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## **Rotting Tomato**

"My tomato's looked great earlier this week and now they are rotting. Can I do anything about this blight?" This is a commonly heard statement, especially this summer. What can be done?

In many cases the culprit that is causing tomatoes to rot is not a disease but a physiological condition common to tomato. Blossom end rot occurs when the level of calcium available to the fruit is deficient. This may be because the calcium in the soil is deficient. The only way to tell is to collect soil and send it to a lab for a soil test.

The damage occurs when the fruit is being formed at the bloom. Symptoms may not appear as the fruit forms because the damage occurs inside the fruit until maturity when the brown, sunken area is formed at the tip of the fruit.

Many times the calcium levels may be just fine in soil but for some reason the calcium is not moving through the plant and reaching the fruit. Extended periods without water, nutrient imbalances of other nutrients (especially nitrogen) or fluctuations in water can cause this type of deficiency.

Unless you know a rain dance the best way to combat water shortage is to make sure plants are mulched to conserve water, shade plants to reduce the amount of heat on the leaf surface and water consistently and evenly from day to day throughout the growing season. Because of the excessive drought, high heat and low humidity this year the issue is and will continue to be even more pronounced.

When using fertilizer avoid excessive amount of nitrogen from ammonia as this will reduce the calcium taken up by plants. Use nitrate nitrogen instead. Light applications of fertilizers high in superphosphate can aid in reducing the condition.

Calcium chloride has been applied to aid prevention of blossom end rot. The effectiveness of this application remains to be seen. Apply 4 pounds of calcium per 100 gallon of water (4 tablespoons per gallon) each week for a minimum of four weeks to counter balance the deficiency while maintaining a consistent watering program.

Other vegetables that suffer from blossom end rot include peppers, eggplant, melons and squash. If a soil test has not been conducted in the last three years, one should be done to determine if the soil is deficient in calcium.

Sources for this article: Hansen, M.A. Blossom End Rot of Tomato. Publication 450-703. Virginia Cooperative Extension. Virginia State University. May 2009.

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