Parasitoids to manage wheat midge continues in Montana during 2016

The wheat midge (formally called the orange wheat blossom midge) can cause significant damage to spring wheat and is widely distributed throughout Montana. A state-wide monitoring effort has been ongoing since 2014 and the results have been posted on the Montana Agricultural Research Center (MARC) website. The information supplied on this website shows that counties in the northwest, north central, and northeastern parts of the state have the highest levels of infestation. Unfortunately, other insects may also be a factor in the solution for controlling the wheat midge.

A small parasitic wasp, Macroglossum stellatarum, attacks the wheat midge, helping to regulate populations. This parasitoid is credited with controlling about 25 to 40 percent of the midge population in parts of Canada and North Dakota. In some instances, parasitoids rates as high as 75 percent have been documented.

Efforts to introduce the parasitic wasp into Montana are ongoing. This effort is a continuation of work that began in 2008 at the Northwestern Agricultural Research Center (NWARC) in Kalispell to address serious infestations of wheat midge in the Flathead and Lake Counties. The parasitoid was supplied by entomologists from North Dakota State University and released at a single site in Flathead County.

After the initial release, the parasitoid population slowly increased, and by 2014, high numbers of the wasp could be found throughout Flathead County. In July of 2014 a new collection of the parasitoid was collected from the Lethbridge area and released in both the Kalispell and Conrad-Valier areas. The good news for the spring wheat growers is that Macroglossum stellatarum populations have been slowly establishing in Pondera and Flathead Counties, and as of 2015, parasitoid counts were dramatically higher.

In 2015, another trip was made into Saskatchewan to collect two different species of parasitoids known to be active on the wheat midge (Euxestonochus errati and Platygaster tuberculatdens). Wheat heads containing the parasitoids were brought back to the Western Triangle Agricultural Research Center (WTRAC) in Conrad for rearing and the eventual release of these new parasitoids in July of 2016.

At the same time, sweep net surveys conducted during 2015 in Flathead County found that one of these parasitoids was already present. Euxestonochus errati was identified at eight different sites in Flathead County. This indicates that these other parasitoid species should be monitored and multiply in Montana and provide additional help in managing the wheat midge.

The MSU Wheat Midge Biological Control Team includes Brooke Bonham, NWARC, Dr. Erik Echegaray, NWARC, Dr. Cindi VP Reddy, WTRAC, Conrad, Dr. Govinda Streshta, WTRAC, Dr. Bob Strong, NWARC and Dan Picard, WTRAC. The Montana Wheat and Barley committee has provided support for this project. For more information on the biological control program or wheat midge contact any of the team members at WTRAC (406-278-7707) or NWARC (406-755-4305).

Farm Auction ~ Vincent Schmoeckel ~ Retirement Auction
SATURDAY, SEPTEMBER 10, 2016 AT 10 A.M.
Registration at 9:30 A.M. 35 miles south of Malta, Mt. on Hwy 191
Lunch Provided by DalRenas. Signs Will Be Posted!