

Wisconsin Crop Manager

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Vegetable Crop Update 6/5/12

The 11th issue of the Vegetable Crop Update is now available. This issue contains various updates relating to entomology, disease, and crops.

[Click here to view this update.](#)

Oat and Necrotic Leaf Tips and Margins

Shawn Conley, Russ Groves (UW Entomology)

When I was out scouting early this week I noticed that many of my oat plots were showing necrosis on the leaf tips and margins (please see below image). I can honestly say I did not give it much thought as I had soybeans to spray. By Wednesday however my email, text, and phone were all buzzing about this consistent and widespread oat issue so I started to do some digging. If you look closely at the below picture you could easily write this crop injury off to our unpredictable spring environment and/or barley yellow dwarf virus (bydv). However after speaking with John Mochon who is the project manager in the oat breeding program and Scott Chapman in entomology they both vividly remember the tremendous influx of aster leafhoppers (ALH) that arrived in early May. A follow-up conversation with Russ Groves in Entomology confirms that we experienced one of the highest ALH influxes in the past decade. Furthermore, Randy Van Haren, with Pest Pros Inc., has performed qPCR assays on populations in the Central Sands in the past 3-4 weeks with infectivity rates as high as 10-12% which is very high for this pathogen. Since I have never dealt with ALH I found a good [article written](#) by Janet J. Knodel at NDSU. She wrote "Aster leafhoppers feed on plant sap and vector aster yellows, a phytoplasma disease that presents like BYDV. Disease symptoms will appear in 2-3 weeks (which fits with our

timeline). Plants infected earlier in crop development are more susceptible to yield loss than mature crops. For example, wheat infected with aster yellows at the seedling stage will not produce kernels due to stunting. A heavy infestation of aster leafhoppers in the field also will increase the incidence of aster yellows." Limited information exists about the susceptibility of grain crops (e.g. oats and wheat) to infection of the aster yellows phytoplasma (AYp). Work includes oat susceptibility to AYp of Chiykowski and Wolynetz 1981, Can J. Plant Path. And most recently Hollingworth et al. 2008 (<http://apsjournals.apsnet.org/doi/pdf/10.1094/PDIS-92-4-0623>). Over the next few days I will be collecting samples and working with Russ Groves to confirm if this is the potential culprit. Stay tuned...



Wisconsin Pest Bulletin 6/7/12

A new issue of the Wisconsin Pest Bulletin from the Wisconsin Department of Agriculture, Trade and Consumer Protection is now available. The Wisconsin Pest Bulletin provides up-to-date pest population estimates, pest distribution and development data, pest survey and inspection results, alerts to new pest finds in the state, and forecasts for Wisconsin's most damaging plant pests.

Issue No. 9 of the Wisconsin Pest Bulletin is now available at:

<http://datcpservices.wisconsin.gov/pb/index.jsp>

<http://datcpservices.wisconsin.gov/pb/pdf/06-07-12.pdf>

Plant Disease Diagnostic Clinic (PDDC) Update

Brian Hudelson, Ann Joy, Amanda Zimmerman, Adam Greene, Andrew Pape, Plant Disease Diagnostics Clinic

The PDDC receives samples of many plant samples from around the state. The following diseases/disorders have been identified at the PDDC from May 25 through May 31, 2012:

PLANT/SAMPLE TYPE	DISEASE/DISORDER	PATHOGEN	COUNTY
FORAGE CROPS			
Alfalfa	Downy Mildew	<i>Peronospora trifoliorum</i>	Columbia
VEGETABLES			
Potato	Early Blight	<i>Alternaria solani</i>	Dane
	Potato Virus V	Potato virus V virus	Dane
	Silver Scurf	<i>Helminthosporium solani</i>	Dane

For additional information on plant diseases and their control, visit the PDDC website at pddc.wisc.edu.

