



# BADGER MEMO

August 2021

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## Inside This Issue

- 1 Inspector contacts
- 1 Potato Profile
- 2 PVY Risk Window
- 2 Water Sampling

With second inspection approaching a reminder that growers need call inspectors BEFORE killing. Also, contact your inspector with increased spraying or aerial application in August. Reminder on bin inspection before digging. Winter test tags should be arriving by the end of August.

## Potato Profile



### Lakeview Russet (W9433-1rus)

Parentage: CalWhite x A96023-6

Lakeview Russet is a **dual purpose** variety, notable for its **low tuber set** (7-9 per plant) and **rapid bulking**.

**Pack out.** Produces a high percentage of U.S. No. 1 tubers due to its large size profile and consistent, blocky shape.

**Maturity.** Early emergence and bulking, but vine senescence and skin set are slow.

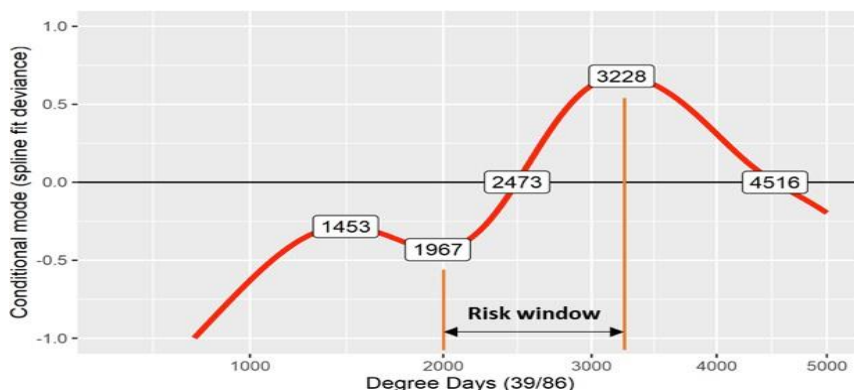
**Fry quality.** Specific gravity and color are similar to Russet Burbank.

**Storage.** Medium to long tuber dormancy (less than Burbank but similar to Norkotah).

**Management.** Tighter seed spacing and less nitrogen are recommended to control oversize and skin set. Good candidate for organic production.

## Aphid PVY Transmission Risk Window

A presentation given at the WSPIA Annual Meeting by Dr. Russ Groves described a model depicting aphid flights for species likely to spread PVY in Wisconsin potatoes. The PVY risk index is a model built from suction trap data that highlights a time frame (Risk Window) during the growing season where aphid pressure is highest. Based on many years (2005-2018) the model fit of risk is based on degree days. Cole Lubinski plugged the growing degree criteria into a Wisconsin climactic website to show the risk windows over the last three years based on the closest weather stations. This risk window starts at 1967 GDUs and goes until 3228 GDUs. If you remember 2018 was a warmer than average spring and summer with an above average degree day accumulation.



Twice weekly oil sprays and potentially using feed blockers or aphicides should be targeted within this window. Notice the risk for most locations extends well into September.

	Antigo	Eagle River	Post Lake	Mountain	Rhineland
<b>2017</b>	7/27-9/23	8/1-10/4	7/25-9/22	7/23-9/17	7/22-9/17
<b>2018</b>	7/19-9/4	7/21-9/11	7/12-8/26	7/16-8/28	7/14-8/26
<b>2019</b>	7/29-9/24	8/3-10/7	7/29-9/25	7/26-9/17	7/22-9/16
<b>2020</b>	7/25-9/21	7/28-10/5	N/A	7/22-9/5	7/25-9/19

## Water Sampling for Soft Rot and Blackleg Bacteria by: Renee Rioux

*Dickeya* has been perplexing the potato industry since its first detection in the United States in 2014. While we have learned much about this pathogen since that time, including great strides in detection and management, there is still limited understanding of where *Dickeya* initially comes from and how it enters the seed potato production system. Unlike *Pectobacterium*, the other major pathogen responsible for blackleg and soft rot, *Dickeya* is not believed to survive well in soil and disinfectants routinely used for sanitization on seed potato farms seem to perform well against *Dickeya*. Water, however, provides another potential source for both *Dickeya* and *Pectobacterium*. *Dickeya* species have been detected in various water sources, especially surface water, in the United States and other potato growing regions around the world. This summer and next summer, my research program will be testing water sources around Wisconsin to understand their possible role in the spread of *Dickeya* and *Pectobacterium* and we are asking for your help in our research.

We will be working with the Wisconsin Seed Potato Certification Program inspectors to collect samples and keep grower information private. If you are interested in participating, you can contact your inspector and they will have the materials needed to assist with gathering your sample and labeling it with a tracking code that allows us to process the sample without knowing any identifying information, such as source grower or location. While surface water is expected to be the most likely reservoir for these pathogens, we are happy to test any water source in which you are interested, including well water.

Water samples we receive will be processed to increase our chances of detecting *Dickeya* and *Pectobacterium*, if present, and then tested using two different methods. The first method involves extracting DNA from the water sample and performing molecular detection assays, similar to the ones done by Brooke Babler in the WSPCP's diagnostic lab. The second method involves plating the samples onto selective microbiological media, which forms pits in the presence of soft rot bacteria. With these assays we will be able to determine whether or not *Dickeya*, and specifically *Dickeya dianthicola*, is in a water sample and also provide information on the presence of *Pectobacterium* species in each sample. When we are able to isolate either pathogen from a sample, we will try to identify the species and determine the isolate's aggressiveness on potato tubers.

If you are interested in participating by submitting samples or have questions about this research, please feel free to contact me ([rrioux@wisc.edu](mailto:rrioux@wisc.edu), 608-358-5101) or another WSPCP team member. Thank you in advance for your support of this project!