## **Head Off Tomato Problems Before They Happen**

# Leimone Waite, Master Gardener, May 31, 2019

This time of year, we start getting lots of questions that start with, "What's wrong with my tomato plant?

I've been asked a variety of tomato questions, all dealing with fungal diseases. That's likely due to the recent warm wet weather.

Here are some common tomato plant questions and answers.

### Problem 1: Tomatoes plants are lush and are the size of small trees but there's no sign of fruit.

You may be over-watering or over-fertilizing or both. With all the rain we have had it is hard to control the amount of water your plants are getting. Use a probe to test soil moisture and water only when it's getting dry. If your soil contains lots of organic matter it probably won't need any fertilizer to grow tomatoes.

In this undated photo, a tomato plant is planted in a garden in New Paltz, N.Y. Earlier planting leads to better harvests only when tomato seedlings have consistently, near-perfect growing conditions. (AP Photo/Lee Reich) (Photo: Lee Reich)

## Problem 2: Tomato plants have flowers but they fall off before they set fruit.

This is a common problem for us because the Redding area has such fluctuation in temperatures or temperatures get really hot. When temperatures consistently reach the high 90's in summer, fruit fails to set because heat kills the pollen and blossoms simply fall off. Also if the temperatures at night drop below 55 degrees but the days are warm this can trigger flower drop. Once temperatures warm up at night without getting too hot during the day or later in the fall when things cool off you should get fruit set. Shading plants in the later afternoon can sometimes help with fruit set.

### Problem 3: Leaves on the plant are yellowing.

Yellow leaves can be a sign of a few different problems. If the leaves are yellowing from the base of the plant and moving upwards, this could be caused by lack of nitrogen. A simple soils test, found at your local nursery or garden center, can help determine if this is the problem. This can also be a sign of too much or too little water. If the yellow leaves contain brown or black spots that also appear on the stem of the plant this may be caused by Early Blight. According to the University of California Integrated Pest Management site (U.C. IPM) "spores of early blight are carried by wind and require moisture for germination and infection. The disease can cause severe damage if conditions remain cool and humid for several days after a rain. Avoid overhead irrigation. Crop rotation is useful in infested gardens. Copper fungicides applied at the first sign of infestation and repeated every 7 to 10 days may provide control" We had a couple gardeners struggling with this fungal disease last weekend at our booth.



In this undated photo, a tomato plant displays healthy signs: Stocky growth, a healthy green color and roots that fill the pot but aren't cramped. (Photo: AP Photo/Lee Reich)

#### Problem 4: Fusarium and Verticillium wilts.

Fusarium Wilt will start with the leaves on one branch wilting and yellowing. Verticillium Wilt will start with yellowing between the veins and wilting of older leaves. The U.C. IPM site gives the following advice on how to positively identify if you have this problem. "Cut affected plants at the base of stems and examine them in cross section to see the browning of the water-conducting tissue compared to the healthy ivory of uninfected plants. Verticillium and Fusarium discoloration are extremely difficult to

distinguish, although Fusarium discoloration tends to be darker. Fusarium tends to occur more in warmer soils and Verticillium in cooler ones." If you do have one of the wilts it is best to pull the plants and dispose of them. Do not put in compost. Make sure to plant resistant varieties next year.

The Shasta Master Gardeners Program can be reached by phone at 242-2219 or email mastergardener@shastacollege.edu. The gardener office is staffed by volunteers trained by the University of California to answer gardeners' questions using information based on scientific research.