



## GROWING EGGPLANT IN NAPA COUNTY

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Most eggplants grown for home use are members of the species *Solanum melongena*. All are very sensitive to frost injury, and need hot weather warm nights to produce a crop. Eggplant, tomatoes and peppers all have the same basic cultural needs.

**Types to plant:** Eggplants come in several colors, shapes and sizes. Colors vary from deep purple, pink, striped or white. One eggplant type ('Turkish Orange') is a separate species and produces tomato-shaped fruits. Common Varieties include: Black Beauty, Burpee Hybrid, Listada de Gandia, Japanese Long, Oriental Express, Thai Green, Violetta di Firenze, Imperial, Ichiban Hybrid, Early Bird and Easter Egg. Local conditions favor different varieties in different locations. You should plant several varieties to find the best for your family use.

**Soil Preparation:** Cultivate beds well and make sure soil is loose and well pulverized. Digging deep helps make essential nutrients more available and helps plants grow deeper roots. Eggplants are moderate users of nitrogen and phosphorus, so fertilizer or manure should be thoroughly mixed into the top six inches of soil before you plant. Use 10 pounds of dry manure or 1/3 pound of commercial 12-12-12 fertilizer per 10 square feet of garden. After flowering begins (6-8 weeks), make additional light nitrogen applications as fruit grows. Maintain moderate nitrogen levels until harvest.

**Planting:** Eggplants are normally transplanted. Transplants may be grown from seed in a hot house 65° to 80° F. Plant 6 to 8 weeks prior to setting into warm field soil. Most roots are in the top 18 inches of soil, but some go as deep as 48 inches. Best growth is at soil pH 5.5 to 6.5. Plants are self-fertile. Spacing: 12 to 24 inches apart in rows spaced 3 feet apart. With East-West rows, tented paper staked at 2 foot intervals protects young plants and improves growing temperature in spring plantings. Growers use butcher paper slanted at 80° to reflect sunlight down to warm soil crop. Black plastic mulch keeps weeds down and improves soil temperature for early crop. Optimum growing temperatures are 70-85° F.

**Watering:** Drip irrigation is good. Critical periods are bloom, fruit set and fruit enlargement. Plants lacking water will be stunted and develop fruit that is pithy. Mature plants have roots to 3 feet deep so wet soil deeply during the fruiting period.

**Fruiting:** Eggplant flowers are self-fruitful and considered day neutral. Will not set at extremely high (above 95° F) or cool (below 65° F) temperatures. From seeding until harvest is 100-140 days, from transplanting until harvest is 75 to 100 days, about 3 weeks from flowering. Plants need warm nights and long hot days to ripen slowly developing fruit. Cut fruit from plant when 'springy firm' to touch. Plants will stop fruiting as fall cool temperatures take effect.

**Problems:** Eggplants attract slugs/snails, diabrotica, flea beetles when young. Healthy plants have few pests, but gophers and rabbits can be problems. Over watering favors root rot in young plants growing in cool soil. Fruits that touch the soil usually become diseased. Trimming lower leaves and flowers and staking plants are done to keep fruit from touching the soil. Plants need full sun all day long.

**Tricks:** Delay planting until soil is at least 75° F. Protect from slugs and leaf-eating insects. Floating spun fabric row covers can reduce insect attack (remove when flowering begins). Use regular nitrogen and water applications. Give additional water during very hot weather. Consider using tomato cages for plant support. Pick regularly and eat while fresh.

**Additional Readings:**

*Growing Tomatoes in Napa County*, UCCE Napa County Mimeo, 1998.

*Home Vegetable Gardening*, UC ANR Publication #21444, 1992.

*Eggplant Production in California*, UC ANR Publication #7235, 1988.

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