



Vegetable Crop Update

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

No. 8 – June 19, 2022

In This Issue:

- Potato and vegetable disease updates and disease management comments
- Announcement and agenda for Jul 28 Rhinelander ARS Field Day

Calendar of Events:

July 7, 2022 – UW-Hancock Ag Research Station Field Day (start at 1PM and ending with WPVGA Assoc. Div. BBQ on site at HARS)
July 8, 2022 – UW-Extension Langlade Co. Airport Ag Research Station Field Day
July 28, 2022 – UW-Rhinelander Field Day
November 29-December 1, 2022 – Midwest Food Producers Assoc. Processing Crops Conference, Kalahari Convention Center
February 7-9, 2023 – UW-Madison Div. of Extension & WPVGA Grower Education Conference & Industry Show, Stevens Point, WI

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Current P-Day (Early Blight) and Disease Severity Value (Late Blight) Accumulations. Many thanks to Ben Bradford, UW-Madison Entomology; Stephen Jordan, UW-Madison Plant Pathology; and our grower collaborator weather station hosts for supporting this disease management effort again in 2022. A Potato Physiological Day or P-Day value of ≥ 300 indicates the threshold for early blight risk and triggers preventative fungicide application. A Disease Severity Value or DSV of ≥ 18 indicates the threshold for late blight risk and triggers preventative fungicide application. Red text in table indicates threshold has been met or surpassed. TBD indicates that data are To Be Determined as time progresses. Weather data used in these calculations will come from weather stations that are placed in potato fields in each of the four locations, once available. Data from an alternative modeling source: <https://agweather.cals.wisc.edu/vdifn> will be used to supplement as needed for missing data points. Data are available in graphical and raw formats for each weather station at: <https://vegpath.plantpath.wisc.edu/dsv/>.

Location	Planting Date		50% Emergence Date	Disease Severity Values (DSVs) 6/18/2022	Potato Physiological Days (P-Days)
					6/18/2022
Grand Marsh	Early	Apr 5	May 10	13	285
	Mid	Apr 20	May 15	13	244
	Late	May 12	May 25	12	186
Hancock	Early	Apr 7	May 12	13	260
	Mid	Apr 22	May 17	13	226
	Late	May 14	May 26	11	182
Plover	Early	Apr 7	May 15	12	242
	Mid	Apr 24	May 20	12	208
	Late	May 18	May 27	11	173
Antigo	Early	May 1	Jun 3	4	106
	Mid	May 15	June 15	0	31
	Late	June 10	TBD	TBD	TBD

In addition to the potato field weather stations, we have the UW Vegetable Disease and Insect Forecasting Network tool to explore P-Days and DSVs across the state (<https://agweather.cals.wisc.edu/vdifn>). This tool utilizes NOAA weather data (stations are not situated within potato fields). In using this tool, be sure to enter your model selections and parameters, then hit the blue submit button at the bottom of the parameter boxes. Once thresholds are met for risk of early blight and/or late blight, fungicides are recommended for optimum disease control. Fungicide details can be found in the 2022 Commercial Vegetable Production in Wisconsin Guide, Extension Document A3422, linked here: <https://learningstore.extension.wisc.edu/products/commercial-vegetable-production-in-wisconsin>

Our UW Hancock Agricultural Research Station potato field weather station is not properly collecting weather data which drives our Disease Severity Value calculations. We will be addressing this problem this week. I utilized the UW Vegetable Disease and Insect Forecasting Network tool to populate the Hancock risk values in the table above. We are nearing threshold of 18 DSV in Grand Marsh, Hancock, and Plover. These will likely be met early this week for earliest planted potatoes. With cooler nighttime temperatures and associated, extended humidity periods the DSVs will accumulate more readily. According to usablight.org there have not been recent diagnoses of late blight in tomato or potato crops in the US. For this year, there were just 2 reports entered back in March in southern Florida (US-23 clonal lineage/strain type).

With the stormy weather this past week, some fields took a beating with high winds and blowing sand and rain. Damaged plants become more susceptible to typically ‘weak’ pathogens (causing diseases such as black dot, bacterial diseases, Botrytis). Damaged fields, even prior to row closure, would benefit from treatment with a preventative fungicide to broadly protect from a range of potential pathogens. Many of the fungicides registered and routinely used for early blight control are also active on (and registered for) black dot and Botrytis. For bacterial diseases, the only treatments with some prophylactic control are those containing copper. Early blight and brown spot are not yet noted in lower canopies in southern Wisconsin, but the activity of these Alternaria species begins typically at the end of June into early July (timing aligned with P-Day 300). Potatoes are resilient and with more normal summer day temps and cooler night temps, healthy growth will be well supported.

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UW-Rhinelander ARS Field Day Agenda – July 28, 2022

Location: 4181 Camp Bryn Afon Rd., Rhinelander, WI 54501

9:30-9:35 a.m. Opening remarks – Mike Peters
9:35-9:50 a.m. RARS improvements over the years – Becky Eddy
9:50-10:00 a.m. Timber Management – Manny Oradei
10:00-10:10 a.m. US Forest Service – Ryan Vinhal
10:10-10:20 a.m. GLBRC – Kurt Thelen
10:20-10:30 a.m. Seed Cert Update – Brooke Babler
10:30-10:40 a.m. KFarm Update – Alex Crockford
10:40-11:00 a.m. Travel to field (stop at pollinator plot to say a few words – Becky Eddy)
11:00-11:10 a.m. – Lin Song
11:10 – 11:20 a.m. – Sitonik Chelangat
11:20-11:35 a.m. – Jeff Endelman
11:35-11:45 a.m. - Amanda Gevens
11:45 -11:55 a.m. – Russ Groves
11:55-12:10 p.m. – Travel back to Station
12:10-1:00 p.m.- Lunch (Sponsor Insight FS)