

Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants and Extension Personnel



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October 3, 2008 No. 26

Flea Beetles in Wheat:

Wheat planting is well under way in most of the state and as plants begin to emerge certain seedling stage problems may become evident. The damage pictured here (Figs. 1 & 2) superficially resembles winter kill – except that these pictures were taken in late October 2005. Furthermore, the progression of damage from the margin of the field into the interior gives another clue to its cause – insects that have migrated out of the neighboring field of forage sorghum.

In this case the culprits are flea beetles, small iridescent beetles with thread-like antennae and well developed hind legs that enable them to jump from plants like fleas when approached (Fig. 3). Adult feeding causes a characteristic 'shot-holing' of plant leaves, or whitish streaking in the case of wheat. Although established plants can recover easily from this type of damage, seedling plants are more at risk. Feeding damage may also interact with other stress factors such as drought and cold temperatures. In this case, the cumulative effect was the death of many plants in bordering rows.

This problem may occur when wheat fields abut sorghum fields, particularly forage sorghum that is harvested earlier than grain sorghum. Since sorghum is a perennial, it can re-sprout and produce fresh growth that attracts flea beetles at a time of year when not much palatable vegetation is present. Later on, when wheat emerges in a neighboring field it is more attractive than the sorghum and the result is an influx of beetles along the field borders. An infestation of 3 – 5 beetles per row foot can be sufficient to kill plants, but often a strip treatment along border rows can be enough to avert damage, provided the problem is recognized early. Baythroid XL, Cobalt, Mustang MAX, Proaxis, and Warrior are all products registered for control of flea beetles on seedling wheat, but see the K-State Wheat Insect Management Guide for more detail and always follow label instructions. Mention of brand names does not imply any endorsement of particular products.

<http://www.oznet.ksu.edu/library/ENTML2/MF745.PDF>

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Photo Credits for Figs. 1 & 2 ---- J.P. Michaud



Photo Credits for Fig 3 --- Peter J. Bryant

J.P. Michaud

Worms in Wheat and Alfalfa

I have received multiple calls this week concerning worms in wheat and alfalfa. Most the callers have indicated that they are finding fall armyworm larvae. However, one sample that I received contained both fall armyworm larvae and beet armyworm larvae. In some cases problems are related to volunteer wheat and other plants growing in the field prior to planting and larvae moving from these plants onto the emerging wheat seedlings. In other cases the larvae are coming from eggs laid directly on emerging wheat plants or on the alfalfa plants. There are several things to think about with these situations. First make sure and check wheat fields regularly after planting. Watch for early signs of feeding. Small worms cause windowpane feeding where they scrape leaf

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material from the leaf. Alfalfa fields should also be watched carefully this time of year especially recently planted fields as seeding plants are very susceptible to feeding injury. Second, proper identification can be important. Beet armyworms are often more difficult to control than fall armyworms. Third, if you have not planted your wheat yet, you may want to make sure that there are not worms present on volunteer wheat or other weeds prior to planting. If worms are present you may want to make sure there is a break of time between when you kill the weeds and the time you plant wheat into these areas to allow the worms to die before the planted wheat will emerge. Most of these worm problems will disappear once there is a killing frost, so delayed planting will reduce the chance of significant injury. If problems are along field edges then sometimes replanting later in the season is an option. For more information see: Beet Armyworm/Alfalfa

<http://www.entomology.ksu.edu/DesktopDefault.aspx?tabindex=187>

<<http://www.entomology.ksu.edu/DesktopDefault.aspx?tabindex=187&tabid=517>>

&tabid=517; Fall Armyworm/Alfalfa

<http://www.entomology.ksu.edu/DesktopDefault.aspx?tabindex=189>

<<http://www.entomology.ksu.edu/DesktopDefault.aspx?tabindex=189&tabid=518>>

&tabid=518 Fall Armyworm/Wheat

<http://www.entomology.ksu.edu/DesktopDefault.aspx?tabindex=201>

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Phil Sloderbeck

Weekly Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostician Laboratory from September 26th to October 2nd.

September 29 2008: Riley County – Sawfly larvae on Bloodtwig dogwood

September 29 2008 Shawnee County – Japanese beetle grubs in sod

September 30 2008 Sheridan County – Electric light bug

September 30 2008 Shawnee County – German cockroach nymphs in home

September 30 2008 Shawnee County – Mud dauber nest, insect pupal casings, and Dermestid beetle larvae

October 01 2008 – Lyon County – Looper caterpillars on porch of home

October 02 2008 – Riley County – Brown recluse spiders in apartment (found dead)

October 03 2008 – Dickinson County – Possible Buffalo gnats around 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 GotBugs@ksu.edu.

Holly Davis

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Sincerely,

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