

Sooty moulds (051)

Summary

- Worldwide distribution. In tropics and sub-tropics. On many crops when colonised by insects that produce honeydew, e.g., coconut, guava, mango, soursop and ornamentals.
- Black moulds grow on honeydew discharged by sap-sucking insects – aphids, planthoppers, whiteflies, scales - onto leaves and fruits.
- The fungi do not infect the leaves, but shut out sunlight, weakening growth, causing leaves to die early, and reducing fruit quality.
- Cultural control: aim to control the insects producing honeydew. If they are protected by ants, destroy nests (use hot water); prune low hanging branches and remove weeds to stop ants reaching the insects.
- Chemical control: soaps or oils to kill sap-sucking insects; use synthetic pyrethroids against ants.

Common Name

Sooty moulds

Scientific Name

A number of sooty mould fungi have been identified in Pacific island countries; e.g., those from Solomon Islands - mostly from living leaves - are as follows: *Aithaloderma citri* (grapefruit); *Capnodium citri* (citrus); *Capnodium mangiferum* (mango); *Capnodium* sp. (papaya); *Chaetobolisia microglobulosa* (chilli); *Chaetothyrium setosum* (coconut, *Xanthosoma taro*); *Limacinula samoensis* (coconut); *Microxiphium* spp. (chilli, coconut, oil palm); *Trichomerium* spp. (coconut, oil palm); *Tripaspermum fructigenum* (*Pometia pinnata*); *Tripaspermum gardneri* (oil palm, cocoa); *Tripaspermum* sp. (chilli); *Triosporiopsis* sp. (papaya). Many of these species and others are present in Fiji, Samoa and Tonga.

Other fungal genera recorded in these countries and elsewhere are: *Antennulariella*, *Parascorias* and *Scoria* species.



Photo 1. Sooty mould on the upper surface of coconut leaflets. Note the twisted leaflet showing a previous scale insect infestation which produced the honeydew on which the sooty mould grew.



Photo 2. Sooty mould in soursop leaves.



Photo 3. Sooty mould on *Frangipani* leaf. The leaf is still green beneath the superficial mould.



Photo 4. Sooty mould, *Capnodium citri*, on citrus.

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Information from RHS (undated) Sooty moulds. Royal Horticultural Society, UK. (<https://www.rhs.org.uk/advice/profile?pid=770>); and from Sooty mold. Wikipedia. (https://en.wikipedia.org/wiki/Sooty_mold); Gillman D (2011) Sooty Mold. The Center for Agriculture, Food and the Environment. University of Massachusetts Amherst. (<https://ag.umass.edu/landscape/fact-sheets/sooty-mold>). Photo 3&4 Kohler F, et al (1997) *Diseases of cultivated crops in Pacific Island countries*. South Pacific Commission. Pirie Printers Pty Limited, Canberra, Australia.

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