

Tomatoes: Ten Tricks for Growing Better Tomatoes

Tomatoes are the most popular garden vegetable. People grow tomatoes to obtain good taste, save money and enjoy gardening. Some even enter contests and take pride in a bumper crop. Here are some ideas to help grow the best tomatoes you can.

- 1. Choose the sunniest site available.** Tomatoes require lots of light, so full sun (at least 6 to 8 hrs or direct sunlight) is important. You can grow them in partial sun, but yields and flavor will not be as good.
- 2. Build good soil.** Add compost and other sources of organic matter. This is the key to soil quality. Organic matter supplies nutrients, increases moisture holding capacity, improves tilth, encourages diversity of soil life and can reduce plant disease. Compost makes a good mulch for tomatoes.
- 3. Use a balanced fertilizer program.** First of all, organic matter can supply much, and sometimes all, of the nutrient needs of tomatoes. Don't over fertilize. Tomatoes are relatively heavy feeders, but excess fertility can reduce yield and cause other problems such as blossom end rot. Look at your plants. Leaves should be green without any hint of yellowing, but a very dark and almost bluish green color indicates excess nitrogen. For good yield and fruit quality, tomatoes need an ample supply of potassium (potash) which can be supplied with fertilizer, wood ashes and organic matter.
- 4. Maintain proper soil pH.** This is important for optimum nutrient availability and health of many beneficial soil organisms. Lime is used to raise soil pH (reduce acidity). It also supplies calcium and magnesium. However, most limestone sold in Massachusetts is dolomite, which is high in magnesium. Repeated use of dolomitic lime, results in soils with high in magnesium but low in calcium. If you can find calcite lime, use it about every other time you apply lime. Another way to supply calcium is to use gypsum in addition to dolomitic lime.
- 5. The only way to be sure of what your garden needs for nutrients and pH is to **have your soil tested**** every two or three years. The idea is to maintain nutrients at *high* (optimum) levels; potassium and calcium should be at the upper end of this range. If you just add fertilizer or other amendment, you may end up with nutrient excesses or imbalances. You can have a complete soil test done at the UMass Soil testing Lab; information on costs and how to take a sample are available online at <http://www.umass.edu/soiltest>. Recommendations for lime and fertilizer will be provided for the crops you list.

6. Choose flavorful varieties. Flavor is an individual preference, but most gardeners prefer varieties developed for the Northeast. You probably will not be happy with the hard, bland shipping varieties. Try some new varieties every year to see what you like the most. Heirloom varieties offer a lot of interesting possibilities. If you haven't already tried some, I suggest you do. One disadvantage of heirlooms is that they don't usually have disease resistance. To avoid *Verticillium* or *Fusarium* wilt, be sure to plant them in soil that has not had tomatoes, peppers, potatoes, eggplant, brambles or strawberries for a few years.

7. Start with good transplants. Buy plants that are stocky with a thick stem. They should be about as wide as they are tall. Tall, spindly plants are not a good choice. They should have a good green color and show no sign of disease or insect problems. Actively growing plants are the best choice whereas hardened plants may take a while to start growing again. Ideally, choose a large plant (four inch pot) that is actively growing, but generally it's better to choose a small, actively growing plant than a large hardened plant that has stopped growing.

8. Use good watering techniques. Avoid dry-wet cycles. Water evenly as required to maintain ample soil moisture, but don't over do it. Over-watering leaches nutrients out of the root zone, damages roots and encourages disease. Dig down a few inches and grab a handful of soil. It should be moist enough to form a ball that does not crumble easily, but should not be dripping wet. When watering, try to keep the foliage dry. Soaker hoses and drip irrigation work well for this. If you have patience, use a hand held hose to wet the soil without wetting the foliage. If you do use a sprinkler, water in the morning on a sunny day so the foliage will dry quickly. Mulching helps conserve soil moisture. Plastic mulch works especially well for this. Black plastic helps control weeds and red mulch has improved tomato yield for many growers.

9. Use an appropriate growing system. Staking or trellising systems require that you prune the plants to a single stem. Indeterminate varieties are best suited to these methods. Determinate varieties are more bushy and not suited to pruning to a single stem. They can be grown on the ground, but also in cages or the basket weave system to keep the fruit off the soil. Plant tags, point of sale information or seed catalogs should indicate the growth habit of each variety.

10. Let the fruit ripen on the vine. Tomatoes will ripen if they are picked after they start to turn pink. If picked early and brought inside to ripen, they will taste almost as good as if they ripened on the vine – but not quite. However, temperature is important. When outdoor night temperatures become cool (below 60°F) in late summer and fall, tomatoes will taste better if picked early and ripened at room temperature. They do not need to be on a window sill.

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