



Extension FactSheet

Plant Pathology, 2021 Coffey Road, Columbus, OH 43210-1087

Anthracnose of Tomato

Richard M. Riedel, Sally A. Miller and Randall C. Rowe
Department of Plant Pathology

Anthrachnose is a common and serious disease of tomato fruit. This disease can occasionally cause severe damage to peppers, especially when red fruit is allowed to develop. Anthracnose can reduce a bountiful harvest into rotted fruit in a few days in warm, moist weather.

Symptoms

Small, watersoaked, circular lesions develop under the skin of fruit as it ripens. These become sunken and dark. Numerous dark specks, the fruiting bodies of the fungus, develop in the lesions in concentric rings. In moist, warm weather, these black bodies ooze gelatinous pink spore masses. In warm weather the fungus and soft rot bacteria which enter the split skin over the lesions spread internally forming a semisoft decay which renders the fruit worthless.

Causal Organism

Colletotrichum coccodes survives between crops on infested plant debris in the soil. Early in the growing season, spores from the soil splash on lower leaves of the tomato plant. Few symptoms develop on infected leaves, but the spores produced on foliage can be carried by splashing rain to developing green fruit. Infected

green fruit will not develop symptoms of anthracnose until they begin to ripen. Ripe fruit is very susceptible to this fungus.

Control

1. Rotate 3 years between pepper and tomato crops.
2. Plant tomatoes and peppers in well drained fields to avoid excess soil moisture as fruit ripen.
3. Apply overhead irrigation during the early part of the day so that plants dry before sundown.
4. Harvest and use fruit before it fully ripens.
5. If conditions favor development of anthracnose, a preventative spray program may be required to give adequate control of this disease. Apply registered fungicides according to product label instructions when weather conditions are above 65 degrees F and the foliage is likely to remain wet longer than 6 hours. Applications to tomatoes should begin when the first fruit is larger than a walnut. Applications to peppers should be started as soon as fruit is present.

Commercial growers of tomatoes may wish to consider use of a forecasting system such as TOMCAST to time fungicide application. (See OSU Extension Bulletin 672 for current fungicide recommendations and a description of the TOMCAST program.)



Figure 1. Early symptoms of Anthracnose on a tomato fruit. Lesions are sunken, circular, and watersoaked.

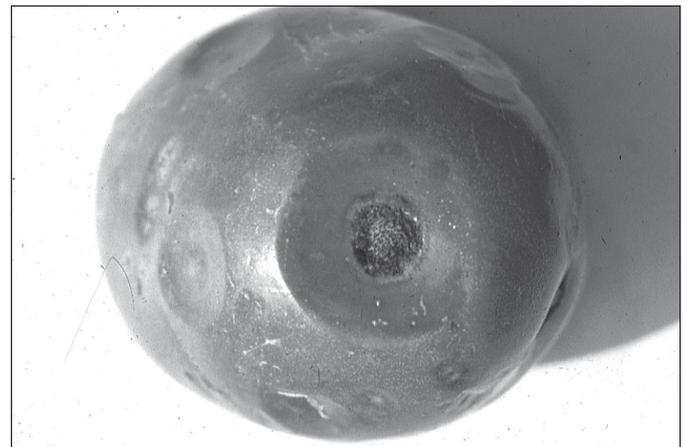


Figure 2. In time, the center of the lesion turns black due to the formation of fungal fruiting bodies.

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Keith L. Smith, Associate Vice President for Ag. Adm. and Director, OSU Extension
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