

<http://www.oznet.ksu.edu/entomology/extension/extension.htm>

Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants, and Extension Personnel

Department of Entomology
239 West Waters Hall
K-State Research and Extension
Manhattan, KS 66506-4027

Tel: 785-532-5891

Fax: 785-532-6258



May 14, 2004 No. 11

Emergence of sunflower stem weevils in Hays:

Adult sunflower stem weevils began emerging from the stubble of cultivated sunflowers in Hays on Wednesday, May 12. We are monitoring sunflower stem insect emergence in field cages containing last year's sunflower stalks. It is thought that rainfall is one cue that can stimulate adults to leave the stalk. The study site received more than one inch of rainfall early Monday morning. Dissection of a large sample of wild sunflower stalks last week revealed that most stem weevils had reached the adult stage, although less than 10% had bored emergence holes and left the stalks. Although some were still pupae, very few were still in the larval stage. Fully developed adults may remain within the stalk for as long as two weeks before emerging. The weevils then require another 10-14 days to mature and mate before females are ready to lay eggs in this year's sunflower plants.



Sunflower Stem Weevils

J.P. Michaud

Wheat is heading so it is time to clean out and treat grain storage areas:

All too often I get calls during harvest from producers wanting to know about treating grain bins prior to storing grain. Often they are in a rush to get an answer because the custom cutter is coming that afternoon. At that time, you have wonder if a bin spray will do any good. Insects need to come into contact with the insecticide to be killed, and if you spray the bin this morning and put grain in that afternoon, lots of insects will probably hide in cracks and crevices and then crawl directly into the fresh grain.

That is why we would really like to see grain storage areas cleaned out now and treated with a bin spray several days prior to harvest. It would also be a good idea to inspect other grain storage areas on the farm and determine if any of those are infested. If they are, think about fumigating, selling, feeding or disposing of any infested grain prior to harvest. Try to minimize the chance of stored grain pests being able to move from infested grain to the new harvest.

When cleaning out bins, don't forget grain handing equipment. A few bushels of insect infested grain dumped into the bottom of a bin as harvest begins, could mean real problems later on. So make sure augers, dump pits, wagons, trucks and grain carts receive a through cleaning. Also make sure and clean-up any spilled grain around bins and grain handling equipment, as these can also serve as refuges for stored grain pests.

When deciding on a bin spray, one may want to look and see what is available rather than just relying on the old stand-bys. For many years producers have used products containing malathion for treating bins and treating grain entering storage. However, over time, many insects have developed resistance to malathion. Chlorpyrifos-methyl (Reldan) has also been a popular bin spray, but it may not control on of our most serious stored grain pests the lesser grain borer. Some newer products one may want to consider are cyfluthrin (Tempo); cyfluthrin + chlorpyrifos-methyl (Storcide) and s-methoprene (Diacon II). These products offer a chance to provide better control of some insect species.

One thing to remember about s-methoprene is that it has a very different mode of action than many of the insecticides that we commonly use. It works by interfering with the development of insect larvae, and it does not kill adult insects. Thus, it may take longer to control existing infestations, making early treatment even more important.

As with any pesticide, make sure and read the label before making your purchase, to make sure you can abide by label recommendations or restrictions. Be aware that the labels on many of these products have change over the last few years, and even though you recognize the product as something you used before, it may no longer be labeled exactly the same as it was in the past. A good example would be many of the malathion labels, in the past many formulations of malathion were labeled for use as grain protectants, now only a few products are labeled for this use. Some formulations are still labeled as empty bin treatments, but

carry the statement now carry the statement "Do not apply directly to grain." Other products, are not labeled for any type of grain or grain bin treatments. So read labels carefully.

Phil Sloderbeck

West Nile Virus Surveillance Program in Kansas 2004:

This year, KDHE in collaboration with K-State, Dept. of Diagnostic Medicine and Pathobiology and Dept. of Entomology will conduct the surveillance program of West Nile Virus in dead birds and live mosquitoes as well as monitor and report human and horse positive cases.

The surveillance of dead birds will be handled this year directly from the Veterinary School and will officially start on May 14th. There will be a press release on May 14th from KDHE on details of this program, including how and what birds will be collected as well as the toll-free number for reporting dead birds.

The surveillance of live adult mosquitoes collected periodically from different parts of Kansas will be directed from the Department of Entomology and will start on May 24th.

All the new information on the positive cases will be posted on the K-State West Nile Virus website: <http://www.oznet.ksu.edu/westnilevirus/>

Questions on mosquito biology, ecology and control as well as personal protection should be directed to me.

Ludek Zurek

Weekly Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostic Laboratory from May 6 to May 12, 2004:

- 5-7-2004, McPherson County: European Fruit Lecanium on Osage Orange.
- 5-10-2004, Lyon County: Winged Termites in home.
- 5-10-2004, Reno County: Cabinet Beetles in home.
- 5-10-2004, Saline County: Clover Mites in home.
- 5-11-2004, Sheridan County: Wolf Spider in yard.

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.

Bobby Brown

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,

J.P. Michaud
Assistant Professor of Entomology
Kansas State University
Agricultural Research Center - Hays

Ludek Zurek
Extension Specialist
Medical & Veterinary Entomologist

Phil Sloderbeck
Kansas State University
Southwest Research and Extension Center
Garden City

Bobby Brown
Entomology Diagnostician