Vegetable Crop Update

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

No. 15 – August 7, 2013

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Calendar of Events

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.: **There have been several new late blight confirmations in WI this past week including an additional potato sample from Portage (US-23), potato and tomato from Brown (both US-23), and potato from Langlade (US-23).** Table 1 includes further details. **In the past week, MA, ME, NY, and OH reported late blight on potato and/or tomato – with all completed genotyping indicating US-23.** To date this production year, late blight has been reported in in FL, KY, LA, MA, MD, ME, MI, NJ, NY, OH, 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

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	440 (46)	44 (3)	8/4/13
	Mid 5/22	6/17	363 (46)	36 (3)	8/4/13
	Late 6/7	6/29	265 (46)	20 (3)	8/4/13
Grand Marsh Area	Early 4/15	5/10	559 (42)	203 (34)	8/4/13
	Mid 5/1	5/21	525 (43)	203 (34)	8/4/13
	Late 5/15	6/5	434 (43)	176 (34)	8/4/13
Hancock Area	Early 4/20	5/15	620 (49)	70 (4)	8/4/13
	Mid 5/5	5/23	559 (50)	68 (4)	8/4/13
	Late 5/15	6/5	476 (49)	46 (4)	8/4/13
Plover Area	Early 4/22	5/17	590 (48)	150 (16)	8/4/13
	Mid 5/7	5/30	510 (48)	126 (16)	8/4/13
	Late 5/24	6/5	468 (48)	117 (16)	8/4/13

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 high in the Grand Marsh and moderate in Plover areas this past week. I added some information in the above table to indicate increase in accumulated PDays and DSVs from previous week. The accumulation of 34 in the Grand Marsh location indicates that nearly 5 DSVs accumulated in each day out of the possible maximum of 6 – very promotive weather for late blight. A 5 to 7-day fungicide program is appropriate at this time given recent rain events and presence of pathogen.

The UW Vegetable Pathology site offers the Blitecast and Tomcast accumulations for foliar disease control from remotely sensed and forecasted weather data. Information is provided to help growers interpret the information offered for potato and carrot disease control. The link is entitled: "NEW: Blitecast & Tomcast estimates (from remotely sensed weather data), 2013" right in the center of the home page of: www.plantpath.wisc.edu/wivegdis/

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 but late plantings in the Antigo area. Fungicide applications for the management of early blight are

recommended at this time for all but mid and late planted fields in the Antigo area. 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 on multiple hosts including AL, GA, IN, MD, NC, NJ, NY, OH, PA, VA, and WV.** In summary this year, AL, CT, DE, FL, GA, KY, MD, MI, NC, NJ, NY, OH, PA, SC, TX, VA, 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. 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-Wisconsin-2013-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

Fruit Insect Update – Christelle Guédot, Assistant Professor & Extension Fruit Crop Entomologist UW-Madison, Dept. of Entomology, 608-262-0899 (office), guedot@wisc.edu.

Spotted Wing Drosophila Alert! (July 31, 2013) Spotted Wing Drosophila has now been confirmed in Crawford, Vernon, Iowa, Bayfield, Columbia, Dane, Sauk, Door, and Trempeleau Counties. It is also suspected in Jefferson, Washburn, Kenosha, Wood, Pierce, Rock, Monroe, Buffalo, and Lacrosse Counties. Numbers of adults are still very low at each location, but larvae have been found in fruit at multiple locations. As you can see, SWD is rapidly appearing throughout the state at the same time suggesting that it is probably overwintering in Wisconsin.

Very few adults have been caught so far in traps baited with the apple cider vinegar. The reason could be that in previous years, experiences from other states were with vinegar that was changed less frequently than once a week. Odors emitted by the vinegar will change over time as it is fermenting in the trap. When changing the bait once a week, less fermentation occurs and the apple cider vinegar is likely to be less attractive. The yeast and sugar bait is much more attractive to SWD and is preferred for monitoring. The bait will attract flies earlier and in higher numbers than the vinegar. We are thus strongly recommending to monitor for SWD in your crop with a yeast and sugar bait (1 Tbsp. active dry yeast: 4 Tbsp. sugar: 12 oz water), and take action if SWD is present and the fruit is at a susceptible stage.

Management recommendations for:

Raspberry http://labs.russell.wisc.edu/swd/files/2013/06/Recommendations-for-SWD-Management-in-Raspberry.pdf

Blueberry http://labs.russell.wisc.edu/swd/files/2013/06/Recommendations-for-SWD-Management-in-Blueberry.pdf

Strawberry http://labs.russell.wisc.edu/swd/files/2013/06/Recommendations-for-SWD-Management-in-Strawberry.pdf

Cherry http://labs.russell.wisc.edu/swd/files/2013/06/Recommendations-for-SWD-Management-in-Cherry.pdf

Please, contact Christell Guedot at guedot@wisc.edu or 608-262-0899 if you have any questions, and check out our website at http://labs.russell.wisc.edu/swd/.

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Please, contact Christelle Guédot at guedot@wisc.edu or 608-262-0899 if you have any question, and check out our website at http://labs.russell.wisc.edu/swd/.