

Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants and Extension Personnel



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Alfalfa Weevil Update

Several alfalfa fields in North Central Kansas have been monitored during the last week. All have been swathed and the hay removed, except one which still had the windrows present. There are various levels of striping (weevil feeding under the windrows) in these fields (see photo). Some have relative dramatic stripes but many have almost indiscernible stripes. However, weevil larvae are still present in these fields. Populations are not significant enough to be sampled using the traditional “bucket shake” method. However, larvae can be collected when using a sweep net to sample. There are more larvae in the foliage between the windrows than where the windrows were/are. Most of these larvae are mature and should be pupating within the week, although there are still a few young larvae. Populations should not be sufficient to retard regrowth, especially with good growing conditions. Very few aphids were present in any of these fields but lady beetle populations were relatively robust in the regrowth between windrows which should help slow aphid populations if they do start to increase.



Jeff Whitworth

Holly Davis

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Carpenter Bees

This is the time of year when people begin to notice large bumble bee-like insects swarming around outside of homes, barns, and other structures. These are Carpenter bees and resemble bumble bees but have bare abdomens that are a shiny black to iridescent green (Photo 1). In the spring these bees, which overwinter as adults, are emerging and looking for other bees to mate with. The male bees can be rather aggressive and may “dive bomb” people in their vicinity. However, they are harmless as they cannot sting. The females are capable of stinging but generally will not do so unless handled or molested. Males and females can be easily distinguished by looking at the front of their faces. Males will have a bald face, or a patch of gold, while females will have completely dark faces (Photo 2).



Photo 1

After mating in the spring, female carpenter bees tunnel into wood to lay their eggs, producing round holes about ½ inch wide (Photo 3). These eggs will develop throughout the summer and the young adults will spend the winter in these tunnels. The next spring the cycle begins again. The next generation of carpenter bees may use tunnels that are already there, they may enlarge or extend the current tunnels, or they may excavate new ones.



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Photo 2



Photo 3

Carpenter bees prefer to attack wood that is bare, weathered, and unpainted. They prefer softwoods such as redwood, cedar, cypress and pine. Common nesting sites are eaves, window trim, siding, decks, and outdoor furniture. The best way to avoid an infestation is to keep all exposed wood surfaces painted. Stains and varnishes will repel the bees to some degree but are not as effective as paint. Once an infestation has been detected, the tunnel entrances can be treated with an insecticide that has residual activity. Treating at night is most effective while the bees are inactive in the tunnels. The holes should be left open for a few days to allow the bees to come in contact with the insecticide and distribute it throughout the tunnels. Then, the holes can be plugged to prevent further use by carpenter bees and reduce the chances of wood decay.

For more information please visit: <http://www.ksre.ksu.edu/library/entml2/mf2946.pdf>

Jeff Whitworth

Holly Davis

Getting “jumpy” X 3 --- 3 situations

Three “topics” come to mind for incorporation into this week’s Kansas Insect Newsletters, and the impetus for each came from 3 different sources: an on-line web site (#1), a telephone call (#2) and a direct observation (#3).

#1 – Because one cannot be everywhere, it is beneficial to have access to an “information collection center” ---- - thus I always check Ward Upham’s “Hot Topics” on Monday morning. Insect-wise, what caught my attention

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were reports of flea beetle activities. Flea beetles are aptly named for their small size, dark brown coloration and **jumping abilities** (although it should be noted that there are myriad of flea beetle species many of which possess brilliant metallic colors/patterns and which are 1/4-inch in length).

There is no single description which encompasses the seasonal developmental cycles of all flea beetle species. In general, beetles seek protection against winter elements beneath leaves, debris and other trash/cover in gardens/field or areas adjacent to. With spring warm-up, beetles revive and seek out available food sources which include emerging seedling plants and early-season transplants. Due to their small size, flea beetles often go unnoticed. Because they possess small chewing mouth parts, their pinhole-sized “nibbles” go unnoticed. Minor damage to the cotyledons/”seed leaves” might be dismissed (Figure 1 – yellow arrows). However, once flea beetles overwhelm and destroy small and tender meristematic leaves (Figure 1 – white arrow), plant survival is questionable. While there are no economic threshold guidelines whether to treat/reduce flea beetle numbers, it would seem prudent to protect all tender developing plants against flea beetles.



Figure 1

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#2 – A watermelon producer called with leafhopper concerns. Because he farms on very sandy ground and has concerns related to the abrasiveness of blowing sand damaging his melon plants, he plants strips of wheat between his melon rows as a deterrent to the wind-related damage. He had noticed leafhopper activity in the strip areas and asked whether he should control the leafhoppers to protect his watermelon plants.

Leafhoppers (aptly named for their preference for leaves and their jumping/hopping ability) are described as slender wedge-shaped insects. Most species are small (1/8 – 3/16-inch long) while others approach 1/2-inch in length. Most are drab in appearance (Figure 2A) with others being colorful (Figure 2B). Of the 2500 species found in North America, relatively few have been granted “pest status”.

Leafhoppers have piercing sucking mouthparts which they use to withdraw plant juices. Damage to plants may be in the form of excessive sap withdrawal, introducing “clogging” salivary secretions which interfere with normal plant physiological functions or salivary secretions which inhibit normal plant growth, and the transmission of plant pathogenic organisms responsible for plant diseases.

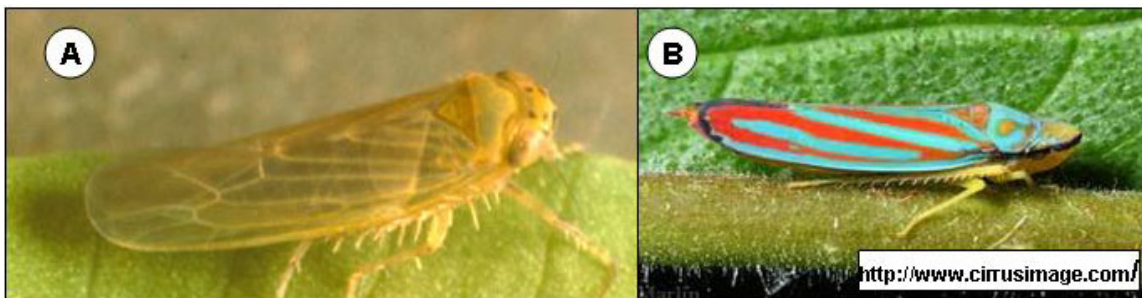


Figure 2

Other than the few species of identifiable economic concern, most others are normally considered to be innocuous. For instance, when mowing my lawn, I sometimes “scare-up” many leafhoppers whose presence I had not been aware of (actually there were 3 different species in the mix) ----- the bottom line being that unless I would see some damage that I could attribute to the leafhoppers, they are no cause for concern.

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Thus to the watermelon producer: leafhoppers are likely to be of no concern. It may well be that those that he is seeing (in his wheat strips) are leafhoppers that were specific to grassy host plants and therefore not likely to move and feed on his melon plants. If he eventually notices leafhoppers in his melons, and because there are no established guidelines as to threshold levels for leafhoppers on watermelon plants, he should not automatically apply an insecticide treatment. Rather he should continually monitor his plantings for any indications of damage (foliar discoloration) which would then signal the need for an insecticide application.

#3 – I recently was planting marigolds into our usual marigold bed when I noticed an occasional “movement”. When I was able to momentarily isolate one, it turned out to be a very small and pale (almost white) grasshopper. My supposition, then, was that it was recent hatchling that had not had adequate time to harden/darken. But it was certainly jumping around in search of something to eat.

As I have more time, and especially with the return of weather fit for outdoor activities, I will collect some of the “little jumpers” and determine what they are species-wise. Recall from previous Kansas Insect Newsletters and Extension Publication L-868, “Grasshoppers in the Lawn and Garden”, that not all grasshoppers are of economic concern ---- that only a few species of the approximately 115 species found in Kansas pose a threat to field and garden crops and lawns.

The two most common and recognizable species are the large two-striped (Figure 3) and differential (Figure 4) grasshoppers, both of which (eventually) measure 1½-inches.

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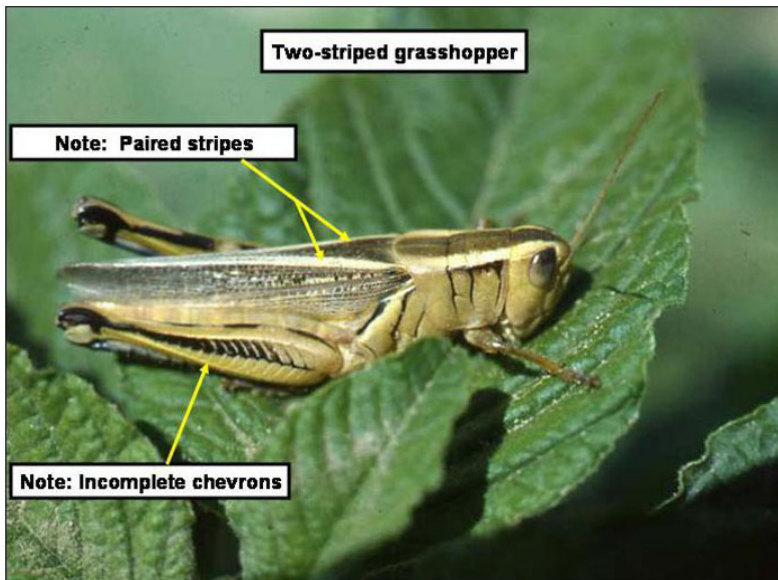


Figure 3

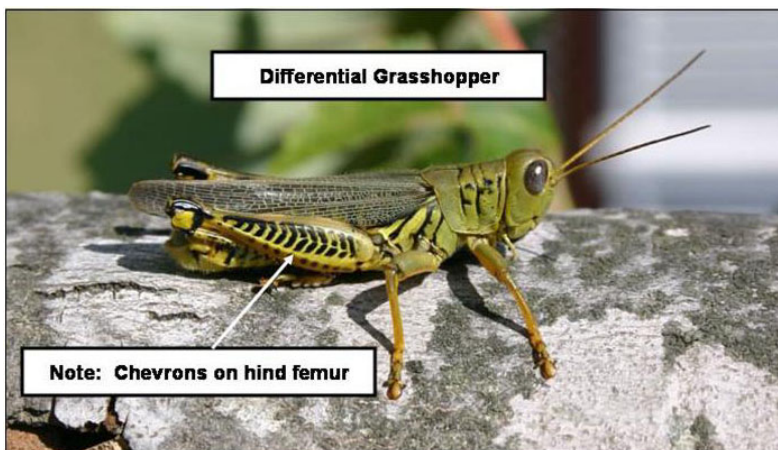


Figure 4

I suspect that the little grasshoppers that are currently present are two-striped nymphs as they reportedly hatch 3 weeks earlier than differential nymphs. Because nymphs are less mobile (thus confined) and highly susceptible to insecticides, now would be an ideal time to initiate treatment applications to manage their populations. Three to four repeated applications will be required (through June into July) to eliminate new hatchlings as they appear.

Bob Bauernfeind

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Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostic Laboratory from May 13th to May 25th.

May 13 2011 – Riley County – Brown recluse spider in apartment
May 13 2011 – Riley County – Cobweb spider in home
May 16 2011 – Osage County – Brown dog ticks on dogs and humans
May 16 2011 – Pratt County – Indianmeal moths in home
May 16 2011 – Harvey County – Clover mites in home
May 16 2011 – Nemaha County – European elm flea weevil around home
May 16 2011 – Riley County – Leafrolling (Tortricidae) damage to milkweed
May 17 2011 – Harvey County – Brown dog tick
May 18 2011 – Riley County – Brown recluse spider
May 18 2011 – Riley County – Brown dog ticks
May 20 2011 – Sedgwick County – Termite swarm around building
May 20 2011 – Lyon County – Stink bug nymphs, twospotted spider mites, and lacewing larvae on tomato
May 20 2011 – Lyon County – Praying mantis ootheca (egg case) on tree
May 23 2011 – Sherman County – Shot hole borer, family Scolytidae, damage to Bur oak
May 25 2011 – Osage County – Carpet beetle larvae in home
May 25 2011 – Riley County – Brown dog tick and American dog tick on humans

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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