

Peppers and Eggplant

Fact Sheet 7.616

Gardening Series | Fruits and Vegetables

By J.E. Ells* (11/20)

Revised by J. Murgel**

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. LED grow-lights are energy efficient and are often designed to provide light in the spectrum ideal for plant growth.

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 peppers and eggplants produce large fruit on relatively small plants they must have good growing conditions to produce abundantly. 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. A good baseline fertilizer rate is apply 10 cubic feet of organic matter, 1 pound of nitrogen per 1,000 square feet of garden. Work soil amendments and/or fertilizer 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 or cloches 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 registered for flea beetle control. A detailed list can be found at www.ipm.ucdavis.edu/PMG/r604300611.html. To deter cutworms, you may want to place cylindrical paper collars around the stems of plants.

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



Quick Facts

- Muskmelons, pumpkins, winter squash and watermelons require a long, warm growing season and are most productive at elevations below 5,000 feet.
- Cucumbers and summer squash, while they need warm weather, produce in a relatively short season.
- Winter squash and pumpkins can be conveniently stored for use through the winter.
- After identifying the pest, you might consider trying an insecticidal soap first. It is the least toxic and most environmental friendly control.

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ridges so they don't stand in water. Eggplants may contract *Verticillium* 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. Colors range from black to pink to white, and shapes range from elongated sausages to eggs.

Eggplants grow well in Colorado. Check your favorite seed catalog for interesting and novel varieties. '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 are either 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.

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

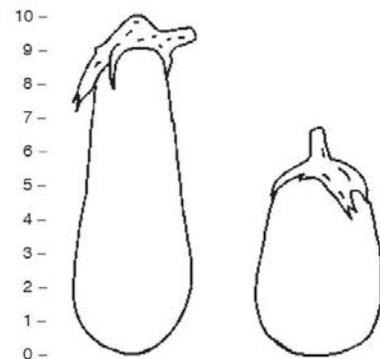


Figure 1: Eggplant varieties.

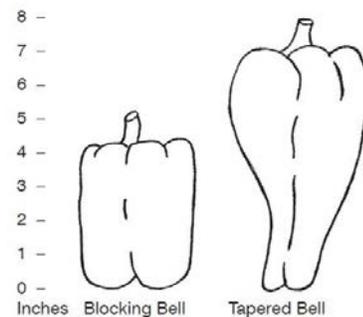
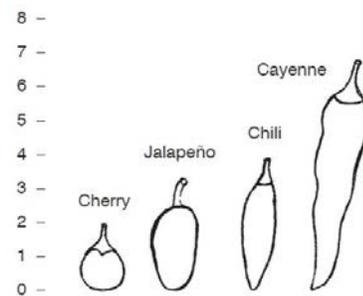


Figure 2: Pepper fruit types.