

Information from the Chester County Master gardeners

Why Grow Peppers?

Peppers come in a wide variety of shapes, sizes, colors, and tastes. With their many interesting shapes, peppers are ideal for container gardens or as an edible landscaping plant. Peppers thrive on full sun and warm weather, and can be a challenge to grow in cooler summers.

Varieties

Peppers can generally be classified into two groups: mild- or sweet-tasting, and hot or pungent

- **Bell types**- Sweet, large, blocky-shaped fruit with thick flesh; normally harvested at mature, green stage, although some may turn yellow or red to brown when mature.
- **Pimento types**- Sweet, slightly pointed, conical-shaped fruit with thick walls; red when ripe.
- **Sweet wax types**- Fruits are yellow when immature, with waxy gloss, turning orange to red when mature; conical.
- **Long green types**- Fruit vary in length and have relatively thin flesh; harvested either in the mature green stage or mature red stage, although some varieties may turn yellow, orange, or brown; pungency ranges from sweet to hot.
- **Jalapeño types**- Fruit conical, with thick flesh and tapered blunt tips; immature fruit are dark green, turning red at maturity and are highly pungent.

You can get more information on peppers suited for Pennsylvania at the Penn State University website: <http://extension.psu.edu>.

Seed or Transplants?

A family interested in having only fresh fruit should plant four to six plants per person. If enough fruit is wanted for processing, then 6 to 12 plants per person should be planted.

If a fairly large number of plants is needed, the plants may be started from seeds in a good porous seeding mix. Because of their long growing season and temperature requirements, peppers must be started indoors 8 to 10 weeks before being moved permanently into the garden. When seedlings are large enough to handle, transplant them into individual containers or bedding plant packs for stocky development. Give them plenty of light. Daily temperatures should be kept below 80 degrees, but not lower than 50 degrees.

To get best results with only a few plants and minimal trouble, purchase plants from a local greenhouse or nursery at the proper planting time. If you are buying transplants at a local garden center, select stocky, sturdy plants that have 3-5 sets of true leaves. Avoid plants that already have flowers and fruit.

Setting out plants

Whether your plants are purchased or home-grown, harden off pepper seedlings before transplanting into the garden.

About 10 days before transplanting, set plants outdoors for a few hours each day to acclimate them gradually to outdoor conditions. Start by setting plants in filtered light in a setting protected from strong breezes. Each day, lengthen the period the seedlings spend outdoors, exposing them gradually to direct sunlight and wind.

Bring plants indoors at night and on days when temperatures fall below 60 degrees. Set peppers in the garden when the weather has warmed and soil temperatures are above 60 degrees. Temperatures below 50 degrees impair pepper growth.

Where to Plant

Pepper plants grow best in warm, well-drained soils of moderate fertility. The plants are not particularly sensitive to soil acidity, but best yields are obtained in the 6.0 to 6.8 pH range. Adjust soil fertility as indicated by soil test results. Use a soil test—available from the Penn State Extension—to determine the amounts and types of soil amendments needed.

Planting distances

Space plants 18 inches apart in rows 24 inches apart or more, depending on the type of cultivation used. Water plants thoroughly after transplanting. Avoid planting under

conditions that will stunt the plants and lead to poor production such as cold weather, lack of sufficient soil moisture, or lack of sufficient fertilizer.

Watering

Peppers should receive 1-2 inches of water a week. If this amount is not received as rainfall, supplemental irrigation is necessary. Soak the soil thoroughly when watering. Frequent light watering will encourage a weak root system. Mulching with straw, clean hay, compost, paper, or plastic will reduce soil water evaporation. Plants growing in small containers may need daily watering.

Care

After plants are established, mulch to conserve moisture, prevent compaction, and help suppress weeds. Peppers set fruit between nighttime temperatures of 60° and 75°. Day-time temperatures above 95° will abort blossoms but fruits will again begin to form when daytime temperatures cool.

Once fruits have begun to set, a side dressing of fertilizer will boost productivity. Use a 12-12-12 fertilizer or other high-nitrogen fertilizer at the rate recommended on the package.

Control weeds by hand-pulling or shallow cultivation to avoid injuring plant roots. The incidence of disease can be reduced by proper spacing and watering early in the day (or using soaker hoses).

Harvesting

Bell peppers are usually picked when they are green and immature but full-sized and firm. However, if they are allowed to ripen on the plant, they will be sweeter and higher in vita-min content. Other peppers are usually harvested at full maturity.

Be careful when breaking peppers from the plant, as the branches are often brittle. Hand clippers or pruners can be used to cut peppers from the plant to avoid excessive stem break-age. The number of peppers per plant varies with the variety. Bell pepper plants may produce 6 to 8 or more fruit per plant.

In general, peppers have short storage life of only 1-2 weeks. Cool, moist conditions (45-50°) and 85-90% humidity are the ideal storage conditions for peppers. Sweet peppers should be stored at 45° or above.