Eggplant

Planting
Eggplant (Solanum melongena) is a warm-season vegetable that grows best when temperatures are between 70 to 85 °F. It generally has a long growing season and grows very slowly during cool periods. Therefore, after the soil has thoroughly warmed in the spring, set out 6- to 8-week-old transplants to get a head start toward harvest. Do not plant eggplant in the garden until after the last chance of frost. Start seed indoors eight to nine weeks prior to this date. Seeds germinate quickly at 70 to 90 °F.

Transplanting Dates

<table>
<thead>
<tr>
<th>Area</th>
<th>Spring</th>
<th>Summer</th>
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<tbody>
<tr>
<td>Piedmont</td>
<td>May 1-15</td>
<td>July 1-15</td>
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<tr>
<td>Central</td>
<td>April 10-25</td>
<td>July 20-20</td>
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<tr>
<td>Coastal</td>
<td>Mar. 25-Apr.10</td>
<td>July 20-25</td>
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Purchase eggplant transplants from a reputable garden center to ensure that the plants are the best quality. Do not purchase tall, spindly plants or plants that have blossoms. Blossoms on the transplants will slow their growth after transplanting and may result in a lower yield.

Space plants 2 to 2 ½ feet apart in rows that are 3 to 4 feet apart.

Recommended Cultivars
The standard eggplant produces egg-shaped, glossy, purple-black fruit 6 to 9 inches long. The long, slender Japanese eggplant has a thinner skin and more delicate flavor. White ornamental varieties are edible, but have poor eating quality.

Regular types - Black magic (hybrid), Purple Rain (hybrid), Early Bird (hybrid)
Long types - Ichiban (hybrid), Pintung Long

Soil
Eggplant grows best in a well-drained sandy loam or loam soil, fairly high in organic matter. The soil pH should be between 5.8 and 6.5 for best growth.

Fertilizing
Eggplant requires moderate amounts of fertilizer. A soil test is always the best method for determining the fertilization needs of the crop. Information on soil testing is available in HGIC 1652, Soil Testing.

If a soil test has not been taken, apply 5-10-10 at the rate of 3 pounds per 100 square feet. This rate is equivalent to 1¼ pounds of 5-10-10 per 10 feet of row when the row spacing is 4 feet.
Eggplant should be sidedressed twice during the growing season. Sidedress when the first fruits are about the size of a quarter, using 3 ounces of calcium nitrate per 10 feet of row. Sidedress again in about two to three weeks. Too much nitrogen may cause excessive vegetative growth. If you are using plastic mulch, apply fertilizer through drip irrigation, or apply fertilizer to the side of the row.

**Watering**
Practice good cultivation and provide adequate moisture. Water the garden to provide a uniform moisture supply to the crop. Water sufficiently to moisten the soil to a depth of at least 6 inches. The critical period for moisture is during fruit set and fruit development. Mulching can help to provide uniform moisture, conserve water and reduce weeds.

**Harvesting & Storage**
Eggplants should be ready for harvest in about 65 to 80 days after transplanting, depending on the variety. When starting from seed, expect 100 to 120 days to maturity. The fruits of eggplant may be harvested at any time after they have reached sufficient size but should be removed from the plants before the flesh becomes tough and seeds begin to harden. Fruit should be large, shiny and a uniform purple color. When the side of the fruit is pressed slightly with the thumbnail and an indentation remains, the fruit is ripe.

Japanese eggplant may be ready to harvest when the size of a finger or hot dog. Typically, eggplants are harvested at least once per week, preferably twice a week. The fruit stems of eggplant are tough and heavy, so harvest the fruits by cutting stems with a sharp knife.

Store eggplant in the refrigerator. The optimal conditions for storage are temperatures of 45 to 50 °F and 90-percent relative humidity for one week.

**Problems**
The major pests that feed on eggplant are flea beetles, Colorado potato beetles, lace bugs, tomato hornworms and mites. This vegetable is a particular favorite of flea beetle insects, which appear early. Their damage is evidenced by small, shot-like holes in the leaves. Grow plants under row covers until they are large enough to tolerate leaf damage.

Other commonly seen pests and diseases in the home garden include root-knot nematodes, Phytophthora blight, bacterial wilt and Phomopsis blight. Phytophthora blight is one of the most destructive diseases of eggplant. Symptoms include dark streaking on the upper branches of the plant, followed by rapid collapse of the plant and death.

Bacterial wilt is another serious disease problem that causes sudden wilting of the plant from the bottom to the top. Eventually, the entire plant withers and dies. Pith inside the stem turns reddish-brown, and there is relatively little yellowing of the leaves.

Phomopsis blight most commonly attacks fruit, but the collar rot stage can cause the stem to become narrower than normal and break off at about 1 to 2 inches above the soil line. Leaves may also have spots. Fruit spots start as pale, sunken areas that rapidly enlarge to become soft and spongy down into the flesh.

Excerpted from *Home Vegetable Gardening*, EC 570, 2002.
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