

Bacterial Fruit Blotch of Watermelon

Symptoms

The typical symptom of bacterial fruit blotch of watermelon is a dark olive green blotch on the upper surface of the fruit. The blotch is first observed as a small watersoaked area that quickly expands (Fig.1)



Figure 1. Watersoaked lesion. Photo: Ronald French.

In a matter of a few days, the lesion fully expands and takes over much of the fruit surface and the blotch has a dark olive green appearance. (Fig.2).



Figure 2. Dark olive-green blotch. Photo: Ronald French

In advanced stages of infection, the rind ruptures and an amber looking substrate is exuded (Fig. 3).



Figure 3. Rupture of epidermal tissue of rind. Amber colored exudate present. Photo: Ronald French.

Causal Agent

This disease is caused by a bacterial plant pathogen known as *Acidovorax avenae* subsp. *citrulli*. Although this bacterium can affect other cucurbits such as melons, it is more prevalent on watermelon.

Inoculum Source and conditions

The bacterium is seedborne. New plants can be infected by rain splash and wind. Leaf symptoms may not need to be present so pathogen is unnoticed until fruiting. Fruit residue and wild cucurbits may allow for pathogen survival. Temperatures around 80°F are ideal for disease development.

Management/Control

Use reliable seed source. Fields should be plowed and volunteer watermelon seedlings should be taken care of. Prior to fruit set, copper sprays can reduce rate of disease development unless there is high disease pressure (rain splash, wind).

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