

News Column for Use the Week of July 7, 2025  
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### **Blossom End Rot**

Do you have tomatoes with a sunken, brown leathery patch on the bottom of the fruit? If so, then you probably have blossom end rot. Blossom end rot is not a disease; it is a condition that is caused by a lack of calcium in the soil. In Kansas this is not necessarily the case, because Kansas soils are derived from limestone, which is partially made up of calcium. So, what causes blossom end rot in Kansas? Actually, there are a number of possible causes, especially on tomatoes. Let's look at some of the other possible causes of blossom end rot.

The first possible cause could be that the tomato tops have outgrown the root system. During cooler spring weather the root system can keep up, but when it turns hot and dry, the plant tries to keep itself alive by sending water; with the calcium it carries; to the leaves and the fruit is bypassed. The plant responds to the heat and lack of calcium with new root growth which should allow the condition to correct itself after a couple of weeks.

The second possible cause could be heavy fertilization, especially with ammonium forms of nitrogen, which can encourage this condition. Heavy fertilization encourages more top foliage growth than root growth causing the ammonium form of nitrogen to compete with calcium for uptake through the roots to the fruit.

The third possible cause could be anything that disturbs the plant roots such as hoeing too deep. Mulching your plants will help because it keeps the soil surface cooler and reduces weed growth and promotes a better environment for root growth.

The fourth possible cause could be inconsistent watering. Keep soil moist but not waterlogged. Mulching can help by keeping the soil moisture level consistent over time. Even so, there are some years you do everything right and the condition shows up due to the weather. In such cases, remember that blossom-end rot is a temporary condition, and plants should come out of it in a couple of weeks. You want to pick off affected fruit to encourage new fruit formation.

Even though blossom end rot is most common on tomatoes, it can also affect squash, peppers and watermelons. If you are noticing that you have a lot of blossom end rot occurring, go through the possible causes and see if you can find what might be causing the problem. If you have any questions, please contact Kelsey Hatesohl at the Washington Office at 785-325-2121 or email [khatesohl@ksu.edu](mailto:khatesohl@ksu.edu).