



CARING FOR YOUR VEGETABLE PLANTS: PEPPERS

There are two types of peppers: the large-fruited, mild-flavored bell types and the hot varieties. The mild peppers include Bell, Banana, Pimiento and Sweet Cherry, while the hot peppers include Cayenne, Celestial, Large Cherry, Serrano, Tabasco, and Jalapeno. Hot peppers are usually allowed to ripen fully and change colors (except for Jalapenos) and have smaller, longer, thinner and more tapering fruits than sweet peppers. Yields are smaller for hot peppers. Bell peppers, measuring 3 in wide by 4 in long, usually have 3 to 4 lobes and a blocky appearance. They are commonly harvested when green, yet turn red or yellow when fully ripe. About 200 varieties are available.

The cultural and climatic requirements for both types of peppers are the same as those recommended for tomatoes.

Transplanting

Peppers generally have a long growing season. They are a warm-season crop, like tomatoes and eggplants, and will not thrive when temperatures are below 60°F. They will grow slowly during cool periods. However, very little fruit set occurs above 90°F, especially with bell peppers. Some hot peppers are more heat-tolerant. Peppers grow best when daytime temperatures are in the low 80's. Night time temperatures should remain mostly above 55 degrees.

The best scenario is to get peppers transplanted as soon as the weather is warm and settled, so that fruit set occurs when temperatures are between 65°F and 85°F. After the soil has thoroughly warmed in the spring, you can set out transplants to get a head start toward harvest.

Peppers perform best in well-drained, fertile soils with a pH around 6.5, which is very-slightly acid to neutral. Abundant levels of phosphorus and calcium will result in better yields. Bury them a bit deeper than the root ball to encourage additional root growth that will make them sturdier. Tomatoes and peppers will grow



additional roots from the stem that is now underground. This will "anchor" the plant better and it will grow stockier. Immediately water the plants well at the soil level. It's best to do your transplants at early evening so that they are not immediately in full sunlight. Dig a hole for each plant that is a bit larger than the root ball of the plant, spacing plants about 2 feet apart. Hold the plant by the rootball (not the stem) and place in the hole, trying to disturb the roots as little as possible. Fill in the hole with soil, then press firmly around the plant base to form a slight depression or moat around the stem to accumulate water. Water deeply. An application of 1 to 2 cups of diluted fertilizer solution may help each plant as a starter fertilizer. Plastic mulch and row cover may be used to increase warmth.

Watch the transplants closely the first week. If the weather is hot they may need more water. In hot weather, you can provide some afternoon cover.

Watering

Proper watering is very important. Drip irrigation or furrow irrigation on raised beds, instead of using sprinklers, will keep your soils well drained and protect against diseases such as root rot. Keep the root zone moist throughout the growing season. Avoid shallow, frequent watering which will encourage shallow roots. Peppers and eggplants root to about 2 feet deep and plants should not be subject to water stress. Stress during the bloom can cause substantial reduction in fruit set and stress during early fruit growth can induce blossom end rot in peppers. Keep adequate moisture in the deeper soil layers even when plants are small. Deep moisture is harder to replace later in the growing season without over irrigating. A layer of mulch will help retain soil moisture.

Fertilizing

When fertilizing your peppers, look for a fertilizer with more phosphate and potassium than nitrogen. A higher phosphate and potassium number will encourage more fruit production. A lower nitrogen number will help the plant grow, without doing it at the expense of producing fruit. New plants can be side-dressed with fertilizer four weeks after transplanting and again at eight weeks. Once fruit



starts to set, you can side dress monthly with a complete balanced fertilizer to encourage plant growth, but this is often unnecessary. Established plants typically require fertilization only if they show poor vegetative growth, which leaves the pepper pods vulnerable to sunscald.

Harvesting

Harvest fruits of mild peppers when they are green or red-ripe. When allowed to mature on the plant, most varieties turn red and sweeter and increase in vitamin A and C content. Cut, instead of pulling, to avoid breaking branches. Hot peppers that you plan to dry are allowed to ripen on the plant. Hot peppers turn red when ripe; they may then be cut with 1 inch of stem attached, strung on a thread, and hung in a sunny place until dry and brittle. Use a sharp knife for cutting, as the stems are tough.

Pest Management

Thorough information on pest management can be read at: <http://www.ipm.ucanr.edu/PMG/GARDEN/VEGES/peppers.html>.