

Blossom End Rot of Tomato

Symptoms

As it can be inferred from its name, this disease normally begins at the blossom end of the tomato fruit. However, it can also occur on other areas of the fruit. Initially, it is observed as a small water-soaked lesion that will enlarge and turn black (Figs. 1 and 2). Although the older lesion may be infected by fungi, these fungi are secondary pathogens.



Figure 1. Typical appearance of blossom end rot on immature tomato fruits. Photo: Ronald French

Causal agent

This disease is not caused by a biological organism, but rather, a calcium deficiency in the area of the fruit affected. Even though calcium may be readily available, calcium may not reach the blossom end fast enough if water supply fluctuates. There are other factors that can prevent calcium uptake and can include: rapidly growing plants, high salts in soil, high levels of ammonium nitrate, and high humidity conditions.



Figure 2. Typical appearance of blossom end rot on a mature tomato fruit. Photo: Ronald French

Management

Use varieties or cultivars that have better tolerance against blossom end rot. Test soil to determine calcium availability prior to growing tomatoes. Fertilize plants to guarantee that calcium levels are sufficiently available. Liming prior to transplanting can provide necessary calcium availability later on in the growing season. Make sure soil moisture levels do not fluctuate radically from dry to wet by monitoring watering and water availability in soil throughout the day.

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September 16, 2011

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