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Home Grounds, Gardens, Home Pests

Fall Webworms

Many calls and questions come in about this time of year regarding the webbing that is seen in trees while driving down the side of the road and from home owners who have them in their landscape. This webbing is the presence of fall webworms - *Hyphantria cunea* (Drury). These worms have been known to web in over 85 species of trees in the United States and in our area are most commonly seen in, but not limited to; oaks, pecans, cherry, willow, and river birch.

Fall webworms caterpillars are covered with long white to yellowish tan hairs. Two races of fall webworms occur in North America, the blackheaded and redheaded races. The blackheaded race has caterpillars which are light greenish-yellow to pale yellow with two rows of distinct black tubercles. The redheaded race is tan in color with orange to reddish tubercles.

Fall webworms become very visible in late summer and fall and create silken nests around leaves at the ends of branches. This pest overwinters in the pupal stage. Pupae are usually in the ground but can be located in old nest remains, under loose bark and in leaf litter. Then the adults emerge from late May into July, then eggs are laid on the undersides of leaves in early to midsummer and hatch in about a week. Then the caterpillars feed for six weeks before dropping to the ground to pupate into adults, then more eggs are laid and the cycle continues. In the South there may be as many as four generations.

All of the feeding from the webworms occurs within the silken nests. The caterpillars remain inside the webbing, and if food runs out new foliage is encased. This pest usually eats leaves late in the season and the nests are generally concentrated to limited areas. Because of this, very little, real damage is done to most trees. However, the nests can look very unsightly and multiple generations in long summers can lead to significant defoliation.



For Control:

Though the webs are very unsightly, damage to most trees is considered to be insignificant. However, in southern states where several generations of attack can severely defoliate trees, control measures are needed. This pest tends to go through periodic population explosions. Outbreaks every four to seven years may last for two to three years and then natural control agents greatly reduce the activity.

Strategy 1: Mechanical Control - Removal of Nests - Small nests can be pruned out of small to medium trees. Monitor trees early to detect the nests when only several leaves are involved. These small nests can be easily crushed. Do not burn or torch the nests in trees as this may do additional damage to the tree.

Strategy 2: Biological Control - Encourage Predators and Parasites - Over 80 species of parasites and predators have been identified in North America. Social wasps (yellow jackets and paper nest wasps), birds, predatory stink bugs and parasitic flies and wasps are the most important. Delay destruction of wasp nests until August when social wasps change from carnivores to sugar feeders. Try to withhold contact insecticide sprays until it is certain that predators and parasites are not present in sufficient numbers to control the webworms.

Strategy 3: Biological Control - Apply *Bacillus thuringiensis* (Bt) - The bacterial insecticide, Bt, is quite effective against fall webworms if it is applied when the larvae are small. Use formulations with UV protectants and thoroughly cover leaves next to nests. As these leaves are incorporated into the nest and eaten, the Bt will be ingested.

Strategy 4: Chemical Control - Standard Insecticide Sprays - Locate nests early and merely wet the nest and cover nearby foliage. As the larvae walk on the nest surface or incorporate new foliage, they will contact the insecticide. Second applications may be needed if additional generations occur.

Strategy 5: Chemical Control - Use Systemic Insecticides - Extensive nests may occur in tall trees which are difficult to spray with ground equipment. These trees can often be treated with translocated systemic insecticides that are applied to the soil for root uptake.