

Blossom End Rot

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With summer here and everything in the garden growing rapidly, we need to be concerned with blossom end rot on our tomatoes, peppers and squash. Although blossom end rot is common in Wyoming, there are preventative measures to take to minimize loss based on the probable causes. Blossom end rot looks just like it sounds. The area around the bottom end of the fruit (the blossom end directly opposite the stem end) turns brown to black and may enlarge to cover the bottom half of the fruit. The tissue dies and fungi and bacteria may set in to compound the problem.

The primary cause of blossom end rot is a calcium deficiency at the blossom end of the fruit and this deficiency causes the tissue to die. There are several reasons for this and the main reason being over watering, which causes poor root growth, which reduces calcium uptake from the soil. We also make the mistake of transplanting too early when the soil temperature is low or we may injure the roots by hoeing or cultivation. Watering or fertilizing heavily in the early summer and less during the late summer periods when the fruit grows rapidly also adds to the problem. Excessive fertilization with nitrogen and potassium or high levels of salts in the soil also restricts the plants uptake of calcium from the soil.

The best way to prevent blossom end rot is to maintain uniform watering and fertilization schedules. Have your soil tested before planting and follow the recommendations. Water at least 6 inches deep per irrigation and avoid frequent light water applications. Another advantage here is that you will be flushing the salts out of the soil. Do not let the soil get extremely dry between watering.

If you notice symptoms of blossom end rot, spray the leaves and fruit with 1-2 tablespoons of calcium chloride (lime) or better yet use 1-2 tablespoons gypsum per gallon of water. Two applications are recommended at 1-week intervals. Be careful while irrigating not to wash off residue.

The other problem we start having this time of year is when we have this really hot weather say above 90 degrees fruit plants have a hard time setting blossoms. Therefore, if you see blossoms but no fruit forming this is the problem and a spraying of "fruit set" may help. Another note when fertilizing garden plants this time of year is they need less nitrogen and more phosphorous. The nitrogen is for plant growth and the phosphorous (middle number on fertilizer) is more for fruit production. Therefore, as you have lots of leafy vegetables and not as much fruit production this could be the problem. Check your fertilizer and go with the smaller first number (which is in

percentages), say go from a 20% to a 10% or 5% nitrogen fertilizer, but keeping the middle number as high or higher. This will keep your plants looking green and healthy.

With the increasing temperatures now is a good time to increase the amount of time you water the yard, not necessarily the frequency. So if you have been watering the yard for 30 minutes two times a week this can be increased to 40 or 50 minutes per setting or longer if you need to but try not to water more than two to three times a week. When watering remember to water deeply then let the top inch dry out before watering again.

Also be on the lookout for spider mites. I have had several calls this last week with plants looking droughty, look under the leaves (a magnifying glass may be needed) for a very small spec looking insect. They suck the juice out the leaves.

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