Tomato growers must take care to avoid blossom-end rot (BER), a disorder that can dramatically reduce fruit quality and quantity. By using a few simple irrigation and fertilization practices, damage from BER can be prevented or reduced.

BER is caused by a calcium deficiency, usually induced by fluctuations in the plant’s water supply. Because calcium is not a “mobile” element in the plant, even brief changes in the water supply can cause BER. Droughty soil or damage to the roots from excessive or improper cultivation (severe root pruning) can restrict water intake preventing the plants from getting the calcium that they need. Also, if plants are growing in highly acidic soil or are getting too much water from heavy rain, over-irrigation, or high relative humidity, they can develop calcium deficiency and BER.

To manage BER, take the following steps:

• Keep the soil’s pH at 6.0 to 6.5. Perform a soil test and apply the recommended rate of lime, using dolomitic or high-calcium limestone. Be sure to apply and incorporate lime 2 to 4 months before planting tomatoes.

• Apply the required amount of fertilizer when necessary based on soil test results for tomatoes. Applying too much fertilizer at one time can actually induce BER. Following soil test recommendations is the most accurate way to fertilize properly.

• Apply mulch to conserve moisture. Use pine straw, straw, decomposed sawdust, or newspaper. Mulches conserve soil moisture and reduce incidence of BER.

• If you experience severe problems with BER, you should remove the infected fruit. Once a fruit develops BER, it will not regrow or repair the infected area. Remove the fruit; otherwise, the damaged area will serve as an entry point for disease-causing bacteria or fungi.

• Some tomato varieties tend to be more sensitive to conditions that cause BER. Try growing several varieties and keep notes as to their performance.

• If your plants develop BER, drench the soil around their roots with a calcium solution containing four pounds of calcium nitrate or calcium chloride per 100 gallons of water (or four level tablespoons per gallon of water). Spraying the plants with calcium has no effect on BER.

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For more information, call your county Extension office. Look in your telephone directory under your county’s name to find the number.

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