



Kimberly Schofield
Program Specialist-Urban IPM
k-schofield@tamu.edu

Pest Check

Watch Out For Whiteflies on Houseplants

More homeowners are moving plants indoors due to the cooler weather. This may be an open invitation for whiteflies to become nuisance pests indoors. Adult whiteflies are about 1/16 inch in length, with a white, wax-like substance covering their body and wings. They are found in the order Homoptera, so they are not really flies. Adult whiteflies will flutter around when disturbed and they tend to be more active during the late morning and afternoon, compared to early morning and evening.

The silverleaf whitefly is the most economically important whitefly species in Texas, with a host range of more than 500 plant species including poinsettias. Adults have white wings and pale yellow bodies. Their wings are held in about a 45-degree angle over their bodies, causing the silverleaf whitefly to appear slender compared to other whiteflies.

The female whitefly will lay oblong, smooth, yellow to amber brown eggs randomly on the underside of leaves. The eggs hatch into flat, greenish-yellow, oval nymphs that begin to suck the sap of plants. Since nymphal and adult stages possess piercing-sucking mouthparts, they are able to remove the phloem from leaves. This can cause leaves to turn pale and die or drop off. Since whiteflies remove phloem, they also excrete honeydew. This honeydew is a perfect media for sooty mold growth. In addition, plant disorders and virus transmission can result from whitefly feeding and it is even a concern when whitefly populations are small. As a result, large whitefly populations can cause plant death.

Some Suggestions for Control Options:

Non-Chemical Control Options:

Inspect new plants before purchase and treat any infested material.

Remove weeds from the area.

Remove and destroy heavily infested plants from the landscape.

Introduce and preserve natural enemies, such as:

Predators: ladybeetles, green lacewings, minute pirate bugs, big eyed bugs and damsel bugs.

Parasitoids: minute wasps, such as *Encarsia formosa* and *Eretmocerus eremicus*, are about 1 millimeter in length. Female parasitic wasps lay eggs inside whitefly nymphs. When the wasp eggs hatch, the larvae feed internally in the whitefly nymphs, eventually killing the whitefly.

Pathogens: *Beauveria bassiana*, which causes white-musccardine disease, is formulated in insecticidal products.

Chemical Control:

Several classes of insecticides are labeled for use against whiteflies. Insecticidal soaps and oils, such as horticultural and neem oils are lowest in toxicity. Also systemic insecticides can be used such as those containing imidacloprid.

To reduce the impact of insecticides on natural enemies, avoid the frequent use of broad-spectrum insecticides.



Picture of whitefly. Photo by Texas A&M University:

<http://hortipm.tamu.edu/pestprofiles/sucking/wfdawn/silverle.html>

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