Purpose of Study:
The objective of this project was to allow for timely barley crop staging and pest identification across the state of MN in order to inform producers of current crop conditions and potential threats. Information was released through media (e.g., radio, internet-based news releases, archived web pages, consultant conversations and e-mail. The survey was conducted in coordination with the NDSU IPM Survey, providing extensive, continuous coverage of small grains across MN and ND.

Results:
Field surveys were initiated the last 2 weeks of May. Thanks to favorable spring planting conditions, the crop ranged from tillering in the north to beginning boot stage in the southern survey locations (see map for Growth Stages - May 25 to June 6).

Barley diseases by prevalence were Bacterial leaf streak from C and NW MN; Barley yellow dwarf incidence was greatest where aphids established early in C MN; Septoria blotch occurred with high incidences in C MN. Head blight (scab) in barley was only found in far NW MN. Barley Spot Blotch and Net Blotch were found in the region but were more often found in North Dakota than MN.

When reviewing the maps, Incidence is defined as “the percent of sampled plants with the disease.” Severity is defined as “the percent of plant tissue that is diseased on affected plants.” Therefore, maps that report incidence are reporting percent plants affected. Severity tells us how bad infections were.

The most important insect related production issues were the appearance of cereal aphids which reached threshold levels in C MN early and reflected the higher incidence of BYD. Armyworm did make their presence known in SW MN by early July, prompting some insecticide treatments in grain fields.

To receive notification of the survey, subscribe to the Northwest Cropping Issues Newsletter at:
http://nw-minnesota-crops.blogspot.com/

Archived maps for MN from 2011 to present are maintained by NDSU and can be found at:
https://www.ag.ndsu.edu/ndipm/ipm-survey-archives
Barley Crop Survey (continued) — Statewide

Barley Bacterial Leaf Streak Incidence
Season Final, 2018

Barley Scab Field Severity Index
Season Final, 2015

Barley Yellow Dwarf Virus Incidence
Season Final, 2015

Aphids in Barley
Season Final, 2015

Barley Septoria SSP Incidence
Season Final, 2015

Barley Leaf Rust Incidence
Season Final, 2015

For Additional Information: Madeleine Smith, Doug Holen, Phillip Glogoza and Jochum Wiersma
Barley Crop Survey (continued) — Statewide

Results (continued):

For Additional Information: Madeleine Smith, Doug Holen, Phillip Glogoza and Jochum Wiersma