



Peppers in Your Garden

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Peppers are an extremely versatile vegetable. In some dishes they add a tangy or sweet taste, and in others they add heat and spice.

Peppers come in a variety of shapes and sizes as well as flavors, and are easy to grow in your home garden.

There are over 200 varieties of known bell peppers, and all share the characteristic trait of a round, bell-like appearance. They can be picked and eaten green or left on the vine to turn yellow, orange or red.

In 1912, William Scoville invented the Scoville Heat Scale. This scale is used to determine the “hotness” level of hot peppers. The unit measured is a chemical called capsaicin, which creates the sensation of heat felt in the mouth. The actual location of the chemical is in the membranes and on the flesh surrounding the seeds. This is why if the seed pouch is removed, the pepper loses its heat.

The lowest rated pepper on the scale is the bell pepper, which is a zero, while the numbers for hot peppers run the gamut.

The pepper guide at the end of this pamphlet has a section entitled “1-10 Scale” and is based on the Scoville scale.

GROWING PEPPERS

Pepper seeds need a temperature of at least 70-80F° to sprout as well as bright light. Pepper seedlings deprived of light become weak and spindly.

Transplants are an easy way to start peppers in your garden, and many varieties are available at local nurseries and garden centers.

Prepare your garden ahead of time by adding compost and mixing it in to your garden soil. When compost is added to the vegetable garden each year, it isn’t necessary to add additional fertilizer.

Applying fertilizer during flowering can actually cause flower blossoms and new peppers to drop.

When planting peppers, place sweet pepper transplants 1’ apart, and hot peppers 1 1/2 to 2’ apart. Dig a hole two times as deep as the transplant, and set the root ball (the soil part of the transplant) in the hole. Fill in around the pepper with garden soil, making sure the transplant is level with or just above the ground.

When watered, most transplants have a tendency to sink, so make sure the top of the root ball is level with garden soil. Do not

cover the root ball with additional garden soil.



PEPPER CARE

While transplants are getting started, be sure to keep soil moist. Once established, deep water pepper plants, soaking the root zone to at least 4 feet. Between watering, allow soil to dry slightly, as pepper plant roots need oxygen as well as water to thrive.

Evaluate the type of soil in your garden. If water drains quickly, your soil is most likely a sandy type and will need to be watered more often.

If water has a tendency to “stand” then your soil is mostly likely a clay type. Be careful not to over-water plants in this type of soil. Mix organic matter into the soil to increase drainage.

Soaker hoses and drip irrigation work well for gardens. Their delivery system of a small amount of water over a long period of time enables adequate water to soak the root zone.

When using sprinkler irrigation, be aware that overhead sprinkling can

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encourage the growth of some diseases. Avoid watering in the late evening. Test how long and how often water will need to be applied to soak soil deeply before setting the timer.

When Central Valley temperatures reach 100F°, plants may wilt, even if watered adequately. This is a temporary condition and plants should revive that night or by the next morning. If plants do not revive, this means not enough water is soaking into the root zone. Adjust your watering system to supply additional water.

SETTING FRUIT

Peppers set fruit when temperatures are between 65-80°F. If night time temperatures are above 86°F, fruit will not set. If daytime temperatures rise above 95°F, fruit that has set will drop.

HARVESTING

Bell peppers are green as they develop, but can change color as they ripen depending on their variety. Hot peppers can be picked and used green, or left on the vine to change color, also depending upon the variety.

PEPPER PROBLEMS

Peppers grow slowly during cool periods. Once the weather warms, expect to see new growth.

Peppers are usually free of most problems that plague other crops. In early spring, aphids

can become a nuisance by sucking plant juices. This causes leaf deformation and curling. Check inside the leaves for the presence of this insect. Use an insecticidal soap to control them.

If a pepper plant receives regular irrigation water but appears to be wilting, it may be receiving too much water. As mentioned earlier, the roots of vegetable plants need oxygen as well as water.

Over-watered plants or plants in poorly drained soils are susceptible to root and crown rot diseases. These diseases can be observed inside the root and stem as a brown, discolored tissue. Planting peppers in furrows or on a berm can help prevent the accumulation of standing water.

PEPPER NUTRITION

Green peppers are high in vitamin 'A' and red peppers are high in vitamins 'A' and 'C.' Peppers also contain potassium, calcium and fiber.

PEPPERS & PAIN

The heat sensation caused by hot peppers results from the irritation of pain receptors. People vary in their reaction to peppers. Those who repeatedly consume hot peppers build up a tolerance to the capsaicinoids and can eat hot foods with less of a reaction than those who don't.

CAUTION

Be extra careful when handling hot peppers, as pepper juice can burn skin on contact. If it gets in the eyes it can be very painful. Wear rubber gloves when harvesting and preparing. Clean peppers under running water.

USING THE GUIDE

The guide is broken into two parts, "Hot Peppers" and "Sweet Peppers." It also lists the "Days to Maturity," which is calculated after setting out transplants. The "Remarks" section describes the peppers in more detail.

FURTHER INFO

For more information on how to preserve peppers by pickling, drying and freezing see ANR publication 8004 "Peppers: safe methods to store, preserve and enjoy." It contains many useful tips as well as recipes. This publication can be found at the Cooperative Extension Office in Modesto or online: <http://anrcatalog.ucdavis.edu/pdf/8004.pdf>

The Pepper Guide

Hot Peppers	1-10 Scale	Days to Maturity	Remarks
Anaheim	1	75	Mildly hot pepper used in chile rellenos.
Ancho/Poblano	2/4	70	This pepper is known as “ancho” when dried, “poblano” when fresh. Mildly pungent, heart-shaped peppers.
Cayenne	7	70-73	Long red peppers great for use fresh or dried.
Habañero	9	90-100	Great for salsa or dip. Has a subtle fruit flavor.
Fresno	5	70-75	Added to main dishes when green; when red-ripe ideal for salsa.
Hungarian Wax	5	70	Can be picked yellow, orange or red. Great for grilling.
Jalapeño	4	70	Harvest when green for best flavor.
Serrano	5	75	Small, finger-shaped pepper. Pick red or green.
Tabasco	7	80	Famous for its use in the sauce with its name.
Thai	8	70	Extremely pungent and easy to dry.
Sweet Peppers	0		
Big Bertha		75	Giant, 8” peppers are excellent for salads and stuffing.
California Wonder		75	Large peppers are great for stuffing.
Chocolate		70	Considered the sweetest bell pepper of all.
Golden Bell		62	Great pepper for 1st time gardeners. Crispy and sweet.
Gypsy		58	Extremely productive pepper changes from green to yellow to orange to red.
Red Beauty		68	Bright, red colored peppers have a thick flesh.
Sweet Banana		66	6” long peppers that are sweet with a crisp flesh.
Sweet Italian		70	Thin walled 7” pepper best enjoyed fresh.
Yolo Wonder		75	Block-shaped peppers can be picked green or red.

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