

Ag Column

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### Why Are My Tomatoes Rotting?

The summer of 2016 has sure had its share of hot days. With many hot days, the limited and “spotty” rain has often resulted in limited soil moisture in many areas.

Dr. David Sams, Retired UT Extension Vegetable Specialist, notes that blossom-end rot is a decay of the bottom or blossom end of the tomato. He points out that this disease is a result of low calcium levels in the tomato.

So, let’s look at ways you can maintain the calcium level in the tomato. Hopefully, you have taken a soil sample of your garden soil in the last two or three years. This will allow you to manage soil pH and fertility. If pH is too low, the tomato roots will not be able to take up the available calcium and the soil may also be low in calcium. Lime, which is calcium carbonate, is used to raise soil pH.

Adequate water is often overlooked as an important consideration in preventing blossom-end rot. Good soil moisture allows calcium to remain dissolved and available for plant uptake. Without an evenly moist soil, tomatoes will not be able to effectively take up adequate levels of calcium. Dry weather will also result in death of the fine roots responsible for water and nutrient uptake.

With the lack of rainfall recently, we are experiencing dry soil conditions which will increase the incidence of this disease. You will need to water your tomatoes in the absence of rainfall, but be sure to not keep the soil saturated. Tomato roots have to breathe too! Mulches will help keep soil moisture levels more ideal for tomatoes. Grass clippings make a good mulch for tomatoes as well as straw, leaves, compost, or even newspaper.

Other causes of blossom-end rot can include heavy pruning or over fertilization with nitrogen.

In an extreme drought, you may continue to see some blossom-end rot even though you have addressed all of the above control measures because of the difficulty in maintaining even calcium uptake.

If blossom-end rot is noticed in growing tomatoes, there a couple of remedies you can try. You can spread hydrated lime which is estimated to be about 1 and ½ times more effective at raising pH and will react more quickly. You can also spray a foliar calcium on the leaves to attempt to raise the calcium level of your tomatoes. While providing some benefit, these reactive measures are not a substitute for pH and soil amendment ahead of planting.