http://www.oznet.ksu.edu/entomology/extension/extensio.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 5, 2006 No. 7

Wheat Stem Maggot:

Have received a couple of reports relative to the Wheat Stem Maggot in south central Kansas. Thus, the following information is reprinted from the May 26, 2005 newsletter: White heads showing up in wheat just after heading is often a topic of coffee shop discussions and they actually can be the result of a variety of causes (freeze, take-all, dryland foot rot, etc.). However, if the white heads occur on individual tillers of various plants in a more or less random pattern (but often more prevalent along the edges of the field), and if the rest of the plant appears healthy, then one possible explanation can be the wheat stem maggot. To check for sure gently pull on the head. If it pulls out of the plant easily and there is evidence of some feeding on the straw, then the damage is more than likely from the wheat stem maggot. If you catch the injury at just the right stage sometimes you can find the larvae still in the plant (see picture), but often all you will find is the damage. Fortunately, damage rarely exceeds 1 to 2 percent of the heads and is usually considered inconsequential.

White head Wheat Stem Maggot

Wheat Stem Maggot

Jeff Whitworth and Phil Sloderbeck

Black Cutworms:

Received several reports of black cutworm damage in southeast Kansas, with inquiries relative to the need for utilizing insecticide--treated seed for replanting. For basic management considerations please refer to Dr. Randy Higgins' contribution in the April 29, 2005, issue of this Newsletter or the 2006 Corn Insect Management Guides available at your local Extension offices. As to whether seed treatments are justified for replanting corn destroyed by black cutworms: probably by the time the replanted corn germinates the feeding stage of the cutworms will be finished and usually this is the only time we have a problem with black cutworms. Thus, the added cost for the treated seed would not be justified for only black cutworm protection. However, they do provide protection for other early season pests, i.e. flea beetles, wireworms, etc. Additionally, from research data published by Dr. Marlin Rice, et. al., at Iowa State University, and Dr. Gerald Wilde, KSU, it seems the higher rates of the commercially available insecticide seed treatments, and therefore the more expensive seed, only provide some protection or at least suppression of black cutworm feeding damage. Therefore, the added cost to protect only against black cutworms in a replant situation is questionable and generally not feasible.

Jeff Whitworth

2006 West Nile Virus surveillance of mosquitoes in Kansas has started:

This year's mosquito-WNV surveillance program in Kansas started on April 26 and will continue throughout the summer and fall. As in the past years, we periodically collect mosquito adults from 15 sites across Kansas using CDC traps. Mosquitoes are identified and Culex spp. are screened for the West Nile virus. The progress of the program as well as the information on mosquito and WNV biology, mosquito management, and personal protection can be seen on the K-State WNV website: http://www.oznet.ksu.edu/westnilevirus/welcome.htm

Ludek Zurek

Gulf Coast Tick Outbreak in Southeastern Kansas:

Alberto B. Broce, Ph.D. and Michael Dryden, DVM, Ph.D.
Departments of Entomology, and Diagnostic Medicine and Parasitology

Calls from Southeastern KS and confirmations by county ag agents indicate that currently in that area there is an outbreak of Gulf Coast ticks (Amblyomma maculatum), a tick whose adults feed preferentially inside the ears of cattle, horses, and deer. Here is an excerpt from a longer report on this tick, published last year at the following site (with pictures of ear infestations and of adult Gulf Coast ticks):

http://www.vet.ksu.edu/features/VetQuarterly/KVQsum05.pdf

The high number of ticks observed this early in the season can only be explained by populations that were capable of overwintering in Kansas; a milder winter may have also helped these numbers. This tick commonly clusters in the inside of the ears of large mammals, causing intense soreness. Under heavy infestations, the ear muscles become weakened, which results in a flop-eared, permanent deformity called "gotch ear". This tick shows a preference for young animals (calves over cows). A current report from a ranch on the Butler/Chase Co. line indicates that cattle worked on May 3rd had numerous engorged ticks, with some ticks on cows, but 85 – 90% of calves with ear infestations. Research on growth performance of cattle infested with Gulf Coast ticks has previously shown it to be reduced by as much as 20%.

There are numerous products registered in the State of Kansas for the control of Gulf Coast ticks. Rapid control of these ticks can be achieved with direct animal applications of acaracides, such as **Amitraz** (Taktic) or **Permethrin** (Ectiban, Atroban, Permectrin, Expar etc.). Amitraz should provide control and prevent reinfestation for 3 or 4 weeks ; the Permethrin products for 2 or 3 weeks. Also available for sprays is Coumaphos (Co-Ral) for cattle once every 45 days. Repeat applications may be needed.

> To control Gulf Coast ticks in the ears. Spray for good neck, shoulder and ear coverage, using permethrin or amitraz. Long term control can be best achieved by using ear tags impregnated with any of several insecticides (preferentially OP tags); but keeping in mind that the use of pyrethroid insecticide tags will enhance the further development of horn fly populations resistant to these insecticides; thus if pyrethroid tags are used, horn fly control should be attempted with other formulations of OP insecticides, such as dust bags, backrubbers, pour-ons, or sprays. Following is a list of just a few of the many of the OP and pyrethroid tags available in Kansas (for a complete list, visit http://kellysolutions.com/ks.
>
> - OP tags (one tag per ear)
> – Commando (Boehringer-Engelheim) Etion 36%
> – Diaphos Rx (Y-Tex) Diazinon 30%; chlorpyriphos 10%
> – Patriot (Boehringer Ingelheim) Diazinon 40%
> – Optimizer (Y-Tex) Diazinon 20%
> – X-Terminator (Fearing) Diazinon 20%
> - Pyrethroid tags
> – Cylence Ultra Insecticide Tags (Bayer) Beta-cyfluthrin 8%; PBO 20%
> – ZetaGard (Y-Tex) Zeta-cypermethrin 10%; PBO 20%
> - OP-Pyrethroid Combo
> – Max-Con (Y-Tex) Cypermethrin 7%; chlorpyriphos 5%; PBO 3.5%

Alberto Broce and Michael Dryden

Plant Movement, Fire Ants and other pests:

During the spring when nursery stock is moving across state lines, certain insects can be carried in or on the

plants, soil materials and packing materials, or by people moving into Kansas from other states and bringing plants with them.

Of particular concern may be tropical and subtropical plants which are typically grown in, or come from, the southern states of Florida, Texas or California and brought into Kansas. To date, any fire ant infestations found in nursery stock or subsequently found in the environment due to plant movement have been controlled and eradicated. This is based on trapping data, collected by the Kansas Department of Agriculture Plant Protection Program. If no fire ants are found or trapped for at least two years beyond the control of the infestation, the population is considered eradicated.

Recently, fire ants were found in Wichita from a tropical hibiscus brought into Kansas, originating from Florida. The infestation was treated with insecticide as overseen by a KDA inspector and will now be monitored for the next two years for further fire ant activity.

Any suspicious insect activity or very aggressive disease incidence found after purchasing new plants, and believed to have come from new plants in an area, should be checked out by a trained professional.

Samples of suspicious insects or diseased plants should be taken to the K-State Research and Extension office in your county. If the local professionals are unable to identify the problem they can forward samples to the appropriate diagnostic lab in Manhattan.

Early detection and control are the best ways to keep non-native invasive species from becoming established in Kansas.

Sharon Dobesh

Weekly Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostic Laboratory from April 27 through May 4, 2006:

4-27-2006, Harvey County: Leaf Fold Gall Midge on Bur Oak.
4-28-2006, Shawnee County: Carpet Beetles in car.
5-1-2006, Johnson County: Yellow Ants in pasture.
5-3-2006, Brown County: Clover Mites in home.
5-4-2006, Ford County: Scale Insects, Plant Bugs in Walnut Tree.
5-4-2006, Rice County: Sawfly in Blue Spruce.

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 at bbrown@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,

Jeff Whitworth
Extension Specialist
Entomology (Crops)

Sharon Dobesh
Pesticide & IPM Coordinator

Ludek Zurek
Medical Entomologist
Entomology

Alberto Broce
Livestock Entomologist

Phil Sloderbeck
Southwest Research and Extension Center
Entomology - Garden City, KS

Bobby Brown
Entomology Diagnostician