

Banana freckle (124)

Summary

- Narrow distribution. Asia, US (Hawaii), Oceania. Four species. On banana. Note, one species (*Phyllosticta cavendishii*) infects Cavendish (and AAB and ABB¹), and is widely distributed. An important disease.
- Reddish-brown spots (0.5-1 mm), turning dark, on the top of leaf, sometimes in groups. Feels rough, as sacs with spores protrude above leaf and fruit surfaces. Leaves turn yellow and die early. Spots on fruits affect sales.
- Spread in wind and rain, in leaves, suckers and fruit.
- Biosecurity: under eradication in Australia (Northern Territory).
- Cultural control: bag bunches; cut out leaf infections.
- Chemical control: if needed, use mancozeb, triazoles or strobilurins (**see notes Fact Sheet no. 2**).



Photo 1. Small, raised spots with the flask-shaped fruiting bodies containing spores. The spots are at first reddish-brown later turning black and joining together to form patches or streaks.

Common Name

Banana freckle

Scientific Name

Previously, freckle was *Phyllosticta musarum* and its sexual form, *Guignardia musae*; now four species are recognised: *Phyllosticta cavendishii*, *Phyllosticta musarum*, *Phyllosticta maculata*, and *Guignardia stevensii*.



Photo 2. Dark brown to black spots, 0.5-1 mm diameter, on the upper leaf surface.



Photo 4. Early death of the leaf due to freckle infection beginning at the leaf margin.



Photo 3. Large numbers of spots on the leaves causing them to turn yellow and die early.



Photo 5. Spots caused by the banana freckle fungus on the fruit.

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¹A way of classifying banana depending on the number of chromosomes and the ratio of the parents *Musa accuminata* and *Musa balbisiana*. Information from (including Photo 1) Gerlach WWP (1988) *Plant diseases of Western Samoa*. Samoan German Crop Protection Project, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, Germany); and Banana freckle (2019) Business Queensland. Queensland Government. (<https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/crop-growing/priority-pest-disease/banana-freckle>); and from Banana freckle (2020) Department of Industry, Tourism and Trade. (<https://nt.gov.au/industry/agriculture/food-crops-plants-and-quarantine/banana-freckle>); and from Plant Health Australia (undated) Bananas freckle (Cavendish strain). Fact Sheet. (<https://www.planthealthaustralia.com.au/wp-content/uploads/2015/03/Banana-freckle-FS.pdf>). Photos 2,3&5 *Diseases of fruit crops in Australia* (2009). Editors, Tony Cooke, et al. CSIRO Publishing. Photo 4 Jacque (Wright) Kami, formerly Plant Pathologist, Secretariat of the Pacific Community, Suva, Fiji.

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