

Weekly Insect Sampling Report: May 21, 2015

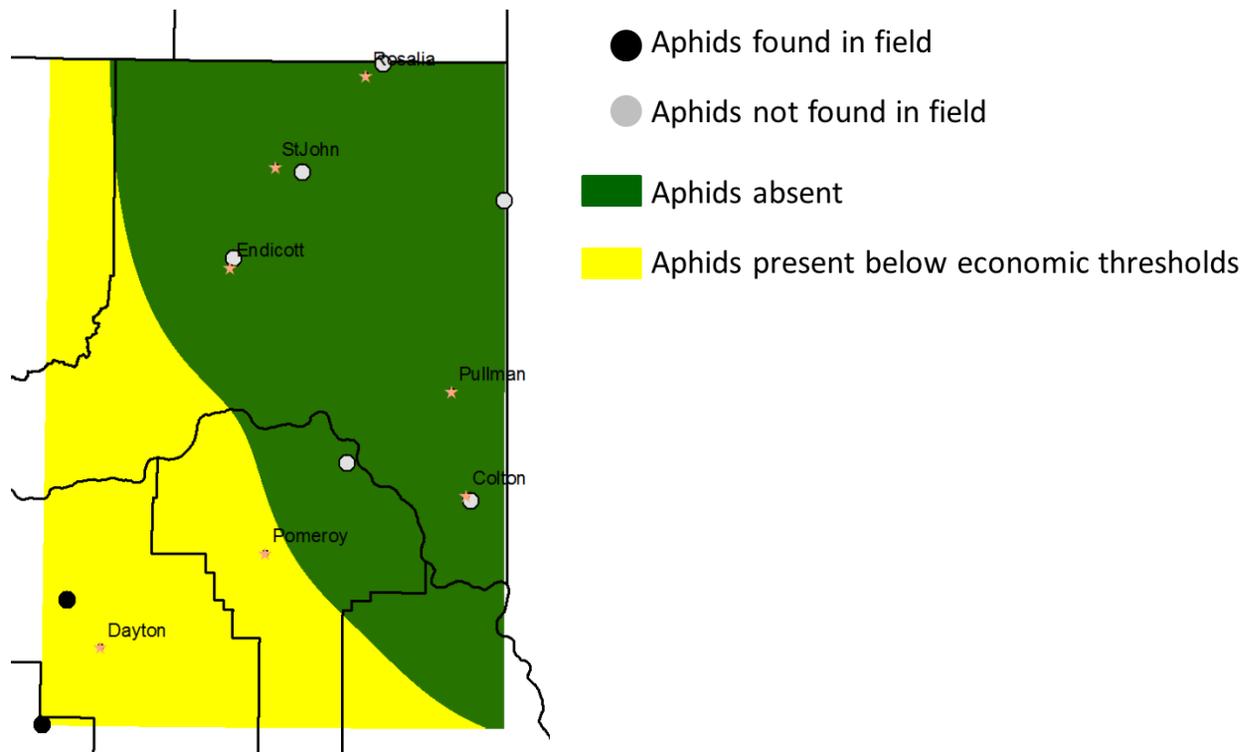
Overview: Beginning the week of May 21st, the small grains team at Washington State University will be conducting weekly sampling of insect pest populations in wheat and barley fields throughout the dryland region of Washington State. Current funding for the regional insect sampling network comes from 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 first week we sampled 8 fields for four pests: Hessian fly, Aphids, Cereal Leaf Beetle (CLB), and Grasshoppers. In the future the network will expand to 16 fields and will include pheromone trapping of wheat head army worm and wheat midge. Data will be published weekly on the smallgrains.wsu.edu website.

Monitoring summary: The table below presents the insect monitoring results from the week of May 21st. Shown are the counts of each insect pest from fields located throughout the southern portion of the dryland region in Eastern Washington State. Cells colored green indicate the pest was not found this week. 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 (none this week) indicate the pest was found above economic thresholds.

6WEEKLY INSECT TRAPPING & FIELD SAMPLING REPORT: May 21, 2015							
FIELD #	AREA NAME	HESSIAN FLY	APHIDS	CLB	GRASSHOPPER	WHEAT HEAD	WHEAT
		Immature	All Stages	Larvae	All stages	ARMY WORM	MIDGE
		AVG #/plant	AVG #/plant	AVG #/plant	AVG#/sweep	AVG #/trap (2 traps per field)	AVG #/trap (2 traps per field)
1	Farmington	0	0	0	0	NA	NA
2	Plaza	0	0	0	0	NA	NA
3	St. John	0	0	0	0	NA	NA
4	Endicott	0	0	0	0	NA	NA
5	Colton	0	0	0.02	0	NA	NA
6	Walla Walla	0	0.14	0.78	0	NA	NA
7	Dayton	0	0.04	0	0	NA	NA
8	Mayview	0	0	0	0.01	NA	NA

Hessian fly: Larvae of Hessian fly, the primary damaging stage in wheat and barley crops, were not found at any of the 8 sampling locations. However, adults were found throughout the region. These first-generation adults are likely laying eggs and we expect to find damaging larval stages in future weeks. Given the lack of Hessian fly, a map showing their occurrence is not shown.

Aphids: Aphids were found at 2 of the 8 sampling locations at densities ranging from 0.04 to 0.14 aphids per plant. These densities are below economic thresholds for aphids. Shown below is a map of aphids occurrence. The circles indicate fields that were sampled as part of the network. Black circles indicate fields where aphids were observed, and gray circles indicate fields where aphids were not observed (from samples of 50 plants per field). Also shown is a prediction of aphid occurrence throughout the dryland region using Geographic Information Systems (GIS) software. Areas shaded green are locations where aphids are not expected to be found at this time, and areas shaded yellow are regions where aphids are likely present but below economic thresholds. Aphids have been found in the southern and western part of the dryland region. As the season progresses populations will continue to move North and East. Growers in these regions should be aware that aphid populations are likely present and growing. See the smallgrains.wsu.edu website for information on economic thresholds for aphids in order to make appropriate management decisions.



Grasshoppers: Grasshoppers were found at only 1 of 8 sampling locations, at a density of 1 grasshopper per 100 sweeps (using a sweep net to sample the vegetation canopy). Grasshopper populations are expected to increase over the course of the season due to the dry, warm spring. Populations will continue to be monitored throughout the season. Given the low abundance of grasshoppers, a map showing their occurrence is not shown.

Cereal Leaf Beetle: Cereal leaf beetles were collected at 2 of the 8 sampling locations at densities ranging from 0.02 to 0.78 larvae per plant. These densities are below economic thresholds for CLB. Shown below is a map of CLB occurrence. The circles indicate fields that were sampled as part of the network. Black circles indicate fields where CLB were observed, and gray circles indicate fields where CLB were not observed (from samples of 50 plants per field). Also shown is a prediction of CLB occurrence throughout the dryland region using Geographic Information Systems (GIS) software. Areas shaded green are locations where CLB are not expected to be found at this time, and areas shaded yellow are regions where CLB are likely present but below economic thresholds. CLB have been found in the southern and western part of the dryland region. As the season progresses populations will continue to move North and East. See the smallgrains.wsu.edu for more information on economic thresholds and management options for CLB.

