



## BLOSSOM-END ROT OF TOMATOES IN THE HOME GARDEN

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Blossom-end rot of tomatoes is a physiological disorder caused by a lack of sufficient calcium in the blossom end of the fruit. This disorder results in the decay of tomato fruits on their blossom end. Dry brown or tan areas the size of a dime, that grow to the size of a half dollar, characterize this disorder. This disorder is usually most severe following extremes in soil moisture (either too dry or too wet).

To reduce blossom-end rot in tomato, implement the following steps:

1. **Lime tomato soils to pH 6.5 to 6.7** – Home gardens not limed in the past 2 to 3 years will need 2 cups of lime for each plant. The lime should be worked into the soil 12 inches deep. To determine the exact amount of lime, send a soil sample to the Agronomic Division, Blue Ridge Road Center, N.C. Department of Agriculture, Raleigh, N. C. 27611, for analysis and recommendations.
2. **Fertilize properly** – Applying too much fertilizer at one time can result in blossom-end rot. Following soil test recommendations is the best way to insure proper fertilization. For home gardens not soil tested, apply 5 pints of 8-8-8 per 100 ft of row, and thoroughly work it into the top 8 inches of soil.
3. **Mulch plants** – Use straw, pine straw, decomposed sawdust, ground/ decomposed corn cobs, plastic, or newspapers. Mulches conserve moisture and reduce blossom-end rot. In extreme drought, plastic may increase blossom-end rot if plants are not watered.
4. **Irrigate when necessary** – Tomato plants require about 1.5 inches of water per week during fruiting. This amount of water should be supplied by rain or irrigation. Extreme fluctuations in soil moisture result in a greater incidence of blossom-end rot.
5. **Spray calcium** – The plants may be sprayed with a calcium solution using calcium nitrite or calcium nitrate or calcium chloride at 4 level Tbsp per gal of water. This spray should be applied 2 to 3 times a week, beginning at the time the second fruit clusters bloom. These materials can be mixed with the spray that is used for control of foliar diseases. Chelated calcium solutions also provide an excellent source of calcium. When using these chelates, follow label directions. Several foliar spray materials containing calcium are available and all work well for tomatoes.

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### Additional Information

*Plant Pathology Information Note (VDIN-019): Blossom-end Rot of Tomato, Pepper and Watermelon.* URL <http://www.ces.ncsu.edu/depts/pp/notes/>

