

COMMERCIAL PRODUCTION OF

Eggplant in Mississippi

Eggplant is extremely sensitive to low temperatures.



Soils

Eggplant will grow in most soil types, but yields are highest on sandy loams. A soil pH of 5.5 to 6.5 is necessary.

Varieties

Traditional: Black Beauty, Epic, Black Bell.

Oriental: Little Fingers, Tycoon.

Conversation: Purple Rain, Casper.

Planting Dates

Eggplant is extremely sensitive to low temperatures. Night temperatures should be above 65 °F for proper growth. Sow seeds between May 15 and June 15, when soil temperatures are above 65 °F. Black plastic mulch and transplants are used to meet early market windows.

Spacing

Plants are spaced at 24 to 30 inches in rows 40 to 48 inches. This requires 4,500 to 6,500 transplants per acre, or two pounds of seed.

Fertilization

Apply according to soil test results. Apply lime at least 3 months before planting. Eggplant requires fertilization similar to tomato and pepper plants, in general, 100-100-100. Nitrogen sidedressing is generally used to supply some of the nitrogen in two or three applications.

Irrigation

Eggplant production is strongly influenced by water availability. Irrigation systems should be in place to supply one inch of water per week, when needed. Eggplant from stressed plants often have a bitter taste and are not marketable.

Weed Control

Treflan (trifluralin) is labeled for grass control in transplanted eggplant crops. Black plastic mulch used in early season crops also controls many weeds. Keep cultivations shallow to prevent damage to the shallow root systems.

Disease Control

Eggplant suffers from several diseases, but the most important one is caused by phomopsis. This fungus attacks seedlings and girdles the stem at the soil line. It also attacks fruit, causing a wet rot.

The disease is seed-borne and will survive on plant debris. The most effective prevention is to plant resistant varieties, use certified seed, and rotate fields. Eggplant is also susceptible to verticillium wilt and powdery mildew. For control measures, refer to Extension Publication 554 *Insect, Disease, and Nematode Control Recommendations for Commercial Vegetables in Mississippi*.

Insect Control

The most serious pest of eggplant is the flea beetle. This small, round insect attacks seedling eggplants and destroys the meristem so the plant never develops past the two-leaf stage. Spider mites are also a problem with eggplant, especially in hot, dry weather. Occasionally, aphids, Colorado potato beetles, and caterpillars attack and must be controlled. Consult Extension Publication 554 for current insecticides to use.

Harvesting

Traditional eggplant fruit is ready for harvest 80 to 90 days after transplanting, and when they reach market size. Oriental types can be ready as fast as 60 days, but first harvest is normally at 70 days.

Harvest by cutting the tough stem with clippers or a knife. Avoid fruit with dull skins and those that are spongy. These are overmature and are not marketable.

Grading

There are no size restrictions on eggplants, except those specified by the buyer. All eggplants in a shipment should be similar in size and should be the same shape, color, and type. All fruits should be free from insects and disease damage.

Storage

Eggplant does not store well and should be marketed as soon as possible after grading. Temperatures below 50 °F cause damage to the fruit.

Yield

The average eggplant yields should be 6 to 10 tons per acre, or 350 to 600 33-pound boxes per acre.

Prices

Prices for eggplant vary between \$4 and \$8 per box.



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