

June 17, 2005 No. 9

Field Scouting Results – NE Kansas:

Ray Ladd and David Hallauer, K-State Research and Extension Ag Agents in Atchison (AT) and Jefferson (JF) Counties, respectively, and I spent several hours together looking for crop insect problems in those two northeastern counties on Thursday, June 16th.

Field Corn Scouting Results:

We found a few second to fourth stage European corn borer larvae in leaf midribs, whorls, and behind leaf sheaths of waist to chest-high field corn where shothole damage was evident. Generally, less than 10 percent of plants in the heaviest infested field that we checked contained a living larva – not economic by any measure (it takes about half of the plants infested with exposed larvae that have not entered the stalk to trigger treatment).





European corn borer shothole

European corn borer midrib damage

More common was the ragged leaf damage associated with late-instar corn earworms. In addition to what is typically called "ragworm" damage, these plants were easy to locate because of the frass (insect waste products) that was evident on the outer surface of some corn stalks. Unrolling the leaves not yet unfurled of these damaged plants often exposed a nearly mature earworm larva. Even though the occasional undeveloped tassel was being heavily chewed up on some of these plants, the effect on pollination in the field as a whole was of no consequence. That is, uninjured plants should produce abundant pollen unless very hot, dry conditions prevail at or near pollen shed. Some fields had scattered areas ranging from a few square yards to an acre or more in size where plant development lagged or was variable because of past standing water, cold temperatures, or a combination of factors. We talked about variability in plant development being more of a detriment to or determinant of future yield potential than the injury caused by the occasional worm pest in the fields that we examined.



Corn earworm ragworm damage



Another view





Earworm feeding on an immature tassel

Corn earworm larva

Soybean Aphid Scouting Results:

A prime purpose of the visit to northeast Kansas was to look for first signs of soybean aphid in our state. As the afternoon went on, we concentrated our sampling efforts in the tallest (probably earliest planted) soybean fields, paying particular attention to parts of fields that were downwind of brushy creek banks and other low-lying areas where buckthorn (the overwintering host) was likely to be found. The weather that we had been having in several areas should be conducive to good survival if aphids are present.

Finding soybean aphids in soybeans now would advance the first confirmed occurrence date for Kansas by a nearly month from previous years first-detection dates. As reviewed in last week's newsletter, every year since infestations were first confirmed in Kansas (during 2002) we have found soybean aphids earlier each season. Last year, our first detection occurred in mid-July. This year, several other states to the north and east of us and some Canadian provinces are reporting soybean aphids in very young soybeans at densities that range from a few individuals per plant up to 150 or more aphids per plant (limited sites in Wisconsin) at the upper end of the scale. Note that very early season populations do not necessarily reliably foretell economic loss potential. However, we believe that having this type of information would help with our on-going attempts to identify locations where sampling effort should be concentrated.

For this week, we did not find soybean aphids in any of several Kansas fields that were inspected. Soybean aphid Extension specialists and researchers are reminding farmers and consultants in infested states that the threshold for treatment still remains at 250 soybean aphids per plant at or near R1 (beginning bloom).

Other crop pests and comments on some beneficial insects:

No insect infestations of concern were found in the field or two of recently swathed alfalfa or young sorghum that we examined in NE Kansas. Overall, we observed a scattering of beneficial insects, such as various ladybird beetle species, immature predatory bugs, and other insects that use pest insects as one of their many sources of food. Green lacewing adults laying eggs seemed to be fairly common in some fields.



Green lacewing adult

No signs of the spider mite problem that had been developing on some soybeans in this area a couple of weeks ago were found in the NE KS fields. Ron Seyfert (Ottawa Co.) reported finding armyworms in some brome and the occasional late maturing wheat field after the last newsletter was written.

Randy Higgins

Corn Rootworms:

Samples from north central Kansas indicate the majority of the western corn rootworm larvae are 2nd instars. This means most of the feeding (and root damage) will be evident in the next 7-14 days prior to pupation and adult emergence.

Terrestrial isopods (pillbugs, sowbugs):

Scattered reports again this year of pillbugs eating germinating soybeans planted in fields with high residue. These pests are crustaceans, closely related to crabs, lobsters, crayfish, and thus need high moisture habitats. They normally are scavengers on decaying plant matter but if populations are high enough can and do forage on young, succulent plants. Recent moisture plus areas of high residue which help retain moisture then are ideal locations for these pests. If populations are present in sufficient numbers they can cause localized damage. As plants mature or drier conditions return, feeding on soybeans should be reduced.

Soybean Stem Borer:

Soybean stubble was sampled and all soybean stem borers were still in the larval stage. This is the overwintering stage and means it will probably be at least 10-14 days before adult emergence starts, at least in north central Kansas.

Jeff Whitworth, Gerry Wilde

New web site:

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Our new Department of Entomology website is up and running. The new URL is <u>http://www.entomology.ksu.edu/></u> for the main department web page and <u>http://www.entomology.ksu.edu/DesktopDefault.aspx?tabindex=155</u> <<u>http://www.entomology.ksu.edu/DesktopDefault.aspx?tabindex=155</u> <<u>http://www.entomology.ps</u></ht>

entomology.tsu.edu/DesktopDefault.aspx?tabindex=155
<u>http://www.entomology.tsu.edu/DesktopDefault.aspx?tabindex=155</u> <<u>http://www.entomology.ps</u>

entomology.tsu.edu/DesktopDef

Phil Sloderbeck

Mosquitoes:

With the wet weather we can expect a serious mosquito season. We currently have a series of new releases available on mosquitoes and the West Nile Virus. Including: Almost All Still At Risk for West Nile Virus, http://www.oznet.ksu.edu/news/sty/2005/westnile_risk061505.htm ; Unless Kansans Take Action Soon, 2005 May Be Year for Mosquitoes, http://www.oznet.ksu.edu/news/sty/2005/westnile_risk061505.htm ; Unless Kansans Take Action Soon, 2005 May Be Year for Mosquitoes, http://www.oznet.ksu.edu/news/sty/2005/mosquitoes_year060805.htm ; and Being 'Healthy as a Horse' the Goal Now for West Nile Virus Country, http://www.oznet.ksu.edu/news/sty/2005/healthy_horse060105.htm .

Phil Sloderbeck

Weekly Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostic Laboratory from June 8 through June 16, 2005:

6-8-2005, Saline County: Honey Bees in granary, Legionary ants in yard.

6-8-2005, Sedgwick County: Carpet Beetles on side of building.

6-8-2005, Sedgwick County: Carpet Beetles under refrigerator.

6-9-2005, Harvey County: Thrips around home.

6-10-2005, Cheyenne County: Spider mites on Juniper.

6-10-2005, Labette County: Spider mites Juniper.

6-10-2005, Anderson County: Thrip.

6-10-2005, N.W. Exp. Center: Moth larvae in bathroom.

6-10-2005, Pawnee County: Springtails in home.

6-10-2005, Pratt County: Lilac Leafminer on Euonymus.

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6-10-2005, Shawnee County: Terrestrial Planarian.

6-10-2005, Edwards County: Checkered Beetle in kitchen.

6-13-2005, Barton County: Mealworms in alfalfa bales.

6-16-2005, Thomas County: European Elm Scale, Kermes scales on trees.

6-16-2005, Mitchell County: Forelius ants in yard, in home.

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 <u>bbrown@oznet.ksu.edu</u>

Bobby Brown

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Sincerely,

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Bobby Brown Entomology Diagnostician