



Bill Ree and Marty Jungman\*

FALL WEBWORM

he fall webworm, *Hyphantria cunea* (Drury), is a common caterpillar pest of trees. It attacks more than 88 different kinds of plants, including many fruit, nut and ornamental trees and shrubs. It does not attack conifers (pines and other needle-bearing trees).

Fall webworms are known for the large, unsightly webs they produce. Heavy infestations are rarely fatal, but if they occur repeatedly over several years they can stress trees and make them more susceptible to drought, disease or other insect pests.

The feeding preferences of fall webworms vary from one place to another. In west Texas, mulberry, poplar and willow are preferred; oak, hickory and pecan are most often attacked in east Texas.



Tightly woven fall webworm web.

## **Description**

The fall webworm moth is white and has a wing span of 1 to  $1^{1/2}$  inches. Sometimes there are small, dark spots on the forewings. Full-grown larvae are approximately 1 inch long, pale green or yellow, and covered with tufts of long, white and black hairs. There are two distinct races of the fall webworm, which can be identified only during the larval stage.

Larvae of the orange race have orange heads and orange tubercles, while larvae of the black race have black heads and tubercles.



Loosely woven web.

Fall webworms often cover entire branches with their webs. In extreme infestations whole trees may be covered. Larvae feed within the web, eating the tender parts of leaves while avoiding the larger veins and midrib.

## Biology

Fall webworms have four generations each year in southern portions of Texas, while two to three generations occur in the northern areas. The first generation occurs as early as April in south Texas and as late as June around Lubbock and Amarillo. The last generation of the year, which occurs in the fall, is usually the most damaging and gives the insect its name.

Fall webworms overwinter as pupae on the ground or on rough tree bark. The moths emerge from silken cocoons in the spring, then disperse and

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mate. Female moths deposit hair-covered egg masses on the undersides of the leaves of their food plants. Egg masses may be deposited in either a single or double layer and can contain up to 600 eggs. Each female moth will deposit only one egg mass. Egg masses of the walnut caterpillar, another common pest on pecans, are not covered with hairs.

The larvae begin to build a silk web soon after hatching. As larvae consume leaves within the web, they expand the web to take in more foliage. All larvae within a web are the offspring of a single egg mass. Larvae will molt six or seven times before leaving the web to pupate. The life cycle from egg to adult requires approximately 50 days under ideal conditions.



Adult laying eggs.



Fall webworm egg mass.

## Control

Fall webworms often can be controlled without insecticides by removing and destroying any leaves that contain egg masses. Larvae may be knocked out of low-hanging webs with a stick or broom and into a box or garbage bag for disposal. Webs also can be pruned from smaller branches.

Many beneficial insects attack the egg and larvae of fall webworm. You can help these predators and parasites get to their fall webworm prey by tearing open the webs.

If webs are too numerous or too high in a tree to deal with individually, insecticides can be used to prevent damage. Hose-end sprayers or commercial high-pressure sprayers are best for reaching upper



Fall webworm larvae.

portions of tall trees. Because webworm larvae remain inside their webbing, insecticide sprays must penetrate the web to be effective. For best control, apply insecticides after eggs hatch and before larvae develop dense webs. Insecticides containing *Bacillus thuringiensis* (*Bt*), carbaryl (Sevin<sup>®</sup>), chlorpyrifos (Lorsban<sup>®</sup>), malathion, tebufenozide (Confirm<sup>®</sup> 2F),

spinosad (Spintor<sup>®</sup>), and methoxyfenozide (Intrepid<sup>®</sup> 2F) are effective. Insecticides containing *Bt*, tebufenozide and spinosad are selective for caterpillars and do not harm beneficial insects; however, they must be applied when caterpillars are small for effective control.



Newly hatched fall webworm larvae.

Insecticide label clearances are subject to change, and changes may have occurred since this publication was printed.

The pesticide user is always responsible for the effects of pesticides on his or her own property, as well as problems caused by drift to other properties. Not all insecticides are registered for fall webworm on all sites and commodities. It is up to the user to read the label to make sure the insecticide is cleared for the site and commodity. Always carefully read and follow instructions on the pesticide label.

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