2009
WESTERN REGIONAL
POTATO VARIETY TRIAL REPORT

State Experiment Stations and
USDA-ARS Cooperating

California
Colorado
Idaho
Oregon
Texas
Washington

2009 WESTERN REGIONAL POTATO VARIETY TRIAL REPORT

TABLE

Western Regional Potato Variety Trial Reports (1998-2009) can be accessed at the following websight:

(www.ars.usda.gov/main/docs.htm?docid=3019)

Compiled by Brian Schneider

TABLE 1: 2009 Western Regional Potato Variety Trial - LOCATIONS, COOPERATORS, AND CULTURAL INFORMATION

No.	Locations	Cooperators	Trial	Irrigation	Fertilizer N-P-K-S(lb/A)	Planting Date	Harvest Date	Days to Vine Kill	Days to Harvest	Pesticides Applied[1] Herbicides	Insecticides	Fungicides
1	Tulelake California **(TUL)**	D. Kirby, R. Wilson	Late	Sprink.	165-211-28-88	13-May	5-Oct	124 Reglone	145	Sencor DF Matrix	Movento Avaunt	Bravo, Dithane, Manzate, Maxim Quadris
2	San Luis Valley Colorado **(SLV)**	D. Holm, F. Goktepe	Late	Pivot	120-60-40-25+	19-May	30-Sep	113 Sulfuric Acid	134	Dual Magnum	Endigo ZC Fulfill	Bravo WS Quadris
3	Aberdeen Idaho **(AB)**	J. Stark, R. Novy, J. Whitworth, P. Bain, M. Chappell	Late	Sprink.	250-115-0-60	7-May	22-Sep	118 Mechanical	138	Eptam, Matrix Metri DF	Admire Pro	Dithane, Equus
4	Parma Idaho **(PAR)**	M. Thornton, B. Buhrig, A. French, M. Martin	Early Late	Sprink. Sprink.	155-200-125 270-200-125	8-Apr 23-Apr	6-Aug 23-Sep	114 138 Mechanical	120 153	**Prowl, Outlook Matrix, Eptam**	Temik, Leverage	**Vapam, Gavel, Bravo Amistar,** Headline Endura, Dithane
5	Hermiston Oregon **(HRM)**	D. Hane	Early Late	Pivot Pivot	210-80-0-40 275-80-0-40	3-Apr 6-Apr	11-Aug 18-Sep	115 151 Mech/Enquik	130 165	**Eptam, Matrix**	**Mocap, Admire Asana,** Monitor Onager	**Vapam, Ridomil Gold Bravo, Dithane, Quadris, Omega**
6	Klamath Falls Oregon **(KLA)**	B. Charlton, D. Culp	Late	Sprink.	170-75-100-205	19-May	6-Oct	115 Mech/Reglone	140	Matrix MZ	Admire Pro Leverage	Topps MZ, Quadris Ridomil Gold, Bravo
7	Springlake Texas **(SPR)**	J. C. Miller Jr., J. Koym, D. Schuering	Early	Pivot	201-33-33-24	8-Apr	17-Aug	125 Mechanical	131	Sencor, Matrix Roundup	Movento, Rimon	Bravo, Dithane, Quadris, Nu Cop
8	Othello **(OTH)** Othello **(OTH)** Washington	M. Pavek, R. Knowles	Early Late	Linear Linear	210-225-180 180-225-100	7-Apr 20-Apr	11-Aug 21-Sep	114 150 Mechanical	126 154	**Sencor, Matrix Chateau, Prowl**	**Platinum Acramite**	**Penncozeb, Omega Oberon 4SC, Quadris**

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

TABLE 2: 2009 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	-	OR	**96**	Long	**4.6**	Med Russet	**3.7**	Med-Large	**3.4**	Medium	**3.4**	**1.9**
2	Russet Burbank	Early Rose ?	W	Ck	Dual	E/L	-	OR	**97**	Long	**4.3**	Med Russet	**3.8**	Med-Large	**3.8**	Med Early	**3.0**	**2.1**
3	Russet Norkotah	ND9687-5Rus ND9526-4Rus	W	Ck	Fresh	E/L	-	OR	**95**	Long	**4.1**	Med Hvy Rus	**4.1**	Medium	**2.8**	Early	**2.0**	**2.4**
4	A96814-65LB	AWN86514-2 A91194-3	W	ID	Proc	E/L	1	OR	**94**	Oblong	**3.3**	Med Russet	**3.1**	Med-Large	**3.6**	Medium	**3.2**	**1.7**
5	A97066-42LB	AWN86514-2 A86102-6	W	ID	Proc	E/L	2	OR	**94**	Obl-Lng	**3.7**	Light Russet	**2.1**	Med-Large	**3.1**	Med-Late	**4.0**	**1.4**
6	A98345-1	Ranger R Premier	W	ID	Dual	E/L	1	OR	**96**	Oblong	**3.4**	Light Russet	**2.4**	Med-Large	**3.8**	Med-Late	**3.6**	**1.9**
7	A0008-1TE	Blazer Russet Classic	W	ID	Dual	E/L	2	OR	**94**	Obl-Lng	**4.0**	Med Russet	**3.4**	Medium	**2.7**	Early	**2.5**	**2.3**
8	AC99375-1RU	AWN86514-2 A89384-10	W	CO	Dual	E/L	1	CO	**91**	Obl-Lng	**3.7**	Med Russet	**3.7**	Med-Large	**4.0**	Late	**4.1**	**2.2**
9	AO96305-3	A91018-6 A89152-4	RP	OR	Dual	E/L	1	OR	**96**	Long	**4.5**	Med Russet	**3.1**	Medium	**3.0**	Med Early	**2.9**	**2.5**
10	AO96365-2	A91141-1 Ranger	RP	OR	Dual	E/L	1	OR	**96**	Oblong	**3.4**	Med Russet	**4.0**	Med-Large	**3.3**	Med-Late	**3.6**	**1.9**
11	CO97087-2RU	CO87009-4 W1005	W	CO	Dual	E/L	3	CO	**94**	Obl-Lng	**3.8**	Med Russet	**3.8**	Med-Large	**3.6**	Med Early	**3.0**	**2.7**
12	CO98067-7RU	Silverton Russet TC1675-1	W	CO	Dual	E/L	2	CO	**96**	Obl-Lng	**3.6**	Med Russet	**4.0**	Med-Large	**3.4**	Early	**2.4**	**3.1**
13	CO98368-2RU	Russet Nugget Bannock Russel	P	CO	Fresh	E/L	2	CO	**94**	Obl-Lng	**3.9**	Med Russet	**3.5**	Medium	**2.7**	Early	**2.0**	**2.8**
14	CO99053-3RU	AC91014-2 Silverton Russel	W	CO	Dual	E/L	1	CO	**95**	Long	**4.3**	Med Russet	**3.8**	Med-Large	**3.4**	Med-Late	**4.0**	**2.6**
15	CO99053-4RU	AC91014-2 Silverton Russel	W	CO	Dual	E/L	1	CO	**94**	Long	**4.3**	Med Russet	**3.5**	Medium	**2.9**	Early	**2.0**	**2.7**
16	CO99100-1RU	AC93047-1 Silverton Russel	W	CO	Dual	E/L	1	CO	**93**	Obl-Lng	**3.9**	Med Russet	**3.8**	Medium	**2.9**	Early	**1.8**	**2.4**
17	PA00N14-2	PA95A14-22 (Bulk Rus + Gem)	W	WA	Dual	E/L	1	OR	**95**	Long	**4.7**	Light Russet	**3.0**	Med-Large	**3.1**	Early	**2.3**	**2.2**
18	PA99N2-1	AO84275-3 G6582-3	W	WA	Proc	E/L	2	OR	**94**	Oblong	**2.9**	Med Russet	**3.5**	Med-Large	**3.3**	Med-Late	**3.7**	**2.6**
19	PA99N82-4	PA95B4-149 Rus bulk	W	WA	Proc	E/L	2	OR	**98**	Rnd-Obl	**2.5**	Med Hvy Rus	**4.5**	Medium	**2.7**	Medium	**3.4**	**2.1**

[1] P=Purple, R=Red, W=White

[2] Numerical values are means of all trial locations.

[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: 2009 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	OR	TX	WA	Entry			CA	CO	ID		OR		WA	Entry		
No.	Clone	PAR	HRM	SPR	OTH	Mean/Rank			TUL	SLV	AB	PAR	HRM	KLA	OTH	Mean/Rank		
1	RANGER R.	458	570	404	475	**477**	**8**	**abc**	505	468	465	639	817	642	814	**621**	**9**	**bcdefg**
2	R. BURBANK	461	598	447	457	**491**	**7**	**abc**	456	522	408	650	936	677	852	**643**	**5**	**bcde**
3	R. NORKOTAH	580	513	449	518	**515**	**4**	**ab**	394	482	329	701	550	530	663	**521**	**16**	**hij**
4	A96814-65LB	426	588	220	473	**427**	**17**	**bc**	522	446	425	631	890	612	946	**639**	**6**	**bcdef**
5	A97066-42LB	429	499	432	313	**418**	**18**	**bc**	472	448	413	601	812	520	871	**591**	**12**	**defgh**
6	A98345-1	340	703	335	442	**455**	**13**	**abc**	596	484	475	688	1101	681	1130	**736**	**1**	**a**
7	A0008-1TE	568	673	433	473	**537**	**2**	**a**	437	407	358	662	797	525	653	**548**	**14**	**fghij**
8	AC99375-1RU	432	685	310	389	**454**	**14**	**abc**	470	527	478	551	1210	595	975	**686**	**3**	**abc**
9	AO96305-3	449	477	394	483	**451**	**15**	**abc**	440	415	439	631	563	534	739	**537**	**15**	**ghij**
10	AO96365-2	424	586	424	420	**463**	**11**	**abc**	509	517	502	694	957	651	857	**670**	**4**	**abcd**
11	CO97087-2RU	564	717	423	486	**548**	**1**	**a**	394	454	423	753	1070	501	607	**600**	**11**	**cdefgh**
12	CO98067-7RU	570	732	297	497	**524**	**3**	**ab**	333	488	355	736	899	652	880	**621**	**9**	**bcdefg**
13	CO98368-2RU	408	325	373	514	**405**	**19**	**c**	330	425	325	616	439	518	606	**466**	**19**	**j**
14	CO99053-3RU	458	456	383	414	**428**	**16**	**bc**	435	525	549	722	817	590	824	**638**	**7**	**bcdef**
15	CO99053-4RU	545	530	346	577	**499**	**6**	**abc**	326	373	336	586	573	473	650	**474**	**18**	**ij**
16	CO99100-1RU	533	521	278	497	**457**	**12**	**abc**	334	369	334	597	640	504	672	**493**	**17**	**ij**
17	PA00N14-2	500	575	298	504	**469**	**10**	**abc**	514	447	444	658	656	546	679	**563**	**13**	**efghi**
18	PA99N2-1	502	569	310	499	**470**	**9**	**abc**	548	530	548	776	919	607	950	**697**	**2**	**ab**
19	PA99N82-4	394	714	443	484	**509**	**5**	**abc**	530	413	409	618	978	562	918	**633**	**8**	**bcdef**
	Location Means	476	581	368	469	**474**			450	460	422	658	822	575	805	**599**		

Means followed by the same letter are not significantly different at the 5% level using Student's t test.

TABLE 4: 2009 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	OR	TX	WA	Entry			CA	CO	ID		OR		WA	Entry		
No.	Clone	PAR	HRM	SPR	OTH	Mean/Rank			TUL	SLV	AB	PAR	HRM	KLA	OTH	Mean/Rank		
1	RANGER R.	345	500	299	463	**402**	**9**	**abcd**	405	354	365	567	702	376	758	**504**	**7**	**cdefg**
		75	88	74	97	**84**	**6**		80	76	78	89	86	59	93	**80**	**10**	
2	R. BURBANK	320	428	199	401	**337**	**18**	**cd**	319	272	289	558	587	389	786	**457**	**13**	**efghi**
		69	72	45	88	**68**	**19**		70	52	71	86	63	57	92	**70**	**19**	
3	R. NORKOTAH	545	441	390	489	**466**	**1**	**a**	302	348	236	641	458	366	604	**422**	**15**	**ghij**
		94	86	87	94	**90**	**1**		77	72	72	91	83	69	91	**79**	**13**	
4	A96814-65LB	394	516	173	449	**383**	**12**	**abcd**	446	381	389	612	736	404	895	**552**	**3**	**bc**
		92	88	78	95	**88**	**2**		85	85	92	97	83	66	95	**86**	**1**	
5	A97066-42LB	378	459	316	258	**353**	**17**	**bcd**	344	357	355	540	733	247	807	**483**	**10**	**cdefgh**
		88	92	73	82	**84**	**6**		73	80	86	90	90	47	93	**80**	**10**	
6	A98345-1	286	656	214	395	**388**	**11**	**abcd**	502	374	429	624	970	496	1084	**640**	**1**	**a**
		84	93	64	89	**83**	**11**		84	77	90	91	88	73	96	**86**	**1**	
7	A0008-1TE	369	607	324	425	**431**	**5**	**abc**	380	339	296	532	715	370	606	**463**	**12**	**defgh**
		65	90	75	90	**80**	**15**		87	83	83	80	90	70	93	**84**	**4**	
8	AC99375-1RU	337	553	205	324	**355**	**16**	**bcd**	363	409	352	480	737	292	896	**504**	**7**	**cdefg**
		78	81	66	83	**77**	**17**		77	78	74	87	61	49	92	**74**	**16**	
9	AO96305-3	235	422	318	465	**360**	**14**	**abcd**	370	320	394	516	450	359	695	**443**	**14**	**fghi**
		52	88	81	96	**79**	**16**		84	77	90	82	80	67	94	**82**	**6**	
10	AO96365-2	361	485	288	372	**377**	**13**	**abcd**	413	365	437	622	725	476	785	**546**	**4**	**bcd**
		85	83	68	88	**81**	**14**		81	70	87	90	76	73	92	**81**	**7**	
11	CO97087-2RU	481	590	323	427	**455**	**2**	**ab**	306	367	336	696	341	306	538	**413**	**16**	**hij**
		85	82	76	88	**83**	**11**		78	81	79	92	32	61	89	**73**	**17**	
12	CO98067-7RU	492	626	220	439	**444**	**3**	**abc**	231	356	192	677	727	415	787	**484**	**9**	**cdefgh**
		86	86	74	88	**84**	**6**		69	73	54	92	81	64	89	**75**	**15**	
13	CO98368-2RU	343	184	292	423	**310**	**19**	**d**	239	275	209	554	264	314	528	**340**	**19**	**j**
		84	57	78	82	**75**	**18**		72	65	64	90	60	61	87	**71**	**18**	
14	CO99053-3RU	402	378	269	377	**356**	**15**	**bcd**	352	466	441	665	666	399	789	**540**	**5**	**bcde**
		88	83	70	91	**83**	**11**		81	89	80	92	82	68	96	**84**	**4**	
15	CO99053-4RU	437	463	258	532	**423**	**6**	**abc**	261	291	227	533	455	266	581	**373**	**18**	**ij**
		80	87	75	92	**84**	**6**		80	78	68	91	79	56	89	**77**	**14**	
16	CO99100-1RU	416	451	231	470	**392**	**10**	**abcd**	234	313	272	523	502	351	613	**401**	**17**	**hij**
		78	87	83	95	**86**	**4**		70	85	81	88	78	70	91	**80**	**10**	
17	PA00N14-2	468	522	206	473	**417**	**7**	**abcd**	455	251	395	602	611	311	641	**467**	**11**	**defgh**
		94	91	69	94	**87**	**3**		89	56	89	92	93	57	94	**81**	**7**	
18	PA99N2-1	438	502	215	456	**403**	**8**	**abcd**	414	449	475	718	823	415	914	**601**	**2**	**ab**
		87	88	70	91	**84**	**6**		76	85	87	92	90	68	96	**85**	**3**	
19	PA99N82-4	358	623	359	410	**438**	**4**	**abc**	412	328	357	564	785	398	742	**512**	**6**	**cdef**
		91	87	81	85	**86**	**4**		78	79	87	91	80	71	81	**81**	**7**	
	Location Means	390	495	268	424	**394**			355	348	339	591	631	366	739	**481**		
		80	84	73	90	**82**			78	76	77	89	75	63	92	**78**		

Means followed by the same letter are not significantly different at the 5% level using Student's t test.

TABLE 5: 2009 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 %									
		ID	OR	TX	WA	Entry			CA	CO	ID		OR		WA	Entry		
No.	Clone	PAR	HRM	SPR	OTH	Mean/Rank			TUL[1]	SLV	AB	PAR	HRM	KLA	OTH	Mean/Rank		
1	RANGER R.	186	138	82	267	168	3	ab	54	70	102	332	398	96	498	221	7	bcdef
		41	24	20	56	35	2		11	15	22	52	49	15	61	32	5	
2	R. BURBANK	36	70	38	131	69	16	de	18	31	58	236	176	41	395	137	11	fghi
		8	12	8	29	14	16		4	6	14	36	19	6	46	19	13	
3	R. NORKOTAH	283	81	78	244	171	2	ab	13	82	29	217	115	74	167	100	16	ghi
		49	16	17	47	32	4		3	17	9	31	21	14	25	17	15	
4	A96814-65LB	194	167	16	258	159	4	abc	78	132	101	343	267	67	647	233	5	bcde
		46	28	7	55	34	3		15	30	24	54	30	11	68	33	4	
5	A97066-42LB	52	146	53	26	69	16	de	100	137	138	304	518	54	563	259	2	ab
		12	29	12	8	16	13		21	31	33	51	64	10	65	39	1	
6	A98345-1	54	299	23	243	155	6	abc	76	58	129	391	692	149	818	331	1	a
		16	43	7	55	30	6		13	12	27	57	63	22	72	38	2	
7	A0008-1TE	167	361	68	254	213	1	a	28	55	20	283	461	51	306	172	8	cdefg
		29	54	16	54	38	1		6	14	6	43	58	10	47	26	8	
8	AC99375-1RU	12	84	36	76	52	18	e	43	105	110	186	191	40	447	160	9	defgh
		3	12	12	19	12	18		9	20	23	34	16	7	46	22	10	
9	AO96305-3	57	29	42	186	79	13	cde	4	67	80	279	117	16	310	125	13	ghi
		13	6	11	39	17	12		1	16	18	44	21	3	42	21	11	
10	AO96365-2	65	105	27	89	72	14	de	28	45	82	257	184	87	350	148	10	efgh
		15	18	6	21	15	14		6	9	16	37	19	13	41	20	12	
11	CO97087-2RU	163	191	50	178	145	7	abcd	57	75	22	227	86	84	247	114	15	ghi
		29	27	12	37	26	8		14	17	5	30	8	17	41	19	13	
12	CO98067-7RU	87	108	41	88	81	12	cde	16	51	0	175	192	61	309	115	14	ghi
		15	15	14	18	15	14		5	10	0	24	21	9	35	15	17	
13	CO98368-2RU	29	8	32	35	26	19	e	7	37	2	166	17	18	152	57	19	i
		7	2	9	7	6	19		2	9	1	27	4	3	25	10	19	
14	CO99053-3RU	115	58	93	144	102	9	bcde	83	245	131	365	358	67	554	258	3	abc
		25	13	24	35	24	9		19	47	24	51	44	11	67	38	2	
15	CO99053-4RU	120	92	55	121	97	10	bcde	15	74	10	159	108	28	215	87	17	ghi
		22	17	16	21	19	10		5	20	3	27	19	6	33	16	16	
16	CO99100-1RU	171	70	42	252	134	8	abcd	59	96	23	246	102	88	267	126	12	ghi
		32	13	15	51	28	7		18	26	7	41	16	17	40	24	9	
17	PA00N14-2	62	105	13	101	70	15	de	6	20	24	157	152	12	156	75	18	hi
		12	18	4	20	14	16		1	4	5	24	23	2	23	12	18	
18	PA99N2-1	115	132	21	122	97	10	bcde	91	175	103	299	352	90	549	237	4	bcd
		23	23	7	24	19	10		17	33	19	39	38	15	58	31	6	
19	PA99N82-4	98	207	103	228	159	4	abc	85	57	76	283	428	47	588	224	6	bcde
		25	29	23	47	31	5		16	14	19	46	44	8	64	30	7	
	Location Means	109	129	48	160	111			45	85	65	258	259	62	397	167		
		22	21	13	34	22			10	18	14	39	30	11	47	24		

Means followed by the same letter are not significantly different at the 5% level using Student's t test.

[1] Tulelake: Over 16 ounces excluded.

TABLE 6: 2009 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 %									
		ID	OR	TX	WA	Entry			CA	CO	ID		OR		WA	Entry		
No.	Clone	PAR	HRM	SPR	OTH	Mean/Rank			TUL[1]	SLV	AB	PAR	HRM	KLA	OTH	Mean/Rank		
1	RANGER R.	12	48	72	12	**36**	**18**	**d**	63	112	26	23	39	106	34	**58**	**11**	**cde**
		3	8	18	3	**8**	**17**		12	24	6	4	5	17	4	**10**	**11**	
2	R. BURBANK	46	121	34	33	**59**	**5**	**bcd**	72	246	45	26	61	152	43	92	3	**a**
		10	20	8	7	**11**	**9**		16	47	11	4	7	22	5	**16**	**5**	
3	R. NORKOTAH	31	70	49	17	**42**	**14**	**d**	90	119	80	53	64	110	57	**82**	**6**	**abc**
		5	14	11	3	**8**	**17**		23	25	24	7	12	21	9	**17**	**4**	
4	A96814-65LB	20	59	46	13	**34**	**19**	**d**	46	58	22	16	53	133	20	**50**	**13**	**e**
		5	10	21	3	**10**	**13**		9	13	5	3	6	22	2	**8**	**17**	
5	A97066-42LB	42	37	112	41	**58**	**6**	**bcd**	28	84	26	25	17	113	23	**45**	**18**	**e**
		10	7	26	13	**14**	**5**		6	19	6	4	2	22	3	**9**	**13**	
6	A98345-1	32	39	87	33	**48**	**10**	**cd**	64	105	31	30	37	74	31	**53**	**12**	**de**
		9	6	26	7	**12**	**7**		11	22	7	4	3	11	3	**9**	**13**	
7	A0008-1TE	30	32	80	17	**40**	**15**	**d**	35	65	53	35	22	91	27	**47**	**17**	**e**
		5	5	18	4	**8**	**17**		8	16	15	5	3	17	4	**10**	**11**	
8	AC99375-1RU	78	115	94	61	87	1	**a**	69	106	50	51	92	169	46	**83**	**5**	**ab**
		18	17	30	16	20	2		15	20	10	9	8	28	5	**14**	**7**	
9	AO96305-3	16	54	74	10	**38**	**16**	**d**	66	91	31	20	72	133	35	**64**	**10**	**bcde**
		4	11	19	2	**9**	**14**		15	22	7	3	13	25	5	**13**	**8**	
10	AO96365-2	48	91	126	49	78	3	**ab**	82	144	48	49	87	109	55	**82**	**6**	**abc**
		11	16	30	12	17	3		16	28	10	7	9	17	6	**13**	**8**	
11	CO97087-2RU	40	53	91	45	**57**	**7**	**bcd**	47	83	69	50	46	98	58	**65**	**9**	**bcde**
		7	7	22	9	**11**	**9**		12	18	16	7	4	20	10	**12**	**10**	
12	CO98067-7RU	66	97	73	55	**73**	**4**	**abc**	90	127	158	52	64	139	80	101	1	**a**
		12	13	25	11	**15**	**4**		27	26	45	7	7	21	9	20	2	
13	CO98368-2RU	54	133	77	86	87	1	**a**	78	147	102	61	85	137	76	98	2	**a**
		13	41	21	17	23	1		24	34	31	10	19	26	13	22	1	
14	CO99053-3RU	34	65	60	30	**47**	**12**	**cd**	38	52	49	27	50	95	22	**48**	**16**	**e**
		8	14	16	7	**11**	**9**		9	10	9	4	6	16	3	**8**	**17**	
15	CO99053-4RU	33	60	68	44	**51**	**8**	**cd**	57	80	100	42	73	129	64	**78**	**8**	**abcd**
		6	11	20	8	**11**	**9**		17	21	30	7	13	27	10	18	3	
16	CO99100-1RU	19	63	45	21	**37**	**17**	**d**	19	45	57	26	49	63	34	**42**	**19**	**e**
		3	12	16	4	**9**	**14**		6	12	17	4	8	13	5	**9**	**13**	
17	PA00N14-2	26	50	89	20	**46**	**13**	**d**	56	192	36	54	22	194	35	**84**	**4**	**ab**
		5	9	30	4	**12**	**7**		11	43	8	8	3	36	5	**16**	**5**	
18	PA99N2-1	26	56	94	26	**51**	**8**	**cd**	42	57	47	37	47	88	29	**49**	**14**	**e**
		5	10	30	5	**13**	**6**		8	11	9	5	5	14	3	**8**	**17**	
19	PA99N82-4	22	75	71	26	**48**	**10**	**cd**	37	77	42	32	52	87	18	**49**	**14**	**e**
		6	11	16	5	**9**	**14**		7	19	10	5	5	15	2	**9**	**13**	
	Location Means	36	69	76	34	**54**			57	105	56	37	54	117	42	**67**		
		8	13	21	7	**12**			13	23	15	6	7	21	6	**13**		

Means followed by the same letter are not significantly different at the 5% level using Student's t test.

TABLE 7: 2009 Western Regional Potato Variety Trial - SPECIFIC GRAVITY - EARLY AND LATE HARVEST

		Specific Gravity - Early Harvest							Specific Gravity - Late Harvest									
		ID	OR	TX	WA	Entry			CA	CO	ID		OR		WA	Entry		
No.	Clone	PAR	HRM	SPR	OTH	Mean/Rank			TUL	SLV	AB	PAR	HRM	KLA	OTH	Mean/Rank		
1	RANGER R.	1.088	1.069	1.074	1.077	**1.077**	**8**	**cdef**	1.102	1.088	1.081	1.092	1.077	1.096	1.081	**1.088**	**7**	**cdef**
2	R. BURBANK	1.084	1.068	1.069	1.079	**1.075**	**9**	**defg**	1.090	1.094	1.079	1.083	1.076	1.094	1.080	**1.085**	**10**	**fgh**
3	R. NORKOTAH	1.079	1.065	1.065	1.070	1.070	17	**hi**	1.090	1.084	1.075	1.076	1.061	1.076	1.065	**1.075**	**18**	**kl**
4	A96814-65LB	1.099	1.078	1.077	1.085	1.085	1	**a**	1.113	1.107	1.100	1.107	1.092	1.106	1.099	**1.103**	**1**	**a**
5	A97066-42LB	1.095	1.076	1.084	1.082	1.084	2	**ab**	1.107	1.096	1.091	1.100	1.088	1.103	1.096	**1.097**	**2**	**b**
6	A98345-1	1.093	1.068	1.087	1.077	1.081	3	**abc**	1.104	1.096	1.084	1.099	1.075	1.097	1.086	**1.092**	**4**	**c**
7	A0008-1TE	1.076	1.069	1.058	1.076	1.070	17	**hi**	1.090	1.089	1.083	1.082	1.070	1.088	1.075	**1.082**	**14**	**hi**
8	AC99375-1RU	1.097	1.072	1.076	1.081	**1.081**	**3**	**abc**	1.112	1.104	1.088	1.096	1.086	1.103	1.093	**1.097**	**2**	**b**
9	AO96305-3	1.093	1.074	1.076	1.075	**1.079**	**6**	**bcd**	1.105	1.096	1.087	1.092	1.073	1.095	1.081	**1.090**	**5**	**cd**
10	AO96365-2	1.086	1.063	1.072	1.074	**1.074**	**10**	**defgh**	1.098	1.089	1.078	1.087	1.070	1.092	1.078	**1.085**	**10**	**fgh**
11	CO97087-2RU	1.088	1.076	1.077	1.072	**1.078**	**7**	**cde**	1.092	1.097	1.089	1.091	1.082	1.097	1.077	**1.089**	**6**	**cde**
12	CO98067-7RU	1.078	1.061	1.059	1.066	1.066	19	**i**	1.083	1.079	1.074	1.073	1.064	1.076	1.068	**1.074**	**19**	**l**
13	CO98368-2RU	1.086	1.071	1.070	1.070	**1.074**	**10**	**defgh**	1.088	1.081	1.076	1.084	1.067	1.080	1.072	**1.078**	**17**	**jk**
14	CO99053-3RU	1.085	1.065	1.068	1.072	**1.073**	**12**	**efgh**	1.102	1.091	1.085	1.087	1.070	1.088	1.081	**1.086**	**9**	**efg**
15	CO99053-4RU	1.082	1.071	1.069	1.072	**1.073**	**12**	**efgh**	1.089	1.085	1.086	1.083	1.066	1.087	1.072	**1.081**	**15**	**ij**
16	CO99100-1RU	1.083	1.065	1.068	1.070	**1.071**	**16**	**gh**	1.093	1.085	1.080	1.082	1.066	1.088	1.073	**1.081**	**15**	**ij**
17	PA00N14-2	1.088	1.073	1.078	1.079	**1.080**	**5**	**abcd**	1.098	1.089	1.090	1.086	1.073	1.091	1.079	**1.087**	**8**	**defg**
18	PA99N2-1	1.081	1.066	1.071	1.069	**1.072**	**14**	**gh**	1.097	1.084	1.079	1.084	1.070	1.091	1.080	**1.084**	**12**	**ghi**
19	PA99N82-4	1.082	1.069	1.075	1.064	**1.072**	**14**	**gh**	1.097	1.090	1.085	1.082	1.073	1.087	1.076	**1.084**	**12**	**ghi**
	Location Means	1.086	1.069	1.072	1.074	**1.076**			1.097	1.091	1.084	1.088	1.074	1.091	1.080	**1.086**		

Means followed by the same letter are not significantly different at the 5% level using Student's t test.

TABLE 8: 2009 Western Regional Potato Variety Trial - AVERAGE TUBER SIZE, AND TUBER SHAPE

		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								Late Trial		
		ID	OR	TX	WA		CA	ID		OR		WA		ID	OR	TX	WA		CA	CO	ID		OR		WA		State Means[1]		
No.	Clone	PAR	HRM	SPR	OTH	Mean	TUL	AB	PAR	HRM	KLA	OTH	Mean	PAR	HRM	SPR	OTH	Mean	TUL	SLV	AB	PAR	HRM	KLA	OTH	Mean	ID	OR	WA
1	RANGER R.	11.2	6.2	5.7	10.7	**8.5**	6.2	8.1	11.5	10.9	7.5	10.9	**9.2**	4.5	5.0	4.5	4.0	**4.5**	4.6	5.0	5.0	4.5	5.0	5.0	4.0	**4.7**	1.92	1.92	1.62
2	R. BURBANK	6.3	5.0	6.3	7.8	**6.4**	4.8	6.8	9.9	7.9	6.1	9.3	**7.5**	4.5	5.0	4.5	3.0	**4.3**	4.4	5.0	4.0	4.5	5.0	4.0	3.0	**4.3**	2.05	2.04	1.77
3	R. NORKOTAH	9.2	5.8	6.0	9.6	**7.7**	4.9	4.9	8.3	6.7	5.8	7.4	**6.3**	4.5	4.5	4.0	3.0	**4.0**	4.8	5.0	4.0	3.5	4.3	4.0	3.0	**4.1**	1.91	1.72	-
4	A96814-65LB	9.0	6.9	5.8	10.5	**8.1**	6.9	7.6	12.4	8.0	6.3	12.6	**9.0**	4.0	3.2	3.7	3.0	**3.5**	3.8	4.0	2.5	3.5	3.0	3.5	2.0	**3.2**	1.48	1.39	1.42
5	A97066-42LB	6.4	7.3	5.3	5.9	**6.2**	7.9	8.6	10.8	11.8	6.2	12.1	**9.6**	4.0	3.9	4.0	3.0	**3.7**	3.9	4.0	3.5	4.0	3.9	3.9	3.0	**3.7**	1.61	1.63	1.45
6	A98345-1	6.7	7.9	5.2	9.9	**7.4**	6.5	7.9	11.1	11.1	7.7	12.8	**9.5**	4.0	3.7	3.4	3.0	**3.5**	3.6	4.0	3.3	2.5	3.7	3.8	2.5	**3.3**	1.52	1.58	1.38
7	A0008-1TE	8.9	8.8	5.7	10.8	**8.6**	6.3	5.8	10.1	11.3	6.8	9.7	**8.3**	4.5	4.5	3.7	3.0	**3.9**	4.1	4.0	3.8	4.5	4.5	4.0	3.0	**4.0**	1.91	1.77	1.75
8	AC99375-1RU	5.1	5.4	4.6	6.1	**5.3**	5.8	7.5	8.4	7.6	5.7	9.0	**7.3**	4.0	3.8	3.5	3.0	**3.6**	4.0	4.0	4.0	4.5	3.8	3.4	2.8	**3.8**	1.64	1.60	1.61
9	AO96305-3	9.1	5.9	5.5	9.2	**7.4**	5.5	7.5	10.5	7.2	5.5	8.9	**7.5**	5.0	5.0	4.7	4.0	**4.7**	4.4	4.0	4.8	5.0	5.0	4.5	3.5	**4.5**	2.16	2.08	1.77
10	AO96365-2	6.4	5.7	4.8	6.4	**5.8**	5.6	6.6	8.3	7.0	6.3	8.4	**7.1**	3.5	3.4	3.5	3.0	**3.4**	3.8	4.0	3.5	3.5	3.3	3.1	2.3	**3.4**	1.66	1.47	1.41
11	CO97087-2RU	7.8	7.3	5.5	7.7	**7.1**	6.3	5.4	8.4	8.9	6.6	8.1	**7.3**	4.4	3.9	4.0	3.0	**3.8**	4.2	4.0	4.0	3.5	3.6	4.0	2.8	**3.7**	1.72	1.54	1.52
12	CO98067-7RU	6.5	5.7	5.8	6.4	**6.1**	4.6	3.7	7.5	7.0	6.3	7.5	**6.1**	4.5	4.0	3.5	3.0	**3.8**	4.0	4.0	2.5	4.0	4.0	3.4	2.3	**3.4**	1.81	1.65	1.47
13	CO98368-2RU	5.7	4.0	5.2	5.6	**5.1**	4.8	4.4	7.4	5.1	5.7	6.9	**5.7**	4.0	3.8	4.0	3.3	**3.8**	4.4	5.0	3.0	4.0	4.2	4.0	2.8	**3.9**	1.70	1.71	-
14	CO99053-3RU	7.1	5.7	5.7	7.8	**6.6**	7.3	7.1	10.5	9.5	6.6	12.3	**8.9**	5.0	4.4	4.5	4.0	**4.5**	4.1	5.0	4.0	4.5	5.0	4.0	3.0	**4.2**	1.70	1.92	1.67
15	CO99053-4RU	7.6	6.2	5.3	7.2	**6.6**	5.3	4.3	7.9	6.7	5.6	7.6	**6.2**	5.0	4.9	4.0	4.0	**4.5**	4.3	4.0	4.3	5.0	5.0	4.0	3.3	**4.3**	1.91	1.94	1.78
16	CO99100-1RU	8.9	6.4	6.5	9.5	**7.8**	7.6	5.5	9.5	7.0	7.6	9.0	**7.7**	4.5	4.1	3.7	3.0	**3.8**	4.2	4.0	4.0	4.0	4.2	4.0	2.8	**3.9**	1.82	1.71	1.58
17	PA00N14-2	7.0	6.7	4.8	8.1	**6.6**	5.7	6.0	7.7	7.9	5.2	7.8	**6.7**	5.0	4.9	4.1	4.7	**4.7**	4.9	5.0	5.0	5.0	5.0	4.5	4.0	**4.8**	2.14	1.90	1.92
18	PA99N2-1	7.7	6.4	5.0	8.0	**6.8**	7.1	7.1	9.2	8.6	7.0	10.9	**8.3**	3.0	2.6	3.4	2.2	**2.8**	3.7	4.0	2.5	3.0	2.7	2.6	2.0	**2.9**	1.43	1.33	1.34
19	PA99N82-4	7.3	6.7	7.9	10.0	**8.0**	7.3	6.8	9.6	9.6	6.6	15.1	**9.2**	2.5	2.4	3.5	1.7	**2.5**	3.3	3.0	2.5	2.5	2.8	1.6	2.0	**2.5**	1.36	1.35	1.26
Location Means		7.6	6.3	5.6	8.3	**6.9**	6.1	6.4	9.4	8.4	6.4	9.8	**7.8**	4.2	4.1	3.9	3.2	**3.8**	4.1	4.3	3.7	4.0	4.1	3.8	2.8	**3.8**	**1.76**	**1.70**	**1.57**

[1] Idaho L/W ratios based on Aberdeen location; Oregon based on Hermiston location; Washington based on Othello location
Washington reported 1.81 for Idaho samples and 1.70 for Oregon samples.

TABLE 9: 2009 Western Regional Potato Variety Trial - EXTERNAL DEFECTS MEANS OF LOCATIONS - GROWTH CRACKS, SECOND GROWTH, SHATTER BRUISE, AND SCAB[1]

		Growth Cracks		Second Growth		Shatter Bruise				Scab	
No.	Clone	Early Trial	Late Trial	Early Trial	Late Trial	Early Trial	Late Trial	Oth[2]	Ab[3]	Early Trial	Late Trial
1	RANGER R.	4.4 PAR 2.7	4.4 AB 3.3	4.4	4.7	4.5	4.9	3.0	2.6	5.0	4.8
2	R. BURBANK	4.0 PAR 2.0	3.8 PAR 2.0 KLA 2.5	4.1 PAR 2.7	4.2	5.0	4.8	3.0	2.4	5.0	5.0
3	R. NORKOTAH	4.8	4.9	5.0	5.0	5.0	5.0	4.0	2.7	5.0	4.8
4	A96814-65LB	4.8	4.7	5.0	5.0	4.5	4.6	2.0	2.9	5.0	4.6 AB 3.0
5	A97066-42LB	5.0	4.6	4.6	4.1 KLA 1.9	4.8	4.7	2.0	2.7	5.0	5.0
6	A98345-1	4.6	4.7	5.0	4.8	4.9	4.2	3.0	2.2	5.0	4.7
7	A0008-1TE	3.8 PAR 1.3	4.4 PAR 2.2	4.9	4.9	4.2 OTH 3.0	4.2	2.0	2.6	5.0	5.0
8	AC99375-1RU	4.8	4.6	5.0	4.7	5.0	4.9	4.0	2.8	5.0	4.8
9	AO96305-3	3.9 PAR 1.0	4.5 PAR 2.7	4.8	4.9	5.0	5.0	4.0	3.0	5.0	4.6
10	AO96365-2	4.5	4.8	5.0	4.8	5.0	5.0	3.0	3.0	5.0	4.8
11	CO97087-2RU	4.7	4.9	4.9	4.9	5.0	4.9	4.0	3.1	5.0	5.0
12	CO98067-7RU	4.8	4.9	5.0	5.0	5.0	5.0	4.0	3.4	5.0	5.0
13	CO98368-2RU	4.8	5.0	5.0	5.0	4.6	2.9 HRM 2.3 PAR 2.7	3.0	2.6	5.0	5.0
14	CO99053-3RU	4.7	4.9	4.9	5.0	5.0	4.9	5.0	2.7	5.0	4.9
15	CO99053-4RU	4.2 PAR 1.8	4.7	4.8	5.0	5.0	4.9	4.0	3.2	5.0	4.8
16	CO99100-1RU	3.8 PAR 1.0	4.4 PAR 3.0	4.8	5.0	5.0	4.9	3.0	3.0	5.0	5.0
17	PA00N14-2	4.8	4.9	5.0	5.0	5.0	5.0	4.0	3.0	5.0	5.0
18	PA99N2-1	4.3 PAR 2.8	4.8	4.8	4.9	4.6	3.6 HRM 2.6	2.0	2.1	5.0	4.9
19	PA99N82-4	3.9 OTH 2.3	4.1 OTH 1.5	5.0	4.9	3.6 HRM 2.5 OTH 2.0	3.4 HRM 1.9	1.0	2.3	5.0	4.8
	Entry Means	4.4	4.6	4.8	4.8	4.8	4.6	3.2	2.8	5.0	4.9

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

[2]Othello shatter scores reflect severe harvest conditions.

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

TABLE 10: 2009 Western Regional Potato Variety Trial - INTERNAL DEFECTS MEANS OF LOCATIONS - HOLLOW HEART/BROWN CENTER, INTERNAL BROWN SPOT, VASCULAR DISCOLORATION/NET NECROSIS, AND BLACKSPOT[1]

		Percent Hollow Heart Plus Brown Center		Percent Internal Brown Spot		Percent Net Necrosis/ Vascular Discoloration		Blackspot Bruise [(1-5(NONE)]		
No.	Clone	Early Trial	Late Trial	Early Trial	Late Trial	Early Trial	Late Trial	Early Trial	Late Trial	ID[2]
1	RANGER R.	0	0	0	0	0	5 TUL 15	3.3 HRM 1.0	3.6 KLA 2.5	1.6
2	R. BURBANK	1	3	1	1	0	3 TUL 10	3.3 HRM 1.0	3.6	1.9
3	R. NORKOTAH	0	2	0	1	0	3 TUL 10	4.0 HRM 2.0	4.4	1.7
4	A96814-65LB	1	4 KLA 15	1	3 HRM 15	2	2	4.3	4.0	2.1
5	A97066-42LB	0	1	0	2	1	4 TUL 13	5.0	4.3	1.9
6	A98345-1	0	0	0	1	0	3 TUL 10	4.0 HRM 2.0	3.4	1.8
7	A0008-1TE	0	2 KLA 18	0	1	2	1	4.7	4.2	1.7
8	AC99375-1RU	0	3 KLA 15	0	0	0	3 TUL 13	4.3	3.7 HRM 2.0	3.1
9	AO96305-3	0	0	0	0	0	2	4.7	4.8	2.3
10	AO96365-2	0	0	0	1	5 SPR 15	2	4.3	3.8 KLA 2.5	2.0
11	CO97087-2RU	1	4 TUL 20 KLA 15	0	0	1	1	3.7 HRM 2.0	4.7	3.0
12	CO98067-7RU	0	1	0	0	0	3 TUL 13	3.7 HRM 1.0	4.6	2.8
13	CO98368-2RU	0	0	0	0	0	2	4.7	4.8	2.2
14	CO99053-3RU	0	2	0	0	1	2 TUL 10	5.0	4.6	2.0
15	CO99053-4RU	1	0	0	0	1	3 TUL 10	4.0 HRM 2.0	4.4	2.9
16	CO99100-1RU	1	7 TUL 35 KLA 28	0	0	0	1	4.0 HRM 2.0	4.4	2.2
17	PA00N14-2	0	0	0	0	0	0	3.7 HRM 2.0	4.4	1.6
18	PA99N2-1	2	3 TUL 20	0	1	2	0	4.0 HRM 2.0	3.7 KLA 2.5	2.5
19	PA99N82-4	1	8 KLA 28	0	1	0	3 TUL 10	3.7 HRM 2.0	4.5	2.9
	Entry Means	0	2	0	1	1	2	4.1	4.2	2.2

[1]Individual trial sites with relatively extreme values are listed right of the entry means.

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

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

		Field Fry							Fry 45					Fry 40			% Sugar Ends					
		CO	ID		OR	WA			CO	ID	OR	WA		ID	WA		ID			OR		
		SLV	PAR		HRM	OTH		Entry	SLV	AB	HRM	OTH	Entry	AB	OTH	Entry	AB	PAR		HRM		Entry
No.	Clone	L	E	L	E	E	L	Mean	L	L	L	L	Mean	L	L	Mean	L	E	L	E	L	Mean
1	RANGER R.	3.0	0.3	0.0	0.0	0.0	0.0	**0.7**	3.0	0.9	0.5	0.0	**1.1**	3.9	3.0	**3.5**	25	0	0	0	0	**5**
2	R. BURBANK	2.0	0.1	0.2	0.5	0.0	0.0	**0.6**	2.0	0.7	1.2	1.0	**1.2**	3.9	3.0	**3.5**	50	0	19	0	3	**14**
3	R. NORKOTAH	3.0	0.0	0.1	0.1	0.0	.	**0.7**	3.0	0.6	1.2	.	**1.6**	4.0	.	**4.0**	33	0	0	0	0	**7**
4	A96814-65LB	1.0	0.0	0.0	0.0	0.0	0.0	**0.2**	2.0	0.6	0.3	0.0	**0.7**	2.5	1.0	**1.8**	13	0	0	0	0	**3**
5	A97066-42LB	3.0	0.0	0.0	0.0	0.0	0.0	**0.6**	4.0	0.8	1.1	1.0	**1.7**	3.8	3.0	**3.4**	4	0	3	0	3	**2**
6	A98345-1	1.0	0.2	0.0	0.2	0.0	0.0	**0.3**	2.0	0.5	0.7	0.0	**0.8**	1.3	2.0	**1.7**	46	0	0	0	0	**9**
7	A0008-1TE	2.0	0.0	0.2	0.0	0.0	0.0	**0.4**	3.0	0.6	0.9	1.0	**1.4**	4.0	3.0	**3.5**	29	0	0	0	0	**6**
8	AC99375-1RU	2.0	0.1	0.1	0.1	0.0	0.0	**0.5**	2.0	0.5	0.3	0.0	**0.7**	1.9	2.0	**2.0**	27	0	0	0	0	**5**
9	AO96305-3	2.0	0.0	0.0	0.0	0.0	0.0	**0.4**	1.0	0.5	0.0	0.0	**0.4**	1.1	1.0	**1.1**	42	10	4	0	0	**11**
10	AO96365-2	2.0	0.1	0.0	0.2	0.0	1.0	**0.5**	3.0	0.8	1.2	0.0	**1.3**	3.4	3.0	**3.2**	17	0	0	0	3	**4**
11	CO97087-2RU	0.0	0.1	0.0	0.0	0.0	0.0	**0.0**	2.0	0.4	0.0	0.0	**0.6**	1.8	2.0	**1.9**	38	0	0	0	0	**8**
12	CO98067-7RU	2.0	0.3	0.0	0.3	0.0	2.0	**0.5**	3.0	0.8	1.1	1.0	**1.5**	4.0	4.0	**4.0**	33	0	0	3	0	**7**
13	CO98368-2RU	3.0	0.2	0.4	0.0	0.0	.	**0.7**	3.0	0.8	0.9	.	**1.6**	4.0	.	**4.0**	46	0	10	0	0	**11**
14	CO99053-3RU	2.0	0.0	1.0	0.4	0.0	0.0	**0.7**	3.0	0.9	1.2	1.0	**1.5**	3.6	3.0	**3.3**	9	0	0	3	5	**3**
15	CO99053-4RU	3.0	0.0	0.2	0.0	0.0	0.0	**0.6**	3.0	0.7	0.5	1.0	**1.3**	3.4	3.0	**3.2**	8	0	0	0	0	**2**
16	CO99100-1RU	1.0	0.5	0.0	0.0	0.0	1.0	**0.3**	1.0	0.4	0.5	1.0	**0.7**	3.9	4.0	**4.0**	4	0	0	0	0	**1**
17	PA00N14-2	2.0	0.0	0.0	0.0	0.0	0.0	**0.4**	4.0	0.7	0.6	1.0	**1.6**	4.0	4.0	**4.0**	25	0	2	3	0	**6**
18	PA99N2-1	3.0	0.0	0.0	0.1	0.0	0.0	**0.6**	3.0	0.5	0.9	0.0	**1.1**	4.0	3.0	**3.5**	17	0	0	0	0	**3**
19	PA99N82-4	1.0	0.5	0.1	0.0	0.0	0.0	**0.3**	2.0	0.6	0.3	0.0	**0.7**	3.1	2.0	**2.6**	17	0	0	0	0	**3**
	Location Means	2.0	0.1	0.1	0.1	0.0	0.2	**0.5**	2.6	0.6	0.7	0.5	**1.1**	3.2	2.7	**3.0**	25	1	2	0	1	**6**

Storage protocol prior to frying

Aberdeen - 4 weeks from 55F to 45F, 4 weeks from 55F to 40F, and 8 weeks @ 45F and 10 weeks @ 40F.
Hermiston - 2 weeks from 60F to 45F, and 7 weeks @45F.
Kimberly - 4 weeks from 55F to 45F, 5 weeks from 55F to 40F, and 8 weeks @ 40F and 7 weeks @ 45F.
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 evalutations of entries can be found in the 2009 Potato Cultivar Yield & Post Harvest Quality Evalutions - Washington State University. Contact: Rick Knowles. **www.potatoes.wsu.edu**

TABLE 12: 2009 Western Regional Potato Variety Trial - DISEASE EVALUATION AND METRIBUZIN REACTION

No.	Clone	Vert. Wilt/ Early Dying AB[1] (0-9)	Vert. Wilt/ Early Dying HRM[2] (0-9)	Early Blight Foliar AB[1] (0-9)	Early Blight Tuber (0-5)	Early Blight Tuber % Incidence	Late Blight Corvallis[3] Foliar (1-9)	Late Blight Corvallis[3] Tuber %	Late Blight Corvallis[3] Tuber AUDPC	Common Scab AB[1] (0-5)	Common Scab AB[1] %Serious Defect	Net Necrosis/ Vasc. Discoloration[1] % Incidence	Net Necrosis/ Vasc. Discoloration[1] %Serious Defect	% Virus Infection PVY HRM[2]	Prosser % Corky Ringspot[4]	Prosser Root-knot[4]	Klamath % Corky Ringspot[5]	Fusarium Dry Rot[1] (0-5) F(sam)	Fusarium Dry Rot[1] (0-5) F(sol)	Erwinia Soft Rot[1] (0-5)
1	RANGER R.	4.0	5.6	6.3	1.1	21	7.0	10	713	3.0	11	89	19	100	2.7	S	23	2.3	2.4	2.7
2	R. BURBANK	7.0	8.4	6.5	1.0	12	8.0	0	861	1.0	1	69	14	100	1.9	S	38	4.1	2.2	1.3
3	R. NORKOTAH	9.0	8.9	8.7	1.0	10	8.5	5	1080	1.3	1	69	6	100	5.3	S	0	2.5	0.9	2.9
4	A96814-65LB	5.5	6.5	6.8	1.3	38	5.8	3	506	2.7	16	91	14	20	0.0	S	0	4.9	3.3	1.3
5	A97066-42LB	2.5	6.0	5.7	1.0	22	5.0	0	321	3.0	3	88	14	40	2.2	S	40	4.8	1.5	2.4
6	A98345-1	1.2	4.5	3.8	1.4	32	6.5	0	770	3.0	13	72	8	5	7.3	S	45	4.6	4.7	3.8
7	A0008-1TE	3.0	8.1	5.7	1.6	11	9.0	10	1154	0.7	0	34	3	83	0.0	S	10	1.3	0.1	4.0
8	AC99375-1RU	7.3	6.4	7.8	0.7	12	5.3	0	361	2.3	2	57	3	5	0.0	S	8	3.5	0.1	1.2
9	AO96305-3	2.3	7.8	4.3	0.7	22	7.5	3	802	3.0	15	54	9	100	5.9	S	25	4.9	0.7	4.7
10	AO96365-2	6.5	5.3	7.3	0.3	4	7.5	8	839	2.7	11	74	4	55	0.0	S	18	3.3	0.1	0.1
11	CO97087-2RU	3.3	7.1	4.8	1.0	21	8.0	3	992	1.0	0	47	19	100	0.0	S	0	3.5	0.1	1.3
12	CO98067-7RU	7.3	7.9	6.5	1.1	7	8.5	5	1080	1.3	1	71	2	95	0.5	S	0	2.5	3.1	0.8
13	CO98368-2RU	8.7	8.0	7.8	0.7	12	9.0	3	1197	0.3	0	49	7	20	1.3	S	3	4.3	2.7	0.5
14	CO99053-3RU	6.8	5.8	7.3	0.3	2	7.3	0	715	1.7	1	55	0	100	0.0	S	28	4.9	1.4	2.5
15	CO99053-4RU	2.7	7.6	5.2	1.0	14	9.0	0	1159	2.0	4	47	0	95	2.8	S	35	4.8	3.2	2.5
16	CO99100-1RU	8.5	8.5	8.2	1.0	5	9.0	8	1166	1.7	2	36	0	100	0.0	S	5	4.6	3.3	1.9
17	PA00N14-2	8.8	8.1	8.5	0.3	2	9.0	8	1236	1.7	3	31	0	100	0.0	S	0	2.6	3.2	1.1
18	PA99N2-1	8.0	5.9	8.0	1.0	10	8.3	3	969	3.7	13	43	6	100	3.8	S	0	2.5	0.4	3.3
19	PA99N82-4	2.8	6.0	4.5	1.4	20	8.0	0	1075	3.3	7	60	5	100	0.0	R	0	3.3	0.6	1.2
	Entry Means	5.5	7.0	6.5	0.9	14	7.7	3	895	2.1	5	60	7	75	1.8	-	14.5	3.6	1.8	2.1
	LSD (.05)	**1.7**	**0.9**	**1.6**	**0.6**	**21**	**0.8**	**11.4**	**265**	**1.7**	**11.5**	**24**	**ns**	**-**	**-**	**-**	**-**	**0.9**	**0.9**	**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. 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.

[2] Evaluations made at Hermiston, Oregon by Dan Hane; scale as indicated, highest number being most severe. % Virus are from evaluation of sprouts from tubers grown under high virus pressure.

[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 Prosser, Washington by Chuck Brown: S=susceptible, R=resistant

[5] Evaluations made at Klamath Falls, Oregon by Brian Charlton.

TABLE 13: 2009 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.	21.7	0.05	0.15	5.2	30.8	3.2
2	R. BURBANK	20.9	0.05	0.12	4.8	20.9	1.6
3	R. NORKOTAH	22.1	0.03	0.12	4.5	21.9	1.8
4	A96814-65LB	22.2	0.00	0.16	6.0	16.5	6.0
5	A97066-42LB	20.9	0.02	0.18	5.2	16.3	3.0
6	A98345-1	21.3	0.02	0.13	5.0	21.1	2.0
7	A0008-1TE	20.5	0.04	0.15	6.0	28.4	1.8
8	AC99375-1RU	21.1	0.02	0.12	6.1	21.8	12.5
9	AO96305-3	20.6	0.02	0.11	5.8	25.7	1.5
10	AO96365-2	21.5	0.05	0.11	5.1	25.0	0.8
11	CO97087-2RU	20.1	0.01	0.12	5.8	22.7	1.6
12	CO98067-7RU	22.1	0.04	0.13	4.1	24.0	0.8
13	CO98368-2RU	22.4	0.05	0.14	5.3	27.2	0.5
14	CO99053-3RU	21.5	0.03	0.14	5.0	26.1	5.9
15	CO99053-4RU	21.1	0.03	0.13	5.4	31.5	3.8
16	CO99100-1RU	21.6	0.01	0.14	5.0	22.6	1.5
17	PA00N14-2	21.7	0.04	0.15	5.8	18.9	3.6
18	PA99N2-1	22.5	0.02	0.11	5.6	22.5	0.9
19	PA99N82-4	21.1	0.02	0.15	5.9	25.1	1.3
	Entry Means	**21.4**	**0.03**	**0.13**	**5.3**	**23.6**	**2.8**

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

[2] Glycoalkaloids: The 2009 Lenape check grown at Aberdeen was 42.6 mg/100g

TABLE 14: 2009 Western Regional Potato Variety Trial - MERIT SCORES [1-5(best)]

No.	Clone	Process CO SLV L	Process ID AB L	Process ID PAR E	Process ID PAR L	Process OR HRM E	Process OR HRM L	Process WA OTH E	Process WA OTH L	Process Early Trial **Mean**(Rnk)	Process Late Trial **Mean**(Rnk)	Process WA[1] 3 State Mean	Fresh CO SLV L	Fresh ID AB L	Fresh ID PAR E	Fresh ID PAR L	Fresh OR HRM E	Fresh OR HRM L	Fresh TX SPR E	Fresh WA OTH E	Fresh WA OTH L	Fresh Early Trial **Mean**(Rnk)	Fresh Late Trial **Mean**(Rnk)
1	RANGER R.	1.0	3.5	3.7	4.2	3.5	3.0	3.3	3.8	**3.5** (4)	**3.1** (12)	3.8	3.0	3.0	2.0	3.2	2.5	1.5	3.0	3.0	3.0	**2.6** (11)	**2.7** (10)
2	R. BURBANK	4.0	3.0	3.3	4.0	2.0	4.0	2.9	2.6	**2.7** (14)	**3.5** (6)	2.6	3.0	2.3	2.0	2.0	2.0	3.0	1.9	3.0	2.8	**2.2** (16)	**2.6** (12)
3	R. NORKOTAH	1.0	3.0	4.2	4.2	3.0	1.5	3.3	.	**3.5** (4)	2.4 (17)	-	3.0	3.0	3.3	4.0	4.5	4.0	3.8	4.0	4.0	3.9 (1)	3.6 (2)
4	A96814-65LB	4.0	3.8	4.0	3.7	2.5	3.0	3.4	4.3	**3.3** (6)	3.8 (3)	4.3	3.0	3.0	2.7	3.0	2.5	1.0	3.1	1.0	2.3	**2.3** (14)	**2.5** (15)
5	A97066-42LB	1.0	3.8	3.0	2.8	3.5	3.5	2.8	3.5	**3.1** (8)	**2.9** (13)	3.5	3.0	2.5	2.0	2.7	2.5	2.0	2.8	1.0	2.0	2.1 (17)	**2.4** (16)
6	A98345-1	5.0	4.0	3.0	3.3	3.0	3.0	3.2	4.2	**3.1** (8)	3.9 (1)	4.2	4.0	3.3	2.0	3.2	2.5	2.0	2.5	1.0	2.5	2.0 (18)	**3.0** (5)
7	A0008-1TE	2.0	3.7	4.0	4.0	5.0	3.0	3.3	3.3	4.1 (1)	**3.2** (10)	3.3	2.0	3.8	3.0	2.0	5.0	2.0	2.7	4.0	3.7	3.7 (2)	**2.7** (10)
8	AC99375-1RU	5.0	4.0	2.0	2.8	2.5	3.0	2.9	4.6	**2.5** (16)	3.9 (1)	4.6	5.0	2.3	2.7	2.5	2.0	2.0	2.5	3.7	2.3	**2.7** (9)	**2.8** (9)
9	AO96305-3	3.0	4.0	3.3	4.0	4.0	3.0	3.4	4.7	3.6 (3)	**3.7** (5)	4.7	2.0	4.0	2.0	3.3	4.0	3.0	3.1	2.7	4.0	**2.9** (6)	**3.3** (4)
10	AO96365-2	3.0	3.6	3.0	4.0	2.0	2.0	2.8	3.3	**2.6** (15)	**3.2** (10)	3.3	4.0	3.5	4.0	2.8	1.0	2.0	2.7	4.0	2.5	**2.9** (6)	**3.0** (5)
11	CO97087-2RU	4.0	4.0	3.7	3.0	2.0	1.0	3.3	4.3	**3.0** (10)	**3.3** (9)	4.3	3.0	1.8	3.3	2.3	1.0	1.0	2.9	2.0	1.5	**2.3** (14)	1.9 (18)
12	CO98067-7RU	2.0	3.0	4.0	4.0	2.0	1.5	2.5	2.4	**2.8** (12)	**2.6** (16)	2.4	3.0	2.3	3.7	3.5	2.0	2.0	2.6	2.7	2.0	**2.7** (9)	**2.6** (12)
13	CO98368-2RU	1.0	3.2	2.3	3.0	1.0	1.0	2.8	.	2.1 (18)	2.1 (19)	-	1.0	2.5	3.3	2.5	1.0	1.0	3.4	2.7	2.8	**2.6** (11)	2.0 (17)
14	CO99053-3RU	4.0	3.8	3.7	4.2	3.0	3.5	1.7	3.4	**2.8** (12)	3.8 (3)	3.4	5.0	3.8	3.7	3.2	4.0	4.0	3.5	3.0	2.8	3.5 (3)	3.7 (1)
15	CO99053-4RU	1.0	3.5	4.3	3.2	3.0	2.0	2.5	4.7	**3.3** (6)	**2.9** (13)	3.2	3.0	3.3	2.7	2.5	4.0	3.5	2.9	3.0	2.3	**3.1** (4)	**2.9** (7)
16	CO99100-1RU	4.0	3.7	3.7	3.8	2.0	2.0	3.0	3.3	**2.9** (11)	**3.4** (7)	2.9	3.0	3.3	3.0	3.0	2.5	3.0	3.6	3.5	2.3	**3.1** (4)	**2.9** (7)
17	PA00N14-2	1.0	3.5	4.0	4.3	4.0	4.0	4.4	4.3	4.1 (1)	**3.4** (7)	3.5	1.0	3.8	2.7	4.0	3.5	4.0	3.2	2.3	4.0	**2.9** (6)	3.4 (3)
18	PA99N2-1	1.0	3.0	3.0	2.7	1.0	1.0	3.2	3.3	2.4 (17)	2.2 (18)	3.8	4.0	3.3	3.0	2.0	1.0	1.0	2.4	3.3	2.5	**2.4** (13)	**2.6** (12)
19	PA99N82-4	3.0	3.0	2.0	2.3	1.0	1.0	2.4	4.3	1.8 (19)	**2.7** (15)	3.9	2.0	3.3	2.3	2.0	1.0	1.0	2.9	1.3	1.0	1.9 (19)	1.9 (18)
	Location Means	2.6	3.5	3.4	3.6	2.6	2.4	3.0	3.8	**3.0**	**3.2**	3.6	3.0	3.1	2.8	2.8	2.6	2.3	2.9	2.7	2.6	**2.7**	**2.8**

[1] Score based upon Idaho, Oregon, and Washington samples evaluated postharvest at Washington State University. **(www.potatoes.wsu.edu)** Scale [1-5(best)]

TABLE 15: 2009 Western Regional Potato Variety Trial - ENTRY SUMMARY[1]

No.	Clone	Year In Trial	Use	Total Yield[2]	US #1's Yield[2]	% US #1's[2]	Tuber Size (oz) Early	Tuber Size (oz) Late	Specific Gravity[2]	Fry 45 Color	%Cumulative Shrink & Sprout Rating[3]		Combined (E&L) Merit Score[4] Process	Combined (E&L) Merit Score[4] Fresh	Observations	Disposition 2010
1	RANGER R.	-	Dual	621	504	80	8.5	9.2	1.088	1.1	9.3	4.0	3.2	2.7		Check
2	R. BURBANK	-	Dual	643	457	70	6.4	7.5	1.085	1.2	10.4	4.0	3.2	2.4		Check
3	R. NORKOTAH	-	Fresh	521	422	79	7.7	6.3	1.075	1.6	12.9	4.0	2.9	3.7		Check
4	A96814-65LB	1	Proc	639	552	86	8.1	9.0	1.103	0.7			3.6	2.4	High % 1's & SG (E&L); Cold Sweet Res; LB & PVY Res.;Scab & F(sam) Susc.	Discard
5	A97066-42LB	2	Proc	591	483	80	6.2	9.6	1.097	1.7	8.4	4.0	3.0	2.3	High SG (E&L);LB Res.;F(sam) Susc.	Return
6	A98345-1	1	Dual	736	640	86	7.4	9.5	1.092	0.8	-	-	3.6	2.5	Blackspot (L); Cold Sweet Res; ED, EB & PVY Res; Scab & Dry Rot Susc	Return
7	A0008-1TE	2	Dual	548	463	84	8.6	8.3	1.082	1.4	8.7	4.0	3.5	3.1	Dry Rot Res; Soft Rot Susc.	Return
8	AC99375-1RU	1	Dual	686	504	74	5.3	7.3	1.097	0.7	-	-	3.3	2.8	Cold Sweet Res; LB, PVY & F(sol) Res.	Return
9	AO96305-3	1	Dual	537	443	82	7.4	7.5	1.090	0.4	-	-	3.7	3.1	Cold Sweet Res; F(sol) Res; Scab, Soft Ro & F(sam) Susc.	Return
10	AO96365-2	1	Dual	670	546	81	5.8	7.1	1.085	1.3	-	-	3.0	3.0	F(sol) & Soft Rot Res.; Scab Susc.	Discard
11	CO97087-2RU	3	Dual	600	413	73	7.1	7.3	1.089	0.6	10.9	4.0	3.2	2.1	Cold Sweet Res.; F(sol) Res.	Graduate
12	CO98067-7RU	2	Dual	621	484	75	6.1	6.1	1.074	1.5	9.9	4.0	2.7	2.6	Low SG (E&L); Soft Rot Res.	Return
13	CO98368-2RU	2	Fresh	466	340	71	5.1	5.7	1.078	1.6	9.9	4.5	2.1	2.2	Low Yields & % No. 1 (E&L); Small tubers; Shatter (L); PVY & S. Rot Res	Discard
14	CO99053-3RU	1	Dual	638	540	84	6.6	8.9	1.086	1.5	-	-	3.4	3.7	F(sam) Susc.	Return
15	CO99053-4RU	1	Dual	474	373	77	6.6	6.2	1.081	1.3	-	-	3.0	3.0	F(sam) Susc.	Return
16	CO99100-1RU	1	Dual	493	401	80	7.8	7.7	1.081	0.7	-	-	3.2	3.0	F(sam) Susc.	Return
17	PA00N14-2	1	Dual	563	467	81	6.6	6.7	1.087	1.6	-	-	3.7	3.2		Return
18	PA99N2-1	2	Proc	697	601	85	6.8	8.3	1.084	1.1	8.4	4.0	2.3	2.5	F(sol) Res.	Return
19	PA99N82-4	2	Proc	633	512	81	8.0	9.2	1.084	0.7	8.9	4.0	2.4	1.9	Growth Cracks & Shatter (E&L): Columbia Root Knot Nematode Res	Return
	Entry Means			599	481	79	6.9	7.8	1.086	1.1	9.8	4.1	3.1	2.7		

[1] Numeric values represent means across all trial locations.

[2] Data shown from late trial results.

[3] 2008 entries at Tulelake, CA; Evaluated at 182 days after harvest. Sprout rating [(1-5(none)]

[4] Data shown from combined early & late trial results.

TABLE 16: 2009 Western Regional Potato Variety Trial - 3 YEAR SUMMARY OF GRADUATING ENTRIES - LATE TRIAL LOCATION MEANS

	2007						2008						2009					
	Total Yield[1]	US #1 Yield[1]		Fry	Merit Score		Total Yield[1]	US #1 Yield[1]		Fry	Merit Score		Total Yield[1]	US #1 Yield[1]		Fry	Merit Score	
Clone	&(rank)	& %	SG	45	Fresh	Proc	&(rank)	& %	SG	45	Fresh	Proc	&(rank)	& %	SG	45	Fresh	Proc
CO97087-2RU	503 (14/19)	371 74	1.085	1.3	2.3	3.1	536 (8/13)	429 78	1.091	0.2	2.7	3.6	600 (11/19)	413 73	1.089	0.6	2.1	3.2
RANGER R.	561 (9/19)	441 78	1.091	1.2	2.8	3.6	554 (7/13)	455 81	1.090	1.2	2.7	3.6	621 (9/19)	504 80	1.088	1.1	2.7	3.2
R. NORKOTAH	476 (16/19)	393 82	1.073	1.4	3.3	2.3	487 (12/13)	416 84	1.076	1.4	3.8	3.0	521 (16/19)	422 79	1.075	1.6	3.7	2.9
R. BURBANK	557 (10/19)	353 64	1.082	1.1	2.0	2.4	589 (3/13)	385 66	1.083	1.1	1.9	2.6	643 (5/19)	457 70	1.085	1.2	2.4	3.2
Trial Mean	545	446 82	1.082	1.0	3.0	3.0	528	438 81	1.084	1.0	2.8	3.0	599	481 79	1.086	1.1	2.7	3.1

3 Year Average (2007-2009)

Clone	Total Yield[1] &(%ile)[2]	US #1 Yld[1]	%	SG	FRY 45	Merit Score Fresh	Proc	Noted Weaknesses	Noted Strengths
CO97087-2RU	546 (35)	404	75	1.088	0.7	2.4	3.3		High SG (E)2/3; Corky Ringspot Res. 3/3; F(sol) Res 3/3;
RANGER R.	579 (51)	467	80	1.090	1.2	2.7	3.5		
R. NORKOTAH	495 (14)	410	82	1.075	1.5	3.6	2.7		
R. BURBANK	596 (65)	398	67	1.083	1.1	2.1	2.7		
Trial Mean[3]	557	455	81	1.084	1.1	2.8	3.0		

[1] (CWT/A)

[2] Percent of entries with lower yields; e.g. 35% of all late rial entries over three years yielded lower than CO97987-2RU

[3] Late Trial mean of all trial entries 2007-2009