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Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants, and Extension Personnel

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In the bucket……

Blacklight traps are passive devices used to collect night-flying insects which are attracted to shorter wavelength lights bordering the ultraviolet end of the light spectrum. While not all insects are so-attracted, some of potential pest status are.

Yellow-necked Caterpillar Moth

Walnut Caterpillar Moth

Two closely related and similarly-sized moth species are currently active. While (to most people) both may appear “the same”, each is visibly different. The outer forewing margins of the yellownecked caterpillar moth are distinctly scalloped while those of the walnut caterpillar moth are not. The forewings of the yellow-necked caterpillar moth are cinnamon brown and marked with dark irregular lines. Those of the walnut caterpillar moth are dull brown to chestnut brown, and crossed with dark lines.

Yellow-necked Caterpillar

Walnut Caterpillar "cluster"

Yellownecked caterpillars are aptly named for their distinctly colored prothoracic shield. Their bodies have longitudinal stripes, black alternating with yellow or whitish/cream coloration. Young walnut caterpillars

are brick red whereas mature larvae are dull grey. The caterpillars of both species are covered with long "hairs", and when mature, both are upwards of 2-inches in length.

Both species feed on a wide variety of trees. While yellownecked caterpillars are most commonly associated with birch, elm, oak, maple, apple and flowering crab trees, walnut caterpillars have a definite preference for "nut species" such as walnut, butternut, pecan and hickory.

The presence of these caterpillars occurs on a yearly basis. However, there is no way to predict upon which specific tree(s) they will occur. Walnut caterpillars might be detected before yellownecked caterpillars because they seem to molt simultaneously, forming readily visible aggregation masses on tree trunks. After completing their molt, they then spread out as they move back to continue foraging activities. Yellownecked caterpillars go undetected because they molt "in place" wherever they are feeding.


Initial Feeding Forays


Complete Defoliation

As is typical with lepidopteran larvae, early instar feeding damage is minimal and goes unnoticed. The first sign of yellowneck and walnut caterpillar feeding usually occurs later in their feeding cycle with the appearance of bare upper branches where larvae tend to be concentrated. High populations of larger larvae approaching the end of their feeding cycle are responsible for massive "seemingly overnight" defoliations. It should be noted that at this point in time, there is little point in attempting control ---- larvae are near the completion of their feeding cycle and will soon pupate. In the end, trees will put out a new flush of leaves, and appear none the worse-for-wear.

And where are the bagworms?.....

Calendar-wise, the 2006 "bagworm hatch" is nearing completion. Given their small size and inability to cause noticeable feeding damage, bagworm detection has essentially gone unreported. People should not become complacent as to their presence. Especially where bagworms have a history of causing damage during previous seasons, people need to be on guard against bagworms by making close inspections of potential hosts on a weekly basis until they are convinced as to the absence of bagworms. Bagworms will become increasingly larger and easier to detect as we approach the end of June. Even if already detected, withhold insecticide applications a bit longer until egg hatch has been completed by the end of June. Treatment considerations will be revisited in an upcoming issue of the Kansas Insect Newsletter.

Bob Bauernfeind

Cotton Fleahoppers:

We are nearing the time when fields should be scouted for fleahoppers and tarnished plant bugs. The cotton fleahopper is probably the most common plant bug in Kansas cotton fields. They are 1/8 inch long, yellowish-green insects with an elongated, oval-shaped body. Nymphs may be white to light green, small and appear to be all legs and antennae.


Fleahopper Adult


Fleahopper Nymph

Another plant bug that can cause problems is the tarnished plant bug which is approximately 1/4 of an inch in length and tarnished brown in color and may be more common in cotton fields near alfalfa. A picture of a tarnished plant bug can be seen at: http://www.uky.edu/Ag/Entomology/entfacts/images/tarnishd.jpg and a picture of a nymph can be seen at: http://www.forestryimages.org/images/768x512/1323073.jpg Begin scouting for plant bugs and damage when cotton reaches the six-leaf stage. Plant bugs damage immature flower buds. If small squares (immature flower buds) turn brown and drop to the ground, the problem could be physiological or it could indicate the presence of plant bugs. If more than 20 percent of the small squares are lost in prebloom cotton, it is time to examine the plants for plant bugs. Scouting may be difficult because adults may jump from plants if they see a shadow. During the first three weeks of squaring, the economic threshold is approximately 40 fleahoppers per 100 terminals. Other sampling techniques involve the use of a drop cloth or sweep net. When sampling with a drop cloth, a 3ft white cloth is placed between the rows and the plants are shaken vigorously over the cloth. Treatment should be considered when counts range between one bug per 1 foot of row to one bug per 3 feet of row. With a sweep net, the threshold ranges between 1 and 1½ bugs per 10 sweeps. Note that the sweep net may miss small nymphs. Keep in mind, that while fleahoppers are not uncommon in Kansas cotton fields, populations often remain below threshold levels. Also, if square retention is 75 percent or greater, there is probably not a significant plant bug population. Where significant numbers of plant bugs are found, try to protect beneficial arthropods that will be needed to reduce bollworm populations later in the season. When possible use lower rates and do not try for 100 percent fleahopper control. Insecticides labeled for fleahopper control can be found in publication MF2674, Cotton Insect Management 2006, http://www.oznet.ksu.edu/library/entml2/mf2674.pdf

Phil Sloderbeck

Intrepid now labeled for soybeans:

Dow AgroSciences has announced a new supplemental label for Intrepid® 2F for foliar insect control in soybeans. Pests on label include green clover worm, saltmarsh caterpillar and soybean loopers. The labeled application rate is 4 – 8 fl oz/acre (0.06 – 0.12 lb ai/acre). Begin applications when threshold levels of feeding damage occur. Use a higher rate for heavier infestations and under conditions in which thorough coverage is more difficult. Restrictions:

• Do not apply more than 64 fl oz of Intrepid 2F (1 lb ai) per acre per season or make more than 4

applications per season.
• Preharvest interval: Do not apply within 7 days of harvest of hay and forage or within 14 days of harvest of seed.
• Re-Planting Interval: A 7-day re-planting interval is required for residues of methoxyfenozide.
• Chemigation: Do not apply this product through any type of irrigation system.

Phil Sloderbeck

Hessian Fly:

If you have significant Hessian fly infestations please notify Jeff Whitworth, 785/532-5656, email: jwhitwor@ksu.edu. We are looking for infested wheat fields as potential research sites.

Jeff Whitworth

Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned.

Sincerely,

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