



Bell Pepper

Climatic requirements

Bell pepper is a cool-climate crop (65–75°F). Production is low during summer months. When the temperature reaches 90°F, the blossoms seldom set fruit. For best result in dry lowlands, plant peppers in the late fall and winter months and harvest in late winter and early spring. In the cooler uplands, plant during the spring and early summer and harvest in the summer and early fall.

Varieties

‘Keystone Resistant Giant’, ‘Emerald Giant’, ‘Titan’, ‘Yolo Wonder L’, ‘California Wonder’, and ‘Bell Boy Hybrid’ often produce peppers of good quality in Hawaii.

Soil management and fertilizers

Peppers thrive in a wide range of soil types, but good drainage is essential. The soil should be worked over to break up large clods and any hardpan that prevents good drainage. A soil pH of 5.5–7.0 is desirable. If manure is used, till it into the soil during preparation for planting. General garden fertilizer, like 10-30-10, can be applied at the rate of 3½–4 pounds per 100 square feet. Apply one-third at transplanting, one-third when flowers form, and one-third a month after flowering. Additional nitrogen may be applied after the first harvest to improve fruit size and vigor. Excess nitrogen applied too early can cause flower drop.

Planting

Peppers are usually transplanted rather than seeded directly into the garden. Plant seeds in seedling flats, beds, or pots. Starting two weeks after germination, fertilize

the seedlings weekly, preferably with a solution of about 1 tablespoon of a water-soluble fertilizer in 1 gallon of water. The seedlings will be ready to transplant in about 6–8 weeks. In single-row plantings, space the plants 12 inches apart in the row. Set the seedlings at the same depth as they were in the seedbed, flat, or pot, and firm the soil around the roots. It is beneficial to use a starter solution (water-soluble, high-phosphate fertilizer) at the time of transplanting.

Irrigation and cultivation

As a rule, lighter soils need more frequent irrigation than do heavier soils, and peppers require more frequent irrigation after fruiting starts than before. Cultivate to control weeds whenever necessary. Tall weeds harbor insects, which might transmit mosaic disease. Weeds are easier to eradicate when they are small.

Insect control

The insects most commonly found on peppers are aphids, mites, white flies, thrips, leaf miners, and pepper weevil. All of them can be controlled to some degree with insecticides².

Disease control

The most common diseases found on peppers are mosaic, bacterial leaf spot, *Cercospora* leaf spot, anthrac-nose, late blight, blossom end rot, and sun scald.

The most common disease problem of pepper is mosaic (one or more virus diseases that cause green and yellow mottling and distorted leaves). To control mosaic, insect pests—especially aphids—must be controlled, because they transmit the disease. A good insect

²Read any pesticide’s label carefully to ensure that its use on bell pepper is allowed, and follow the label directions.

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control program plus weed control and field sanitation will help control mosaic. The use of a reflective mulch, such as aluminum foil, to cover the soil around the plants is reported to be effective in repelling aphids and thus may help in controlling mosaic.

Fungicides^z can control *Cercospora* leaf spot, anthracnose, and bacterial leaf spot.

Blossom end rot is a result of insufficient water reaching the fruit. The various causes of this may be insufficient irrigation, irrigation with water with a high salt content, poorly drained soil, an insufficient root system in acid (low pH) soil, calcium deficiency, root-knot nematode infestation of the roots, root damage from cultivating too deeply, and root damage or excessive transpiration from strong winds.

Sun scald (sunburn) causes sunken, white, dry spots on the fruits. Keep the leaves healthy to prevent them

from dropping off and exposing fruits to the sun. Closer planting during the hot months of the year is recommended to shade the fruits.

If the bacterial wilt organism is present in the soil, bell pepper should not be planted. There is no chemical control or resistant bell pepper variety for this disease.

Harvesting

Bell peppers should be harvested when mature-green. The skin of the mature-green pepper is shiny and waxy. Peppers harvested too young will wilt and shrivel. Stems should be left on the fruits when they are harvested. After the first pepper matures, harvest at three- to four-day intervals. Harvest will last from one to six months or more, depending upon the condition of the plants.

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