



FRUITS & VEGETABLES

Peppers and Eggplant

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by J.E. Ellis¹ (4/07)

Quick Facts...

Peppers and eggplant are members of the *Solanaceae* family and have similar growing requirements.

Both peppers and eggplant are best transplanted to perform acceptably in Colorado.

Neither plant is tolerant of early- or late-season frost.

Peppers and eggplants should be monitored for early evidence of pest damage during the season.

Fruit should be harvested with pruning shears to avoid damaging the plant.

Peppers (*Capsicum annuum*) and eggplant (*Solanum melongena*) may be started eight weeks before they are planted into the garden. Along the Front Range, both can be sown in April for transplanting into the field on June 1.

Plants can be grown by sowing seeds in a prepared potting soil 1/2 inch deep at 80 degrees F until seedlings emerge.

As soon as seedlings begin to crowd, transplant the plants into pots or cell packs and grow at 70 degrees by day and 60 degrees at night. Suspend fluorescent lights 8 inches above the plants as soon as they emerge to provide 13 hours of light each day. Include a single incandescent bulb to expand the light spectrum.

A small greenhouse with automated heat can produce excellent transplants. If you have problems providing the required light and temperatures, purchase good plants prior to transplanting into the garden. The disadvantage of purchased plants is that variety selection is limited.

Because you're producing large fruit on relatively small plants, peppers and eggplants must have good growing conditions to produce abundantly. To compensate, make sure they receive full sunlight and are planted in the best part of the garden.

If you do a soil test, make sure you follow its recommendation. If not, apply 10 cubic feet of organic matter, 1 pound of nitrogen per 1,000 square feet of garden. Work these amendments into the soil prior to setting out the transplants.

Cover the soil with black plastic mulch to suppress weeds, keep fruit off the ground and reduce surface evaporation, irrigation requirement and nutrient leaching. Hot caps can protect the transplants from wind and frost and advance the date of transplanting. Normally, hot caps are anchored in the soil, but you also can tape them to plastic mulch.

Arrange the plants 1 foot apart in the row, with rows 3 feet apart. This allows 3 square feet per plant.

Pests

You may encounter flea beetles soon after transplanting. If there are more than four per plant, spray with an insecticide such as carbaryl (Sevin) or pyrethrum. To deter cutworms, you may want to place cylindrical paper collars around the stems of plants.

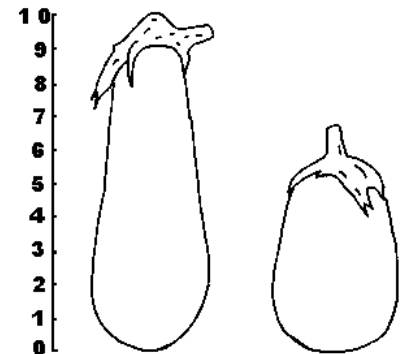


Figure 1: Eggplant varieties.

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The following pepper types and varieties have done well along the Front Range.

Bells: Predi (*large, elongated*), Figaro (*blocky*), Jingle Bells (*little*), Islander (*purple*)

Bells, tapered: Ori (*green*), Fry King (*yellow*)

Cayenne: Super Cayenne

Cherry: Sweet Cherry, Hot Cherry

Chili: Super Chili (*red*), Hot Portugal (*green*), Paper Dragon (*yellow*)

Jalapeño: Jalapa

Ornamental: Candle Light

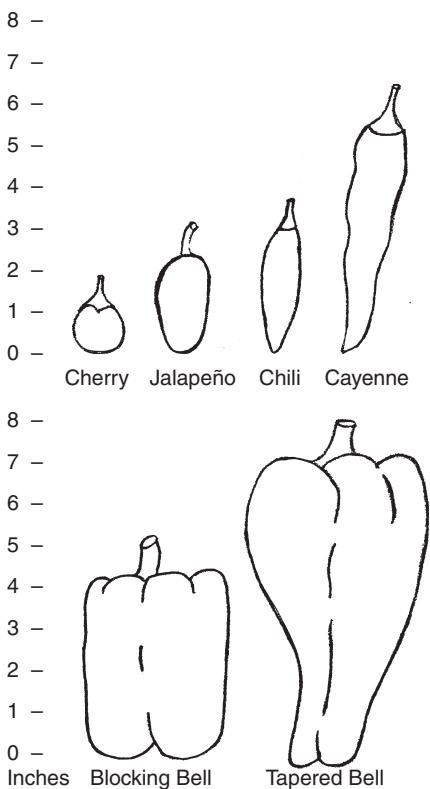


Figure 2: Pepper fruit types.

Phytophthora is the principal disease of peppers. It is soil-borne and especially severe where drainage is poor. If drainage is a problem, plant peppers on ridges so they don't stand in water. Eggplants may contract *Verticilium* wilt that gradually will kill the plants. Planting eggplants on uninfected ground is the only practical means of control.

Blossoms set fruit best between 70 and 90 degrees, when there is sufficient soil moisture and the bees are active. Pollen production is curtailed when the night temperatures fall below 55 degrees, resulting in poor fruit set.

Varieties

Eggplant fruit comes in a variety of shapes and colors that have little to do with the flavor or quality of the fruit. The traditional eggplant fruit is purple to black and bulb-shaped. It measures 7 inches tall, 3 inches across the top, and 4 inches across the bottom (Figure 1). Colors range from black to pink to white, and shapes range from elongated sausages to eggs.

Eggplants have done well in Colorado State University trials over the years. 'Easter Egg' produces a white egg-shaped fruit, 'Black Beauty' produces the traditional fruit, and 'Oriental Express' produces an elongated sausage-shaped fruit.

Peppers may be classified as sweet or hot, or by color. Most peppers either are green or yellow when immature. When they reach their maximum size, they usually turn red, similar to a tomato (to which they are related). Because the Colorado growing season is short, peppers generally are harvested before they turn red, although small peppers generally produce a fair percentage of red fruit. All peppers, including ornamental peppers, are edible. However, be careful tasting peppers of unknown hotness.

Harvesting

It's best to harvest with hand pruners to avoid damaging the plant. You can enhance production by harvesting often. When fruit reaches acceptable size, remove it from the plant. If maximum-size fruit is desired, remove all but one or two fruits so they will receive all the plant's resources.

Flavor or pungency is not influenced by maturity, so fruit may be harvested at any stage of maturity. If red peppers are desired, allow the earliest fruit to remain on the plant while harvesting subsequent fruit. Only the early-formed fruit of the large-fruited varieties has a chance to mature before frost.

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