

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 500 bushels per acre.

Varieties

- **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.
- **Epic** — (76 days) long, tapered classic shape, good yields.

Specialty Varieties

- **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.

- **Casper** — (70 days) Ivory-white color with fruit 6 inches long and 2 3/4 inches wide. Medium sized plant. Recommended for attention getter.
- **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 Plants — 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 ball which will insure better stands, earlier harvest and greater yields. Consult “*Commercial Transplant Production*” Bulletin AG 337 for more detailed information.

Seed — Four oz of seed will produce enough plants for an acre. This will require at least 90 ft² of plant bed space. More space in the plant bed will result in better plants and earlier yields.

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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 400 to 600 lb of 10-20-20 fertilizer. This may be applied in one of the following ways:

- (a) 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.
- (b) 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 20 to 30 lb N/A 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 feet apart in rows that are 3 1/2 to 4 feet apart (6,233 plants per acre are needed for 2 x 3 1/2 foot spacing).

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 and Colorado potato beetle are two of the major insects. 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 drip 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 lbs 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. Relative humidity should be at least 90 percent. They should not be stored for longer than 10 to 14 days, before retailing. Long term storage results in chilling injury, surface scald or bronzing and pitting. Disease will appear during retailing if eggplants are stored too long.