Pacific Pests, Pathogens and Weeds - Online edition

Maize southern leaf blight (080)

Summary

- Worldwide distribution. In tropics and sub-tropics. On sorghum and grasses. Occasional outbreaks have been serious.
- Spots merge and cause leaves to dry and die. Spores on undersides of leaves spread in wind and rain splash.
- The blight survives in debris, and on 'volunteers'.
- In the 1970s, in the US and elsewhere, a strain of the fungus (Race T), caused an epidemic, and resulted in ear rot, ear drop and lodging, and a large loss of yield. Race O is the common strain in the tropics and causes minor crop loss.
- Cultural control: resistant varieties; remove volunteers; provide mineral fertilizers or manures; wide spacing to reduce humidity; collect trash at harvest, compost or feed to livestock; plough-in remains; crop rotation.
- Chemical control: only use if resistant varieties are not available (main control method); use chlorothalonil or mancozeb. Apply when spots first appear.

Photo 1. Light tan, rectangular leaf spots, mostly on the lower leaves caused by southern leaf blight, *Cochliobolus heterostrophus*.

Common Name

Southern leaf blight, southern corn leaf blight, southern leaf spot, maydis leaf blight

Scientific Name

Cochliobolus heterostrophus; this is the name for the sexual stage; the asexual stage is known as *Bipolaris maydis* (previously it was *Drechslera maydis* and before that *Helminthosporium maydis*). There are different races.

Photo 2. Spots on maize leaf, expanding and joining together, caused by southern leaf blight, *Cochliobolus heterostrophus*.

AUTHORS Helen Tsatsia & Grahame Jackson

Information from Souther corn leaf blight. Wikipedia. (https://en.wikipedia.org/wiki/Southern_corn_leaf_blight); and CABI (2019) Cochliobolus heterostrophus (southern leaf spot). Invasive Species Compendium. (https://www.cabi.org/isc/datasheet/14689); and Pereira J (2014) Bipolaris maydis. BugwoodWiki. (https://wiki.bugwood.org/Bipolaris_maydis). https://wiki.bugwood.org/Bipolaris_maydis); and from McKenzie E (2013) *Bipolaris maydis*: PaDIL - http://www.padil.gov.au.

Produced with support from the Australian Centre for International Agricultural Research under project PC/2010/090: *Strengthening integrated crop management research in the Pacific Islands in support of sustainable intensification of high-value crop production*, implemented by the University of Queensland and the Secretariat of the Pacific Community.

Copyright © 2021. All rights reserved.

pestnet

Australian Government
Australian Centre for International Agricultural Research

POWERED BY LUCID®

Web edition hosted at https://apps.lucidcentral.org/pppw