

Fall Webworm

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Distribution and Hosts:

The fall webworm occurs throughout the United States and southern Canada. It attacks many deciduous hardwood trees and a few evergreen species. In the South, pecan, hickory, persimmon, and sweetgum are the preferred hosts.

Description:

The adult fall webworm is a medium sized white moth with a stout body. The forewings are sometimes marked with brownish to black spots.

Larvae (caterpillars) have orange heads and tubercles (small bumps on the body) from which long silky hairs arise (Figs. 1a and 1b). Full grown larvae are 1 to 1 ¼ inches long.



Figure 1. Fall webworm larvae

Life Cycle and Damage:

Three to four generations of the fall webworm occur each year. The first generation begins in late April and culminates with the larvae of the last generation pupating in late October and early November.

The insects overwinter in the pupal stage in the leaf litter and surface layers of the soil. Moths are active during the summer and early fall. After mating, the females usually lay their eggs in masses on the undersides of leaves. Larvae hatch in about a week and feed in groups. As they grow, they construct large, loose, irregular-shaped silk webs, which cover the leaves, twigs, and small branches (Fig. 2a, 2b, 2c). As the larvae continue to feed and develop, the webs are enlarged to enclose more leaves. Prior to pupation, larvae of the early generations leave the web to find protected areas on the tree to pupate, such as bark crevices. Larvae of the last generation leave the web and drop to the ground where they pupate in the leaf litter and soil.

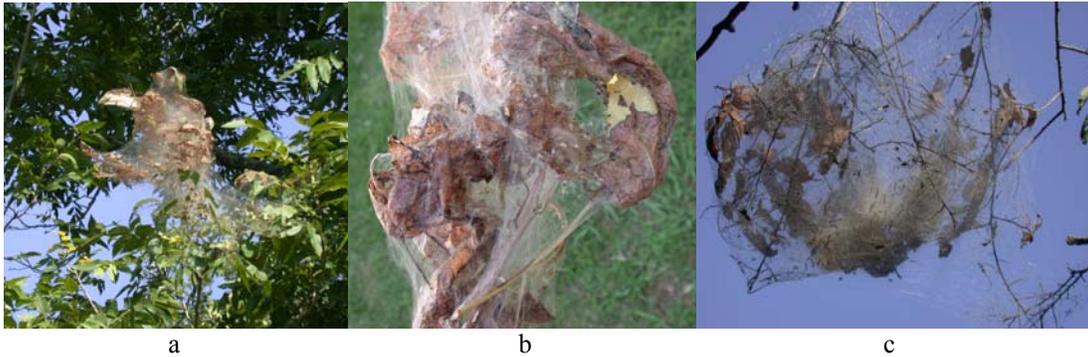


Figure 2. Fall webworm damage

The large, ugly webs of the fall webworm seriously detract from the beauty of shade trees. Defoliation caused by the larvae feeding on pecan leaves can reduce the quality of the current season's nuts and, if defoliation is extensive, reduce crop yields and the following season. Fall webworms do not attack the nuts and will not kill a tree outright. However, massive defoliation over several years may weaken a tree making it susceptible to damage by other insects and diseases.

Control:

In properly managed commercial orchards, the fall webworm is seldom a pest. Sprays routinely applied to control more serious pecan insects also control webworms. In residential areas, it is one of the most important pecan pests because homeowners rarely have the type of spray equipment required to adequately cover large pecan trees and supply enough pressure to penetrate the webs.

When only a few webs are involved on small trees, it is more economical to prune them from the trees. Periodic inspection will allow for removal of the webs before they become large, numerous, and unsightly.

If a homeowner chooses to spray, several insecticides are available which give good control of the fall webworm, and are safe to use in residential areas. Control measures should be initiated when the webs and the larvae are small. Large webs make it difficult for insecticides to penetrate and contact the larvae within. Smaller larvae are also easier to kill. For effective control spray the web and the foliage surrounding the web. A listing of the insecticides that can be used for controlling fall webworm, can be found in the Louisiana Recommendations for Control of Pecan Insects. This guide can be found at www.lsuagcenter.com. When using insecticides be sure to check the pH of the water being used for spraying. The pH needs to be between 5.5 and 6.5 for optimum insecticide efficacy. Use of a buffering agent will help maintain the desired pH once pesticides have been added to a solution.