

What's Wrong with My Tomatoes?

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Americans love our tomatoes. We eat an average of 20 pounds of tomato products per year (second only to potatoes), and devote nearly 300,000 acres of farmland to commercial production. Tomatoes also grow in 9 out of 10 home gardens.

Most tomato problems are actually caused by less-than-ideal weather and water conditions. Tomatoes need consistent temperatures in the air and soil of between 65°-80° for ideal growing conditions. Outside this range and growth slows, yields decline, and flavor is poor. Below 50° or above 90° and most tomatoes start to die a slow death. Tomatoes need consistently moist, fertile, crumbly, light soil. Provide these growing conditions and you'll have few tomato problems.



Below are some of the problems that can occur with your tomatoes:

Catfacing is when your tomatoes have zipper-like scars and are deformed and lumpy near the blossom end. Usually caused by weather that is either too cold or too hot during blossom formation which results in deformed tomatoes. The tomatoes are edible but poor

quality. When the weather improves, new tomatoes should be okay. If your tomatoes are affected all summer regardless of weather, try a different variety that is less prone to catfacing.

Blossom End Rot is a hard black spot on the blossom end of the fruit, caused when the weather is too cold or too hot so that the plants cannot take up calcium that is already in the soil. Most soil in Yakima has high amounts of calcium. Do NOT add calcium to your soil unless a soil test shows a deficiency! Wait for the weather to improve and the problem should resolve itself. If you have this problem all summer, try a variety that is more resistant to blossom end rot.



Few Blossoms or Poor Fruit Set can be caused by too much nitrogen fertilizer, inconsistent water, or too much shade. Tomatoes need at least 10 hours of sun each day. However, the most common cause of blossom end rot is weather that's too cold or too hot.

Sunscald appears on healthy fruits as a soft yellow spot that gradually turns hard and white. It is caused in hot weather when direct sunlight cooks part of the fruit, killing the cells. Sunscald is most common in heavily pruned plants. Make sure there is enough leaf canopy to shade the

fruits. If sunscald is a common problem in your garden, try a tomato variety that has 'potato leaves'. The larger leaves do a better job of shading fruits.

Cracking of the tomato skin is usually caused by too much water during warm weather. Fruits grow more quickly than their skin in hot weather. Over watering results in even more cracking. Adding a layer of mulch to reduce water evaporation allows you water less, reducing cracking.

Leaf Roll is usually caused by hot weather. The leaves curl to reflect sunlight away from the foliage and to retain moisture in the plant. It can also be caused by water-logged soil. Many early varieties prefer slightly cooler weather and are therefore more prone to leaf roll. Generally leaf roll makes the plant look sick and unattractive, but doesn't cause any damage.

Fusarium Wilt is a soil borne fungus specific to tomatoes that attacks the roots. It causes a healthy plant to develop patches of yellow leaves usually near the bottom or on one side of the plant and nearly always results in death. Pull infected plants and discard in the garbage bin. Fusarium is a very long lived fungus, so crop rotation is not very effective. If you want to continue to grow tomatoes in future years, planting varieties that are resistant to Fusarium is your best option.

Powdery Mildew looks like a white powder on the leaves and will eventually kill the plant. It is crop specific. Powdery mildew that affects tomatoes will not spread to other species, like roses or squash. Powdery mildew does not absolutely require high humidity or wet foliage, but is more common in those conditions. Trellising plants and increasing spacing for better air flow may provide some benefit. Removing affected foliage is not helpful and may actually spread spores making the problem worse. Fungicides that contain sulfur, copper, or mineral oil are quite effective and many are approved for organic gardens. It is important to follow the instructions carefully and spray weekly to maintain control. Homemade sprays with vinegar, baking soda, garlic, or milk are commonly suggested on the internet, but are not backed up by science based studies.

Most tomato problems can be avoided by planting when soil and air are warm. Unfortunately, this May and June have been unusually cold so expect problems like catfacing, blossom end rot, and poor fruit set. Warm weather will help resolve most tomato problems. And as always, enjoy the 'fruits of your labor' and if you have any questions, feel free to call or email the Master Gardener clinic - we are here to help you succeed.