

Weekly Insect Sampling Report: June 4, 2015



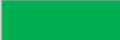

Overview: Beginning the week of May 21st, the small grains team at Washington State University will be conducting weekly sampling of insect pest populations in wheat and barley fields throughout the dryland region of Washington State. Current funding for the regional insect sampling network comes from 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 third week we sampled 17 fields for 5 pests: Hessian fly, Aphids, Cereal Leaf Beetle (CLB), Grasshoppers and Wheat Head Armyworm. Next week we will have results from pheromone trapping of wheat midge next week. Data will be published weekly on the smallgrains.wsu.edu website.

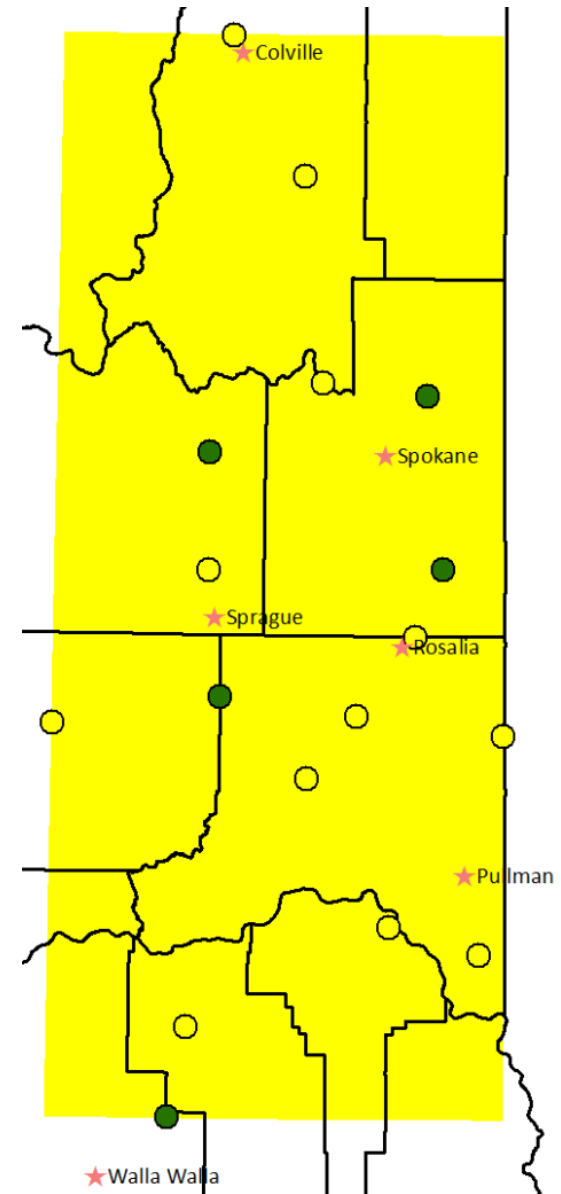
Monitoring summary: The table below presents the insect monitoring results from the week of June 4th. Shown are the counts of each insect pest from fields located throughout the dryland region in Eastern Washington State. Cells colored green indicate the pest was not found this week. Cells colored yellow 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 indicate the pest was found above economic thresholds. Sites not sampled are indicated with an NA.

WEEKLY INSECT TRAPPING & FIELD SAMPLING REPORT: June 4, 2015

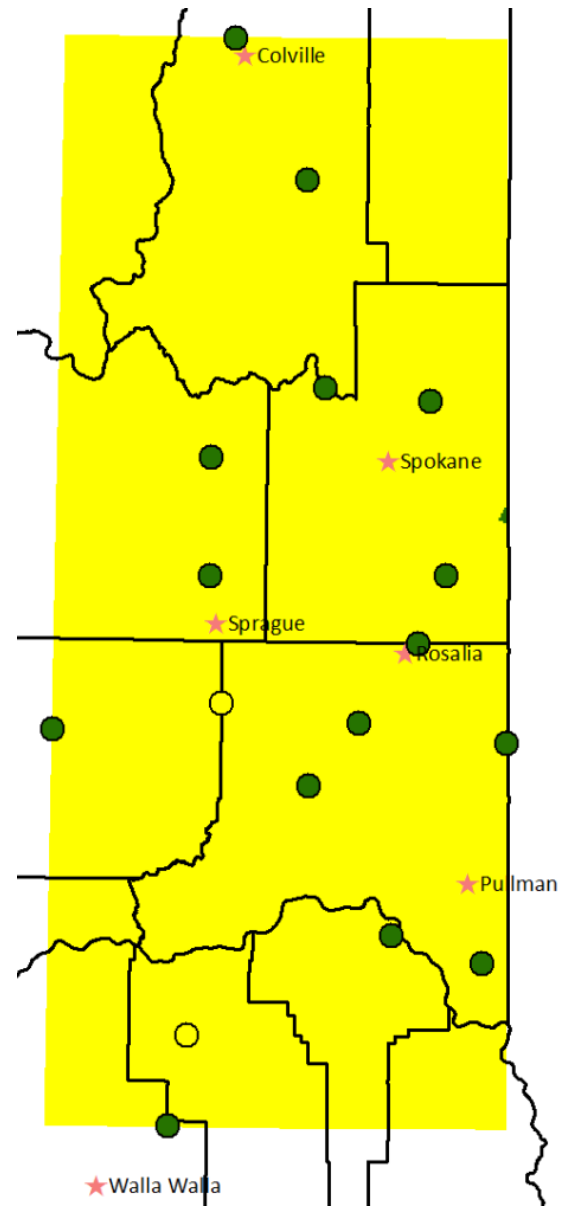
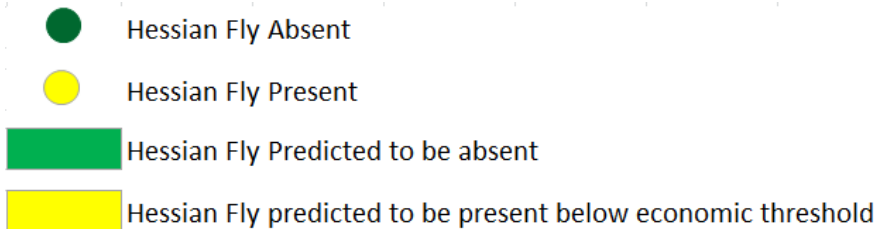
FIELD #	AREA NAME	HESSIANFLY	APHIDS	CLB	GRASSHOPPER	WHEAT HEAD	WHEAT
		Immature	All Stages	Larvae	All stages	ARMY WORM	MIDGE
		AVG #/plant	AVG #/plant	AVG #/plant	AVG#/sweep	AVG #/trap	AVG #/trap
		Visually Inspected			Swept	(2 traps per field)	(2 traps per field)
1	Farmington	0	0.02	0.02	0	0	NA
2	Plaza	0	0.08	0	0	14	NA
3	St. John	0	0.04	0	0	18.5	NA
4	Endicott	0	0.16	0	0.02	1	NA
5	Colton	0	0.1	0	0.02	0	NA
6	Walla Walla	0	0	0.1	0	0	NA
7	Dayton	0.02	0.86	0	0	0	NA
8	Mayview	0	0.16	0	0.01	0	NA
9	Colville	0	0.08	0	0.03	0	NA
10	Chewelah	0	0.04	0	0.01	0	NA
11	Peone Prairie	0	0	0	0	0	NA
12	Nine Mile Falls	0	0.14	0.52	0.02	0	NA
13	Fairfield	0	0	0	0	30.5	NA
14	Revere	0.02	0	0.02	0.01	3.5	NA
15	Ritzville	0	0.08	0	0	2	NA
16	Edwall	0	0.02	0	0.01	62	NA
17	Mondovi	0	0	0.02	0.01	89.5	NA
18	N. St Andrews	NA	NA	NA	NA	NA	NA
19	S. St Andrews	NA	NA	NA	NA	NA	NA

Aphids: Aphids were found at 12 of the 17 sampling locations at densities ranging from 0.02 to 0.86 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. Yellow circles indicate fields where aphids were observed, and green 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.

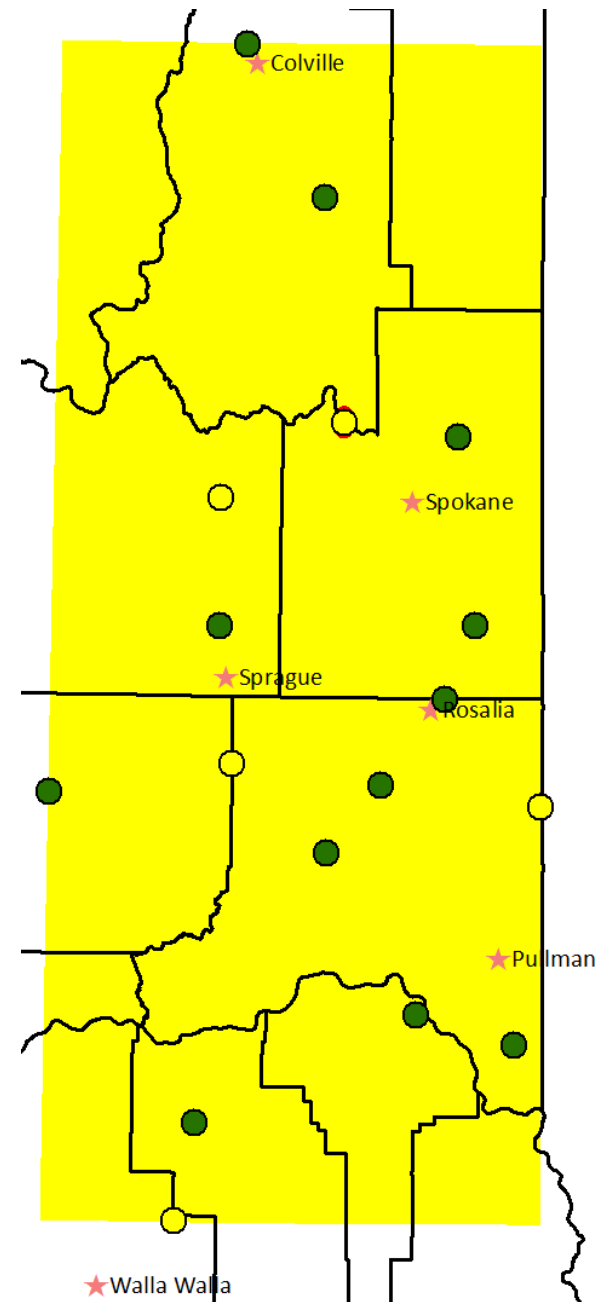
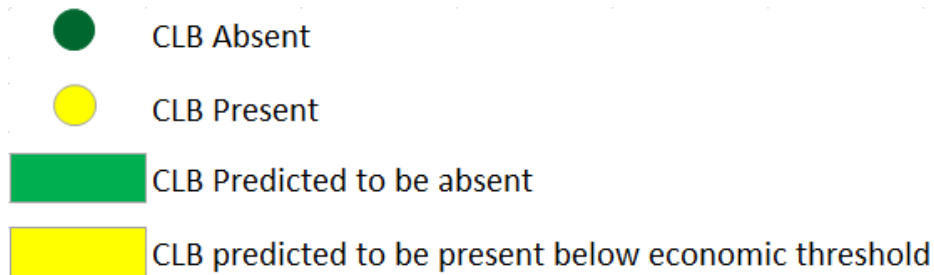
-  Aphids Absent
-  Aphids Present
-  Aphids Predicted to be absent
-  Aphids predicted to be present below economic threshold







Hessian fly: Larvae of Hessian fly, the primary damaging stage in wheat and barley crops, were found at 2 of the 17 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. On the map to the left, the circles indicate fields that were sampled as part of the network. Yellow circles indicate fields where HF were observed, and green circles indicate fields where HF were not observed (from samples of 50 plants per field). Also shown is a prediction of HF occurrence throughout the dryland region using Geographic Information Systems (GIS) software. Areas shaded green are locations where HF are not expected to be found at this time, and areas shaded yellow are regions where HF are likely present but below economic thresholds. 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 HF.

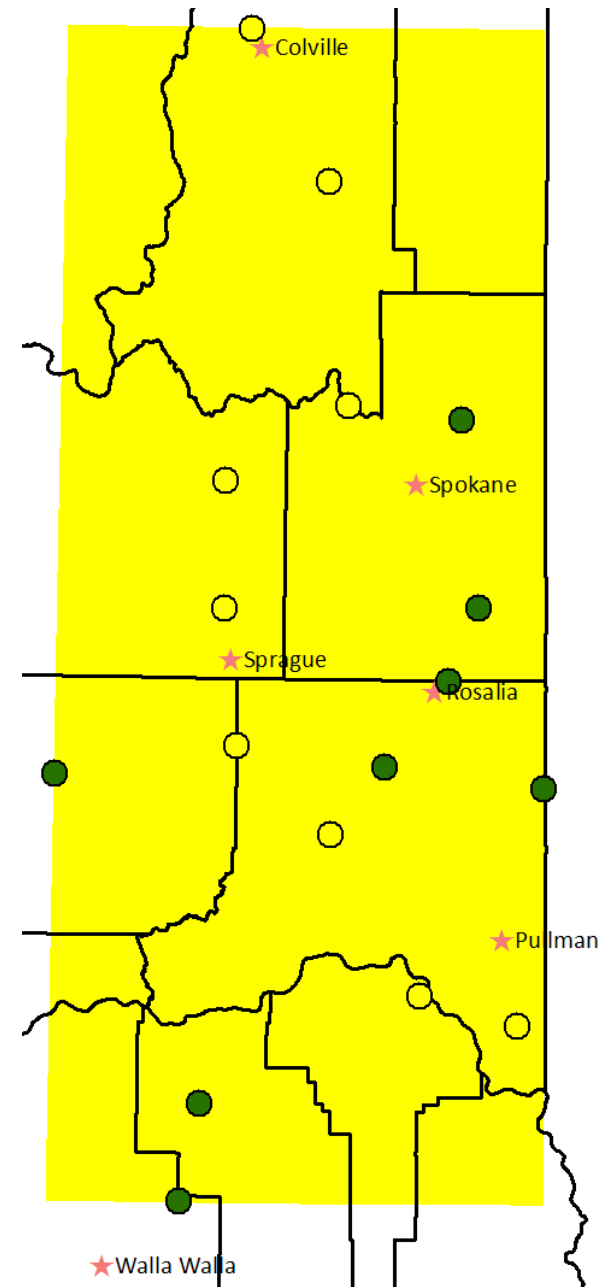


Cereal Leaf Beetle: Cereal leaf beetles were collected at 5 of the 17 sampling locations at densities ranging from 0.02 to 0.52 larvae per plant. These densities are below economic thresholds for CLB. Shown, left, is a map of CLB occurrence. The circles indicate fields that were sampled as part of the network. Yellow circles indicate fields where CLB were observed, and green 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.



Grasshoppers: Grasshoppers were found at 9 of 17 sampling locations, at a density ranging from 0.01 to 0.03 and these are below economic thresholds. The average grasshopper density is calculated per sweep, out of 100 total sweeps. On the map to the left, the circles indicate fields that were sampled as part of the network. Yellow circles indicate fields where grasshoppers were observed, and green circles indicate fields where grasshoppers were not observed. Also shown is a prediction of grasshopper occurrence throughout the dryland region using Geographic Information Systems (GIS) software. Areas shaded yellow are regions where grasshoppers are likely present but below economic thresholds. Grasshopper populations are expected to increase over the course of the season due to the dry, warm spring. See the smallgrains.wsu.edu for more information on economic thresholds and management options for grasshoppers.

-  Grasshoppers Absent
-  Grasshoppers Present
-  Grasshoppers predicted to be absent
-  Grasshoppers predicted to be present below economic threshold



Wheat Armyworm Complex: The wheat armyworm complex consists of two species: the true WHA, *Dargida diffusa*; and the false WHA, *Dargida terrapictalis*. These species are collected by pheromone lures in bucket traps (for a total of 2 traps per site). On the map to the left, the circles indicate fields that were sampled as part of the network. This was our first week of collection and we are already seeing high numbers. Green circles indicate fields where an average of 2 or less WHA were observed, yellow circles indicate fields where 2-10 WHA were observed and red circles indicate where over 10 WHA were observed. Also shown is a risk prediction of WHA occurrence throughout the dryland region using Geographic Information Systems (GIS) software. Areas shaded green are regions where WHA are likely to be present at very low numbers, yellow are regions where WHA are likely present at medium-risk numbers and red are regions where WHA are expected to be very high. See the smallgrains.wsu.edu for more information on economic thresholds and management options for grasshoppers.

