

Table 2. 2023 Michigan Statewide Chip Processing Potato Variety Trials
Overall Averages - Twelve 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					
SP327 ^{hl}	764	842	91	7	91	0	2	1.070	1.5	0	2	14	0	0.3	1.5	3.9	2.7	round blocky type, bright skin
AF6206-3 ^{cek}	752	798	95	4	94	1	1	1.084	1.0	0	7	0	0	1.3	0.2	4.0	3.5	bright skin, nice blocky round to oval type
MSDD376-4 ^{abcefgkl}	708	757	94	6	93	1	0	1.087	1.1	11	9	3	0	0.6	0.4	4.0	3.5	flat blocky type, heavy netted skin, sticky stolons
Winterset ^{bdk}	662	721	92	7	91	1	1	1.086	1.3	3	0	10	3	1.2	0.3	3.0	2.7	flat round type, slight skinning
MSDD249-9 ^{aeg}	634	643	98	2	94	4	0	1.082	1.0	3	3	0	0	1.7	0.7	3.8	2.8	large oval type, consistent appearance
MSDD553-1 ^{abcefgkl}	629	678	93	6	92	1	1	1.079	1.1	1	13	0	0	1.0	0.5	3.3	3.4	blocky round type, slight skinning, trace pointed tubers
MSBB630-2 ^{abcefgkl}	622	701	87	11	84	3	2	1.078	1.3	9	7	2	2	0.5	0.3	3.3	3.7	large round type, some misshapen tubers, trace sticky stolons
AF6675-1 ^{abefkl}	604	702	85	13	85	0	2	1.070	1.2	0	21	2	0	1.0	0.3	3.5	2.4	heavy netted skin, blocky oval type
Lady Liberty ^{af}	598	660	91	8	91	0	1	1.078	1.0	5	20	0	0	0.0	0.2	4.0	2.8	attractive round type, bright appearance
Manistee ^{adef}	587	639	92	7	90	2	1	1.080	1.0	3	10	5	0	1.0	0.2	4.3	2.9	compressed type, heavy netted skin, deep eyes
AF6565-8 ^{acdefgkl}	585	637	92	7	91	1	1	1.082	1.0	0	6	0	0	0.9	0.2	3.8	3.0	poor appearance, deeper eyes, blocky type
NY179 ^{abcefgkl}	584	644	90	10	90	0	0	1.080	1.1	4	3	0	0	1.7	0.3	3.4	2.8	long oval type, medium netted skin
NY174 ^{aefghi}	582	647	90	7	90	0	3	1.082	1.0	0	7	0	0	0.9	0.4	3.8	2.8	flat round to oval type, heavier skin
MSW474-1 ^{acdefgl}	581	661	88	11	87	1	1	1.084	1.0	0	7	2	0	0.1	0.3	4.2	3.2	uniform round type, deeper eyes, light skin
MSAA252-7 ^{bdk}	577	606	95	5	92	3	0	1.080	1.2	3	0	0	0	1.0	0.1	3.0	4.0	rough blocky type, heavy netted skin
MSEE035-4 ^{af}	573	641	89	7	88	1	4	1.087	1.0	3	6	1	0	0.5	0.8	3.7	3.0	trace growth crack, light netted skin
MSFF038-3 ^{abcdef}	568	617	92	6	92	0	2	1.079	1.3	8	2	0	3	1.2	0.3	3.7	2.8	deeper eyes, heavy skin, round type
AF6200-4 ^{cdceghi}	558	597	94	4	92	2	2	1.077	1.1	1	2	1	0	1.3	0.2	3.9	3.1	flat blocky round type, inconsistent shape
AF6886-3 ^l	548	576	95	4	88	7	1	1.066	1.0	0	13	17	7	1.0	0.3	3.7	2.7	blocky round type
MSBB614-15 ^{abcefgkl}	547	582	95	2	93	2	3	1.079	1.1	4	1	0	0	0.6	0.2	3.3	3.9	heavy netted skin, growth crack, some sticky stolons
MSAA217-3 ^{acdefgkl}	545	567	96	3	91	5	1	1.087	1.1	14	8	4	0	0.8	0.6	3.9	3.1	blocky round to oval type, deeper eyes
NYU34-6 ^{cf}	544	629	86	13	85	1	1	1.093	1.0	0	10	0	0	1.0	0.3	4.0	3.5	small flat oval type
WAF17049-2 ^{abefkl}	543	587	92	6	92	0	2	1.100	1.1	18	1	0	0	0.1	0.1	3.4	3.1	lighter skin, slight growth crack, oval type
AC13125-5W ^l	541	592	91	9	90	1	0	1.057	1.0	13	7	7	0	0.0	0.8	4.2	1.7	nice bright round appearance
Petoskey ^{el}	537	581	92	6	92	0	2	1.081	1.3	0	9	0	0	0.7	0.7	4.7	3.0	heavy netted skin, round type, a few compressed tubers
NYT22-1 ^{cl}	535	580	93	6	91	2	1	1.070	1.0	0	10	0	0	0.7	0.3	3.8	3.5	variable type, light netted skin
Mackinaw ^{abcdefgkl}	534	595	90	9	89	1	1	1.086	1.1	2	4	5	0	1.0	0.2	3.8	3.3	flat oval type, light netted skin
AF6894-12 ^l	533	577	92	8	92	0	0	1.076	1.0	0	10	10	0	1.5	0.6	2.7	2.7	light netted skin, round type
NYU15-8 ^{ef}	533	593	90	8	90	0	2	1.079	1.0	0	30	0	0	0.8	0.3	4.0	3.3	flat oval type, light netted skin
MSEE207-2 ^{abcef}	532	585	92	6	89	3	2	1.075	1.1	0	4	0	0	0.2	0.8	4.1	3.4	blocky round type, medium netted skin, slight sheep nose
AF6892-6 ^k	527	571	92	8	92	0	0	1.076	1.0	0	0	0	0	0.5	0.2	2.5	2.0	round to oblong blocky type, netted skin
AF6969-3 ^l	526	552	95	4	87	8	1	1.063	2.0	3	7	3	0	0.3	0.7	3.3	2.7	bright blocky round type
MSDD372-07 ^{fgl}	520	579	89	11	89	0	0	1.091	1.0	1	3	6	0	1.1	0.5	3.6	3.7	blocky round type, consistent appearance and shape
MSAA076-6 ^{abcefgkl}	520	594	87	10	87	0	3	1.087	1.2	4	9	3	1	0.9	0.3	3.7	3.2	small round uniform type, growth cracks, deeper eyes
MSGG242-1 ^{abcef}	517	613	83	15	83	0	2	1.081	1.6	0	10	52	0	0.2	0.8	3.7	3.0	attractive small round type, good appearance
AF6552-2 ^{egj}	516	560	91	8	88	3	1	1.076	1.0	0	0	0	3	0.8	0.2	3.3	3.7	light netted skin, blocky round type
AR2018-07 ^{afk}	513	586	87	12	87	0	1	1.076	1.5	10	7	13	0	1.7	0.4	3.8	2.8	small type, dark skin, slight growth crack
Lamoka ^{acefhji}	513	572	90	7	88	2	3	1.080	1.0	2	16	8	0	1.4	0.3	4.4	2.9	oval to pointed tubers, some deeper eyes, netted skin
AF6878-15 ^l	504	555	91	6	91	0	3	1.086	1.0	0	7	0	0	1.0	0.8	4.0	3.2	misshapen pickouts, flat round type
AF6872-11 ^k	501	589	85	12	85	0	3	1.090	1.5	0	0	0	0	1.5	0.2	2.5	2.5	netted skin, blocky round type, pitted scab
B3379-2 ^{bd}	497	560	89	10	89	0	1	1.089	1.3	40	0	0	0	0.8	0.2	4.8	3.3	light purple eyes, variable type
NC470-3 ^{bdk}	494	544	91	7	91	0	2	1.090	1.3	23	3	0	0	0.5	0.3	2.8	3.8	severe skinning, sticky stolons, growth cracks
AF6665-3 ^{abefkl}	494	572	85	14	85	0	1	1.077	1.1	2	6	2	2	1.0	0.3	3.6	3.0	flat oval type, some pointed tubers
B3403-6 ^d	491	544	90	10	90	0	0	1.093	1.0	0	0	0	0	2.0	0.0	4.0	3.5	nice type and appearance, scab susceptible

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
MSAFB635-15 ^{abcde fghijk}	489	584	82	18	82	0	0	1.085	1.2	1	5	1	1	1.3	0.4	3.7	3.0	uniform blocky round type, moderate skinning
Snowden ^{abcde fghjkl}	486	560	85	14	85	0	1	1.086	1.2	4	20	3	0	1.4	0.4	3.9	3.0	flat round type, some pink eyes, trace sticky stolons
AF6671-10 ^{abefl}	479	522	92	7	92	0	1	1.080	1.1	0	4	2	2	0.3	0.7	3.6	2.5	flat round type, moderate skinning
MSBB230-1 ^{gl}	474	525	91	8	90	1	1	1.082	1.0	0	19	0	0	0.6	0.8	3.2	2.8	round blocky type, some pitted scab
B3379-6 ^{bdk}	470	543	86	14	85	1	0	1.086	1.8	13	0	0	3	0.7	0.5	3.5	2.5	purple eyes, blocky round type
AF6652-3 ^{befkl}	469	519	90	8	90	0	2	1.078	1.1	3	20	0	0	0.4	1.4	3.1	2.8	bright skin, variable type
AF6978-1 ^l	464	516	90	7	88	2	3	1.073	1.0	10	7	0	0	1.2	1.7	3.0	3.5	large flat type, skinning
AF6655-1 ^{abefkl}	461	509	90	8	90	0	2	1.076	1.1	8	23	0	0	0.6	0.3	3.4	2.8	blocky round type, heavy netted skin
Dundee ^{befgl}	457	506	90	6	90	0	4	1.096	1.1	4	3	0	0	0.6	0.2	3.4	3.2	growth crack, oval type
AF5933-4 ^{abcde fglk}	447	518	83	16	83	0	1	1.085	1.0	3	7	0	0	1.5	0.3	3.4	2.2	smaller round uniform type
Bliss ^{ace f gij}	443	515	84	15	84	0	1	1.081	1.0	0	6	0	0	0.6	0.2	3.9	2.7	small round type, bright skin, trace points
MSDD247-11 ^{acfgl}	443	487	90	8	90	0	2	1.089	1.0	0	5	0	2	0.5	0.0	4.1	2.7	deeper eyes, attractive round type
Mystere ^{abcde fglk}	439	547	78	21	78	0	1	1.072	1.1	0	16	0	0	1.5	0.2	3.4	2.6	bright light skin, flat round to oval type
MSDD244-05 ^{gl}	438	467	95	3	71	24	2	1.078	1.0	0	7	0	0	0.3	0.1	2.8	3.0	round flat type, deeper apical eyes
B3012-1 ^{bdk}	437	557	79	20	79	0	1	1.073	1.2	0	0	0	0	0.7	0.6	3.0	2.3	variable oval type, netted skin
Atlantic ^{bdk}	433	488	90	8	89	1	2	1.080	1.5	23	7	3	0	1.5	0.5	3.7	2.7	slight skinning, round to pointed tubers
MSBB058-1 ^{cfgl}	426	459	93	6	93	0	1	1.088	1.0	0	8	0	0	0.4	0.1	3.0	3.3	blocky round type, moderate skinning
AF6883-15 ^l	424	483	88	11	87	1	1	1.070	1.0	0	7	3	0	0.7	0.3	3.8	1.5	variable appearance and skin finish
TX19009-2W ^l	423	532	79	18	79	0	3	1.070	1.0	3	10	0	0	1.8	0.1	3.8	2.7	smaller size profile, slight growth crack
MSBB610-13 ^{adk}	422	458	92	7	91	1	1	1.075	1.3	0	0	0	0	0.7	0.0	2.5	2.3	large round blocky type, growth cracks
NC821-30 ^{bdk}	422	501	83	14	83	0	3	1.092	1.2	7	0	0	0	0.3	0.1	3.0	3.3	blocky round type, heavy netted skin
AF6980-1 ^l	421	511	82	14	82	0	4	1.068	1.0	0	0	0	0	0.2	1.6	3.5	1.7	pointed tubers, variable skin and type
B3306-2 ^{bdk}	419	506	83	17	83	0	0	1.078	1.7	0	0	0	10	0.8	1.1	4.0	2.3	oval to oblong type, light yellow flesh
AF6898-1 ^l	415	510	82	16	82	0	2	1.068	1.0	5	20	0	0	0.3	1.4	3.5	2.2	pointed tubers, trace heat knobs
NYU44-7 ^{cf}	413	452	91	9	91	0	0	1.087	1.0	20	5	0	0	1.3	0.3	4.0	3.3	medium netted skin, round type
AF6883-8 ^l	413	470	88	12	88	0	0	1.077	1.0	3	7	0	0	1.2	0.3	4.5	2.2	light netted skin, flat oval type
MSEE031-3 ^{fgl}	411	463	88	9	88	0	3	1.083	1.0	2	10	10	2	0.7	0.3	3.7	2.4	variable shape, some scab
AF6165-9 ^{bcd fghkl}	411	481	85	14	85	0	1	1.085	1.1	33	8	1	2	2.0	0.3	3.9	2.7	variable shape, flat type
NY177 ^{gh}	398	488	82	17	82	0	1	1.096	1.0	0	4	0	0	1.8	0.6	3.5	3.0	medium netted skin, uniform type
WAF17045-2 ^{abefkl}	395	449	88	11	87	1	1	1.078	1.3	18	2	3	0	0.3	0.3	3.6	2.9	small round type, moderate skinning, heavy skin
MSDD247-07 ^{acfgl}	393	431	91	8	91	0	1	1.096	1.0	5	8	3	2	1.0	0.1	3.7	2.8	recessed stem end, slight skin
AF6911-4 ^l	392	485	81	19	81	0	0	1.075	1.0	0	10	3	0	1.5	0.6	3.0	3.0	compressed shape, bright thin skin
NYU34-5 ^{cf}	384	439	88	12	87	1	0	1.076	1.0	10	20	0	0	1.3	0.7	4.0	2.8	trace of purple blushing around eyes, round blocky type
B3381-4 ^{bck}	371	533	70	19	70	0	11	1.087	2.3	37	0	0	3	1.2	1.8	4.5	2.5	uniform oval type, light yellow flesh
AF6979-3 ^l	370	396	93	6	93	0	1	1.063	1.0	0	15	0	0	0.5	0.0	3.3	1.0	variable skin finish
MSAA260-03 ^{abcde fglkl}	359	421	84	12	83	1	4	1.077	1.2	0	8	4	1	0.9	0.2	3.6	3.1	small flat round type, moderate growth crack
AF6896-1 ^k	346	441	79	21	79	0	0	1.081	1.5	0	0	0	0	0.5	1.3	2.5	2.5	netted skin, round oblong type
AF6669-10 ^{abefkl}	339	432	75	25	75	0	0	1.077	1.1	2	12	1	2	0.5	0.1	3.3	2.8	bright skin, small round tubers
BNC726-5 ^{bdk}	329	426	73	26	73	0	1	1.079	1.2	20	0	0	0	0.8	0.3	3.3	2.8	small round type
B3471-1 ^d	296	386	77	19	77	0	4	1.073	2.5	0	0	0	0	2.0	3.8	4.0	3.5	oval type, pitted scab, light netted skin
NYU20-10 ^{ce}	290	355	82	17	82	0	1	1.077	1.0	5	25	0	0	2.0	0.1	4.0	3.3	small round type, some lenticel scarring
AF6901-8 ^k	229	313	73	26	73	0	1	1.078	1.5	0	10	0	0	0.5	0.2	2.0	2.5	bright skin color, round blocky type
AF6555-2 ^k	222	336	66	33	66	0	1	1.067	1.0	0	10	0	0	1.0	0.3	2.0	3.0	small type, bright skin, surface scab
BNC742-2 ^{bdk}	203	268	76	23	76	0	1	1.066	1.3	3	0	0	0	0.3	0.2	3.0	2.0	bright skin, round blocky type
BNC549-1 ^{bdk}	174	347	50	47	50	0	3	1.078	1.2	0	0	0	0	1.3	0.2	3.2	2.7	smaller oval type
TX18170-4W ^k	38	131	29	71	29	0	0	1.065	1.0	0	0	0	0	2.0	0.3	2.0	2.5	smaller size profile, slight growth crack
MEAN	474	539	86	12	85	1	2	1.080	1.2	5	7	2	1	0.9	0.5	3.5	2.9	

2023 Chip Variety Trial Sites

^a4-L Farms, Storage Trial

^bBlack Gold Farms, Fresh Trial

^cHampton Potato Growers, Storage Trial

^dLennard Ag. Co., Fresh Trial

^eLennard Ag. Co., Storage Trial

^fMain Farms, Storage Trial

^gMontcalm Research Center Box Bin Trial

^hSandyland Farms SNAC Replicated Storage Trial

ⁱSandyland Farms, Set 1 Storage Trial

^jVerbrigghe Farms, Fresh Chip Trial

^kWalther Farms, Fresh Trial

^lWalther Farms, Replicated 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 emergence (vigorous vines, some flowering)

⁸VINE MATURITY RATING

Date: Variable

Rating 1-5

1: Early (vines completely dead)

5: Late (vigorous vines, some flowering)