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Eastern Tent Caterpillar

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Plants Attacked

Black cherry, chokecherry and apple are favored; also feeds on hawthorn, pear, plum, and flowering fruits.

Description of Damage

Eastern tent caterpillars initiate small silken nests (tents) for protection in branch crotches as soon as they hatch (Fig. 1). Most larvae leave the tent during the day to feed on foliage, but return at night. Larvae defoliate increasingly larger portions of the canopy as they grow in size. They continually increase the size of the unsightly tent until it measures a foot (30 cm) or more in length. Leaves may be stripped completely when several tents occur in the same tree. Infested trees are often able to re-leaf in the spring after the initial defoliation and the caterpillars have finished feeding.

Figure 1. Silk tent of eastern tent caterpillars in the crotch of a host tree (Robert L. Anderson, USDA Forest Service, Bugwood.org).

Identification

The larval or caterpillar stage is colorful and covered with yellow-brown hairs (Fig. 2). It has a creamy white stripe running down the center of the back that is bordered by thin yellow-brown stripes. In addition, the caterpillar has a row of alternating blue and black spots along each side. Eastern tent caterpillars are sometimes mistaken for the superficially similar gypsy moth larvae. The dark reddish-tan adult moth has a stout body with two slanted pale stripes on each of the front wings (Fig. 3).

Lepidoptera: Lasiocampidae, *Malacosoma americanum* (F.)

Figure 2. Eastern tent caterpillar (PA Dept. of Conservation and Natural Resources – Forestry, Bugwood.org).

Figure 3. Adult moth of the eastern tent caterpillar (Mark Dreiling, Bugwood.org).

Life History

Adult females lay egg masses that completely encircle small twigs. Egg masses are a shiny dark brown color often described as “varnished” (Fig. 4). The species overwinters as eggs and the young larvae hatch at or before bud break in March or April. The caterpillars are gregarious, building a tent together in a fork of the limbs. The larvae leave the tent during the day to feed, but return to the nest during rainy weather and cool overnight temperatures. They measure 2-2.5 inches (5-6.4 cm) when full grown in 4-6 weeks. Mature larvae are often found crawling on the ground as they seek nearby buildings or other protected places to spin their dirty-white, coarse cocoons. Adult moths emerge in about three weeks and each female lays an egg mass containing several hundred eggs around a twig. There is one generation per year.

Figure 4. Egg mass of eastern tent caterpillar (Whitney Cranshaw, Colorado State University, Bugwood.org).

Control

During the fall and winter months, cut off and destroy any egg masses found on twigs.

Chemical control against the larvae should be done early in the spring while the larvae are small and actively feeding. However, larvae begin feeding on leaves opening from the bud in early spring, before there is much leaf surface area present to be treated with an insecticide. Spray treatments are not always successful if applied too early before the canopy has flushed out.

Most insecticides kill larvae by direct contact; however, any larvae remaining in the tent are protected by their shelter. Treat foliage and twigs during the day, when caterpillars are actively foraging outside the tent, using insecticides with residual properties. Residual insecticides will still be effective over a short period of time after spraying, killing any larvae that may have been protected in the nest but then emerged to feed on treated foliage.

If treating fruit-bearing trees, use an insecticide labeled for use on fruit trees. Burning out tents with fire is not recommended as the tree will likely suffer damage.

Remarks

Homeowners are often concerned at the sight of migrating eastern tent caterpillars seeking protected places to pupate. The larvae are seen crawling on other types of plants, roadways, walks, buildings, etc., suggesting that infestations have spread elsewhere than from the original host tree. Mature, migrating larvae are no longer feeding, so insecticides are generally ineffective against this stage. Crushing any migrating larvae when seen will reduce the adult population to some extent.

The nests of eastern tent caterpillar and those of the fall webworm may be mistaken for each other. However, eastern tent caterpillar spins nests in the crotches of trees, while fall webworm makes nest at the trips of leafy branches.

Revised

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