

2009
TRI-STATE
POTATO VARIETY TRIAL REPORT

State Experiment Stations and
USDA-ARS Cooperating

Washington

Oregon

Idaho

2009 TRI-STATE POTATO VARIETY TRIAL REPORT

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Compiled by Peggy Bain

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TABLE 1: 2009 Tri-State Potato Variety Trial - LOCATIONS, COOPERATORS, AND CULTURAL INFORMATION

Locations	Cooperators	Trial	Irrigation	Fertilizer N-P-K-S(lb/A)	Planting Date	Vine Kill Date	Harvest Date	Days to Vine Kill	Days to Harvest	Herbicides	Insecticides	Fungicides
Aberdeen Idaho (ID)	J. Stark J. Whitworth R. Novy P. Bain M. Chappell	Late	Sprink.	250-115-0-60	7-May	2-Sep mechanical	22-Sep	118	138	Metri DF Matrix Eptam	Admire Pro	Dithane F-45 Equus
Hermiston Oregon (HOR)	D. Hane, I. Vales	Late	Pivot	275-80-0-40	6-Apr	4-Sep cut/beat/enquik	18-Sep	151	165	Matrix Eptham	Admire Pro Monitor Asana Onager	Ridomil Gold Bravo Dithane Quadris Omega
Klamath Falls Oregon (KOR)	B. Charlton D. Culp	Late	Pivot	170-75-100-205	19-May	11-Sep Mechanical and Reglone We had a high amount of nematode pressure in this field, but overall yields were higher than normal	6-Oct	115	140	Matrix MZ	Admire Pro Leverage Fumigation Vapam	Topps MZ Quadris Ridomil Gold Bravo Nemetode Vydate
Othello (EWA) Washington	M Pavek R. Knowles N. Fuller Z. Holden	Early	Liner	210-225-180	7-Apr	30-Jul mechanical	11-Aug	114	126	Sencor Matrix Chateau Prowl	Platinum Acramite	Penncozeb Omega Oberon 4SC Quadris
Othello (LWA) Washington	M Pavek R. Knowles N. Fuller Z. Holden	Late	Liner	180-225-100	20-Apr	17-Sep Mechanical	21-Sep	150	154	Sencor Matrix Chateau Prowl	Platinum Acramite	Penncozeb Omega Oberon 4SC Quadris

TABLE 2: 2009 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 %	Tuber				Vine			Stems/Plant	
									Means	Shape	Means	Skin	Means	Size	Means		Maturity
1	Ranger Russet	Butte A6595-3	Med Red-purple	Check	Dual	Ck	OR	99	4.8	Long	3.8	Med Russet	2.6	Medium	3.1	Medium	1.7
2	Russet Burbank	Early Rose ?	White	Check	Dual	Ck	OR	100	4.0	Obl-Lng	3.8	Med Russet	2.8	Medium	2.6	Med Early	1.8
3*	Russet Norkotah	ND9687-5 Ru ND9526-4 Ru	White	Check	Fresh	Ck	OR	99	3.9	Obl-Lng	4.0	Med Russet	3.1	Med-large	2.8	Med Early	1.9
4	A00324-1	A95038-1 GemStar Russ	Red-purple	ID	Dual	2	OR	99	3.9	Obl-Lng	3.5	Med Russet	2.9	Medium	3.0	Med Early	2.2
5	A00727-1	PA95A11-14 A92030-5	White	ID	Dual	1	ID	96	3.6	Obl-Lng	3.1	Med Russet	2.0	Small	2.0	Early	2.2
6	A01010-1	A92303-7 A96004-8	White	ID	Dual	1	ID	99	4.3	Long	4.6	Heavy Rus	3.0	Medium	2.8	Med Early	2.4
7	AO00057-2	A93570-13 A95154-1	White	OR	Dual	2	OR	97	3.6	Obl-Lng	4.4	Med Hvy Rus	2.7	Medium	3.0	Med Early	1.4
8	AO02183-2	A97236-3 Premier Russ	White	OR	Dual	1	OR	99	4.3	Long	4.0	Med Russet	2.9	Medium	2.8	Med Early	2.3

TABLE 3: 2009 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)					
		(EWA)	Entry Mean	Rank	(ID)	(OR)		(LWA)	Entry Mean	Rank
					Herm	KF				
1	Ranger Russet	475	475	6	432	900	642	814	697	4
2	Russet Burbank	457	457	7	400	957	677	852	722	3
3	Russet Norkotah	518	518	2	.	474	530	663	556	6
4	A00324-1	501	501	3	352	1118	632	1029	783	1
5	A00727-1	530	530	1	409	569		663	547	7
6	A01010-1	445	445	8	418	808	637	832	674	5
7	AO00057-2	496	496	4	431	554	509	678	543	8
8	AO02183-2	480	480	5	428	1261	513	864	767	2
Location Means		488	488		410	830	591	799	661	
LSD (.05)									204	

TABLE 4: 2009. 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)/%				Entry Mean	Rank
		(EWA)	Entry Mean	Rank	(ID)	(OR)		(LWA)		
						Herm	KF			
1	Ranger Russet	463	463	5	359	769	376	758	566	4
		97	97	1	83	85	59	93	80	6
2	Russet Burbank	401	401	8	309	477	389	786	490	6
		88	88	8	77	50	57	92	69	8
3	Russet Norkotah	489	489	1		397	366	604	456	8
		94	94	3		84	69	91	81	5
4	A00324-1	471	471	3	352	1012	448	1001	703	1
		94	94	3	88	91	71	97	87	1
5	A00727-1	466	466	4	409	480		596	495	5
		88	88	7	83	84		90	86	3
6	A01010-1	408	408	7	372	709	455	778	579	3
		92	92	5	89	88	71	93	85	4
7	AO00057-2	479	479	2	398	494	351	648	473	7
		97	97	2	92	89	69	96	87	2
8	AO02183-2	426	426	6	355	1003	320	823	625	2
		89	89	6	83	80	62	95	80	6
Location Means		450	450		365	668	386	749	542	
LSD (.05)		92	92		85	81	65	93	81	182

TABLE 5: 2009 Tri-State Potato Variety Trial - YIELD > 12 OZ (CWT/A & %) - EARLY AND LATE HARVEST

No.	Clone	U.S. No. 1's > 12 OZ - Early Harvest			U.S. No. 1's >12 OZ - Late Harvest					
		(CWT/A)/%		Rank	(ID)	(OR)		(LWA)	Entry Mean	Rank
		(EWA)	Entry Mean			Herm	KF			
1	Ranger Russet	267	267	3	94	460	96	498	287	3
		56	56	3	22	51	15	61	37	3
2	Russet Burbank	131	131	6	17	144	41	395	149	7
		29	29	5	4	15	6	46	18	7
3	Russet Norkotah	244	244	4		63	74	167	101	8
		47	47	4		13	14	25	17	8
4	A00324-1	358	358	1	92	776	172	831	468	1
		71	71	1	23	69	27	81	50	1
5	A00727-1	141	141	5	51	130		325	169	6
		27	27	6	10	23		49	27	5
6	A01010-1	49	49	8	12	298	79	333	181	5
		11	11	8	3	37	12	40	23	6
7	AO00057-2	282	282	2	166	237	66	458	232	4
		57	57	2	39	43	13	68	41	2
8	AO02183-2	79	79	7	33	693	48	415	297	2
		16	16	7	8	55	9	48	30	4
Location Means		194	194		66	350	82	428	232	
LSD (.05)		39	39		16	38	14	52	30	202

TABLE 6: 2009 Tri-State Potato Variety Trial - YIELD < 4 OZ (CWT/A & %) - EARLY AND LATE HARVEST

No.	Clone	Yield < 4 OZ - Early Harvest (CWT/A)/%			U.S. No. 1's < 4 OZ - Late Harvest (CWT/A)/%					
		(EWA)	Entry Mean	Rank	(ID)	(OR)		(LWA)	Entry Mean	Rank
						Herm	KF			
1	Ranger Russet	12	12	7	34	37	106	34	53	6
		3	3	5	8	4	17	4	8	7
2	Russet Burbank	33	33	4	71	82	152	43	87	1
		7	7	3	18	9	22	5	14	2
3	Russet Norkotah	17	17	5		63	110	57	77	2
		3	3	5		13	21	9	14	1
4	A00324-1	15	15	6	29	20	48	19	29	8
		3	3	5	7	2	8	2	5	8
5	A00727-1	60	60	1	66	83		55	68	4
		11	11	1	13	14		8	12	4
6	A01010-1	36	36	2	38	31	98	50	54	5
		8	8	2	9	4	15	6	9	6
7	AO00057-2	10	10	8	18	44	102	28	48	7
		2	2	8	4	8	20	4	9	5
8	AO02183-2	36	36	2	69	52	124	39	71	3
		7	7	3	16	4	24	5	12	3
Location Means		27	27		46	52	106	41	61	
LSD (.05)		6	6		11	7	18	5	10	NS

TABLE 7: 2009 Tri-State Potato Variety Trial - SPECIFIC GRAVITY - EARLY AND LATE HARVEST

No. Clone	Specific Gravity - Early Harvest		Specific Gravity - Late Harvest				Entry Mean	Rank
	EWA	Rank	ID	Herm	KF	LWA		
1 Ranger Russet	1.077	2	1.088	1.080	1.096	1.081	1.086	1
2 Russet Burbank	1.079	1	1.078	1.077	1.094	1.080	1.082	5
3 Russet Norkotah	1.070	6	.	1.063	1.076	1.065	1.068	8
4 A00324-1	1.070	7	1.078	1.078	1.088	1.082	1.081	6
5 A00727-1	1.076	4	1.086	1.072	.	1.080	1.079	7
6 A01010-1	1.067	8	1.082	1.074	1.093	1.082	1.083	4
7 AO00057-2	1.077	3	1.086	1.074	1.094	1.077	1.083	3
8 AO02183-2	1.074	5	1.085	1.075	1.095	1.089	1.086	2
Location Means	1.074		1.083	1.074	1.091	1.079	1.081	
LSD (0.5)							0.005	

TABLE 8: 2009 Tri-State Potato Variety Trial - AVERAGE TUBER SIZE, AND TUBER SHAPE

No. Clone	Average Tuber Size (oz)					Tuber Shape (Length/Width Ratio)				
	WA E	ID L	OR Herm	OR KF	WA L	Entry Late only	WA E	ID L	OR L	Entry Means
1 Ranger Russet	10.7	8.0	10.4	7.5	10.9	9.2	1.75	2.03	2.15	1.98
2 Russet Burbank	7.8	6.2	7.3	6.1	9.3	7.2	1.83	2.09	1.86	1.93
3 Russet Norkotah	9.6	.	6.0	5.8	7.4	6.4	1.76	.	1.81	1.78
4 A00324-1	12.5	7.2	13.7	9.1	15.5	11.4	1.80	1.72	1.73	1.75
5 A00727-1	6.9	5.8	6.3	.	8.3	6.8	1.61	1.75	1.69	1.68
6 A01010-1	6.7	6.0	7.7	6.5	8.6	7.2	1.87	1.95	2.01	1.94
7 AO00057-2	10.9	8.9	8.6	6.1	11.4	8.8	1.43	1.71	1.57	1.57
8 AO02183-2	7.2	5.4	11.2	6.0	9.3	8.0	na	2.18	1.90	2.04
Location Means	9.0	6.8	8.9	6.7	10.1	8.1	1.72	1.92	1.84	1.83
LSD (0.5)						2.5				NS

TABLE 9: 2009 Tri-State Potato Variety Trial - EXTERNAL DEFECTS - GROWTH CRACKS, SECOND GROWTH, 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	5.0	4.2	4.7	4.7	4.0	4.3	3.4	5.0	4.6
2 Russet Burbank	4.5	3.9	4.5	4.4	5.0	4.3	2.5	5.0	4.8
3 Russet Norkotah	4.3	4.9	5.0	4.9	5.0	4.7	.	5.0	5.0
4 A00324-1	4.7	4.8	5.0	5.0	5.0	4.3	3.8	5.0	4.9
5 A00727-1	4.7	4.9	5.0	4.9	4.0	2.5	2.9	5.0	4.8
6 A01010-1	5.0	4.9	5.0	5.0	5.0	4.2	2.6	5.0	5.0
7 AO00057-2	5.0	5.0	5.0	5.0	4.0	3.5	2.9	5.0	5.0
8 AO02183-2	4.7	5.0	4.3	4.9	5.0	4.3	3.3	5.0	4.7
LSD (.05)	NS		NS					NS	

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 10: 2009 Tri-State Potato Variety Trial - INTERNAL DEFECTS - HOLLOW HEART PLUS BROWN CENTER, INTERNAL BROWN SPOT, VASCULAR DISCOLORATION/NET NECROSIS, BLACKSPOT - MEANS OF LOCATION:

No.	Clone	Percent Hollow Heart plus Brown Center		Percent Internal Brown Spot		Percent Net Necrosis/ Vascular Discoloration		Blackspot Bruise				
		Early	Late	Early	Late	Early	Late	Washington ¹	Herm	KF	OR ¹	OR ²	AB^{3}
1	Ranger Russet	0.0	0.6	0.0	0.5	n/a	1.3	4.0	4.0	1.0	17.5	1.7
2	Russet Burbank	0.0	1.3	3.3	4.5	n/a	2.5	4.0	4.0	1.0	12.5	2.7
3	Russet Norkotah	0.0	1.7	0.0	-	n/a	5.0	5.0	5.0	2.0	0.0	.
4	A00324-1	0.0	1.8	0.0	1.4	n/a	1.2	4.0	4.0	1.0	2.5	2.1
5	A00727-1	0.0	0.0	0.0	0.0	n/a	5.5	4.0	4.0	1.0	.	1.4
6	A01010-1	0.0	0.0	3.3	0.3	n/a	3.0	5.0	5.0	4.0	0.0	4.3
7	AO00057-2	0.0	0.0	0.0	0.0	n/a	0.0	4.0	5.0	1.0	7.5	4.6
8	AO02183-2	0.0	0.3	0.0	0.8	n/a	19.7	5.0	5.0	3.0	2.5	3.9
Means		0.0	0.7	0.8	1.1		4.8	4.4	4.5	1.8	6.1	3.0
LSD (.05)			NS		NS		NS					

¹ Score 1-5, with 1=severe, 5=none.

² Klamath Falls, Oregon is percentage of tuber showing blackspot bruising.

³ Aberdeen blackspot scores from an abrasive peel test [1-5(none)].

TABLE 11: 2009 Tri-State Potato Variety Trial - FRENCH FRY COLOR (00-4.0(darkest)), AND PERCENT SUGAR ENDS

No. Clone	Fry 45°						Fry 40°			% Sugar Ends		
	ID ¹	HRM ²	LWA ³	Postharvest 3 state avg. ⁴	Mean	Rank	ID ¹	LWA ³	Mean	ID	HRM	Entry Mean
1 Ranger Russet	1.0	0.5	0.0	0.3	0.5	3	3.7	3.0	3.4	29	0	15
2 Russet Burbank	0.6	1.4	1.0	2.0	1.3	6	4.0	3.0	3.5	42	3	23
3 Russet Norkotah	.	1.0	.	.			.	.	.	.	5	-
4 A00324-1	0.5	1.0	1.0	2.0	1.1	5	3.5	4.0	3.8	9	0	5
5 A00727-1	2.1	0.8	2.0	2.3	1.8	7	4.0	3.0	3.5	0	0	0
6 A01010-1	0.5	0.1	0.0	0.7	0.3	2	3.7	3.0	3.4	0	0	0
7 AO00057-2	0.6	0.0	0.0	0.3	0.2	1	2.9	0.0	1.5	11	0	6
8 AO02183-2	0.5	0.4	1.0	0.3	0.6	4	1.6	2.0	1.8	4	0	2
Location Means	0.8	0.7	0.7	1.1	0.8		3.3	2.6	3.0	14	1	7

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

² Samples held for 1 week cool down period - 7 weeks at storage temperature.

³ Samples held for 54 days at 44 or 40°F

⁴ Three state average processed at Washington - For complete postharvest results see <http://www.potatoes.wsu.edu/>

TABLE 12: 2009 Tri-State Potato Variety Trial - DISEASE EVALUATIONS, METRIBUZIN REACTION

No. Clone	Vert. Wilt/ Early Dying		Early Blight	Late Blight			Common Scab AB		% Net Necrosis/ vascular discoloration		% Virus Infection ⁵		Corky Ringspot Prosser ⁶	Root- knot	Corky Ringspot Klamath ⁶	Pecto- bacterium Soft Rot AB	Metr. Reaction AB ⁸	
	AB	HERM		AB	Foliar		Tuber	%Serious	Incidence	Serious defect ⁴	PVY	PLRV						
	0-9 ¹	0-9 ¹	0-9 ¹	CORV	CORV	CORV	(0-5)	Defect ⁴	AB	AB	HRM	(%)	(%)	0-5 ⁷	AB ⁸			
				0-9	AUDPC ²	% ³												
1 Ranger Russet	3.0	6.3	5.3	7.0	713	10.0	3.0	11.0	89.0	18.8	100	na	2.7	S	22.5	na	2.7	na
2 Russet Burbank	6.7	8.0	5.7	8.0	861	0.0	1.0	1.0	69.0	13.6	94	na	1.9	S	37.5	na	1.3	na
3 Russet Norkotah	9.0	8.8	8.3	8.5	1080	5.0	1.3	1.0	69.0	5.6	100	na	5.3	S	0.0	na	2.9	na
4 A00324-1	4.0	6.8	5.7	6.0	589	0.0	1.3	3.0	82.0	2.1	20	na	0.0	S	17.5	na	0.7	na
5 A00727-1	3.3	7.5	6.7	8.8	981	2.5	1.7	1.0	64.0	9.9	90	na	--	--	--	na	3.7	na
6 A01010-1	2.3	6.0	5.3	6.5	580	17.5	0.0	0.0	65.0	1.4	90	na	0.0	S	0.0	na	0.9	na
7 AQ00057-2	2.0	7.1	5.7	8.0	886	7.5	0.7	0.0	77.0	15.8	90	na	0.3	S	42.5	na	1.9	na
8 AQ02183-2	2.7	5.3	4.3	7.8	858	0.0	0.7	0.0	87.0	17.8	100	na	0.5	S	10.0	na	0.8	na
MEANS	4.1	7.0	5.9	7.6	819	5.3	1.2	2.1	61	8.6	85.5	--	1.5	--	18.6		1.9	--
LSD @ .05	2.0	1.1	1.6	0.8	265	11.4	2.3	15.1	24	ns			--	--	--		1.4	

1 Evaluations made by Whitworth, Hane, and Yilma; 0 to 9, Where 0 or 1=No symptoms to a 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

2 Evaluations made at Corvallis, Oregon by Solomon Yilma; AUDPC=area under the disease progress curve. Higher number indicates more disease over time.

3 Evaluations made at Corvallis, Oregon by Solomon Yilma; % of tubers examined with any late blight symptoms. Normal readings: six yr. tuber average for Ranger Russet = 61%; foliar = 8.6. Evaluations made at Aberdeen, Idaho by Jonathan Whitworth; Percent serious defect = number of tubers with a 3 rating (0-5 scale) or higher, divided by the

4 total number of tubers examined. Data from PLRV-infected plots

5 Evaluations made at Hermiston, Oregon by Dan Hane; scale as indicated, highest number being most severe. (19-20 tubers per test)

% Virus are from ELISA test of sprouts from tubers grown under high virus pressure

6 Evaluations made at Prosser, WA by Chuck Brown; Klamath, OR by Brian Charlton. S=susceptible, R= resistant

7 Evaluations made at Aberdeen, Idaho by Jonathan Whitworth; scale as indicated with highest number being most severe.

8 Metribuzin Reaction measured at Aberdeen, ID

VR=very resistant, R=Resistant, MR=Moderately resistant, MS=moderately susceptible, S=susceptible VS=very susceptible.

TABLE 13: 2009 Tri-State Potato Variety Trial - SOLIDS, DEXTROSE, SUCROSE, PROTEIN,
VITAMIN C, AND GLYCOALKALOIDS - ABERDEEN

Clone	Solids Oven Dry (%)	Sugars		Protein (%DWB)	Vitamin C (mg/100g FWB)	Glycoalkaloids (mg/100gFWB)
		Dextrose (%FWB)	Sucrose (%FWB)			
1 Ranger Russet	23.0	0.04	0.18	4.4	30.3	3.5
2 Russet Burbank	21.1	0.05	0.14	3.8	18.9	4.2
3 Russet Norkotah						
4 A00324-1	21.1	0.02	0.17	3.9	24.1	2.2
5 A00727-1	21.5	0.17	0.18	4.3	20.3	4.3
6 A01010-1	22.0	0.02	0.17	5.2	38.8	1.3
7 AO00057-2	22.1	0.03	0.18	5.6	23.8	1.2
8 AO02183-2	22.3	0.01	0.17	5.1	17.1	13.2
Means	21.8	0.05	0.17	4.6	24.8	4.3

FWB = fresh weight basis DWB = dry weight basis

Glycoalkaloids: The 2009 Lenape check from Aberdeen was 42.6 mg/100g

TABLE 14: 2009 Tri-State Potato Variety Trial - MERIT SCORES (1-5(best))

No.	Clone	Process						Postharvest Merit * 3 State Avg.	Fresh					
		Early WA	ID	OR	WA	MEANS	RANK		Early WA	ID	OR	WA	MEANS	RANK
1	Ranger Russet	3.0	3.0	4.0	3.9	3.5	4	3.9	3.0	3.0	1.5	3.0	2.6	7
2	Russet Burbank	3.0	3.0	3.0	2.5	2.9	7	2.5	3.0	3.3	1.0	2.8	2.5	8
3	Russet Norkotah	4.0	.	2.0		3.0			4.0	.	3.5	4.0	3.8	1
4	A00324-1	2.0	3.5	3.0	3.2	2.9	6	3.2	2.0	3.5	3.0	2.3	2.7	6
5	A00727-1	3.0	3.7	1.5	2.2	2.6	8	2.2	3.0	4.0	1.0	3.3	2.8	5
6	A01010-1	3.5	4.0	4.0	3.4	3.7	1	3.4	3.5	3.5	4.0	4.0	3.8	2
7	AO00057-2	4.0	4.2	2.5	4.2	3.7	2	4.2	4.0	4.3	1.5	3.5	3.3	3
8	AO02183-2	3.3	4.0	3.0	4.4	3.7	3	4.4	3.3	3.5	1.5	3.8	3.0	4
Location Means		3.2	3.6	2.9	3.4	3.3		3.4		3.6	2.1	3.3	3.0	

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

TABLE 15: 2009 Tri-State Potato Variety Trial - SUMMARY

Clone	Year in		Yield		% US#1's		Tuber Size		Specific Gravity		Fry Color		P F	Merit Score	Comments	Dis
	Trial	Use	Late													
1 Ranger	CK	Dual	697	high	566 80	medium	9.2	large	86	good	0.5	v. good	3.5 2.5			
2 R. Burbank	Ck	Dual	722	high	490 69	low	7.2	medium	82	medium	1.3	good	2.9 2.5			
E* Norkotah	Ck	Fresh	518	medium	489 94	high	5.8	small	68	low						
5 A00324-1	2	Dual	783	v high	703 87	med-high	11.4	v large	81	medium	1.1	good	2.9 2.7		big tubers, BS	advance
6 A00727-1	2	Dual	547	medium	495 86	med-high	6.8	medium	79	medium	1.8	fair	2.6 2.8		shat. BS bruise	discard
7 A01010-1	1	Dual	674	med-high	579 85	med-high	7.2	medium	83	good	0.3	v. good	3.7 3.8	best	shat. Bruise; high Vit C	advance
8 AO00057-2	1	Dual	543	medium	473 87	med-high	8.8	large	83	good	0.2	excellent	3.7 3.3	good		advance
9 AO02183-2	2	Dual	767	v high	625 80	medium	8.0	large	86	good	0.6	v. good	3.7 3.0	good	scab, net, TGA; good fry	retain

TABLE 16: 2009 Tri-State Potato Variety Trial - LATE HARVEST TRIAL COMMENTS AND INFORMATION BY STATE

Entry	Clone	Comments from Hermiston	length/dep ratio	30day emerg	Photovolt Fry color	stem/bud fry color ratio
1	Ranger Russet	nice, large(2),	1.13	82	40.3	0.99
2	Russet Burbank	nice RB, dumb bell/bottle neck, OK for RB,	1.2	96	32.1	0.75
3	Russet Norkotah		1.18	78	35.7	0.92
4	A00324-1	Coarse russet(4), very large, good shape,	1.19	82	36.5	0.9
5	A00727-1	discard, nice,	1.19	78	38.1	0.96
6	A01010-1	little rough	1.2	98	44.5	0.9
7	AO00057-2	OK,discard,too rough/round,	1.22	39	45.4	0.98
8	AO02183-2	lots pear(4),eyes too deep(4),discard,	1.12	93	41.6	1.06

Comments from Idaho

1	Ranger Russet	few knobs, fairly nice for RB
2	Russet Burbank	growth cracks, curves
4	A00324-1	blocky, lt russ, patchy skin, nice size, few crooks
5	A00727-1	blocky, lt russ, patchy skin, nice size, few crooks
6	A01010-1	long, thin , med heavy russet, few points
7	AO00057-2	oblong, med heavy russet, few folded ends, ad stolons
8	AO02183-2	long, medium russet, small, shatter, ad stolons

Entry	Clone	Comments from Kalamath Falls	Size Uni. (1-5 ex.)	Shape Uni. (1-5 ex.)	Eye Depth (1-5 shal.)	Greening (1-5 none)	Percent CRS	color (1-5 dark)
1	Ranger Russet	long, lumpy, deep eye, banana	3.6	1.9	2.4	4.5	22.5	3.5
2	Russet Burbank	growth cracks, irregular, fair	3.4	2.9	3.6	4.8	37.5	3.9
3	Russet Norkotah	uniform, nice	3.6	4.0	3.8	4.6	0	4.1
4	A00324-1	very large, heavy russet, not fresh	4.1	3.9	4.4	5.0	17.5	4.9
5	A00727-1	.	.	.	.	.	.	.
6	A01010-1	uniform, heavy skin, good shape, nice	4.0	4.3	3.9	4.9	0	3.9
7	AO00057-2	nice color, irregular, fair	3.4	3.8	4.4	4.6	42.5	3.8
8	AO02183-2	long, many eyes, fair	3.8	3.3	4.0	4.5	10	3.9

TABLE 17: 2009 Tri-State Harvest Potato Variety Trials - WASHINGTON STATE POSTHARVEST EVALUATIONS

Entry	Clone	Comments from Washington Early Trial	Fresh - Visual	Tubers	Carton Yield	Process	Fresh Mkt	Shape
			Appearance	per plant	CWT/A				Value $/A	Value $/A	Uniformity
					100 to 50 Count			
1	Ranger Russet	Very large, blocky, mostly ttypy.	3.0	4.6	310.3	3659.6	4189.8	4.0
2	Russet Burbank	Mostly ttypy, a bit rough.	3.0	6.1	309.6	3237.9	4076.1	3.0
3	Russet Norkotah	Mostly ttypy, eyes somewhat deep, a bit flat.	4.0	5.6	401.1	3872.4	5396.6	3.7
4	A00324-1	Large, rough shape, some pointy ends.	2.0	4.2	275.0	3728.3	3974.2	2.7
5	A00727-1	Somewhat pear-shaped, some pointy ones.	3.0	8.0	338.6	3823.0	4715.7	2.7
6	A01010-1	Small, skinny, eyes a bit deep, ttypy.	3.5	6.9	280.6	3301.9	3872.3	4.0
7	AO00057-2	Large, blocky, nice dark russetting, ttypy.	4.0	4.7	339.1	3775.4	4956.2	4.0
8	AO02183-2	Ttypy, but many prominent eyes; some dumbbells, poor skin set.	3.3	7.0	311.8	3435.6	4169.3	3.7

Entry	Clone	Comments from Washington Late Trial	Fresh - Visual	Tubers	Carton Yield	Process	Fresh Mkt	Shape
			Appearance	per plant	CWT/A				Value $/A	Value $/A	Uniformity
					100 to 50 Count			
1	Ranger Russet	Mostly ttypy, some large, some irregular shapes.	3.0	6.5	392.1	5434.0	5827.7	3.0
2	Russet Burbank	Mostly ttypy, some irregular shapes, a few rough ones.	2.8	8.0	499.6	5848.5	7397.5	2.8
3	Russet Norkotah	Nice, ttypy, uniform, baker size.	4.0	7.8	432.7	3900.8	6159.8	4.0
4	A00324-1	Very large tubers (too large), some rough; ugly skin, deep eyes.	2.3	5.8	327.8	6817.1	5117.9	2.3
5	A00727-1	Many undersized tubers, some ttypy.	3.3	6.9	342.9	4381.0	5035.2	3.3
6	A01010-1	Nice, uniform baker size, but puffed wheat skin, mostly ttypy.	4.0	8.5	571.9	6009.6	8040.8	4.0
7	AO00057-2	Mostly ttypy, plump girth, very dark skin.	3.5	5.2	324.8	4218.3	5296.3	3.8
8	AO02183-2	Eyes a bit deep; otherwise, uniform shape; fresh pack potential.	3.8	8.0	551.1	6205.7	7978.0	3.8

Complete postharvest evaluations and procedures are found at: www.potatoes.wsu.edu