

2011 WESTERN REGIONAL POTATO VARIETY TRIAL REPORT

State Experiment Stations and
USDA-ARS Cooperating

California
Colorado
Idaho
Oregon
Texas
Washington



2011 WESTERN REGIONAL POTATO VARIETY TRIAL REPORT

TABLE

- 1 Locations, Cooperators, and Cultural Information
- 2 Clone, Parentage, Flower Color, Seed and Trial Information, Stand, Tuber and Vine Characteristics
- 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 10/12 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 External Defects - Growth Cracks, 2nd Growth, Shatter Bruise, and Scab
- 10 Internal Defects - Hollow Heart/Brown Center, Internal Brown Spot, Vascular Discoloration, Blackspot
- 11 French Fry Color and Percent Sugar Ends
- 12 Disease Evaluations - Aberdeen, Klamath, Tulelake, Corvallis, and Prosser
- 13 Solids, Dextrose, Sucrose, Protein, Vitamin C, and Glycoalkaloids - Aberdeen
- 14 Merit Scores
- 15 Entry Summary
- 16 Three Year Summary of Graduating Entries
- 17 Entry Comments - Early & Late Harvest

Western Regional Potato Variety Trial Reports (1998-2011) can be accessed at the following websight:

www.ars.usda.gov/main/docs.htm?docid=21888

Compiled by Brian Schneider

TABLE 1: 2011 Western Regional Potato Variety Trial - LOCATIONS, COOPERATORS, AND CULTURAL INFORMATION

No.	Locations	Cooperators	Trial	Irrigation	Fertilizer	Planting	Vine Kill	Days to	Days to	Herbicides	Pesticides Applied ¹	
					N-P-K-S(lb/A)	Date	Date	Vine Kill	Harvest		Insecticides	Fungicides
1	Tulelake California (TUL)	D. Kirby, R. Wilson	Late	Sprink.	204-80-48-21	23-May	16-Sep	116	142	Metribuzin Outlook Matrix Reglone	Movento Coragen Alias 4F	Endura Quadris Tanos
2	San Luis Valley Colorado (SLV)	D. Holm, C. Gray	Late	Pivot	120-60-40-25+	20-May	6-Sep	109	131	Dual Magnum Matrix SG Eptam 7E Reglone	Endigo ZC Fulfill	Bravo WS Quadris
3	Aberdeen Idaho (AB)	J. Stark, R. Novy, J. Whitworth, P. Bain, M. Chappell	Late	Sprink.	235-160-150-50	4-May	7-Sep	126	142	Metri 4F, Matrix Eptam Mechanical	Admire Pro	Echo, Dithane
4	Kimberly Idaho (KIM)	J. Stark, R. Novy, J. Whitworth, P. Bain, M. Chappell	Late	Sprink.	235-160-150-50	2-May	7-Sep	128	164	Sencor, Matrix Mechanical	Couraze	Gavel, Dithane Bravo Weatherstik
5	Parma Idaho (PAR)	M. Thornton, B. Buhrig, A. French, M. Martin	Early Late	Sprink. Sprink.	135-180-50 255-180-50	15-Apr 29-Apr	28-Jul 13-Sep	104 137	109 152	Outlook Prowl, Eptam Mechanical (Flail)	Leverage	Quadris, Gavel Mankocide, Endura Bravo, Dithane
6	Hermiston Oregon (HRM)	D. Hane, M. Pavsek	Late	Pivot	387-280-200-70+	15-Apr	6-Sep	144	147	Matrix Magnum Gramoxone	Oberon, Leverage Agri Mek	Bravo, Dithane Omega
7	Klamath Oregon (KLA)	B. Charlton, D. Culp	Late	Sprink.	161-173-34-43	24-May	12-Sep	111	146	Matrix, Outlook Prowl H2O Eptam 7E Reglone, PRO AMS	Admire Pro, Leverage Endigo, Movento, Fulfill Assail 70 WP, Helena	Moncut Ridomil Gold, Bravo
8	Springlake Texas (SPR)	J. C. Miller Jr., J. Koym, D. Schuering	Early	Pivot	125-21-21-124	24-Mar	16-Aug	145	154	Sencor Roundup Treflan, Dual Mechanical	Movento Admire Pro, Epimek	
9	Othello (OTH) Othello (OTH) Washington	M. Pavsek, R. Knowles	Early Late	Linear Linear	335-250-480 335-250-480	7-Apr 14-Apr	1-Aug 15-Sep	116 154	137 158	Matrix Metribuzin DF Chateau Mechanical	Omega Onager	Penncozeb

¹**Bold indicates use in both early and late trials.**

TABLE 2: 2011 Western Regional Potato Variety Trial - CLONE, PARENTAGE, FLOWER COLOR, ENTRY SUBMISSION, USE, TRIAL, YEARS IN TRIAL, SEED SOURCE, STAND, TUBER AND VINE CHARACTERISTICS

										Tuber and Vine Descriptions from Trial Observations ²								
No.	Clone	Parents	Flower Color ¹	Entered by	Use	Trial	Year in Trial	Seed Source	Stand ²	Tuber Shape (1-5) ³		Tuber Skin (1-5) ⁴		Vine Size (1-5) ⁵		Vine Maturity (1-5) ⁶		Stems/Hill
1	Ranger Russet	Butte A6595-3	RP	Ck	Dual	E/L	-	ID	95	Long	4.5	Med Russet	3.9	Med-Large	3.2	Medium	3.2	2.9
2	Russet Burbank	Early Rose ?	W	Ck	Dual	E/L	-	ID	93	Obl-Lng	3.9	Med Russet	3.6	Med-Large	3.4	Medium	3.1	2.7
3	Russet Norkotah	ND9687-5Rus ND9526-4Rus	W	Ck	Fresh	E/L	-	ID	95	Long	4.4	Med Russet	4.0	Medium	2.6	Early	2.3	3.1
4	A98345-1	Ranger R Premier	W	ID	Dual	E/L	3	ID	95	Oblong	3.1	Light Russet	2.4	Med-Large	3.5	Medium	3.2	2.7
5	A00324-1	A95038-1 GemStar Russet	RP	ID	Dual	E/L	2	OR/ID	98	Oblong	3.4	Med Russet	3.3	Med-Large	3.3	Med Early	3.0	2.6
6	A01010-1	A92303-7 A96004-8	W	ID	Dual	E/L	2	ID	95	Long	4.2	Med Hvy Rus	4.2	Med-Large	3.5	Medium	3.1	2.7
7	A01025-4	A96095-3 Premier Russet	W	ID	Dual	E/L	1	ID	89	Obl-Lng	3.7	Light Russet	2.6	Med-Large	3.2	Med Early	2.9	2.7
8	A02060-3TE	A97201-4 Premier Russet	W	ID	Dual	E/L	1	OR/ID	94	Oblong	3.5	Med Russet	3.6	Med-Large	3.3	Medium	3.3	2.6
9	AC99375-1RU	AWN86514-2 A89384-10	W	CO	Dual	E/L	3	CO	95	Oblong	3.4	Med Russet	3.6	Large	4.2	Med-Late	3.8	2.8
10	AO00057-2	A91048-3 A93116-3BSR	W	OR	Dual	E/L	2	OR	94	Oblong	3.3	Med Hvy Rus	4.3	Small	2.5	.	.	.
11	AO02183-2	A97236-3 Premier	W	OR	Dual	E/L	1	OR	96	Obl-Lng	3.8	Med Russet	3.8	Medium	3.0	.	.	.
12	AO96305-3	A91018-6 A89152-4	RP	OR	Dual	E/L	3	OR	98	Obl-Lng	3.8	Light Russet	2.7	Medium	3.0	.	.	.
13	AOTX96265-2Ru	A90621-4 A84180-8	W	TX	Fresh	E/L	2	CO	93	Oblong	3.1	Med Russet	3.8	Med-Large	3.2	Med Early	2.7	3.2
14	CO99053-3RU	AC91014-2 Silverton Russet	W	CO	Dual	E/L	3	CO	94	Obl-Lng	3.7	Med Russet	3.5	Med-Large	3.4	Med-Late	3.6	3.0
15	CO99053-4RU	AC91014-2 Silverton Russet	W	CO	Fresh	E/L	3	CO	96	Obl-Lng	4.0	Med Russet	3.5	Medium	2.6	Early	2.4	3.4
16	CO99100-1RU	AC93047-1 Silverton Russet	W	CO	.	E/L	3	CO	92	Obl-Lng	3.6	Med Russet	3.6	Small	2.5	Early	1.3	3.2
17	PA00N14-2	PA95A14-22 (Bulk Rus + Gem)	W	WA	Dual	E/L	3	OR	93	Long	4.3	Light Russet	3.0	Medium	3.0	.	.	.

¹ P=Purple, R=Red, W=White

² Numerical values are means of all trial locations at 60 days except for Tulelake at 36 days.

³ 1.0-2.0=Round, 2.1-2.5=Round-Oblong, 2.6-3.5=Oblong, 3.6-4.0=Oblong-Long, 4.1-5.0=Long

⁴ 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

⁵ 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

⁶ 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: 2011 Western Regional Potato Variety Trial - TOTAL YIELD (CWT/A) - EARLY AND LATE HARVEST

Total Yield - Early Harvest (CWT/A)							Total Yield - Late Harvest (CWT/A)											
		ID	TX	WA	Entry		CA	CO	ID			OR		WA	Entry			
No.	Clone	PAR	SPR ¹	OTH	Mean/Rank		TUL	SLV	AB	KIM	PAR	HRM	KLA	OTH	Mean/Rank			
1	RANGER R.	327	83	459	393	8	a	416	454	422	578	601	846	509	735	570	7	cd
2	R. BURBANK	358	106	453	406	5	a	390	455	465	479	689	907	460	641	561	8	cd
3	R. NORKOTAH	399	46	299	349	12	a	435	326	299	346	680	456	508	506	444	10	ef
4	A98345-1	329	80	458	394	7	a	439	487	501	745	659	968	589	1030	677	1	a
5	A00324-1	.	59	513	513			.	402	434	.	.	1001	479	804	624		
6	A01010-1	309	119	512	411	4	a	494	427	508	621	615	1040	518	896	640	3	abc
7	A01025-4	427	103	522	474	1	a	444	481	485	543	658	941	561	704	602	5	abcd
8	A02060-3TE	385	133	345	365	10	a	520	394	459	580	711	1022	568	721	622	4	abc
9	AC99375-1RU	377	91	469	423	3	a	456	503	517	581	639	1237	576	846	669	2	ab
10	AO00057-2	.	.	343	343			.	.	.	.	.	755	436	578	590		
11	AO02183-2	.	.	448	448			.	.	.	.	.	1157	549	881	862		
12	AO96305-3	.	.	414	414			.	.	.	.	.	684	553	609	615		
13	AOTX96265-2Ru	369	100	421	395	6	a	431	387	373	450	535	839	507	712	529	9	de
14	CO99053-3RU	360	104	406	383	9	a	439	454	464	612	645	875	531	683	588	6	bcd
15	CO99053-4RU	327	73	394	361	11	a	350	338	332	402	563	522	451	538	437	11	f
16	CO99100-1RU	437	37	444	440	2	a	443	308	301	301	553	496	477	580	433	12	f
17	PA00N14-2	.	.	413	413			.	.	.	.	.	723	483	589	598		
Location Means		367	87	430	407		408	438	417	428	520	629	851	515	709	592		

Means followed by the same letter are not significantly different at the 5% level using Student's t test. Means with no letter were missing entries at some locations and excluded from statistical analysis.

¹Springlake Texas excluded from means and statistical analysis due to low yields resulting from growing season environmental conditions (above average high and low temperatures, drought, and severe freeze 6 weeks after planting).

Indicates high or strength

Indicates low or weakness

TABLE 4: 2011 Western Regional Potato Variety Trial - YIELD OF U.S. #1'S [CWT/A (upper) and % (lower)] - EARLY AND LATE HARVEST

U.S. No. 1's - Early Harvest (CWT/A) and %										U.S. No. 1's - Late Harvest (CWT/A) and %									
		ID	TX	WA	Entry				CA	CO	ID		OR		WA	Entry			
No.	Clone	PAR	SPR ¹	OTH	Mean/Rank				TUL	SLV	AB	KIM	PAR	HRM	KLA	OTH	Mean/Rank		
1	RANGER R.	239	7	367	303	9	ab		290	402	328	463	491	635	306	628	443	8	de
		73	8	80	77	8			70	89	78	80	82	75	60	85	77	9	
2	R. BURBANK	260	2	350	305	8	ab		275	378	328	277	553	609	262	528	401	9	ef
		73	2	77	75	9			70	83	71	58	80	67	57	82	71	12	
3	R. NORKOTAH	287	7	190	238	12	b		332	271	179	254	602	385	343	377	343	11	f
		72	15	63	68	12			76	83	60	73	89	84	68	74	76	10	
4	A98345-1	233	18	346	289	11	b		338	450	449	655	581	873	442	967	595	1	a
		71	22	76	73	10			77	92	90	88	88	90	75	94	87	1	
5	A00324-1	.	12	450	450				.	333	355	.	.	883	306	731	521		
		.	12	450	450				.	139	53	.	.	5	54	36	57		
6	A01010-1	226	29	431	329	5	ab		360	379	429	529	532	900	407	829	546	2	ab
		73	24	84	79	7			73	89	84	85	86	87	79	93	84	3	
7	A01025-4	381	34	469	425	1	a		258	420	379	378	589	762	402	633	478	5	bcde
		89	33	90	90	1			58	87	78	70	90	81	72	90	78	8	
8	A02060-3TE	368	44	291	330	4	ab		340	347	404	450	673	912	409	679	527	4	abcd
		96	33	84	90	1			65	88	88	77	95	89	72	94	84	3	
9	AC99375-1RU	239	4	390	314	7	ab		321	431	373	466	542	1066	362	731	536	3	abc
		63	5	83	73	10			70	86	72	80	85	86	63	86	79	7	
10	AO00057-2	.	.	294	294				.	.	.	.	.	671	328	513	504		
		.	.	.	86				.	.	.	.	.	89	75	89	84		
11	AO02183-2	.	.	384	384				.	.	.	.	.	1037	361	817	738		
		.	.	86	86				.	.	.	.	.	90	66	93	83		
12	AO96305-3	.	.	362	362				.	.	.	.	.	628	409	534	524		
		.	.	88	88				.	.	.	.	.	92	74	88	84		
13	AOTX96265-2Ru	294	25	383	338	3	ab		322	341	333	382	474	798	367	667	461	7	cde
		80	25	91	85	3			75	88	89	85	88	95	72	94	86	2	
14	CO99053-3RU	273	11	369	321	6	ab		326	384	351	460	544	732	368	610	472	6	bcde
		76	11	91	83	5			74	85	76	75	84	84	69	89	80	5	
15	CO99053-4RU	258	28	323	291	10	ab		252	289	228	267	468	413	264	425	326	12	f
		79	38	82	80	6			72	85	69	66	83	79	59	79	74	11	
16	CO99100-1RU	357	10	390	373	2	ab		348	271	234	223	477	427	288	507	347	10	f
		82	28	88	85	3			79	88	78	74	86	86	60	87	80	5	
17	PA00N14-2	.	.	352	352				.	.	.	.	.	654	367	513	511		
		.	.	85	85				.	.	.	.	.	90	76	87	85		
Location Means		285	18	361	335				313	361	336	400	544	728	352	629	487		
		77	20	105	103				72	91	76	76	86	81	68	85	79		

Means followed by the same letter are not significantly different at the 5% level using Student's t test. Means with no letter were missing entries at some locations and excluded from statistical analysis.

¹Springlake Texas excluded from means and statistical analysis.

TABLE 5: 2011 Western Regional Potato Variety Trial - YIELD > 10/12 OZ [CWT/A (upper) & % (lower)] - EARLY AND LATE HARVEST

U.S. No. 1's > 10/12 OZ - Early Harvest (CWT/A) and %							U.S. No. 1's > 10/12 OZ - Late Harvest (CWT/A) and %										
No. Clone	ID	TX	WA	Entry			CA	CO	ID		OR		WA	Entry			
	PAR	SPR ¹	OTH	Mean	Rank		TUL	SLV	AB	KIM	PAR	HRM	KLA	OTH	Mean	Rank	
1 RANGER R.	4	0	17	10	8	b	35	158	67	210	58	337	107	228	150	8	def
	1	0	4	2	8		8	35	16	36	10	40	21	31	25	6	
2 R. BURBANK	2	0	51	26	2	b	43	123	60	67	123	320	32	145	114	9	efg
	1	0	11	6	3		11	27	13	14	18	35	7	23	18	9	
3 R. NORKOTAH	11	0	3	7	10	b	48	65	8	61	119	69	125	25	65	11	g
	3	0	1	2	8		11	20	3	18	18	15	25	5	14	11	
4 A98345-1	0	1	6	3	12	b	25	176	145	356	81	596	120	494	249	3	abc
	0	1	1	1	11		6	36	29	48	12	62	20	48	33	3	
5 A00324-1	.	0	75	75			.	139	228	.	.	688	83	393	306		
	.	0	75	75			.	139	53	.	.	5	54	36	57		
6 A01010-1	2	0	9	5	11	b	21	174	72	171	30	569	66	314	177	5	cde
	1	0	2	1	11		4	41	14	28	5	55	13	35	24	7	
7 A01025-4	107	0	285	196	1	a	154	249	218	199	158	582	99	468	266	2	abc
	25	0	55	40	1		35	52	45	37	24	62	18	67	42	2	
8 A02060-3TE	23	0	29	26	2	b	174	185	223	261	310	621	99	366	280	1	a
	6	0	8	7	2		34	47	49	45	44	61	17	51	43	1	
9 AC99375-1RU	6	0	26	16	6	b	50	113	52	145	68	511	54	233	153	7	def
	2	0	5	4	6		11	23	10	25	11	41	9	28	20	8	
10 AO00057-2	.	.	67	67			.	.	.	.	.	473	74	267	271		
	.	.	.	20			.	.	.	.	.	63	17	46	42		
11 AO02183-2	.	.	35	35			.	.	.	.	.	839	101	398	446		
	.	.	8	8			.	.	.	.	.	73	18	45	45		
12 AO96305-3	.	.	43	43			.	.	.	.	.	321	98	132	184		
	.	.	10	10			.	.	.	.	.	47	18	22	29		
13 AOTX96265-2Ru	6	0	40	23	5	b	28	209	74	191	62	467	75	218	166	6	de
	2	0	9	5	5		7	54	20	43	12	56	15	31	29	5	
14 CO99053-3RU	6	0	44	25	4	b	121	247	118	236	98	417	124	220	198	4	bcd
	2	0	11	6	3		28	55	26	39	15	48	23	32	33	3	
15 CO99053-4RU	11	0	5	8	9	b	31	74	16	16	34	115	56	64	51	12	bcd
	3	0	1	2	8		9	22	5	4	6	22	12	12	12	12	
16 CO99100-1RU	6	0	22	14	7	b	99	80	9	21	68	89	135	88	73	10	fg
	1	0	5	3	7		22	26	3	7	12	18	28	15	16	10	
17 PA00N14-2	.	.	11	11			.	.	.	.	.	267	20	46	111		
	.	.	3	3			.	.	.	.	.	37	4	8	16		
Location Means	15	0	45	35			69	153	99	161	101	428	86	241	192		
	4	0	13	11			15	44	22	28	15	43	19	31	29		

Means followed by the same letter are not significantly different at the 5% level using Student's t test. Means with no letter were missing entries at some locations and excluded from statistical analysis.

¹Springlake Texas excluded from means and statistical analysis.

TABLE 6: 2011 Western Regional Potato Variety Trial - YIELD < 4 OZ [CWT/A (upper) & % (lower)] - EARLY AND LATE HARVEST

Yield < 4 OZ - Early Harvest (CWT/A) and %							Yield < 4 OZ - Late Harvest (CWT/A) and %										
No. Clone	ID	TX	WA	Entry			CA	CO	ID		OR		WA	Entry			
	PAR	SPR ¹	OTH	Mean/Rank			TUL	SLV	AB	KIM	PAR	HRM	KLA	OTH	Mean/Rank		
1 RANGER R.	78	70	72	75	4	ab	91	36	64	36	92	28	57	66	59	6	bcd
	24	84	16	20	4		22	8	15	6	15	3	11	9	11	6	
2 R. BURBANK	85	71	66	75	4	ab	80	59	79	57	106	31	106	74	74	3	ab
	24	67	15	19	5		20	13	17	12	15	3	23	12	14	3	
3 R. NORKOTAH	110	38	92	101	1	a	71	44	74	54	71	57	40	115	66	4	abc
	28	82	31	29	1		16	14	25	16	10	12	8	23	15	2	
4 A98345-1	97	56	106	101	1	a	86	27	43	28	74	24	77	44	50	8	cde
	29	70	23	26	2		20	5	9	4	11	3	13	4	9	9	
5 A00324-1	.	36	43	43			.	41	22	.	.	24	54	36	36		
	.	61	8	8			.	10	5	.	.	2	11	5	7		
6 A01010-1	80	51	65	73	6	abc	102	27	77	43	77	34	67	59	61	5	bcd
	26	43	13	19	5		21	6	15	7	12	3	13	7	11	6	
7 A01025-4	46	30	21	33	11	bc	29	22	25	31	66	24	61	20	35	12	e
	11	29	4	7	12		7	5	5	6	10	3	11	3	6	12	
8 A02060-3TE	16	55	47	32	12	c	41	26	33	40	28	36	75	37	39	11	e
	4	41	14	9	11		8	6	7	7	4	4	13	5	7	11	
9 AC99375-1RU	135	85	66	100	3	a	79	55	85	63	92	70	147	74	83	1	a
	36	94	14	25	3		17	11	16	11	14	6	26	9	14	3	
10 AO00057-2	.	.	42	42			.	.	.	.	.	22	53	60	45		
	.	.	.	12			.	.	.	.	.	3	12	10	8		
11 AO02183-2	.	.	55	55			.	.	.	.	.	30	57	45	44		
	.	.	12	12			.	.	.	.	.	3	10	5	6		
12 AO96305-3	.	.	26	26			.	.	.	.	.	24	71	51	49		
	.	.	6	6			.	.	.	.	.	3	13	8	8		
13 AOTX96265-2Ru	73	67	32	52	10	bc	86	19	47	22	56	13	91	38	47	10	de
	20	67	8	14	9		20	5	13	5	10	2	18	5	10	8	
14 CO99053-3RU	85	60	29	57	9	bc	47	29	45	42	89	34	32	66	48	9	cde
	24	58	7	15	8		11	6	10	7	14	4	6	10	8	10	
15 CO99053-4RU	68	39	67	67	7	abc	69	40	83	95	81	57	75	107	76	2	ab
	21	53	17	19	5		20	12	25	24	14	11	17	20	18	1	
16 CO99100-1RU	74	27	48	61	8	abc	33	29	85	65	63	45	34	65	52	7	cde
	17	72	11	14	9		7	9	28	21	11	9	7	11	13	5	
17 PA00N14-2	.	.	55	55			.	.	.	.	.	21	83	68	58		
	.	.	13	13			.	.	.	.	.	3	17	12	11		
Location Means	79	53	55	62			68	35	59	48	74	34	70	60	54		
	22	63	13	16			16	9	15	10	12	5	14	9	10		

Means followed by the same letter are not significantly different at the 5% level using Student's t test. Means with no letter were missing entries at some locations and excluded from statistical analysis.

¹Springlake Texas excluded from means and statistical analysis.

TABLE 7: 2011 Western Regional Potato Variety Trial - SPECIFIC GRAVITY - EARLY AND LATE HARVEST

No. Clone		Specific Gravity - Early Harvest					Specific Gravity - Late Harvest											
		ID	TX	WA	Entry		CA	CO	ID			OR		WA	Entry			
		PAR	SPR ¹	OTH	Mean/Rank		TUL	SLV	AB	KIM	PAR	HRM	KLA	OTH	Mean/Rank			
1	RANGER R.	1.091	1.045	1.079	1.085	8	bcde	1.090	1.102	1.092	1.090	1.090	1.084	1.085	1.086	1.090	3	b
2	R. BURBANK	1.089	1.051	1.084	1.087	5	bcde	1.087	1.094	1.074	1.081	1.082	1.069	1.086	1.076	1.081	8	ef
3	R. NORKOTAH	1.084	1.058	1.081	1.083	11	de	1.077	1.082	1.074	1.073	1.077	1.068	1.072	1.070	1.074	12	g
4	A98345-1	1.096	1.037	1.093	1.094	1	a	1.093	1.095	1.088	1.091	1.100	1.083	1.096	1.086	1.092	2	ab
5	A00324-1		1.051	1.083	1.083				1.086	1.085			1.072	1.078	1.078	1.080		
6	A01010-1	1.082	1.049	1.082	1.082	12	e	1.086	1.083	1.084	1.086	1.080	1.069	1.081	1.080	1.081	8	ef
7	A01025-4	1.089	1.052	1.080	1.084	9	cde	1.081	1.090	1.080	1.078	1.085	1.065	1.084	1.082	1.081	8	ef
8	A02060-3TE	1.090	1.053	1.082	1.086	6	bcde	1.083	1.100	1.087	1.086	1.086	1.070	1.090	1.085	1.086	5	cd
9	AC99375-1RU	1.097	1.051	1.083	1.090	3	abc	1.095	1.102	1.091	1.095	1.092	1.091	1.100	1.084	1.094	1	a
10	AO00057-2			1.079	1.079								1.076	1.089	1.085	1.083		
11	AO02183-2			1.081	1.081								1.085	1.094	1.091	1.090		
12	AO96305-3			1.084	1.084								1.077	1.089	1.084	1.083		
13	AOTX96265-2Ru	1.094	1.044	1.088	1.091	2	ab	1.090	1.097	1.087	1.092	1.089	1.080	1.087	1.086	1.088	4	bc
14	CO99053-3RU	1.091	1.046	1.086	1.089	4	abcd	1.088	1.089	1.081	1.087	1.086	1.070	1.085	1.082	1.083	6	de
15	CO99053-4RU	1.085	1.058	1.083	1.084	9	bcde	1.088	1.093	1.084	1.084	1.080	1.069	1.078	1.080	1.082	7	ef
16	CO99100-1RU	1.090	1.059	1.082	1.086	6	bcde	1.084	1.088	1.082	1.075	1.079	1.065	1.082	1.075	1.079	11	f
17	PA00N14-2			1.081	1.081								1.081	1.087	1.082	1.083		
Location Means		1.090	1.050	1.083	1.085			0.815	1.092	1.084	1.085	1.086	1.075	1.086	1.082	1.084		

Means followed by the same letter are not significantly different at the 5% level using Student's t test. Means with no letter were missing entries at some locations and excluded from statistical analysis.

¹Springlake Texas excluded from means and statistical analysis.

TABLE 8: 2011 Western Regional Potato Variety Trial - AVERAGE TUBER SIZE, AND TUBER SHAPE

No. Clone		Average Tuber Size (oz)												Tuber Shape (1-5 length/width ratio: 1=round, 5=long)										Length/Width				
		Early Trial				Late Trial								Early Trial			Late Trial				Location Means ²							
		ID	TX	WA	Mean	CA	ID			OR			WA	TX	WA	Mean	CA	CO	ID	WA	ID	OR	WA					
		PAR	SPR ¹	OTH		TUL	AB	KIM	PAR	HRM	KLA	OTH	Mean	SPR	OTH		Mean	TUL	SLV	AB	OTH	Mean	AB	KIM	PAR	KLA	OTH	
1	RANGER R.	4.4	2.0	5.5	4.9	5.1	6.7	8.6	6.4	10.3	7.2	7.5	7.4	3.5	4.0	3.8	4.8	5.0	5.0	4.0	4.7	2.47	2.05	1.89	2.19	1.85		
2	R. BURBANK	4.2	2.0	6.0	5.1	5.4	6.4	6.7	6.2	9.4	5.3	6.8	6.6	4.4	3.0	3.5	4.2	5.0	4.0	3.0	4.1	2.19	1.86	1.80	1.61	1.82		
3	R. NORKOTAH	4.3	2.1	4.4	4.3	5.6	4.3	5.9	7.0	6.4	7.7	5.1	6.0	3.5	4.0		4.1	5.0	5.0	4.0	4.3	2.08	2.17	1.72	1.94			
4	A98345-1	4.2	3.9	5.1	4.6	5.2	7.9	10.0	6.9	12.1	6.7	9.3	8.3	3.5	2.0	2.5	3.6	3.0	3.8	2.4	3.4	1.66	1.86	1.47	1.56	1.38		
5	A00324-1	.	2.2	6.9	6.9	.	10.9	.	.	13.4	6.1	9.7	10.0	3.3	2.5	2.8	.	4.0	3.9	3.3	3.7	1.97	.	.	1.84	1.50		
6	A01010-1	4.5	3.3	5.7	5.1	5.1	6.8	7.9	5.9	11.0	5.9	8.0	7.3	4.0	3.0	3.3	3.7	5.0	5.0	3.8	4.1	2.31	1.87	1.82	1.60	1.67		
7	A01025-4	6.6	3.3	10.4	8.5	8.2	9.9	9.7	8.3	13.4	5.9	12.4	9.7	3.8	3.0	3.3	3.6	4.0	4.0	3.3	3.7	1.97	1.91	1.74	1.82	1.69		
8	A02060-3TE	7.0	4.0	6.0	6.5	7.9	8.9	9.5	10.8	11.6	6.5	9.4	9.2	3.4	3.0	3.1	3.8	4.0	3.5	3.0	3.7	1.86	1.79	1.58	1.89	1.51		
9	AC99375-1RU	3.9	1.6	5.7	4.8	5.6	6.5	7.0	6.0	8.8	4.9	7.2	6.6	3.5	3.0	3.2	3.9	4.0	3.0	3.0	3.7	1.64	1.55	1.58	1.59	1.60		
10	AO00057-2	.	.	7.0	7.0	.	.	.	.	13.1	6.4	7.9	9.2	.	3.7	3.7	.	.	.	3.0	3.0	.	.	.	1.71	1.48		
11	AO02183-2	.	.	5.8	5.8	.	.	.	.	13.5	6.7	9.4	9.9	.	4.0	4.0	.	.	.	3.5	3.5	.	.	.	2.31	1.73		
12	AO96305-3	.	.	7.2	7.2	.	.	.	.	10.1	6.7	7.0	8.0	.	4.0	4.0	.	.	.	3.5	3.5	.	.	.	2.00	1.72		
13	AOTX96265-2Ru	4.9	2.4	6.6	5.7	5.1	7.5	9.1	7.0	11.2	5.8	8.3	7.7	2.5	2.7	2.6	3.5	3.0	3.2	3.0	3.3	1.74	1.69	1.44	1.50			
14	CO99053-3RU	4.5	2.6	6.4	5.4	7.0	7.3	9.0	6.7	10.4	7.8	7.4	7.9	3.5	3.0	3.2	3.9	5.0	3.5	2.6	3.8	1.83	1.72	1.67	1.70	1.58		
15	CO99053-4RU	5.0	2.1	5.3	5.2	5.3	4.6	5.0	6.2	6.7	5.3	5.5	5.5	3.5	3.0	3.2	4.4	5.0	4.3	3.3	4.3	1.81	2.05	1.92	1.99			
16	CO99100-1RU	4.8	2.5	6.0	5.4	7.5	5.2	5.2	6.9	6.5	7.7	6.3	6.5	3.8	3.0	3.3	3.9	4.0	3.3	3.3	3.7	1.88	1.79	1.69	1.80			
17	PA00N14-2	.	.	5.7	5.7	.	.	.	.	9.1	5.3	6.2	6.9	.	4.7	4.7	.	.	.	4.0	4.0	.	.	.	2.19	2.03		
Location Means		4.8	2.6	6.2	5.8	6.1	7.1	7.8	7.0	10.4	6.4	7.9	7.8	3.6	3.3	3.4	4.0	4.3	4.0	3.3	3.8	1.95	1.86	1.69	1.84	1.66		

¹ Springlake Texas excluded from means.² Washington reported 1.98 for Idaho samples and 1.78 for Oregon samples.

TABLE 9: 2011 Western Regional Potato Variety Trial - EXTERNAL DEFECTS MEANS OF LOCATIONS - GROWTH CRACKS, SECOND GROWTH, SHATTER BRUISE, AND SCAB¹

No. Clone	Growth Cracks		Second Growth		Shatter Bruise					Scab	
	Early Trial	Late Trial	Early Trial	Late Trial	Early Trial	Late Trial	Ab ²	Oth ³		Early Trial	Late Trial
1 RANGER R.	4.4	4.7	4.9	4.4 KLA 3.6	5.0	4.6	3.2	63	46	5.0	4.4
2 R. BURBANK	4.1 PAR 3.0	4.2 PAR 3.3	4.1 OTH 3.0	3.8 SLV 3.0	5.0	4.7	2.7	39	24	5.0	5.0
3 R. NORKOTAH	5.0	4.9	4.9	4.7	5.0	4.7	3.1	38	38	5.0	4.6
4 A98345-1	5.0	4.7	5.0	4.7	5.0	4.2	2.5	81		5.0	4.0 KIM 2.9 AB 3.3
5 A00324-1	5.0	4.3 KLA 3.0	5.0	4.9	5.0	3.8	3.1	35	67	5.0	4.7
6 A01010-1	4.8	4.7	5.0	4.7	5.0	3.9 KLA 3.5	2.9	100	55	5.0	4.9
7 A01025-4	5.0	4.7	4.8	4.6	5.0	4.1	2.9	46	59	5.0	4.5
8 A02060-3TE	5.0	4.7	5.0	4.8	5.0	4.6	3.0	45	60	5.0	4.9
9 AC99375-1RU	5.0	4.7	4.9	4.7	5.0	4.5	2.6	40	68	5.0	4.8
10 AO00057-2	5.0	4.7	5.0	4.8		3.7		59	38		5.0
11 AO02183-2	5.0	4.6	5.0	4.2 KLA 3.4		4.1		50	39		5.0
12 AO96305-3	2.7 OTH 2.7	4.3 KLA 3.5	5.0	4.9		4.1		63	38		5.0
13 AOTX96265-2Ru	4.9	4.7	5.0	4.6	5.0	3.8 KLA 3.3	2.2	55	84	5.0	4.5
14 CO99053-3RU	5.0	4.8	4.9	4.8	5.0	4.5	3.1	52		5.0	4.8
15 CO99053-4RU	4.9	4.5	5.0	4.9	5.0	4.6	3.2	50		5.0	4.8
16 CO99100-1RU	4.6	4.5	5.0	4.8	5.0	4.3 KLA 3.6	3.2	29	70	5.0	4.9
17 PA00N14-2	5.0	5.0	5.0	5.0		4.3		0	47		5.0
Entry Means	4.7	4.6	4.9	4.7	5.0	4.3	2.9	42	52	5.0	4.7

¹All scores [1-5(none)]. Individual trial sites with relatively extreme values are listed to the right of the entry means. Entries 5,10,11,12, and 17 did not have all sites represented and were excluded from highlighting for strength/weakness where there was incomplete representation.

²Aberdeen shatter scores reflect dropping from shatter chamber [1-5(none)].

³Othello shatter scores % and reflect severe harvest conditions.

TABLE 10: 2011 Western Regional Potato Variety Trial - INTERNAL DEFECTS MEANS OF LOCATIONS - HOLLOW HEART/BROWN CENTER, INTERNAL BROWN SPOT, VASCULAR DISCOLORATION/NET NECROSIS, AND BLACKSPOT¹

No. Clone	Percent Hollow Heart Plus Brown Center		Percent Internal Brown Spot		Percent Net Necrosis/ Vascular Discoloration		Blackspot Bruise [(1-5(NONE))]		ID ²	OTH ³	
	Early Trial	Late Trial	Early Trial	Late Trial	Early Trial	Late Trial	Early Trial	Late Trial		E	L
1 RANGER R.	8 OTH 25	0	0	3	0	5 TUL 23	5.0	4.6	2.2	25	49
2 R. BURBANK	22 OTH 67 (33 HH)	17 TUL 28 KLA 28 OTH 56 (35 HH)	0	2	12 PAR 37	5 TUL 20	5.0	4.8	2.9	28	6
3 R. NORKOTAH	5	5	0	0	14 SPR 43	1	5.0	5.0	2.7	0	0
4 A98345-1	0	1	0	5 HRM 17	0	6 TUL 28	5.0	4.8	2.3	33	44
5 A00324-1	0	4 AB 23	0	8 HRM 30	21 SPR 41	0	5.0	4.8	2.1	48	39
6 A01010-1	0	1	0	2	0	5 TUL 23	5.0	5.0	3.2	0	6
7 A01025-4	0	3	0	3	1	2	5.0	4.4 SLV 3.7	2.0	38	50
8 A02060-3TE	1	18 AB 40 KIM 63 PAR 23	6 OTH 18	4	2	3	5.0	4.7	3.1	18	9
9 AC99375-1RU	3	4	7 OTH 20	4	0	5 TUL 20	5.0	4.6	3.6	0	19
10 AO00057-2	0	2	0	0	0	0		5.0		24	6
11 AO02183-2	0	0	0	9 HRM 23	0	8		5.0		0	11
12 AO96305-3	0	0	5	0	0	0		5.0		11	9
13 AOTX96265-2Ru	1	13 AB 43 KIM 50	0	2	0	14 TUL 38 PAR 20	5.0	4.8	2.5	27	34
14 CO99053-3RU	3	5	0	1	1	3	5.0	4.9	2.6	14	6
15 CO99053-4RU	0	0	0	1	0	4 TUL 20	5.0	5.0	2.9	50	13
16 CO99100-1RU	0	2	0	0	0	3	5.0	4.9	2.3	14	13
17 PA00N14-2	0	0	0	0	0	0		5.0		40	32
Entry Means	3	4	1	3	3	4	5.0	4.8	2.6	22	20

¹All scores [1-5(none)]. Individual trial sites with relatively extreme values are listed to the right of the entry means. Entries 5,10,11,12, and 17 did not have all sites represented and were excluded from highlighting for strength/weakness where there was incomplete representation.

²Aberdeen Idaho, blackspot scores reflect abrasive peel test [1-5(none)].

³Othello, Washington, blackspot scores are %.

TABLE 11: 2010 Western Regional Potato Variety Trial - FRENCH FRY COLOR (00-4.0(darkest)) AND PERCENT SUGAR ENDS

No. Clone	Field Fry					Fry 45					Fry 40					% Sugar Ends		
	CO	ID	WA	Entry	Mean	CO	ID	OR	WA	Entry	Mean	ID	OR	WA	Entry	Mean	ID	
	SLV	PAR	OTH			SLV	AB	KIM	HRM			AB	KIM	HRM			AB	KIM
	L	L	E	L		L	L	L	L	L		L	L	L	L		L	L
1 RANGER R.	1.0	0.0	0.0	0.0	0.3	3.0	0.7	1.2	1.0	1.0	1.4	2.0	3.5	1.0	2.0	2.1	5	2
2 R. BURBANK	2.0	0.0	0.0	1.0	0.8	2.0	1.2	1.5	1.0	1.0	1.3	3.1	3.9	3.0	3.0	3.3	31	2
3 R. NORKOTAH	2.0	0.0	0.0	0.0	0.5	2.0	0.9	1.1	.	.	1.3	2.8	3.4	.	.	3.1	9	11
4 A98345-1	1.0	0.0	0.0	0.0	0.3	2.0	0.5	1.1	0.0	0.0	0.7	0.8	1.6	0.0	0.0	0.6	1	0
5 A00324-1	3.0	.	0.0	0.0	1.0	3.0	0.5	.	.	1.0	1.5	2.2	.	4.0	1.0	2.4	7	.
6 A01010-1	1.0	0.0	0.0	0.0	0.3	2.0	0.5	0.9	1.0	0.0	0.9	2.4	3.9	3.0	1.0	2.6	4	1
7 A01025-4	1.0	0.0	0.0	0.0	0.3	1.0	0.5	1.1	0.0	0.0	0.5	1.9	3.0	3.0	2.0	2.5	1	3
8 A02060-3TE	1.0	0.0	0.0	0.0	0.3	2.0	0.6	1.1	1.0	0.0	0.9	2.7	3.4	3.0	2.0	2.8	3	5
9 AC99375-1RU	0.0	0.0	0.0	0.0	0.0	1.0	0.5	0.7	.	0.0	0.6	1.8	3.0	1.0	1.0	1.7	4	1
10 AO00057-2	.	.	0.0	0.0	0.0	.	.	.	0.0	0.0	0.0	.	.	1.0	1.0	1.0	.	.
11 AO02183-2	.	.	0.0	0.0	0.0	.	.	.	0.0	0.0	0.0	.	.	0.0	0.0	0.0	.	.
12 AO96305-3	.	.	0.0	0.0	0.0	.	.	.	0.0	0.0	0.0	.	.	1.0	0.0	0.5	.	.
13 AOTX96265-2Ru	1.0	0.0	0.0	0.0	0.3	1.0	0.4	0.6	.	.	0.7	1.2	2.3	.	.	1.8	3	15
14 CO99053-3RU	2.0	0.0	0.0	0.0	0.5	2.0	0.8	1.4	0.0	0.0	0.8	2.8	3.6	2.0	1.0	2.3	0	4
15 CO99053-4RU	2.0	0.0	0.0	0.0	0.5	2.0	0.9	1.4	.	.	1.4	2.4	3.9	.	.	3.1	0	0
16 CO99100-1RU	0.0	0.0	0.0	0.0	0.0	1.0	0.5	0.8	.	.	0.8	2.2	3.8	.	.	3.0	2	6
17 PA00N14-2	.	.	0.0	0.0	0.0	.	.	.	0.0	1.0	0.5	.	.	3.0	2.0	2.5	.	.
Location Means	1.3	0.0	0.0	0.1	0.3	1.8	0.7	1.1	0.4	0.3	0.8	2.2	3.3	1.9	1.2	2.1	6	4

Storage protocol prior to frying

Aberdeen - 6 weeks from 55F to 45F, 7 weeks from 55F to 40F, and 6 weeks @ 45F and 7 weeks @ 40F.

Hermiston - 2 weeks from 48F to 40F and 45 F, and 8 weeks @ 40F and 45F.

Kimberly - 6 weeks from 55F to 45F, 7 weeks from 55F to 40F, and 6 weeks @ 45F and 7 weeks @ 40F.

Othello - 2 weeks from 48F to 40F and 45 F, and 8 weeks @ 40F and 45F.

San Luis Valley - 4 weeks from 55F to 45F, and 9 weeks @ 45F.

* Comprehensive post harvest evaluations of entries can be found in the 2010 Potato Cultivar Yield & Post Harvest Quality Evaluations - Washington State University. Contact: Rick Knowles. www.potatoes.wsu.edu

TABLE 12: 2011 Western Regional Potato Variety Trial - DISEASE EVALUATION AND METRIBUZIN REACTION

No.	Clone	Vert. Wilt/ Early Dying			Early Blight AB ¹			Late Blight Corvallis ³			Common Scab AB ¹		Net Necrosis/ Vasc. Discoloration ¹		Pectobacterium			
		AB ¹		TUL ²	Foliar		Tuber	Foliar		Tuber	Percent Serious		Percent Serious		Fusarium		Soft	Metribuzin
															Dry Rot ¹ (0-5)		Rot ¹	Reaction ⁴
		(0-9)	AUDPC	(0-9)	(0-9)	AUDPC	%	(1-9)	AUDPC	%	Incid.	Defect	Incidence	Defect	F(sam)	F(sol)	(0-5)	AB
1	RANGER R.	4.0	167	4.8	3.3	237	10	8.0	1198	18	20	6	58	4	2.3	3.5	0.8	MR
2	R. BURBANK	6.3	507	5.5	4.2	391	3	8.3	1180	5	0	0	78	55	4.7	3.7	1.6	MS
3	R. NORKOTAH	8.8	960	8.0	3.3	750	0	8.8	1354	5	7	1	65	5	2.6	2.4	2.9	.
4	A98345-1	2.8	62	2.8	2.8	153	11	7.5	1167	0	23	8	49	18	4.6	4.8	0.9	MR
5	A00324-1	4.7	161	.	4.5	398	31	7.3	982	0	10	0	63	15	4.6	.	0.2	MR
6	A01010-1	3.3	87	3.5	3.8	222	45	7.8	1196	5	0	0	48	17	4.7	3.3	0.6	MS
7	A01025-4	3.8	160	4.5	3.7	260	57	9.0	1387	3	33	10	33	18	3.7	3.4	1.9	MR
8	A02060-3TE	3.0	51	3.5	3.8	213	19	8.8	1323	0	14	1	48	4	4.3	2.1	1.5	MR
9	AC99375-1RU	2.2	21	3.0	2.8	59	0	5.3	567	3	9	3	65	66	3.9	1.3	1.9	MR
10	AO00057-2	.	.	.	.	.	.	8.8	1359	0	.	.	.	.	.	.	.	.
11	AO02183-2	.	.	.	.	.	.	8.0	1202	0	.	.	.	.	.	.	.	.
12	AO96305-3	.	.	.	.	.	.	9.0	1375	5	.	.	.	.	.	.	.	.
13	AOTX96265-2Ru	5.3	388	3.8	4.8	333	3	9.0	1336	3	21	12	85	20	4.3	3.0	2.7	R
14	CO99053-3RU	3.7	127	3.3	3.3	206	21	7.0	1142	0	6	2	52	21	4.7	3.7	1.4	VS
15	CO99053-4RU	8.3	903	7.8	4.3	818	6	9.0	1387	0	4	0	60	2	4.6	3.3	1.9	MR
16	CO99100-1RU	8.7	975	7.3	8.0	945	1	9.0	1400	0	2	2	36	7	4.3	3.7	1.0	S
17	PA00N14-2	.	.	.	.	.	.	9.0	1397	0	.	.	.	.	.	.	.	.
Entry Means		5.0	351	4.8	4.1	383	16	8.2	1232	3	11	3	57	19	4.1	3.1	1.5	
LSD (.05)		1.7	.	.	n.s.	.	14	0.8	138	8	19	12	24	22	0.7	0.8	1.8	

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.

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. 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 Tulelake, California; scale as indicated, highest number (9=90-100%) being most severe.

³ 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%.

Tuber % based on examination at harvest and showing any tuber late blight symptoms. AUDPC = Area Under the Disease Progress Curve.

⁴ Evaluations made at Aberdeen, Idaho; R=Resistant, MR=Moderately Resistant, S=Susceptible, MS=Moderately Susceptible, VS=Very Susceptible

**TABLE 13: 2011 Western Regional Potato Variety Trial - SOLIDS, DEXTROSE, SUCROSE, PROTEIN, VITAMIN C,
AND GLYCOALKALOIDS - ABERDEEN**

No. Clone	Solids Oven Dry %	Sugars		Protein (%DWB) ¹	Vitamin C (mg/100g FWB) ¹	Glycoalkaloids ² (mg/100g FWB) ¹
		Dextrose (%FWB) ¹	Sucrose (%FWB) ¹			
1 RANGER RUSSET	24.2	0.12	0.18	4.7	32.4	4.7
2 RUSSET BURBANK	20.1	0.28	0.13	4.8	19.4	3.4
3 RUSSET NORKOTAH	20.2	0.27	0.13	4.4	25.3	2.7
4 A98345-1	22.6	0.09	0.14	4.8	20.6	3.7
5 A00324-1	15.3	0.08	0.12	3.5	18.5	2.2
6 A01010-1	22.0	0.11	0.15	5.9	32.9	1.5
7 A01025-4	19.6	0.24	0.13	4.7	18.1	5.5
8 A02060-3TE	20.8	0.10	0.13	6.1	26.6	1.5
9 AC99375-1RU	22.8	0.08	0.11	5.2	19.0	11.8
10 AO00057-2	.	.	.	.	.	.
11 AO02183-2	.	.	.	.	.	.
12 AO96305-3	.	.	.	.	.	.
13 AOTX96265-2Ru	22.9	0.06	0.16	6.5	24.7	0.9
14 CO99053-3RU	20.7	0.18	0.13	4.9	25.7	3.8
15 CO99053-4RU	21.5	0.10	0.14	5.4	32.1	4.0
16 CO99100-1RU	21.9	0.02	0.13	5.3	25.9	2.3
17 PA00N14-2	.	.	.	.	.	.
Entry Means	21.1	0.13	0.14	5.1	24.7	3.7

¹ DWB = Dry Weight Basis; FWB = Fresh Weight Basis

² Glycoalkaloids: The 2011 Lenape check grown at Aberdeen was 43.8 mg/100g

TABLE 14: 2011 Western Regional Potato Variety Trial - MERIT SCORES [1-5(best)]

No. Clone		Process										Process										Fresh									
		CO		ID			OR	WA		Early Trial	Late Trial	WA ¹	CA	CO	ID			TX	WA		Early Trial	Late Trial									
		SLV	AB	KIM	PAR	HRM	OTH	TUL	SLV					AB	KIM	PAR	SPR		OTH												
		L	L	L	E	L	L	E	L	Mean(Rnk)	Mean(Rnk)	2 or 3 State	Mean	L	L	L	L	E	L	E	E	L	Mean(Rnk)	Mean(Rnk)							
1	RANGER R.	2.0	3.5	3.0	3.3	4.0	3.6	3.1	3.8	3.2 (7)	3.3 (7)	3.8	3.3	4.0	3.3	2.5	3.0	2.7	2.1	2.7	2.5	2.6 (8)	3.0 (7)								
2	R. BURBANK	5.0	3.0	3.0	3.3	4.0	1.8	3.3	2.7	3.3 (5)	3.3 (7)	3.0	3.2	4.0	2.8	1.8	3.3	2.0	1.6	2.2	2.0	2.4 (10)	2.6 (9)								
3	R. NORKOTAH	2.0	3.8	2.8	3.7	4.0	.	1.7	.	2.7 (10)	3.2 (10)	.	3.6	1.0	3.0	3.0	4.0	4.0	1.5	3.2	2.3	2.9 (2)	2.8 (8)								
4	A98345-1	5.0	2.8	3.5	1.8	3.0	1.8	3.6	2.1	2.7 (10)	3.0 (12)	4.3	2.7	5.0	3.6	3.3	2.0	2.7	2.6	2.5	2.5	2.4 (10)	3.3 (4)								
5	A00324-1	1.0	2.5	.	.	.	2.8	4.0	3.4	4.0	2.4	3.0	.	3.0	3.7	.	.	.	1.6	2.4	2.0	2.0	2.9								
6	A01010-1	4.0	4.0	3.0	3.2	3.3	3.4	3.2	3.9	3.2 (7)	3.6 (4)	3.6	3.5	4.0	3.5	3.8	3.0	2.7	3.2	2.2	3.6	2.8 (3)	3.5 (1)								
7	A01025-4	4.0	3.2	3.2	4.0	2.8	2.8	3.6	3.1	3.8 (1)	3.2 (10)	3.6	3.7	4.0	3.3	2.4	2.3	2.8	2.6	2.6	2.2	2.5 (9)	3.1 (6)								
8	A02060-3TE	4.0	4.0	2.5	4.2	4.2	3.3	2.5	4.1	3.3 (5)	3.7 (3)	3.8	3.9	3.0	4.1	3.7	4.0	3.0	1.6	2.8	2.5	2.8 (3)	3.4 (2)								
9	AC99375-1RU	5.0	4.5	3.0	1.7	3.7	3.7	3.0	4.3	2.3 (12)	4.0 (1)	4.0	2.5	5.0	1.8	2.2	2.0	2.2	2.9	2.2	2.3	2.4 (10)	2.6 (9)								
10	AO00057-2	.	.	.	.	.	3.8	2.0	4.1	2.0	4.0	4.3	.	.	.	.	.	.	.	3.3	2.0	3.3	2.0								
11	AO02183-2	.	.	.	.	.	4.3	3.0	4.6	3.0	4.5	4.1	.	.	.	.	.	.	.	2.7	4.1	2.7	4.1								
12	AO96305-3	.	.	.	.	.	3.6	3.5	4.2	3.5	3.9	4.2	.	.	.	.	.	.	.	3.1	2.7	3.1	2.7								
13	AOTX96265-2Ru	4.0	3.8	2.5	2.0	3.3	.	4.1	.	3.1 (9)	3.4 (5)	.	3.4	3.0	3.3	4.1	3.0	2.3	2.1	3.1	2.8	2.7 (6)	3.2 (5)								
14	CO99053-3RU	5.0	3.8	3.5	3.0	3.5	3.2	3.8	3.6	3.4 (4)	3.8 (2)	3.8	3.8	4.0	4.0	3.5	3.0	2.7	3.2	3.1	2.7	3.1 (1)	3.4 (2)								
15	CO99053-4RU	2.0	3.8	3.8	3.5	3.5	.	3.5	.	3.5 (2)	3.3 (7)	.	3.2	1.0	3.3	2.8	3.3	2.7	3.0	2.1	1.5	2.8 (3)	2.4 (12)								
16	CO99100-1RU	3.0	3.8	3.5	2.7	3.3	.	4.3	.	3.5 (2)	3.4 (5)	.	4.0	1.0	2.9	3.2	3.0	2.8	1.6	3.5	2.0	2.7 (6)	2.6 (9)								
17	PA00N14-2	.	.	.	.	.	3.4	3.5	3.6	3.5	3.5	3.7	.	.	.	.	.	.	.	2.9	2.8	2.9	2.8								
Location Means		3.5	3.6	3.1	3.0	3.6	3.2	3.3	3.7	3.2	3.5	3.8	3.4	3.2	3.3	3.0	3.0	2.7	2.3	2.7	2.5	2.7	3.0								

¹ Score based upon Idaho, Oregon, and Washington samples evaluated postharvest at Washington State University.
No Idaho samples for entries 5,10,11,12,17. (www.potatoes.wsu.edu) Scale [1-5(best)]

TABLE 15: 2011 Western Regional Potato Variety Trial - ENTRY SUMMARY¹

No. Clone	Year		US Total Yield ²	US #1's Yield ²	US % #1's ²	Tuber		Specific Gravity ²	Fry45 Color	%Cumulative Shrink & Sprout Rating ³	%Combined(E&L)			Observations	Disposition 2012	
	In Trial	Use				Size (oz)	Early				Late	Merit Score ⁴	Fresh			
1	RANGER R.	-	Dual	570	443	77	4.9	7.4	1.090	1.4	6.0	3.0	3.1	2.8		Check
2	R. BURBANK	-	Dual	561	401	71	5.1	6.6	1.081	1.3	7.4	4.0	3.5	2.5		Check
3	R. NORKOTAH	-	Fresh	444	343	76	4.3	6.0	1.074	1.3	7.0	3.0	2.9	2.8		Check
4	A98345-1	3	Dual	677	595	87	4.6	8.3	1.092	0.7	7.6	2.8	3.2	3.0	Highest total and US#1 yields (L); High % ov. size (L); High SG (E&L); Res to VW/ED and EB; Susc. C. scab and Fus(sol); CSR	Graduate
5	A00324-1	2	Dual	624	521	57	6.9	10.0	1.080	1.5	9.0	3.0	2.5	2.5	IBS (Herm); NN/VD (TX); Res to Fus(sol) & soft rot	Discard
6	A01010-1	2	Dual	640	546	84	5.1	7.3	1.081	0.9	7.9	2.8	3.6	3.2	High total and US#1 yields (L); Lower SG (E&L); shatter bruise; low BS (WA); High Vit. C; Res to VW/ED, c. scab, and soft rot	Return
7	A01025-4	1	Dual	602	478	78	8.5	9.7	1.081	0.5	-	-	3.4	2.8	Highest total and US#1 yields (E); High % ov. size and large tuber size(E&L); Lower SG (E&L); B. spot (L); Susc. to c. scab	Discard
8	A02060-3TE	1	Dual	622	527	84	6.5	9.2	1.086	0.9	-	-	3.6	3.1	High % ov. size and large tuber size(E&L); HH (L); IBS (E-WA); high protein; Res to VW/ED and F(sol)	Discard
9	AC99375-1RU	3	Dual	669	536	79	4.8	6.6	1.094	0.6	6.4	3.3	3.8	2.6	High total (E&L),and US#1 (L) yields; high % und. size (E&L); High SG (E&L); IBS (E-WA); Higher TGA; Res to VW/ED, EB, LB., and Fus(sol); CSR	Graduate
10	AO00057-2	2	Dual	590	504	84	7.0	9.2	1.083	0.0	5.6	4.0	3.3	2.7		Return
11	AO02183-2	1	Dual	862	738	83	5.8	9.9	1.090	0.0	-	-	4.0	3.4	IBS (Herm); low BS (WA)	Return
12	AO96305-3	3	Dual	615	524	84	7.2	8.0	1.083	0.0	5.7	4.0	3.8	2.9	low BS (WA)	Return
13	AOTX96265-2Ru	2	Fresh	529	461	86	5.7	7.7	1.088	0.7	6.9	3.0	3.4	3.0	Shatter bruise (L); HH (L); NN/VD (L); High protein; Susc. to c. scab	Discard
14	CO99053-3RU	3	Dual	588	472	80	5.4	7.9	1.083	0.8	5.9	3.3	3.8	3.2	Res. to VW/ED and EB; Very susceptible to metribuzin	Graduate
15	CO99053-4RU	3	Fresh	437	326	74	5.2	5.5	1.082	1.4	8.4	3.7	3.2	2.4	Low yields (E&L); low % ov. size and high % und.size(L); High Vit. C.; Susc. to VW/ED, EB	Graduate
16	CO99100-1RU	3	Fresh	433	347	80	5.4	6.5	1.079	0.8	10.3	3.3	3.4	2.5	Hight total and US#1 yields (E); low % ov. size yield (L); Susc. to VW/ED, EB, and metribuzin	Graduate
17	PA00N14-2	3	Dual	598	511	85	5.7	6.9	1.083	0.5	6.7	4.0	3.5	2.8		Return - Early Only
Entry Means				592	487	79	5.8	7.8	1.084	0.8	7.2	3.4	3.4	2.8		

¹ Numeric values represent means across all trial locations.² Data shown from late trial results.³ 2010 entries at Tulalake, CA; Evaluated at 168 days after harvest. Sprout rating: 1(>2 inches), 2(1-2 inches), 3(peeping to 1 inch), 4(peeping), 5(none).⁴ Data shown from combined early & late trial results.

TABLE 16: 2011 Western Regional Potato Variety Trial - 3 YEAR SUMMARY OF GRADUATING ENTRIES - LATE TRIAL LOCATION MEANS

Clone	2009							2010							2011						
	Total Yield ¹ &(rank)	US #1 Yield ¹ & %	SG	Fry 45	Merit Score			Total Yield ¹ &(rank)	US #1 Yield ¹ & %	SG	Fry 45	Merit Score			Total Yield ¹ &(rank)	US #1 Yield ¹ & %	SG	Fry 45	Merit Score		
A98345-1	736 (1/19)	640 86	1.092	0.8	2.5	3.6		660 (2/21)	595 90	1.089	0.6	2.8	3.6		677 (2/17)	595 87	1.092	0.7	3.0	3.2	
AC99375-1RU	686 (3/19)	504 74	1.097	0.7	2.7	3.3		679 (1/21)	549 80	1.092	0.4	2.1	3.8		669 (3/17)	536 79	1.094	0.6	2.6	3.8	
AO96305-3	537 (15/19)	443 82	1.090	0.4	3.1	3.7		476 (18/21)	418 88	1.087	0.3	3.4	4.1		615 (7/17)	524 84	1.083	0.0	2.9	3.8	
CO99053-3RU	638 (7/19)	540 84	1.086	1.5	3.7	3.4		537 (10/21)	452 84	1.083	0.9	2.9	3.6		588 (11/17)	472 80	1.083	0.8	3.2	3.8	
CO99053-4RU	474 (18/19)	373 77	1.081	1.3	3.0	3.0		413 (20/21)	326 79	1.080	0.9	2.5	3.4		437 (16/17)	326 74	1.082	1.4	2.4	3.2	
CO99100-1RU	493 (17/19)	401 80	1.081	0.7	3.0	3.2		396 (21/21)	319 79	1.077	0.7	2.9	3.2		433 (17/17)	347 80	1.079	0.8	2.5	3.4	
PA00N14-2	563 (13/19)	467 81	1.087	1.6	3.2	3.7		509 (14/21)	424 82	1.086	1.0	3.1	3.4		598 (9/17)	511 85	1.083	0.5	2.8	3.5	
RANGER R.	621 (9/19)	504 80	1.088	1.1	2.7	3.2		575 (7/21)	474 82	1.087	0.9	3.1	3.0		570 (12/17)	443 77	1.09	1.38	2.8	3.1	
R. NORKOTAH	521 (16/19)	422 79	1.075	1.6	3.7	2.9		444 (19/21)	361 82	1.074	1.0	3.2	3.0		444 (15/17)	343 76	1.074	1.3	2.8	2.9	
R. BURBANK	643 (5/19)	457 70		1.2	2.4	3.2		551 (8/21)	409 74	1.083	1.2	2.3	3.0		561 (13/17)	401 71	1.081	1.3	2.5	3.5	
Trial Mean	599	481 78	1.086	1.1	2.7	3.1		537	450 83	1.084	0.9	2.8	3.3		592	487 79	1.084	0.8	2.8	3.4	

3 Year Average (2009-2011)

Clone	Total	Yield ¹	US #1	SG	FRY	Merit Score			Noted Weaknesses	Noted Strengths
	&(‰ile) ²	Yld ¹	%			45	Fresh	Proc		
A98345-1	691 (91)	610	88	1.091	0.7	2.8	3.5	C. Scab Susc. (3/3); Fus(sol) 3/3;	V. Wilt/E. Dying, and E. Blight Res (3/3); Cold Sweet Res (3/3)	
AC99375-1RU	678 (87)	530	78	1.094	0.6	2.5	3.6	Higher TGA (2/3)	LB Res. (3/3); Fus(sol) Res. (3/3);V. Wilt/ED, E. Blight (2/3);CSR (3/3)	
AO96305-3	543 (31)	462	85	1.087	0.2	3.1	3.9	S. rot & C. Scab susc (2/2); not eval. In 2011	Cold Sweet Res (2/3); not complete fry eval. in 2011	
CO99053-3RU	588 (50)	488	83	1.084	1.1	3.3	3.6	Metribuzin susc (2/2); no data in 2009	V. Wilt/E. Dying, and E. Blight Res (2/3)	
CO99053-4RU	441 (05)	342	342	1.081	1.2	2.6	3.2	Low total yield (L) (3/3) & (E) (2/3)	High Vit. C (3/3);	
CO99100-1RU	441 (04)	356	356	1.079	0.7	2.8	3.3	Susc. to VD/ED and EB (3/3) and metrib. (2/2); no data in 09	High Total & U.S. #1 yields for Early Harvest (2/3)	
PA00N14-2	557 (37)	467	467	1.085	1.0	3.0	3.5	None Noted Over Years	Corky Ringspot Res.	
RANGER R.	589 (50)	474	80	1.088	1.1	2.9	3.1			
R. NORKOTAH	470 (12)	375	79	1.075	1.3	3.2	2.9		¹ (CWT/A)	
R. BURBANK	585 (37)	422	72	1.083	1.2	2.4	3.2		² Percent of entries with lower yields; e.g. 91% of all late trial entries over three years yielded lower than A98345-1.	
Trial Mean ³	576	473	80	1.085	0.9	2.8	3.3		³ Late Trial mean of all trial entries 2009-2011	

¹ (CWT/A)² Percent of entries with lower yields; e.g. 91% of all late trial entries over three years yielded lower than A98345-1.³ Late Trial mean of all trial entries 2009-2011

TABLE 17: 2010 Western Regional Potato Variety Trial - ENTRY COMMENTS - EARLY AND LATE HARVEST

Entry Comments - Early Harvest				Entry Comments - Late Harvest							
No.	Clone	ID PAR	TX SPR	WA OTH	CA TUL	AB	ID KIM	PAR	OR HRM	KLA	WA OTH
1	Ranger Russet	small, curved,pear shape	very small, poor shape, skinny, heat sprouts, heavy set, poor shape	Long, skinny, somewhat rough-shaped, mostly typy.		curved and smaller than typical	curves	Long, skinning, curvy	Somewhat typy, some irregular shapes, and long.	Typy Ranger, crook	Typy, long, a few irregular ones, eyes a bit deep.
2	Russet Burbank	long , smooth, nice for burbank	long, skinny+, light skin, rough, light skin, poor shape	Irregular shape, knobs, some typy tubers.		slightly smoother than typical	points	Misshapen	Rough, pointy, many knobs.	Typy, small	Mostly typy, some irregular shapes, skinny, knobs.
3	Russet Norkotah	smooth, oblong	small, small, skinny+	Mostly typy, small, some irregular shapes.		Small, typical	small	Uniform, smooth, big	Mostly typy and small	Typy, rough RN	Small, somewhat skinny, typy.
4	A98345-1	round smooth small	light set, small, blocky, light russet skin, nice shape	Round, short, light russet, sticky stolons, uniform shape.		deep eyes	big, attached stolons, scab, deep eyes	Alligator skin, blocky	Large, light skin, with irregular shapes.	Typy, process, ?	Large, short; flaky, ugly skin, a bit flat and round, spotty.
5	A00324-1		heavy set, heat sprouts, small, skinny, small, heat sprouts, small	Plump, short, ugly light skin, some irregular shapes.		Med Russet, large, curved			Large, bad shatter, light skin, DISCARD!	Growth cracks, Rz bad, fair	Mostly typy, small to large, light russet, irregular shape.
6	A01010-1	long, smooth, pointy, alligator	skinny, long, nice skin, blocky	Small, mostly typy, some irregular shapes, eyes a bit deep.		thin	long thin	Alligator hide,rough	Bumpy shape*, irregular shape.	Round/short, coarse, drop	Mostly typy, flat, some shatter, puffed wheat skin.
7	A01025-4	big, nice yield	light set, nice shape, blocky, small, light set	Large, light, ugly skin, irregular shape.	several tubers with elephant hide,had highest amount of knobs & green tubers	big, misshaped, curved	big, lt russ, green	Pointy, lumpy	Light skin, large, ugly.	Process, typy, ok	Large, irregular shape, ugly spotty skin.
8	A02060-3TE	smooth, uniform, nice	light set, small, nice skin, blocky, rot, light set	Mostly typy, light russet, some irregular shapes.	easily skinned	MR, nice size and shape	nice, twins, HH	Smooth, nice, blocky	Bad shatter, bumpy shape*.	Real typy, nice, keep	Blocky, typy, shape variable.
9	AC99375-1RU	flat, misshapen, small	oblong, small, heat sprouts++, nice shape+, nice shape, blocky	Small, irregular shape.		lumpy	lumpy	Not very uniform, blocky	Bumpy shape*,too large.	B size, small, drop	Nonuniform; bumpy, irregular shapes, bad skinning.
10	AO00057-2			Typy, large, dark russet, nice.					Large, bumpy shape*, mostly typy.	Small, short, blocky, typy	Short, a bit round, blocky, bumpy, mostly typy.
11	AO02183-2			Mostly typy, long, skinny, deep eyes, heavy Rhizoctonia.					Very large, eyes a bit deep.	Blocky, long, Rz bad	Mostly typy, bumpy shape, blocky, deep eyes.
12	AO96305-3			Long, skinny, ugly skin, growth cracks on some.					Mostly typy, long and skinny, light russet.	Typy, growth cracks, nice	Typy, light russet, puffed wheat skin, a few cracks.
13	AOTX96265-2RU	round, small, smooth	oblong, round, nice skin, low yield, small+, blocky	Small, flat, plump, typy.		short, lumpy	big, nice	Misshapen, white eyes, lumpy	Bumpy shape*, eyes a bit deep.	Short, blocky, shatter, drop	Shape somewhat irregular, bumpy; deep eyes, shatter
14	CO99053-3RU	blocky, pearshape, small	nice shape+, skinny, long, heat sprouts, rot, heavy set, blocky	Mostly typy, a bit flat, irregular shape.		blocky, curves, folds	curves, points	Not uniform, pointy	Somewhat typy, some irregular shapes, and large.	Flat, coarse, big, drop	Mostly typy, variable shape; flaky, puffed wheat skin.
15	CO99053-4RU	long, smooth, curvy	nice shape, low yield++, nice shape, light set	Typy, a bit flat, somewhat small, light russet, nice.	Pointy in shape	small, thin, points	small, points	Low yield, small, curvy	Somewhat typy, irregular shape.	Typy, small, drop	Small, variable shape, light russet, mostly typy.
16	CO99100-1RU	oblong , smooth, pointy	bad rep, low yield+, light set, small	Small, mostly typy, some irregular shapes and pears.	highest amount of growth cracks of all the entries	small, few	bright eyes, small	Alligator hide, big, blocky	Small, somewhat typy, undersized.	Coarse, big, pointy stern-end	Mostly typy, small, irregular shape, light russet.
17	PA00N14-2			Typy, long, skinny, light russet.					Flat, light skin.	Small, typy, process	Typy, a few curves, a bit flat, skin has yellow tint.