



Entomological Notes

Department of Entomology

FALL WEBWORM

Hyphantria cunea Drury

The fall webworm is a widely distributed native pest of shade trees and shrubs and appears from late summer through early fall. It feeds on almost 90 species of deciduous trees commonly attacking hickory, walnut, birch, cherry, and crabapple. This species acts similarly to the eastern tent caterpillar, but the fall webworm constructs its nest over the end of the branch rather than at tree crotches. The large conspicuous webs contain caterpillars, dead partially eaten leaves, and fecal droppings.

DESCRIPTION

White hair-covered egg masses contain several hundred light yellow eggs. Young larvae are pale yellow with 2 rows of black marks along their bodies. When fully grown, they are covered with whitish hairs that originate from black and orange warts (Fig. 1). Larvae vary as to their coloring and markings, but are usually greenish with a broad, dusky stripe along the back with a yellow stripe along the side. The pupal stage is brown. Adult coloration varies considerably from pure white to white with black spots with a wingspread of about 32 mm.

LIFE HISTORY

This pest overwinters as a pupa in a cocoon that is concealed in ground litter, cracks and crevices, or in the soil. Adults first appear in mid-June but may continue to emerge in small numbers during most of the summer. Females usually deposit their egg masses on the undersurface of the leaves. Larvae hatch in approximately 7 days. They immediately begin to spin a small silken web over the foliage on which they feed. As they grow, they enlarge the web to enclose more and more foliage (Fig. 2). The remains of these nests may persist through winter. These webs may sometimes surround 2-3 feet of infested branch. Larvae are gregarious and feed together until the last molt, after which they may feed independently. Larvae mature in about 6 weeks. Mature larvae leave the web and pupate on or in the soil. There may be one or two generations each year, depending on the geographic location in Pennsylvania.

Figure 1. Mature fall webworm larva.



Figure 2. Webbing of a "nest" of fall webworm on a branch tip.

DAMAGE

The larval stage of this pest skeletonizes and consumes leaves inside the protection of a tent-like web that they enlarge as they require additional food and grow. They may defoliate a tree occasionally, but rarely kill it. On shade trees webs usually occur on occasional branches. They may not injure the tree appreciably, but they reduce its ornamental value.

MANAGEMENT

Non-Chemical

Various species of natural enemies help to manage this native insect. Birds and many insect predators and parasitoids attack the larval stage. Eggs may also be destroyed by predators and insect parasitoids. It is possible to reduce this pest's population by mechanical control. When the webbed branches are within reach, they can be pruned and destroyed. This may be practical if the webs have not become too large and the aesthetic shape of the woody ornamental plant is not reduced by pruning.

Chemical

Apply a registered insecticide when webs and larvae are small. This usually occurs sometime during July. The entire infested plant does not need to be treated. Only the webs and their associated foliage should be thoroughly covered.

WARNING

Pesticides are poisonous. Read and follow directions and safety precautions on labels. Handle carefully and store in original labeled containers out of the reach of children, pets, and livestock. Dispose of empty containers right away, in a safe manner and place. Do not contaminate forage, streams, or ponds.

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