
TOMATO CULTURE & CARE

Tomatoes are the home gardener's favorite vegetable, primarily because the quality, flavor, and variety of home-grown tomatoes far surpass that which are available in the supermarket. Fortunately, they are not hard to grow, once a few basics are understood.

TYPES

Everyone has their own opinions about favorite varieties, and much of it has to do with use. Some varieties are good slicers for sandwiches or burgers, others are great for canning or drying, and others are tasty in salads. Early types will produce a harvest in as little as 55 days, while others can take 80 days or longer. Every gardener agrees, though, that we want our tomatoes as early in the season as possible. To stretch the tomato season, it is advantageous to plant a variety of types that will produce a harvest over an extended period of time, by combining early, mid-season and later varieties.

TWO DIFFERENT GROWTH HABITS

DETERMINATE tomatoes grow on shorter (1-3 foot), bushy plants, requiring less room and staking. Determinate plants are ideal for containers or for the small garden. The determinate tomato sets fruit all at the same time, making it perfect for planning large batches of sauce or salsa for canning or freezing. Determinate plants should be spaced on 2- to 3-foot centers.

INDETERMINATE tomatoes, on the other hand, have long branches (6 feet or more), requiring sturdy supports to keep them off the ground. They should be planted with more room, 3 to 4 feet apart; if you plan to let them sprawl without supports, give them at least 4 feet. The indeterminate tomato will keep growing and flowering until stopped by frost (here in the Northwest, around October 15th), so you are assured a long harvest. However, here in Oregon, it is a good idea to pinch the tips of the indeterminate vines in late August or early September, to encourage the plants to ripen the tomatoes already on the vine, and discourage further flowering.

PLANTING

Unless you are starting your seedlings in a greenhouse, we don't advise planting tomato seedlings in the ground too soon, despite most gardeners' eagerness to the contrary. Tomatoes are a warm weather crop, and do not benefit from wet, cold ground. There are, however, some techniques for getting a jump-start on the season, such as Wall-o-Water, which are plastic water-filled structures that can be placed around young plants to absorb the sun's heat during the day, and give it off at night. Black plastic mulch will also absorb heat, warming up the soil. Floating row covers or cold frames can also be beneficial, although due to the tomato's tender growing tips, the row covers should be used with a hoop or stake. These types of techniques will allow you to plant several weeks earlier.

When the danger of frost has passed and the soil has warmed, usually after May 15th, it is time to prepare your soil and select your plants. Tomatoes have large root systems, and benefit from deeply cultivated beds. Place in the sunniest spot in your garden – the general rule of thumb is, tomatoes need at least eight hours of direct sunshine. Pinch off the bottom two pairs of branches from the seedling, and bury the seedling extra deep. This will encourage extra rooting along the buried stem, creating a healthier, more vigorous plant. It is a good idea to install your support system at planting time, so as not to disturb the root system later. Commercially available wire cages are an easy way to provide support for large tomatoes, but sturdy cedar stakes or fencing work as well. A-frame structures and tee pees made of wood or heavy bamboo are also successful. As the plant grows, it is important to carefully tie it with soft garden string, to support the growing heavy fruit.

FEEDING

Tomatoes are big feeders. It is important to give them a blended organic starter fertilizer at planting time and also periodically throughout the growing season with a high phosphate fertilizer. As a preventive measure

against blossom end rot make sure your soil pH is correct, if it is too acidic the plant cannot access the calcium it needs in the soil. To raise the pH of the soil it is best to add lime the fall before the planting season. This is an easy and convenient way to make sure your tomatoes can access the calcium they need during the growing season.

COMPANION PLANTS

Some plants benefit from close proximity to other plants, for disease resistance and in attracting beneficial insects – this is called companion planting. Basil is a favorite partner with tomatoes, both in cooking and in the garden. Other aromatic herbs are beneficial, such as dill and fennel. Flowers such as cosmos, Shasta daisies, marigolds, and sunflowers also work well near tomato cages.

PROBLEMS AND SOLUTIONS

Black area on bottom of fruit - This is called blossom end rot, and occurs when the plant is having a hard time accessing calcium, either from too acidic soil or when moisture applications fluctuate too greatly, - it is important to be consistent with watering, not allowing it to get very dry and then soaking it heavily. Once a fruit has blossom end rot, it can't be fixed for that piece of fruit; however, with more consistent watering, later fruits probably won't develop the problem. Adding lime to the soil, mix into the top layer and water well will help raise the soil pH.

Blossom drop- It's usually caused by dry soil and dry winds, but also may be caused by a sudden cold spell, heavy rain or too much nitrogen. Usually not all blossoms will fall off, and another set of flowers will appear.

Early and late blight: These are fungal diseases caused by warm, wet weather and characterized by irregular, greenish water-soaked spots on lower leaves and stems. The spots rapidly enlarge to form purplish black lesions, which girdle the stems and leaves, killing the foliage. Avoid overhead watering, give plants plenty of room, stake and prune to keep air circulating and plants dry. Remove diseased leaves.

Leaf roll - A physiological problem that is most often the result of heavy pruning or root injury. Some tomato cultivars display leaf rolling as a normal growth habit. Plants may lose leaves but will recover.

Slow-ripening fruit -Temperatures above 85 degrees can slow the ripening of tomatoes, which ripen quickest at 70 degrees to 75 degrees. Fruit just showing color changes can be picked and stored at room temperature to ripen.

HARVESTING

Flavor is best when harvested when full of color and very juicy. Keep picking to encourage further ripening. In the fall, when frost is predicted, harvest all full-sized fruit, both green and partly ripe. Store in a cool dark place and check often.