UTAH PESTS fact sheet

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Fall Webworm

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DID YOU KNOW?

- Fall webworms are a common pest in urban and forest areas from mid July through August.
- Fall webworms can feed on over 100 species of trees, but cottonwood and chokecherry are preferred hosts.
- While unsightly, fall webworm damage rarely causes serious stress to trees and control is usually not recommended.
- Webs can be removed from low-growing trees by hand, with a pole or other apparatus, or pruned out. *Bacillus thuringiensis* is an effective, low-toxicity chemical option.

INTRODUCTION

The fall webworm, *Hyphantria cunea*, is a common defoliator of ornamental and fruit trees in Utah. Starting around late July, the caterpillars, webbing, and damage become noticeable, particularly in some of the canyons adjacent to populated areas (Little Cottonwood canyon, Logan canyon, Provo canyon, etc.).

Fig. 1. Adult fall webworm (*Hyphantria cunea*) laying eggs on the underside of a leaf.[1]

Fig. 2. Fall webworm (*Hyphantria cunea*) larvae feeding gregariously inside of a silken "tent."[1]

GENERAL BIOLOGY

Fall Webworm

Scientific Name: *Hyphantria cunea.*

Range: Native to North America.

Hosts: Cottonwood and chokecherry are preferred, but over 100 species can be consumed.

Identification Adult: The adult moth has a wing spread of 1 to 2 inches and is primarily white (body and wings), but can have black spots on the wings (Fig. 1). Occasionally, the legs and body will have orange markings.

Identification Immature: Full grown larvae are about 1 inch long, and have highly variable coloration (Fig. 3). Larvae are covered with long tufts of hair coming from orange and black bumps on the back (Fig. 3).

Life History: Adult moths emerge from June to July, mate, and lay eggs on the under sides of host leaves (Fig. 1). Eggs hatch in about 1 to 2 weeks; larvae mature in about 6 weeks and drop to the ground to pupate. Pupation sites frequently occur in the soil, leaf litter, or under loose bark. Moths overwinter as pupae. There are one to two generations per year depending on location.

Key Habits: Newly hatched larvae make a web "tent" around themselves and their food, which increases in size as they progress. Young larvae feed gregariously (in a group, socially) skeletonizing leaves (Fig. 4), and will consume whole leaves when older. Damage usually does not cause serious stress to the tree.

CONTROL

Outbreak populations of fall webworms seldom occur, and because they defoliate trees late in the growing season they rarely cause life-threatening damage to trees. Chemical control of fall webworms is usually not recommended. On occasion, high numbers of caterpillars may be unsightly and become a nuisance pest that warrants control.

Cultural and Physical Control Methods:

If webworms or their tents are located within a safe reaching distance by hand or pole, they can be physically removed or pruned out of the tree. A strong spray from a high pressure hose can also dislodge tents. Burning tents is not recommended, as this can cause much more damage than the webworms would inflict.

Chemical Control Methods:

Chemical control of fall webworms can be difficult because of their location in the tree (generally found high in the canopy) and because their webbing reduces the penetration of pesticides to the point that the insect may not come in contact with a lethal dose. When applying pesticides focus on the foliage surrounding the current tents or caterpillars to stop their expansion. When taller trees are treated, a high pressure spray gun should be used to obtain good coverage.

Fig. 3. Fall webworm (*Hyphantria cunea*) larvae can have great variability in their coloration.[1]

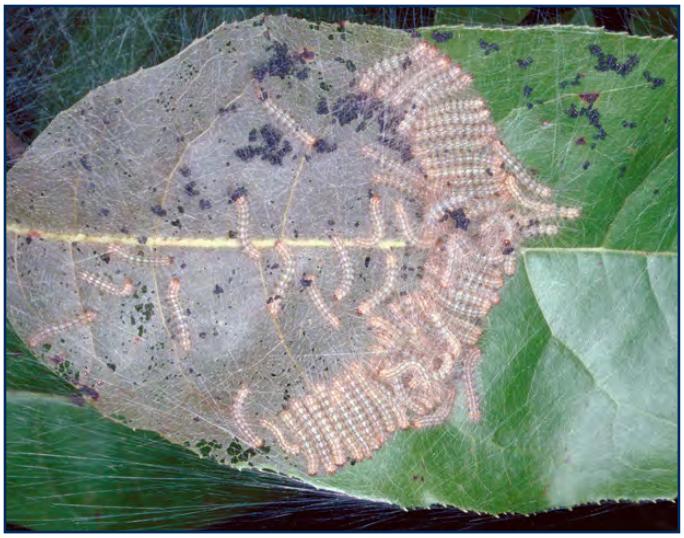

Fig. 4. Fall webworm (*Hyphantria cunea*) larvae feeding gregariously on a leaf--notice the skeletonizing pattern of the damage.[1]

The microbial insecticide B.t. provides good control of fall webworm with minimal impact on other insects or wildlife. Dipel and Bonide are two products that contain B.t. For best results apply B.t. when newly hatched caterpillars first appear.

In Utah there are over 140 products containing 29 different active ingredients (AI's) labeled for use on ornamental shade trees for fall webworm control. Examples of AI's include: acephate (1B), bifenthrin (3A), carbaryl (1A), chlorpyrifos (1B), imidacloprid (4A), premethrin (3A), and thiamethoxam (4A). The number and letter combinations following AI's indicate its chemical group. These groups are chemically similar insecticides that kill the target organism in a similar way, i.e., mode of action. Rotating insecticides with different chemical groups on a yearly basis can help reduce insect resistance build-up to an insecticide. For more information on insecticide mode of action and insecticide resistance, visit irac-online.org. Make sure the product you select contains the site, e.g., ornamental fruit or shade trees, to which you are going to apply.

PHOTO CREDITS

1. Lacy Hyche, Auburn University, Bugwood.org.