# GROW GREAT TOMATOES

From reliable hybrids to old fashioned heirlooms, tomatoes are one of the most popular plants in the vegetable garden today. Surprisingly, they are not that difficult to grow, but to get great tomatoes, there are a few guidelines to follow.

**Site and soil:**
Tomatoes need sun to grow properly. No less than 6 hours is important for the plant to grow fruit, better yet, they should receive 8-10 hours to be very productive.

Tomatoes prefer a well drained, loamy soil amended with some kind of rich compost. Be careful of using "fresh" manure – the plant roots could be damaged, opt for composted manures instead. If tomatoes are grown in containers, add some moisture holding crystals to a well drained, compost based planting mix. When using plastic mulch, it is a good idea to lay it down a few days ahead of the time of planting to warm up the soil. Make sure the soil has plenty of moisture before laying the plastic and if using a drip watering system, put that down under the plastic.

Check the soil pH; it should be between 6.3 and 6.8 so that the fertilizer and other micronutrients are readily available for the plants when they are needed. Maintaining the pH also helps the soil microbes do a better job of converting organic materials to food for themselves and thus for the plants. Apply dolomitic limestone according to soil test results or package directions. If the planting bed is new, a soil test is recommended.

Tomato vines are usually described as indeterminate or determinate. Indeterminate vines will continue to grow until killed by frost in the fall and will produce fruit until that time as well. Determinate vines slow growth at a certain height and produce a concentrated set of fruit, usually over a two week period. These types are good for small spaces or containers.

**How and When to Plant:**
Tomatoes are sensitive to cold soil and air temperatures. Soil temperatures below 50˚F will slow down plant growth considerably. Tomatoes will not set flowers until the night time air temperatures are above 55-60˚F or so. If the season is cold, there are many products on the market to keep plants in a more desirable temperature range such as Wall 'O' Water, or row covers.

Once the soil is prepared, it is time to plant. Use **hardened off** transplants that are 6-8 weeks old; they grow and adapt quickly. Oversized plants should be avoided since they can suffer

from transplant shock and growth can be set back. Tomatoes do not mind being planted deep since they produce roots along the buried stem. The plants can be set so that just the top leaves show. This will produce a well anchored plant. Add a few teaspoons of a starter fertilizer to the planting hole and mix with the soil before setting the plant or water it in with a diluted solution of liquid feed to reduce transplant shock and to boost the plant. A good time to transplant is in the late afternoon so that the plant can 'recover' overnight.
If the tomatoes are going to be staked or trellised, plan to put a system in place at the time of planting or very soon after so the root system is not damaged. Staking and trellising keeps the plants off the ground with the result being more harvestable fruit. Tomatoes benefit from the addition of mulch. Mulch maintains even soil moisture, eliminates weed competition, and aids in disease control.

**Fertility:**
Proper tomato fertility is a key factor in productive plants and bountiful, ripe red fruit, and aids in insect and disease resistance. Fertilizer formulations for tomatoes are higher in phosphorous and potassium and have less nitrogen. Fertilizer applications and timing of these applications are important. Using a slow release fertilizer as a pre-plant or at the time of planting gets the plant off to a good start. Applying other applications at bloom and fruit set with subsequent monthly or bi-monthly applications keep the plants healthy and productive throughout the growing season. Tomatoes respond well to foliar applications of fish/seaweed combinations or compost tea after fruit set and throughout the growing season.

**Water:**
Proper soil moisture is a crucial factor for tomatoes. Adequate moisture helps the plants obtain nutrients when they are needed as well as preventing blossom end rot and other micronutrient deficiencies. Using mulch and a drip irrigation system is a good way to provide moisture directly to the root zone. Overhead watering is discouraged since that practice encourages disease problems. Watering early in the day rather than late in the day also reduces disease issues.

**Insects and Diseases:**
Insects and diseases are a constant threat to tomatoes. Keeping the plants healthy and removing any diseased plant parts when spotted can keep disease pressure low. Monitor the plants frequently for insects and signs of disease. It is a good idea to become familiar with what diseases and insects are specific to tomatoes. This helps when determining what control will be used and as to when they should be applied. Begin to look for signs of disease during periods of rain and high humidity and for insects when the weather warms up.

These growing tips will surely help with the journey to a bumper crop of delicious tomatoes!