

Hot Summer Challenges for Tomato Growers

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Tomatoes ask very little of us. They do fine in most average garden soils in locations that receive full sun and adequate irrigation. But, when temperatures exceed 90 degrees for most of a month, problems are bound to arise. Some of the problems you may be seeing in your gardens this summer may include tomato cracking, blossom end rot, sun scald and solar yellowing. Unlike pests or diseases, these are abiotic disorders, usually attributable to environmental or cultural factors, or simply the plant's genetic makeup. So what causes these problems and what can we do about them?

Tomato cracking occurs during periods of very fast growth with high temperatures and high soil moisture levels, or wide fluctuations in soil moisture content. Many of the larger beef steak and lobed heirloom tomatoes seem to be susceptible. Avoid this problem by choosing tomatoes grown for our region and those noted for good crack resistance. You can also grow fruits with earlier maturities so that you're likely to be harvesting before temperatures will consistently be above 90 degrees. Keep your soil evenly moist and provide partial shade during periods of high light intensity. Add a layer of organic mulch 3-4 inches deep, such as compost, to help moderate soil temperatures and soil moisture fluctuations.

Blossom End Rot looks like a water-soaked or darkened area on the bottom or "blossom end" of the fruit. The spot may become large and leathery as it progresses. It involves calcium nutrition and water balance in the plant, aggravated by high soil salt content and fluctuating soil moisture. Like cracking, the best way to control this problem is to maintain even moisture and amend with organic mulch. Also, avoid heavy applications of high-nitrogen fertilizer.

Sunburn or Sunscald is a familiar problem for many tomato gardeners. The fruit turns whitish and leathery on the side exposed to extreme sunlight. Solar Yellowing and Green Shoulders occurs when the fruit does not fully color. Typically, the fruit stays yellow or yellow-orange, or the body of the fruit colors but the upper portion of the fruit stays green. High temperatures and high light intensity are the cause. Control by maintaining leaf cover (don't overprune) or you can shade the plant during the hours of the most intense heat. For both cracking and sunburn, it may be worthwhile to harvest a bit early, letting the fruit ripen on your counter, to avoid further damage to the fruit.

Possibly the most aggravating thing about prolonged heat spells is the effect on tomato fruit production. When daytime temperatures stay above 90 degrees for long, blossoms fall off and plants fail to set fruit. Many tomato gardeners have complained about their reduced crop. No doubt, there are far fewer salsas and BLT's being enjoyed this summer. Luckily, most cherry and other small tomato varieties set their fruit over a wider temperature range, so are not as affected by heat extremes.

For more information on growing tomatoes in the home garden, including a list of selected tomato varieties, refer to: <http://anrcatalog.ucanr.edu/pdf/8159.pdf>

Have you had a successful tomato year? Don't miss the annual Tomato Tasting Contest, hosted by UCCE Master Gardeners at the Sutter Creek Farmers Market on August 24th! Enter your tomatoes and win prizes and bragging rights. Bring at least one washed variety or 5 cherry tomatoes to our table at 8:30 a.m, judging at 10 a.m. Categories include, Biggest tomato, best tasting red, non-red and cherry. See you at the market on the corner of Main St and Gopher Flat Road in Sutter Creek.

For more information about our public education classes and activities, go to our UCCE Master Gardeners of Amador County website at <http://ucanr.edu/mgamador>. UCCE Master Gardeners of Amador County are available to answer home gardening questions Tuesday through Thursday, 10:00 a.m. to noon, by calling (209) 223-6838. Walk-ins are welcome at our office, located at 12200-B Airport Rd. in Jackson. You can also find us on Facebook. We offer free classes every month and we'll have an educational booth at the County fair. Join us!



Figure 1 Blossom End Rot



Figure 2 Sunscald