Table 1

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

ADVANCED CHIP-PROCESSING TRIAL
MONTCALM RESEARCH FARM
May 14 to September 22, 2015 (131 days)
DD Base 40°F 3130[8]

		CWT/A		PERCENT OF TOTAL[1]								PERCENT (%) TUBER QUALITY[4]							LB RAUDPC	3-YR AVG US#1
LINE	N	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR	CHIP SCORE[2]	OTF SED[3]	HH	VD	IBS	BC	SCAB[5]	MAT[6]	BRUISE[7]	x100	CWT/A
NY154	4	472	498	95	6	88	7	0	1.087	1.0	0.0	0	18	0	0	1.8	3.3	1.4	9.7	-
MSV313-2	3	452	461	98	1	53	45	1	1.082	1.0	1.0	0	13	0	0	-	4.0	2.2	-	-
A01143-3C	3	399	450	89	9	86	3	2	1.080	1.0	0.0	7	10	0	0	1.1	3.3	0.9	19.0	-
MSR127-2	4	380	402	95	5	72	23	1	1.084	1.0	0.0	3	8	0	0	1.3	3.8	1.7	-	395
CO02343-3W	4	371	395	94	6	62	32	1	1.076	1.0	2.0	3	5	0	0	2.5	3.3	1.0	22.9	-
Atlantic	**4**	**367**	**409**	**90**	**7**	**78**	**12**	**3**	**1.092**	**1.0**	**2.0**	**20**	**10**	**0**	**3**	**2.8**	**2.5**	**2.2**	**25.9**	**303**
MSV507-056	3	362	380	95	4	78	17	1	1.091	1.0	0.0	30	10	0	3	2.1	3.7	1.4	-	-
MSW509-5	3	362	399	90	9	75	16	1	1.082	1.5	4.0	0	43	0	0	1.4	2.7	0.8	19.6	-
MSV033-01	3	361	395	91	5	57	35	3	1.077	1.0	0.0	13	30	0	0	1.9	3.3	1.0	-	-
NY157	4	339	387	88	12	83	5	0	1.084	1.0	0.0	0	10	0	0	2.1	2.8	0.6	23.5	-
MSW474-01	3	331	424	78	22	77	1	0	1.085	1.0	1.0	0	3	0	0	1.0	3.0	2.0	-	-
AF4975-3	4	327	364	90	9	74	16	2	1.083	1.0	1.0	10	8	0	0	2.3	2.8	0.3	23.4	-
MSX398-2	3	325	342	95	5	81	13	0	1.078	1.0	1.0	0	7	7	0	2.0	3.0	0.8	0.2	-
MSR061-1	4	321	356	90	11	81	9	0	1.085	1.5	2.0	3	25	0	0	2.0	2.3	2.1	3.6	287
MSW394-1	4	320	349	91	8	84	7	1	1.077	1.0	1.0	0	25	0	0	1.5	2.5	1.5	10.8	-
MSV030-4	4	314	345	91	8	75	17	1	1.089	1.0	2.0	0	20	0	0	1.6	2.8	1.5	-	-
W5955-1	4	313	356	88	11	78	10	1	1.084	1.5	0.0	3	15	0	3	1.5	2.8	0.2	20.3	330*
AF4648-2	3	307	332	92	8	84	8	0	1.086	1.0	0.0	13	7	0	0	0.9	2.7	0.8	10.2	-
FL1879	**4**	**304**	**318**	**95**	**5**	**80**	**15**	**0**	**1.081**	**1.5**	**0.0**	**8**	**18**	**0**	**0**	**2.5**	**2.0**	**0.8**	**-**	**330**
NYK28-18	4	299	352	85	16	84	0	0	1.096	1.0	0.0	0	8	0	0	2.9	2.0	1.2	23.8	-
MSX540-4	4	296	326	91	5	72	19	4	1.088	1.0	1.0	0	33	0	3	2.0	3.8	2.8	4.6	-
Lamoka	3	295	321	92	7	85	7	1	1.084	1.0	0.0	0	10	0	0	1.8	2.7	0.6	21.4	299
Snowden	**3**	**292**	**353**	**83**	**15**	**77**	**6**	**2**	**1.087**	**1.0**	**1.0**	**0**	**27**	**0**	**0**	**2.8**	**2.3**	**1.6**	**18.0**	**275**
MSV358-3	3	291	341	85	8	73	12	6	1.081	1.0	0.0	0	3	0	0	1.6	2.0	0.6	-	-
MSV394-3	3	289	332	87	13	78	9	0	1.083	1.0	0.0	27	7	0	3	1.8	2.0	0.6	17.3	-
MSV393-1	3	269	332	81	19	80	1	0	1.082	1.0	1.0	7	7	0	0	1.8	3.3	0.9	20.0	-
MSV380-1	3	263	291	90	10	87	3	0	1.084	1.0	0.0	0	17	0	0	1.3	3.0	0.5	-	-
MSW163-03	2	258	273	94	3	73	22	3	1.079	-	-	5	0	5	0	1.4	3.0	-	18.9	-
MSV383-B	3	257	295	87	12	83	4	1	1.095	1.0	0.0	3	0	0	0	1.1	1.0	0.8	-	-
AF5320-1	3	246	314	78	19	74	4	3	1.081	1.0	0.0	7	23	0	0	1.1	2.3	0.2	23.2	-
MSW505-2	3	224	274	82	8	73	9	10	1.086	1.0	0.0	0	17	3	0	1.4	2.0	1.2	23.6	-
MSV440-6	3	122	152	57	43	55	2	0	1.066	2.0	0.0	0	3	0	0	2.1	2.0	-	-	-
MSW360-18	3	119	159	31	69	27	3	0	1.075	1.5	1.0	0	10	0	0	3.1	3.0	-	6	-
MEAN		310	348						1.083							1.8	2.7	1.1	16.6	315
$HSD_{0.05}$		135	131						0.006							1.4			10.8	

* Two-Year Average

[1]SIZE: B: < 2 in.; A: 2-3.25 in.; OV: > 3.25 in.; PO: Pickouts.
[2]CHIP SCORE: Snack Food Association Scale (Out of the field); Ratings: 1-5; 1: Excellent, 5: Poor.
[3]SED: Stem End Defect, Based on Paul Bethke's (USDA/UWisconsin - Madison) 0 - 5 scale. 0 = no SED; 3 = significant SED; 5 = severe SED
[4]QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.
[5]SCAB DISEASE RATING: MSU Scab Nursery; 0: No Infection; 1: Low Infection <5%; 3: Intermediate; 5: Highly Susceptible.
[6]MATURITY RATING: August 28, 2015; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).
[7]BRUISE: Simulated blackspot bruise test average number of spots per tuber.

Plant Date: 5/14/15
Vine Kill: 9/10/15
Days from planting to vine kill: 119

[8]Enviroweather: Entrican Station. Planting to vine kill

Table 2

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

NORTH CENTRAL REGIONAL TRIAL
MONTCALM RESEARCH FARM
May 14 to September 11, 2015 (120 days)
DD Base 40°F 3130[6]

		CWT/A		PERCENT OF TOTAL[1]						PERCENT (%) TUBER QUALITY[2]							LB RAUDPC	3-YR AVG US#1
LINE	N	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR	HH	VD	IBS	BC	SCAB[3]	MAT[4]	Bruise[5]	x100	CWT/A
ND113300-3RSY	1	569	667	85	9	70	15	6	1.075	0	0	0	0	-	3.0	1.2	-	-
MSV093-1	1	437	467	94	4	62	32	2	1.076	0	0	0	0	1.7	3.0	0.4	16.9	-
Red LaSoda	1	427	480	**89**	**3**	**65**	**24**	**8**	**1.065**	**30**	**0**	**0**	**0**	**-**	**2.0**	**0.1**	**-**	**402***
MST386-1P	1	416	478	87	1	36	51	12	1.085	0	0	0	0	0.6	3.0	1.0	18.4	-
ND6961B-21PY	1	397	439	91	9	89	2	0	1.081	0	0	0	0	-	3.0	0.3	0.0	-
MSS576-5SPL	1	355	389	91	4	60	31	5	1.071	0	0	0	0	1.8	2.0	0.3	7.0	360
MN10003PLWR-06R	2	353	388	91	6	76	15	3	1.065	0	0	0	0	-	2.5	0.1	23.9	379*
Red Norland	**1**	**350**	**363**	**96**	**4**	**80**	**16**	**0**	**1.062**	**10**	**10**	**0**	**0**	**-**	**2.0**	**0.1**	**25.5**	**285**
MSX540-4[PVYR]	1	336	397	85	10	79	5	6	1.090	0	0	0	0	2.0	3.0	2.0	4.6	325*
W10209-2R	1	329	401	82	18	79	3	0	1.070	0	0	0	0	-	1.0	0.4	21.6	-
Dark Red Norland	**1**	**329**	**374**	**88**	**11**	**80**	**8**	**1**	**1.063**	**10**	**0**	**0**	**0**	**-**	**1.0**	**0.2**	**-**	**-**
MSV235-2PY	1	328	395	83	16	83	0	1	1.077	0	0	0	0	2.6	1.0	0.2	0	-
Yukon Gold	**1**	**327**	**345**	**95**	**4**	**66**	**28**	**1**	**1.078**	**70**	**30**	**0**	**0**	**-**	**1.0**	**0.5**	**-**	**296***
ND7834-2P	1	322	362	89	10	89	0	1	1.076	0	0	0	0	-	1.0	0.0	-	-
MSW343-2R	2	316	337	94	6	84	10	0	1.059	0	5	0	0	-	1.5	0.1	-	-
ND7982-1R	1	275	387	71	26	71	0	3	1.073	0	0	0	0	-	1.0	0.6	-	-
W9432-4R	2	268	347	77	17	63	14	5	1.051	0	0	0	0	-	1.5	0.2	-	-
W10114-3R	1	254	297	85	8	45	40	7	1.058	0	0	10	0	-	3.0	0.1	-	-
MSX324-1P	1	242	313	77	20	74	3	3	1.083	0	0	0	0	1.1	1.0	0.6	19.2	-
ND7818-1Y	1	237	294	81	17	81	0	2	1.069	0	30	0	0	-	1.0	0.1	21.9	-
MEAN		343	396						1.071					1.6	1.9	0.4	14.5	322
$HSD_{0.05}$		NS	NS						0.025					1.4			10.8	

* Two-Year Average

[1]SIZE: B: < 2 in.; A: 2-3.25 in.; OV: > 3.25 in.; PO: Pickouts.

[2]QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.

[3]SCAB DISEASE RATING: MSU Scab Nursery; 0: No Infection; 1: Low Infection <5%; 3: Intermediate; 5: Highly Susceptible.

[4]MATURITY RATING: August 28, 2015; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).

[5]BRUISE: Simulated blackspot bruise test average number of spots per tuber.

Plant Date: 5/14/14
Vine Kill: 9/10/14
Days from planting to vine kill: 119

[6]Enviroweather: Entrican Station. Planting to vine kill

Table 3

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

RUSSET TRIAL
MONTCALM RESEARCH FARM
May 14 to September 11, 2015 (120 days)
DD Base 40°F 3130[6]

		CWT/A		PERCENT OF TOTAL[1]						PERCENT (%) TUBER QUALITY[2]							LB	3-YR AVG
LINE	N	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR	HH	VD	IBS	BC	SCAB[3]	MAT[4]	BRUISE[5]	RAUDPC x100	US#1 CWT/A
W10074-8rus (NCR)	1	514	570	90	7	73	18	3	1.090	50	0	0	0	-	3.0	1.6	-	-
ATX91137-1Rus (Reveille Russet)	2	418	451	93	6	57	35	1	1.069	0	35	0	0	1.6	2.0	0.4	21.0	409*
W9433-1Rus	1	377	406	93	4	55	38	3	1.077	0	10	0	0	1.9	3.0	0.6	19.0	354*
W10043-1rus (NCR)	1	364	397	92	5	64	28	3	1.078	10	0	0	0	-	2.0	0.3	-	-
W9519-3Rus	1	354	388	91	9	86	5	0	1.069	0	10	0	0	1.1	2.0	-	22.0	-
ND7882b-7Russ (NCR)	1	338	451	75	9	39	36	17	1.076	0	0	0	0	-	2.0	0.8	15.4	275*
CW08071-2Rus	2	322	400	80	15	75	5	4	1.078	0	15	0	0	2.1	2.0	1.7	18.0	-
AW07791-2Rus	2	316	389	81	11	60	21	7	1.087	50	0	10	0	2.3	3.5	1.0	12.0	-
A01010-1 (Targhee Russet)	2	314	372	84	14	78	6	2	1.076	0	15	0	0	1.3	3.0	0.3	19.0	-
Silverton Russet	2	**291**	**310**	**94**	**6**	**77**	**17**	**0**	**1.070**	**0**	**40**	**0.0**	**0.0**	**0.9**	**2.0**	**0.4**	**23.0**	**340**
MSY573-3Rus	2	277	346	80	12	54	26	8	1.065	5	15	0	0	0.6	2.0	0.2	-	-
Russet Norkotah (NCR)	**1**	**274**	**323**	**85**	**15**	**61**	**24**	**0**	**1.072**	**10**	**0**	**10**	**0**	-	**2.0**	0.1	**21.9**	**-**
CO5068-1Rus	2	269	291	92	7	72	20	1	1.087	55	0	25.0	5.0	1.3	3.0	1.7	14.0	-
AFW5465-2rus (NCR)	1	263	318	83	8	60	23	9	1.067	0	0	0	0	-	2.0	0.8	-	-
AF3362-1Rus (Caribou Russet)	2	255	279	91	7	72	20	2	1.075	0	15	0.0	0.0	1.3	2.0	0.6	21.0	328*
AFW5472-1rus (NCR)	1	239	336	71	19	64	7	10	1.068	0	0	0	0	-	1.0	0.1	-	-
W9742-3Rus	2	226	316	72	6	55	18	22	1.096	5	30	0	0	2.0	2.0	-	19.0	-
MSW496-1Rus	2	213	269	80	10	51	29	10	1.068	30	10	0.0	0.0	2.0	4.0	1.2	-	-
Russet Norkotah	2	**170**	**259**	**65**	**35**	**63**	**2**	**0**	**1.070**	**0**	**25**	**0**	**0**	**2.1**	**1.0**	**0.3**	**22.0**	**161**
ND8068-5Rus	2	113	197	57	30	57	0	13	1.077	0	30	0	0	2.9	1.0	1.2	26.0	-
MEAN		295	353						1.076					1.7	2.2	0.7	19.5	250
$HSD_{0.05}$		225	248						0.012					1.4			10.8	

* Two-Year Average

[1]SIZE: B: < 4 oz.; A: 4-10 oz.; OV: > 10 oz.; PO: Pickouts.
[2]QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.
[3]SCAB DISEASE RATING: MSU Scab Nursery; 0: No Infection; 1: Low Infection <5%; 3: Intermediate; 5: Highly Susceptible.
[4]MATURITY RATING: August 28, 2015; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).
[5]BRUISE: Simulated blackspot bruise test average number of spots per tuber.

Plant Date: 5/14/15
Vine Kill: 9/10/15
Days from planting to vine kill: 119
[6]Enviroweather: Entrican Station. Planting to vine kill

Table 4

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

ADAPTATION TRIAL, TABLESTOCK LINES
MONTCALM RESEARCH FARM
May 14 to September 14, 2015 (123 days)
DD Base 40°F 3130[6]

		CWT/A		PERCENT OF TOTAL[1]						PERCENT (%) TUBER QUALITY[2]							LB RAUDPC
LINE		US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR	HH	VD	IBS	BC	SCAB[3]	MAT[4]	BRUISE[5]	x100
MSV093-1Y	3	491	533	92	7	76	16	1	1.073	3	0	0	3	1.7	3.0	0.4	16.9
MSW121-5R	1	430	467	92	8	82	10	0	1.068	40	30	30	0	2.6	3.0	nd	1.7
MSW259-5	3	429	447	96	4	71	25	0	1.079	17	7	3	0	2.5	3.0	1.1	14.6
MSW151-05	3	354	399	89	4	60	29	7	1.067	0	10	0	0	2.5	3.0	1.1	6.1
Reba	**3**	**353**	**371**	**95**	**5**	**71**	**24**	**0**	**1.074**	**20**	**7**	**0**	**0**	**2.1**	**2.7**	**1.4**	**21.4**
MSS576-5SPL	3	336	359	93	3	66	27	3	1.070	0	3	0	0	1.8	2.7	0.6	7.0
MSW239-03SPL	3	323	365	89	8	79	9	3	1.056	0	0	0	0	2.3	1.3	0.2	-
MSV179-1	3	321	338	95	3	59	36	1	1.060	0	7	0	0	1.9	2.7	0.5	23.3
Red Norland	**3**	**318**	**361**	**88**	**11**	**86**	**2**	**0**	**1.063**	**3**	**0**	**0**	**0**	**1.5**	**1.0**	**0.5**	**25.5**
MSW134-1	4	311	376	83	17	81	2	0	1.072	3	5	0	0	2.2	2.0	2.6	22.8
MSV434-1Y	3	297	336	88	11	77	11	1	1.073	7	3	7	0	1.9	2.7	1.1	-
Molli	3	297	381	78	17	75	3	5	1.068	0	20	0	0	2.3	2.0	0.9	18.0
Oneida Gold	3	294	333	88	12	87	1	0	1.079	0	3	0	0	1.8	2.3	0.8	19.2
MSW299-2	3	287	330	87	13	82	4	0	1.072	0	3	0	0	2.3	2.7	0.6	13.4
MSW075-1	3	280	368	76	24	76	1	0	1.081	0	17	0	0	1.6	2.3	1.4	-
Spartan Splash	4	272	313	87	13	81	6	1	1.072	0	10	0	0	2.0	1.5	0.7	-
MSV396-4Y	1	254	364	70	30	70	0	0	1.078	0	10	0	0	1.8	3.0	nd	9.4
Superior	**3**	**248**	**271**	**91**	**8**	**88**	**3**	**1**	**1.070**	**0**	**3**	**0**	**3**	**1.6**	**1.0**	**1.0**	**-**
MST252-1Y	3	245	320	76	16	68	8	8	1.069	0	17	0	7	1.5	1.3	0.7	-
McBride	4	239	276	87	12	77	10	1	1.080	3	8	0	0	1.1	2.0	0.4	-
MSX526-1	3	238	317	75	24	75	0	1	1.080	0	13	0	3	1.3	2.3	0.2	20.3
MSX324-1P	4	230	285	80	20	79	1	0	1.079	0	3	0	0	1.1	1.0	1.8	19.2
MSV235-2PY	3	189	262	72	23	72	0	5	1.075	0	10	0	0	2.6	1.0	2.3	0.0
MEAN		306	355						1.072					1.9	2.2	1.0	14.9
$HSD_{0.05}$		108	110						0.007					1.4			10.8

[1]SIZE: B: < 2 in.; A: 2-3.25 in.; OV: > 3.25 in.; PO: Pickouts.
[2]QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.
[3]SCAB DISEASE RATING: MSU Scab Nursery; 0: No Infection; 1: Low Infection <5%; 3: Intermediate; 5: Highly Susceptible.
[4]MATURITY RATING: August 28, 2015; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).
[5]BRUISE: Simulated blackspot bruise test average number of spots per tuber.

Plant Date: 5/14/15
Vine Kill: 9/10/15
Days from planting to vine kill: 119
[6]Enviroweather: Entrican Station. Planting to vine kill

Table 5

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

PRELIMINARY TRIAL, CHIP-PROCESSING LINES
MONTCALM RESEARCH FARM
May 14 to September 14, 2015 (123 days)
DD Base 40°F 3130[8]

		CWT/A		PERCENT OF TOTAL[1]								PERCENT (%) TUBER QUALITY[4]							LB RAUDPC
LINE	N	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR	CHIP SCORE[2]	OTF SED[3]	HH	VD	IBS	BC	SCAB[5]	MAT[6]	BRUISE[7]	x100
MSX542-2	1	535	544	98	2	72	27	0.0	1.085	1.0	3.0	0	30	0	0	1.9	4.0	1.0	7.9
Dakota Diamond	1	504	516	98	2	69	28	0.0	1.084	1.5	3.0	20	10	0	0	2.1	3.0	1.0	-
MSV507-129	1	471	494	95	5	80	15	0.0	1.093	1.5	0.0	90	0	0	0	1.3	4.0	4.2	-
MST186-1Y	1	467	486	96	4	87	9	0.0	1.083	1.5	1.0	20	0	0	0	1.3	3.0	1.2	-
MSY008-3	2	455	490	93	8	84	10	0.0	1.079	1.5	1.0	0	5	0	0	1.5	3.5	0.9	14.7
Beacon Chipper	1	452	469	96	3	68	28	1.0	1.078	1.5	0.0	0	10	0	0	2.4	3.0	1.3	-
MSX198-5	1	445	474	94	5	79	15	1.0	1.079	1.0	3.0	0	20	0	0	2.5	2.5	0.3	0.5
MSX245-2Y	1	440	469	94	6	80	14	0.0	1.086	1.5	2.0	0	20	0	0	1.6	3.5	1.4	-
MSX196-1	1	432	437	99	1	68	31	1.0	1.072	1.5	1.0	0	0	0	0	1.4	3.0	0.4	15.0
MSY022-2	2	426	451	95	4	49	46	1.5	1.077	2.0	2.0	0	5	0	0	1.9	3.0	1.0	15.5
MSW399-2	1	413	478	86	14	84	3	0.0	1.087	1.5	2.0	0	10	0	0	1.9	4.0	2.3	9.2
MSZ280-7	1	383	392	98	2	70	28	0.0	1.078	1.5	2.0	90	0	0	0	1.8	2.0	1.3	-
MSZ222-19	1	370	402	92	8	80	12	0.0	1.091	1.0	1.0	10	0	0	0	1.3	2.5	0.8	-
MSZ057-5	1	368	391	94	6	67	27	0.0	1.075	-	-	30	0	0	0	2.6	3.0	-	8.6
MSX129-1	1	365	378	97	3	62	34	0.0	1.085	1.5	1.0	0	10	0	0	1.6	4.0	1.2	-
MSZ194-2	1	362	387	94	4	76	18	3.0	1.087	1.5	1.0	0	10	0	0	2.3	3.0	0.4	22.8
MSZ452-1	1	353	391	91	9	74	16	0.0	1.095	2.0	2.0	0	30	10	0	2.3	3.0	0.7	14.7
Atlantic	**1**	**349**	**372**	**94**	**6**	**88**	**6**	**0.0**	**1.089**	**1.5**	**3.0**	**0**	**20**	**0**	**0**	**2.8**	**2.5**	**1.0**	**25.9**
MSZ407-2Y	2	346	388	89	11	78	11	0.0	1.074	1.0	0.0	0	5	0	0	1.0	2.5	0.9	20.9
MSZ300-1	1	337	400	84	6	66	19	10.0	1.085	1.5	2.0	60	20	0	0	2.0	3.0	1.1	20.3
MSW064-1	1	328	346	95	5	90	5	0.0	1.082	1.5	1.0	0	0	0	0	1.4	4.0	1.2	9.2
MSX472-1	1	327	362	90	10	90	0	0.0	1.089	1.5	0.0	0	10	0	0	-	3.0	0.8	-
MSW464-3	1	319	330	97	3	84	13	0.0	1.082	1.5	1.0	0	0	0	0	1.9	3.5	0.5	0.3
MSW537-6	1	314	337	93	5	69	25	2.0	1.095	1.5	2.0	0	0	0	0	1.6	4.0	2.8	15.7
MSW248-02	1	312	340	92	6	62	29	3.0	1.087	1.5	1.0	10	0	0	10	2.0	3.5	0.4	-
MSX156-2	1	309	365	85	15	78	6	0.0	1.071	-	-	0	0	0	0	-	3.0	0.5	-
MSU383-A	2	306	334	93	7	77	15	1.5	1.074	1.0	4.0	20	40	5	0	1.1	2.0	1.1	20.3
MSW168-2	1	305	327	93	6	81	12	1.0	1.089	1.5	3.0	0	20	0	0	2.0	4.0	1.8	15.9
MSZ219-01	1	302	323	93	7	84	9	0.0	1.074	1.5	2.0	20	0	0	0	1.1	3.0	0.6	9.2
MSV335-1	1	300	318	94	6	69	25	0.0	1.077	1.0	0.0	10	10	0	0	1.8	2.0	1.2	-
MSW502-4	1	298	357	84	16	84	0	0.0	1.066	-	-	0	0	0	0	1.3	3.5	-	15.9
MSV241-2	1	295	347	85	9	73	12	6.0	1.088	-	-	50	0	0	0	1.5	1.5	-	-
MSW326-6	1	293	397	74	24	70	3	2.0	1.093	1.5	2.0	0	0	0	0	2.4	3.5	1.0	19.4
MSX221-2	1	293	318	92	8	88	4	0.0	1.080	1.5	2.0	0	10	0	0	1.9	4.0	2.8	18.2
MSZ025-5	1	287	312	92	8	92	0	0.0	1.091	1.0	1.0	0	10	10	0	2.0	3.5	0.8	-
MSZ159-3	2	282	387	73	25	69	5	2.0	1.081	1.0	0.0	0	10	0	0	1.9	2.0	1.3	-
MSX417-1	1	278	314	88	12	88	0	0.0	1.086	1.5	0.0	0	0	0	0	1.6	2.5	2.0	-
MSW485-2	1	276	369	75	25	73	1	0.0	1.089	1.5	2.0	0	30	0	0	2.0	3.0	0.3	6.7
MSX225-2	1	275	307	90	10	90	0	0.0	1.085	1.5	2.0	0	10	0	0	1.0	2.5	1.7	-
MSU379-1	1	272	284	96	4	82	14	0.0	1.081	1.5	2.0	0	0	20	0	1.3	2.0	1.4	20.5
MSV507-143	1	270	304	89	5	66	23	7.0	1.088	1.0	2.0	20	0	40	0	1.3	4.0	2.0	-
MSW294-1	1	266	334	80	20	80	0	0.0	1.097	-	-	0	0	0	0	2.1	2.0	-	-
MSW044-1	2	264	365	72	25	72	0	3.0	1.092	2.0	2.0	0	10	0	0	1.5	3.0	1.5	-
MSS164-1	1	262	306	86	14	86	0	0.0	1.088	1.5	1.0	0	0	0	10	1.3	2.0	0.4	0.2

Table 5

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

PRELIMINARY TRIAL, CHIP-PROCESSING LINES
MONTCALM RESEARCH FARM
May 14 to September 14, 2015 (123 days)
DD Base 40°F 3130[8]

		CWT/A		PERCENT OF TOTAL[1]								PERCENT (%) TUBER QUALITY[4]							LB RAUDPC
LINE	N	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR	CHIP SCORE[2]	OTF SED[3]	HH	VD	IBS	BC	SCAB[5]	MAT[6]	BRUISE[7]	x100
MSV284-1	1	256	293	87	10	78	9	2.0	1.078	1.5	3.0	0	0	0	0	2.1	2.5	1.0	0.0
MSV092-2	2	255	277	92	9	87	5	0.0	1.086	-	-	0	0	0	0	0.9	3.0	0.7	-
MSV246-1	2	254	281	92	7	66	25	2.0	1.088	1.0	2.0	25	15	10	0	2.4	3.0	1.3	-
MSX472-2	2	254	336	75	25	68	8	0.0	1.081	-	-	0	0	0	5	1.6	2.0	-	9.5
Snowden	**1**	**254**	**308**	**83**	**17**	**83**	**0**	**0.0**	**1.084**	**1.0**	**1.0**	**0**	**10**	**0**	**0**	**2.8**	**2.5**	**1.6**	**18.0**
MSW164-2	1	250	281	89	11	89	0	0.0	1.076	-	-	0	0	0	0	2.5	2.0	-	-
MSZ507-2	2	248	323	77	22	73	4	2.0	1.083	1.0	0.0	0	15	0	0	2.5	1.5	1.2	2.4
MSX420-4Y	1	242	271	89	11	89	0	0.0	1.087	1.5	0.0	0	0	0	0	2.4	1.0	0.8	-
MSV307-2	1	236	282	84	16	84	0	0.0	1.085	1.0	2.0	0	10	0	0	1.8	1.5	1.0	-
MSW502-3	1	234	242	97	3	78	19	0.0	1.079	1.0	1.0	0	10	0	0	1.6	2.5	0.7	-
Pike	**1**	**225**	**266**	**84**	**12**	**84**	**0**	**3.0**	**1.089**	**1.0**	**0.0**	**0**	**0**	**0**	**0**	**1.5**	**2.5**	**0.8**	**22.5**
QSMSU10-15	1	224	287	78	20	70	8	2.0	1.092	1.0	1.0	0	10	0	10	1.6	2.0	0.8	21.0
MSY193-1	1	220	260	85	15	85	0	0.0	1.087	-	-	0	0	0	0	1.5	2.5	-	-
MSX495-2	1	212	271	78	17	76	3	5.0	1.084	1.0	0.0	0	20	0	0	1.8	1.5	0.8	23.4
MSX345-6Y	1	210	229	92	8	71	21	0.0	1.088	1.5	1.0	0	30	0	0	1.9	3.0	0.6	-
MSW509-1	1	206	343	60	40	57	4	0.0	1.081	-	-	0	20	0	0	1.6	2.5	-	-
MSZ119-1	1	202	278	72	28	72	0	0.0	1.081	1.0	0.0	0	0	0	0	2.1	2.0	0.8	-
MSW324-01	1	200	291	69	31	69	0	0.0	1.090	1.5	1.0	0	10	0	0	1.8	4.0	1.2	1.0
MSW100-1	1	189	296	64	36	64	0	0.0	1.086	-	-	0	40	0	0	1.1	2.5	-	3.1
MSZ282-6	1	185	211	88	12	88	0	0.0	1.077	-	-	0	0	0	0	1.4	2.0	-	-
MSW078-1	2	165	240	69	32	69	0	0.0	1.089	-	-	0	10	0	0	-	2.5	-	0.7
MSX410-12Y	1	158	281	56	44	56	0	0.0	1.086	1.5	0.0	0	0	0	0	1.8	1.5	0.9	-
MSZ157-3	1	135	192	70	30	70	0	0.0	1.073	-	-	0	0	0	0	2.3	1.5	-	4.1
MSW182-1Y	2	104	319	31	69	31	0	0.0	1.086	-	-	0	5	25	0	2.1	2.0	-	15.1
MEAN		300	346						1.084							1.8	2.7	1.1	12.4
$HSD_{0.05}$		245	273						0.029							1.4			10.8

[1]SIZE: B: < 2 in.; A: 2-3.25 in.; OV: > 3.25 in.; PO: Pickouts.
[2]CHIP SCORE: Snack Food Association Scale (Out of the field); Ratings: 1-5; 1: Excellent, 5: Poor.
[3]SED: Stem End Defect, Based on Paul Bethke's (USDA/UWisconsin - Madison) 0 - 5 scale. 0 = no SED; 3 = significant SED; 5 = severe SED
[4]QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.
[5]SCAB DISEASE RATING: MSU Scab Nursery; 0: No Infection; 1: Low Infection <5%; 3: Intermediate; 5: Highly Susceptible.
[6]MATURITY RATING: August 28, 2015; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).
[7]BRUISE: Simulated blackspot bruise test average number of spots per tuber.

Plant Date: 5/14/15
Vine Kill: 9/10/15
Days from planting to vine kill: 119

[8]Enviroweather: Entrican Station. Planting to vine kill

Table 6

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

PRELIMINARY TRIAL, TABLESTOCK LINES
MONTCALM RESEARCH FARM
May 14 to September 10, 2015 (120 days)
DD Base 40°F 3130[6]

		CWT/A		PERCENT OF TOTAL[1]						PERCENT (%) TUBER QUALITY[2]							LB RAUDPC
LINE	N	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR	HH	VD	IBS	BC	SCAB[3]	MAT[4]	BRUISE[5]	x100
MSY111-1	1	512	535	96	4	63	33	0	1.076	0	0	10	0	1.5	3.0	0.8	-
QSMSU08-4	1	475	494	96	4	85	11	0	1.082	0	20	0	0	1.8	2.0	0.4	22.8
Soraya	2	462	513	90	7	87	4	3	1.062	0	15	0	0	1.6	2.0	0.3	21.7
VC1009-1W/Y	2	456	495	93	6	74	19	2	1.072	15	0	0	0	2.3	4.0	0.5	12.5
MSX156-1Y	1	448	476	94	3	65	29	3	1.068	0	0	0	0	2.3	3.0	0.6	-
MSV502-5	2	439	452	97	3	75	22	1	1.076	5	0	0	5	1.9	3.0	0.5	-
MSW126-1	1	439	458	96	4	70	26	0	1.078	10	10	0	0	1.5	3.0	1.0	18.9
MSW236-3	1	433	451	96	4	74	22	0	1.078	10	0	0	0	2.8	3.0	0.6	18.5
MSW125-3	2	407	444	92	5	63	29	3	1.059	5	15	0	0	1.1	1.0	0.2	20.6
MST094-1	1	402	433	93	4	81	12	3	1.080	0	60	0	0	1.6	3.0	2.0	-
A05182-7Y	1	399	450	89	11	78	10	0	1.076	0	20	0	0	-	3.0	1.3	-
MSW353-3	2	371	389	95	5	84	12	0	1.076	0	45	0	0	0.9	2.5	0.3	17.6
Maris Bard	1	363	387	94	2	78	16	4	1.070	70	40	0	0	2.6	2.0	-	21.5
Granola	1	360	479	75	21	72	3	4	1.067	0	10	0	0	1.1	4.0	0.4	14.8
QSMSU10-02	2	359	384	94	5	72	22	2	1.074	0	5	0	0	1.4	1.0	0.7	1.9
MSX506-3	1	358	388	92	8	69	23	0	1.075	0	0	0	0	1.5	2.0	0.7	19.6
MSU016-2	1	348	374	93	7	85	8	0	1.090	10	0	0	10	2.1	3.0	1.3	5.6
MSY491-2Y	1	346	399	87	13	84	3	0	1.072	0	0	0	0	1.5	2.0	0.5	5.0
MSU161-1	1	344	370	93	7	86	7	0	1.075	0	0	0	0	2.3	3.0	1.1	6.5
MSW556-1	1	343	499	69	21	69	0	10	1.073	0	0	0	0	2.4	2.0	0.4	-
MST191-2Y	1	339	379	89	11	79	10	0	1.085	0	0	0	0	2.5	3.0	0.6	-
MSV111-1	1	339	395	86	14	82	4	0	1.073	0	10	0	10	1.4	2.0	0.0	15.2
MSW042-1	1	338	400	84	16	83	1	0	1.077	0	0	0	0	2.4	3.0	0.6	1.6
MST148-3	1	336	362	93	7	73	20	0	1.077	0	0	0	0	2.5	3.0	0.5	-
MSX137-6	2	336	374	90	10	87	3	0	1.073	0	10	5	0	1.8	1.5	1.1	22.6
W9577-6Y	1	326	379	86	14	82	4	0	1.075	0	0	0	0	2.1	4.0	0.2	18.9
MST145-2	1	320	408	79	10	62	17	11	1.074	0	0	0	0	-	3.0	0.9	-
Reba	**1**	**320**	**334**	**96**	**4**	**80**	**16**	**0**	**1.078**	**0**	**10**	**0**	**0**	**2.1**	**1.0**	**1.0**	**21.4**
MSV397-2	1	317	343	92	4	89	4	4	1.076	0	0	0	0	1.4	2.0	1.0	19.9
MSX009-2	1	309	365	85	15	80	4	0	1.083	0	10	0	0	1.9	3.0	1.7	11.3
MSW068-4	1	303	360	84	10	83	2	5	1.074	0	0	0	0	2.8	2.0	0.4	-
MSV127-1	1	301	332	91	9	91	0	0	1.088	0	20	0	0	2.1	2.0	1.7	-
W9576-13Y	1	300	328	91	7	73	18	2	1.072	0	0	0	0	1.4	2.0	0.2	22.5
MSX172-7	1	298	363	82	18	81	2	0	1.084	0	10	0	0	1.8	3.0	1.0	-
MSY042-1	1	296	330	90	6	73	16	4	1.079	0	10	0	0	1.8	3.0	0.6	-
CalWhite	**1**	**292**	**335**	**87**	**9**	**74**	**13**	**4**	**1.071**	**0**	**10**	**0**	**0**	**2.8**	**2.0**	**0.9**	**-**
MSX503-5	1	290	312	93	7	90	3	0	1.075	0	10	0	0	1.0	1.0	1.1	21.7
MST441-1	1	288	343	84	16	78	6	0	1.079	0	0	0	0	1.1	1.0	0.6	-
MSW123-3	2	288	310	92	5	61	32	3	1.062	0	0	0	10	1.3	1.5	0.5	18.6
MSU245-1	1	287	332	86	14	74	12	0	1.090	0	0	0	0	2.5	2.0	1.1	10.3
MSV301-2	1	284	310	92	6	64	27	2	1.080	20	0	0	0	1.5	3.0	0.4	24.3
A02267-1Y	1	283	342	83	14	77	6	3	1.060	0	40	0	0	2.0	3.0	0.5	17.0
MSV016-2	1	283	309	92	8	78	13	0	1.090	0	0	0	0	2.1	3.0	1.2	-
MSW437-9	1	279	308	90	10	85	6	0	1.070	0	0	0	0	2.6	2.0	0.4	17.7

Table 6

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

PRELIMINARY TRIAL, TABLESTOCK LINES
MONTCALM RESEARCH FARM
May 14 to September 10, 2015 (120 days)
DD Base 40°F 3130[6]

		CWT/A		PERCENT OF TOTAL[1]						PERCENT (%) TUBER QUALITY[2]							LB RAUDPC
LINE	N	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR	HH	VD	IBS	BC	SCAB[3]	MAT[4]	BRUISE[5]	x100
Barbara	1	277	382	73	22	71	2	5	1.076	10	50	0	0	1.0	3.0	1.1	17.4
MSW500-04	1	274	301	91	9	88	3	0	1.074	0	0	0	0	2.0	3.0	0.5	-
MSV282-4Y	1	273	316	86	14	81	5	0	1.083	0	0	0	0	2.1	2.0	1.6	0.0
MSV292-1Y	1	270	292	93	5	72	20	3	1.065	0	10	0	0	2.0	2.0	0.5	-
MSX293-1Y	1	269	329	82	18	82	0	0	1.079	0	0	0	0	1.6	2.0	0.8	0.6
MSW237-4Y	1	266	297	89	11	89	0	0	1.082	0	0	0	0	1.8	3.0	2.5	14.8
MSW270-1	1	265	337	79	21	79	0	0	1.074	0	0	0	0	1.9	1.0	0.4	-
W9576-11Y	1	251	314	80	19	77	4	1	1.058	0	10	0	0	1.4	1.0	0.3	23.4
MSW569-2	1	250	275	91	9	80	12	0	1.077	0	0	0	0	1.9	2.0	0.4	-
MSX497-6	2	245	264	93	7	93	0	0	1.069	0	0	0	0	2.9	2.0	0.3	1.6
MSY452-1	2	244	293	84	11	58	26	6	1.062	0	5	0	0	1.4	2.0	0.6	6.5
MSV089-2	1	243	277	88	12	82	6	0	1.077	0	0	0	0	1.8	2.0	0.9	-
MST229-1	1	233	258	90	10	84	6	0	1.081	0	10	0	0	1.8	3.0	1.5	-
Superior	**2**	**231**	**253**	**91**	**9**	**81**	**11**	**0**	**1.072**	**5**	**0**	**0**	**0**	**1.6**	**1.0**	**1.2**	**-**
MSW298-4Y	2	230	315	73	27	72	2	0	1.076	0	5	10	0	2.3	1.0	0.6	12.1
MSW119-2	2	228	283	81	20	78	3	0	1.075	0	5	0	0	1.1	2.5	0.6	13.0
MSX011-4	1	226	287	79	21	79	0	0	1.090	10	0	0	0	3.0	2.0	1.5	18.9
MSX010-3	2	208	264	79	21	77	2	0	1.078	0	0	0	0	2.5	1.5	1.2	24.6
MSW242-5Y	1	185	311	59	41	59	0	0	1.077	0	10	0	0	2.9	1.0	1.8	0.0
MSW500-10	2	177	221	76	24	74	2	0	1.072	5	5	0	0	-	2.0	0.2	22.8
CO07370-1W/Y	1	165	307	54	46	54	0	0	1.062	0	20	0	0	2.1	4.0	0.6	12.7
MSX255-1	1	153	245	62	38	62	0	0	1.089	0	10	0	0	1.4	2.0	0.5	22.4
MSY520-1	1	118	172	69	31	69	0	0	1.068	0	30	0	0	1.4	1.0	0.1	5.4
CO05037-3W/Y	1	95	181	53	47	53	0	0	1.073	0	10	0	0	2.0	1.0	0.4	26.7
MSW092-1	1	0	106	0	100	0	0	0	-	0	0	0	0	2.4	4.0	-	0.2
MEAN		301	349						1.075					1.9	2.3	0.8	14.6
$HSD_{0.05}$		NS	NS						0.009					1.4			10.8

[1]SIZE: B: < 2 in.; A: 2-3.25 in.; OV: > 3.25 in.; PO: Pickouts.
[2]QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.
[3]SCAB DISEASE RATING: MSU Scab Nursery; 0: No Infection; 1: Low Infection <5%; 3: Intermediate; 5: Highly Susceptible.
[4]MATURITY RATING: August 28, 2015; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).
[5]BRUISE: Simulated blackspot bruise test average number of spots per tuber.

Plant Date: 5/14/15
Vine Kill: 9/10/15
Days from planting to vine kill: 119
[6]Enviroweather: Entrican Station. Planting to vine kill

Table 7

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

PRELIMINARY TRIAL, PIGMENTED LINES
MONTCALM RESEARCH FARM
May 14 to September 14, 2015 (123 days)
DD Base 40°F 3130[5]

		CWT/A		PERCENT OF TOTAL[1]						PERCENT (%) TUBER QUALITY[2]						LB RAUDPC
LINE	N	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR	HH	VD	IBS	BC	SCAB[3]	MAT[4]	x100
MSX517-3SPL	1	494	536	92	8	84	8	0	1.075	0	10	0	0	2.4	2.0	4.0
Michigan Purple Sport I	1	484	520	93	3	67	26	4	1.069	0	0	0	0	2.6	2.0	-
MSZUNK-7	1	399	423	94	5	62	33	0	1.048	0	0	0	0	1.6	2.0	21.0
Dakota Ruby	1	391	471	83	17	83	0	0	1.068	0	10	0	0	2.0	2.0	22.0
MSX507-1R	1	362	387	93	7	76	18	0	1.060	0	0	0	0	2.4	1.0	5.0
MSU198-01SPL	1	348	407	86	4	58	28	10	1.061	0	0	0	0	1.6	2.0	16.0
MST075-1R	1	348	382	91	9	91	0	0	1.069	0	0	0	0	1.9	2.0	24.0
MSX148-1WP	1	347	376	92	8	84	8	0	1.075	0	0	0	0	1.5	3.0	-
MSU202-1P	1	347	372	93	7	75	18	0	1.064	0	0	0	0	1.4	1.0	22.0
MSX569-1R	1	347	383	90	10	88	3	0	1.059	0	0	0	10	2.0	1.0	-
MSU316-3PY	1	313	362	86	14	86	0	0	1.060	0	10	0	0	1.8	2.0	20.0
MSZ107-6PP	1	306	365	84	16	81	3	0	1.074	0	0	0	0	1.8	2.0	-
Merlot	1	304	449	68	32	68	0	0	1.070	0	10	0	0	2.4	2.0	14.0
Red Norland	**2**	**297**	**322**	**92**	**8**	**88**	**4**	**0**	**1.060**	**5**	**5**	**0**	**0**	**1.5**	**1.0**	**26.0**
MSU616-3PP	1	277	350	79	21	77	2	0	1.069	10	0	0	0	2.0	1.0	-
MSY544-5R	1	262	355	74	23	74	0	3	1.062	0	0	0	0	2.0	1.0	-
MSX324-2R	1	229	255	90	7	87	2	3	1.070	0	10	0	0	1.0	2.0	19.0
MSY480-3RY	1	227	285	80	16	71	9	5	1.064	0	0	0	0	1.8	3.0	-
Purple Surprise 3	1	213	244	87	13	77	10	0	1.063	0	0	0	0	1.6	1.0	24.0
MSX001-4WP	1	175	201	87	13	82	6	0	1.064	0	0	0	0	1.8	1.0	22.0
CO07102-1R	1	168	229	73	27	73	0	0	1.059	0	0	0	0	2.6	1.0	27.0
MSZ109-07PP	1	130	208	62	38	62	0	0	1.059	0	0	0	0	1.4	3.0	-
MEAN		308	358						1.065					1.9	1.7	19.0
$HSD_{0.05}$		NS	NS						NS					1.4		10.8

[1]SIZE: B: < 2 in.; A: 2-3.25 in.; OV: > 3.25 in.; PO: Pickouts.
[2]QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.
[3]SCAB DISEASE RATING: MSU Scab Nursery; 0: No Infection; 1: Low Infection <5%; 3: Intermediate; 5: Highly Susceptible.
[4]MATURITY RATING: August 28, 2015; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).
[5]Enviroweather: Entrican Station. Planting to vine kill

Plant Date: 5/14/15
Vine Kill: 9/10/15
Days from planting to vine kill: 119

Table 8

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

PRELIMINARY TRIAL: Scab resistant "MSZ" LINES
MONTCALM RESEARCH FARM
May 18 to September 16, 2015 (121 days)
DD Base 40°F 3048[6]

		CWT/A		PERCENT OF TOTAL[1]						SFA	SED	PERCENT (%) TUBER QUALITY[2]						
LINE	N	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR	OTF	OTF	HH	VD	IBS	BC	SCAB[3]	MAT[4]	BRUISE[5]
MSZ096-02	2	394	416	95	5	86	9	0	1.088	1.0	2.0	0	0	0	0	1.8	3.5	1.6
MSZ020-04	2	393	456	86	14	74	12	0	1.090	1.5	2.0	10	10	0	0	nd	0.0	0.7
MSZ045-09	2	362	399	91	7	71	19	2	1.074	1.0	1.0	10	10	0	0	1.5	4.0	0.2
MSZ118-02	2	354	416	85	15	84	1	0	1.089	1.0	2.0	0	0	10	0	nd	0.0	0.4
MSZ120-04	1	347	403	86	13	84	1	1	1.089	1.5	1.0	0	10	0	0	2.0	4.0	0.6
Atlantic	2	**333**	**370**	**89**	**11**	**87**	**2**	**0**	**1.095**	**1.5**	**0.0**	**10**	**5**	**10**	**0**	**2.8**	**2.0**	**1.8**
MSZ219-14	2	326	358	91	9	82	9	0	1.089	1.0	1.0	20	20	0	0	0.5	3.5	1.3
MSZ096-03	2	321	359	89	11	82	7	0	1.081	1.5	2.0	0	30	5	0	1.0	3.5	1.6
MSZ022-19	2	308	337	91	9	79	12	0	1.086	1.5	0.0	0	10	0	0	1.8	3.0	0.5
MSZ062-18	2	307	371	82	18	77	5	0	1.077	1.5	2.0	0	5	0	5	0.5	2.5	0.6
MSZ022-16	2	303	335	91	9	87	4	0	1.089	1.0	1.0	10	25	10	0	0.8	3.0	1.3
MSZ026-08	2	302	334	91	9	82	9	0	1.083	1.0	1.0	0	10	0	0	2.3	3.0	0.8
Snowden	2	**298**	**368**	**81**	**18**	**79**	**2**	**1**	**1.090**	**1.0**	**1.0**	**0**	**30**	**0**	**0**	**3.2**	**2.0**	**1.7**
MSZ062-31Y	2	291	353	83	17	81	1	0	1.073	1.0	1.0	0	0	0	0	1.0	3.0	0.6
MSZ219-29	2	280	298	94	6	89	5	0	1.079	1.0	0.0	10	25	5	0	0.5	2.0	1.2
MSZ219-46	2	273	279	98	2	69	29	0	1.087	1.5	4.0	10	15	0	0	0.3	3.0	0.7
MSZ052-13	2	271	306	88	12	87	1	0	1.089	1.0	1.0	0	15	0	0	0.3	2.5	1.8
MSZ118-19	2	269	302	89	11	78	11	0	1.093	1.0	2.0	0	15	0	0	0.5	3.0	2.2
MSZ062-50	2	266	294	91	9	75	16	0	1.089	1.0	1.0	0	5	0	0	0.5	4.0	1.8
MSZ022-07	2	263	301	87	13	84	3	0	1.083	1.0	1.0	10	10	0	0	0.8	2.0	0.8
MSZ101-07	2	251	301	83	15	76	7	2	1.086	1.0	2.0	15	5	0	0	2.0	3.5	1.1
MSZ022-14	2	248	281	88	12	82	6	0	1.079	1.5	3.0	0	5	0	0	1.0	3.0	0.8
MSZ020-08	2	244	265	92	8	91	1	0	1.082	1.0	0.0	0	5	0	0	0.5	2.0	0.6
MSZ052-31	2	231	242	95	5	93	2	0	1.083	1.0	1.0	5	0	20	5	0.5	2.5	0.8
MSZ062-06	2	231	276	84	14	74	10	3	1.082	1.0	0.0	10	0	5	0	1.3	3.0	0.8
MSZ020-10	2	231	259	89	11	72	17	0	1.087	1.5	0.0	15	10	0	5	2.5	2.5	0.7
MSZ101-06	2	218	288	76	24	75	1	0	1.081	1.0	1.0	0	0	0	0	2.0	3.0	0.8
MSZ242-03	2	209	276	76	23	75	1	1	1.094	1.0	2.0	5	5	5	0	0.8	2.5	0.5
MSZ052-14	2	206	262	78	22	74	4	0	1.085	1.0	2.0	0	15	0	0	1.0	3.0	1.6
MSZ118-08	1	203	302	67	33	67	0	0	1.088	1.0	2.0	0	0	0	0	0.5	3.0	0.4
MSZ103-02Y	2	198	233	85	15	80	5	1	1.087	1.5	2.0	0	5	0	0	1.0	2.5	1.2
MSZ242-15Y	2	197	223	87	13	82	5	0	1.093	1.5	0.0	10	0	0	0	0.8	2.5	1.0
MSZ242-14Y	2	193	227	84	15	83	1	1	1.083	1.5	1.0	0	0	0	0	1.3	1.5	0.3
MSZ062-42	2	181	230	82	17	76	6	1	1.084	1.5	3.0	0	5	0	0	0.5	2.5	0.5
MSZ242-13	2	179	220	81	19	78	3	0	1.100	1.0	0.0	0	5	0	0	0.8	3.0	1.0
MSZ242-09	2	170	227	75	25	70	5	0	1.093	1.0	1.0	0	10	0	0	1.3	2.0	0.8
MSZ222-15	2	166	212	77	20	74	3	3	1.078	1.5	1.0	5	0	0	0	1.0	2.5	0.8
MSZ242-12	2	164	208	78	20	74	4	2	1.092	1.0	0.0	5	0	5	0	1.5	3.0	1.4

Table 8

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

PRELIMINARY TRIAL: Scab resistant "MSZ" LINES
MONTCALM RESEARCH FARM
May 18 to September 16, 2015 (121 days)
DD Base 40°F 3048[6]

		CWT/A		PERCENT OF TOTAL[1]						SFA	SED	PERCENT (%) TUBER QUALITY[2]						
LINE	N	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR	OTF	OTF	HH	VD	IBS	BC	SCAB[3]	MAT[4]	BRUISE[5]
MSZ052-40	2	151	216	69	30	69	0	1	1.092	1.0	1.0	0	5	0	0	1.0	3.0	0.8
MSZ222-18	2	147	237	62	25	58	4	12	1.069	0.0	0.0	55	0	0	0	2.0	3.0	-
MSZ242-07	2	137	149	93	7	72	21	0	1.101	1.5	0.0	0	5	0	0	1.5	3.0	0.9
MSZ062-10	2	137	162	85	15	79	6	0	1.092	1.0	1.0	0	10	10	0	0.5	2.5	0.3
MSZ169-01	2	125	137	90	9	78	12	2	1.077	1.0	3.0	0	15	0	0	0.8	3.5	0.1
MSZ052-11	2	113	210	54	43	54	0	3	1.082	1.0	1.0	0	15	0	0	0.8	2.0	0.3
MSZ062-46	2	110	209	51	49	51	0	0	1.081	1.0	1.0	0	5	0	5	1.0	2.0	0.5
MSZ118-20	2	103	179	53	47	53	0	0	1.081	1.5	0.0	0	0	0	0	0.8	2.5	0.4
MSZ052-38	2	80	87	92	6	85	7	2	1.085	1.0	1.0	0	15	10	0	0.5	3.5	-
MEAN		236	280						1.086							1.1	2.7	0.9
$HSD_{0.05}$		220	234						0.012							1.4		

[1]SIZE: B: < 2 in.; A: 2-3.25 in.; OV: > 3.25 in.; PO: Pickouts.
[2]QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.
[3]SCAB DISEASE RATING: 2014 On Farm Scab Trial; 0: No Infection; 1: Low Infection <5%; 3: Intermediate; 5: Highly Susceptible.
[4]MATURITY RATING: August 28, 2015; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).
[5]BRUISE: Simulated blackspot bruise test average number of spots per tuber.

Plant Date: 5/18/15
Vine Kill: 9/10/15
Days from planting to vine kill: 115
[6]Enviroweather: Entrican Station. Planting to vine kill

Table 9

2013-2015 SCAB DISEASE TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER , MI

LINE	3-YR* AVG.	2015 RATING	2015 WORST	2015 N	2014 RATING	2014 WORST	2014 N	2013 RATING	2013 WORST	2013 N
Sorted by ascending 2015 Average Rating;										
MST386-1P	0.8*	0.6	1.5	4	1.0	1.5	4	-	-	-
MSY573-3Rus	-	0.6	1.0	4	-	-	-	-	-	-
AF4648-2[PVYR]	-	0.9	1.0	4	-	-	-	-	-	-
MSV092-2	-	0.9	1.0	4	-	-	-	-	-	-
MSW353-3	-	0.9	1.0	4	-	-	-	-	-	-
Silverton Russet	**1.2**	**0.9**	**1.0**	**4**	**1.6**	**2.0**	**4**	**1.1**	**2**	**4**
Barbara	-	1.0	1.5	4	-	-	-	-	-	-
MSW474-01	-	1.0	1.5	4	-	-	-	-	-	-
MSX225-2	-	1.0	1.5	4	-	-	-	-	-	-
MSX324-2R	-	1.0	1.5	4	-	-	-	-	-	-
MSX503-5	-	1.0	2.0	4	-	-	-	-	-	-
MSZ407-2Y	-	1.0	1.5	4	-	-	-	-	-	-
A01143-3C	-	1.1	1.5	4	-	-	-	-	-	-
AF5320-1	-	1.1	1.5	4	-	-	-	-	-	-
Granola	0.9*	1.1	1.5	4	0.8	1.0	4	-	-	-
McBride	1.0	1.1	1.5	4	1.1	1.5	4	0.8	1.5	4
MST441-1	1.0*	1.1	1.5	4	0.9	1.5	4	-	-	-
MSU383-A	-	1.1	2.0	4	-	-	-	-	-	-
MSV081-04	-	1.1	1.5	4	-	-	-	-	-	-
MSV383-B	-	1.1	1.5	4	-	-	-	-	-	-
MSW100-1[LBR]	-	1.1	1.5	4	-	-	-	-	-	-
MSW119-2	-	1.1	1.5	4	-	-	-	-	-	-
MSW125-3	1.3*	1.1	1.5	4	-	-	-	1.4	1.5	4
MSX324-1P	-	1.1	2.0	8	-	-	-	-	-	-
MSZ219-01[PVYR]	-	1.1	1.5	4	-	-	-	-	-	-
MSZ263-4	-	1.1	1.5	4	-	-	-	-	-	-
W9519-3Rus	-	1.1	1.5	4	-	-	-	-	-	-
A01010-1 (Targhee Russet)	1.5*	1.3	2.0	4	-	-	-	1.75	2.5	4
AF3362-1Rus (Caribou Russet)	1.1*	1.3	1.5	4	1.0	1.0	4	-	-	-
CO5068-1Rus[LBMS]	1.3*	1.3	2.0	4	-	-	-	1.25	1.5	4
MSR127-2	1.2	1.3	1.5	4	1.4	2.0	4	1.0	1.5	4
MSS164-1[LBR]	1.3*	1.3	1.5	4	1.3	1.5	4	-	-	-
MST186-1Y	1.4*	1.3	1.5	4	1.6	2.0	4	-	-	-
MSU379-1	-	1.3	1.5	4	-	-	-	-	-	-
MSV380-1	1.1*	1.3	1.5	4	0.9	1.5	4	-	-	-
MSV507-129	1.1*	1.3	2.0	4	0.9	1.0	4	-	-	-
MSV507-143	-	1.3	1.5	4	-	-	-	-	-	-
MSW123-3	-	1.3	1.5	4	-	-	-	-	-	-
MSW502-4	-	1.3	1.5	4	-	-	-	-	-	-
MSX526-1	-	1.3	1.5	4	-	-	-	-	-	-
MSZ222-19	-	1.3	2.0	4	-	-	-	-	-	-
MSU202-1P	1.3*	1.4	1.5	4	1.1	1.5	4	-	-	-
MSV111-1[LBMR]	1.6	1.4	2.0	4	1.6	2.0	4	1.9	2	4
MSV397-2	-	1.4	2.0	4	-	-	-	-	-	-
MSW064-1	-	1.4	2.0	4	-	-	-	-	-	-
MSW163-03	-	1.4	1.5	4	-	-	-	-	-	-
MSW229-5P[LBR]	-	1.4	2.0	4	-	-	-	-	-	-
MSW505-2	-	1.4	1.5	4	-	-	-	-	-	-
MSW509-5	1.1*	1.4	2.0	4	-	-	-	0.8	1.5	4
MSX156-2	-	1.4	2.0	4	-	-	-	-	-	-
MSX196-1	-	1.4	2.0	4	-	-	-	-	-	-
MSX255-1	-	1.4	1.5	4	-	-	-	-	-	-
MSY452-1	-	1.4	1.5	4	-	-	-	-	-	-
MSY520-1	-	1.4	2.0	4	-	-	-	-	-	-
MSZ109-07PP	-	1.4	2.0	4	-	-	-	-	-	-
MSZ282-6	-	1.4	1.5	4	-	-	-	-	-	-
QSMSU10-02[LBR]	1.2*	1.4	1.5	4	1.0	1.0	4	-	-	-
W9576-11Y	-	1.4	1.5	4	-	-	-	-	-	-

Table 9

2013-2015 SCAB DISEASE TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER , MI

LINE	3-YR* AVG.	2015 RATING	2015 WORST	2015 N	2014 RATING	2014 WORST	2014 N	2013 RATING	2013 WORST	2013 N
W9576-13Y	-	1.4	2.5	4	-	-	-	-	-	-
MST252-1Y	1.3	1.5	2.0	4	0.8	1.0	4	1.5	2	4
MSV241-2	-	1.5	2.0	4	-	-	-	-	-	-
MSV301-2	1.5*	1.5	2.0	4	1.5	2.0	4	-	-	-
MSW044-1	-	1.5	2.0	4	-	-	-	-	-	-
MSW126-1	-	1.5	2.0	4	-	-	-	-	-	-
MSW394-1	-	1.5	2.0	4	-	-	-	-	-	-
MSX148-1WP	-	1.5	2.0	4	-	-	-	-	-	-
MSX506-3	-	1.5	1.5	4	-	-	-	-	-	-
MSY008-3	-	1.5	2.0	4	-	-	-	-	-	-
MSY111-1	-	1.5	1.5	4	-	-	-	-	-	-
MSY193-1	-	1.5	2.0	4	-	-	-	-	-	-
MSY491-2Y	-	1.5	2.0	4	-	-	-	-	-	-
Pike	**1.4**	**1.5**	**1.5**	**4**	**1.3**	**1.5**	**4**	**1.4**	**2**	**4**
Red Norland	**1.6**	**1.5**	**2.0**	**8**	**1.4**	**2.0**	**9**	**2.0**	**2.5**	**4**
W5955-1	1.5	1.5	2.0	4	1.6	2.0	4	1.5	2	4
MSX472-2	-	1.6	2.0	8	-	-	-	-	-	-
ATX91137-1Rus (Reveille Russet)	1.4*	1.6	2.0	4	1.1	2.0	4	-	-	-
MST094-1	1.6*	1.6	2.0	4	1.6	2.0	4	-	-	-
MSU198-01SPL	-	1.6	2.0	4	-	-	-	-	-	-
MSV030-4	1.8*	1.6	2.0	4	1.9	2.0	4	-	-	-
MSV358-3	1.6*	1.6	2.0	4	1.5	2.5	3	-	-	-
MSV505-2	1.3*	1.6	2.0	4	0.9	1.0	4	-	-	-
MSW075-1	-	1.6	2.0	4	-	-	-	-	-	-
MSW502-3	-	1.6	2.0	4	-	-	-	-	-	-
MSW509-1	-	1.6	2.0	8	-	-	-	-	-	-
MSW537-6	-	1.6	2.0	4	-	-	-	-	-	-
MSX129-1	-	1.6	2.0	4	-	-	-	-	-	-
MSX245-2Y	-	1.6	2.0	4	-	-	-	-	-	-
MSX293-1Y[LBR]	-	1.6	2.0	4	-	-	-	-	-	-
MSX417-1	-	1.6	2.0	4	-	-	-	-	-	-
MSZUNK-7	-	1.6	2.0	4	-	-	-	-	-	-
Purple Surprise 3	-	1.6	2.0	4	-	-	-	-	-	-
QSMSU10-15	1.5	1.6	2.0	4	1.8	2.5	4	1.1	2	4
Soraya	-	1.6	2.0	4	-	-	-	-	-	-
Superior	-	**1.6**	**2.0**	**4**	-	-	-	-	-	-
MSV093-1[LBMR]	1.4	1.7	2.0	8	1.4	2.0	4	1.3	2	4
Lamoka	**1.6**	**1.8**	**2.0**	**4**	**1.5**	**2.0**	**4**	**1.5**	**2**	**4**
MSS576-05SPL[LBR]	1.8	1.8	2.5	4	1.6	2.0	8	2.2	2.5	8
MST229-1	-	1.8	2.0	4	-	-	-	-	-	-
MSU316-3PY	-	1.8	2.0	4	-	-	-	-	-	-
MSV089-2	-	1.8	2.0	4	-	-	-	-	-	-
MSV266-3P	-	1.8	2.0	4	-	-	-	-	-	-
MSV307-02	1.6*	1.8	2.0	4	1.5	2.0	4	-	-	-
MSV335-1	-	1.8	2.0	4	-	-	-	-	-	-
MSV393-1	-	1.8	2.0	4	-	-	-	-	-	-
MSV394-3	1.7*	1.8	2.0	4	1.6	2.0	4	-	-	-
MSV396-4Y[LBMR]	1.8*	1.8	2.0	4	1.8	2.5	4	-	-	-
MSW237-4Y	-	1.8	2.0	4	-	-	-	-	-	-
MSW324-01[LBR]	-	1.8	2.0	4	-	-	-	-	-	-
MSX001-4WP	-	1.8	2.0	4	-	-	-	-	-	-
MSX137-6	-	1.8	2.0	4	-	-	-	-	-	-
MSX172-7	-	1.8	2.5	4	-	-	-	-	-	-
MSX410-12Y	-	1.8	2.0	4	-	-	-	-	-	-
MSX495-2	-	1.8	2.0	4	-	-	-	-	-	-
MSY042-1	-	1.8	2.0	4	-	-	-	-	-	-
MSY480-3RY	-	1.8	2.0	4	-	-	-	-	-	-
MSZ107-6PP	-	1.8	2.0	4	-	-	-	-	-	-
MSZ280-7	-	1.8	2.0	4	-	-	-	-	-	-
NY154[LBMS]	1.7*	1.8	2.0	4	1.6	2.0	4	-	-	-

Table 9

2013-2015 SCAB DISEASE TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER , MI

LINE	3-YR* AVG.	2015 RATING	2015 WORST	2015 N	2014 RATING	2014 WORST	2014 N	2013 RATING	2013 WORST	2013 N
Oneida Gold	-	1.8	2.5	4	-	-	-	-	-	-
QSMSU08-04	1.8	1.8	2.0	4	1.6	2.0	4	2.0	2.5	4
MST075-1R	-	1.9	2.5	4	-	-	-	-	-	-
MSV033-1	1.9*	1.9	2.0	4	2.0	2.5	4	-	-	-
MSV179-1	1.5*	1.9	2.0	4	-	-	-	1.1	1.5	4
MSV434-1Y	1.7*	1.9	2.0	4	1.5	2.0	4	-	-	-
MSV502-5	-	1.9	2.0	4	-	-	-	-	-	-
MSW270-1	-	1.9	2.0	4	-	-	-	-	-	-
MSW399-2	-	1.9	2.0	4	-	-	-	-	-	-
MSW464-3[LBR]	-	1.9	2.5	4	-	-	-	-	-	-
MSW569-2	-	1.9	2.5	4	-	-	-	-	-	-
MSX009-2	-	1.9	2.0	4	-	-	-	-	-	-
MSX221-2	-	1.9	2.5	4	-	-	-	-	-	-
MSX345-6Y	-	1.9	2.5	4	-	-	-	-	-	-
MSX542-2	-	1.9	2.0	4	-	-	-	-	-	-
MSY022-2	-	1.9	2.0	4	-	-	-	-	-	-
MSZ159-3	-	1.9	2.0	4	-	-	-	-	-	-
W9433-1Rus	1.6*	1.9	2.0	4	1.3	2.0	4	-	-	-
A02267-1Y	-	2.0	2.0	4	-	-	-	-	-	-
CO05037-3W/Y	-	2.0	2.0	4	-	-	-	-	-	-
Dakota Ruby	-	2.0	2.0	4	-	-	-	-	-	-
MSR061-1[LBMR,PVYR]	1.7	2.0	2.0	3	1.0	1.5	4	2.0	2	4
MSU616-3PP	-	2.0	2.5	4	-	-	-	-	-	-
MSV292-1Y	1.8*	2.0	2.5	4	-	-	-	1.5	2.5	4
MSW168-2	-	2.0	2.0	4	-	-	-	-	-	-
MSW248-02	-	2.0	2.5	4	-	-	-	-	-	-
MSW485-2	-	2.0	2.0	4	-	-	-	-	-	-
MSW496-1Rus	-	2.0	2.0	2	-	-	-	-	-	-
MSW500-04	-	2.0	2.5	4	-	-	-	-	-	-
MSX398-2[LBR]	-	2.0	2.5	4	-	-	-	-	-	-
MSX540-4[PVYR, LBR]	1.4*	2.0	2.5	4	0.9	1.0	4	-	-	-
MSX569-1R	-	2.0	2.0	2	-	-	-	-	-	-
MSY544-5R	-	2.0	2.0	4	-	-	-	-	-	-
MSZ025-5	-	2.0	3.0	4	-	-	-	-	-	-
MSZ030-4	-	2.0	2.0	4	-	-	-	-	-	-
MSZ300-1	-	2.0	2.5	4	-	-	-	-	-	-
Spartan Splash	2.2*	2.0	2.0	4	-	-	-	2.4	3	4
W9742-3Rus	-	2.0	3.5	4	-	-	-	-	-	-
BNC182-5	1.9*	2.1	2.5	4	1.6	2.0	4	-	-	-
CO07370-1W/Y	-	2.1	3.0	4	-	-	-	-	-	-
CW08071-2Rus	-	2.1	3.0	4	-	-	-	-	-	-
Dakota Diamond	2.1*	2.1	3.0	4	2.0	2.5	4	-	-	-
Manistee	2.4	2.1	2.5	4	1.9	2.0	4	3.3	3.5	4
MSS487-2[LBR]	2.7	2.1	3.0	4	2.6	3.0	4	3.3	3.5	4
MSU016-2	-	2.1	2.5	4	-	-	-	-	-	-
MSV016-2	-	2.1	2.5	4	-	-	-	-	-	-
MSV127-1	-	2.1	2.5	4	-	-	-	-	-	-
MSV282-4Y[LBR]	-	2.1	2.5	4	-	-	-	-	-	-
MSV284-1[LBR]	-	2.1	2.5	4	-	-	-	-	-	-
MSV440-6[LBMR]	2.3*	2.1	2.5	4	2.4	2.5	4	-	-	-
MSV507-056	2.3*	2.1	2.5	4	2.4	3.0	5	-	-	-
MSW182-1Y	2.4*	2.1	2.5	4	-	-	-	2.6	3	4
MSW294-1	-	2.1	2.5	4	-	-	-	-	-	-
MSZ119-1	-	2.1	2.5	4	-	-	-	-	-	-
NY157	-	2.1	2.5	4	-	-	-	-	-	-
Reba	**2.3**	**2.1**	**3.0**	**8**	**2.3**	**2.5**	**6**	**2.6**	**3**	**4**
Russet Norkotah	**2.1**	**2.1**	**2.5**	**4**	**1.8**	**2.5**	**7**	**2.5**	**3**	**4**
W9577-6Y	2.1*	2.1	2.5	4	2.0	2.0	3	-	-	-
MSW134-1	-	2.2	2.5	3	-	-	-	-	-	-
AF4975-3	-	2.3	3.0	4	-	-	-	-	-	-

Table 9

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2013-2015 SCAB DISEASE TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER , MI

LINE	3-YR* AVG.	2015 RATING	2015 WORST	2015 N	2014 RATING	2014 WORST	2014 N	2013 RATING	2013 WORST	2013 N
AW07791-2Rus	-	2.3	2.5	4	-	-	-	-	-	-
MSU161-1[LBMR, PVYR]	2.0*	2.3	2.5	4	1.8	2.0	4	-	-	-
MSW239-3SPL	2.3	2.3	3.0	4	2.4	3.0	4	2.3	3	4
MSW298-4Y	-	2.3	2.5	4	-	-	-	-	-	-
MSW299-2	-	2.3	2.5	4	-	-	-	-	-	-
MSX156-1Y	-	2.3	2.5	4	-	-	-	-	-	-
MSZ157-3[LBR]	-	2.3	3.0	4	-	-	-	-	-	-
MSZ194-2	-	2.3	2.5	2	-	-	-	-	-	-
MSZ452-1	-	2.3	2.5	4	-	-	-	-	-	-
VC1009-1W/Y	-	2.3	2.5	4	-	-	-	-	-	-
Molli	-	2.3	2.5	3	-	-	-	-	-	-
A05182-7Y	-	2.4	3.0	4	-	-	-	-	-	-
Beacon Chipper	2.1*	2.4	3.0	4	1.8	2.0	4	-	-	-
Merlot	-	2.4	3.0	4	-	-	-	-	-	-
MSV246-1	-	2.4	3.0	4	-	-	-	-	-	-
MSW042-1[LBR]	-	2.4	2.5	4	-	-	-	-	-	-
MSW092-1[LBR]	-	2.4	3.0	4	-	-	-	-	-	-
MSW326-6	-	2.4	3.0	4	-	-	-	-	-	-
MSW556-1	-	2.4	3.0	4	-	-	-	-	-	-
MSX420-4Y	-	2.4	3.0	4	-	-	-	-	-	-
MSX507-1R[LBR]	-	2.4	3.0	4	-	-	-	-	-	-
MSX517-3SPL[LBR]	-	2.4	3.0	4	-	-	-	-	-	-
CO02343-3W	-	2.5	3.0	4	-	-	-	-	-	-
FL1879	**2.5***	**2.5**	**3.0**	**4**	**2.5**	**3.0**	**4**	**-**	**-**	**-**
MST148-3	2.5	2.5	3.0	4	2.4	3.0	4	2.6	4	4
MST191-2Y	2.7*	2.5	3.0	4	2.9	3.0	4	-	-	-
MSU245-1	-	2.5	2.5	4	-	-	-	-	-	-
MSW151-05	-	2.5	3.0	4	-	-	-	-	-	-
MSW164-2	-	2.5	2.5	4	-	-	-	-	-	-
MSW259-5	-	2.5	3.0	4	-	-	-	-	-	-
MSX010-3	-	2.5	3.0	4	-	-	-	-	-	-
MSX198-5[LBR]	-	2.5	2.5	4	-	-	-	-	-	-
MSZ507-2[LBR]	-	2.5	3.0	4	-	-	-	-	-	-
CO07102-1R	-	2.6	3.0	4	-	-	-	-	-	-
Maris Bard	-	2.6	3.0	4	-	-	-	-	-	-
Michigan Purple Sport I	2.3	2.6	3.0	4	1.5	2.0	4	2.6	3	4
MSV235-2PY[LBR]	2.8	2.6	3.0	4	2.8	3.0	4	3.1	3.5	4
MSW121-5R[LBR]	-	2.6	3.5	4	-	-	-	-	-	-
MSW437-9	2.8*	2.6	3.0	4	-	-	-	2.8	3	4
MSZ057-5	-	2.6	3.0	4	-	-	-	-	-	-
CalWhite	-	2.8	3.5	4	-	-	-	-	-	-
MSW068-4	-	2.8	3.0	4	-	-	-	-	-	-
MSW236-3	-	2.8	3.5	4	-	-	-	-	-	-
Snowden	**2.8**	**2.8**	**3.5**	**8**	**2.6**	**3.0**	**8**	**3.1**	**3.5**	**12**
Atlantic	**2.8**	**2.8**	**3.5**	**8**	**2.6**	**3.0**	**8**	**3.2**	**3.5**	**12**
MSW242-5Y[LBR]	-	2.9	3.5	4	-	-	-	-	-	-
MSX497-6[LBR]	-	2.9	3.5	4	-	-	-	-	-	-
ND8068-5Rus	-	2.9	3.0	4	-	-	-	-	-	-
NYK28-18	-	2.9	3.5	4	-	-	-	-	-	-
MSX011-4	-	3.0	3.0	4	-	-	-	-	-	-
MSW360-18[PVYR]	-	3.1	3.5	4	-	-	-	-	-	-
$HSD_{0.05}$ =		**1.4**			**1.5**			**1.5**		

SCAB DISEASE RATING: MSU Scab Nursery plot rating of 0-5; 0: No Infection; 1: Low Infection <5%, no pitted leisions; 3: Intermediate >20%, some pitted leisions (Susceptible, as commonly seen on Atlantic); 5: Highly Susceptible, >75% coverage and severe pitted leisions.

N = Number of replications.

*2-Year Average.

Table 10

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2015 SCAB DISEASE EARLY GENERATION TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER , MI

LINE	2015 RATING	2015 N	FEMALE	MALE
Sorted by ascending 2015 Rating;				
MSAA055-13	0.0	1	MSP239-1	MSV383-B
MSAA205-1	0.0	1	AO008-1TE	Silverton Russet
MSAA035-1	0.5	1	MSL007-B	MSR169-8Y
MSAA036-01	0.5	1	Manistee	MSR127-2
MSAA049-1	0.5	1	MegaChip	McBride
MSAA067-4	0.5	1	MSR061-1	MSR127-2
MSAA101-1RR	0.5	1	Adirondack Blue	Colonial Purple
MSAA103-1RR	0.5	1	Adirondack Blue	MSR214-2P
MSAA110-1	0.5	1	Colonial Purple	MSR217-1R
MSAA151-1	0.5	1	MSS544-1R	Colonial Purple
MSAA156-1	0.5	1	Spartan Splash	Colonial Purple
MSAA161-1PY	0.5	1	MST386-1P	MN02616RY
MSAA161-4RY	0.5	1	MST386-1P	MN02616RY
MSAA163-3	0.5	1	MST386-1P	MSR214-2P
MSAA203-2	0.5	1	AO008-1TE	Goldrush Russet
MSAA214-2	0.5	1	Elkton	Pike
MSAA313-2	0.5	1	Elkton	Lamoka
MSAA392-3	0.5	1	MSP239-1	McBride
MSAA481-1	0.5	1	MSS927-1	MSV241-2
MSAA498-18	0.5	1	MSV092-2	Elkton
MSAA502-3	0.5	1	MSV092-2	Manistee
MSAA507-10	0.5	1	MSV092-2	MSR127-2
MSAA571-4	0.5	1	MSV313-1	MSR169-8Y
MSAA720-1	0.5	1	Silverton Russet	A01124-3Rus
MSX245-2Y	0.5	1	Manistee	McBride
MSX324-1P	0.5	1	MSN105-1	Colonial Purple
MSY507-2	0.5	1	Superior	MSL211-3
MSY573-3Rus	0.5	1	Canela	Goldrush Russet
MSY713-1	0.5	1	MSS703-5	MCR150
MSY741-1	0.5	1	MSA133-16Y	MSP055-1Y
MSZ107-1PP	0.5	1	COMN07-W112BG1	MSR127-2
MSZ109-05RR	0.5	1	COMN07-W112BG1	MSU200-5PP
MSZ213-2P	0.5	1	MSQ279-1	Colonial Purple
MSZ223-2	0.5	1	MSR148-4	MSS297-3
MSZ412-2RR	0.5	1	Colonial Purple	MST406-2RR
MSZ427-3R	0.5	1	MSQ440-2	NDTX4271-5R
MSAA006-2	1.0	1	Beacon Chipper	Elkton
MSAA012-11	1.0	1	Beacon Chipper	MSR169-8Y
MSAA014-2	1.0	1	Beacon Chipper	MSS297-3
MSAA036-10	1.0	1	Manistee	MSR127-2
MSAA055-10	1.0	1	MSP239-1	MSV383-B
MSAA056-8	1.0	1	MSP270-1	McBride
MSAA072-2	1.0	1	MSR127-2	Lamoka
MSAA072-4	1.0	1	MSR127-2	Lamoka
MSAA076-15	1.0	1	MSR127-2	MSS297-3
MSAA076-06	1.0	1	MSR127-2	MSS297-3
MSAA076-07	1.0	1	MSR127-2	MSS297-3
MSAA081-1	1.0	1	MSR169-8Y	MSQ086-3
MSAA086-2	1.0	1	MSR169-8Y	W6609-3
MSAA100-1	1.0	1	Snowden	MSR061-1

Table 10

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2015 SCAB DISEASE EARLY GENERATION TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER , MI

LINE	2015 RATING	2015 N	FEMALE	MALE
Sorted by ascending 2015 Rating;				
MSAA143-1	1.0	1	MSR606-2	MSL211-3
MSAA161-3RY	1.0	1	MST386-1P	MN02616RY
MSAA166-2P	1.0	1	MST386-1P	MSU200-5PP
MSAA170-3	1.0	1	MSU016-2	MSR157-1Y
MSAA194-2	1.0	1	MSW151-5	MSL211-3
MSAA208-1	1.0	1	AF4130-3	Lamoka
MSAA217-3	1.0	1	Beacon Chipper	Atlantic
MSAA228-1	1.0	1	CO22188-4W	MSR169-8Y
MSAA230-4	1.0	1	MSL007-B	McBride
MSAA241-1	1.0	1	MSM246-B	MSR127-2
MSAA242-2	1.0	1	MSM246-B	MSS297-3
MSAA250-1	1.0	1	NY140	MSR169-8Y
MSAA252-7	1.0	1	NY148	MSQ089-1
MSAA253-1	1.0	1	NY148	MSV241-2
MSAA253-2	1.0	1	NY148	MSV241-2
MSAA253-5	1.0	1	NY148	MSV241-2
MSAA254-4	1.0	1	MSP239-1	Lamoka
MSAA260-3	1.0	1	MSQ086-3	Atlantic
MSAA261-2	1.0	1	MSQ086-3	McBride
MSAA261-3	1.0	1	MSQ086-3	McBride
MSAA263-3	1.0	1	MSQ089-1	Lamoka
MSAA265-2	1.0	1	MSQ089-1	W6609-3
MSAA265-4	1.0	1	MSQ089-1	W6609-3
MSAA266-1	1.0	1	MSQ279-1	Manistee
MSAA271-5	1.0	1	MSS927-1	Lamoka
MSAA289-1	1.0	1	MSU379-1	MegaChip
MSAA290-2	1.0	1	MSU379-1	Tundra
MSAA311-3	1.0	1	Elkton	Atlantic
MSAA324-4	1.0	1	Boulder	Lamoka
MSAA328-06	1.0	1	Boulder	MSR169-8Y
MSAA342-11Y	1.0	1	MSJ042-3Y	MSR169-8Y
MSAA342-07Y	1.0	1	MSJ042-3Y	MSR169-8Y
MSAA376-1	1.0	1	NY148	MSQ086-3
MSAA376-3	1.0	1	NY148	MSQ086-3
MSAA392-5	1.0	1	MSP239-1	McBride
MSAA478-2	1.0	1	MSS927-1	Atlantic
MSAA481-2	1.0	1	MSS927-1	MSV241-2
MSAA498-17	1.0	1	MSV092-2	Elkton
MSAA498-07	1.0	1	MSV092-2	Elkton
MSAA498-09	1.0	1	MSV092-2	Elkton
MSAA502-5	1.0	1	MSV092-2	Manistee
MSAA507-11	1.0	1	MSV092-2	MSR127-2
MSAA509-2	1.0	1	MSV092-2	MSS165-2Y
MSAA523-1	1.0	1	MSV127-1	Lamoka
MSAA526-1	1.0	1	MSV127-1	MSS165-2Y
MSAA530-2	1.0	1	MSV158-2	McBride
MSAA570-15	1.0	1	MSV313-1	Lamoka
MSAA570-19	1.0	1	MSV313-1	Lamoka
MSAA578-4	1.0	1	MSV358-3	Pike
MSAA578-7	1.0	1	MSV358-3	Pike

Table 10

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2015 SCAB DISEASE EARLY GENERATION TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER , MI

LINE	2015 RATING	2015 N	FEMALE	MALE
Sorted by ascending 2015 Rating;				
MSAA588-3	1.0	1	MSV383-B	Lamoka
MSAA603-5	1.0	1	MSV434-4	Lamoka
MSAA678-1	1.0	1	W5015-12	Lamoka
MSAA690-2	1.0	1	W6609-3	Lamoka
MSAA708-1PP	1.0	1	Spartan Splash	MSU200-5PP
MSAA739-5	1.0	1	NYG86-1	MSS165-2Y
MSAA743-1	1.0	1	MSQ070-1	McBride
MSAA743-3	1.0	1	MSQ070-1	McBride
MSM269-1Y	1.0	1	84SD22	USDA8380-1
MSM270-BY	1.0	1	84SD22	W5337.3
Pike	**1.0**	**2**	**Allegany**	**Atlantic**
Purple Surprise	1.0	1		
MSQ341-BY	1.0	1	McBride	NY120
MSR127-2	1.0	1	MSJ167-1	MSG227-2
MSV383-B	1.0	1	Pike	MSN238-A
MSV407-2	1.0	1	MSQ070-1	MSP239-1
MSX105-1	1.0	1	Dakota Crisp	McBride
MSX172-7	1.0	1	McBride	Nicolet
MSX225-2	1.0	1	MSK061-4	Nicolet
MSX469-2	1.0	1	MSQ070-1	
MSX472-2	1.0	1	MSQ070-1	MSP292-7
MSX501-5	1.0	1	MSQ176-5	McBride
MSX503-5	1.0	1	MSQ176-5	MSL268-D
MSY027-2	1.0	1	MST096-2Y	Pike
MSY041-1	1.0	1	Dakota Diamond	MSP368-1
MSY044-1	1.0	1	MSK061-4	MST096-2Y
MSY111-1	1.0	1	MSQ086-3	McBride
MSY468-16	1.0	1	NYL235-4	MSL211-3
MSY480-3RY	1.0	1	MN96013-1RY	MSS544-1R
MSY520-1	1.0	1	MSQ440-2	MSN105-1
MSZ097-1	1.0	1	Boulder	Lamoka
MSZ109-10PP	1.0	1	COMN07-W112BG1	MSU200-5PP
MSZ144-04Y	1.0	1	M5	McBride
MSZ172-3	1.0	1	MSP270-1	W6609-3
MSZ205-1	1.0	1	MSQ070-1	MSU383-A
MSZ218-5	1.0	1	MSR061-1	MSQ086-3
MSZ246-1	1.0	1	Snowden	Dakota Diamond
MSZ248-02	1.0	1	Snowden	MSV229-2
MSZ251-1	1.0	1	MSS070-B	Lamoka
MSZ263-4	1.0	1	MSU088-1	McBride
MSZ282-6	1.0	1	MSV502-3	Kalkaska
MSZ407-2Y	1.0	1	Montanosa	Colonial Purple
MSZ413-6P	1.0	1	Colonial Purple	MSU200-5PP
MSZ416-8RY	1.0	1	MSN230-1RY	NDTX4271-5R
MSZ427-1R	1.0	1	MSQ440-2	NDTX4271-5R
MSZ436-2SPL	1.0	1	MSS576-05SPL	MSQ440-2
MSZ464-3	1.0	1	MSQ070-1	Alca Tarma
MSZ571-3R	1.0	1	NDTX4271-5R	Colonial Purple
MSZ590-1	1.0	1	Superior	Picasso
MSZ609-1P	1.0	1	386056.17	Colonial Purple

Table 10

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2015 SCAB DISEASE EARLY GENERATION TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER , MI

LINE	2015 RATING	2015 N	FEMALE	MALE
Sorted by ascending 2015 Rating;				
MSZ622-1	1.0	1	Satina	MSL211-3
MSZ709-01Y	1.0	1	MSM269-HORG	84SD22
MSZ744-1	1.0	1	MSM185-1	MSP091-1
McBride	1.1	4	Penta	OP
MSAA003-6	1.5	1	Atlantic	MSS165-2Y
MSAA011-1	1.5	1	Beacon Chipper	MSR159-2
MSAA012-01	1.5	1	Beacon Chipper	MSR169-8Y
MSAA034-2	1.5	1	MSL007-B	MSR127-2
MSAA036-03	1.5	1	Manistee	MSR127-2
MSAA036-07	1.5	1	Manistee	MSR127-2
MSAA036-09	1.5	1	Manistee	MSR127-2
MSAA055-01	1.5	1	MSP239-1	MSV383-B
MSAA056-5	1.5	1	MSP270-1	McBride
MSAA061-7	1.5	1	Pike	MSS297-3
MSAA072-5	1.5	1	MSR127-2	Lamoka
MSAA076-04	1.5	1	MSR127-2	MSS297-3
MSAA079-5	1.5	1	MSR169-8Y	Lamoka
MSAA083-4Y	1.5	1	MSR169-8Y	MSS165-2Y
MSAA091-1	1.5	1	MSS165-2Y	Lamoka
MSAA127-1	1.5	1	Purple Heart	MSV200-5PP
MSAA127-7	1.5	1	Purple Heart	MSV200-5PP
MSAA131-2	1.5	1	MSQ341-BY	MSQ176-5
MSAA139-1	1.5	1	MSR214-2P	Purple Heart
MSAA144-4	1.5	1	MSR606-2	MSQ086-3
MSAA168-1	1.5	1	MSU016-2	MSL211-3
MSAA168-3	1.5	1	MSU016-2	MSL211-3
MSAA169-3	1.5	1	MSU016-2	MSQ086-2
MSAA173-2	1.5	1	MSU161-1	MSQ086-3
MSAA176-3	1.5	1	MSU161-1	MSU016-2
MSAA177-3	1.5	1	MSU161-1	MSW126-1
MSAA182-3R	1.5	1	MSU200-5PP	MSS544-1R
MSAA185-1Y	1.5	1	MSV205-4	MSL211-3
MSAA196-1	1.5	1	MSW151-5	MSQ440-2
MSAA233-2	1.5	1	Lamoka	Pike
MSAA237-1	1.5	1	Lelah	MSR169-8Y
MSAA244-1	1.5	1	Missaukee	Lamoka
MSAA255-03	1.5	1	MSQ035-3	Lamoka
MSAA257-1	1.5	1	MSQ070-1	MSR127-2
MSAA260-2	1.5	1	MSQ086-3	Atlantic
MSAA267-2	1.5	1	MSQ279-1	Lamoka
MSAA275-5	1.5	1	Snowden	MSS297-3
MSAA283-2	1.5	1	Tundra	MSR127-2
MSAA309-15	1.5	1	Atlantic	Lamoka
MSAA311-1	1.5	1	Elkton	Atlantic
MSAA315-1	1.5	1	Beacon Chipper	McBride
MSAA328-11	1.5	1	Boulder	MSR169-8Y
MSAA328-04	1.5	1	Boulder	MSR169-8Y
MSAA328-09	1.5	1	Boulder	MSR169-8Y
MSAA335-7	1.5	1	CO00188-4W	Elkton
MSAA335-9	1.5	1	CO00188-4W	Elkton

Table 10

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2015 SCAB DISEASE EARLY GENERATION TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER , MI

LINE	2015 RATING	2015 N	FEMALE	MALE
Sorted by ascending 2015 Rating;				
MSAA372-3	1.5	1	NY140	Lamoka
MSAA373-3	1.5	1	NY148	McBride
MSAA468-4	1.5	1	MSR297-A	MSQ086-3
MSAA470-6	1.5	1	MSR297-A	W6609-3
MSAA474-8	1.5	1	MSS297-3	MSR127-2
MSAA498-01	1.5	1	MSV092-2	Elkton
MSAA498-11	1.5	1	MSV092-2	Elkton
MSAA503-2	1.5	1	MSV092-2	Lamoka
MSAA689-2	1.5	1	W6609-3	McBride
MSAA741-3	1.5	1	MSQ035-3	McBride
MSAA745-1	1.5	1	MSQ086-3	Kalkaska
ARS102400-2CPB	1.5	1		
MSL517-6	1.5	1	Atlantic	8380-1 chc, 4x
MSS543-2	1.5	1	Boulder	MSK214-1R
MST154-3	1.5	1	MSJ033-10Y	McBride
MSW111-1	1.5	1	MSL505-3	MSR061-1
MSW485-2	1.5	1	MSQ070-1	MSR156-7
MSX035-WP	1.5	1	Beacon Chipper	ARS10091WP
MSX042-3	1.5	1	Beacon Chipper	NY121
MSX142-2	1.5	1	Eva	MSQ176-5
MSX221-2	1.5	1	MSK061-4	MSR036-5
MSX255-1	1.5	1	MSM171-A	ARS10342-4
MSX506-3	1.5	1	MSQ176-5	MSR169-8Y
MSY022-2	1.5	1	MSS176-1	MST096-2Y
MSY042-1	1.5	1	MSJ147-1	Nicolet
MSY089-2	1.5	1	MSS176-1	B2731-2
MSY156-2	1.5	1	MSK061-4	Kalkaska
MSY434-1Y	1.5	1	Reba	MSQ440-2
MSY452-1	1.5	1	MSQ176-5	MSL211-3
MSY483-3	1.5	1	MSL505-3	MSN105-1
MSY517-8YSPL	1.5	1	Spartan Splash	Bison
MSY728-1	1.5	1	523-3-S7	84SD22
MSY733-1	1.5	1	MSL316-EY	84SD22
MSZ004-1	1.5	1	Atlantic	MSL211-3
MSZ063-02	1.5	1	MSR148-4	McBride
MSZ063-07Y	1.5	1	MSR148-4	McBride
MSZ069-11	1.5	1	Snowden	MSS297-3
MSZ092-2	1.5	1	Elkton	MSQ086-3
MSZ109-08PP	1.5	1	COMN07-W112BG1	MSU200-5PP
MSZ119-1	1.5	1	Kalkaska	M5
MSZ144-10Y	1.5	1	M5	McBride
MSZ189-3	1.5	1	Pike	MSS297-3
MSZ200-3	1.5	1	MSQ070-1	Lamoka
MSZ200-6	1.5	1	MSQ070-1	Lamoka
MSZ215-2	1.5	1	MSR058-1	MSQ086-3
MSZ268-1	1.5	1	MSU278-1Y	Pike
MSZ269-17	1.5	1	MSU278-1Y	MSR127-2
MSZ269-18	1.5	1	MSU278-1Y	MSR127-2
MSZ296-1Y	1.5	1	W6609-3	MSR127-2
MSZ407-7	1.5	1	Montanosa	Colonial Purple

Table 10

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2015 SCAB DISEASE EARLY GENERATION TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER , MI

LINE	2015 RATING	2015 N	FEMALE	MALE
Sorted by ascending 2015 Rating;				
MSZ428-1PP	1.5	1	MSQ461-2PP	MSS544-1R
MSZ433-3P	1.5	1	MSS483-1	MSU200-5PP
MSZ437-9RR	1.5	1	MSS576-05SPL	MST406-2RR
MSZ443-1PP	1.5	1	MSU200-5PP	NDTX4271-5R
MSZ513-2	1.5	1	MSL268-D	MSL211-3
MSZ537-4	1.5	1	MSL211-3	Chaposa
MSZ551-1	1.5	1	MSM182-1	MSL268-D
MSZ552-2P	1.5	1	MSM182-1	Colonial Purple
MSZ578-1Y	1.5	1	Nicola	Santa Ana
MSZ598-2	1.5	1	MSS576-05SPL	Superior
MSZ615-2	1.5	1	Sieglinde	MSL211-3
MSZ620-3	1.5	1	Muziranzara	MSL211-3
MSZ708-6	1.5	1	MSL316-EY	84SD22
MSZ709-03Y	1.5	1	MSM269-HORG	84SD22
MSZ709-04	1.5	1	MSM269-HORG	84SD22
MSZ749-3	1.5	1	MSP102-5	MSL505-3
MSZ502-7PP	1.5	1		
Manistee	1.8	5	Snowden	H098-2
MSAA014-1	2.0	1	Beacon Chipper	MSS297-3
MSAA018-2	2.0	1	MSJ147-1	Atlantic
MSAA057-2	2.0	1	MSP270-1	Lamoka
MSAA058-1	2.0	1	MSP270-1	MSS165-2Y
MSAA073-4	2.0	1	MSR127-2	MSM246-B
MSAA077-1	2.0	1	MSR169-8Y	AF4130-3
MSAA079-7Y	2.0	1	MSR169-8Y	Lamoka
MSAA079-8Y	2.0	1	MSR169-8Y	Lamoka
MSAA085-1	2.0	1	MSR169-8Y	MSV383-B
MSAA157-3PYPSpl	2.0	1	Spartan Splash	Purple Heart
MSAA168-8	2.0	1	MSU016-2	MSL211-3
MSAA169-6	2.0	1	MSU016-2	MSQ086-2
MSAA172-5	2.0	1	MSU016-2	MSV198-2Y
MSAA174-1	2.0	1	MSU161-1	MSQ440-2
MSAA193-3	2.0	1	MSW111-1	MSS297-3
MSAA196-6	2.0	1	MSW151-5	MSQ440-2
MSAA211-3	2.0	1	Atlantic	Kalkaska
MSAA218-5	2.0	1	Beacon Chipper	MSV313-1
MSAA231-1	2.0	1	Lamoka	Kalkaska
MSAA232-4	2.0	1	Lamoka	Manistee
MSAA240-3	2.0	1	MSM246-B	MSQ086-3
MSAA240-5	2.0	1	MSM246-B	MSQ086-3
MSAA252-1	2.0	1	NY148	MSQ089-1
MSAA255-10	2.0	1	MSQ035-3	Lamoka
MSAA256-3	2.0	1	MSQ070-1	Lamoka
MSAA267-4	2.0	1	MSQ279-1	Lamoka
MSAA277-3	2.0	1	Snowden	W6609-3
MSAA294-3	2.0	1	Accumulator	MSR127-2
MSAA342-02	2.0	1	MSJ042-3Y	MSR169-8Y
MSAA342-03	2.0	1	MSJ042-3Y	MSR169-8Y
MSAA460-2Y	2.0	1	MSR159-2	MSS165-2Y
MSAA472-1	2.0	1	MSS165-2Y	MSV358-3

Table 10

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2015 SCAB DISEASE EARLY GENERATION TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER , MI

LINE	2015 RATING	2015 N	FEMALE	MALE
Sorted by ascending 2015 Rating;				
MSAA513-1	2.0	1	MSV117-1	Lamoka
MSAA523-2	2.0	1	MSV127-1	Lamoka
MSAA541-4	2.0	1	MSV198-2Y	Pike
MSAA556-2	2.0	1	MSV284-1	McBride
MSAA556-3Y	2.0	1	MSV284-1	McBride
MSAA556-4Y	2.0	1	MSV284-1	McBride
MSAA570-03	2.0	1	MSV313-1	Lamoka
MSAA571-3Y	2.0	1	MSV313-1	MSR169-8Y
MSAA725-3	2.0	1	BNC182-5	MSS165-2Y
MSAA739-1	2.0	1	NYG86-1	MSS165-2Y
MSAA742-6	2.0	1	MSQ035-3	MSR127-2
Barbara	2.0	1		
Chloe Anwd	2.0	1		
MSL007-B	2.0	1	MSA105-1	MSG227-2
LT-7	2.0	1		
MSQ558-2RR	2.0	1	Rose Gold	POORPG2-16
MSR061-1	2.0	1	W1201	NY121
MSR186-3P	2.0	1	MN19525R	MSK034-1
MSS805-8	2.0	1	Atlantic	Mcr1-150
MSW128-2	2.0	1	MSM171-A	MSQ176-5
MSW501-5	2.0	1	Boulder	White Pearl
MSX009-2	2.0	1	ARS10241-2	Missaukee
MSX010-3	2.0	1	ARS10241-2	MSL211-3
MSX018-2	2.0	1	ARS10342-4	Pike
MSX050-1	2.0	1	Beacon Chipper	Nicolet
MSX137-6	2.0	1	Eva	MSL211-3
MSX150-1	2.0	1	MSH228-6	MSM246-B
MSX156-1Y	2.0	1	MSI005-20Y	Boulder
MSX293-1Y	2.0	1	MSM288-2Y	MSQ176-5
MSX324-2R	2.0	1	MSN105-1	Colonial Purple
MSX345-6Y	2.0	1	MSN191-2Y	McBride
MSX389-2	2.0	1	Lamoka	MSL268-D
MSX495-2	2.0	2	MSQ131-A	Kalkaska
MSX517-3SPL	2.0	1	Spartan Splash	MSQ176-5
MSX540-4	2.0	1	MSR061-1	Lamoka
MSX542-2	2.0	1	MSR102-3	Megachip
MSY008-3	2.0	1	MSP515-2	Manistee
MSY192-2PP	2.0	1	MSQ405-1PP	MSQ461-2PP
MSY193-1	2.0	1	MSQ279-1	B2731-2
MSY209-1	2.0	1	Pike	MSN170-A
MSY491-2Y	2.0	1	MSL183-AY	MSL211-3
MSY515-1	2.0	1	Reba	Haig Ind 98
MSY544-5R	2.0	1	Bison	MSS544-1R
MSY712-2Y	2.0	1	MSS703-5	84SD22

Table 11

2015 MSU LATE BLIGHT VARIETY TRIAL
CLARKSVILLE RESEARCH CENTER, MI

Line Sort: ***RAUDPC Sort:***

LINE	N	RAUDPC[1] MEAN	LINE	N	RAUDPC[1] MEAN	*Pedigrees go w/ RAUDPC Sort* Female	Male
A01010-1 (Targhee Russet)	3	19.3	MSS487-2	3	0.0	Stirling	Missaukee
A01143-3C	3	19.0	MSV235-2PY	3	0.0	Malinche	Colonial Purple
A02267-1Y	3	17.0	MSV282-4Y	3	0.0	Monserrat	MSN105-1
A05182-7Y	3	11.5	MSV284-1	3	0.0	Monserrat	MSP239-1
AF3362-1Rus (Caribou Russet)	3	20.7	MSZ562-4	3	0.0	Muruta	MSL211-3
AF4648-2	3	10.2	MSZ609-1P	3	0.0	386056.17	Colonial Purple
AF4975-3	3	23.4	MSW242-5Y	3	0.0	NY121	Malinche
AF5320-1	3	23.2	ND6961B-21PY	3	0.0		
Atlantic	**4**	**25.9**	MSX398-2	2	0.2	Lamoka	Stirling
ATX91137-1Rus (Reveille Russet)	2	20.6	MSW092-1	3	0.2	MSL106-AY	Montserrat
AW07791-2Rus	2	12.0	MSS164-1	3	0.2	MSM188-1	Missaukee
Barbara	2	17.4	MSW464-3	3	0.3	MSM246-B	MSR102-3
BNC182-5	3	23.1	MSX198-5	3	0.5	Missaukee	OP
CO02343-3W	2	22.9	MSX293-1Y	2	0.6	MSM288-2Y	MSQ176-5
CO05037-3W/Y	2	26.7	MSW229-5P	3	0.6	Michigan Purple	MSN105-1
CO07102-1R	3	26.5	MSZ610-3	3	0.6	Chaposa	MSQ176-5
CO07370-1W/Y	3	12.7	MSW078-1	2	0.7	MSK409-1	Malinche
CO5068-1Rus	3	14.1	MSZ551-1	2	1.0	MSM182-1	MSL268-D
CW08071-2Rus	2	18.4	MSW324-01	3	1.0	MSQ070-1	Marcy
Dakota Ruby	3	22.3	MSZ219-46	3	1.1	MSR061-1	MSR127-2
Granola	3	14.8	MSZ454-1Y	3	1.4	Atlantic	Enfula
Lamoka	3	21.4	MSZ552-2P	2	1.5	MSM182-1	Colonial Purple
Maris Bard	3	21.5	MSX497-6	3	1.6	MSQ131-A	MSL268-D
Merlot	3	14.3	MSW042-1	3	1.6	MSI152-A	MSL211-3
MN10003PLWR-06R	3	23.9	MSW121-5R	3	1.7	MSM182-1	NDTX4271-5R
Molli	3	18.0	MSZ219-14	3	1.8	MSR061-1	MSR127-2
MSR061-1	3	3.6	MSZ436-2SPL	2	1.8	MSS576-05SPL	MSQ440-2
MSS164-1	3	0.2	MSZ702-1	3	1.8	CIP575045	84SD22
MSS487-2	3	0.0	QSMSU10-02	3	1.9	MSN106-2	MSL211-3
MSS576-5SPL	2	7.0	MSZ706-1	2	2.0	J138K6A22	MSV020-2
MST075-1R	2	24.0	MSZ409-1R	3	2.3	Muruta	MSR217-1R
MST386-1P	3	18.4	MSZ507-2	3	2.4	MSL211-3	NY121
MSU016-2	3	5.6	MSW100-1	3	3.1	LBR9	MSP292-7
MSU161-1	3	6.5	MSZ578-1Y	2	3.3	Nicola	Santa Ana
MSU198-01SPL	3	15.8	MSZ210-08	3	3.4	MSQ131-A	MSL211-3
MSU202-1P	3	22.4	MSR061-1	3	3.6	W1201	NY121
MSU245-1	3	10.3	MSX517-3SPL	3	3.6	Spartan Splash	MSQ176-5
MSU316-3PY	3	19.8	MSZ464-3	3	3.7	MSQ070-1	Alca Tarma
MSU379-1	3	20.5	MSZ157-3	3	4.1	NDU030-1	Missaukee
MSU383-A	2	20.3	MSZ513-2	6	4.3	MSL268-D	MSL211-3
MSV093-1	6	16.9	MSX540-4	3	4.6	MSR061-1	Lamoka
MSV111-1	3	15.2	MSZ705-3	2	4.7	HS66	BER83
MSV179-1	2	23.3	MSX507-1R	2	5.0	MSQ176-5	MSR219-2R
MSV235-2PY	3	0.0	MSY491-2Y	3	5.0	MSL183-AY	MSL211-3
MSV282-4Y	3	0.0	MSY520-1	3	5.4	MSQ440-2	MSN105-1
MSV284-1	3	0.0	MSZ218-5	3	5.6	MSR061-1	MSQ086-3
MSV301-2	3	24.3	MSU016-2	3	5.6	Boulder	MSN105-1
MSV393-1	2	20.0	MSW151-05	3	6.1	Montanosa	MSL211-3
MSV394-3	2	17.3	MSW360-18	3	6.1	MSR061-1	MSN238-A
MSV396-4Y	3	9.4	MSU161-1	3	6.5	MSM182-1	MSL211-3
MSV397-2	3	19.9	MSY452-1	3	6.5	MSQ176-5	MSL211-3
MSV505-2	1	16.9	MSW485-2	3	6.7	MSQ070-1	MSR156-7
MSW042-1	3	1.6	MSZ251-1	3	6.8	MSS070-B	Lamoka
MSW064-1	3	9.2	MSZ219-44	3	7.0	MSR061-1	MSR127-2
MSW078-1	2	0.7	MSS576-5SPL	2	7.0	MSI005-20Y	MSL211-3
MSW092-1	3	0.2	MSZ004-1	3	7.2	Atlantic	MSL211-3
MSW100-1	3	3.1	MSZ424-1R	2	7.6	NY121	MSR217-1R
MSW119-2	3	13.0	MSZ620-1	2	7.9	Muziranzara	MSL211-3
MSW121-5R	3	1.7	MSX542-2	3	7.9	MSR102-3	Megachip
MSW123-3	3	18.6	MSZ091-3	2	8.3	B1992-106	MSL211-3
MSW125-3	3	20.6	MSZ570-1	2	8.5	ND8331cb-3	MSL211-3

2015 MSU LATE BLIGHT VARIETY TRIAL
CLARKSVILLE RESEARCH CENTER, MI

Line Sort: ***RAUDPC Sort:***

LINE	N	RAUDPC[1] MEAN	LINE	N	RAUDPC[1] MEAN	*Pedigrees go w/ RAUDPC Sort* Female	Male
MSW126-1	2	18.9	MSZ057-5	2	8.6	MSQ070-1	ND8334Cb-3
MSW134-1	2	22.8	MSW064-1	3	9.2	MSK061-4	MSR036-5
MSW151-05	3	6.1	MSW399-2	3	9.2	MSW2133-1	MSR036-5
MSW163-03	3	18.9	MSZ219-01	3	9.2	MSR061-1	MSR127-2
MSW168-2	3	15.9	MSZ547-3	3	9.2	MSL505-3	MSL211-3
MSW182-1Y	3	15.1	MSV396-4Y	3	9.4	MSQ070-1	McBride
MSW229-5P	3	0.6	MSX472-2	3	9.5	MSQ070-1	MSP292-7
MSW236-3	3	18.5	MSZ706-5	3	9.7	J138K6A22	MSV020-2
MSW237-4Y	3	14.8	NY154	3	9.7		
MSW242-5Y	3	0.0	AF4648-2	3	10.2		
MSW259-5	3	14.6	MSU245-1	3	10.3	NY132	MSP542-4
MSW298-4Y	1	12.1	MSW394-1	3	10.8	W2133-1	MSJ319-1
MSW299-2	3	13.4	MSZ616-1	3	10.9	Nicola	MSL211-3
MSW324-01	3	1.0	MSZ453-1	3	11.2	McBride	Alca Tarma
MSW326-6	3	19.4	MSX009-2	2	11.3	ARS10241-2	Missaukee
MSW353-3	3	17.6	A05182-7Y	3	11.5		
MSW360-18	3	6.1	AW07791-2Rus	2	12.0		
MSW394-1	3	10.8	MSW298-4Y	1	12.1	MSP102-5	MSL505-3
MSW399-2	3	9.2	VC1009-1W/Y	3	12.5		
MSW437-9	3	17.7	CO07370-1W/Y	3	12.7		
MSW464-3	3	0.3	MSW119-2	3	13.0	MSM171-A	MSR036-5
MSW485-2	3	6.7	MSZ219-29	3	13.1	MSR061-1	MSR127-2
MSW500-10	3	22.8	MSZ433-3P	3	13.2	MSS483-1	MSU200-5PP
MSW502-4	3	15.9	MSW299-2	3	13.4	MSP516-A	MSR061-1
MSW505-2	3	23.6	MSZ427-1R	2	14.0	MSQ440-2	NDTX4271-5R
MSW509-5	3	19.6	MSZ407-7	3	14.0	Montanosa	Colonial Purple
MSW537-6	3	15.7	CO5068-1Rus	3	14.1		
MSX001-4WP	2	22.3	Merlot	3	14.3		
MSX009-2	2	11.3	MSZ708-6	3	14.5	MSL316-EY	84SD22
MSX010-3	3	24.6	MSW259-5	3	14.6	MSN073-2	MSR159-2
MSX011-4	3	18.9	MSY008-3	3	14.7	MSP515-2	Manistee
MSX137-6	3	22.6	MSZ452-1	2	14.7	Atlantic	Chaposa
MSX196-1	3	15.0	Granola	3	14.8		
MSX198-5	3	0.5	MSW237-4Y	3	14.8	Montserrat	MSN191-2Y
MSX221-2	3	18.2	MSX196-1	3	15.0	Missaukee	Manistee
MSX255-1	2	22.4	MSW182-1Y	3	15.1	MSI005-20Y	POR02PG7-5
MSX293-1Y	2	0.6	MSV111-1	3	15.2	MSJ316-A	MSN105-1
MSX324-1P	5	19.2	ND7882b-7Russ	3	15.4		
MSX324-2R	1	18.8	MSY022-2	3	15.5	MSS176-1	MST096-2Y
MSX398-2	2	0.2	MSZ200-3	3	15.6	MSQ070-1	Lamoka
MSX472-2	3	9.5	MSW537-6	3	15.7	MSM070-1	MSP516-A
MSX495-2	2	23.4	MSU198-01SPL	3	15.8	MSN111-4PP	MSN105-1
MSX497-6	3	1.6	MSW168-2	3	15.9	Beacon Chipper	MSR159-2
MSX503-5	3	21.7	MSW502-4	3	15.9	CO95051-7W	Kalkaska
MSX506-3	3	19.6	MSV093-1	6	16.9	McBride	MSP408-14Y
MSX507-1R	2	5.0	MSV505-2	1	16.9	W2310-3	Missaukee
MSX517-3SPL	3	3.6	A02267-1Y	3	17.0		
MSX526-1	3	20.3	MSV394-3	2	17.3	MSQ070-1	MSH228-6
MSX540-4	3	4.6	Barbara	2	17.4		
MSX542-2	3	7.9	MSW353-3	3	17.6	MSR036-5	Marcy
MSY008-3	3	14.7	MSW437-9	3	17.7	Boulder	MSR036-5
MSY022-2	3	15.5	MSZ154-1	2	17.9	NDU022-1	MSQ086-3
MSY452-1	3	6.5	Molli	3	18.0		
MSY491-2Y	3	5.0	**Snowden**	**6**	**18.0**	**Lenape**	**Wischip**
MSY520-1	3	5.4	MSX221-2	3	18.2	MSK061-4	MSR036-5
MSZ004-1	3	7.2	CW08071-2Rus	2	18.4		
MSZ057-5	2	8.6	MST386-1P	3	18.4	Michigan Purple	Liberator
MSZ091-3	2	8.3	MSW236-3	3	18.5	Montanosa	MSR036-5
MSZ100-3	2	19.3	MSW123-3	3	18.6	MSM171-A	Dakota Diamond
MSZ154-1	2	17.9	MSZ615-1	3	18.7	386056.17	MSL211-3
MSZ157-3	3	4.1	MSX324-2R	1	18.8	MSN105-1	Colonial Purple
MSZ194-2	3	22.8	MSW126-1	2	18.9	MSM171-A	MSL268-D
MSZ200-3	3	15.6	MSW163-03	3	18.9	Atlantic	MSR036-5
MSZ210-08	3	3.4	MSX011-4	3	18.9	ARS10241-2	MSN105-1

2015 MSU LATE BLIGHT VARIETY TRIAL
CLARKSVILLE RESEARCH CENTER, MI

Line Sort: ***RAUDPC Sort:***

LINE	N	RAUDPC[1] MEAN	LINE	N	RAUDPC[1] MEAN	*Pedigrees go w/ RAUDPC Sort* Female	Male
MSZ218-5	3	5.6	W9577-6Y	2	18.9		
MSZ219-01	3	9.2	A01143-3C	3	19.0		
MSZ219-11	3	19.2	MSZ219-11	3	19.2	MSR061-1	MSR127-2
MSZ219-14	3	1.8	MSX324-1P	5	19.2	MSN105-1	Colonial Purple
MSZ219-29	3	13.1	W9742-3Rus	2	19.2		
MSZ219-44	3	7.0	Oneida Gold	3	19.2		
MSZ219-46	3	1.1	W9433-1Rus	2	19.3		
MSZ251-1	3	6.8	MSZ100-3	2	19.3	Boulder	MSV477-5
MSZ300-1	3	20.3	A01010-1 (Targhee Russett)	3	19.3		
MSZ407-2Y	2	20.9	MSW326-6	3	19.4	MSQ070-1	MSN190-2
MSZ407-7	3	14.0	MSW509-5	3	19.6	Kalkaska	Marcy
MSZ409-1R	3	2.3	MSX506-3	3	19.6	MSQ176-5	MSR169-8Y
MSZ424-1R	2	7.6	MSU316-3PY	3	19.8	Liberator	MSL766-1
MSZ427-1R	2	14.0	MSV397-2	3	19.9	MSQ070-1	MSJ147-1
MSZ433-3P	3	13.2	MSV393-1	2	20.0	MSQ070-1	MSG227-2
MSZ436-2SPL	2	1.8	MSU383-A	2	20.3	MSP292-7	MSG227-2
MSZ452-1	2	14.7	MSZ300-1	3	20.3	W6822-3	MSU205-4
MSZ453-1	3	11.2	W5955-1	3	20.3		
MSZ454-1Y	3	1.4	MSX526-1	3	20.3	MSR036-5	Lamoka
MSZ464-3	3	3.7	MSU379-1	3	20.5	MSP238-1	Missaukee
MSZ507-2	3	2.4	ATX91137-1Rus (Reveille Russet)	2	20.6		
MSZ513-2	6	4.3	MSW125-3	3	20.6	MSM171-A	MSL211-3
MSZ547-3	3	9.2	AF3362-1Rus (Caribou Russet)	3	20.7		
MSZ551-1	2	1.0	MSZ407-2Y	2	20.9	Montanosa	Colonial Purple
MSZ552-2P	2	1.5	QSMSU10-15	3	21.0	MSN106-2	MSL211-3
MSZ562-4	3	0.0	MSZUNK-7	3	21.3		
MSZ570-1	2	8.5	Lamoka	3	21.4		
MSZ578-1Y	2	3.3	Reba	6	21.4		
MSZ609-1P	3	0.0	Maris Bard	3	21.5		
MSZ610-3	3	0.6	W10209-2R	2	21.6		
MSZ615-1	3	18.7	MSX503-5	3	21.7	MSQ176-5	MSL268-D
MSZ616-1	3	10.9	Soraya	3	21.7		
MSZ620-1	2	7.9	ND7818-1Y	3	21.9		
MSZ702-1	3	1.8	**Russet Norkotah**	**3**	**21.9**		
MSZ705-3	2	4.7	MSX001-4WP	2	22.3	ARS10091WP	MSL211-3
MSZ706-1	2	2.0	Dakota Ruby	3	22.3		
MSZ706-5	3	9.7	MSU202-1P	3	22.4	Colonial Purple	MSL211-3
MSZ708-6	3	14.5	W9519-3Rus	3	22.4		
MSZUNK-7	3	21.3	MSX255-1	2	22.4	M171-A	ARS10342-4
ND6961B-21PY	3	0.0	**Pike**	**2**	**22.5**	**Allegany**	**Atlantic**
ND7818-1Y	3	21.9	W9576-13Y	3	22.5		
ND7882b-7Russ	3	15.4	MSX137-6	3	22.6	Eva	MSL211-3
ND8068-5Rus	2	25.5	MSW134-1	2	22.8	Marcy	Dakota Diamond
NY154	3	9.7	MSW500-10	3	22.8	Boulder	MSP516-A
NY157	3	23.5	MSZ194-2	3	22.8	MSQ035-3	MSU383-A
NYK28-18	3	23.8	QSMSU08-4	3	22.8	MSM037-3	MSL211-3
Oneida Gold	3	19.2	CO02343-3W	2	22.9		
Pike	**2**	**22.5**	**Silverton Russet**	**3**	**22.9**		
Purple Surprise 3	3	24.4	BNC182-5	3	23.1		
QSMSU08-4	3	22.8	AF5320-1	3	23.2		
QSMSU10-02	3	1.9	MSV179-1	2	23.3	LBR8	MSL211-3
QSMSU10-15	3	21.0	MSX495-2	2	23.4	MSQ131-A	Kalkaska
Reba	6	21.4	W9576-11Y	3	23.4		
Red Norland	**3**	**25.5**	AF4975-3	3	23.4		
Russet Norkotah	**3**	**21.9**	NY157	3	23.5		
Silverton Russet	**3**	**22.9**	MSW505-2	3	23.6	MSI005-20Y	MSL766-1
Snowden	**6**	**18.0**	NYK28-18	3	23.8		
Soraya	3	21.7	MN10003PLWR-06R	3	23.9		
VC1009-1W/Y	3	12.5	MST075-1R	2	24.0	Dakota Jewel	MSL211-3
W10209-2R	2	21.6	MSV301-2	3	24.3	MSN105-1	MSP197-1
W5955-1	3	20.3	Purple Surprise 3	3	24.4		
W9433-1Rus	2	19.3	MSX010-3	3	24.6	ARS10241-2	MSL211-3
W9519-3Rus	3	22.4	ND8068-5Rus	2	25.5		
W9576-11Y	3	23.4	**Red Norland**	**3**	**25.5**		

2015 MSU LATE BLIGHT VARIETY TRIAL
CLARKSVILLE RESEARCH CENTER, MI

Line Sort: ***RAUDPC Sort:***

LINE	N	RAUDPC[1] MEAN	LINE	N	RAUDPC[1] MEAN	*Pedigrees go w/ RAUDPC Sort* Female	Male
W9576-13Y	3	22.5	**Atlantic**	**4**	**25.9**	**Waueson**	**Lenape**
W9577-6Y	2	18.9	CO07102-1R	3	26.5		
W9742-3Rus	2	19.2	CO05037-3W/Y	2	26.7		
$HSD_{0.05}$		10.8			10.8		

[1]Ratings indicate the average plot RAUDPC (Relative Area Under the Disease Progress Curve).
LB Isolate used: US-23

Table 12

2015 LATE BLIGHT EARLY GENERATION TRIAL
CLARKSVILLE RESEARCH CENTER, MI

Line Sort:				***RAUDPC Sort:***			
		RAUDPC[1]			RAUDPC[1]	*Pedigrees go w/ RAUDPC Sort*	
LINE	N	MEAN	LINE	N	MEAN	Female	Male
Atlantic	1	25.4	MSAA172-5	1	0.0	MSU016-2	MSV198-2Y
Atlantic	1	27.6	MSAA196-1	1	0.0	MSW151-5	MSQ440-2
Barbara	1	13.6	Chloe Anwd	1	0.0		
Chloe Anwd	1	0.0	VSB2186F-302-8	1	0.0		
LT-7	1	13.5	MSZ414-1RY	1	0.0	MSN230-1RY	Colonial Purple
MSAA011-1	1	20.4	MSZ436-2SPL	1	0.0	MSS576-05SPL	MSQ440-2
MSAA110-1	1	18.8	MSZ551-1	1	0.0	MSM182-1	MSL268-D
MSAA143-1	1	18.8	MSZ562-4	1	0.0	Muruta	MSL211-3
MSAA144-2	1	11.4	MSZ609-1P	1	0.0	386056.17	Colonial Purple
MSAA144-4	1	13.2	MSZ537-4	1	0.5	MSL211-3	Chaposa
MSAA169-3	1	15.8	MSZ210-08	1	0.7	MSQ131-A	MSL211-3
MSAA170-3Y	1	6.1	MSZ454-1Y	1	0.8	Atlantic	Enfula
MSAA172-5	1	0.0	MSZ513-2	1	1.3	MSL268-D	MSL211-3
MSAA173-3	1	3.1	MSZ552-2P	1	1.4	MSM182-1	Colonial Purple
MSAA194-2	1	25.2	NY121	1	1.7		
MSAA195-3	1	8.3	MSX293-1Y	1	1.7	MSM288-2Y	MSQ176-5
MSAA196-1	1	0.0	MSY515-1	1	1.7	Reba	Haig Ind 98
MSAA196-6	1	5.7	MSZ620-3	1	1.7	Muziranzara	MSL211-3
MSAA460-2Y	1	24.1	MSZ702-01	1	1.7	CIP575045	84SD22
MSAA468-4	1	26.0	MSZ578-1Y	1	2.2	Nicola	Santa Ana
MSAA513-1	1	16.2	MSZ215-2	1	2.4	MSR058-1	MSQ086-3
MSAA556-2	1	17.1	MSZ464-3	1	2.7	MSQ070-1	Alca Tarma
MSAA556-3Y	1	2.7	MSAA556-3Y	1	2.7	MSV284-1	McBride
MSAA556-4Y	1	20.3	MSZ610-3	1	2.9	Chaposa	MSQ176-5
MSV407-2	1	19.5	MSAA173-3	1	3.1	MSU161-1	MSQ086-3
MSW128-2	1	7.7	MSZ409-1R	1	3.3	Muruta	MSR217-1R
MSX196-1	1	14.3	MSZ263-4	1	3.6	MSU088-1	McBride
MSX221-2	1	18.9	MSZ705-3	1	3.9	HS66	BER83
MSX255-1	1	22.2	MSZ057-5	1	4.1	MSQ070-1	ND8334Cb-3
MSX293-1Y	1	1.7	MSZ510-4	1	4.6	MSL211-3	MSQ440-2
MSX324-1P	1	18.2	MSY507-2	1	4.9	Superior	MSL211-3
MSX324-2R	1	18.0	MSX496-2	1	5.6	MSQ131-A	MSL211-3
MSX495-2	1	6.1	MSAA196-6	1	5.7	MSW151-5	MSQ440-2
MSX496-2	1	5.6	MSAA170-3Y	1	6.1	MSU016-2	MSR157-1Y
MSY022-2	1	18.7	MSX495-2	1	6.1	MSQ131-A	Kalkaska
MSY041-1	1	30.0	MSZ706-1	1	6.3	J138K6A22	MSV020-2
MSY089-2	1	18.6	VSB16LBR8	1	6.5		
MSY452-1	1	12.8	MSZ547-3	1	6.8	MSL505-3	MSL211-3
MSY491-2Y	1	11.7	MSZ004-1	1	7.0	Atlantic	MSL211-3
MSY507-2	1	4.9	MSZ706-5	1	7.1	J138K6A22	MSV020-2
MSY515-1	1	1.7	Olalla	1	7.4		
MSY520-1	1	11.8	MSW128-2	1	7.7	MSM171-A	MSQ176-5
MSZ001-1	1	17.6	MSZ091-3	1	8.3	Elkton	MSL211-3
MSZ004-1	1	7.0	MSAA195-3	1	8.3	MSW151-5	MSQ176-5
MSZ057-5	1	4.1	MSZ218-5	1	8.6	MSR061-1	MSQ086-3
MSZ091-3	1	8.3	MSZ159-3	1	9.1	NDU030-1	MSV477-5
MSZ092-2	1	33.5	MSZ616-1	1	9.9	Nicola	MSL211-3

2015 LATE BLIGHT EARLY GENERATION TRIAL
CLARKSVILLE RESEARCH CENTER, MI

Line Sort:				***RAUDPC Sort:***				
		RAUDPC[1]			RAUDPC[1]	*Pedigrees go w/ RAUDPC Sort*	
LINE	N	MEAN		LINE	N	MEAN	Female	Male
MSZ100-3	1	17.3		MSZ251-1	1	10.4	MSS070-B	Lamoka
MSZ154-1	1	17.1		MSZ433-3P	1	10.4	MSS483-1	MSU200-5PP
MSZ159-3	1	9.1		MSZ424-1	1	11.2	NY121	MSR217-1R
MSZ200-6	1	14.3		MSAA144-2	1	11.4	MSR606-2	MSQ086-3
MSZ210-08	1	0.7		MSY491-2Y	1	11.7	MSL183-AY	MSL211-3
MSZ215-2	1	2.4		MSY520-1	1	11.8	MSQ440-2	MSN105-1
MSZ218-5	1	8.6		MSZ507-2	1	12.4	MSL211-3	NY121
MSZ251-1	1	10.4		MSY452-1	1	12.8	MSQ176-5	MSL211-3
MSZ263-4	1	3.6		MSAA144-4	1	13.2	MSR606-2	MSQ086-3
MSZ268-1	1	15.2		LT-7	1	13.5		
MSZ269-17	1	24.3		Barbara	1	13.6		
MSZ300-1	1	17.3		MSZ452-1	1	14.1	Atlantic	Chaposa
MSZ405-1PP	1	17.4		MSZ200-6	1	14.3	MSQ070-1	Lamoka
MSZ407-2Y	1	19.5		MSX196-1	1	14.3	Missaukee	Manistee
MSZ407-7	1	14.3		MSZ407-7	1	14.3	Montanosa	Colonial Purple
MSZ409-1R	1	3.3		MSZ570-1	1	14.5	ND8331cb-3	MSL211-3
MSZ414-1RY	1	0.0		MSZ427-1R	1	15.2	MSQ440-2	NDTX4271-5R
MSZ416-8RY	1	19.9		MSZ268-1	1	15.2	MSU278-1Y	Pike
MSZ424-1	1	11.2		MSZ708-6	1	15.4	MSL316-EY	84SD22
MSZ427-1R	1	15.2		MSAA169-3	1	15.8	MSU016-2	MSQ086-2
MSZ427-6R	1	25.9		MSAA513-1	1	16.2	MSV117-1	Lamoka
MSZ433-3P	1	10.4		MSZ613-1	1	16.5	386056.17	MSL211-3
MSZ436-2SPL	1	0.0		MSZ154-1	1	17.1	NDU022-1	MSQ086-3
MSZ452-1	1	14.1		MSAA556-2	1	17.1	MSV284-1	McBride
MSZ454-1Y	1	0.8		MSZ300-1	1	17.3	W6822-3	MSU205-4
MSZ464-3	1	2.7		MSZ100-3	1	17.3	Boulder	MSV477-5
MSZ507-2	1	12.4		MSZ405-1PP	1	17.4	MSM182-1	MSU200-5PP
MSZ510-4	1	4.6		MSZ001-1	1	17.6	1989-86061	Manistee
MSZ513-2	1	1.3		MSX324-2R	1	18.0	MSN105-1	Colonial Purple
MSZ537-4	1	0.5		MSX324-1P	1	18.2	MSN105-1	Colonial Purple
MSZ547-3	1	6.8		MSY089-2	1	18.6	MSS176-1	B2731-2
MSZ551-1	1	0.0		MSY022-2	1	18.7	MSS176-1	MST096-2Y
MSZ552-2P	1	1.4		MSAA143-1	1	18.8	MSR606-2	MSL211-3
MSZ562-4	1	0.0		MSAA110-1	1	18.8	Colonial Purple	MSR217-1R
MSZ570-1	1	14.5		MSX221-2	1	18.9	MSK061-4	MSR036-5
MSZ578-1Y	1	2.2		MSV407-2	1	19.5	MSQ070-1	MSP239-1
MSZ609-1P	1	0.0		MSZ407-2Y	1	19.5	Montanosa	Colonial Purple
MSZ610-3	1	2.9		MSZ416-8RY	1	19.9	MSN230-1RY	NDTX4271-5R
MSZ613-1	1	16.5		MSZ622-1	1	20.1	Satina	MSL211-3
MSZ615-2	1	20.9		MSAA556-4Y	1	20.3	MSV284-1	McBride
MSZ616-1	1	9.9		MSAA011-1	1	20.4	Beacon Chipper	MSR159-2
MSZ620-3	1	1.7		MSZ615-2	1	20.9	Sieglinde	MSL211-3
MSZ622-1	1	20.1		MSX255-1	1	22.2	MSM171-A	ARS10342-4
MSZ702-01	1	1.7		MSAA460-2Y	1	24.1	MSR159-2	MSS165-2Y
MSZ705-3	1	3.9		MSZ269-17	1	24.3	MSU278-1Y	MSR127-2
MSZ706-1	1	6.3		MSAA194-2	1	25.2	MSW151-5	MSL211-3
MSZ706-5	1	7.1		**Atlantic**	**1**	**25.4**	**Wauseon**	**Lenape**
MSZ708-6	1	15.4		MSZ738-2	1	25.7	MSL316-EY	MSP091-1
MSZ738-2	1	25.7		MSZ427-6R	1	25.9	MSQ440-2	NDTX4271-5R
NY121	1	1.7		MSAA468-4	1	26.0	MSR297-A	MSQ086-3

2015 LATE BLIGHT EARLY GENERATION TRIAL
CLARKSVILLE RESEARCH CENTER, MI

Line Sort:				***RAUDPC Sort:***			
		RAUDPC[1]			RAUDPC[1]	*Pedigrees go w/ RAUDPC Sort*	
LINE	N	MEAN	LINE	N	MEAN	Female	Male
Olalla	1	7.4	**Atlantic**	**1**	**27.6**	**Wauseon**	**Lenape**
VSB16LBR8	1	6.5	MSY041-1	1	30.0	Dakota Diamond	MSP368-1
VSB2186F-302-8	1	0.0	MSZ092-2	1	33.5	Elkton	MSQ086-3

[1] Ratings indicate the average plot RAUDPC (Relative Area Under the Disease Progress Curve).
LB Isolate used: US-23

Table 13

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2015 BLACKSPOT BRUISE SUSCEPTIBILITY TEST
SIMULATED BRUISE SAMPLES*

ENTRY	SP GR	NUMBER OF SPOTS PER TUBER 0	1	2	3	4	5+	PERCENT (%) BRUISE FREE	AVERAGE SPOTS/TUBER
ADAPTATION TRIAL, CHIP-PROCESSING LINES									
W5955-1	1.084	22	2	1	0	0	0	88	0.2
AF5320-1	1.081	20	4	1	0	0	0	80	0.2
AF4975-3	1.083	18	7	0	0	0	0	72	0.3
MSV380-1	1.084	17	5	2	1	0	0	68	0.5
Lamoka	1.084	11	13	1	0	0	0	44	0.6
MSV358-3	1.081	14	7	4	0	0	0	56	0.6
NY157	1.084	15	7	2	0	1	0	60	0.6
MSV394-3	1.083	13	9	2	1	0	0	52	0.6
AF4648-2	1.086	12	9	2	2	0	0	48	0.8
MSV383-B	1.095	10	12	2	1	0	0	40	0.8
MSW509-5	1.082	12	7	6	0	0	0	48	0.8
FL1879	**1.081**	**9**	**12**	**4**	**0**	**0**	**0**	**36**	**0.8**
MSX398-2	1.078	11	10	1	3	0	0	44	0.8
MSV393-1	1.082	9	12	2	2	0	0	36	0.9
A01143-3C	1.080	10	8	6	1	0	0	40	0.9
MSV033-01	1.077	6	14	3	1	0	0	25	1.0
CO02343-3W	1.076	8	10	5	2	0	0	32	1.0
NYK28-18	1.096	5	12	7	1	0	0	20	1.2
MSW505-2	1.086	6	10	6	1	1	0	25	1.2
MSV507-056	1.091	5	10	7	2	1	0	20	1.4
NY154	1.087	8	6	6	3	1	1	32	1.4
MSW394-1	1.077	2	13	6	4	0	0	8	1.5
MSV030-4	1.089	3	5	6	3	0	0	18	1.5
Snowden	**1.087**	**4**	**7**	**9**	**3**	**1**	**0**	**17**	**1.6**
MSR127-2	1.084	6	7	6	2	2	2	24	1.7
MSW474-01	1.085	4	6	6	5	2	2	16	2.0
MSR061-1	1.085	4	4	7	7	2	1	16	2.1
Atlantic	**1.092**	**1**	**9**	**5**	**6**	**3**	**1**	**4**	**2.2**
MSV313-2	1.082	2	5	8	6	4	0	8	2.2
MSX540-4	1.088	0	5	6	6	4	4	0	2.8
RUSSET TRIAL									
MSY573-3Rus	1.065	19	6	0	0	0	0	**76**	**0.2**
A01010-1 (Targhee Russet)	1.076	19	5	1	0	0	0	76	0.3
Russet Norkotah	**1.070**	**17**	**8**	**0**	**0**	**0**	**0**	**68**	**0.3**
Silverton Russet	**1.070**	**17**	**7**	**1**	**0**	**0**	**0**	**68**	**0.4**
ATX91137-1Rus (Reveille)	1.069	16	8	1	0	0	0	64	0.4
AF3362-1Rus (Caribou)	1.075	14	8	2	1	0	0	56	0.6
W9433-1Rus	1.077	14	7	3	1	0	0	56	0.6
AW07791-2Rus	1.087	7	11	6	1	0	0	28	1.0
ND8068-5Rus	1.077	4	15	4	2	0	0	16	1.2
MSW496-1Rus	1.068	7	9	7	1	1	0	28	1.2
CO5068-1Rus	1.087	4	6	9	5	1	0	16	1.7
CW08071-2Rus	1.078	3	7	10	4	1	0	12	1.7
NCR									
ND7834-2P	1.076	25	0	0	0	0	0	100	0.0
ND7818-1Y	1.069	13	1	0	0	0	0	93	0.1
MN10003PLWR-06R	1.065	23	2	0	0	0	0	92	0.1
Russet Norkotah	**1.072**	**23**	**2**	**0**	**0**	**0**	**0**	**92**	**0.1**
MSW343-2R	1.059	23	0	1	0	0	0	96	0.1
AFW5472-1rus	1.068	22	3	0	0	0	0	88	0.1
Red LaSoda	**1.065**	**23**	**1**	**1**	**0**	**0**	**0**	**92**	**0.1**
Red Norland	**1.062**	**22**	**3**	**0**	**0**	**0**	**0**	**88**	**0.1**
W10114-3R	1.058	20	3	0	0	0	0	87	0.1

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MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2015 BLACKSPOT BRUISE SUSCEPTIBILITY TEST
SIMULATED BRUISE SAMPLES*

ENTRY	SP GR	NUMBER OF SPOTS PER TUBER 0	1	2	3	4	5+	PERCENT (%) BRUISE FREE	AVERAGE SPOTS/TUBER
Dark Red Norland	**1.063**	**21**	**4**	**0**	**0**	**0**	**0**	**84**	**0.2**
W9432-4R	1.051	21	4	0	0	0	0	84	0.2
MSV235-2PY	1.077	19	6	0	0	0	0	76	0.2
ND6961B-21PY	1.081	20	3	2	0	0	0	80	0.3
W10043-1rus	1.078	19	5	1	0	0	0	76	0.3
MSS576-5SPL	1.071	17	8	0	0	0	0	68	0.3
MSV093-1	1.076	17	7	1	0	0	0	68	0.4
W10209-2R	1.070	14	7	1	0	0	0	64	0.4
Yukon Gold	**1.078**	**15**	**7**	**2**	**0**	**0**	**0**	**63**	**0.5**
MSX324-1P	1.083	11	12	2	0	0	0	44	0.6
ND7982-1R	1.073	14	7	3	1	0	0	56	0.6
AFW5465-2rus	1.067	12	4	6	1	0	0	52	0.8
ND7882b-7Russ	1.076	11	8	5	1	0	0	44	0.8
MST386-1P	1.085	7	11	6	1	0	0	28	1.0
ND113300-3RSY	1.075	7	9	5	4	0	0	28	1.2
W10074-8rus	1.090	5	10	3	5	2	0	20	1.6
MSX540-4	1.090	4	6	6	5	4	0	16	2.0
ADAPTATION TRIAL, TABLESTOCK LINES									
MSW239-03SPL	1.056	21	4	0	0	0	0	84	0.2
MSX526-1	1.080	20	5	0	0	0	0	80	0.2
MSV093-1	1.073	16	9	0	0	0	0	64	0.4
McBride	1.080	16	8	1	0	0	0	64	0.4
MSV179-1	1.060	14	10	1	0	0	0	56	0.5
Red Norland	**1.063**	**15**	**8**	**2**	**0**	**0**	**0**	**60**	**0.5**
MSS576-5SPL	1.070	14	9	1	1	0	0	56	0.6
MSW299-2	1.072	17	3	3	1	1	0	68	0.6
MST252-1Y	1.069	10	14	0	1	0	0	40	0.7
Spartan Splash	1.072	12	8	5	0	0	0	48	0.7
Oneida Gold	1.079	10	12	1	2	0	0	40	0.8
Molli	1.068	7	13	5	0	0	0	28	0.9
Superior	**1.070**	**10**	**8**	**4**	**3**	**0**	**0**	**40**	**1.0**
MSV434-1Y	1.073	8	11	4	1	0	1	32	1.1
MSW151-05	1.067	7	10	7	1	0	0	28	1.1
MSW259-5	1.079	8	10	3	2	0	1	33	1.1
MSW075-1	1.081	6	8	8	2	0	1	24	1.4
Reba	**1.074**	**3**	**11**	**8**	**3**	**0**	**0**	**12**	**1.4**
MSX324-1P	1.079	5	7	7	3	1	2	20	1.8
MSV235-2PY	1.075	0	4	13	3	2	1	0	2.3
MSW134-1	1.072	1	5	5	7	3	3	4	2.6
PRELIMINARY TRIAL, CHIP-PROCESSING LINES									
MSW485-2	1.089	18	4	1	0	0	0	78	0.3
MSX198-5	1.079	18	7	0	0	0	0	**72**	**0.3**
MSS164-1	1.088	18	5	2	0	0	0	72	0.4
MSW248-02	1.087	17	7	1	0	0	0	68	0.4
MSZ194-2	1.087	18	5	1	1	0	0	72	0.4
MSX196-1	1.072	16	7	2	0	0	0	64	0.4
MSX156-2	1.071	15	8	2	0	0	0	60	0.5
MSW464-3	1.082	16	5	4	0	0	0	64	0.5
MSZ219-01	1.074	15	7	2	1	0	0	60	0.6
MSX345-6Y	1.088	11	12	2	0	0	0	44	0.6
MSV092-2	1.086	11	10	3	0	0	0	46	0.7
MSZ452-1	1.095	11	11	3	0	0	0	44	0.7
MSW502-3	1.079	12	8	5	0	0	0	48	0.7
MSX420-4Y	1.087	11	10	3	1	0	0	44	0.8
MSX495-2	1.084	13	6	5	1	0	0	52	0.8

Table 13

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2015 BLACKSPOT BRUISE SUSCEPTIBILITY TEST
SIMULATED BRUISE SAMPLES*

ENTRY	SP GR	NUMBER OF SPOTS PER TUBER						PERCENT (%) BRUISE FREE	AVERAGE SPOTS/TUBER
		0	1	2	3	4	5+		
QSMSU10-15	1.092	11	9	5	0	0	0	44	0.8
MSX472-1	1.089	12	6	5	1	0	0	50	0.8
MSZ222-19	1.091	9	12	2	1	0	0	38	0.8
MSZ119-1	1.081	11	9	4	1	0	0	44	0.8
MSZ025-5	1.091	12	8	4	0	0	1	48	0.8
Pike	**1.089**	**10**	**10**	**4**	**1**	**0**	**0**	**40**	**0.8**
MSX410-12Y	1.086	8	13	3	0	1	0	32	0.9
MSY008-3	1.079	8	11	6	0	0	0	32	0.9
MSZ407-2Y	1.074	8	12	4	1	0	0	32	0.9
MSV284-1	1.078	10	7	7	0	1	0	40	1.0
MSV307-2	1.085	7	12	5	1	0	0	28	1.0
D. Diamond	1.084	9	10	4	0	2	0	36	1.0
MSW326-6	1.093	7	12	4	2	0	0	28	1.0
MSY022-2	1.077	11	8	2	3	0	1	44	1.0
Atlantic	**1.089**	**9**	**8**	**4**	**1**	**0**	**1**	**39**	**1.0**
MSX542-2	1.085	7	11	2	3	0	0	30	1.0
MSU383-A	1.074	12	5	4	3	0	1	48	1.1
MSZ300-1	1.085	10	7	5	1	2	0	40	1.1
MST186-1Y	1.083	6	10	8	1	0	0	24	1.2
MSW324-01	1.090	7	8	9	1	0	0	28	1.2
MSV335-1	1.077	7	10	5	2	1	0	28	1.2
MSW064-1	1.082	9	6	7	2	1	0	36	1.2
MSZ507-2	1.083	7	9	6	3	0	0	28	1.2
MSX129-1	1.085	4	13	6	2	0	0	16	1.2
MSZ159-3	1.081	6	8	9	2	0	0	24	1.3
MSZ280-7	1.078	8	7	6	3	1	0	32	1.3
MSV246-1	1.088	6	7	9	2	0	0	25	1.3
Beacon Chipper	1.078	5	10	7	3	0	0	20	1.3
MSU379-1	1.081	5	0	4	3	0	0	42	1.4
MSX245-2Y	1.086	3	13	6	2	0	1	12	1.4
MSW044-1	1.092	2	11	10	2	0	0	8	1.5
Snowden	**1.084**	**5**	**8**	**8**	**2**	**1**	**1**	**20**	**1.6**
MSX225-2	1.085	2	8	12	2	0	1	8	1.7
MSW168-2	1.089	4	10	5	1	3	2	16	1.8
MSX417-1	1.086	0	9	10	3	3	0	0	2.0
MSV507-143	1.088	3	5	8	7	1	1	12	2.0
MSW399-2	1.087	1	4	10	7	2	1	4	2.3
MSW537-6	1.095	0	5	6	7	3	4	0	2.8
MSX221-2	1.080	1	4	6	7	2	5	4	2.8
MSV507-129	1.093	0	1	0	5	6	13	0	4.2
PRELIMINARY TRIAL, TABLESTOCK LINES									
MSV111-1	1.073	24	0	0	0	0	0	100	0.0
MSY520-1	1.068	22	3	0	0	0	0	88	0.1
MSW500-10	1.072	22	2	1	0	0	0	88	0.2
MSW125-3	1.059	20	4	1	0	0	0	80	0.2
W9576-13Y	1.072	20	4	1	0	0	0	80	0.2
W9577-6Y	1.075	20	4	1	0	0	0	80	0.2
MSW353-3	1.076	18	7	0	0	0	0	72	0.3
Soraya	1.062	19	5	1	0	0	0	76	0.3
W9576-11Y	1.058	19	5	1	0	0	0	76	0.3
MSX497-6	1.069	16	8	0	0	0	0	67	0.3
Granola	1.067	16	9	0	0	0	0	64	0.4
MSW437-9	1.070	16	9	0	0	0	0	64	0.4
MSW068-4	1.074	15	9	0	0	0	0	63	0.4
MSV301-2	1.080	17	6	2	0	0	0	68	0.4
MSW556-1	1.073	16	8	1	0	0	0	64	0.4

Table 13

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2015 BLACKSPOT BRUISE SUSCEPTIBILITY TEST
SIMULATED BRUISE SAMPLES*

ENTRY	SP GR	NUMBER OF SPOTS PER TUBER 0	1	2	3	4	5+	PERCENT (%) BRUISE FREE	AVERAGE SPOTS/TUBER
MSW569-2	1.077	16	8	1	0	0	0	64	0.4
MSW270-1	1.074	14	7	1	0	0	0	64	0.4
CO05037-3W/Y	1.073	14	10	0	0	0	0	58	0.4
QSMSU08-4	1.082	15	6	2	0	0	0	65	0.4
MSW123-3	1.062	16	5	3	0	0	0	67	0.5
VC1009-1W/Y	1.072	13	9	1	0	0	0	57	0.5
MSV502-5	1.076	14	10	1	0	0	0	56	0.5
MSW500-04	1.074	14	8	2	0	0	0	58	0.5
A02267-1Y	1.060	15	7	3	0	0	0	60	0.5
MST148-3	1.077	14	9	2	0	0	0	56	0.5
MSV292-1Y	1.065	14	9	2	0	0	0	56	0.5
MSX255-1	1.089	14	9	2	0	0	0	56	0.5
MSY491-2Y	1.072	14	7	3	0	0	0	58	0.5
CO07370-1W/Y	1.062	14	8	3	0	0	0	56	0.6
MSW119-2	1.075	13	10	2	0	0	0	52	0.6
MSW236-3	1.078	12	12	1	0	0	0	48	0.6
MST191-2Y	1.085	12	10	2	0	0	0	50	0.6
MST441-1	1.079	12	11	2	0	0	0	48	0.6
MSW042-1	1.077	14	7	4	0	0	0	56	0.6
MSW298-4Y	1.076	12	11	2	0	0	0	48	0.6
MSX156-1Y	1.068	16	6	0	3	0	0	64	0.6
MSY042-1	1.079	12	11	1	1	0	0	48	0.6
MSY452-1	1.062	10	14	1	0	0	0	40	0.6
MSX506-3	1.075	12	9	4	0	0	0	48	0.7
QSMSU10-02	1.074	12	9	3	1	0	0	48	0.7
MSX293-1Y	1.079	10	5	4	1	0	0	50	0.8
MSY111-1	1.076	8	14	2	1	0	0	32	0.8
MSV089-2	1.077	8	13	3	1	0	0	32	0.9
CalWhite	**1.071**	**9**	**11**	**3**	**2**	**0**	**0**	**36**	**0.9**
MST145-2	1.074	9	11	4	0	1	0	36	0.9
MSW126-1	1.078	3	5	3	0	0	0	27	1.0
MSV397-2	1.076	7	11	6	1	0	0	28	1.0
MSX172-7	1.084	8	9	7	1	0	0	32	1.0
Reba	**1.078**	**7**	**11**	**6**	**1**	**0**	**0**	**28**	**1.0**
Barbara	1.076	4	15	6	0	0	0	16	1.1
MSX137-6	1.073	6	11	8	0	0	0	24	1.1
MSU161-1	1.075	7	10	6	2	0	0	28	1.1
MSU245-1	1.090	6	12	5	2	0	0	24	1.1
MSX503-5	1.075	7	10	6	2	0	0	28	1.1
MSV016-2	1.090	9	7	6	2	1	0	36	1.2
MSX010-3	1.078	7	10	5	3	0	0	28	1.2
Superior	**1.072**	**8**	**8**	**7**	**1**	**1**	**0**	**32**	**1.2**
MSU016-2	1.090	8	7	5	3	1	0	33	1.3
A05182-7Y	1.076	8	6	4	6	0	0	33	1.3
MSX011-4	1.090	2	10	12	1	0	0	8	1.5
MST229-1	1.081	5	6	9	3	1	0	21	1.5
MSV282-4Y	1.083	2	10	10	3	0	0	8	1.6
MSV127-1	1.088	5	8	7	2	0	3	20	1.7
MSX009-2	1.083	3	8	9	4	0	1	12	1.7
MSW242-5Y	1.077	3	6	7	4	2	0	14	1.8
MST094-1	1.080	1	8	7	8	1	0	4	2.0
MSW237-4Y	1.082	0	6	6	9	1	2	0	2.5
USPB/SFA TRIAL CHECK SAMPLES (Not bruised)									
AF4648-2	1.079	20	1	0	0	0	0	95	0.0
CO03243-3W	1.070	22	2	0	0	0	0	92	0.1
Lamoka	**1.077**	**21**	**3**	**0**	**0**	**0**	**0**	**88**	**0.1**

Table 13

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2015 BLACKSPOT BRUISE SUSCEPTIBILITY TEST
SIMULATED BRUISE SAMPLES*

ENTRY	SP GR	NUMBER OF SPOTS PER TUBER 0	1	2	3	4	5+	PERCENT (%) BRUISE FREE	AVERAGE SPOTS/TUBER
A00188-3C	1.079	21	2	1	0	0	0	88	0.2
AC01151-5W	1.072	20	4	0	0	0	0	83	0.2
AC03433-1W	1.068	20	4	0	0	0	0	83	0.2
Atlantic	**1.081**	**20**	**3**	**1**	**0**	**0**	**0**	**83**	**0.2**
Snowden	**1.079**	**19**	**5**	**0**	**0**	**0**	**0**	**79**	**0.2**
W6822-3	1.079	19	6	0	0	0	0	76	0.2
NY152	1.074	14	9	1	0	0	0	58	0.5
USPB/SFA TRIAL BRUISE SAMPLES									
A00188-3C	1.079	20	4	0	0	0	0	83	0.2
AF4648-2	1.079	19	5	0	0	0	0	79	0.2
AC03433-1W	1.068	18	6	0	0	0	0	75	0.3
AC01151-5W	1.072	16	7	1	0	0	0	67	0.4
CO03243-3W	1.07	14	10	0	0	0	0	58	0.4
Lamoka	**1.077**	**10**	**9**	**3**	**1**	**0**	**0**	**43**	**0.8**
Atlantic	**1.081**	**10**	**10**	**3**	**0**	**0**	**1**	**42**	**0.9**
NY152	1.074	10	9	3	2	0	0	42	0.9
Snowden	**1.079**	**9**	**9**	**6**	**1**	**0**	**0**	**36**	**1.0**
W6822-3	1.079	1	5	9	2	2	5	4	2.6
MSZ selections 2 x 20									
MSZ169-01	1.077	22	3	0	0	0	0	88	0.1
MSZ045-09	1.074	21	4	0	0	0	0	84	0.2
MSZ052-11	1.082	20	3	2	0	0	0	80	0.3
MSZ242-14	1.083	18	6	1	0	0	0	72	0.3
MSZ062-10	1.092	15	8	0	0	0	0	65	0.3
MSZ118-02	1.089	17	7	1	0	0	0	68	0.4
MSZ118-20	1.081	8	5	0	0	0	0	62	0.4
MSZ118-08	1.088	18	5	0	2	0	0	72	0.4
MSZ062-46	1.081	15	8	2	0	0	0	60	0.5
MSZ242-03	1.094	13	10	1	0	0	0	54	0.5
MSZ022-19	1.086	15	8	1	1	0	0	60	0.5
MSZ062-42	1.084	16	6	2	1	0	0	64	0.5
MSZ020-08	1.082	15	7	2	1	0	0	60	0.6
MSZ062-31	1.073	13	9	1	1	0	0	54	0.6
MSZ062-18	1.077	7	5	0	1	0	0	54	0.6
MSZ120-04	1.089	6	6	1	0	0	0	46	0.6
MSZ020-04	1.090	12	9	4	0	0	0	48	0.7
MSZ219-46	1.087	13	7	5	0	0	0	52	0.7
MSZ020-10	1.087	13	7	4	1	0	0	52	0.7
MSZ026-08	1.083	12	7	6	0	0	0	48	0.8
MSZ062-06	1.082	13	7	3	2	0	0	52	0.8
MSZ022-14	1.079	10	11	2	0	1	0	42	0.8
MSZ022-07	1.083	10	12	1	2	0	0	40	0.8
MSZ052-31	1.083	11	8	6	0	0	0	44	0.8
MSZ052-40	1.092	12	8	3	2	0	0	48	0.8
MSZ222-15	1.078	10	10	5	0	0	0	40	0.8
MSZ101-06	1.081	13	5	5	2	0	0	52	0.8
MSZ242-09	1.093	10	10	4	1	0	0	40	0.8
MSZ242-07	1.101	5	5	2	1	0	0	38	0.9
MSZ242-13	1.100	10	8	5	2	0	0	40	1.0
MSZ242-15	1.093	9	8	8	0	0	0	36	1.0
MSZ101-07	1.086	8	8	7	2	0	0	32	1.1
MSZ103-02	1.087	10	6	4	4	1	0	40	1.2
MSZ219-29	1.079	4	5	1	3	0	0	31	1.2
MSZ219-14	1.089	7	9	5	3	1	0	28	1.3
MSZ022-16	1.089	5	8	11	1	0	0	20	1.3

Table 13

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2015 BLACKSPOT BRUISE SUSCEPTIBILITY TEST
SIMULATED BRUISE SAMPLES*

ENTRY	SP GR	NUMBER OF SPOTS PER TUBER						PERCENT (%) BRUISE FREE	AVERAGE SPOTS/TUBER
		0	1	2	3	4	5+		
MSZ242-12	1.092	6	7	8	4	0	0	24	1.4
MSZ052-14	1.085	3	10	6	6	0	0	12	1.6
MSZ096-02	1.088	5	10	3	3	4	0	20	1.6
MSZ096-03	1.081	2	9	11	2	1	0	8	1.6
Snowden	**1.090**	**5**	**7**	**5**	**6**	**2**	**0**	**20**	**1.7**
MSZ052-13	1.089	3	8	8	4	2	0	12	1.8
Atlantic	**1.095**	**2**	**8**	**9**	**4**	**2**	**0**	**8**	**1.8**
MSZ062-50	1.089	5	6	6	5	2	1	20	1.8
MSZ118-19	1.093	1	7	7	7	1	2	4	2.2

* Twenty to twenty-five A-size tuber samples were collected at harvest, held at 50 F at least 12 hours, and placed in a six-sided plywood drum and rotated ten times to produce simulated bruising. Samples were abrasive-peeled and scored 10/28-29/2015. The table is presented in ascending order of average number of spots per tuber.