

# THOSE PESKY WHITEFLIES

*TWG Editor: The one houseplant that I have actually kept alive is a hibiscus which blooms bright red all year. It came as a gift from my dear friend, Rosemary Stelzner. Even after multiple prunings, it looms large: it's about 4' around in all directions. I love it! But whenever I deprive her of water, those pesky whiteflies attack. I've tried putting the hibiscus in the shower, but she's too large now. This article from Logee's seemed to be just what I needed. I hope it helps you too.*

Perhaps you have seen them. To the naked eye, they look nothing like flies. They appear to be flecks of white dust which are capable of flight. In severe infestations, they may even move as a swarm, a blizzard of tiny insects which rise up from your plant when you mist the leaves, move the pot or disturb the foliage. They are whiteflies.

If left untreated, the population of bugs becomes so great that the plant vigor diminishes and its structure weakens. The plant may die.

Several options are available for controlling whitefly. We will review some of these methods, with emphasis on the least toxic.

One option is to spray with a substance that will kill the insect on contact. When in the crawler or adult stage, the whitefly is most vulnerable to contact insecticides. There was a time when contact sprays such as Orathene or Malathion were effective. No longer. The bugs have mutated: the egg to adult cycle is no longer broken by these chemicals. In fact, most of the synthetic pesticides of the last forty years no longer work.

Another option is to neutralize development at any of the stages of growth. Presently, we at Logee's are using neem products as a means of control. Neem is a tree [*Azadirachta indica*], native to India, which has for centuries provided a variety of medicinal products; more recently, its oils have proven effective in the control of insects. With regard to whiteflies, neem sprays are most effective during the pupating stage. Rose Defense™, put out by Green Light Company, contains extracts from the seed of the neem tree. Its actions are three-fold: repellent, antifeedent, and growth regulator. The spray is absorbed by the leaves; the pupae feed on it, are unable to continue their growth, and die. BioNeem®, put out by Safer, Inc., contains neem oil. It works like other horticultural oils, smothering the adult insects, eggs and crawlers, yet causing no foliar damage. At Logee's, we have found that spraying the oil and extracts once a week for a period of three weeks provides good control. The use of ultra fine oils, such as SunSpray®, also works, especially on the eggs and crawlers; but caution needs to be taken for this kind of oil is petroleum based and will damage certain plants. The best advice is to apply SunSpray® in the evening and start with the lowest concentration.

Believe it or not, for small infestations of only a few plants, the mouthwash Listerine® works quite well as a contact insecticide. We've used it diluted and straight out of the bottle. But it's expensive and has a strong odor which lingers. As for mechanical control, whitefly populations can be reduced by hanging sticky cards. These are either blue or yellow cards coated with 'Tanglefoot', which is a non-toxic, very sticky goo. The

whitefly is attracted by the color of the card. Should a wing merely graze the goo upon the card, the bug has no escape. This method will not eliminate the bugs, but the population is kept low enough to be of little concern.

The next methods were suggested by our customers. One shakes the plant, while letting a vacuum cleaner inhale the adults as they fly off. Another closes up her greenhouse and sets oak leaves on fire. The smoke kills the adult whiteflies, but the process has to be done at four day intervals for a period of up to 20 days. Because there is an obvious downside to this method, we hesitate to recommend it.

The final method of gentler controls is the use of predators. At least three insects are sold which are parasitic specifically to the whitefly. They are *Encarsara formosa*, lace wings, and the delphastus beetle, a relative of the ladybug. Control with predator bugs is easy to do and environmentally friendly, but due to natural processes, a residual population of whitefly always remains. Furthermore, the predators are extremely sensitive to certain pesticides, particularly synthetic ones. A good rule of thumb is to wait sixty days after spraying the greenhouse to release these predators.



**Logee's Greenhouse** is a mail-order supplier of tropical and subtropical plants. You may call Logee's at (888) 330-8038 or call their horticultural hotline at (860) 779-7481. [www.logees.com](http://www.logees.com)

Insect predators are available from Rincon-Vitova, (800) 248-2847.