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Eggplant in the Garden

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Summary

Eggplant prefers a sunny location, a long growing season, and fertile, well-drained soil for best yields. Do not plant too early as plants are killed by light frost and grow poorly in cool conditions. Most gardeners transplant eggplant through a black plastic mulch for earlier maturity and high productivity. Use row covers or hot caps to protect the plants when transplanting before the frost-free period. Side dress with additional nitrogen fertilizer to help grow large plants. Irrigation should be deep and infrequent. Do not apply organic mulches until soils have warmed to 75°F. Control insect and diseases throughout the year. Harvest eggplant when the fruits are full sized, smooth skinned, and glossy.



Recommended Varieties

In selecting eggplant varieties, consider your growing environment, primary use, and how much space you have available to grow the plants. Most varieties will grow in Utah, but all are not available. Most garden centers and nurseries carry varieties that have been proven to grow well and produce high quality fruits in local conditions. There are many other varieties available on-line.

Fruit Type	Selected Varieties
Black Skin	Black Beauty, Black Bell, Black Magic, Classic, Dusky, Little Fingers, Orient Express
Specialty	Calliope, Easter Egg, Fairy Tale, Ichiban, Snowy, Zebra

How to Grow

Soil: Soil: Eggplant prefers organic, rich, well-drained, sandy soil for best growth. Most soils in Utah will grow eggplant provided they are well drained and fertile.

Soil Preparation: Before planting, determine fertilizer needs with a soil test and then follow the recommendations given with the test report. If fertilizer applications are warranted, work the fertilizer into the top 6 inches of soil. If you fertilize with compost, apply no more than 1 inch of well-composted organic matter per 100 square feet of garden area.

Plants: Eggplant grows best if transplanted when plants have 6-9 leaves and a well-developed root system. Transplants mature earlier, yield more, and are recommended for the cooler growing areas of Utah. When growing transplants, allow 8-10 weeks to grow the plant. Germinate the seeds at 80°F until the seed root emerges, then plant the seeds in sterile seeding mix and grow out at 65-75°F. Adequate light is essential to produce a quality plant. Cool white fluorescent tubes placed 2 to 3 inches above the plants and lit for 14-16 hours per day will ensure plants grow large and healthy. Water regularly and feed weekly with ½ strength soluble complete fertilizer.

Planting and Spacing: Eggplant should be transplanted when soils are 60°F or after all frost danger has passed. Eggplants are very sensitive to cool temperatures. Transplants should be planted 24

inches apart in the row, with rows 24 inches apart. Transplants that are stocky, dark green, have 6-9 leaves and are 5-8 inches tall, grow most rapidly. Plants with blossoms or fruits establish slowly and yield poorly.

Mulches: Black plastic mulch warms the soil, conserves water, and helps control weeds. Plastic mulches allow earlier planting and maturity, especially with transplants. After preparing the soil, lay the plastic, secure the edges with soil, and cut holes for the transplants. When using plastic mulches and row covers, plants can be set out several weeks before the last frost date. Do not apply organic mulches like grass clippings, straw, or newspapers around plants until soils are warmer than 75°F. Organic mulches also help conserve water and control weeds.

Row covers: Hotcaps, plastic tunnels, fabric covers, and other devices protect transplants from cool air temperatures and enhance plant growth and earliness. Eggplant grown under row covers requires ventilation when air temperatures exceed 80°F.

Water: Water eggplant deeply and infrequently, applying 1-2 inches per week. Use drip irrigation if possible. Mulching around the plant will conserve soil moisture and reduce weed growth. Irrigate so that moisture goes deeply into the soil. Irregular watering (under or over) can cause tough leathery fruit or root rot.

Fertilization: Avoid over fertilization of eggplant which encourages excessive leaf growth and delays flowering and fruit maturity. Side dress with nitrogen (21-0-0) using ½ tablespoon per plant at 4 and 8 weeks after planting. Place the fertilizer to the side of the plant and irrigate it into the soil.

Problems

Weeds: Plastic and organic mulches help control weeds. Cultivate shallowly around the plants to avoid root damage, especially when plants are small.

Insects and Diseases:

Insects	Identification	Control
Flea Beetles	Small black beetles that feed on seedlings. Adults chew tiny holes in cotyledons and leaves. Beetles can reduce plant stands or may kill seedlings.	Control beetles with appropriate insecticides at planting or after seedlings have emerged from the soil.
Diseases	Symptoms	Control
Leaf Blights or Spots	Dark spots on stem, leaves, or fruits. The diseases eventually spreads to all plant parts. The foliage eventually dies, exposing fruits to the sun, which causes sunscald.	Diseases promoted by cool, wet conditions. Don't apply overhead irrigation late in the day. Let the soil dry between watering. Apply appropriate fungicide once disease identified.
Verticillium Wilt	Leaves wilt starting at the bottom of plants and turn yellow before they wither and fall off. Disease causes a brown discoloration in the stem and root.	No varietal resistance. Crop rotations and soil solarization can help reduce wilt diseases.
Disorders	Symptoms	Control
Sunscald	Scald is caused when fruits are exposed to direct sunlight during hot, dry weather. Exposed areas over-heat, dry out, and do not color uniformly.	Maintain uniform soil moisture during hot weather. Big plants with good leaf cover have less sunscald problems. Consider covering plants with shade.

Harvest and Storage

Eggplant is generally harvested when fruits are full size, have a glossy sheen, and are 6-8 inches long. Fruits that are firm, plump and fully colored, with smooth skin have the best flavor and quality. Use a knife or pruning shears to cut the stem when harvesting rather than twisting off the fruits. Wear gloves, as eggplant has small prickly thorns on the stems and under the leaves. Pick fruits as they mature. Mature eggplant will store for 7 days if held at 50-55°F. Fruits are subject to chilling injury if refrigerated. Over-

mature fruits are dull colored, soft, seedy, and taste bitter. Eggplant is not suitable for canning or drying, but can be frozen.

Productivity

Plant 1-2 plants per person for fresh use depending on fruit shape, size and variety.

Nutrition

Eggplant has limited nutrients and is low in calories, high in fiber and a source of folate and potassium.

Frequently Asked Questions

What can I do to keep my eggplant fruits from getting tough? Tough skins generally form during unfavorable weather (night temperatures lower than 55°F, or day temperatures above 95°F), when plants are water stressed, or when fruits get over-mature. Fruits will achieve their fully mature size in 10 to 20 days after flowering. Since you can't do much about high temperatures, keep the plants well-watered and harvest the fruits when they are full size and mature.

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