

# **2018 Potato Outreach Program On-Farm Variety Trials**

## **Data Summary: Michigan Chip Processing Trials**

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## 2018 Michigan Statewide Chip Processing Potato Variety Trials Overall Averages- Fourteen Locations

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>							RAW TUBER QUALITY <sup>4</sup> (%)					COMMON SCAB RATING <sup>5</sup>	SED SCORE <sup>6</sup>	VINE VIGOR <sup>7</sup>	VINE MATURITY <sup>8</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	OTF CHIP SCORE <sup>3</sup>	HH	VD	IBS	BC						
MSZ096-3 <sup>l</sup>	731	787	93	6	93	0	1	1.081	1.5	0	10	0	0	1.5	-	1.5	5.0	some flattened tubers	
MSZ120-4 <sup>l</sup>	530	587	90	10	90	0	0	1.086	1.0	0	20	0	0	0.0	-	1.0	4.5	bright skin	
MSZ052-2 <sup>ghimn</sup>	524	557	95	3	85	10	2	1.070	1.3	0	5	36	4	0.6	0.3	3.2	3.0	uniform round tuber type, darker netted skin	
<b>Atlantic<sup>begm</sup></b>	<b>485</b>	<b>549</b>	<b>89</b>	<b>2</b>	<b>74</b>	<b>15</b>	<b>9</b>	<b>1.078</b>	<b>1.0</b>	<b>35</b>	<b>3</b>	<b>25</b>	<b>0</b>	<b>1.0</b>	<b>0.4</b>	<b>2.0</b>	<b>4.1</b>	<b>sl alligator hide, GC and misshapen POs</b>	
AC03452-2W <sup>acefhijm</sup>	480	573	84	11	82	2	5	1.065	1.1	5	23	1	0	1.3	0.2	2.9	3.4	misshapen POs, light skin finish	
AF5429-3 <sup>l</sup>	476	520	91	8	90	1	1	1.073	1.0	7	10	0	3	2.5	0.5	3.0	3.0	attractive round tuber type	
MSW485-2 <sup>abdefghijm</sup>	473	523	90	8	87	3	2	1.079	1.4	10	23	8	3	0.4	1.0	2.6	4.2	sl alligator hide, attractive bright white flesh	
MSZ062-10 <sup>abefghijm</sup>	462	507	91	5	87	4	4	1.076	1.4	3	18	1	3	0.2	0.7	2.5	2.9	uniform skin finish, sl alligator hide	
BNC182-5 <sup>abcegi</sup>	453	503	91	6	84	7	3	1.073	1.3	13	12	4	1	0.3	1.0	2.7	4.1	mod skin flaking, sl alligator hide	
MSV030-4 <sup>abdefghijklm</sup>	434	497	88	9	86	2	3	1.081	1.5	1	15	1	0	0.4	0.4	2.6	3.3	uniform round tuber type, netted skin, sl alligator hide	
CO10076-4W <sup>j</sup>	432	515	84	16	84	0	0	1.074	1.5	0	40	0	0	0.0	-	2.5	3.5		
<b>Snowden<sup>bdefhijm</sup></b>	<b>431</b>	<b>477</b>	<b>91</b>	<b>7</b>	<b>86</b>	<b>5</b>	<b>2</b>	<b>1.077</b>	<b>1.2</b>	<b>6</b>	<b>19</b>	<b>5</b>	<b>0</b>	<b>1.6</b>	<b>0.5</b>	<b>2.7</b>	<b>3.0</b>	<b>netted skin, tr alligator hide, misshapen POs</b>	
NY162 <sup>abchijm</sup>	427	478	88	8	85	3	4	1.076	1.2	2	6	3	1	1.1	0.4	2.1	3.1	sl alligator hide, points and bottlenecking in POs	
B2904-2 <sup>bcefhijm</sup>	425	499	86	6	82	4	8	1.077	1.2	24	23	1	1	0.7	0.7	2.5	3.3	mod GC, deep stem ends, bottlenecking and misshapen POs	
Niagara (NY152) <sup>acdtkhjn</sup>	421	485	87	11	87	0	2	1.076	1.4	14	12	0	1	0.8	0.3	2.3	2.8	uniform round tuber type, sl alligator hide	
Mega Chip <sup>h</sup>	409	458	90	3	88	2	7	1.081	1.0	0	40	0	0	0.0	0.4	3.0	2.0	mod alligator hide, misshapen POs	
MSZ219-14 <sup>hjn</sup>	408	444	90	8	89	1	2	1.073	1.2	24	10	4	2	0.2	0.9	2.5	3.3	sl alligator hide, GC in POs	
MSZ242-7 <sup>gjm</sup>	406	468	86	7	79	7	7	1.085	1.3	0	10	3	0	0.2	0.5	1.8	3.8	tr alligator hide, knobs and misshapen POs	
MSY156-2 <sup>l</sup>	404	452	90	10	90	0	0	1.079	1.0	0	10	0	0	0.0	-	1.5	3.0	bright skin, attractive round tuber profile	
ND7519-1 <sup>l</sup>	394	478	82	18	82	0	0	1.082	2.0	0	23	0	0	0.7	0.2	2.5	3.5	tr greening and alligator hide, smooth skin	
MSZ219-46 <sup>acefhijm</sup>	389	452	86	4	84	2	10	1.069	1.7	0	11	0	0	0.2	1.2	2.3	2.9	oblong tuber type, mod alligator hide	
MSW044-1 <sup>abdefghijm</sup>	383	453	85	14	83	2	1	1.081	1.2	7	10	3	1	0.3	0.4	2.5	3.4	bright skin, uniform round tuber type	
B2869-29 <sup>bcefhijm</sup>	379	445	85	12	84	1	3	1.081	1.2	1	11	2	2	0.7	0.5	2.6	2.9	sl alligator hide, misshapen POs	
MSZ222-19 <sup>acefhijm</sup>	372	433	86	8	82	4	6	1.077	1.4	13	1	3	0	0.1	0.4	2.5	3.1	mod alligator hide, deep apical eyes, GC in POs	
MSZ022-16 <sup>hin</sup>	369	428	86	9	85	1	5	1.074	1.5	4	9	39	6	0.2	0.6	3.1	3.1	sl alligator hide, mod skinning, misshapen POs	
MSZ118-8 <sup>abefhim</sup>	367	450	82	9	74	8	9	1.070	1.3	5	7	13	9	0.4	0.7	2.3	3.4	sl alligator hide, misshapen POs	
W9968-5 <sup>abcefhijm</sup>	367	461	79	7	74	5	14	1.080	1.3	10	12	8	2	0.8	1.2	2.3	3.7	netted skin, many misshapen tubers, tr alligator hide	
MSZ242-9 <sup>bcgjn</sup>	365	440	82	9	77	5	9	1.080	1.2	0	7	23	0	0.4	0.4	2.4	3.3	sl alligator hide, deep apical eyes, GC in POs	
MSV498-1 <sup>gin</sup>	358	390	92	6	90	2	2	1.067	1.2	7	14	0	2	0.1	1.2	2.4	3.4	netted skin, tr alligator hide, oblong tubers	
MSZ219-13 <sup>abcefhijn</sup>	358	387	92	4	89	3	4	1.073	1.6	9	11	1	1	0.2	0.5	2.2	4.0	heavy netted skin type, tr alligator hide, GC in POs	
BNC311-4 <sup>bcegi</sup>	357	458	78	10	74	4	12	1.072	1.0	7	1	0	0	0.7	0.6	2.5	3.4	oval to oblong tuber type, GC and apical heat knobs	
CO02321-4W <sup>chjn</sup>	354	409	86	12	86	0	2	1.080	1.1	11	11	0	1	1.5	0.6	3.4	2.7	mod alligator hide, greening in POs	
MSZ242-13 <sup>acefhijm</sup>	353	401	87	6	84	3	7	1.087	1.6	6	3	1	0	0.3	0.5	2.5	3.5	tr GC, netted skin type	
MSZ248-10 <sup>j</sup>	346	385	90	9	90	0	1	1.079	1.0	0	0	0	0	1.5	-	1.5	1.5		
MSV111-2 <sup>hn</sup>	341	442	77	21	77	0	2	1.066	1.5	2	13	8	0	0.1	1.7	2.3	3.6	misshapen POs, sl alligator hide	
<b>Lamoka<sup>abchiji</sup></b>	<b>334</b>	<b>383</b>	<b>87</b>	<b>7</b>	<b>82</b>	<b>5</b>	<b>6</b>	<b>1.077</b>	<b>1.3</b>	<b>4</b>	<b>23</b>	<b>1</b>	<b>0</b>	<b>0.7</b>	<b>0.5</b>	<b>2.3</b>	<b>2.8</b>	<b>pear shaped and misshapen POs</b>	
AF5040-8 <sup>acefhijm</sup>	315	378	82	13	80	2	5	1.081	1.5	3	18	0	0	0.8	0.5	2.9	2.7	tr alligator hide, cream colored flesh, misshapen POs	
<b>Pike<sup>cdehi</sup></b>	<b>311</b>	<b>364</b>	<b>84</b>	<b>12</b>	<b>84</b>	<b>0</b>	<b>4</b>	<b>1.079</b>	<b>1.1</b>	<b>8</b>	<b>18</b>	<b>2</b>	<b>0</b>	<b>0.6</b>	<b>0.4</b>	<b>2.6</b>	<b>3.0</b>	<b>bright skin finish, tr alligator hide</b>	
Manistee <sup>acefhijn</sup>	307	345	89	8	89	0	3	1.076	1.3	10	10	9	1	0.9	0.4	2.6	2.3	flat stem end, mod skinning	
NDA081453CAB-2C <sup>l</sup>	298	337	89	9	89	0	2	1.076	1.0	0	10	3	17	0.0	0.4	2.5	2.5	larger tuber size profile, light skin	
CO02033-1W <sup>acefhijm</sup>	294	418	70	19	70	0	11	1.081	1.2	11	16	1	1	0.8	0.5	2.9	3.2	smaller uniform tuber size profile, sl alligator hide	
MSZ219-1 <sup>actijn</sup>	279	316	81	12	80	1	7	1.073	1.7	1	11	15	3	0.5	0.7	2.8	2.8	sl alligator hide, darker netted skin	
Mackinaw (MSX540-4) <sup>abdefghijklm</sup>	279	344	80	11	79	1	9	1.079	1.2	4	11	0	0	0.6	0.6	1.9	3.3	sl alligator hide, attractive tuber shape and size	
AC00206-2W <sup>bcefhijm</sup>	262	343	75	19	73	2	6	1.068	1.1	12	3	9	0	1.4	0.2	2.9	2.6	mod alligator hide, sl skinning	
Hodag (W5955-1) <sup>cdikn</sup>	250	295	85	6	80	5	9	1.075	1.5	28	11	6	7	0.6	0.7	2.4	3.3	sl skin flaking, GC in POs	
NDTX081648CB-13W <sup>l</sup>	230	311	73	25	73	0	2	1.076	1.5	3	23	0	3	1.0	0.6	3.0	2.5	some tubers with pink eyes	
AC05153-1W <sup>acefhijm</sup>	203	315	64	33	64	0	3	1.072	1.3	0	3	0	0	1.0	0.2	3.0	2.0	tr alligator hide, small uniform tuber type	
MSZ022-7 <sup>n</sup>	182	281	65	18	65	0	17	1.064	1.5	0	7	43	0	0.0	0.3	3.3	3.3	severe GC, mod alligator hide	
<b>MEAN</b>	<b>379</b>	<b>442</b>	<b>85</b>	<b>10</b>	<b>82</b>	<b>3</b>	<b>5</b>	<b>1.076</b>	<b>1.3</b>	<b>6</b>	<b>13</b>	<b>6</b>	<b>2</b>	<b>0.6</b>	<b>0.6</b>	<b>2.5</b>	<b>3.2</b>		

**2018 CHIP VARIETY TRIAL SITES**

- <sup>a</sup>4-L Farms, Allegan County
- <sup>b</sup>Black Gold Fresh Trial, St. Joseph County
- <sup>c</sup>County Line Farms, Allegan County
- <sup>d</sup>Crawford Farms, Montcalm County
- <sup>e</sup>Hampton Farms Fresh Trial, Bay County
- <sup>f</sup>Hampton Farms, Bay County
- <sup>g</sup>Lennard Ag. Co. Fresh Trial, St. Joseph County
- <sup>h</sup>Lennard Ag. Co, St. Joseph County
- <sup>i</sup>Main Farms, Montcalm County
- <sup>j</sup>MSU Box Bin Trial, Montcalm County
- <sup>k</sup>Sandyland Farms, Montcalm County
- <sup>l</sup>Sandyland Farms SNAC Trial, Montcalm County
- <sup>m</sup>Walther Farms Fresh Trial, St. Joseph County
- <sup>n</sup>Walther Farms, St. Joseph County

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

Bs: < 1 7/8"  
As: 1 7/8" - 3 1/4"  
OV: > 3 1/4"  
PO: Pickouts

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

Data not replicated

**<sup>3</sup>OUT OF**

**(SNAC Scale)**

Ratings: 1 - 5  
1: Excellent  
5: Poor

**<sup>4</sup>RAW**

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

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

**<sup>5</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

**<sup>6</sup>SED (STEM END DEFECT) SCORE**

0: No stem end defect  
1: Trace stem end defect  
2: Slight stem end defect  
3: Moderate stem end defect  
4: Severe stem end defect  
5: Extreme stem end defect

**<sup>7</sup>VINE VIGOR RATING**

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

**<sup>8</sup>VINE MATURITY RATING**

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

# 2018 Storage Chip Processing Potato Variety Trial

## 4-L Farms

Planting: 5/30/18 Vine Kill: 9/12/18 Harvest: 9/26/18  
GDD<sub>40</sub>: 3294

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>4</sup> (%)					COMMON SCAB RATING <sup>5</sup>	SED SCORE <sup>6</sup>	VINE VIGOR <sup>7</sup>	VINE MATURITY <sup>8</sup>	COMMENTS	
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	OTF CHIP SCORE <sup>3</sup>	HH	VD	IBS						BC
MSV030-4	652	694	94	5	94	0	1	1.082	1.0	0	0	0	0	0.0	0.5	3.5	4.0	uniform type, nice yield
NY162	519	557	93	6	92	1	1	1.070	1.0	0	0	0	0	0.5	0.3	3.0	4.0	sl alligator hide, uniform tuber type
MSW485-2	504	565	89	11	64	25	0	1.083	1.0	10	0	0	0	0.0	1.1	3.5	4.0	sl alligator hide
AC03452-2W	491	571	86	5	86	0	9	1.068	1.0	10	0	0	0	0.5	0.3	3.5	4.0	deep apical eyes, misshapen POs
MSW044-1	483	542	89	8	89	0	3	1.084	1.5	10	0	0	0	0.0	0.2	3.5	3.0	GC in POs
MSZ219-46	479	513	93	3	87	6	4	1.074	1.5	0	0	0	0	0.0	0.6	3.0	3.0	dark netted skin, non uniform tuber type
MSZ118-8	474	547	87	3	83	4	10	1.076	1.5	10	0	0	0	0.0	0.3	3.0	3.5	sl alligator hide, misshapen and GC in POs
BNC182-5	465	525	88	9	85	3	3	1.077	1.0	0	0	0	0	0.5	1.3	3.0	3.0	
MSZ062-10	401	434	92	6	92	0	2	1.073	1.5	0	0	0	0	0.0	0.8	3.5	3.0	tr rhizoctonia
CO02033-1W	391	535	73	8	73	0	19	1.083	1.0	70	0	10	0	1.0	0.6	3.0	2.5	misshapen, non-uniform, knobs, elongated
MSZ242-13	372	407	92	2	90	2	6	1.088	2.0	10	0	0	0	0.0	0.5	2.5	3.5	tr GC in POs, sl alligator hide
MSZ222-19	369	414	89	4	89	0	7	1.076	1.0	0	0	0	0	0.0	0.1	3.0	2.5	mod alligator hide, non uniform, deep apical eyes
MSZ219-1	368	396	93	2	93	0	5	1.074	1.5	0	0	0	0	0.0	0.2	3.5	3.5	sl alligator hide, dark netted skin, sl deep apical eyes
Manistee	358	391	91	5	91	0	4	1.077	1.5	20	0	0	0	1.5	0.2	3.0	3.0	
Niagara (NY152)	346	391	88	9	88	0	3	1.074	1.5	0	0	0	0	0.5	0.2	3.5	2.5	tr alligator hide, round uniform tubers
MSZ219-13	341	355	96	2	92	4	2	1.072	2.5	0	0	0	0	0.0	0.3	3.0	3.0	mod alligator hide
Mackinaw (MSX540-4)	294	341	86	9	86	0	5	1.074	1.0	10	10	0	0	0.0	0.6	3.0	3.0	mod alligator hide
<b>Lamoka</b>	<b>267</b>	<b>347</b>	<b>77</b>	<b>2</b>	<b>72</b>	<b>5</b>	<b>21</b>	<b>1.078</b>	<b>1.5</b>	<b>20</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0.0</b>	<b>0.4</b>	<b>2.5</b>	<b>3.0</b>	<b>tr alligator hide, overall large, misshapen</b>
AC05153-1W	246	336	73	21	73	0	6	1.073	1.5	0	0	0	0	0.5	0.1	3.0	1.5	
AF5040-8	215	286	75	19	75	0	6	1.076	1.5	0	0	0	0	0.5	0.5	3.5	3.5	tr alligator hide
W9968-5	197	258	76	1	47	29	23	1.090	1.0	30	10	0	0	0.5	0.8	2.0	3.0	poor tuber type and appearance, many POs
<b>MEAN</b>	<b>392</b>	<b>448</b>	<b>87</b>	<b>7</b>	<b>83</b>	<b>4</b>	<b>7</b>	<b>1.077</b>	<b>1.4</b>	<b>10</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0.3</b>	<b>0.3</b>	<b>3.1</b>	<b>3.1</b>	

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

Bs: < 1 7/8"  
As: 1 7/8" - 3 1/4"  
OV: > 3 1/4"  
PO: POs

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

Data not replicated

<sup>3</sup>**OUT OF THE FIELD CHIP COLOR SCORE (SNAC Scale)**

Ratings: 1 - 5  
1: Excellent  
5: Poor

<sup>4</sup>**RAW TUBER QUALITY (percent of tubers out of 10)**

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

<sup>5</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>6</sup>**SED (STEM END DEFECT) SCORE**

0: No stem end defect  
1: Trace stem end defect  
2: Slight stem end defect  
3: Moderate stem end defect  
4: Severe stem end defect  
5: Extreme stem end defect

<sup>7</sup>**VINE VIGOR RATING**

Date: 6/25/18  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vines, some flowering)

<sup>8</sup>**VINE MATURITY RATING**

Date: 8/28/18  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

**FIELD DATA**

Planting date 5/30/18  
Vine Kill Date 9/12/18  
Harvest Date 9/26/18  
Days (planting to vine kill) 105  
Days (planting to harvest) 119  
GDD<sub>40</sub> MAWN Station Allegan  
GDD<sub>40</sub> (planting to vine kill) 3294  
Seed Spacing 10"  
Row Width 34"  
Harvest Length 23'

# 2018 Fresh Chip Processing Potato Variety Trial

## Black Gold Farms

Planting: 5/2/18 Vine Kill: 8/24/18 Harvest: 9/4/18

GDD<sub>40</sub>: 3445

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>						RAW TUBER QUALITY <sup>4</sup> (%)						COMMON SCAB RATING <sup>5</sup>	SED SCORE <sup>6</sup>	VINE VIGOR <sup>7</sup>	VINE MATURITY <sup>8</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	OTF CHIP SCORE <sup>3</sup>	HH	VD	IBS	BC						
MSW485-2	731	802	91	4	88	3	5	1.076	2.0	60	0	0	10	0.0	0.8	2.0	5.0	tr alligator hide, sl misshapen tubers	
MSZ062-10	627	683	91	2	71	20	7	1.072	1.5	10	0	0	0	0.0	0.7	1.5	3.5	tr alligator hide, sheepnosing, sily misshapen tubers	
<b>Snowden</b>	<b>612</b>	<b>651</b>	<b>94</b>	<b>2</b>	<b>73</b>	<b>21</b>	<b>4</b>	<b>1.070</b>	<b>1.0</b>	<b>10</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>2.5</b>	<b>0.5</b>	<b>2.0</b>	<b>4.0</b>	<b>heavy netted skin type, mishapen tubers, sl sheepnosing</b>	
W9968-5	542	638	85	3	73	12	12	1.080	1.0	20	20	10	0	0.0	0.6	2.5	4.0	heavy netted skin type, 4 tubers with black leg, mishapen tubers	
BNC182-5	515	568	91	3	73	18	6	1.064	1.5	30	20	0	10	0.0	1.6	2.0	3.5	sl sheepnosing	
MSV030-4	512	561	92	2	78	14	6	1.075	2.0	0	0	0	0	0.0	0.3	1.5	3.5	sl alligator hide, mod growth crack, chips are off color	
MSZ242-9	495	586	84	3	67	17	13	1.071	1.0	0	10	60	0	0.0	0.5	2.0	3.5	tr alligator hide	
<b>Atlantic</b>	<b>449</b>	<b>557</b>	<b>80</b>	<b>3</b>	<b>61</b>	<b>19</b>	<b>17</b>	<b>1.071</b>	<b>1.0</b>	<b>40</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>2.0</b>	<b>0.9</b>	<b>1.5</b>	<b>3.5</b>	<b>mod growth crack</b>	
<b>Lamoka</b>	<b>446</b>	<b>526</b>	<b>85</b>	<b>1</b>	<b>50</b>	<b>35</b>	<b>14</b>	<b>1.070</b>	<b>1.0</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0.4</b>	<b>1.0</b>	<b>3.5</b>	<b>mod alligator hide, sl sheepnosing and pear shaped tubers</b>	
BNC311-4	435	549	79	5	72	7	16	1.071	1.0	0	0	0	0	0.0	1.2	2.0	4.0	blocky tuber type, tr alligator hide, mod growth crack, sl sheepnosing	
B2869-29	426	512	84	6	78	6	10	1.079	1.0	0	20	0	0	0.0	0.8	2.0	3.0	sl mishapen tubers	
NY162	409	454	90	6	74	16	4	1.074	1.0	20	20	0	0	0.0	0.2	1.0	4.0	round to oval tuber shape, sl growth crack	
MSZ219-13	393	453	87	1	70	17	12	1.065	1.0	10	0	0	0	0.0	0.2	1.5	4.5	tr alligator hide, uniform tuber type, heavy netted skin type	
B2904-2	379	506	75	4	60	15	21	1.066	1.0	50	20	0	0	2.0	1.2	2.0	5.0	severely mishapen tubers, mod growth crack	
MSZ118-8	344	447	78	1	48	30	21	1.060	1.5	10	20	0	0	0.0	1.0	1.5	3.0	tr alligator hide, tr sheepnosing, sl mishapen tubers	
MSW044-1	228	248	92	7	92	0	1	1.071	1.0	0	10	0	0	0.0	0.3	1.5	2.0	non-uniform tuber type	
Mackinaw (MSX540-4)	130	162	80	6	77	3	14	1.073	1.0	0	10	0	0	0.0	0.7	1.0	3.0		
AC00206-2W	116	180	65	10	61	4	25	1.057	1.0	0	20	0	0	3.5	0.3	2.0	2.0	multiple tubers with heavy scabbing	
<b>MEAN</b>	<b>433</b>	<b>505</b>	<b>85</b>	<b>4</b>	<b>70</b>	<b>14</b>	<b>12</b>	<b>1.070</b>	<b>1.2</b>	<b>14</b>	<b>13</b>	<b>4</b>	<b>1</b>	<b>0.6</b>	<b>0.7</b>	<b>1.7</b>	<b>3.6</b>		

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

Bs: < 1 7/8"  
As: 1 7/8" - 3 1/4"  
OV: > 3 1/4"  
PO: Pickouts

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

Data not replicated

<sup>3</sup>**OUT OF THE FIELD CHIP COLOR SCORE**

(SNAC Scale)  
Ratings: 1 - 5  
1: Excellent  
5: Poor

<sup>4</sup>**RAW TUBER QUALITY**

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

<sup>5</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>6</sup>**SED (STEM END DEFECT) SCORE**

0: No stem end defect  
1: Trace stem end defect  
2: Slight stem end defect  
3: Moderate stem end defect  
4: Severe stem end defect  
5: Extreme stem end defect

<sup>7</sup>**VINE VIGOR RATING**

Date: 6/1/18  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vines, some flowering)

<sup>8</sup>**VINE MATURITY RATING**

Date: 8/16/18  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

**FIELD DATA**

Planting date 5/2/18  
Vine Kill Date 8/24/18  
Harvest Date 9/4/18  
Days (planting to vine kill) 114  
Days (planting to harvest) 125  
GDD<sub>40</sub> MAWN Station Constantine  
GDD<sub>40</sub> (planting to vine kill) 3445  
Seed Spacing 10"  
Row Width 34"  
Harvest Length 23'

# 2018 Storage Chip Processing Potato Variety Trial

## County Line Farms

Planting:5/30/18 Vine Kill: 9/24/2018 Harvest: 10/23/18  
GDD<sub>40</sub>: 3630

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>4</sup> (%)							COMMON SCAB RATING <sup>5</sup>	SED SCORE <sup>6</sup>	VINE VIGOR <sup>7</sup>	VINE MATURITY <sup>8</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	OTF CHIP SCORE <sup>3</sup>	HH	VD	IBS	BC						
AC03452-2W	485	541	90	9	90	0	1	1.063	1.0	0	20	0	0	3.5	0.3	3.0	3.0	very light skin	
B2904-2	433	463	93	5	93	0	2	1.075	1.0	50	60	0	0	2.0	0.6	2.5	3.0		
MSW485-2	393	439	90	9	90	0	1	1.081	1.0	10	70	0	0	0.0	1.9	2.0	4.0	mod to severe alligator hide, uniform tuber type	
BNC182-5	368	412	89	10	86	3	1	1.076	1.5	30	60	0	0	1.0	1.7	3.0	4.5		
W9968-5	356	441	81	9	81	0	10	1.086	2.0	0	0	0	0	1.5	1.9	2.5	4.0	GC, knobs, misshapen in POs. Poor tuber type	
NY162	348	410	85	7	85	0	8	1.076	1.0	0	10	0	0	2.0	0.5	2.0	2.5	misshapen POs, oval to oblong tuber type, mod alligator hide	
MSZ242-13	348	374	93	5	91	2	2	1.085	1.5	0	10	0	0	0.5	0.5	2.5	4.0	tr GC, blocky oval tuber type	
MSZ242-9	344	416	83	6	83	0	11	1.081	1.5	0	10	10	0	0.0	0.3	2.5	3.0	mod alligator hide, severe deep apical eyes in pos	
Manistee	323	350	92	8	92	0	0	1.072	1.0	10	50	0	0	2.5	0.3	2.5	2.5	flat stem end	
B2869-29	322	390	83	15	83	0	2	1.077	1.5	0	10	0	0	2.5	0.6	2.5	2.5		
MSW044-1	319	375	86	13	84	2	1	1.077	1.5	0	10	0	0	0.5	0.6	2.5	3.5	lighter skin type	
Niagara (NY152)	313	363	86	10	86	0	4	1.077	1.5	60	40	0	0	1.5	0.2	2.5	3.0	mod alligator hide,	
MSZ219-46	313	335	93	7	93	0	0	1.067	2.0	0	10	0	0	0.5	2.1	3.0	3.0	oblong, blocky tuber type	
BNC311-4	292	358	82	17	82	0	1	1.075	1.0	20	10	0	0	3.0	0.4	3.0	1.5	sl alligator hide	
CO02321-4W	289	337	86	14	86	0	0	1.082	1.0	40	20	0	0	2.0	0.6	3.0	2.0	severe alligator hide	
AF5040-8	288	342	84	10	84	0	6	1.080	2.0	20	50	0	0	3.0	0.5	3.0	2.5	non uniform tuber type	
<b>Lamoka</b>	<b>287</b>	<b>313</b>	<b>92</b>	<b>8</b>	<b>92</b>	<b>0</b>	<b>0</b>	<b>1.073</b>	<b>1.5</b>	<b>0</b>	<b>70</b>	<b>0</b>	<b>0</b>	<b>1.5</b>	<b>0.9</b>	<b>3.0</b>	<b>2.5</b>	<b>pear shaped</b>	
MSV030-4	284	326	87	13	87	0	0	1.075	2.0	0	40	0	0	0.0	0.7	3.0	3.5	deeper stem end	
<b>Snowden</b>	<b>265</b>	<b>320</b>	<b>83</b>	<b>17</b>	<b>83</b>	<b>0</b>	<b>0</b>	<b>1.074</b>	<b>1.0</b>	<b>20</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>3.0</b>	<b>0.7</b>	<b>3.0</b>	<b>2.0</b>		
Hodag (W5955-1)	249	306	81	6	81	0	13	1.075	1.5	40	40	0	0	0.0	0.9	2.5	3.0	sl alligator hide, misshapen POs	
Mackinaw (MSX540-4)	243	266	91	9	91	0	0	1.077	1.0	20	40	0	0	2.0	0.4	2.0	3.0		
MSZ219-13	242	262	92	3	92	0	5	1.077	1.5	30	50	0	0	0.0	0.6	1.5	5.0	severe alligator hide and GC on apical end, nice skin and type	
AC00206-2W	213	306	70	27	70	0	3	1.064	1.0	0	20	0	0	4.0	0.6	3.0	3.0		
MSZ219-1	209	283	74	4	72	2	22	1.068	1.0	0	30	0	0	0.0	0.1	3.0	2.5	mod alligator hide, knobs and gc in pos	
<b>Pike</b>	<b>174</b>	<b>240</b>	<b>72</b>	<b>27</b>	<b>72</b>	<b>0</b>	<b>1</b>	<b>1.081</b>	<b>1.0</b>	<b>0</b>	<b>70</b>	<b>0</b>	<b>0</b>	<b>1.5</b>	<b>0.5</b>	<b>3.0</b>	<b>2.0</b>	<b>bright skin finish</b>	
MSZ222-19	171	213	80	16	78	2	4	1.075	1.5	60	0	0	0	0.0	0.5	3.0	2.0	sl alligator hide, some flattened tubers	
CO02033-1W	147	312	47	53	47	0	0	1.087	1.0	20	70	0	0	2.5	0.7	3.0	2.0		
AC05153-1W	126	252	50	50	50	0	0	1.068	1.0	0	10	0	0	1.0	0.3	3.0	2.5	tr GC	
<b>MEAN</b>	<b>291</b>	<b>348</b>	<b>83</b>	<b>14</b>	<b>82</b>	<b>0</b>	<b>4</b>	<b>1.076</b>	<b>1.3</b>	<b>15</b>	<b>33</b>	<b>0</b>	<b>0</b>	<b>1.5</b>	<b>0.7</b>	<b>2.7</b>	<b>2.9</b>		

<sup>1</sup>SIZE

Bs: < 1 7/8"  
As: 1 7/8" - 3 1/4"  
OV: > 3 1/4"  
PO: POs

<sup>2</sup>SPECIFIC GRAVITY

Data not replicated

<sup>3</sup>OUT OF THE FIELD CHIP COLOR SCORE

(SNAC Scale)  
Ratings: 1 - 5  
1: Excellent  
5: Poor

<sup>4</sup>RAW TUBER QUALITY

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

<sup>5</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>6</sup>SED (STEM END DEFECT) SCORE

0: No stem end defect  
1: Trace stem end defect  
2: Slight stem end defect  
3: Moderate stem end defect  
4: Severe stem end defect  
5: Extreme stem end defect

<sup>7</sup>VINE VIGOR RATING

Date: 6/25/18  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vines, some flowering)

<sup>8</sup>VINE MATURITY RATING

Date:8/28/18  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

FIELD DATA

Planting date 5/30/18  
Vine Kill Date 9/24/18  
Harvest Date 10/23/18  
Days (planting to vine kill) 117  
Days (planting to harvest) 146  
GDD<sub>40</sub> MAWN Station Allegan  
GDD<sub>40</sub> (planting to vine kill) 3630  
Seed Spacing 10"  
Row Width 34"  
Harvest Length 23'

# 2018 Storage Chip Processing Potato Variety Trial

## Crawford Farms

Planting: 5/29/19 Vine Kill: 9/6/18 Harvest: 10/26/18

GDD<sub>40</sub>: 2945

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				
MSW485-2	462	512	90	3	90	0	0	1.093	10	10	0	10	0.0	3.0	3.5	sl alligator hide
Niagara (NY152)	437	472	93	2	93	0	1	1.088	20	0	0	10	0.0	3.0	3.0	
MSV030-4	379	448	85	4	85	0	1	1.096	0	20	0	0	0.0	3.0	3.0	mod alligator hide
Mackinaw (MSX540-4)	345	407	85	3	85	0	5	1.096	0	10	0	0	0.0	3.0	3.5	tr alligator hide
<b>Snowden</b>	<b>327</b>	<b>372</b>	<b>88</b>	<b>3</b>	<b>88</b>	<b>0</b>	<b>1</b>	<b>1.092</b>	<b>30</b>	<b>50</b>	<b>10</b>	<b>0</b>	<b>2.0</b>	<b>2.5</b>	<b>3.0</b>	
MSW044-1	308	431	72	8	72	0	2	1.090	0	10	0	0	0.5	3.0	3.0	nice type
Manistee	298	330	90	2	89	1	0	1.090	30	10	0	0	0.0	2.5	3.0	
<b>Pike</b>	<b>258</b>	<b>307</b>	<b>84</b>	<b>3</b>	<b>84</b>	<b>0</b>	<b>2</b>	<b>1.086</b>	<b>20</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>3.0</b>	<b>3.0</b>	
Hodag (W5955-1)	242	267	91	1	88	3	5	1.083	30	0	0	20	0.0	3.0	3.0	
AF5040-8	172	276	62	7	62	0	3	1.090	0	30	0	0	0.0	3.0	2.5	
<b>MEAN</b>	<b>323</b>	<b>382</b>	<b>84</b>	<b>4</b>	<b>83</b>	<b>0</b>	<b>2</b>	<b>1.091</b>	<b>14</b>	<b>15</b>	<b>1</b>	<b>4</b>	<b>0.3</b>	<b>2.9</b>	<b>3.1</b>	

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

Bs: < 1 7/8"  
As: 1 7/8" - 3 1/4"  
OV: > 3 1/4"  
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: 6/26/18  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vines, some flowering)

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

Date: 8/20/18  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

**FIELD DATA**

Planting date	5/29/18	Chip and SED scores not reported due to delay in chipping after harvest.
Vine Kill Date	9/6/18	
Harvest Date	10/26/18	
Days (planting to vine kill)	100	
Days (planting to harvest)	150	
GDD <sub>40</sub> MAWN Station	Entrican	
GDD <sub>40</sub> (planting to vine kill)	2945	
Seed Spacing	10"	
Row Width	34"	
Harvest Length	23'	

# 2018 Fresh Chip Processing Potato Variety Trial

## Hampton Farms

Planting: 5/1/18 Vine Kill: N/A Harvest: 9/17/18  
GDD<sub>40</sub>: 3961

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>4</sup> (%)							COMMON SCAB RATING <sup>5</sup>	SED SCORE <sup>6</sup>	VINE VIGOR <sup>7</sup>	VINE MATURITY <sup>8</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	OTF CHIP SCORE <sup>3</sup>	HH	VD	IBS	BC						
BNC182-5	617	682	91	5	89	2	4	1.076	1.0	0	0	30	0	0.0	0.9	2.5	5.0	misshapen tubers in POs, no alligator hide	
MSW044-1	532	614	87	11	86	1	2	1.083	1.5	10	0	0	0	0.0	0.3	1.5	5.0	tr alligator hide, sl heat sprouting	
MSZ062-10	504	557	91	4	89	2	5	1.074	1.5	0	20	0	0	0.0	1.4	2.5	3.0	tr alligator hide	
MSW485-2	501	573	87	11	87	0	2	1.064	1.0	10	30	40	0	0.0	1.5	2.0	5.0	mod heat sprouts, sl alligator hide	
<b>Atlantic</b>	<b>479</b>	<b>514</b>	<b>93</b>	<b>4</b>	<b>87</b>	<b>6</b>	<b>3</b>	<b>1.080</b>	<b>1.0</b>	<b>10</b>	<b>0</b>	<b>60</b>	<b>0</b>	<b>0.0</b>	<b>0.6</b>	<b>2.0</b>	<b>4.5</b>	<b>sl alligator hide, longer tuber type</b>	
<b>Snowden</b>	<b>445</b>	<b>495</b>	<b>90</b>	<b>9</b>	<b>90</b>	<b>0</b>	<b>1</b>	<b>1.075</b>	<b>1.0</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>0.0</b>	<b>0.3</b>	<b>2.5</b>	<b>4.0</b>	<b>tr alligator hide</b>	
MSV030-4	411	523	79	9	79	0	12	1.080	1.0	0	0	10	0	0.0	0.3	2.5	4.0	heavy netted skin, heat knobs in POs	
<b>Pike</b>	<b>394</b>	<b>481</b>	<b>82</b>	<b>6</b>	<b>80</b>	<b>2</b>	<b>12</b>	<b>1.077</b>	<b>1.5</b>	<b>0</b>	<b>10</b>	<b>10</b>	<b>0</b>	<b>0.0</b>	<b>0.9</b>	<b>2.0</b>	<b>4.5</b>	<b>POs have knobs, tr alligator hide</b>	
MSZ118-8	390	459	84	9	82	2	7	1.068	1.0	0	10	0	0	0.0	1.5	2.0	4.0	sl alligator hide, sl heat sprouts, GC and misshapes in POs	
AC03452-2W	383	513	75	20	75	0	5	1.065	1.0	0	10	0	0	0.5	0.2	2.0	5.0	sticky stolons, non uniform tuber type, no alligator hide	
B2904-2	372	505	74	4	74	0	22	1.076	1.0	0	0	0	0	0.0	1.8	1.5	4.0	severe GC, tr alligator hide	
Manistee	356	438	81	10	81	0	9	1.075	1.5	0	20	80	0	0.0	0.8	2.5	3.0	mod heat knobbing	
MSZ242-7	354	433	82	6	82	0	12	1.082	2.0	0	10	0	0	0.5	0.7	1.0	5.0	tr alligator hide, knobs in POs	
B2869-29	348	427	81	16	81	0	3	1.078	1.0	0	20	0	0	0.0	0.7	2.0	4.0	misshapen tubers in POs	
AF5040-8	346	428	81	8	81	0	11	1.078	2.5	0	30	0	0	0.0	1.0	1.5	3.0	misshapen tubers in POs	
AC00206-2W	304	407	75	22	75	0	3	1.075	1.0	0	0	70	0	0.0	0.2	2.0	3.0	tr heat knobbing, sl alligator hide	
MSZ222-19	298	481	62	12	62	0	26	1.066	1.0	0	0	0	0	0.0	0.5	2.5	4.0	sl alligator hide	
Mackinaw (MSX540-4)	279	373	75	12	75	0	13	1.072	1.0	0	0	0	0	0.0	0.3	1.0	4.0	sl alligator hide	
BNC311-4	279	402	69	8	69	0	23	1.067	1.0	0	0	0	0	0.0	1.6	3.0	3.0	GC and apical heat knobs	
MSZ219-13	256	290	88	11	88	0	1	1.071	1.0	0	0	0	10	0.0	0.5	3.0	4.0	uniform tuber type, netted skin, tr alligator hide	
MSZ219-46	252	421	60	3	60	0	37	1.066	2.5	0	0	0	0	0.0	2.6	2.0	2.5	oblong tubers, mod alligator hide, bottlenecking, tr heat sprouts	
MSZ242-13	225	300	75	6	75	0	19	1.085	1.0	0	0	0	0	0.0	0.2	3.0	5.0	tr alligator hide, GC	
W9968-5	114	461	25	9	25	0	66	1.058	1.0	10	0	10	0	0.0	1.0	2.5	5.0	heavy netted skin, severe heat knobbing, misshapen, sl GC	
CO02033-1W	81	471	17	12	17	0	71	1.074	1.0	0	0	0	0	0.0	1.2	3.0	4.0	tuber bottlenecking, sl alligator hide	
<b>MEAN</b>	<b>355</b>	<b>469</b>	<b>75</b>	<b>9</b>	<b>75</b>	<b>1</b>	<b>15</b>	<b>1.073</b>	<b>1.3</b>	<b>2</b>	<b>7</b>	<b>14</b>	<b>0</b>	<b>0.0</b>	<b>0.9</b>	<b>2.2</b>	<b>4.1</b>		

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

Bs: < 1 7/8"  
As: 1 7/8" - 3 1/4"  
OV: > 3 1/4"  
PO: POs

<sup>2</sup>**SPECIFIC GRAVITY**  
Data not replicated

<sup>3</sup>**OUT OF THE FIELD CHIP COLOR SCORE (SNAC Scale)**  
Ratings: 1 - 5  
1: Excellent  
5: Poor

<sup>4</sup>**RAW TUBER QUALITY (percent of tubers out of 10)**  
HH: Hollow Heart  
VD: Vascular Discoloration  
IBS: Internal Brown Spot  
BC: Brown Center

<sup>5</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>6</sup>**SED (STEM END DEFECT) SCORE**  
0: No stem end defect  
1: Trace stem end defect  
2: Slight stem end defect  
3: Moderate stem end defect  
4: Severe stem end defect  
5: Extreme stem end defect

<sup>7</sup>**VINE VIGOR RATING**

Date: 6/1/18  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vines, some flowering)

<sup>8</sup>**VINE MATURITY RATING**

Date: 8/3/  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

**FIELD DATA**

Planting date 5/1/18  
Vine Kill Date N/A  
Harvest Date 9/17/18  
Days (planting to vine kill) N/A  
Days (planting to harvest) 139  
GDD<sub>40</sub> MAWN Station Richville  
GDD<sub>40</sub> (planting to vine kill) 3961  
Seed Spacing 10"  
Row Width 34"  
harvest Length 23'



# 2018 Storage Chip Processing Potato Variety Trial

## Hampton Farms

Planting: 5/1/18 Vine Kill: N/A Harvest: 10/3/18  
GDD<sub>40</sub>: N/A

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>4</sup> (%)							COMMON SCAB RATING <sup>5</sup>	SED SCORE <sup>6</sup>	VINE VIGOR <sup>7</sup>	VINE MATURITY <sup>8</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	OTF CHIP SCORE <sup>3</sup>	HH	VD	IBS	BC						
B2904-2	419	471	89	4	89	0	7	1.085	1.0	0	40	0	0	1.0	0.3	3.0	1.5		
MSZ062-10	414	469	88	4	87	1	8	1.077	1.5	0	30	0	0	0.0	0.4	1.5	3.0		
<b>Snowden</b>	<b>400</b>	<b>452</b>	<b>89</b>	<b>9</b>	<b>89</b>	<b>0</b>	<b>2</b>	<b>1.078</b>	<b>1.0</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0.3</b>	<b>3.0</b>	<b>2.0</b>		
AC03452-2W	381	456	84	8	84	0	8	1.065	2.0	0	80	0	0	1.0	0.5	3.0	2.5		
MSZ118-8	377	396	95	4	93	2	1	1.076	1.0	10	20	0	0	2.0	0.3	2.0	4.0	browning in the center of chips	
MSZ219-46	370	451	82	3	82	0	15	1.066	1.0	0	10	0	0	0.0	0.8	1.5	2.0		
Niagara (NY152)	350	423	83	15	83	0	2	1.078	1.5	0	20	0	0	0.5	0.2	1.5	4.0		
MSV030-4	328	354	93	5	93	0	2	1.082	1.0	0	20	0	0	2.0	0.2	3.0	3.0		
B2869-29	313	417	75	24	75	0	1	1.082	1.5	0	10	0	0	0.5	0.2	2.5	2.5		
MSW485-2	293	335	87	12	87	0	1	1.078	1.0	10	30	0	0	0.5	0.3	2.0	5.0		
MSZ219-13	280	305	92	3	92	0	5	1.073	1.5	0	20	0	0	0.5	0.5	2.0	5.0	sl chip blistering	
AC00206-2W	262	345	76	20	76	0	4	1.075	1.0	0	0	0	0	2.0	0.1	3.0	2.0		
MSZ242-13	254	296	86	8	86	0	6	1.089	2.0	0	10	10	0	1.0	0.2	2.5	4.0		
W9968-5	226	297	76	13	76	0	11	1.085	1.0	0	10	0	0	2.5	0.8	2.5	3.0	very light chip color	
MSX540-4 (Mackinaw)	99	186	53	21	50	3	26	1.076	1.5	0	30	0	0	0.5	0.4	1.0	4.0	many misshapen tubers	
AC05153-1W	95	275	35	61	35	0	4	1.071	1.0	0	0	0	0	1.5	0.0	3.0	1.5		
Manistee	81	93	87	6	87	0	7	1.073	1.0	0	0	0	0	0.0	0.4	3.0	2.0		
AF5040-8	75	82	91	7	91	0	2	1.086	1.5	10	0	0	0	0.0	0.3	2.5	1.0		
CO02033-1W	58	72	81	19	81	0	0	1.083	1.0	0	0	0	0	1.5	0.2	2.5	4.5	tuber rot	
MSZ222-19	32	32	100	0	99	1	0	1.089	1.5	0	0	10	0	0.0	1.0	2.0	4.0	low yield, few tubers	
<b>Lamoka</b>	<b>11</b>	<b>13</b>	<b>89</b>	<b>11</b>	<b>89</b>	<b>0</b>	<b>0</b>	<b>1.092</b>	<b>-</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1.0</b>	<b>-</b>	<b>2.5</b>	<b>3.5</b>	<b>few tubers</b>	
MSZ219-1	2	4	50	50	50	0	0	-	-	0	0	0	0	0.5	-	2.5	3.0	most tubers were rotten	
MSW044-1	-	-	-	-	-	-	-	-	-	0	10	0	0	1.0	-	2.5	2.5		
NY162	-	-	-	-	-	-	-	1.075	1.5	0	0	0	0	3.0	0.2	2.5	2.0		
<b>MEAN</b>	<b>233</b>	<b>283</b>	<b>81</b>	<b>14</b>	<b>81</b>	<b>0</b>	<b>5</b>	<b>1.079</b>	<b>1.3</b>	<b>1</b>	<b>15</b>	<b>1</b>	<b>0</b>	<b>0.9</b>	<b>0.9</b>	<b>2.4</b>	<b>3.0</b>		

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

Bs: < 1 7/8"  
As: 1 7/8" - 3 1/4"  
OV: > 3 1/4"  
PO: Pickouts

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

Data not replicated

**<sup>3</sup>OUT OF THE FIELD CHIP COLOR SCORE**

(SNAC Scale)  
Ratings: 1 - 5  
1: Excellent  
5: Poor

**<sup>4</sup>RAW TUBER QUALITY**

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

**<sup>5</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>6</sup>SED (STEM END DEFECT) SCORE**

0: No stem end defect  
1: Trace stem end defect  
2: Slight stem end defect  
3: Moderate stem end defect  
4: Severe stem end defect  
5: Extreme stem end defect

**<sup>7</sup>VINE VIGOR RATING**

Date: 6/1/18  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vines, some flowering)

**<sup>8</sup>VINE MATURITY RATING**

Date: 8/3/18  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

**FIELD DATA**

Planting date 5/1/18  
Vine Kill Date N/A  
Harvest Date 10/3/18  
Days (planting to vine kill) N/A  
Days (planting to harvest) 155  
GDD<sub>40</sub> MAWN Station Richville  
GDD<sub>40</sub> (planting to vine kill) N/A  
Seed Spacing 10"  
Row Width 34"  
Harvest Length 23'

This storage trial occurred in a fresh chip field, and vines died naturally instead of being killed

# 2018 Fresh Chip Processing Potato Variety Trial

## Lennard Ag. Co.

Planting: 4/13/18 Vine Kill: N/A Harvest: 7/31/18  
GDD<sub>40</sub>: 2914

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>4</sup> (%)							COMMON SCAB RATING <sup>5</sup>	SED SCORE <sup>6</sup>	VINE VIGOR <sup>7</sup>	VINE MATURITY <sup>8</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	OTF CHIP SCORE <sup>3</sup>	HH	VD	IBS	BC						
MSZ052-2	439	454	97	3	84	13	0	1.076	1.0	0	10	0	0	0.0	0.5	3.0	3.0	uniform round tuber type	
MSW044-1	421	445	95	5	77	18	0	1.079	0.0	0	20	0	0	0.0	0.0	3.0	3.5	larger tuber size profile	
MSZ062-10	408	464	88	6	76	12	6	1.076	1.0	0	0	10	0	0.0	0.0	3.0	3.5	flattened tuber type, sl skinning, tr alligator hide	
MSZ222-19	405	472	85	8	66	19	7	1.078	1.0	20	0	0	0	0.0	0.2	2.5	4.0	oval blocky tuber shape	
B2869-29	391	438	89	8	88	1	3	1.089	1.0	0	10	0	0	0.0	0.0	3.0	3.5	nice skin finish	
BNC182-5	389	427	91	7	87	4	2	1.081	1.0	30	10	0	0	0.0	0.1	2.0	5.0	uniform round tuber type, sl alligator hide	
<b>Atlantic</b>	<b>378</b>	<b>422</b>	<b>90</b>	<b>3</b>	<b>71</b>	<b>19</b>	<b>7</b>	<b>1.080</b>	<b>1.0</b>	<b>90</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>	<b>2.0</b>	<b>4.5</b>	<b>GC and misshapen tubers in pickouts</b>	
MSV030-4	374	424	88	7	88	0	5	1.082	1.0	10	20	0	0	0.0	0.0	3.0	3.5	oval tuber type	
AF5040-8	371	435	85	9	80	5	6	1.084	1.0	0	0	0	0	0.0	0.0	2.5	2.5	GC and misshapen tubers in POs, light skin type	
MSV498-1	362	383	95	5	91	4	0	1.074	1.0	0	0	0	0	0.0	0.1	2.5	4.5	heavy netted skin, sl skinning, oblong shape	
B2904-2	342	398	86	14	76	10	0	1.075	1.0	60	0	0	0	0.0	0.0	2.5	3.5	misshapen tubers in POs	
C002033-1W	339	378	90	6	90	0	4	1.085	1.0	0	0	0	0	0.0	0.1	3.0	4.5	oblong tuber type	
MSZ219-46	335	403	83	6	79	4	11	1.067	1.0	0	0	0	0	0.0	0.0	2.5	3.0	netted skin type	
MSZ242-9	321	389	82	5	70	12	13	1.083	1.5	0	10	20	0	0.0	0.0	3.0	4.0	misshapen and deep apical eyes in Pos	
BNC311-4	311	413	75	14	75	0	11	1.081	1.0	30	0	0	0	0.0	0.1	2.5	5.0	oval to oblong tuber type, GC and misshapen in Pos	
W9968-5	307	364	84	6	83	1	10	1.085	1.0	0	0	0	0	0.0	0.5	1.5	4.5	GC in Pos	
MSW485-2	291	334	87	8	86	1	5	1.082	1.0	0	20	0	0	0.0	0.1	2.5	5.0	misshapen tubers in POs	
AC00206-2W	252	329	77	22	77	0	1	1.073	1.0	0	0	0	0	0.0	0.0	3.0	3.0	small uniform size profile, sl skinning	
AC05153-1W	228	391	58	40	58	0	2	1.078	1.0	0	0	0	0	0.5	0.0	3.0	2.5	small uniform tuber type	
Mackinaw (MSX540-4)	189	232	82	9	79	3	9	1.079	1.0	0	10	0	0	0.0	0.4	1.5	3.5	uniform round tuber type	
<b>MEAN</b>	<b>343</b>	<b>400</b>	<b>85</b>	<b>10</b>	<b>79</b>	<b>6</b>	<b>5</b>	<b>1.079</b>	<b>1.0</b>	<b>12</b>	<b>6</b>	<b>2</b>	<b>0</b>	<b>0.0</b>	<b>0.1</b>	<b>2.6</b>	<b>3.8</b>		

<sup>1</sup>**SIZE**  
Bs: < 1 7/8"  
As: 1 7/8" - 3 1/4"  
OV: > 3 1/4"  
PO: Pickouts

<sup>2</sup>**SPECIFIC GRAVITY**  
Data not replicated

<sup>3</sup>**OUT OF THE FIELD CHIP COLOR SCORE (SNAC Scale)**  
Ratings: 1 - 5  
1: Excellent  
5: Poor

<sup>4</sup>**RAW TUBER QUALITY (percent of tubers out of 10)**  
HH: Hollow Heart  
VD: Vascular Discoloration  
IBS: Internal Brown Spot  
BC: Brown Center

<sup>5</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>6</sup>**SED (STEM END DEFECT) SCORE**  
0: No stem end defect  
1: Trace stem end defect  
2: Slight stem end defect  
3: Moderate stem end defect  
4: Severe stem end defect  
5: Extreme stem end defect

<sup>7</sup>**VINE VIGOR RATING**  
Date: 5/31/18  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vines, some flowering)

<sup>8</sup>**VINE MATURITY RATING**  
Date: 7/26/18  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

**FIELD DATA**  
Planting date: 4/13/18  
Vine Kill Date: N/A  
Harvest Date: 7/31/18  
Days (planting to vine kill): N/A  
Days (planting to harvest): 109  
GDD<sub>40</sub> MAWN Station: Constantine  
GDD<sub>40</sub> (planting to vine kill): 2914  
Seed Spacing: 10"  
Row Width: 34"  
Harvest Length: 23'

# 2018 Storage Chip Processing Potato Variety Trial

## Lennard Ag. Co.

Planting: 4/26/18 Vine Kill: 8/22/18 Harvest: 9/18/18

GDD<sub>40</sub>: 3490

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>4</sup> (%)							COMMON SCAB RATING <sup>5</sup>	SED SCORE <sup>6</sup>	VINE VIGOR <sup>7</sup>	VINE MATURITY <sup>8</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	OTF CHIP SCORE <sup>3</sup>	HH	VD	IBS	BC						
MSZ052-2	591	640	92	4	92	0	4	1.072	1.5	0	10	10	0	1.0	0.2	3.5	2.5	severe alligator hide, misshapen POs	
AC03452-2W	583	701	83	10	83	0	7	1.063	1.0	10	50	0	0	1.5	0.2	4.0	3.5	points in POs	
MSZ219-14	568	600	94	5	91	3	1	1.069	1.0	40	0	0	0	0.0	0.9	2.5	1.5	mod alligator hide	
MSW485-2	534	565	95	4	95	0	1	1.079	1.5	0	60	30	0	1.5	1.4	3.5	3.0	severe alligator hide	
<b>Snowden</b>	<b>528</b>	<b>570</b>	<b>93</b>	<b>3</b>	<b>93</b>	<b>0</b>	<b>4</b>	<b>1.081</b>	<b>1.5</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>1.0</b>	<b>0.3</b>	<b>3.5</b>	<b>1.0</b>	<b>non uniform scab coverage</b>	
MSW044-1	527	567	93	7	93	0	0	1.078	1.0	0	40	10	0	0.0	0.5	3.0	3.0	sl alligator hide, small uniform tuber type	
Niagara (NY152)	505	552	92	7	92	0	1	1.075	1.5	10	30	0	0	0.5	0.2	2.5	1.0	mod alligator hide	
MSV030-4	490	535	91	6	91	0	3	1.084	1.0	0	60	0	0	1.5	0.4	3.0	3.0	sl alligator hide	
CO02033-1W	487	603	81	15	81	0	4	1.076	1.0	0	40	0	0	0.5	0.4	3.5	1.5	sl alligator hide	
CO02321-4W	485	524	93	5	93	0	2	1.078	1.0	0	20	0	0	1.0	0.3	4.0	2.5		
MSZ219-46	441	476	93	5	93	0	2	1.071	2.0	0	40	0	0	0.0	0.9	2.5	2.0	mod alligator hide, dark skin	
MSZ222-19	434	498	87	7	87	0	6	1.079	2.0	40	0	10	0	0.0	0.2	3.0	1.0	mod alligator hide	
Mega Chip	409	458	90	3	88	2	7	1.081	1.0	0	40	0	0	0.0	0.4	3.0	2.0	mod to severe alligator hide, misshapen POs	
MSZ219-13	405	424	96	2	87	9	2	1.068	1.5	20	10	10	0	0.0	0.6	2.5	3.5	heavy russet skin type	
MSZ062-10	398	441	90	6	90	0	4	1.075	2.0	0	40	0	0	0.5	0.7	3.0	1.0	sl alligator hide	
B2904-2	397	463	86	8	86	0	6	1.080	1.5	10	50	0	0	1.0	0.5	3.0	2.0		
MSZ242-13	392	425	92	5	92	0	3	1.087	1.5	0	0	0	0	0.0	0.2	3.0	2.5	netted skin type	
B2869-29	385	425	91	9	91	0	0	1.081	1.0	0	10	0	0	0.5	0.5	3.0	1.0	sl alligator hide, tr heat sprouting	
NY162	379	444	85	10	85	0	5	1.079	1.0	0	10	0	0	1.0	0.0	2.0	4.0	sl alligator hide	
<b>Lamoka</b>	<b>368</b>	<b>430</b>	<b>85</b>	<b>5</b>	<b>85</b>	<b>0</b>	<b>10</b>	<b>1.080</b>	<b>1.5</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0.2</b>	<b>3.0</b>	<b>3.0</b>	<b>mod alligator hide, mishapen POs</b>	
AF5040-8	365	417	88	10	88	0	2	1.084	2.0	0	70	0	0	0.0	0.2	3.5	1.0	sl alligator, misshapen tubers in POs	
MSZ022-16	358	436	82	9	82	0	9	1.074	1.0	10	20	70	0	0.5	0.5	3.0	2.5	misshapen POs	
Manistee	357	394	91	6	91	0	3	1.078	1.5	0	0	0	0	0.0	0.2	2.5	1.0		
W9968-5	349	421	83	5	83	0	12	1.081	1.0	0	60	10	0	0.5	1.5	2.5	2.5	misshapen POs	
AC00206-2W	309	377	82	14	82	0	4	1.066	1.0	10	0	0	0	1.0	0.1	4.0	1.0	mod alligator hide	
Mackinaw (MSX540-4)	295	362	81	12	81	0	7	1.078	1.0	0	0	0	0	1.0	1.0	2.5	1.0	mod alligator hide	
MSZ118-8	294	389	76	21	76	0	3	1.072	1.5	0	0	30	20	0.5	0.4	2.5	2.0	mod alligator hide	
AC05153-1W	275	387	71	25	71	0	4	1.068	1.5	0	10	0	0	1.5	0.2	3.5	1.0	points and mishapen tubers in POs, alligator hide	
<b>Pike</b>	<b>255</b>	<b>297</b>	<b>86</b>	<b>11</b>	<b>86</b>	<b>0</b>	<b>3</b>	<b>1.080</b>	<b>1.0</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>0.0</b>	<b>3.0</b>	<b>1.5</b>	<b>sl alligator hide</b>	
<b>MEAN</b>	<b>419</b>	<b>477</b>	<b>88</b>	<b>8</b>	<b>87</b>	<b>0</b>	<b>4</b>	<b>1.076</b>	<b>1.3</b>	<b>6</b>	<b>26</b>	<b>6</b>	<b>1</b>	<b>0.5</b>	<b>0.4</b>	<b>3.0</b>	<b>2.0</b>		

### <sup>1</sup>SIZE

Bs: < 1 7/8"  
As: 1 7/8" - 3 1/4"  
OV: > 3 1/4"  
PO: Pickouts

### <sup>2</sup>SPECIFIC GRAVITY

Data not replicated

### <sup>3</sup>OUT OF THE FIELD CHIP COLOR SCORE

(SNAC Scale)  
Ratings: 1 - 5  
1: Excellent  
5: Poor

### <sup>4</sup>RAW TUBER QUALITY

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

### <sup>5</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>6</sup>SED (STEM END DEFECT) SCORE

0: No stem end defect  
1: Trace stem end defect  
2: Slight stem end defect  
3: Moderate stem end defect  
4: Severe stem end defect  
5: Extreme stem end defect

### <sup>7</sup>VINE VIGOR RATING

Date: 5/31/18  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vines, some flowering)

### <sup>8</sup>VINE MATURITY RATING

Date: 8/14/18  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

### FIELD DATA

Planting date 4/26/18  
Vine Kill Date 8/22/18  
Harvest Date 9/18/18  
Days (planting to vine kill) 118  
Days (planting to harvest) 145  
GDD<sub>40</sub> MAWN Station Constantine  
GDD<sub>40</sub> (planting to vine kill) 3490  
Seed Spacing 10"  
Row Width 34"  
Harvest Length 23'

# 2018 Storage Chip Processing Potato Variety Trial

## Main Farms

Planting: 5/25/18 Vine Kill: 9/14/18 Harvest: 9/25/2018

GDD<sub>40</sub>: 3266

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>						RAW TUBER QUALITY <sup>4</sup> (%)					COMMON SCAB RATING <sup>5</sup>	SED SCORE <sup>6</sup>	VINE VIGOR <sup>7</sup>	VINE MATURITY <sup>8</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	OTF CHIP SCORE <sup>3</sup>	HH	VD	IBS	BC					
MSZ062-10	616	635	97	1	94	3	2	1.073	1.0	20	10	0	30	1.0	1.0	2.0	4.0	
MSZ222-19	616	635	97	1	94	3	2	1.074	2.0	0	0	0	0	1.0	0.3	1.5	3.0	
B2869-29	595	644	92	6	92	0	2	1.078	1.5	0	0	0	0	2.5	0.9	2.5	4.0	
MSW485-2	555	608	91	8	91	0	1	1.074	2.0	0	0	0	0	2.5	1.1	2.5	3.0	
B2904-2	548	599	91	7	91	0	2	1.069	1.5	20	0	0	0	0.5	0.5	3.0	3.0	deep stem ends
BNC311-4	537	605	88	8	85	3	4	1.065	1.0	0	0	0	0	1.5	0.3	3.0	3.0	
<b>Lamoka</b>	<b>515</b>	<b>546</b>	<b>94</b>	<b>5</b>	<b>94</b>	<b>0</b>	<b>1</b>	<b>1.069</b>	<b>1.5</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2.5</b>	<b>0.6</b>	<b>2.0</b>	<b>2.0</b>	
MSZ242-13	515	545	94	5	93	1	1	1.087	2.5	30	0	0	0	0.5	0.7	2.0	3.0	
MSZ219-46	513	559	91	5	90	1	4	1.064	-	0	0	0	0	1.0	-	2.0	2.0	
BNC182-5	511	565	91	8	85	6	1	1.063	1.5	10	0	0	0	0.5	1.1	2.5	2.5	
MSZ022-16	477	541	88	10	88	0	2	1.076	2.0	0	0	0	10	0.0	0.6	2.5	3.0	mod skinning
<b>Pike</b>	<b>473</b>	<b>495</b>	<b>96</b>	<b>4</b>	<b>96</b>	<b>0</b>	<b>0</b>	<b>1.070</b>	<b>1.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1.5</b>	<b>0.3</b>	<b>2.0</b>	<b>4.0</b>	nice shape
MSV030-4	472	510	93	7	93	0	0	1.076	2.0	0	0	0	0	1.0	0.3	1.5	3.0	attractive round tuber type
Mackinaw (MSX540-4)	471	522	90	6	90	0	4	1.077	1.0	0	0	0	0	2.5	0.4	1.5	3.0	
AF5040-8	468	534	88	9	88	0	3	1.076	2.0	0	10	0	0	0.0	0.8	2.5	2.5	misshapen POs
CO02321-4W	457	509	90	9	90	0	1	1.074	1.0	0	0	0	0	2.0	0.3	3.0	3.5	
W9968-5	442	492	90	8	90	0	2	1.082	0.0	50	0	50	10	1.5	1.5	2.0	3.0	oval to oblong tuber shape
NY162	436	479	91	6	91	0	3	1.071	2.0	0	0	30	10	1.5	0.8	2.0	3.5	
MSZ219-13	431	448	96	3	95	1	1	1.073	2.0	0	0	0	0	1.0	0.6	1.5	3.5	
MSZ219-1	428	460	93	5	93	0	2	1.073	2.5	0	0	90	20	2.5	0.3	2.0	2.5	
MSZ052-2	426	450	95	3	95	0	2	1.062	1.5	0	0	0	10	1.0	0.3	2.5	2.0	deeper stem end, nice shape
Niagara (NY152)	426	566	75	24	75	0	1	1.073	1.5	40	0	0	0	1.5	0.3	1.5	3.5	
<b>Snowden</b>	<b>419</b>	<b>471</b>	<b>89</b>	<b>8</b>	<b>89</b>	<b>0</b>	<b>3</b>	<b>1.073</b>	<b>1.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2.5</b>	<b>0.7</b>	<b>2.5</b>	<b>3.5</b>	misshapen POs
MSW044-1	413	465	89	10	89	0	1	1.076	1.0	70	0	0	0	0.5	0.6	1.5	3.0	
AC03452-2W	396	451	88	11	88	0	1	1.063	1.0	0	10	0	0	1.5	0.1	2.0	2.5	very light skin finish
Manistee	395	453	87	12	87	0	1	1.069	2.0	10	0	0	0	1.0	0.3	2.0	2.0	some flattened tubers, mod skinning
MSZ118-8	377	486	78	18	78	0	4	1.070	1.5	10	0	0	10	0.5	0.4	2.0	3.5	
MSZ242-9	364	427	85	8	85	0	7	1.076	1.0	0	0	0	0	0.5	0.9	2.0	3.0	lighter skin, GC in POs
CO02033-1W	360	495	73	26	73	0	1	1.072	1.5	0	0	0	10	1.0	0.3	2.5	3.5	5% of tubers with severe pitted scab
AC00206-2W	345	436	79	15	77	2	6	1.061	1.0	100	0	0	0	1.5	0.3	2.5	2.5	greening in POs
Hodag (W5955-1)	250	289	86	4	69	17	10	1.070	1.0	20	0	0	0	1.0	0.3	1.5	3.0	greening in POs
AC05153-1W	246	345	71	29	71	0	0	1.065	1.5	0	0	0	0	2.0	0.2	2.5	1.5	
<b>MEAN</b>	<b>453</b>	<b>508</b>	<b>89</b>	<b>9</b>	<b>87</b>	<b>1</b>	<b>2</b>	<b>1.072</b>	<b>1.5</b>	<b>12</b>	<b>1</b>	<b>5</b>	<b>3</b>	<b>1.3</b>	<b>0.5</b>	<b>2.1</b>	<b>3.0</b>	

<sup>1</sup>SIZE

Bs: < 1 7/8"  
As: 1 7/8" - 3 1/4"  
OV: > 3 1/4"  
PO: POs

<sup>2</sup>SPECIFIC GRAVITY

Data not replicated

<sup>3</sup>OUT OF THE FIELD CHIP COLOR SCORE

(SNAC Scale)  
Ratings: 1 - 5  
1: Excellent  
5: Poor

<sup>4</sup>RAW TUBER QUALITY

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

<sup>5</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>6</sup>SED (STEM END DEFECT) SCORE

0: No stem end defect  
1: Trace stem end defect  
2: Slight stem end defect  
3: mod stem end defect  
4: Severe stem end defect  
5: Extreme stem end defect

<sup>7</sup>VINE VIGOR RATING

Date: 6/18/18  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vines, some flowering)

<sup>8</sup>VINE MATURITY RATING

Date: 8/20/18  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

FIELD DATA

Planting date 5/25/18  
Vine Kill Date 9/14/18  
Harvest Date 9/25/18  
Days (planting to vine kill) 112  
Days (planting to harvest) 123  
GDD<sub>40</sub> MAWN Station Entrican  
GDD<sub>40</sub> (planting to vine kill) 3266  
Seed Spacing 10"

# 2018 Storage Chip Processing Potato Variety Trial

## MRC Box Bin

Planting: 4/27/18 Vine Kill: 9/5/18 Harvest: 10/12/18  
GDD<sub>40</sub>: 3567

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>4</sup> (%)							COMMON SCAB RATING <sup>5</sup>	VINE VIGOR <sup>6</sup>	VINE MATURITY <sup>7</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	OTF CHIP SCORE <sup>3</sup>	HH	VD	IBS	BC					
MSZ096-3	731	787	93	6	93	0	1	1.081	1.5	0	10	0	0	1.5	1.5	5.0	some flatter tubers	
AC03452-2W	575	700	82	17	82	0	1	1.068	1.0	0	10	10	0	2.0	2.0	3.0	deep apical ends	
MSW485-2	558	621	90	9	90	0	1	1.089	1.0	0	40	0	10	0.5	1.5	3.0	mod alligator hide	
MSZ219-13	553	587	94	6	94	0	0	1.081	1.0	0	10	0	0	0.0	1.0	2.5	mod alligator hide	
MSZ120-4	530	587	90	10	90	0	0	1.086	1.0	0	20	0	0	0.0	1.0	4.5	bright skin	
MSZ222-19	528	598	88	10	88	0	2	1.087	1.5	0	0	0	0	0.0	1.0	2.0	misshapen POs	
<b>Snowden</b>	<b>494</b>	<b>540</b>	<b>91</b>	<b>8</b>	<b>90</b>	<b>1</b>	<b>1</b>	<b>1.085</b>	<b>1.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2.0</b>	<b>1.5</b>	<b>2.5</b>		
Niagara (NY152)	478	533	90	9	90	0	1	1.076	1.0	0	0	0	0	0.0	1.0	2.0		
W9968-5	470	540	87	13	87	0	0	1.083	1.5	0	0	0	0	1.5	1.0	3.0	mod alligator hide	
MSZ242-9	462	519	89	10	89	0	1	1.094	1.0	0	0	0	0	1.0	1.5	3.0	misshapen POs	
MSZ219-46	459	489	94	6	93	1	0	1.076	1.5	0	30	0	0	0.0	1.0	3.0		
MSZ062-10	445	491	91	9	91	0	0	1.087	1.0	0	60	0	0	0.0	1.5	1.0	darker netted skin	
MSZ219-14	435	476	91	8	91	0	1	1.075	1.0	0	20	0	0	0.5	1.5	4.0		
CO10076-4W	432	515	84	16	84	0	0	1.074	1.5	0	40	0	0	0.0	2.5	3.5		
NY162	422	483	87	8	87	0	5	1.077	1.0	0	0	0	0	0.0	1.0	1.5	misshapen POs	
MSZ242-13	417	471	88	8	87	1	4	1.096	1.0	0	0	0	0	0.0	1.0	2.0	mod skinning, GC in POs	
MSY156-2	404	452	90	10	90	0	0	1.079	1.0	0	10	0	0	0.0	1.5	3.0	bright skin, attractive round tuber profile	
MSZ219-1	396	416	96	3	94	2	1	1.079	1.0	0	30	0	0	0.0	1.5	2.5	darker netted skin	
MSV111-2	389	486	80	20	80	0	0	1.070	1.5	0	20	0	0	0.0	1.0	4.0	missahpen Pos	
MSW044-1	371	494	75	25	74	1	0	1.089	1.0	0	10	0	0	0.0	2.0	3.0	bright skin, attractive round tuber profile	
MSZ242-7	368	405	91	8	91	0	1	1.092	1.0	0	20	0	0	0.0	1.5	2.5	misshapen POs	
<b>Lamoka</b>	<b>368</b>	<b>419</b>	<b>88</b>	<b>11</b>	<b>88</b>	<b>0</b>	<b>1</b>	<b>1.080</b>	<b>1.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>	<b>1.5</b>	<b>1.5</b>	<b>pointed tubers in POs</b>	
MSV030-4	352	415	85	14	85	0	1	1.078	1.0	0	10	0	0	0.0	1.0	2.0		
MSZ248-10	346	385	90	9	90	0	1	1.079	1.0	0	0	0	0	1.5	1.5	1.5		
B2904-2	333	386	86	13	86	0	1	1.092	1.5	10	50	0	0	0.0	1.5	1.5	round tubers	
B2869-29	302	410	74	25	74	0	1	1.087	1.0	0	20	0	0	0.0	1.5	1.0	flatter tuber type	
MSV498-1	297	338	88	10	88	0	2	1.065	1.5	0	30	0	0	0.0	1.5	2.5	deep apical ends	
Manistee	292	334	87	12	87	0	1	1.079	1.0	0	0	0	0	1.0	1.5	1.0	deep apical ends, mod skinning	
CO02321-4W	292	368	79	20	79	0	1	1.086	1.0	0	0	0	0	1.0	3.0	2.0		
Mackinaw (MSX540-4)	282	357	79	21	79	0	0	1.086	1.0	0	10	0	0	0.5	1.0	2.5	smaller tuber size profile	
CO02033-1W	270	382	71	29	71	0	0	1.087	1.0	0	10	0	0	0.0	1.5	1.5	smaller tuber size profile	
AF5040-8	245	318	77	22	75	2	1	1.078	1.0	0	0	0	0	2.5	2.0	2.5	large pitted scab lesions	
BNC311-4	225	278	81	19	81	0	0	1.073	1.0	0	0	0	0	0.5	1.5	3.0		
AC00206-2W	187	295	63	36	63	0	1	1.072	1.0	0	0	0	0	0.5	2.0	2.5		
AC05153-1W	159	233	68	32	68	0	0	1.079	1.0	0	0	0	0	0.0	2.0	2.0		
<b>MEAN</b>	<b>396</b>	<b>460</b>	<b>85</b>	<b>14</b>	<b>85</b>	<b>0</b>	<b>1</b>	<b>1.081</b>	<b>1.1</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0.5</b>	<b>1.5</b>	<b>2.5</b>		

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

Bs: < 1 7/8"  
As: 1 7/8" - 3 1/4"  
OV: > 3 1/4"  
PO: POs

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

Data not replicated

<sup>3</sup>**OUT OF THE FIELD CHIP COLOR SCORE**

(SNAC Scale)

Ratings: 1 - 5

1: Excellent

5: Poor

Data collected by Techmark, Inc.

<sup>4</sup>**RAW TUBER QUALITY**

(percent of tubers out of 10)

HH: Hollow Heart

VD: Vascular Discoloration

IBS: Internal Brown Spot

BC: Brown Center

<sup>5</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>6</sup>VINE VIGOR RATING**

Date: 5/30/18

Rating 1-5

1: Slow emergence

5: Early emergence (vigorous vines, some flowering)

**<sup>7</sup>VINE MATURITY RATING**

Date: 8/20/18

Rating 1-5

1: Early (vines completely dead)

5: Late (vigorous vines, some flowering)

**FIELD DATA**

Planting date	4/27/18
Vine Kill Date	9/5/18
Harvest Date	10/12/18
Days (planting to vine kill)	131
Days (planting to harvest)	168
GDD <sub>40</sub> MAWN Station	Entrican
GDD <sub>40</sub> (planting to vine kill)	3567
Seed Spacing	10"
Row Width	34"
Harvest Length	23'

# 2018 Storage Chip Processing Potato Variety Trial

## Sandyland Set 1

Planting: 5/24/18 Vine Kill: 8/31/18 Harvest: 10/16/18  
GDD<sub>40</sub>: 2925

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>4</sup> (%)							COMMON SCAB RATING <sup>5</sup>	SED SCORE <sup>6</sup>	VINE VIGOR <sup>7</sup>	VINE MATURITY <sup>8</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	OTF CHIP SCORE <sup>3</sup>	HH	VD	IBS	BC						
Niagara (NY152)	562	657	85	6	85	0	1	1.075	1.5	0	20	0	0	1.5	0.4	2.0	3.0	netted skin, sl chip blistering	
MSV030-4	433	577	75	9	75	0	1	1.085	2.0	0	0	0	0	1.0	0.3	2.5	3.5		
Mackinaw (MSX540-4)	410	491	83	5	83	0	1	1.080	1.5	0	20	0	0	0.5	1.0	1.5	4.0		
Hodag (W5955-1)	288	366	79	3	79	0	11	1.074	1.5	0	0	0	0	1.0	0.4	2.0	4.0	sl skin flaking	
<b>MEAN</b>	<b>423</b>	<b>523</b>	<b>81</b>	<b>6</b>	<b>81</b>	<b>0</b>	<b>4</b>	<b>1.079</b>	<b>1.6</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>1.0</b>	<b>1.0</b>	<b>2.0</b>	<b>3.6</b>		

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

Bs: < 1 7/8"  
As: 1 7/8" - 3 1/4"  
OV: > 3 1/4"  
PO: Pickouts

**<sup>2</sup>SPECIFIC GRAVITY**  
Data not replicated

**<sup>3</sup>OUT OF THE FIELD CHIP COLOR SCORE (SNAC Scale)**  
Ratings: 1 - 5  
1: Excellent  
5: Poor

**<sup>4</sup>RAW TUBER QUALITY (percent of tubers out of 10)**  
HH: Hollow Heart  
VD: Vascular Discoloration  
IBS: Internal Brown Spot  
BC: Brown Center

**<sup>5</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>6</sup>SED (STEM END DEFECT) SCORE**  
0: No stem end defect  
1: Trace stem end defect  
2: Slight stem end defect  
3: Moderate stem end defect  
4: Severe stem end defect  
5: Extreme stem end defect

**<sup>7</sup>VINE VIGOR RATING**

Date: 6/18/18  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vines, some flowering)

**<sup>8</sup>VINE MATURITY RATING**  
Date: 8/27/18  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

**FIELD DATA**  
Planting date 5/24/18  
Vine Kill Date 8/31/18  
Harvest Date 10/16/18  
Days (planting to vine kill) 99  
Days (planting to harvest) 145  
GDD<sub>40</sub> MAWN Station Entrican  
GDD<sub>40</sub> (planting to vine kill) 2925  
Seed Spacing 10"  
Row Width 34"  
Harvest Length 23'

# 2018 Storage Chip Processing Potato Variety Trial

## Sandyland SNAC Chip Trial

Planting: 5/24/18 Vine Kill: 8/31/2018 Harvest: 10/16/18  
GDD<sub>40</sub>: 2925

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>4</sup> (%)							COMMON SCAB RATING <sup>5</sup>	SED SCORE <sup>6</sup>	VINE VIGOR <sup>7</sup>	VINE MATURITY <sup>8</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	OTF CHIP SCORE <sup>3</sup>	HH	VD	IBS	BC						
MSV030-4	500	613	81	18	81	0	1	1.078	2.0	0	23	0	0	0.2	0.3	3.0	3.5	sl pointed ends, medium netted skin, flatter shape	
W9968-5	488	567	86	11	86	0	3	1.080	2.0	0	27	0	3	0.3	1.5	2.0	4.0	variable skin color	
AF5429-3	476	520	91	8	90	1	1	1.073	1.0	7	10	0	3	2.5	0.5	3.0	3.0	10% of tubers have severe scab, attractive round tuber shape	
<b>Lamoka</b>	<b>411</b>	<b>471</b>	<b>87</b>	<b>10</b>	<b>87</b>	<b>0</b>	<b>3</b>	<b>1.077</b>	<b>1.0</b>	<b>0</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>0.8</b>	<b>0.6</b>	<b>2.5</b>	<b>3.5</b>	<b>misshapen and pear shapes in POs, blocky type</b>	
AF5040-8	409	478	86	12	86	0	2	1.082	1.0	0	10	0	0	1.3	0.4	2.5	4.0	sl pitted scab lesions	
NY162	400	468	85	12	85	0	3	1.075	1.5	0	3	0	0	1.8	0.3	1.5	1.5	tuber bottlenecking and misshapen in Pos	
<b>Snowden</b>	<b>395</b>	<b>446</b>	<b>89</b>	<b>11</b>	<b>89</b>	<b>0</b>	<b>0</b>	<b>1.078</b>	<b>1.5</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0.7</b>	<b>0.2</b>	<b>2.5</b>	<b>4.0</b>	<b>deeper stem ends, non uniform skin</b>	
ND&519-1	394	478	82	18	82	0	0	1.082	2.0	0	23	0	0	0.7	0.2	2.5	3.5	tr greening, tr alligator hide, tr skinning, smooth skin	
MSW044-1	367	545	67	33	67	0	0	1.085	2.0	0	10	0	3	0.2	0.6	2.0	3.5	sl alligator hide, tr black dot	
Mackinaw (MSX540-4)	354	452	78	21	78	0	1	1.084	1.5	0	17	0	0	0.7	0.6	2.0	3.5	sl alligator hide, attractive tuber size profile, smooth skin	
NDA081453CAB-2C	298	337	89	9	89	0	2	1.076	1.0	0	10	3	17	0.0	0.4	2.5	2.5	larger tuber size profile, light skin	
NDTX081648CB-13W	230	311	73	25	73	0	2	1.076	1.5	3	23	0	3	1.0	0.6	3.0	2.5	20% of tubers with pink eyes, flatter tuber shape	
<b>MEAN</b>	<b>394</b>	<b>474</b>	<b>83</b>	<b>16</b>	<b>83</b>	<b>0</b>	<b>2</b>	<b>1.079</b>	<b>1.5</b>	<b>1</b>	<b>19</b>	<b>0</b>	<b>3</b>	<b>0.8</b>	<b>0.5</b>	<b>2.4</b>	<b>3.3</b>		
<b>ANOVA p-value</b>	<b>&lt;.0001</b>	<b>&lt;.0001</b>	<b>&lt;.0001</b>	<b>&lt;.0001</b>	<b>&lt;.0001</b>	<b>0.0023</b>	<b>0.0030</b>	<b>&lt;.0001</b>		<b>0.4120</b>	<b>0.0004</b>	<b>0.4744</b>	<b>0.0006</b>	<b>&lt;.0001</b>					
<b>LSD</b>	<b>78.0</b>	<b>84.7</b>	<b>4.3</b>	<b>3.9</b>	<b>4.3</b>	<b>0.5</b>	<b>1.7</b>	<b>0.004</b>		<b>-</b>	<b>17.8</b>	<b>-</b>	<b>6.3</b>	<b>0.8</b>					

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

Bs: < 1 7/8"  
As: 1 7/8" - 3 1/4"  
OV: > 3 1/4"  
PO: Pickouts

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

Three replicates

<sup>3</sup>**OUT OF THE FIELD CHIP COLOR SCORE**

(SNAC Scale)  
Ratings: 1 - 5  
1: Excellent  
5: Poor

<sup>4</sup>**RAW TUBER QUALITY**

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

<sup>5</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>6</sup>**SED (STEM END DEFECT) SCORE**

0: No stem end defect  
1: Trace stem end defect  
2: Slight stem end defect  
3: Moderate stem end defect  
4: Severe stem end defect  
5: Extreme stem end defect

<sup>7</sup>**VINE VIGOR RATING**

Date: 6/18/18  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vines, some flowering)

<sup>8</sup>**VINE MATURITY RATING**

Date: 8/27/2018  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

**FIELD DATA**

Planting date 5/24/18  
Vine Kill Date 8/31/18  
Harvest Date 10/16/18  
Days (planting to vine kill) 99  
Days (planting to harvest) 145  
GDD<sub>40</sub> MAWN Station Entrican  
GDD<sub>40</sub> (planting to vine kill) 2925  
Seed Spacing 10"  
Row Width 34"  
Harvest Length 23'



# 2018 Fresh Chip Processing Potato Variety Trial

## Walther Farms

Planting: 4/30/18 Vine Kill: N/A Harvest: 8/23/18  
GDD<sub>40</sub>: 3497

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>						RAW TUBER QUALITY <sup>4</sup> (%)						COMMON SCAB RATING <sup>5</sup>	SED SCORE <sup>6</sup>	VINE VIGOR <sup>7</sup>	VINE MATURITY <sup>8</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	OTF CHIP SCORE <sup>3</sup>	HH	VD	IBS	BC						
MSZ052-2	801	854	94	1	60	34	5	1.072	1.5	0	0	80	0	0.0	0.1	3.0	4.0	many tubers with IBS	
B2904-2	697	817	86	3	76	10	11	1.077	1.0	10	10	0	0	0.0	0.4	2.5	5.0		
<b>Atlantic</b>	<b>635</b>	<b>702</b>	<b>91</b>	<b>1</b>	<b>77</b>	<b>14</b>	<b>8</b>	<b>1.083</b>	<b>1.0</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>2.0</b>	<b>0.0</b>	<b>2.5</b>	<b>4.0</b>	<b>alligator hide, skinning, large potatoes</b>	
W9968-5	627	727	86	6	70	16	8	1.078	2.0	0	10	10	0	0.0	0.4	3.0	4.0	darker netted skin color, skinning	
NY162	597	642	93	4	80	13	3	1.081	1.0	0	10	0	0	0.5	0.0	2.5	4.0	pear shaped tubers with points in Pos	
MSV030-4	579	633	91	6	84	7	3	1.080	1.0	0	0	0	0	0.0	0.3	2.0	4.0	nice round shape	
<b>Snowden</b>	<b>556</b>	<b>609</b>	<b>92</b>	<b>3</b>	<b>64</b>	<b>28</b>	<b>5</b>	<b>1.074</b>	<b>1.0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>1.0</b>	<b>0.1</b>	<b>3.0</b>	<b>4.0</b>		
MSZ222-19	552	614	90	5	78	12	5	1.070	1.0	0	0	0	0	0.0	0.1	2.5	5.0	mod alligator hide, round tuber shape	
AC03452-2W	542	651	83	7	66	17	10	1.065	1.0	20	0	0	0	0.0	0.0	4.0	3.5	flaky skin	
AF5040-8	518	576	90	4	72	18	6	1.080	1.0	0	0	0	0	0.0	0.4	3.5	4.0	cream colored flesh	
MSZ062-10	511	570	90	5	85	5	5	1.075	1.5	0	0	0	0	0.0	0.4	3.0	4.0	uniform skin	
CO02033-1W	503	564	89	7	87	2	4	1.087	1.0	0	10	0	0	0.0	0.1	3.0	4.0	uniform tuber size profile	
MSZ242-7	497	566	87	4	65	22	9	1.080	1.0	0	0	10	0	0.0	0.3	3.0	4.0		
MSW485-2	470	508	93	5	88	5	2	1.077	1.5	0	0	0	0	0.0	0.1	3.0	5.0	nice bright white flesh	
MSZ118-8	422	518	82	1	59	23	17	1.074	1.0	0	0	0	0	0.0	1.3	2.5	3.5	many oversize tubers in POs with GC	
BNC311-4	421	601	70	3	54	16	27	1.074	1.0	0	0	0	0	0.0	0.0	2.5	4.0	GC in POs, cream colored flesh	
B2869-29	419	474	88	8	88	0	4	1.085	1.0	0	0	0	0	0.0	0.6	3.0	3.5	good skin finish	
MSZ219-46	417	534	78	5	73	5	17	1.069	1.5	0	0	0	0	0.0	0.0	2.0	5.0	oval tuber shape	
BNC182-5	402	459	88	9	74	14	3	1.077	1.0	0	0	0	0	0.0	0.3	3.0	5.0	mod skin flaking, alligator hide	
AC00206-2W	363	440	83	5	68	15	12	1.067	1.0	0	0	0	0	0.5	0.2	3.0	4.0		
MSZ242-13	359	441	82	7	61	21	11	1.086	1.5	0	0	0	0	0.5	0.3	2.5	4.0		
MSW044-1	335	375	89	8	88	1	3	1.076	1.0	0	0	0	0	0.0	0.2	3.0	5.0	recessed bud ends	
Mackinaw (MSX540-4)	258	333	77	4	69	8	19	1.077	1.0	10	0	0	0	0.5	0.3	2.0	5.0	rodent damage and herbicide injury in POs	
AC05153-1W	253	325	78	17	78	0	5	1.073	1.0	0	0	0	0	0.0	0.1	3.0	3.5	tr alligator hide, some mechanical damage	
<b>MEAN</b>	<b>489</b>	<b>564</b>	<b>86</b>	<b>5</b>	<b>74</b>	<b>13</b>	<b>8</b>	<b>1.076</b>	<b>1.1</b>	<b>2</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>0.2</b>	<b>0.2</b>	<b>2.8</b>	<b>4.2</b>		

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

Bs: < 1 7/8"  
As: 1 7/8" - 3 1/4"  
OV: > 3 1/4"  
PO: POs

<sup>2</sup>**SPECIFIC GRAVITY**  
Data not replicated

<sup>3</sup>**OUT OF THE FIELD CHIP COLOR SCORE**  
(SNAC Scale)  
Ratings: 1 - 5  
1: Excellent  
5: Poor

<sup>4</sup>**RAW TUBER QUALITY**  
(percent of tubers out of 10)  
HH: Hollow Heart  
VD: Vascular Discoloration  
IBS: Internal Brown Spot  
BC: Brown Center

<sup>5</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>6</sup>**SED (STEM END DEFECT) SCORE**  
0: No stem end defect  
1: Trace stem end defect  
2: Slight stem end defect  
3: Moderate stem end defect  
4: Severe stem end defect  
5: Extreme stem end defect

<sup>7</sup>**VINE VIGOR RATING**  
Date: 5/31/18  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vines, some flowering)

<sup>8</sup>**VINE MATURITY RATING**  
Date: 8/14/18  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

**FIELD DATA**  
Planting date: 4/30/18  
Vine Kill Date: N/A  
Harvest Date: 8/23/18  
Days (planting to vine kill): N/A  
Days (planting to harvest): 115  
GDD<sub>40</sub> MAWN Station: Mendon  
GDD<sub>40</sub> (planting to vine kill): 3497  
Seed Spacing: 10"  
Row Width: 34"  
Harvest Length: 23'

# 2018 Replicated Storage Chip Processing Potato Variety Trial

## Walther Farms

Planting: 5/29/18 Vine Kill: 9/17/18 Harvest: 10/9/18

GDD<sub>40</sub>: 3505

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					RAW TUBER QUALITY <sup>4</sup> (%)							COMMON SCAB RATING <sup>5</sup>	SED SCORE <sup>6</sup>	VINE VIGOR <sup>7</sup>	VINE MATURITY <sup>8</sup>	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	OTF CHIP SCORE <sup>3</sup>	HH	VD	IBS	BC						
MSV498-1	416	448	93	4	92	1	3	1.061	1.0	20	13	0	7	0.2	2.4	3.2	3.2	tr alligator hide	
MSW485-2	384	418	91	5	90	1	4	1.077	2.0	7	13	20	7	0.3	2.3	3.8	5.0	sl alligator hide, attractive round tuber type	
Niagara (NY152)	374	407	92	7	92	0	1	1.068	1.5	0	0	0	0	1.2	0.8	3.5	3.3	sl alligator hide, uniform tuber type	
MSZ052-2	361	384	94	5	93	1	1	1.065	1.0	0	7	90	10	1.0	0.7	4.2	3.7	darker netted skin type	
BNC182-5	360	388	93	5	91	2	2	1.073	1.5	3	3	0	0	0.7	1.0	3.7	4.0	sl alligator hide	
B2904-2	335	382	87	8	85	2	5	1.073	1.0	30	0	13	10	0.8	0.7	3.8	4.2	tuber bottleneaking in POs	
NY162	331	365	91	5	90	1	4	1.078	1.0	0	7	0	0	0.5	1.0	3.0	3.5		
MSZ219-13	322	361	89	3	89	0	8	1.075	2.0	17	7	0	0	0.0	1.1	3.5	4.8	GC in POs, sl alligator hide, netted skin	
MSZ222-19	316	378	84	11	83	1	5	1.076	1.0	7	10	7	0	0.0	0.6	3.8	3.0	mod alligator hide, GC in POs	
MSV030-4	315	348	90	10	90	0	0	1.079	2.0	0	20	10	0	0.2	1.4	3.5	3.0	tr alligator hide, medium netted skin, uniform tuber size	
AF5040-8	306	367	84	8	83	1	8	1.077	1.5	0	13	0	0	1.7	1.4	4.5	3.0	pear shaped tubers, non uniform type	
MSZ219-46	305	341	90	5	90	0	5	1.071	2.0	3	20	0	0	0.0	2.3	3.5	3.2	mod alligator hide, GC in POs	
<b>Snowden</b>	<b>304</b>	<b>326</b>	<b>93</b>	<b>6</b>	<b>93</b>	<b>0</b>	<b>1</b>	<b>1.074</b>	<b>1.5</b>	<b>7</b>	<b>13</b>	<b>7</b>	<b>3</b>	<b>2.7</b>	<b>1.4</b>	<b>4.2</b>	<b>3.2</b>		
Manistee	302	326	93	6	92	1	1	1.069	1.0	17	13	0	7	2.0	0.8	3.7	3.0		
MSZ062-10	301	325	93	6	92	1	1	1.074	1.5	0	23	0	0	0.0	1.2	3.5	2.8	uniform round tuber type	
CO02033-1W	300	369	82	13	81	1	5	1.080	2.0	17	27	0	0	1.7	0.9	3.8	3.5	pear shaped tubers, netted skin	
MSZ242-13	294	353	84	6	83	1	10	1.082	1.0	17	7	3	0	0.5	1.5	3.3	3.7	mod skinning, non-uniform tuber type	
MSV111-2	292	399	73	23	73	0	4	1.062	1.5	3	7	17	0	0.2	1.7	3.7	3.2	sl alligator hide, flatter tuber shape, non uniform tuber type	
MSW044-1	292	338	86	11	84	2	3	1.078	2.0	7	13	23	3	0.8	0.8	4.0	4.0	tr alligator hide	
B2869-29	291	318	91	7	91	0	2	1.079	1.0	13	10	20	23	1.0	0.4	3.7	3.5	tr alligator hide, uniform tuber type	
W9968-5	280	329	86	6	86	0	8	1.076	1.5	10	7	10	10	1.0	2.4	3.7	4.0	poor tuber shape, tr alligator hide	
MSZ022-16	273	308	88	7	86	2	5	1.072	1.5	3	7	47	7	0.0	0.7	3.8	3.7	sl alligator hide, non uniform tuber type	
MSZ219-1	272	338	80	8	80	0	12	1.072	2.5	7	7	0	0	0.0	2.2	4.2	2.7	sl alligator hide, deep apical eyes, GC	
MSZ118-8	259	355	73	18	73	0	9	1.064	1.5	3	7	77	40	0.3	0.7	3.0	3.5	many POs, poor tuber type	
Mackinaw (MSX540-4)	258	337	76	9	76	0	15	1.079	1.5	10	3	0	0	0.3	1.3	3.2	3.7	sl alligator hide, severe GC and misshapen POs	
CO02321-4W	246	307	80	13	80	0	7	1.078	1.5	13	17	0	3	1.7	1.1	4.0	3.3	many green tubers in POs	
MSZ219-14	221	256	86	9	86	0	5	1.074	1.5	33	10	13	7	0.0	1.0	3.5	4.3	tr alligator hide, GC in POs	
AC00206-2W	221	274	81	18	81	0	1	1.068	2.0	0	3	7	0	3.7	0.5	4.3	3.2		
Hodag (W5955-1)	220	247	90	3	83	7	7	1.075	2.0	50	13	30	17	0.8	1.0	3.2	3.5	GC in POs	
MSZ242-9	206	303	71	21	70	1	8	1.077	1.0	0	10	47	0	0.7	0.3	3.7	3.3	mod GC, mod alligator hide	
AC05153-1W	198	285	69	27	69	0	4	1.069	2.0	0	10	0	0	2.0	0.9	4.0	2.2	small uniform tuber type, sl alligator hide	
MSZ022-7	182	281	65	18	65	0	17	1.064	1.5	0	7	43	0	0.0	0.3	3.3	3.3	severe GC, mod alligator hide	
<b>MEAN</b>	<b>292</b>	<b>342</b>	<b>85</b>	<b>10</b>	<b>84</b>	<b>1</b>	<b>5</b>	<b>1.073</b>	<b>1.5</b>	<b>9</b>	<b>10</b>	<b>15</b>	<b>5</b>	<b>0.8</b>	<b>0.8</b>	<b>3.7</b>	<b>3.5</b>		
<b>Anova p-value</b>	<b>&lt;.0001</b>	<b>&lt;.0001</b>	<b>&lt;.0001</b>	<b>&lt;.0001</b>	<b>&lt;.0001</b>	<b>0.0134</b>	<b>0.003</b>	<b>&lt;.0001</b>		<b>0.0006</b>	<b>0.4465</b>	<b>&lt;.0001</b>	<b>0.0005</b>	<b>&lt;.0001</b>		<b>&lt;.0001</b>	<b>&lt;.0001</b>		
<b>HSD</b>	<b>124.1</b>	<b>127.1</b>	<b>21.9</b>	<b>16.8</b>	<b>22.9</b>	<b>5.1</b>	<b>15.5</b>	<b>0.009</b>		<b>39.9</b>	<b>-</b>	<b>42.4</b>	<b>29.3</b>	<b>1.5</b>		<b>0.9</b>	<b>1.2</b>		

### <sup>1</sup>SIZE

Bs: < 1 7/8"  
As: 1 7/8" - 3 1/4"  
OV: > 3 1/4"  
PO: POs

### <sup>2</sup>SPECIFIC GRAVITY

Three replicates

### <sup>3</sup>OUT OF THE FIELD CHIP COLOR SCORE

(SNAC Scale)  
Ratings: 1 - 5  
1: Excellent  
5: Poor

### <sup>4</sup>RAW TUBER QUALITY

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

### <sup>5</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>6</sup>SED (STEM END DEFECT) SCORE

0: No stem end defect  
1: Trace stem end defect  
2: Slight stem end defect  
3: Moderate stem end defect  
4: Severe stem end defect  
5: Extreme stem end defect

### <sup>7</sup>VINE VIGOR RATING

Date: 6/25/18  
Rating 1-5  
1: Slow emergence  
5: Early emergence (vigorous vines, some flowering)

### <sup>8</sup>VINE MATURITY RATING

Date: 8/14/18  
Rating 1-5  
1: Early (vines completely dead)  
5: Late (vigorous vines, some flowering)

### FIELD DATA

Planting date: 5/29/18  
Vine Kill Date: 9/17/18  
Harvest Date: 10/9/18  
Days (planting to vine kill): 111  
Days (planting to harvest): 133  
GDD<sub>40</sub> MAWN Station: Mendon  
GDD<sub>40</sub> (planting to vine kill): 3505  
Seed Spacing: 10"  
Row Width: 34"  
Harvest Length: 23'

# Chip Process Potatoes Bulk Planting Test Digs

LINE	CWT/A		PERCENT OF TOTAL <sup>1</sup>					TUBER SET							RAW TUBER QUALITY <sup>3</sup> (%)				COMMON SCAB RATING <sup>4</sup>			
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR <sup>2</sup>	Stand Count	Stem Count	Bs	As	OV	PO	Total	Tubers Per Plant	Tubers Per Stem	HH		VD	IBS	BC
<b>MSW485-2</b> Sandyland Farms	377	487	77	1	77	0	15	1.082	8	25	24	81	0	15	120	15.0	4.8	0	90	0	0	1.0
<b>MSV030-4</b> Walther Farms	-	436	-	-	-	-	-	-	13	45	-	-	-	-	120	9.2	2.7	-	-	-	-	-
<b>Niagara (NY152)</b> Sackett Potatoes	317	405	78	2	78	0	3	1.080	11	41	55	101	0	2	158	14.4	3.9	0	40	0	0	0.5
<b>Mackinaw (MSX540-4)</b> Sackett Potatoes	186	302	62	3	62	0	2	1.090	10	41	69	66	0	3	138	13.8	3.4	0	100	0	0	0.5
<b>MEAN</b>	<b>293</b>	<b>407</b>	<b>72</b>	<b>2</b>	<b>72</b>	<b>0</b>	<b>7</b>	<b>1.084</b>	<b>11</b>	<b>38</b>	<b>49</b>	<b>83</b>	<b>0</b>	<b>7</b>	<b>134</b>	<b>13.1</b>	<b>3.7</b>	<b>0</b>	<b>77</b>	<b>0</b>	<b>0</b>	<b>0.7</b>

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

Bs: < 1 7/8"  
As: 1 7/8" - 3 1/4"  
OV: > 3 1/4"  
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

**Table 1. 2018 Chip Processing Variety Descriptions**

Entry	Pedigree	2018 Scab Rating*	Characteristics
Atlantic	Wauseon x B5141-6 (Lenape)	1.0	High yield, early maturing, high incidence of hollow heart and internal brown spot, high specific gravity, more oversize tubers than trial average
Hodag (W5955-1)	Pike x Dakota Pearl	0.6	Average yield, high specific gravity, size profile similar to Atlantic, management should be adjusted because this variety tends to produce large tubers, long storage potential with common scab resistance
Lamoka (NY139)	NY120 x NY115	0.7	Average yield, mid-late season maturity, medium specific gravity, oval to oblong tuber type, low internal defects, long-term chip quality
Manistee (MSL292-A)	Snowden x MSH098-2	0.9	Average yield with early to mid-season maturity, excellent chip-processing quality and long storage potential, scab tolerance and specific gravity similar to Snowden, uniform round tubers with shallow eyes and heavy netted skin, some compressed tubers apical to stem
Mackinaw (MSX540-4)	Saginaw Chipper x Lamoka	0.8	Average yield with high specific gravity and high percentage of A-sized tubers, mid to late-season maturity, long-term chip-processing quality with resistance to PVY and late blight and tolerance to common scab, currently in Fast Track program

(2018 Processing Varieties cont.)

<b>Entry</b>	<b>Pedigree</b>	<b>2018 Scab Rating*</b>	<b>Characteristics</b>
MegaChip	Wischip x FYF85	0.0	Medium to late season maturity, high yield potential, early bulking, longer dormancy than Snowden, common scab resistance, fairly resistant to shatter bruise, good chip quality out of the field and out of storage
Niagara (NY152)	B38-14 x Marcy	0.8	High yield potential, medium specific gravity, excellent long-term storage chip quality, tolerance to common scab,
Pike (NYE55-35)	Allegany x Atlantic	0.6	Average yield, early to mid-season maturity, small tuber size profile, early storage, some internal defects, medium specific gravity
Snowden (W855)	B5141-6 x Wischip	1.6	High yield, medium-late maturity, mid-season storage, reconditions well in storage, medium to high specific gravity
AC00206-2W	AC87340-2 x ND2627-10	1.4	Common scab susceptible, early to mid-season maturity, lower specific gravity
AC03452-2W	A98423-1C x COA96141-2C	1.3	High yield potential, high percentage of US #1 tubers, susceptibility to vascular discoloration
AC05153-1W	A91814-5 x Chipeta	1.0	Lower yield, smaller tuber size profile, good internal quality, low stem end defect
AF5429-3	Dakota Pearl x NY140	2.5	High yield potential and percentage of US #1 tubers, round tuber type, average specific gravity

(2018 Processing Varieties cont.)

<b>Entry</b>	<b>Pedigree</b>	<b>2018 Scab Rating*</b>	<b>Characteristics</b>
AF5040-8	AF2376-5 x Lamoka	0.8	High yield potential, high specific gravity, medium maturing, vigorous vines, pale yellow flesh, round to oblong shape, common scab susceptible
BNC182-5	Tacna x B0766-3	0.3	High yield potential, average specific gravity, good OTF chip quality
B2869-29	B0564-8 x B1316-5	0.7	Average yield potential, higher specific gravity,
B2904-2	B1873-6 x Coastal Chip	0.7	Above average yield potential, susceptible to vascular discoloration and hollow heart
BNC311-4	BNC41-7 x NCB2489-5	0.7	Average yield potential, susceptible to heat knobs, good internal quality, oval to oblong tuber type, acceptable OTF chip quality
CO02033-1W	A91790-13W x S440	0.8	Smaller tuber size profile, above average specific gravity, mid-season maturity
CO02321-4W	NY115 x BC0894- 2W	1.5	Average yield, good OTF chip quality, common scab susceptibility
CO10076-4W	CO03243-3W x CO02024-9W	0.0	Above average yield, susceptible to vascular discoloration, full season maturity
MSV030-4	Beacon Chipper x MSG227-2	0.4	High yield and specific gravity, uniform round tuber type, good OTF chip quality

(2018 Processing Varieties cont.)

<b>Entry</b>	<b>Pedigree</b>	<b>2018 Scab Rating*</b>	<b>Characteristics</b>
MSV111-2	MSJ316-A x MSN105-1	0.1	Smaller size profile, lower specific gravity, less susceptible to common scab, rougher skin
MSV498-1	Snowden x MSQ283-2	0.1	Average yield, high percentage US#1 tubers, average internal quality, less susceptible to common scab
MSW044-1	Kalkaska x Lamoka	0.3	High specific gravity, average yield, good internal quality, bright skin, uniform round tuber type
MSW485-2	MSQ070-1 x MSR156-7	0.4	High yielding with high specific gravity, full-season maturity, excellent chip-processing quality out of the field and long-term storage, resistance to late-blight and common scab tolerant
MSY156-2	MSK061-4 x Kalkaska	0.0	Good OTF chip quality and internal quality, above average yield
MSZ022-7	Kalkaska x Tundra	0.0	Average yield potential, full season maturity, SED observed in 2018
MSZ022-16	Kalkaska x Tundra	0.2	Average yield and specific gravity, susceptible to internal brown spot, less susceptible to common scab
MSZ052-2	Pike x MSR127-2	0.6	High yield and specific gravity, susceptible to internal brown spot, high percentage A sized tubers

(2018 Processing Varieties cont.)

<b>Entry</b>	<b>Pedigree</b>	<b>2018 Scab Rating*</b>	<b>Characteristics</b>
MSZ062-10	MSR127-2 x McBride	0.2	High yield, average specific gravity, susceptible to vascular discoloration
MSZ096-3	Boulder x MSR127-2	1.5	Highest yielding variety in 2018, above average specific gravity, good internal quality
MSZ118-8	Kalkaska x Lenape	0.4	Average yield and internal quality, at trial average for common scab, internal defects, vigor, and maturity
MSZ120-4	Kalkaska x MSQ086-3	0.0	High yield, no common scab observed in 2018, 90% US #1 tubers, bright skin, full season maturity
MSZ219-1	Saginaw Chipper x MSR127-2	0.5	Scab, PVY and late-blight resistant with high specific gravity, smooth and round tubers, in NCPT and Fast Track
MSZ219-13	Saginaw Chipper x MSR127-2	0.2	High yield potential, good chip color, some VD in 2017, no common scab observed 2017.
MSZ219-14	Saginaw Chipper x MSR127-2	0.2	High specific gravity, high yield potential with a high percentage of A-sized tubers, mid to late season maturity, long-term chip-processing quality with resistance to common scab, late blight, and PVY, in NCPT and Fast Track
MSZ219-46	Saginaw Chipper x MSR127-2	0.2	Lower yield potential, some VD observed in 2017, good chip color



(2018 Processing Varieties cont.)

<b>Entry</b>	<b>Pedigree</b>	<b>2018 Scab Rating*</b>	<b>Characteristics</b>
MSZ222-19	MSR127-2 x Tundra	0.1	Average yield, deeper apical eyes, less susceptible to common scab
MSZ242-7	MSR169-8Y x MSU383-A	0.2	Above average yield and specific gravity, good internal quality, medium to full season maturity
MSZ242-9	MSR169-8Y x MSU383-A	0.4	Average yield potential, high specific gravity, susceptible to internal brown spot
MSZ242-13	MSR169-8Y x MSU383-A	0.3	Average yield potential, good internal quality, mid-season maturity
MSZ248-10	Snowden x MSV229-2	1.5	Good OTF chip quality, no internal defects observed in 2018, average yield potential
NDA081453CAB-2C	Dakota Diamond x ND039173CAB-22	0.0	Larger tuber size profile, good internal quality, no common scab observed in 2018
NDTX081648CB-13W	ND8456-1 x ND7377CB-1	1.0	Low yield, smaller tuber size profile, susceptible to vascular discoloration
ND7519-1	ND3828-15 x W1353	0.7	Above average yield potential, susceptible to vascular discoloration
NY162	NYE106-2 x NYE48-2	1.1	High yield potential, low internal defects, medium specific gravity, moderate common scab resistance
W9968-5	Fasan x Nicolet	0.8	Average yield potential, acceptable OTF chip color, good internal quality, mid-season maturity

\*Scab rating based on 0-5 scale; 0 = most resistant and 5 = most susceptible. Common scab data provided by Potato Outreach Program. Line descriptions provided by various potato breeding programs and updated by Potato Outreach Program following evaluations at various trial locations throughout Michigan.