



Vegetable Crop Update

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

No. 20– July 8, 2015

In This Issue

Disease forecasting values for early blight and late blight
Late blight updates – *First report in Waushara Co. on potato*
Cucurbit downy mildew updates

Calendar of Events

July 15 – UW-Hancock ARS Field Day, 12:30PM, Hancock, WI
July 17 – Rhinelander State Farm Field Day, Lelah Starks Elite Found. Seed Farm, Rhinelander, WI
August 19 – UW-Arlington ARS Agronomy/Soils Field Day, 8AM, Arlington, WI
August 20 – UWEX Langlade County Airport Field Day, Antigo, WI
August 25-27 – Wisconsin Farm Technology Days, Statz Bros., Inc. Farm, Sun Prairie, WI
September 1 – UW-Arlington ARS Organic Agriculture Field Day, Arlington, 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.** NA 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_2015.html

Location	Planting Date	50% Emergence	P-Day Cumulative	Disease Severity Value	Date of DSV Generation	Increase in DSV from 6/30
Antigo	Early 4/25	5/25	266	52	7/7	10
	Mid 5/5	6/1	266	52	7/7	10
	Late 5/15	6/15	169	26	7/7	10
Grand Marsh	Early 4/5	5/10	409	70	7/7	9
	Mid 4/15	5/15	399	69	7/7	9
	Late 5/1	5/21	365	67	7/7	9
Hancock	Early 4/10	5/15	401	62	7/7	6
	Mid 4/20	5/18	376	59	7/7	6
	Late 5/5	5/25	363	54	7/7	6
Plover	Early 4/15	5/20	402	74	7/7	11
	Mid 4/25	5/22	363	71	7/7	11
	Late 5/10	5/30	300	55	7/7	11

Potato Early Blight Preventive Management: P-Days have surpassed threshold of 300 in all potato plantings in the Grand Marsh, Hancock, and Plover areas. The threshold has not been met in Antigo. We are seeing early blight in lower potato plant canopies in commercial production fields of southern and central Wisconsin. Areas in which this threshold has been reached should be on a preventive program for control of early blight, especially on highly susceptible cultivars in areas of concentrated potato production. On May 8th, I provided a summary of fungicides for control of early blight in conventional potato in this newsletter, please find the link to this information below.

<http://www.plantpath.wisc.edu/wivegdis/pdf/2015/May%208,%202015.pdf>

Late Blight Updates: The DSV 18 threshold has been met/surpassed for all plantings and locations. This threshold indicates that environmental conditions have been met to promote late blight disease activity. At 18 DSVs, preventive applications of effective late blight fungicides is recommended. Accumulation of DSVs over the last four days has been low-moderate, however, cloudy days, heavy dews, and in some areas, sporadic showers are creating site specific conditions which do favor late blight.

In Wisconsin: Late blight has been detected in a commercial potato field in Waushara County on July 7, 2015. We are working on the pathogen genotype and will report this information through the newsletter as soon as possible. This is the second county to confirm the disease in Wisconsin (1st was northern Adams on 23 June). The genotype/strain of the late blight in northern Adams County is US-23 which is sensitive to phenylamide fungicides such as mefenoxam and metalaxyl.

Across the nation: There were new detections of late blight in NJ (tomato), NY (potato, US-23), and VT (potato) this past week www.usablight.org. To date, nationally, there have been confirmations of late blight in FL (US-23), CA (US-11), NC (strain not yet determined), TX (not reported on [usablight.org](http://www.usablight.org)/strain not yet identified), WA, NJ, NY (US-23), VT, and WI (US-23).

Fungicides are critical for protection of potato and tomato crops at this time.

There is not one recommended fungicide program for all late blight susceptible potato (and tomato) fields in Wisconsin. Fungicide selections may vary based on type of inoculum introduction, proximity to infected fields, crop stage, late blight strain, and other diseases that may be in need of management. Please see UWEX Veg Crop Updates article on fungicide selections from June 5 at link below.

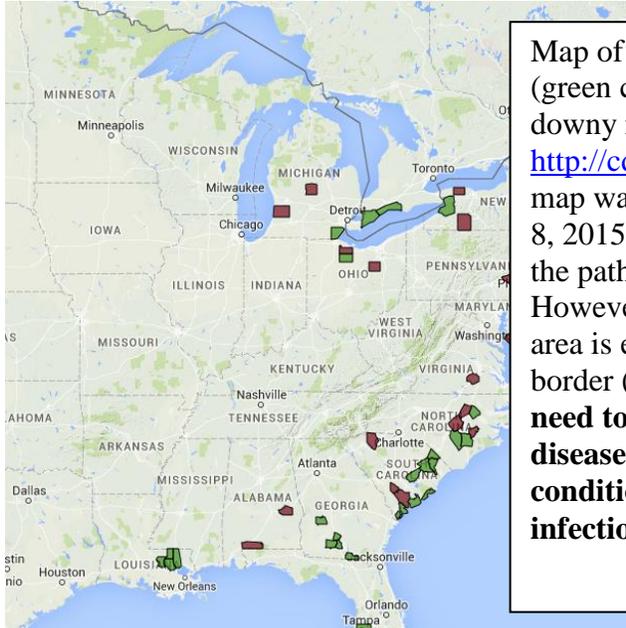
<http://www.plantpath.wisc.edu/wivegdis/pdf/2015/June%205,%202015.pdf> or a listing of 2015 WI potato late blight fungicides:

<http://www.plantpath.wisc.edu/wivegdis/pdf/2015/Potato%20Late%20Blight%20Fungicides%202015.pdf>

If you suspect/detect late blight, have the disease confirmed (free diagnostics through my lab and the UWEX Plant Disease Diagnostic Clinic) and we can genotype for further information on the nature of the pathogen.

Further details on registered fungicides for WI vegetables can be found in the Univ. of WI Commercial Vegetable Production in WI Guide A3422, <http://learningstore.uwex.edu/assets/pdfs/A3422.PDF>.

Cucurbit downy mildew updates: We have had no reports of downy mildew on cucurbits here in WI at this time. Downy mildew has been confirmed in AL, DE, MD, MI, NC, NY, OH, PA, SC, and VA in the past week. Prior reports of the disease have been confirmed in FL, GA, LA, MI, NC, NY, OH, ON Canada, SC, and TX. For more information, visit: <http://learningstore.uwex.edu/Assets/pdfs/A3978.pdf>



Map of recent (red counties) and past (green counties) reporting cucurbit downy mildew in the U.S. through the <http://cdm.ipmpipe.org/> website. The map was sourced at 2:40PM on July 8, 2015. No forecasted movement of the pathogen to WI at this time. However, for July 9 the moderate risk area is encroaching WI's southeast border (see forecast map below). **We need to keep an eye out for this disease on cucurbits. Weather conditions have been prime for infection.**

