Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants and Extension Personnel



Department of Entomology 123 West Waters Hall K-State Research and Extension Manhattan, Kansas 66506 785-532-5891 http://www.entomology.ksu.edu/extension

September 19, 2008.....No. 24

Lygus Bug Damage on Grain Sorghum



Fig. 1 - Tarnished Plant Bug – with arrows to the light-colored "v" on the scutellum (the triangular space between the wings) and a light-colored patch further back on the wings. Fig. 2 – Tarnished plant bug nymph note the four dark-colored spots on the thorax and one spot in the middle of the abdomen. (Photos for Figs. 1 & 2 from the University of Tennessee Extension Service.)

We have received several reports from Northwestern Kansas about false chinch bug damage on grain sorghum. The specimens received turned out to be tarnished plant bugs, a.k.a. lygus bugs, *Lygus lineolaris*. Both adults (Fig. 1) and nymphs (Fig. 2) have features that make them quite easy to distinguish from other bugs. Although unusual in Kansas, lygus bug damage to sorghum has been reported in Texas, particularly in cotton-growing areas. Lygus bugs have a very broad host range and often migrate from one crop to another in response to changes in plant quality. In Kansas, tarnished plant bugs are often found in alfalfa fields and may disperse when fields are harvested. Large numbers can also build up on various weeds and then migrate to crops following herbicide applications.

True bugs have piecing, sucking mouthparts and will only attack developing seeds while they are still soft, particularly in the milk stage. On sorghum, damage will be evident as deformations in the panicle where seed fails to set (Fig. 3), or as flattened or collapsed seeds (Fig. 4), in this case with mold growing over the dead seed. The remaining seed may appear enlarged as the plant shifts resources toward undamaged portions of the head.

Kansas Insect Newsletter

September 19, 2008.....No. 24



Fig. 3 and 4. Tarnished plant bug damage to sorghum heads. (Photos for figures 3 and 4 from Chad Fabrizius, Monsanto)

An economic threshold for tarnished plant bugs on sorghum has not been established. Minor infestations of a few bugs on scattered heads is probably of little concern as are populations that occur after seed is fully formed and heads are starting to mature. Sample at least 5 or 6 parts of the field by beating heads onto a light colored cloth or into a bucket. Infestations of several bugs per head on sorghum prior to the milk stage might justify treatment with an insecticide labeled for other types of bugs on sorghum such as those listed for the false chinch bug in the KSRE Sorghum Insect Management Guide: <u>http://www.entomology.k-state.edu/DesktopDefault.aspx?tabindex=283&tabid=535</u>

J. P. Michaud and Phil Sloderbeck

Wheat Seed Treatments

There seems to be considerable interest this year regarding insecticide-treated wheat seed. Our experience with wheat seed treatments suggests that they work well to protect the seed and seedling 21-28 days after planting from wireworms, white grubs, flea beetles, grasshoppers, and aphids. They protect seedlings from Hessian flies if infestations occur within that time frame and densities are not too great. Remember, Hessian fly infestations can occur in the spring also. Wheat seed treatments are not effective, again from our experience, against false wireworms, fall armyworms, or army cutworms even if infestations occur within 21-28 days after planting. An exception to the 21-28 day protection period, are aphids, both greenbugs and bird cherry oat aphids, which have been controlled into the spring. These products work well but should only be used if needed and with the knowledge of the limitations due to species susceptibility and timing of infestation. For more information see your local county Extension Agent or visit our website at: http://www.entomology.ksu.edu/DesktopDefault.aspx?tabindex=195&tabid=405

Jeff Whitworth

Holly Davis

Kansas Insect Newsletter

Weekly Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostician Laboratory from September 12th to September 18th.

September 12 2008: Neosho County - Bostrichid beetle from a wooden statue and a fly in a home

September 12 2008: McPherson County – Insect boring damage in dead Austrian pine branches

September 15 2008: Sedgwick County - Two spotted spider mites on Butterfly bush

September 15 2008: Ford County – Snail shells on sidewalk

September 17 2008: Nemaha County – Winged Carpenter ants around exterior of home

September 17 2008: Morris County - Lady beetle larvae and true bug nymph

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 <u>GotBugs@ksu.edu</u>.

Sincerely,

Holly Davis	J.P. Michaud
Insect Diagnostician	Associate Professor of Entomology
Phone: (785) 532-4739	Agricultural Research Center-Hays
e-mail: holly3@ksu.edu	Tel: 785-625-3425 x212
	Fax: 785-623-4369
	e-mail: jpmi@ksu.edu
Phil Sloderbeck	Jeff Whitworth
Extension Specialist- Entomology	Extension Specialist
Southwest Research and Extension Center	Field Crops
Garden City, KS	Phone: 785/532-5656
Phone: 620/275-9164	e-mail: jwhitwor@ksu.edu
e-mail: <u>psloderb@ksu.edu</u>	



K-State Research and Extension is an equal opportunity provider and employer. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and United States Department of Agriculture Cooperating, Fred A. Cholick, Director.