

2017 TRI-STATE RUSSET POTATO VARIETY TRIAL REPORT



State Experiment Stations and
USDA-ARS Cooperating

Washington

Oregon

Idaho

2017 TRI-STATE POTATO VARIETY TRIAL REPORT

TABLE

- 1 Locations, Cooperators, and Cultural Information
- 2 Clone, Seed Source, Stand, Tuber and Vine Characteristics, Stems per Plant
- 3 Total Yield (CWT/A) - Early & Late Harvest
- 4 Yield of U.S. No. 1's (CWT/A & %) - Early & Late Harvest
- 5 Yield of U.S. No. 1's Over 10 oz. (CWT/A & %) - Early & Late Harvest
- 6 Yield of Tubers Under 4 oz. (CWT/A & %) - Early & Late Harvest
- 7 Specific Gravity - Early & Late Harvest
- 8 Average Tuber Size, and Tuber Shape
- 9 Tubers per Plant and Eye Depth
- 10 Tuber Discriptors
- 11 External Defects - Growth Cracks, 2nd Growth, Shatter Bruise, and Scab
- 12 Internal Defects - Hollow Heart/Brown Center, Internal Brown Spot, Vascular Discoloration, Blackspot Bruise
- 13 French Fry Color and Percent Sugar Ends
- 14 Disease Evaluations - Aberdeen, Hermiston, Corvallis, and Prosser
- 15 Solids, Dextrose, Sucrose, Protein, Vitamin C, and Glycoalkaloids - Aberdeen
- 16 Merit Scores
- 17 Summary of Entries' Performances
- 18 Early Trial Comments by State
- 19 Late Trial Comments by State
- 20 Washington State Postharvest Evaluations- Early and Late

Compiled by Chelsey Lowder

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TABLE 1: 2017 Tri-State Potato Variety Trial - LOCATIONS, COOPERATORS, AND CULTURAL INFORMATION

Locations	Cooperators	Trial	Irrigation	Fertilizer (lb/A)	Planting Date	Vine Kill Date	Harvest Date	Days to Vine Kill	Days to Harvest	Herbicides	Insecticides	Fungicides
Aberdeen Idaho (ID)	J. Stark	Early	Solid Set	225-120-83-30S- 5Zn-5Mn Seed spacing: in row 10.6" rows 36"	5-May	16-Aug	30-Aug	103	117	TriCor 4F	Admire	
	J. Whitworth R. Novy B. Schneider C. Lowder J. Hatch	Late			5-May	31-Aug	19-Sep	118	137	Matrix Eptam		
Ontario Oregon (HOR)	Clint Shock	Early	Solid Set	160N-53K Seed spacing: in row 9.0" rows 36"	13-Apr	16-Aug	23-Aug	125	132	Dual Magnum Prowl H2O Matrix		Bravo
Hermiston Oregon (HOR)	Sagar Sathuvalli	Late	Pivot	385N-90P-60K- 163S-25Mg-3B- 2.25Zn Seed spacing: in row 9.25" rows 34"	5-Apr	28-Aug	15-Sep	145	163	Vapam Dual magnum Matrix pre-emerge Outlook Prowl	Admire Coragen Agr-Mek Echo	Quadris Ridmil Omega Dithane
					We reduced the rate of P from the traditional 190 to only 90. K was reduced to 60 as per CPS recommendation.			We found some issues with our specific gravity balance and the gravities are taken from the stored samples after 2 months				
Klamath Falls Oregon (KOR)	B. Charlton	Late	Solid Set	180N-125P-250K- 265S Seed spacing: in row 9.25" rows 36"	22-May	7-Sep	26-Sep	108	127	Prowl Matrix Outlook	Alias Vydate	Vertisan Luna
Othello (EWA) Washington	M Pavek R. Knowles N. Fuller Z. Holden	Early	Linear	200N-100P- 150K20-20S-2B Seed spacing: in row 12" rows 32"	4-Apr	20-Jul	31-Jul	107	118	PreEmerge: Outlook Prowl H2O Metribuzin Post Emerge: Eptam	Platinum Onager	Luna Traquility Chloronil Bravo Omega
					Othello (LWA) Washington	Late	Pivot	365N-300P-250K- 2B-40S Seed spacing: in row 10" rows 32"	5-Apr	1-Sep	11-Sep	149

TABLE 2: 2017 Tri-State Potato Variety Trial - CLONE, PARENTS, FLOWER COLOR, ENTERED BY, SEED SOURCE, STAND, TUBER AND VINE CHARACTERISTICS, STEMS PER PLANT

No	Clone	Parents	Flower Color	Entered by	Use	Trial Year	Seed Source	Mean Stand %	Stems/Plant	Tuber				Vine			
										Means	Shape	Means	Skin	Means	Size	Means	Maturity
1	Ranger Russet	Butte A6595-3	Red-purple	Check	Dual	Check	OR	97	2.2	4.2	Long	3.2	Med Russet	2.1	Small	0.7	Early
2	Russet Burbank	Early Rose ?	White	Check	Dual	Check	OR	98	2.3	4.0	Obl-Lng	3.4	Med Russet	3.9	Med-large	2.0	Early
3	Russet Norkotah	ND9687-5 Rus ND9526-4 Rus	White	Check	Fresh	Check	OR	99	2.4	3.8	Obl-Lng	3.9	Med Russet	2.3	Small	1.3	Early
4	Shepody	Bake-King F58050	White	Check	Proc	Check	OR	99	1.9	3.3	Oblong	1.6	White	2.0	Small	3.5	Medium
5	A07088-6	A02104-2 Dakota Trailblazer	White	ID	Dual	2	OR	100	2.6	2.6	Oblong	2.6	Light Russet	3.5	Med-large	3.0	Med Early
6	A07098-4	Owyhee Russet A01025-4	White	ID	Dual	1	ID	98	2.4	3.6	Obl-Lng	2.0	White	3.0	Medium	2.0	Early
7	A071012-4BF	A85331-7 A01054- 4	White	ID	Dual	2	OR	98	2.4	3.3	Oblong	3.1	Med Russet	3.8	Med-large	3.2	Medium
8	A07705-4	A00Etb12-2 A02768-1	White	ID	Fresh	1	ID	98	2.6	3.4	Oblong	3.0	Light Russet	2.9	Medium	3.3	Medium
9	A07769-4	PA01N32-1 Premier Russet	Red-Purple	ID	Dual	1	ID	99	2.9	3.3	Oblong	2.7	Light Russet	3.2	Med-large	2.4	Early
10	A08422-2VRsto	A96953-13sto A02618-1adg	White	ID	Dual	2	OR	99	1.7	3.5	Oblong	3.0	Light Russet	2.6	Medium	2.0	Early
11	A08422-4VRsto	A96953-13sto A02618-1adg	White	ID	Dual	1	ID	98	1.9	2.8	Oblong	3.2	Med Russet	1.9	Small	3.1	Medium
12	A08510-1LB	PA00V6-4 Rio Grande Russet	White	ID	Dual	1	ID	97	3.2	2.8	Oblong	3.1	Med Russet	3.2	Med-large	2.5	Early
13	A10021-5TE	A03921-2 Mountain Gem Russet	White	ID	Dual	1	ID	99	3.1	4.3	Long	3.4	Med Russet	3.1	Med-large	2.5	Early
14	AOR06576-1	A00487-22LB A93575-4	White	OR	Fresh	2	OR	99	2.6	4.1	Long	3.0	Light Russet	3.4	Med-large	2.5	Early
15	AOR07821-1	WHA4052-1 Clearwater Russet	Lav-Purple	OR	Proc	2	OR	95	2.4	3.5	Oblong	3.6	Med Russet	3.3	Med-large	3.3	Medium
16	POR12NCK50-1	PA99N82-4 Western Russet	Lav-Purple	OR	Dual	1	OR	98	2.4	3.8	Obl-Lng	4.0	Med Russet	2.7	Medium	2.2	Early

Numerical values are means of all trial locations.

1.0-2.0=Round, 2.1-2.5=Round-Oblong, 2.6-3.5=Blocky, 3.6-4.0=Oblong, 4.1-5.0=Long

1.0-2.0=White, 2.1-3.0=Light Russet, 3.1-4.0=Medium Russet, 4.1-4.5=Medium Heavy Russet, 4.6-5.0 Heavy Russet

1.0-2.5=Small, 2.6-3.0=Medium, 3.1-4.0=Medium-Large, 4.1-4.5=Large, 4.6-5.0=Very Large

1.0-2.5=Early, 2.6-3.0=Medium-Early, 3.1-3.5=Medium, 3.6-4.0= Medium-Late, 4.1-4.5=Late, 4.6-5.0=Very Late

TABLE 3: 2017 Tri-State Potato Variety Trial - TOTAL YIELD (CWT/A) - EARLY AND LATE HARVEST

No.	Clone	Total Yield - Early Harvest (CWT/A)				Total Yield - Late Harvest (CWT/A)						
		ID	WA	Ont	Entry Mean	Rank	ID	WA	OR		Entry Mean	Rank
								Herm	KF			
1	Ranger Russet	-	439	417	428	7	-	721	680	656	686	5
2	Russet Burbank	318	501	503	441	6	476	747	443	605	567	11
3	Russet Norkotah	229	549	393	390	13	328	724	263	534	462	13
4	Shepody	191	503	-	347	15	-	-	-	-	-	-
5	A07088-6	302	494	478	425	8	-	-	-	-	-	-
6	A07098-4	380	595	492	489	1	506	845	695	643	672	6
7	A071012-4BF	365	478	413	419	10	512	851	768	649	695	4
8	A07705-4	382	502	448	444	4	506	1027	675	600	702	2
9	A07769-4	367	579	393	446	3	530	969	726	628	713	1
10	A08422-2VRsto	304	468	438	403	12	365	790	519	663	585	10
11	A08422-4VRsto	312	540	411	421	9	-	-	-	-	-	-
12	A08510-1LB	352	416	261	343	16	484	670	647	607	602	9
13	A10021-5TE	344	569	409	441	5	512	797	601	616	632	8
14	AOR06576-1	427	518	410	452	2	512	820	733	719	696	3
15	AOR07821-1	253	535	448	412	11	463	949	631	637	670	7
16	POR12NCK50-1	231	473	-	352	14	266	807	628	556	564	12
Location Means		317	510	422	416		455	824	616	624	634	
LSD (.05)					150						114	

TABLE 4: 2017. Tri-State Potato Variety Trial - YIELD OF U.S. #1'S (CWT/A & %) - EARLY AND LATE HARVEST

No.	Clone	U.S. No. 1's - Early Harvest (CWT/A)/%				U.S. No. 1's - Late Harvest (CWT/A)/%						
		ID	WA	Ont	Entry Mean	Rank	ID	WA	OR		Entry Mean	Rank
									Herm	KF		
1	Ranger Russet	-	393	271	332	12	-	636	509	474	540	7
		-	89	65	77	13	-	88	75	72	78	12
2	Russet Burbank	195	397	227	273	15	325	679	279	401	421	12
		60	79	45	62	16	68	91	63	66	72	13
3	Russet Norkotah	178	536	300	338	11	254	708	160	428	387	13
		77	98	76	84	8	77	98	61	80	79	10
4	Shepody	108	485	-	296	14	-	-	-	-	-	-
		57	96	-	76	14	-	-	-	-	-	-
5	A07088-6	205	468	400	358	6	-	-	-	-	-	-
		67	95	84	82	11	-	-	-	-	-	-
6	A07098-4	350	575	358	428	1	450	813	563	489	579	3
		92	97	73	87	4	89	96	81	76	86	3
7	A071012-4BF	291	456	309	352	9	447	795	617	516	594	2
		80	95	75	83	9	87	93	80	79	85	4
8	A07705-4	315	490	257	354	8	415	1009	427	434	571	6
		83	97	57	79	12	82	98	63	72	79	11
9	A07769-4	335	566	309	403	2	481	935	635	530	645	1
		91	98	78	89	2	91	96	88	84	90	1
10	A08422-2VRsto	271	453	342	356	7	341	734	423	529	507	9
		89	97	78	88	3	93	93	81	80	87	2
11	A08422-4VRsto	296	531	372	400	3	-	-	-	-	-	-
		95	98	91	95	1	-	-	-	-	-	-
12	A08510-1LB	255	414	142	271	16	415	664	466	469	503	10
		70	100	54	75	15	86	99	72	77	84	7
13	A10021-5TE	292	541	296	376	5	453	747	465	490	539	8
		85	95	72	84	7	89	94	77	80	85	6
14	AOR06576-1	358	505	291	385	4	428	794	554	538	578	4
		84	97	71	84	6	84	97	76	75	83	8
15	AOR07821-1	207	495	333	345	10	413	894	478	511	574	5
		80	93	74	82	10	89	94	76	80	85	5
16	POR12NCK50-1	168	460	-	314	13	190	789	514	432	481	11
		71	97	-	84	5	72	98	82	78	82	9
Location Means		255	485	301	349		384	784	468	480	529	
		79	95	71	82		84	95	75	77	83	
LSD (.05)					114						113	

TABLE 5: 2017 Tri-State Potato Variety Trial - YIELD > 10 OZ (CWT/A & %) - EARLY AND LATE HARVEST

No.	Clone	U.S. No. 1's > 10 OZ - Early Harvest (CWT/A)/%					U.S. No. 1's >10 OZ - Late Harvest (CWT/A)/%					
		ID	WA	Ont	Entry Mean	Rank	ID	WA	OR		Entry Mean	Rank
									Herm	KF		
1	Ranger Russet	-	41	72	56	12	-	321	191	194	235	7
		-	9	17	13	12	-	45	28	30	34	8
2	Russet Burbank	47	101	35	61	10	175	334	43	103	164	11
		14	20	7	14	11	36	45	10	17	27	12
3	Russet Norkotah	38	103	79	73	8	55	333	20	242	163	12
		16	19	20	18	8	17	46	8	45	29	9
4	Shepody	36	215	-	125	2	-	-	-	-	-	-
		19	43	-	31	2	-	-	-	-	-	-
5	A07088-6	23	70	78	57	11	-	-	-	-	-	-
		7	14	16	13	13	-	-	-	-	-	-
6	A07098-4	151	89	47	95	5	269	349	222	114	238	6
		38	15	9	21	6	53	41	32	18	36	6
7	A071012-4BF	98	146	61	102	4	189	485	349	228	313	2
		27	31	15	24	3	36	57	45	35	44	4
8	A07705-4	99	38	2	47	15	231	459	101	58	213	9
		27	8	1	12	15	46	45	15	10	29	10
9	A07769-4	116	91	47	85	7	216	603	391	239	362	1
		31	16	12	20	7	41	62	54	38	49	1
10	A08422-2VRsto	72	33	35	47	14	181	386	104	203	219	8
		23	7	8	13	14	50	49	20	31	37	5
11	A08422-4VRsto	124	174	119	139	1	-	-	-	-	-	-
		40	32	29	34	1	-	-	-	-	-	-
12	A08510-1LB	55	18	3	25	16	157	201	90	85	133	13
		14	4	1	6	16	33	30	14	14	23	13
13	A10021-5TE	78	117	111	102	3	247	448	234	193	280	4
		23	21	27	24	4	48	56	39	31	44	3
14	AOR06576-1	166	19	15	67	9	238	433	170	135	244	5
		39	4	4	15	9	46	53	23	19	35	7
15	AOR07821-1	99	107	62	89	6	243	569	233	172	304	3
		36	20	14	23	5	52	60	37	27	44	2
16	POR12NCK50-1	40	64	-	52	13	62	445	116	87	178	10
		16	14	-	15	10	23	55	18	16	28	11
Location Means		83	89	55	76		189	413	174	158	234	
LSD (.05)		25	17	13	18		40	49	26	25	35	
					77					103		

TABLE 6: 2017 Tri-State Potato Variety Trial - YIELD < 4 OZ (CWT/A & %) - EARLY AND LATE HARVEST

No.	Clone	Yield < 4 OZ - Early Harvest (CWT/A)/%					Yield < 4 OZ - Late Harvest (CWT/A)/%					
		ID	WA	Ont	Entry Mean	Rank	ID	WA	OR		Entry Mean	Rank
									Herm	KF		
1	Ranger Russet	-	58	35	47	14	-	41	78	80	66	7
		-	13	8	11	14	-	6	11	12	10	8
2	Russet Burbank	42	103	77	74	4	43	48	96	120	77	3
		13	21	15	16	7	9	6	22	20	14	4
3	Russet Norkotah	33	55	63	50	11	60	38	62	37	49	9
		15	10	16	13	9	18	5	24	7	14	5
4	Shepody	37	37	-	37	15	-	-	-	-	-	-
		20	7	-	13	10	-	-	-	-	-	-
5	A07088-6	91	76	50	72	5	-	-	-	-	-	-
		31	15	10	19	4	-	-	-	-	-	-
6	A07098-4	17	67	67	50	10	19	45	104	97	66	6
		4	11	14	10	15	4	5	15	15	10	7
7	A071012-4BF	33	49	62	48	13	33	21	73	65	48	10
		9	10	15	11	12	6	3	9	10	7	12
8	A07705-4	49	140	167	119	1	47	64	151	136	100	2
		13	28	37	26	2	9	6	22	23	15	3
9	A07769-4	28	72	63	55	9	27	29	58	31	36	13
		8	12	16	12	11	5	3	8	5	5	13
10	A08422-2VRsto	27	107	75	70	6	12	40	76	59	47	12
		9	23	17	16	8	3	5	15	9	8	9
11	A08422-4VRsto	15	38	29	27	16	-	-	-	-	-	-
		5	7	7	6	16	-	-	-	-	-	-
12	A08510-1LB	69	180	101	117	2	56	89	170	120	109	1
		22	43	39	35	1	12	13	26	20	18	1
13	A10021-5TE	35	61	50	49	12	24	31	71	66	48	11
		10	11	12	11	13	5	4	12	11	8	11
14	AOR06576-1	30	113	84	75	3	33	38	99	112	71	5
		7	22	21	16	6	7	5	13	16	10	6
15	AOR07821-1	33	87	86	69	7	29	33	71	69	51	8
		15	16	19	17	5	6	4	11	11	8	10
16	POR12NCK50-1	53	83	-	68	8	58	46	101	101	76	4
		24	18	-	21	3	21	6	16	18	15	2
Location Means		39	83	72	64		37	43	93	84	65	
LSD (.05)		14	17	18	16		9	5	16	14	11	
					40						25	

TABLE 7: 2017 Tri-State Potato Variety Trial - SPECIFIC GRAVITY - EARLY AND LATE HARVEST

No.	Clone	Specific Gravity - Early Harvest					Specific Gravity - Late Harvest					
		ID	WA	Ont	Entry Mean	Rank	ID	WA	Herm	KF	Entry Mean	Rank
1	Ranger Russet	-	1.097	1.093	1.095	2	-	1.088	1.076	1.090	1.085	6
2	Russet Burbank	1.075	1.089	1.077	1.081	15	1.084	1.092	1.070	1.085	1.083	9
3	Russet Norkotah	1.071	1.097	1.075	1.081	14	1.073	1.075	1.063	1.074	1.071	13
4	Shepody	1.083	1.091	-	1.087	9	-	-	-	-	-	-
5	A07088-6	1.087	1.099	1.097	1.094	3	-	-	-	-	-	-
6	A07098-4	1.084	1.082	1.080	1.082	13	1.086	1.084	1.068	1.079	1.079	10
7	A071012-4BF	1.091	1.097	1.102	1.096	1	1.100	1.099	1.085	1.097	1.095	1
8	A07705-4	1.072	1.074	1.081	1.075	16	1.079	1.082	1.065	1.077	1.076	11
9	A07769-4	1.086	1.079	1.090	1.085	11	1.092	1.083	1.072	1.085	1.083	8
10	A08422-2VRsto	1.083	1.081	1.087	1.084	12	1.087	1.083	1.080	1.087	1.084	7
11	A08422-4VRsto	1.086	1.087	1.090	1.088	8	-	-	-	-	-	-
12	A08510-1LB	1.087	1.086	1.095	1.089	5	1.090	1.090	1.078	1.089	1.087	3
13	A10021-5TE	1.087	1.086	1.090	1.088	7	1.094	1.085	1.070	1.091	1.085	5
14	AOR06576-1	1.075	1.099	1.086	1.087	10	1.078	1.080	1.063	1.079	1.075	12
15	AOR07821-1	1.077	1.096	1.094	1.089	6	1.089	1.093	1.072	1.088	1.086	4
16	POR12NCK50-1	1.086	1.093	-	1.090	4	1.087	1.090	1.079	1.092	1.087	2
Location Means		1.082	1.090	1.088	1.087		1.087	1.086	1.072	1.086	1.083	
LSD (0.5)											0.004	

TABLE 9: 2017 Tri-State Potato Variety Trial - TUBERS PER PLANT AND EYE DEPTH

No.	Clone	Average Tuber per Plant							Eye Depth (1-5, 5=shallow)							
		Early		Late				Means Late only	Early			Late				Entry Means
		ID	WA	ID	WA	Herm	KF		ID	WA	Ont	ID	WA	Herm	KF	
1	Ranger Russet	-	7.1	-	6.8	8.9	8.3	8.0	-	3.0	2.0	-	3.0	3.0	3.5	2.9
2	Russet Burbank	5.0	8.6	5.9	7.5	7.7	9.7	7.7	3.0	3.0	3.0	3.1	3.0	3.0	3.6	3.1
3	Russet Norkotah	4.0	8.8	5.7	7.3	4.7	6.3	6.0	3.3	4.0	3.0	3.6	3.0	3.5	3.3	3.4
4	Shepody	4.0	6.0	-	-	-	-	-	3.3	3.0	-	-	-	-	-	3.1
5	A07088-6	6.6	8.8	-	-	-	-	-	3.5	4.0	4.0	-	-	-	-	3.8
6	A07098-4	4.7	9.8	4.8	8.8	8.1	10.0	7.9	3.8	4.0	3.0	3.5	4.0	3.9	3.8	3.7
7	A071012-4BF	5.5	7.0	6.4	7.1	8.6	8.0	7.5	3.0	3.3	3.0	3.1	3.5	3.0	3.6	3.2
8	A07705-4	6.1	10.9	6.3	10.4	11.8	10.6	9.8	3.5	4.0	5.0	3.6	4.0	4.0	3.8	4.0
9	A07769-4	4.9	9.6	6.7	8.2	8.0	7.2	7.5	4.1	4.0	3.0	4.0	4.0	3.5	3.9	3.8
10	A08422-2VRsto	4.2	9.7	4.1	7.5	7.1	8.7	6.9	3.0	4.0	3.0	3.3	3.0	3.4	3.3	3.3
11	A08422-4VRsto	4.2	7.4	-	-	-	-	-	3.1	4.0	4.0	-	-	-	-	3.7
12	A08510-1LB	6.5	10.7	7.1	8.5	11.1	10.5	9.3	3.6	4.0	4.0	3.9	4.0	4.0	3.8	3.9
13	A10021-5TE	5.4	8.8	6.1	7.0	7.2	8.4	7.2	3.5	3.7	3.0	3.6	4.0	3.8	4.0	3.6
14	AOR06576-1	5.2	10.6	6.2	7.8	11.4	11.4	9.2	3.1	4.0	4.0	3.0	3.0	3.8	3.6	3.5
15	AOR07821-1	4.4	9.0	5.5	7.8	7.9	8.9	7.5	3.8	4.0	4.0	3.9	3.0	3.9	4.6	3.9
16	POR12NCK50-1	4.3	8.6	5.9	7.4	9.2	8.7	7.8	3.5	4.0	-	3.5	3.0	3.8	4.0	3.6
Location Means		5.0	8.8	5.9	7.8	8.6	9.0	7.9	3.4	3.8	3.4	3.5	3.4	3.6	3.7	3.5

TABLE 10: 2017 Tri-State Potato Variety Trial - TUBER DISCRIPTORS

No. Clone		Tuber Uniformity ¹								Shatter ¹					Greening ¹								
		Early			Late				Entry Means	Early		Late			Entry Means	Early			Late			Entry Means	
		ID	WA	Ont	ID	WA	Herm	KF		ID	WA	ID	Herm	KF		ID	WA	Ont	ID	WA	Herm		KF
1	Ranger Russet	-	2.7	2.0	-	2.0	2.6	2.6	2.4	-	5.0	-	5.0	5.0	5.0	-	5.0	5.0	-	5.0	4.6	4.3	4.8
2	Russet Burbank	2.4	2.0	2.0	2.3	1.3	2.1	2.9	2.1	5.0	5.0	4.3	5.0	5.0	4.9	4.6	5.0	5.0	4.3	5.0	4.6	4.8	4.8
3	Russet Norkotah	3.8	3.7	3.0	3.9	4.0	3.5	4.0	3.7	5.0	5.0	5.0	5.0	5.0	5.0	4.5	5.0	5.0	5.0	5.0	5.0	4.4	4.8
4	Shepody	2.5	3.0	-	-	-	-	-	2.8	5.0	5.0	-	-	-	5.0	4.3	5.0	-	-	-	-	-	4.6
5	A07088-6	3.1	2.3	4.0	-	-	-	-	3.2	5.0	5.0	-	-	-	5.0	5.0	5.0	5.0	-	-	-	-	5.0
6	A07098-4	4.3	2.0	3.0	3.5	3.0	3.8	3.6	3.3	4.4	5.0	3.5	4.0	4.0	4.2	4.9	5.0	5.0	4.1	5.0	4.6	3.6	4.6
7	A071012-4BF	3.1	2.3	2.0	3.3	2.3	3.4	3.3	2.8	5.0	5.0	4.5	4.5	5.0	4.8	4.8	4.0	5.0	4.8	5.0	4.9	4.0	4.6
8	A07705-4	3.4	3.0	3.0	3.0	2.0	3.3	2.8	2.9	5.0	5.0	4.6	5.0	4.9	4.9	4.4	5.0	5.0	4.4	5.0	4.5	4.8	4.7
9	A07769-4	3.5	3.7	3.0	3.6	2.5	3.6	3.9	3.4	5.0	5.0	4.0	3.8	4.3	4.4	5.0	5.0	5.0	4.6	5.0	4.6	3.9	4.7
10	A08422-2VRsto	3.8	3.0	3.0	3.8	2.0	3.5	3.4	3.2	5.0	5.0	4.0	4.8	3.6	4.5	5.0	5.0	5.0	5.0	5.0	4.6	3.6	4.8
11	A08422-4VRsto	3.3	2.0	4.0	-	-	-	-	3.1	4.5	5.0	-	-	-	4.8	5.0	5.0	5.0	-	-	-	-	5.0
12	A08510-1LB	2.9	3.7	2.0	2.9	2.0	3.8	3.3	2.9	5.0	5.0	4.5	5.0	4.9	4.9	4.9	5.0	5.0	5.0	5.0	4.8	4.6	4.9
13	A10021-5TE	4.1	3.0	4.0	4.1	4.0	3.3	4.4	3.8	5.0	5.0	4.1	4.4	4.5	4.6	5.0	5.0	5.0	4.6	5.0	5.0	4.5	4.9
14	AOR06576-1	2.8	3.0	4.0	3.1	3.3	3.4	2.9	3.2	5.0	5.0	4.1	5.0	4.1	4.7	4.1	5.0	5.0	4.5	5.0	3.9	3.9	4.5
15	AOR07821-1	3.0	2.7	3.0	2.9	2.0	3.5	3.1	2.9	5.0	4.0	4.9	4.9	5.0	4.8	5.0	5.0	5.0	4.5	5.0	4.4	4.5	4.8
16	POR12NCK50-1	3.0	4.0	-	3.4	3.0	3.6	4.0	3.5	5.0	5.0	4.6	4.9	5.0	4.9	5.0	5.0	-	5.0	5.0	4.6	4.8	4.9
Location Means		3.3	2.9	3.0	3.3	2.6	3.3	3.4	3.1	4.9	4.9	4.3	4.6	4.8	4.8	4.8	4.9	5.0	4.6	5.0	4.6	4.3	4.8

¹ Score 1-5, with 5=Best.

TABLE 11: 2017 Tri-State Potato Variety Trial - EXTERNAL DEFECTS - GROWTH CRACKS, SECOND GROWTH,
0 SHATTER BRUISE, SCAB - MEANS OF LOCATIONS

No.	Clone	Growth Cracks ¹		Second Growth ¹		Shatter Bruise ¹			Scab ¹	
		Early	Late	Early	Late	Early	Late	AB ²	Early	Late
1	Ranger Russet	4.0	4.7	5.0	4.3	5.0	5.0	0.0	5.0	4.9
2	Russet Burbank	4.1	4.3	3.2	3.6	5.0	4.0	2.5	5.0	4.8
3	Russet Norkotah	5.0	4.9	5.0	4.9	5.0	5.0	3.6	5.0	4.3
4	Shepody	5.0	-	3.8	-	5.0	-	-	4.5	-
5	A07088-6	4.7	-	5.0	-	5.0	-	-	4.7	-
6	A07098-4	4.3	5.0	5.0	4.9	5.0	3.5	2.1	4.8	4.7
7	A071012-4BF	5.0	4.8	4.8	4.5	5.0	4.8	3.7	4.8	4.8
8	A07705-4	5.0	4.9	4.8	4.6	5.0	4.5	3.5	4.6	4.7
9	A07769-4	4.6	4.8	5.0	4.9	5.0	2.9	3.3	4.7	4.8
10	A08422-2VRsto	4.7	5.0	5.0	4.7	5.0	4.9	3.0	4.8	4.9
11	A08422-4VRsto	5.0	-	5.0	-	4.5	-	-	5.0	-
12	A08510-1LB	5.0	4.9	5.0	4.9	5.0	4.5	3.4	4.5	4.9
13	A10021-5TE	4.0	4.8	5.0	4.9	5.0	4.2	3.7	5.0	4.5
14	AOR06576-1	4.2	4.6	4.8	4.5	5.0	4.5	2.9	4.9	4.9
15	AOR07821-1	4.9	5.0	4.8	4.9	4.5	3.4	3.5	5.0	4.8
16	POR12NCK50-1	5.0	4.9	5.0	4.9	5.0	4.4	3.0	4.7	4.9
Means		4.7	4.8	4.8	4.7	4.9	4.3	2.9	4.8	4.8

¹ Score 1-5, with 1=severe, 5=none.

² Aberdeen shatter scores obtained from bruise evaluation conducted using a shatter chamber [1-5(none)].

TABLE 12: 2017 Tri-State Potato Variety Trial - INTERNAL DEFECTS - HOLLOW HEART PLUS BROWN CENTER, INTERNAL BROWN SPOT, VASCULAR DISCOLORATION/NET NECROSIS, BLACKSPOT - MEANS OF LOCATIONS

No.	Clone	Percent Hollow Heart plus Brown Center		Percent Internal Brown Spot		Percent Vascular Discoloration		Blackspot Bruise			
		Early	Late	Early	Late	Early-Ont	Late	Washington ²		Herm ³	AB ⁴
1	Ranger Russet	0.0	0.0	0.0	0.0	0.0	7.5	5.0	5.0	3.5	-
2	Russet Burbank	10.1	11.3	0.0	0.0	0.0	1.3	5.0	5.0	3.5	2.3
3	Russet Norkotah	6.7	4.4	0.0	0.0	0.0	0.0	5.0	5.0	2.9	3.1
4	Shepody	0.0	-	0.0	-	-	-	5.0	-	-	-
5	A07088-6	0.0	-	0.0	-	0.0	-	5.0	-	-	-
6	A07098-4	0.0	2.5	0.0	0.0	0.0	2.5	5.0	5.0	3.5	1.2
7	A071012-4BF	4.2	5.0	0.0	0.0	0.0	0.0	5.0	5.0	3.5	1.7
8	A07705-4	0.8	3.1	0.0	3.8	0.0	0.0	5.0	5.0	4.5	2.2
9	A07769-4	0.0	0.6	0.0	0.0	0.0	0.0	5.0	5.0	3.8	1.8
10	A08422-2VRsto	0.0	0.6	0.0	3.1	0.0	0.0	5.0	5.0	2.5	1.5
11	A08422-4VRsto	2.4	-	0.0	-	0.0	-	5.0	-	-	-
12	A08510-1LB	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	3.8	4.2
13	A10021-5TE	1.7	0.0	0.0	0.0	0.0	3.8	5.0	5.0	2.1	1.3
14	AOR06576-1	1.6	5.6	0.0	0.6	0.0	1.3	5.0	5.0	4.5	3.0
15	AOR07821-1	1.6	5.0	0.0	0.0	0.0	1.3	5.0	5.0	3.0	2.0
16	POR12NCK50-1	0.0	6.3	0.0	0.0	-	8.8	5.0	5.0	3.5	2.9
Means		1.8	3.4	0.0	0.6	0.0	2.0	5.0	5.0	3.4	2.3

¹ Rating of Stem-end Browning + VD

² Score 1-5, with 1=severe, 5=none.

³ Oregon is percentage of tuber showing impact bruising.

⁴ Aberdeen blackspot scores from an abrasive peel test [1-5(none)].

TABLE 13: 2017 Tri-State Potato Variety Trial - FRENCH FRY COLOR (00-4.0(darkest)), AND PERCENT SUGAR ENDS

No.	Clone	Fry 44 or 45°							Fry 40°				Sugar Ends			
		ID ¹	WA	Ont ²	Herm ⁴	All Entries		Postharvest 3 state mean. ³	ID ¹	WA	All Entries		Postharvest 3 state mean. ³	Ont ²	HRM	Entry Mean
						Mean	Rank				Mean	Rank				
1	Ranger Russet	-	1.0	1.5	1.1	1.2	6	1.0	-	4.0	4.0	13	3.5	0.0	8.3	4
2	Russet Burbank	2.0	3.0	2.5	2.3	2.5	15	2.7	1.9	4.0	2.9	10	3.3	2.5	4.2	3
3	Russet Norkotah	2.2	-	2.4	1.8	2.1	11	-	2.4	-	2.4	6	-	2.5	0.0	1
4	Shepody	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	A07088-6	-	-	1.0	-	1.0	2	-	-	-	-	-	-	-	-	-
6	A07098-4	2.1	2.0	2.0	3.1	2.3	12	1.3	2.6	4.0	3.3	12	3.0	0.0	0.0	0
7	A071012-4BF	1.3	2.0	1.8	2.4	1.9	10	1.3	1.2	4.0	2.6	8	2.3	0.0	16.7	8
8	A07705-4	1.3	-	2.2	2.1	1.9	9	-	2.3	-	2.3	3	-	0.0	29.2	15
9	A07769-4	0.4	0.0	2.0	2.1	1.1	5	0.0	0.5	2.0	1.3	1	2.3	0.0	16.7	8
10	A08422-2VRsto	1.8	4.0	1.7	2.0	2.4	13	2.3	2.0	4.0	3.0	11	3.3	0.0	20.8	10
11	A08422-4VRsto	-	-	1.1	-	1.1	4	-	-	-	-	-	-	-	-	-
12	A08510-1LB	1.7	1.0	1.2	1.8	1.4	7	0.3	1.9	3.0	2.5	7	2.0	0.0	0.0	0
13	A10021-5TE	1.1	0.0	1.0	1.1	0.8	1	0.3	1.5	3.0	2.3	3	2.0	0.0	8.3	4
14	AOR06576-1	3.2	-	1.5	2.6	2.4	14	-	2.0	-	2.0	2	-	0.0	4.2	2
15	AOR07821-1	1.2	2.0	1.8	1.7	1.7	8	1.0	1.8	4.0	2.9	9	2.7	0.0	0.0	0
16	POR12NCK50-1	1.6	1.0	-	0.7	1.1	3	0.7	1.7	3.0	2.3	5	2.7	0.0	4.2	2
Location Means		1.7	1.6	1.7	1.9	1.7		1.1	1.8	3.5	2.6		2.7	0.4	9	4.5

¹ Samples held for 6 week cool down period - 7 weeks at storage temperature.

² Samples held for 90 days at 48°.

³ Three state average processed at Washington - For complete postharvest results see <http://www.potatoes.wsu.edu/>

⁴ Samples held for 3 week cool down period - 10 weeks at storage temperature.

TABLE 14: 2017 Tri-State Potato Variety Trial - DISEASE EVALUATIONS, METRIBUZIN REACTION

No. Clone	Vert. Wilt/ Early Dying		Early Blight AB ¹				Late Blight CORV ²			Common Scab AB ¹		Rhizoc.	Corky Ringspot		Pecto- bacterium Soft Rot	Metr.		
	AB ¹		HERM		Foliar		Tuber Incidence (%)	% Serious Defect	Foliar		Tuber	Incidence (%)	% Serious Defects	KLAM ³	PROS ⁴		AB	Reaction
	(0-9)*	AUDPC	(0-9)*	AUDPC	(0-9)*	AUDPC			0-9	AUDPC				%	(1-5=none) ³	Incidence (%)	% Serious Defects	
1 Ranger Russet	3.7	75	6	390	5.7	257	3	0	8.0	904	27.5	10.8	7.4	4.4	47.5	30.2	2.5	R
2 Russet Burbank	3.7	60	7	683	5.0	126	0	0	9.0	1721	22.5	0.0	0.0	4.1	35.0	26.3	1.6	MR
3 Russet Norkotah	6.0	275	8	1478	9.0	1027	0	0	9.0	1981	32.5	1.4	1.4	5.0	23.3	17.7	4.0	R
4 Shepody	3.8	68	--	--	5.3	271	2	0	9.0	1740	30.0	1.5	0.0	--	--	--	3.3	VS
5 A07088-6	2.7	35			3.0	37	0	0	6.0	906	7.5	14.1	7.1	--	37.5	24.3	2.9	
6 A07098-4	6.0	256	7	840	6.0	251	40	18	9.0	1939	0.0	11.0	2.9	4.6	30.8	22.3	4.8	MR
7 A071012-4BF	2.3	21	6	533	2.3	21	2	0	5.5	759	7.5	10.7	1.3	4.5	34.2	18.2	2.5	R
8 A07705-4	2.0	25	6	383	1.7	20	0	0	5.0	553	0.0	8.3	0.0	4.9	20.0	11.7	3.1	R
9 A07769-4	5.3	247	6	683	2.7	29	0	0	7.0	1438	25.0	16.5	3.4	4.5	13.3	5.2	3.7	R
10 A08422-2sto	5.7	188	7	833	6.3	275	0	0	--	--	--	1.9	0.0	3.0	44.2	30.4	3.9	R
11 A08422-4sto	6.7	306	6	683	4.7	162	0	0	9.0	1856	0.0	12.6	1.8	--	41.7	25.6	2.5	
12 A08510-1LB	3.3	64	6	383	4.3	106	0	0	6.0	892	20.0	0.0	0.0	3.9	19.2	7.6	4.4	R
13 A10021-5TE	3.7	72	7	1058	3.0	30	2	0	7.5	1566	30.0	13.6	2.9	4.3	32.5	19.1	3.6	R
14 AOR06576-1	4.0	93	7	833	3.0	29	0	0	8.3	1558	0.0	0.0	0.0	4.5	56.4	42.9	1.4	R
15 AOR07821-1	1.7	13	6	533	4.0	84	0	0	6.5	1152	0.0	10.0	1.7	4.9	33.3	20.6	3.3	R
16 POR12NCK50-1	4.0	84	7	1065	6.7	349	3	0	--	--	--	0.0	0.0	4.0	52.5	42.4	2.4	VS
MEANS	4.0	118	6.6	741	4.5	192	3	1	7.5	1355	14.5	7.0	1.9	4.4	34.8	23.0	3.2	
LSD @ .05	1.9				1.9		10	4	0.8	316	11.0	21.0	10.0				1.5	

* 117 days after planting

¹ Evaluations made at Aberdeen, Idaho by Jonathan Whitworth; scale as indicated with highest number being most severe. For 0 to 9: 0=no symptoms; 1= trace; 2=1-5%; 3=5-10%; 4=10-20%; 5=25-40%; 6=40-60%; 7=60-70%; 8=75-90%; 9=90-100% dead or dying with typical disease symptoms.

Early Blight and Vert. Wilt AUDPC: Area Under the Disease Progress Curve based on foliar readings taken on 3 separate readings after planting.

Common Scab and Net Necrosis serious defects are the number of tubers with a 3 rating (0-5 scale) or higher, divided by the total number of tubers examined. Net necrosis data from PLRV-infected plots. For 0 to 5: 0=none, 5=severe as a combination of tuber area and degree impacted by Pectobacterium inoculations.

² Evaluations made at Corvallis, Oregon by Solomon Yilma; 1=no foliar injury; 3=5-10%; 5=25-40%; 7=60-75%; 8=75-90%; 9=90-100%.

Late blight AUDPC=area under the disease progress curve. Higher number indicates more disease over time; % of tubers examined with any late blight symptoms.

³ *Rhizoctonia solani* readings made by Brian Charlton, Klamath Falls, Oregon; scale as indicated with lowest number being most severe

⁴ Corky ringspot readings Prosser, WA by Rich Quick and Launa Hamlin

⁵ Metribuzin Reaction measured at Aberdeen, ID. VR=very resistant, R=Resistant, MR=Moderately resistant, MS=moderately susceptible, S=susceptible VS=very susceptible

TABLE 15: 2017 Solids, Dextrose and Sucrose, Protein, Vitamin C and Glycoalkaloids
- Tubers Grown at Aberdeen, Idaho

No.	Clone	Solids Oven Dry (%)	Sugars		Protein (%DWB)	Vitamin C (mg/100g FWB)	Glycoalkaloids (mg/100gFWB)
			Dextrose (%FWB)	Sucrose (%FWB)			
2	Russet Burbank	21.17	0.213	0.170	4.44	26.21	1.78
3	Russet Norkotah	21.33	0.189	0.123	4.73	27.27	2.64
6	A07098-4	19.64	0.213	0.144	5.04	25.03	7.87
7	A071012-4BF	25.58	0.107	0.219	5.89	22.01	2.83
8	A07705-4	20.96	0.212	0.126	4.34	21.79	1.71
9	A07769-4	23.62	0.051	0.159	5.26	23.62	2.54
10	A08422-2VRsto	24.43	0.153	0.181	5.81	34.71	10.79
12	A08510-1LB	22.37	0.186	0.158	5.67	25.18	9.19
13	A10021-5TE	23.68	0.102	0.165	5.92	37.16	3.99
14	AOR06576-1	21.38	0.264	0.250	5.72	27.99	2.70
15	AOR07821-1	24.31	0.167	0.194	4.76	26.73	3.32
16	POR12NCK50-1	23.18	0.149	0.157	5.52	28.93	4.33
Means		22.6	0.167	0.170	5.26	27.2	4.5

FWB = fresh weight basis DWB = dry weight basis

Glycoalkaloids: The 2017 Lenape check from Aberdeen was 20.4 mg/100g

TABLE 16: 2017 Tri-State Potato Variety Trial - MERIT SCORES (1-5(best))

No.	Clone	Field Performance Process Merit						Post-Harvest Process* 3 State Mean	Fresh							
		WA	Early		LATE		RANK		Early		Late			LATE	RANK	
			ID	WA	Herm	MEANS		ID	WA	ID	WA	Herm	KF	MEANS	RANK	
1	Ranger Russet	3.7	-	3.1	3.0	3.0	6	17.0	0.0	1.3	-	0.9	2.0	1.0	1.3	13
2	Russet Burbank	3.4	2.0	2.7	2.5	2.4	11	15.0	2.0	1.1	2.1	0.9	1.5	2.0	1.6	12
3	Russet Norkotah	3.4	2.0	1.5	1.5	1.7	13	-	3.5	4.3	3.8	2.5	2.5	4.0	3.2	1
4	Shepody	5.0	-	-	-	-	-	-	1.8	-	-	-	-	-	-	-
5	A07088-6	3.3	-	-	-	-	-	-	3.1	1.5	-	-	-	-	-	-
6	A07098-4	3.5	2.0	3.4	2.5	2.6	7	19.9	4.3	2.2	3.6	1.4	2.0	1.5	2.1	11
7	A071012-4BF	2.2	3.5	2.4	3.5	3.1	3	21.0	2.5	1.9	3.0	1.8	2.5	2.5	2.4	8
8	A07705-4	2.7	2.5	4.3	2.5	3.1	4	-	3.1	2.1	3.1	2.1	3.0	2.0	2.6	5
9	A07769-4	4.5	4.5	4.6	3.0	4.0	1	21.7	3.8	2.4	3.8	2.2	3.0	2.5	2.9	2
10	A08422-2VRsto	2.7	2.5	2.4	2.5	2.5	10	15.5	3.9	1.4	3.6	1.2	2.0	2.0	2.2	10
11	A08422-4VRsto	4.0	-	-	-	-	-	-	3.0	1.8	-	-	-	-	-	-
12	A08510-1LB	2.3	3.0	1.6	3.0	2.5	9	24.6	3.0	0.9	3.1	0.7	3.0	2.5	2.3	9
13	A10021-5TE	4.7	3.5	2.3	2.0	2.6	8	24.9	3.6	2.4	3.9	0.9	2.0	4.0	2.7	3
14	AOR06576-1	2.2	1.5	3.2	2.5	2.4	12	-	2.5	1.2	2.9	2.4	2.5	3.0	2.7	3
15	AOR07821-1	3.5	3.5	4.1	3.0	3.5	2	20.8	2.6	2.3	2.6	1.2	3.0	3.0	2.5	7
16	POR12NCK50-1	3.7	3.0	3.2	3.0	3.1	5	24.3	2.7	3.4	2.8	1.9	3.0	2.5	2.5	6
Location Means		3.4	2.8	3.0	2.7	2.8		20.5	2.8	2.0	3.2	1.5	2.5		2.4	

* For Complete information and procedures see Washington at www.potatoes.wsu.edu/

TABLE 17: 2017 Tri-State Potato Variety Trial - SUMMARY

Clone	Year in Trial	Use	Yield Late	% US#1's	Tuber Size	Specific Gravity	45 Fry Color	P F	Merit Score	Comments	Dis
1 Ranger Russet	Check	Dual	686	540 78	7.4	1.085	1.2	3.0	1.3	Low	
2 Russet Burbank	Check	Dual	567	421 72	6.7	1.083	2.5	2.4	1.6		
3 Russet Norkotah	Check	Fresh	462	Low 387 79	6.5	1.071	Low 2.1	1.7	3.2	Low High	
4 Shepody	Check	Proc	347*	296* 76*	6.8*	1.087*	-	-	-		
5 A07088-6	2	Dual	425*	358* 82*	5.4*	Small 1.094*	1.0	-	-		
6 A07098-4	1	Dual	672	579 86	7.8	1.079	2.3	2.6	2.1	Low Shatter Bruise Blackspot	
7 A071012-4BF	2	Dual	695	594 85	8.1	1.095	High 1.9	3.1	2.4	Uniformity	
8 A07705-4	1	Fresh	702	571 79	6.5	1.076	1.9	3.1	2.6	Sugar Ends	
9 A07769-4	1	Dual	713	High 645 90	High 8.3	1.083	1.1	4.0	2.9	High High	
10 A08422-2VRsto	2	Dual	585	507 87	7.6	1.084	2.4	2.5	2.2		
11 A08422-4VRsto	1	Dual	421*	400* 95*	7.2*	1.088*	1.1	-	-		
12 A08510-1LB	1	Dual	602	503 84	5.8	Small 1.087	1.4	2.5	2.3		
13 A10021-5TE	1	Dual	632	539 85	7.9	1.085	0.8	Good 2.6	2.7		
14 AOR06576-1	2	Fresh	696	578 83	7.0	1.075	2.4	2.4	2.7	Low	
15 AOR07821-1	2	Proc	670	574 85	7.9	1.086	1.7	3.5	2.5		
16 POR12NCK50-1	1	Dual	564	Low 481 82	Low 6.4	1.087	1.1	3.1	2.5	Hollow Heart Vascular Discolor	

* Early only

TABLE 18: 2017 Early Tri-State Potato Variety Trial - COMMENTS BY STATE

Entry	Clone	Early Idaho	Early Washington	Early Ontario
1	Ranger Russet		Shape a bit irregular, lots of points.	3 curved, 1 Curved, 2 Irregular, 2 irregular, 1 Pointed, 3 bottleneck, 1 Bottleneck, 2 dumbell, 1 growth cracks, 1 sprouts, 1 jelly end rot
2	Russet Burbank	MHR: bumps, knobs (2)	Shapes a bit irregular, cracks, UGLY.	3 Pointed, 1 pointed, 1 sprouts, 1 heart, 3 growth cracks, 1 knobs, 4 Irregular, 3 Dumbell, 1 dumbell, 1 Bottleneck, 1 bottleneck
3	Russet Norkotah	HR: slight checking (2); bright deep eye, few misshapen	Mostly typy, dark russet.	3 irregular, 1 pointed
4	Shepody	LR: Flat, knobs (2)	Light skin, plump shape a bit irregular.	
5	A07088-6	MR: small/short (2); some points, good yield, patchy	A lot of short ones, not an early variety.	2 folded bud end, 2 irregular, 2 growth cracks
6	A07098-4	MLR: uniform (3); good yield, nice shape (2)	Light skin, large range of shapes.	3 heart, 1 growth cracks, 3 irregular, 1 swollen lenticels, 1 bottleneck, 1 sprouts
7	A071012-4BF	MHR: some curves, mishapen, skinned, bumps	Highly irregular shapes, light russet, not early. DISCARD	1 knobs, 2 irregular, 1 Pointed, 1 heart
8	A07705-4	MR: uniform (3); good yield, nice shape (2)	Light russet, wide range in size, not early.	2 sprouts, 2 small, 2 pointed
9	A07769-4	MR: good blocky shape with few bumps	Smaller, short and plump.	1 small, 1 pointed, 1 growth cracks
10	A08422-2VRsto	MR: fairly uniform, slight deep eyes, nice shape (2)	Short, light russeting, small, not early.	2 heart, 1 irregular, 2 wedge shape, 1 pointed
11	A08422-4VRsto	MR: points (3); pear shapped (2)	Many pears, not early.	1 heart, 2 growth cracks, 3 pointed, 1 wedge shape, 1 folded bud end
12	A08510-1LB	MR: not uniform, misshapen (2); flat, bumps, ats	Small, round, light russet.	4 small
13	A10021-5TE	MHR: checking (3); curves (2); some bowling pins/cigar shapes	Irregular shapes, bad skin, long and skinny.	1 irregular, 2 alligator hide, 2 rough skin, 1 growth cracks, 2 folded bud end, 1 heart, 1 sprouts, 1 curved
14	AOR06576-1	MHR: misshapen (2); points, bumps, folded ends	Not early, light russet, irregular shapes.	1 irregular, 2 pointed, 1 small
15	AOR07821-1	MHR: misshapen, points (2) checking	Nice dark russet, typy, but a bit short.	3 pointed, 1 Pointed, 1 small, 1 irregular, 2 heart, 1 alligator hide
16	POR12NCK50-1	HR: few misshapen, not uniform	Looked like Norkotah, but smaller. Dark russet, typy.	

TABLE 19: 2017 Late Tri-State Potato Variety Trial - COMMENTS BY STATE

Entry	Clone	Late Idaho	Late Washington	Late Hermiston	Klamath Falls
1	Ranger Russet		Large, shape a bit irregular.	snaky x4, curvy x4	crooks (x2), long (x4), skinny (x2), nice, best rep (4), typy
2	Russet Burbank	MHR: misshapen (3); not uniform, few jelly ends	Many irregular shapes.	pointy x4, knobs x2, bottle x4, dumbbell x4, rot+	3 rotten, misshaped, ok, knobs, some crooks
3	Russet Norkotah	HR: small, good shape, low yield (3); slight checking (2)	Mostly typy.	low yield x4, tuberworm x4, typy x4	typy (x4), nice (x3), best rep (3), blocky, dark
6	A07098-4	LR: nice shape, few bulging eyes (2)	Light skin, good length but some were round.	bulky x3, sprouts x2, lenticels x3, squishy x3, shatter bruise	process only (x4), impact bruise (x4), ok (x2), typy
7	A071012-4BF	MR: few misshapen, short, few points (2)	Short and plump.	flakey russeting x3, deep eyes x3, curvy x2, pink splash x2, sticky x2, bulky x2	process only, misshaped, FBE, dingy, ok, erratic size and shape, typy (x2), blocky, nice
8	A07705-4	MR: some misshapen (3); bumps, flat, some green	Many pears with irregular shapes.	typy x3, pear x2, dumbbell x2, rodent damage x2	small (x4), pears (x4), nice, skin, round, ok
9	A07769-4	MR: blocky (4); good shape, uniform (3); few bumps (2)	Plump, some long, some short.	bulky x4, sticky x3, nice x4, rot x2	process only (x3), erratic shape, round, plump, uniform, nice skin, blocky, typy, keep, Shepody-like, impact bruise
10	A08422-2VRsto	MR: good shape (3); flat, uniform (2)	Most too short, irregular shapes.	pointy x3, thin x2, bottle x3, slightly irregular x2, rot	process only, typy (x3), not bad, plump (x2), blocky, rhizoc
12	A08510-1LB	MR: flat (3); some misshapen (2)	Too small, many round, DISCARD!	round x4, sticky x2, rot x2, pixel x2	short, flat, small, round (x2), baseballs (x2), sticky stolon
13	A10021-5TE	MHR: uniform (4); some checking/flaking skin (2)	Mostly typy. Bad skin. (Road mapping)	pointy x3, cracky skin x2, PVY x2, flakey x2, curvy x2, bottle x2, scab x2	big, nice (x4), typy (x4), fresh potential (x2), keep (x2), long
14	AOR06576-1	MHR: points (3); uniform, deep eyes, (2)	Long, good length, somewhat typy.	sprouts x4, lenticels x2, pointy x2, very long x2	ok (x2), typy (x3), nice, bright, Ranger-like, smaller, uniform
15	AOR07821-1	MHR: checking (4); some misshapen, some bumps (3); flat (2)	Some very irregular shapes, lumpy, oval.	slightly irregular x4, typy x3, pointy x2, allegator x3, rodent damage	rough/heavy hide (x2), FBE, blocky, typy (x3), fresh potential (x2), nice (x2)
16	POR12NCK50-1	MHR: low yield, small, few ats	Blocky, shape mostly uniform.	typy x4, skinning x3, pointy x2, nice x2	skinning (x2), ok, fresh pot. (x2), typy (x2), nice, small, dented

TABLE 20: 2017 Tri-State Harvest Potato Variety Trials
 WASHINGTON STATE POSTHARVEST EVALUATIONS

Entry	Early Clone	Carton Yield		Process Yield	
		100-50 count (US 1's 7-18 oz)		US 1's and 2's > 6 oz	
		% of Total Yield	Tons/A	% of Total Yield	Tons/A
1	Ranger Russet	36.7	8.1	63.1	13.9
2	Russet Burbank	33.9	8.5	54.0	13.6
3	Russet Norkotah	48.2	13.2	65.1	17.8
4	Shepody	59.5	15.0	83.1	21.1
5	A07088-6	37.4	9.2	47.8	11.9
6	A07098-4	45.8	13.6	61.6	18.5
7	A071012-4BF	54.8	13.1	68.8	16.4
8	A07705-4	25.0	6.3	38.7	9.7
9	A07769-4	47.5	13.8	64.1	18.7
10	A08422-2VRsto	26.5	6.2	39.6	9.3
11	A08422-4VRsto	65.1	17.6	73.6	19.9
12	A08510-1LB	17.2	3.6	22.8	4.8
13	A10021-5TE	52.2	14.9	66.0	18.9
14	AOR06576-1	25.0	6.5	37.6	9.9
15	AOR07821-1	42.6	11.4	59.3	15.9
16	POR12NCK50-1	42.2	10.0	55.4	13.2
		41.2	10.7	56.3	14.6
Late					
Entry	Clone				
1	Ranger Russet	66.1	19.7	82.0	29.7
2	Russet Burbank	68.7	21.7	81.9	30.6
3	Russet Norkotah	70.3	23.5	79.7	28.9
6	A07098-4	74.0	28.4	81.7	34.6
7	A071012-4BF	71.1	27.5	88.3	37.5
8	A07705-4	71.7	33.9	82.2	42.2
9	A07769-4	78.8	35.7	89.5	43.3
10	A08422-2VRsto	81.8	28.4	85.9	34.0
12	A08510-1LB	61.8	17.8	67.5	22.6
13	A10021-5TE	67.3	24.1	82.4	32.9
14	AOR06576-1	75.8	28.6	84.6	34.7
15	AOR07821-1	60.5	26.1	87.3	41.4
16	POR12NCK50-1	72.8	27.0	86.3	34.8
		70.8	26.3	83.0	34.4