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# Peppers and eggplant for the home garden

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## Quick Facts

Peppers and eggplant are both members of the same plant family and have similar growing requirements.

Both peppers and eggplant must be transplanted in order to perform acceptably in Colorado.

Neither plant is tolerant of frost; however, peppers will gradually stand cooler weather than eggplant and may be transplanted earlier into the garden.

Peppers and eggplant are both susceptible to insect pests and should be carefully watched during the growing season.

Poor fruit set is the main problem Front Range gardeners may have with peppers and eggplant.

Eggplant usually is served as a fresh cooked vegetable.

Peppers are either sweet or hot and may be prepared fresh, cooked, canned, pickled, frozen or dried.

While most peppers can be grown to the green or yellow stage in Colorado, the season is too short to allow many fruit to ripen to the red stage.

requirements is going to present a problem, it is advisable to purchase plants at planting time.

Peppers and eggplant should be planted in the garden where drainage is best, preferably where they have not been previously grown. Too much nitrogen may delay fruiting beyond any chance of maturing before frost. Therefore, if the soil has been productive it should receive no more than 5 bushels (.2 cubic meter) of organic matter, 3 pounds (1.4 kilograms) of ammonium nitrate (33-0-0) and 2 pounds (.9 kg) of superphosphate (0-46-0) per 1000 square feet (90 sq m). These amendments should be worked into the soil a week prior to setting out the plants and the rows should be covered with black plastic or paper mulch to warm up the soil. The plants then are set through the mulch at the usual spacing of 2 feet (.6 m) apart in rows 3 feet (.9 m) apart. By using hot caps, seeding and transplanting may be advanced a week or two. While hot caps are intended to be anchored in soil, they can be anchored to plastic mulch with tape.

## Maintenance

Peppers and eggplant both should be watched closely while they are growing since one can expect visits from four insect pests. The first concern is cutworms that may be best thwarted by placing a tarpaper collar around each individual plant at the time of transplanting. Flea beetles are to be expected just after transplanting and plants should be sprayed with carbaryl (Sevin) according to label directions. Potato beetles are expected on eggplant about July 1 and also may be treated with carbaryl as directed. During hot dry weather, spider mites may appear on eggplant. Their presence is indicated by small yellow dots on the underside of the leaves. Spider mites call for treatment with malathion according to label directions.

Phytophthora is the principal disease of peppers. It is soil borne and can be avoided by good drainage. If soil drains slowly, peppers had better be planted on ridges. Eggplant may contract verticillium wilt that will gradually kill the plants. There is nothing that can be done except remember not to plant eggplant in the same general area again.

Perhaps poor fruit set is the main problem a gardener along the Front Range of Colorado will experience with peppers or eggplant and there is little that can be done about it. Peppers will not set fruit when the night temperature goes below 60°F (16°C) or the day temperature above 90°F (32°C). Nor will they set under wilted conditions that can result whenever the transpiration rate exceeds the water uptake rate. This

## Planting

Peppers, (*Capsicum annum*) should be sown eight weeks before they are to be transplanted to the garden, while eggplant (*Solanum melongena*) should be started ten weeks in advance. They both may be sown on March 20 along the Front Range, with peppers being transplanted on May 20, and eggplant on June 1 since they require warmer conditions. For other areas of the state, peppers may be transplanted a week after the last average frost date and eggplants ten days later.

If only a few plants are required, four seed may be sown in a 3-inch (7.6 centimeter) peat pot using a prepared potting soil. The pots should be kept at 70°F (21°C) until the seeds have sprouted. The pots then should be placed under fluorescent light and at least one incandescent bulb suspended 8 inches (20 cm) over the tops of the plants. If a sunny window is available, the lights may be used only as supplemental light on cloudy days and to extend the daylight to 13 hours. The plants will become spindly if the night temperature is not kept near 60°F (16°C) after the cotyledons (seed leaves) are formed. When the plants begin to crowd, they should be thinned to one per pot. If meeting these

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can occur with adequate soil moisture on a warm windy day with low humidity. Pepper plants stop growing when night temperatures go below 55°F (13°C) and fruit will not develop a red color. Above 80°F (27°C), the red that develops has a yellowish cast. Eggplant has not been as extensively studied but is presumed to have similar temperature requirements.

## Varieties

The eggplant varieties Dusky Hybrid, Morden Midget, Early Beauty Hybrid and Burpee Hybrid are recommended for gardens because they produce early. These are all purple-black when ripe. Others including Golden Egg, White Beauty and Florida Market generally are too late for Colorado growing seasons.

Pepper varieties may be divided into sweet and hot. Since all peppers turn red when fully ripe, color cannot be used as a classifying factor; however, the sweets may be divided into blocky, tapered and round varieties. Of these three, the blocky type is by far the most popular. It is the bell pepper used commonly in salads, on pizzas, and used for stuffed peppers. The following varieties are recommended with the understanding that they will be used either in the green or yellow state since the season is too short and the weather becomes too cold to develop a red color in most varieties. **Blocky:** California Wonder, Penn Wonder, Yolo Wonder and Golden Calwonder. **Tapered:** Cubanelle, Hungarian Sweet Wax, Pimento and Sweet Banana. **Round:** Sweet Red Cherry.

Most hot peppers are tapered except the Hot Red Cherry that is round. The recommended "green-turning-red" hot peppers are Anaheim, Cayenne,

College, Chili, Jalapeno and Hot Red Cherry. The recommended "yellow-turning-red" hot peppers are Caloro, Hungarian Yellow Wax, Romanian and Santa Fe Grande. Generally speaking there is no appreciable change in pungency as a pepper develops its red color and the "green-turning-red" varieties usually are more pungent than the "yellow-turning-red" varieties.

Tabasco peppers are of a different species (*frutescens*) and are grown in Louisiana where they generally are processed into hot sauce. Paprika is a sweet red powder ground from dried red paprika peppers, used as a garnish on vegetables, eggs and casseroles. It generally is imported from Europe but could be grown in this country. Pimientos are produced in Georgia and Alabama where they have sufficient season to turn bright red. Most of the pepper production is canned and much of this is used, in turn, to stuff green olives.

## Harvesting

Eggplant may be harvested when it reaches an acceptable size and is colored uniformly. Yields are enhanced when fruit is harvested often without waiting for it to obtain full size. Similarly, peppers should be harvested as soon as they reach sufficient size, even though they still may be expanding. It is not recommended that fruit be left on the vine to turn red because this reduces the productivity of the plant, and often, low temperatures preclude the development of a red color. The fruit may be snapped from the plant, but less damage results when both eggplant and peppers are snipped with pruning shears.

