

September 8, 2006 No. 24

Harpalus Pennsylvanicus:

Received several calls relative to "little black bugs" invading businesses throughout central Kansas during the last week. This phenomenon occurs periodically and in most cases it involves a common ground beetle identified as *Harpalus pennsylvanicus*. It is a hard-shelled, shiny black beetle easily distinguished by its orange legs. It is attracted to lights, thus can be a problem for businesses which have night lights. It is harmless but can be a significant nuisance due to the large numbers and its ability to get inside. These beetles are susceptible to insecticides but they often don't die until they do get inside the business and they can fly toward lights thus often avoiding the insecticide. This migration should end naturally in the next two weeks and thus the problem will solve itself as we progress into fall.

Jeff Whitworth

Wheat Streak Risk:

Several questions seem to be centering on trying to asses the potential for wheat streak under various wheat planting options.

The scenarios vary with location and cropping systems. Does volunteer growing in sunflowers pose a risk? Does planting near CRP and pasture pose a risk? Does planting into corn stubble pose a risk? While the exact answer to these questions will vary some things are fairly constant among all of the answers.

The closer you plant to plants than can harbor wheat curl mites and wheat streak and high plains virus the greater the chance of wheat streak. The earlier you plant wheat the greater the chance of wheat streak. The bigger break in time and space that you can get between the infected summer and fall hosts of wheat streak and your planted wheat the less chance you have of getting wheat streak. Varietal selection can affect your

September 8

chances of getting wheat streak. Mild fall weather will increase your chances of getting wheat streak.

For example, what are the risks of planting wheat into corn stubble next to a field of sunflowers that were planted after wheat and where volunteer came up late in the season? On the one hand the risks may not be too great assuming you wait until after corn harvest to plant the wheat. Late emerging volunteer should not support as many curl mites as early emerging volunteer and planting wheat after corn means that you may not be planting overly early. However if we have a very mild fall that allows the volunteer wheat to get pretty rank and allows the mites to reproduce until November or December then all bets are off. In addition corn stubble can be a source of wheat curl mites, wheat streak and high plains virus, so if you plant immediately after harvest into green corn stubble there is a chance of getting infected from the corn in addition to the volunteer wheat. Thus, one must weigh the risks, if you are feeling lucky and thinking that we will have normal fall weather there is a good chance that you may get by with out a major wheat streak problem. On the other hand, there will be some risk involved. One might consider spraying at least a border of the sunflower field to kill some of the volunteer an create a buffer to reduce the spread of the wheat curl mites (Make sure this is done several days before planting the wheat so the volunteer is dead before the planted wheat emerges). Also if the corn is still green at harvest one might consider delaying the wheat planting as long as practical to allow as much of the corn tissue to dye before planting the wheat. Plus, one should avoid planting highly susceptible wheat varieties in this situation.

As for the questions about CRP and rangeland, it is not really the perennial grasses that pose the biggest problems, but actually the weedy annual grasses that may be present. A paper by Mike Christian and Bill Willis a few years ago indicated that none of the perennial grasses (buffalograss, little bluestem, Indiangrass, and western wheat grass) that they tested were hosts for wheat streak, but they did find wheat streak in 5 annual grasses (barnyard grass, common witchgrass, giant foxtail, green foxtail and prairie cupgrass). An earlier paper in 1970 lists some additional annual grasses as potential hosts of both mites and wheat streak (sandbur crabgrass and wildrye). So, one probably needs to look at the condition of the pastures and CRP fields, more than just their presence or absence, when assessing the potential for wheat streak. A pasture with lots of grassy weeds is probably a potential source of wheat streak, but so would a weedy ditch or field road. In which case, planting dates, wheat varieties and weather will play a major role in predicting the chance for wheat streak infection.

The situations that you probably have the most control over are volunteer wheat and planting date. Control as much volunteer as you can and plant as late as practical, and you will greatly reduce your chances of suffering severe losses from wheat streak.

Information on varietal resistance to wheat streak and other diseases can be found in Wheat Variety Disease and Insect Ratings 2006: <u>http://www.oznet.ksu.edu/library/plant2/mf991.pdf</u> And additional information on avoiding wheat streak can be found in Be a Good Neighbor: Control Your Volunteer Wheat: <u>http://www.oznet.ksu.edu/library/crpsl2/mf1004.pdf</u>

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Sincerely,

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