



## Tomatoes and the Drought in Alameda County

All tomato varieties are really very similar in their physiology, and as such, there are no "drought resistant" varieties, just some varieties that yield better results with low water application than others.

That being said, here are a few general rules that may help you select the right tomatoes for your garden. Cherry tomatoes are more tolerant of low water than their bigger counterparts. The closer to the wild type a variety is the sturdier it will be in general. A cherry or Saladette/slicer will be more tolerant of water-stress than a big beefsteak or heart. Many cherry tomatoes, however, are well known for their tendency to split if watered irregularly; Sungold is an example of this problem. In this respect, cherries aren't as good in a drought as a thicker-skinned slicer.

Dry-fruited tomatoes are more susceptible to blossom-end rot (BER) if they dry out too much, as they're closer to their moisture limit to start with. Paste tomatoes like San Marzano or Roma can get by with reduced water, but they have to start with it, not have it imposed mid-season. Even then, if they get too dry in very late summer, BER will return, as they wilt in the middle of the day.

Drought-stressed tomatoes are more a target for pests, such as thrips and mites. Problems with the russet mite and plants short on water will be hit even harder. Mites like dry, hot, dusty conditions; borderline dry-farming can produce just such conditions that foster mites, even when the plants are otherwise doing well. You should mulch around your tomatoes to keep the dust down which helps prevent mites and keeps moisture in the soil.

Soil type also makes a huge difference, and the first question you need to ask yourself is what type of soil you have if you're planting tomatoes in the ground. Containers always dry out faster than anything but sandy soil. Clay is ideal for minimal-water farming.

Changing your irrigation will also help promote low water use. You can sink short lengths of PVC pipe in the ground and put a drip output in these underground PVC pipes. This means you leave the top 3" of soil as a dry crust to conserve water. This works particularly well if the soil is dense.

Digging a 3'-wide, 8"-deep hole for each plant and lining the hole with organic material also helps. When you get past 6" all plants are primarily seeking water. Planting earlier may also help.

Finally, home-grown produce with an efficient watering system will use far less water than commercially-grown produce. We recommend that home gardeners focus on other forms of water conservation, such as reducing or replacing your lawn and replacing high-water use ornamentals with natives, rather than on our food supply. We want to encourage you to continue to grow your own food!

*Our thanks to the Contra Costa Master Gardeners for their help in making this information available.*