Spring And Fall Cankerworms (and other inchworms and loopers)

There are numerous cankerworms, or inchworms, that attack deciduous trees and shrubs. The spring cankerworm, and fall cankerworm, are the most common pests encountered but the elm spanworm, and linden looper, also have periodic outbreaks.

These cankerworms, inchworms, loopers and spanworms occur throughout North America. The fall cankerworm is also known from Montana, Colorado, Utah and California while the spring cankerworm territory extends southwards into Arkansas and Texas. Other inchworms, loopers and spanworms occur in western states.

Fall Cankerworm

Linden Looper

Plants Attacked
Both fall and spring cankerworms feed on a wide variety of trees including apple, ash, beech, elm, hickory, linden, maples and oaks. The elm spanworm attacks elms, hickory, ash and oaks as well as a variety of other broadleaf trees. The linden looper is common on basswood, linden, apple, maples and oaks and other trees.

Damage
Young larvae chew small irregular holes in young leaves or skeletonize leaves. As they mature, the larvae begin eating larger irregular holes and finally entire leaves except for the major leaf veins. Low populations do not damage healthy trees but high populations can defoliate trees causing them to expend considerable resources to re-foliate.

Many of the cankerworms and loopers spin down from the trees on a strand of silk when they are ready to pupate. These larvae drop onto people, cars and picnic tables, resulting in them being nuisance pests.

Description and Life Cycle
"Cankerworm" is an older name used for what we commonly call inchworms, loopers, measuring worms or spanworms today. They move by arching their mid-body to pull the hind pro-legs up to meet the anterior true legs. There are numerous caterpillars which use this inchworm behavior. Cankerworm larvae feed on tree leaves from late April to mid-June. The adult females of cankerworms are wingless and emerge to lay eggs in the late fall (fall cankerworms) or early spring (spring cankerworms).

Fall cankerworm larvae grow to 3/4 to 1 inch long and are usually apple green to brownish green in color with a dark middle stripe and three narrow white lines on each side. Fall cankerworms have three pairs of fleshy pro-legs at the- end of the abdomen.

Spring cankerworm larvae reach the same size but are green to reddish brown in color and have a single yellowish strip on each side. Spring cankerworms only have two fleshy pro-legs at the end of the abdomen.

Fall cankerworms emerge as adults in late fall, often during warmer periods in October through early December. The wingless females are a dull grey color and crawl up on tree trunks to await a winged male. The males are about one inch long, dull grey in color and often have two light, wavy stripes on the forewings. After mating the female lays a cluster of barrel shaped eggs, often encircling small branches. The eggs over winter and hatch in late April to early May. Occasionally adults emerge in March, especially in more northern areas.

Spring cankerworms emerge as adults in late winter, usually during warm spells in February or March. The wingless females are often mottled with grey or brown color and have a darker stripe down the back. The winged males are brownish-grey with three dark, irregular stripes across the front wings. The eggs are oval shaped and irregular clusters of about 50 eggs are attached under flaky bark or in cracks and crevices of the tree trunk.

Upon hatching in April and May the young larvae rapidly feed on the fresh tender spring leaves of various trees. Periodic outbreaks of large numbers are especially annoying as the crowded larvae often hang from trees on a strand of silk.

By late June to early July the larvae of both species have matured and they then descend to the ground on silk threads. The larvae then burrow into the ground to a depth of one to four inches, spin a silken cocoon and pupate. The pupae remain in the soil until the late fall or early spring.

Elm spanworms are generally gray-brown in color and are often confused with spring cankerworms. The adult spanworm is a completely white moth which flies in August. The linden loopers have a bright yellow band of color down each side with brown to black lines running down the back.

Control Hints
Most controls are directed towards trapping the wingless females or spraying the active larvae after they start feeding on the tree leaves.

Strategy 1: Adult Trapping - Banding the trunks of susceptible trees with sticky adhesives such tanglefoot will trap females as they crawl up the trunk to mate and lay eggs. Trapped females may remain attractive to the males which also get stuck in the sticky band.

Strategy 2: Horticultural Oil Sprays - The 2-3% dormant horticultural oil spray is quite effective against the eggs. Be sure to thoroughly wet the trunk bark if spring cankerworms are present. Reduce the oil rate, especially on maples, if the trees seem to be active in the spring.

Strategy 3: Spray with Bacillus thuringiensis (Bt) - This biological control is quite effective against young cankerworm and looper larvae. Wait until all the eggs have hatched but spray before the larvae get to be over inch long.

Strategy 4: Insecticide Sprays - Most common insecticides are effective for control of cankerworms and loopers. Best results are obtained if the spray is applied after all the eggs have hatched and the larvae are still small.

Information obtained through the Ohio State Extension Factsheet HYG-2558-95