

TOMATO CULTURE AND CARE

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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. Patio tomatoes are an example of determinate.

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. Promising new university research is showing that mulching with red plastic can coax large yields from tomato and pepper plants. It has to do with the light spectrum of the reflected light back onto the plant. We are watching this research to see if it proves advantageous; in the meantime, it might be something to try.

When the danger of frost is 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 fertilizer, such as E.B. Stone, at planting time (about ¼ cup in each hole), and also periodically throughout the growing season (side-dress with ¼ cup once a month until fruit set). Foliar-feeding with fish emulsion or compost tea (spraying a solution onto the leaves – follow directions for dilution on package) is an alternative and may show quick results. As a preventive measure against blossom end rot, add a handful of lime to each hole at planting time. This is an easy and convenient way to make sure your tomatoes have the calcium they need.

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 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 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. Add lime to the soil, mix into the top layer and water well.

Yellow leaves, slow growth – This might be a nitrogen deficiency. Spraying with a fish emulsion solution or compost tea should help. Remove and destroy yellowed leaves.

Failure to set fruit – If the plant looks healthy but has not set fruit, hormone spray on blossoms might help. Tomatoes sometimes fail to set fruit if night temperatures drop below 55 degrees, so the hormone spray can help speed up the process in the early part of the season.

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.