Department of Horticultural Science

Horticulture Information Leaflet 8015

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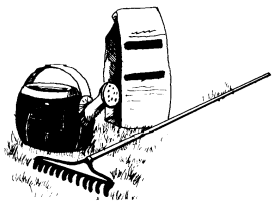

HOME GARDEN EGGPLANT

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Eggplant is a warm season plant that is very susceptible to frost. It requires a relatively long growing season to produce profitable yields. Growth is checked by cool weather. Proper cultural practices can yield a bushel per 10 plants.

Varieties of Eggplant

Variety	Days to Maturity	Description
Special Hibush	85 days	Fruits dark purple, long and tapering toward stem. Plants strong and upright, keeping fruit off the ground.
Florida Market 10	85 days	Similar to Special Hibush with resistance to Phomopsis blight.
Classic	76 days	Fruits glossy dark purple-black, long tapering to the stem, abundant yield especially in early season and continue to bear.
Midnite	77 days	Dark purple, deep oval fruit with good yields, tall plants with strong stems. TMV and Phomopsis blight tolerance.
Orient Express	58 days	Dark purple, long fruit, 2 weeks earlier than other varieties.

Special Varieties of Eggplant

Variety	Days to Maturity	Description
Little Fingers	68 days	Oriental type with smooth slender fruit 4 to 7 inches long.
Longtom	68 days	Oriental type, good yield of slender 4- to 7-inch long fruit.
Ichiban	66 days	Dark purple, very long (up to 12 inches) fruit with heavy set, Oriental type and only recommended for specialty markets.
Machiaw	65 days	Long, skinny pink-purple fruit, oriental type.
Tango	60 days	White fruit, slender (7 by 2 inches), strong plant.
Italian Pink Bicolor	85 days	Large (6 to 8 inches), bell-shaped fruit with creamy white base color and rose pink vertical stripes. Popular with European trade.

Growing Transplants. Grow plants in a heated plastic or glass house about 8 weeks before field setting. Locate the plant bed in a warm spot facing south, and near a water supply. Use a well-drained soil, high in organic matter. Soils that dry rapidly, pack, cake, or crust are not desirable.

Plant seed about 3/4 inch deep, putting about 2 seeds per inch in rows 4 to 6 inches apart. Keep soil damp but not wet. When early season harvest is desired, direct seed into peat pots or other containers. The resulting plant will have a larger root system which will ensure better stands, earlier harvest and greater yields. Consult *"Commercial*

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Transplant Production" Bulletin AG-337 for more detailed information.

Soils - A well-drained, sandy loam or loam soil, fairly high in organic matter with a pH of 6.0 to 6.5 is best.

Fertilizer - Have soil tested and follow recommendations on soil test report. On average soils (not tested), use 2 lb of 10-10-10 per 100 ft of row. This may be applied in one of the following ways:

- Broadcast half of the fertilizer before planting; put the remainder in the row before planting. The fertilizer in the row should be banded or mixed well in the row.
- Place half of the fertilizer in the row, as described above, and sidedress with the remainder of the fertilizer about 3 to 4 weeks after transplanting.

Sidedress with 3 oz of 10-10-10 per 100 ft of row when first fruits are set and then twice more at 2- to 3-week intervals. These side dressings may be applied in the middles and do not have to be "plowed in".

Planting - Transplant plants as soon as possible after danger of frost has passed. Use only strong healthy plants 6 to 8 inches tall.

Spacing - Space plants 2 to 2 1/2 ft apart in rows 3 1/2 to 4 ft apart.

Pest Management

Weeds - Cultivation should be shallow and only often enough to keep grass and weeds out. Use a preemergence herbicide. Consult the *N.C. Agricultural Chemicals Manual* for latest recommendation.

Insects - Flea beetle, Colorado potato beetle and spider mites are the major insects that feed on eggplant. For specific control measures consult the *N. C. Agricultural Chemicals Manual* or see your county extension agent.

Plastic Mulch - Eggplants are earlier and more productive when plastic mulch is used. For this system all fertilizer is placed in the bed prior to laying the plastic or rip irrigation is used and fertigation is practiced. Consult Horticulture Information Leaflet No. 33-D, *Drip Irrigation Systems*, for more information on fertigation. Beds are spaced 60 to 72 inches apart and 4- to 5-ft plastic is laid over a 36- to 42-inch-wide bed. Two rows spaced 14 to 18 inches apart are planted on the bed. Plants are spaced 18 to 24 inches in a row and plants are alternated in adjacent rows. Plastic mulch will improve earliness and yield of eggplant. (Consult the Plastic Mulch HIL No. 33 for more information.)

Two Crops from One Planting - In eastern North Carolina, plants can be cut back after the first crop (late July) and will form a second crop. Mow plants 6 to 8 inches above the soil line to leave 2 to 3 leaf axils. Then fertilize with 50 to 60 lb N per acre and 80 to 120 lbs potash per acre to produce vigorous regrowth and stimulate flowering. Then 4 to 6 weeks after cutting, plants will produce a second crop until frost.

Harvesting - Use sharp knife or small pruning shears to harvest. Harvest at least once a week, preferably twice a week, and before flesh becomes tough and seeds begin to harden. The market usually prefers 22 to 24 fruits per bushel, which means fruits 4 to 6 inches in diameter. Fruits are usually sold in bushel baskets, crates or cardboard containers.

Cooling and Storage - Eggplant loses water and quality when field heat is not removed quickly. Forced air and/or room cooling works well for eggplant. They should be stored at 45 to 50 °F to avoid chilling damage. Relative humidity should be at least 90 percent. They should not be stored for longer than 10 to 14 days. Long term storage results in chilling injury, surface scald or bronzing and pitting. Disease will appear during retailing if eggplants are stored too long.