

Table 1

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICSADVANCED CHIP-PROCESSING TRIAL
MONTCALM RESEARCH FARM
May 9 to September 26, 2016 (140 days)
DD Base 40°F 3459⁸

LINE	N	CWT/A		PERCENT OF TOTAL ¹					SP GR	CHIP SCORE ²	OTF SED ³	PERCENT (%) TUBER QUALITY ⁴					SCAB ⁵	MAT ⁶	BRUISE ⁷	Late Blight Resistance	3-YR AVG
		US#1	TOTAL	US#1	Bs	As	OV	PO				HH	VD	IBS	BC	US#1 CWT/A					
Snowden	4	563	604	93	6	85	8	1	1.075	1.0	1.0	0	18	3	0	2.4	2.3	0.9	-	378	
MSU379-1	4	546	564	97	3	77	20	0	1.066	1.0	1.0	3	0	0	0	2.3	2.0	0.1	LBMR	-	
MSZ222-19	4	486	503	97	2	74	22	1	1.078	1.0	1.0	5	0	0	0	1.3	2.5	0.4	-	-	
FL2137	4	473	507	93	4	77	17	2	1.076	1.0	1.0	0	0	10	0	2.0	2.3	0.0	-	452*	
MSR127-2	4	458	496	92	7	84	9	1	1.072	1.0	0.0	0	5	0	0	1.3	3.0	0.7	-	418	
QSMSU10-02	4	458	467	98	1	59	40	1	1.065	1.5	0.0	0	3	0	0	0.6	1.3	0.0	-	-	
MSZ219-01	4	457	463	99	1	52	46	0	1.074	1.5	1.0	0	0	0	0	0.9	2.8	0.2	LBR	-	
MSW509-5	4	450	486	93	7	82	10	0	1.074	1.5	3.0	0	23	8	0	0.8	1.8	1.2	-	406*	
MSW353-03	4	450	461	98	2	36	61	1	1.061	1.0	3.0	3	8	0	0	0.9	2.3	0.1	LBR	-	
MSW044-01	4	436	478	91	7	70	21	2	1.076	1.5	1.0	15	13	0	10	1.5	3.0	3.5	-	-	
MSX540-4	4	434	452	96	4	85	11	0	1.080	1.0	0.0	0	8	0	0	1.3	2.3	0.9	LBR	365*	
MSZ242-09	4	425	450	94	5	86	9	1	1.079	1.0	0.0	0	3	25	0	1.1	2.8	0.5	-	-	
MSZ219-14	4	415	433	96	4	67	29	1	1.069	1.0	1.0	13	20	0	0	0.8	3.0	0.2	LBR	-	
ND7519-1	4	403	437	92	7	83	9	1	1.078	1.0	0.0	0	5	20	0	1.6	1.3	0.3	-	-	
NY153	4	401	438	91	8	85	6	1	1.077	1.0	0.0	10	8	0	0	2.3	2.0	0.2	-	-	
COTX09022-3RusRE/Y	4	396	431	92	8	74	18	0	1.069	-	-	3	0	0	0	2.9	1.0	0.2	-	-	
MSW485-02	3	396	427	93	7	78	15	0	1.078	1.0	2.0	3	13	3	0	1.8	2.3	0.3	LBR	-	
Atlantic	4	395	417	95	5	78	16	0	1.077	1.0	3.0	33	5	0	0	2.8	2.3	0.9	-	338	
MSW474-01	4	394	453	87	12	80	7	1	1.072	1.0	1.0	0	0	0	0	1.1	2.5	1.2	-	362*	
Manistee	4	375	403	93	6	78	15	1	1.071	1.0	0.0	0	3	0	0	2.6	1.0	0.5	-	257	
MSV358-3	4	367	413	88	11	83	5	0	1.072	1.0	0.0	0	3	0	0	1.9	1.8	0.3	-	329*	
Lamoka	4	359	378	95	4	75	20	1	1.072	1.0	0.0	0	10	0	0	1.6	1.5	0.4	-	313	
MSV030-4	4	357	390	91	8	75	16	1	1.075	1.0	2.0	0	8	0	3	1.8	1.8	0.3	-	336*	
NY157	3	341	372	91	9	83	9	0	1.070	1.5	0.0	0	0	0	0	2.0	1.7	0.2	-	340*	
W6822-3	4	334	377	88	11	78	10	0	1.078	1.0	0.0	3	10	8	3	2.1	1.5	0.6	-	-	
AF4648-2	4	329	357	92	4	74	18	4	1.074	1.0	1.0	0	0	0	0	1.0	2.3	0.0	LBMR	318*	
MSV301-2	4	328	359	91	8	84	7	1	1.071	1.0	0.0	0	0	0	0	1.8	1.8	0.5	-	-	
W5955-1	4	324	345	94	6	65	29	0	1.071	1.0	1.0	10	13	0	13	1.3	2.8	0.1	-	328	
MSV498-1	4	305	348	87	13	78	9	1	1.068	1.0	0.0	0	0	0	0	1.1	1.8	0.4	-	-	
MSV313-2	4	294	306	96	3	60	36	0	1.063	1.0	0.0	0	3	0	0	1.1	2.3	1.7	-	373*	
MSV383-B	4	288	343	84	7	74	10	9	1.078	1.0	0.0	5	0	0	0	0.8	1.5	0.3	-	272*	
Pike	4	276	309	89	10	86	3	1	1.075	1.0	1.0	0	0	3	0	1.2	2.3	0.2	-	-	
MSV380-1	4	266	305	87	11	86	1	1	1.070	1.0	0.0	0	0	0	0	1.1	2.3	0.2	-	264*	
MSV507-040	4	264	279	95	5	83	11	0	1.079	1.0	0.0	0	3	0	0	1.1	2.0	5.0	-	-	
MSZ242-13	4	240	284	85	14	78	7	1	1.077	1.0	0.0	0	3	3	0	1.0	3.0	0.2	-	-	
MEAN		385	415						1.073							1.5	2.1	0.7		339	
HSD _{0.05}		182	187						0.011							1.7					

* Two-Year Average

¹SIZE: B: < 2 in.; A: 2-3.25 in.; OV: > 3.25 in.; PO: Pickouts.²CHIP SCORE: SNAC Scale (Out of the field); Ratings: 1-5; 1: Excellent, 5: Poor.³SED: Stem End Defect, Based on Paul Bethke's (USDA/UWisconsin - Madison) 0 - 5 scale. 0 = no SED; 3 = significant SED; 5 = severe SED⁴QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.⁵SCAB DISEASE RATING: MSU Scab Nursery; 0: No Infection; 1: Low Infection <5%; 3: Intermediate; 5: Highly Susceptible.⁶MATURITY RATING: August 31, 2016; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).⁷BRUISE: Simulated blackspot bruise test, average number of spots per tuber.⁸Enviroweather: Entrican Station. Planting to vine kill

Plant Date: 5/9/16

Vine Kill: 9/9/16

Days from planting to vine kill: 123

Table 2

NORTH CENTRAL REGIONAL TRIAL
MONTCALM RESEARCH FARM
May 9 to September 13, 2016 (127 days)
DD Base 40°F 3459⁸

LINE	N	CWT/A		PERCENT OF TOTAL ¹				SP	GR	CHIP SCORE ²	OTF SED ³	PERCENT (%) TUBER QUALITY ⁴					MAT ⁶	Bruise ⁷	Late Blight Resistance	3-YR AVG US#1 CWT/A
		US#1	TOTAL	US#1	Bs	As	OV					PO	HH	VD	IBS	BC				
Yellow Flesh and Pigmented																				
MSV093-1Y	2	514	551	93	7	75	18	0	1.065	1.0	1.0	0	0	0	0	1.8	2.5	0.1	-	475*
Yukon Gold	2	444	462	96	3	65	31	1	1.066	2.0	3.0	0	5	0	0	2.6	1.0	0.1	-	345
ND6961B-21PY	2	408	462	88	12	83	6	0	1.068	1.5	2.0	0	10	0	10	0.3	2.5	0.1	-	402*
W10114-3R	2	401	428	94	6	69	24	1	1.054	2.5	4.0	0	15	0	0	1.8	1.0	0.3	-	327*
Red Norland	2	382	393	97	3	78	19	0	1.051	2.0	2.0	0	5	0	0	1.8	1.0	0.0	-	319
MSW316-3PY	2	379	497	76	10	66	11	13	1.065	2.5	2.0	0	15	0	0	1.9	2.0	0.0	-	-
ND6002-1R	2	375	398	94	5	84	10	1	1.059	2.0	2.0	0	0	0	0	2.1	1.0	0.0	-	384*
W10209-2R	2	334	455	73	20	73	0	7	1.061	2.5	4.0	0	0	0	0	1.3	1.0	0.2	-	332*
ATND99331-2PintoY	2	328	343	95	5	75	20	0	1.057	1.5	1.0	5	20	0	0	0.8	1.0	0.0	-	-
MN13089PLWR-01	2	290	318	91	7	79	12	2	1.069	0.0	0.0	0	10	0	0	2.3	2.0	0.1	-	-
ND7834-2P	2	285	339	84	14	83	1	2	1.060	1.5	2.0	0	0	0	0	1.3	1.0	0.1	-	304*
MSX324-1P	2	259	312	83	14	81	2	3	1.068	1.0	3.0	0	0	0	0	0.9	1.0	0.3	-	251*
ND7818-1Y	2	258	371	69	20	68	1	10	1.060	1.0	2.0	0	5	0	0	0.5	1.0	0.0	-	247*
ND7982-1R	2	249	336	74	23	74	0	4	1.062	1.5	2.0	0	0	0	0	0.8	1.0	0.0	-	262*
Purple Soul	2	191	201	95	4	71	24	1	1.054	1.5	1.0	0	0	0	0	1.0	1.0	0.1	-	-
Russet																				
W10612-8rus	2	460	488	94	6	85	9	0	1.065	0.0	0.0	0	5	0	0	1.5	1.5	0.1	-	-
CW08221-5rus	2	431	465	93	7	69	23	0	1.054	0.0	0.0	0	0	5	0	0.5	1.0	0.0	-	-
W10074-3rus	2	382	453	84	6	66	18	10	1.067	0	0	0	5	0	0	0.75	1	0.16	-	-
CW08071-2rus	2	364	426	85	10	67	18	5	1.070	0.0	0.0	0	15	0	0	2.0	1.5	1.8	-	-
Russet Norkotah	2	339	398	85	15	83	2	0	1.060	0.0	0.0	0	10	0	0	2.1	1.0	0.0	-	307*
W9523-1rus	2	329	357	92	8	78	14	0	1.058	0.0	0.0	0	0	0	0	1.0	1.5	0.3	-	-
MN13072PLWR-01Rus	2	301	322	93	6	81	12	1	1.069	0.0	0.0	15	0	0	0	1.0	1.0	0.1	-	-
MN13063PLWR-01Rus	2	278	308	90	7	66	24	3	1.062	0.0	0.0	0	10	0	0	0.8	1.5	0.3	-	-
MN13070PLWR-02Rus	2	191	227	83	17	81	2	0	1.064	0.0	0.0	0	0	0	0	0.5	1.0	0.3	-	-
Round White																				
MSX540-4	2	415	428	97	3	84	13	0	1.075	1.0	0.0	0	5	0	0	1.3	2.5	0.0	LBR	355
MSZ219-14	2	357	386	92	5	70	23	3	1.071	1.0	2.0	0	15	0	0	0.8	3.0	0.0	LBR	-
MEAN		344	389						1.063	1.0	1.3					1.3	1.4	0.2		332
HSD _{0.05}		184	174						0.019							1.7				

* Two-Year Average

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

²CHIP SCORE: SNAC Scale (Out of the field); Ratings: 1-5; 1: Excellent, 5: Poor.

³SED: Stem End Defect, Based on Paul Bethke's (USDA/UWisconsin - Madison) 0 - 5 scale. 0 = no SED; 3 = significant SED; 5 = severe SED

⁴QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.

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

⁶MATURITY RATING: August 31, 2016; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).

⁷BRUISE: Simulated blackspot bruise test, average number of spots per tuber.

Late blight resistance (LBR) or late blight moderate resistance (LBMR) based on inoculated foliar late blight trials.

⁸Enviroweather: Entrican Station. Planting to vine kill

Plant Date: 5/9/16

Vine Kill: 9/9/16

Days from planting to vine kill: 123

Table 3

RUSSET TRIAL
MONTCALM RESEARCH FARM
May 09 to September 12, 2016 (126 days)
DD Base 40°F 3236⁶

LINE	N	CWT/A		PERCENT OF TOTAL ¹					SP GR	PERCENT (%) TUBER QUALITY ²						BRUISE ⁵	3-YR AVG
		US#1	TOTAL	US#1	Bs	As	OV	PO		HH	VD	IBS	BC	SCAB ³	MAT ⁴		US#1 CWT/A
Caribou (AF3362-1Rus)	4	416	445	93	4	75	18	3	1.063	0	10	3	0	1.6	1.0	0.3	357
WND8625-2RUS	4	410	430	95	4	70	26	0	1.068	15	3	0	0	1.6	1.5	0.4	-
ND050032-4Rus	4	406	433	94	4	78	16	2	1.073	0	18	3	0	1.0	1.3	0.8	-
CW08221-5Rus	3	402	433	93	7	78	15	0	1.051	0	0	0	0	0.5	1.0	0.0	-
Mountain Gem (A03158-2TE)	4	385	456	84	9	65	19	7	1.070	40	3	0	0	1.3	2.3	0.4	-
AF5091-8Rus	4	378	420	90	5	58	32	5	1.055	0	3	0	0	2.3	1.0	0.1	-
W9433-1Rus	4	377	409	91	5	49	42	3	1.068	0	3	0	0	1.9	2.3	0.7	361
AF4872-2Rus	4	372	433	85	8	60	25	7	1.069	0	3	0	0	2.5	1.3	0.2	-
AF4124-7Rus	4	371	414	90	3	63	27	8	1.070	0	8	0	0	1.9	1.5	0.2	-
Reveille (ATX91137-1Rus)	3	361	421	85	8	69	17	6	1.058	0	3	0	0	1.6	1.3	0.0	393
COTX09052-2Rus	4	344	412	83	15	75	8	2	1.061	0	15	0	0	1.8	1.0	0.1	-
TX08352-5Rus	3	342	388	88	10	78	9	3	1.059	0	0	0	0	1.1	1.0	0.4	-
A096305-3Rus	4	337	400	84	10	70	14	6	1.072	18	5	0	0	3.6	1.3	0.2	-
Russet Norkotah	4	334	402	83	14	76	7	4	1.060	0	3	0	0	2.1	1.0	0.2	214
Dakota Russet (ND8229-3)	4	308	345	89	9	75	14	2	1.071	0	5	5	0	1.9	2.0	1.6	-
MSW496-1RUS	3	295	362	81	15	65	16	4	1.061	10	13	0	0	1.1	2.0	0.4	254*
Silverton Russet	4	294	333	88	8	69	19	4	1.059	10	0	0	0	1.3	1.5	0.0	291
W9742-3Rus	4	293	344	85	7	63	22	9	1.083	3	5	0	0	1.5	1.3	0.2	259*
AC96052-1Rus	4	252	307	82	17	74	8	1	1.063	3	5	0	0	0.5	2.3	0.2	-
MEAN		351	399						1.065					1.6	1.4	0.3	323
HSD _{0.05}		160	142						0.009					1.7			

¹SIZE: B: < 4 oz.; A: 4-10 oz.; OV: > 10 oz.; PO: Pickouts.

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

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

⁴MATURITY RATING: August 31, 2016; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).

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

⁶A few plots had no data due to a lightning strike.

* Two-Year Average

Plant Date: 5/9/16

Vine Kill: 9/2/16

Days from planting to vine kill: 116

⁶Enviroweather: Entrican Station. Planting to vine kill

Table 4

ADAPTATION TRIAL, TABLESTOCK LINES
MONTCALM RESEARCH FARM
May 9 to September 22, 2016 (136 days)
DD Base 40°F 3236⁶

LINE	CWT/A		PERCENT OF TOTAL ¹							PERCENT (%) TUBER QUALITY ²					MAT ⁴	BRUISE ⁵	Late Blight Resistance
	US#1	TOTAL	US#1	Bs	As	OV	PO	SP GR	HH	VD	IBS	BC	SCAB ³				
MSW501-05	4	483	505	96	4	81	15	0	1.060	0	0	0	0.0	2.3	2.0	-	-
MSV093-1Y	4	467	492	95	5	72	23	0	1.062	0	0	0	0.0	1.8	3.0	0.3	-
MSV111-02	4	458	495	92	7	81	12	1	1.063	0	3	0	37.5	1.0	1.3	0.0	LBR
MST191-2Y	3	435	491	89	11	76	12	1	1.076	0	0	0	0.0	2.6	2.7	0.7	LBR
Yukon Gold	4	429	444	97	3	71	26	1	1.069	0	0	15	0.0	2.6	1.0	0.2	-
MSV507-007	4	411	431	95	5	84	11	0	1.068	0	5	0	0.0	2.0	1.5	-	-
Reba	3	387	404	96	4	73	22	0	1.062	0	0	0	0.0	2.1	1.7	0.8	-
MSW343-2R	3	370	389	95	5	87	8	0	1.049	0	7	0	0.0	1.8	1.0	0.0	-
MSV179-1	4	366	372	98	1	77	22	0	1.056	0	0	0	0.0	1.3	1.3	0.1	-
Lehigh (NY126)	4	357	370	96	3	63	34	0	1.066	23	3	0	2.5	1.5	2.0	0.0	-
Onaway	4	342	374	92	5	63	28	3	1.055	0	3	0	0.0	1.6	1.0	0.3	-
MST252-1Y	4	338	382	88	12	82	6	0	1.060	0	3	0	0.0	1.0	1.0	0.1	-
MST186-1Y	2	337	361	93	7	81	12	0	1.062	15	5	0	0.0	1.5	2.5	0.2	-
MSS576-5SPL	4	330	352	94	6	69	25	0	1.061	0	0	0	0.0	2.3	1.5	0.1	LBR
Satina	3	325	347	94	6	78	15	0	1.055	0	0	0	3.3	0.9	2.3	0.1	-
Saginaw Chipper (MSR061-1)	4	317	345	92	8	80	11	0	1.067	5	5	3	0.0	2.0	1.3	0.1	LBR
MSW502-3	4	311	320	97	3	75	22	0	1.070	0	3	0	0.0	1.9	1.0	0.1	-
Purple Soul	4	268	284	95	5	73	22	0	1.055	0	0	5	0.0	1.0	1.8	0.0	-
MSX324-1P	4	259	317	80	19	78	2	1	1.065	0	3	0	0.0	0.9	1.0	0.1	-
MSV505-02	3	258	298	86	8	60	27	6	1.069	7	3	0	0.0	2.8	1.3	2.3	-
QSMSU10-15	3	237	286	82	18	80	2	0	1.074	0	10	0	0.0	1.3	2.0	0.1	-
MEAN		356	384						1.063					1.7	1.6	0.3	
HSD _{0.05}		148	144						0.009					1.7			

¹SIZE: B: < 2 in.; A: 2-3.25 in.; OV: > 3.25 in.; PO: Pickouts.²QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.³SCAB DISEASE RATING: MSU Scab Nursery; 0: No Infection; 1: Low Infection <5%; 3: Intermediate; 5: Highly Susceptible.⁴MATURITY RATING: August 31, 2016; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).⁵BRUISE: Simulated blackspot bruise test average number of spots per tuber.

* A few plots had no data due to a lightning strike.

Plant Date: 5/9/16

Vine Kill: 9/2/16

Days from planting to vine kill: 116

⁶Enviroweather: Entrican Station. Planting to vine kill

Table 5

PRELIMINARY TRIAL, CHIP-PROCESSING LINES
MONTCALM RESEARCH FARM
May 9 to September 19, 2016 (133 days)
DD Base 40°F 3459⁸

LINE	N	CWT/A		PERCENT OF TOTAL ¹					SP GR	CHIP SCORE ²	OTF SED ³	PERCENT (%) TUBER QUALITY ⁴				SCAB ⁵	MAT ⁶	BRUISE ⁷	Late Blight Resistance
		US#1	TOTAL	US#1	Bs	As	OV	PO				HH	VD	IBS	BC				
MSY156-02	2	585	638	92	3	90	2	5.0	1.074	1.0	3.0	0	5	5	0	1.3	2.0	2.3	-
MSX129-01	2	578	591	98	2	54	43	0.0	1.071	1.0	1.0	0	0	0	0	2.3	3.0	1.0	-
Snowden	2	530	558	95	5	90	5	0.0	1.079	1.0	0.0	5	0	0	0	2.4	1.5	1.1	-
MSX245-2Y	2	529	548	97	3	64	32	0.8	1.074	1.0	1.0	0	0	30	0	1.5	3.0	0.3	-
MSX177-7Y	2	476	513	92	7	72	21	0.4	1.069	1.0	1.0	0	0	0	0	1.3	2.0	0.4	-
MSX150-01	2	449	475	95	5	72	22	0.8	1.069	-	-	0	0	10	0	2.6	2.5	-	-
MSW075-01	2	443	484	91	9	86	5	0.0	1.059	-	-	0	5	0	0	1.6	2.0	-	-
MSX495-02	2	441	447	98	2	52	47	0.0	1.067	-	-	0	0	0	0	1.6	2.0	-	LBR
MSX225-02	2	434	467	93	5	67	25	1.7	1.067	1.0	2.0	0	15	20	0	1.3	2.5	0.7	-
AF5040-8	2	430	455	95	5	81	14	0.3	1.071	1.0	0.0	0	0	0	0	2.9	1.0	0.5	-
NDTX081648CB-13V	2	427	459	93	7	81	12	0.0	1.070	-	-	5	10	0	0	2.1	1.5	-	-
MSX111-03	2	419	432	97	3	62	35	0.0	1.080	1.0	0.0	0	0	0	0	2.5	3.0	3.4	-
AF5432-5	2	419	457	92	8	74	18	0.0	1.071	-	-	10	0	0	0	2.8	2.0	-	-
MSX542-02	2	412	441	93	6	70	23	0.9	1.070	-	-	30	5	0	0	2.0	2.5	-	LBR
MSX526-01	2	412	430	96	4	76	20	0.0	1.065	-	-	0	10	5	0	1.6	1.5	-	LBMR
MSX105-01	2	398	448	89	11	84	5	0.7	1.080	1.0	1.0	0	0	10	10	1.1	1.0	0.5	-
W8822-1	2	386	418	92	7	80	12	0.3	1.077	-	-	0	0	0	0	1.8	1.5	0.7	-
MSY008-03	2	385	423	91	5	54	37	4.1	1.056	-	-	0	0	5	0	1.5	2.5	-	LBMR
MSX345-6Y	2	384	398	97	2	57	39	1.7	1.072	1.0	0.0	0	0	0	0	1.8	2.5	1.6	-
MSX417-01	2	383	416	92	7	90	2	1.2	1.074	1.0	0.0	0	0	0	0	1.9	1.0	0.7	-
Atlantic	2	382	411	93	7	87	6	0.0	1.080	1.0	1.0	5	0	5	0	2.8	2.0	0.8	-
MSZ219-13	2	380	398	95	4	75	21	0.5	1.061	1.0	1.0	0	5	0	0	0.9	3.0	0.8	LBR
MSV507-198	2	377	413	91	9	82	10	0.0	1.072	1.0	0.0	20	0	0	0	1.4	2.0	0.3	-
MSX172-07	2	372	401	92	8	78	15	0.0	1.068	1.0	1.0	0	0	0	0	1.5	2.5	0.7	-
MSW537-06	2	366	400	91	9	82	9	0.0	1.086	1.0	0.0	0	5	0	5	2.1	3.0	2.1	-
NC0349-3	2	365	411	89	11	77	12	0.0	1.072	-	-	45	15	0	0	2.9	1.5	-	-
MSZ062-10	2	360	395	91	8	85	6	1.3	1.071	1.0	2.0	0	0	0	0	0.6	1.5	0.2	-
MST441-01	2	353	399	88	10	78	10	1.5	1.072	-	-	0	0	0	0	1.0	1.0	-	-
B2727-2	2	340	360	94	6	94	1	0.0	1.074	-	-	0	0	0	0	3.0	1.0	-	-
MSV507-073	2	330	350	94	6	80	14	0.0	1.075	1.0	0.0	5	0	0	0	1.8	2.5	2.5	-
MSX420-4Y	2	327	372	87	13	86	1	0.0	1.071	1.0	0.0	0	0	0	0	2.1	2.0	0.2	-
MSW159-03	2	313	351	89	11	83	6	0.0	1.078	1.0	1.0	0	0	5	0	1.4	1.0	1.0	-
MSW399-02	2	309	354	87	12	71	16	0.5	1.073	1.0	2.0	5	0	5	0	1.4	3.0	1.3	-

Table 5

PRELIMINARY TRIAL, CHIP-PROCESSING LINES
MONTCALM RESEARCH FARM
May 9 to September 19, 2016 (133 days)
DD Base 40°F 3459⁸

LINE	N	CWT/A		PERCENT OF TOTAL ¹					SP GR	CHIP SCORE ²	OTF SED ³	PERCENT (%) TUBER QUALITY ⁴				SCAB ⁵	MAT ⁶	BRUISE ⁷	Late Blight Resistance
		US#1	TOTAL	US#1	Bs	As	OV	PO				HH	VD	IBS	BC				
MSX050-01	2	308	323	96	4	81	15	0.0	1.060	1.0	0.0	5	0	0	0	2.0	1.0	0.5	-
CO07070-13W	2	290	360	79	21	79	0	0.0	1.071	-	-	0	0	0	0	2.9	1.0	-	-
MSX042-03	2	286	303	94	6	86	8	0.0	1.076	-	-	10	0	0	0	1.8	2.0	-	-
MSX255-01	2	280	334	84	16	81	2	0.2	1.076	1.0	2.0	0	0	5	0	1.3	1.5	0.6	-
Pike	2	277	308	90	10	86	4	0.0	1.078	-	-	0	0	0	0	1.2	2.0	-	-
MSY012-02	2	269	330	81	19	81	0	0.0	1.062	-	-	0	0	0	0	1.6	1.0	-	-
MST443-01	2	257	303	84	14	72	12	1.6	1.064	-	-	0	5	0	0	1.3	2.5	-	-
CO07070-10W	2	241	311	78	22	78	0	0.0	1.083	1.0	0.0	0	0	0	0	2.4	1.0	1.2	-
MSX240-03	2	238	297	80	20	72	8	0.0	1.063	-	-	0	10	0	0	2.3	1.5	-	-
MSW163-03	2	221	232	95	5	85	10	0.0	1.068	1.0	1.0	0	0	0	5	1.1	1.0	0.9	-
MSW324-01	2	205	271	75	22	59	16	3.4	1.065	-	-	5	0	0	0	2.3	3.0	-	LBR
MSW464-3	2	200	223	90	10	72	18	0.0	1.065	1.0	1.0	0	0	10	0	2.5	3.0	0.0	LBR
MSW502-04	2	173	214	80	20	80	0	0.0	1.067	-	-	0	0	0	0	1.1	2.0	-	-
MEAN		364	398						1.071							1.8	1.9	1.0	
HSD _{0.05}		222	215						0.014							1.7			

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

²CHIP SCORE: SNAC Scale (Out of the field); Ratings: 1-5; 1: Excellent, 5: Poor.

³SED: Stem End Defect, Based on Paul Bethke's (USDA/UWisconsin - Madison) 0 - 5 scale. 0 = no SED; 3 = significant SED; 5 = severe SED

⁴QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.

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

⁶MATURITY RATING: August 31, 2016; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).

⁷BRUISE: Simulated blackspot bruise test average number of spots per tuber.

Late blight resistance (LBR) or late blight moderate resistance (LBMR) based on inoculated foliar late blight trials.

Plant Date: 5/9/16

Vine Kill: 9/9/16

Days from planting to vine kill: 123

⁸Enviroweather: Entrican Station. Planting to vine kill

Table 6

PRELIMINARY TRIAL, TABLESTOCK LINES
MONTCALM RESEARCH FARM
May 9 to September 12, 2016 (127 days)
DD Base 40°F 3236⁸

LINE	N	CWT/A		PERCENT OF TOTAL ¹					SP GR	CHIP SCORE ²	OTF SED ³	PERCENT (%) TUBER QUALITY ⁴				SCAB ⁵	MAT ⁶	BRUISE ⁷	Late Blight Resistance
		US#1	TOTAL	US#1	Bs	As	OV	PO				HH	VD	IBS	BC				
MSW259-05	2	567	597	95	3	49	47	2	1.066	1.0	1.0	35	0	0.0	0.0	1.8	3.0	0.4	-
MSQ086-3	2	552	591	93	5	68	26	2	1.069	1.0	1.0	0	15	0.0	0.0	2.0	2.5	0.0	LBR
MSY111-01	2	532	552	96	3	69	27	1	1.061	1.0	1.0	0	5	0.0	0.0	1.6	2.5	0.3	-
MSV502-05	2	516	541	95	5	77	18	0	1.066	1.0	0.0	0	5	0.0	0.0	1.8	1.5	0.0	-
MSX120-5Y	2	493	518	95	5	76	19	0	1.066	1.0	2.0	0	10	0.0	0.0	1.9	2.0	1.4	-
MSW119-02	2	468	486	96	3	68	28	1	1.066	1.0	0.0	5	0	0.0	0.0	1.3	1.0	0.0	-
MST145-02	2	464	510	91	8	70	21	1	1.058	2.0	3.0	0	10	0.0	5.0	2.1	1.5	0.1	LBR
MSU161-01	2	451	468	96	3	72	25	0	1.057	1.5	4.0	0	0	0.0	0.0	1.6	2.0	0.3	-
MSX503-05	2	442	458	96	3	73	23	0	1.063	1.0	1.0	0	0	0.0	0.0	1.1	1.0	0.7	-
Reba	2	434	447	97	3	64	33	0	1.062	1.5	1.0	0	0	0.0	5.0	2.1	1.0	0.3	-
MSY089-02	2	403	423	95	4	75	20	1	1.072	1.0	0.0	0	5	0.0	0.0	2.1	1.5	1.0	-
MSW237-4Y	2	391	431	91	9	73	17	0	1.068	2.0	3.0	15	0	0.0	0.0	2.4	1.5	1.5	-
Soraya	2	390	434	89	5	80	9	6	1.047	2.5	2.0	0	0	0.0	0.0	1.5	1.5	0.0	LBMR
MSU403-03	2	389	431	90	10	80	10	0	1.071	1.0	2.0	0	5	0.0	0.0	1.1	2.0	0.4	-
MSW455-03	2	387	405	95	5	78	17	0	1.057	1.5	1.0	0	0	0.0	0.0	1.4	1.0	0.0	-
MSV434-01Y	2	386	405	95	5	66	30	0	1.057	1.5	2.0	0	5	15.0	0.0	2.1	1.0	0.0	-
MSV331-3	2	379	405	93	6	81	12	1	1.068	1.5	0.0	0	0	5.0	0.0	0.6	1.5	1.7	-
Superior	2	378	384	98	2	70	29	0	1.064	1.5	2.0	5	10	0.0	0.0	1.6	1.0	0.3	-
MSV434-04	2	377	404	94	6	77	16	1	1.060	1.0	0.0	0	0	0.0	0.0	1.1	1.0	0.1	-
MSY193-01	2	377	390	97	3	95	2	0	1.070	1.0	0.0	0	0	0.0	0.0	1.3	1.0	0.3	-
MSU088-01	2	367	406	91	9	87	3	0	1.076	1.0	1.0	0	0	0.0	0.0	2.3	1.5	0.1	LBMR
MSW042-01	2	366	406	90	10	78	12	0	1.062	1.0	0.0	0	5	0.0	0.0	2.3	1.5	0.1	LBR
MSX501-05	2	348	377	91	9	81	11	0	1.074	1.5	0.0	0	5	0.0	0.0	2.0	2.0	0.0	-
MSV507-052	2	343	379	90	10	86	4	0	1.069	1.0	0.0	0	0	25.0	0.0	1.0	1.0	0.0	-
Smart	2	342	404	85	14	84	1	1	1.059	2.5	3.0	0	10	0.0	0.0	2.3	1.0	0.6	-
MSW154-04	2	342	364	94	2	38	56	4	1.058	2.0	1.0	0	0	10.0	10.0	2.6	2.0	0.2	LBR
MSX293-1Y	2	336	355	95	5	75	20	0	1.070	1.0	1.0	0	0	0.0	0.0	2.0	2.0	0.1	LBR
MSX497-06	2	328	344	95	5	93	3	0	1.060	1.5	0.0	0	0	0.0	0.0	2.1	1.0	0.4	-
MSV177-04	2	327	352	93	7	85	8	0	1.067	1.0	1.0	0	10	0.0	0.0	1.4	1.0	0.2	-
MSV507-012	2	325	335	97	3	75	22	0	1.074	1.0	2.0	5	5	0.0	0.0	1.5	3.0	3.1	-
Alegria	2	322	360	89	7	74	15	4	1.064	2.5	4.0	0	15	0.0	0.0	1.8	1.0	0.1	-
MSX137-06	2	316	382	83	17	73	10	0	1.056	2.5	2.0	0	15	0.0	0.0	1.9	1.5	0.1	-
MSU358-02	2	315	334	94	6	87	7	0	1.080	1.0	0.0	0	0	0.0	0.0	0.9	1.0	1.2	-
MSV427-2Y	2	311	326	95	4	59	36	0	1.063	1.5	0.0	0	0	50.0	0.0	1.1	2.0	0.7	LBMR
MSQ131-A	2	306	314	98	1	37	61	1	1.057	1.5	2.0	0	0	0.0	0.0	2.1	1.5	0.0	LBR
MSV507-003	2	303	362	84	16	80	4	0	1.084	1.0	0.0	0	0	0.0	0.0	1.9	1.5	5.0	-
MSV507-001	2	303	388	78	22	74	4	0	1.080	1.0	0.0	0	15	20.0	0.0	2.5	1.5	1.1	-
MSV081-04	2	298	319	94	6	83	11	1	1.057	1.0	0.0	0	0	0.0	0.0	1.1	1.0	0.1	-
MSU016-02	2	293	337	87	9	74	13	4	1.074	1.0	0.0	5	0	0.0	0.0	2.4	2.5	0.3	LBMR
MSV394-3	2	291	308	95	5	79	16	0	1.070	1.0	0.0	25	0	0.0	10.0	2.0	1.0	0.2	-

Table 6

PRELIMINARY TRIAL, TABLESTOCK LINES
MONTCALM RESEARCH FARM
May 9 to September 12, 2016 (127 days)
DD Base 40°F 3236⁸

LINE	N	CWT/A		PERCENT OF TOTAL ¹					SP GR	CHIP SCORE ²	OTF SED ³	PERCENT (%) TUBER QUALITY ⁴				SCAB ⁵	MAT ⁶	BRUISE ⁷	Late Blight Resistance
		US#1	TOTAL	US#1	Bs	As	OV	PO				HH	VD	IBS	BC				
MST437-01	2	291	342	85	14	73	12	1	1.072	1.0	2.0	0	5	0.0	0.0	1.5	2.5	0.1	-
MSV242-7	2	286	300	95	5	73	22	0	1.088	1.0	0.0	0	0	0.0	0.0	1.8	3.0	0.7	-
Wega	2	264	385	67	32	67	0	1	1.048	2.5	4.0	0	10	0.0	0.0	2.0	1.0	0.0	LBMR
MSW423-13	2	261	318	82	18	75	7	0	1.065	1.0	1.0	0	0	0.0	0.0	2.9	1.0	0.0	-
MSY022-02	2	260	353	73	27	72	1	0	1.069	1.0	0.0	0	0	0.0	0.0	0.8	1.0	0.1	LBR
MSS164-06	2	239	285	83	16	74	9	0	1.072	1.5	1.0	0	0	0.0	5.0	1.0	1.0	0.3	LBR
MSV205-04	2	237	254	93	6	75	18	1	1.073	1.0	1.0	0	5	0.0	0.0	1.3	1.0	3.1	-
MSV393-01	2	216	270	80	20	80	0	0	1.069	1.0	0.0	5	0	0.0	0.0	1.1	2.0	0.4	-
MSW248-02	1	205	225	91	9	59	32	0	1.069	1.0	0.0	10	30	0.0	0.0	1.8	2.0	0.2	-
MEAN		357	391						1.066	1.3	1.1					1.7	1.6	0.6	
HSD _{0.05}		229	221						0.015							1.7			

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

²CHIP SCORE: SNAC Scale (Out of the field); Ratings: 1-5; 1: Excellent, 5: Poor.

³SED: Stem End Defect, Based on Paul Bethke's (USDA/UWisconsin - Madison) 0 - 5 scale. 0 = no SED; 3 = significant SED; 5 = severe SED

⁴QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.

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

⁶MATURITY RATING: August 31, 2016; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).

⁷BRUISE: Simulated blackspot bruise test average number of spots per tuber.

Late blight resistance (LBR) or late blight moderate resistance (LBMR) based on inoculated foliar late blight trials.

Plant Date: 5/9/15
Vine Kill: 9/2/15
Days from planting to vine kill: 116

⁸Enviroweather: Entrican Station. Planting to vine kill

Table 7

PRELIMINARY TRIAL, PIGMENTED LINES
MONTCALM RESEARCH FARM
May 9 to September 13, 2016 (127 days)
DD Base 40°F 3236⁸

LINE	N	CWT/A		PERCENT OF TOTAL ¹					SP GR	CHIP SCORE ²	OTF SED ³	PERCENT (%) TUBER QUALITY ⁴				SCAB ⁵	MAT ⁶	Bruise ⁷	Late Blight Resistance
		US#1	TOTAL	US#1	Bs	As	OV	PO				HH	VD	IBS	BC				
Red Lasoda	2	560	591	95	5	71	24	0	1.056	-	-	0	10	0	0	3.1	1.0	0.3	-
Red LaSoda NY Strain	2	492	524	94	3	64	30	3	1.057	-	-	5	5	0	5	3.0	1.0	0.1	-
MSN230-1RY	2	486	521	93	7	82	12	0	1.081	-	-	0	15	0	5	1.0	2.0	0.3	-
MSZ109-08PP	2	484	543	89	10	86	3	1	1.055	1.5	2.0	0	0	0	0	1.0	3.0	0.0	-
ND6002-1R	2	451	472	96	4	78	18	0	1.060	-	-	0	5	0	0	2.1	1.0	0.1	-
QSNDSU07-04R	2	450	474	95	5	86	9	0	1.057	-	-	0	5	5	0	1.9	1.0	0.0	-
MSZ427-01R	2	448	612	73	26	72	1	1	1.069	-	-	0	10	0	0	2.3	1.0	0.3	-
AF4985-1R	2	447	505	88	9	74	14	3	1.056	-	-	0	0	0	0	1.3	1.0	0.2	-
AF4831-2R	2	426	505	84	14	83	1	2	1.058	-	-	0	0	0	0	2.3	1.0	0.0	-
MSZ109-10PP	2	424	562	75	24	74	1	1	1.056	1.0	2.0	0	0	0	0	1.9	1.5	0.0	-
Modoc	2	416	492	85	15	82	3	0	1.055	-	-	0	0	0	0	1.9	1.0	0.0	-
Dakota Ruby	2	415	520	80	17	80	0	3	1.066	-	-	5	0	5	0	2.0	1.0	0.0	-
Red Norland	2	408	425	96	3	66	30	1	1.050	-	-	0	0	0	5	1.8	1.0	0.0	-
MSZUNK-07PP	2	402	439	92	6	72	20	2	1.046	1.0	2.0	0	0	0	0	1.4	1.0	0.1	LBMR
MST075-1R	2	402	437	92	8	78	14	0	1.060	-	-	0	0	0	0	1.6	1.0	0.0	-
MSZ107-06PP	2	392	513	77	22	73	4	1	1.067	1.5	2.0	0	0	0	0	1.8	2.0	0.1	-
MSZ436-02Spl	2	392	416	94	6	83	11	0	1.050	-	-	0	5	0	0	1.5	1.0	0.0	LBR
MSU202-1P	2	389	444	88	8	82	6	4	1.058	-	-	0	0	5	0	1.0	1.0	0.0	-
ND7132-1R	2	389	421	92	6	77	15	2	1.052	-	-	0	10	0	0	2.3	1.0	0.1	-
MSW239-03SPL	2	375	440	85	6	63	22	8	1.043	-	-	0	0	0	0	1.8	1.0	0.0	-
MSX569-1R	2	373	420	89	11	86	3	0	1.049	-	-	0	5	0	5	1.9	1.0	0.0	-
NorDonna	2	371	405	92	8	70	22	0	1.055	-	-	0	5	0	0	1.4	1.5	0.0	-
MSX517-3SPL	2	362	415	88	12	82	6	0	1.064	-	-	5	10	0	0	1.9	1.5	0.4	LBR
Dark Red Norland	2	346	389	89	8	82	7	3	1.053	-	-	0	5	0	5	1.3	1.0	0.0	-
CO00291-5R	2	343	376	91	8	87	4	1	1.055	-	-	0	0	0	0	1.3	2.0	0.5	-
MSW273-3R	2	343	382	90	5	63	26	5	1.064	-	-	5	5	0	5	2.0	1.0	0.0	-
MSZ427-03R	2	342	406	84	11	78	7	5	1.051	-	-	0	0	0	0	1.8	1.0	0.2	-
MSY517-8YSPL	2	333	354	94	5	91	3	1	1.062	1.5	2.0	0	0	0	0	1.9	1.0	0.1	-
MSXUNK-3P	2	333	392	85	12	81	4	3	1.065	-	-	0	10	0	0	2.0	1.0	0.0	-
MSW148-1P	2	326	401	81	17	79	3	1	1.069	-	-	0	10	0	0	2.5	1.5	0.3	-
MSZ416-08RY	2	318	376	84	11	72	13	5	1.057	-	-	0	10	0	0	1.0	1.0	0.5	-
QSNDSU07-12R	2	305	349	87	13	83	5	0	1.058	-	-	0	0	5	0	0.5	1.0	0.0	-
Merlot	2	302	444	68	23	68	0	9	1.063	-	-	0	15	15	0	2.1	1.5	0.4	-
MSX426-1RR	2	301	373	81	19	80	1	1	1.074	1.5	0.0	0	0	0	0	0.9	1.0	0.8	-
MSU616-3PP	2	291	363	80	15	80	0	5	1.067	1.5	2.0	0	0	0	0	1.0	1.0	0.2	-
MSQ558-2RR	2	291	356	82	16	75	7	2	1.063	1.5	1.0	0	0	0	0	2.0	1.0	0.4	-
Dark Red Chieftain	2	290	332	87	13	87	0	0	1.053	-	-	0	10	0	0	1.5	1.0	0.0	-
CO098012-5R	2	275	372	73	25	73	0	2	1.057	-	-	0	0	0	0	2.9	1.0	0.2	-
MSX514-1P	2	266	332	80	18	79	1	2	1.054	1.5	2.0	0	0	0	0	1.9	1.0	0.1	-

Table 7

PRELIMINARY TRIAL, PIGMENTED LINES
MONTCALM RESEARCH FARM
May 9 to September 13, 2016 (127 days)
DD Base 40°F 3236⁸

LINE	CWT/A		PERCENT OF TOTAL ¹					SP GR	CHIP SCORE ²	OTF SED ³	PERCENT (%) TUBER QUALITY ⁴				SCAB ⁵	MAT ⁶	Bruise ⁷	Late Blight Resistance	
	N	US#1	TOTAL	US#1	Bs	As	OV				HH	VD	IBS	BC					
MSX035-1WP	2	251	319	79	7	61	18	14	1.043	1.5	1.0	5	0	0	5	1.3	2.5	0.3	-
MSX001-9WP	2	249	335	74	21	55	19	4	1.064	-	-	0	0	0	0	1.5	1.0	0.1	LBR
MSZ443-1PP	2	240	322	74	26	70	4	0	1.055	1.5	2.0	0	0	0	0	1.9	1.0	0.1	-
MSZ107-01PP	2	240	328	72	24	70	2	3	1.071	1.5	3.0	0	0	0	0	0.9	3.0	0.1	-
MSZ424-01R	2	231	293	79	21	76	3	0	1.071	-	-	5	15	0	0	3.4	1.0	0.0	-
MSZ433-3P	2	227	411	55	44	55	0	0	1.070	-	-	0	5	0	0	1.9	2.0	0.0	LBMR
MSZ602-02PP	2	209	271	77	23	75	2	0	1.060	1.0	1.0	0	0	0	0	1.3	2.5	0.1	-
MSR226-ARR	2	194	299	65	32	64	1	3	1.063	1.5	2.0	0	0	0	0	1.4	1.0	0.1	-
AmaRosa	2	81	169	49	50	49	0	1	1.057	1.5	2.0	0	0	0	0	1.9	2.0	0.0	-
MSZ109-05RR	2	33	185	18	82	18	0	0	1.058	2.0	1.0	0	0	5	15	0.4	2.0	0.1	-
MEAN		341	409						1.059							1.7	1.3	0.1	
HSD _{0.05}		197	206						0.011							1.7			

¹SIZE: B: < 2 in.; A: 2-3.25 in.; OV: > 3.25 in.; PO: Pickouts.²CHIP SCORE: SNAC Scale (Out of the field); Ratings: 1-5; 1: Excellent, 5: Poor.³SED: Stem End Defect, Based on Paul Bethke's (USDA/UWisconsin - Madison) 0 - 5 scale. 0 = no SED; 3 = significant SED; 5 = severe SED⁴QUALITY: HH: Hollow Heart; BC: Brown Center; VD: Vascular Discoloration; IBS: Internal Brown Spot. Percent of 40 Oversize and/or A-size tubers cut.⁵SCAB DISEASE RATING: MSU Scab Nursery; 0: No Infection; 1: Low Infection <5%; 3: Intermediate; 5: Highly Susceptible.⁶MATURITY RATING: August 31, 2016; Ratings 1-5; 1: Early (vines completely dead); 5: Late (vigorous vine, some flowering).⁷BRUISE: Simulated blackspot bruise test, average number of spots per tuber.

Late blight resistance (LBR) or late blight moderate resistance (LBMR) based on inoculated foliar late blight trials.

Plant Date: 5/9/16

Vine Kill: 9/2/16

Days from planting to vine kill: 116

⁸Enviroweather: Entrican Station. Planting to vine kill

Table 8

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS2014-2016 SCAB DISEASE TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER, MI

LINE	3-YR* AVG.	2016 RATING	2016 WORST	2016 N	2015 RATING	2015 WORST	2015 N	2014 RATING	2014 WORST	2014 N
<i>Sorted by ascending 2016 Average Rating:</i>										
MSZ109-05RR	-	0.4	0.5	4	-	-	-	-	-	-
AC96052-1Rus	-	0.5	1.0	4	-	-	-	-	-	-
CW08221-5Rus	-	0.5	1.5	4	-	-	-	-	-	-
Goldrush Russet	-	0.5	1.0	4	-	-	-	-	-	-
QSNDSU07-12R	-	0.5	1.0	4	-	-	-	-	-	-
MSV331-3	-	0.6	1.0	4	-	-	-	-	-	-
MSZ062-10	-	0.6	1.0	4	-	-	-	-	-	-
QSMSU10-02 ^{LBR}	1.0	0.6	1.0	4	1.4	1.5	4	1.0	1.0	4
MST386-1P	0.8	0.8	1.0	4	0.6	1.5	4	1.0	1.5	4
MSV383-B	0.9*	0.8	0.5	4	1.1	1.5	4	-	-	-
MSW509-5	1.1*	0.8	2.0	4	1.4	2.0	4	-	-	-
MSY022-2 ^{LBR}	1.3*	0.8	1.5	4	1.9	2.0	4	-	-	-
MSZ219-14 ^{LBR, PVYR}	-	0.8	1.0	4	-	-	-	-	-	-
MSU358-02	0.9*	0.9	1.0	4	-	-	-	0.8	1	3
MSW100-1 ^{LBR}	1.0*	0.9	1.0	4	1.1	1.5	4	-	-	-
MSW353-3 ^{LBR}	0.9*	0.9	1.0	4	0.9	1.0	4	-	-	-
MSX324-1P	1.0*	0.9	1.5	4	1.1	2.0	8	-	-	-
MSX426-1RR	-	0.9	1.5	4	-	-	-	-	-	-
MSZ107-01PP	-	0.9	1.0	4	-	-	-	-	-	-
MSZ219-01 ^{LBR, PVYR}	1.0*	0.9	1.5	4	1.1	1.5	4	-	-	-
MSZ219-13 ^{LBR, PVYR}	-	0.9	1.0	4	-	-	-	-	-	-
Satina	-	0.9	1.5	4	-	-	-	-	-	-
AF4648-2 ^{LBR, PVYR}	0.9*	1.0	1.5	4	0.9	1.0	4	-	-	-
MSN230-1RY	-	1.0	1.5	4	-	-	-	-	-	-
MSS164-06 ^{LBR}	-	1.0	1.0	4						
MST252-1Y	1.1	1.0	1.5	4	1.5	2.0	4	0.8	1.0	4
MST441-1	1.0	1.0	1.5	4	1.1	1.5	4	0.9	1.5	4
MSU202-1P	1.2	1.0	1.0	4	1.4	1.5	4	1.1	1.5	4
MSU616-3PP	1.5*	1.0	2.0	4	2.0	2.5	4	-	-	-
MSV111-02 ^{LBR}	1.3*	1.0	1.5	4				1.6	2.0	4.0
MSV507-052	1.0*	1.0	1.0	4	-	-	-	1.0	1.5	3
MSZ109-08PP	-	1.0	1.0	4	-	-	-	-	-	-
MSZ242-13	-	1.0	1.5	4	-	-	-	-	-	-
MSZ416-08RY	-	1.0	1.5	4	-	-	-	-	-	-
ND050032-4Rus	-	1.0	1.5	4	-	-	-	-	-	-
Purple Soul (MSX001-4WP)	1.4*	1.0	2.0	4	1.8	2.0	4	-	-	-
MSU403-03	-	1.1	1.5	4	-	-	-	-	-	-
MSV081-04	1.1*	1.1	1.5	4	1.1	1.5	4	-	-	-
MSV313-2	-	1.1	2.0	4	-	-	-	-	-	-
MSV380-1	1.1	1.1	1.5	4	1.3	1.5	4	0.9	1.5	4
MSV393-1	1.4*	1.1	1.5	4	1.8	2.0	4	-	-	-
MSV427-2Y ^{LBR}	-	1.1	2.5	4	-	-	-	-	-	-
MSV434-04	-	1.1	2.0	4	-	-	-	-	-	-
MSV498-1	1.3*	1.1	1.5	4	-	-	-	1.6	2	4
MSV507-040	1.2*	1.1	1.5	4	-	-	-	1.3	1.5	4
MSV507-128	-	1.1	1.5	4	-	-	-	-	-	-
MSV507-143	1.2*	1.1	1.5	4	1.3	1.5	4	-	-	-
MSW163-03	1.3*	1.1	1.5	4	1.4	1.5	4	-	-	-
MSW474-01	1.1*	1.1	1.5	4	1.0	1.5	4	-	-	-

Table 8

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS2014-2016 SCAB DISEASE TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER, MI

LINE	3-YR* AVG.	2016 RATING	2016 WORST	2016 N	2015 RATING	2015 WORST	2015 N	2014 RATING	2014 WORST	2014 N
MSW496-1Rus	1.6*	1.1	1.5	4	2.0	2.0	2	-	-	-
MSW502-4	1.2*	1.1	1.5	4	1.3	1.5	4	-	-	-
MSX105-01	-	1.1	2.0	4	-	-	-	-	-	-
MSX503-5	1.1*	1.1	1.5	4	1.0	2.0	4	-	-	-
MSZ242-09	-	1.1	1.5	4	-	-	-	-	-	-
TX08352-5Rus	-	1.1	2.0	4	-	-	-	-	-	-
Pike	1.3	1.2	1.5	8	1.5	1.5	4	1.3	1.5	4
AF4985-1R	-	1.3	2.0	4	-	-	-	-	-	-
Dark Red Norland	-	1.3	1.5	4	-	-	-	-	-	-
Granola	1.0	1.3	1.5	4	1.1	1.5	4	0.8	1.0	4
Mountain Gem (A03158-2TE)	-	1.3	1.5	4	-	-	-	-	-	-
MSR127-2	1.3	1.3	2.0	4	1.3	1.5	4	1.4	2.0	4
MST443-01	1.3*	1.3	1.5	4	-	-	-	1.4	2	4
MSU383-A	1.2*	1.3	2.0	4	1.1	2.0	4	-	-	-
MSV205-04	-	1.3	1.5	4	-	-	-	-	-	-
MSW119-2	1.2*	1.3	1.5	4	1.1	1.5	4	-	-	-
MSW394-1	1.4*	1.3	1.5	4	1.5	2.0	4	-	-	-
MSX035-1WP	-	1.3	1.5	4	-	-	-	-	-	-
MSX177-7Y	-	1.3	1.5	4	-	-	-	-	-	-
MSX225-2	1.1*	1.3	1.5	4	1.0	1.5	4	-	-	-
MSX255-1	1.3*	1.3	1.5	4	1.4	1.5	4	-	-	-
MSX540-4 ^{PVYR, LBR}	1.4	1.3	2.0	4	2.0	2.5	4	0.9	1.0	4
MSY156-02	-	1.3	1.5	4	-	-	-	-	-	-
MSY193-1	1.4*	1.3	1.5	4	1.5	2.0	4	-	-	-
MSZ222-19	1.3*	1.3	2.0	4	1.3	2.0	4	-	-	-
MSZ443-01PP	-	1.3	1.5	4	-	-	-	-	-	-
QSMSU10-15	1.5	1.3	1.5	4	1.6	2.0	4	1.8	2.5	4
Silverton Russet	1.3	1.3	2.0	4	0.9	1.0	4	1.6	2.0	4
W5955-1	1.5	1.3	1.5	4	1.5	2.0	4	1.6	2.0	4
MSV179-1	1.6*	1.3	1.5	3	1.9	2.0	4	-	-	-
MSZ602-02PP	-	1.3	2.0	4	-	-	-	-	-	-
MSR226-ARR	-	1.4	2.0	4	-	-	-	-	-	-
MSV177-04	-	1.4	1.5	4	-	-	-	-	-	-
MSV507-198	1.3*	1.4	2.0	4	-	-	-	1.3	2	4
MSW159-03	-	1.4	2.0	4	-	-	-	-	-	-
MSW399-2	1.6*	1.4	2.0	4	1.9	2.0	4	-	-	-
MSW455-03	-	1.4	1.5	4	-	-	-	-	-	-
MSZUNK-07PP ^{LBR}	1.5*	1.4	1.5	4	1.6	2.0	4	-	-	-
NorDonna	-	1.4	2.0	4	-	-	-	-	-	-
Dark Red Chieftain	-	1.5	2.0	4	-	-	-	-	-	-
Lehigh (NY126)	-	1.5	1.5	4	-	-	-	-	-	-
MST186-1Y	1.5	1.5	1.5	4	1.3	1.5	4	1.6	2.0	4
MST437-01	-	1.5	2.0	4	-	-	-	-	-	-
MSV292-1Y	1.8*	1.5	2.0	4	2.0	2.5	4	-	-	-
MSV507-012	1.6*	1.5	2.0	4	-	-	-	1.8	2	4
MSW044-1	1.5*	1.5	1.5	4	1.5	2.0	4	-	-	-
MSX001-9WP ^{LBR}	-	1.5	2.5	4	-	-	-	-	-	-
MSX172-7	1.6*	1.5	2.0	4	1.8	2.5	4	-	-	-
MSX245-2Y	1.6*	1.5	2.0	4	1.6	2.0	4	-	-	-
MSY008-3 ^{LBR}	1.5*	1.5	1.5	4	1.5	2.0	4	-	-	-
MSZ436-02Sp ^{ILBR}	-	1.5	2.0	4	-	-	-	-	-	-

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MICHIGAN STATE UNIVERSITY
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SCAB NURSERY, MONTCALM RESEARCH CENTER, MI

LINE	3-YR* AVG.	2016 RATING	2016 WORST	2016 N	2015 RATING	2015 WORST	2015 N	2014 RATING	2014 WORST	2014 N
Soraya ^{LBM}	1.6*	1.5	2.0	4	1.6	2.0	4	-	-	-
W9742-3Rus	1.8*	1.5	2.0	4	2.0	3.5	4	-	-	-
AF3362-1Rus (Caribou Russet)	1.3	1.6	2.0	4	1.3	1.5	4	1.0	1.0	4
CO00291-5R	-	1.6	2.0	4	-	-	-	-	-	-
Lamoka	1.6	1.6	2.0	4	1.8	2.0	4	1.5	2.0	4
MST075-1R	1.8*	1.6	2.0	4	1.9	2.5	4	-	-	-
MSV307-02	1.6	1.6	2.0	4	1.8	2.0	4	1.5	2.0	4
MSW075-1	1.6*	1.6	2.5	4	1.6	2.0	4	-	-	-
MSW509-1	1.6*	1.6	2.0	4	1.6	2.0	8	-	-	-
MSX495-2 ^{LBR}	1.7*	1.6	2.0	4	1.8	2.0	4	-	-	-
MSX526-1 ^{LBM}	1.4*	1.6	2.0	4	1.3	1.5	4	-	-	-
MSY012-02	-	1.6	2.0	4	-	-	-	-	-	-
MSY111-1	1.6*	1.6	2.0	4	1.5	1.5	4	-	-	-
ND7519-1	-	1.6	2.0	4	-	-	-	-	-	-
Onaway	1.8*	1.6	2.0	4	-	-	-	2.0	2.5	4
Reveille (ATX91137-1Rus)	1.5	1.6	2.0	4	1.6	2.0	4	1.1	2.0	4
Superior	1.6*	1.6	2.0	4.0	1.6	2.0	4	-	-	-
WND8625-2Rus	-	1.6	2.5	4	-	-	-	-	-	-
Alegria	1.8*	1.8	2.0	4	-	-	-	1.8	2	4
COTX09052-2Rus	-	1.8	2.0	4	-	-	-	-	-	-
MSV030-4	1.8	1.8	2.0	4	1.6	2.0	4	1.9	2.0	4
MSV093-1 ^{LBM}	1.6	1.8	2.0	4	1.7	2.0	8	1.4	2.0	4
MSV241-2	1.6*	1.8	2.0	4	1.5	2.0	4	-	-	-
MSV242-7	-	1.8	2.0	4	-	-	-	-	-	-
MSV301-2	1.6	1.8	2.0	4	1.5	2.0	4	1.5	2.0	4
MSV502-5	1.8*	1.8	2.0	4	1.9	2.0	4	-	-	-
MSV507-073	1.7*	1.8	2.0	4	-	-	-	1.6	2.5	5
MSW239-3SPL	2.1	1.8	2.5	4	2.3	3.0	4	2.4	3.0	4
MSW248-02	1.9*	1.8	2.0	4	2.0	2.5	4	-	-	-
MSW259-05	-	1.8	2.0	4	-	-	-	-	-	-
MSW343-02R	-	1.8	2.0	4	-	-	-	-	-	-
MSW485-2 ^{LBR}	1.9*	1.8	2.0	4	2.0	2.0	4	-	-	-
MSX042-03	-	1.8	2.5	4	-	-	-	-	-	-
MSX345-6Y	1.8*	1.8	2.0	4	1.9	2.5	4	-	-	-
MSZ427-03R	-	1.8	2.5	4	-	-	-	-	-	-
Red Norland	1.6	1.8	2.5	4	1.5	2.0	8.0	1.4	2.0	9
W8822-1	-	1.8	2.5	4	-	-	-	-	-	-
MSZ107-6PP	1.8*	1.8	2.0	4	1.8	2.0	4	-	-	-
AF4124-7Rus	1.8*	1.9	2.0	4	-	-	-	1.8	2	4
Amarosa	-	1.9	2.5	4	-	-	-	-	-	-
Dakota Russet (ND8229-3)	-	1.9	2.0	4	-	-	-	-	-	-
Modoc	-	1.9	2.5	4	-	-	-	-	-	-
MSU161-1 ^{LBM, PVYR}	2.0	1.9	2.0	4	2.3	2.5	4	1.8	2.0	4.0
MSV033-1	1.9	1.9	2.0	4	1.9	2.0	4	2.0	2.5	4
MSV358-3	1.7	1.9	2.0	4	1.6	2.0	4	1.5	2.5	3
MSV507-003	1.9*	1.9	2.5	4	-	-	-	2.0	2	4
MSW316-3PY	-	1.9	2.5	4	-	-	-	-	-	-
MSW502-3	1.8*	1.9	2.0	4	1.6	2.0	4	-	-	-
MSX120-5Y	-	1.9	2.0	4	-	-	-	-	-	-
MSX137-6	1.8*	1.9	2.0	4	1.8	2.0	4	-	-	-
MSX417-1	1.8*	1.9	2.0	4	1.6	2.0	4	-	-	-

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SCAB NURSERY, MONTCALM RESEARCH CENTER, MI

LINE	3-YR* AVG.	2016 RATING	2016 WORST	2016 N	2015 RATING	2015 WORST	2015 N	2014 RATING	2014 WORST	2014 N
MSX514-1P	-	1.9	2.0	4	-	-	-	-	-	-
MSX517-3SPL ^{LBR}	2.1*	1.9	2.5	4	2.4	3.0	4	-	-	-
MSX569-1R	1.9*	1.9	2.0	4	2.0	2.0	2	-	-	-
MSY517-8YSPL	-	1.9	2.0	4	-	-	-	-	-	-
MSZ109-10PP	-	1.9	2.5	4	-	-	-	-	-	-
MSZ433-3P ^{LBM}	-	1.9	2.5	4	-	-	-	-	-	-
QSNDSU07-04R	-	1.9	2.0	4	-	-	-	-	-	-
W9433-1Rus	1.7	1.9	2.0	4	1.9	2.0	4	1.3	2.0	4
Dakota Ruby	2.0*	2.0	2.5	4	2.0	2.0	4	-	-	-
FL2137	-	2.0	2.5	4	-	-	-	-	-	-
MSQ086-3 ^{LBR}	1.9*	2.0	2.0	4	-	-	-	1.9	2	4
MSQ558-2RR	-	2.0	2.5	4	-	-	-	-	-	-
MSV394-3	1.8	2.0	2.5	4	1.8	2.0	4	1.6	2.0	4
MSV507-007	-	2.0	2.0	4	-	-	-	-	-	-
MSW273-03R	-	2.0	2.5	4	-	-	-	-	-	-
MSX050-01	-	2.0	2.0	4	-	-	-	-	-	-
MSX293-1Y ^{LBR}	1.8*	2.0	2.5	4	1.6	2.0	4	-	-	-
MSX501-05	-	2.0	2.5	4	-	-	-	-	-	-
MSX542-2 ^{LBR}	1.9*	2.0	2.0	4	1.9	2.0	4	-	-	-
MSXUNK-3P	-	2.0	2.0	4	-	-	-	-	-	-
NY157	2.1*	2.0	2.5	4	2.1	2.5	4	-	-	-
Saginaw Chipper ^{LBR,PVYR}	1.7	2.0	2.0	4	2.0	2.0	3	1.0	1.5	4
Wega ^{LBR}	-	2.0	2.0	4	-	-	-	-	-	-
Merlot	2.3*	2.1	2.5	4	2.4	3.0	4	-	-	-
MSQ131-A ^{LBR}	2.0*	2.1	2.5	4	-	-	-	1.9	2.5	7
MST145-02 ^{LBR}	2.4*	2.1	2.0	4	-	-	-	2.8	3	4
MSV434-01Y	1.8	2.1	2.5	4	1.9	2.0	4	1.5	2.0	4
MSW537-6	1.9*	2.1	2.5	4	1.6	2.0	4	-	-	-
MSX420-4Y	2.3*	2.1	2.5	4	2.4	3.0	4	-	-	-
MSX497-6 ^{LBR}	2.5*	2.1	2.5	4	2.9	3.5	4	-	-	-
MSY089-02	-	2.1	2.5	4	-	-	-	-	-	-
ND6002-1R	1.8*	2.1	2.5	4	-	-	-	1.5	2	2
NDTX081648CB-13W	-	2.1	2.5	4	-	-	-	-	-	-
NY152	2.4*	2.1	2.5	4	-	-	-	2.8	3.5	5
Reba	2.2	2.1	2.5	8.0	2.1	3.0	8	2.3	2.5	6
Russet Norkotah	2.0	2.1	2.5	4.0	2.1	2.5	4	1.8	2.5	7
W6822-3	1.9*	2.1	2.5	4	-	-	-	1.8	2	4
AF4831-2R	-	2.3	3.0	4	-	-	-	-	-	-
AF5091-8Rus	-	2.3	2.5	4	-	-	-	-	-	-
MSS576-05SPL ^{LBR}	1.9	2.3	2.5	4	1.8	2.5	4	1.6	2.0	8
MSU088-01 ^{LBM}	-	2.3	2.5	4	-	-	-	-	-	-
MSU379-1 ^{LBM}	1.8*	2.3	2.5	4	1.3	1.5	4	-	-	-
MSW042-1 ^{LBR}	2.3*	2.3	2.5	4	2.4	2.5	4	-	-	-
MSW182-1Y	2.2*	2.3	2.5	4	2.1	2.5	4	-	-	-
MSW324-01 ^{LBR}	2.0*	2.3	2.5	4	1.8	2.0	4	-	-	-
MSW501-05	-	2.3	3.0	4	-	-	-	-	-	-
MSX129-1	1.9*	2.3	3.0	4	1.6	2.0	4	-	-	-
MSX240-03	-	2.3	2.5	4	-	-	-	-	-	-
MSZ427-01R	-	2.3	3.0	4	-	-	-	-	-	-
ND7132-1R	-	2.3	2.0	4	-	-	-	-	-	-

Table 8

2014-2016 SCAB DISEASE TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER, MI

LINE	3-YR* AVG.	2016 RATING	2016 WORST	2016 N	2015 RATING	2015 WORST	2015 N	2014 RATING	2014 WORST	2014 N
NY153	-	2.3	2.5	4	-	-	-	-	-	-
Smart	-	2.3	2.5	4	-	-	-	-	-	-
CO07070-10W	-	2.4	2.5	4	-	-	-	-	-	-
MSU016-2 ^{LBR}	2.3*	2.4	2.5	4	2.1	2.5	4	-	-	-
MSW237-4Y	2.1*	2.4	2.5	4	1.8	2.0	4	-	-	-
Snowden	2.6	2.4	2.5	8.0	2.8	3.5	8	2.6	3.0	8
AF4872-2Rus	-	2.5	3.0	4	-	-	-	-	-	-
MSV235-2PY ^{LBR}	2.6	2.5	3.0	4	2.6	3.0	4	2.8	3.0	4
MSV507-001	2.2*	2.5	2.5	4	-	-	-	1.9	2	4
MSW148-01P	-	2.5	2.5	4	-	-	-	-	-	-
MSW464-3 ^{LBR}	2.2*	2.5	3.0	4	1.9	2.5	4	-	-	-
MSX111-03	-	2.5	3.0	4	-	-	-	-	-	-
Manistee	2.2	2.6	3.0	4	2.1	2.5	4	1.9	2.0	4
MST191-2Y ^{LBR}	2.7	2.6	3.5	4	2.5	3.0	4	2.9	3.0	4
MSW154-04 ^{LBR}	-	2.6	3.0	4	-	-	-	-	-	-
MSX150-01	-	2.6	3.0	4	-	-	-	-	-	-
Red Marker #2	-	2.6	3.5	4	-	-	-	-	-	-
Yukon Gold	2.4*	2.6	3.0	4	-	-	-	2.3	3.5	8
AF5432-5	-	2.8	3.0	4	-	-	-	-	-	-
Atlantic	2.7	2.8	3.0	8.0	2.8	3.5	8	2.6	3.0	8
MSV505-2	1.8	2.8	3.5	4	1.6	2.0	4	0.9	1.0	4
AF5040-8	-	2.9	3.5	4	-	-	-	-	-	-
CO07070-13W	-	2.9	3.5	4	-	-	-	-	-	-
CO098012-5R	-	2.9	3.5	4	-	-	-	-	-	-
COTX09022-3RusRE/Y	-	2.9	3.5	4	-	-	-	-	-	-
MSW432-13	-	2.9	3.5	4	-	-	-	-	-	-
NC0349-3	-	2.9	3.0	4	-	-	-	-	-	-
B2727-2	-	3.0	3.0	4	-	-	-	-	-	-
Red LaSoda Ny Strain	-	3.0	3.5	4	-	-	-	-	-	-
Red LaSoda	3.0 *	3.1	4.0	4				2.9	3.5	4
MSZ424-01R	-	3.4	4.0	4	-	-	-	-	-	-
A096305-3Rus	-	3.6	4.5	4	-	-	-	-	-	-
HSD_{0.05} =		1.7			1.4			1.5		

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

N = Number of replications.

*2-Year Average.

Table 9

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2016 SCAB DISEASE EARLY GENERATION TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER, MI

LINE	2016 RATING	2016 N	FEMALE	MALE
<i>Sorted by ascending 2016 Rating;</i>				
MSBB910-07	0.0	1	A133-134	Che523-3
MSBB914-03	0.0	1	MSM267-B	Che523-3
MSBB920-03	0.0	1	MS	Che524-8
MSBB933-01	0.0	1	XD3	Che523-3
MSBB952-11	0.0	1	DMMS-89	Che523-3
MSBB029-02Y	0.5	1	MSK409-1	MSP239-1
MSBB036-01	0.5	1	Kalkaska	MSR127-2
MSBB038-01	0.5	1	Manistee	MSP239-1
MSBB045-02	0.5	1	Lamoka	MSR127-2
MSBB058-02	0.5	1	NY148	MSR127-2
MSBB089-02	0.5	1	MSW100-1	MSR127-2
MSBB090-02	0.5	1	MSW140-3	Lamoka
MSBB144-01	0.5	1	Manistee	MSR127-2
MSBB148-1	0.5	1	Manistee	MST096-2Y
MSBB212-02	0.5	1	MSS297-3	MSR127-2
MSBB362-1	0.5	1	MSW125-3	MSN105-1
MSBB606-05	0.5	1	NY148	McBride
MSBB610-09	0.5	1	NY148	MST096-2Y
MSBB614-10	0.5	1	Saginaw Chipper	MSR127-2
MSBB617-04	0.5	1	Saginaw Chipper	MSV383-B
MSBB617-08	0.5	1	Saginaw Chipper	MSV383-B
MSBB620-02	0.5	1	Saginaw Chipper	Lamoka
MSBB620-09	0.5	1	Saginaw Chipper	Lamoka
MSBB626-03	0.5	1	Saginaw Chipper	Kalkaska
MSBB628-04	0.5	1	MSW242-5Y	MSS165-2Y
MSBB634-07	0.5	1	NYH15-5	MSR169-8Y
MSBB635-07	0.5	1	NYH15-5	MSS297-3
MSBB635-14	0.5	1	NYH15-5	MSS297-3
MSBB635-15	0.5	1	NYH15-5	MSS297-3
MSBB635-18	0.5	1	NYH15-5	MSS297-3
MSBB636-11	0.5	1	NYH15-5	MST096-2Y
MSBB636-14	0.5	1	NYH15-5	MST096-2Y
MSBB636-16	0.5	1	NYH15-5	MST096-2Y
MSBB902-05	0.5	1	S703-5	Che523-3
MSBB902-07	0.5	1	S703-5	Che523-3
MSBB902-10	0.5	1	S703-5	Che523-3
MSBB902-13	0.5	1	S703-5	Che523-3
MSBB902-18	0.5	1	S703-5	Che523-3
MSBB903-03	0.5	1	BER83	Che523-3
MSBB905-03	0.5	1	84SD22	Che523-3
MSBB913-03	0.5	1	MSM269-1Y	Che523-3
MSBB918-16	0.5	1	MSM269-1Y	Che524-8
MSBB919-02	0.5	1	MCR205	Che524-8
MSBB919-03	0.5	1	MCR205	Che524-8
MSBB919-07	0.5	1	MCR205	Che524-8
MSBB919-10	0.5	1	MCR205	Che524-8

Table 9

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2016 SCAB DISEASE EARLY GENERATION TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER, MI

LINE	2016 RATING	2016 N	FEMALE	MALE
<i>Sorted by ascending 2016 Rating;</i>				
MSBB919-11	0.5	1	MCR205	Chc524-8
MSBB920-04	0.5	1	MS	Chc524-8
MSBB921-01	0.5	1	S703-5	Chc524-8
MSBB932-05	0.5	1	XD3	S703-5
MSBB933-06	0.5	1	XD3	Chc523-3
MSBB934-03	0.5	1	Scab4-48	XD3
MSBB938-01	0.5	1	HS66	XD3
MSBB944-21	0.5	1	L308-A	DMMS-89
MSBB945-08	0.5	1	DMMS-89	84SD22
MSBB946-02	0.5	1	DMMS-89	MCR205
MSBB946-04	0.5	1	DMMS-89	MCR205
MSBB947-02	0.5	1	DMMS-89	MS
MSBB949-05	0.5	1	DMMS-89	BER83
MSBB952-06	0.5	1	DMMS-89	Chc523-3
MSBB953-01	0.5	1	MCR205	XD3
MSBB953-03	0.5	1	MCR205	XD3
MSBB953-11	0.5	1	MCR205	XD3
MSBB963-03	0.5	1	-	-
MSBBUNK-2PP	0.5	1	-	-
MSBB004-01	1.0	1	AF4157-6	MSR169-8Y
MSBB008-03	1.0	1	Atlantic	MSR127-2
MSBB018-1	1.0	1	Dakota Diamond	MSR169-8Y
MSBB024-02Y	1.0	1	J138K6A22	MSS297-3
MSBB029-01	1.0	1	MSK409-1	MSP239-1
MSBB036-1	1.0	1	MSL007-B	MSR127-2
MSBB038-02	1.0	1	Manistee	MSP239-1
MSBB038-04	1.0	1	Manistee	MSP239-1
MSBB043-01	1.0	1	Lamoka	Missaukee
MSBB051-01	1.0	1	Missaukee	MSR127-2
MSBB051-03	1.0	1	Missaukee	MSR127-2
MSBB067-01	1.0	1	MSQ035-3	MSR127-2
MSBB068-1	1.0	1	MSQ086-3	MSR127-2
MSBB073-03	1.0	1	Saginaw Chipper	MSR127-2
MSBB073-05	1.0	1	Saginaw Chipper	MSR127-2
MSBB075-1Y	1.0	1	MSR127-2	MST096-2Y
MSBB079-01	1.0	1	MSS927-1	MSR127-2
MSBB079-02	1.0	1	MSS927-1	MSR127-2
MSBB089-01	1.0	1	MSW100-1	MSR127-2
MSBB090-01	1.0	1	MSW140-3	Lamoka
MSBB107-02	1.0	1	Beacon Chipper	Manistee
MSBB109-1	1.0	1	Beacon Chipper	OP
MSBB120-02	1.0	1	McBride	Kalkaska
MSBB142-1	1.0	1	MSL007-B	MSS297-3
MSBB144-02	1.0	1	Manistee	MSR127-2
MSBB145-1	1.0	1	Manistee	MSJ042-3
MSBB146-1	1.0	1	Manistee	MSS297-3

Table 9

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2016 SCAB DISEASE EARLY GENERATION TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER, MI

LINE	2016 RATING	2016 N	FEMALE	MALE
<i>Sorted by ascending 2016 Rating;</i>				
MSBB173-1	1.0	1	R128-4Y	OP
MSBB176-01	1.0	1	McBride	OP
MSBB177-02	1.0	1	MSP270-1	OP
MSBB179-1	1.0	1	MSP270-1	MSR169-8Y
MSBB193-01	1.0	1	MSR127-2	McBride
MSBB193-02Y	1.0	1	MSR127-2	McBride
MSBB195-01	1.0	1	MSR127-2	Manistee
MSBB196-01	1.0	1	MSR127-2	MSM246-B
MSBB207-01	1.0	1	MSR169-8Y	Lamoka
MSBB208-1	1.0	1	MSR169-8Y	OP
MSBB209-01	1.0	1	MSR169-8Y	MSR127-2
MSBB213-1	1.0	1	MSS576-5	Lamoka
MSBB222-01	1.0	1	Snowden	MSQ086-3
MSBB233-1	1.0	1	NYH15-5	Lamoka
MSBB240-1P	1.0	1	A02267-5PY	MSS927-1
MSBB250-1PP	1.0	1	Guinch Negra	MSL211-3
MSBB251-1	1.0	1	Guinch Negra	MSN105-1
MSBB286-1	1.0	1	MSR216-AP	W6002-1R
MSBB305-02PY	1.0	1	Spartan Splash	W6002-1R
MSBB308-02P	1.0	1	W6002-1R	MSV266-3P
MSBB343-01	1.0	1	MSQ341-BY	MSL211-3
MSBB351-1	1.0	1	MSS483-1	MSQ440-2
MSBB364-1	1.0	1	MSW125-3	MSQ440-2
MSBB371-1	1.0	1	MSW151-9	Spartan Splash
MSBB602-05	1.0	1	MSP239-1	MSW242-1
MSBB610-02	1.0	1	NY148	MST096-2Y
MSBB610-25	1.0	1	NY148	MST096-2Y
MSBB613-04	1.0	1	Saginaw Chipper	McBride
MSBB618-08	1.0	1	Saginaw Chipper	Manistee
MSBB618-09	1.0	1	Saginaw Chipper	Manistee
MSBB618-10	1.0	1	Saginaw Chipper	Manistee
MSBB620-10	1.0	1	Saginaw Chipper	Lamoka
MSBB620-19	1.0	1	Saginaw Chipper	Lamoka
MSBB623-05	1.0	1	Saginaw Chipper	MSW140-3
MSBB623-06	1.0	1	Saginaw Chipper	MSW140-3
MSBB625-01	1.0	1	MSW242-1	MSS297-3
MSBB625-02	1.0	1	MSW242-1	MSS297-3
MSBB626-02	1.0	1	Saginaw Chipper	Kalkaska
MSBB630-02	1.0	1	NYH15-5	Kalkaska
MSBB633-08	1.0	1	NYH15-5	MSR128-4Y
MSBB633-17	1.0	1	NYH15-5	MSR128-4Y
MSBB634-08	1.0	1	NYH15-5	MSR169-8Y
MSBB637-06	1.0	1	NYH15-5	MSQ089-1
MSBB905-01	1.0	1	84SD22	Che523-3
MSBB906-04	1.0	1	XD3	Che523-3
MSBB907-01	1.0	1	A151-16	Che523-3

Table 9

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2016 SCAB DISEASE EARLY GENERATION TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER, MI

LINE	2016 RATING	2016 N	FEMALE	MALE
<i>Sorted by ascending 2016 Rating;</i>				
MSBB909-04	1.0	1	HS66	Chc523-3
MSBB913-04	1.0	1	MSM269-1Y	Chc523-3
MSBB917-01	1.0	1	MSM267-B	Chc524-8
MSBB917-03	1.0	1	MSM267-B	Chc524-8
MSBB921-02	1.0	1	S703-5	Chc524-8
MSBB921-04	1.0	1	S703-5	Chc524-8
MSBB921-08	1.0	1	S703-5	Chc524-8
MSBB932-03	1.0	1	XD3	S703-5
MSBB934-04	1.0	1	Scab4-48	XD3
MSBB935-03	1.0	1	MS	XD3
MSBB936-01	1.0	1	MSM269-1Y	XD3
MSBB936-02	1.0	1	MSM269-1Y	XD3
MSBB942-12	1.0	1	2XLB-60	DMMS-89
MSBB947-01	1.0	1	DMMS-89	MS
MSBB948-01	1.0	1	DMMS-89	S703-5
MSBB953-04	1.0	1	MCR205	XD3
MSBB953-10	1.0	1	MCR205	XD3
MSBB963-08	1.0	1	-	-
MSBB007-04	1.5	1	Atlantic	MSP239-1
MSBB012-01	1.5	1	Beacon Chipper	MSR169-8Y
MSBB012-02	1.5	1	Beacon Chipper	MSR169-8Y
MSBB014-1	1.5	1	Beacon Chipper	MSP270-1 (?)
MSBB024-01	1.5	1	J138K6A22	MSS297-3
MSBB036-02	1.5	1	MSL007-B	MSR127-2
MSBB038-03	1.5	1	Manistee	MSP239-1
MSBB039-04	1.5	1	Manistee	MSP516-A
MSBB042-01	1.5	1	Lamoka	MSQ086-3
MSBB045-01	1.5	1	Lamoka	MSR127-2
MSBB051-02	1.5	1	Missaukee	MSR127-2
MSBB058-01	1.5	1	NY148	MSR127-2
MSBB058-03	1.5	1	NY148	MSR127-2
MSBB058-04	1.5	1	NY148	MSR127-2
MSBB071-01	1.5	1	MSQ279-1	MSR127-2
MSBB073-04	1.5	1	Saginaw Chipper	MSR127-2
MSBB074-1	1.5	1	MSR127-2	Pike
MSBB078-01	1.5	1	MSS576-05SPL	MSR127-2
MSBB078-02	1.5	1	MSS576-05SPL	MSR127-2
MSBB079-03	1.5	1	MSS927-1	MSR127-2
MSBB080-1	1.5	1	MSS934-4	MSR127-2
MSBB087-01	1.5	1	MST412-3	MSR127-2
MSBB087-02	1.5	1	MST412-3	MSR127-2
MSBB087-03	1.5	1	MST412-3	MSR127-2
MSBB094-1	1.5	1	Lamoka	McBride
MSBB114-01	1.5	1	Dakota Diamond	McBride
MSBB116-02	1.5	1	Dakota Diamond	Manistee
MSBB118-01	1.5	1	Dakota Diamond	MSS297-3

Table 9

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2016 SCAB DISEASE EARLY GENERATION TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER, MI

LINE	2016 RATING	2016 N	FEMALE	MALE
<i>Sorted by ascending 2016 Rating;</i>				
MSBB120-01	1.5	1	McBride	Kalkaska
MSBB120-03	1.5	1	McBride	Kalkaska
MSBB120-04	1.5	1	McBride	Kalkaska
MSBB131-02	1.5	1	MSK409-1	MSR127-2
MSBB152-01	1.5	1	MSM246-B	McBride
MSBB156-02	1.5	1	Missaukee	MSJ042-3
MSBB165-01	1.5	1	MSN190-2	McBride
MSBB165-02	1.5	1	MSN190-2	McBride
MSBB166-1	1.5	1	MSN190-2	MSR169-8Y
MSBB168-02	1.5	1	NY140	Manistee
MSBB176-02	1.5	1	McBride	OP
MSBB177-01	1.5	1	MSP270-1	OP
MSBB183-1	1.5	1	Pike	MSR127-2
MSBB190-01	1.5	1	MSQ131-A	MSR127-2
MSBB209-02	1.5	1	MSR169-8Y	MSR127-2
MSBB210-01	1.5	1	MSS165-2Y	Lamoka
MSBB210-02	1.5	1	MSS165-2Y	Lamoka
MSBB212-01	1.5	1	MSS297-3	MSR127-2
MSBB222-04	1.5	1	Snowden	MSQ086-3
MSBB238-01RY	1.5	1	A02267-5PY	Purple Heart
MSBB270-1SPL	1.5	1	MSQ341-BY	Spartan Splash
MSBB276-02P	1.5	1	MSR214-02P	MSL211-3
MSBB281-1PY	1.5	1	MSR214-02P	Spartan Splash
MSBB306-01R	1.5	1	W6002-1R	MSL211-3
MSBB306-02R	1.5	1	W6002-1R	MSL211-3
MSBB308-01R	1.5	1	W6002-1R	MSV266-3P
MSBB313-1	1.5	1	GoldRush	Silverton Russet
MSBB322-1	1.5	1	Kenya Akiba	McBride
MSBB349-01	1.5	1	MSQ279-1	MSQ440-2
MSBB349-02	1.5	1	MSQ279-1	MSQ440-2
MSBB365-1	1.5	1	MSW125-3	MSS934-4
MSBB368-02	1.5	1	MSW151-9	MSQ086-3
MSBB604-04	1.5	1	NY148	MSQ089-1
MSBB604-06	1.5	1	NY148	MSQ089-1
MSBB609-11	1.5	1	NY148	MSQ086-3
MSBB610-07	1.5	1	NY148	MST096-2Y
MSBB610-12	1.5	1	NY148	MST096-2Y
MSBB610-13	1.5	1	NY148	MST096-2Y
MSBB610-15	1.5	1	NY148	MST096-2Y
MSBB610-24	1.5	1	NY148	MST096-2Y
MSBB611-11	1.5	1	NY148	MSR128-4Y
MSBB611-12	1.5	1	NY148	MSR128-4Y
MSBB611-14	1.5	1	NY148	MSR128-4Y
MSBB613-07	1.5	1	Saginaw Chipper	McBride
MSBB617-02	1.5	1	Saginaw Chipper	MSV383-B
MSBB618-02	1.5	1	Saginaw Chipper	Manistee

Table 9

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2016 SCAB DISEASE EARLY GENERATION TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER, MI

LINE	2016 RATING	2016 N	FEMALE	MALE
<i>Sorted by ascending 2016 Rating;</i>				
MSBB620-01	1.5	1	Saginaw Chipper	Lamoka
MSBB623-12	1.5	1	Saginaw Chipper	MSW140-3
MSBB626-06	1.5	1	Saginaw Chipper	Kalkaska
MSBB626-11	1.5	1	Saginaw Chipper	Kalkaska
MSBB635-01	1.5	1	NYH15-5	MSS297-3
MSBB637-17	1.5	1	NYH15-5	MSQ089-1
MSBB906-06	1.5	1	XD3	Chc523-3
MSBB907-02	1.5	1	A151-16	Chc523-3
MSBB908-02	1.5	1	L308-A	Chc523-3
MSBB915-02	1.5	1	Chc523-3	DMMS-89
MSBB918-08	1.5	1	MSM269-1Y	Chc524-8
MSBB920-02	1.5	1	MS	Chc524-8
MSBB922-01	1.5	1	US-W1712	Chc524-8
MSBB930-01	1.5	1	XD3	BER83
MSBB934-02	1.5	1	Scab4-48	XD3
MSBB934-05	1.5	1	Scab4-48	XD3
MSBB935-01	1.5	1	MS	XD3
MSBB935-04	1.5	1	MS	XD3
MSBB935-07	1.5	1	MS	XD3
MSBB935-09	1.5	1	MS	XD3
MSBB936-06	1.5	1	MSM269-1Y	XD3
MSBB941-18	1.5	1	A133-57	DMMS-89
MSBB943-03	1.5	1	XD3	DMMS-89
MSBB943-05	1.5	1	XD3	DMMS-89
MSBB945-04	1.5	1	DMMS-89	84SD22
MSBB947-04	1.5	1	DMMS-89	MS
MSBB948-05	1.5	1	DMMS-89	S703-5
MSBB949-03	1.5	1	DMMS-89	BER83
MSBB963-07	1.5	1	-	-
MSBB963-09	1.5	1	-	-
MSBB004-02	2.0	1	AF4157-6	MSR169-8Y
MSBB007-01	2.0	1	Atlantic	MSP239-1
MSBB007-02	2.0	1	Atlantic	MSP239-1
MSBB007-03	2.0	1	Atlantic	MSP239-1
MSBB008-01	2.0	1	Atlantic	MSR127-2
MSBB008-02	2.0	1	Atlantic	MSR127-2
MSBB016-01	2.0	1	Dakota Diamond	Lamoka
MSBB017-1	2.0	1	Dakota Diamond	MSR127-2
MSBB019-1	2.0	1	MSJ042-3	NY148
MSBB020-1	2.0	1	MSJ042-3	MSR127-2
MSBB028-01	2.0	1	MSK409-1	MSM246-B
MSBB028-02Y	2.0	1	MSK409-1	MSM246-B
MSBB032-01	2.0	1	Kalkaska	McBride
MSBB037-1	2.0	1	Manistee	McBride
MSBB041-01	2.0	1	Lamoka	MSM246-B
MSBB041-02	2.0	1	Lamoka	MSM246-B

Table 9

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2016 SCAB DISEASE EARLY GENERATION TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER, MI

LINE	2016 RATING	2016 N	FEMALE	MALE
<i>Sorted by ascending 2016 Rating;</i>				
MSBB047-01	2.0	1	Lamoka	MST096-2Y
MSBB055-01	2.0	1	NY140	MSR127-2
MSBB060-01	2.0	1	NY148	MSS297-3
MSBB061-01	2.0	1	NYH15-5	MSR127-2
MSBB064-1	2.0	1	R127-2	OP
MSBB067-02	2.0	1	MSQ035-3	MSR127-2
MSBB069-1	2.0	1	MSQ086-3	Lamoka
MSBB072-01	2.0	1	Saginaw Chipper	OP
MSBB072-02	2.0	1	Saginaw Chipper	OP
MSBB072-03	2.0	1	Saginaw Chipper	OP
MSBB073-02	2.0	1	Saginaw Chipper	MSR127-2
MSBB116-01	2.0	1	Dakota Diamond	Manistee
MSBB121-1	2.0	1	McBride	MSR127-2
MSBB131-01	2.0	1	MSK409-1	MSR127-2
MSBB141-1	2.0	1	MSL007-B	MSS165-2Y
MSBB144-03	2.0	1	Manistee	MSR127-2
MSBB147-1	2.0	1	Manistee	MSS927-1
MSBB153-1	2.0	1	MSM246-B	OP
MSBB156-01	2.0	1	Missaukee	MSJ042-3
MSBB168-01	2.0	1	NY140	Manistee
MSBB172-1	2.0	1	Pike	OP
MSBB188-02	2.0	1	MSQ089-1	MSS165-2Y
MSBB190-02	2.0	1	MSQ131-A	MSR127-2
MSBB194-1	2.0	1	MSR127-2	Kalkaska
MSBB196-02	2.0	1	MSR127-2	MSM246-B
MSBB211-01	2.0	1	MSS297-3	Lamoka
MSBB217-1	2.0	1	MSS934-4	MSM246-B
MSBB220-1Y	2.0	1	Snowden	McBride
MSBB221-01	2.0	1	Snowden	Kalkaska
MSBB221-02	2.0	1	Snowden	Kalkaska
MSBB222-2	2.0	1	Snowden	MSQ086-3
MSBB225-01	2.0	1	Snowden	Kalkaska
MSBB230-1	2.0	1	NY148	MSQ089-1
MSBB262-1YSPL	2.0	1	MSN105-1	MSR241-4RY
MSBB263-1PP	2.0	1	Purple Heart	MSQ440-2
MSBB266-01RP	2.0	1	Purple Heart	MSR217-1R
MSBB268-1	2.0	1	Purple Heart	Spartan Splash
MSBB271-2YSPL	2.0	1	MSR186-3P	MSL211-3
MSBB272-1P	2.0	1	MSR186-3P	MSQ086-3
MSBB276-03P	2.0	1	MSR214-02P	MSL211-3
MSBB277-1PP	2.0	1	MSR214-02P	Magic Molly
MSBB284-1P	2.0	1	MSR216-AP	MSN105-1
MSBB294-01	2.0	1	MSR241-4RY	Spartan Splash
MSBB305-01	2.0	1	Spartan Splash	W6002-1R
MSBB323-1	2.0	1	MSQ086-3	Kenya Akiba
MSBB343-02	2.0	1	MSQ341-BY	MSL211-3

Table 9

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS

2016 SCAB DISEASE EARLY GENERATION TRIAL SUMMARY
SCAB NURSERY, MONTCALM RESEARCH CENTER, MI

LINE	2016 RATING	2016 N	FEMALE	MALE
<i>Sorted by ascending 2016 Rating;</i>				
MSBB346-1	2.0	1	MSQ341-BY	MSQ440-2
MSBB348-1	2.0	1	MSQ440-2	MSN105-1
MSBB353-1	2.0	1	MSS487-2	MSQ440-2
MSBB354-1	2.0	1	MSS487-2	MSS934-4
MSBB372-01	2.0	1	MSW151-9	MSN105-1
MSBB375-1	2.0	1	MSW153-1	MSN105-1
MSBB605-1	2.0	1	NY148	MSV241-2
MSBB610-03	2.0	1	NY148	MST096-2Y
MSBB610-26	2.0	1	NY148	MST096-2Y
MSBB611-13	2.0	1	NY148	MSR128-4Y
MSBB612-04	2.0	1	Saginaw Chipper	Atlantic
MSBB614-12	2.0	1	Saginaw Chipper	MSR127-2
MSBB618-04	2.0	1	Saginaw Chipper	Manistee
MSBB620-08	2.0	1	Saginaw Chipper	Lamoka
MSBB621-03.1	2.0	1	MSW027-3	MSQ086-3
MSBB631-04	2.0	1	Saginaw Chipper	MSS297-3
MSBB635-02	2.0	1	NYH15-5	MSS297-3
MSBB719-1	2.0	1	MSL211-3	NY132
MSBB721-1	2.0	1	-	-
MSBB903-01	2.0	1	BER83	Che523-3
MSBB904-02	2.0	1	A133-57	Che523-3

Table 11

2016 MSU LATE BLIGHT VARIETY TRIAL
CLARKSVILLE RESEARCH CENTER, MI*Select lines out of 152 total entries (3 reps)*

LINE	Late Blight Resistance	Female	Male
MSAA120-01	LBR	MSM182-1	MSW126-1
MSAA176-03	LBR	MSU161-1	MSU016-2
MSAA252-07	LBR	NY148	MSQ089-1
MSQ086-3	LBR	Onaway	Missaukee
MSQ086-3	LBR	Onaway	Missaukee
MSQ131-A	LBR	Boulder	Missaukee
MSQ131-A	LBR	Boulder	Missaukee
MSR061-1	LBR	MegaChip	NY121
MSS164-6	LBR	MSM188-1	Missaukee
MSS576-5SPL	LBR	MSI005-20Y	MSL211-3
MST145-02	LBR	MSI152-A	MSL211-3
MST191-2Y	LBR	McBride	MSL766-1
MSW042-01	LBR	MSI152-A	MSL211-3
MSW154-04	LBR	1989-86061	MSL211-3
MSW324-1	LBR	MSQ070-1	Marcy
MSW353-3	LBR	MSR036-5	Marcy
MSW464-3	LBR	MSM246-B	MSR102-3
MSW485-02	LBR	MSQ070-1	MSR156-7
MSX001-9WP	LBR	ARS10091WP	MSL211-3
MSX293-1Y	LBR	MSM288-2Y	MSQ176-5
MSX495-02	LBR	MSQ131-A	Kalkaska
MSX517-3SPL	LBR	MSQ425-4YSPL	MSQ176-5
MSX540-4	LBR	Saginaw Chipper (MSR061-1)	NY139
MSX542-02	LBR	MSR102-3	MegaChip
MSY022-02	LBR	MSS176-1	T096-2Y
MSZ219-01	LBR	Saginaw Chipper (MSR061-1)	MSR127-2
MSZ219-13	LBR	Saginaw Chipper (MSR061-1)	MSR127-2
MSZ219-14	LBR	Saginaw Chipper (MSR061-1)	MSR127-2
MSZ436-02SPL	LBR	S576-05SPL	MSQ440-2
MSZ510-04	LBR	MSL211-3	MSQ440-2
MSZ513-02	LBR	MSL268-D	MSL211-3
MSZ551-01	LBR	MSM182-1	MSL268-D
MSZ616-01Y	LBR	Nicola	MSL211-3
MSZ620-01	LBR	Muziranzara	MSL211-3
MSAA100-01	LBMR	Snowden	Saginaw Chipper (MSR061-1)
MSAA131-02	LBMR	Q341-BY	MSQ176-5
MSAA373-03	LBMR	NY148	McBride
MSAA376-03	LBMR	NY148	MSQ086-3
MSU016-02	LBMR	Boulder	MSN105-1
MSU088-1	LBMR	MSK061-4	Missaukee
MSU379-1	LBMR	MSP238-1	Missaukee
MSV111-02	LBMR	MSJ316-A	MSN105-1
MSV427-2Y	LBMR	MSQ279-1	McBride
MSX526-01	LBMR	MSR036-5	NY139
MSY008-03	LBMR	MSP515-2	Manistee
MSZ433-3P	LBMR	MSS483-1	MSU200-5PP
MSZUNK-07PP	LBMR	-	-
Soraya	LBMR	-	-
Wega	LBMR	-	-

Ratings indicate resistance based on foliar late blight disease reaction.

Late blight resistance (LBR) or late blight moderate resistance (LBMR) based on inoculated foliar late blight trials.

LB Isolate: US-23

Table 12

2016 MSU LATE BLIGHT EARLY GENERATION TRIAL
CLARKSVILLE RESEARCH CENTER, MI

Select lines out of 228 total entries (1 rep)

LINE	Late Blight Resistance	Female	Male
M5AA168-01	LBR	MSU016-2	MSL211-3
M5AA196-01	LBR	MSW151-5	MSQ440-2
M5AA240-05	LBR	MSM246-B	MSQ086-3
M5AA252-07	LBR	NY148	MSQ089-1
M5AA376-03	LBR	NY148	MSQ086-3
M5AA556-3Y	LBR	MSV284-1	McBride
MSBB067-2	LBR	MSQ035-3	MSR127-2
MSBB073-03	LBR	Saginaw Chipper (MSR061-1)	MSR127-2
MSBB168-1	LBR	NY140	Manistee
MSBB188-2	LBR	MSQ089-1	MSS165-2Y
MSBB190-01	LBR	MSQ131-A	MSR127-2
MSBB229-1	LBR	Saginaw Chipper (MSR061-1)	MSS934-4
MSBB230-1	LBR	NY148	MSQ089-1
MSBB276-3P	LBR	MSR214-02P	MSL211-3
MSBB279-1R	LBR	MSR214-02P	MSR217-1R
MSBB284-1P	LBR	MSR216-AP	MSN105-1
MSBB286-1	LBR	MSR216-AP	W6002-1R
MSBB322-1	LBR	Kenya Akiba	McBride
MSBB323-1	LBR	MSQ086-3	Kenya Akiba
MSBB331-2	LBR	MSM182-1	Pike
MSBB346-1	LBR	MSQ341-BY	MSQ440-2
MSBB352-1	LBR	MSS487-2	MSN105-1
MSBB364-1	LBR	MSW125-3	MSQ440-2
MSBB372-1	LBR	MSW151-9	MSN105-1
MSBB602-05	LBR	MSP239-1	MSW242-1
MSBB604-01	LBR	NY148	MSQ089-1
MSBB604-02	LBR	NY148	MSQ089-1
MSBB604-03	LBR	NY148	MSQ089-1
MSBB604-04	LBR	NY148	MSQ089-1
MSBB604-05	LBR	NY148	MSQ089-1
MSBB604-06	LBR	NY148	MSQ089-1
MSBB609-11	LBR	NY148	MSQ086-3
MSBB609-12	LBR	NY148	MSQ086-3
MSBB613-04	LBR	Saginaw Chipper (MSR061-1)	McBride
MSBB614-12	LBR	Saginaw Chipper (MSR061-1)	MSR127-2
MSBB617-02	LBR	Saginaw Chipper (MSR061-1)	MSV383-B
MSBB617-08	LBR	Saginaw Chipper (MSR061-1)	MSV383-B
MSBB618-08	LBR	Saginaw Chipper (MSR061-1)	Manistee
MSBB618-09	LBR	Saginaw Chipper (MSR061-1)	Manistee
MSBB620-01	LBR	Saginaw Chipper (MSR061-1)	Lamoka
MSBB620-02	LBR	Saginaw Chipper (MSR061-1)	Lamoka
MSBB620-08	LBR	Saginaw Chipper (MSR061-1)	Lamoka
MSBB620-09	LBR	Saginaw Chipper (MSR061-1)	Lamoka
MSBB620-19	LBR	Saginaw Chipper (MSR061-1)	Lamoka
MSBB623-05	LBR	Saginaw Chipper (MSR061-1)	MSW140-3
MSBB623-06	LBR	Saginaw Chipper (MSR061-1)	MSW140-3
MSBB625-01	LBR	MSW242-1	MSS297-3
MSBB626-03	LBR	Saginaw Chipper (MSR061-1)	Kalkaska
MSBB631-01	LBR	Saginaw Chipper (MSR061-1)	MSS297-3
MSBB637-17	LBR	NYH15-5	MSQ089-1
MSBB930-02	LBR	XD3	BER83

**2016 MSU LATE BLIGHT EARLY GENERATION TRIAL
CLARKSVILLE RESEARCH CENTER, MI**

Select lines out of 228 total entries (1 rep)

LINE	Late Blight Resistance	Female	Male
MSBB930-06	LBR	XD3	BER83
MSBB941-29	LBR	MSA133-57	DMMS-89
MSBB946-03	LBR	DMMS-89	MCR205
MSBB949-02	LBR	DMMS-89	BER83
MSBB949-05	LBR	DMMS-89	BER83
MSBB953-01	LBR	MCR205	XD3
MSBB953-01	LBR	MCR205	XD3
MSBB953-03	LBR	MCR205	XD3
MSBB953-04	LBR	MCR205	XD3
MSBB953-11	LBR	MCR205	XD3
MSZ424-01	LBR	NY121	MSR217-1R
MSZ547-03	LBR	MSL505-3	MSL211-3
MSZ610-03	LBR	Chaposa	MSQ176-5
MSZ615-02	LBR	Sieglinde	MSL211-3
MSZ705-03	LBR	HS66	BER83
MSZ706-01	LBR	J138K6A22	MSV020-2
MSZ706-05	LBR	J138K6A22	MSV020-2
MSAA091-01	LBMR	MSS165-2Y	Lamoka
MSAA513-01	LBMR	MSV117-1	Lamoka
MSAA725-03	LBMR	BNC182-5	MSS165-2Y
MSAA745-01	LBMR	MSQ086-3	Kalkaska
MSBB073-04	LBMR	Saginaw Chipper (MSR061-1)	MSR127-2
MSBB073-05	LBMR	Saginaw Chipper (MSR061-1)	MSR127-2
MSBB277-1PP	LBMR	MSR214-02P	Magic Molly
MSBB333-1	LBMR	MSM182-1	MSQ176-5
MSBB614-10	LBMR	Saginaw Chipper (MSR061-1)	MSR127-2
MSBB628-04	LBMR	MSW242-5Y	MSS165-2Y
MSBB953-10	LBMR	MCR205	XD3
MSZ407-2Y	LBMR	Montanosa	Colonial Purple
MSZ552-2P	LBMR	MSM182-1	Colonial Purple
MSZ562-04	LBMR	Muruta	MSL211-3

Ratings indicate resistance based on foliar late blight disease reaction.

Late blight resistance (LBR) or late blight moderate resistance (LBMR) based on inoculated foliar late blight trials.

LB Isolate: US-23

Table 13

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS2016 BLACKSPOT BRUISE SUSCEPTIBILITY TEST
SIMULATED BRUISE SAMPLES*

ENTRY	SP GR	NUMBER OF SPOTS PER TUBER						PERCENT (%)	AVERAGE SPOTS/TUBER
		0	1	2	3	4	5+	BRUISE FREE	
ADAPTATION TRIAL, CHIP-PROCESSING LINES									
FL2137	1.076	25	0	0	0	0	0	100	0.0
QSMSU10-02	1.065	24	1	0	0	0	0	96	0.0
AF4648-2	1.074	23	1	0	0	0	0	96	0.0
MSU379-1	1.066	23	2	0	0	0	0	92	0.1
MSW353-03	1.061	23	2	0	0	0	0	92	0.1
W5955-1	1.071	22	2	0	0	0	0	92	0.1
MSV380-1	1.070	21	3	1	0	0	0	84	0.2
MSZ242-13	1.077	21	3	1	0	0	0	84	0.2
Pike	1.075	22	2	0	1	0	0	88	0.2
COTX09022-3RUS	1.069	21	1	2	0	0	0	88	0.2
NY157	1.070	15	4	0	0	0	0	79	0.2
MSZ219-01	1.074	19	6	0	0	0	0	76	0.2
MSZ219-14	1.069	21	2	2	0	0	0	84	0.2
NY153	1.077	21	3	0	1	0	0	84	0.2
MSV030-4	1.075	19	5	1	0	0	0	76	0.3
MSW485-02	1.078	15	2	2	0	0	0	79	0.3
MSV358-3	1.072	19	4	2	0	0	0	76	0.3
MSV383-B	1.078	20	4	0	0	1	0	80	0.3
ND7519-1	1.078	19	5	0	1	0	0	76	0.3
MSV498-1	1.068	20	3	0	2	0	0	80	0.4
MSZ222-19	1.078	18	5	2	0	0	0	72	0.4
Lamoka	1.072	18	5	1	1	0	0	72	0.4
WND8625-2RUS	1.068	16	7	2	0	0	0	64	0.4
Manistee	1.071	16	5	3	0	0	0	67	0.5
MSV301-2	1.071	18	4	1	1	1	0	72	0.5
MSZ242-09	1.079	16	6	2	1	0	0	64	0.5
W6822-3	1.078	15	6	3	1	0	0	60	0.6
MSR127-2	1.072	14	5	5	1	0	0	56	0.7
Atlantic	1.077	11	10	2	1	0	1	44	0.9
MSX540-4	1.080	12	7	3	3	0	0	48	0.9
Snowden	1.075	9	10	5	1	0	0	36	0.9
MSW474-01	1.072	11	5	3	4	2	0	44	1.2
MSW509-5	1.074	13	6	1	0	2	3	52	1.2
MSV313-2	1.063	6	4	10	3	1	1	24	1.7
MSW044-01	1.076	1	4	2	3	4	10	4	3.5
MSV507-040	1.079	0	0	0	0	0	25	0	5.0
ADAPTATION TRIAL, TABLESTOCK LINES									
Lehigh (NY126)	1.066	25	0	0	0	0	0	100	0.0
MSV111-02	1.063	24	0	0	0	0	0	100	0.0
MSW343-2R	1.049	19	0	0	0	0	0	100	0.0
MSX001-4WP (Purple Soul)	1.055	24	1	0	0	0	0	96	0.0
MSV179-1	1.056	18	1	0	0	0	0	95	0.1
QSMSU10-15	1.074	18	1	0	0	0	0	95	0.1
MSS576-5SPL	1.061	23	2	0	0	0	0	92	0.1
MSW502-3	1.070	23	2	0	0	0	0	92	0.1
Saginaw Chipper	1.067	23	2	0	0	0	0	92	0.1
Satina	1.055	17	2	0	0	0	0	89	0.1
MST252-1Y	1.060	23	1	1	0	0	0	92	0.1
MSX324-1P	1.065	22	3	0	0	0	0	88	0.1

Table 13

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS2016 BLACKSPOT BRUISE SUSCEPTIBILITY TEST
SIMULATED BRUISE SAMPLES*

ENTRY	SP GR	NUMBER OF SPOTS PER TUBER						PERCENT (%)	
		0	1	2	3	4	5+	BRUISE FREE	AVERAGE SPOTS/TUBER
MST186-1Y	1.062	11	2	0	0	0	0	85	0.2
Yukon Gold	1.069	20	4	1	0	0	0	80	0.2
Onaway	1.055	19	4	1	0	0	0	79	0.3
MSV093-1Y	1.062	19	5	1	0	0	0	76	0.3
MST191-2Y	1.076	10	4	5	0	0	0	53	0.7
Reba	1.062	12	3	1	2	0	1	63	0.8
MSV505-02	1.069	1	1	3	0	1	1	14	2.3
PRELIMINARY TRIAL, CHIP-PROCESSING LINES									
MSW464-3	1.065	25	0	0	0	0	0	100	0.0
MSZ062-10	1.071	21	4	0	0	0	0	84	0.2
MSX420-4Y	1.071	22	2	0	1	0	0	88	0.2
MSV507-198	1.072	20	2	2	0	0	0	83	0.3
MSX245-2Y	1.074	20	2	2	0	0	0	83	0.3
MSX177-7Y	1.069	17	6	2	0	0	0	68	0.4
AF5040-8	1.071	17	5	2	1	0	0	68	0.5
MSX050-01	1.060	17	4	4	0	0	0	68	0.5
MSX105-01	1.080	17	5	1	2	0	0	68	0.5
MSX255-01	1.076	13	9	3	0	0	0	52	0.6
MSX172-07	1.068	11	6	2	1	0	0	55	0.7
MSX225-02	1.067	14	6	4	1	0	0	56	0.7
MSX417-01	1.074	15	5	3	2	0	0	60	0.7
W8822-1	1.077	14	7	2	2	0	0	56	0.7
Atlantic	1.080	14	4	6	1	0	0	56	0.8
MSZ219-13	1.061	13	6	1	1	2	0	57	0.8
MSW163-03	1.068	12	8	3	1	0	1	48	0.9
MSW159-03	1.078	10	7	5	3	0	0	40	1.0
MSX129-01	1.071	13	4	6	0	0	2	52	1.0
Snowden	1.079	11	8	3	1	0	2	44	1.1
CO07070-10W	1.083	10	7	3	3	1	1	40	1.2
MSW399-02	1.073	8	7	6	3	0	1	32	1.3
MSX345-6Y	1.072	7	7	3	5	2	1	28	1.6
MSW537-06	1.086	3	9	2	6	4	1	12	2.1
MSY156-02	1.074	2	2	10	8	3	0	8	2.3
MSV507-073	1.075	3	4	9	1	3	5	12	2.5
MSX111-03	1.080	2	2	3	6	0	12	8	3.4
PRELIMINARY TRIAL, TABLESTOCK LINES									
MSQ131-A	1.057	25	0	0	0	0	0	100	0.0
MSV434-01Y	1.057	25	0	0	0	0	0	100	0.0
MSW455-03	1.057	25	0	0	0	0	0	100	0.0
Soraya	1.047	25	0	0	0	0	0	100	0.0
MSQ086-3	1.069	24	1	0	0	0	0	96	0.0
MSV502-05	1.066	24	1	0	0	0	0	96	0.0
MSW119-02	1.066	24	1	0	0	0	0	96	0.0
MSW423-13	1.065	24	1	0	0	0	0	96	0.0
MSX501-05	1.074	24	1	0	0	0	0	96	0.0
Wega	1.048	24	1	0	0	0	0	96	0.0
MSV507-052	1.069	22	1	0	0	0	0	96	0.0
Alegria	1.064	23	2	0	0	0	0	92	0.1
MST145-02	1.058	24	0	1	0	0	0	96	0.1
MSU088-01	1.076	23	2	0	0	0	0	92	0.1

Table 13

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS2016 BLACKSPOT BRUISE SUSCEPTIBILITY TEST
SIMULATED BRUISE SAMPLES*

ENTRY	SP GR	NUMBER OF SPOTS PER TUBER						PERCENT (%)	
		0	1	2	3	4	5+	BRUISE FREE	AVERAGE SPOTS/TUBER
MSV081-04	1.057	23	2	0	0	0	0	92	0.1
MSV434-04	1.060	23	2	0	0	0	0	92	0.1
MSX137-06	1.056	23	2	0	0	0	0	92	0.1
MST437-01	1.072	22	3	0	0	0	0	88	0.1
MSW042-01	1.062	22	3	0	0	0	0	88	0.1
MSX293-1Y	1.070	22	3	0	0	0	0	88	0.1
MSY022-02	1.069	21	3	0	0	0	0	88	0.1
MSW248-02	1.069	11	2	0	0	0	0	85	0.2
MSV394-3	1.070	22	1	2	0	0	0	88	0.2
MSW154-04	1.058	21	3	1	0	0	0	84	0.2
MSV177-04	1.067	20	4	1	0	0	0	80	0.2
MSU161-01	1.057	22	1	0	2	0	0	88	0.3
MSY111-01	1.061	19	5	1	0	0	0	76	0.3
Reba	1.062	18	7	0	0	0	0	72	0.3
Superior	1.064	20	4	0	1	0	0	80	0.3
MSU016-02	1.074	19	4	0	1	0	0	79	0.3
MSS164-06	1.072	19	5	0	1	0	0	76	0.3
MSY193-01	1.070	21	1	2	1	0	0	84	0.3
MSU403-03	1.071	17	7	1	0	0	0	68	0.4
MSX497-06	1.060	19	3	3	0	0	0	76	0.4
MSW259-05	1.066	19	3	2	1	0	0	76	0.4
MSV393-01	1.069	17	5	3	0	0	0	68	0.4
Smart	1.059	15	6	3	1	0	0	60	0.6
MSV427-2Y	1.063	16	4	4	0	0	1	64	0.7
MSV242-7	1.088	13	8	2	2	0	0	52	0.7
MSX503-05	1.063	15	6	0	4	0	0	60	0.7
MSY089-02	1.072	14	3	2	5	1	0	56	1.0
MSV507-001	1.080	10	5	6	3	0	0	42	1.1
MSU358-02	1.080	12	4	3	5	1	0	48	1.2
MSX120-5Y	1.066	12	2	6	1	3	1	48	1.4
MSW237-4Y	1.068	9	5	5	2	3	1	36	1.5
MSV331-3	1.068	8	5	3	4	5	0	32	1.7
MSV205-04	1.073	4	2	4	2	3	10	16	3.1
MSV507-012	1.074	7	1	1	2	1	13	28	3.1
MSV507-003	1.084	0	0	0	0	0	25	0	5.0
PRELIMINARY TRIAL, PIGMENTED LINES									
Dark Red Chieftain	1.053	25	0	0	0	0	0	100	0.0
Dark Red Norland	1.053	25	0	0	0	0	0	100	0.0
MST075-1R	1.060	25	0	0	0	0	0	100	0.0
MSW239-03SPL	1.043	25	0	0	0	0	0	100	0.0
MSW273-3R	1.064	25	0	0	0	0	0	100	0.0
MSX569-1R	1.049	25	0	0	0	0	0	100	0.0
MSZ109-08PP	1.055	25	0	0	0	0	0	100	0.0
MSZ109-10PP	1.056	25	0	0	0	0	0	100	0.0
MSZ424-01R	1.071	25	0	0	0	0	0	100	0.0
MSZ436-02Spl	1.050	25	0	0	0	0	0	100	0.0
NorDonna	1.055	25	0	0	0	0	0	100	0.0
QSNDSU07-04R	1.057	25	0	0	0	0	0	100	0.0
QSNDSU07-12R	1.058	25	0	0	0	0	0	100	0.0
Red Norland	1.050	25	0	0	0	0	0	100	0.0
AF4831-2R	1.058	24	1	0	0	0	0	96	0.0

Table 13

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS2016 BLACKSPOT BRUISE SUSCEPTIBILITY TEST
SIMULATED BRUISE SAMPLES*

ENTRY	SP GR	NUMBER OF SPOTS PER TUBER						PERCENT (%)	
		0	1	2	3	4	5+	BRUISE FREE	AVERAGE SPOTS/TUBER
AmaRosa	1.057	24	1	0	0	0	0	96	0.0
Dakota Ruby	1.066	24	1	0	0	0	0	96	0.0
Modoc	1.055	24	1	0	0	0	0	96	0.0
MSU202-1P	1.058	24	1	0	0	0	0	96	0.0
MSXUNK-3P	1.065	24	1	0	0	0	0	96	0.0
MSZ433-3P	1.070	24	1	0	0	0	0	96	0.0
MSZ109-05RR	1.058	18	1	0	0	0	0	95	0.1
MSR226-ARR	1.063	23	2	0	0	0	0	92	0.1
MSX514-1P	1.054	23	2	0	0	0	0	92	0.1
MSY517-8YSPL	1.062	23	2	0	0	0	0	92	0.1
MSZ107-01PP	1.071	23	2	0	0	0	0	92	0.1
MSZ443-1PP	1.055	23	2	0	0	0	0	92	0.1
MSZ602-02PP	1.060	23	2	0	0	0	0	92	0.1
MSZUNK-07PP	1.046	23	2	0	0	0	0	92	0.1
ND7132-1R	1.052	23	2	0	0	0	0	92	0.1
MSX001-9WP	1.064	23	1	1	0	0	0	92	0.1
MSZ107-06PP	1.067	22	3	0	0	0	0	88	0.1
ND6002-1R	1.060	22	3	0	0	0	0	88	0.1
Red LaSoda (NY Strain)	1.057	22	3	0	0	0	0	88	0.1
AF4985-1R	1.056	21	4	0	0	0	0	84	0.2
MSU616-3PP	1.067	21	3	1	0	0	0	84	0.2
MSZ427-03R	1.051	22	2	0	1	0	0	88	0.2
CO098012-5R	1.057	20	4	1	0	0	0	80	0.2
MSX035-1WP	1.043	19	5	1	0	0	0	76	0.3
MSZ427-01R	1.069	20	3	2	0	0	0	80	0.3
Red Lasoda (10-3)	1.056	22	1	1	0	1	0	88	0.3
MSN230-1RY	1.081	18	6	1	0	0	0	72	0.3
MSW148-1P	1.069	19	5	0	1	0	0	76	0.3
MSX517-3SPL	1.064	18	6	0	1	0	0	72	0.4
Merlot	1.063	17	6	2	0	0	0	68	0.4
MSQ558-2RR	1.063	17	5	3	0	0	0	68	0.4
MSZ416-08RY	1.057	18	4	1	2	0	0	72	0.5
CO00291-5R	1.055	8	4	0	1	0	0	62	0.5
MSX426-1RR	1.074	13	8	1	3	0	0	52	0.8
RUSSET TRIAL									
CW08221-5Rus	1.051	25	0	0	0	0	0	100	0.0
Reveille (ATX91137-1Rus)	1.058	24	1	0	0	0	0	96	0.0
Silverton Russet	1.059	24	1	0	0	0	0	96	0.0
COTX09052-2Rus	1.061	23	2	0	0	0	0	92	0.1
AF5091-8Rus	1.055	22	1	1	0	0	0	92	0.1
AF4872-2Rus	1.069	22	2	1	0	0	0	88	0.2
Russet Norkotah	1.060	22	2	1	0	0	0	88	0.2
W9742-3Rus	1.083	22	2	1	0	0	0	88	0.2
AC96052-1Rus	1.063	22	2	0	1	0	0	88	0.2
AF4124-7Rus	1.070	21	3	1	0	0	0	84	0.2
A096305-3Rus	1.072	20	4	1	0	0	0	80	0.2
AF3362-1Rus	1.063	19	5	1	0	0	0	76	0.3
Mountain Gem (A03158-2TE)	1.070	17	7	1	0	0	0	68	0.4
TX08352-5Rus	1.059	12	7	0	0	0	0	63	0.4
MSW496-1RUS	1.061	14	4	0	0	1	0	74	0.4
W9433-1Rus	1.068	16	3	5	0	1	0	64	0.7

Table 13

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS2016 BLACKSPOT BRUISE SUSCEPTIBILITY TEST
SIMULATED BRUISE SAMPLES*

ENTRY	SP GR	NUMBER OF SPOTS PER TUBER						PERCENT (%)	
		0	1	2	3	4	5+	BRUISE FREE	AVERAGE SPOTS/TUBER
ND050032-4Rus	1.073	13	9	0	1	1	1	52	0.8
Dakota Russet (ND8229-3)	1.071	6	7	5	4	3	0	24	1.6
USPB/SFA TRIAL CHECK SAMPLES (Not bruised)									
W6822-3	1.082	24	1	0	0	0	0	96	0.0
AF4648-2	1.075	23	2	0	0	0	0	92	0.1
NDA081453CAB-2C	1.078	22	3	0	0	0	0	88	0.1
NDTX081648CB-13W	1.084	21	4	0	0	0	0	84	0.2
NY157	1.079	17	7	0	0	0	0	71	0.3
MSR127-2	1.082	17	7	1	0	0	0	68	0.4
NCO349-3	1.072	17	6	2	0	0	0	68	0.4
Lamoka	1.081	18	5	1	1	0	0	72	0.4
MSW485-2	1.086	13	11	1	0	0	0	52	0.5
Snowden	1.086	15	5	5	0	0	0	60	0.6
AF5040-8	1.080	14	6	5	0	0	0	56	0.6
W8822-1	1.084	11	10	4	0	0	0	44	0.7
B2727-2	1.079	12	7	3	3	0	0	48	0.9
TX09396-1W	1.080	9	10	5	1	0	0	36	0.9
CO07070-10W	1.088	8	9	5	2	0	0	33	1.0
NY152	1.076	3	13	6	2	1	0	12	1.4
USPB/SFA TRIAL BRUISE SAMPLES									
NDA081453CAB-2C	1.078	18	6	1	0	0	0	72	0.3
W6822-3	1.082	14	6	3	2	0	0	56	0.7
NDTX081648CB-13W	1.084	13	6	6	0	0	0	52	0.7
AF4648-2	1.075	13	7	3	2	0	0	52	0.8
Lamoka	1.081	11	8	3	2	1	0	44	1.0
MSW485-2	1.086	9	8	5	1	1	1	36	1.2
MSR127-2	1.082	2	14	6	0	1	1	8	1.5
NY157	1.079	7	5	7	0	1	3	30	1.7
AF5040-8	1.08	6	9	2	3	2	2	25	1.7
NCO349-3	1.072	4	8	6	3	2	2	16	1.9
B2727-2	1.079	4	6	7	5	2	1	16	1.9
W8822-1	1.084	6	6	5	3	1	4	24	2.0
CO07070-10W	1.088	6	3	6	5	0	5	24	2.2
TX09396-1W	1.08	4	4	5	7	3	2	16	2.3
Snowden	1.086	2	4	8	4	3	4	8	2.6
NY152	1.076	6	1	2	4	3	9	24	3.0
North Central Region Trial (MSU)									
ATND99331-2PintoY	1.057	25	0	0	0	0	0	100	0.0
CW08221-5rus	1.054	25	0	0	0	0	0	100	0.0
Red Norland	1.051	24	0	0	0	0	0	100	0.0
MSW316-3PY	1.065	24	1	0	0	0	0	96	0.0
MSX540-4	1.075	24	1	0	0	0	0	96	0.0
ND6002-1R	1.059	24	1	0	0	0	0	96	0.0
ND7818-1Y	1.060	24	1	0	0	0	0	96	0.0
ND7982-1R	1.062	24	1	0	0	0	0	96	0.0
Russet Norkotah (NCR seed)	1.060	24	1	0	0	0	0	96	0.0
MSZ219-14	1.071	23	1	0	0	0	0	96	0.0
MSV093-1Y	1.065	23	2	0	0	0	0	92	0.1
ND6961B-21PY	1.068	23	2	0	0	0	0	92	0.1

Table 13

MICHIGAN STATE UNIVERSITY
POTATO BREEDING and GENETICS**2016 BLACKSPOT BRUISE SUSCEPTIBILITY TEST
SIMULATED BRUISE SAMPLES***

ENTRY	SP GR	NUMBER OF SPOTS PER TUBER						PERCENT (%)	
		0	1	2	3	4	5+	BRUISE FREE	AVERAGE SPOTS/TUBER
ND7834-2P	1.060	23	2	0	0	0	0	92	0.1
Purple Soul	1.054	24	0	1	0	0	0	96	0.1
W10612-8rus	1.065	22	2	0	0	0	0	92	0.1
Yukon Gold	1.066	18	2	0	0	0	0	90	0.1
MN13072PLWR-01Rus	1.069	14	2	0	0	0	0	88	0.1
MN13089PLWR-01	1.069	21	3	0	0	0	0	88	0.1
W10074-3rus	1.067	21	4	0	0	0	0	84	0.2
W10209-2R	1.061	20	4	0	0	0	0	83	0.2
MN13063PLWR-01Rus	1.062	20	3	2	0	0	0	80	0.3
W10114-3R	1.054	19	5	1	0	0	0	76	0.3
MN13070PLWR-02Rus	1.064	19	4	2	0	0	0	76	0.3
MSX324-1P	1.068	20	2	3	0	0	0	80	0.3
W9523-1rus	1.058	20	3	1	1	0	0	80	0.3
CW08071-2rus	1.070	7	4	5	6	1	2	28	1.8

* 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 11/2 & 21/2016. The table is presented in ascending order of average number of spots per tuber.