Fall Webworms Are Back! Here’s How to Control Them

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While visiting growers in mid-June, I started noticing quite a bit of fall webworm infestation in native pecan groves as well as in backyard pecan and fruit trees. If early populations are any indication, we can expect a lot of defoliation heading into the fall.

The range of trees attacked by this pest is impressive. Worldwide, more than 600 kinds of deciduous trees have been attacked. Favorites in Oklahoma include pecan, hickory, walnut, crabapple and persimmon.

FIRST GENERATION
SPRING/SUMMER
- Female moths can lay up to 500 eggs on both sides of the leaves.
- Larvae hatch and then feed for up to 50 days.
- Larvae then form webs as they feed on the leaves.

SECOND GENERATION
FALL/WINTER
- When left to feed, colonies can completely defoliate a limb.
- Larvae continue feeding in fall.
- Pupae winter beneath loose bark.
THE WEBWORM CYCLE

Entomologists tell us that webworm outbreaks run in cycles. Some years outbreaks are severe, while in other years they are barely noticed. Weather, birds and the predatory insect population contribute to the circular nature of these outbreaks. Heavy, driving rains can flush the worms from the foliage early in the season, reducing the level of damage.

Two generations of fall webworm caterpillars can occur in the Southern Great Plains. The first generation usually appears from June through August. If a second generation is produced, it can extend into October.

This pest overwinters as a pupa in a cocoon concealed in ground litter, cracks and crevices, or in the soil. Following mating, female moths usually deposit their egg masses on the undersurface of the leaves. Larvae hatch in approximately seven days. They immediately begin to spin a small silken web over the foliage on which they feed. In the initial stages, the small, hairy, yellow-brown worms feed only on the leaf’s upper surface; but as the size of the caterpillar increases, the whole leaf is eaten. As they grow, the web grows to enclose more and more foliage.

For the first half of the 4- to 6-week period during which the caterpillars feed, all feeding occurs in the web. As caterpillars near maturity at 1 3/4-inch long, they leave the web at night to feed.

During the final development stage, caterpillars leave the web and crawl to a convenient hiding place, such as a thick patch of bark or the leaf litter at the tree base, where they pupate.

HOW TO CONTROL WEBWORMS

During most years, a fall webworm infestation can be ignored, especially if it is in a large, mature tree in good condition. When small trees are attacked, they can be severely defoliated and can even be completely encased by webs. In most cases, complete defoliation will not kill the trees. However, if small trees are not well established or are experiencing any type of severe stress, defoliation can result in death, especially if it happens twice in one season. On pecan trees, nut production and quality can be reduced if severe infestations are not controlled. Unless the webbing is widespread, it is not necessary to treat the entire canopy. When treating isolated webs, spray the leaves next to webs. As these leaves are incorporated into the webs and eaten, the Bt will be ingested. The molting disrupter class of insecticides, including the brand name products Confirm and Intrepid, are recommended for control of fall webworms in commercial pecan plantings for the same reason; they target caterpillars and will not harm beneficials. Orchards sprayed to control pecan nut casebearer using molting disrupters in May to early-June seldom experience significant fall webworm infestation.

Fall webworm populations vary from year to year. Several strategies and techniques are available to control this pest. Early detection is important when controlling heavy infestations of webworms.