General Tips for Growing Tomatoes

	Tomatoes grow best in sunny, open location. If previous years' tomatoes had disease, plant in a new location for 3 or more years.	
Soil	Plant in well-drained, neutral to slightly acid soil. Usually a generous application of compost mixed in planting area is enough Apply 3 to 4 inches of mulch after planting.	
Spacing	Indeterminate varieties (continue to produce until freeze) should be supported by stakes or a cage and space plants $2' - 3'$ apart. Determinate varieties (all fruit ripens about the same time) can be left to ramble and space $3' - 4'$ apart.	
Planting	Wait until all danger of frost has passed before moving seedlings outside or prepare to protect plants from the cold. Make planting holes extra deep, then carefully pinch off the lowest sets of leaves. Set seedling deep enough so that the lowest remaining leaves are just above soil level. If desired, start tomatoes from seeds indoors 6 – 8 weeks before last spring frost date. Harden off before transplanting outside.	
Pruning and Staking	For indeterminate varieties, pruning off side shoots to control vine size will result in larger, earlier-ripening tomatoes. Staking keeps the tomatoes off the ground where soil rot and pest damage could occur. Begin staking/supporting plants when they are still young. Pinch off growth above the cage so top of plant doesn't fall over and shade out lower portion.	
Watering	Water deeply about twice a week in early part of season (tomatoes are deep-rooted) but keep foliage dry to prevent disease. Reduce water by as much as 50% as fruit ripens to reduce cracking and intensify flavor. To check moisture, insert your finger 3" – 4" into the soil – your finger should be moist, not wet or dry. If dry, it's time to water.	
Fertilizing	Lightly fertilize with a low nitrogen fertilizer or tomato fertilizer. 1) at time of planting, 2) when fruit set is well on its way, and 3) after picking the first tomato.	
Temperature	Plant seedlings outside after all danger of frost has passed or be prepared to cover with some form of frost protection. Fruit will set best when the temperature is between 55° and 90°.	
Harvesting and Storing	For the best tomatoes, let them completely ripen on the vine. Store on a cool counter (55° – 65°) rather than in the refrigerator. When frost is expected, any tomatoes that have turned lighter green may be picked and ripened indoors. Alternately, pull up the entire plant and hang it upside down in shelter location to allow the remaining tomatoes to ripen.	

UCANR Resources:

*UC UPM Pest Notes http://ipm.ucanr.edu/PMG/PESTNOTES/

Pests in Gardens and Landscapes – Tomatoes http://ipm.ucanr.edu/PMG/GARDEN/VEGES/tomato.html
Pests of the Garden and Small Farm 3rd Edition https://anrcatalog.ucanr.edu/Details.aspx?item
Growing Tomatoes in the Home Garden: https://anrcatalog.ucanr.edu/Details.aspx?itemNo=8159

Symptom	Problem	Solution
Missing leaves and large black droppings	Tomato hornworms* (large green caterpillars with horn on the rear end) will eat leaves, weakening plant and leaving the tomatoes exposed to sunburn.	Can be controlled by hand picking or spraying with Bacillus Thuringiensis (BT).
Small white flies that scatter when disturbed	Whiteflies* cause leaves to yellow and curl when feeding and can cause fruit to ripen unevenly.	Use silver- or aluminum-coated mulches. Spray with insecticidal soap. Put out yellow sticky traps at first sign of infestation.
Blossoms drop before fruit forms	Lush plant with no fruit, could be too much nitrogen OR too much water or lack of water OR temperature too low or high – blossoms set best from 55° to 90°.	Use balanced or tomato fertilizer according to package Regular irrigation schedule to maintain moist (not wet) soil. When temperature changes, blooms might set.
Brown depression on bottom of fruit	Blossom end rot*, which can be caused by insufficient moisture when plants were young	Regular irrigation schedule to maintain moist (not wet) soil. 3 to 4 inches of mulch will help.
Splitting on Fruit	Too much or inconsistent water OR fruit is exposed to too much sun	Regular irrigation schedule to maintain moist (not wet) soil. Provide sun relief for plants. Avoid over-pruning.
Curling leaves	If leaves are not discolored and only curled on one side of plant, possibly a normal response to direct sun and heat. If leaves are curled and with a purple-tinged edge, possibly curly top virus.	Provide sun relief for plants. Avoid over-pruning. Remove infected plants from garden and plant in different location next year. Avoid plants touching to limit spread by leafhoppers.
Wilted, dying leaves	Older leaves turn slight yellow and die (verticillium wilt*) OR older leaves turn bright yellow and die (fusarium wilt*). Stem takes on a bronzy or russet-color appearance and leaves start dying from the bottom up (possibly tomato russet mite*).	Buy plants with wilt resistance (indicated on label) AND Remove infected plants from garden and plant tomatoes in different location next year. Can be controlled by an application of wettable sulfur applied to entire plant, should not be used if temperature is above 90°
Yellow or green shoulders on tomatoes	Too much direct sun or high heat OR low potassium or high pH.	Provide sun relief for plants. Avoid over-pruning. Amend soil with amendment high in potassium.
Scarring on bottom of tomato	Tomato bottom scarring can be caused by cooler weather conditions which cause blossom to stick to plant too long.	Tomatoes are still good to eat. Some heirlooms are most susceptible to this condition.



General Tips for Growing Tomatoes courtesy of:

University of California Cooperative Extension Master Gardeners of Tulare/Kings Co.

Have a gardening question? The UC Master Gardeners offer free information on gardening.

Call anytime and we will return your call. Tulare: (559) 684-3325 & (559) 684-3326 Hanford: (559) 852-2736

