Vegetable Crop Update

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

Extension UNIVERSITY OF WISCONSIN-MADISON

No. 23 – September 18, 2022

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Calendar of Events:

November 29-December 1, 2022 – Midwest Food Producers Assoc. Processing Crops Conference, Kalahari Convention Center
January 11-12, 2023 – Wisconsin Agribusiness Classic, Alliant Energy Center, Madison, WI
January 29-31, 2023 – Wisconsin Fresh Fruit and Vegetable Growers Conference, Kalahari Resort, Wisconsin Dells, WI
February 7-9, 2023 – UW-Madison Div. of Extension & WPVGA Grower Education Conference & Industry Show, Stevens Point, WI

Save the date for the 2023 Wisconsin Agribusiness Classic (January 11th and 12th). The Wisconsin Agribusiness Classic is Wisconsin's premier agribusiness industry event drawing interest and participation from all confluences of the industry from throughout the Midwestern states. The program is held at the Alliant Energy Center each January and boasts an attendance of over 1,000 attendees. The conference and tradeshow is a collaborative effort between the Wisconsin Agri-Business Association and the University of Wisconsin. The depth of coverage and exhibits provided through the conference and tradeshow make it clear why the Wisconsin Agribusiness Classic is Wisconsin's premier industry event. Registration coming soon: agclassic.org

Amanda Gevens, Chair, Professor & Extension Vegetable Pathologist, UW-Madison, Dept. of Plant Pathology, 608-575-3029, Email: gevens@wisc.edu, Lab Website: https://vegpath.plantpath.wisc.edu/

Current P-Day (Early Blight) and Disease Severity Value (Late Blight) Accumulations. 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 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. Weather data used in these calculations will come from weather stations that are placed in potato fields in each of the four locations, as available. Data from an alternative modeling source: https://agweather.cals.wisc.edu/vdifn will be used to supplement as needed. Data are available for each weather station at: https://vegpath.plantpath.wisc.edu/dsv/.

Location	Planting Date		50% Emergence Date	Disease Severity Values (DSVs) 9/17/2022	Potato Physiological Days (P-Days) 9/17/2022
Grand Marsh	**Early**	Apr 5	May 10	**81**	**961**
	Mid	Apr 20	May 15	**81**	**920**
	Late	May 12	May 25	**81**	**862**
Hancock	**Early**	Apr 7	May 12	**52**	**955**
	Mid	Apr 22	May 17	**52**	**935**

	Late	May 14	May 26	**52**	**876**
Plover	**Early**	Apr 7	May 15	**123**	**905**
	Mid	Apr 24	May 20	**123**	**871**
	Late	May 18	May 27	**122**	**836**
Antigo	**Early**	May 1	Jun 3	**54**	**776**
	Mid	May 15	June 15	**50**	**702**
	Late	June 10	June 24	**50**	**617**

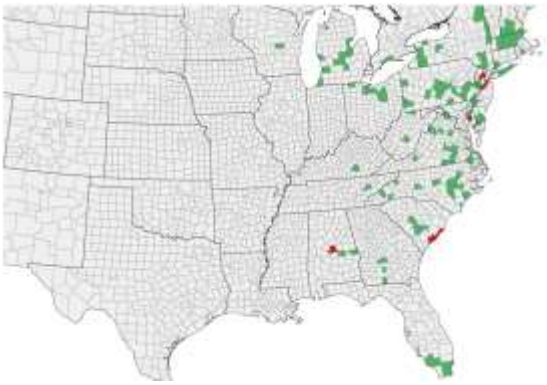
Accumulations of P-Days were 43 to 48 over the past week. Potatoes should continue to be on a preventative fungicide program with effective disease management selections to limit early blight in long-season potatoes with persistent green foliage.

All monitored Wisconsin locations accumulated 0-4 DSVs this past week indicating a relatively low risk week for promoting late blight in potato. A fungicide list for potato late blight in Wisconsin was provided in a past newsletter and is available here: https://vegpath.plantpath.wisc.edu/2022/07/03/update-10-july-3-2022/

I will discontinue the DSV and P-Day reporting in the coming week or so as the field in which the weather stations are housed are vine killed and advanced to harvest.

To my knowledge, there have been no reports of late blight in Wisconsin on potato or tomato so far this season. Michigan reported potato late blight in a few additional fields over this past week. The genotype is US-23. According to usablight.org there were no other diagnoses of late blight in the US in the past week. Previous diagnoses in the US this season included those in NC, FL, CA, TN, and Ontario Canada. These have been primarily on tomato, with only the FL report on potato in early spring.

Cucurbit Downy Mildew: During this past week, cucurbit downy mildew was confirmed in MD, NJ, SC, and AL this past week. Previously this growing season, the disease was confirmed in AL, CT, DE, FL, GA, KY, MA, MD, ME, MI, NC, NH, NJ, NY, OH, PA, SC, VA,WI, and WV. Red counties, on the figure below, indicate recent reports (less than 1 week old) of cucurbit downy mildew.



https://cdm.ipmpipe.org/

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As a reminder, the pathogen is now known to have two 'strains' for clade types. The type (Clade 2) which infects cucumber, can also infect melon. Due to fungicide resistance within the downy mildew pathogen population, especially in Clade 2, selection of fungicides is important. Management of cucurbit downy mildew requires preventative fungicide applications as commercial cultivars are generally susceptible to current strains (Clades) of the pathogen. Management information can be sourced here:
https://vegpath.plantpath.wisc.edu/2022/07/03/update-10-july-3-2022/