



# Vegetable Crop Update

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

No. 27 – September 10, 2016

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## Calendar of Events

**September 11, 2016** – UW-West Madison ARS Organic Vegetable Field Day  
**September 16, 2016** – UW-Rhinelander ARS “A Night on the Farm” event  
**January 22-24, 2017** – WI Fresh 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

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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  $\geq 300$  indicates the threshold for early blight risk and triggers preventative fungicide application. A DSV of  $\geq 18$  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](http://www.plantpath.wisc.edu/wivegdis/contents_pages/pday_sevval_2016.html)

<i>Location</i>	Planting Date	50% Emergence	P-Day Cumulative	Disease Severity Value	Date of DSV Generation	Increase in DSV from 9/2
<i>Antigo</i>	Early 5/1	6/2	<b>794</b>	<b>155</b>	9/10	24
	Mid 5/18	6/7	<b>759</b>	<b>145</b>	9/10	24
	Late 6/3	6/21	<b>656</b>	<b>130</b>	9/10	24
<i>Grand Marsh</i>	Early 4/15	5/22	<b>868</b>	<b>181</b>	9/10	21
	Mid 5/1	5/27	<b>831</b>	<b>175</b>	9/10	21
	Late 5/15	6/3	<b>772</b>	<b>164</b>	9/10	21
<i>Hancock</i>	Early 4/18	5/24	<b>807</b>	<b>190</b>	9/10	26
	Mid 5/3	5/29	<b>766</b>	<b>177</b>	9/10	26
	Late 5/20	6/5	<b>709</b>	<b>168</b>	9/10	26
<i>Plover</i>	Early 4/20	5/25	<b>770</b>	<b>206</b>	9/10	21
	Mid 5/5	5/30	<b>727</b>	<b>191</b>	9/10	21
	Late 5/20	6/6	<b>671</b>	<b>182</b>	9/10	21

**Summary:** Disease Severity Values (DSVs) and Late Blight Blitecast: Generally, conditions highly favorable for late blight in this past week with 8 day accumulations of 21-26 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>

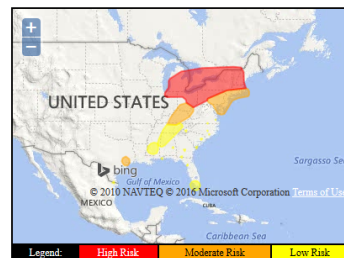
**Late Blight Diagnostic Updates.** **No new late blight confirmations from Wisconsin in this past week, as far as I am aware.** Recall, we have had just 3 farm confirmations from 2 counties, to date: Polk (tomato and potato, US-23, 8/15 & 8/22) and Dane (tomato, 8/18). Late blight of the pathogen genotype US-8 was confirmed in Morgan Co., CO on potato this week through the national research and extension website ([www.usablight.org](http://www.usablight.org)). US-24 was confirmed in Tompkins Co, NY on potato last week. Earlier season's reports have come from AR, MD, CA, FL, ME, MI, NC, SC, VA, WA, and WI. Several regions of Canada have also confirmed potato late blight, including Western Manitoba, (north of ND), and the Pert-Andover area of New Brunswick (north of ME). US-23 has predominated cases of this disease in the US so far this year. West coast locations and CO has had US-8 and US-11, and NY has had US-24 as well. Disease has been confirmed on both potato and tomatoes. An earlier season US-23 isolate from MD was characterized with resistance to mefenoxam; this is not the response typically associated with this genotype – but indicates risk for pathogen evolution and need for continued testing.

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 and provide the pathogen genotype for best management strategies.

**Cucurbit Downy Mildew Updates (<http://cdm.ipmpipe.org/>).** In the past week there were 5 states reporting new confirmations of cucurbit downy mildew: IN, MI, NC, OH, and SC (counties colored red in map below from 9/9/16). Previous confirmations were made in AL, DE, FL, GA, IN, KY, MA, MD, MI, MS, NC, NJ, NY, OH, ON Canada, PA, SC, TX, VA, and VT (counties colored green in map below from 9/9/16). The closest past finds to WI at this time are in central IL (not recorded on map, but present based on disease reports from IL pathologist, Dr. Mohammad Babadoost) and in southwestern MI. 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>). Growers should be on watch for earliest symptoms of downy mildew for rapid response with effective fungicides. <http://www.plantpath.wisc.edu/wivegdis/pdf/2016/July%202013,%202016.pdf>



Risk prediction map for Day 2: Saturday, September 10



**HIGH Risk for cucurbits in central and southern MI, northern IN, northern and eastern OH, southern ON, western OH, and northern PA, NY but the southeast, southern Quebec, VT, NH, western and central MA.**  
**Moderate Risk for central and eastern KY, southern OH, DE, eastern MD, southern and eastern PA, NJ, southeast NY, Long Island, CT, RI, southeast MA, and southeast TX. Low risk for cucurbits in central MS, northern AL, and central and eastern TN.**  
Minimal Risk to cucurbits elsewhere.

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**Food Safety Modernization Act: Seeking Feedback from Farmers:** As a fresh produce grower, you may have heard of and wondered about the Food Safety Modernization Act (FSMA). One component of FSMA is the Produce Safety Rule. The Produce Safety Rule establishes science-based minimum standards for the safe growing, harvesting, packing, and holding of fruits and vegetables grown for human consumption and applies to produce generally consumed in raw form.

The Rule *does not apply to all produce growers*. For example, it is not required for growers of foods the FDA has identified as rarely consumed raw, such as beets, sweet corn, and potatoes.

Exemptions are allowed for producers that meet certain criteria:

- Less than an average of \$25,000 in annual produce sales for each of previous three years
- Produce is intended for personal or on-farm consumption

Further, producers with an average three years' annual food sales of less than \$500,000 to *qualified end users* (i.e. retail food establishment in the same state) may apply for a qualified exemption (meaning there are modified compliance requirements).

As part of the North Central Regional Center for FSMA Training, Extension and Technical Assistance (NCR FSMA), which has been charged with assisting growers on our 12 state region, we want to know **your needs** in order to comply with the Produce Safety Rules. **If your farm will not be required to comply with FSMA, there is no need to continue further. Thank you for your participation.**

To access the online survey, go to the website: [www.ncrfsma.org](http://www.ncrfsma.org)

Completion of the survey will put you in the running for a \$50 amazon gift card!