

## Alternaria Fruit Rot of Pepper

### Symptoms

Surface lesions may form at growth cracks, at locations where wounding has occurred prior to or at harvest, or on tissue that has been injured by sunscald, calcium deficiency, heat, insect injury, and chilling. Although at first lesions are small and slightly sunken, later on the lesions will enlarge and will be fully sunken (Fig. 1).



Figure 1. Fruit rot of tomato caused by the fungus *Alternaria* sp. Photo: Luz M. Serrato-Diaz.

### Causal Agent

Fungi in the genus *Alternaria* cause this disease. Normally, this fungus is a weak pathogen; however, if tomatoes are growing under stressful growth conditions or limiting factors such as injuries, this fungus may be more prevalent than normal. Spots are covered by gray moldy growth with black specks that indicate spore production (Fig. 2).



Figure 2. Conidia (asexual spores) of *Alternaria* sp., obtained from fruit lesions. Photo: Luz M. Serrato-Diaz.

### Inoculum Source and conditions

The fungus is primarily airborne, but can also originate from the stigma of the flower and other areas subject to moisture accumulation. Green fruit is normally not susceptible unless challenged by high temperature or calcium deficiency.

### Management

Use varieties or cultivars that shade the fruit well. Manage other diseases, such as bacterial spot, that tend to defoliate pepper. Upon harvest fruit, needs to be cleaned and stored under cool temperature conditions. Provide enough calcium in order to prevent calcium deficiency. The use of organic or inorganic fungicides is not recommended as above recommendations should prevent disease.

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