



Pacific Pests, Pathogens & Weeds - Mini Fact Sheet Edition

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Banana black Sigatoka (002)

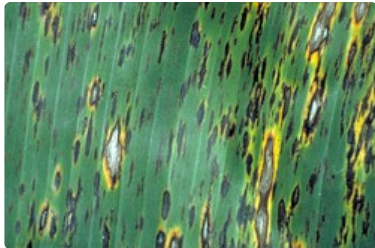


Photo 1. Reddish-brown and black streaks of black Sigatoka, *Mycosphaerella fijiensis*, on the upper surface of a leaf, with some developing white or tan centres where the spores are produced. Note that the spots have bright yellow haloes, or margins.



Photo 2. Long streaks with bright yellow margins typical of infection by black Sigatoka, *Mycosphaerella fijiensis*. Note the blighted areas at the leaf tip and margins where the spots have joined together to cause the blight.



Photo 3. Typical decay of a leaf infected with black Sigatoka, *Mycosphaerella fijiensis*, showing the brown streaks, some with white centres, and the edges of the leaf decaying before other parts where the streaks have joined together.

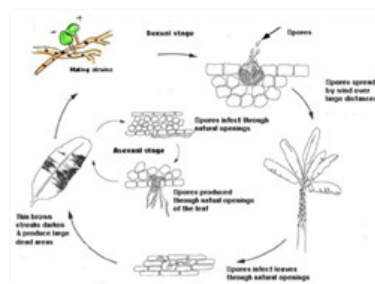


Diagram. Life cycle of black Sigatoka, *Mycosphaerella fijiensis*. Note that there are two types of spores, but it is the sexual stage that produces the ascospores that are considered the most important in disease development. The spores are discharged from the top surface of the leaves and spread by wind.

Summary

- Worldwide distribution. A fungus causes early leaf death, starting from tips and margins. Low leaf number causes 35-50% loss of fruit yield. Spores spread in wind-blown rain.
- Cultural control: plant in soils with good drainage, exposed to the sun and orientated to the wind so leaves dry quickly; 2.5 m spacing; weed; prune leaves when >50% infected; prune suckers, leaving 3-4 plants/matt; mulch; collect and remove infected leaves at harvest; for resistant (FHIA) varieties, contact SPC CePaCT.
- Chemical control: protectants – copper, mancozeb, chlorothalonil, misting oil. Systemics – triazoles, strobilurins, alternating with protectants.

Common Name

Black Sigatoka, black leaf streak

Scientific Name

Mycosphaerella fijiensis. This is the name of the sexual state; the asexual name is *Paracercospora fijiensis* (previously *Pseudocercospora fijiensis*).

Information from CABI (2019) *Mycosphaerella fijiensis* (black Sigatoka). Crop Protection Compendium. (<http://www.cabi.org/cpc>); and from Black Sigatoka. Business Queensland. Queensland Government. (<https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/crop-growing/priority-pest-disease/black-sigatoka>).

Photo 1 Kohler F, Pellegrin F, Jackson G, McKenzie E (1997) *Diseases of cultivated crops in Pacific Island countries*. South Pacific Commission. Pirie Printers Pty Limited, Canberra, Australia. Diagram APSnet Education Center. Back Sigatoka of bananas and plantains, American Phytopathological Society. (<http://www.apsnet.org/edcenter/intropp/lessons/fung/ascomycetes/Pages/BlackSigatoka.aspx>).

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This mini fact sheet is a part of the app *Pacific Pests, Pathogens & Weeds*

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