

# Burlington Community Gardens

*Dig in. Eat fresh.*

## *Blossom Rot: Causes & Treatments*



### **What Causes Blossom End Rot?**

Plants need calcium to develop healthy fruit. When tomatoes (*or peppers, or eggplants*) don't get enough calcium from the soil, that's when the blossom end rot problem begins.

Several factors can limit a plant's ability to absorb enough calcium — fluctuations in soil moisture, an excess of nitrogen in the soil, root damage due to cultivation (like when you're using a rake or hoe to pull weeds), cold soil, or soil acidity that's either too high or too low.

Another reason is that too much fertilizer causes the plant to grow so fast that the calcium can't move into the plant quickly enough.

### **How Do You Prevent It From Happening?**

The first steps in preventing blossom end rot happen when you're planting. If you're new to planting, have your soil tested. Tomatoes like a soil pH level of 6.0-6.5.

To lower the pH, use coffee grounds, tea bags, and/or compost or composted manure. To raise your soil pH level, use wood ash (ashes from your fireplace and fire pit (you are saving wood ash, right?)) and/or crushed egg shells. Mix these in when you first till your soil.

If you're using fertilizers, use ones low in nitrogen and high in phosphorous.

Maintain consistent moisture levels in the soil throughout the growing season. Water deep and infrequently — this will help the plant grow strong roots, thereby strengthening the plant itself.

When the weather is dry, water thoroughly once or twice each week to moisten the soil to a depth of at least 6 inches. Use mulch to help regulate soil moisture levels.

Allow the soil to warm up before planting. Tomatoes love heat, and cold soil limits the amount of nutrients the roots absorb.

### ***How Do You Treat Blossom End Rot When It Happens?***

If your tomatoes are already starting to develop blossom end, you may be able to stop it, and the plant can go on to produce healthy tomatoes.

At the first sign of blossom end rot, remove all affected tomatoes from the plant and discard. Water the affected plant deeply at the base with an eggshell and Epsom salt tea:

- As you're using eggs, save the shells. Rinse them out thoroughly and allow them to air dry. After you've baked something and turned the oven off, you can pop the eggshells into the cooling oven to help them dry completely. This will also help kill any potential bacteria. Once you have a good amount of eggshells, crush them into your food processor, mini chopper, or spice grinder (in batches). Pulverize the shells into a powder.
- Dissolve 1/4 cup of Epsom Salt and 1 tablespoon of powdered eggshells into a gallon of water and slowly pour the entire gallon around the base of the affected tomato plant. The mixture will go directly to the plant roots and be absorbed by the plant to help stop future developing tomatoes from being afflicted by blossom end rot.

If you find the eggshells aren't providing enough of a calcium boost to help, add some bone meal. Bone meal has provides a bigger boost of calcium than even eggshells!

### ***More Tips to Stop Blossom End Rot***

Rotate your crops each season. Don't plant tomatoes in the same soil year after year. Varying your planting locations will help deter diseases and fungi in the soil as each crop needs different levels of each nutrient.

Be sure to have your soil tested every year and track it. Eventually, you'll have a surplus of nutrients in your soil and blossom end rot shouldn't be a problem any more.

You may discover that some crop varieties are more susceptible to blossom-end rot than others.

Adapted from <http://survivalathome.com/blossom-end-rot-fix/> by Patrick Blair