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## Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants, and Extension Personnel

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## Hessian Fly:

Hessian fly was observed to be causing significant lodging in Edwards and Ford counties this week. Producers, consultants and insurance adjusters need to remember that this pest can be the cause of lodged wheat this time of the year, in addition to the other common culprits of hail, wind and early freeze injury. Keys to pinning lodging damage to Hessian fly are, tillers lodging just above a joint, finding the “flaxseed shaped” fly pupae under the leaf sheath at or just below where the tiller is broke over. In addition knowing which varieties are susceptible to Hessian fly is also often a dead give away. If the susceptible varieties (eg. Jagger, Tam 110) are lodged and the resistant varieties (Ike, 2145) are not it is an indication that one should check the lodged tillers for the fly pupae (Check the **Wheat Variety Disease and Insect Ratings 2003** for more information on which varieties are susceptible: <http://www.oznet.ksu.edu/library/plant2/mf991.pdf> .



Lodged wheat



Broken tiller



Pupae

Leaf sheath pulled back to expose Hessian fly pupae.

In some of the instances, the wheat showing signs of Hessian fly was planted near the Hessian fly free date. So, why is it still showing signs of significant Hessian fly injury? Well that probably can be related back to the warm October we had last fall. The fly free date is really based on historical weather averages, when you have abnormal weather then things change, and evidently the fly remained active later in the season than normal. Also the timing of the rains last fall and this spring probably played an important role in where we are seeing infestations. While wheat in the area were we found the Hessian fly is currently under severe drought stress, it had receive fairly timely rains last fall and earlier this spring, which would have allowed the Hessian fly to reproduce.

## Wheat Head Armyworm:

Last week J.P. Michaud reported that he had been picking up wheat head armyworm moths in the light trap at Hays. This week during the wheat tours in Southwest Kansas wheat head armyworms could be found at most locations. Larvae ranged in size from around ½ inch to well over an inch. In most cases only an occasional larva was found, but in some cases larvae or damage were fairly obvious. While it is hard to say for sure I doubt that we will see a repeat of the problems that we saw last season, ([http://www.oznet.ksu.edu/dp\\_entm/extension/KIN/KIN\\_2003/kin-13/03ksne13.htm#Wheat\\_Head\\_Armyworm](http://www.oznet.ksu.edu/dp_entm/extension/KIN/KIN_2003/kin-13/03ksne13.htm#Wheat_Head_Armyworm)) mainly because this years weather is so much different than last season. However, there may be enough worms or injury in some areas to at least be noticeable if one takes the time to look. No economic injury levels have been established and controls are not normally recommended for this pest. Indications are that usually damage is concentrated around field margins and there is really no indication that efforts to control the wheat head armyworm are economically justified.



Small wheat head armyworm larva



Large wheat head armyworm larva

Phil Sloderbeck

## MAGIC?:

Abbra cadabra! Presto chango! Now you see it, now you don't!!! Familiar words to the fans of magic acts ----- and now being uttered by people who notice that tree leaves are disappearing (Figure 1) or are completely missing (seemingly overnight). And there does not seem to be anything in sight to account for the mysterious disappearance.



Figure 1

Of course, for every trick in an illusionist's act, there is a logical explanation. In our instance, May beetles (MB)/June beetles (JB) are responsible for the denuded trees. These beetles are a yearly occurrence. While many people see MB/JB as all looking alike, there are many species which differ in size, coloration, sheen and hairiness (Figure 2). The beetles appearing this year actually got their start in 2001 when eggs were deposited by the previous generation. These insects (Figure 2) have a 3-year developmental cycle. However, because Assorted May/June there are overlapping generations, individuals for each beetle species appear every year.



Figure 2

The MB/JB are active during the night, their flights beginning after dusk. People are familiar with this cycle, often reporting the presence of beetles attracted to porch and street lights, or banging against screens as beetles fly towards light shining through windows. With the approach of dawn, beetles seek sites to hide-away the daylight hours. If surface litter/debris is absent, they merely burrow into the soil in the vicinity of where they were feeding. A check the Beetle emergence ground for emergence holes (Figure 3)

provides a clue as to holes in soil their presence.



Figure 3

As stated earlier, May beetles/June beetles are a yearly occurrence. They vary in abundance from year-to-year. Thus far, 2004 has been a banner year for these beetles. It is interesting to note, though, that despite their current high numbers, the populations pale in comparison to reports (from years past) where beetles by-the-wagon-load were scooped up and disposed of to avoid the stench of decomposing bodies.

For the most part, there instances of defoliation seem to be sporadic and isolated. It is interesting to note that the beetles seem to have certain host preferences. In one situation, walnut trees were the preferred host (Figure 4), while only elm trees were singled out at another (Figure 5). While the stripped trees may currently have a startlingly “naked” appearance, they will soon put out a new flush of leaves, thus appearing normal for the remainder of the season and apparently none the worse-for-wear.



Figure 4

(Courtesy of Sandra Wick -  
Smith County CEA-ANR)



Figure 5

As a side note: people erroneously associate May beetles/June beetles with white grubs in their lawns ----- that is when the MB/JB are flying “hot and heavy”, people are running out to buy insecticides to apply on their lawns for grub control. MB/JB grubs are not responsible for the turf damage which encounter in August and September. Those grubs are the “annual white grubs” that are the immature stages of “masked chafer beetles” whose flights begin in another couple of weeks (mid-June) and typically peak around the Fourth of July. **THUS, PEOPLE SHOULD NOT BE APPLYING INSECTICIDES FOR GRUB CONTROL AT THIS TIME ----- WRONG BEETLES/GRUBS, AND WRONG TIME TO BE APPLYING INSECTICIDES FOR GRUB CONTROL!**

Bob Bauernfeind

## Chinch bugs:

Chinch bug activity has increased during the last week in central Kansas. Bugs are fairly common in wheat fields and have already moved into some cornfields as evidenced by the accompanying photos. Photo 1 shows adult chinch bugs mating around the base of a three leaf stage corn plant and photo 2 shows recently hatched nymphs (27 May 2004 for both photos). As the wheat matures and starts to dry, the bugs will move to adjacent corn and sorghum fields. Thus, fields need to be monitored closely, for the next 3-4 weeks. A migrating chinch bug infestation can quickly decimate young corn or sorghum. If you have not yet planted your corn or sorghum and wheat fields are nearby, we strongly urge you to use one of the insecticide seed treatments labeled for chinch bugs. They have performed relatively well in Dr. Wilde’s research trials especially under light to moderate chinch bug infestations. Please contact your local County Extension Agent for insecticides and seed treatments labeled for chinch bug control.

Gerry Wilde, Michal Roberts, Jeff Whitworth



Photo 1 - Chinch bug adults mating in corn



Photo 2 - Chinch bug nymphs in corn

# MOSQUITO MAGNETS:

I've been getting many phone calls about the Mosquito magnets. Here is my take on this product.

Mosquito Magnets are traps based on carbon dioxide, heat, moisture and octenol to mimic human body. These traps do attract and kill mosquito adults. However, I do not recommend buying this product for mosquito control nor personal protection unless they are used with all other steps for mosquito management, primarily controlling larvae. Targeting mosquito adults is just not good enough! The main effort has to be focused on the sources of mosquitoes - standing water with mosquito larvae (see: publication MF2571: <http://www.oznet.ksu.edu/library/ENTML2/MF2571.pdf> ).

Mosquito magnets are not cheap; from about \$260 to \$1,300 depending on a type. I am afraid that if people spend this much money, they will feel falsely protected and will not take any other actions for mosquito control and personal protection. Some commercial advertisements for Mosquito Magnets actually claim that if you use this product you don't have to spend money on repellents etc. So far, I have not seen any evidence that these traps alone reduce the frequency of mosquito bites!

It has to be clear that these devices are attracting mosquito adults from the neighborhood and this might actually increase the chance of getting bitten on your property. Magnets are good for mosquito monitoring and surveillance programs. For mosquito control, they probably work well in semi-closed (large tents etc.) or closed spaces where you can kill mosquitoes that are already inside.

I am sure that test trials show traps with killed mosquitoes but frequency of bites and protection from mosquito bites is another story.

Ludek Zurek

# Thrips:

Thrips numbers appear to be fairly high in some wheat fields and may pose a threat to emerging cotton. Thrips migrate out of wheat as it matures in search of new food sources. This may cause a burst of thrips activity that is particularly bad if it occurs just as the young cotton plants are emerging from the soil.

These tiny, barely visible, splinter-like insects rasp tender leaves and terminal buds with their sharp mouth-parts and feed on the escaping juices. Leaves may turn brown on the edges, develop a silvery color, or may become distorted and curl upward. Light thrips infestations tend to delay plant growth and retard maturity. Heavy infestations may kill terminal buds or even entire plants. Damaged terminal buds result in abnormal branching patterns.

The duration and intensity of thrips infestations vary greatly according to season and geographic location. Once cotton plants are 4 to 6 weeks old, they usually outgrow thrips damage and begin to recover. Since we have an early frost date in comparison with other Cotton Belt states, Economic damage may occur when

plants avg. 3 or more thrips per plant before the 4-leaf stage.

Later in the season, control is rarely necessary. Looking for these little critters is not always the easiest thing to do. You want to catch a problem before damage occurs. Start looking for thrips as soon as the plants begin to emerge. Look for thrips in the newest growth. Work on hands & knees. Sometimes you can shake plants over a piece of white paper and if you see small long, slender objects crawling on the paper, they are usually thrips. If there is residue of sand or soil on the plants, the thrips will be harder to see. And if it is windy, pull some plants, put them in a zip lock bag, take them to the truck then examine for thrips in the terminals and on the under side of the first two leaves. Also look for early signs of damage; thrips feeding in the terminal tissue cause the new leaves to appear ratty looking.

Options for Thrips control include: The Seed Treatments imidacloprid (Gaucho) and thiamethoxam (Cruiser); Hopperbox Treatments acephate (Address & Orthene) Planting Time Treatments of acephate (Address, Orthene & Payload), aldicarb (Temik), carbofuran (Furadan), and phorate (Phorate & Thimet) and Foliar Treatments acephate (Address & Orthene), dimethoate (Dimate & Dimethoate), endosulfan (Phaser & Thiodan) and thiamethoxam (Centric).

Phil Sloderbeck

## **2004 Restricted Use Pesticide Publication Available:**

The 2004 Restricted Use Pesticide publication (MF-710) is now available through the Extension publication distribution office. It is also available on the publications website at <http://www.oznet.ksu.edu/library/entml2/mf710.pdf>.

As in 2003, there will not be a 2004 Worker Protection Standard (MF-2121) publication. The Kansas Department of Agriculture has not updated their new database from a year ago to include the WPS information. All efforts to locate a federal list of all WPS chemicals has also failed. Once the registration status check is completed on MF-2121 the accuracy of the 2002 publication information will determine if it needs to be dead-filed or not. We'll keep you posted.

If you have any questions regarding this publication please contact Sharon Dobesh at 785-532-4748 or by e-mail at [sdobesh@oznet.ksu.edu](mailto:sdobesh@oznet.ksu.edu).

Sharon Dobesh

## **Weekly Report from the Kansas State University Insect Diagnostic Laboratory:**

The following samples were submitted to the Insect Diagnostic Laboratory from May 20 to May 27, 2004:

- 5-20-2004, Labette County: Carpet Beetles on flowers.
- 5-20-2004, Harvey County: Winged Termites in courthouse.
- 5-20-2004, Norton County: Midges in home.
- 5-21-2004, Kingman County: Sac Spider in home.
- 5-21-2004, Rooks County: Boxelder Bugs in yard.
- 5-21-2004, Leavenworth County: Carpenter Ants in yard.
- 5-24-2004, Riley County: Black Widow Spider in home.
- 5-24-2004, Reno County: Winged Termites in home.
- 5-24-2004, Johnson County: Lone Star Tick on person.
- 5-24-2004, Ford County: Lecanium Scale on Redbud Trees.
- 5-24-2004, Wabaunsee County: Chicken Mites.
- 5-24-2004, Jefferson County: Codling Moths in orchard.
- 5-25-2004, Riley County: Carpenter Bees in deck.
- 5-26-2004, Sedgwick County: Kermes Scale on Post Oak.

This week's Critter Pics features Chicken Mites (sometimes called Red Chicken Mite), *Dermanyssus gallinae* (DeGeer), from Wabaunsee County. These mites are usually associated with hosts at night and feed on blood. During the day they hide in crevices and debris near prey. They can also bite people. Further information on these parasites can be found in the Cooperative Extension Service publication **"Eliminating Mites in Poultry Flocks"**, MF-2387 (also at <http://www.oznet.ksu.edu/library/lvsk2/mf22387.pdf>) .



Chicken Mite - Ventral View  
from Wabaunsee County



Chicken Mite - Dorsal View

If there any questions regarding these samples or about the identification of any arthropod please contact the Insect Diagnostician at 785-532-4739 or at [bbrown@oznet.ksu.edu](mailto:bbrown@oznet.ksu.edu) .

Bobby Brown

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Sincerely,



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