Pacific Pests, Pathogens & Weeds - Mini Fact Sheet Edition

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Watermelon fruit blotch (196)

Photo 1. Large rapidly expanding blotch on watermelon caused by *Acidovorax citrulli.*

Photo 2. Angular marginal leaf spots of *Acidovorax citrulli* on melon.

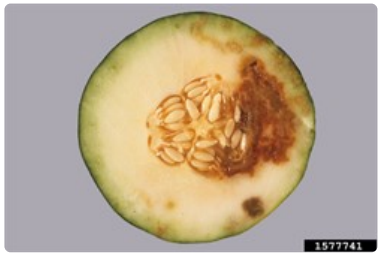

Photo 3. Infection of melon by fruit blotch, *Acidovorax citrulli,* showing the rot has reached the seeds.

Summary

- Widespread. Not reported from Africa. On cucurbits, including wild species. An important bacterial disease. More serious on watermelon.
- Greyish spots on seedlings; those on stem cause death. Fruit infections occur early with dark green areas near harvest, superficial at first, later cracking.
- Spread from seed to leaves and then in wind and rain.
- Cultural control: certified seed; 2-year crop rotation; check seedlings; disinfect nursery after outbreaks (bleach); grow new crops far from other cucurbits; remove volunteers; use drip irrigation; clean equipment used in diseased fields; tolerant varieties; collect and burn debris after harvest.
- Chemical control: copper, if symptoms seen early.

Common Name

Fruit blotch; it is also known as bacterial fruit blotch.

Scientific Name

Acidovorax citrulli; previously this bacterium was named *Acidovorax avenae* subsp. *citrulli*, and when first isolated from watermelon, it was *Pseudomonas pseudoalcaligenes* subsp. *citrulli.* Several strains exist.

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Information from CABI (2019) Acidovorax citrulli (fruit blotch) Crop Protection Compendium. (http://www.cabi.org/cpc); and *Acidovorax citrulli.* Wikipedia. (https://en.wikipedia.org/wiki/Acidovorax_citrulli); and from Islam MR (2019) Development of molecular markers for dection of *Acidovorax citrulli* strains causing bacterial fruit blotch disease in melon. International Journal of Molecular Sciences 20(11):2715. Photo 1 Gerald Holmes, California Polytechnic State University at San Luis Obispo, Bugwood.org. Photo 2 George Wall, formerly CALS/AES University of Guam. Photo 3 Jason Brock, University of Georgia, Bugwood.org.

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The mobile application is available from the Google Play Store and Apple iTunes.