



Pacific Pests, Pathogens & Weeds - Mini Fact Sheet Edition

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Sweetpotato whitefly (284)



Photo 1. Sweet potato whitefly, *Bemisia tabaci*, and eggs.



Photo 2. Fourth stage nymphs (puparium) of sweet potato whitefly, *Bemisia tabaci*.



Photo 3. Adult sweet potato whitefly, *Bemisia tabaci*, and skins of the fourth stage (puparium) also present.



Photo 4. Adults, nymphs and moulted skins of the sweetpotato whitefly, *Bemisia tabaci*.

Summary

- Worldwide distribution. In tropics and sub-tropics. Several strains. On many crops, ornamentals and weeds.
- Eggs laid on underside of leaves produce 'crawlers' and scale-like larvae, then yellow and white adults.
- Adults suck sap, fungi grow on honeydew excreta blackening leaves, and spread important viruses.
- Natural control: predators and parasitoid wasps.
- Cultural control: reflective mulches; trap crops; check seedlings for infestations; avoid overlapping crops; weed; monitor; collect and burn trash after harvest.
- Chemical control: soap, white or horticultural oils; alternatively, PDPs: chilli, neem, or derris. Avoid synthetic insecticides because of development of resistant strains.

Common Name

Sweetpotato whitefly, tobacco whitefly, silverleaf whitefly

Scientific Name

Bemisia tabaci. There are a number of closely related strains (or biotypes) that appear the same as the local strains, but can only be identified by molecular techniques. The two most important are the silverleaf, MEAM1 or B biotype, and the Q or Mediterranean (MED)

biotype. The B biotype is also referred to as a different species, *Bemisia argentifolii*, and more species may be named in the future from within this group. Both spread many viruses, and are resistant to many insecticides.

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Information from Tobacco whitefly (*Bemisia tabaci*), and Silverleaf whitefly (*Bemisia tabaci* (MEAM1)). Plantwise Technical Factsheets, CABI; and from Q biotype *Bemisia tabaci* species complex. Department of Agriculture and Fisheries, Queensland Government. (<https://www.daf.qld.gov.au/plants/field-crops-and-pastures/broadacre-field-crops/integrated-pest-management/a-z-insect-pest-list/whitefly-overview/q-biotype-bemisia-tabaci-species-complex>). De Barro PJ *et al.* (1998) Distribution and identity of biotypes of *Bemisia tabaci* (Gennadius) (Hemiptera: Aleyrodidae) in member countries of the Secretariat of the Pacific Community. Australian Entomological Society 37, 193-287. Photo 1 Lesley Ingram, Bugwood.org. Photo 2 Pest and Diseases Image Library, Bugwood.org. Photo 3 Scott Bauer, USDA Agricultural Research Service. Photo 4 Richard Markham, ACIAR, Canberra.

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