



## Greenhouse

# Greenhouse Whitefly

Pest **8**  
Fact  
Sheet

### Introduction

The greenhouse whitefly, *Trialeurodes vaporariorum*, feeds on a variety of vegetable and floral crops: pointsettia, cucumber, tomato, lettuce, geraniums, pelargonium, salvia, ageratum, lantana, heliotrope, fuchsia, hibiscus, abutilon, solanum, and coleus are among the favorites.

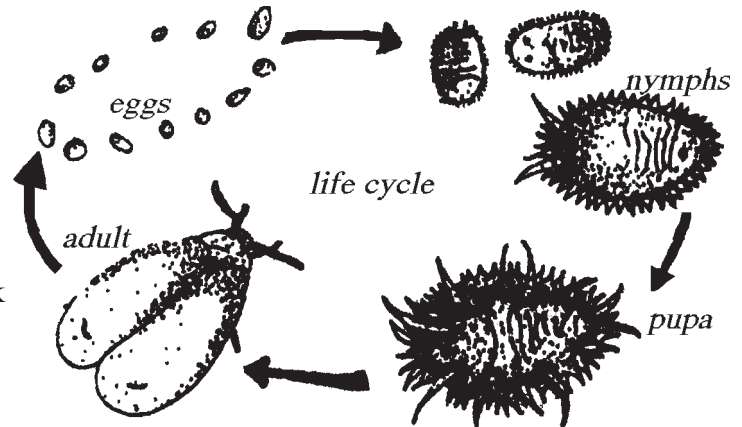
### Description

The eggs are usually found on the underside of tender leaves. Very small, oval, light green to yellow-green eggs are typically attached to the undersides of tender leaves by short stalks.

The newly-hatched nymph is flat, oval and nearly transparent. White waxy filaments radiate from the body of the last stage nymph. The adult is a small insect about 1/16th of an inch long, with four snow white wings and a yellow body.

### Life cycle

This insect does not overwinter outdoors in New Hampshire. It can only survive the winter in greenhouses. The life stages of whiteflies overlap, so that throughout the year, growers may simultaneously see eggs, nymphs, pupae, and adults. Damage from whiteflies is two-fold. They suck the juices out of the host leaves, causing a lack of vigor and wilting. They also secrete a sticky material called honeydew, upon which a black fungus called *sooty mold* develops. Sooty mold can eventually cover an entire leaf. The mold will interfere with the plant's photosynthetic processes, reduce its vigor and eventually cause death.



The female may lay 150 or more eggs at a rate of about 25 per day on the undersides of leaves. Hatching occurs within 10 days. Upon hatching, the nymph will travel for awhile. Then it will insert its beak into the plant tissue and remain there feeding for about a month while passing through four stages of development.

Unlike most sucking insects, the whitefly has a resting stage ("pupa") before becoming an adult. The adult also feeds in the same manner as the nymph. Whiteflies complete their life-cycle in 21-36 days, depending on the temperature.

A second species of whitefly, the Sweet potato whitefly, *Bemisia tabaci*, is also a serious problem in New Hampshire. It is very similar to the greenhouse whitefly. The main difference is that the Sweet potato whitefly lacks the spines (waxy filaments) on the last nymphal stage ("pupa"). Both species have become resistant to many insecticides, making control difficult.

**Control**

The key to successful whitefly control is early and frequent pesticide applications before populations build up. All pesticides have the potential to damage sensitive plants. Check with the label or apply the pesticide to a few plants first. Consult your county Extension Educator (see county office telephone listing on reverse side) for specific pesticide recommendations.

**Summary**

Damaging stage	Adult, nymph
Part of plant attacked	Leaves
Overwintering stage	Doesn't overwinter outdoors in NH, usually remains in greenhouses year-round.
Number of generations per year	8-12
Time of year when most damage done	Year round (greenhouse); summer (outdoors)
Number of applications	3-6 depending upon the chemical used and number of infestations per year

**UNH Cooperative Extension County Office Telephone Numbers**

<b>Belknap</b> (603) 527-5475	<b>Carroll</b> (603) 539-3331	<b>Cheshire</b> (603) 352-4550	<b>Coos</b> (603) 788-4961	<b>Grafton</b> (603) 787-6944
<b>Hillsborough</b> Goffstown (603) 641-6060	<b>Merrimack</b> (603) 225-5505 (603) 796-2151	<b>Rockingham</b> Brentwood, NH 03833 (603) 679-5616	<b>Strafford</b> (603) 749-4445	<b>Sullivan</b> (603) 863-9200

*Stop! It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. If unsure of registration status of a particular pesticide product, contact the NH Division of Pesticide Control at (603) 271-3550. Store pesticides in their original containers in a locked cabinet or shed away from food. Dispose of unused pesticides or empty containers safely, according to NH regulations. If you suspect pesticide poisoning, call the New Hampshire Poison Control Center at 1-800-222-1222.*

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