

FALL WEBWORM

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The fall webworm, *Hyphantria cunea* (Drury), is native to North America and is a common caterpillar pest of trees. It attacks more than 88 kinds of plants in North America, including many fruit, nut, and ornamental trees and shrubs. It does not attack pines and other needle-bearing trees (conifers). Fall webworms are known for their large webs on terminal foliage. Heavy infestations are rarely fatal, but if they occur over several years they can make trees more susceptible to drought, disease, or other insect pests. The fall webworm's plant preference varies according to region. In West Texas, they prefer mulberry, poplar and willow—in East Texas, they most often attack sweetgum, oak, hickory and pecan.

Description

The fall webworm moth has a 1- to 1½-inch wingspan. Its wings are white but sometimes may have 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. Fall webworms often cover entire branches with their webs and in extreme infestations may cover the whole tree. Larvae feed within the web—they eat the tender parts of leaves but avoid the larger veins and midrib.

Biology

The fall webworm's name is somewhat misleading because the caterpillars and adult moths can be found in the spring as well. Fall webworms have four generations per year in South Texas, and two to three generations in northern parts of the state. The first generation occurs as early as April in South Texas and as late as June in the Panhandle. However, the fall generation is usually the most damaging—hence the name.



Figure 1. Fall webworm egg mass

Fall webworms overwinter as pupae on the ground, behind rough tree bark or in other sheltered sites around homes and buildings. Moths emerge from their silken cocoons in the spring, then disperse and mate. Female moths deposit hair-covered egg masses (Fig. 1) on the undersides of the leaves of their food plants. Do not mistake these egg masses for those of the walnut caterpillar, which have no hairs.

Egg masses may be deposited in a single or double layer and can contain up to 600 eggs. Each female moth deposits only one egg mass in her life. 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 the larvae within a web are the offspring of a single egg mass and will molt six or seven times before leaving the web to pupate. Under ideal conditions, the life cycle from egg to adult is approximately 50 days.

Control

Fall webworms can be managed on smaller trees without insecticides. You can do this by physically removing the webs, caterpillars, or egg masses. You can knock larvae out of low-hanging webs

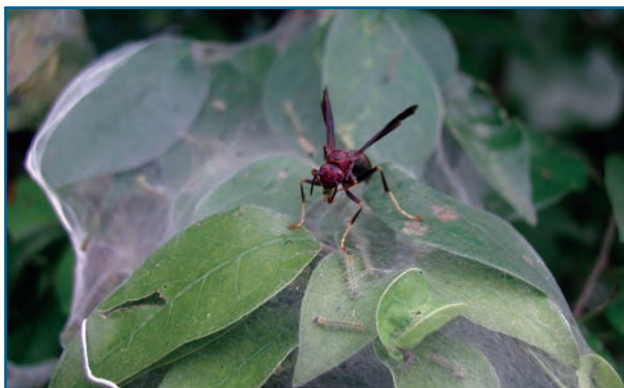


Figure 2. Wasp feeding on fall webworm larvae

into a box or garbage bag with a stick or broom. You can also prune webs from lower and smaller branches, or pull them down with a rake or a pole.

Beneficial insects attack the eggs and larvae of the fall webworm and keep populations under control in many years (Fig. 2). You can help beneficial insects by tearing open the protective webs. If webs are too numerous or too high in a tree to deal with individually, you can use insecticides to prevent damage.

Hose-end or commercial high-pressure sprayers are best for reaching upper parts of trees. Webworm larvae stay inside their web so insecticide sprays must penetrate the web to be most effective. For best control, apply insecticides when webs and caterpillars are small. Insecticides containing *Bacillus thuringiensis* (Bt) or spinosad are effective and will not harm beneficial insects.

Carbaryl and pyrethroid insecticides (such as permethrin, cyfluthrin, bifenthrin, and esfenvalerate) are highly effective against fall webworm. However, these insecticides are also toxic to beneficial insects so use them only for severe infestations. Insecticidal soaps and horticultural oil sprays can also be effective when applied directly to caterpillars in their nests.

Insecticide labels are subject to change—always read and follow instructions on the pesticide label carefully. You are responsible for the effects of pesticides on your own property, as well as problems caused by drift to other properties. Not all insecticides are registered for fall webworms on all sites and commodities. Read the label to make sure the insecticide is labeled for your site and commodity.



Figure 3. Colony of fall webworm on sweetgum

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