



Eggplant

About Eggplant

Eggplant is a warm season vegetable that requires a long growing season (>80 days) and does not tolerate frost. Eggplant is usually grown from transplants. It is a perennial plant but is grown as an annual. They are all determinate in growth. Eggplant is not usually grown in greenhouses because of their inability to set fruit at high temperatures.



Climate and Soil

| Temperature | Frost tolerance | Water needs | Tolerance to waterlogging | Drought tolerance |
|--|--|---|--|--|
| Warm: day 22-30°C, night 18-24°C. Fruit set 20-35°C. Seed germination 24-32°C. Chilling injury below 10°C. | Sensitive to frost at all growth stages. | Medium rooted, moderate total needs but regular watering needed. | Low at any time. Root fungal diseases increase at high soil water. | Poor to fair. Stress can result in poor fruit set and quality. |
| Humidity tolerance | Wind tolerance | Soil needs | Nutrient requirements | |
| Low – Leaf foliar diseases in wet environments. | Fair to poor. | Well drained. Sandy – earlier planting; Medium texture - highest yields | Moderate to high N, P and K | |

Production, Harvest and Postharvest Practices

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| Planting Material | Usually transplanted in spring using mulches or row covers to protect seedlings. May be direct seeded. |
| Varieties | Many types and varieties. Mostly open-pollinated. Several types can be grown: American – oblong, globular; Japanese – elongated, tear drop; Chinese – long, cylindrical; Italian – short, thick skin; and Specialty – multi-colored, multi-shaped |
| Spacing | Transplants or final thinned direct seeded stands on single row 90-100 cm beds with 30-60 cm spacing between plants. Approx. 15,000-30,000 plants/ha |
| Site selection and Field Preparation | Level soil to permit irrigation. Till in fall for early spring planting. Raised beds sloping to south, east-west rows. Fine seed bed. |
| Time to harvest | 75 - 90 days after transplanting, 25-35 days after anthesis. Long types longer. |
| Length of harvest | 1-3 times/week for 2-4 weeks. |
| Expected yields | 15-25 t/ha |
| Harvest | Hand harvest by cutting stem. Cool by placing immediately in cold water. |
| Storage | Eggplant has a short storage and shelf-life, less than 14 days. Storage of ripe fruit is possible for ripe fruit at 10-12°C and 90-95% Relative Humidity. Fruit are very sensitive to chilling injury and to ethylene exposure. |
| Pests and diseases | Weeds, insects, nematode, viral/fungal/bacterial diseases |

Prepared by Ron Voss and Mark Bell 2007

Primary references:

Aguiar, J. et al. Eggplant production in California. Pub. 7235. <http://anrcatalog.ucdavis.edu/pdf/7235.pdf>
Eggplant . Vegetable Research & Information Center - UC Davis <http://vric.ucdavis.edu/pdf/eggplant.pdf>
IPM Pest Management Guidelines. www.ipm.ucdavis.edu

For more information visit: International Programs <http://ip.ucdavis.edu>

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