Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants and Extension Personnel

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Yellownecked Caterpillar

This is the time of year to be "on the lookout" for certain caterpillar pests feeding on trees and shrubs in landscapes. One of these "critters" is the yellownecked caterpillar, *Datana ministra*, which feeds on a wide-range of plant types including azalea, beech, birch, crabapple, elm, linden, maple, oak, and walnut.

Adult female moths are typically present from June through July depositing white eggs in masses of 25 to 100 on leaf undersides. Eggs hatch from July through August, depending on temperature, into caterpillars (larvae) that are yellowish with black stripes and are covered with fine hairs. They eventually change into red caterpillars with yellow or white stripes, and jet-black head. The caterpillar is named because of the bright orange-yellow segments located behind the head. Full-grown caterpillars are 2.0 inches in length and black with yellow or white stripes. When disturbed, these caterpillars lift their heads and tails to form a distinct "U" shape, which is a defense response to ward-off predators. The caterpillars are gregarious (feed in clusters), generally feeding for 4 to 6 weeks. Young caterpillars skeletonize the lower leaf surface, whereas older caterpillars may consume the entire leaf except the petiole. Any late-season defoliation may not significantly impact tree health, depending on the age of the tree, but the damage can be unsightly. Sometime in August, caterpillars crawl down the trunk and burrow 2.0 to 4.0 inches into the soil to pupate. Yellownecked caterpillar overwinters as a pupa with one generation per year.

Pruning out small infestations or using insecticides are several means of managing yellownecked caterpillars and minimizing plant damage. Insecticides recommended for control or regulation include *Bacillus thuringiensis* subsp. *kurstaki* (Dipel), spinosad (Conserve), indoxacarb (Provaunt), chlorantraniliprole (Acelepryn), and pyrethroids (e.g. bifenthrin, cyfluthrin, and lambda-cyhalothrin). Be sure to apply insecticides (especially Dipel) when caterpillars are small. Yellownecked caterpillars are highly susceptible to many natural enemies such as birds (e.g. robins), predaceous bugs, and parasitic flies.

Raymond Cloyd

Sunflower Head Moth in Central Kansas

Sunflower head moth infestations in central Kansas have been relatively light. The flowers checked on 12 August, in central Kansas had all mature larvae and therefore pupation will occur soon, so those flowers that are still in the vulnerable stage need to be sampled for the next two to three weeks. Pheromone trap catches in Riley County are also indicating very light moth flights, which seem to be in agreement with actual larval infestation counts.

Jeff Whitworth *Holly Davis*

Right on target ---- Fall webworms (FWW)

For the full story on FWW, refer to Extension Publication MF-2395 – Web-Producing Caterpillars in Kansas. Portions of that information also appears in Kansas Insect Newsletter #23 (2007) as well as Kansas Insect Newsletter #17 (2008). The content of this Kansas Insect Newsletter is to update you on the current year's activities.

As indicated earlier this year (KIN #10), in the Manhattan area, moths of the blackheaded race of caterpillars began emerging from overwintered pupae on **May 15**. By now, those 1st generation larvae should have completed their development, pupated, and moths emerged to produce for the second generation. Moths observed in southeast Kansas could be those reported in the current August 10, 2009, Kansas Department of Agriculture's Insect Survey Report Volume 57, #10. From the Manhattan area, I can not report that I noted/collected any of the characteristic thick and compact web masses (Figure 1) associated with the blackheaded race ----- but then the first generation of that race typically is sparse.

Figure 1

The numerous current sightings of "loose" web masses in the Manhattan area (Figure 2) are as should be expected for the redheaded race of FWW. That is, the moths of those caterpillars began emerging from their overwintered pupae on **June 17** as determined by direct observation of moths resting on grass blades and blacklight trap catches.

Figure 2

These web masses are approximately 5-6 weeks old. They only now became apparent because the larvae congregated within the web masses have reached a growth stage where they have become increasingly ravenous. After consuming the foliage within their web mass, they quickly expand their webbing to enclose additional foliage ----- thus the rapid expansion and sudden visibility of webbing. Walnut, pecan, sweet gum, flowering crab, linden, red bud, river birch, sycamore and red oak are the tree species noted with current web masses.

Objections to FWW include the unappealing presence/visibility of webbing as well as the presence of larval masses and their fecal pellets and shed skins (Figure 3).

Figure 3

What are some options to controlling/eliminating fall webworms? Much depends on tree size and when fall webworms are first detected. In large/tall trees with canopies out of arm's reach, one can only watch as webworms feed with impunity (Figure 4).

Figure 4

In trees with lower branches, there are opportunities for action. Some people may opt for chemical control. Larvae are always more susceptible to insecticides when small (in their beginning stages). However, this seldom is the situation because small larvae and small web masses have been concealed/camouflaged by abundant foliage. Only now when larvae are larger and their web masses become detectable do insecticide applications enter as a control option. Bear in mind that the larvae are protected within their web mass against insecticides applied to the outer webbing. Thus, it is essential that the sprayer wand be thrust into the web mass so that the spray can make direct contact with the targeted pests. Another approach may be to apply spray treatments to that foliage immediately in line to be included into an expanded web. There are numerous active ingredients in many insecticide products for homeowner use against webworms. Check with your local retail/garden shop outlets as to product availability in your area.

For people opposed chemical sprays, physical removal (pruning) and disposal of branches with web masses is an option. However, if too many branches are webbed, excessive pruning might result in a tree with a "bad haircut".

To avoid this, then, just remove the webbing per se. A simple handy (apologies for the horrible pun) method is "finger raking". Larvae within the web mass will be simultaneously collected as the webbing is removed (Figure 5).

Figure 5

While the now webless, wormless, leafless branch may look stark, all buds are intact and will produce new foliage the ensuing year (Figure 6).

Figure 6

For web masses out of arm's reach, a stick/pole with a nail driven through the end of the pole is a popular often-suggested device for web removal. It is left up to individual ingenuity to devise a different modification/add-on to the end of the pole to increase the efficiency of the removal process.

Bob Bauernfeind

Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostician Laboratory from August 7th to August 13th.

August 7 2009 Riley County – Foreign grain beetles in home
August 7 2009 Riley County – Ferruginous spider wasp
August 7 2009 Riley County – Common house spider (Parasteatoda sp.) in commercial building
August 7 2009 Riley County – Moth fly and Scymnus larvae in green house
August 7 2009 Pottawatomie County – Squash lady beetle on zucchini squash plants
August 7 2009 Pottawatomie County – Cottonwood borer adult around home
August 7 2009 Riley County – Grass spider
August 10 2009 Crawford County – Corn wireworm adults in home
August 10 2009 Lyon County – Slug caterpillars on hibiscus
August 11 2009 Pratt County – Oak mites on English oak

August 12 2009 Pottawatomie County – Drain flies in commercial building
August 12 2009 Harvey County – Indianmeal moths in home

If there are any questions regarding these samples or about the identification of any arthropod please contact the Insect Diagnostician at (785) 532-4739 or GotBugs@ksu.edu.

Holly Davis

Sincerely,

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