



Vegetable Crop Update

A newsletter for commercial potato and vegetable growers prepared by the University of Wisconsin-Madison vegetable research and extension specialists

No. 16 – August 12, 2013

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Aug 22 – UWEX-Langlade County Airport
Research Station Field Day, Antigo, WI

Vegetable Disease Update – Amanda J. Gevens, Assistant Professor & Extension Vegetable Plant Pathologist, UW-Madison, Dept. of Plant Pathology, 608-890-3072 (office), Email: gevens@wisc.edu. Vegetable Path Webpage: <http://www.plantpath.wisc.edu/wivegdis/>

Late blight status in WI and the U.S.: We had a few new late blight samples this past week – however – none from new counties. Table 1 includes further details. **In the past week, MA, ME, NY, OH, and OR reported late blight on potato and/or tomato. The OR sample on potato was of the US-24 genotype; US-23 predominated other tested samples.** To date this production year, late blight has been reported in in FL, KY, LA, MA, MD, ME, MI, NJ, NY, OH, OR, PA, TN, WI, and WV. The website: <http://www.usablight.org/> indicates location of positive reports of late blight in the U.S. and provides further information on disease characteristics and management.

Table 1. Characterization of late blight from Wisconsin in 2013.

County	Host	Genotype	Date of Confirmation
Adams	potato	US-23	28 Jun
Juneau	potato	US-23	29 Jun
Sauk	tomato	US-23	2 Jul
Dunn	potato	US-23	29 Jul
Portage	potato	US-8/US-23	29 Jul/6 Aug
Brown	potato+tomato	US-23	6 Aug
Langlade	potato	US-23	6 Aug
Racine	tomato	US-23	8 Aug
Waushara	potato	US-23	8 Aug

As a reminder, US-8 is resistant to mefenoxam/metalaxyl fungicides and is an A2 mating type; US-23 is sensitive to mefenoxam/metalaxyl fungicides and is an A1 mating type.

Current P-Day (Early Blight) and Severity Value (Late Blight) Accumulations

P-Day of ≥ 300 indicates threshold for early blight risk and triggers preventative application of fungicide. DSV of ≥ 18 indicates threshold for late blight risk and triggers preventative application of fungicide. Red text in table below indicates threshold has been met. NA indicates that information is not yet available as emergence has yet to occur. http://www.plantpath.wisc.edu/wivegdis/contents_pages/pday_sevval_2013.html

Location	Planted	50% Emergence	P-Day Cumulative (increase from 7/29)	DSV Cumulative (increase from 7/29)	Calculation Date
Antigo Area	Early 5/13	6/4	507 (67)	50 (6)	8/12/13
	Mid 5/22	6/17	430 (67)	42 (6)	8/12/13
	Late 6/7	6/29	332 (67)	20 (3)	8/12/13
Grand Marsh Area	Early 4/15	5/10	628 (69)	252 (49)	8/12/13
	Mid 5/1	5/21	594 (69)	252 (49)	8/12/13
	Late 5/15	6/5	503 (69)	225 (49)	8/12/13
Hancock Area	Early 4/20	5/15	696 (76)	86 (16)	8/12/13
	Mid 5/5	5/23	635 (76)	84 (16)	8/12/13
	Late 5/15	6/5	553 (77)	62 (16)	8/12/13
Plover Area	Early 4/22	5/17	617 (27)	169 (19)	8/8/13*
	Mid 5/7	5/30	537 (27)	145 (19)	8/8/13*
	Late 5/24	6/5	495 (27)	136 (19)	8/8/13*

*Plover area weather station is having technical difficulties. Data could not be collected for determination of risk values for 8/12/13. We're working to correct the problem.

DSVs and Late Blight: From in-potato-field weather stations here in Wisconsin, we have exceeded initial threshold for Blitecast in all monitored locations. Accumulations of DSVs were moderate to low in most sites. However, in Grand Marsh, DSVs accumulated rapidly with maximum DSVs accumulated over the past 8 days – very promotive weather for late blight. I added some information in the above table to indicate increase in accumulated PDays and DSVs from previous week. A 5 to 7-day fungicide program is appropriate at this time given presence of pathogen in state and favorable weather. Cool nights are leading to very foggy mornings in many areas of the state which promote late blight.

In order to help better understand the epidemic at hand, **please submit samples to my lab** or work through your county agent and request that they send to me for genotyping. *Even if a sample has already been submitted from your county and determined to be US-23.* All we need to know is the county of sample origin. Identification of genotype at the county level would be very helpful in improving our understanding of this epidemic and potential future risks. Lab address is: Amanda Gevens, 1630 Linden Dr, Room 689, Plant Pathology Dept., University of Wisconsin, Madison, WI 53706. Please send infected leaves in a slightly inflated ziplock bag with no paper towel. Overnight shipping is best.

PDays and Early blight: P-Days have reached/surpassed the threshold of 300 in all plantings of potato in WI. Fungicide applications for the management of early blight are recommended at this time. Because of the dual risk of late and early blight, consider management options that control against both diseases. Symptoms of early blight are advancing in lower and mid-plant canopies throughout most of Wisconsin.

Cucurbit Downy Mildew: has not been identified in Wisconsin at this time in commercial fields, home gardens, or our sentinel monitoring plots. **In the past week, many states reported cucurbit downy mildew including AL, GA, KY, MA, MI, NC, NJ, NY, PA, and WV.** In summary this year, AL, CT, DE, FL, GA, IN, KY, MD, MI, NC, NJ, NY, OH, PA, SC, TX, VA, WV, and Ontario Canada have reported cucurbit downy mildew across multiple cucurbit hosts. I will be keeping tabs on disease reports in the region and will provide updates in this newsletter. No forecasted risk of movement of spores from states reporting detects to Wisconsin at this time. Forecasts have the pathogen moving to the north and east of active sites at this time and we do not have inoculum sources to our direct south or west. The website: <http://cdm.ipmpipe.org/> offers up to date reports of cucurbit downy mildew and disease forecasting information.

The 2013 A3422 Commercial Vegetable Production in Wisconsin guide is available for purchase through the UW Extension Learning Store website: <http://learningstore.uwex.edu/Commercial-Vegetable-Production-in-Wisconsin2013-P540.aspx>

A pdf of the document can be downloaded or is available at the following direct link:
<http://learningstore.uwex.edu/Assets/pdfs/A3422.pdf>