

Weekly Insect Sampling Report: July 31, 2015

Overview: Beginning the week of May 21st, the small grains team at Washington State University began conducting weekly sampling of insect pest populations in wheat and barley fields throughout the dryland region of Washington State. Current funding for the regional insect sampling network comes from WSU Extension. The objective of this monitoring network is to alert the small grains industry about the size and location of damaging insect pest populations to aid in early detection and management efforts for each insect pest. In this fourth week we sampled 10 fields for 5 pests: Hessian fly, Aphids, Cereal Leaf Beetle (CLB), Grasshoppers, Wheat Midges, and Wheat Head Armyworm (WHA) (complex). Data for previous weeks are also published on the smallgrains.wsu.edu website

Monitoring summary: The table below presents the insect monitoring results from the week of July 31th. Shown are the counts of each insect pest from fields located throughout the dryland region in Eastern Washington State. *We have completed sampling throughout the region for 2015, as all of our sampled fields have been harvested.*

Cells shown in green indicate the pest was not found. Cells colored yellow indicate the pest was found below economic thresholds. Growers in these regions should be on the lookout for these pests but management action is not warranted unless populations exceed thresholds. Cells shown in red indicate the pest was found at higher than average levels. As growers continue to harvest insect populations have remained low and in general treatments are likely not needed.

At many sites we are also finding high numbers of beneficial insects such as the ladybird beetle and the soft-winged flower beetle (*Collops* spp), which is often mistaken for the cereal leaf beetle. These beneficial insects play a great role in managing pest species! They are very sensitive to insecticides that are labeled for use on wheat, so balance the pros and cons before making a spray application.



Soft-winged flower beetle (left) and cereal leaf beetle (right)

WEEKLY INSECT TRAPPING & FIELD SAMPLING REPORT: July 31, 2015							
FIELD #	AREA NAME	CLB	HESSIANFLY	APHIDS	GRASSHOPPER	WHEAT	WHEAT HEAD
		Larvae	Immature	All Stages	All stages	MIDGE	ARMY WORM
		AVG #/plant	AVG #/plant	AVG #/plant	AVG#/sweep	AVG #/trap	AVG #/trap
		Visually Inspected			Swept	(2 traps per field)	(2 traps per field)
1	Farmington	FFS*	FFS	FFS	FFS	FFS	FFS
2	Plaza	FFS	FFS	FFS	FFS	FFS	FFS
3	St. John	FFS	FFS	FFS	FFS	FFS	FFS
4	Endicott	FFS	FFS	FFS	FFS	FFS	FFS
5	Colton	FFS	FFS	FFS	FFS	FFS	FFS
6	Walla Walla	FFS	FFS	FFS	FFS	FFS	FFS
7	Dayton	FFS	FFS	FFS	FFS	FFS	FFS
8	Mayview	FFS	FFS	FFS	FFS	FFS	FFS
9	Colville	0	0	0	0.1	FFS	0
10	Chewelah	0	0	0	0	FFS	0
11	Peone Prairie	0	0	0	0.03	FFS	0
12	Nine Mile Falls	FFS	FFS	FFS	FFS	FFS	FFS
13	Fairfield	0	0	0	0.04	FFS	0
14	Revere	0	0	0	0.06	FFS	0
15	Ritzville	FFS	FFS	FFS	FFS	FFS	FFS
16	Edwall	FFS	FFS	FFS	FFS	FFS	FFS
17	Mondovi	FFS	FFS	FFS	FFS	FFS	FFS
18	N. St Andrews	FFS	FFS	FFS	FFS	FFS	FFS
19	S. St Andrews	FFS	FFS	FFS	FFS	FFS	FFS

*FFS = Finished for season

Aphids: Aphids were not found at any locations. Map not shown given low risk from aphids across the region.

Hessian fly: Larvae of Hessian fly (HF), the primary damaging stage in wheat and barley crops, were not found at any sampling locations.

Cereal Leaf Beetle: Cereal leaf beetles were not collected at any of the 11 sampling locations.

Grasshoppers: Grasshoppers (GH) were found at 4 of 5 sampling locations, at a density ranging from 0.03 to 0.10 per 100 sweeps. The average grasshopper density is calculated per sweep, out of 100 total sweeps. Populations have decreased from their high-points in the middle of July. Map not shown given low risk from grasshoppers across the region.

Wheat Armyworm Complex: The wheat armyworm complex consists of two species: the true WHA, *Dargida diffusa*; and the false WHA, *Dargida terrapictalis*. There were no WHA found at our sampling locations this week. These species are collected by pheromone lures in bucket traps (for a total of 2 traps per site).

Wheat Midge. Wheat Midge (WM) was not found at any locations.