

If this is the year for you to grow terrific tomatoes, follow these tips:
Choose suitable varieties. Valley weather is most noted for its hot, dry summers. Good choices for this climate include Ace, Ace 55, Better Boy, Burpee VF Hybrid Lemon Boy and Early Girl (all main season tomatoes); Beefmaster, Big Beef, Supersteak and Whopper (big-fruit varieties); Juliet, Roma VF and San Marzano (paste tomatoes); and, Patio Hybrid, Sweet 100, Sweet Million, Sun Gold and Sun Sugar (small-fruit varieties). All of these varieties were taste test favorites, in trials conducted by the Master Gardeners of Sacramento County since 1999. Catalog seed sources include the Tomato Growers Supply Company (www.tomatogrowers.com) and Totally Tomatoes (www.totallytomato.com). Among the heirloom tomato varieties that do well here include Brandywine, Black Krim, Mortgage Lifter, Dr. Wyche’s Yellow, Marianna’s Peace, Arkansas Traveler, German Johnson and Giant Belgium. For containers, choose determinate varieties such as

Using home-saved tomato seeds. If you want to save seeds of a particular tomato variety, remember that many varieties are hybrids; they may not necessarily come back with the same traits as the tomato you enjoyed last season. Open pollinated or heirloom tomato seeds are fine for saving, as long as they are grown at least 30 feet away from any other varieties. For best results: save the seeds from tomatoes that are overly ripe; rinse off as much of the flesh and protective gelatinous coating from the seeds as is possible. Then, soak the seeds in a jar of water for a couple of days to remove the rest of the coating. The seeds will sink to the bottom, the gel will float. Discard the gel, remove the seeds and let dry on a paper towel. Then, store in an airtight container in a cool, dry location.

Start seeds early. Late February through early March is the time for starting tomato seeds. This will allow 8 weeks for the plants to get off to a good start in a warm, sunny place, such as a south or west facing window. It usually takes 7-14 days to germinate tomato seeds. To test for viable seed that you've been saving: moisten a coffee filter, and place a few seeds in the filter, with space between the seeds. Place the filter in an old yogurt container, cover it, and place in an area out of direct heat. Check every few days to see if seeds have sprouted.

Give seeds a healthy start. Use a light, quick-draining potting mix. Commercial seed-starting potting mixes are available; or, mix your own, using 4 parts compost, 2 parts peat moss, and 1 part each of vermiculite and perlite. Any small container with drainage is OK for starting tomato seeds. Fill containers about $3 / 4$ to the top with the potting mix. Water, let drain. Plant seeds shallow, no deeper than $1 / 4$ of an inch. To hasten germination, use a heating pad designed for seeds, such as a propagation mat. This will warm the soil to 70-75 degrees, which tomatoes need to germinate. Keep the soil mix moist. To prevent emerging seedlings from bending too much toward the sunny window, rotate the pots a quarter turn each day. If you are using grow lights, position the seedlings about 6 inches from the light source; keep the lights on 15-18 hours a day. Air circulation from a nearby fan, run a few hours a day, will help strengthen the young tomato plants.

Movin' on up. When two or three sets of true leaves develop on the tomato seedling, you can transplant it to a bigger pot. When transplanting to a bigger pot (preferably a 4-6 inch pot, but no larger than a one gallon container), prepare the new pot the same as before; or, use a regular soil mix. Place the tomato seedling, with as much of the original soil as possible to avoid disturbing the roots, into a $1 / 3$ to $1 / 2$ filled pot. Then, add moistened soil mix all along the stem, up to the bottom set of leaves. If you are growing tomato seedlings in a flat, thin them out so that there are six inches between plants. This will lessen the chance of root entanglement and damping off, a fungus disease that kills young seedlings.

Timing is everything. Acclimate any indoor-grown tomato seedlings slowly to their new outdoor home; this lessens the shock to the plant, allowing it to grow at a quicker pace. About 10 days before setting out into its permanent garden home, place out during the day in a shady or semi-shady location; bring plants in at night.

Mid-Spring is Tomato Planting Time. Plant tomato transplants when the soil has warmed enough to keep the plant actively growing. Around here, late April or early May is the optimum time to set tomato plants outdoors, unprotected, in a garden area that gets full sun. If you can't wait that long, protect those tender young plants with hot caps, row covers or "Walls of Water" - plastic, cone shaped enclosures that are filled with water which collect heat during the day, slowly releasing it at night.

Plant deeply. Place the tomato deep into the soil, clipping off the lower leaves and leaving only the top leaves and branches exposed. This will cause more roots to develop along the stem, speeding development.

Stake, stake, stake. Supported tomato plants produce more fruit and are subject to fewer problems. One of the best tomato support systems that can be used repeatedly for a number of years include "cages" made from concrete reinforcement wire. A 50 -foot roll of this six-inch mesh, five feet-high wire can be cut to make about a half dozen tomato cages, each with a diameter of two to three feet. The six inch mesh allows for easy access at picking time. Stake and tie the cages to the ground, with one stake on either side of the cage.

Water carefully. Tomato plants like water on a regular basis, deeply, once or twice a week. Soaker hoses or drip irrigation work best. Deep watering reduces plant stress, one of the causes for that mushy, black or brown discoloration on the bottom of tomatoes, called blossom end rot.

Fertilize regularly, but sparingly. Lightly feed the plants every other week with a fertilizer intended for vegetables. Organic vegetable fertilizers are excellent for safely feeding tomato plants without burning them.

Pick, pick, pick. Don't let the fruit overripe on the vine; pick when fully firm and red. Hand picking is also the most potent control for mature tomato worms. If using chemical products, make sure the label states that hornworms are controlled by the product. Also available for hornworm control: a bacterial insecticide containing Bacillus thuringiensis (Bt). If you spot a tomato horn worm with a patch of white on its back, let it be. Those patches of white are the eggs of the parasitic trichogramma wasp that eventually will do the dirty work, eating away at the host tomato worm.

## The Tomato Dictionary.

Determinate: Tomato plants whose vines make little or no growth once fruit is set. Most of the fruit develops at the same time. A desirable trait for those wishing to can or process their crop. Indeterminate: Vines keep producing new shoots, blossoms and fruit throughout the growing season. V: A tomato variety with this letter listed after the name is resistant or tolerant to verticillium wilt. F: Tolerance to fusarium wilt. N: Nematode resistance; T: resistance to tobacco mosaic virus.

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