



Vegetable Crop Update

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

No. 24 – August 20, 2016

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Calendar of Events

September 11, 2016 – UW-West Madison ARS Organic Vegetable Field Day
January 22-24, 2017 – WIFresh Fruit & Vegetable Growers Conf. WI Dells
February 7-9, 2017 – UWEX/WPVG Grower Ed. Conf., Stevens Point, WI
March 1, 2017 – UWEX Processing Vegetable Crops Meeting, Hancock, WI

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

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 8/12
<i>Antigo</i>	Early 5/1	6/2	630	107	8/20	13
	Mid 5/18	6/7	596	97	8/20	13
	Late 6/3	6/21	493	82	8/20	13
<i>Grand Marsh</i>	Early 4/15	5/22	701	139	8/20	12
	Mid 5/1	5/27	664	133	8/20	12
	Late 5/15	6/3	606	122	8/20	12
<i>Hancock</i>	Early 4/18	5/24	653	134	8/20	25
	Mid 5/3	5/29	612	121	8/20	25
	Late 5/20	6/5	555	112	8/20	25
<i>Plover</i>	Early 4/20	5/25	626	146	8/20	18
	Mid 5/5	5/30	583	131	8/20	18
	Late 5/20	6/6	527	122	8/20	18

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 have reached threshold for late blight management. Generally, conditions were moderate to highly favorable for late blight in this past week with 7 day accumulations of 12-25 Disease Severity Values, depending upon the location. 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 potato late blight control can be found at: <http://www.plantpath.wisc.edu/wivegdis/pdf/2016/updated%20Potato%20Late%20Blight%20Fungicides%202016%20MOA.pdf>

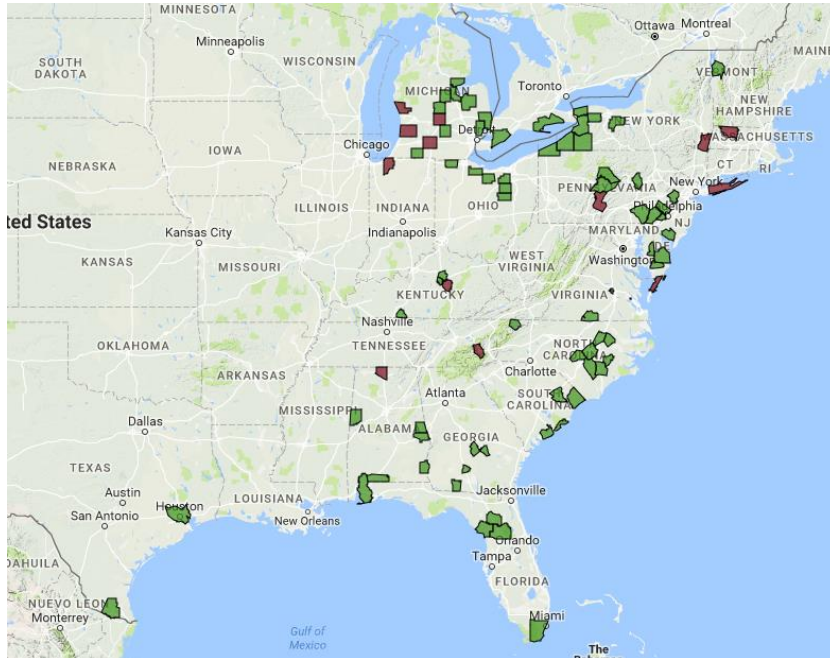
P-Days indicating early blight risk are now at or above threshold for all potatoes in Wisconsin. Lesions are being observed in the middle and top canopies of potato crops throughout WI. We have not noted much brown spot in potatoes, so far, this year. Based on my early blight observations from our trials at the UW Hancock Ag Research Station, early blight is now at roughly 60% severity on 'Russet Burbank' planted during the first week of May 2016 with no early-blight-specific fungicides.

Late Blight Diagnostic Updates. Late blight was confirmed in WI in two counties during the past week. Polk (tomato and potato, US-23) and Dane (tomato, no strain info as of yet) County reports came from individual farms in each county. No other new reports of late blight were made through the national research and extension website in this past week (www.usablight.org). Earlier season's reports have come from AR, MD, CA, FL, MI, SC, VA, and WA. However, Western Manitoba, Canada (north of North Dakota) confirmed late blight in their potato production region ~3 weeks ago; and the Pert-Andover area of New Brunswick Canada has also confirmed late blight. The closest detection to WI so far has been in south central MI (US-23) on potato. US-23 has predominated cases of this disease in the US so far this year. West coast has had US-8 and US-11 as well. Disease has been confirmed on both potato and tomato. Careful monitoring for and management of volunteers and solanaceous weeds is critical – along with preventive management of the main potato crop with use of effective fungicides.

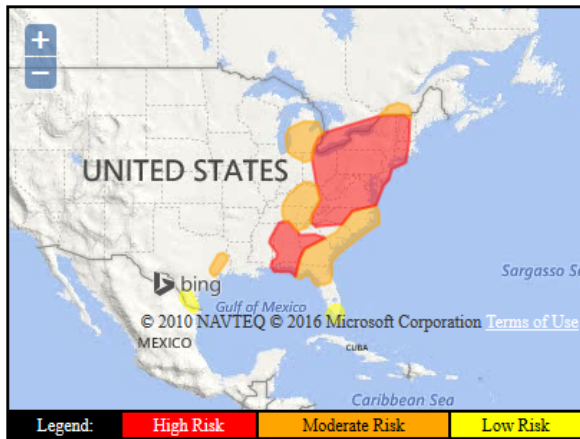
If you are suspect late blight, please submit for free diagnostic testing through the UWEX Plant Disease Diagnostic Clinic or through my laboratory directly. Dr. Brian Hudelson in the clinic offers rather quick late blight confirmations. My program can do this, similarly, for commercial producers. Further 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 10 states reporting new confirmations of cucurbit downy mildew: AL, IL, IN, KY, MA, MI, NC, NY, PA, and VA (counties colored red in map below from 8/20/16). Previous confirmations were made in AL, DE, FL, GA, KY, MD, MI, NC, NJ, NY, OH, ON Canada, PA, SC, TX, VA, and VT (counties colored green in map below from 8/20/16). The closest finds to WI at this time are in central IL. There is no risk of movement of the pathogen to Wisconsin production regions in the upcoming forecast for cucurbit downy mildew movement over the next several days (see below from <http://cdm.ipmpipe.org/current-forecast>). However, the forecast was not calculated with the central IL report. Growers should be on watch for earliest symptoms of

downy mildew for rapid response with effective fungicides (link below to treatment information). <http://www.plantpath.wisc.edu/wivegdis/pdf/2016/July%2013,%202016.pdf>



Risk prediction map for Day 3: Sunday, August 21



HIGH Risk for cucurbits in the western FL panhandle, AL, central GA, northeast TN, western and central NC, VA, WV, MD, DE, central and eastern OH, PA, NJ, NY, Long Island, CT, central and western MA, western NH, VT and southern ON.
Moderate Risk for central and southern MI, southern Quebec, central and eastern KY, central and eastern TN, eastern NC, southern and eastern SC, southern 1/2 GA, northern FL and the eastern panhandle, and southeast TX.
Low risk for cucurbits in southern FL and deep south TX. Minimal Risk to cucurbits elsewhere.

Forecaster: TK at NCSU for the Cucurbit ipmPIPE - 2016