Fall Webworm

Hyphantria cunea

The Fall webworm caterpillar, *Hyphantria cunea*, in the family Arctiidae, is a pest native to North America that can cause serious defoliation to deciduous trees and shrubs. It is often mistaken for the Gypsy moth caterpillar (which does not create webs) and the Eastern tent caterpillar (which does create tents). The eastern tent caterpillar nests are found in the crotch of branches in the spring while the fall webworm starts to create its silken tents over the ends of branches in August, gradually extending down the branch as it encompasses the foliage that it is feeding upon. A single host plant may contain several tents containing larval communities. The defoliation is generally esthetic and not injurious to healthy trees.

Life Cycle

The fall webworm overwinters as cocooned pupae in the soil, in leaf debris, or in cracks or crevices. The brown pupal case is about 1/3” (10mm) long and may have bits of leaf litter woven into it. The primarily white hairy adult moth will begin to emerge in June and will continue to hatch throughout the summer. Some adults may have black spots on their 1 ¼” (32mm) wingspans. The light yellow/green masses of several hundred eggs are laid on the undersides of leaves.
In mid-July the larvae hatch and immediately begin to feed and create the silken tents that will surround them and the foliage. The tents will be home to many larvae and as they grow they will enlarge the tent, generally feeding within its protection. There are two types of larvae, red-headed (found more frequently in southern climes) and black headed (found in the northern climes). The black-headed morphs differ in their behavior as they are known to leave the tents during their fifth instar to feed outside. The larvae may wag or jerk in unison if the tent is disturbed or a loud noise is made nearby. There is one generation per year in Connecticut that matures in about 6 weeks. The mature larvae have hairy, lime-green bodies with black spots and will leave the nest to pupate in their thin cocoons.

Black-headed fall webworm caterpillars on blueberry.

Hosts

Host plants of the fall webworm are mostly hardwood deciduous trees and shrubs including but not limited to American elm (*Ulmus americana*), Birch (*Betula*), Cherry (*Prunus*), Crabapple (*Malus*), Hickory (*Carya*), Lilac (*Syringa*), Maple (*Acer*), and Walnut (*Juglans*).

Control Measures

- Prune out or destroy all tents that may be safely reached.
- Bag and trash the remains.
- Early scouting is the best defense.
- More than 50 species of parasitoid wasps and flies are natural predators of the fall webworm caterpillar.
- Bacillus thuringiensis var. Kurstaki (BtK) is a soil-borne bacteria that must be consumed by the larvae. It is the most effective within the first few weeks after hatching when the larvae are small and should be applied to the foliage adjacent to the web.
- Use a high-pressure spray on tents that are higher up.
- Spinosad is a bacterial insecticide that works both by contact and by ingestion, attacking the nervous system of the insect. While wet, spinosad is toxic to bees and should not be applied to plants in flower.

Despite good cultural practices, pests and diseases at times may appear. Chemical control should be used only after all other methods have failed.

For pesticide information please call UConn Home and Garden Education Center weekdays, in Connecticut call toll free 877-486-6271. Out of state call 860-486-6271.

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