



Pest e-alerts



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Fall Webworms in Pecan

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Fall webworms occurs throughout the US and attack many types of deciduous hardwood trees and a few evergreen species. In the south, pecan, hickories, and sweetgums are the preferred hosts. The adult fall webworm is a stout bodied moth that varies from all white to white with brownish to black spots on the wings (Fig 1). The larvae (caterpillars) have orange heads and tubercles (bumps) where silky white hairs are found, giving the caterpillar a fuzzy appearance (Fig 2). Full grown larvae are around 1 inch long.

Lifecycle

There are three to four generations in Oklahoma each year. The first begins in April and the last in late August, early September. Females lay their eggs on the underside of leaves in masses



Fig 1. Adult fall webworms. Photos courtesy H C Ellis, UGA (l), Gerald J. Lenhard, LSU (r), Bugwood.org

(Fig 3). Larvae hatch in about a week and feed in groups. As they feed and grow, they construct a large, loose, web which covers the branch and leaves they are feeding on (Figure 4). As the larvae grow so does the web enveloping more leaves for food. The larvae of the earlier generations leave the web and pupate underneath the bark of the trees. The last generation larvae leave the web and drop to the ground to overwinter where they pupate in leaf litter and soil.

Damage

The webs are an eyesore and detract from the aesthetics of an orchard or landscape. Defoliation of the leaves by the webworm can affect the current year's nut quality, and if it is extensive can reduce crop yields the following season. Younger trees are affected more than older trees by this damage. The caterpillars only feed on leaves and do not directly damage the nuts. A few webs will not cause enough defoliation to impact yield or trees. Some years Oklahoma does experience fall webworm in large numbers. The last generation in the fall is generally the only one that causes economic damage.



Fig 3. Fall webworm egg mass. Photo courtesy PA Dept of Conservation and Natural Resources - Forestry Archive, Bugwood.org



Fig 2. Fall webworm larvae. Photo courtesy Lacy L. Hyche, Auburn University, Bugwood.org

Control

Webworm is rarely a problem in orchards that manage for other pests. Sprays routinely applied for pecan nut casebearer and hickory shuckworm control the webworm also. In commercial orchards if webs are common and the potential defoliation appears unacceptable, especially if young trees are affected, spray with a product that targets caterpillar pests: *Bacillus thuringiensis* (Bt), methoxyfenozide, chlorpyrifos, or carbaryl. Apply the insecticide as a spot treatment to the web and foliage surrounding the web. The web must be soaked by the insecticide to work. Follow all instructions on insecticide label.

If there are only a few webs present in young trees these can be pruned out easily. It is much easier to control webworm when the larvae and webs are small; scout orchards and groves regularly. For more information on webworm and other pecan pests go to <http://okpecans.okstate.edu/> or <http://pecan.ipmpipe.org/>.



Fig 4. Fall webworm web in pecan.

Dr. Richard Grantham - Director, Plant Disease and Insect Diagnostic Laboratory

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