

# **2023 Potato Outreach Program On-Farm Variety Trials**

## **Data Summary: Michigan Russet Variety Trials**

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## 2023 Michigan Statewide Russet Potato Variety Trials

### Overall Averages - Thirteen Locations

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>3</sup> (%)					COMMON SCAB RATING <sup>4</sup>	VINE VIGOR <sup>5</sup>	VINE MATURITY <sup>6</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	HH	VD	IBS	BC				
AAF15169-3 <sup>fl</sup>	650	767	85	4	68	18	10	1.081	0	0	0	0	0.8	4.5	3.5	prominent eyes, misshapen tubers
A12327-5VR <sup>abdeim</sup>	616	683	91	3	42	49	6	1.075	5	2	2	0	0.3	3.5	3.4	deeper eyes, moderate alligator hide, darker skin
A08433-4STO <sup>abcdeghijm</sup>	557	689	81	12	63	18	7	1.077	10	5	0	0	0.5	3.5	4.1	oblong blocky type, light to medium russet skin
Vanguard <sup>adfgim</sup>	557	637	87	7	70	18	5	1.068	0	1	3	0	0.2	3.5	2.4	nice dark russet skin, oblong type, trace growth cracks
Umatilla <sup>gim</sup>	537	785	69	12	65	5	18	1.086	11	1	0	1	0.2	3.9	3.6	deeper eyes, misshapen and pointed tubers
AF6298-2 <sup>fl</sup>	522	630	83	10	70	13	7	1.088	40	5	5	0	0.3	3.0	2.8	nice appearance and skin
AAF15402-1 <sup>fl</sup>	515	607	85	3	59	27	11	1.076	0	0	15	0	0.5	2.8	3.3	growth crack, pointed tubers
AF5736-16 <sup>gim</sup>	512	578	89	7	72	16	5	1.091	7	4	0	0	0.1	3.7	4.4	flay oblong to long type, medium russet skin
AF6997-1 <sup>fl</sup>	511	632	78	19	72	5	4	1.089	5	5	0	0	1.0	3.0	3.8	variable type and appearance
AAF15193-9 <sup>fl</sup>	511	603	85	11	74	11	4	1.078	0	10	0	0	1.0	4.0	2.8	flat blocky oblong type
A09086-1LB <sup>abcdeghim</sup>	506	606	83	15	65	17	3	1.084	1	2	0	2	1.1	3.7	3.5	blocky large type, variable light skin
Rickey Russet <sup>abcdegim</sup>	505	606	84	11	71	13	5	1.074	0	10	5	0	0.1	3.6	2.8	heavy russet skin, oblong type, nice, light yellow flesh
AAF15193-6 <sup>fl</sup>	502	679	77	5	61	16	18	1.074	0	0	0	0	0.8	4.3	3.0	variable type, pointed tubers
AF6377-10 <sup>gikm</sup>	499	530	95	4	55	40	1	1.073	0	5	0	0	0.0	3.1	2.5	slight alligator hide, skinning, blocky oblong type, nice
AF6750-3 <sup>fl</sup>	494	608	81	9	61	19	11	1.070	5	0	0	0	0.5	3.0	3.3	dark russet skin, growth crack
Reveille Russet <sup>abcdfghim</sup>	489	570	85	7	56	29	8	1.067	0	7	4	0	0.1	2.7	3.1	large blocky type, growth cracks, trace prominent eyes
AF7001-5 <sup>fl</sup>	465	581	79	14	38	41	7	1.080	5	5	0	0	0.3	3.5	3.3	large blocky type, trace pointed tubers
A09136-9LB <sup>acdfgikm</sup>	464	535	88	6	62	26	6	1.087	15	2	1	0	0.6	4.1	3.6	slight alligator hide, lighter skin, variable type
AF7015-2 <sup>fl</sup>	456	526	87	5	57	30	8	1.069	0	0	20	0	0.5	3.8	3.3	oblong type, marginal appearance
NDAF1791-3 <sup>fl</sup>	453	620	63	33	56	7	4	1.094	0	10	0	0	0.8	3.3	4.5	long tubular type, light skin
NDAF1791-1 <sup>fl</sup>	449	573	78	12	74	5	9	1.095	0	5	0	0	0.3	3.3	3.8	variable type, misshapen pickouts
A10071-1 <sup>abdim</sup>	442	535	82	11	70	12	7	1.072	5	11	2	2	0.4	4.3	2.7	dark russet skin, long tubular type
AF5521-1 <sup>bcdtfgim</sup>	440	475	93	4	62	31	3	1.080	5	0	4	0	1.2	3.6	3.2	oval to oblong type, light russet skin, nice appearance
Portage Russet <sup>abcdegimhj</sup>	438	547	79	16	70	9	5	1.082	13	8	0	0	0.4	3.1	3.3	sticky stolons, lighter skin, trace pointed tubers
A11737-1LB <sup>m</sup>	430	543	79	14	66	13	7	1.080	3	3	3	0	1.0	3.5	3.5	misshapen pointed tubers, variable type
NDAF1791-6 <sup>fl</sup>	419	564	68	28	61	7	4	1.091	0	5	15	5	1.5	3.0	3.5	pointed tubers, smaller, oblong type
A15057-2TE <sup>abcdegim</sup>	416	470	89	8	69	20	3	1.072	2	5	4	0	0.3	3.6	2.7	oblong to long type, skinning, darker skin
<b>Silverton Russet<sup>abcdfghijl</sup></b>	<b>415</b>	<b>492</b>	<b>83</b>	<b>11</b>	<b>69</b>	<b>14</b>	<b>6</b>	<b>1.071</b>	<b>3</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>0.3</b>	<b>3.9</b>	<b>3.2</b>	<b>nice type and appearance, trace growth crack</b>
AF6340-6 <sup>abcdtfgim</sup>	411	515	79	19	72	7	2	1.067	4	11	1	0	0.7	3.1	2.9	recessed eyes, oblong to long type
COTX10080-2RU <sup>abcdtfgm</sup>	403	483	83	11	69	14	6	1.068	4	8	1	0	0.3	2.7	3.2	nice skin, slight alligator hide, oblong type
AF6377-12 <sup>abcdtfgim</sup>	400	475	83	12	62	21	5	1.077	13	3	1	1	0.3	3.2	3.0	prominent eyes, dark russet skin, growth crack, nice
AF6997-3 <sup>fl</sup>	399	596	68	11	54	13	22	1.081	0	10	15	0	1.0	3.5	3.0	poor appearance, deep eyes, tubular type
AAF15291-5 <sup>fl</sup>	394	611	63	22	59	4	15	1.078	5	0	15	0	0.8	4.5	3.5	misshapen pickouts, variable type
AAF15247-3 <sup>fl</sup>	392	468	84	11	71	13	5	1.069	0	0	0	0	0.3	3.5	3.0	heavy dark russet skin, nice appearance
A13074-1TE <sup>abcekm</sup>	388	495	79	13	68	11	8	1.080	2	15	2	7	0.3	3.8	3.2	variable type and appearance
A11175-12TE <sup>abdegim</sup>	386	464	82	12	66	16	6	1.075	0	11	1	0	0.4	3.3	3.2	deeper eyes, blocky oval to oblong type
<b>Russet Norkotah<sup>abcdtfgijm</sup></b>	<b>374</b>	<b>459</b>	<b>79</b>	<b>14</b>	<b>63</b>	<b>16</b>	<b>7</b>	<b>1.072</b>	<b>11</b>	<b>5</b>	<b>3</b>	<b>0</b>	<b>0.4</b>	<b>3.6</b>	<b>2.9</b>	<b>variable type and appearance, trace alligator hide</b>
AF7008-1 <sup>fl</sup>	369	468	80	19	70	9	2	1.070	0	0	15	0	0.0	3.8	3.3	small blocky type, medium russet skin
AC12090-3RU <sup>dim</sup>	357	464	72	24	66	7	3	1.074	10	0	0	0	0.0	3.2	2.9	long oval to oblong type, purple eye pigmentation
W13008-1RU <sup>abcdegim</sup>	337	427	78	14	63	16	7	1.076	9	7	1	0	0.3	3.9	3.0	oblong to long type, alligator hide, lighter skin
NDAF1762-7 <sup>fl</sup>	334	496	68	26	67	1	6	1.086	0	15	20	0	0.5	3.3	3.3	pointed tubers, medium russet skin
CO13003-1RU <sup>abcdtfgim</sup>	327	449	71	26	66	5	3	1.076	11	5	6	5	0.4	2.9	3.0	slight skinning, nice appearance, blocky type
COAF16090-14 <sup>fl</sup>	326	467	71	15	66	5	14	1.070	5	0	15	0	1.3	3.3	2.8	smaller oblong type, pointed tubers
A15169-6 <sup>l</sup>	324	462	70	17	58	12	13	1.083	10	0	10	0	0.5	3.0	4.5	knobs, poor type
A09119-4LB <sup>b</sup>	322	399	81	13	71	10	6	1.087	20	10	10	0	2.5	2.5	2.5	pointed oblong type, medium russet skin

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>3</sup> (%)					COMMON SCAB RATING <sup>4</sup>	VINE VIGOR <sup>5</sup>	VINE MATURITY <sup>6</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	HH	VD	IBS	BC				
<b>Goldrush</b> <sup>abcdafgim</sup>	<b>321</b>	<b>468</b>	<b>69</b>	<b>16</b>	<b>61</b>	<b>8</b>	<b>15</b>	<b>1.068</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>0.1</b>	<b>2.9</b>	<b>2.9</b>	<b>variable skin and type, growth crack, oblong</b>
CO15016-1RUsto <sup>lm</sup>	307	549	56	28	52	4	16	1.071	4	4	0	0	0.3	2.7	3.3	nice, pointed tubers, bottlenecks
AF6989-3 <sup>fi</sup>	299	409	73	19	69	3	9	1.089	10	5	5	0	0.0	2.3	3.3	flat oblong type, nice
<b>Russet Burbank</b> <sup>cgf</sup>	<b>292</b>	<b>626</b>	<b>49</b>	<b>32</b>	<b>48</b>	<b>1</b>	<b>19</b>	<b>1.077</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0.3</b>	<b>3.3</b>	<b>3.3</b>	<b>pointed and misshapen tubers, long tubular type</b>
CO14371-3RU <sup>lm</sup>	271	450	59	29	57	3	11	1.066	0	14	0	0	0.5	3.3	3.7	smaller, growth crack, alligator hide
COTX08121-1RU <sup>bi</sup>	163	223	71	26	71	0	3	1.066	10	5	0	0	0.0	3.0	2.8	small oblong type
ATX15097-1RU <sup>b</sup>	154	236	66	15	53	13	19	1.078	0	0	40	0	1.5	1.0	2.5	low yield, misshapen pointed tubers
ATX16119-1RU <sup>b</sup>	118	255	46	48	46	0	6	1.092	0	0	20	0	2.0	2.0	2.5	smaller tubers, medium russet skin, oblong type
COTX18174-1RU <sup>d</sup>	46	135	34	63	34	0	3	1.067	0	0	50	0	1.5	2.5	2.5	small tubers, oblong to pointed type
<b>MEAN</b>	<b>407</b>	<b>523</b>	<b>76</b>	<b>16</b>	<b>63</b>	<b>14</b>	<b>8</b>	<b>1.078</b>	<b>5</b>	<b>5</b>	<b>6</b>	<b>1</b>	<b>0.6</b>	<b>3.3</b>	<b>3.2</b>	

**2023 Russet Variety Trial Sites**

- <sup>a</sup>L Farm
- <sup>b</sup>Elmaple Farms
- <sup>c</sup>Horkey Farms
- <sup>d</sup>Jenkins Farms
- <sup>e</sup>Kitchen Farms, Mini Bulk Trial
- <sup>f</sup>Kitchen Farms, Strip Trial
- <sup>g</sup>Lennard Ag. Co.
- <sup>h</sup>Sandyland Farms
- <sup>i</sup>Styma Potato Farms
- <sup>j</sup>Verbrigghe Farms
- <sup>k</sup>Walther Farms, NFPT Trial
- <sup>l</sup>Walther Farms, NFPT Add On Trial
- <sup>m</sup>Walther Farms, Replicated Norkotah Trial

**<sup>1</sup>SIZE**

**Russets**

- Bs: < 4 oz
- As: 4 - 10 oz
- OV: > 10 oz
- PO: Pickouts

**<sup>5</sup>VINE VIGOR RATING**

- Date: Variable
- Rating 1-5
- 1: Slow emergence
- 5: Early

**<sup>2</sup>SPECIFIC GRAVITY**

Data not replicated

**<sup>3</sup>RAW TUBER QUALITY**

(percent of tubers out of 10)

- HH: Hollow Heart
- VD: Vascular Discoloration
- IBS: Internal Brown Spot
- BC: Brown Center

**<sup>6</sup>VINE MATURITY RATING**

- Date: Variable
- Rating 1-5
- 1: Early (vines completely dead)
- 5: Late (vigorous vines, some flowering)

**<sup>4</sup>COMMON SCAB RATING**

- 0.0: Complete absence of surface or pitted lesions
- 1.0: Presence of surface lesions
- 2.0: Pitted lesions on tubers, though coverage is low
- 3.0: Pitted lesions common on tubers
- 4.0: Pitted lesions severe on tubers
- 5.0: More than 50% of tuber surface area covered in pitted lesions

# 2023 Russet Potato Variety Trial

## 4-L Farms

Planting: 5/12/23 Vine Kill: 9/27/23 Harvest: 10/23/23  
GDD<sub>40</sub>: 3675

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>3</sup> (%)					COMMON SCAB RATING <sup>4</sup>	VINE VIGOR <sup>5</sup>	VINE MATURITY <sup>6</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	HH	VD	IBS	BC				
A08433-4STO	819	972	85	2	15	70	13	1.083	30	0	0	0	0.0	4.0	4.0	misshapen tubers, second growth
Vanguard	780	803	97	3	73	24	0	1.072	0	0	0	0	0.0	4.0	2.0	nice dark russet skin, consistent shape
A12327-5VR	664	704	94	4	29	65	2	1.077	20	0	0	0	0.0	4.0	3.0	deep eyes, growth crack in pickouts, slight skinning
A09086-1LB	653	761	86	7	66	20	7	1.093	0	0	0	20	0.0	4.5	2.5	larger blocky type, slight skinning, pinkeye, skin cracking
Reveille Russet	641	727	88	2	28	60	10	1.066	0	0	20	0	0.0	3.5	2.5	large blocky type, dark russet skin, growth crack in pickouts, slight skinning
Rickey Russet	597	684	87	10	73	14	3	1.075	0	0	0	0	0.0	4.0	2.0	rounder type, heavy russet skin, misshapen pickouts
Portage Russet	565	653	86	8	72	14	6	1.085	20	10	0	0	0.5	1.0	2.5	deeper eyes, some misshapen tubers, lighter skin
Silverton Russet	525	591	89	5	61	28	6	1.071	0	0	0	20	0.0	4.5	2.5	nice type and appearance, medium netting, misshapen pickouts
A10071-1	520	593	88	7	65	23	5	1.068	10	10	0	0	0.0	4.5	2.5	dark russet skin, oblong to long, tubular, slight skinning
AF6377-12	497	551	90	6	46	44	4	1.071	30	0	0	0	0.5	4.0	2.5	black dot, prominent eyebrows
Russet Norkotah	485	574	84	15	64	20	1	1.072	30	0	0	0	0.0	4.0	2.5	nice type and appearance, trace skinning, darker skin, deeper eyes
COTX10080-2RU	430	481	89	7	68	21	4	1.068	20	0	10	0	0.0	3.5	3.5	nice russet skin, some pointed tubers, good type
A11175-12TE	398	476	84	7	62	22	9	1.078	0	40	10	0	0.0	4.0	2.5	deeper eyes, variable skin, sheep nose
A09136-9LB	368	396	93	6	73	20	1	1.088	10	0	0	0	0.0	4.5	2.5	nice russet skin, trace pointed tubers
A15057-2TE	348	399	87	13	74	13	0	1.076	0	10	0	0	0.0	4.5	2.0	flat oblong to long type, slight skinning, darker skin
AF6340-6	317	462	69	31	65	4	0	1.062	10	10	0	0	0.5	4.0	2.5	recessed eyes, smaller type, tubular shape
A13074-1TE	304	364	83	15	72	11	2	1.074	0	0	0	20	0.0	4.5	2.5	variable skin, oval type, skinning, poor appearance
W13008-1RUS	302	355	85	5	45	40	10	1.083	70	10	0	0	0.5	4.5	2.5	knobs, second growth, flat blocky oblong type, variable russet skin
CO13003-1RU	202	270	75	22	65	10	3	1.071	0	0	0	20	1.5	4.0	2.5	medium russet skin, moderate skinning
Goldrush	128	279	46	36	43	3	18	1.063	0	0	0	10	0.0	4.0	2.5	poor type, moderate skinning
MEAN	477	555	84	11	58	26	5	1.075	13	5	2	5	0.2	4.0	2.6	

<sup>1</sup>SIZE

Russets  
Bs: < 4 oz  
As: 4 - 10 oz  
OV: > 10 oz  
PO: Pickouts

<sup>2</sup>SPECIFIC GRAVITY

Data not replicated

<sup>3</sup>RAW TUBER QUALITY

(percent of tubers out of 10)  
HH: Hollow Heart  
VD: Vascular Discoloration  
IBS: Internal Brown Spot  
BC: Brown Center

<sup>4</sup>COMMON SCAB RATING

0.0: Complete absence of surface or pitted lesions  
1.0: Presence of surface lesions  
2.0: Pitted lesions on tubers, though coverage is low  
3.0: Pitted lesions common on tubers  
4.0: Pitted lesions severe on tubers  
5.0: More than 50% of tuber surface area covered in pitted lesions

<sup>5</sup>VINE VIGOR RATING

Date: 6/23/23  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vine, some flowering)

<sup>6</sup>VINE MATURITY RATING

Date: 8/17/23  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

FIELD DATA

Planting Date 5/12/23  
Vine Kill Date 9/27/23  
Harvest Date 10/23/23  
Days (planting to vine kill) 138  
Days (planting to harvest) 164  
GDD<sub>40</sub> MAWN Station Allegan  
GDD<sub>40</sub> (planting to vine kill) 3675  
Seed Spacing 10"

# 2023 Russet Potato Variety Trial

## Horkey Brothers

Planting: 4/26/23 Vine Kill: 8/17/23 Harvest: 9/11/23

GDD<sub>40</sub>: 2685

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>3</sup> (%)					COMMON SCAB RATING <sup>4</sup>	VINE VIGOR <sup>5</sup>	VINE MATURITY <sup>6</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	HH	VD	IBS	BC				
Reveille Russet	516	577	89	3	38	51	8	1.060	0	10	0	0	0.0	1.5	2.5	nice skin, skinning, prominent eyes, misshapen pickouts
Rickey Russet	483	554	87	12	79	8	1	1.070	0	20	0	0	0.0	2.0	2.5	heavy netted skin, oval to oblong type
A08433-4STO	480	592	81	18	75	6	1	1.071	0	10	0	0	0.5	1.5	3.0	oval to oblong blocky type, heavy netted skin, non uniform
<b>Goldrush</b>	<b>448</b>	<b>539</b>	<b>83</b>	<b>11</b>	<b>79</b>	<b>4</b>	<b>6</b>	<b>1.069</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0.5</b>	<b>1.5</b>	<b>2.0</b>	<b>variable russet skin, growth crack, misshapen tubers</b>
A09136-9LB	440	475	93	3	70	23	4	1.083	10	0	0	0	0.5	1.5	2.5	variable skin, nice type, slight second growth
A09086-1LB	433	536	81	16	4	77	3	1.081	10	0	0	0	1.0	1.5	2.5	light skin, variable type
AF6377-12	402	470	86	12	75	11	2	1.073	0	0	0	0	0.5	1.5	2.5	growth cracks, prominent eyes, nice skin
A15057-2TE	376	405	93	7	77	16	0	1.081	0	10	0	0	0.5	1.5	2.5	lenticel pit rot, lighter skin, nice shape
AF5521-1	344	363	94	6	65	29	0	1.081	0	0	0	0	3.0	1.5	2.5	very light skin, misshapen tubers, netted skin
<b>Russet Burbank</b>	<b>307</b>	<b>533</b>	<b>58</b>	<b>34</b>	<b>58</b>	<b>0</b>	<b>8</b>	<b>1.066</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>1.0</b>	<b>2.0</b>	<b>2.5</b>	<b>pointed and misshapen tubers, skinning</b>
A13074-1TE	291	353	82	14	74	8	4	1.079	10	30	0	10	0.0	2.0	2.5	poor skin, variable type
CO13003-1RU	266	388	68	31	68	0	1	1.076	0	0	0	0	0.0	1.0	2.0	smaller, blocky type, variable skin
W13008-1RUS	230	298	78	19	70	8	3	1.067	0	0	0	0	0.5	2.0	3.0	light skin, nice type
<b>Silverton Russet</b>	<b>174</b>	<b>228</b>	<b>76</b>	<b>16</b>	<b>74</b>	<b>2</b>	<b>8</b>	<b>1.067</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>10</b>	<b>0.0</b>	<b>2.0</b>	<b>2.5</b>	<b>plot lost due to rot</b>
Portage Russet	154	206	75	22	72	3	3	1.067	0	20	0	0	0.5	1.5	2.5	nice skin and type, some rotten tubers
<b>Russet Norkotah</b>	<b>102</b>	<b>112</b>	<b>91</b>	<b>9</b>	<b>72</b>	<b>19</b>	<b>0</b>	<b>1.066</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>2.0</b>	<b>2.5</b>	<b>plot lost due to rot</b>
AF6340-6								1.054	0	0	0	0		2.0	2.5	plot lost due to rot
COTX10080-2RU								1.057	0	20	0	0		1.5	2.5	plot lost due to rot
<b>MEAN</b>	<b>340</b>	<b>414</b>	<b>82</b>	<b>15</b>	<b>66</b>	<b>17</b>	<b>3</b>	<b>1.070</b>	<b>2</b>	<b>9</b>	<b>0</b>	<b>1</b>	<b>0.5</b>	<b>1.7</b>	<b>2.5</b>	

<sup>1</sup>**SIZE**

**Russets**

- Bs: < 4 oz
- As: 4 - 10 oz
- OV: > 10 oz
- PO: Pickouts

<sup>2</sup>**SPECIFIC GRAVITY**

Data not replicated

<sup>3</sup>**RAW TUBER QUALITY**

(percent of tubers out of 10)

- HH: Hollow Heart
- VD: Vascular Discoloration
- IBS: Internal Brown Spot
- BC: Brown Center

<sup>4</sup>**COMMON SCAB RATING**

- 0.0: Complete absence of surface or pitted lesions
- 1.0: Presence of surface lesions
- 2.0: Pitted lesions on tubers, though coverage is low
- 3.0: Pitted lesions common on tubers
- 4.0: Pitted lesions severe on tubers
- 5.0: More than 50% of tuber surface area covered in pitted lesions

<sup>5</sup>**VINE VIGOR RATING**

- Date: 6/7/23
- Rating 1-5
- 1: Slow emergence
- 5: Early emergence (vigorous vine, some flowering)

<sup>6</sup>**VINE MATURITY RATING**

- Date: 8/16/23
- Rating 1-5
- 1: Early (vines completely dead)
- 5: Late (vigorous vines, some flowering)

**FIELD DATA**

Planting Date	4/26/23
Vine Kill Date	8/17/23
Harvest Date	9/11/23
Days (planting to vine kill)	113
Days (planting to harvest)	138
GDD <sub>40</sub> MAWN Station	Deerfield/Blissfield
GDD <sub>40</sub> (planting to vine kill)	2685
Seed Spacing	10"

# 2023 Russet Potato Variety Trial

## Jenkins Farms

Planting: 5/18/23 Vine Kill: 9/1/23 Harvest: 9/26/23  
GDD<sub>40</sub>: 2564

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>3</sup> (%)					COMMON SCAB RATING <sup>4</sup>	VINE VIGOR <sup>5</sup>	VINE MATURITY <sup>6</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	HH	VD	IBS	BC				
A12327-5VR	820	896	92	4	33	59	4	1.073	0	10	0	0	0.0	3.0	3.5	blocky oval to oblong type, dark russet skin, very large
Portage Russet	717	793	90	7	67	23	3	1.080	70	0	0	0	0.0	3.0	3.5	moderate alligator hide, light russet skin, moderate black dot
A08433-4STO	628	897	70	7	55	15	23	1.073	40	0	0	0	0.0	2.0	4.0	flat oblong to long type, non uniform, slight alligator hide
Reveille Russet	622	714	87	5	51	36	8	1.068	0	10	0	0	0.0	1.5	3.5	blocky type, dark russet skin, moderate skinning, trace alligator hide
Rickey Russet	543	635	86	10	59	27	4	1.071	0	30	0	0	0.0	4.0	3.5	not uniform, heavy dark russet skin, flat oval to oblong type
AF5521-1	538	575	94	3	53	41	3	1.084	20	0	0	0	0.0	3.0	3.5	flat blocky oval to oblong type, trace rhizoctonia
<b>Silverton Russet</b>	<b>486</b>	<b>598</b>	<b>81</b>	<b>7</b>	<b>71</b>	<b>10</b>	<b>12</b>	<b>1.067</b>	<b>10</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>2.0</b>	<b>3.5</b>	<b>trace alligator hide, medium russet skin, growth cracks</b>
A09136-9LB	474	560	85	8	50	35	7	1.078	30	0	0	0	0.0	3.5	3.5	flat long type, light russet skin, knobs, slight alligator hide
CO13003-1RU	458	542	85	14	68	17	1	1.074	50	0	0	0	0.0	2.5	3.5	uniform appearance, slight skinning, oval to oblong type
Vanguard	450	588	77	6	45	32	17	1.067	0	0	0	0	0.0	2.0	3.0	oval to oblong type, medium russet skin, knobs and growth cracks
W13008-1RUS	447	504	89	9	69	20	2	1.075	0	20	0	0	0.0	3.0	3.0	not uniform, flat oval to oblong type, black dot and silver scurf
A15057-2TE	432	460	94	6	58	36	0	1.067	0	10	0	0	0.0	2.0	3.0	flat long type, light russet skin, not uniform
A09086-1LB	430	524	82	16	76	6	2	1.082	0	20	0	0	0.0	3.0	4.0	oblong to long tubular type, light russet skin
A10071-1	415	557	74	14	67	7	12	1.076	10	10	0	10	0.0	3.0	3.0	moderate alligator hide and skinning, oblong to long tubular type, knobs
A11175-12TE	405	464	87	7	51	36	6	1.075	0	20	0	0	0.0	3.0	3.5	blocky oval to oblong type
AF6377-12	379	490	78	14	59	19	8	1.077	0	10	0	0	0.0	2.0	3.5	blocky oblong type, dark russet skin, skinning, growth cracks, knobs
COTX10080-2RU	374	484	78	14	72	6	8	1.064	10	10	0	0	0.0	2.5	4.0	slight alligator hide, variable type, prominent eyes
AF6340-6	370	486	76	20	69	7	4	1.064	0	10	0	0	0.5	3.0	3.5	not uniform, silver scurf, light russet skin
<b>Goldrush</b>	<b>369</b>	<b>477</b>	<b>77</b>	<b>13</b>	<b>65</b>	<b>12</b>	<b>10</b>	<b>1.066</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>1.5</b>	<b>3.5</b>	<b>flat oblong type, dark russet skin, moderate skinning, misshapen</b>
AC12090-3RU	296	405	73	21	61	12	6	1.072	20	0	0	0	0.0	3.0	3.5	oval to oblong type, pink eye blushing
<b>Russet Norkotah</b>	<b>236</b>	<b>354</b>	<b>66</b>	<b>20</b>	<b>55</b>	<b>11</b>	<b>14</b>	<b>1.064</b>	<b>20</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>3.0</b>	<b>3.5</b>	<b>slight alligator hide, variable type, prominent eyes</b>
<b>MEAN</b>	<b>471</b>	<b>572</b>	<b>82</b>	<b>11</b>	<b>60</b>	<b>22</b>	<b>7</b>	<b>1.072</b>	<b>13</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>2.6</b>	<b>3.5</b>	

<sup>1</sup>**SIZE**

Russets  
Bs: < 4 oz  
As: 4 - 10 oz  
OV: > 10 oz  
PO: Pickouts

<sup>2</sup>**SPECIFIC GRAVITY**

Data not replicated

<sup>3</sup>**RAW TUBER QUALITY**

(percent of tubers out of 10)  
HH: Hollow Heart  
VD: Vascular Discoloration  
IBS: Internal Brown Spot  
BC: Brown Center

<sup>4</sup>**COMMON SCAB RATING**

0.0: Complete absence of surface or pitted lesions  
1.0: Presence of surface lesions  
2.0: Pitted lesions on tubers, though coverage is low  
3.0: Pitted lesions common on tubers  
4.0: Pitted lesions severe on tubers  
5.0: More than 50% of tuber surface area covered in pitted lesions

<sup>5</sup>**VINE VIGOR RATING**

Date: 6/29/23  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vine, some flowering)

<sup>6</sup>**VINE MATURITY RATING**

Date: 8/14/23  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

**FIELD DATA**

Planting Date 5/18/23  
Vine Kill Date 9/1/23  
Harvest Date 9/26/23  
Days (planting to vine kill) 106  
Days (planting to harvest) 131  
GDD<sub>40</sub> MAWN Station Kalkaska  
GDD<sub>40</sub> (planting to vine kill) 2564  
Seed Spacing 10"

# 2023 Russet Potato Variety Trial

## Kitchen Farms Mini Bulk

Planting: 5/30/23 Vine Kill: 8/18/23 Harvest: 9/13/23

GDD<sub>40</sub>: 2058

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>3</sup> (%)						COMMON SCAB RATING <sup>4</sup>	VINE VIGOR <sup>5</sup>	VINE MATURITY <sup>6</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	HH	VD	IBS	BC					
A12327-SVR	458	494	93	4	56	37	3	1.077	0	0	0	0	0.0	3.5	3.5	oval to oblong type, heavy russet skin, trace skinning	
Rickey Russet	440	526	84	14	79	5	2	1.081	0	0	0	0	0.0	4.5	4.0	flat oval to oblong type, heavy russet skin, nice appearance	
A11175-12TE	406	470	87	9	75	12	4	1.072	0	0	0	0	0.5	3.5	3.5	blocky oval to oblong type	
A15057-2TE	403	467	87	11	80	7	2	1.076	0	0	0	0	0.0	4.5	3.5	blocky oblong to long type, skinning	
A08433-4STO	378	475	79	19	78	1	2	1.072	0	0	0	0	0.0	4.0	4.5	blocky type	
A09086-1LB	338	457	74	21	72	2	5	1.072	0	0	0	0	0.5	4.5	4.5	variable light skin, poor appearance	
A13074-1TE	327	425	76	22	75	1	2	1.082	0	10	0	0	0.0	5.0	3.5	oblong type, nice appearance	
Portage Russet	305	465	66	33	65	1	1	1.081	0	0	0	0	0.5	3.5	4.0	long tubular type, light russet skin, uniform appearance	
W13008-1RUS	259	342	75	21	72	3	4	1.077	0	0	0	0	0.0	5.0	3.5	medium russet skin, flat to oblong type, trace pink eye	
<b>MEAN</b>	<b>368</b>	<b>458</b>	<b>80</b>	<b>17</b>	<b>72</b>	<b>8</b>	<b>3</b>	<b>1.077</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0.2</b>	<b>4.2</b>	<b>3.8</b>		

**<sup>1</sup>SIZE**

**Russets**  
Bs: < 4 oz  
As: 4 - 10 oz  
OV: > 10 oz  
PO: Pickouts

**<sup>2</sup>SPECIFIC GRAVITY**

Data not replicated

**<sup>3</sup>RAW TUBER QUALITY**

**(percent of tubers out of 10)**  
HH: Hollow Heart  
VD: Vascular Discoloration  
IBS: Internal Brown Spot  
BC: Brown Center

**<sup>4</sup>COMMON SCAB RATING**

0.0: Complete absence of surface or pitted lesions  
1.0: Presence of surface lesions  
2.0: Pitted lesions on tubers, though coverage is low  
3.0: Pitted lesions common on tubers  
4.0: Pitted lesions severe on tubers  
5.0: More than 50% of tuber surface area covered in pitted lesions

**<sup>5</sup>VINE VIGOR RATING**

Date: 7/10/23  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vine, some flowering)

**<sup>6</sup>VINE MATURITY RATING**

Date: 8/14/23  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

**FIELD DATA**

Planting Date	5/30/23
Vine Kill Date	8/18/23
Harvest Date	9/13/23
Days (planting to vine kill)	80
Days (planting to harvest)	106
GDD <sub>40</sub> MAWN Station	Kalkaska
GDD <sub>40</sub> (planting to vine kill)	2058
Seed Spacing	10"

# 2023 Russet Potato Variety Trial

## Kitchen Strip Trial

Planting: 5/30/23 Vine Kill: 8/18/23 Harvest: 9/13/23  
GDD<sub>40</sub>: 2058

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>				RAW TUBER QUALITY <sup>3</sup> (%)						COMMON SCAB RATING <sup>4</sup>	VINE VIGOR <sup>5</sup>	VINE MATURITY <sup>6</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	HH	VD	IBS	BC				
AF6340-6	571	683	83	15	77	6	2	1.081	20	0	0	0	0.0	3.5	3.5	oblong type, good appearance
AAF15193-6	506	554	91	6	75	16	3	1.079	0	0	0	0	0.0	4.5	3.5	non uniform skin, prominent eyes, oblong to long type
AAF15169-3	463	536	86	7	83	3	7	1.077	0	0	0	0	0.5	5.0	4.0	medium russet skin, light skinning, prominent eyes
AAF15193-9	450	542	83	13	80	3	4	1.078	0	0	0	0	1.0	4.5	3.5	flat blocky oblong type
Vanguard	442	511	87	6	70	17	7	1.070	0	0	0	0	0.0	3.5	3.5	oval to oblong type, heavy russet skin, good appearance
COTX10080-2RU	437	543	81	13	76	5	6	1.075	0	0	0	0	0.0	3.0	3.5	slight growth crack, medium russet skin, small oval to oblong type
AF7001-5	372	492	75	14	5	70	11	1.081	10	0	0	0	0.0	4.0	3.5	large blocky type, medium russet skin, misshapen pickouts
AAF15402-1	371	437	85	6	78	7	9	1.083	0	0	0	0	0.0	3.0	3.5	non uniform type and skin, misshapen and pointed tubers
<b>Russet Norkotah</b>	<b>365</b>	<b>477</b>	<b>77</b>	<b>17</b>	<b>74</b>	<b>3</b>	<b>6</b>	<b>1.086</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.5</b>	<b>3.5</b>	<b>3.5</b>	<b>slight pink eye, not uniform type</b>
AF5521-1	365	395	93	6	78	15	1	1.079	0	0	0	0	0.5	5.0	4.0	flat blocky to oval type, medium russet skin, good appearance
AF7015-2	349	414	85	6	67	18	9	1.072	0	0	0	0	0.5	5.0	3.5	blocky oval to oblong type, moderate skinning, marginal appearance
AF7008-1	344	419	83	15	77	6	2	1.074	0	0	0	0	0.0	4.5	3.5	small blocky oblong type, medium russet skin
Reveille Russet	338	406	83	8	75	8	9	1.072	0	0	0	0	0.0	2.5	4.0	moderate growth crack, blocky oblong type, variable skin
A09136-9LB	331	367	91	6	78	13	3	1.081	0	0	0	0	0.5	5.0	3.5	rough oblong type, poor appearance
AAF15247-3	331	394	84	14	80	4	2	1.075	0	0	0	0	0.0	4.0	3.5	heavy dark russet skin, variable type
<b>Goldrush</b>	<b>331</b>	<b>386</b>	<b>86</b>	<b>11</b>	<b>79</b>	<b>7</b>	<b>3</b>	<b>1.074</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>3.0</b>	<b>3.5</b>	<b>blocky oval to oblong type, variable heavy russet skin</b>
NDAF1791-1	330	440	75	15	73	2	10	1.094	0	0	0	0	0.5	3.5	4.0	non uniform type, misshapen pickouts
AF6997-3	327	458	71	10	54	17	19	1.082	0	0	0	0	1.0	4.0	3.5	poor appearance, deep eyes, blocky oblong type
NDAF1762-7	307	446	69	28	69	0	3	1.089	0	0	0	0	0.5	3.5	3.5	flat long to oblong type, medium russet skin
AF6997-1	290	432	67	26	65	2	7	1.089	0	0	0	0	1.5	3.0	4.0	non uniform, poor appearance, light russet skin
AAF15291-5	265	495	54	29	53	1	17	1.081	0	0	0	0	0.5	5.0	3.5	poor appearance, misshapen pickouts
COAF16090-14	261	363	72	21	69	3	7	1.075	10	0	0	0	1.0	3.5	3.0	smaller oblong type, medium skinning
<b>Silverton Russet</b>	<b>253</b>	<b>296</b>	<b>85</b>	<b>12</b>	<b>81</b>	<b>4</b>	<b>3</b>	<b>1.076</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>4.5</b>	<b>3.5</b>	<b>uniform medium russet skin, blocky oblong type</b>
AF6989-3	206	294	70	24	67	3	6	1.089	20	0	0	0	0.0	2.5	4.0	flat oblong type, variable russet skin, good appearance
CO13003-1RU	181	338	54	43	52	2	3	1.080	0	0	0	10	0.0	3.0	3.5	non uniform type
NDAF1791-6	171	327	52	48	52	0	0	1.093	0	0	0	10	1.5	3.0	4.0	poor appearance, medium to heavy russet skin, smaller
AF6377-12	170	275	62	30	60	2	8	1.084	0	0	0	0	0.0	4.5	3.5	very dark heavy russet skin, oblong to oval type, moderate skinning
NDAF1791-3	133	351	38	60	38	0	2	1.095	0	0	0	0	0.5	3.5	4.5	long tubular type, very light russet skin
<b>MEAN</b>	<b>331</b>	<b>431</b>	<b>76</b>	<b>18</b>	<b>67</b>	<b>8</b>	<b>6</b>	<b>1.081</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0.4</b>	<b>3.8</b>	<b>3.6</b>	

<sup>1</sup>SIZE

**Russets**  
Bs: < 4 oz  
As: 4 - 10 oz  
OV: > 10 oz  
PO: Pickouts

<sup>2</sup>SPECIFIC GRAVITY

Data not replicated

<sup>3</sup>RAW TUBER QUALITY

(percent of tubers out of 10)  
HH: Hollow Heart  
VD: Vascular Discoloration  
IBS: Internal Brown Spot  
BC: Brown Center

<sup>4</sup>COMMON SCAB RATING

0.0: Complete absence of surface or pitted lesions  
1.0: Presence of surface lesions  
2.0: Pitted lesions on tubers, though coverage is low  
3.0: Pitted lesions common on tubers  
4.0: Pitted lesions severe on tubers  
5.0: More than 50% of tuber surface area covered in pitted lesions

<sup>5</sup>VINE VIGOR RATING

Date: 7/10/23  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vine, some flowering)

<sup>6</sup>VINE MATURITY RATING

Date: 8/14/23  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

FIELD DATA

Planting Date 5/30/23  
Vine Kill Date 8/18/23  
Harvest Date 9/13/23  
Days (planting to vine kill) 80  
Days (planting to harvest) 106  
GDD<sub>40</sub> MAWN Station Kalkaska  
GDD<sub>40</sub> (planting to vine kill) 2058  
Seed Spacing 10"



# 2023 Russet Potato Variety Trial

## Lennard Ag. Co.

Planting: 5/15/23 Vine Kill: 9/13/23 Harvest: 10/3/23  
GDD<sub>40</sub>: 3485

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>3</sup> (%)					COMMON SCAB RATING <sup>4</sup>	VINE VIGOR <sup>5</sup>	VINE MATURITY <sup>6</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	HH	VD	IBS	BC				
A08433-4sto	752	816	92	4	58	34	4	1.081	0	0	0	0	0.5	4.5	4.5	flat oval to oblong type, medium russet skin
A09086-1LB	601	727	82	14	72	10	4	1.087	0	0	0	0	1.0	4.5	3.5	prominent eyes, light to medium russet skin, rough appearance
A09136-9LB	557	674	83	9	66	17	8	1.089	40	0	0	0	0.5	4.5	4.0	not uniform, slight alligator hide, misshapen pickouts
AF6298-2	536	640	83	9	62	21	8	1.088	80	0	0	0	0.0	3.5	3.0	nice appearance, blocky type, medium russet skin
Portage Russet	535	662	81	9	62	19	10	1.084	40	0	0	0	0.5	4.0	3.5	flat long tubular type, slight alligator hide, sticky stolons
AF5521-1	533	598	89	3	51	38	8	1.081	10	0	10	0	1.5	4.0	3.5	large blocky oblong to long type, medium russet skin
COTX10080-2RU	529	585	91	3	63	28	6	1.070	0	0	0	0	0.0	3.0	3.0	severe tuber rot, slight alligator hide, points
Rickey Russet	528	784	68	11	61	7	21	1.073	0	0	0	0	0.0	4.0	2.5	heat sprouts, non uniform, medium russet skin
Vanguard	519	592	88	9	78	10	3	1.061	0	0	0	0	0.0	4.0	1.5	not uniform, medium russet skin
AF5736-16	512	607	85	2	60	25	13	1.090	20	0	0	0	0.0	3.5	4.5	flat blocky oblong to long type, medium russet skin, poor appearance
Umatilla	504	674	75	8	69	6	17	1.084	10	0	0	0	0.0	4.5	3.5	deep eyes, poor appearance
CO13003-1RU	502	583	86	12	80	6	2	1.078	20	0	10	0	0.0	4.0	3.0	small oblong type, heavy russet skin, nice uniform appearance
W13008-1RUS	501	620	81	7	68	13	12	1.082	0	0	0	0	0.5	4.5	3.0	misshapen pickouts, long tubular type
AF6377-10	497	521	96	3	55	41	1	1.073	0	0	0	0	0.0	3.5	2.5	large blocky to oblong type, heavy netted skin, slight skinning
<b>Russet Norkotah</b>	<b>486</b>	<b>602</b>	<b>81</b>	<b>9</b>	<b>66</b>	<b>15</b>	<b>10</b>	<b>1.070</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1.0</b>	<b>4.0</b>	<b>3.5</b>	<b>poor appearance, deep eyes, not uniform, many misshapen tubers</b>
Reveille Russet	486	560	86	7	60	26	7	1.068	0	0	0	0	0.0	3.5	3.0	blocky oblong type, heavy russet skin, slight skinning, misshapen pickouts
A15057-2TE	485	579	83	12	73	10	5	1.070	0	0	0	0	0.5	4.5	2.5	non uniform, flat oblong type, purple blushing around eyes
AF6377-12	484	554	87	4	41	46	9	1.078	30	0	0	0	0.0	3.5	3.0	slight alligator hide, dark russet skin, blocky long type, growth crack
<b>Silverton Russet</b>	<b>483</b>	<b>570</b>	<b>84</b>	<b>8</b>	<b>68</b>	<b>16</b>	<b>8</b>	<b>1.067</b>	<b>20</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0.0</b>	<b>4.5</b>	<b>4.0</b>	<b>slight pink eye and alligator hide, flat long type</b>
<b>Goldrush</b>	<b>385</b>	<b>566</b>	<b>68</b>	<b>17</b>	<b>63</b>	<b>5</b>	<b>15</b>	<b>1.066</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>4.0</b>	<b>2.0</b>	<b>long tubular type, medium to heavy russet skin, misshapen</b>
AF6750-3	375	488	77	12	65	12	11	1.074	10	0	0	0	0.0	3.5	3.5	dark russet skin, long tubular type
A11175-12TE	336	416	81	13	77	4	6	1.073	0	0	0	0	0.0	4.0	4.0	blocky to oblong type, rough appearance, deep apical eyes
AF6340-6	322	466	69	25	69	0	6	1.065	0	0	0	0	1.0	3.5	2.0	moderate alligator hide, not uniform, oblong to long type
Russet Burbank	302	564	54	37	53	1	9	1.084	0	0	0	0	0.0	4.0	3.5	poor appearance, long tubular type
<b>MEAN</b>	<b>490</b>	<b>602</b>	<b>81</b>	<b>10</b>	<b>64</b>	<b>17</b>	<b>8</b>	<b>1.076</b>	<b>13</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0.3</b>	<b>4.0</b>	<b>3.2</b>	

<sup>1</sup>**SIZE**

Russets  
Bs: < 4 oz  
As: 4 - 10 oz  
OV: > 10 oz  
PO: Pickouts

<sup>2</sup>**SPECIFIC GRAVITY**

Data not replicated

<sup>3</sup>**RAW TUBER QUALITY**

(percent of tubers out of 10)  
HH: Hollow Heart  
VD: Vascular Discoloration  
IBS: Internal Brown Spot  
BC: Brown Center

<sup>4</sup>**COMMON SCAB RATING**

0.0: Complete absence of surface or pituber typeed lesions  
1.0: Presence of surface lesions  
2.0: Pitted lesions on tubers, though coverage is low  
3.0: Pitted lesions common on tubers  
4.0: Pitted lesions severe on tubers  
5.0: More than 50% of tuber surface area covered in pitted lesions

<sup>5</sup>**VINE VIGOR RATING**

Date: 6/28/23  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vine, some flowering)

**FIELD DATA**

Planting Date 5/15/23  
Vine Kill Date 9/13/23  
Harvest Date 10/3/23  
Days (planting to vine kill) 121  
Days (planting to harvest) 141  
GDD<sub>40</sub> MAWN Station Constantine  
GDD<sub>40</sub> (planting to vine kill) 3485  
Seed Spacing 10"

<sup>6</sup>**VINE MATURITY RATING**

Date: 8/18/23  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

# 2023 Russet Potato Variety Trial

## Sandyland Farms

Planting: 5/17/23 Vine Kill: 9/4/23 Harvest: 10/10/23

GDD<sub>40</sub>: 2893

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>3</sup> (%)					COMMON SCAB RATING <sup>4</sup>	VINE VIGOR <sup>5</sup>	VINE MATURITY <sup>6</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	HH	VD	IBS	BC				
A08433-4STO	628	815	77	20	70	7	3	1.083	0	20	0	0	2.0	4.0	4.0	flat oblong to long type, light to medium russet skin
A09086-1LB	580	684	85	14	73	12	1	1.088	0	0	0	0	2.5	4.0	3.0	blocky oblong tubular type, prominent eyes
Portage Russet	458	534	85	12	77	8	3	1.083	1	20	0	0	0.5	4.0	4.0	light to medium russet skin, flat long tubular type
Reveille Russet	372	503	74	15	68	6	11	1.069	0	0	0	0	0.0	3.5	3.5	growth cracks, knobs, variable dark russet skin
<b>Silverton Russet</b>	<b>350</b>	<b>437</b>	<b>81</b>	<b>11</b>	<b>71</b>	<b>10</b>	<b>8</b>	<b>1.072</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>4.0</b>	<b>2.0</b>	<b>growth cracks</b>
<b>MEAN</b>	<b>478</b>	<b>595</b>	<b>80</b>	<b>14</b>	<b>72</b>	<b>9</b>	<b>5</b>	<b>1.079</b>	<b>1</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>1.0</b>	<b>3.9</b>	<b>3.3</b>	

<sup>1</sup>**SIZE**

**Russets**  
Bs: < 4 oz  
As: 4 - 10 oz  
OV: > 10 oz  
PO: Pickouts

<sup>2</sup>**SPECIFIC GRAVITY**

Data not replicated

<sup>3</sup>**RAW TUBER QUALITY**

**(percent of tubers out of 10)**  
HH: Hollow Heart  
VD: Vascular Discoloration  
IBS: Internal Brown Spot  
BC: Brown Center

<sup>4</sup>**COMMON SCAB RATING**

0.0: Complete absence of surface or pitted lesions  
1.0: Presence of surface lesions  
2.0: Pitted lesions on tubers, though coverage is low  
3.0: Pitted lesions common on tubers  
4.0: Pitted lesions severe on tubers  
5.0: More than 50% of tuber surface area covered in pitted lesions

<sup>5</sup>**VINE VIGOR RATING**

Date: 6/26/23  
Rating 1-5  
1: Slow emergence  
5: Early emergence  
(vigorous vines, some flowering)

<sup>6</sup>**VINE MATURITY RATING**

Date: 8/28/23  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

**FIELD DATA**

Planting date 5/17/23  
Vine Kill Date 9/4/23  
Harvest Date 10/10/23  
Days (planting to vine kill) 110  
Days (planting to harvest) 146  
GDD<sub>40</sub> MAWN Station Entrican  
GDD<sub>40</sub> (planting to vine kill) 2893  
Seed Spacing 10"

# 2023 Russet Potato Variety Trial

## Styma Potato Farm

Planting: 5/25/23 Vine Kill: 8/31/23 Harvest: 9/25/23  
GDD<sub>40</sub>: 2447

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>				RAW TUBER QUALITY <sup>3</sup> (%)						COMMON SCAB RATING <sup>4</sup>	VINE VIGOR <sup>5</sup>	VINE MATURITY <sup>6</sup>	COMMENTS	
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	HH	VD	IBS	BC					
A08433-4STO	459	526	88	8	78	10	4	1.079	20	0	0	0	0	0.0	5.0	5.0	flat oblong type, light to medium russet skin, marginal appearance
A09086-1LB	551	601	92	8	80	12	0	1.089	0	0	0	0	0	2.5	5.0	4.5	non uniform skin, flat blocky oblong to long type
A09136-9LB	447	513	87	6	64	23	7	1.091	30	0	0	0	0	1.0	5.0	4.0	not uniform, flat blocky oblong type, medium russet skin
A10071-1	370	438	85	9	76	9	6	1.074	0	0	0	0	0	0.0	5.0	2.0	dark russet skin, long type
A11175-12TE	345	388	89	6	69	20	5	1.077	0	0	0	0	0	0.5	3.5	3.0	blocky oblong type, prominent eyes
A12327-5VR	579	631	92	4	35	57	4	1.071	0	0	0	0	0	0.5	4.5	3.5	large blocky oblong type, dark russet skin, moderate alligator hide
A15057-2TE	343	368	93	7	71	22	0	1.068	0	0	0	0	0	0.5	5.0	2.5	medium russet skin, slight skinning, blocky oblong type
AC12090-3RU	155	263	59	39	59	0	2	1.075	0	0	0	0	0	0.0	3.5	2.5	small tubular type, violet blush over eyes
AF5521-1	408	424	96	3	67	29	1	1.071	0	0	0	0	0	0.5	5.0	4.0	flat blocky oval to oblong type, light russet skin
AF5736-16	472	531	89	10	85	4	1	1.094	0	0	0	0	0	0.0	4.5	5.0	flat oblong to long type, medium russet skin, uniform type
AF6340-6	481	531	91	9	78	13	0	1.075	0	10	0	0	0	1.0	3.5	3.0	flat blocky oval to oblong type, medium russet skin
AF6377-10	353	371	96	2	59	37	2	1.076	0	0	0	0	0	0.0	4.5	3.0	slight alligator hide, blocky oblong type
AF6377-12	386	450	86	11	75	11	3	1.085	20	0	0	10	0	0.0	4.5	4.0	slight alligator hide, dark russet skin, blocky oblong to oval type
CO13003-1RU	303	488	62	33	62	0	5	1.081	0	20	30	0	0	0.5	3.5	3.5	moderate alligator hide, uniform oval to oblong type
COTX08121-1RU	221	256	86	14	86	0	0	1.065	20	0	0	0	0	0.0	4.5	3.0	trace rhizoctonia, small oblong type
Goldrush	294	364	81	10	64	17	9	1.077	0	0	0	0	0	0.0	3.5	3.5	flat oblong type, dark russet skin
Portage Russet	439	541	81	17	78	3	2	1.087	0	0	0	0	0	0.5	4.0	2.5	slight rhizoctonia, flat oblong to long type
Reveille Russet	317	377	84	8	61	23	8	1.069	0	10	0	0	0	0.0	4.5	3.5	larger blocky type, dark russet skin, growth crack
Rickey Russet	423	483	87	11	73	14	2	1.080	0	10	0	0	0	0.0	4.0	2.0	slight rhizoctonia, dark russet skin, flat blocky oval to oblong type
<b>Russet Norkotah</b>	<b>307</b>	<b>362</b>	<b>85</b>	<b>11</b>	<b>65</b>	<b>20</b>	<b>4</b>	<b>1.079</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>4.5</b>	<b>3.0</b>	<b>non uniform russet skin</b>
<b>Silverton Russet</b>	<b>252</b>	<b>315</b>	<b>80</b>	<b>14</b>	<b>69</b>	<b>11</b>	<b>6</b>	<b>1.070</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.5</b>	<b>4.5</b>	<b>4.0</b>	<b>trace alligator hide, medium russet skin</b>
Vanguard	483	541	90	9	74	16	1	1.069	0	0	20	0	0	0.5	4.0	2.0	moderate alligator hide, blocky oblong type
W13008-1Rus	268	320	84	9	66	18	7	1.077	0	0	0	0	0	0.0	5.0	3.5	severe alligator hide, oblong to long flat type
<b>MEAN</b>	<b>376</b>	<b>438</b>	<b>85</b>	<b>11</b>	<b>69</b>	<b>16</b>	<b>3</b>	<b>1.077</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0.4</b>	<b>4.4</b>	<b>3.3</b>	

<sup>1</sup>**SIZE**

Russets  
Bs: < 4 oz  
As: 4 - 10 oz  
OV: > 10 oz  
PO: Pickouts

<sup>2</sup>**SPECIFIC GRAVITY**

Data not replicated

<sup>3</sup>**RAW TUBER QUALITY**

(percent of tubers out of 10)  
HH: Hollow Heart  
VD: Vascular Discoloration  
IBS: Internal Brown Spot  
BC: Brown Center

<sup>4</sup>**COMMON SCAB RATING**

0.0: Complete absence of surface or pitted lesions  
1.0: Presence of surface lesions  
2.0: Pitted lesions on tubers, though coverage is low  
3.0: Pitted lesions common on tubers  
4.0: Pitted lesions severe on tubers  
5.0: More than 50% of tuber surface area covered in pitted lesions

<sup>5</sup>**VINE VIGOR RATING**

Date: 7/13/23  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vine, some flowering)

<sup>6</sup>**VINE MATURITY RATING**

Date: 8/21/23  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

**FIELD DATA**

Planting Date 5/25/23  
Vine Kill Date 8/31/23  
Harvest Date 9/25/23  
Days (planting to vine kill) 98  
Days (planting to harvest) 123  
GDD<sub>40</sub> MAWN Station Hawks  
GDD<sub>40</sub> (planting to vine kill) 2447  
Seed Spacing 10"

# 2023 Russet Potato Variety Trial

## Verbrigghe Potato Farms

Planting: 6/6/23 Vine Kill: 9/8/23 Harvest: 10/10/23

GDD<sub>40</sub>: 2275

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>						RAW TUBER QUALITY <sup>3</sup> (%)				COMMON SCAB RATING <sup>4</sup>	VINE VIGOR <sup>5</sup>	VINE MATURITY <sup>6</sup>
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	HH	VD	IBS	BC			
A08433-4STO	417	548	76	21	76	0	3	1.074	0	0	0	0	1.0	4.5	5.0
<b>Silverton Russet</b>	<b>399</b>	<b>493</b>	<b>81</b>	<b>17</b>	<b>66</b>	<b>15</b>	<b>2</b>	<b>1.073</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0.5</b>	<b>4.5</b>	<b>3.5</b>
Portage Russet	282	462	61	34	61	0	5	1.082	0	0	0	0	0.0	4.5	4.5
<b>Russet Norkotah</b>	<b>280</b>	<b>374</b>	<b>75</b>	<b>24</b>	<b>68</b>	<b>7</b>	<b>1</b>	<b>1.071</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>4.5</b>	<b>2.0</b>
<b>MEAN</b>	<b>344</b>	<b>469</b>	<b>73</b>	<b>24</b>	<b>68</b>	<b>6</b>	<b>3</b>	<b>1.075</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0.4</b>	<b>4.5</b>	<b>3.8</b>

**<sup>1</sup>SIZE**

Bs: < 4 oz  
As: 4 - 10 oz  
OV: >10 oz  
PO: Pickouts

**<sup>2</sup>SPECIFIC GRAVITY**

Data not replicated

**<sup>3</sup>RAW TUBER QUALITY**

**(percent of tubers out of 10)**

HH: Hollow Heart  
VD: Vascular Discoloration  
IBS: Internal Brown Spot  
BC: Brown Center

**<sup>4</sup>COMMON SCAB RATING**

0.0: Complete absence of surface or pitted lesions  
1.0: Presence of surface lesions  
2.0: Pitted lesions on tubers, though coverage is low  
3.0: Pitted lesions common on tubers  
4.0: Pitted lesions severe on tubers  
5.0: More than 50% of tuber surface area covered in pitted lesions

**<sup>5</sup>VINE VIGOR RATING**

Date: 7/28/23  
Rating 1-5  
1: Slow emergence  
5: Early emergence

**FIELD DATA**

Planting Date	6/6/23
Vine Kill Date	9/8/23
Harvest Date	10/10/23
Days (planting to vine kill)	94
Days (planting to harvest)	126
GDD <sub>40</sub> MAWN Station	Escanaba
GDD <sub>40</sub> (planting to vine kill)	2275
Seed Spacing	12"

**<sup>6</sup>VINE MATURITY RATING**

Date: 8/22/23  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

## 2023 Russet Potato Variety Trial Walther Farms NFPT and Added Lines

Planting: 4/27/23 Vine Kill: 9/1/23 Harvest: 9/21/23

GDD<sub>40</sub>: 3448

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>3</sup> (%)						COMMON SCAB RATING <sup>4</sup>	VINE VIGOR <sup>5</sup>	VINE MATURITY <sup>6</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	HH	VD	IBS	BC					
AF6314-12"	840	1038	81	6	52	29	13	1.081	0	0	100	0	1.0	3.0	4.0	many pointed tubers, misshapen pickouts, heat knobs	
AAF15010-1"	826	1000	82	10	66	16	8	1.103	10	10	40	0	0.0	3.5	4.5	poor shape and appearance	
AF6384-2	810	958	85	10	61	24	5	1.081	0	30	10	0	1.0	4.0	3.5	flat blocky oblong type, misshapen pickouts	
AAF15086-5	790	880	90	6	55	35	4	1.082	0	10	0	0	1.5	3.5	3.5	alligator hide, less uniform type, misshapen pickouts	
AOR10071-8	777	827	94	6	78	16	0	1.088	0	30	0	0	1.5	4.5	3.0	nice blocky oval type, lighter russet skin	
A15053-17	758	908	83	8	52	31	9	1.064	0	30	0	0	1.0	3.5	3.5	lighter russet skin, flat oblong blocky type, misshapen tubers	
AOR16118-1	716	816	88	7	69	19	5	1.088	20	0	0	0	0.5	3.5	4.5	light russet skin, silver scurf or black dot, nice type	
A15094-13"	712	936	76	9	64	12	15	1.067	40	0	0	0	1.0	3.5	4.0	long tubular type, bottlenecks, apical purple pigmentation	
AOR15227-2	711	830	86	5	55	31	9	1.101	0	0	20	0	0.5	3.5	3.5	knobs, less uniform, nice dark russet skin	
A15175-1	700	832	84	11	76	8	5	1.095	0	30	0	0	0.5	3.5	3.0	knobs in pickouts, light to medium russet skin, deeper eyes	
COA15494-8*	697	759	92	6	65	27	2	1.077	0	20	50	0	0.5	3.0	4.0	nice type, attractive dark russet skin, slight alligator hide	
AF6749-3	690	813	85	5	69	16	10	1.082	0	0	0	0	0.5	3.0	3.5	attractive skin, prominent eyes, pointed ends	
A15077-9TE	681	768	88	7	45	43	5	1.084	60	0	0	0	1.0	3.5	4.5	growth crack, alligator hide, blocky type	
AOR15166-2*	681	760	89	4	67	22	7	1.097	0	10	0	0	0.5	3.0	4.0	blocky oval to oblong type, nice appearance	
AAF15180-3*	678	797	85	8	70	15	7	1.075	0	0	30	0	0.5	3.5	2.5	medium russet, nice type and appearance	
AF6465-7	665	777	86	6	57	29	8	1.073	10	20	30	0	1.0	3.5	4.0	dark russet, blocky oblong to oval type, alligator hide	
A16051-3"	641	855	75	10	56	19	15	1.076	0	20	0	0	1.5	2.5	3.5	knobs, growth cracks, lighter russet skin, variable type	
A15102-11"	638	729	87	8	69	18	5	1.084	0	0	40	0	1.5	3.0	3.5	prominent eyes, knobs, lighter russet skin, tubular	
A13074-1TE"	632	805	78	12	62	16	10	1.088	0	30	0	0	0.5	3.5	4.0	apical growth crack, alligator hide	
AF6814-1"	627	744	85	4	55	30	11	1.088	0	0	0	0	0.5	2.5	3.5	flaky russet skin, prominent eyes, misshapen pickouts	
A16117-4"	618	761	82	4	63	19	14	1.081	10	0	0	0	1.0	4.0	4.0	poor appearance, misshapen tubers, skinning	
A18476-3ADG*	601	703	85	12	71	14	3	1.077	0	20	0	0	0.5	2.5	4.0	medium russet skin, oval to oblong type, nice appearance	
A15084-4"	595	889	67	10	53	14	23	1.089	0	20	40	0	1.5	4.0	4.5	knobs, heat sprouts	
NDAF13242B-3	595	728	82	18	81	1	0	1.079	0	10	0	0	1.5	3.0	2.5	small round type	
A11887-5ADG"	590	830	71	10	58	13	19	1.078	0	10	10	0	1.5	3.0	3.0	pointed tubers, misshapen pickouts	
A18682-8STO"	583	742	79	8	60	19	13	1.095	20	0	0	0	1.0	3.0	4.5	severe black dot and scurf, poor appearance	
A15038-6	575	669	86	8	59	27	6	1.068	0	20	10	20	0.5	3.5	4.0	medium dark russet skin, nice type	
AF5762-8*	574	651	88	9	83	5	3	1.096	0	0	30	0	0.5	3.5	4.5	nice skin, consistent type, slight apical alligator hide	
AAF16069-2	572	762	75	14	65	10	11	1.081	0	0	40	0	0.5	3.0	4.0	bottlenecks, points, heavier dark russet skin, variable type	
A18503-2STO	569	679	84	14	76	8	2	1.096	10	0	0	0	1.5	2.0	4.5	flat oval to oblong type, nice uniform skin	
AOR15152-2"	566	882	65	3	35	30	32	1.079	0	20	0	0	1.0	3.5	4.5	poor type and appearance, lighter skin	
AF6377-10	551	590	93	7	58	35	0	1.071	0	10	0	0	0.0	2.0	2.5	nice skin and appearance, trace sheep nose, slight sticky stolons	
A13085-2"	550	735	74	10	69	5	16	1.070	0	20	0	0	1.0	3.5	3.0	bottlenecks, medium russet skin, less uniform type	
A15190-8CR"	541	747	73	10	60	13	17	1.081	0	20	0	0	0.5	3.5	3.5	tubular, light russet skin, bottlenecks	
A13072-7*	540	580	93	5	61	32	2	1.077	0	30	40	0	0.5	3.5	3.5	nice appearance, heavier russet skin, blocky type	
A15258-1	537	644	83	10	71	12	7	1.063	0	0	0	0	0.5	2.5	2.5	slight skinning, light russet skin, tubular type	
AAF14025-2"	537	880	61	20	55	6	19	1.100	0	0	30	0	1.5	4.0	5.0	non uniform tubular type, knobs, lighter russet skin	
AF6446-17	524	636	83	8	62	21	9	1.078	20	0	0	0	1.0	3.5	2.5	large tubers, attractive blocky type	
A10861-3CR	523	633	83	14	64	19	3	1.075	20	20	50	0	0.5	3.0	4.0	nice light skin, pointed tubers, flat to oval type	
AOR15194-2	521	617	85	7	67	18	8	1.082	0	10	0	0	1.0	3.5	4.0	prominent eyes, nice russet skin, misshapen pickouts	
A09136-9LB"	502	611	82	9	54	28	9	1.094	0	10	10	0	1.5	4.0	4.5	light to medium russet, poor appearance	
A18679-3STO	502	754	66	5	51	15	29	1.082	10	0	20	0	1.0	2.5	5.0	severe knobs, bottlenecks, misshapen pickouts	
A15254-5"	487	741	66	9	55	11	25	1.077	0	0	20	0	1.0	3.5	4.0	bottlenecks, misshapen and pointed tubers	
A13091-5	482	549	87	10	63	24	3	1.080	0	40	0	0	1.0	4.0	2.5	growth cracks, moderate rot, nice russet skin	
COAF16253-1"	471	796	60	4	39	21	36	1.078	0	0	0	0	1.0	4.0	3.0	bottlenecks, knobs, not uniform	

A18070-6	466	598	78	17	72	6	5	1.073	0	20	0	0	1.0	3.0	3.0	growth cracks, nice medium russet skin, smaller type
A13038-3	464	573	81	3	60	21	16	1.083	0	10	0	0	0.5	2.5	4.0	knobs, misshapen tubers, medium russet skin
AFA6346-2	445	737	60	12	60	0	28	1.076	0	10	0	0	1.5	2.0	4.5	growth cracks, poor type and appearance
OR170058-20	438	528	83	14	78	5	3	1.084	0	10	0	0	0.5	4.0	2.0	light russet skin, flat oval type
A15094-11"	434	754	57	17	54	3	26	1.066	0	20	0	0	0.0	3.5	4.5	misshapen tubers, light skin, growth crack, knobs
A16137-6STO	430	547	79	12	66	13	9	1.074	0	20	20	0	0.5	3.0	2.5	flat to oblong type, medium russet skin, slight skinning
OR11222-4	408	918	45	6	29	16	49	1.072	0	20	0	0	0.5	4.0	3.0	
A15028-2TE	399	507	79	15	70	9	6	1.074	0	0	0	0	0.5	2.5	2.0	medium russet skin, variable type, smaller tubers
A18072-7"	397	663	60	24	55	5	16	1.058	0	10	0	0	2.0	3.0	4.0	growth crack, alligator hide, light skin
A15101-2PMTV	358	431	83	13	70	13	4	1.078	0	0	0	0	0.0	2.5	2.5	nice uniform dark russet skin, round to oval type, smaller tubers
A15038-2"	338	530	63	14	53	10	23	1.063	0	10	0	0	0.5	3.5	3.5	heat knobs, heat sprouting, rot
A15169-6"	324	462	70	17	58	12	13	1.083	10	0	10	0	0.5	3.0	4.5	knobs, poor type
CO15016-1RUsto	280	523	54	31	51	3	15	1.069	0	0	0	0	0.5	2.5	3.5	nice skin, lots of knobs and bottlenecks, small
<b>Russet Burbank</b>	<b>266</b>	<b>779</b>	<b>34</b>	<b>27</b>	<b>32</b>	<b>2</b>	<b>39</b>	<b>1.080</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>4.0</b>	<b>4.0</b>	<b>tubular, light skin, severe misshapen tubers</b>
A15041-11TE"	177	251	71	27	67	4	2	1.074	0	0	0	0	0.5	2.5	4.0	small type, medium russet skin
AAF15169-3	837	998	84	4	52	32	12	1.084	0	0	0	0	1.0	4.0	3.0	silver scurf or black dot, misshapen pickouts, knobs
<b>Russet Norkotah</b>	<b>797</b>	<b>880</b>	<b>91</b>	<b>6</b>	<b>60</b>	<b>31</b>	<b>3</b>	<b>1.077</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>0.5</b>	<b>3.5</b>	<b>2.5</b>	<b>alligator hide</b>
NDAF1791-3	773	889	87	8	74	13	5	1.093	0	20	0	0	1.0	3.0	4.5	pointed tubers, variable type, sticky stolons
<b>Silverton Russet</b>	<b>763</b>	<b>850</b>	<b>90</b>	<b>5</b>	<b>66</b>	<b>24</b>	<b>5</b>	<b>1.076</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>1.0</b>	<b>4.0</b>	<b>3.5</b>	<b>medium russet skin</b>
AF6997-1	733	831	88	11	80	8	1	1.089	10	10	0	0	0.5	3.0	3.5	uniform type, black dot or silver scurf
MN19AOR16061-007*	722	864	83	10	71	12	7	1.077	0	10	50	0	0.5	3.0	4.0	dark russet skin, misshapen pickouts, nice appearance
NDAF1791-6	666	800	83	10	69	14	7	1.090	0	10	30	0	1.5	3.0	3.0	flat oblong to long type, rot, pointed tubers
AAF15402-1	659	776	85	3	39	46	12	1.070	0	0	30	0	1.0	2.5	3.0	growth crack, bottlenecks, less uniform
AF6750-3"	614	727	84	6	59	25	10	1.067	0	0	0	0	1.0	2.5	3.0	rot, heavy russet skin, bottlenecks, growth crack
AAF15193-9	571	663	86	10	68	18	4	1.077	0	20	0	0	1.0	3.5	2.0	slight soft rot, flat blocky oblong type
A12304-1STO	569	736	77	17	71	6	6	1.079	0	20	40	0	1.0	2.5	3.5	flat oblong type, pointed tubers, variable skin
NDAF1791-1	569	706	81	12	74	7	7	1.095	0	10	0	0	0.0	3.0	3.5	variable type, medium to dark russet skin
AF7015-2	563	637	89	4	48	41	7	1.067	0	0	40	0	0.5	2.5	3.0	large blocky type, moderate skinning
AF7001-5"	559	670	83	14	72	11	3	1.079	0	10	0	0	0.5	3.0	3.0	lighter skin, flat oblong type, slight points
Umatilla	555	921	60	15	57	3	25	1.086	20	0	0	0	0.0	3.5	3.5	nice skin, severe points and knobs
A11381-3	535	636	84	9	61	23	7	1.082	0	10	0	0	1.0	3.0	3.5	round type, medium russet skin, heat knobs
A13036-12"	530	680	78	10	69	9	12	1.077	0	20	0	0	0.5	4.0	4.5	apical sprouting, variable type
MN19CO17021-003"	525	674	78	8	54	24	14	1.074	40	0	30	0	1.0	3.5	4.0	growth crack, light russet skin, tubular type
AAF15291-5	522	726	72	16	65	7	12	1.075	10	0	30	0	1.0	4.0	3.5	variable type
AF6298-2*	509	620	82	13	77	5	5	1.088	0	10	10	0	0.5	2.5	2.5	smaller blocky oblong type, nice medium russet skin
AAF15193-6"	498	803	62	6	47	15	32	1.069	0	0	0	0	1.5	4.0	2.5	misshapen tubers, some rot, severe points and growth cracks
A15051-1TE"	485	641	75	16	73	2	9	1.083	10	10	20	0	0.0	3.0	5.0	alligator hide, bottlenecks, variable shape
AF6997-3"	471	734	64	12	55	9	24	1.079	0	20	30	0	1.0	3.0	2.5	knobs, severe bottlenecks, tubular type
AAF15247-3*	452	542	83	9	62	21	8	1.063	0	0	0	0	0.5	3.0	2.5	dark russet skin, nice appearance
A12169-5"	432	589	73	8	50	23	19	1.078	0	20	0	0	1.5	2.5	2.5	growth cracks, knobs, flat pointed type
ATX18679-2RU	428	697	62	33	61	1	5	1.097	0	0	0	0	0.5	3.0	5.0	alligator hide, misshapen tubers
MN19AOR17020-009*	394	463	85	10	59	26	5	1.079	0	10	0	0	0.0	2.0	2.0	attractive russet skin, blocky oblong type
AF7008-1	394	518	76	22	64	12	2	1.066	0	0	30	0	0.0	3.0	3.0	medium russet skin, blocky oblong type, trace knobs
AF6989-3	391	524	75	14	72	3	11	1.090	0	10	10	0	0.0	2.0	2.5	knobs, flat oblong type
COAF16090-14"	391	571	69	10	62	7	21	1.064	0	0	30	0	1.5	3.0	2.5	pointed tubular type, knobs
NDAF1762-7	361	546	66	26	65	1	8	1.083	0	30	40	0	0.5	3.0	3.0	medium russet type, pointed tubers, not uniform
MN19CO17072-005"	328	453	73	23	67	6	4	1.078	0	0	30	0	0.5	3.0	3.0	small round type
CO14371-3RU	192	379	51	35	51	0	14	1.062	0	20	0	0	0.5	3.0	4.5	variable type, growth cracks
<b>MEAN</b>	<b>553</b>	<b>712</b>	<b>78</b>	<b>11</b>	<b>62</b>	<b>16</b>	<b>11</b>	<b>1.080</b>	<b>4</b>	<b>10</b>	<b>12</b>	<b>0</b>	<b>0.8</b>	<b>3.2</b>	<b>3.5</b>	

**<sup>1</sup>SIZE****Russets**

Bs: < 4 oz  
 As: 4 - 10 oz  
 OV: > 10 oz  
 PO: Pickouts

**<sup>2</sup>SPECIFIC GRAVITY**

Data not replicated

**<sup>3</sup>RAW TUBER QUALITY****(percent of tubers out of 10)**

HH: Hollow Heart  
 VD: Vascular Discoloration  
 IBS: Internal Brown Spot  
 BC: Brown Center

**<sup>4</sup>COMMON SCAB RATING**

0.0: Complete absence of surface or pitted lesions  
 1.0: Presence of surface lesions  
 2.0: Pitted lesions on tubers, though coverage is low  
 3.0: Pitted lesions common on tubers  
 4.0: Pitted lesions severe on tubers  
 5.0: More than 50% of tuber surface area covered in pitted lesions

**FIELD DATA**

Planting Date	4/27/23
Vine Kill Date	9/1/23
Harvest Date	9/21/23
Days (planting to vine kill)	127
Days (planting to harvest)	147
GDD <sub>40</sub> MAWN Station	Constantine
GDD <sub>40</sub> (planting to vine kill)	3448
Seed Spacing	10"

**<sup>5</sup>VINE VIGOR RATING**

Date: 6/12/23

Rating 1-5

1: Slow emergence  
 5: Early emergence (vigorous vine, some flowering)

**<sup>6</sup>VINE MATURITY RATING**

Date: 8/17/23

Rating 1-5

1: Early (vines completely dead)  
 5: Late (vigorous vines, some flowering)

Varieties below the dashed line are added lines

\*High visual appeal during grading  
 "Poor visual appeal during grading

# 2023 Replicated Russet Potato Variety Trial

## Walther Farms Norkotah Fertility Trial

Planting: 4/27/23 Vine Kill: 9/1/23 Harvest: 9/21/23

GDD<sub>40</sub>: 3448

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>3</sup> (%)					COMMON SCAB RATING <sup>4</sup>	VINE VIGOR <sup>5</sup>	VINE MATURITY <sup>6</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	HH	VD	IBS	BC				
Rickey Russet	711	827	86	8	59	27	6	1.069	0	0	37	0	0.0	3.5	3.2	apical knobs, heat sprouts, growth crack, nice skin
A12327-5VR	677	841	81	3	52	29	16	1.079	10	0	0	0	0.0	3.7	4.2	moderate alligator hide and skin cracking
A09086-1LB	670	792	84	11	72	12	5	1.091	0	0	0	0	1.8	3.8	4.7	light russet skin, Burbank appearance
Vanguard	665	787	84	13	77	7	3	1.068	0	7	0	0	0.7	3.3	2.7	attractive skin and type, smaller
Reveille Russet	663	748	89	5	58	31	6	1.069	3	3	17	0	0.2	2.8	3.3	slight alligator hide, blocky type, trace skinning
A11175-12TE	635	721	88	7	70	18	5	1.078	3	7	0	0	0.5	3.0	3.2	poor appearance, deep eyes, light skin
A10071-1*	624	720	87	8	72	15	5	1.071	7	3	0	0	0.3	5.0	3.7	dark russet skin, nice appearance, trace pointed tubers
AC12090-3RU*	619	725	85	13	77	8	2	1.077	10	0	0	0	0.0	3.0	2.7	attractive dark netted skin, oblong type
<b>Silverton Russet</b>	<b>619</b>	<b>698</b>	<b>89</b>	<b>6</b>	<b>59</b>	<b>30</b>	<b>5</b>	<b>1.074</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0.8</b>	<b>4.5</b>	<b>4.0</b>	<b>growth crack, prominent eyes, medium russet skin</b>
AF6377-10*	596	640	93	5	46	47	2	1.071	0	10	0	0	0.0	2.3	2.0	blocky oblong type, uniform nice appearance
A09136-9LB	596	686	87	4	40	47	9	1.089	0	7	0	0	0.8	4.7	4.0	variable appearance, moderate skinning
A08433-4STO*	594	744	80	14	76	4	6	1.079	0	7	0	0	0.5	3.8	4.8	nice appearance, trace flat and pointed tubers
Portage Russet	591	736	80	13	73	7	7	1.093	0	10	0	0	0.7	3.2	3.5	sticky stolons, flat oblong type, pointed tubers
AF6377-12	591	667	89	10	76	13	1	1.076	0	10	7	0	0.7	3.3	2.8	blocky oblong type, slight skinning, nice appearance
<b>Russet Norkotah</b>	<b>586</b>	<b>694</b>	<b>85</b>	<b>9</b>	<b>61</b>	<b>24</b>	<b>6</b>	<b>1.072</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0.5</b>	<b>3.5</b>	<b>3.0</b>	<b>darker skin, moderate alligator hide, misshapen pickouts</b>
AF5521-1	577	621	93	3	59	34	4	1.077	3	3	7	0	1.0	4.2	2.2	pointed tubers, variable type
AF6340-6	573	658	87	10	72	15	3	1.072	0	7	7	0	0.8	3.0	3.5	severe silver scurf, poor appearance
Umatilla	553	760	73	15	68	5	12	1.088	3	3	0	3	0.5	3.7	3.8	pointed tubers, misshapen pickouts, growth crack
AF5736-16	552	597	92	6	72	20	2	1.089	0	13	0	0	0.3	3.0	3.8	blocky oblong type, black dot or scurf
A15057-2TE*	544	637	86	7	56	30	7	1.071	13	3	3	0	0.7	4.2	2.8	blocky oblong to long type, nice appearance
W13008-1RUS	505	646	78	8	53	25	14	1.076	0	7	0	0	0.7	4.5	3.0	oblong type, pointed tubers, sticky stolons
A13074-1TE	474	646	74	8	58	16	18	1.079	0	7	0	3	0.2	4.3	4.0	apical growth crack and alligator hide
CO13003-1RU*	440	546	80	18	74	6	2	1.077	20	3	0	13	0.0	3.0	3.5	nice uniform blocky type, consistent skin
A11737-1LB	430	543	79	14	66	13	7	1.080	3	3	3	0	1.0	3.5	3.5	misshapen tubers, variable type, pointed tubers
COTX10080-2Ru	416	498	83	11	66	17	6	1.074	0	3	0	0	0.5	3.7	3.5	darker skin, misshapen tubers, alligator hide
<b>Goldrush</b>	<b>350</b>	<b>743</b>	<b>47</b>	<b>8</b>	<b>36</b>	<b>11</b>	<b>45</b>	<b>1.064</b>	<b>0</b>	<b>7</b>	<b>3</b>	<b>0</b>	<b>0.2</b>	<b>3.0</b>	<b>3.5</b>	<b>variable type, many misshapen tubers, growth crack</b>
CO14371-3RU	350	521	67	25	62	5	8	1.071	0	7	0	0	0.5	3.5	2.8	smaller type, apical growth crack, alligator hide
CO15016-1RUsto	333	574	57	27	53	4	16	1.073	7	7	0	0	0.0	2.8	3.2	attractive dark skin, heat sprouts, bottlenecks
<b>MEAN</b>	<b>555</b>	<b>679</b>	<b>82</b>	<b>10</b>	<b>63</b>	<b>19</b>	<b>8</b>	<b>1.077</b>	<b>3</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>0.5</b>	<b>3.6</b>	<b>3.4</b>	

<sup>1</sup>**SIZE**  
Russets  
Bs: < 4 oz  
As: 4 - 10 oz  
OV: > 10 oz  
PO: Pickouts

<sup>2</sup>**SPECIFIC GRAVITY**  
Data is replicated

<sup>3</sup>**RAW TUBER QUALITY**  
(percent of tubers out of 10)  
HH: Hollow Heart  
VD: Vascular Discoloration  
IBS: Internal Brown Spot  
BC: Brown Center

<sup>4</sup>**COMMON SCAB RATING**  
0.0: Complete absence of surface or pitted lesions  
1.0: Presence of surface lesions  
2.0: Pitted lesions on tubers, though coverage is low  
3.0: Pitted lesions common on tubers  
4.0: Pitted lesions severe on tubers  
5.0: More than 50% of tuber surface area covered in pitted lesions

<sup>5</sup>**VINE VIGOR RATING**  
Date: 6/12/23  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vine, some flowering)

**FIELD DATA**  
Planting Date 4/27/23 <sup>6</sup>VINE MATURITY RATING \*High visual appeal during grading  
Vine Kill Date 9/1/23 Date: 8/17/23  
Harvest Date 9/21/23 Rating 1-5  
Days (planting to vine kill) 127 1: Early (vines completely dead)  
Days (planting to harvest) 147 5: Late (vigorous vines, some flowering)  
GDD<sub>40</sub> MAWN Station Constantine  
GDD<sub>40</sub> (planting to vine kill) 3448  
Seed Spacing 10"