

Blossom End Rot

Blossom End Rot (BER) is a problem with most fruiting vegetables, especially tomatoes, peppers, sometimes cucumbers, and even on butternut squash. Early in the fruits (vegetables!) development, a brown area or dry sunken spot appears on the blossom end. As the spot develops, it enlarges, becomes sunken and turns tan to dark brown to black and leathery, as noted here:



This problem can be caused by either of two situations:

- 1) Moisture
- 2) Lack of calcium.

Moisture

BER may be brought about by drought stress, excessive soil moisture, and/or fluctuations due to rain or overwatering. While there is not a lot we

can to do about the wet spring conditions, we can help to relieve drought stress. Regular watering of 2 - 4" each week during the summer is required. Equally as important as watering is to keep the soil from drying out between waterings. To do this, apply 2 - 3" of a good mulch layer over the entire bed, such as leaf mulch that has not completely composted. After the growing season, simply till it into the soil.

Calcium

Calcium is required for normal cell growth. When a rapidly growing fruit doesn't get enough calcium, the tissues break down, leaving the characteristic lesion at the blossom end. Ample supply of calcium in the soil may not be enough. And, many commercial garden fertilizers have only a trace amount of calcium, so additional calcium may be necessary. Note the pH level of the soil is important for calcium absorption; maintain the soil pH around 6.5, as a pH out of this range limits the uptake of calcium. Here's a thought . . . mulch those eggshells!

Once the problem develops, quick fixes are difficult. Stabilize the moisture level as much as possible. Feeding with manure or compost tea is recommended by many, but foliar applications of calcium are of questionable value according to research because of poor absorption and movement to fruit where it is needed. Prevention is the key.

The following OSU Fact Sheets are very helpful and are available at the extension office or online:

[F-7627: Common Diseases of Tomatoes, Part 3: Non-Infectious Diseases](#)

[F-6436 : Healthy Garden Soils](#)

[F-6007: Improving Garden Soil Fertility](#)

Some gardening websites that I found have great information and tips:

<http://homeguides.sfgate.com/way-put-calcium-garden-soil-74759.html>

<https://www.gardeningknowhow.com/edible/vegetables/tomato/watering-tomato-plants.htm>

<http://www.tomatodirt.com/blossom-end-rot.html>