Defoliating Caterpillars – Is Control Justified?

Several caterpillars can attack deciduous trees late in the growing season. Common examples are the orange-striped oak worm, red-necked caterpillar, and the walnut caterpillar.

**Orange Striped Oak Worm**

The orange striped oak worm (Figure 1) can be abundant in August. Eggs are laid in clusters, so groups of the caterpillars can strip trees of their foliage in a short time. Willow oak and pin oak are preferred hosts, but the insects will feed on other hardwoods.

Newly hatched caterpillars are greenish yellow with longitudinal orange stripes. They feed in groups on surface tissue of leaves creating small irregular brown areas. Their bodies darken as they grow so the orange stripes become more apparent. They develop a pair of long projections behind the head.

These caterpillars disperse as they grow and begin to eat all of the leaf except main veins. Often, damage is not noticed until significant defoliation occurs. By then, the full-grown caterpillars (2 inches long) have left the tree and burrowed into the soil to pupate.

**Yellownecked Caterpillar**

The yellownecked caterpillar (Figure 2) feeds on a range of tree species. Eggs of this species are laid in masses so the early stages feed together before dispersing. Most are nearly full grown (2 inches long) by August, so their feeding is now nearly complete.
Walnut Caterpillar

There are two generations of the walnut caterpillar (Figure 3) each year. They prefer walnut, hickory, and pecan but can be found on other species. They feed in groups on a branch and move to the trunk of the tree to molt. Mature larvae are almost 2 inches long.
Natural Predators Help Manage Caterpillars

Most healthy, established deciduous trees in the landscape can tolerate a significant amount of defoliation late in the growing season. By that time, sufficient carbohydrates have been produced and stored in the roots to support early growth in spring.

Numbers of natural enemies are usually at their peak by late summer and will take a toll on caterpillars.

Many species of wasps (Figure 4) lay their eggs in feeding caterpillars. While the caterpillars may complete their feeding and development, they will not become moths, so next year’s population will be reduced.

The spined stink bug (Figure 5) is one of the predators that can reduce caterpillar numbers.
Figure 5. The spined soldier bug is an important predator of caterpillars. Note the small one impaled on the beak of this one (Photo: Lee Townsend, UK).

Unfortunately, populations of beneficial insects, including wasp larvae developing in parasitized caterpillars, are reduced by unneeded insecticide applications.

For more information, call the Pulaski County Extension office at 679-6361. Become a fan of Pulaski County Horticulture on Facebook, follow me @hortagentbeth on Twitter and kyplants on Instagram.

A class on Straw Bale Gardening will be held on August 18, 2016 at 6pm at the Pulaski Co Extension office. There is no fee and we’ll give away a straw bale as a door prize (sponsored by Southern States Cooperative).

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