

2012 WESTERN REGIONAL POTATO VARIETY TRIAL REPORT

State Experiment Stations and
USDA-ARS Cooperating

California

Colorado

Idaho

Oregon

Texas

Washington



2012 WESTERN REGIONAL POTATO VARIETY TRIAL REPORT

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Western Regional Potato Variety Trial Reports (1998-2012) can be accessed at the following website.

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

Compiled by Brian Schneider

TABLE 1: 2012 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, D. Culp K. Nicholson	Late	Sprink.	199-73-16-31	16-May	14-Sep	121	147	Matrix Metribuzin Reglone	Admire Pro	Moncut Bravo Weather Stick Manzate
2	San Luis Valley Colorado (SLV)	D. Holm, C. Gray	Late	Pivot	120-60-40-25-2.5	16-May	31-Aug	107	131	Matrix SG Eptam 7E Sulfuric Acid	Fulfill	Quadris Endura
3	Aberdeen Idaho (AB)	J. Stark, R. Novy, J. Whitworth, P. Bain, M. Chappell	Late	Sprink.	230-280-300	3-May	31-Aug	120	147	Outlook Prowl H20 Metribuzin Mech.	Admire Pro	Pennco Zeb 75DF Echo
4	Kimberly Idaho (KIM)	J. Stark, R. Novy, J. Whitworth, P. Bain, M. Chappell	Late	Sprink.	330-270-180-40	25-Apr	27-Aug	124	174	Impreg Metribuzin Matrix Mechanical	Admire Pro	Bravo Weather Stick Gavel, Dithane Rimon, Beleaf
5	Parma Idaho (PAR)	M. Thornton, B. Buhrig, A. French, Oksana Adams	Early	Sprink.	134-160-100	9-Apr	30-Jul	112	114	Prowl Outlook Eptam	Leverage Movento , Admire	Endura , Luna Gavel , Bravo Omega
6	Hermiston Oregon (HRM)	P. Hamm, L. Leroux	Early	Pivot	300-380-200-60-5+	23-Mar	23-Jul	122	136	Matrix Gramoxone	Admire , Radiant Agrimek , Oberon Movento	Maxim 4FS Ridimil Gold , Dithane Quadris , Omega
7	Klamath Oregon (KLA)	B. Charlton	Late	Sprink.	193-116-250-132	24-May	10-Sep	109	147	Prowl Matrix Reglone+Mech.	Admire, Movento, Fulfill Asana, Endigo, Assail Vydate C-LV, Telone II	Moncut Ridomil, Bravo Endura
8	Springlake (SPR) Dalhart (DAL) Texas	J. C. Miller Jr., J. Koym, D. Schuering	Early	Pivot	155-50-50	27-Mar	27-Jul	122	128	Roundup, Treflan Sencor , Matrix Select Max	Platinum, Movento Epimek , Fulfill , Beleaf Admire Pro, Oberon	Penncozeb, Revus Top Quadris, Bravo, Scala SC Luna Tranquility
9	Othello (OTH) Othello (OTH) Washington	M. Pavek, R. Knowles	Early	Linear	200-340-220	4-Apr	17-Jul	104	119	Matrix , Eptam Prowl H20		Penncozeb Oberon , Manzate

¹**Bold indicates use in both location's trials.**

TABLE 2: 2012 Western Regional Potato Variety Trial - CLONE, PARENTAGE, FLOWER COLOR, ENTRY SUBMISSION, USE, TRIAL, YEARS IN TRIAL, SEED SOURCE, STAND, TUBER AND VINE CHARACTERISTICS

No.	Clone	Parents	Flower Color ¹	Entered by Use	Trial	Year in Trial	Seed Source	Stand ²	Tuber and Vine Descriptions from Trial Observations 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	-	OR	99	Long	4.4	Med Russet	3.8	Med-Large	3.8	Med-Late	3.6	2.2
2	Russet Burbank	Early Rose ?	W	Ck	Dual	E/L	-	OR	98	Long	4.1	Med Russet	3.6	Med-Large	3.7	Medium	3.3	2.6
3	Russet Norkotah	ND9687-5Rus ND9526-4Rus	W	Ck	Fresh	E/L	-	OR	97	Long	4.2	Med Russet	4.0	Medium	3.0	Early	1.8	2.8
4	A99029-3E ⁷	A9230-5 Summit Russet	W	ID	Fresh	E	1	OR	96	Oblong	3.5	Med Russet	3.5	Med-Large	4.0	Med-Late	3.7	2.0
5	A01010-1	A92303-7 A96004-8	W	ID	Dual	E/L	3	OR	99	Long	4.1	Med Hvy Rus	4.2	Med-Large	3.8	Medium	3.3	3.0
6	A02138-2	A96563-8 Premier Russet	W	ID	Dual	E/L	1	OR	99	Oblong	3.0	Light Russet	2.9	Med-Large	3.2	Early	2.3	3.0
7	A02507-2LB	EGA09702-2 GemStar Russet	W	ID	Dual	E/L	1	OR	97	Oblong	3.3	Med Russet	3.6	Med-Large	3.9	Late	4.1	2.2
8	A03158-2TE	A98292-2 A98104-4	W	ID	Dual	E/L	1	OR	98	Obl-Lng	3.9	Med Russet	3.7	Med-Large	3.6	Medium	3.2	2.4
9	AC00395-2RU	A95523-12 A84118-3	LP	CO	Dual	E/L	1	CO	99	Obl-Lng	3.7	Med Russet	3.5	Large	4.3	Med-Late	3.8	2.1
10	AO00057-2	A91048-3 A93116-3BSR	W	OR	Dual	E/L	3	OR	94	Obl-Lng	3.7	Med Russet	3.9	Med-Large	3.5	Medium	3.5	1.8
11	AO02060-3	A97201-4 Premier Russet	W	OR	Dual	E/L	1	OR	98	Obl-Lng	3.6	Med Russet	3.2	Med-Large	3.2	Med Early	2.7	2.6
12	AO02183-2	A97236-3 Premier Russet	W	OR	Dual	E/L	2	OR	99	Long	4.1	Med Russet	3.7	Large	4.2	Medium	3.5	2.5
13	AO96305-3	A91018-6 A89152-4	RP	OR	Dual	E/L	3	OR	99	Long	4.1	Light Russet	2.9	Med-Large	3.5	Med Early	3.0	2.3
14	CO03187-1RU ⁷	Rio Grande Russet	LP	CO	Dual	E	1	CO	99	Long	4.2	Med Russet	3.6	Med-Large	3.3	Early	1.7	2.5
15	CO03202-1RU	AC96010-3RU Canela Russet	W	CO	Dual	E/L	1	CO	95	Long	4.6	Med Russet	3.6	Med-Large	3.8	Med-Late	3.6	2.2
16	CO03276-4RU ⁸	CO95086-8RU Blazer Russet	W	CO	Dual	E/L	1	CO	.	.	.	.	.	.	.	.	.	.
17	CO03276-5RU ⁷	CO95086-8RU Blazer Russet	P	CO	Dual	E	1	CO	100	Long	4.1	Med Hvy Rus	4.1	Med-Large	3.9	Med Early	2.8	2.9
18	PA00N14-2	PA95A14-22 (Bulk Rus + Gem)	W	WA	Dual	E/L	3	OR	98	Long	4.4	Med Russet	3.3	Medium	3.0	Early	1.9	2.7

¹ P=Purple, R=Red, W=White

² Numerical values are means of all trial locations at 60 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

⁷ Early Trial only, but some sites also reported performance in late harvest trials as well.

⁸ Seed Mix in trial; Data not reported for this clone

TABLE 3: 2012 Western Regional Potato Variety Trial - TOTAL YIELD (CWT/A) - EARLY AND LATE HARVEST

No. Clone	Total Yield - Early Harvest (CWT/A)							Total Yield - Late Harvest (CWT/A)											
	ID	OR	TX		WA	Entry		CA	CO	ID		OR	WA	Entry					
	PAR	HRM	DAL	SPR	OTH	Mean/Rank		TUL	SLV	AB	KIM	PAR	HRM	KLA	OTH	Mean/Rank			
1 RANGER R.	499	493	462	258	396	422	11	abcd	525	395	482	631	775	924	539	852	640	6	bc
2 R. BURBANK	533	447	442	306	364	418	12	bcd	440	424	487	524	849	1192	366	710	624	7	cd
3 R. NORKOTAH	585	418	490	182	355	406	16	cd	393	259	310	425	729	685	443	522	471	14	f
4 A99029-3E	443	540	477	260	337	411	14	bcd	.	380	.	.	.	.	.	.	.	.	.
5 A01010-1	497	739	381	290	455	473	5	abc	543	398	533	615	855	1176	723	896	717	3	ab
6 A02138-2	527	588	531	348	455	490	2	ab	491	400	445	389	749	597	633	683	548	9	def
7 A02507-2LB	422	583	427	311	312	411	14	bcd	512	411	471	513	715	1053	602	899	647	5	bc
8 A03158-2TE	566	685	430	344	463	498	1	a	558	491	603	712	832	1153	713	872	742	2	a
9 AC00395-2RU	504	549	470	297	404	445	7	abcd	576	438	478	606	760	972	708	965	688	4	abc
10 AO00057-2	463	498	308	260	391	384	17	d	483	.	.	323	689	642	554	598	548	9	
11 AO02060-3	500	523	423	307	402	431	9	abcd	453	363	304	450	661	739	569	669	526	13	ef
12 AO02183-2	525	751	475	290	385	485	3	ab	576	419	561	773	799	1404	748	787	758	1	a
13 AO96305-3	673	474	422	287	361	443	8	abcd	435	.	.	348	667	740	472	581	540	12	
14 CO03187-1RU	572	469	511	183	380	423	10	abcd	437	320	.	.	.	.	.	.	.	.	.
15 CO03202-1RU	533	510	329	319	387	415	13	bcd	522	371	428	476	712	897	610	789	601	8	cde
17 CO03276-5RU	573	626	460	279	442	476	4	abc	513	357	.	.	.	.	.	.	.	.	.
18 PA00N14-2	544	458	.	.	350	451	6		.	424	500	417	688	629	491	658	544	11	
Location Means	527	550	440	282	390	440			497	390	467	514	749	914	584	749	614		

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

Indicates high or strength

Indicates low or weakness

TABLE 4: 2012 Western Regional Potato Variety Trial - YIELD OF U.S. #1'S [CWT/A (upper) and % (lower)] - EARLY AND LATE HARVEST

No. Clone	U.S. No. 1's - Early Harvest (CWT/A) and %							U.S. No. 1's - Late Harvest (CWT/A) and %											
	ID	OR	TX		WA	Entry		CA	CO	ID		OR	WA	Entry					
	PAR	HRM	DAL	SPR	OTH	Mean/Rank		TUL	SLV	AB	KIM	PAR	HRM	KLA	OTH	Mean/Rank			
1 RANGER R.	462	422	329	96	347	331	10	bcde	445	328	338	414	715	747	271	732	499	6	bc
	92	86	71	37	88	75	10		85	83	70	66	92	81	50	86	77	10	
2 R. BURBANK	418	317	340	27	178	256	17	e	351	291	201	253	547	814	169	515	393	13	de
	78	71	77	9	49	57	17		80	69	41	48	63	68	46	72	61	14	
3 R. NORKOTAH	528	336	403	125	267	332	9	bcde	321	214	202	335	656	558	217	412	364	14	e
	90	80	82	69	75	79	4		82	83	65	79	90	81	49	79	76	12	
4 A99029-3E	361	435	413	80	253	309	16	de	.	353	.	.	.	.	.	.	.	.	.
	82	81	87	31	75	71	14		.	93	.	.	.	.	.	.	.	.	.
5 A01010-1	413	655	273	235	304	376	4	abcd	430	341	402	489	771	1017	519	773	593	3	a
	83	89	72	81	67	78	7		79	86	75	80	90	86	72	86	82	5	
6 A02138-2	442	513	434	216	351	392	2	ab	345	345	352	272	649	424	399	542	416	12	cde
	84	87	82	62	77	79	4		70	86	79	70	87	71	63	79	76	12	
7 A02507-2LB	371	481	354	212	185	321	13	bcde	456	382	343	401	659	939	458	796	554	5	ab
	88	83	83	68	59	76	9		89	93	73	78	92	89	76	89	85	1	
8 A03158-2TE	511	595	384	184	380	411	1	a	482	434	514	582	760	1045	415	761	624	2	a
	90	87	89	54	82	80	3		86	88	85	82	91	91	58	87	84	2	
9 AC00395-2RU	405	472	321	156	275	326	11	bcde	495	397	345	503	674	858	471	890	579	4	ab
	80	86	68	52	68	71	14		86	91	72	83	89	88	67	92	83	3	
10 AO00057-2	409	447	271	162	293	317	14	bcde	421	.	.	267	604	557	402	492	457	8	
	88	90	88	63	75	81	2		87	.	.	83	88	87	73	82	83	3	
11 AO02060-3	432	439	371	235	317	359	6	abcd	386	310	241	368	589	633	372	527	428	9	cde
	87	84	88	77	79	83	1		85	85	79	82	89	86	65	79	81	7	
12 AO02183-2	471	673	394	118	270	385	3	abc	513	313	474	579	732	1224	497	687	627	1	a
	90	90	83	41	70	75	10		89	75	84	75	92	87	66	87	82	5	
13 AO96305-3	457	376	361	184	250	325	12	bcde	362	.	.	257	520	592	381	448	427	10	
	74	79	86	64	69	74	12		83	.	.	74	78	80	81	77	79	8	
14 CO03187-1RU	477	377	342	75	282	311	15	cde	335	260	.	.	.	.	.	.	.	.
	83	80	67	41	74	69	16		77	81	.	.	.	.	.	.	.	.
15 CO03202-1RU	454	455	291	190	288	336	8	abcd	430	332	308	333	614	631	390	680	465	7	cd
	85	89	89	60	74	79	4		82	89	72	70	86	70	64	86	78	9	
17 CO03276-5RU	478	515	358	119	348	364	5	abcd	428	227	.	.	.	.	.	.	.	.
	83	82	78	43	79	73	13		83	64	.	.	.	.	.	.	.	.
18 PA00N14-2	430	389	.	.	233	351	7		.	316	352	311	551	530	371	541	424	11	
	79	85	.	.	67	77	8		.	75	70	74	80	84	75	82	77	10	
Location Means	442	465	352	151	284	341			413	323	339	383	646	755	381	628	489		
	85	84	81	53	72	75			83	83	72	74	86	82	65	83	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 entries not represented at all locations and excluded from statistical analysis.

TABLE 5: 2012 Western Regional Potato Variety Trial - YIELD > 10/12 OZ [CWT/A (upper) & % (lower)] - EARLY AND LATE HARVEST

No. Clone	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 %											
	ID	OR	TX		WA	Entry		CA	CO	ID		OR	WA	Entry					
	PAR	HRM	DAL	SPR	OTH	Mean/Rank		TUL	SLV	AB	KIM	PAR	HRM	KLA	OTH	Mean/Rank			
1 RANGER R.	106	159	88	29	32	83	8	bc	92	85	232	211	293	345	115	364	217	3	abc
	21	32	19	11	8	18	7		18	22	48	33	38	37	21	43	33	2	
2 R. BURBANK	61	84	101	1	11	52	15	c	71	30	111	111	171	268	56	151	121	9	efg
	11	19	23	0	3	11	15		16	7	23	21	20	22	15	21	18	9	
3 R. NORKOTAH	173	40	183	20	13	86	6	abc	52	33	68	74	205	87	57	43	77	12	fg
	30	10	37	11	4	18	7		13	13	22	18	28	13	13	8	16	12	
4 A99029-3E	160	192	176	7	37	114	2	ab	.	108	.	.	.	.	.	.	.	.
	36	36	37	3	11	24	2		.	28	.	.	.	.	.	.	.	.
5 A01010-1	31	155	99	78	3	73	11	bc	17	25	208	153	160	265	150	137	139	8	def
	6	21	26	27	1	16	10		3	6	39	25	19	23	21	15	19	8	
6 A02138-2	36	157	157	62	14	85	7	bc	17	36	122	45	117	19	99	71	66	13	g
	7	27	30	18	3	17	9		3	9	27	11	16	3	16	10	12	13	
7 A02507-2LB	46	18	153	70	0	57	14	c	105	128	200	119	259	260	228	250	194	4	abcd
	11	3	36	22	0	15	12		20	31	43	23	36	25	38	28	30	5	
8 A03158-2TE	161	243	213	32	40	138	1	a	113	66	335	319	356	491	164	250	262	1	a
	28	35	50	9	9	26	1		20	13	56	45	43	43	23	29	34	1	
9 AC00395-2RU	21	120	88	34	0	52	15	c	94	121	118	171	165	280	116	429	187	5	bcde
	4	22	19	11	0	11	15		16	28	25	28	22	29	16	44	26	7	
10 AO00057-2	126	127	99	21	15	78	10	bc	148	.	.	110	331	182	164	176	185	6	
	27	26	32	8	4	19	6		31	.	.	34	48	28	30	29	33	2	
11 AO02060-3	40	75	213	82	6	83	8	bc	47	30	72	145	101	123	134	101	94	11	fg
	8	14	50	27	1	20	4		10	8	24	32	15	17	24	15	18	9	
12 AO02183-2	48	206	190	5	3	90	5	abc	111	41	279	337	264	545	129	267	247	2	ab
	9	27	40	2	1	16	10		19	10	50	44	33	39	17	34	31	4	
13 AO96305-3	105	100	190	42	18	91	4	abc	31	.	.	63	167	122	109	113	101	10	
	17	21	45	15	5	20	4		7	.	.	18	25	16	23	19	18	9	
14 CO03187-1RU	87	89	100	1	13	58	13	c	38	49	.	.	.	.	.	.	.	.
	15	19	20	1	3	12	14		9	15	.	.	.	.	.	.	.	.
15 CO03202-1RU	80	149	147	79	5	92	3	abc	123	138	186	172	185	123	149	288	171	7	cde
	15	29	45	25	1	23	3		24	37	43	36	26	14	24	36	30	5	
17 CO03276-5RU	38	169	100	20	15	68	12	bc	69	23	.	.	.	.	.	.	.	.
	7	27	22	7	3	13	13		13	6	.	.	.	.	.	.	.	.
18 PA00N14-2	4	62	.	.	3	23	17		.	13	105	39	67	8	104	11	50	14	
	1	14	.	.	1	5	17		.	3	21	9	9	1	21	2	10	14	
Location Means	78	126	144	36	13	78			75	62	170	148	203	223	127	189	151		
	15	22	33	12	3	17			15	16	35	27	27	22	22	24	23		

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

TABLE 6: 2012 Western Regional Potato Variety Trial - YIELD < 4 OZ [CWT/A (upper) & % (lower)] - EARLY AND LATE HARVEST

No. Clone	Yield < 4 OZ - Early Harvest (CWT/A) and %									Yield < 4 OZ - Late Harvest (CWT/A) and %									
	ID		OR		TX		WA	Entry		CA	CO	ID		OR		WA	Entry		
	PAR	HRM	DAL	SPR	OTH	Mean/Rank	Mean/Rank	TUL	SLV	AB	KIM	PAR	HRM	KLA	OTH	Mean/Rank	Mean/Rank		
1 RANGER R.	26	38	120	59	33	55	14	c	66	61	16	41	46	37	20	28	39	14	d
	5	8	26	23	8	14	14		13	15	3	6	6	4	4	3	7	12	
2 R. BURBANK	91	48	58	72	81	70	10	bc	53	124	53	63	133	81	29	75	76	3	ab
	17	11	13	24	22	17	8		12	29	11	12	16	7	8	11	13	4	
3 R. NORKOTAH	48	60	69	51	73	60	12	c	64	44	72	55	62	89	26	85	62	8	bc
	8	14	14	28	21	17	8		16	17	23	13	9	13	6	16	14	3	
4 A99029-3E	62	77	39	110	66	71	9	bc	.	27	.	.	.	.	.	.	.	.
	14	14	8	42	20	20	5		.	7	.	.	.	.	.	.	.	.
5 A01010-1	46	45	97	24	135	69	11	bc	105	51	45	55	80	69	47	88	68	4	bc
	9	6	25	8	30	16	10		19	13	8	9	9	6	7	10	10	8	
6 A02138-2	80	65	82	77	85	78	6	abc	138	54	56	105	93	156	42	120	96	1	a
	15	11	15	22	19	16	10		28	14	13	27	12	26	7	18	18	1	
7 A02507-2LB	46	90	68	65	118	77	7	abc	34	17	43	54	46	63	11	65	42	13	d
	11	15	16	21	38	20	5		7	4	9	11	6	6	2	7	7	12	
8 A03158-2TE	35	59	29	84	62	54	17	c	62	55	27	54	62	48	19	65	49	12	cd
	6	9	7	24	13	12	17		11	11	4	8	7	4	3	7	7	12	
9 AC00395-2RU	98	61	135	139	113	109	1	a	63	36	56	58	85	48	43	51	55	10	cd
	20	11	29	47	28	27	2		11	8	12	10	11	5	6	5	9	10	
10 AO00057-2	50	45	32	67	79	55	14	c	39	.	.	39	67	70	41	77	55	10	
	11	9	10	26	20	15	12		8	.	.	12	10	11	7	13	10	8	
11 AO02060-3	60	67	37	61	78	60	12	c	57	43	35	44	69	75	39	95	57	9	bcd
	12	13	9	20	19	14	14		13	12	12	10	11	10	7	14	11	6	
12 AO02183-2	53	50	56	131	112	80	5	abc	46	97	36	65	65	93	50	66	65	6	bc
	10	7	12	45	29	21	4		8	23	6	8	8	7	7	8	9	10	
13 AO96305-3	186	35	50	72	38	76	8	abc	67	.	.	76	83	66	39	60	65	6	
	22	7	12	25	10	15	12		15	.	.	22	12	9	8	10	13	4	
14 CO03187-1RU	87	73	161	99	86	101	2	ab	94	59	.	.	.	.	.	.	.	.
	15	16	32	54	23	28	1		22	18	.	.	.	.	.	.	.	.
15 CO03202-1RU	76	35	27	40	98	55	14	c	56	39	51	66	96	72	78	69	66	5	bc
	14	7	8	13	25	13	16		11	11	12	14	14	8	13	9	11	6	
17 CO03276-5RU	96	60	89	102	87	87	4	abc	80	129	.	.	.	.	.	.	.	.
	17	10	19	37	20	20	5		15	36	.	.	.	.	.	.	.	.
18 PA00N14-2	112	54	.	.	117	94	3		.	104	74	87	137	84	39	97	89	2	
	21	12	.	.	33	22	3		.	25	15	21	20	13	8	15	17	2	
Location Means	73	57	72	78	86	73			68	63	47	62	80	75	37	74	63		
	13	11	16	29	22	18			14	16	11	13	11	9	7	10	11		

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

TABLE 7: 2012 Western Regional Potato Variety Trial - SPECIFIC GRAVITY - EARLY AND LATE HARVEST

No. Clone	Specific Gravity - Early Harvest						Specific Gravity - Late Harvest								
	ID	OR	TX		WA	Entry	CA	CO	ID		OR		WA	Entry	
	PAR	HRM	DAL	SPR	OTH	Mean/Rank	TUL	SLV	AB	KIM	PAR	HRM	KLA	OTH	Mean/Rank
1 RANGER R.	1.097	1.080	1.082	1.072	1.077	1.082 3 bc	1.095	1.097	1.092	1.089	1.089	1.075	1.094	1.084	1.089 4 bcd
2 R. BURBANK	1.089	1.082	1.071	1.070	1.074	1.077 11 cde	1.092	1.086	1.084	1.077	1.081	1.076	1.085	1.074	1.082 12 f
3 R. NORKOTAH	1.081	1.067	1.066	1.070	1.069	1.071 17 g	1.075	1.077	1.076	1.072	1.073	1.064	1.071	1.072	1.072 14 g
4 A99029-3E	1.084	1.067	1.073	1.067	1.070	1.072 16 fg	.	1.082	.	.	.	.	.	.	.
5 A01010-1	1.087	1.070	1.075	1.071	1.069	1.075 13 efg	1.097	1.089	1.086	1.083	1.081	1.072	1.091	1.081	1.085 11 e
6 A02138-2	1.096	1.075	1.082	1.073	1.082	1.081 5 bc	1.100	1.092	1.097	1.086	1.087	1.074	1.089	1.084	1.089 4 bcd
7 A02507-2LB	1.096	1.084	1.079	1.076	1.080	1.083 2 ab	1.097	1.096	1.089	1.090	1.103	1.085	1.088	1.087	1.092 2 b
8 A03158-2TE	1.087	1.071	1.072	1.068	1.069	1.073 15 eft	1.089	1.085	1.086	1.084	1.079	1.071	1.081	1.077	1.082 12 f
9 AC00395-2RU	1.102	1.087	1.081	1.085	1.081	1.087 1 efg	1.109	1.098	1.100	1.104	1.101	1.089	1.102	1.092	1.099 1 a
10 AO00057-2	1.091	1.084	1.079	1.074	1.079	1.081 5 bc	1.095	.	.	1.082	1.090	1.079	1.090	1.083	1.086 8
11 AO02060-3	1.092	1.078	1.080	1.077	1.076	1.081 5 bcd	1.094	1.090	1.088	1.087	1.083	1.078	1.089	1.081	1.086 8 de
12 AO02183-2	1.091	1.074	1.070	1.078	1.076	1.078 9 cde	1.099	1.095	1.093	1.084	1.090	1.075	1.089	1.091	1.090 3 bc
13 AO96305-3	1.090	1.078	1.077	1.069	1.074	1.078 9 cde	1.095	.	.	1.091	1.086	1.079	1.090	1.083	1.087 6
14 CO03187-1RU	1.083	1.070	1.083	1.078	1.084	1.080 8 bcd	1.081	1.083	.	.	.	.	.	.	.
15 CO03202-1RU	1.086	1.073	1.074	1.073	1.068	1.075 13 efg	1.092	1.088	1.095	1.085	1.085	1.075	1.088	1.083	1.086 8 cde
17 CO03276-5RU	1.081	1.075	1.079	1.070	1.076	1.076 12 def	1.088	1.088	.	.	.	.	.	.	.
18 PA00N14-2	1.095	1.075	.	.	1.076	1.082 3	.	1.091	1.090	1.088	1.084	1.080	1.090	1.083	1.087 6
Location Means	1.090	1.076	1.076	1.073	1.075	1.078	1.093	1.089	1.089	1.086	1.087	1.077	1.088	1.082	1.087

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

TABLE 8: 2012 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 Location Means ¹					
	Early Trial							Late Trial							Early Trial							Late Trial							ID		CA CO OR WA			
	ID	OR	TX	WA	CA	ID	OR	WA	OR	TX	WA	CA	CO	ID	OR	WA	OR	TX	WA	CA	CO	ID	OR	WA	AB	KIM	PAR ²	TUL	SLV	KLA	OTH			
	PAR	HRM	DAL	SPR	OTH	Mean	TUL	AB	KIM	PAR	HRM	KLA	OTH	Mean	HRM	DAL	SPR	OTH	Mean	TUL	SLV	AB	KIM	HRM	OTH	Mean	AB	KIM	PAR ²	TUL	SLV	KLA	OTH	
1 RANGER R.	9.1	5.5	4.8	5.7	6.5	6.3	6.2	9.7	8.6	9.3	9.5	8.4	9.6	8.8	4.5	4.0	4.0	3.0	3.9	4.5	5.0	4.8	4.8	5.0	4.0	4.7	2.39	2.01	1.89	2.20	1.75	2.01	1.69	
2 R. BURBANK	6.1	5.8	5.2	8.1	5.3	6.1	6.5	7.2	7.0	6.7	8.2	6.8	7.0	7.1	4.8	4.0	4.0	3.0	4.0	3.9	5.0	4.5	4.3	5.0	3.0	4.3	2.12	1.98	1.91	1.97	1.69	1.83	1.78	
3 R. NORKOTAH	8.2	5.8	6.1	3.1	5.1	5.6	5.8	5.0	6.0	8.8	6.4	8.3	5.7	6.6	4.6	4.0	4.0	4.0	4.2	4.1	5.0	4.0	4.1	4.3	4.0	4.3	2.04	1.97	1.83	1.98	1.93	1.96	.	
4 A99029-3E	6.8	6.8	6.6	5.5	5.5	6.2	.	.	.	.	.	.	.	.	4.0	4.0	2.5	3.0	3.4	.	4.0	.	.	.	.	.	.	.	1.71	.	1.63	.	.
5 A01010-1	7.0	8.8	5.5	4.0	4.6	6.0	5.1	7.6	7.4	8.0	7.9	7.3	6.7	7.1	4.4	3.5	4.4	3.0	3.8	3.8	4.0	5.0	4.8	4.7	3.0	4.2	2.21	1.96	1.87	1.84	1.92	1.75	1.70	
6 A02138-2	6.0	7.4	5.8	6.1	5.3	6.1	4.5	6.5	4.7	7.0	5.0	6.3	5.4	5.6	3.5	3.5	4.2	2.0	3.3	3.2	4.0	3.2	2.5	2.5	1.8	2.9	1.50	1.34	1.42	1.54	1.44	1.44	1.45	
7 A02507-2LB	7.0	8.8	6.8	5.4	4.2	6.4	7.3	7.9	6.5	8.9	8.1	8.4	7.7	7.8	3.7	3.5	3.5	2.0	3.2	3.8	4.0	4.0	3.0	2.8	2.8	3.4	1.67	1.39	1.53	1.76	1.61	1.58	1.49	
8 A03158-2TE	9.5	7.8	7.3	6.5	6.0	7.4	6.8	9.4	8.1	9.0	8.9	7.7	7.6	8.2	3.9	4.0	4.0	3.0	3.7	3.9	4.0	4.1	4.2	4.4	3.0	3.9	2.06	1.70	1.76	1.99	1.74	1.66	1.56	
9 AC00395-2RU	5.6	6.1	5.1	6.3	4.6	5.5	6.4	6.7	6.8	7.5	7.8	6.4	8.8	7.2	4.2	4.0	2.8	3.7	3.7	3.8	5.0	3.8	3.0	4.0	3.0	3.8	1.77	1.52	1.59	1.79	1.76	1.59	1.55	
10 AO00057-2	7.4	5.9	6.1	4.9	5.1	5.9	7.6	.	6.9	9.3	7.1	7.0	6.7	7.4	4.2	4.0	4.0	3.0	3.8	3.8	.	.	4.0	3.5	3.0	3.6	.	1.58	1.69	1.87	.	1.67	1.52	
11 AO02060-3	6.1	7.6	7.6	3.7	5.1	6.0	6.0	6.5	7.0	7.4	6.6	7.0	6.2	6.7	4.5	3.5	3.5	2.0	3.4	3.8	4.0	3.3	3.6	4.7	3.0	3.7	1.75	1.48	1.79	2.05	1.58	1.90	1.68	
12 AO02183-2	6.7	8.7	6.2	6.6	4.6	6.6	7.0	8.6	7.8	8.5	8.4	6.9	8.6	8.0	5.0	4.0	3.0	3.0	3.8	4.2	4.0	4.8	4.5	4.7	4.0	4.4	2.11	2.06	1.91	2.09	1.88	2.07	1.55	
13 AO96305-3	9.5	5.7	6.0	5.6	6.4	6.6	5.6	.	5.4	7.4	7.2	6.4	6.9	6.5	5.0	4.0	4.0	3.0	4.0	4.2	.	.	4.1	4.9	4.0	4.3	.	2.10	2.08	2.18	.	1.99	1.81	
14 CO03187-1RU	6.5	6.4	4.9	4.2	4.9	5.4	5.1	.	.	.	.	.	.	.	4.8	3.5	3.3	4.0	3.9	4.3	5.0	.	.	.	.	.	.	.	1.91	2.13	1.90	.	.
15 CO03202-1RU	6.8	5.9	6.3	4.6	4.9	5.7	6.8	7.2	7.0	7.7	7.3	7.1	7.9	7.3	5.0	4.5	5.0	4.0	4.6	4.2	5.0	4.9	4.8	5.0	4.0	4.6	2.26	2.13	2.10	2.15	1.99	1.95	1.93	
17 CO03276-5RU	6.3	7.6	5.1	5.8	5.1	6.0	5.8	.	.	.	.	.	.	.	4.3	4.0	4.0	4.3	4.2	4.2	4.0	.	.	.	.	.	.	.	1.88	2.27	1.87	.	.
18 PA00N14-2	4.9	6.2	.	.	4.2	5.1	.	6.3	5.1	5.6	5.5	6.1	5.5	5.7	4.9	.	.	4.0	4.5	.	4.0	5.0	4.1	5.0	4.0	4.4	2.22	2.06	2.12	.	1.84	1.67	1.94	
Location Means	7.0	6.9	6.0	5.4	5.1	6.1	6.2	7.4	6.7	7.9	7.4	7.2	7.2	7.1	4.4	3.9	3.8	3.2	3.8	4.0	4.4	4.3	4.0	4.3	3.3	4.0	2.01	1.81	1.82	1.99	1.77	1.79	1.67	

¹ Washington reported 2.05 for Idaho samples and 1.78 for Oregon samples.² Parma means: early and late trials combined.

TABLE 9: 2012 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.	4.5	4.2 KIM 3.3	4.9	4.2	4.7	4.4	2.5	3.0	5.0	4.7
2 R. BURBANK	4.2 OTH 3.3	3.5 AB 2.8 KIM 2.8	3.9 OTH 1.7	3.5 AB 2.8 PAR 2.0	4.8	4.3	2.0	3.0	5.0	4.9
3 R. NORKOTAH	5.0	4.7	4.9	4.7	4.8	4.6	3.0	3.0	5.0	4.7 KIM 3.8
4 A99029-3E	4.5	.	4.9	.	5.0	.	.	.	5.0	.
5 A01010-1	4.4 PAR 3.3	4.7	4.7	4.8	4.4	4.3	2.2	1.0	4.9	4.8
6 A02138-2	4.8	4.9	4.9	4.7	4.6	3.5 KLA 2.5	2.1	2.0	4.7 HRM 3.5	4.6 AB 3.8
7 A02507-2LB	5.0	4.7	4.8	4.7	4.5 HRM 3.3	3.5 KLA 3.1	2.7	1.0	5.0	4.8
8 A03158-2TE	4.3 OTH 3.3	4.3	4.9	4.6	4.0 OTH 1.0	4.3	2.3	2.0	5.0	5.0
9 AC00395-2RU	4.8	4.8	4.9	4.9	5.0	4.3	3.1	2.0	5.0	4.9
10 AO00057-2	4.9	4.8	4.9	4.6	5.0	4.4	.	2.0	5.0	4.9
11 AO02060-3	4.6	4.4	4.9	4.8	4.6 OTH 3.0	4.3	2.8	2.0	5.0	4.8 KIM 3.8
12 AO02183-2	5.0	4.5 KIM 3.8	4.9	4.6	5.0	4.6	3.1	4.0	4.9	4.9
13 AO96305-3	3.6 PAR 2.7 OTH 2.0	3.8 PAR 2.0 OTH 2.5	4.9	4.8	5.0	4.5	.	2.0	5.0	4.8
14 CO03187-1RU	5.0	.	4.9	.	5.0	.	.	.	4.9	.
15 CO03202-1RU	5.0	4.8	4.9	4.8	5.0	4.1	2.6	2.0	5.0	4.8
17 CO03276-5RU	4.9	.	5.0	.	4.6 OTH 3.0	.	.	.	5.0	.
18 PA00N14-2	5.0	4.9	5.0	4.8	5.0	4.2	2.9	3.0	5.0	4.8
Entry Means	4.7	4.5	4.8	4.6	4.8	4.2	2.6	2.3	5.0	4.8

¹All scores [1-5(none)]. Individual trial sites with relatively extreme values are listed to the right of the entry means.

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

³Othello Late Trial shatter scores reflect severe harvest conditions.

TABLE 10: 2012 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
	Early Trial	Late Trial	Early Trial	Late Trial	Early Trial	Late Trial	Early Trial	Late Trial	
1 RANGER R.	0	0	2	2	0	4 KLA 23	4.5	4.0 ^{KLA 3.0 OTH 3.0}	1.2
2 R. BURBANK	11 ^{PAR 17 OTH 30}	6 ^{OTH 27}	0	0	8 ^{PAR 30}	5 KLA 15	4.9	4.4	2.3
3 R. NORKOTAH	1	6 ^{AB 28}	1	0	0	2	4.9	4.8	2.3
4 A99029-3E	0	0	0	.	0	.	5.0	4.9	.
5 A01010-1	0	0	1	0	1	3	5.0	4.7	2.9
6 A02138-2	0	0	0	0	1	5 PAR 23	4.7	4.5	1.3
7 A02507-2LB	5 PAR 23	2 HRM 19BC	0	4 HRM 14	0	2	5.0	4.5 KLA 3.0	3.1
8 A03158-2TE	11 ^{PAR 40}	3	0	0	0	1	5.0	4.7	2.4
9 AC00395-2RU	0	8 ^{AB 38}	0	0	0	0	5.0	4.7	2.9
10 AO00057-2	5 PAR 17	1	0	0	0	1	5.0	4.3 KLA 2.5	3.1
11 AO02060-3	5 PAR 20	2	0	0	0	1	4.7	4.8	2.6
12 AO02183-2	0	1	0	1	2	4	5.0	4.8	3.3
13 AO96305-3	1	0	0	2	0	4 KLA 15	4.9	4.8	2.0
14 CO03187-1RU	0	0	0	0	1	0	4.9	5.0	.
15 CO03202-1RU	1	2	0	1	3	0	4.9	4.4	1.6
17 CO03276-5RU	0	0	0	0	0	0	4.9	4.4	.
18 PA00N14-2	0	0	0	1	0	0	4.8	4.7	1.3
Entry Means	2	2	0	1	1	2	4.9	4.6	2.3

¹All scores [1-5(none)]. Individual trial sites with relatively extreme values are listed to the right of the entry means.

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

TABLE 11: 2012 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	OR	WA	Entry Mean	CO	ID		OR	WA	Entry Mean	ID		WA	Entry Mean	ID			OR	Entry Mean
	SLV	PAR	HRM	OTH		SLV	AB	KIM	HRM	OTH		AB	KIM	OTH		AB	KIM	PAR	HRM	
L	L	E	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L		
1 RANGER R.	2.0	0.0	0.6	0.0	0.7	2.0	0.7	0.5	2.4	1.0	1.3	3.1	2.8	2.0	2.6	25	31	0	30	22
2 R. BURBANK	1.0	0.0	0.6	2.0	0.9	2.0	1.2	0.8	2.6	2.0	1.7	4.0	4.0	4.0	4.0	31	50	8	45	34
3 R. NORKOTAH	2.0	0.2	0.6	.	0.9	2.0	1.0	0.5	3.0	.	1.6	4.0	3.7	.	3.8	38	21	7	20	21
4 A99029-3E	2.0	.	0.9	.	1.5	2.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5 A01010-1	0.0	0.0	0.0	1.0	0.3	1.0	0.8	0.4	1.7	1.0	1.0	3.5	2.9	3.0	3.2	0	8	2	18	7
6 A02138-2	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.3	1.3	0.0	0.4	1.0	1.3	1.0	1.1	0	0	8	0	2
7 A02507-2LB	0.0	0.0	0.3	0.0	0.1	0.0	0.3	0.3	1.2	0.0	0.4	1.1	1.0	0.0	0.7	0	4	0	10	4
8 A03158-2TE	2.0	0.2	0.3	1.0	0.9	1.0	0.7	1.1	2.2	1.0	1.2	2.9	2.7	3.0	2.9	8	8	0	5	5
9 AC00395-2RU	2.0	0.0	0.2	2.0	1.0	3.0	1.2	1.0	2.7	2.0	2.0	3.5	3.2	4.0	3.6	13	0	0	5	4
10 AO00057-2	.	0.0	0.0	0.0	0.0	.	.	0.5	1.5	1.0	1.0	.	2.5	2.0	2.3	.	17	0	5	7
11 AO02060-3	1.0	0.0	0.0	0.0	0.3	1.0	0.3	0.3	1.6	1.0	0.8	1.9	2.9	3.0	2.6	0	0	0	0	0
12 AO02183-2	0.0	0.0	0.0	0.0	0.0	1.0	0.4	0.4	1.2	0.0	0.6	0.8	1.4	2.0	1.4	4	17	5	3	7
13 AO96305-3	.	0.0	0.0	0.0	0.0	.	.	0.3	1.3	0.0	0.5	.	0.7	1.0	0.8	.	40	0	3	14
14 CO03187-1RU	2.0	.	0.8	.	1.4	2.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.
15 CO03202-1RU	2.0	0.3	1.2	2.0	1.4	1.0	0.8	0.6	2.8	2.0	1.4	3.0	3.0	4.0	3.3	19	21	1	10	13
17 CO03276-5RU	2.0	.	0.8	.	1.4	2.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.
18 PA00N14-2	2.0	0.0	0.1	0.0	0.5	2.0	0.7	0.6	2.3	2.0	1.5	3.3	4.0	3.0	3.4	13	25	1	23	.
Location Means	1.3	0.1	0.4	0.6	0.7	1.5	0.7	0.5	2.0	1.0	1.1	2.7	2.6	2.5	2.5	13	17	2	13	11

Storage protocol prior to frying

Aberdeen - 6 weeks from 55F to 45F, 6 weeks from 55F to 40F, and 8 weeks @ 45F and 8 weeks @ 40F.

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

Kimberly - 8 weeks from 50F to 45F, 8 weeks from 50F to 40F, and 8 weeks @ 45F and 8 weeks @ 40F.

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

San Luis Valley - 5 weeks from 55F to 45F, and 8 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: 2012 Western Regional Potato Variety Trial - DISEASE EVALUATION AND METRIBUZIN REACTION

No.	Clone	Vert. Wilt/ Early Dying			Early Blight			Late Blight		Common Scab		Net Necrosis/ Vasc. Discoloration ¹		KLA ⁵ Rhizoc.	Pectobacterium		Soft Rot ¹ (0-5)	Metribuzin Reaction ⁶ AB			
		Early Dying		TUL ³ (0-9)	AB ¹		Tuber %	Corvallis ⁴		AB ¹		Percent Incidence	Serious Defect		F(sam)	F(sol)					
		AB ¹ (0-9)	AUDPC (0-9)		HRM ² AUDPC	Foliar (0-9)		AUDPC	Foliar (1-9)	AUDPC	Percent Incid.			Defect			Percent Incidence	Serious Defect	0-5(none)	Dry Rot ¹ (0-5)	
1	RANGER R.	4.7	130	4.5	87	4.0	5.3	173	0	8.3	1510	45	46	14	67	8	4.1	3.3	1.9	3.7	MR
2	R. BURBANK	7.3	531	8.8	167	5.3	5.3	268	0	8.3	1459	8	3	0	70	12	4.5	4.9	2.7	3.5	MS
3	R. NORKOTAH	9.0	975	9.0	233	8.8	6.0	313	0	9.0	1754	15	21	2	50	2	4.5	2.5	1.7	4.5	.
4	A99029-3E	5.7	222	7.8	136	.	4.3	125	5	8.5	1601	0	6	2	64	16	.	3.5	1.0	3.0	.
5	A01010-1	6.7	343	6.3	92	3.5	6.0	330	24	7.5	1421	23	19	4	63	13	4.6	4.1	2.8	0.7	MS
6	A02138-2	8.7	633	8.8	192	4.5	6.7	353	6	9.0	1866	3	28	4	33	1	4.4	3.1	2.2	2.9	R
7	A02507-2LB	5.3	191	2.8	39	3.0	5.0	170	4	3.3	121	0	3	0	57	8	4.4	4.1	1.3	4.3	MS
8	A03158-2TE	7.0	327	7.0	125	5.5	5.0	198	0	8.8	1762	5	2	0	60	7	4.5	4.9	2.3	2.7	MR
9	AC00395-2RU	6.7	388	7.4	160	1.8	5.7	252	0	6.0	1021	3	12	1	46	2	4.1	4.1	1.9	1.5	MS
10	AO00057-2	8.3	865	8.0	139	3.0	5.5	254	0	9.0	1846	0	5	0	49	14	4.3	3.3	2.3	4.7	MR
11	AO02060-3	.	.	8.5	189	5.5	.	.	2	.	.	.	.	.	34	0	4.4	5.0	1.5	4.2	MR
12	AO02183-2	5.3	185	1.4	29	4.0	5.0	178	3	8.0	1463	0	11	1	76	6	4.0	3.8	1.7	0.9	S
13	AO96305-3	9.0	905	8.1	155	5.3	7.0	468	0	8.5	1401	10	1	0	56	4	4.8	1.9	2.3	3.1	R
14	CO03187-1RU	9.0	890	9.0	240	8.3	8.0	601	6	8.8	1767	18	2	0	38	14	.	3.7	2.5	2.7	.
15	CO03202-1RU	4.7	76	7.3	154	4.3	3.7	69	6	6.5	1160	0	1	0	54	2	3.9	4.6	1.1	3.2	MR
17	CO03276-5RU	9.0	933	8.8	211	7.3	7.0	640	6	8.5	1713	43	0	0	31	4	.	3.5	3.3	4.5	.
18	PA00N14-2	8.7	785	8.8	205	.	7.7	608	0	.	.	.	19	4	11	0	4.5	3.1	2.3	2.9	MR
Entry Means		7.2	524	7	150	4.9	5.8	312	4	7.9	1458	11	11	2	51	7	4.3	3.7	2.0	3.1	
LSD (.05)		1.1					1.5		9	0.8	297	22	22	11	34	17	0.5	1.1	0.8	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 typical disease symptoms.

AUDP: Area Under the Disease Progress curve based on foliar readings taken 116, 122, and 127 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 Hermiston, Oregon; scale as indicated with highest number being most severe.

³ Evaluations made at Tulelake, California; scale as indicated, highest number (9=90-100%) being most severe.

⁴ 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.

⁵ Evaluations made at Klamath, Oregon by Brian Charlton; seed treated with thiophanate-methyl (Tops MZ®) and Azoxystrobin (Quadris®)

⁶ Evaluations made at Aberdeen, Idaho; R=Resistant, MR=Moderately Resistant, S=Susceptible, MS=Moderately Susceptible, VS=Very Susceptible

**TABLE 13: 2012 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 R.	22.5	0.07	0.16	5.3	31.8	2.4
2 R. BURBANK	20.5	0.08	0.14	4.6	18.6	2.7
3 R. NORKOTAH	20.7	0.07	0.11	4.6	22.3	1.1
4 A99029-3E	-	-	-	-	-	-
5 A01010-1	23.0	0.04	0.19	5.8	35.6	0.6
6 A02138-2	22.9	0.01	0.13	5.8	21.1	4.0
7 A02507-2LB	23.4	0.02	0.16	5.7	21.2	3.8
8 A03158-2TE	21.0	0.07	0.15	5.5	23.4	2.2
9 AC00395-2RU	25.4	0.07	0.21	6.0	20.6	2.7
10 AO00057-2	-	-	-	-	-	-
11 AO02060-3	22.2	0.02	0.15	5.5	23.4	1.8
12 AO02183-2	24.2	0.03	0.18	5.8	20.5	18.5
13 AO96305-3	-	-	-	-	-	-
14 CO03187-1RU	-	-	-	-	-	-
15 CO03202-1RU	22.3	0.10	0.12	5.7	22.1	0.9
17 CO03276-5RU	-	-	-	-	-	-
18 PA00N14-2	23.3	0.06	0.17	5.5	21.3	3.1
Entry Means	22.6	0.05	0.16	5.5	23.5	3.7

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

² Glycoalkaloids: The 2012 Lenape check grown at Aberdeen was 29.8 mg/100g

TABLE 14: 2012 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			OR		TX		WA		Early Trial	Late Trial	
	SLV	AB	KIM	PAR	HRM	OTH	E	L	E	L	Mean(Rnk)	Mean(Rnk)	2 or 3 State	TUL	SLV	AB	KIM	PAR	HRM	KLA	DAL	SPR	OTH	E	L	Mean(Rnk)	Mean(Rnk)
1 RANGER R.	3.0	3.5	3.5	4.0	4.7	4.0	2.0	3.1	3.9	3.7 (2)	3.4 (8)	3.2	3.4	4.0	2.7	2.0	3.2	2.3	2.0	2.0	1.5	2.9	2.2	1.6	1.8	2.4 (13)	2.4 (13)
2 R. BURBANK	3.0	3.0	2.5	4.0	4.3	4.0	2.0	1.0	1.8	3.0 (8)	2.8 (13)	1.8	3.3	4.0	1.0	1.3	2.2	1.7	2.0	2.0	2.0	2.2	1.0	0.5	0.9	1.6 (17)	2.0 (14)
3 R. NORKOTAH	1.0	2.5	3.0	3.7	4.7	3.0	1.0	2.1	.	2.9 (10)	2.4 (14)	.	4.1	2.0	2.5	3.3	4.0	4.0	4.0	4.0	3.0	3.8	3.5	1.3	1.2	3.3 (1)	3.0 (3)
4 A99029-3E	4.0	.	.	2.7	.	4.0	.	2.1	.	2.9 (10)	.	.	.	5.0	.	.	2.0	.	3.0	.	.	3.3	2.0	1.7	.	2.4 (13)	.
5 A01010-1	3.0	4.0	4.0	3.7	4.7	4.0	3.0	1.8	3.6	3.2 (6)	3.7 (5)	3.4	3.9	4.0	3.3	3.6	2.7	3.3	3.0	2.5	1.5	3.7	3.2	1.4	1.8	2.8 (7)	3.0 (3)
6 A02138-2	3.0	3.8	3.8	2.3	4.3	3.0	4.0	3.1	3.3	2.8 (14)	3.7 (5)	4.6	2.9	4.0	3.0	2.8	3.7	4.0	3.0	3.5	1.0	3.9	3.1	1.4	0.6	3.0 (2)	2.7 (10)
7 A02507-2LB	4.0	4.0	4.0	2.3	4.0	4.0	4.0	1.5	4.5	2.6 (17)	4.1 (1)	4.6	3.2	5.0	2.6	3.0	2.0	2.7	3.0	3.5	3.0	3.3	2.8	0.6	2.9	2.3 (16)	3.2 (1)
8 A03158-2TE	5.0	4.5	3.5	3.7	4.7	4.0	2.0	3.4	3.3	3.7 (2)	3.8 (3)	3.4	3.8	4.0	4.0	3.1	2.3	2.7	3.0	3.0	1.0	2.9	2.7	2.5	2.8	2.7 (10)	3.0 (3)
9 AC00395-2RU	5.0	2.5	3.5	2.8	4.5	3.0	2.0	3.0	3.5	2.9 (10)	3.5 (7)	2.5	3.3	3.0	2.8	3.0	2.2	2.7	3.0	4.0	1.0	3.3	2.7	2.1	3.5	2.7 (10)	2.9 (7)
10 AO00057-2	.	.	2.5	4.0	4.3	4.0	3.0	3.3	3.5	3.8 (1)	3.3 (9)	3.6	3.9	.	.	3.3	2.0	2.7	4.0	4.0	1.0	3.5	3.0	2.6	1.5	3.0 (2)	2.7 (10)
11 AO02060-3	3.0	2.0	3.8	3.5	4.3	4.0	3.0	1.9	3.3	3.1 (7)	3.2 (10)	4.3	3.8	4.0	2.5	3.5	2.3	3.0	3.0	4.0	4.0	3.9	3.8	1.1	1.1	2.8 (7)	3.2 (1)
12 AO02183-2	3.0	4.5	4.5	3.5	4.7	4.0	2.0	3.1	4.4	3.5 (4)	3.8 (3)	4.3	3.8	4.0	3.8	2.6	2.7	3.7	4.0	2.0	1.0	3.5	2.5	1.9	3.4	2.9 (6)	3.0 (3)
13 AO96305-3	.	.	4.0	3.7	4.5	3.0	4.0	2.2	3.6	3.0 (8)	4.0 (2)	4.1	3.3	.	.	3.3	2.2	2.5	3.0	4.0	3.0	3.3	2.7	1.8	1.1	2.6 (12)	2.9 (7)
14 CO03187-1RU	2.0	.	.	3.7	.	3.0	.	3.2	.	3.3 (5)	.	.	3.6	3.0	.	.	2.7	.	2.0	.	.	3.6	2.5	1.4	.	2.4 (13)	.
15 CO03202-1RU	3.0	2.5	3.5	3.0	3.5	3.0	2.0	2.1	3.2	2.7 (16)	3.0 (12)	2.4	3.5	4.0	3.0	2.7	3.3	2.0	3.5	3.0	1.5	3.1	2.4	2.5	2.2	3.0 (2)	2.7 (10)
17 CO03276-5RU	1.0	.	.	3.7	.	2.0	.	3.1	.	2.9 (10)	.	.	3.6	2.0	.	.	3.7	.	2.0	.	.	3.4	1.9	3.8	.	3.0 (2)	.
18 PA00N14-2	3.0	3.5	3.5	3.8	3.7	3.0	2.0	1.6	3.1	2.8 (14)	3.1 (11)	3.1	.	4.0	3.2	2.8	4.0	2.3	3.0	3.0	3.0	.	.	1.5	1.3	2.8 (7)	2.8 (9)
Location Mean	3.1	3.4	3.5	3.4	4.3	3.5	2.6	2.4	3.4	3.1	3.4	3.5	3.6	3.7	2.9	2.9	2.8	2.8	3.0	3.2	3.4	2.6	1.7	1.9	2.7	2.8	

¹ Score based upon Idaho, Oregon, and Washington samples evaluated postharvest at Washington State University. No Idaho samples for entries 10 and 13. (www.potatoes.wsu.edu) Scale [1-5(best)]

TABLE 15: 2012 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) Merit Score ⁴		Observations	Disposition 2013 ⁵	
	In Trial	Use				Early	Late				Process	Fresh			
1 RANGER R.	-	Dual	640	499	77	6.3	8.8	1.089	1.3	6.7	3.0	3.5	2.3		Check
2 R. BURBANK	-	Dual	624	393	61	6.1	7.1	1.082	1.7	5.7	5.0	2.8	1.7		Check
3 R. NORKOTAH	-	Fresh	471	364	76	5.6	6.6	1.072	1.6	8.2	3.5	2.6	3.1		Check
4 A99029-3E	1	Fresh	.	.	.	6.2	.	1.072	.	-	-	3.2	2.8	Low US#1 yield and % (E)	Discard
5 A01010-1	3	Dual	717	593	82	6.0	7.1	1.085	1.0	7.4	3.0	3.5	2.8	High Total and US#1 Yield (L); Susc. to tuber LB & EB, c. scab; High Vit. C; Res. to soft rot;	Graduate
6 A02138-2	1	Dual	548	416	76	6.1	5.6	1.089	0.4	-	-	3.4	2.8	High Yield (E); Lower US#1 yield and % (L); shorter tuber; shatter (L);CSR; Susc. to C. scab;	Return
7 A02507-2LB	1	Dual	647	554	85	6.4	7.8	1.092	0.4	-	-	3.6	2.9	High SG (E&L); shorter tuber; shatter (L);CSR;Res. to VW/ED, EB, LB; Susc. to soft rot;	Return
8 A03158-2TE	1	Dual	742	624	84	7.4	8.2	1.082	1.2	-	-	3.8	2.8	High Total and US #1 Yield (E&L); High % ov. size & large tuber size (E&L); Low SG (E&L); HH (E); Susc. to Fus(sam)	Return
9 AC00395-2RU	1	Dual	688	579	83	5.5	7.2	1.099	2.0	-	-	3.3	2.8	High SG (E&L); HH (L); Res.to soft rot; MR to LB;High protein;	Return
10 AO00057-2	3	Dual	548	457	83	5.9	7.4	1.086	1.0	-	-	3.5	2.8	High % US#1 (E&L);Susc. to EB, soft rot;	Graduate
11 AO20260-3	1	Dual	526	428	81	6.0	6.7	1.086	0.8	-	-	3.2	3.0	Susc. to soft rot and Fus(sam);	Return
12 AO2183-2	2	Dual	758	627	82	6.6	8.0	1.090	0.6	-	-	3.7	2.9	High Total and US Yield (E&L); CSR; Res. to VW/ED, soft rot; EB; Susc. to Metribuzin; High glycoalkaloids;	Return?
13 AO96305-3	3	Dual	540	427	79	6.6	6.5	1.087	0.5	-	-	3.6	2.7	Growth Cracks (E&L); CSR; Sug. Ends; Susc.EB; Res to F(sam)	Return
14 CO03187-1RU	1	Dual	.	.	.	5.4	.	1.080	.	-	-	3.0	2.5	Low US#1 yield and % (E); Susc. to VW/ED, EB;	Return - E
15 CO03202-1RU	1	Dual	601	465	78	5.7	7.3	1.086	1.4	-	-	2.9	2.8	Long tuber; Res. to EB; MR to LB; Susc. to Fus(sam)	Discard
17 CO03276-5RU	1	Dual	.	.	.	6.0	.	1.076	.	-	-	2.4	2.8	Susc. to VW/ED, EB,tuber LB, soft rot, and F(sol)	Return - E
18 PA00N14-2	3	Dual	544	424	77	5.1	5.7	1.087	1.5	-	-	3.0	2.8	Low % ov. Size and small tuber size (E&L);long tuber;Susc. to VW/ED, EB, c. scab; Res. to NN/VD	Graduate
Entry Means			614	489	79	6.1	7.1	1.085	1.1	7.0	3.6	3.2	2.7		

¹ Numeric values represent means across all trial locations.

² Data shown from late trial results unless early trial entry only.

³ 2011 entries at Tulelake, CA; Evaluated at 179 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.

⁵ Return - E indicates early trial only.

TABLE 16: 2012 Western Regional Potato Variety Trial - 3 YEAR SUMMARY OF GRADUATING ENTRIES - LATE TRIAL LOCATION MEANS

Clone	2010							2011							2012						
	Total		US #1		SG	Fry 45	Merit Score Fresh Proc	Total		US #1		SG	Fry 45	Merit Score Fresh Proc	Total		US #1		SG	Fry 45	Merit Score Fresh Proc
	Yield ¹ &(rank)	Yield ¹ & %	Yield ¹ & %	Yield ¹ & %				Yield ¹ &(rank)	Yield ¹ & %	Yield ¹ &(rank)	Yield ¹ & %										
A01010-1	654 (3/21)	568 87	1.085	0.9	3.0	3.5	640 (4/17)	546 84	1.081	0.9	3.2	3.6	717 (3/14)	593 82	1.085	1.0	2.8	3.5			
AO00057-2	528 (11/21)	466 88	1.090	0.5	3.1	3.9	590 (10/17)	504 84	1.083	0.0	2.7	3.3	548 (9/14)	457 83	1.086	1.0	2.8	3.5			
AO96305-3	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	540 (13/14)	427 79	1.087	0.5	2.7	3.6			
PA00N14-2	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	544 (11/14)	424 77	1.087	1.5	2.8	3.0			
RANGER R.	575 (7/21)	474 82	1.087	0.9	3.1	3.9	570 (12/17)	443 77	1.090	1.4	2.8	3.1	640 (6/14)	499 77	1.089	1.3	2.3	3.5			
R. NORKOTAH	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	471 (14/14)	364 76	1.072	1.6	3.1	2.6			
R. BURBANK	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	624 (7/14)	393 61	1.082	1.7	1.7	2.8			
Trial Mean	537	450 83	1.084	0.9	2.8	3.3	592	487 79	1.084	0.8	2.8	3.4	614	489 79	1.085	1.1	2.7	3.2			

3 Year Average (2010-2012)

Clone	Total		US #1		SG	FRY 45	Merit Score Fresh Proc	Noted Weaknesses	Noted Strengths
	Yield ¹ &(rank)	Yield ¹ & (%ile) ²	Yld ¹ %	%					
A01010-1	670 (80)	569	84	1.084	0.9	3.0	3.5	Susc. to tuber LB & EB (2/3)	High total yield (L) (3/3) and US#1 yields (2/3); High Vit. C (3/3); Res. to soft rot (3/3)
AO00057-2	555 (42)	476	85	1.086	0.5	2.9	3.6	None Noted; Limited number of trial sites in 2011	None Noted
AO96305-3	544 (27)	456	84	1.086	0.3	3.0	3.8	Grow. Crack (E) (2/3); Limited number of trial sites in 2011	Cold sweet. res. (2/3);
PA00N14-2	550 (34)	453	81	1.085	1.0	2.9	3.3	Limited number of trial sites in 2011	Long tubers (2/3); Res. To NN/VD (2/2)
RANGER R.	595 (51)	472	79	1.089	1.2	2.8	3.5		
R. NORKOTAH	453 (07)	356	78	1.074	1.3	3.0	2.8		¹ (CWT/A)
R. BURBANK	579 (45)	401	69	1.082	1.4	2.2	3.1		² Percent of entries with lower yields; e.g. 80% of all late trial entries over three years yielded lower than A01010-1.
Trial Mean³	581	475	80	1.084	0.9	2.8	3.3		³ Late Trial mean of all trial entries 2010-2012

TABLE 17: 2012 Western Regional Potato Variety Trial - ENTRY COMMENTS - EARLY AND LATE HARVEST

No. Clone	Entry Comments - Early Harvest					Entry Comments - Late Harvest							
	ID	TX		OR	WA	CA	CO	ID			OR		WA
	PAR	DAL	SPR	HRM	OTH			TUL	SLV	AB	KIM	PAR	HRM	KLA	OTH
1 Ranger Russet	Folded ends, big, typical, average	small, pointed, yield+, skinny	poor shape, culls++, rough+	long, few bottlenecks	Poingly, a bit rough.	shatter bruise		rough, JE	curved	Big, curvy, long	big, long, growth cracks, knobs	hooky-crooky, boomerangs	Large, skinny.
2 Russet Burbank	Average, ugly	rough, skinny	lots of culls, rough, small, heat necrosis	knobs, bottlenecks, growth cracks	Knobs, cracks, irregular skin	shatter bruise		rough, JE	Jelly Ends, rough	Typical, dumbbell shaped	bottlenecks, knobs, misshapen	MS, poor	Nonuniform shape, large, rough.
3 Russet Norkotah	Folded ends, average, typical	nice shape, BOT-	blocky, some small, nice, light set	nice, small size	Irregular, variable russetting, a bit flat			skin checking, HH	typical	Average Norkotah, smooth, nice	nice, small, little round	MS, poor, pty, atypical for R. Nork	Small, mostly typy.
4 A99029-3E7	Poor yield, lumpy	pointed, drop, yield+	blocky, too round	short, flattish, some pointy	Poor skin set, nonuniform russetting, some short shapes.		some pointed						
5 A01010-1	Poor yield, blocky	small, blocky	heavy set+, tubers did not fill, long, skinny, too long and skinny	some nice, flattish, few knobs	Deep eyes, shape a bit rough.	Nice	deep eyes	long thin straight	long thin, MHR, deep eyes	Misshapen, blocky, smooth	large, some flat, deep eyes	Hvy net x4, lenticels x3, Not Fresh!	Small, eyes a bit deep.
6 A02138-2	Round	nice flesh, BOT-	skinny, pointed, drop+	too short, round	Baseballs, irregular, light russetting.	skinning	blocky	MLR, pinkish tones, short blocky some lumps	short, few elongated	Round, short	lots small and round	Rnd x4, Plump, Impact Bruise x3, Not Fresh, Drop	Round, light russet.
7 A02507-2LB	Poor yield, round, misshapen	blocky, small, light set	blocky, drop	some ok, little too round	Short, small, some pointy - DISCARD	Ugly, shatter bruise		MR, blocky, some misshaped	MHR, Blocky, ATS, short, some points	Poor yield, curvy, big, pointy, round	some blocky, some short, round	Typy x4, SB x4, Fresh Potential, Keep?	A bit short, mostly typy, uniform shape.
8 A03158-2TE	Big, low set, blocky, lumpy, folded ends	skinny, too long, drop	rough, heavy set, drop for TX, long skinny+	some nice, lots small, round	Irregular russetting, some cracks.			MR, oblong, deep ends, rot	long thin, MHR, deep eyes, curved	Lumpy, blocky, small	large, nice, some deep eyes	Proc only, MS x4, deep eyes, dents/dimples, Poor	Blocky, deep eyes, shape a bit variable.
9 AC00395-2RU	Smooth, misshapen	pointed, small, heavy set, drop	blocky+, small	pointy, poor shape, some flat	Poor skin set, mostly typy, some variable sizes.			size varies, HH	blocky, MR, Flat, teardrop, MS, Alig hide	Blocky, smooth, little misshapen	nice blocky, little flat, some pointy	Flat x4, pears x4, MS x4, High % 2's, Drop	Mostly typy, shape a bit variable.
10 AO00057-2	Low yield, big tubers, misshapen	low yield+	skinny, drop	nice, blocky	Short, plump, nice russet skin.				blocky MHR, few	Low yield, big, blocky	nice oblong shape	Typy x4, flat x4, Proc only,	Variable size, low yield.
11 AO02060-3	Little curvy, irregular shape, not bad	large, nice flesh, some pointing, BOT-, yield-	pointed, nice, BOT-, cream colored flesh	some nice, some poor shape, short	Plump, short, spotty Russet.	fat	light russet	skin checking	MR, oblong, size varies, big, scab	Average, blocky	nice shape, blocky, few pointy	Typy x4, Fresh Potential x4, Keep	Rough skin, variable shape.
12 AO02183-2	Average, misshapen, not bad	yield+, skinny	poor skin finish, blocky	nice, blocky shape	A few pointy ones: variable russetting.	ugly	rough	ATS, MLR, long, few points	long thin, MHR, deep eyes	Big, typical, smooth, nice shape	heat sprouts, large blocky, deep eyes	Typy x4, long x4, Proc only, Keep	Mostly typy, long.
13 AO96305-3	Long smooth, big growth crack, folded ends	long and skinny, pointed, drop	heavy set, pointed	growth cracks, misshapen	Spotty russetting, severe cracking!	Round, skinning			oblong, MLR, few, nice	Long, little curvy, skinning	some nice, blocky, pointy, bottlenecks	Typy x4, low yield x4, Lt. Net x4, Struggle Fresh,	Typy, variable shape, some cracks.
14 CO03187-1RU7	Misshapen, smooth, folded ends	yield+, blocky, heavy set, small	blocky+, small+, smooth	bottlenecks, growth cracks, flat	Skinny, some curves.	skinning							
15 CO03202-1RU	Average, long, smooth	flat, long skinny, too long	too long and skinny, rough, drop	nice, blocky, few crooks	Typy.	many eyes, shatter		MLR, oblong, non uniform	long, MR, point, curves	Alligator skin, long, skinny,	little flat, long thin, some bottlenecks	Ranger look-alike x4, too long x4, Proc only	Long, large, variable shape.
17 CO03276-5RU7	Smooth, little pointy, little bumpy	pointed, skinny, drop+	culls+, skinny, drop++, 20% heat necrosis	flattish, pointy, coarse russet	Typy, shallow eyes.		some pointed						
18 PA00N14-2	Long, smooth, nice, small			nice, little flat	Flat, skinny, irregular shape.		pink inside	long, thin, few curves	long, thin, MHR, smaller curves, Misshaped	Long, little curvy, pointing	long, thin and a little flat	Typy x4, small size, fair	Smaller, typy, similar to Russet Norkotah.