do provided they are well drained.

Soil Preparation

The year before planting, control all perennial weeds in the selected planting location. Before planting, determine fertilizer needs with a soil test and then follow the recommendations given with the test report. If fertilizer applications are warranted, work the fertilizer into the top 6 inches of soil. If you fertilize with compost, apply no more than 1 inch of well-composted organic matter per 100 square feet of garden area. After creating the planting furrows, add an additional ½ pounds of high phosphate (11-52-0) fertilizer per 100 square feet of furrow. Asparagus needs high soil phosphorus levels to grow the large root system.

Plants

Purchase quality 1 year-old crowns from local garden centers or seed catalogs. Crowns should have 8-10 large roots and a healthy bud cluster. You may also establish asparagus from transplants grown from seed. Plant seed in January for transplanting in April.

Planting and Spacing

Asparagus crowns should be planted in 8-inch-deep furrows in April (Figure 1) and this is considered Year 1. Space plants 12 inches apart in the row, with rows 4 feet apart. Cover crowns with 2 inches of soil. Slowly backfill the furrow by cultivation during the year adding 2 inches of soil every other month until the furrows are filled. Do not bury the growing ferns that are already established when adding soil to the furrow.

Water

During the first 2 years after planting, water 1-2 inches every other week in one application. Use drip irrigation if possible. Mulch around the plant with compost or grass clippings to conserve soil moisture and reduce weed growth. Reduce irrigation to every 3 weeks after year 3. Irrigate so that the water goes down to 3-4 feet in the soil.

Fertilization

In early June or after harvest is over, fertilize with a complete fertilizer (16-16-8) using about 1 pound per 100 square feet.

Establishment

Maintain healthy fern growth during the first 2 years after planting but do not harvest any spears. Asparagus needs time to grow a large root and this takes time. Control weeds and insects. Water deeply to ensure good root growth and feed as suggested. Do not harvest asparagus until year 3 after planting.
Problems

Weeds

Control all perennial weeds and grasses in asparagus. Mulch asparagus heavily (2-3 inches) with compost or other organic matter each year. “Round-up” herbicide may be applied to weeds before or after the harvest period. Avoid spraying “Round-up” on asparagus plants. Avoid tilling asparagus as damage to the roots may occur.

<table>
<thead>
<tr>
<th>Insects</th>
<th>Description and Symptoms</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diseases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asparagus aphid</td>
<td>Green plant sucking insects that stunt fern and reduce yield and plant vigor.</td>
<td>Use insecticidal soaps or labeled insecticides.</td>
</tr>
<tr>
<td>Asparagus beetle</td>
<td>Beetles are black or orange and have 6 or 12 spots on their wings. Larvae feed on fern which reduces leaf area and plant vigor. Adults feed on emerging spears in spring.</td>
<td>Used insecticides labeled for this pest.</td>
</tr>
<tr>
<td>Root Rot diseases</td>
<td>Fungal diseases reduce plant vigor and stands. Tips of fern turn yellow, growing points die, whole stems and plants eventually die. Spears are small and skinny.</td>
<td>Reduce plant stress. Stresses include insects, over-watering, over cutting, drought, and weed pressure.</td>
</tr>
<tr>
<td>Viruses</td>
<td>Viruses cause plants to decline and die and yields to go down.</td>
<td>Control aphids which transmit the virus.</td>
</tr>
</tbody>
</table>

Harvest and Storage

Harvesting

Asparagus harvest begins in Year 3. Plants may be harvested for up to 4 weeks in Year 3. Cut 9 inch tall spears at ground level. Harvest all spears since tall growing spears suppress further spear growth. Harvest for 6 weeks in Year 4 and up to 8 weeks after 5 years of growth. Stop harvesting when the majority of spears are smaller than a pencil in diameter. In most areas, stop harvest by early to mid-June.

After Harvest Plant Care

After harvest is completed, control weeds and allow spears to develop into fern. Fertilize the beds, water regularly, and control pests. After ferns die in the fall, mow them down and use as a soil mulch. Avoid tilling asparagus beds since this damages the crown. Use mulches and herbicides to control weeds.

Productivity

A mature asparagus plant can produce ¾ pound of spears/plant during the harvest period. 25 plants should provide sufficient spears for fresh consumption and storage purposes. Spears will store for 3-5 days at 35°F and 95% relative humidity.
Frequently Asked Questions

How long will asparagus last?

Expect the plant to produce spears for 10-15 years.

Why are the spears always skinny?

Plants may have been water stressed last summer. New spears form in July and August so stress (water, heat, etc.) will affect their size. Plants need healthy fern to grow and store enough food for good spear growth. As the harvest season progresses spear size naturally decreases.

Can you harvest asparagus at other times of the year beside spring?

Yes you can but generally these plants do not yield well and the life span of the bed is greatly reduced.

Can you grow white asparagus in Utah?

Yes but you need to mound soil over the planted bed and then cut the spears just as they poke through the soil. If light gets to the spear it will turn green. Use black plastic in the spring to cover the beds. This will keep the light out.

Authors

Dan Drost, Vegetable Specialist