



# BADGER MEMO

September 2021

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## Winter Test Updates

The program will again be planting the 2021 CY winter test plot in Homestead, FL on Alger Farms.

Inspectors will be dropping off your winter test tags and finishing up warehouse inspection the first week of September. If you have not received your winter test tags please contact your field inspector. Final field inspection reports will be done by mid-September.

## Winter Test Sample Collection

Winter test sample collection will be done on Wednesday October 20, 2021. Please bring your winter test samples to Servco FS main office loading dock between the hours of 12:00 pm to 4:30pm. Please call field inspector in advance if you cannot make the scheduled delivery period.

**Submit samples containing only 400 high quality tubers to ensure that all of the tubers you send can be planted and will grow normally. You must submit one 400-tuber sample for each 50 acres comprising an individual seed lot. The maximum number of samples required for a particular lot is four (1600 tuber). The breakdown is as follows:**

<u>Seed Lot Size</u>	<u>No. of Samples</u>
Up to 50 acres	1 (400 tubers)
51 to 100 acres	2 (800 tubers)
101 to 150 acres	3 (1200 tubers)
151 to more acres	4 (1600 tubers)

PLEASE KEEP THE SAMPLES AT ROOM TEMPERATURE TO KEEP THE TUBERS FROM GOING INTO DEEP DORMANCY.

A few days before the samples are to be delivered to us, "grade" the tubers set aside down to a uniform-sized 400-tuber sample. The use of mesh bags is to increase the exposure of dormancy breaking gas to the tubers when they are already palletized. Use zip ties to ensure close bags. Be sure to attach the identification tag supplies to you. Please return any tags for lots that will not be sent to Florida.

Please pay close attention to the size of the tubers in your samples. Tubers larger than 2 inches (in any dimension – chose blocky russets!) may clog the planter we use, while those smaller than 1 ½ inches often result in small or weak plants in the field.

If you have any questions or comments, please feel free to call us at the Certification Office.

## Representative Winter Test Sampling Table

Collecting a Representative Sample for Post Harvest Testing

Lot Size (acres)	0.25	0.5	1	5	10	20	30	40	50
Post Harvest Sample	200	400	400	400	400	400	400	400	400
Truck Size 300 cwt	Lot Size (acres)								
	0	0.5	1	5	10	20	30	40	50
Est. Yield (cwt/ac) 300	Tubers per load for 400 tuber sample								
350	200	400	400	80	40	20	13	10	8
400	200	400	343	69	34	17	11	9	7
450	200	400	300	60	30	15	10	8	6
	200	400	267	53	27	13	9	7	5
Truck Size 250 cwt	Lot Size (acres)								
	0	0.5	1	5	10	20	30	40	50
Est. Yield (cwt/ac) 300	Tubers per load for 400 tuber sample								
350	200	400	333	67	33	17	11	8	7
400	200	400	286	57	29	14	10	7	6
450	200	400	250	50	25	13	8	6	5
	200	400	222	44	22	11	7	6	4
Truck Size 200 cwt	Lot Size (acres)								
	0	0.5	1	5	10	20	30	40	50
Est. Yield (cwt/ac) 300	Tubers per load for 400 tuber sample								
350	200	400	267	53	27	13	9	7	5
400	200	400	229	46	23	11	8	6	5
450	200	400	200	40	20	10	7	5	4
	200	356	178	36	18	9	6	4	4

## PCN Soil Sampling

PCN soil sampling will begin the end of September, Kirk Engineering will be doing the soil sampling again this year. Ben Osborn from Kirk Engineering will be doing the soil sample his cell number is 406-595-1145 if you need to contact him.

## Testing Requirements for Trade within US and Canada

Keep in mind if you are importing to another state, they may have other test requirements other than a winter test grow out. Please look at the table for lots going out of state.

The Wisconsin Seed Potato Certification Office will be doing Late Blight Incubation in Antigo so if you need this done please make arrangement to have test done 50 days before lot is shipped. If have any questions on the testing requirement, please contact the Wisconsin Seed Potato Certification Office at 715-623-4039.

**Testing Requirements for Seed Potato Trade within US and to Canada (in addition to Post Harvest Test)**

US Agency	Lab Test PVY		Soil sampling	Other Requirements to import into these states/provinces
	All Varieties	Latent * Varieties		
Alaska	-	-		
California	-	-		
Colorado	✓ <sup>A</sup>	-		Late blight incubation, PHT growout required all seed, <sup>A</sup> virus test for 1.0% PVY <sub>NTN</sub> PHT Tolerance
Idaho	✓	✓		BRR G1 and later gen, PVY, PLRV (visual or ELISA)
Maine	-	✓		
Michigan	-	✓		
Minnesota	-	-		
Montana	NA	NA		Montana does not allow seed import into certification
North Dakota	-	-		
Nebraska/WY	✓	✓	CRKN	Columbia Root Knot Nematode from areas of known to be present/unknown, <u>all russets</u> must be PVY ELISA.
New York	-	-		
Oregon	-	-		
Washington	-	-		
Wisconsin	-	✓		Growout (field or greenhouse) required for recertification.
<b>Canada Agency</b>	-	-	PCN	BRR
-New Brunswick	✓	✓	PCN	BRR, PLRV
-PEI	✓	✓	PCN	BRR, PVY & PLRV testing 200 tuber/ 40 ac (16 ha) +20 add'l tubers per ha over 16 ha. Total virus cap 3% max PLRV is 2%).

\* Latent varieties include: Alpine Russet, Austrian Crescent, Banana, Blazer Russet, CalWhite, Caribou Russet, Chieftain, Chipeta, Classic Russet, Crestone Russet, Dakota Diamond, Easton, French Fingerling, Gem Russet, Green Mountain, Innovator, Ivory Russet, Keystone Russet, LaRatte, Mesa Russet, Pike, Purple Peruvian, Rose Finn Apple, Russet Norkotah, Sage Russet, Shasta, Shepody, Silverton Russet, Winema, Snowden

Certain states have implemented blackleg tolerances for seed lots being imported. So please check the blackleg reading on your summer field reading report to make sure your lots are eligible to be imported to other states. If you have any questions, please feel free to contact seed office.

Blackleg Tolerances						
	FY1	FY2	FY3	FY4	FY5	
<b>US Agency</b>						
Alaska	0%	1.00%	1.00%	2.00%	2.00%	These tolerances <b>WILL</b> be used to for seed lots entering the state
California	0.10%	0.30%	3.00%	3.00%	3.00%	Seed lots entering CA will be accepted as long as they meet the incoming state's tolerances.
Colorado	0%	0.10%	4.00%	4.00%	4.00%	Seed lots entering CO will be accepted as long as they meet the incoming state's tolerances.
Idaho	No regulation	No regulation	No regulation	No regulation	No regulation	
Maine	0.10%	0.20%	1.00%	2.00%	2.00%	These tolerances <b>WILL</b> be used to for seed lots entering the state
Michigan	Reported but no set tolerance	Reported but no set tolerance	Reported but no set tolerance	Reported but no set tolerance	Reported but no set tolerance	
Minnesota	0%	0.20%	0.50%	1.00%	exc. ( over 1%)	These tolerances <b>WILL</b> be used to for seed lots entering the state
Montana	Visual Regulation	Visual Regulation	Visual Regulation	Visual Regulation	Visual Regulation	
North Dakota	Reported but no set tolerance	Reported but no set tolerance	Reported but no set tolerance	Reported but no set tolerance	Reported but no set tolerance	
Nebraska/WY	Foundation=0.5% Certified=3.0%	Foundation=0.5% Certified=3.0%	Foundation=0.5% Certified=3.0%	Foundation=1.0% Certified=3.0%	Foundation=3.0% Certified=3.0%	These tolerances <b>WILL</b> be used to for seed lots entering the state
New York	Reported but no set tolerance	Reported but no set tolerance	Reported but no set tolerance	Reported but no set tolerance	Reported but no set tolerance	
Oregon	0.10%	0.3% (1st) 0.2% (2nd)	3.0% (1st) 1.0% (2nd)	3.0% (1st) 1.0% (2nd)	3.0% (1st) 1.0% (2nd)	These tolerances will <b>NOT</b> be used to for seed lots entering the state
Washington	0.00%	0.10%	0.50%	1.00%	2.00%	These tolerances <b>WILL</b> be used to for seed lots entering the state
Wisconsin	Reported but no set tolerance	Reported but no set tolerance	Reported but no set tolerance	Reported but no set tolerance	Reported but no set tolerance	
<b>Canada Agency</b>						
ALL Provinces	0%	0.10%	0.20%	0.30%	0.50%	These tolerances will <b>NOT</b> be used to for seed lots entering the Country
**CANADA - FY6(FOUNDATION) = 1.0% FY7(CERTIFIED) = 2.0%						

## Farwell Andy, Enjoy Retirement!



The Wisconsin Seed Potato Certification Program members want to extend warm wishes to Robert (Andy) Witherell, who retired from the program on August 14, 2021. Andy managed the tissue culture laboratory from 2004 until his recent retirement. Previously he worked in Plant Pathology and Entomology research labs at UW-Madison. He holds a Bachelor of Science degree in Agriculture with an emphasis in Ornamental Horticulture from the University of Florida (1979), along with a Bachelor of Science in Bacteriology from the University of Wisconsin-Madison (1986). With his knowledge of micropropagation, background in horticulture and plant pathology, and love of researching and trialing new procedures/techniques the laboratory thrived during his period as manager. He especially loved researching plant viruses and developing or improving testing methodologies. Andy's accomplishments will continue to guide the program as we move forward and remind us of his dedication to the production of quality seed potatoes.

As many will attest to, Andy loved to interact with co-workers and always took a moment to stop and chat, ask how you were and share a laugh. However, Andy will be remembered most for mentoring of graduate students as they navigated the development, implementation, and analysis of their various research projects. He was always willing to answer research questions, develop methods to answer questions and be a smiling support as they completed their graduate work and embarked on their next adventure.

Andy will be greatly missed by all the program members, seed growers, extension faculty, research staff, graduate, and undergraduate students that have interacted with him throughout his many years at the University of Wisconsin-Madison. We wish Andy the best as he enjoys this new chapter in his life.

