BLOSSOM-END ROT ON TOMATO

Cause: Physiological disorder, may result from calcium deficiency

Symptoms: Water-soaked spot on blossom-end of fruit enlarges and darkens, becomes sunken and leathery

When It Is a problem: On green fruit during fruit enlargement

IPM Techniques: Avoid heavy applications of nitrogenous fertilizer; avoid extreme fluctuations in water supply

Introduction and Symptoms. Blossom-end rot is a non-parasitic disorder that is related to a deficiency of calcium in the tomato fruit. The problem occurs when tomato plants have grown rapidly during the early part of the season and are then subjected to hot dry weather when the fruits are in an early stage of development. However, too much water such as with heavy irrigation may also bring on the problem. Tomato fruits may be affected by blossom-end rot at any stage of development but are most susceptible when 1/3 to 1/2 grown. Symptoms first appear as a water-soaked spot near the blossom end of the fruit. The spot becomes brown and enlarges until it may cover 1/3 to 1/2 of the surface; it later becomes dark, leathery, and sunken.

Control. Tomatoes that are already affected by blossom-end rot cannot be cured. The disorder can only be avoided by using proper cultural practices before symptoms appear. Heavy applications of nitrogenous fertilizer and extreme fluctuations in water supply increase the likelihood of blossom-end rot and should be avoided. Fertilizer used on tomato plants should contain a balance of phosphorus and nitrogen. An even supply of moisture through regular and deep irrigations will also help. Use a mulch around the base of the plants to reduce the loss of moisture from the soil.

Bibliography
Controlling Tomato Diseases, USDA Farmer's Bulletin No. 2200, 1976.