

## **Friday BrownBagger looks at wheat stem sawfly, natural enemies**

Wheat stem sawfly has been on the rise in recent years and USDA Agricultural Research Service (ARS) scientists in Sidney are looking at a variety of factors to keep the pest in check. In particular, Sidney researchers and their collaborators in Montana and North Dakota have been looking at numerous solid stem lines to determine their resistance to wheat stem sawfly but also their impact on native wasp parasitoids that attack and kill the pest. They want to know if varieties currently exist, or can be developed, that aid both efforts. They also want to know whether there are particular genotypes beneficial to the parasitoids that breeders can use when developing new varieties.

On a larger scale, Sidney ARS researchers are also looking at the impact grasslands adjacent to wheat fields have as a source of both wheat stem sawfly infestations and/or their native parasitoids. The issue is of increasing importance as more and more land is scheduled to come out of the Conservation Reserve Program in the next several years. Does removing the CRP grass cover reduce infestations, or will the anticipated increase in wheat rotation acreage compound the current problem?

These questions and more are the subject of the next two presentations in the 2012 BrownBagger series sponsored by the USDA-ARS Northern Plains Agricultural Research Laboratory (NPARL) in Sidney. The first presentation by NPARL Entomologist and Insect Ecologist Tatyana Rand is set for this Friday, March 30<sup>th</sup> from noon to 1 pm, and is entitled “*Factors influencing wheat stem sawfly infestation levels and parasitism by native biocontrol agents.*”

The results of her research, Rand notes, will help producers identify and balance their management strategies so that they work together to more effectively curb the wheat pest and preserve its natural enemy.

Her presentation will be followed the next Friday (April 6<sup>th</sup>) by our final BrownBagger of the year to be given by Sidney ARS Entomologist Kevin Delaney. A portion of Dr. Delaney’s talk will also include research results related to wheat stem sawfly. His work is focused on how the environment and different wheat varieties, both solid and hollow-stem, affect wheat stem sawfly development and how sawfly larvae impact grain mass when feeding inside the wheat stem.

“We’re looking at both how the wheat plant affects the sawfly and how the sawfly affects the wheat plant,” Delaney noted.

All NPARL BrownBagger presentations are open to the public, so bring your lunch and learn more at these informative upcoming sessions. Coffee and cookies will be provided. The lab is located at 1500 N. Central in Sidney and all presentations begin at noon. For more information, contact Beth Redlin at 406-433-9427.

As noted above our last BrownBagger presentation for 2012 includes another look at wheat stem sawfly, as well as additional information on weed biocontrol research projects underway at the Sidney lab:

Apr. 6: Kevin Delaney, Entomologist, ARS-Sidney, MT  
*Wheat stem sawfly – wheat interactions with spring wheat, and classical biocontrol of weeds*