

# Grow Your Own Peppers

**Usually the most frequent questions we get from spring through early fall concern growing tomatoes but the same questions will also appear with respect to their close relatives the peppers. Both tomatoes & peppers (and potato or nightshade) are in the same family; the Solanaceae.**

## CLIMATE AND SOIL

Peppers like a nice warm area in full sun, and need at least 8 hours of sunlight a day, or they get spindly and produce little mature fruit. They like soil that has a pH of 5.5 - 6.8, is fertile, deep, well-drained, and rich in organic matter. If the soil stays soggy where you want to plant, build a raised bed. You want soil that will hold water as evenly as possible because uneven uptake of water can cause all kinds of problems with peppers including: flower drop, fruit splitting and blossom-end rot. To help give your peppers the best-suited environment till in a good amount of compost or organic matter. A general guide would be 7.5 cm of organic matter into the top 15 cm of soil. Lastly, many pepper diseases reside in the soil and affect tomatoes, eggplants, potatoes, and other crops in the nightshade (Solanaceae) family. To break the disease cycle, and to help get rid of the disease-causing organisms, rotate peppers with unrelated crops, such as corn, beans or lettuce.

## PLANTING

Peppers require full sun, at least 6 to 8 hours of hot sun per day for best production & growth. Select a sunny location where water does not stand in puddles after a heavy rain. Bring down the acidity of your soil by adding dolomite lime in the spring. This will help prevent end rot. Also be certain that peppers or their relatives (Potatoes, Eggplants, Petunias, Nicotiana) have not grown there for at least 1 year. This is called "rotation planting" & is important in the control of diseases such as blight.

## SPACING

When planting, space your peppers 30-40cm apart if plants are to be staked or grown in tomato cages. If you plan to grow your peppers without support, you will need to leave 100 - 125cm between each plant.

## GROWING IN CONTAINERS

Peppers lend themselves well to growing in pots, & using sterilized potting soil, such as **GARDENWORKS™** Planter Box Mix is an excellent way to guarantee that blight will not be present in your soil. 5-gallon black nursery pots are the perfect size for one tomato plant, & heat up in the sun providing root warmth. Dig in a few handfuls of tomato food such as **GARDENWORKS™** 10-15-20. At the same time, dig in a few handfuls of dolomite lime - this will bring down the acidity of the soil & help prevent blossom end rot.

## WATERING

Keep plants well watered all season, especially during dry weather. Use a soft spray so as not to disturb the roots, and keep the foliage dry as much as possible! Many gardeners find that our summers are plenty rainy enough for peppers, in fact too much so, & prefer to grow their peppers under the cover of a balcony or overhang. This allows total control over watering, which is an important step in preventing blight.

## FERTILIZING

Once growing, sprinkle slow-release fertilizer around your peppers once every 6 weeks. This could take the form of an organic fertilizer such as **GARDENWORKS™** Liquid Organic Tomato & Vegetable Food 3-1-4.

## HARVESTING

The best tasting peppers ripen on the vine, that is a fact! Leave peppers on the vine until fully ripe. To pick, gently pull the fruit off the vine being careful not to bruise it. Hold the vine in one hand and pull on the pepper with the other. When heavy frost is predicted, pick all fruits, even those at the green-white stage. Allow them to ripen at room temperature or slightly cooler. Wrap each individually in tissue or newspaper, & place them in shallow boxes, stem side down. Check the peppers frequently & remove any that have bad spots. Store them in the refrigerator after they reach full colour.

## HOW HOT IS IT

The usual rule is the SMALLER the pepper the HOTTER it is! It is measured using the Scoville scale. The HIGHER the number the HOTTER the pepper. It is the amount of litres of water needed to dilute the "HOTNESS" so it does not burn any more. So a reading of 5000 needs 5000L of water to dilute the "PURE HOTNESS" to non burning state.

## WHY ARE PEPPERS HOT?

Some plants do not want to get eaten. They may grow in places difficult to approach, they may look unappetizing, or they may evolve vile smells. Some are fuzzy, hairy or sticky, others evolve thorns. In nature ever more bizzare adaptations by plants are used to deter their consumption by animals. One of the most efficient ways for a plant to deter a herbivore is to make something that will give the plant bad taste, induce vomiting or even pain or may be toxic enough to kill the animal.

But there are other kinds of co-evolution between plants and herbivores. Some plants need to have a part eaten – usually the seed – so they can propagate themselves. So, they evolved fruits. The seeds are enveloped in meaty, juicy, tasty packages of pure energy. Those fruits often evolve a sweet smell that can be detected from a distance. And the fruits are often advertised with bright colors – red, orange, yellow, green or purple: "Here I am! Here I am! Please eat me!"

So, the hot peppers are a real evolutionary conundrum. On one hand, they are boldly coloured and sweet-smelling fruits – obvious sign of advertising to herbivores. On the other hand, once bitten into, they are far too hot and spicy to be a pleasant experience to the animal. So, what gives? What is hot in peppers is capsaicin, a chemical that elicits a sensation of pain when it binds to the tastebuds on the tongue. As it happens, all mammals have capsaicin receptors, but it was found, relatively recently, that birds do not. So mammals avoid hot peppers but the birds gorge on them!

The "antidote" for too much pepper-capsaicin... ice cream! Not only does it offer immediate relief from the feeling of heat, the calcium in the ice cream binds to the receptor that's stimulated by the capsaicin and helps stop the pain reaction. Some restaurants that offer super spicy food have creamsicles on hand for folks that think they can handle the super-hot stuff, but then end up realizing the error of their macho ways.

Ironic, isn't it, that the pepper's "defence" against being eaten by man has turned into an advantage. We now cultivate these plants in far greater numbers than they would appear in the wild.

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