



Vegetable Crop Update

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

No. 17 – July 8, 2016

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Potato disease forecasting updates (P-Days/DSVs)
Late blight and cucurbit downy mildew national updates
UW-ARS Field Day agenda for Langlade County

Calendar of Events

July 14, 2016 – UW-Rhineland Agricultural Research Station Field Day
July 21, 2016 – UWEX Langlade County – Antigo Research Station Field Day
July 28, 2016 – UW-Hancock Agricultural Research Station Field Day
February 7-9, 2017 – UWEX/WPVG Grower Ed. Conf., Stevens Point, WI

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Current P-Day (Early Blight) and Severity Value (Late Blight) Accumulations (R.V. James, UW-Plant Pathology/R.V. James Designs): A P-Day value of ≥ 300 indicates the threshold for early blight risk and triggers preventative fungicide application. A DSV of ≥ 18 indicates the threshold for late blight risk and triggers preventative fungicide application. **Red** text in table below indicates threshold has been met/surpassed. “-” indicates that information is not available. Blitecast and P-Day values for actual potato field weather from Grand Marsh, Hancock, Plover, and Antigo are now posted at the UW Veg Path website at the tab “P-Days and Severity Values.” http://www.plantpath.wisc.edu/wivegdis/contents_pages/pday_sevval_2016.html

Location	Planting Date	50% Emergence	P-Day Cumulative	Disease Severity Value	Date of DSV Generation	Increase in DSV from 7/1
<i>Antigo</i>	Early 5/1	6/2	277	36	7/8	9
	Mid 5/18	6/7	242	26	7/8	9
	Late 6/3	6/21	139	11	7/8	9
<i>Grand Marsh</i>	Early 4/15	5/22	377	44	7/8	8
	Mid 5/1	5/27	340	38	7/8	8
	Late 5/15	6/3	281	27	7/8	8
<i>Hancock</i>	Early 4/18	5/24	351	46	7/8	8
	Mid 5/3	5/29	310	33	7/8	8
	Late 5/20	6/5	253	24	7/8	8
<i>Plover</i>	Early 4/20	5/25	340	46	7/8	7
	Mid 5/5	5/30	298	31	7/8	7
	Late 5/20	6/6	241	22	7/8	7

Summary: Disease Severity Values (DSVs) and Late Blight Blitecast: We now have all potatoes in WI at 50% emergence or greater and are generating forecast values for all potatoes. All growing areas with the exception of late planted potatoes in the Antigo area have reached threshold for late blight management. Generally, conditions were not greatly promotive for late blight in this past week with 7 day accumulations of 7-9 Disease Severity Values. Recall the

maximum number of DSVs that one day can accumulate is 4. Where thresholds of 18 DSVs have been met, routine, protection of susceptible tomato and potato crops is recommended.

Wisconsin commercial conventional fungicides for late blight control can be found at: <http://www.plantpath.wisc.edu/wivegdis/pdf/2016/Potato%20Late%20Blight%20Fungicides%202016.pdf>

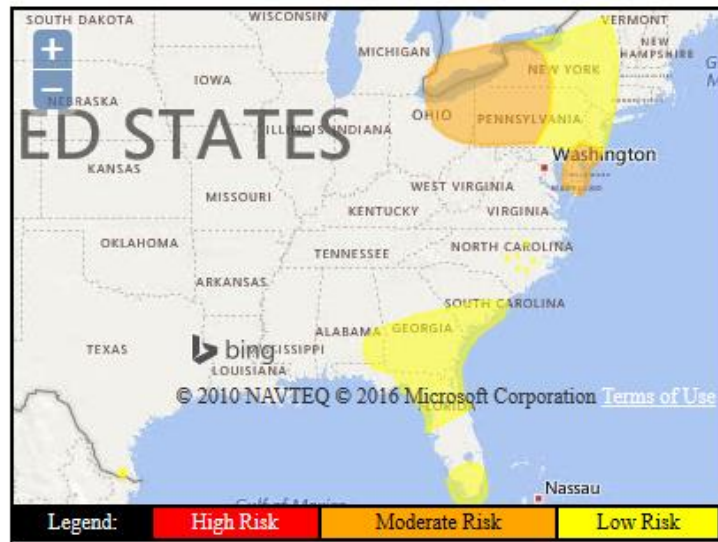
P-Days indicating early blight risk are now at or above threshold for early and mid-planted potatoes in the Hancock and Grand Marsh areas, and early planted potatoes in the Plover area. Lesions are being observed in the lower canopies of potato crops in central and southern WI. We have not noted much brown spot in potatoes, so far, this year.

National Late Blight Updates (www.usablight.org). There were 4 states reporting late blight confirmations in this past week (7/1-7/8). Three of these states posted to the usablight.org website: Arkansas (13 counties all on tomato, no genotype yet determined), Maryland (3 counties, tomato), and Washington (potato, genotype not yet determined). Michigan has not yet reported through this national tool, but Dr. Noah Rosenzweig and collaborators (MSU) made a public news release of the finding of US-23 on potato in Branch County (south central MI). The early June Washington (Walla Walla Co.) report of late blight on potato was confirmed to be of the US-8 strain/genotype. Also from early June, there was a confirmation from VA (potato, US-23). Earlier reports have come from MD (tomato US-23), CA (potato, types US-8 and US-11), and FL (potato and tomato US-23). **US-11** can infect both tomato and potato, is of the A1 mating type, and is resistant to Ridomil. **US-8** can infect both potato and tomato, but favors potato, is of the A2 mating type and is also resistant to Ridomil. **US-23** is a genotype that can be controlled with mefenoxam/metalaxyl fungicides (ie: Ridomil Gold SL) and can infect both tomato and potato. It should be noted, however, that some US-23 isolates can be intermediately or fully resistant to mefenoxam. As such, ongoing tests/screens should be conducted to best prescribe appropriate treatment responses.

If you are suspect late blight, please submit for free diagnostic testing through the UWEX Plant Disease Diagnostic Clinic or through my laboratory directly. Dr. Brian Hudelson in the clinic offers rather quick late blight confirmations. My program can do this, similarly, for commercial producers. Further my lab will genotype the pathogen in order to better prescribe best management strategies.

Cucurbit Downy Mildew Updates (<http://cdm.ipmpipe.org/>). In the past week there were 7 counties reporting new confirmations of cucurbit downy mildew in 3 states, in addition to Ontario Canada: DE, NC, and OH. Previous confirmations were made in AL, FL, GA, MD, NC, SC, and TX. No risk of movement of the pathogen to Wisconsin production region at this time, rather to the north and east of current field confirmations (figure below from <http://cdm.ipmpipe.org/current-forecast>).

Risk prediction map for Day 2: Saturday, July 9



Moderate Risk in southern ON, northeast OH, DE, eastern MD, southern NJ, western NY, and western and central PA. Low risk for cucurbits in central and eastern NY, eastern PA, northern and central NJ, southern SC, southern GA, southeast AL, northern FL, and southern FL. Minimal Risk to cucurbits elsewhere.

Langlade County Agricultural Research Station Field Day – Antigo, WI

Date & Time: Thursday July 21, 2016 – 1:00 pm

Location: Langlade County Airport, Antigo, Wisconsin (intersection of Highways 64 and 52)
The Public is invited to attend.

Topics/presenters will include:

"Managing Aphid Vectors and the Viruses they transmit" - Russ Groves, UW-Entomology

"Developing a Whole Seed Approach to Commercial Production" - Mike Copas, RPE

"New Potato Variety Options - Wisconsin Potato Variety Trial Update" - Felix Navarro, Research Manager, Hancock Agricultural Research Station

"Continued Assessment of Common Scab Control Materials in Potato and WI Potato Disease Updates" – Amanda Gevens, UW Plant Pathology

"Update from the Potato Breeding Program" - Jeffrey Endelman, UW-Horticulture

Food and Refreshments at Antigo City Park East following the tour provided by Insight FS of Antigo

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