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Asparagus: A Perennial Spring Favorite

One of the more anticipated “rites of spring” for the avid vegetable gardener is the annual asparagus harvest. Indeed, a meal of early asparagus is good “spring tonic” and sets the stage for an entire growing season of more healthful eating because of the availability of fresh vegetables from the garden. The association of vegetables with good health is more than coincidental, and asparagus represents an excellent (and tasty) example of the latter.

The “Latinized” or scientific name of a plant often holds clues to the plant’s original use by humans. For example, the scientific name for asparagus is *Asparagus officinalis*. The latter comes from the Latin word *officina* which was the term for the storeroom of a monastery where medicines and other necessities were kept. It is fairly safe to assume, then, that the delectable spring vegetable asparagus first was consumed for its medicinal properties. Indeed, such is the case since history records that ancients first used it as a medicine to treat nearly any ailment ranging from heart trouble to toothache.

The genus (and common) name *Asparagus* was derived from the Persian word “asparag” which, literally interpreted, means “shoot”. A native of the Mediterranean region, asparagus originally was classified as a member of the Liliaceae family, along with other vegetables such as onions and garlic. Today, asparagus and its counterparts are designated to be part of the family Asparagaceae while onions and garlic have been moved to the Agavaceae family.

The first use of asparagus dates back over 5000 years ago to the ancient Egyptians. Later, Greeks and Romans not only ate asparagus fresh, they dried it for winter use. History records that the Romans actually went to the trouble of freezing asparagus high in the Alps for the Feast of Epicurus. The Roman emperors were said to be so fond of the vegetable that they maintained a special fleet of ships to retrieve the frozen delicacy, with great haste.

By the 15th century asparagus was cultivated in French monasteries. Evidently, French monarch Louis XIV was so fond of asparagus that he had special greenhouses built so that it could be grown year-around. Later, asparagus would find favor in England and the remainder of Europe. The early colonists are credited with introducing asparagus into what is now the United States.

Asparagus is a perennial, herbaceous plant that can grow to a height of nearly five feet. Its needle-like leaves botanically are known as “cladodes”, which actually are modified stems. It has a deep, adventitious root system and overwinters as a crown, which is a collection of rhizomes (modified stems) and lateral roots. Asparagus (mainly) is a dioecious species with both male and female flowers appearing bell-shaped. Female plants bear small red berries which are slightly toxic to humans.

The emerging shoot or “spear” is the edible part of asparagus. Harvest begins in spring as soon as spears begin to emerge and lasts (usually) until the early part of June. Green asparagus simply is asparagus that develops chlorophyll as the spear emerges. White or blanched asparagus is green asparagus that has been shielded from the sun, thus preventing the development of chlorophyll. This traditionally has been accomplished by the labor-intensive task of hilling asparagus beds and (later) removing the soil to expose the white spears.

Because asparagus is a perennial vegetable, attention

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should be given to choosing the best planting site. Like most vegetables, asparagus will not tolerate wet, soggy soil. Choose well-drained soil, or use raised beds to promote drainage. Since weeds are a major problem, try to select a site with as few weeds as possible. Growing a cover crop during the summer (e.g. buckwheat) and the fall and winter (e.g. rye or wheat) the year before you wish to plant asparagus will suppress weed growth and increase organic matter in the soil. A soil sample should be taken the fall or spring before planting for nutrient analysis. The optimal pH for asparagus is 6.5 to 7.0; lime may need to be incorporated into the soil before planting. Before planting, broadcast and incorporate fertilizer about 20 pounds of 10-20-10 or a similar fertilizer per 1,000 square feet of garden area.

Asparagus should be planted in the spring as early as the soil in the garden or field can be worked. In southern regions of Missouri, asparagus can usually be planted in late March or early April; in central and northern regions, early to mid April.

Normally, asparagus is propagated vegetatively using dormant crowns. Select healthy, 1-year-old crowns from an inspected nursery. Separate crowns by size, and plant similar-sized crowns together to encourage uniform growth. If crowns cannot be planted immediately, store them in a refrigerator.

To plant, make a 4- to 6-inch-deep furrow. Cover the fertilizer or mulch with an inch of soil, and space the crowns 12 to 18 inches apart in the furrow. If a variety produces large-diameter spears, you should reduce spacing within the row to decrease spear size. Each row should be no less than 5 feet apart so the ferns can close canopy and shade weeds during the summer. If rows are spaced too close together, spear size may be reduced. Cover the crowns with about 2 inches of soil, and as the plants emerge and grow, gradually fill in the furrow through the summer.

Weed control is the most challenging component of successful asparagus production. Asparagus is a poor competitor with weeds. On small plantings, very light cultivation with a hoe may be used to remove weeds, but avoid using a power rotary tillers or any other tillage implements that can damage the crown, reduce yields and promote diseases. Organic mulches such as grass clippings, wood chips, straw/hay or compost can be applied 4 to 6 inches thick to suppress weeds.

Several herbicides are labeled for weed control in asparagus. Glyphosate can be used as a contact spray to control winter annual and biennial weeds early in the

spring before the spears emerge and after the last harvest. Cover crops such as rye or wheat may be spring-seeded in row middles to suppress weeds. Common rock salt was once used to control shallow-rooted weeds in asparagus because asparagus is deep rooted and can tolerate some salt, but it is no longer recommended because the salt can damage soil structure by creating a crust that impedes water infiltration.

Asparagus can be harvested for a limited time (two weeks) the second year after planting crowns. Overharvesting one year can weaken the plant and decrease yields the following year. Three years after planting the crowns, asparagus can be harvested for five to eight weeks. Each year during the first several years of production, yields will increase if the planting is managed properly.

Asparagus spears are best harvested by snapping them off by hand near ground level. Most gardeners prefer to snap the asparagus spears when they reach 7 to 9 inches in length in cool weather (less than 70 degrees F), or 5 to 7 inches in warmer weather (more than 70 degrees F), and the spear tip is tight. Cutting with a knife is generally not recommended because it may spread diseases. Expect to harvest every one to three days as temperatures increase. Harvesting should stop when the majority of spears are the diameter of a pencil (less than 3/8 inch). Harvesting for a longer period will weaken plants and lead to poor production the following spring.

After harvest season has ended, the asparagus planting should be fertilized to stimulate summer and fall fern growth. A complete, balanced fertilizer (e.g. 13-13-13) can be applied at a rate of about 1.5 cups per 10 feet of row. Herbicides can be applied after harvest to control weed growth. Frost will desiccate the ferns, and they can then be cut in late fall or early winter. Do not mow ferns in early fall while they are still green because this will reduce the following spring's harvest. In northern Missouri, growers may mulch the crowns to protect them from low-temperature injury. The mulch can be raked to the row middles the following spring (early April), and spears will emerge for another harvest season.

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July Gardening Calendar

Ornamentals

- **Weeks 1-4:** Provide water in the garden for the birds, especially during dry weather.
- **Weeks 1-4:** Remove infected leaves from roses. Pick up fallen leaves. Continue fungicidal sprays as needed.
- **Weeks 1-4:** While spraying roses with fungicides, mix extra and spray hardy phlox to prevent powdery mildew.
- **Weeks 1-4:** Newly planted trees and shrubs should continue to be watered thoroughly, once a week.
- **Weeks 1-4:** Fertilize container plants every 2 weeks with a water soluble solution.
- **Weeks 1-4:** Keep weeds from making seeds now. This will mean less weeding next year.
- **Weeks 1-4:** Keep deadheading spent annual flowers for continued bloom.
- **Weeks 1-4:** Perennials that have finished blooming should be deadheaded. Cut back the foliage some to encourage tidier appearance.
- **Weeks 1-2:** Plant zinnia seed by July 4th for late bloom in annual border.
- **Weeks 1-2:** Spray hollies for leaf miner control.
- **Weeks 1-2:** Prune climbing roses and rambler roses after bloom.
- **Weeks 1-2:** Apply final treatment for borers on hardwood trees.
- **Week 1:** Apply no fertilizers to trees and shrubs after July 4th. Fertilizing late may cause lush growth that is apt to winter kill.
- **Week 1:** Hot, dry weather is ideal for spider mite development. With spider mite damage, leaves may be speckled above and yellowed below. Evergreen needles appear dull gray-green to yellow or brown. Damage may be present even before webs are noticed.
- **Weeks 2-3:** Fall webworms begin nest building near the ends of branches of infested trees. Prune off webs. Spray with Bt if defoliation becomes severe.
- **Week 4:** Divide and reset oriental poppies after flowering as the foliage dies.
- **Weeks 3-4:** Semi-hardwood cuttings of spring flowering shrubs can be made now.
- **Weeks 3-4:** Summer pruning of shade trees can be done now.
- **Week 3:** Powdery mildew is unsightly on lilacs, but rarely harmful. Shrubs grown in full sun are less prone to this disease.
- **Week 4:** Divide bearded iris now.
- **Week 2:** Don't pinch mums after mid-July or you may delay flowering.

Lawns

- **Weeks 1-4:** Water frequently enough to prevent wilting. Early morning irrigation allows turf to dry before nightfall and will reduce the chance of disease.
- **Weeks 3-4:** Monitor lawns for newly hatched white grubs. If damage is occurring, apply appropriate controls, following product label directions.

Vegetables

- **Weeks 1-4:** Blossom-end rot of tomato and peppers occurs when soil moisture is uneven. Water when soils begin to dry; maintain a 2-3 inch layer of mulch.
- **Week 1:** To minimize insect damage to squash and cucumber plants, try covering them with lightweight floating row covers. Remove covers once plants flower.
- **Week 2:** Dig potatoes when the tops die. Plant fall potatoes by the 15th.
- **Weeks 3-4:** For the fall garden, sow seeds of collards, kale, sweet corn and summer squash as earlier crops are harvested.
- **Weeks 3-4:** Set out broccoli, cabbage, and cauliflower transplants for the fall garden.
- **Week 3:** Sweet corn is ripe when the silks turn brown.
- **Week 3:** Keep cukes well watered. Drought conditions will cause bitter fruit.
- **Week 3:** Harvest onions and garlic when the tops turn brown.
- **Week 4:** Sow seeds of carrots, beets, turnips, and winter radish for fall harvest.
- **Weeks 1-4:** Cover grape clusters loosely with paper sacks to provide some protection from marauding birds.
- **Week 1:** Prune out and destroy old fruiting canes of raspberries after harvest is complete.
- **Week 1:** Blackberries are ripening now.
- **Weeks 2-3:** Apply second spray to trunks of peach trees for peach borers.
- **Weeks 3-4:** Early peach varieties ripen now.
- **Week 4:** Thornless blackberries ripen now.

Gardening Calendar supplied by the staff of the William T. Kemper Center for Home Gardening located at the Missouri Botanical Garden in St. Louis, Missouri. (www.GardeningHelp.org)