

UC Pest Management Guidelines

AVOCADO WHITEFLIES

Scientific Names:

Giant whitefly: *Aleurodicus dugesii*

Greenhouse whitefly: *Trialeurodes vaporariorum*

Mulberry whitefly: *Tetraleurodes mori*

Nesting whitefly: *Paraleyrodes minei*

Redbanded whitefly: *Tetraleurodes perseae*

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DESCRIPTION OF THE PESTS

Whiteflies are small (0.12 inch, 3 mm or less), flying insects that derive their name from the white wax covering their wings and body. While different whitefly species appear similar as adults, their immature stages are distinct. Nymphs and [pupae of the redbanded whitefly](#) are black and have a distinct "crowned" fringe around their body margin that is caused by the wide marginal wax bands that curl over the body. Nymphs and [pupae of the mulberry whitefly](#) are also black, but with slender marginal wax bands that do not curl over the body. Adults of both the redbanded and mulberry whiteflies have reddish bands on the wings. Nymphs and pupae of the nesting whitefly are oval, flat, semitransparent, and pale green in color. Most distinctive are the long crystalline strands of wax produced by nymphs, giving it the field name of "pasta" or "spaghetti" whitefly. Nymphs and [pupae of greenhouse whitefly](#) are oval, thin, flat, semitransparent, and pale green in color. Giant whitefly adults are about 3 times larger than other whiteflies. Their pupae produce long cylindrical strands of wax extending an inch or more below the leaf surface.

DAMAGE

Whiteflies feed on plant sap. Honeydew excreted by nymphs collects dust and supports growth of sooty mold fungus and can attract ants, which interfere with the biological control of whiteflies and other pests.

CULTURAL CONTROL

Control dust by oiling or paving main orchard roads. If it is necessary to use dirt roads for a particular activity, use a water truck or trailer to prevent dust, especially during summer months when heat convection currents carry dust well up into the tree canopies. Avoid moving uncertified plant materials from one orchard to another and do not transport plant materials into California from out of country. Make sure bins are clean when transporting bins from giant whitefly infested areas to clean groves.

BIOLOGICAL CONTROL

Several natural enemies attack the immature stages of whiteflies and provide partial to complete biological control when undisturbed by ants, dust, or insecticide treatment. Conserve natural enemies by applying *Bacillus thuringiensis* (Bt) products for [amorbia](#) and [looper](#), and pyrenone or sabadilla for [thrips](#) if monitoring indicates a need to control these pests. Especially important natural enemies include parasites such as [Encarsia spp.](#), [Cales spp.](#), and [Eretmocerus spp.](#), and predators such as [Delphastus spp.](#), [Chrysoperla spp.](#), [Geocoris spp.](#), and [Orius spp.](#). [Jumping spiders](#) feed on adult whiteflies.

ORGANICALLY ACCEPTABLE METHODS

Biological and cultural controls.

MANAGEMENT DECISIONS

Chemical treatment of whiteflies is not effective; temporary suppression may be achieved only to be followed by a resurgence of the pest. This is especially true if broad-spectrum insecticides, such as methomyl or malathion, are used.

PRECAUTIONS

PUBLICATION



UC IPM Pest Management Guidelines: Avocado
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