

Pruning tomato plants: how and when to do it

Pruning tomato plants can maximize the number, size, and flavor of your tomatoes. Warm up your pinching fingers and your garden clippers and find out how a little trim can mean bigger, tastier fruit.

Why tomato plants grow side stems and suckers



Tomatoes are energy factories fueled by sunlight. During their first several weeks in the garden before blossoms emerge, tomato plants put their energy into growing new leaves. Soon, extra branches emerge to hold more leaves.

A side stem grows directly off the main stem. Suckers are new branches that grow out of the tomato's main stem, just above a leaf branch or side stem (in the "crotch").

As tomato plants get bigger, their leaves produce even more energy. That's why they continue to put out stems and suckers throughout the season. Suckers that emerge in mid- to late season are nearly always weak, produce inferior fruit, and drain away energy from the main stem. Also, suckers near the bottom of the plant are stronger than those near the top because the plant's sugar concentration decreases up the height of the plant.

Why pinch off or prune suckers?



There are several good reasons pruning tomato suckers can help your plants.

- **Earlier production.** If you let a sucker grow, it will become a full-blown stem and develop its own blossoms. Extra stems divert energy from the main plant's fruit production. When you prune suckers, plants invest less energy in producing extra branches and leaves and more energy in fruit, producing an earlier crop.
- **Larger, healthier fruit.** Overgrowth means leaves get less sunlight. Un-pruned, unstaked tomato plants get weighed down. When you prune suckers, more leaves are exposed to sunlight and can make energy for the plant. Plants direct energy to existing branches and blossoms, producing larger fruit.
- **Disease prevention.** If unsupported, un-pruned tomato plants spread into a horizontal position on the ground. Water splashes up on leaves, spreading fungi and bacteria. Plants become more susceptible to diseases like leaf spot and tomato rot. When you prune suckers, leaves stay drier and diseases don't spread as easily.





How to pinch off a sucker: “simple pruning”

Pruning tomato sucker shoots when they are young and tender is better than waiting until the sucker is mature and strong. Carefully grasp the base of the sucker between the thumb and forefinger. Pinch it or bend the sucker back and forth gently until it snaps. This technique is called “simple pruning.”

Use your fingers to pinch young suckers rather than clippers or a knife. Pinched wounds will heal quickly and are less disease-prone on young plants. When stems become older and tougher you may need to use garden clippers rather than fingers on older plants. Disinfect your tool to prevent an infection to the tomato plant.

Pruning tomato side stems

To grow the strongest tomato plant possible, prune side stems below the first fruit cluster.

When to prune the lower leaves

As a tomato plant matures, its lower leaves begin to yellow. Pinch or prune yellowed leaves to prevent disease, improve the tomato plant’s appearance, and help the plant keep its energy focused on fruit production.

Pruning cautions

Don’t over prune in hot climates. If you grow tomatoes in an area that is hot, be careful not to over prune. Too much sunlight or steady, intense sunlight can lead tomatoes to develop sunscald.

Go easy on pruning determinate varieties. Determinate tomatoes set the bulk of their crop at one time. Each plant will produce a limited number of fruit before ceasing production. Avoid pruning tomato determinate varieties or pinch back only suckers that appear below the first flower cluster, or you will reduce your yield. Indeterminates, on the

other hand, will continue to grow and set fruit until frost. Pruning tomato suckers on indeterminates helps produce healthier, tastier, more abundant fruit.

Pruning and staking go hand in hand

When a tomato plant is nicely pruned and staked well, its leaf tips are open to the sun and are able to conduct photosynthesis without excess stress. Because the plant doesn't have to work extra hard to make sugar, energy produced by the leaves invested in developing strong, flavorful, healthy tomatoes.

Is pruning absolutely necessary?

Pruning tomato plants isn't required. You may choose not to prune your tomatoes and still have an acceptable crop. Tomatoes require only sun, water, and nutrients to grow. Pruning enhances production – more tomatoes, bigger tomatoes, and more flavorful tomatoes.

Pruning Tomato Plants: Different Methods to Use

Pruning tomato plants helps them produce earlier in the season. Tomatoes can be stronger, bigger, and healthier. When tomato plants are both pruned and staked, their chances of contracting diseases are reduced because leaves and stems stay drier and allow for more circulation.

Simple pruning means pinching young suckers between a main stem and a side stem. There are other ways to pruning tomato plants successfully, too. Try these.

How to pinch off a sucker: "Missouri pruning"

One way to prune suckers, other than simple pruning, is to pinch them off at the tips rather than the base of the shoot. By leaving a few leaves, you allow the plant to produce more energy for ripening tomatoes, plus you give shade to ripening fruit. This technique is called "Missouri pruning."

Missouri pruning reduces shock to the plant. It's especially helpful for those in hot, sunny climates or when suckers have gotten large. The downside of Missouri pruning is that remaining suckers will grow new suckers. Carefully monitor plants when you prune sucker tips only.

What is “root pruning” and when should you do it?



Some gardeners like to strengthen tomato plants is by pruning the roots. Cutting the roots interrupts the plant’s growth cycle and stresses it enough to force it to mature more than it would otherwise.

A good time to root prune is just as the first few clusters of tomatoes ripen. Insert a long kitchen knife, pitchfork, or a spade a few inches from the base of the plant, penetrating the soil 8-10 inches. Make your cut just halfway around the plant.

When to prune the top of the plant



[Image: Fresh Bites Daily](#)

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At the end of the season, tomatoes on the vine have only a short time to ripen. You can help plants maximize this time.

About a month before the last frost, clip off the top of the plant's terminal shoot above the last blossom. (Make sure you use a high-quality set of garden pruners.) This technique is called "topping the plant." It allows the greatest amount of nutrients to be directed to the fruit to give you the best production at the end of your crop. When you top your plant, you'll have a better chance of a final harvest of red tomatoes rather than green.

Staking Tomatoes Gives You a Healthier, More Productive Crop

It's true – staking tomatoes takes a little bit of work.

But it has distinct advantages that help you have a healthier, bigger crop.

Plus, some types of tomato staking are taken care of once, early in the season – and then you're done.

Tomatoes grow vigorously. They continually send up new stems, branches, and blossoms.

Indeterminate tomato varieties (those which keep growing and producing fruit all season until frost) are most in need of staking.

Determinate tomatoes (those which stop growing at a certain size and set their fruit at one time) have a more bushy habit, and may not need to be staked.

Advantages to staking tomatoes



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- **Space.** Staked tomatoes grow upright, rather than sprawled, which saves garden space.

- **Bigger fruit.** Staking allows more light to blossoms and leaves. In addition, some gardeners prune staked plants. The plant invests the extra energy into the fruit.
- **Earlier fruit.** Staked tomatoes have more leaves open to the sun, which allows the plant to manufacture more energy sooner. Blossoms have energy they need to set fruit earlier.
- **Healthier fruit.** Staking keeps tomatoes off the ground. That makes it more difficult for pests to attack plants and keeps fruit from rotting as easily.
- **Better air circulation.** By staking, you allow air to move in and around branches, which keeps diseases from spreading.
- **Accessibility.** Staked tomatoes are easier to pick.

Disadvantages to staking tomatoes

- **Time.** Staking, tying, training, caging, and pruning are labor-intensive.
- **Cost.** Initially, stakes, cages, and ties are added expenses, although they can be used over and over each year.
- **Mulch.** Staked tomatoes grow upright. Exposed ground retains water best when mulched.
- **Water.** Staked tomatoes are erect and more vulnerable to wind, drying, and sun scald. They need more frequent watering.

Ways to stake tomatoes

- **Tomato stakes:** posts or poles inserted next to tomato plant to which branches are tied for support.
- **Tomato cages:** pre-made or formed wire mesh cylinders that encircle and support tomato plants.
- **Tomato trellises:** wires or rope dropped from a line between posts which provide support.
- **Tomato spirals:** heavy gauge steel wire that provides support through an upward twisted coil.

A water-soaked spot at the blossom end of tomato fruits is the classic symptom of blossom-end rot. This relatively common garden problem is not a disease, but rather a physiological disorder caused by a calcium imbalance within the plant. It can occur in pepper, squash, cucumber, and melon fruits as well as tomatoes.

Blossom-end rot is most common when the growing season starts out wet and then becomes dry when fruit is setting. Damage first appears when fruits are approximately half their full size. The water-soaked areas enlarge and turn dark brown and leathery. These areas will eventually begin to rot, so the fruit should be picked and discarded.

Several factors can limit a plant's ability to absorb enough calcium for proper development. These include: fluctuations in soil moisture (too wet or too dry), an excess of nitrogen in the soil, root damage due to cultivation, soil pH that's either too high or too low, cold soil and soil high in salts.

Prevention and Control

- Maintain consistent levels of moisture in the soil throughout the growing season. When the weather is dry, water thoroughly once or twice each week to moisten the soil to a depth of at least 6 inches.
- Prevent calcium deficiency with [Tomato Rot Stop](#).
- In cold climates, allow soil to warm before planting; cold soils limit nutrient uptake.
- Maintain soil pH at or near 6.5.
- Use fertilizers that are low in nitrogen and high in phosphorous, such as our [GSC Organic Tomato Fertilizer](#).
- Use watering cones ([Aqua Cones](#)) to get water down into the root zone.
- Apply mulch, such as [Red Tomato Mulch](#), to minimize evaporation and help maintain consistent soil moisture.
- Keep garden records: You may discover that some crop varieties are more susceptible to blossom-end rot than others.