

Blossom End Rot

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A familiar problem for some gardeners is blossom end rot. Most common on tomatoes, blossom end rot can also be found in pepper, squash, cucumber, melons, and a few others. This is not a disease or insect infestation but rather a calcium imbalance within the plant. Because of one or several factors, calcium is not being taken up by the plant as quickly as needed. Blossom end rot usually makes its presence known when the fruits are about half the size they're likely to become. The bottoms of the fruits start with a soft spot which turns brown and eventually start to rot. Fruits with blossom end rot should be picked and discarded as there is nothing to "heal" the fruit. For the more adventurous types the fruits can be picked, the rotting part trimmed off and the rest eaten immediately, but most tomato fruits with the disorder haven't reached their full height of flavor yet.



Blossom end rot is most common when the growing season starts out wet and then becomes dry when the fruit is setting. Other factors that inhibit calcium uptake are daily fluctuations in soil moisture, excess nitrogen in the soil, damaged roots due to mechanical injury, soil pH that's either too high or too low, cold soil, and soil high in salts. Of these, our area is famous for its high pH soils, and this spring is certainly starting out wet and cold. If you've experienced blossom end rot in your garden before, this year is certainly looking to be one where you might see this disorder again.

Prevention and control of this disorder has both chemical and operational components. The easiest and most affordable treatment option is to water in the mornings rather than afternoons or evenings. This will reduce daily fluctuations in soil moisture as will adding a nice layer of mulch below the plants. The need for morning waterings become much more important if the daytime temperatures are expected to become high. Sometimes keeping the soil moisture constant is the only treatment needed to prevent blossom end rot.

Directly adding calcium to the soil is a common sought after treatment. There is a ready to spray product that uses a calcium chloride derivative that prevents blossom end rot on new fruit. An alternative and environmentally friendly calcium adding option is mixing finely ground egg shells into the soil. This accomplishes the same thing as the spray although it may take a year or two before the shells break down enough so the plants can access the calcium. The more finely ground the shells the better - try using a coffee grinder or mortar and pestle. Lowering the soil pH can be done but is not usually necessary as the aforementioned techniques are almost always more than sufficient to defeat the disorder. Finally, there is some variance in which tomato varieties get blossom end rot. By keeping records of which varieties are more or less susceptible to blossom end rot is a sure fire way to increase your chance of having a successful gardening season.

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