Garden Update
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Blossom End Rot of Tomatoes

A dark leathery lesion on the underside of tomatoes indicates blossom end rot. It's not a fungal condition alone but a location of calcium deficiency that allows rot to develop. Typically, BER occurs on the first tomatoes of the season, often with the onset of high temperatures. A recurrence of BER can happen when conditions are extremely dry. Peppers, eggplant, zucchini, and other summer squash can also develop BER.

The calcium deficiency that leads to blossom end rot is not caused by a lack of calcium in the soil itself. Rather, it is inadequate moisture that inhibits movement of water-carried calcium from the soil to plant roots, stems, leaves, and ultimately the fruits. There are a few factors that add to inadequate moisture in plants. The first is pretty straightforward—drought. A lack of soil moisture restricts water uptake by plants, often when hot weather increases plant water demand. The second condition is the rate of tomato plant growth. Rapidly growing tomato plants may be taking in water at a rate insufficient to keep up with developing stems, leaves, and fruits. Lastly, water uptake is compromised when roots are damaged. Avoid cultivating out weeds near tomato plants and do not water every day as this promotes root rot.

What can be done to remedy blossom end rot? Adding calcium-containing products to the soil isn't one of them. Remember, there is adequate calcium in our soil to support good plant health. The best solution is one that involves providing soil moisture. When rainfall falls short of 1 inch per week and temperatures are hot, watering deeply 2-3 times per week is necessary to keep moisture levels high, plants hydrated, and calcium moving. Watering deeply ensures the deepest roots are fully hydrated. Keep droplet splash to a minimum to prevent the spread of soil-borne pathogens.

Mulch with shredded paper, straw, or untreated grass clippings to act as a temperature buffer between the air and the soil. Fungicides, fertilizers containing calcium, and insecticides do not correct BER in tomatoes. More information may be found here: Blossom-end rot of tomato tip sheet - MSU Extension .