For Agribusinesses, Applicators, Consultants and Extension Personnel



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"Clusters of Bugs"

Within the past week, I have received two inquiries regarding clusters of small shiny black beetle-like insects with red "butts", and one report of the same. What do they have in common? All were from southeast Kansas. While I have not had any samples to examine, I did receive a couple of images which reminded me of something that I had seen years ago ---- clusters of burrower bug nymphs. The images seen here are early instar nymphs which are predominantly "red".

What were being reported were **<u>later</u>** instars. That is, with progressive molts, the thorax and wingpads continually expand thus covering/obscuring the "red" abdomen (hence the description of



"....shiny black beetle-like insects with red "butts""). After a final molt, the adult emerges --- fully winged. In this instance, the burrower bug in question likely is *Sehirus cinctus*. Given the narrow white line running along the lateral margins of the body, they have the common name, white-margined burrowing bug.



Actually, white-margined burrowing bugs are not uncommon. I pick them up in my blacklight traps every year. And most people probably see them occasionally but pay them no heed ---- "Just another black bug". The "startling" nature though is with the appearance of massive populations of "hard-to-miss" red nymphs which (for some reason) seem to suddenly occur. This causes people to wonder/worry what is in store for plants in their landscapes and gardens. But people can rest easy ---- there is little to be concerned about. The adults and nymphs feed on henbit (plenty of henbit throughout Kansas) and plants in the family Lamiaceae (mints) ---- numerous genera and species.

White-margined burrowing bugs are interesting. While I don't think of insects as "thinking entities possessing emotions", they do have a reported curious side: the female will tend her clutch of nymphs for several days fending off potential threats to her nymphs as well as bringing them food. Thereafter, nymphs may remain clustered, but feed and fend for themselves. There is nothing to be gained by spraying/killing them. To paraphrase the Beetles' song "Let It Be", "Let Them Be".

Bob Bauernfeind

Now Is Time To "Nail" Those Bagworms

It is now time to "do battle" (I love military metaphors) with that "infamous" of insect pests known as the bagworm (*Thyridopteryx ephemeraeformis*). Throughout most of Kansas, bagworm eggs have hatched and the young caterpillars are out-and-about feeding on both broadleaf and evergreen trees and shrubs. Bagworms were

first considered a pest of primarily conifers but over the years they have expanded their host range to include a number of broadleaf plants including rose, honeylocust, and flowering plum. I have even seen them "eating chicken wire" at the Sunset Zoo (Manhattan, KS). At this time of year, what is the best way to deal with bagworm caterpillars and thus prevent them from causing damage? Hand-picking any small caterpillars (along with their accompanying bag) and placing them into a container of soapy water will kill them directly. This is highly therapeutic and, if feasible, will quickly remove populations before they can cause



substantial plant damage. You should consider having a weekend "bagworm hand-picking party" with prizes awarded to those individuals that collect the most bags.



For those less interested in the pleasures of handpicking, there are a number of insecticides labeled for use against bagworms including those with the following active ingredients (trade name in parentheses): acephate (Orthene), Bacillus thuringiensis subsp. kurstaki (Dipel/Thuricide), cyfluthrin (Tempo), lambda-cyhalothrin (Scimitar), trichlorfon (Dylox), indoxacarb (Provaunt), chlorantraniliprole (Acelepryn), and spinosad (Conserve). Many of these active ingredients are commercially available and sold under different trade names or generic products. However, several insecticides may not be directly available to homeowners. The key to dealing with bagworms when using insecticides is to make applications early and frequently enough in order to kill the highly susceptible young caterpillars that are feeding aggressively on plant foliage. Older caterpillars that develop later in the season, in the bags, may be 3/4inches long, and are typically more difficult to kill with insecticides. In addition, females tend to feed less as they prepare for reproduction, which reduces their susceptibility to spray applications and any residues. The bacterium Bacillus thuringiensis subsp. kurstaki is active on young caterpillars; however, the active ingredient must be consumed to be effective, so thorough coverage of all plant parts and frequent applications are required to avoid having to deal with later stages. This compound is sensitive to ultra-violet

light degradation and rainfall, which reduces any residual activity. Spinosad is the active ingredient in a number of homeowner products (including Borer, Bagworm, Tent Caterpillar & Leafminer Spray; Captain Jack's

DeadBug Brew; and Monterey Garden Insect Spray) and works by contact and ingestion (stomach poison); however, it is most effective when ingested and it can be used against older or larger bagworm caterpillars. Cyfluthrin, lambda-cyhalothrin, trichlorfon, chlorantraniliprole, and indoxacarb may be used against both the young and the older caterpillars. However, thorough coverage of all plant parts, especially the tops of trees and shrubs, where bagworms commonly start feeding, and frequent applications are required. The reason why multiple applications will be needed when bagworms are first detected is because bagworms



"blow in" (called 'ballooning') from neighboring plants. If left unchecked, bagworms can cause significant damage, thus ruining the aesthetic quality of plants. In addition, they may actually kill plants, especially evergreens since they don't usually produce another flush of growth, and newly transplanted small plants.

If you have any questions regarding the management bagworms contact your county horticultural agent, or university-based or state extension entomologist.

Raymond Cloyd

Hessian Fly

As spring/summer storms rake across Kansas, we are seeing some wheat lodging. High winds alone can cause this as can hail, pathogens, some insects and mites. However, generally when we see considerable lodging we think of Hessian flies. Hessian flies have been infesting Kansas wheat for over 100 years. Just about every field we've ever stopped to sample has some Hessian flies. They are usually at the $\leq 1\%$ level, and because they are so small and feed without causing any noticeable sign or symptom, they usually go unnoticed. That is until there is a wind event that causes the Hessian fly-weakened stems to fall over/lodge. We see this periodically in different areas of the state. This year it has been reported from Edwards Co. and Smith Co. The only way to ensure proper identification of the cause of any lodging is to ID the culprit. In this case, Hessian fly, as identified by the flaxseed (pupal stage) packed along the stems behind the leaf sheaths (see photos). There is no remedial action to prevent Hessian fly-induced lodging between now and harvest. Destroying volunteer, using a resistant variety, and delaying planting are still the only tactics to manage Hessian flies.



Photos taken from wheat collected in Edwards County

Jeff Whitworth

Holly Davis-Schwarting

National Pollinator Week

National Pollinator Week is June 16-22, 2014. This program is managed by the Pollinator Partnership. The first National Pollinator Week was held in 2007 after approval by the U.S. Senate, and it has grown to be an international celebration of all pollinators. The week is designed to encourage the public to take steps to help address declining pollinator populations. All pollinators are supported through this program including honey bees, butterflies, beetles, flies, bats, birds, and all others. For events and ideas to promote pollinator week, see the website at www.pollinator.week_2014.htm. The closest event posted near Kansas is the "Celebration of Honey bees" held at Powell Gardens, Kingsville, MO, just southeast of Kansas City. Additional pollinator conservation resources can be found at www.xerces.org.

Sharon Dobesh

Insect Diagnostic Laboratory Report

http://entomology.k-state.edu/extension/diagnostician/recent-samples.html

Eva Zurek

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Kansas Insect Newsletter

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