



Vegetable Crop Update

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

No. 22 – September 5, 2018

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Calendar of Events

November 27-29, 2018 – Processing Crops Conference & MWFPA Annual Convention, Wisconsin Dells, WI
January 15-17, 2019 – Wisconsin Agribusiness Classic, Alliant Energy Center, Madison, WI
January 27-29, 2019 – Wisconsin Fresh Fruit & Vegetable Conference, Kalahari Conference Center, Wisconsin Dells, WI
February 5-7, 2019 – UWEX & WPVGA Grower Education Conference, Stevens Point, WI

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Late blight risk for Wisconsin, based on accumulation of DSVs for 8/29-9/4/18

Date	Grand Marsh	Hancock	Plover	Antigo
8/29/18	2.0	2.0	2.0	1.0
8/30/18	2.0	1.0	2.0	1.0
8/31/18	1.0	1.0	1.0	2.0
9/1/18	3.0	3.0	3.0	3.0
9/2/18	0	0	4.0	3.0
9/3/18	0	0	0	3.0
9/4/18	3.0	3.0	3.0	4.0
Weekly Total	11.0	10.0	15.0	17.0

Severity legend: very high severity risk for late blight indicates a weekly accumulation of ≥ 20 DSVs, high indicates accumulation of 15-20 DSVs, medium indicates 10-15, low indicates 5-10, and very low indicates < 5 DSVs. Values available with select dates/locations at: <https://agweather.cals.wisc.edu/vdifn/maps>

WI Potato Disease Risk Updates: All commercial potato plantings have surpassed 18 DSVs and with presence of the disease in WI, I recommend that fields of susceptible potato and tomato be routinely receiving preventative fungicide applications to limit disease. 7-day programs should be appropriate unless field is proximal to known infection. With close proximity to infection, programs should shift to 5-day intervals with fungicides known to have both curative and anti-sporulant activities.

A list of registered fungicides for late blight in potato for Wisconsin can be found in past Vegetable Crop Updates Newsletter #6 (May 20, 2018) and at link below: <http://www.plantpath.wisc.edu/wivegdis/pdf/2018/2018%20Potato%20Late%20Blight%20Fungicides.pdf> Further information on fungicides and other vegetable crop management inputs in the 2018 Commercial Vegetable Production in Wisconsin guide (A3422): <http://learningstore.uwex.edu/Assets/pdfs/A3422.pdf>

No new late blight confirmations in WI this past week. There has been little apparent progress of late blight in WI commercial production fields since the first finds over 4 weeks ago. While it has been very wet recently, rainfall has been so spotty around WI this season and I suspect that the late blight pathogen hasn't had the right conditions for prolonged periods to progress, sporulate, and spread. We've had bouts

of very high heat which can limit disease; and in some areas, we had limited rainfall about a month back when early spread would have taken place. Additionally, fungicides have been doing their jobs in disease control. Recent weather has limited access to some field locations, but systemic fungicide should help enhance the longevity of the treatments.

Late blight was detected in potatoes in PA this week, as per usablight.org, no genotype yet identified. To date, all Midwestern samples (IL, MI, WI) were of the US-23 genotype. The MN tomato late blight report from earlier in summer was not typed. Back in July, WA confirmed US-8 late blight on potato; and earlier season sample from FL also had a US-8 result. Aside from a recent characterization of the new genotype US-25 from tomato in 2 counties in NY, all other late blight samples from 2018 from NC, NY, and PA were US-23.

Pink eye and subsequent tuber rots in potato (Gevens): Over the past several weeks I've been diagnosing tuber conditions that include pink eye along with one or more subsequent pathogens. The pink eye has included symptoms of pink to brown just beneath the skin as well as rough, corky skin, or bull/elephant hide (symptoms shown in pics below). This combined physiological disorder and pathogen invasion is not uncommon especially after a season in which we've experienced high soil temperatures as well as high precipitation in some areas. Dr. Yi Wang, UW-Madison Horticulture, and I wrote a brief fact sheet on pink eye which includes a picture and further description of the condition (link here: <https://pddc.wisc.edu/2018/04/18/pink-eye-potato/>). The pink eye condition leaves the tuber with non-functioning periderm that doesn't heal to protect itself from further infection from diseases such as bacterial soft rot (caused by *Pectobacterium* and/or *Dickeya* species) and Pythium leak (caused by *Pythium ultimum* or other species). While soft rotting pathogens are most common following pink eye, especially under wet conditions, other pathogens can be present in storage including *Fusarium* spp. In some cases, pink eye can develop on tubers in some areas of a field, but not progress to a rot at- or post-harvest. Be aware of the presence of pink eye as you near harvest time and beyond, as careful management of harvest conditions, as well as the conditions once in storage can impact quality.



No new reports of cucurbit downy mildew in WI this past week. Last week we did have reports of cucumber downy mildew in Columbia, Dane, Ozaukee, and Portage Counties. These findings represent sentinel plot detections as well as commercial pickling cucumber and commercial fresh market cucumbers. No downy mildew on cucurbits in our UW Hancock Agricultural Research Station sentinel plots this past week. New reports were abundant in the US this past week with detections in NC, PA, RI, SC, and TN based on the reporting and forecasting site: <http://cdm.ipmpipe.org/>. Previous reports this 2018 season have come from: AL, CT, DE, FL, GA, IN, KY, MA, MD, MI, NC, NJ, NY, OH, ON Canada, PA, SC, TN, VA, WI, and WV on various cucurbits. Given the detections in WI over the past few weeks, and likely further spread, preventative fungicides are recommended to limit downy mildew in later crops. Fungicide information can be found in previous newsletters. For more info on symptoms, disease cycle, and general management, please visit: <http://learningstore.uwex.edu/Assets/pdfs/A3978.pdf>