2012
TRI-STATE
RUSSET POTATO VARIETY
TRIAL REPORT

State Experiment Stations and
USDA-ARS Cooperating

Washington

Oregon

Idaho

2012 TRI-STATE POTATO VARIETY TRIAL REPORT

TABLE

Compiled by Peggy Bain

Revision - 6/20/2013

2012 TRI-STATE RUSSET POTATO VARIETY TRIAL

TABLE 1: Locations, Cooperators, and Cultural Information

Locations	Cooperators	Planting Date	Vine Kill Date	Harvest Date	Herbicides	Insecticides	Fungicides
Aberdeen, Idaho **(ID)**	J. Stark	3-May	4-Sep	27-Sep	Outlook	Admire Pro	Pennco Zeb 75DF
Late Trial	J. Whitworth				Prowl H2O		Echo
Seed spacing:	R. Novy		**DAP**	**DAP**	Metribuzin		
10.6" in-row	P. Bain		124	147			
36" between row	M. Chappell		mechanical				
Fertilizer							
N-P-K-S(lb/A)							
230-280-300							
Hermiston, Oregon **(HOR)**	P. Hamm	6-Apr	4-Sep	24-Sep	Matrix	Admire	Maxim 4FS
Late Trial	L. Leroux				Gramoxone	Radiant	Ridimil Gold
Seed spacing:			**DAP**	**DAP**		Agrimek	Dithane
9.25" in-row			151	171		Oberon	Quardris
34" between row			Reglone			Movento	Omega
Fertilizer	Field was fall fumigated with 41 gal metham sodium /A. Temps above average with several days over 100 F in early July, Sugar End stress year.						
N-P-K-S(lb/A)							
360-380-200-60							
Klamath Falls, Oregon **(KOR)**	B. Charlton	24-May	10-Sep	18-Oct	Prowl	Admire	Moncut
Late Trial	D. Culp				Matrix	Movento	Ridomil Bravo
Seed spacing:			**DAP**	**DAP**		Fulfill	Endura
9.25" in-row			109	147		Asana	
36" between row			Reglone + Mechanical			Endigo	
Fertilizer						Assail	
N-P-K-S(lb/A)						Vydate C-LV	
193-116-250-132						Telone II	
Othello, Washington	M Pavek	11-Apr	4-Sep	12-Sep	Matrix		Penncozeb
Late Trial (LWA)	R. Knowles				Eptam		Oberon
Seed spacing:	N. Fuller		**DAP**	**DAP**	Prowl H2O		Manzate
10" in-row	Z. Holden		146	154			
34" between row			Mechanical/Chemical				
Fertilizer							
N-P-K-S(lb/A)							
350-227-450							
Early Trial (EWA)		1-Apr	17-Jul	1-Aug	Chateau	Platinum	Quardris
Seed spacing:					Prowl H2O		Omega
12" in-row			**DAP**	**DAP**			
34" between row			107	122			
Fertilizer			Mechanical				
N-P-K-S(lb/A)							
200-340-220							

2012 TRI-STATE RUSSET POTATO VARIETY TRIAL

TABLE 2: Clones, Parents, Flower Color, State Entered By, Use, Seed Source, and Percent Stand

No	Clone	Parents	Parents	Flower Color	Entered by	Use	Seed Source	Trial Year	Mean Stand %
1	Ranger Russet	Butte	A6595-3	Med Red-purple	Check	Dual	Ck	ID	**90**
2	Russet Burbank	Early Rose	?	White	Check	Dual	Ck	ID	**93**
3*	Russet Norkotah	ND9687-5 Ru	ND9526-4 Ru	White	Check	Fresh	Ck	ID	
4	A0012-5	GEMSTAR RUSSET	AO87277-6	Red-purple	ID	Dual	LW	1	**90**
5	A0073-2	A9304-3	A95154-1	Red-purple	ID	Dual	LW	1	**86**
6	A01325-1	AO96763-7	PREMIER RUSSET	White	ID	Dual	ID	1	**83**
*7	A02062-1TE	A97201-4	A97299-1	White	ID	Dual	OR	3	
8	A02144-2	A97123-10	A96563-8	White	ID	Dual	OR	2	**91**
9	A02424-83LB	AO96781-4	A97229-1	White	ID	Dual	ID	1	**98**
10	A03082-4	A96095-3	A98104-4	White	ID	Dual	ID	1	**96**
*11	A03131-4TE	A98082-17	A98104-4	White	ID	Dual	OR	2	
12	A03921-2	A96953-13	A93005-10	MR purple	ID	Dual	ID	1	**96**
13	A05013-29	A97119-2	A96095-3	White	ID	Dual	ID	1	**98**
14	A05015-5TE	A97119-2	A97314-4	White	ID	Dual	ID	1	**91**
15	A05052-3TE	A99133-6	A99032-2TE	White	ID	Dual	ID	1	**89**
16	A06003-3TE	A92030-5	A97306-3	White	ID	Dual	ID	1	**89**
17	A06015-13TE	A99031-1TE	A97306-3	White	ID	Dual	ID	1	**94**
*18	A06029-5TE	A99133-6	A99034-2E	White	ID	fresh	ID	1	
19	A06084-1TE	A98345-1	A97267-1	White	ID	Dual	ID	1	**96**
20	AO01114-4	AO92017-6	A86102-6	White	OR	Dual	OR	3	**95**
21	AO03123-2	A98082-17	Premier R	White	OR	Dual	OR	1	**94**
22	OR05039-4	AO95245-2	PA00N29-3	White	OR	Dual	OR	2	**95**
23	POR06V12-3	PA00V6-4	PA01N22-1	White	OR	Dual	OR	1	**91**

* Early Entry only

LW= entered by Lamb Weston

2012 TRI-STATE RUSSET POTATO VARIETY TRIAL

TABLE 3: Tuber and Vine Characteristics, Stems per Plant, Tubers per Plant

		Tuber				Vine				Stems/	Tubers/
No	Clone	Means	Shape	Means	Skin	ID	Size	Means	Maturity	Plant	Plant
1	Ranger Russet	**4.5**	Long	**3.9**	Med Russet	**3.3**	Med-large	**3.1**	Medium	**2.3**	**6.3**
2	Russet Burbank	**3.8**	Obl-Lng	**3.8**	Med Russet	**3.8**	Med-large	**2.4**	Early	**2.1**	**7.1**
3*	Russet Norkotah	**3.7**	Obl-Lng	**4.0**	Med Russet					**2.3**	**7.8**
4	A0012-5	**3.1**	Oblong	**4.7**	Heavy Rus	**3.8**	Med-large	**4.1**	Late	**1.5**	**5.7**
5	A0073-2	**3.0**	Oblong	**3.7**	Med Russet	**4.3**	Large	**2.3**	Early	**1.7**	**7.6**
6	A01325-1	**2.8**	Oblong	**1.8**	White			**4.0**	Med--late	**1.7**	**7.8**
*7	A02062-1TE	**4.0**	Obl-Lng	**4.0**	Med Russet					**1.5**	**7.5**
8	A02144-2	**2.9**	Oblong	**4.1**	Med Hvy Rus	**2.0**	Small	**1.3**	Early	**2.8**	**8.3**
9	A02424-83LB	**3.2**	Oblong	**1.8**	White	**4.0**	Med-large	**3.8**	Med--late	**2.9**	**9.0**
10	A03082-4	**3.9**	Obl-Lng	**3.2**	Med Russet	**4.0**	Med-large	**3.4**	Medium	**2.3**	**6.8**
*11	A03131-4TE	**2.0**	Round	**3.7**	Med Russet					**2.0**	**8.2**
12	A03921-2	**3.5**	Oblong	**2.8**	Light Russet	**3.5**	Med-large	**2.6**	Med Early	**2.5**	**7.7**
13	A05013-29	**3.9**	Obl-Lng	**3.4**	Med Russet	**1.8**	Small	**1.3**	Early	**2.2**	**6.9**
14	A05015-5TE	**2.7**	Oblong	**3.1**	Med Russet	**2.5**	Small	**1.9**	Early	**1.8**	**5.6**
15	A05052-3TE	**2.8**	Oblong	**2.9**	Light Russet	**2.5**	Small	**3.0**	Med Early	**2.3**	**7.5**
16	A06003-3TE	**3.8**	Obl-Lng	**4.4**	Med Hvy Rus	**2.8**	Medium	**2.8**	Med Early	**1.6**	**6.1**
17	A06015-13TE	**3.6**	Obl-Lng	**4.4**	Med Hvy Rus	**3.5**	Med-large	**2.9**	Med Early	**1.8**	**5.5**
*18	A06029-5TE	**3.0**	Oblong	**2.7**	Light Russet					**1.1**	**5.4**
19	A06084-1TE	**4.2**	Long	**4.0**	Med Russet	**2.5**	Small	**2.1**	Early	**1.9**	**7.2**
20	AO01114-4	**3.5**	Oblong	**3.9**	Med Russet	**3.0**	Medium	**2.8**	Med Early	**2.1**	**6.6**
21	AO03123-2	**3.9**	Obl-Lng	**3.7**	Med Russet	**3.3**	Med-large	**3.8**	Med--late	**2.6**	**8.6**
22	OR05039-4	**4.3**	Long	**2.3**	Light Russet	**3.5**	Med-large	**3.3**	Medium	**2.4**	**7.3**
23	POR06V12-3	**4.0**	Obl-Lng	**4.5**	Med Hvy Rus	**3.3**	Med-large	**3.1**	Medium	**1.9**	**8.1**

Numerical values are means of all trial locations.

TABLE 4: Total Yield (CWT/A) - EARLY AND LATE HARVEST

No.	Clone	Total Yield - Early Harvest (CWT/A) Early (WA)	Rank	Total Yield - Late Harvest (CWT/A) (ID)	(OR) Herm	(OR) KF	(LWA)	Entry Mean	Rank
1	Ranger Russet	**323**	**17**	548	835	639	676	**675**	**5**
2	Russet Burbank	**334**	**15**	356	1093	559	476	**621**	**9**
3*	Russet Norkotah	**357**	**10**			473			
4	A0012-5	**246**	**22**	336	1086	562	713	**674**	**6**
5	A0073-2	**308**	**20**	382	804	529	647	**591**	**11**
6	A01325-1	**365**	**9**		982	682	753	**806**	**1**
7*	A02062-1TE	**368**	**8**						
8	A02144-2	**342**	**12**	325	539	528	443	**459**	**19**
9	A02424-83LB	**442**	**3**	538	799	688	816	**710**	**4**
10	A03082-4	**414**	**5**	464	1006	828	742	**760**	**2**
11*	A03131-4TE	**485**	**1**						
12	A03921-2	**290**	**21**	444	1028	675	708	**714**	**3**
13	A05013-29	**443**	**2**	315	857	712	735	**655**	**7**
14	A05015-5TE	**323**	**17**	336	747	524	543	**538**	**16**
15	A05052-3TE	**338**	**13**	418	717	455	611	**550**	**14**
16	A06003-3TE	**423**	**4**	396	706	590	463	**539**	**15**
17	A06015-13TE	**355**	**11**	542	540	493	553	**532**	**17**
18*	A06029-5TE	**376**	**7**						
19	A06084-1TE	**242**	**23**	344	868	587	457	**564**	**13**
20	AO01114-4	**382**	**6**	333	637	505	550	**506**	**18**
21	AO03123-2	**323**	**17**	375	792	576	600	**586**	**12**
22	OR05039-4	**336**	**14**	380	982	485	573	**605**	**10**
23	POR06V12-3	**328**	**16**	412	875	559	658	**626**	**8**
	Location Means	**354**		**402**	**836**	**582**	**617**	**616**	

TABLE 5: Yield of U.S. #1'S (CWT/A & %) - EARLY AND LATE HARVEST

No.	Clone	USNo. 1's - Early Harvest (CWT/A)/% Early (WA)	Rank	U.S. No. 1's - Late Harvest (CWT/A)/% (ID)	(OR) Herm	(OR) KF	(LWA)	Entry Mean	Rank
1	Ranger Russet	252	**14**	359	578	267	543	**437**	**9**
		78	**10**	64	69	42	80	**64**	**17**
2	Russet Burbank	175	**21**	181	630	307	364	**371**	**16**
		53	**23**	50	58	55	76	**60**	**18**
3*	Russet Norkotah	257	**13**			269			
		72	**15**			57			
4	A0012-5	182	**20**	159	912	376	658	**526**	**3**
		74	**14**	46	84	67	92	**72**	**9**
5	A0073-2	201	**18**	291	599	421	591	**476**	**6**
		65	**17**	73	74	80	91	**80**	**3**
6	A01325-1	279	**10**		839	370	671	**627**	**1**
		77	**11**		85	54	89	**76**	**8**
7*	A02062-1TE	297	**8**						
		81	**7**						
8	A02144-2	203	**17**	229	326	353	328	**309**	**19**
		59	**20**	71	61	67	74	**68**	**13**
9	A02424-83LB	301	**7**	429	635	481	713	**565**	**2**
		68	**16**	80	79	70	87	**79**	**4**
10	A03082-4	344	**3**	349	524	367	490	**433**	**10**
		83	**5**	75	52	44	66	**59**	**19**
11*	A03131-4TE	423	**1**						
		87	**1**						
12	A03921-2	217	**16**	344	799	299	619	**515**	**4**
		75	**13**	75	78	44	87	**71**	**11**
13	A05013-29	351	**2**	253	494	308	638	**423**	**12**
		79	**9**	80	58	43	87	**67**	**15**
14	A05015-5TE	274	**11**	300	646	320	487	**438**	**8**
		85	**3**	88	86	61	90	**81**	**1**
15	A05052-3TE	283	**9**	277	604	271	465	**404**	**14**
		84	**4**	66	84	60	76	**72**	**10**
16	A06003-3TE	343	**4**	220	555	345	361	**370**	**17**
		81	**7**	54	79	58	78	**67**	**14**
17	A06015-13TE	273	**12**	405	396	173	428	**351**	**18**
		77	**11**	73	73	35	77	**65**	**16**
18*	A06029-5TE	327	**5**						
		87	**1**						
19	A06084-1TE	130	**23**	288	637	405	370	**425**	**11**
		54	**21**	83	73	69	81	**77**	**6**
20	AO01114-4	316	**6**	191	536	385	416	**382**	**15**
		83	**5**	83	84	76	76	**80**	**2**
21	AO03123-2	175	**21**	252	558	356	461	**407**	**13**
		54	**21**	66	70	62	77	**69**	**12**
22	OR05039-4	218	**15**	273	743	353	488	**464**	**7**
		65	**17**	72	76	73	85	**77**	**6**
23	POR06V12-3	197	**19**	330	737	391	529	**497**	**5**
		60	**19**	80	84	70	80	**79**	**5**
	Location Means	**262**		**285**	**618**	**341**	**506**	**443**	
		73		**71**	**74**	**59**	**82**	**72**	

TABLE 6: Yield of U.S. #1'S > 10 oz.(CWT/A & %) - EARLY AND LATE HARVEST

No.	Clone	>10 oz. - Early Harvest (CWT/A)/% Early (WA)	Rank	>10 (or 12**) oz. - Late Harvest (CWT/A)/% (ID)	(OR) Herm**	(OR) KF**	(LWA)	Entry Mean	Rank
1	Ranger Russet	16	**11**	220	279	91	236	**207**	**6**
		5	**10**	39	33	14	35	**30**	**10**
2	Russet Burbank	6	**16**	79	270	123	87	**140**	**14**
		2	**14**	19	25	22	18	**21**	**16**
3*	Russet Norkotah	15	**12**			94			
		4	**12**			20			
4	A0012-5	5	**18**	76	718	75	406	**319**	**2**
		2	**14**	22	66	13	57	**40**	**3**
5	A0073-2	0	**21**	89	102	44	347	**146**	**13**
		0	**21**	21	13	8	54	**24**	**14**
6	A01325-1	33	**7**		557	155	328	**347**	**1**
		9	**7**		57	23	43	**41**	**1**
7*	A02062-1TE	9	**14**						
		2	**14**						
8	A02144-2	6	**16**	47	31	75	29	**46**	**19**
		2	**14**	14	6	14	7	**10**	**19**
9	A02424-83LB	7	**15**	161	213	76	238	**172**	**10**
		2	**14**	31	27	11	29	**25**	**11**
10	A03082-4	73	**2**	233	260	150	221	**216**	**5**
		18	**3**	49	26	18	30	**31**	**9**
11*	A03131-4TE	46	**5**						
		10	**6**						
12	A03921-2	11	**13**	211	467	93	205	**244**	**3**
		4	**12**	43	45	14	29	**33**	**5**
13	A05013-29	59	**4**	163	207	122	286	**195**	**8**
		13	**4**	52	24	17	39	**33**	**4**
14	A05015-5TE	42	**6**	164	350	135	235	**221**	**4**
		13	**4**	46	47	26	43	**41**	**2**
15	A05052-3TE	22	**9**	135	171	89	128	**131**	**15**
		7	**8**	32	24	20	21	**24**	**12**
16	A06003-3TE	26	**8**	151	290	140	132	**178**	**9**
		6	**9**	37	41	24	28	**33**	**6**
17	A06015-13TE	71	**3**	303	120	81	182	**172**	**11**
		20	**2**	54	22	16	33	**31**	**8**
18*	A06029-5TE	101	**1**						
		27	**1**						
19	A06084-1TE	3	**19**	117	162	89	50	**105**	**18**
		1	**19**	34	19	15	11	**20**	**18**
20	AO01114-4	20	**10**	63	173	99	136	**118**	**16**
		5	**10**	19	27	20	25	**23**	**15**
21	AO03123-2	0	**21**	143	140	92	74	**112**	**17**
		0	**21**	37	18	16	12	**21**	**17**
22	OR05039-4	0	**21**	146	366	147	133	**198**	**7**
		0	**21**	38	37	30	23	**32**	**7**
23	POR06V12-3	3	**19**	124	255	106	126	**153**	**12**
		1	**19**	30	29	19	19	**24**	**12**
	Location Means	**25**		**146**	**270**	**104**	**188**	**180**	
		7		**34**	**31**	**18**	**29**	**28**	

TABLE 7: Yield of <4 oz. (CWT/A & %) - EARLY AND LATE HARVEST

No.	Clone	<4 oz. - Early Harvest (CWT/A)/% Early (WA)	Rank	<4 oz. - Late Harvest (CWT/A)/% (ID)	(OR) Herm	(OR) KF	(LWA)	Entry Mean	Rank
1	Ranger Russet	47	**17**	23	46	30	54	**38**	**12**
		14	**15**	4	5	5	8	**6**	**15**
2	Russet Burbank	65	**10**	32	67	36	73	**52**	**8**
		19	**11**	10	6	6	15	**9**	**8**
3*	Russet Norkotah	76	**8**			28			
		21	**10**			6			
4	A0012-5	42	**21**	15	46	25	25	**28**	**18**
		17	**13**	5	4	4	3	**4**	**18**
5	A0073-2	79	**7**	56	79	44	22	**50**	**9**
		26	**8**	17	10	8	3	**10**	**7**
6	A01325-1	68	**9**		23	15	38	**25**	**19**
		19	**11**		2	2	5	**3**	**19**
7*	A02062-1TE	57	**13**						
		16	**14**						
8	A02144-2	128	**3**	69	157	60	111	**99**	**1**
		37	**4**	21	29	11	25	**22**	**1**
9	A02424-83LB	134	**2**	43	59	65	60	**57**	**5**
		30	**7**	8	7	9	7	**8**	**9**
10	A03082-4	46	**19**	26	49	24	47	**37**	**13**
		11	**21**	6	5	3	6	**5**	**16**
11*	A03131-4TE	55	**14**						
		111	**1**						
12	A03921-2	64	**11**	33	48	31	54	**42**	**11**
		22	**9**	9	5	5	8	**7**	**11**
13	A05013-29	61	**12**	23	65	47	59	**49**	**10**
		14	**15**	7	8	7	8	**8**	**10**
14	A05015-5TE	44	**20**	24	39	27	25	**29**	**17**
		14	**15**	8	5	5	5	**6**	**14**
15	A05052-3TE	47	**17**	46	81	42	100	**67**	**4**
		14	**15**	11	11	9	16	**12**	**3**
16	A06003-3TE	53	**16**	14	34	23	59	**33**	**15**
		12	**20**	4	5	4	13	**7**	**12**
17	A06015-13TE	26	**23**	30	49	8	33	**30**	**16**
		7	**23**	3	9	2	6	**5**	**16**
18*	A06029-5TE	31	**22**						
		8	**22**						
19	A06084-1TE	104	**6**	24	79	54	68	**56**	**6**
		43	**3**	7	9	9	15	**10**	**5**
20	AO01114-4	54	**15**	27	65	29	88	**52**	**7**
		14	**15**	8	10	6	16	**10**	**5**
21	AO03123-2	148	**1**	40	91	43	126	**75**	**2**
		46	**2**	11	11	7	21	**13**	**2**
22	OR05039-4	111	**4**	22	50	27	45	**36**	**14**
		33	**5**	6	5	6	8	**6**	**13**
23	POR06V12-3	109	**5**	45	59	65	101	**68**	**3**
		33	**5**	11	7	12	15	**11**	**4**
	Location Means	**72**		**33**	**62**	**36**	**63**	**49**	
		25		**9**	**8**	**6**	**11**	**8**	

2012 TRI-STATE RUSSET POTATO VARIETY TRIAL

TABLE 8: Specific Gravity - EARLY AND LATE HARVEST

		Specific Gravity - Early Harvest		Specific Gravity - Late Harvest					
No.	Clone	EWA	Rank	ID	Herm	KF	LWA	Entry Mean	Rank
1	Ranger Russet	1.075	**14**	1.088	1.077	1.085	1.079	**1.082**	**11**
2	Russet Burbank	1.086	**2**	1.078	1.077	1.091	1.072	**1.079**	**15**
3*	Russet Norkotah	1.078	**9**			1.073		**1.073**	**20**
4	A0012-5	1.074	**16**	1.089	1.071	1.092	1.086	**1.084**	**7**
5	A0073-2	1.077	**11**	1.094	1.088	1.089	1.084	**1.089**	**6**
6	A01325-1	1.075	**13**		1.077	1.090	1.084	**1.084**	**9**
7*	A02062-1TE	1.067	**21**						
8	A02144-2	1.078	**7**	1.088	1.068	1.089	1.075	**1.080**	**14**
9	A02424-83LB	1.078	**8**	1.097	1.082	1.090	1.091	**1.090**	**3**
10	A03082-4	1.064	**22**	1.084	1.064	1.082	1.068	**1.075**	**19**
11*	A03131-4TE	1.070	**20**						
12	A03921-2	1.087	**1**	1.106	1.091	1.102	1.092	**1.098**	**1**
13	A05013-29	1.072	**18**	1.077	1.070	1.088	1.081	**1.079**	**16**
14	A05015-5TE	1.086	**3**	1.089	1.068	1.093	1.073	**1.081**	**12**
15	A05052-3TE	1.076	**12**	1.099	1.092	1.100	1.089	**1.095**	**2**
16	A06003-3TE	1.077	**10**	1.080	1.068	1.088	1.067	**1.076**	**18**
17	A06015-13TE	1.073	**17**	1.086	1.065	1.087	1.069	**1.076**	**17**
18*	A06029-5TE	1.084	**4**						
19	A06084-1TE	1.061	**23**	1.084	1.072	1.085	1.079	**1.080**	**13**
20	AO01114-4	1.071	**19**	1.094	1.081	1.098	1.087	**1.090**	**4**
21	AO03123-2	1.081	**6**	1.083	1.078	1.084	1.085	**1.082**	**10**
22	OR05039-4	1.075	**15**	1.094	1.073	1.091	1.077	**1.084**	**8**
23	POR06V12-3	1.082	**5**	1.094	1.082	1.094	1.086	**1.089**	**5**
	Location Means	**1.076**		**1.089**	**1.076**	**1.090**	**1.080**	1.083	

2012 TRI-STATE RUSSET POTATO VARIETY TRIAL

TABLE 9: Average Tuber Size, and Tuber Shape

		Average Tuber Size (oz)					Tuber Shape (Length/Width Ratio)				
No.	Clone	WA E	ID L	OR Herm	WA L	Means Late only	WA E	ID L	OR Herm	OR KF	Entry Means
1	Ranger Russet	6.0	9.5	9.4	8.7	**9.2**	1.77	2.25	1.99	2.01	**2.01**
2	Russet Burbank	5.6	7.3	8.5	6.2	**7.3**	1.70	2.11	1.79	1.80	**1.85**
3*	Russet Norkotah	5.1					1.78			2.01	**1.89**
4	A0012-5	5.3	8.9	11.7	10.7	**10.5**	1.60	1.51	1.59	1.47	**1.54**
5	A0073-2	4.4	6.2	6.7	10.5	**7.8**	1.63	1.69	1.55	1.67	**1.64**
6	A01325-1	5.3		11.2	9.0	**10.1**	1.76		1.49	1.54	**1.59**
7*	A02062-1TE	5.5					1.81				**1.81**
8	A02144-2	4.1	5.3	4.7	4.7	**4.9**	1.38	1.92	1.35	1.75	**1.60**
9	A02424-83LB	4.4	7.2	7.6	7.6	**7.5**	1.87	1.93	1.71	1.80	**1.83**
10	A03082-4	6.3	9.3	9.8	9.1	**9.4**	1.53	1.79	1.82	1.73	**1.72**
11*	A03131-4TE	6.1					1.49				**1.49**
12	A03921-2	4.8	8.2	9.8	7.7	**8.6**	1.79	2.04	1.62	1.60	**1.76**
13	A05013-29	6.0	8.9	8.3	8.2	**8.5**	1.93	1.52	1.86	2.02	**1.83**
14	A05015-5TE	6.1	7.7	9.5	8.6	**8.6**	1.57	1.71	1.53	1.65	**1.61**
15	A05052-3TE	5.7	6.9	7.2	6.0	**6.7**	1.53	1.94	1.33	1.76	**1.64**
16	A06003-3TE	6.0	11.0	9.0	7.1	**9.0**	1.80	1.97	1.72	1.59	**1.77**
17	A06015-13TE	7.5	10.4	7.6	8.7	**8.9**	1.61	1.99	1.60	1.61	**1.70**
18*	A06029-5TE	7.6					1.76				**1.76**
19	A06084-1TE	4.0	7.7	7.1	6.0	**6.9**	1.91	2.04	1.92	1.84	**1.93**
20	AO01114-4	5.8	7.6	7.2	6.4	**7.0**	1.62	1.87	1.60	1.69	**1.70**
21	AO03123-2	3.7	7.4	6.7	5.4	**6.5**	1.81	2.06	1.79	1.87	**1.88**
22	OR05039-4	4.3	8.1	8.7	7.4	**8.1**	1.98	2.12	1.98	1.79	**1.97**
23	POR06V12-3	4.4	6.7	8.0	6.2	**7.0**	1.87	1.86	1.76	1.73	**1.80**
Location Means		**5.4**	**8.0**	**8.3**	**7.6**	**8.0**	**1.72**	**1.91**	**1.68**	**1.75**	**1.75**

2012 TRI-STATE RUSSET POTATO VARIETY TRIAL

TABLE 10: EXTERNAL DEFECTS - Growth Cracks, Seecond 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**	5.0	**4.0**	5.0	**3.7**	2.8	5.0	**4.7**
2	Russet Burbank	2.7	**3.7**	2.0	**3.1**	5.0	**3.0**	2.4	5.0	**4.9**
3*	Russet Norkotah	4.7	**4.6**	5.0	**4.5**	4.0	**4.5**		5.0	
4	A0012-5	4.3	**4.4**	5.0	**4.8**	5.0	**3.9**	3.7	5.0	**4.7**
5	A0073-2	5.0	**4.5**	5.0	**4.9**	5.0	**3.7**	2.2	5.0	**4.8**
6	A01325-1	5.0	**4.4**	5.0	**4.7**	5.0	**2.9**		5.0	**3.6**
7*	A02062-1TE	5.0		5.0		5.0			5.0	
8	A02144-2	4.7	**4.4**	5.0	**4.9**	4.0	**2.8**	2.3	5.0	**4.9**
9	A02424-83LB	5.0	**4.8**	5.0	**4.7**	4.0	**3.2**	2.3	5.0	**3.0**
10	A03082-4	4.7	**3.1**	5.0	**4.3**	4.0	**3.6**	2.4	5.0	**4.2**
11*	A03131-4TE	4.7		5.0		5.0			5.0	
12	A03921-2	5.0	**4.4**	5.0	**4.7**	5.0	**3.4**	2.8	5.0	**4.4**
13	A05013-29	5.0	**4.2**	5.0	**4.5**	5.0	**3.7**	2.8	5.0	**4.0**
14	A05015-5TE	5.0	**4.5**	5.0	**4.8**	5.0	**3.3**	3.1	5.0	**4.8**
15	A05052-3TE	4.3	**4.8**	5.0	**4.9**	4.0	**3.8**	2.3	5.0	**4.6**
16	A06003-3TE	5.0	**4.2**	5.0	**4.5**	5.0	**3.8**	2.6	5.0	**4.9**
17	A06015-13TE	3.3	**3.5**	5.0	**4.6**	5.0	**3.1**	2.7	5.0	**4.8**
18*	A06029-5TE	5.0		5.0		4.0			5.0	
19	A06084-1TE	5.0	**4.7**	5.0	**4.7**	5.0	**3.4**	2.7	5.0	**4.7**
20	AO01114-4	4.3	**3.9**	5.0	**4.6**	5.0	**3.3**	2.6	5.0	**4.9**
21	AO03123-2	5.0	**4.7**	5.0	**4.7**	4.0	**4.4**	2.9	5.0	**4.8**
22	OR05039-4	5.0	**4.6**	5.0	**4.7**	5.0	**4.2**	2.8	5.0	**4.3**
23	POR06V12-3	5.0	**4.8**	5.0	**4.5**	5.0	**3.7**	3.0	5.0	**4.9**
Means		**4.7**	**4.3**	**4.9**	**4.5**	**4.7**	**3.6**	**2.7**	**5.0**	**4.5**

[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 11: INTERNAL DEFECTS - Hollow Heart & Brown Center, Internal Brown Spot, Vascular Discoloration/Net Necrosis, Blackspot - MEANS OF LOCATIONS

		Percent Hollow Heart plus Brown Center		Percent Internal Brown Spot		Percent Net Necrosis/VD		Blackspot Bruise				
								Washington [1]		Herm	KF	
No.	Clone	Early	Late	Early	Late	Early	Late	Early	Late	OR[2]	OR[2]	AB[3]
1	Ranger Russet	0.0	**0.6**	0.0	**3.7**	-n/a-	**2.5**	4.0	5.0	6.3	3	2.2
2	Russet Burbank	50.0	**14.9**	0.0	**4.1**	-n/a-	**2.5**	4.0	5.0	2.5	13	2.8
3*	Russet Norkotah	0.0	**5.0**	0.0	**0.0**	-n/a-	**5.0**	5.0			15	
4	A0012-5	0.0	**15.1**	0.0	**0.3**	-n/a-	**0.8**	5.0	5.0	0.0	0	3.3
5	A0073-2	0.0	**2.1**	0.0	**1.3**	-n/a-	**3.8**	5.0	5.0	6.3	23	2.5
6	A01325-1	0.0	**1.7**	0.0	**1.7**	-n/a-	**1.9**	5.0	5.0	0.0	5	
7*	A02062-1TE	0.0		0.0		-n/a-		5.0				
8	A02144-2	0.0	**1.3**	0.0	**4.1**	-n/a-	**5.8**	5.0	5.0	2.5	13	2.2
9	A02424-83LB	0.0	**0.0**	0.0	**2.2**	-n/a-	**8.3**	5.0	5.0	1.3	13	2.8
10	A03082-4	0.0	**0.3**	0.0	**1.7**	-n/a-	**0.8**	5.0	5.0	0.0	5	2.2
11*	A03131-4TE	0.0		0.0		-n/a-		5.0				
12	A03921-2	0.0	**3.8**	0.0	**11.6**	-n/a-	**6.7**	5.0	5.0	0.0	25	2.3
13	A05013-29	0.0	**2.8**	0.0	**1.9**	-n/a-	**6.7**	5.0	5.0	1.3	8	1.3
14	A05015-5TE	0.0	**2.3**	0.0	**1.3**	-n/a-	**1.7**	5.0	5.0	10.0	18	1.7
15	A05052-3TE	0.0	**2.8**	0.0	**2.5**	-n/a-	**0.8**	4.0	4.0	11.3	5	1.9
16	A06003-3TE	0.0	**2.2**	0.0	**3.1**	-n/a-	**5.4**	5.0	5.0	12.5	15	2.3
17	A06015-13TE	0.0	**0.0**	0.0	**0.0**	-n/a-	**5.0**	4.0	4.0	13.8	3	2.0
18*	A06029-5TE	0.0		0.0	**0.0**	-n/a-		5.0				
19	A06084-1TE	0.0	**3.4**	0.0	**4.4**	-n/a-	**5.8**	5.0	5.0	0.0	33	2.4
20	AO01114-4	0.0	**2.5**	0.0	**0.6**	-n/a-	**2.9**	5.0	5.0	0.0	23	2.6
21	AO03123-2	0.0	**8.8**	0.0	**0.0**	-n/a-	**2.5**	5.0	5.0	0.0	0	3.5
22	OR05039-4	0.0	**0.0**	0.0	**3.8**	-n/a-	**2.5**	5.0	5.0	2.5	5	2.4
23	POR06V12-3	0.0	**4.4**	0.0	**0.0**	-n/a-	**1.7**	3.0	5.0	0.0	3	3.4
Means		**2.2**	**3.7**	**0.0**	**2.3**		**3.7**	**4.7**	**4.9**	**3.7**	**11**	**2.4**

[1] Score 1-5, with 1=severe, 5=none.

[2] Klamath Falls, and Hermiston, Oregon is percentage of tuber showing blackspot bruising.

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

2012 TRI-STATE RUSSET POTATO VARIETY TRIAL

TABLE 12: Solids, Dextrose and Sucrose, Protein, Vitamin C and Glycoalkaloids - Tubers Grown at Aberdeen, Idaho

	Clone	Solids Oven Dry (%)	Sugars Dextrose (%FWB)	Sugars Sucrose (%FWB)	Protein (%DWB)	Vitamin C (mg/100g FWB)	Glycoalkaloids (mg/100gFWB)
1	Ranger Russet	22.8	0.07	0.17	4.52	29.0	2.2
2	Russet Burbank	19.8	0.12	0.15	3.90	15.9	1.0
3*	Russet Norkotah						
4	A0012-5	23.7	0.05	0.28	4.84	25.5	2.6
5	A0073-2	23.6	0.02	0.19	4.51	21.9	2.1
6	A01325-1						
7*	A02062-1TE						
8	A02144-2	21.8	0.02	0.12	4.94	20.3	3.7
9	A02424-83LB	25.7	0.03	0.22	5.04	31.5	3.8
10	A03082-4	20.2	0.08	0.16	5.21	21.2	7.3
11*	A03131-4TE						
12	A03921-2	26.4	0.03	0.20	5.14	27.0	4.7
13	A05013-29	20.4	0.07	0.21	3.93	21.0	1.2
14	A05015-5TE	22.0	0.08	0.22	4.77	25.0	2.8
15	A05052-3TE	25.0	0.04	0.20	4.37	27.6	2.6
16	A06003-3TE	20.4	0.12	0.18	4.88	25.1	2.2
17	A06015-13TE	22.1	0.13	0.27	4.95	30.3	6.4
18*	A06029-5TE						
19	A06084-1TE	22.7	0.01	0.18	5.14	20.7	3.8
20	AO01114-4	23.8	0.07	0.22	4.91	23.3	0.5
21	AO03123-2	20.8	0.06	0.24	5.11	13.9	2.1
22	OR05039-4	21.9	0.04	0.17	5.18	17.4	11.0
23	POR06V12-3	24.3	0.04	0.16	4.88	18.0	8.9
	Means	**22.7**	**0.06**	**0.20**	**4.79**	**23.0**	**3.8**

FWB = fresh weight basis DWB = dry weight basis

Glycoalkaloids: The 2012 Lenape check from Aberdeen was 34.4 mg/100g

TABLE 13: French Fry Color (00-4.0(darkest)), and Percent Sugar Ends

		Fry 44 or 45°						Fry 40°			% Sugar Ends
					Postharvest	All Entries				Postharvest	
No.	Clone	ID[1]	Herm	LWA[2]	3 state avg.[3]	Mean	Rank	ID[1]	LWA[2]	3 state avg.[3]	Means
1	Ranger Russet	0.5	2.3	1.0	1.7	**1.4**	**12**	3.5	2.0	3.2	**16**
2	Russet Burbank	0.9	2.9	2.0	2.3	**2.0**	**15**	3.9	4.0	3.7	**22**
3*	Russet Norkotah										
4	A0012-5	0.4	1.5	0.0	0.0	**0.5**	**3**	1.8	0.0	0.3	**0**
5	A0073-2	0.4	1.6	0.0	0.5	**0.6**	**6**	2.4	1.0	1.3	**6**
6	A01325-1		2.7	1.0	1.0	**1.6**	**13**		3.0	2.3	**28**
7*	A02062-1TE										
8	A02144-2	0.3	0.7	0.0	0.2	**0.3**	**1**	1.7	0.0	0.8	**0**
9	A02424-83LB	0.5	1.5	0.0	0.8	**0.7**	**7**	2.4	2.0	2.2	**6**
10	A03082-4	0.7	2.4	1.0	1.3	**1.4**	**11**	2.1	3.0	2.7	**10**
11*	A03131-4TE										
12	A03921-2	0.4	1.4	0.0	1.0			1.1	0.0	1.8	**14**
13	A05013-29	0.9	3.2	2.0	2.2	**2.1**	**16**	4.0	4.0	3.5	**0**
14	A05015-5TE	0.7	3.4	3.0	1.7	**2.2**	**18**	3.8	4.0	2.5	**12**
15	A05052-3TE	0.5	2.0	1.0	1.0	**1.1**	**10**	2.3	1.0	2.3	**16**
16	A06003-3TE	1.0	2.4	2.0	1.5	**1.7**	**14**	3.5	3.0	3.7	**6**
17	A06015-13TE	1.5	3.0	2.0	2.0	**2.1**	**17**	3.8	4.0	4.0	**8**
18*	A06029-5TE										
19	A06084-1TE	0.3	1.3	0.0	0.2	**0.4**	**2**	1.4	1.0	1.2	**3**
20	AO01114-4	0.6	2.0	0.0	0.3	**0.7**	**9**	3.2	2.0	2.0	**9**
21	AO03123-2	0.7	2.0	0.0	0.2	**0.7**	**8**	3.3	2.0	2.0	**13**
22	OR05039-4	0.3	1.8	0.0	0.0	**0.5**	**4**	2.4	3.0	1.8	**6**
23	POR06V12-3	0.4	2.1	0.0	0.0	**0.6**	**5**	2.2	2.0	2.0	**5**
	Location Means	**0.6**			**0.9**	**1.1**		**2.7**		**2.3**	**9**

[1] Samples held for 4 week cool down period - 7 weeks at storage temperature.

[2] Samples held for 60 days at 44 or 40°F

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

2012 TRI-STATE RUSSET POTATO VARIETY TRIAL

TABLE 14: Merit Scores (1-5(best))

		Process Merit					Postharvest Merit **	Early	Fresh Merit					
No.	Clone	ID	OR	WA	MEANS	RANK	3 State Avg.	WA	ID	Herm	KF OR	WA	MEANS	RANK
1	Ranger Russet	3.2	2.0	3.1	**2.8**	**13**	**3.3**	1.4	3.8	2.0	1.0	1.4	**1.9**	**18**
2	Russet Burbank	1.8	2.0	1.8	**1.9**	**19**	**2.0**	0.9	3.0	2.0	1.5	0.5	**1.6**	**23**
3*	Russet Norkotah							1.4			3.5		**2.5**	**6**
4	A0012-5	1.5	4.0	4.8	**3.4**	**6**	**4.5**	0.8	3.0	2.0	1.5	1.9	**1.8**	**20**
5	A0073-2	2.9	4.0	4.5	**3.8**	**1**	**4.5**	1.0	3.0	3.0	3.0	1.4	**2.3**	**9**
6	A01325-1		2.0	3.1	**2.6**	**16**	**3.5**	1.6		3.5	1.0	2.1	**2.1**	**14**
7*	A02062-1TE							2.6					**2.6**	**5**
8	A02144-2	3.3	2.0	4.1	**3.1**	**9**	**4.3**	0.4	3.0	4.0	1.0	0.7	**1.8**	**21**
9	A02424-83LB	3.9	3.0	3.9	**3.6**	**4**	**3.9**	1.1	4.0	2.0	1.0	2.0	**2.0**	**15**
10	A03082-4	3.3	3.0	2.2	**2.8**	**12**	**2.4**	2.3	3.0	2.0	1.0	1.6	**2.0**	**17**
11*	A03131-4TE							3.2					**3.2**	**1**
12	A03921-2	3.6	3.0	4.1	**3.6**	**5**	**3.9**	1.4	3.0	2.0	1.0	3.1	**2.1**	**12**
13	A05013-29	2.5	2.0	1.9	**2.1**	**17**	**2.2**	2.5	2.0	2.0	1.0	2.0	**1.9**	**19**
14	A05015-5TE	2.7	2.0	1.5	**2.1**	**18**	**2.0**	2.4	3.0	2.0	1.0	0.7	**1.8**	**21**
15	A05052-3TE	3.6	3.0	3.5	**3.4**	**8**	**3.3**	2.8	3.5	4.0	1.0	0.8	**2.4**	**7**
16	A06003-3TE	2.1	4.0	2.7	**2.9**	**11**	**2.6**	3.5	3.5	4.0	2.0	0.8	**2.8**	**3**
17	A06015-13TE	3.5	2.0	2.6	**2.7**	**15**	**2.5**	2.9	3.5	2.0	1.0	1.1	**2.1**	**13**
18*	A06029-5TE							2.3					**2.3**	**8**
19	A06084-1TE	3.5	3.5	3.8	**3.6**	**3**	**3.8**	1.4	4.5	2.0	2.0	0.8	**2.1**	**11**
20	AO01114-4	1.5	2.5	4.2	**2.7**	**14**	**4.2**	3.1	2.5	4.0	3.5	1.4	**2.9**	**2**
21	AO03123-2	2.8	2.0	4.3	**3.0**	**10**	**4.0**	1.0	2.5	3.5	2.0	2.1	**2.2**	**10**
22	OR05039-4	3.1	3.5	3.6	**3.4**	**7**	**3.9**	0.9	3.0	3.5	1.0	1.5	**2.0**	**16**
23	POR06V12-3	3.6	4.0	3.5	**3.7**	**2**	**4.0**	1.0	3.5	3.5	3.0	2.3	**2.7**	**4**
Location Means		**2.9**	**2.8**	**3.3**	**3.0**		**3.4**	**1.8**	**3.2**		**1.7**	**1.5**	**2.2**	

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

2012 TRI-STATE RUSSET POTATO VARIETY TRIAL

TABLE 15: Disease Evaluations

No.	Clone	Vert. Wilt/ Early Dying AB[1] (0-9)	Vert. Wilt/ Early Dying AUDPC	Vert. Wilt/ Early Dying HERM (0-9)	Vert. Wilt/ Early Dying HERM AUDPC	Early Blight AB[1] Foliar (0-9)	Early Blight AB[1] Foliar AUDPC	Early Blight AB[1] % Tuber	Late Blight CORV[2] Foliar 0-9	Late Blight CORV[2] Foliar AUDPC	Late Blight CORV[2] Tuber %	Common Scab AB[1] Incidence	Common Scab AB[1] %Serious Defect	% Net Necrosis/ vascular discoloration[1] *AB (2011 data) Incidence	% Net Necrosis/ vascular discoloration[1] *AB (2011 data) % Serious Defect	Pecto-bacterium Soft Rot[1] AB 0-5	Metr. Reaction AB [3]
	* =early trial only																
1	Ranger Russet	4.7	130	6.3	118.7	5.3	173	0	8.3	1510	45.0	46	14	67	8	3.7	MR
2	Russet Burbank	7.3	531	8.9	191.3	5.3	268	0	8.3	1459	7.5	3	0	70	12	3.5	MR
3	Russet Norkotah	9.0	975	--	--	6.0	313	0	9.0	1754	15.0	21	2	50	2	4.5	--
4	A0012-5	3.0	41	2.0	38.3	3.3	79	0	--	--	--	50	16	61	22	0.1	MR
5	A0073-2	6.3	205	7.4	141.2	6.7	259	2	--	--	--	13	0	46	3	4.1	MS
6	A01325-1	4.3	97	2.5	41.1	5.0	188	4	5.3	959	5.0	70	33	50	20	4.5	MR
7*	A02062-1TE	8.0	665	--	--	7.3	509	0	9.0	1889	15.0	12	0	30	3	3.0	--
8	A02144-2	9.0	875	8.6	210.9	7.5	545	0	9.0	1940	7.5	25	10	34	8	3.6	MR
9	A02424-83LB	5.0	90	6.8	146.8	4.7	133	10	4.5	408	10.0	37	9	60	16	1.5	R
10	A03082-4	6.7	288	6.3	141.8	5.3	211	15	9.0	1749	2.5	21	6	62	11	4.5	VS
11*	A03131-4TE	7.0	355	--	--	5.3	219	2	9.0	1918	2.5	13	8	34	2	3.5	--
12	A03921-2	6.7	368	6.0	117.0	4.7	143	0	7.0	1293	7.5	28	7	59	8	3.3	R
13	A05013-29	9.0	875	8.9	195.2	7.0	620	2	8.0	1591	5.0	41	12	67	29	0.7	R
14	A05015-5TE	8.7	690	9.0	221.6	7.7	537	0	9.0	1809	2.5	62	23	51	0	2.5	S
15	A05052-3TE	7.0	405	6.6	114.2	6.3	261	6	8.5	1648	7.5	53	18	44	6	2.7	MR
16	A06003-3TE	7.7	460	9.0	219.9	6.0	338	0	--	--	--	42	9	85	16	3.1	S
17	A06015-13TE	9.0	890	9.0	218.8	7.0	510	3	9.0	1829	2.5	8	0	25	2	0.9	MR
18*	A06029-5TE	9.0	833	--	--	7.0	433	2	8.3	1585	20.0	14	0	62	2	3.9	--
19	A06084-1TE	8.3	718	8.6	191.3	6.0	340	1	9.0	1840	22.5	53	19	67	6	2.7	MS
20	AO01114-4	8.0	638	7.9	183.4	6.7	443	1	9.0	1803	7.5	0	0	45	4	3.1	MR
21	AO03123-2	4.7	81	6.6	147.4	5.7	252	0	8.0	1451	20.0	32	7	60	10	4.1	MS
22	OR05039-4	5.3	188	4.8	95.6	4.3	135	4	8.0	1461	15.0	31	14	40	10	2.6	R
23	POR06V12-3	7.0	472	6.0	134.4	5.7	252	2	7.0	1252	12.5	9	0	56	11	3.7	MR
	MEANS	**7.0**	**472**	**6.9**	**151.0**	**5.9**	**311**	**2**	**8.1**	**1557**	**11.6**	**29.7**	**9.1**	**53**	**9**	**3.0**	
	LSD @ .05	**1.1**				**1.5**		**9**	**0.8**	**138**	**8**	**22.0**	**11.0**	**34**	**17**	**1.4**	

[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 typcial disease symptoms.
Early Blight and Vert. Wilt AUDPC: Area Under the Disease Progress Curve based on foliar readings taken 106, 113, and 120 days 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=0%/none; 5=100%/severe as a combination of tuber area and degree impacted by Fusarium and 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] Metribuzin Reaction measured at Aberdeen, ID. VR=very resistant, R=Resistant, MR=Moderately resistant, MS=moderately susceptible, S=susceptible VS=very susceptible

TABLE 16: Summary

	Clone	Year in Trial	Use	Early Late	Yield Late	US#1's CWT	US#1's %	Tuber Size	Specific Gravity	Fry Color	Merit F	Score P	Comments	Dis
1	Ranger	CK	Dual	323	675	437	64	9.2	1.082	1.4	1.9	2.8		
2	R. Burbank	Ck	Dual	334	621	371	60	7.3	1.079	2.0	1.6	1.9		
3*	**Norkotah**	**Ck**	**Fresh**	357		0	0	0.0	1.073	0.0	2.5	0.0		
4	A0012-5	1	Dual	246	674	526	72	10.5	1.084	0.5	1.8	3.4	good color, HH	return
5	A0073-2	1	Dual	308	591	476	80	7.8	1.089	0.6	2.3	3.8	good process merit	return
6	A01325-1	2	Dual	365	806	627	76	10.1	1.084	1.6	2.1	2.6	yield? No Idaho, disease res	discard
7*	A02062-1TE	1	Dual	368	0	0	0	0.0	0.000	0.0	2.6	0.0		adv to WR
8	A02144-2	1	Dual	342	459	309	68	4.9	1.080	0.3	1.8	3.1	small, short, good fry color	discard
9	A02424-83LB	1	Dual	442	710	565	79	7.5	1.090	0.7	2.0	3.6	high Vit C, disease res	adv to WR
10	A03082-4	1	Dual	414	760	433	59	9.4	1.075	1.4	2.0	2.8	GC, low SG	discard
11*	A03131-4TE	1	Dual	485	0	0	0	0.0	0.000	0.0	3.2	0.0	early good, short	discard
12	A03921-2	2	Dual	290	714	515	71	8.6	1.098	0.0	2.1	3.6	IBS, high SG	return
13	A05013-29	2	Dual	443	655	423	67	8.5	1.079	2.1	1.9	2.1		discard
14	A05015-5TE	1	Dual	323	538	438	81	8.6	1.081	2.2	1.8	2.1	Blackspot, disease susc	discard
15	A05052-3TE	1	Dual	338	550	404	72	6.7	1.095	1.1	2.4	3.4	Blackspot	return
16	A06003-3TE	2	Dual	423	539	370	67	9.0	1.076	1.7	2.8	2.9		return
17	A06015-13TE	1	Dual	355	532	351	65	8.9	1.076	2.1	2.1	2.7	high Vit C, GC	discard
18*	A06029-5TE	1	Dual	376	0	0	0	0.0	0.000	0.0	2.3	0.0		discard
19	A06084-1TE	1	Dual	242	564	425	77	6.9	1.080	0.4	2.1	3.6	good color and shape	return
20	AO01114-4	1	Dual	382	506	382	80	7.0	1.090	0.7	2.9	2.7	fresh merit good	adv to WR
21	AO03123-2	1	Dual	323	586	407	69	6.5	1.082	0.7	2.2	3.0		return
22	OR05039-4	2	Dual	336	605	464	77	8.1	1.084	0.5	2.0	3.4	high TGA	adv to WR
23	POR06V12-3	2	Dual	328	626	497	79	7.0	1.089	0.6	2.7	3.7	process merit good	adv to WR

2012 TRI-STATE RUSSET POTATO VARIETY TRIAL

TABLE 17: WASHINGTON STATE POSTHARVEST EVALUATIONS - Early Harvest

			Carton Yield US 1 (7-18 oz)			
	Clone	Comments from Washington Early Trial	% of Total Yield	Process Yield Tons/A	Shape Uniformity	Greening
1	Ranger Russet	Nice size uniformity.	43	58.0	2.7	5.0
2	Russet Burbank	Knobs, cracks, pears	26	41.0	1.3	5.0
3	Russet Norkotah	Nonuniform russet, a few pears, a bit flat.	27	42.4	2.7	5.0
4	A0012-5	Irregular shape, thick stolons.	32	53.6	2.7	5.0
5	A0073-2	Small, irregular shape.	10	23.3	2.3	5.0
6	A01325-1	Large white, spotty skin, shape a bit irregular.	34	51.5	2.7	5.0
7	A02062-1TE	Mostly typy, pointy ends.	37	49.7	3.7	5.0
8	A02144-2	Golf balls, baseballs, and a few pears.	14	24.2	2.7	5.0
9	A02424-83LB	White skin, powdery scab, uniform shape.	17	29.8	2.7	5.0
10	A03082-4	Large, spotty russeting, pear shaped.	55	67.9	2.3	5.0
11	A03131-4TE	Many round ones, good skin set.	50	64.7	3.7	5.0
12	A03921-2	Spotty russeting, variable shape.	28	39.6	2.3	4.7
13	A05013-29	Large, spotty russeting, lot of irregular shapes.	46	62.7	2.0	5.0
14	A05015-5TE	Mostly typy, poor skin set, short.	47	62.5	3.7	4.7
15	A05052-3TE	Poor skin set, blocky, typy.	45	58.2	3.7	5.0
16	A06003-3TE	Typy, some with irregular shapes.	47	61.2	3.3	5.0
17	A06015-13TE	Large, many growth cracks, shape a bit irregular.	53	65.1	3.3	5.0
18	A06029-5TE	Large, irregular shape, spotty russet.	65	78.4	2.7	5.0
19	A06084-1TE	Small, typy, not early.	16	26.0	4.0	5.0
20	AO01114-4	Some typy, shape variable.	42	54.1	3.0	5.0
21	AO03123-2	Small, not early.	4	12.5	3.7	5.0
22	OR05039-4	White, long, skinny spotty skin.	15	24.9	4.0	5.0
23	POR06V12-3	Irregular shapes, small, mostly typy.	19	36.3	2.7	5.0

2012 TRI-STATE RUSSET POTATO VARIETY TRIAL

TABLE 18: WASHINGTON STATE POSTHARVEST EVALUATIONS - Late Harvest

		Carton Yield		Postharvest Evaluations											
		US 1 (7-18 oz)		48°F				44°F				40°F			
	Clone	% of Total Yield	Process Yield Tons/A	WA	ID	OR	Means	WA	ID	OR	Means	WA	ID	OR	Means
1	Ranger Russet	49	80.4	1	0	0	1.2	1	1	1	1.7	2	2	4	3.2
2	Russet Burbank	45	60.9	2	2	2	2.0	2	2	3	2.3	4	3	4	3.7
3	Russet Norkotah														
4	A0012-5	55	87.7	0	0	0	0.0	0	0	0	0.0	0	0	1	0.3
5	A0073-2	57	88.1	0	0	0	0.5	0	0	0	0.5	1	0	0	1.3
6	A01325-1	65	83.5	1	0	2	1.0	1	0	2	1.0	3	1	3	2.3
7	A02062-1TE														
8	A02144-2	31	42.7	0	0	0	0.0	0	0	0	0.2	0	0	0	0.8
9	A02424-83LB	62	76.6	0	0	0	0.3	0	0	1	0.8	2	1	2	2.2
10	A03082-4	44	71.0	1	0	1	0.7	1	1	2	1.3	3	2	3	2.7
11	A03131-4TE														
12	A03921-2	51	73.8	0	0	0	0.8	0	0	0	1.0	0	0	1	1.8
13	A05013-29	58	80.4	2	0	3	1.5	2	1	3	2.2	4	3	3	3.5
14	A05015-5TE	54	78.8	1	1	2	0.7	3	2	2	1.7	4	3	4	2.5
15	A05052-3TE	48	60.4	0	0	0	0.3	1	0	2	1.0	1	1	2	2.3
16	A06003-3TE	51	70.2	0	0	2	0.8	2	0	1	1.5	3	3	4	3.7
17	A06015-13TE	55	70.3	1	2	0	1.0	2	2	2	2.0	4	4	4	4.0
18	A06029-5TE														
19	A06084-1TE	43	57.2	0	0	0	0.0	0	0	0	0.2	1	0	1	1.2
20	AO01114-4	39	57.5	0	0	0	0.0	0	0	1	0.3	2	1	2	2.0
21	AO03123-2	40	53.1	0	0	0	0.0	0	0	1	0.2	2	2	3	2.0
22	OR05039-4	54	74.2	0	0	0	0.0	0	0	0	0.0	3	1	1	1.8
23	POR06V12-3	48	66.1	0	0	0	0.0	0	0	0	0.0	2	2	2	2.0

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

2012 TRI-STATE RUSSET POTATO VARIETY TRIAL

TABLE 19: State Comments - Late Harvest

		Idaho	Hermiston	Late Washington
1	Ranger Russet	long thin fairly straight No JE	knobs, bottlenecks, large and long	Long, shape a bit irregular.
2	Russet Burbank	Jelly Ends	knobs, bottlenecks, misshapen	Smaller, mostly typy, eyes a bit deep.
4	A0012-5	big, MHR, curves, lumps,HH	too big, poor shape, heat sprouts	Puffed wheat skin, thick, shallow eyes.
5	A0073-2	short, blocky, ATS	nice shape, few pointy, little flat	Short, blocky tubers.
6	A01325-1		big, flat pears, poor shape	Scab, irregular shape - DISCARD.
8	A02144-2	MHR, small but nice, some shatter	nice blocky, lots small	Mostly small, pear shaped - DISCARD.
9	A02424-83LB	MLR, Nice, blocky, brow	knobs, crooks, pears, poor shape	Bad powdery scab, flat, variable shape - DISCARD
10	A03082-4	MLR, blocky, some GC, lumps	long, growth cracks, bottlenecks	Bumpy, misshapen tubers, scab - DISCARD
12	A03921-2	LR, oblong, nice	large, flat, bottlenecks, pear shaped	Mostly typy, uniform, some flat.
13	A05013-29	MHR, oblong, GC, lumps	big, long, crooks, bottlenecks	Very long, uniform shape.
14	A05015-5TE	ATS, MR, blocky	too large, round, growth cracks	Short, plump, small footballs.
15	A05052-3TE	MR, oblong, nice, few curves, some skin checking	nice shape, blocky	Smaller, irregular shapes.
16	A06003-3TE	MHR, long, curved, knobs, ugly	nice shape and size, few crooks	Mostly typy, large
17	A06015-13TE	long, MLR, bright eyes, smooth	severe growth cracks, pear shaped	Variable sizes, many growth cracks.
19	A06084-1TE	MR, long, nice shape	blocky, some long, thin, few crooks	Smaller, skinny, mostly typy.
20	AO01114-4	bad skin checking	nice, blocky shape, few knobs	Mostly typy, nice shape.
21	AO03123-2	Mr, long, size varies	ok shape, round, few bottlenecks	Some irregular shapes, too small.
22	OR05039-4	deep ends, folds	long, thin, few knobs, bottlenecks	Shape variable, bad skin.
23	POR06V12-3	MHR, blocky	nice shape, blocky, heavy russet	Typy, blocky, nice russet skin.

ATS= attached stolons

2012 TRI-STATE RUSSET POTATO VARIETY TRIAL

TABLE 20: Late Harvest Additional Date - Klamath Falls, OR

		(1-5(best)			Eye Depth	Blackspot Bruise	Rhizoc (1-	
		Skinning	Uniformity	Greening	(1-5(shallow)	(1-5(none)	5=none)	comments
1	Ranger Russet	4.1	3.0	4.0	3.5	3	3.6	hooky-crooky, MS, 2's
2	Russet Burbank	4.1	3.6	4.5	3.6	13	4.5	MS x 4, Pty x 4, Poor x 4
3	Russet Norkotah	4.8	3.9	3.3	4.0	15	4.8	Pty SE x 3, MS x 4, Poor for R. Nork
4	A0012-5	4.0	3.5	4.4	4.0	0	2.9	Rnd x 3, Eratic Shape x 4, Drop x 4
5	A0073-2	4.0	4.4	4.3	4.4	23	4.1	Typy x 4, Small x 4, Fresh Maybe
6	A01325-1	4.4	3.0	3.4	4.0	5	4.1	Proc only x 4, SB x 4, Poor x 4
8	A02144-2	4.3	4.0	4.0	3.8	13	4.1	Proc only x 4, SB x 3, Poor x 3
9	A02424-83LB	4.5	4.0	3.3	4.1	13	3.0	Proc only x 4, Smooth x 4, Typy x 4, Keep
10	A03082-4	4.3	2.3	3.3	2.9	5	3.6	Lumpy x 4, Junk x 4, Drop x 4
12	A03921-2	4.1	3.1	2.9	3.8	25	3.3	Proc only, MS x 4, SB x 3, Drop x 4
13	A05013-29	4.4	3.9	3.5	3.9	8	4.4	Proc only, MS x 3, Pty SE x 3, 2's, Poor, Drop
14	A05015-5TE	4.1	4.0	3.3	3.9	18	4.1	Proc only, GE x 3, Fair x 4
15	A05052-3TE	4.5	4.1	3.1	3.9	5	4.4	Proc only, Pty x 3, lenticels x 3
16	A06003-3TE	3.3	3.6	3.8	4.0	15	4.6	Plump x 3, Hvy Net x 3, Fair, Drop
17	A06015-13TE	4.0	3.0	4.0	3.6	3	4.8	Total Junk x 4, Drop
19	A06084-1TE	4.3	4.1	4.4	3.5	33	4.4	Hvy Net x 4, Brows x 4, Not Fresh, Drop
20	AO01114-4	4.1	4.5	4.3	3.5	23	3.9	Typy, SB, Fresh Potential
21	AO03123-2	4.0	4.0	4.0	3.6	0	4.5	Proc only, Typy x 4
22	OR05039-4	4.8	4.3	4.0	4.0	5	4.1	Proc only, Pty SE, Few MS, Fair
23	POR06V12-3	4.1	4.3	4.0	4.0	3	4.1	Hvy Net x 4, Small x 4, Fresh Maybe

category is Impact Bruise - percentage of tubers with TNC, Shatter, White-knot, BS, etc.