For Agribusinesses, Applicators, Consultants and Extension Personnel



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July 11, 2014 No. 14

Corn, Soybean, Sorghum, and Alfalfa Update

CORN

Western corn rootworm adults are actively feeding on silks (see photo), for the most part, and laying eggs in the soil. This will continue for as long as the silks are green. When silks get too dry, the beetles will stop feeding somewhat, and seek food elsewhere. They are mostly looking for pollen and thus, at times, can be detected in pretty good numbers in sorghum and/or soybean fields when pollen is available. That is why you sometimes find a small amount of root feeding by rootworms in a first year cornfield. The previous year's adults were feeding on soybean pollen and laid a few eggs while in the field.



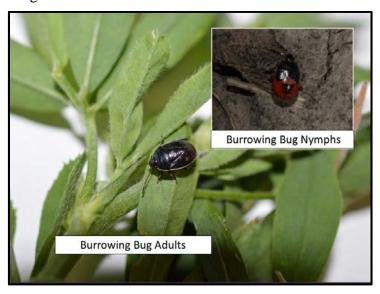
There are also significant numbers of stink bugs in some cornfields. Much of the corn in north central KS is pollinating and ears are still elongating, thus it should be a good year to try to determine a correlation between stink bug feeding on the ear and if that results in the 'boomerang' or 'C-shaped' ear.

SOYBEANS

Dectes stem borer adults are plentiful throughout south central and north central Kansas (see photo). There is no management recommendation at this time, but if you have a significant infestation by the end of August, those fields should be the first ones harvested to try to avoid plant lodging prior to harvest.

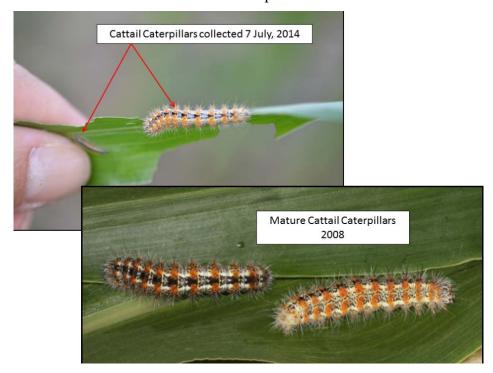


Burrowing bugs are also very common at this time, as they are in most years (see photos). As the weeds are sprayed in either sorghum or soybeans, the burrowing bugs lose their natural food source and often move to crop plants. However, we have no data relative to crop damage by burrowing bugs and they will soon disperse without causing any crop damage.



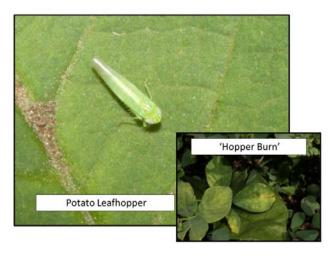
SORGHUM

Cattail caterpillars seem to be a little more numerous this year than usual. These insects were quite numerous in 2008 and caused considerable concern due to their size, highly visible coloration, and their ability to cause large amounts of defoliation on young sorghum plants (see photo). However, the sorghum was not permanently damaged, i.e. no impact on yield, because it was very resilient during the vegetative stages. All larvae we collected in 2008 had been parasitized by a beneficial wasp. Thus, insecticide applications are not recommended to control cattail caterpillars.



ALFALFA

Potato leafhoppers are very numerous (see photos). They are easily controlled by insecticide applications. However, if you are within 10-14 days of swathing, that will also take care of potato leafhopper populations. Monitor stubble after swathing to ensure good control and to detect any reinfestation that may occur.



Jeff Whitworth

Holly Davis-Schwarting

Images Are Important - #1

In the "old days", entomologists would receive phone calls from people who would describe insects and situations. What would follow was a back-and-forth sequence of questions-and-answers in an attempt to further identify the problem and its insect-related cause. But this is 2014 ---- an age of computers and smartphone cameras/images. Yet that does not always suffice.

In a recent e-mail, a harlequin bug was pictured on a horseradish leaf with a large portion of missing leaf tissue. Because harlequin bugs have piercing-sucking mouth parts, they are incapable of consuming leaf tissue. A second image was forthcoming. And, it revealed the critters responsible for the damage: fuzzy/hairy caterpillars.





The "hairy" caterpillars in the image are commonly called wooly bear caterpillars which are the larvae of moths broadly referred to as <u>Tiger Moths</u> belonging to the taxonomic Family Arctiidae ---- of which there are many species. One of the most common arctiid moths are <u>Salt Marsh Moths</u>, *Estigmene acrea*. Thus their larvae are called Salt Marsh Caterpillars. Because they are not picky eaters and have a wide host range, I refer to them as A-to-Z feeders. The following is a quick description of their seasonal life cycle.

Overwintering as pupae in the soil or other protected/concealed sites, moths emerge in the Spring and deposit eggs from which emerge small larvae (only

between .5 to 1 mm). Because of their small size and corresponding "small nibbles", they feed unseen. They eventually are detected when approaching the end of their feeding phase ---- a time when rapidly growing caterpillars consume larger amounts of leafy material resulting in noticeable leaf damage/loss. Mature caterpillars pupate. Soon thereafter, moths emerge, mate and deposit eggs for the second generation. When the second generation caterpillars complete their feeding in the Fall, they enter the soil or seek a secluded niche to pupate. These will be the overwintering pupae from which moths will emerge the ensuing Spring.

"Why me and not my neighbor?" is an often-asked question for which there is no precise answer other than the imprecise response, "That's just the way it is!" There is no predicting when and where there will be outbreaks of salt marsh caterpillars.

Images Are Important - #2

In a recent phone call, it was related that a client had borers in his elderberry planting. The only two insects with "elder" in their common name were the elder borer, *Desmocercus palliatus* (beautiful long-horned beetle common in Kansas) and the elderberry shoot borer, *Achatodes zeae* (not recorded in Kansas). Images were to be forthcoming.

When the images arrived, it became clear as to the "borer" in question ---- and it was not either of the borer species associated with deciduous shrubs and small trees in the elder family. Rather it was the very distinctly marked common stalk borer, *Papaipema nebris*. Much like the aforementioned salt marsh caterpillar, the common stalk borer is an A-to-Z feeder, known to attack 176 different species of plants, representing 44 families.



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In the Fall of the year, moths deposit overwintering eggs in grassy and weedy settings. In early spring, newly emerged larvae begin their development by boring into in grass stems. When a larva outgrows the confines of

its initial host, it exits and seeks out a more suitable host. During this migration the larva shows little preference in the selection of the new plant, rather, readily accepting almost any plant with a moderately larger stem. If needed, this process will be repeated. When common stalk borer larvae complete their development, most will exit their host plant and form an oval pupal cell just beneath the soil surface. If the final host plant is of accommodating size, a larva may remain within and prepare a pupal chamber which includes the creation of an opening (leaving the thin epidermis of the stem as a protective cover) through which the eventual moth can



escape. Mating is followed by the deposition of the aforementioned overwintering eggs. There is a single generation per year.

If an insect pest is restricted to a specific host, rouging out infested canes would be an effective method of control. In this elderberry instance, such a removal tactic would be wise, but would not be the all-to-end-all. Because many larvae may exit the elderberry canes, WEED CONTROL becomes an additional component of reducing potential for future stalk borer activities. The largest borer populations occur in fields and fence rows containing many large stemmed weeds, especially the very common giant ragweed. The elimination of ragweed and other large weeds from the fence rows or adjacent/nearby areas is the most important single step in controlling future encounters with common stalk borers.

Bob Bauernfeind

Insect Diagnostic Laboratory Report

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

Eva Zurek

July 11, 2014 No. 14

Sincerely,

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