

2019 Potato Outreach Program On-Farm Variety Trials

Data Summary: Michigan Chip Processing Trials

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2019 Michigan Statewide Chip Processing Potato Variety Trials Overall Averages - Fourteen Locations

LINE	CWT/A		PERCENT OF TOTAL ¹							RAW TUBER QUALITY ⁴ (%)				COMMON SCAB RATING ⁵	SED SCORE ⁶	VINE VIGOR ⁷	VINE MATURITY ⁸	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR ²	OTF CHIP SCORE ³	HH	VD	IBS	BC					
WAF10664-3 ⁿ	584	635	92	6	91	1	2	1.078	1.5	0	13	3	0	0.2	0.2	4.7	3.0	round, bright thin skin
MSAFB636-1 ⁿ	515	567	91	8	91	0	1	1.072	1.5	0	0	0	7	1.0	0.3	3.2	3.5	uniform, attractive type
Lady Liberty ^{acdeghijn}	485	559	86	12	86	1	1	1.082	1.4	9	10	0	0	1.3	0.2	3.4	3.0	round, misshapen pos
MSZ096-3 ^{bcdm}	477	515	86	13	83	2	2	1.080	2.0	4	20	10	0	0.6	1.0	2.6	4.3	round, netted skin
Snowden^{abdefghiklmn}	471	536	83	14	80	3	3	1.088	1.4	7	15	0	0	1.4	0.5	3.2	3.0	sl gc, pitted scab lesions
MSBB626-11 ^{ln}	468	554	84	8	84	1	7	1.088	2.0	10	20	4	0	0.9	0.9	3.5	3.0	sl sticky stolons, deep ends
MSZ248-10 ⁿ	467	546	86	10	85	1	4	1.081	1.0	3	3	27	7	1.0	0.6	3.0	3.7	heavy, dark, netted skin
AOR09034-3 ^k	461	536	86	12	86	0	2	1.086	2.0	0	13	0	7	3.0	0.4	4.5	4.0	pointed tubers, moderate rhizoctonia
MSZ219-14 ^{abdefghiklmn}	460	512	88	11	87	0	2	1.083	1.5	6	15	0	3	0.5	0.6	3.5	3.1	bright, uniform, attractive
Atlantic^{bdfm}	458	494	90	7	89	1	3	1.093	1.5	3	3	0	5	0.7	0.7	3.7	3.3	pointed tubers, gc
Manistee ^{abdefghimn}	456	530	84	12	84	1	3	1.085	1.5	3	8	5	1	1.7	0.4	3.3	2.5	flattened type, deep apical ends, mod skinning
NY165 ^{abdefghin}	448	543	82	15	82	0	3	1.084	1.3	0	4	1	0	0.6	0.5	2.7	3.4	variable type
MSZ222-19 ^{bdfghm}	447	533	83	13	83	0	4	1.091	1.4	7	7	12	2	0.9	0.6	3.4	2.3	deep apical ends, sl gc
NY163 ^{abdefghin}	441	502	83	12	83	0	5	1.085	1.2	1	9	0	0	0.7	0.3	2.8	3.0	apical anthocyanin pigmentation
NY166 ^{abcegin}	440	561	78	16	78	0	6	1.081	1.4	2	9	2	10	1.0	0.4	2.8	3.5	thin bright skin, pear shapes
Hodag ^{abdefghimn}	439	495	87	8	85	2	5	1.085	1.5	14	13	9	5	0.7	0.4	3.1	3.1	pointed tubers, bottlenecking, tr knobs
AF5563-5 ⁿ	438	482	91	1	87	4	8	1.073	1.0	7	17	0	0	0.0	1.8	2.8	2.5	misshapen pos, thin bright skin
MSB058-4 ^{dgin}	431	505	85	12	85	0	3	1.085	1.4	1	10	2	1	1.1	0.5	2.7	3.5	blocky, poor appearance in box bin
BNC182-5 ^{abdefghin}	421	475	84	14	83	1	2	1.083	1.6	7	17	0	1	0.9	0.8	3.5	3.1	uniform, skin flaking, sl gc
MSW044-1 ^{abdefghimn}	421	509	81	17	81	0	2	1.090	1.5	3	8	0	0	0.5	0.5	3.4	3.2	thin skin, bright, round to oval
MSBB625-2 ^{gin}	419	499	83	13	83	1	3	1.091	1.7	0	21	27	2	0.9	0.6	3.2	4.1	round, heavy netted skin
MSAA275-3 ^{hin}	418	463	90	7	89	1	3	1.077	1.7	0	29	0	0	2.0	1.2	2.5	2.5	oblong, compressed, sticky stolons
Mackinaw ^{abdefghiklmn}	413	498	82	14	80	2	4	1.091	1.5	0	15	2	1	0.9	0.5	2.9	3.0	flattened oval type, heavier skin netting
Petoskey (MSV030-4) ^{abdefghiklmn}	412	474	86	12	85	0	3	1.092	1.2	1	8	0	1	0.9	0.5	2.5	3.0	heavy netting, nice shape, mod ah
MSBB131-1 ^{cl}	405	484	83	7	79	5	9	1.075	2.0	20	25	0	0	1.0	0.5	3.5	1.5	bright skin, cream flesh
MSBB058-1 ^{hin}	403	473	84	12	84	0	4	1.096	1.3	0	11	0	0	0.8	0.3	3.0	2.4	bright, uniform, round, sl gc
NY162 ^{abdefghin}	398	454	84	10	84	1	5	1.088	1.5	1	5	0	1	1.1	0.7	2.4	2.7	light skin, oval type
ND7519-1 ^{abdefghiklm}	397	478	82	15	81	1	3	1.087	1.5	4	11	11	4	0.9	0.4	3.7	2.6	tr rhizoc, sl silver scurf
NYP14-1 ^{dign}	396	487	78	19	77	1	3	1.088	1.0	14	8	0	5	0.8	0.2	3.5	2.0	deep stem ends, sl skin flaking
MSX472-2 ^{ngi}	392	482	79	18	79	0	3	1.073	1.3	10	13	3	5	0.7	0.2	2.8	2.2	small, round, attractive type
CO10076-4W ^{igghn}	390	487	80	14	80	0	6	1.073	1.7	3	12	2	0	1.3	0.4	1.6	3.0	light skin, deep stem ends
Pike^{abdfgh}	381	429	89	8	88	1	3	1.086	1.6	10	12	13	10	0.5	0.4	2.7	3.0	tuber bottlenecking, pointed ends
MSAA311-1 ^{fm}	375	429	88	10	88	0	2	1.078	1.8	0	10	5	0	0.5	0.5	3.5	4.8	thinner skin, gc
Lamoka^{abceghik}	373	445	82	14	82	0	4	1.084	1.5	0	15	1	1	1.2	0.6	3.4	2.5	
MSZ219-13 ^{abdefghijmn}	364	392	92	4	89	3	4	1.083	1.5	13	8	1	1	0.5	0.4	1.7	3.7	darker netted skin, mod gc
MSZ052-14 ^{chi}	363	424	76	19	76	0	5	1.077	1.6	3	18	0	3	0.9	0.7	2.3	3.3	blocky, sheep nose
MSZ200-3 ⁱⁿ	362	416	87	10	86	1	3	1.073	1.8	5	30	0	10	1.3	0.7	2.8	3.4	large, marginal appearance
MSZ120-4 ^{cl}	358	435	83	11	86	0	3	1.083	1.8	5	20	0	0	0.9	0.6	2.3	3.5	sticky stolons
MSAFB609-12 ^m	354	442	80	20	80	0	0	1.085	1.0	0	0	0	0	0.0	0.5	3.5	3.5	bright and uniform
MSW075-2 ^{abdefghiklmn}	350	435	78	20	78	0	2	1.079	1.4	0	16	0	0	0.7	0.5	2.5	3.3	uniform, round, bright, attractive type
MSZ242-13 ⁿ	345	383	90	9	90	0	1	1.101	1.0	0	0	0	0	0.5	0.1	2.5	3.0	darker netted skin
MSZ020-10 ^{gin}	343	418	81	12	79	2	7	1.086	1.5	0	12	2	1	1.3	0.3	0.9	3.4	poor appearance, blocky, flattened
Winterset ^{ai}	326	431	72	25	72	0	3	1.086	1.5	5	20	10	0	2.8	0.4	3.0	2.5	
B2869-26 ^{abdefghmn}	323	417	72	25	72	0	3	1.090	1.6	8	14	0	2	1.0	0.6	3.9	2.7	light skin, smaller, sl scurf
B2904-2 ^{abdefghmn}	321	375	82	11	82	1	6	1.080	1.5	22	27	1	2	1.1	0.8	2.9	3.3	sl gc, bright, non uniform
MSBB060-1 ⁱ	317	387	82	7	78	4	11	1.080	1.5	0	40	0	0	1.3	0.5	2.0	2.5	nice shape
NYP111-9 ⁱ	282	439	64	27	64	0	9	1.100	1.5	0	30	10	0	0.5	0.2	3.0	3.0	smaller size profile, buff skin
MSAA498-18 ⁱ	250	306	82	14	82	0	4	1.080	1.5	0	20	0	0	0.5	0.1	2.0	2.0	
MSBB008-3 ⁱ	218	301	73	24	73	0	3	1.081	2.0	0	40	0	0	1.0	0.3	3.0	1.0	
Manistee SEL ⁱ	190	370	51	37	51	0	12	1.078	2.0	0	30	0	0	3.5	0.3	3.0	1.0	lots of pitted scab lesions
MEAN	397	471	82	13	82	1	4	1.084	1.5	4	15	3	2	1.0	1	3	3.0	

2019 CHIP VARIETY TRIAL SITES

- a 4-L Farms
- b Black Gold Farms
- c County Line Farms
- d Hampton Farms, Fresh Trial
- e Hampton Farms, Storage Trial
- f Lennard Ag. Co., Fresh Trial
- g Lennard Ag. Co., Storage Trial
- h Main Farms
- i MRC Box Bin
- j Sandyland Farms, Set 1
- k Sandyland Farms, SNAC
- l Verbrigg Farms
- m Walther Farms, Fresh Trial
- n Walther Farms, Storage Trial

¹SIZE

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

²SPECIFIC GRAVITY

Data not replicated

**³OUT OF THE FIELD CHIP COLOR SCORE
(SNAC Scale)**

Ratings: 1 - 5
1: Excellent
5: Poor

**⁴RAW TUBER QUALITY
(percent of tubers out of 10)**

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

⁵COMMON 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

⁶SED (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

⁷VINE VIGOR RATING

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

⁸VINE MATURITY RATING

Date: Variable
Rating 1-5
1: Early (vines completely dead)
5: Late

2019 Chip Processing Potato Variety Trial

4-L Farms

Planting: 5/28/19 Vine Kill: 9/12/19 Harvest: 10/24/19
GDD₄₀: 3164

LINE	CWT/A		PERCENT OF TOTAL ¹						RAW TUBER QUALITY ⁴ (%)						COMMON SCAB RATING ⁵	SED SCORE ⁶	VINE VIGOR ⁷	VINE MATURITY ⁸	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR ²	OTF CHIP SCORE ³	HH	VD	IBS	BC						
Lady Liberty	629	684	92	7	92	0	1	1.071	2.0	0	0	0	0	2.0	0.3	3.5	3.0		
Hodag	553	567	98	2	87	11	0	1.079	2.0	10	0	30	0	0.0	0.4	4.0	3.5	large round uniform type, sl alligator hide	
NY166	544	615	89	9	89	0	2	1.078	1.0	0	0	0	30	0.5	0.1	3.0	4.0	bright light skin	
BNC182-5	541	596	90	6	87	3	4	1.077	2.0	10	0	0	0	0.0	1.8	3.0	3.0		
NY163	539	580	93	4	93	0	3	1.085	1.0	0	10	0	0	0.0	0.3	2.5	4.0	anthocyanin pigmentation around eyes	
NY162	535	568	94	4	94	0	2	1.081	2.0	10	0	0	0	0.5	1.5	3.0	3.0		
MSW044-1	521	596	87	11	87	0	2	1.084	2.5	0	0	0	0	0.5	0.7	3.5	3.5	bright appearance, round shape	
Snowden	494	534	93	7	93	0	0	1.086	1.0	0	0	0	0	2.0	1.0	3.0	3.5		
ND7519-1	489	501	98	1	96	2	1	1.078	1.5	10	0	0	0	0.5	0.5	4.0	4.0		
Winterset	478	521	92	6	92	0	2	1.087	1.0	10	20	20	0	2.0	0.4	3.0	4.0		
NY165	463	532	87	9	87	0	4	1.076	1.5	0	0	10	0	0.5	0.6	4.0	3.0	uniform round to oval tuber type	
Pike	458	480	95	5	95	0	0	1.081	1.5	10	0	0	0	0.0	0.5	3.0	3.0		
MSW075-2	413	481	86	10	86	0	4	1.074	1.5	0	10	0	0	0.0	1.3	2.5	4.0	bright appearance, round shape	
Manistee	412	445	93	6	93	0	1	1.079	2.0	0	0	0	0	2.0	0.9	4.0	2.5		
MSZ219-14	391	410	95	4	92	3	1	1.072	2.0	0	10	0	20	0.0	0.9	3.0	3.0		
MSZ219-13	387	405	96	1	80	16	3	1.075	1.5	50	10	0	0	0.0	0.6	2.0	3.0	very large, round, moderate growth crack	
Lamoka	384	425	90	6	90	0	4	1.075	2.0	0	0	0	0	2.0	1.1	3.5	3.0		
Petoskey (MSV030-4)	374	399	94	6	94	0	0	1.087	1.5	0	0	0	0	0.5	0.9	3.0	3.0		
Mackinaw	357	433	83	11	83	0	6	1.082	2.0	0	0	0	0	0.0	0.7	3.0	3.0	growth crack in pickouts	
B2869-29	353	442	80	17	80	0	3	1.082	1.5	10	10	0	10	1.0	0.4	4.0	3.0		
B2904-2	292	322	91	7	86	5	2	1.072	2.0	0	20	0	0	1.0	1.4	2.5	4.0	deep apical eyes	
MEAN	457	502	91	7	89	2	2	1.079	1.7	6	4	3	3	0.7	0.8	3.2	3.3		

¹SIZE

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

²SPECIFIC GRAVITY

Data not replicated

³OUT OF THE FIELD CHIP

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

⁴RAW TUBER QUALITY

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

⁵COMMON 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

⁶SED (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

⁷VINE VIGOR RATING

Date: 7/5/19
Rating 1-5
1: Slow emergence
5: Early emergence (vigorous vines, some flowering)

⁸VINE MATURITY RATING

Date: 8/14/19
Rating 1-5
1: Early (vines completely dead)
5: Late (vigorous vines, some flowering)

FIELD DATA

Planting date 5/28/19
Vine Kill Date 9/12/19
Harvest Date 10/24/19
Days (planting to vine kill) 107
Days (planting to harvest) 149
GDD₄₀ MAWN Station Allegan
GDD₄₀ (planting to vine kill) 3164
Seed Spacing 10"

2019 Fresh Chip Processing Potato Variety Trial

Black Gold Farms

Planting: 4/25/19 Vine Kill: 8/30/19 Harvest: 9/6/2019
GDD₄₀: 3401

LINE	CWT/A		PERCENT OF TOTAL ¹					RAW TUBER QUALITY ⁴ (%)							COMMON SCAB RATING ⁵	SED SCORE ⁶	VINE VIGOR ⁷	VINE MATURITY ⁸	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR ²	OTF CHIP SCORE ³	HH	VD	IBS	BC						
Petoskey (MSV030-4)	789	829	95	3	95	0	2	1.087	1.0	0	0	0	0	1.0	0.5	3.5	3.0	darker skin type	
MSZ096-3	685	754	91	6	89	2	3	1.087	2.0	0	10	50	0	1.5	1.5	3.0	4.5	slow emergence, small plants at vine vigor	
Snowden	665	753	89	7	88	1	4	1.090	2.0	0	0	0	0	0.8	0.7	1.5	3.5	deep apical eyes	
MSZ222-19	657	744	88	7	88	0	5	1.093	1.5	30	0	50	0	1.3	1.5	4.0	2.0	moderate skin netting	
Hodag	636	696	91	5	91	0	4	1.095	1.5	20	30	20	0	1.0	0.5	3.0	2.5	moderate skin netting	
Manistee	629	702	90	6	89	1	4	1.092	1.0	0	20	0	0	1.0	0.4	3.5	1.5	moderate skinning and silver scurf	
Mackinaw	610	685	89	6	89	0	5	1.097	1.5	0	30	0	0	1.0	1.0	3.5	2.0	moderate skin netting	
ND7519-1	575	648	89	6	89	0	5	1.097	1.0	0	0	0	0	1.0	0.1	4.0	3.0	slight silver scurf	
BNC182-5	546	627	87	10	83	4	3	1.085	1.0	0	10	0	0	1.0	0.2	4.0	2.5		
NY163	536	594	90	5	89	1	5	1.087	1.0	0	10	0	0	1.0	0.2	3.5	3.5		
Atlantic	518	575	91	6	88	3	3	1.094	2.0	10	0	0	20	1.3	0.9	4.5	4.0		
MSW044-1	514	596	86	12	86	0	2	1.091	1.0	0	10	0	0	0.8	0.9	3.0	2.5	thin skin, bright appearance	
MSZ219-14	482	533	90	8	90	0	2	1.075	1.0	0	10	0	0	1.0	0.3	3.0	3.5		
NY165	464	531	87	10	87	0	3	1.086	1.0	0	0	0	0	0.5	1.1	3.0	3.0	moderate silver scurf	
NY162	459	533	86	13	86	0	1	1.097	2.0	0	0	0	0	0.8	0.7	3.0	3.0	moderate skinning	
Pike	450	503	90	8	90	0	2	1.092	1.0	0	0	0	0	0.5	0.9	2.0	3.0	variable emergence	
B2869-29	392	495	79	16	79	0	5	1.098	2.0	0	0	0	0	0.5	0.8	4.0	3.0	lighter skin, slight silver scurf	
NY166	345	433	80	15	80	0	5	1.087	1.0	0	20	0	10	1.0	0.9	2.5	3.5		
MSZ219-13	338	355	95	5	95	0	0	1.078	1.0	0	0	0	0	1.0	0.6	1.0	4.0	dark skin	
MSW075-2	310	374	83	15	83	0	2	1.081	1.5	0	10	0	0	1.0	0.6	2.5	2.0	flattened tuber type	
Lamoka	246	355	69	23	69	0	8	1.080	1.5	0	10	0	0	0.8	0.7	4.0	2.5		
B2904-2	209	265	79	17	77	2	4	1.074	1.5	30	20	0	10	1.0	0.8	3.0	4.0	heavy netted skin	
MEAN	503	572	87	10	86	1	4	1.088	1.4	4	9	5	2	0.9	0.9	3.1	3.0		

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OV: > 3 1/4"
PO: Pickouts

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Data not replicated

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(SNAC Scale)

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(percent of tubers out of 10)

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5.0: Over 50% of tuber surface area covered in pitted lesions

⁶**SED (STEM END DEFECT) SCORE**

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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

⁷**VINE VIGOR RATING**

Date: 6/4/19
Rating 1-5
1: Slow emergence
5: Early emergence (vigorous vines, some flowering)

⁸**VINE MATURITY RATING**

Date: 8/13/19
Rating 1-5
1: Early (vines completely dead)
5: Late (vigorous vines, some flowering)

FIELD DATA

Planting date 4/25/19
Vine Kill Date 8/30/19
Harvest Date 9/6/19
Days (planting to vine kill) 127
Days (planting to harvest) 134
GDD₄₀ MAWN Station Coldwater
GDD₄₀ (planting to vine kill) 3419
Seed Spacing 10"

2019 Storage Chip Processing Potato Variety Trial County Line Farms

Planting: 6/7/19 Vine Kill: 10/13/19 Harvest: 10/26/19
GDD₄₀: 3499

LINE	CWT/A		PERCENT OF TOTAL ¹					RAW TUBER QUALITY ⁴ (%)						COMMON SCAB RATING ⁵	SED SCORE ⁶	VINE VIGOR ⁷	VINE MATURITY ⁸	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR ²	OTF CHIP SCORE ³	HH	VD	IBS	BC					
MSZ052-14	576	672	86	7	86	0	7	1.074	2.5	10	30	0	10	0.0	0.9	1.0	not taken	sheep nose, blocky, non uniform
Manistee	575	626	92	8	88	4	0	1.079	2.5	20	0	0	0	2.0	0.6	3.0		flattened type
Snowden	572	647	88	5	88	0	7	1.080	3.5	90	10	0	0	2.5	1.1	2.0		pitted lesions
NY163	534	594	90	3	90	0	7	1.074	1.0	10	0	0	0	0.0	0.1	3.0		bright, thin skin, apical anthocyanin, non uniform
MSBB131-1	528	611	87	4	78	9	9	1.070	2.5	40	10	0	0	0.0	0.4	4.0		gc, deep apical ends, light yellow flesh
Lady Liberty	487	534	91	8	91	0	1	1.074	1.0	60	10	0	0	0.0	0.1	2.5		
MSZ219-14	477	527	91	8	91	0	1	1.080	2.5	70	0	0	10	0.0	1.0	3.0		
NY165	472	547	87	9	85	2	4	1.077	1.0	0	10	0	0	0.0	0.6	2.0		flat oval shape
NY166	467	559	83	13	83	0	4	1.079	1.0	0	20	10	20	0.0	0.3	3.0		
MSZ096-3	458	475	96	4	86	10	0	1.066	2.5	10	10	0	0	0.0	0.7	3.0		large blocky tuber type
Lamoka	449	532	84	5	84	0	11	1.080	1.0	0	50	10	10	0.5	0.4	2.5		
MSX472-2	413	444	93	6	93	0	1	1.069	1.5	40	0	0	10	0.0	0.3	3.0		
NYP14-1	412	454	90	7	89	1	3	1.080	1.0	50	10	0	20	0.0	0.2	4.0		deep stem ends
MSW044-1	401	448	89	11	89	0	0	1.083	2.0	10	0	0	0	0.0	0.4	3.0		lenticel spotting, tr sticky stolons
MSZ219-13	396	478	83	3	73	10	14	1.077	2.5	70	10	0	0	0.0	0.6	1.0		lots of gc, misshapen
Pike	389	437	89	5	87	2	6	1.079	3.0	50	10	0	0	0.0	0.5	3.0		
Mackinaw	384	422	91	7	89	2	2	1.083	1.5	0	0	0	10	0.0	0.5	3.0		
CO10076-4W	365	480	76	19	76	0	5	1.068	2.0	10	20	0	0	0.0	0.7	1.0		
ND7519-1	361	398	90	8	89	1	2	1.076	1.0	20	10	0	30	0.0	0.3	3.0		sl gc
NY162	359	417	86	11	86	0	3	1.076	2.0	0	0	0	0	0.5	0.5	2.0		
MSZ120-4	322	372	87	13	87	0	0	1.075	2.0	10	20	0	0	0.0	1.0	2.0		rot, pythium
Petoskey (MSV030-4)	315	393	80	12	80	0	8	1.077	1.5	20	10	0	10	0.0	0.6	2.0		sl ah
Hodag	311	356	88	5	78	10	7	1.076	1.5	80	10	0	10	0.0	0.4	3.0		large, tr gc, points
B2904-2	306	350	87	8	87	0	5	1.070	1.5	50	10	0	0	2.0	0.9	3.0		non uniform, gc
MSW075-2	304	366	83	16	83	0	1	1.069	1.0	0	0	0	0	0.0	0.4	2.0		uniform, bright
B2869-29	293	393	75	18	73	2	7	1.079	2.0	70	0	0	10	1.0	0.5	4.5		deep stem ends
BNC182-5	218	272	80	19	80	0	1	1.068	1.5	0	10	0	0	0.5	1.6	4.0		rot
MEAN	413	474	87	9	85	2	4	1.076	1.8	29	10	1	6	0.3	0.3	2.7		

¹SIZE

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

²SPECIFIC GRAVITY

Data not replicated

³OUT OF THE FIELD CHIP COLOR SCORE

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

⁴RAW TUBER QUALITY

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

⁵COMMON 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

⁶SED (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

⁷VINE VIGOR RATING

Date: 7/5/19
Rating 1-5
1: Slow emergence
5: Early emergence (vigorous vines, some flowering)

⁸VINE MATURITY RATING

Date: Not Taken
Rating 1-5
1: Early (vines completely dead)
5: Late (vigorous vines, some flowering)

FIELD DATA

Planting date 6/7/19
Vine Kill Date 10/13/19
Harvest Date 10/26/19
Days (planting to vine kill) 128
Days (planting to harvest) 141
GDD₄₀ MAWN Station Fennville
GDD₄₀ (planting to vine kill) 3499
Seed Spacing 10"

2019 Fresh Chip Processing Potato Variety Trial

Hampton Potato Growers

Planting: 4/29/19 Vine Kill: N/A Harvest: 9/11/19
GDD₄₀: 3411

LINE	CWT/A		PERCENT OF TOTAL ¹						RAW TUBER QUALITY ⁴ (%)						COMMON SCAB RATING ⁵	SED SCORE ⁶	VINE VIGOR ⁷	VINE MATURITY ⁸	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR ²	OTF CHIP SCORE ³	HH	VD	IBS	BC						
NY165	552	656	84	15	84	0	1	1.098	2.0	0	10	0	0	1.0	0.7		3.0	slightly flattened type	
Petoskey (MSV030-4)	511	600	85	13	85	0	2	1.100	1.0	0	0	0	0	2.0	0.9		3.0		
BNC182-5	510	572	89	8	89	0	3	1.097	1.5	0	30	0	0	1.0	0.6		3.5	some misshapen tubers	
Atlantic	467	544	86	11	86	0	3	1.097	1.0	0	0	0	0	0.5	0.3		2.5	pointed stem ends, rough skin	
MSZ219-14	423	515	82	16	82	0	2	1.100	1.0	0	20	0	0	1.0	0.5		2.5	pointed tubers	
MSBB058-4	393	457	86	11	86	0	3	1.088	1.0	0	10	0	0	1.3	0.5		2.5	slight growth crack	
Manistee	387	483	80	15	80	0	5	1.092	1.5	0	10	0	0	2.0	0.7		3.5	flattened tubers	
Pike	384	441	87	12	87	0	1	1.099	1.0	0	10	80	60	1.0	0.1		3.5		
ND7519-1	376	455	83	14	83	0	3	1.089	1.0	0	0	0	0	0.8	0.3		2.5		
MSZ096-3	367	447	82	15	82	0	3	1.094	1.5	0	50	0	0	0.5	1.0		3.0	round type, netted skin	
MSW044-1	360	517	70	28	70	0	2	1.102	1.0	10	0	0	0	0.5	0.6		4.0	bright, thin skin, uniform type	
Hodag	349	462	75	20	75	0	5	1.090	1.0	0	20	0	0	0.5	1.0		3.0	tuber bottlenecking	
Snowden	338	465	73	25	73	0	2	1.094	1.0	0	10	0	0	0.5	0.5		3.0		
Mackinaw	333	421	79	19	79	0	2	1.106	1.5	0	40	0	0	1.0	1.2		3.0		
MSW075-2	328	452	72	28	72	0	0	1.092	1.5	0	0	0	0	1.0	0.5		4.0		
B2904-1	314	412	76	19	76	0	5	1.092	1.0	0	50	0	0	1.5	0.4		2.5	slight growth crack	
MSZ222-19	302	426	71	26	71	0	3	1.100	1.5	0	30	0	10	1.0	0.4		2.0		
MSZ219-13	299	340	88	11	88	0	1	1.095	1.0	0	0	0	0	1.0	0.1		3.5	dark color	
B2869-29	274	444	62	37	62	0	1	1.095	1.0	0	20	0	0	0.5	0.7		3.0		
NY162	196	231	85	6	85	0	9	1.099	1.0	0	0	0	0	0.5	1.4		3.0	light, bright skin, uniform size	
MEAN	373	467	80	17	80	0	3	1.096	1.2	1	16	4	4	1.0	1.0		3.0		

¹SIZE

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

²SPECIFIC GRAVITY

Data not replicated

³OUT OF THE FIELD CHIP COLOR SCORE

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

⁴RAW TUBER QUALITY

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

⁷VINE VIGOR RATING

Date: Not Taken
Rating 1-5
1: Slow emergence
5: Early emergence (vigorous vines, some flowering)

⁸VINE MATURITY RATING

Date: 8/16/19
Rating 1-5
1: Early (vines completely dead)
5: Late (vigorous vines, some flowering)

FIELD DATA

Planting date 4/29/19
Vine Kill Date N/A
Harvest Date 9/11/19
Days (planting to vine kill) N/A
Days (planting to harvest) 135
GDD₄₀ MAWN Station Munger
GDD₄₀ (planting to vine kill) 3411
Seed Spacing 10"

2019 Storage Chip Processing Potato Variety Trial

Hampton Potato Growers

Planting: 4/29/19 Vine Kill: 9/1/19 Harvest: 9/11/19
GDD₄₀: 3169

LINE	CWT/A		PERCENT OF TOTAL ¹					RAW TUBER QUALITY ⁴ (%)						COMMON SCAB RATING ⁵	SED SCORE ⁶	VINE VIGOR ⁷	VINE MATURITY ⁸	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR ²	OTF CHIP SCORE ³	HH	VD	IBS	BC					
MSZ219-14	594	674	88	9	87	1	3	1.085	1.0	0	40	0	0	0.5	0.4	Not	3.5	
Lady Liberty	593	644	92	8	92	0	0	1.088	1.0	0	0	0	0	1.8	0.2	Taken	3.5	variable skin type
MSX472-2	543	614	88	11	88	0	1	1.079	1.0	0	20	10	0	1.0	0.1		3.0	attractive type
NY162	530	589	90	8	90	0	2	1.089	1.5	0	10	0	0	2.0	0.8		3.5	light skin color
NY165	527	628	84	15	84	0	1	1.091	1.0	0	0	0	0	2.0	0.4		3.5	attractive type
MSZ219-13	522	560	93	4	93	0	3	1.085	2.0	0	30	0	0	1.5	0.6		4.0	darker skin
Snowden	492	556	88	11	88	0	1	1.094	1.5	0	30	0	0	2.5	0.4		3.0	pitted scab lesions
Hodag	471	543	87	9	87	0	4	1.089	1.5	0	30	20	0	0.5	0.6		3.0	light skin color
Lamoka	463	498	93	6	93	0	1	1.091	1.5	0	20	0	0	1.0	0.8		3.5	
Mackinaw	458	541	85	13	85	0	2	1.093	1.0	0	50	0	0	1.3	0.4		3.0	slight growth crack
BNC182-5	451	513	88	12	88	0	0	1.086	2.0	0	30	0	0	1.3	0.8		4.0	
Manistee	446	541	82	17	82	0	1	1.086	1.5	0	10	0	0	2.0	0.3		4.0	flattened tuber type
NY166	444	601	74	24	74	0	2	1.083	1.0	0	0	0	0	2.0	0.5		3.5	thin skin
Petoskey (MSV030-4)	437	514	85	13	85	0	2	1.088	1.0	0	50	0	0	2.0	0.4		3.5	pitted scab lesions
MSW044-1	432	572	76	22	76	0	2	1.090	1.0	0	20	0	0	1.0	0.6		4.5	light skin color
ND7519-1	429	524	82	14	82	0	4	1.088	1.0	10	30	50	10	1.5	0.3		3.5	oblong to blocky tuber type
NY163	420	490	86	11	86	0	3	1.088	1.0	0	0	0	0	1.5	0.3		2.5	surface scab
MSW075-2	346	459	75	25	75	0	0	1.076	1.5	0	40	0	0	1.5	0.7		4.5	round type, small, thin light skin
B2869-29	273	395	69	30	69	0	1	1.090	1.0	0	30	0	0	2.5	0.7		3.0	smaller tuber size, some pitted lesions
B2904-2	273	368	74	21	74	0	5	1.085	1.0	0	10	0	0	2.0	0.2		2.5	bright appearance, moderate growth crack
MEAN	457	541	84	14	84	0	2	1.087	1.3	1	23	4	1	1.6	1.6		3.5	

¹**SIZE**

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

²**SPECIFIC GRAVITY**

Data not replicated

³**OUT OF THE FIELD CHIP COLOR SCORE**

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

⁴**RAW TUBER QUALITY**

(percent of tubers out of 10)
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VD: Vascular Discoloration
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⁶**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

⁷**VINE VIGOR RATING**

Date: Not Taken
Rating 1-5
1: Slow emergence
5: Early emergence (vigorous vines, some flowering)

⁸**VINE MATURITY RATING**

Date: 8/16/19
Rating 1-5
1: Early (vines completely dead)
5: Late (vigorous vines, some flowering)

FIELD DATA

Planting date 4/29/19
Vine Kill Date 9/1/19
Harvest Date 9/11/19
Days (planting to vine kill) 125
Days (planting to harvest) 135
GDD₄₀ MAWN Station Munger
GDD₄₀ (planting to vine kill) 3169
Seed Spacing 10"

2019 Fresh Chip Processing Potato Variety Trial

Lennard Ag. Co.

Planting: 4/26/19 Vine Kill: N/A Harvest: 8/19/19
GDD₄₀: 3054

LINE	CWT/A		PERCENT OF TOTAL ¹					RAW TUBER QUALITY ⁴ (%)							COMMON SCAB RATING ⁵	SED SCORE ⁶	VINE VIGOR ⁷	VINE MATURITY ⁸	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR ²	OTF CHIP SCORE ³	HH	VD	IBS	BC						
Snowden	370	266	72	15	72	0	13	1.086	1.0	0	10	0	0	1.5	0.1	3.5	3.0		
MSZ219-14	334	290	87	10	87	0	3	1.084	1.0	0	0	0	0	0.5	0.3	3.5	3.0	skinning	
NY165	334	426	78	17	78	0	5	1.084	1.0	0	0	0	0	0.5	0.1	2.0	4.0	blocky shape, waxy skin	
Manistee	325	377	86	11	86	0	3	1.090	1.0	0	10	0	0	0.5	0.1	2.5	4.0	0.0	
MSZ219-13	319	304	95	5	95	0	0	1.090	1.5	0	0	0	0	0.5	0.1	1.5	3.5	round shape	
Petoskey (MSV030-4)	318	285	90	8	90	0	2	1.092	1.0	0	0	0	0	1.5	0.0	2.0	2.5	oval type, heavier netted skin	
B2869-29	313	198	63	33	63	0	4	1.093	1.0	0	0	0	0	1.0	0.2	4.0	2.0	light, bright skin	
MSAA311-1	308	351	88	8	88	0	4	1.083	2.0	0	20	10	0	1.0	0.3	3.0	4.5	thinner skin, growth crack	
Atlantic	304	270	89	7	89	0	4	1.092	1.5	0	0	0	0	1.0	0.5	3.0	3.5	growth crack, netted skin	
MSZ222-19	283	359	79	14	79	0	7	1.092	1.0	0	0	10	0	1.0	0.2	3.5	2.0	pointed ends, minor growth crack	
MSW044-1	282	263	93	5	93	0	2	1.090	1.0	0	0	0	0	0.5	0.1	3.0	4.0	slight skin netting, pointed ends	
BNC182-5	282	211	75	21	75	0	4	1.081	1.5	30	20	0	0	1.0	0.3	4.0	3.0	small tubers, growth crack	
Hodag	265	233	88	8	88	0	4	1.088	1.0	0	0	0	0	1.5	0.1	2.5	3.0	slight pointed ends	
Mackinaw	256	205	80	15	80	0	5	1.084	1.0	0	10	10	0	1.5	0.2	2.0	4.0		
MSW075-2	237	186	78	19	78	0	3	1.084	1.0	0	0	0	0	1.0	0.1	1.5	3.5	moderate growth crack	
B2904-2	234	180	77	10	77	0	13	1.086	1.0	20	0	0	0	1.0	0.1	3.0	3.0	growth crack	
NY163	209	147	71	27	71	0	2	1.087	2.0	0	10	0	0	1.0	0.3	2.0	4.0		
MSZ096-3	179	126	70	25	70	0	5	1.071	1.5	10	10	0	0	1.0	0.8	1.5	4.5		
MSZ052-14	170	113	67	29	67	0	4	1.065	1.0	0	10	0	0	1.0	0.4	2.0	4.0	smaller tubers	
NY162	112	77	69	28	69	0	3	-	1.0	-	-	-	-	1.0	0.5	1.5	2.5	variable emergence	
MEAN	272	243	80	16	80	0	5	1.085	1.2	3	5	2	0	1.0	1.0	2.6	3.4		

¹SIZE

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

²SPECIFIC GRAVITY

Data not replicated

³OUT OF THE FIELD CHIP COLOR SCORE

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

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(percent of tubers out of 10)
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2: Slight stem end defect
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4: Severe stem end defect
5: Extreme stem end defect

⁷VINE VIGOR RATING

Date: 6/3/19
Rating 1-5
1: Slow emergence
5: Early emergence (vigorous vines, some flowering)

⁸VINE MATURITY RATING

Date: 8/13/19
Rating 1-5
1: Early (vines completely dead)
5: Late (vigorous vines, some flowering)

FIELD DATA

Planting date 4/26/19
Vine Kill Date N/A
Harvest Date 8/19/19
Days (planting to vine kill) N/A
Days (planting to harvest) 115
GDD₄₀ MAWN Station Cassopolis
GDD₄₀ (planting to vine kill) 3054
Seed Spacing 10"

2019 Storage Chip Processing Potato Variety Trial

Lennard Ag. Co.

Planting: 4/29/19 Vine Kill: 8/31/19 Harvest: 9/6/19
GDD₄₀: 3355

LINE	CWT/A		PERCENT OF TOTAL ¹					RAW TUBER QUALITY ⁴ (%)							COMMON SCAB RATING ⁵	SED SCORE ⁶	VINE VIGOR ⁷	VINE MATURITY ⁸	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR ²	OTF CHIP SCORE ³	HH	VD	IBS	BC						
MSW044-1	682	743	92	6	90	2	2	1.088	1.5	0	30	0	0	1.3	0.3	4.0	3.0		
NY163	623	693	90	6	89	1	4	1.085	1.0	0	0	0	0	0.8	0.3	3.5	3.0	attractive bright skin, some tuber bottlenecking	
Snowden	618	683	90	7	89	1	3	1.092	1.0	0	0	0	0	0.8	0.4	4.0	3.5		
NY166	601	699	86	8	86	0	6	1.081	2.0	0	0	0	0	1.0	0.4	3.0	3.5	oblong tuber type	
Hodag	525	578	90	4	87	3	6	1.080	1.0	30	0	0	10	1.0	0.3	2.5	4.5	round tuber type	
NYP14-1	525	614	85	10	84	1	4	1.092	1.0	0	10	0	0	1.0	0.4	3.5	2.5	deeper apical ends, slight gc, moderate greening	
NY162	521	581	90	7	86	4	4	1.082	1.0	0	10	0	10	2.0	0.3	2.5	3.0		
Manistee	499	585	85	6	85	0	8	1.084	1.0	0	10	0	0	1.5	0.2	3.0	2.5	moderate skinning	
MSW075-2	482	538	90	7	90	0	3	1.079	1.5	0	10	0	0	1.0	0.5	2.0	3.5	slight skinning and second growth	
ND7519-1	477	561	85	8	85	0	7	1.087	1.0	0	20	0	0	1.5	0.4	2.5	3.0	moderate netting	
MSZ222-19	472	530	89	6	88	1	5	1.087	1.5	0	0	10	0	0.8	0.5	3.0	3.0	misshapen tubers, deep apical ends	
NY165	470	564	83	12	83	0	5	1.076	1.0	0	0	0	0	0.5	0.2	2.0	4.0	oblong tuber type, light skin netting	
Lamoka	460	501	92	5	92	0	3	1.086	1.0	0	0	0	0	1.5	0.8	4.0	1.5		
MSBB058-4	447	535	83	11	82	1	6	1.082	1.0	0	10	0	0	1.0	0.3	3.0	4.5	thinner skin	
MSBB625-2	436	507	85	10	84	1	5	1.093	1.0	0	0	50	0	1.5	0.2	3.5	5.0	heavy skin netting	
Lady Liberty	430	517	83	15	83	0	2	1.084	1.0	0	20	0	0	1.0	0.2	3.5	2.5		
MSX472-2	411	488	84	11	84	0	5	1.067	1.0	0	0	0	10	1.0	0.3	2.5	1.0	round tuber type	
MSZ219-14	408	449	91	8	91	0	2	1.075	1.0	0	10	0	0	0.8	1.4	3.5	3.0	darker netted skin type	
Mackinaw	398	462	95	12	86	9	1	1.085	1.0	0	0	0	0	1.0	0.5	1.5	1.5	heavy skin netting	
CO10076-4W	379	463	82	11	82	0	7	1.071	1.5	0	0	0	0	1.5	0.2	1.0	2.5		
MSZ020-10	357	418	85	10	85	0	4	1.082	1.5	0	0	0	0	1.5	0.3	0.5	3.5	very poor emergence, seed looks ok but slow	
Petoskey (MSV030-4)	345	432	80	9	80	0	11	1.089	1.5	0	0	0	0	1.3	1.1	2.0	3.0	moderate growth crack, heavy netting	
Pike	311	371	84	9	83	1	7	1.079	1.5	0	30	0	0	1.0	0.4	3.0	3.0	tuber bottlenecking, pointed ends	
BNC182-5	294	374	78	19	78	0	2	1.077	1.0	10	0	0	10	1.0	0.6	3.0	3.5	skin flaking	
B2904-2	292	345	84	8	84	0	7	1.069	1.5	10	20	0	10	1.3	1.9	3.0	4.0		
B2869-29	264	364	73	27	73	0	1	1.092	1.0	0	20	0	0	0.8	0.4	4.0	3.0		
MSZ219-13	169	200	84	13	84	0	2	1.071	1.0	0	0	10	0	1.5	0.5	1.5	4.0	attractive round tuber type	
MEAN	441	511	86	10	85	1	5	1.082	1.2	2	7	3	2	1.1	1.1	2.8	3.1		

¹SIZE

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

²SPECIFIC GRAVITY

Data not replicated

³OUT OF THE FIELD CHIP COLOR SCORE

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

⁴RAW TUBER QUALITY

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

⁵COMMON 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

⁶SED (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

⁷VINE VIGOR RATING

Date: 6/3/19
Rating 1-5
1: Slow emergence
5: Early emergence (vigorous vines, some flowering)

⁸VINE MATURITY RATING

Date: 8/13/19
Rating 1-5
1: Early (vines completely dead)
5: Late (vigorous vines, some flowering)

FIELD DATA

Planting date 4/29/19
Vine Kill Date 8/31/19
Harvest Date 9/6/19
Days (planting to vine kill) 124
Days (planting to harvest) 130
GDD₄₀ MAWN Station Cassopolis
GDD₄₀ (planting to vine kill) 3355
Seed Spacing 10"

2019 Storage Chip Processing Potato Variety Trial

Main Farms

Planting: 5/17/19 Vine Kill: 9/1/19 Harvest: 9/24/19
GDD₄₀: 2850

LINE	CWT/A		PERCENT OF TOTAL ¹						RAW TUBER QUALITY ⁴ (%)						COMMON SCAB RATING ⁵	SED SCORE ⁶	VINE VIGOR ⁷	VINE MATURITY ⁸	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR ²	OTF CHIP SCORE ³	HH	VD	IBS	BC						
MSZ219-14	520	571	91	8	91	0	1	1.087	1.5	0	0	0	0	0.5	0.1	3.5	2.5	nice overall appearance	
MSZ222-19	481	565	85	14	85	0	1	1.093	1.5	0	10	0	0	1.0	0.3	2.5	1.0		
MSAA275-3	471	506	93	6	93	0	1	1.081	1.5	0	40	0	0	2.5	0.4	2.0	2.0	nice overall appearance	
MSZ052-14	461	548	84	16	84	0	0	1.085	1.5	0	10	0	0	1.5	0.2	3.0	3.5		
MSBB058-1	461	508	91	8	91	0	1	1.097	1.0	0	10	0	0	0.5	0.0	2.5	2.0	netted skin	
BNC182-5	453	538	84	16	84	0	0	1.089	1.5	0	50	0	0	2.0	0.1	3.0	2.0		
NY163	452	530	85	13	85	0	2	1.091	1.0	0	10	0	0	0.5	0.1	2.0	1.5	thinner skin	
NY162	436	519	84	12	84	0	4	1.092	1.5	0	10	0	0	2.0	0.2	2.0	2.0		
Mackinaw	427	508	84	10	84	0	6	1.095	1.5	0	20	0	0	1.5	0.5	2.5	2.0		
CO10076-4W	412	500	82	17	82	0	1	1.080	1.5	0	20	0	0	2.0	0.2	2.0	3.5		
NY165	407	535	76	23	76	0	1	1.089	1.0	0	10	0	0	0.5	0.1	2.5	3.0	attractive round tuber type	
B2904-2	397	450	88	9	88	0	3	1.089	2.0	10	30	0	0	0.5	0.2	2.0	2.0	lighter skin	
MSZ219-13	393	410	96	2	96	0	2	1.095	1.5	30	0	0	0	0.5	0.1	1.5	3.5		
Lady Liberty	393	473	83	16	83	0	1	1.084	1.0	0	10	0	0	1.5	0.1	3.5	2.0		
Lamoka	374	425	88	11	88	0	1	1.089	1.0	0	20	0	0	1.5	0.1	3.0	1.5		
Petoskey (MSV030-4)	373	411	91	9	91	0	0	1.098	1.0	0	0	0	0	1.0	0.1	2.0	1.5		
ND7519-1	364	474	77	21	77	0	2	1.091	1.0	0	20	60	0	1.5	1.2	3.5	1.0		
Hodag	361	430	84	8	84	0	8	1.091	2.0	0	0	0	10	1.0	0.1	2.5	2.5	pear shaped tubers in pickouts	
MSZ242-13	345	383	90	9	90	0	1	1.101	1.0	0	0	0	0	0.5	0.1	2.5	3.0	darker netted skin	
Manistee	304	388	78	21	78	0	1	1.082	1.5	10	20	0	10	2.5	0.1	2.5	1.0	black leg	
MSW044-1	294	375	78	22	78	0	0	1.088	1.5	10	20	0	0	0.5	0.1	2.5	2.0		
Pike	292	340	86	12	86	0	2	1.089	1.5	0	20	0	0	0.5	0.1	2.5	2.5		
MSW075-2	287	424	68	31	68	0	1	1.082	1.0	0	30	0	0	0.5	0.1	2.5	3.0		
Snowden	266	361	74	24	74	0	2	1.087	1.0	0	10	0	0	2.0	0.0	2.5	1.0		
B2869-29	253	362	70	30	70	0	0	1.093	2.0	0	30	0	0	2.0	0.1	2.0	1.5		
MEAN	387	461	84	15	84	0	2	1.089	1.4	2	16	2	1	1.2	0.2	2.5	2.1		

¹**SIZE**

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

²**SPECIFIC GRAVITY**

Date not replicated

³**OUT OF THE FIELD CHIP COLOR SCORE**

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

⁴**RAW TUBER QUALITY**

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

⁵**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

⁶**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

⁷**VINE VIGOR RATING**

Date: 6/19/19
Rating 1-5
1: Slow emergence
5: Early emergence (vigorous vines, some flowering)

⁸**VINE MATURITY RATING**

Date: 8/30/19
Rating 1-5
1: Early (vines completely dead)
5: Late (vigorous vines, some flowering)

FIELD DATA

Planting date 5/17/19
Vine Kill Date 9/1/19
Harvest Date 9/24/19
Days (planting to vine kill) 107
Days (planting to harvest) 130
GDD₄₀ MAWN Station Entrican
GDD₄₀ (planting to vine kill) 2850
Seed Spacing 10"

2019 Storage Chip Processing Potato Variety Trial

Montcalm Research Center Chip Box Bin

Planting: 5/8/19 Vine Kill: 9/9/19 Harvest: 9/30/19

GDD₄₀: 3133

LINE	CWT/A		PERCENT OF TOTAL ¹					RAW TUBER QUALITY ⁴ (%)					COMMON SCAB RATING ⁵	SED SCORE ⁶	VINE VIGOR ⁷	VINE MATURITY ⁸	COMMENTS	
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR ²	OTF CHIP SCORE ³	HH	VD	IBS						BC
MSZ120-4	394	498	79	15	79	0	6	1.090	1.5	0	20	0	0	1.8	0.2	2.5	3.5	sticky stolons, variable size
MSBB626-11	392	530	74	15	74	0	11	1.090	2.0	0	30	0	0	1.5	0.9	3.0	2.0	deep apical ends, misshapen pos
MSBB625-2	368	482	76	22	76	0	2	1.095	2.0	0	50	20	0	0.7	0.7	3.0	3.0	sl silver scurf, round shape, netted skin
CO10076-4W	358	496	72	14	72	0	14	1.074	1.5	0	20	10	0	1.8	0.3	1.5	3.0	pitted scab lesions, flaky skin
MSBB058-4	352	453	78	19	78	0	3	1.085	2.0	0	20	0	0	2.0	0.6	2.0	2.5	poor appearance
Lady Liberty	350	490	72	22	72	0	6	1.085	2.0	0	50	0	0	1.3	0.2	3.0	2.5	deep apical ends, blockier type
Mackinaw	328	542	61	24	61	0	15	1.093	1.5	0	40	10	0	2.0	0.3	2.5	2.5	
Hodag	326	436	75	19	75	0	6	1.084	2.5	0	20	0	0	1.5	0.3	3.0	2.5	
MSZ200-3	323	405	80	19	80	0	1	1.077	2.0	10	40	0	20	2.0	0.6	2.5	3.0	sticky stolons. Marginal, don't need to see again
MSAA275-3	322	379	85	11	85	0	4	1.080	2.0	0	40	0	0	2.0	1.5	2.5	2.0	slightly flattened tuber typr
MSBB060-1	317	387	82	7	78	4	11	1.080	1.5	0	40	0	0	1.3	0.5	2.0	2.5	nice shape
MSZ219-13	283	330	86	3	84	2	11	1.085	1.5	0	20	0	0	0.0	0.5	2.0	3.0	round, larger, darker netted skin
NY165	283	431	66	28	66	0	6	1.080	2.0	0	10	0	0	0.5	0.9	2.5	3.0	round, uniform, nice
MSBB131-1	283	357	79	13	79	0	8	1.080	1.5	0	40	0	0	2.0	0.7	3.0	1.5	bright skin, nice appearance, cream flesh
NYP111-9	282	439	64	27	64	0	9	1.100	1.5	0	30	10	0	0.5	0.2	3.0	3.0	smaller size profile, buff skin
NY166	263	491	54	35	54	0	11	1.081	1.5	0	20	0	0	1.8	0.1	2.5	2.0	flattened round tuber type, flaky skin
NY162	263	405	65	20	65	0	15	1.087	1.5	0	10	0	0	1.5	0.4	2.0	1.5	
MSBB058-1	260	368	71	21	71	0	8	1.098	1.5	0	20	0	0	1.5	0.6	3.0	1.5	
MSAA498-18	250	306	82	14	82	0	4	1.080	1.5	0	20	0	0	0.5	0.1	2.0	2.0	
MSZ052-14	245	362	67	26	67	0	7	1.085	1.5	0	20	0	0	1.0	1.1	3.0	2.5	alligator hide
MSZ020-10	232	347	67	19	67	0	14	1.087	2.0	0	10	0	0	2.0	0.2	1.0	3.5	oval, slightly flattened type
MSW075-2	228	385	59	34	59	0	7	1.081	1.5	0	50	0	0	1.5	0.2	2.5	3.0	round, bright, thin skin
MSBB008-3	218	301	73	24	73	0	3	1.081	2.0	0	40	0	0	1.0	0.3	3.0	1.0	
MSZ219-14	209	313	67	29	67	0	4	1.084	2.5	0	40	0	0	1.5	0.2	3.5	3.0	brighter appearance, uniform round tuber type
MSW044-1	206	380	54	37	54	0	9	1.088	2.0	0	0	0	0	0.7	0.3	3.5	2.5	
ND7519-1	204	329	62	35	62	0	3	1.082	1.5	0	0	0	0	2.0	0.2	3.0	2.0	
Petoskey (MSV030-4)	203	274	74	22	74	0	4	1.096	1.5	0	0	0	0	0.0	0.3	2.5	3.5	lots of alligator hide
MSX472-2	200	381	52	42	52	0	6	1.077	1.5	0	30	0	0	0.7	0.1	3.0	2.5	round, smaller, thin skin
NY163	191	340	56	33	56	0	11	1.086	1.5	0	40	0	0	1.0	0.5	2.5	2.0	oval, some pear shapes, misshapen Pos
Manistee SEL	190	370	51	37	51	0	12	1.078	2.0	0	30	0	0	3.5	0.3	3.0	1.0	lost of pitted scab lesions
Snowden	187	359	52	44	52	0	4	1.076	1.5	0	70	0	0	3.5	0.4	3.0	1.5	sl growth crack, variable skin color
Manistee	180	315	57	31	57	0	12	1.080	2.0	0	10	0	0	3.5	0.4	3.0	1.0	deep apical ends, misshapen pos
Winterset	174	341	51	45	51	0	4	1.086	2.0	0	20	0	0	3.5	0.3	3.0	1.0	
Lamoka	170	285	60	34	60	0	6	1.086	2.0	0	0	0	0	2.0	0.3	3.5	3.0	
NYP14-1	156	316	49	50	49	0	1	1.090	1.0	0	10	0	0	2.0	0.1	3.0	1.0	
MEAN	263	389	67	25	67	0	7	1.085	1.7	0	26	1	1	1.6	0.4	2.7	2.3	

¹ SIZE Bs: < 1 7/8" As: 1 7/8" - 3 1/4" OV: > 3 1/4" PO: Pickouts	² SPECIFIC GRAVITY Data not replicated	³ OUT OF THE FIELD CHIP COLOR SCORE (SNAC Scale) Ratings: 1 - 5 1: Excellent 5: Poor	⁴ RAW TUBER QUALITY (percent of tubers out of 10) HH: Hollow Heart VD: Vascular Discoloration IBS: Internal Brown Spot BC: Brown Center	⁵ 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	⁶ 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
⁷ VINE VIGOR RATING Date: 6/17/19 Rating 1-5 1: Slow emergence 5: Early emergence (vigorous vines, some flowering)	⁸ VINE MATURITY RATING Date: 9/3/19 Rating 1-5 1: Early (vines completely dead) 5: Late (vigorous vines, some flowering)	FIELD DATA Planting date: 5/8/19 Vine Kill Date: 9/9/19 Harvest Date: 9/30/19 Days (planting to vine kill): 124 Days (planting to harvest): 145 GDD ₄₀ MAWN Station: Entrican GDD ₄₀ (planting to vine kill): 3133 Seed Spacing: 10"			

2019 Storage Chip Processing Potato Variety Trial

Sandyland Set 1

Planting: 5/13/19 Vine Kill: Harvest:
GDD₄₀: 2861

LINE	CWT/A		PERCENT OF TOTAL ¹						RAW TUBER QUALITY ⁴ (%)						COMMON SCAB RATING ⁵	SED SCORE ⁶	VINE VIGOR ⁷	VINE MATURITY ⁸	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR ²	OTF CHIP SCORE ³	HH	VD	IBS	BC						
Mackinaw	482	640	75	24	75	0	1	1.095	2.0	0	0	0	0	1.5	0.4	3.0	3.5	flattened oval	
Petoskey (MSV030-4)	462	585	79	20	79	0	1	1.098	1.5	0	10	0	0	1.5	0.3	2.5	2.5	nice shape, slightly flattened, some pitted lesions, netted skin	
Lady Liberty	445	586	76	24	76	0	0	1.078	2.0	0	0	0	0	2.0	0.6	3.5	3.0		
MSZ219-13	424	442	96	3	96	0	1	1.082	2.0	10	0	0	10	0.0	0.3	1.5	4.0		
ND7519-1	350	460	76	23	76	0	1	1.088	2.5	0	10	0	0	0.5	0.6	3.5	1.5	tr rhizoc	
MEAN	432	542	80	19	80	0	1	1.088	2.0	2	4	0	2	1.1	1.1	2.8	2.9		

¹**SIZE**

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

²**SPECIFIC GRAVITY**

Data not replicated

³**OUT OF THE FIELD CHIP COLOR SCORE**

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

⁴**RAW TUBER QUALITY**

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

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5.0: More than 50% of tuber surface area covered in pitted lesions

⁶**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

⁷**VINE VIGOR RATING**

Date: 6/19/19
Rating 1-5
1: Slow emergence
5: Early emergence (vigorous vines, some flowering)

⁸**VINE MATURITY RATING**

Date: 9/3/19
Rating 1-5
1: Early (vines completely dead)
5: Late (vigorous vines, some flowering)

FIELD DATA

Planting date 5/13/19
Vine Kill Date 8/29/19
Harvest Date 10/17/19
Days (planting to vine kill) 108
Days (planting to harvest) 157
GDD₄₀ MAWN Station Entrican
GDD₄₀ (planting to vine kill) 2861
Seed Spacing 10"

2019 Replicated Chip Processing Potato Variety Trial

Sandyland SNAC

Planting: 5/13/19 Vine Kill: 8/29/19 Harvest: 10/17/19
GDD₄₀: 2861

LINE	CWT/A		PERCENT OF TOTAL ¹					RAW TUBER QUALITY ⁴ (%)							COMMON SCAB RATING ⁵	SED SCORE ⁶	VINE VIGOR ⁷	VINE MATURITY ⁸	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR ²	OTF CHIP SCORE ³	HH	VD	IBS	BC						
AOR09034-3	461	536	86	12	86	0	2	1.086	2.0	0	13	0	7	3.0	0.4	4.5	4.0	pointed tubers, moderate rhizoctonia	
Petoskey (MSV030-4)	443	552	80	19	80	0	1	1.092	1.0	0	3	0	0	2.0	0.2	2.5	2.0	moderate netted skin, uniform type	
Lamoka	440	541	81	18	81	0	1	1.088	2.0	0	17	0	0	0.5	0.3	3.5	2.5		
Mackinaw	433	600	72	27	72	0	1	1.090	1.5	0	3	0	0	1.5	0.4	3.5	3.5	tr pitted scab, heavier netted skin	
MSZ219-14	426	503	85	15	85	0	0	1.084	2.0	0	7	0	0	0.2	0.6	3.5	3.0	nice appearance and shape, tr alligator hide	
Snowden	374	488	77	23	77	0	0	1.086	1.5	0	13	0	0	2.0	0.4	3.5	2.5		
ND7519-1	294	445	66	32	66	0	2	1.086	2.0	0	7	0	0	1.0	0.5	4.0	1.0	tr rhizoctonia	
MSW075-2	256	414	62	38	62	0	0	1.082	2.0	0	7	0	0	0.5	0.4	3.0	2.5	tr scab, small, round, bright, uniform	
MEAN	391	510	76	23	76	0	1	1.087	1.8	0	9	0	1	1.3	0.4	3.5	2.6		

¹**SIZE**

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

²**SPECIFIC GRAVITY**

3 replicates

³**OUT OF THE FIELD CHIP COLOR SCORE**

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

⁴**RAW TUBER QUALITY**

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

⁵**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

⁶**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

⁷**VINE VIGOR RATING**

Date: 6/19/19
Rating 1-5
1: Slow emergence
5: Early emergence (vigorous vines, some flowering)

⁸**VINE MATURITY RATING**

Date: 9/3/19
Rating 1-5
1: Early (vines completely dead)
5: Late (vigorous vines, some flowering)

FIELD DATA

Planting date 5/13/19
Vine Kill Date 8/29/19
Harvest Date 10/17/19
Days (planting to vine kill) 108
Days (planting to harvest) 157
GDD₄₀ MAWN Station Entrican
GDD₄₀ (planting to vine kill) 2861
Seed Spacing 10"

2019 Storage Chip Processing Potato Variety Trial

Verbrigghe Farms

Planting: 5/15/19 Vine Kill: 9/7/19 Harvest: 10/9/19
GDD₄₀: 2547

LINE	CWT/A		PERCENT OF TOTAL ¹					RAW TUBER QUALITY ⁴ (%)							COMMON SCAB RATING ⁵	SED SCORE ⁶	VINE VIGOR ⁷	VINE MATURITY ⁸	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR ²	OTF CHIP SCORE ³	HH	VD	IBS	BC						
Lady Liberty	486	495	99	1	91	8	0	1.089	Not	20	0	0	0	1.0	Not	4.0	4.0		
Snowden	440	449	98	2	63	35	0	1.099	Taken	0	10	0	0	0.0	Taken	4.0	4.0		
ND7519-1	376	431	87	13	73	14	0	1.100		0	10	0	0	1.0		5.0	4.0		
MSV030-4	285	307	93	7	88	5	0	1.099		0	0	0	0	0.0		2.5	4.5		
Mackinaw	269	335	80	20	62	18	0	1.094		0	0	0	0	0.0		3.0	4.5		
MEAN	371	403	91	9	75	16	0	1.096		4	4	0	0	0.4		3.7	4.2		

¹SIZE	²SPECIFIC GRAVITY	³OUT OF THE FIELD CHIP COLOR SCORE (SNAC Scale)	⁴RAW TUBER QUALITY (percent of tubers out of 10)	⁵COMMON SCAB RATING	⁶SED (STEM END DEFECT) SCORE
Bs: < 1 7/8" As: 1 7/8" - 3 1/4" OV: > 3 1/4" PO: Pickouts	Data not replicated	Ratings: 1 - 5 1: Excellent 5: Poor	HH: Hollow Heart VD: Vascular Discoloration IBS: Internal Brown Spot BC: Brown Center	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	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
⁷VINE VIGOR RATING		⁸VINE MATURITY RATING	FIELD DATA		
Date: 7/10/19 Rating 1-5 1: Slow emergence 5: Early emergence (vigorous vines, some flowering)		Date: 8/28/19 Rating 1-5 1: Early (vines completely dead) 5: Late (vigorous vines, some flowering)	Planting date 5/15/19 Vine Kill Date 9/7/19 Harvest Date 10/9/19 Days (planting to vine kill) 115 Days (planting to harvest) 147 GDD ₄₀ MAWN Station Escanaba GDD ₄₀ (planting to vine kill) 2547 Seed Spacing 10"		

2019 Fresh Chip Processing Potato Variety Trial

Walther Farms

Planting: 4/16/19 Vine Kill: 8/19/19 Harvest: 9/18/19
GDD₄₀: 3243

LINE	CWT/A		PERCENT OF TOTAL ¹					RAW TUBER QUALITY ⁴ (%)							COMMON SCAB RATING ⁵	SED SCORE ⁶	VINE VIGOR ⁷	VINE MATURITY ⁸	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR ²	OTF CHIP SCORE ³	HH	VD	IBS	BC						
Snowden	775	841	92	7	92	0	1	1.085	1.0	0	20	0	0	0.0	0.4	4.0	4.0		
Manistee	764	826	92	8	92	0	0	1.078	1.5	0	0	50	0	0.0	0.5	4.0	2.0	moderate skinning	
MSZ096-3	696	775	90	10	90	0	0	1.082	2.5	0	20	0	0	0.0	1.0	3.0	5.0		
MSZ219-14	639	696	92	7	92	0	1	1.090	1.5	0	30	0	0	0.0	0.7	4.0	3.0	nice type	
Mackinaw	561	632	89	9	89	0	2	1.088	1.5	0	10	0	0	0.0	0.4	4.5	3.0	pointed pos	
Atlantic	543	585	93	6	93	0	1	1.089	1.5	0	10	0	0	0.0	0.9	3.5	3.0		
MSV030-4	502	580	87	8	87	0	5	1.088	1.5	0	30	0	0	0.0	0.8	3.5	3.0	attractive skin	
Hodag	497	585	85	9	85	0	6	1.085	1.0	0	20	0	0	0.0	0.3	4.0	2.5	tr knobs in pos	
MSW044-1	491	605	81	18	81	0	1	1.097	1.0	0	0	0	0	0.0	0.4	4.0	3.0		
MSZ219-13	489	515	95	5	95	0	0	1.088	1.0	0	10	0	0	0.0	0.3	2.5	3.5		
MSZ222-19	485	576	84	14	84	0	2	1.082	1.5	10	0	0	0	0.0	0.5	4.0	4.0	deep apical ends, sheep nosing	
MSW075-2	466	554	84	16	84	0	0	1.073	1.5	0	30	0	0	0.0	0.6	3.0	3.5		
MSAA311-1	442	506	87	13	87	0	0	1.073	1.5	0	0	0	0	0.0	0.7	4.0	5.0		
B2904-2	385	492	78	14	78	0	8	1.078	2.0	60	80	10	0	0.0	1.4	3.5	4.0	gc, non uniform type	
B2869-29	373	535	70	29	70	0	1	1.093	2.0	0	20	0	0	0.0	1.0	4.5	2.5		
MSAFB609-12	354	442	80	20	80	0	0	1.085	1.0	0	0	0	0	0.0	0.5	3.5	3.5	bright and uniform	
MEAN	529	609	86	12	86	0	2	1.085	1.5	4	18	4	0	0	0.0	3.7	3.4		

¹SIZE

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

²SPECIFIC GRAVITY

Data not replicated

³OUT OF THE FIELD CHIP COLOR SCORE (SNAC Scale)

Ratings: 1 - 5
1: Excellent
5: Poor

⁴RAW TUBER QUALITY (percent of tubers out of 10)

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

⁵COMMON 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

⁶SED (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

⁷VINE VIGOR RATING

Date: 6/3/19
Rating 1-5
1: Slow emergence
5: Early emergence (vigorous vines, some flowering)

⁸VINE MATURITY RATING

Date: 8/12/19
Rating 1-5
1: Early (vines completely dead)
5: Late (vigorous vines, some flowering)

FIELD DATA

Planting date 4/16/19
Vine Kill Date 8/19/19
Harvest Date 9/18/19
Days (planting to vine kill) 125
Days (planting to harvest) 155
GDD₄₀ MAWN Station Mendon
GDD₄₀ (planting to vine kill) 3243
Seed Spacing 10"

2019 Replicated Chip Processing Potato Variety Trial

Walther Farms

Planting: 5/24/19 Vine Kill: 9/4/19 Harvest: 10/14/19
GDD₄₀: 2954

LINE	CWT/A		PERCENT OF TOTAL ¹				RAW TUBER QUALITY ⁴ (%)							COMMON SCAB RATING ⁵	SED SCORE ⁶	VINE VIGOR ⁷	VINE MATURITY ⁸	COMMENTS
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR ²	OTF CHIP SCORE ³	HH	VD	IBS	BC					
MSZ219-14	614	660	93	6	93	0	1	1.081	1.5	0	10	0	0	0.3	0.6	4.7	4.0	
WAF10664-3	584	635	92	6	91	1	2	1.078	1.5	0	13	3	0	0.2	0.2	4.7	3.0	round, bright thin skin
NY162	565	620	91	6	90	1	3	1.084	1.0	0	3	0	0	0.3	0.9	3.0	3.0	pear shapes, oval tubers
Lady Liberty	551	611	90	10	90	0	0	1.081	1.5	0	3	0	0	0.8	0.1	3.7	3.3	round type, misshapen pos
MSBB626-11	544	577	94	4	93	1	2	1.085	2.0	20	10	7	0	0.3	0.8	4.0	4.0	sl sticky stolons, uniform
MSW075-2	540	588	92	7	92	0	1	1.075	1.5	0	3	0	0	0.0	0.3	3.2	3.3	uniform, round, bright, attractive
Snowden	535	564	95	5	95	0	0	1.089	1.0	7	7	0	0	0.7	0.3	3.8	3.8	pitted scab lesions, sl gc
MSBB058-4	533	575	93	7	93	0	0	1.083	1.5	3	0	7	3	0.2	0.5	3.0	4.3	sl sticky stolons, blocky
Hodag	531	561	94	3	93	1	3	1.081	2.0	10	13	33	23	0.2	0.9	3.2	4.2	alligator hide, points
MSAFB636-1	515	567	91	8	91	0	1	1.072	1.5	0	0	0	7	1.0	0.3	3.2	3.5	uniform, attractive type
NY165	512	576	89	10	89	0	1	1.084	1.0	0	3	0	0	0.0	0.4	3.7	4.3	uniform, round, attractive
B2904-2	511	566	90	4	88	2	6	1.080	1.0	37	30	3	0	1.0	0.8	3.3	3.8	miderate gc
Manistee	498	539	93	6	92	1	1	1.087	1.5	0	3	7	0	2.2	0.5	3.8	2.8	
BNC182-5	497	572	87	9	86	1	4	1.085	2.0	10	0	0	0	0.0	1.0	3.5	3.3	uniform type
NYP14-1	492	562	87	11	87	0	2	1.089	1.0	7	3	0	0	0.3	0.1	3.5	2.5	flaking skin, variable skin color
Mackinaw	491	541	91	8	91	0	1	1.091	1.5	0	7	3	0	0.2	0.3	3.0	3.3	mod alligator hide, sl gc
MSBB058-1	490	543	90	6	89	1	4	1.093	1.5	0	3	0	0	0.5	0.3	3.5	3.7	round, gc in pos
ND7519-1	469	506	93	5	93	0	2	1.087	2.5	7	27	20	10	0.0	0.6	4.8	3.2	attractive, bright appearance
MSZ248-10	467	546	86	10	85	1	4	1.081	1.0	3	3	27	7	1.0	0.6	3.0	3.7	heavy, dark, netted skin
NY163	463	550	84	9	84	0	7	1.082	1.0	0	0	0	0	0.2	0.4	3.5	3.2	purple apical pigmentation, bright
MSAA275-3	462	503	91	6	89	2	3	1.071	1.5	0	7	0	0	1.5	1.7	3.0	3.5	sticky stolons, oblong, non uniform
MSBB625-2	454	509	89	8	88	1	3	1.085	2.0	0	13	10	5	0.5	0.8	3.2	4.3	ah, misshapen, darker skin
MSW044-1	445	508	87	11	87	0	2	1.089	2.5	1	13	0	0	0.2	0.7	3.8	3.0	oval shape
B2869-29	443	542	82	16	81	1	2	1.089	2.5	0	10	0	3	0.8	1.1	4.3	3.3	tr gc
MSZ020-10	440	489	90	7	85	5	3	1.087	1.0	0	27	7	3	0.3	0.4	1.2	3.3	poor appearance, blocky, pinkeye
AF5563-5	438	482	91	1	87	4	8	1.073	1.0	7	17	0	0	0.0	1.8	2.8	2.5	misshapen pos, thin bright skin
CO10076-4W	435	496	88	9	88	0	3	1.072	2.0	3	0	0	0	1.0	0.6	2.3	2.8	light skin, deep stem ends
Petoskey (MSV030-4)	415	480	86	5	86	0	9	1.089	1.0	0	7	0	0	0.0	0.3	2.5	3.5	mod gc, alligator hide
NY166	413	527	78	12	78	0	10	1.079	2.0	13	3	7	10	0.5	0.3	3.0	4.2	pear shapes, oblong, points
MSZ200-3	401	426	94	2	92	2	4	1.070	1.5	0	20	0	0	0.5	0.9	3.2	3.7	large, sticky stolons
MSZ219-13	344	369	93	2	85	8	5	1.081	1.0	0	10	0	0	0.0	0.5	2.0	4.3	gc, sl ah, large
MEAN	487	542	90	7	89	1	3	1.082	1.5	4	9	4	2	0.5	0.6	3.3	3.5	

¹SIZE

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

²SPECIFIC GRAVITY

Data not replicated

³OUT OF THE FIELD CHIP COLOR SCORE

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

⁴RAW TUBER QUALITY

(percent of tubers out of 10)
HH: Hollow Heart
VD: Vascular Discoloration
IBS: Internal Brown Spot
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⁷VINE VIGOR RATING

Date: 6/28/19
Rating 1-5
1: Slow emergence
5: Early emergence (vigorous vines, some flowering)

⁸VINE MATURITY RATING

Date: 9/4/19
Rating 1-5
1: Early (vines completely dead)
5: Late (vigorous vines, some flowering)

FIELD DATA

Planting date 5/24/19
Vine Kill Date 9/4/19
Harvest Date 10/14/19
Days (planting to vine kill) 103
Days (planting to harvest) 143
GDD₄₀ MAWN Station Ceresco
GDD₄₀ (planting to vine kill) 2954
Seed Spacing 10"

Chip Process Potatoes Bulk Planting Test Digs

LINE	CWT/A		PERCENT OF TOTAL ¹							TUBER SET							RAW TUBER QUALITY ³ (%)					
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR ²	Stand Count	Stem Count	Bs	As	OV	PO	Total	Tubers Per Plant	Tubers Per Stem	HH	VD	IBS	BC	CHIP COLOR ⁴
ND7519-1 Sandyland Farms	626	742	84	12	83	1	3	1.087	11	62	53	124	1	5	183	16.6	3.0	0	20	0	10	1.0
Lamoka Sackett Potatoes	423	456	93	4	93	0	3	1.086	10	26	9	90	0	4	103	10.3	4.0	0	30	0	0	1.5
Mackinaw Sackett Potatoes	251	321	78	21	78	0	1	1.092	11	38	34	66	0	1	101	9.2	2.7	0	0	0	0	1.0
MEAN	433	506	85	12	85	0	2	1.088	11	42	32	93	0	3	129	12.0	3.2	0	17	0	3	1.2

¹SIZE

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

²SPECIFIC GRAVITY

Data not replicated

³RAW TUBER QUALITY

(percent of tubers out of 10)
HH: Hollow Heart
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IBS: Internal Brown Spot
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⁴OUT OF THE FIELD CHIP

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