

# 1999 WESTERN REGIONAL POTATO VARIETY TRIAL REPORT

California

Colorado

Idaho

New Mexico

Oregon

Texas

Washington

State Experiment Stations and  
USDA-ARS Cooperating



## 1999 WESTERN REGIONAL POTATO VARIETY TRIAL REPORT

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TABLE 1: 1999 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	Herbicides	Insecticides	Fungicides
1	Kern Co. California ( <b>KRN</b> )	R. Voss, H. Phillips, J. Nunez	Early	Sprink.	400-110	23-Feb	28-Jun	-	125			Bravo W.S., Champ2 GreenStar Pennco Zeb, Rovral
2	Tulelake California ( <b>TUL</b> )	R. Voss, H. Phillips, D. Kirby, H. Carlson	Late	Sprink.	160-200	18-May	5-Oct	129 Diquat	140	Matrix Sencor		Bravo, Dithane Tattoo C
3	San Luis Valley Colorado ( <b>SLV</b> )	D. Holm	Late	Pivot	130-100	19-May	23-Sep	105 Sulf Acid	127	Dual II Magnum Sencor DF	Thiodan 3 EC	Bravo Ultrex, Champ2 Dithane DF, Curzate Quadris, Super Tin
4	Aberdeen Idaho ( <b>AB</b> )	S. Love, R. Novy, D. Corsini	Late	Sprink.	240-150-80-44+	5-May	23-Sep	126 Diquat	141	Eptam Matrix Metribuzin	Admire Monitor	Bravo Fullfill
5	Kimberly Idaho ( <b>KIM</b> )	S. Love, R. Novy, D. Corsini	Late	Sprink.	220-130	26-Apr	12-Oct	137 Diquat	169	Lexone Matrix	Pounce Sevin Temik	Acrobat Bravo Dithane
6	Clovis New Mexico ( <b>CLV</b> )	R. D. Baker, W. Laing	Early	Furrow	84-120-72-0+	30-Mar	1-Sep	136 Mech.	155	Prowl		
7	Farmington New Mexico ( <b>FRM</b> )	C. Owen	Late	Sprink.	182-104-120	20-Apr	18-Oct	-	181	Turbo		
8	Hermiston Oregon ( <b>HRM</b> )	D. Hane, A. Mosley	Early Late	Pivot Pivot	290-80-200-40+	31-Mar 12-Apr	16-Aug 30-Sep	120 155	138 171	Ad-Wet, Eptam Matrix, Sencor Vapam	Admire, Gaucho Mocap, Monitor Phorate, Temik	Bravo, Break-thru Curzate, Dithane Ridomil, Rovral WP
9	Klamath Falls Oregon ( <b>KLM</b> )	K. Rykbost, B. Charlton	Late	Sprink.	160-80-80-140	19-May	1-Oct	110 Diquat	135	Dual Matrix Prowl	DiSyston	Bravo Dithane Tops 2.5
10	Malheur Oregon ( <b>MAL</b> )	C. Shock, A. Mosley, E. Eldredge	Early Late	Furrow	91 91	19-Apr 21-Apr	11-Aug 27-Sep	113 149 Mech.	114 159	Dual Prowl	Thimet	Bravo Dithane
11	Springlake Texas ( <b>SPR</b> )	J. C. Miller Jr., J. Koym, D. Schuering	Early	Pivot	177-30-30	12-Mar	17-Aug	144	158	Roundup Sencor Trifluralin		Maxim
12	Othello Washington ( <b>OTH</b> )	R. Thornton, N. Fuller, J. Rupp, G. Newberry	Early Late	Sprink. Pivot	262-455-245 321-486-400	6-Apr 19-Apr	24-Aug 27-Sep	121 151 Mech. Diquat	140 161	Eptam Prowl Sencor	Admire, Comite Dimethoate Furadan, Monitor Success, Sevin	Bravo, Chlorothalonil EDBC, Polyram Quadras, Ridomil MZ Rovral, Super Tin

TABLE 2: 1999 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 <sup>1</sup>	Entered by	Use	Year in Trial	Seed Source	Stand <sup>2</sup>	Tuber and Vine Descriptions <sup>2</sup>								
								Tuber Shape (1-5) <sup>3</sup>		Tuber Skin (1-5) <sup>4</sup>		Vine Size (1-5) <sup>5</sup>		Vine Maturity (1-5) <sup>6</sup>		
1	RUSSET BURBANK	W	Ck	Dual	E/L	-	OR	98	Long	4.5	Med Russet	3.6	Med-large	3.5	Medium	3.4
2	RANGER RUSSET	RP	Ck	Dual	E/L	-	OR	99	Long	4.6	Med Russet	3.5	Med-large	3.8	Med-late	3.6
3	RUSSET NORKOTAH	W	Ck	Fresh	E/L	-	OR	96	Long	4.1	Med Russet	4.0	Medium	2.6	Early	2.2
4	SHEPODY	RP	Ck	Proc	E	-	OR	97	Obl-Lng	4.0	White	1.1	Med-large	3.5	Medium	3.3
5	A88338-1	RP	ID	Dual	E/L	2	OR	96	Obl-Lng	3.6	Med Russet	3.6	Med-large	4.0	Late	4.2
6	A8893-1	W	ID	Dual	E/L	1	OR	97	Oblong	3.4	Med Russet	3.7	Med-large	3.4	Med-early	3.0
7	A9014-2	W	ID	Dual	E/L	1	OR	96	Obl-Lng	3.7	Med-Hvy Rus	4.3	Medium	2.9	Medium	3.4
8	AC87079-3	W	CO	Dual	E/L	1	CO	97	Oblong	3.5	Med-Hvy Rus	4.3	Med-large	4.0	Medium	3.2
9	AC87084-3	P	CO	Dual	E/L	3	OR/CO	95	Rnd-Obl	2.9	Med-Hvy Rus	4.4	Med-large	3.8	Medium	3.4
10	AC87138-4	W	CO	Dual	E/L	1	CO	97	Obl-Lng	3.9	Med Russet	3.7	Med-large	3.9	Medium	3.5
11	AO87277-6	RP	OR	Dual	E/L	3	OR	97	Obl-Lng	3.8	Med Russet	3.4	Med-large	3.3	Medium	3.5
12	CO89036-10	W	CO	Dual	E/L	1	CO	97	Oblong	3.2	Light Russet	2.9	Large	4.2	Medium	3.4
13	NDD840-1	PINK	CA	Dual	L	3	OR	73*	Oblong	3.4	Med-Hvy Rus	4.1	Med-large	3.1	Med-late	3.9
14	PORTGNP3-138	W	OR	Fresh	E	1	OR	98	Obl-Lng	3.8	Med Russet	4.0	Small	1.8	Early	2.5
15	PORTGS124-1	RP	OR	Proc	E	1	OR	96	Obl-Lng	3.7	White	1.6	Med-large	3.7	Medium	3.4
16	PORTGS129-1	RP	OR	Proc	E	1	OR	99	Obl-Lng	3.6	White	1.5	Medium	3.0	Medium	3.3
17	TXNS102	W	TX	Fresh	E/L	1	TX	98	Long	4.2	Med Russet	3.9	Medium	2.8	Med-early	2.8
18	TXNS296	W	TX	Fresh	E/L	1	TX	99	Long	4.3	Med Russet	3.9	Med-large	3.1	Med-early	2.7

<sup>1</sup> P=Purple, R=Red, W=White.

<sup>2</sup> Numerical values are means of all trial locations.

<sup>3</sup> 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

<sup>4</sup> 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

<sup>5</sup> 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

<sup>6</sup> 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

\* 28% in Kern County, California.

TABLE 3: 1999 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)											
	CA	NM	OR		TX	WA	Entry	CA	CO	ID		NM	OR		WA	Entry			
	KRN <sup>1</sup>	CLV	HRM	MAL	SPR	OTH	Mean/Rank	TUL	SLV <sup>1</sup>	AB	KIM	FRM	HRM	KLM	MAL	OTH	Mean/Rank		
1 R. BURBANK	687	223	435	531	245	553	<b>397</b> <b>13</b>	abc	528	471	429	469	434	783	559	545	806	<b>569</b> <b>6</b>	a
2 RANGER R.	683	301	414	489	367	547	<b>424</b> <b>8</b>	abc	522	410	516	490	575	765	556	522	817	<b>595</b> <b>3</b>	a
3 R. NORKOTAH	774	206	437	502	260	667	<b>415</b> <b>9</b>	abc	375	367	304	284	335	523	533	464	705	<b>440</b> <b>12</b>	cd
4 SHEPODY	528	265	478	491	188	588	<b>402</b> <b>12</b>	abc	-	406	-	-	-	-	-	-	-	-	-
5 A88338-1	620	250	369	492	204	593	<b>381</b> <b>15</b>	abc	594	370	530	484	578	821	489	565	759	<b>603</b> <b>1</b>	a
6 A8893-1	608	264	494	548	309	603	<b>443</b> <b>2</b>	ab	432	-	499	542	520	668	522	603	787	<b>572</b> <b>5</b>	a
7 A9014-2	-	247	398	486	311	539	<b>396</b> <b>14</b>	abc	383	-	497	419	392	590	438	508	692	<b>490</b> <b>11</b>	bc
8 AC87079-3	768	221	486	523	276	566	<b>414</b> <b>10</b>	abc	353	351	415	409	491	785	466	565	784	<b>534</b> <b>10</b>	ab
9 AC87084-3	860	256	346	422	200	506	<b>346</b> <b>17</b>	c	408	440	325	414	148	626	527	605	443	<b>437</b> <b>13</b>	cd
10 AC87138-4	590	252	507	571	212	587	<b>426</b> <b>6</b>	ab	550	437	507	505	410	832	548	600	829	<b>598</b> <b>2</b>	a
11 AO87277-6	591	325	410	534	260	660	<b>438</b> <b>3</b>	ab	546	-	490	512	392	819	572	581	810	<b>590</b> <b>4</b>	a
12 CO89036-10	776	258	345	543	299	420	<b>373</b> <b>16</b>	abc	447	391	524	466	512	761	518	605	706	<b>567</b> <b>7</b>	a
13 NDD840-1	201	-	-	-	-	-	-	-	323	388	366	339	398	514	286	-	648	<b>411</b> <b>14</b>	d
14 PORTGNP3-138	-	149	501	537	266	606	<b>412</b> <b>11</b>	abc	-	-	-	-	-	-	-	-	-	-	-
15 PORTGS124-1	-	231	534	505	208	642	<b>424</b> <b>7</b>	ab	-	-	-	-	-	-	-	-	-	-	-
16 PORTGS129-1	-	247	563	514	210	642	<b>435</b> <b>4</b>	ab	-	-	-	-	-	-	-	-	-	-	-
17 TXNS102	-	151	544	555	276	628	<b>431</b> <b>5</b>	ab	591	404	359	362	451	680	533	585	804	<b>546</b> <b>9</b>	ab
18 TXNS296	-	248	575	573	272	647	<b>463</b> <b>1</b>	a	544	436	392	391	401	679	597	612	805	<b>553</b> <b>8</b>	ab
<b>Location Means</b>	<b>641</b>	<b>241</b>	<b>461</b>	<b>519</b>	<b>257</b>	<b>588</b>	<b>413</b>		<b>471</b>	<b>406</b>	<b>440</b>	<b>435</b>	<b>431</b>	<b>703</b>	<b>510</b>	<b>566</b>	<b>742</b>	<b>536</b>	

Numbers followed by the same letter are not significantly different at the 5% level using Duncan's multiple range test.

<sup>1</sup>Excluded from means due to missing entries.

TABLE 4: 1999 Western Regional Potato Variety Trial - YIELD OF U.S. #1'S (CWT/A &amp; %) - EARLY AND LATE HARVEST

No. Clone	U.S. No. 1's - Early Harvest (CWT/A)								U.S. No. 1's - Late Harvest (CWT/A)												
	CA	NM	OR		TX	WA	Entry	Mean/Rank	CA	CO	ID		NM	OR	WA	Entry	Mean/Rank				
	KRN <sup>1</sup>	CLV	HRM	MAL	SPR	OTH			TUL	SLV <sup>1</sup>	AB	KIM	FRM <sup>2</sup>	HRM	KLM	MAL		OTH			
1 R. BURBANK	371	44	237	359	41	290	<b>194</b>	<b>17</b>	d	343	245	286	242	368	409	398	284	510	<b>355</b>	<b>12</b>	de
	54	19	55	67	17	52	<b>42</b>	<b>17</b>		65	52	67	52	85	52	71	52	63	<b>63</b>	<b>14</b>	
2 RANGER R.	552	89	302	393	284	428	<b>299</b>	<b>7</b>	ab	425	326	444	309	514	620	439	331	634	<b>464</b>	<b>3</b>	ab
	81	29	73	81	77	78	<b>68</b>	<b>4</b>		82	79	86	63	89	81	79	63	78	<b>78</b>	<b>8</b>	
3 R. NORKOTAH	720	65	355	393	165	540	<b>304</b>	<b>6</b>	ab	252	297	222	197	260	361	493	360	544	<b>336</b>	<b>13</b>	de
	93	32	81	78	63	81	<b>67</b>	<b>6</b>		67	81	73	69	78	69	92	78	77	<b>75</b>	<b>10</b>	
4 SHEPODY	420	84	305	404	89	393	<b>255</b>	<b>14</b>	abcd	-	327	-	-	-	-	-	-	-	-	-	-
	80	31	64	82	47	67	<b>58</b>	<b>13</b>		-	80	-	-	-	-	-	-	-	-	-	-
5 A88338-1	577	83	341	398	132	448	<b>280</b>	<b>11</b>	abc	501	257	491	372	539	646	435	372	642	<b>500</b>	<b>1</b>	a
	93	33	92	81	65	76	<b>69</b>	<b>2</b>		84	69	93	77	93	79	89	66	85	<b>83</b>	<b>3</b>	
6 A8893-1	537	87	410	455	177	451	<b>316</b>	<b>4</b>	a	301	-	423	402	456	482	476	449	627	<b>452</b>	<b>4</b>	ab
	88	33	83	83	57	75	<b>66</b>	<b>7</b>		70	-	85	74	88	72	91	75	80	<b>79</b>	<b>5</b>	
7 A9014-2	-	109	324	426	227	442	<b>306</b>	<b>5</b>	ab	302	-	454	357	347	477	378	398	583	<b>412</b>	<b>8</b>	bcd
	-	44	82	87	74	82	<b>74</b>	<b>1</b>		79	-	91	85	88	81	86	78	84	<b>84</b>	<b>1</b>	
8 AC87079-3	686	74	353	454	150	403	<b>287</b>	<b>8</b>	abc	236	233	338	309	423	552	394	426	644	<b>415</b>	<b>7</b>	bcd
	89	33	73	87	54	71	<b>63</b>	<b>10</b>		67	66	81	76	86	70	85	75	82	<b>78</b>	<b>6</b>	
9 AC87084-3	806	85	286	362	80	406	<b>244</b>	<b>15</b>	abcd	340	335	283	326	128	520	479	462	386	<b>365</b>	<b>11</b>	cde
	94	33	83	86	40	80	<b>64</b>	<b>9</b>		83	76	87	79	86	83	91	76	87	<b>84</b>	<b>2</b>	
10 AC87138-4	520	46	358	426	70	417	<b>263</b>	<b>13</b>	abc	386	231	388	360	324	609	464	437	636	<b>450</b>	<b>5</b>	ab
	88	19	71	75	35	71	<b>54</b>	<b>16</b>		70	53	77	71	79	73	85	73	77	<b>76</b>	<b>9</b>	
11 AO87277-6	557	119	286	466	188	523	<b>317</b>	<b>2</b>	a	484	-	433	417	327	613	507	424	670	<b>484</b>	<b>2</b>	ab
	94	36	70	87	72	79	<b>69</b>	<b>3</b>		89	-	88	81	83	75	89	73	83	<b>83</b>	<b>4</b>	
12 CO89036-10	724	63	222	430	138	294	<b>229</b>	<b>16</b>	cd	317	279	404	348	450	523	443	461	563	<b>439</b>	<b>6</b>	abc
	93	25	64	79	47	70	<b>57</b>	<b>14</b>		71	71	77	75	88	69	86	76	80	<b>78</b>	<b>7</b>	
13 NDD840-1	155	-	-	-	-	-	-	-		149	216	297	262	351	382	187	-	527	<b>308</b>	<b>14</b>	e
	77	-	-	-	-	-	-	-		46	56	81	77	88	74	65	-	81	<b>73</b>	<b>13</b>	
14 PORTGNP3-138	-	20	412	373	152	465	<b>284</b>	<b>9</b>	abc	-	-	-	-	-	-	-	-	-	-	-	-
	-	23	82	69	57	77	<b>62</b>	<b>11</b>		-	-	-	-	-	-	-	-	-	-	-	-
15 PORTGS124-1	-	91	455	437	105	494	<b>316</b>	<b>3</b>	a	-	-	-	-	-	-	-	-	-	-	-	-
	-	39	85	86	49	77	<b>67</b>	<b>5</b>		-	-	-	-	-	-	-	-	-	-	-	-
16 PORTGS129-1	-	88	338	414	60	459	<b>272</b>	<b>12</b>	abc	-	-	-	-	-	-	-	-	-	-	-	-
	-	36	60	80	30	72	<b>56</b>	<b>15</b>		-	-	-	-	-	-	-	-	-	-	-	-
17 TXNS102	-	41	390	392	146	452	<b>284</b>	<b>10</b>	abc	539	324	251	224	330	467	464	393	560	<b>404</b>	<b>10</b>	bcd
	-	27	72	71	52	72	<b>59</b>	<b>12</b>		91	80	70	62	73	69	87	67	70	<b>74</b>	<b>12</b>	
18 TXNS296	-	92	447	446	142	481	<b>322</b>	<b>1</b>	a	449	359	303	246	301	395	529	461	562	<b>406</b>	<b>9</b>	bcd
	-	37	78	78	62	74	<b>66</b>	<b>8</b>		82	82	77	63	75	58	89	75	70	<b>74</b>	<b>11</b>	
<b>Location Means</b>	552	75	342	413	138	434	<b>281</b>			359	286	358	312	365	504	435	404	578	<b>414</b>		
	85	31	74	80	53	74	<b>62</b>			75	70	81	72	84	72	85	71	78	<b>77</b>		

Numbers followed by the same letter are not significantly different at the 5% level using Duncan's multiple range test.

<sup>1</sup>Excluded from means due to missing entries.

<sup>2</sup>FRM graded by size: > 1 7/8".

TABLE 5: 1999 Western Regional Potato Variety Trial - YIELD &gt; 10/12 OZ (CWT/A &amp; %) - EARLY AND LATE HARVEST

No. Clone	U.S. No. 1's > 10/12 OZ - Early Harvest									U.S. No. 1's > 10/12 OZ - Late Harvest											
	(CWT/A)									(CWT/A)											
	CA KRN <sup>1</sup>	NM CLV	OR		TX SPR	WA OTH	Entry		e	CA TUL	CO SLV <sup>1</sup>	ID		NM FRM <sup>2</sup>	OR			WA OTH	Entry		c
HRM	MAL	AB	KIM	HRM	KLM	MAL	OTH	Mean/Rank		HRM	KLM	MAL	OTH	Mean/Rank							
1 R. BURBANK	133	0	18	9	0	43	<b>14</b>	<b>17</b>	e	69	31	46	29	36	153	78	42	111	<b>70</b>	<b>14</b>	c
	19	0	4	2	0	8	<b>3</b>	<b>17</b>		13	7	11	6	8	20	14	8	14	<b>12</b>	<b>14</b>	
2 RANGER R.	220	19	41	58	43	128	<b>58</b>	<b>9</b>	bcde	177	74	111	133	0	332	191	69	179	<b>149</b>	<b>2</b>	b
	32	7	10	12	12	23	<b>13</b>	<b>7</b>		34	18	22	27	0	43	34	13	22	<b>24</b>	<b>4</b>	
3 R. NORKOTAH	302	3	50	19	14	207	<b>59</b>	<b>8</b>	bcde	125	90	19	8	3	80	229	81	228	<b>97</b>	<b>11</b>	bc
	39	1	11	4	5	31	<b>10</b>	<b>9</b>		33	24	6	3	1	15	43	18	32	<b>19</b>	<b>8</b>	
4 SHEPODY	164	10	106	101	10	198	<b>85</b>	<b>3</b>	bc	-	105	-	-	-	-	-	-	-	-	-	-
	31	4	22	21	5	34	<b>17</b>	<b>3</b>		-	26	-	-	-	-	-	-	-	-	-	-
5 A88338-1	258	46	126	72	18	243	<b>101</b>	<b>2</b>	ab	303	31	290	177	111	400	177	147	439	<b>256</b>	<b>1</b>	a
	42	18	34	15	9	41	<b>23</b>	<b>2</b>		51	8	55	37	19	49	36	26	58	<b>41</b>	<b>1</b>	
6 A8893-1	155	8	62	79	4	120	<b>55</b>	<b>10</b>	bcde	159	-	79	118	21	235	114	131	279	<b>142</b>	<b>3</b>	b
	26	3	13	14	1	20	<b>10</b>	<b>11</b>		37	-	16	22	4	35	22	22	35	<b>24</b>	<b>5</b>	
7 A9014-2	-	19	31	93	25	210	<b>76</b>	<b>5</b>	bcd	165	-	189	70	31	155	82	218	225	<b>142</b>	<b>4</b>	b
	-	8	8	19	8	39	<b>16</b>	<b>4</b>		43	-	38	17	8	26	19	43	32	<b>28</b>	<b>3</b>	
8 AC87079-3	264	6	39	71	14	125	<b>51</b>	<b>11</b>	bcde	90	13	60	81	31	166	74	78	307	<b>111</b>	<b>9</b>	bc
	34	3	8	14	5	22	<b>10</b>	<b>10</b>		25	4	14	20	6	21	16	14	39	<b>19</b>	<b>7</b>	
9 AC87084-3	105	14	22	74	2	184	<b>59</b>	<b>7</b>	bcde	167	63	100	46	32	241	170	83	171	<b>126</b>	<b>5</b>	bc
	12	5	6	18	1	36	<b>13</b>	<b>6</b>		41	14	31	11	21	38	32	14	39	<b>28</b>	<b>2</b>	
10 AC87138-4	86	1	21	18	2	111	<b>31</b>	<b>14</b>	de	164	17	83	49	7	150	123	60	227	<b>108</b>	<b>10</b>	bc
	15	1	4	3	1	19	<b>6</b>	<b>14</b>		30	4	16	10	2	18	22	10	27	<b>17</b>	<b>11</b>	
11 AO87277-6	196	9	53	44	18	182	<b>61</b>	<b>6</b>	bcde	70	-	71	116	0	181	197	70	216	<b>115</b>	<b>7</b>	bc
	33	3	13	8	7	27	<b>12</b>	<b>8</b>		13	-	14	23	0	22	34	12	27	<b>18</b>	<b>10</b>	
12 CO89036-10	248	5	12	35	8	55	<b>23</b>	<b>16</b>	e	156	25	73	57	85	163	106	85	247	<b>122</b>	<b>6</b>	bc
	32	2	3	7	3	13	<b>5</b>	<b>15</b>		35	6	14	12	17	21	20	14	35	<b>21</b>	<b>6</b>	
13 NDD840-1	38	-	-	-	-	-	-	-		16	43	42	34	7	138	18	-	249	<b>72</b>	<b>13</b>	c
	19	-	-	-	-	-	-	-		5	11	11	10	2	27	6	-	38	<b>14</b>	<b>13</b>	
14 PORTGNP3-138	-	0	25	17	12	117	<b>34</b>	<b>13</b>	cde	-	-	-	-	-	-	-	-	-	-	-	-
	-	0	5	3	4	19	<b>6</b>	<b>13</b>		-	-	-	-	-	-	-	-	-	-	-	-
15 PORTGS124-1	-	26	270	120	12	288	<b>143</b>	<b>1</b>	a	-	-	-	-	-	-	-	-	-	-	-	-
	-	11	51	24	6	45	<b>27</b>	<b>1</b>		-	-	-	-	-	-	-	-	-	-	-	-
16 PORTGS129-1	-	9	123	61	10	182	<b>77</b>	<b>4</b>	bcd	-	-	-	-	-	-	-	-	-	-	-	-
	-	3	22	12	5	28	<b>14</b>	<b>5</b>		-	-	-	-	-	-	-	-	-	-	-	-
17 TXNS102	-	3	26	5	6	96	<b>27</b>	<b>15</b>	de	204	109	20	32	15	114	184	46	126	<b>93</b>	<b>12</b>	bc
	-	2	5	1	2	15	<b>5</b>	<b>16</b>		34	27	6	9	3	17	35	8	16	<b>16</b>	<b>12</b>	
18 TXNS296	-	15	45	47	4	131	<b>48</b>	<b>12</b>	cde	159	159	42	38	13	90	259	99	204	<b>113</b>	<b>8</b>	bc
	-	6	8	8	1	20	<b>9</b>	<b>12</b>		29	36	11	10	3	13	43	16	25	<b>19</b>	<b>9</b>	
<b>Location Means</b>	181	11	63	54	12	154	<b>59</b>			145	63	88	71	28	186	143	93	229	<b>122</b>		
	28	5	13	11	4	26	<b>12</b>			30	15	19	16	7	26	27	17	31	<b>22</b>		

Numbers followed by the same letter are not significantly different at the 5% level using Duncan's multiple range test.

<sup>1</sup>Excluded from means due to missing entries.

<sup>2</sup>FRM graded by size: > 3".

TABLE 6: 1999 Western Regional Potato Variety Trial - YIELD &lt; 4 OZ (CWT/A &amp; %) - EARLY AND LATE HARVEST

No. Clone	Yield < 4 OZ - Early Harvest (CWT/A)									Yield < 4 OZ - Late Harvest (CWT/A)											
	CA	NM	OR		TX	WA	Entry			CA	CO	ID		NM	OR			WA	Entry		
	KRN <sup>1</sup>	CLV <sup>2</sup>	HRM	MAL	SPR	OTH	Mean	Rank		TUL	SLV <sup>1</sup>	AB	KIM	FRM <sup>3</sup>	HRM	KLM	MAL	OTH	Mean	Rank	
1 R. BURBANK	32	58	116	109	66	86	<b>87</b>	<b>5</b>	abc	46	202	89	102	66	109	66	87	80	<b>81</b>	<b>3</b>	a
	5	26	27	21	27	15	<b>23</b>	<b>15</b>		9	43	21	22	15	14	12	16	10	<b>15</b>	<b>4</b>	
2 RANGER R.	16	61	50	49	39	39	<b>48</b>	<b>15</b>	ef	27	69	42	34	61	56	24	63	57	<b>45</b>	<b>11</b>	cde
	2	20	12	10	11	7	<b>12</b>	<b>17</b>		5	17	8	7	11	7	4	12	7	<b>8</b>	<b>13</b>	
3 R. NORKOTAH	21	68	68	89	82	45	<b>70</b>	<b>8</b>	bcde	24	65	77	71	75	81	20	60	66	<b>59</b>	<b>8</b>	bc
	3	33	16	18	32	7	<b>21</b>	<b>7</b>		6	18	25	25	22	15	4	13	9	<b>15</b>	<b>3</b>	
4 SHEPODY	12	69	43	48	52	43	<b>51</b>	<b>13</b>	ef	-	58	-	-	-	-	-	-	-	-	-	
	2	26	9	10	28	7	<b>16</b>	<b>12</b>		-	14	-	-	-	-	-	-	-	-	-	
5 A88338-1	10	50	19	47	45	29	<b>38</b>	<b>17</b>	f	13	89	15	27	39	38	15	24	18	<b>24</b>	<b>14</b>	f
	2	20	5	10	22	5	<b>12</b>	<b>16</b>		2	24	3	6	7	5	3	4	2	<b>4</b>	<b>14</b>	
6 A8893-1	14	66	62	65	97	69	<b>72</b>	<b>7</b>	bcde	15	-	55	66	64	88	23	60	47	<b>52</b>	<b>10</b>	cd
	2	25	13	12	31	11	<b>18</b>	<b>9</b>		4	-	11	12	12	13	4	10	6	<b>9</b>	<b>10</b>	
7 A9014-2	-	53	58	40	70	30	<b>50</b>	<b>14</b>	ef	17	-	31	47	46	60	43	28	50	<b>40</b>	<b>12</b>	de
	-	21	15	8	22	6	<b>14</b>	<b>15</b>		4	-	6	11	12	10	10	5	7	<b>8</b>	<b>12</b>	
8 AC87079-3	27	44	93	46	76	68	<b>65</b>	<b>9</b>	bcdef	26	116	66	68	68	102	51	62	46	<b>61</b>	<b>7</b>	bc
	4	20	19	9	28	12	<b>18</b>	<b>10</b>		7	33	16	17	14	13	11	11	6	<b>12</b>	<b>8</b>	
9 AC87084-3	42	98	45	47	74	32	<b>59</b>	<b>11</b>	cdef	12	70	29	61	21	47	20	57	30	<b>34</b>	<b>13</b>	ef
	5	39	13	11	38	6	<b>21</b>	<b>6</b>		3	16	9	15	14	8	4	9	7	<b>9</b>	<b>11</b>	
10 AC87138-4	61	68	109	130	111	107	<b>105</b>	<b>1</b>	a	37	182	91	103	85	124	53	112	62	<b>83</b>	<b>2</b>	a
	10	27	21	23	52	18	<b>28</b>	<b>2</b>		7	42	18	20	21	15	10	19	7	<b>15</b>	<b>5</b>	
11 AO87277-6	17	95	57	50	47	57	<b>61</b>	<b>10</b>	bcdef	49	-	48	45	66	90	24	56	44	<b>53</b>	<b>9</b>	cd
	3	30	14	9	18	9	<b>16</b>	<b>13</b>		9	-	10	9	17	11	4	10	5	<b>9</b>	<b>9</b>	
12 CO89036-10	28	90	117	91	132	84	<b>103</b>	<b>2</b>	a	23	107	105	87	62	127	49	85	45	<b>73</b>	<b>4</b>	ab
	4	35	34	17	44	20	<b>30</b>	<b>1</b>		5	27	20	19	12	17	9	14	6	<b>13</b>	<b>7</b>	
13 NDD840-1	21	-	-	-	-	-	-	-		44	153	69	65	47	77	74	-	54	<b>61</b>	<b>6</b>	bc
	10	-	-	-	-	-	-	-		14	39	19	19	12	15	26	-	8	<b>16</b>	<b>2</b>	
14 PORTGNP3-138	-	59	73	150	101	66	<b>90</b>	<b>4</b>	ab	-	-	-	-	-	-	-	-	-	-	-	
	-	30	15	28	38	11	<b>24</b>	<b>3</b>		-	-	-	-	-	-	-	-	-	-	-	
15 PORTGS124-1	-	51	19	42	68	32	<b>42</b>	<b>16</b>	ef	-	-	-	-	-	-	-	-	-	-	-	
	-	23	4	8	34	5	<b>15</b>	<b>14</b>		-	-	-	-	-	-	-	-	-	-	-	
16 PORTGS129-1	-	65	55	64	56	46	<b>57</b>	<b>12</b>	def	-	-	-	-	-	-	-	-	-	-	-	
	-	26	10	12	29	7	<b>17</b>	<b>11</b>		-	-	-	-	-	-	-	-	-	-	-	
17 TXNS102	-	34	82	142	97	97	<b>90</b>	<b>3</b>	ab	29	74	93	107	121	112	28	104	98	<b>87</b>	<b>1</b>	a
	-	23	15	25	35	16	<b>23</b>	<b>5</b>		5	18	26	30	27	16	5	18	12	<b>17</b>	<b>1</b>	
18 TXNS296	-	72	81	95	97	76	<b>84</b>	<b>6</b>	abcd	28	57	73	68	100	119	18	88	83	<b>72</b>	<b>5</b>	ab
	-	29	14	17	30	12	<b>20</b>	<b>8</b>		5	13	19	17	25	18	3	14	10	<b>14</b>	<b>6</b>	
<b>Location Means</b>	25	65	67	77	77	59	<b>69</b>			28	104	63	68	66	88	36	68	56	<b>59</b>		
	4	27	15	15	30	10	<b>19</b>			6	25	15	16	16	13	8	12	7	<b>12</b>		

Numbers followed by the same letter are not significantly different at the 5% level using Duncan's multiple range test.

<sup>1</sup>Excluded from means due to missing entries.

<sup>2</sup>CLV: < 6 oz shown. <sup>3</sup>FRM graded by size: <1 7/8".



TABLE 7: 1999 Western Regional Potato Variety Trial - SPECIFIC GRAVITY - EARLY AND LATE HARVEST

No. Clone	Specific Gravity - Early Harvest (CWT/A)						Specific Gravity - Late Harvest (CWT/A)													
	CA KRN <sup>1</sup>	OR HRM MAL	TX SPR	WA OTH	Entry Mean/Rank		CA TUL	CO SLV <sup>1</sup>	ID AB KIM	NM FRM	OR HRM KLM MAL	WA OTH	Entry Mean/Rank							
1 R. BURBANK	1.087	1.076	1.077	1.061	1.075	<b>1.072</b>	<b>6</b>	abc	1.082	1.085	1.080	1.083	1.088	1.078	1.084	1.080	1.087	<b>1.083</b>	<b>8</b>	cde
2 RANGER R.	1.083	1.068	1.088	1.067	1.071	<b>1.074</b>	<b>3</b>	a	1.078	1.094	1.089	1.091	1.089	1.078	1.078	1.104	1.093	<b>1.087</b>	<b>3</b>	ab
3 R. NORKOTAH	1.075	1.069	1.074	1.056	1.073	<b>1.068</b>	<b>14</b>	abcd	1.072	1.082	1.074	1.072	1.089	1.067	1.068	1.075	1.070	<b>1.073</b>	<b>14</b>	f
4 SHEPODY	1.080	1.068	1.078	1.070	1.065	<b>1.070</b>	<b>10</b>	abcd	-	1.091	-	-	-	-	-	-	-	-	-	-
5 A88338-1	1.085	1.071	1.071	1.051	1.068	<b>1.065</b>	<b>17</b>	d	1.082	1.086	1.087	1.089	1.083	1.078	1.078	1.088	1.088	<b>1.084</b>	<b>7</b>	bcd
6 A8893-1	1.083	1.071	1.077	1.063	1.073	<b>1.071</b>	<b>9</b>	abcd	1.070	-	1.086	1.085	1.085	1.077	1.078	1.080	1.079	<b>1.080</b>	<b>10</b>	de
7 A9014-2	-	1.073	1.079	1.065	1.076	<b>1.073</b>	<b>4</b>	abc	1.077	-	1.088	1.092	1.094	1.075	1.077	1.089	1.087	<b>1.085</b>	<b>6</b>	abc
8 AC87079-3	1.089	1.073	1.090	1.058	1.078	<b>1.075</b>	<b>1</b>	a	1.070	1.098	1.089	1.094	1.093	1.079	1.079	1.098	1.090	<b>1.087</b>	<b>4</b>	ab
9 AC87084-3	1.089	1.072	1.081	1.057	1.076	<b>1.071</b>	<b>8</b>	abcd	1.078	1.101	1.094	1.094	1.090	1.077	1.083	1.101	1.090	<b>1.088</b>	<b>2</b>	a
10 AC87138-4	1.080	1.071	1.083	1.060	1.077	<b>1.073</b>	<b>5</b>	abc	1.079	1.094	1.089	1.094	1.087	1.078	1.077	1.098	1.087	<b>1.086</b>	<b>5</b>	abc
11 AO87277-6	1.087	1.075	1.089	1.056	1.078	<b>1.074</b>	<b>2</b>	a	1.085	-	1.090	1.090	1.093	1.078	1.084	1.100	1.089	<b>1.089</b>	<b>1</b>	a
12 CO89036-10	1.076	1.065	1.080	1.053	1.068	<b>1.067</b>	<b>15</b>	bcd	1.073	1.090	1.083	1.088	1.082	1.073	1.072	1.091	1.082	<b>1.080</b>	<b>9</b>	de
13 NDD840-1	-	-	-	-	-	-	-	-	1.070	1.085	1.084	1.086	1.086	1.074	1.073	-	1.083	<b>1.079</b>	<b>11</b>	e
14 PORTGNP3-138	-	1.064	1.073	1.055	1.073	<b>1.066</b>	<b>16</b>	cd	-	-	-	-	-	-	-	-	-	-	-	-
15 PORTGS124-1	-	1.066	1.082	1.065	1.066	<b>1.070</b>	<b>11</b>	abcd	-	-	-	-	-	-	-	-	-	-	-	-
16 PORTGS129-1	-	1.070	1.086	1.060	1.072	<b>1.072</b>	<b>7</b>	abc	-	-	-	-	-	-	-	-	-	-	-	-
17 TXNS102	-	1.069	1.077	1.058	1.074	<b>1.069</b>	<b>12</b>	abcd	1.067	1.093	1.074	1.074	1.091	1.068	1.070	1.080	1.073	<b>1.075</b>	<b>12</b>	f
18 TXNS296	-	1.068	1.076	1.059	1.072	<b>1.069</b>	<b>13</b>	abcd	1.071	1.085	1.077	1.073	1.088	1.065	1.069	1.076	1.072	<b>1.074</b>	<b>13</b>	f
<b>Location Means</b>	1.083	1.070	1.080	1.060	1.073	<b>1.071</b>			1.075	1.090	1.085	1.086	1.088	1.075	1.076	1.089	1.084	<b>1.082</b>		

Numbers followed by the same letter are not significantly different at the 5% level using Duncan's multiple range test.

<sup>1</sup>Excluded from means due to missing entries.

TABLE 8: 1999 Western Regional Potato Variety Trial - AVERAGE TUBER SIZE, AND TUBER SHAPE

No. Clone	<b>Average Tuber Size (oz)</b>										<b>Tuber Shape (1-5 length/width ratio: 1=round, 5=long)</b>																
	Early Trial					Late Trial					Early Trial						Late Trial										
	OR	TX	WA	Mean		ID	OR	WA	Mean		CA	OR	TX	WA	Mean	CA	CO	ID	OR	WA	Mean						
	HRM	SPR	OTH		AB	KIM	HRM	OTH		KRN	HRM	MAL	SPR	OTH		TUL	SLV	AB	KIM	HRM	KLM	MAL	OTH	Mean			
1 R. BURBANK	4.8	3.0	6.0	<b>4.6</b>		5.4	4.9	7.0	7.1	<b>6.1</b>		4.0	5.0	5.0	5.0	4.0	<b>4.6</b>		4.0	5.0	4.0	4.0	5.0	5.0	5.0	3.7	<b>4.5</b>
2 RANGER R.	6.1	5.7	7.9	<b>6.6</b>		7.2	8.0	9.5	7.8	<b>8.1</b>		4.8	5.0	4.5	5.0	4.0	<b>4.7</b>		4.8	5.0	4.5	4.8	5.0	5.0	3.8	3.8	<b>4.6</b>
3 R. NORKOTAH	6.0	3.7	8.2	<b>6.0</b>		4.8	4.3	6.1	7.7	<b>5.7</b>		4.0	4.5	3.8	4.0	4.0	<b>4.1</b>		4.0	5.0	4.0	4.3	5.0	5.0	3.3	3.0	<b>4.2</b>
4 SHEPODY	7.7	3.9	9.0	<b>6.9</b>		-	-	-	-	-		4.3	3.5	3.0	4.0	4.0	<b>3.8</b>		-	5.0	-	-	-	-	-	-	-
5 A88338-1	8.3	4.7	9.3	<b>7.4</b>		10.5	8.4	10.1	12.5	<b>10.4</b>		3.8	3.0	3.5	4.3	4.0	<b>3.7</b>		3.5	4.0	3.5	3.8	3.5	3.0	3.8	3.0	<b>3.5</b>
6 A8893-1	6.2	3.7	6.9	<b>5.6</b>		6.6	6.6	6.1	8.9	<b>7.0</b>		3.0	2.7	3.5	3.9	3.0	<b>3.2</b>		3.8	-	3.8	3.8	4.0	3.0	3.5	2.8	<b>3.5</b>
7 A9014-2	5.9	5.0	9.2	<b>6.7</b>		8.4	6.1	7.3	4.9	<b>6.7</b>		-	3.0	4.0	3.8	4.0	<b>3.7</b>		4.3	-	4.0	3.8	3.5	4.0	3.5	3.2	<b>3.8</b>
8 AC87079-3	5.3	3.2	7.0	<b>5.2</b>		5.7	5.6	6.0	8.7	<b>6.5</b>		3.0	3.0	4.0	4.1	3.0	<b>3.4</b>		4.0	4.0	4.0	4.0	3.0	3.0	3.3	2.6	<b>3.5</b>
9 AC87084-3	5.8	3.4	8.3	<b>5.8</b>		5.8	5.4	8.6	5.2	<b>6.3</b>		2.7	2.5	2.0	2.9	3.0	<b>2.6</b>		3.5	4.0	3.0	3.0	2.5	3.0	3.3	3.0	<b>3.2</b>
10 AC87138-4	5.1	2.6	5.8	<b>4.5</b>		5.6	5.0	6.4	8.0	<b>6.2</b>		3.5	4.0	3.0	3.4	4.0	<b>3.6</b>		4.0	5.0	3.8	3.8	4.5	4.5	3.5	3.5	<b>4.1</b>
11 AO87277-6	6.2	4.8	7.7	<b>6.2</b>		6.7	6.9	7.4	8.2	<b>7.3</b>		4.3	3.5	3.0	4.3	3.5	<b>3.7</b>		4.0	-	4.8	4.0	3.5	4.0	3.0	3.5	<b>3.8</b>
12 CO89036-10	5.3	3.0	5.5	<b>4.6</b>		5.1	5.2	6.1	8.4	<b>6.2</b>		3.8	3.0	2.3	3.5	3.3	<b>3.2</b>		4.3	4.0	3.0	3.3	2.5	3.0	2.3	3.2	<b>3.2</b>
13 NDD840-1	-	-	-	-		5.1	5.1	6.6	8.5	<b>6.3</b>		3.7	-	-	-	-	-		3.5	4.0	2.3	3.5	-	4.0	-	3.0	<b>3.4</b>
14 PORTGNP3-138	5.6	3.4	6.8	<b>5.3</b>		-	-	-	-	-		-	4.0	3.5	3.5	4.0	<b>3.8</b>		-	-	-	-	-	-	-	-	-
15 PORTGS124-1	10.5	4.1	10.1	<b>8.2</b>		-	-	-	-	-		-	4.0	3.7	3.5	3.5	<b>3.7</b>		-	-	-	-	-	-	-	-	-
16 PORTGS129-1	7.6	3.3	8.3	<b>6.4</b>		-	-	-	-	-		-	3.5	3.0	4.0	4.0	<b>3.6</b>		-	-	-	-	-	-	-	-	-
17 TXNS102	6.0	3.7	6.0	<b>5.2</b>		4.7	4.2	6.1	6.6	<b>5.4</b>		-	4.5	3.8	4.0	4.0	<b>4.1</b>		4.3	5.0	4.0	4.8	5.0	4.5	3.5	3.3	<b>4.3</b>
18 TXNS296	6.1	3.4	6.7	<b>5.4</b>		5.5	5.3	6.1	7.4	<b>6.1</b>		-	4.5	4.5	4.5	3.5	<b>4.3</b>		4.0	5.0	4.3	4.8	5.0	4.5	4.0	3.0	<b>4.3</b>
<b>Location Means</b>	<b>6.4</b>	<b>3.8</b>	<b>7.6</b>	<b>5.9</b>		<b>6.2</b>	<b>5.8</b>	<b>7.1</b>	<b>7.9</b>	<b>6.7</b>		<b>3.7</b>	<b>3.7</b>	<b>3.5</b>	<b>4.0</b>	<b>3.7</b>	<b>3.7</b>		<b>4.0</b>	<b>4.6</b>	<b>3.8</b>	<b>4.0</b>	<b>4.0</b>	<b>4.0</b>	<b>3.5</b>	<b>3.2</b>	<b>3.8</b>

TABLE 9: 1999 Western Regional Potato Variety Trial - EXTERNAL DEFECTS MEANS OF LOCATIONS - GROWTH CRACKS, SECOND GROWTH, SHATTER BRUISE, AND SCAB<sup>1</sup>

No. Clone	Growth Cracks		Second Growth		Shatter Bruise			Scab	
	Early Trial	Late Trial	Early Trial	Late Trial	Early Trial	Late Trial	AB <sup>2</sup>	Early Trial	Late Trial
1 R. BURBANK	4.2	3.8	4.4	3.7	5.0	4.5	3.2	5.0	5.0
2 RANGER R.	4.4	4.5	4.8	4.7	5.0	4.5	2.9	4.4	4.4 MAL 2.0
3 R. NORKOTAH	4.5 SPR 3.0	5.0	5.0	4.9	5.0	4.6	2.5	4.9	4.6
4 SHEPODY	4.8	-	4.4	-	5.0	-	-	3.7 MAL 1.5	-
5 A88338-1	4.7	4.2 SLV 2.0	4.9	4.6	5.0	4.3	2.5	4.9	4.9
6 A8893-1	4.7	4.6	4.8	4.9	4.8	3.8	3.0	4.9	4.8
7 A9014-2	4.7	4.9	4.8	4.9	4.8	3.2	3.0	5.0	4.8
8 AC87079-3	4.5	4.6	4.9	4.9	4.7	3.9	3.0	5.0	4.9
9 AC87084-3	4.2	4.2 SLV 2.0	4.8	5.0	4.3 HRM 2.3	3.5 HRM 2.0	3.3	5.0	4.4 MAL 1.3
10 AC87138-4	4.5	4.4 SLV 3.0	5.0	4.9	4.9	4.8	2.4	4.4	4.2
11 AO87277-6	4.5	4.9	5.0	5.0	4.9	3.5	3.4	4.6	4.5 MAL 2.3
12 CO89036-10	4.7	4.6	4.9	5.0	4.8	3.4 MAL 1.5 HRM 2.0	2.9	4.3 MAL 2.0	4.0 MAL 1.0
13 NDD840-1	-	4.7	-	4.6 SLV 3.0	-	3.9	3.2	-	5.0
14 PORTGNP3-138	4.8	-	4.9	-	4.9	-	-	4.7	-
15 PORTGS124-1	4.6	-	4.5	-	5.0	-	-	3.9 MAL 1.6	-
16 PORTGS129-1	4.9	-	4.1	-	5.0	-	-	3.8 MAL 1.3	-
17 TXNS102	4.6 SPR 3.5	4.8	3.4 OTH 2.5	4.8	5.0	4.8	2.5	4.8	4.6 MAL 2.5
18 TXNS296	5.0	4.8	5.0	4.7	5.0	4.6	2.5	4.8	4.7
<b>Entry Means</b>	4.6	4.6	4.7	4.7	4.9	4.1	2.9	4.6	4.6

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

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

TABLE 10: 1999 Western Regional Potato Variety Trial - INTERNAL DEFECTS MEANS OF LOCATIONS - HOLLOW HEART/BROWN CENTER, INTERNAL BROWN SPOT, VASCULAR DISCOLORATION/NET NECROSIS, AND BLACKSPOT<sup>1</sup>

No. Clone	Percent Hollow Heart Plus Brown Center		Percent Internal Brown Spot		Percent Net Necrosis/ Vascular Discoloration		Blackspot Bruise [1-5(none)]		ID <sup>1</sup>
	Early Trial	Late Trial	Early Trial	Late Trial	Early Trial	Late Trial	Early Trial	Late Trial	
1 R. BURBANK	12 <sub>OTH 34</sub>	7 <sub>OTH 20</sub>	4	1	1	3	4.5	4.2 <sub>SLV 2.6</sub>	2.8
2 RANGER R.	0	3 <sub>TUL 17</sub>	2	1	9 <sub>HRM 26</sub>	2	4.3	4.4	1.5
3 R. NORKOTAH	0	4	0	0	4	2	5.0	4.9	2.7
4 SHEPODY	5	-	2	-	10	-	5.0	-	-
5 A88338-1	1	12 <sub>AB 31 KLM 35</sub>	6 <sub>KRN 25</sub>	1	3	6 <sub>TUL 25</sub>	5.0	4.7	3.4
6 A8893-1	2	14 <sub>TUL 25 KLM 30</sub>	6 <sub>KRN 25</sub>	0	3	0	5.0	4.7	2.9
7 A9014-2	5	6 <sub>TUL 25</sub>	0	1	4	0	4.6	4.1	3.7
8 AC87079-3	8 <sub>OTH 22</sub>	20 <sub>AB 53 KLM 48</sub>	3	5 <sub>HRM 25</sub>	5	1	4.4 <sub>OTH 3.8</sub>	4.5	2.4
9 AC87084-3	5	22 <sub>TUL 67 AB, KLM 30</sub>	4	4 <sub>HRM 16</sub>	4	0	4.8	3.0 <sub>SLV 2.1 OTH 1.9</sub>	1.2
10 AC87138-4	4	21 <sub>AB 58 KLM 58</sub>	4	0	5	4 <sub>TUL 17</sub>	5.0	3.4 <sub>SLV 2.6</sub>	1.2
11 AO87277-6	1	1	4	0	3	1	4.8	4.7	2.5
12 CO89036-10	1	2	4	1	0	1	4.9	4.2	3.9
13 NDD840-1	-	9 <sub>TUL 33</sub>	-	1	-	2	-	3.8	2.0
14 PORTGNP3-138	0	-	0	-	1	-	4.9	-	-
15 PORTGS124-1	8	-	1	-	13 <sub>HRM 20</sub>	-	4.5	-	-
16 PORTGS129-1	3	-	1	-	22 <sub>HRM 36</sub>	-	4.5	-	-
17 TXNS102	1	5	1	0	1	2	5.0	4.8	2.6
18 TXNS296	1	5	0	1	1	1	5.0	5.0	2.6
<b>Entry Means</b>	3	9	3	1	5	2	4.8	4.3	2.5

<sup>1</sup>Individual trial sites with extreme values are listed to the right of the entry means.

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

TABLE 11: 1999 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	OR	OR	Entry Mean	CO	ID		OR			Entry Mean	ID		Entry Mean	ID		OR		Entry Mean
	SLV	HRM	MAL		SLV	AB	KIM	HRM	KL	M		MAL	AB		KIM	AB	KIM	HRM	
	L	E	E	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	
1 R. BURBANK	2.0	0.5	0.5	<b>1.0</b>	2.0	1.1	0.8	0.9	1.0	1.0	<b>1.1</b>	3.7	3.5	<b>3.6</b>	13	21	0	3	<b>9</b>
2 RANGER R.	2.0	0.1	0.0	<b>0.7</b>	2.0	1.2	1.0	0.5	1.5	0.0	<b>1.0</b>	3.6	3.3	<b>3.5</b>	13	21	0	0	<b>9</b>
3 R. NORKOTAH	1.0	0.2	0.5	<b>0.6</b>	2.0	1.8	1.8	1.1	1.0	1.0	<b>1.5</b>	3.9	4.0	<b>4.0</b>	25	29	0	0	<b>14</b>
4 SHEPODY	2.0	0.1	0.0	<b>0.7</b>	3.0	-	-	-	-	-	-	-	-	-	-	-	0	-	-
5 A88338-1	2.0	0.0	0.1	<b>0.7</b>	3.0	0.8	0.9	0.6	1.0	0.1	<b>1.1</b>	3.5	3.9	<b>3.7</b>	21	17	0	0	<b>10</b>
6 A8893-1	-	0.0	0.0	<b>0.0</b>	-	0.6	1.0	0.1	1.0	0.0	<b>0.5</b>	3.4	3.4	<b>3.4</b>	13	9	0	0	<b>6</b>
7 A9014-2	-	0.0	0.0	<b>0.0</b>	-	0.4	0.2	0.1	0.0	0.0	<b>0.1</b>	2.0	2.2	<b>2.1</b>	9	0	0	0	<b>2</b>
8 AC87079-3	2.0	0.1	0.1	<b>0.7</b>	2.0	1.5	1.4	0.3	2.0	0.1	<b>1.2</b>	4.0	3.8	<b>3.9</b>	42	38	0	0	<b>20</b>
9 AC87084-3	2.0	0.3	1.5	<b>1.3</b>	3.0	1.9	1.1	1.1	1.5	0.0	<b>1.4</b>	3.3	3.5	<b>3.4</b>	17	9	0	3	<b>7</b>
10 AC87138-4	2.0	0.2	0.5	<b>0.9</b>	2.0	0.5	0.4	0.6	0.0	0.1	<b>0.6</b>	3.6	3.4	<b>3.5</b>	58	29	0	0	<b>22</b>
11 AO87277-6	-	0.0	0.1	<b>0.1</b>	-	0.7	0.6	0.5	0.5	0.0	<b>0.5</b>	3.2	3.3	<b>3.3</b>	37	17	0	0	<b>14</b>
12 CO89036-10	3.0	0.0	1.5	<b>1.5</b>	4.0	2.3	1.9	1.5	3.0	0.5	<b>2.2</b>	4.0	4.0	<b>4.0</b>	58	46	0	8	<b>28</b>
13 NDD840-1	3.0	-	-	-	4.0	2.2	1.6	1.2	2.5	-	<b>2.3</b>	3.9	4.0	<b>4.0</b>	33	42	-	10	<b>28</b>
14 PORTGNP3-138	-	0.4	0.5	<b>0.5</b>	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-
15 PORTGS124-1	-	0.0	0.0	<b>0.0</b>	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-
16 PORTGS129-1	-	0.1	0.0	<b>0.0</b>	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-
17 TXNS102	2.0	0.2	0.5	<b>0.9</b>	3.0	1.9	1.8	1.2	1.5	0.5	<b>1.7</b>	3.9	4.0	<b>4.0</b>	63	25	0	3	<b>23</b>
18 TXNS296	3.0	0.5	1.5	<b>1.7</b>	2.0	2.3	1.6	0.8	1.0	0.5	<b>1.4</b>	3.8	4.0	<b>3.9</b>	58	25	0	3	<b>21</b>
<b>Location Means</b>	<b>2.2</b>	<b>0.2</b>	<b>0.4</b>	<b>0.9</b>	<b>2.7</b>	<b>1.4</b>	<b>1.2</b>	<b>0.8</b>	<b>1.3</b>	<b>0.3</b>	<b>1.2</b>	<b>3.6</b>	<b>3.6</b>	<b>3.6</b>	<b>33</b>	<b>23</b>	<b>0</b>	<b>2</b>	<b>15</b>

TABLE 12: 1999 Western Regional Potato Variety Trial - DISEASE EVALUATION AND METRIBUZIN REACTION

No. Clone	Vert. Wilt/Early Dying		Early Blight <sup>1</sup> (0-9)	Common Scab <sup>1</sup> (0-5)	Late Blight <sup>3</sup>		Severe Leafroll		% Severe Tuber Early Blight <sup>1</sup>	Fusarium Dry Rot <sup>1</sup> (0-5)	Erwinia Soft Rot <sup>1</sup> (0-5)	Metribuzin Reaction <sup>4</sup> AB
	AB <sup>1</sup> (0-9)	HRM <sup>2</sup> (1-9)			Foliar (1-9)	Tuber % by Wt.	Net Necrosis AB <sup>1</sup> (%)	HRM <sup>2</sup> (1-5)				
1 R. BURBANK	5.7	5.4	7.3	2	4.2	7.5	8	3.3	0	4.3	3.7	MS
2 RANGER R.	3.3	2.9	6.3	3	3.2	2.5	40	3.4	20	2.7	2.1	-
3 R. NORKOTAH	8.7	8.8	8.7	1	7.5	2.5	4	2.1	0	1.8	3.8	MR
4 SHEPODY	5.8	4.1	7.7	3	7.0	2.5	35	3.3	8	2.9	3.1	VS
5 A88338-1	1.5	3.4	3.8	0	2.2	5.0	37	2.5	20	3.6	0.9	MR
6 A8893-1	7.0	4.1	7.7	0	7.7	10.0	5	3.1	8	3.5	3.9	R
7 A9014-2	2.7	5.4	7.3	1	5.0	0.0	0	3.3	2	4.1	0.6	MS
8 AC87079-3	4.5	4.7	7.2	1	-	-	-	2.3	-	-	3.5	MR
9 AC87084-3	1.8	5.4	5.3	0	-	-	6	2.5	34	4.1	2.1	VS
10 AC87138-4	2.7	6.1	6.5	3	-	-	-	3.1	-	-	1.4	R
11 AO87277-6	4.0	5.9	6.7	2	4.5	2.5	8	2.8	0	4.3	3.5	R
12 CO89036-10	3.7	3.6	6.2	1	-	-	-	2.0	-	-	3.7	R
13 NDD840-1	2.3	4.5	5.5	2	-	-	36	3.5	13	4.1	2.1	R
14 PORTGNP3-138	-	8.6	-	-	8.2	2.5	-	3.3	-	-	-	-
15 PORTGS124-1	-	3.4	-	-	6.7	7.5	-	3.6	-	-	-	-
16 PORTGS129-1	7.0	4.3	8.2	4	6.7	10.0	-	3.1	-	-	3.2	-
17 TXNS102	8.2	7.7	8.3	1	-	-	-	-	-	-	4.4	-
18 TXNS296	6.8	7.7	8.0	2	-	-	-	-	-	-	4.1	-
<b>Entry Means</b>	4.7	5.3	6.9	2	5.7	4.8	18	3.0	11	3.5	2.9	-
<b>LSD (.05)</b>	<b>1.7</b>		<b>1.2</b>	<b>1.2</b>							<b>1.6</b>	

<sup>1</sup> Evaluations made at Aberdeen, Idaho by Dennis Corsini; scale as indicated with highest number being most severe.

<sup>2</sup> Evaluations made at Hermiston, Oregon by Dan Hane; scale as indicated with highest number being most severe.

<sup>3</sup> Evaluations made at Corvallis, Oregon by Al Mosley; scale as indicated with highest number being most severe.

<sup>4</sup> Evaluations made at Aberdeen, Idaho by Steve Love: R=resistant, MR=moderately resistant, MS=moderately susceptible, S=susceptible.

TABLE 13: 1999 Western Regional Potato Variety Trial - SOLIDS, DEXTROSE, SUCROSE, PROTEIN, VITAMIN C,  
AND GLYCOALKALOIDS - ABERDEEN

No. Clone	Solids Oven Dry (%)	Sugars		Protein (%DWB) <sup>1</sup>	Vitamin C (mg/100g FWB) <sup>1</sup>	Glycoalkaloids <sup>2</sup> (mg/100gFWB) <sup>1</sup>
		Dextrose (%FWB) <sup>1</sup>	Sucrose (%FWB) <sup>1</sup>			
1 RUSSET BURBANK	23.2	0.07	0.18	4.8	22.4	8.2
2 RANGER RUSSET	24.7	0.11	0.27	5.0	35.5	5.1
3 RUSSET NORKOTAH	21.4	0.18	0.16	4.6	23.5	3.7
5 A88338-1	24.3	0.10	0.23	5.8	23.1	7.6
6 A8893-1	24.5	0.11	0.27	6.0	25.8	6.1
7 A9014-2	25.0	0.04	0.46	6.2	30.4	1.6
8 AC87079-3	23.9	0.09	0.31	6.4	30.7	9.9
9 AC87084-3	25.0	0.10	0.30	5.1	33.3	9.4
10 AC87138-4	24.5	0.11	0.23	4.8	23.7	5.3
11 AO87277-6	25.2	0.05	0.21	5.5	32.0	9.7
12 CO89036-10	21.8	0.19	0.25	6.2	26.9	3.1
13 NDD840-1	23.8	0.18	0.24	5.6	26.6	5.9
17 TXNS102	21.2	0.16	0.16	5.2	23.3	3.8
18 TXNS296	21.7	0.19	0.20	5.2	26.5	3.5
<b>Entry Means</b>	23.6	0.12	0.25	5.5	27.4	5.9

<sup>1</sup> DWB = Dry Weight Basis; FWB = Fresh Weight Basis

<sup>2</sup> Glycoalkaloids: The 1999 Lenape check from Aberdeen was 28.8 mg/100g

TABLE 14: 1999 Western Regional Potato Variety Trial - MERIT SCORES [1-5(best)]

No. Clone	Process						Fresh										
	CO	ID		OR		Entry	CA		CO	ID		OR		TX	Entry		
	SLV	AB	KIM	HRM			KRN	TUL	SLV	AB	KIM	HRM		SPR			
L	L	L	E	L	Mean/Rank	E	L	L	L	L	E	L	E	Mean/Rank			
1 R. BURBANK	3.0	3.5	3.5	1.0	3.0	<b>2.8</b>	<b>6</b>	1.0	2.9	2.0	2.5	2.5	1.0	2.0	2.4	<b>2.0</b>	<b>15</b>
2 RANGER R.	5.0	4.0	4.0	2.0	4.0	<b>3.8</b>	<b>3</b>	2.0	3.9	4.0	3.5	2.5	2.0	3.0	3.3	<b>3.0</b>	<b>9</b>
3 R. NORKOTAH	4.0	2.0	1.0	2.0	1.0	<b>2.0</b>	<b>11</b>	3.5	3.0	3.0	3.3	3.3	4.0	3.0	3.2	<b>3.3</b>	<b>5</b>
4 SHEPODY	2.0	-	-	2.0	-	-	-	2.3	-	3.0	-	-	1.0	-	2.5	<b>2.2</b>	<b>13</b>
5 A88338-1	1.0	2.5	4.5	3.0	3.0	<b>2.8</b>	<b>6</b>	2.5	2.8	2.0	2.3	2.3	2.0	3.0	2.9	<b>2.5</b>	<b>12</b>
6 A8893-1	-	4.0	4.5	2.0	4.0	<b>3.6</b>	<b>4</b>	3.3	3.4	-	3.8	3.3	1.0	4.0	3.0	<b>3.1</b>	<b>7</b>
7 A9014-2	-	5.0	5.0	4.0	4.0	<b>4.5</b>	<b>1</b>	-	2.3	-	4.8	3.5	3.0	3.0	3.8	<b>3.4</b>	<b>4</b>
8 AC87079-3	2.0	2.5	3.0	3.0	1.0	<b>2.3</b>	<b>9</b>	2.8	2.9	1.0	3.8	3.3	3.0	1.0	3.0	<b>2.6</b>	<b>11</b>
9 AC87084-3	4.0	3.0	3.5	1.0	1.0	<b>2.5</b>	<b>8</b>	2.0	3.6	5.0	2.8	3.0	1.0	1.0	2.4	<b>2.6</b>	<b>10</b>
10 AC87138-4	3.0	2.0	4.0	4.0	4.0	<b>3.4</b>	<b>5</b>	3.0	2.5	2.0	3.5	2.8	4.0	4.0	2.5	<b>3.0</b>	<b>8</b>
11 AO87277-6	-	5.0	5.0	3.0	3.0	<b>4.0</b>	<b>2</b>	3.3	4.0	-	3.5	3.5	3.0	2.0	3.1	<b>3.2</b>	<b>6</b>
12 CO89036-10	1.0	3.0	2.5	1.0	1.0	<b>1.7</b>	<b>14</b>	2.0	2.3	2.0	2.8	3.3	1.0	1.0	2.9	<b>2.2</b>	<b>14</b>
13 NDD840-1	1.0	3.0	3.0	-	1.0	<b>2.0</b>	<b>11</b>	2.3	2.0	1.0	2.8	2.8	-	1.0	-	<b>2.0</b>	<b>16</b>
14 PORTGNP3-138	-	-	-	1.0	-	-	-	-	-	-	-	-	4.0	-	2.9	<b>3.5</b>	<b>3</b>
15 PORTGS124-1	-	-	-	2.0	-	-	-	-	-	-	-	-	1.0	-	2.8	<b>1.9</b>	<b>17</b>
16 PORTGS129-1	-	-	-	2.0	-	-	-	-	-	-	-	-	1.0	-	2.4	<b>1.7</b>	<b>18</b>
17 TXNS102	3.0	2.0	1.5	2.0	1.0	<b>1.9</b>	<b>13</b>	-	4.1	4.0	3.0	3.0	5.0	5.0	3.0	<b>3.9</b>	<b>1</b>
18 TXNS296	3.0	2.0	1.5	2.0	2.0	<b>2.1</b>	<b>10</b>	-	3.8	5.0	3.8	3.0	5.0	2.0	3.2	<b>3.7</b>	<b>2</b>
<b>Location Means</b>	2.7	3.1	3.3	2.2	2.4	<b>2.8</b>		2.5	3.1	2.8	3.3	3.0	2.5	2.5	2.9	<b>2.8</b>	



TABLE 15: 1999 Western Regional Potato Variety Trial - ENTRY SUMMARY<sup>1</sup>

No. Clone	Year in Trial	Use	Total Yield <sup>2</sup>	US#1's Yield <sup>2</sup>	% US#1's <sup>2</sup>	Tuber Size (oz)		Tuber Shape	Specific Gravity <sup>2</sup>	Fry 45 Color	Merit Score		Noted Problems	Disposition 2000
						Early	Late				Process	Fresh		
1 R. BURBANK	Ck	Dual	569	355	63	4.6	6.1	Long	1.083	1.1	2.8	2.0		Check
2 RANGER R.	Ck	Dual	595	464	78	6.6	8.1	Long	1.087	1.0	3.8	3.0		Check
3 R. NORKOTAH	Ck	Fresh	440	336	75	6.0	5.7	Long	1.073	1.5	2.0	3.3		Check
4 SHEPODY	Ck	Proc	402	255	-	6.9	-	Obl-Lng	-	-	-	2.2		Check
5 A88338-1	2	Dual	603	500	83	7.4	10.4	Obl-Lng	1.084	1.1	2.8	2.5	HH, Net Necrosis, EB-Tuber	Discard
6 A8893-1	1	Dual	572	452	79	5.6	7.0	Oblong	1.080	0.5	3.6	3.1	HH	Cont. E/L
7 A9014-2	1	Dual	490	412	84	6.7	6.7	Obl-Lng	1.085	0.1	4.5	3.4	Shattering(late)	Cont. E/L
8 AC87079-3	1	Fresh	534	415	78	5.2	6.5	Oblong	1.087	1.2	2.3	2.6	HH, Sugar Ends	Cont. E/L
9 AC87084-3	3	Dual	437	365	84	5.8	6.3	Rnd-Obl	1.088	1.4	2.5	2.6	HH, Blackspot, EB-Tuber	Graduate
10 AC87138-4	1	Dual	598	450	76	4.5	6.2	Obl-Lng	1.086	0.6	3.4	3.0	HH, Blackspot, Sugar Ends	Cont. E/L
11 AO87277-6	3	Dual	590	484	83	6.2	7.3	Obl-Lng	1.089	0.5	4.0	3.2		Graduate
12 CO89036-10	1	Dual	567	439	78	4.6	6.2	Oblong	1.080	2.2	1.7	2.2	Lower SG(early), Sugar Ends	Discard
13 NDD840-1	3	Dual	411	308	73	-	6.3	Oblong	1.079	2.3	2.0	2.0	Lower SG, Blackspot, Sugar Ends, Net Necrosis	Discard
14 PORTGNP3-138	1	Fresh	412	284	62	5.3	-	Obl-Lng	1.066	-	-	3.5		Cont. E
15 PORTGS124-1	1	Proc	424	316	67	8.2	-	Obl-Lng	1.070	-	-	1.9	Net Necrosis/VD	Cont. E
16 PORTGS129-1	1	Proc	435	272	56	6.4	-	Obl-Lng	1.072	-	-	1.7	Net Necrosis/VD, Scab	Cont. E
17 TXNS102	1	Fresh	546	404	74	5.2	5.4	Long	1.075	1.7	1.9	3.9	Smaller tuber size, Erwinia, 2nd Growth(early)	Cont. E/L
18 TXNS296	1	Fresh	553	406	74	5.4	6.1	Long	1.074	1.4	2.1	3.7	Erwinia	Cont. E/L
<b>Entry Means</b>			510	384	74	5.9	6.7		1.080	1.2	2.8	2.8		

<sup>1</sup> Numeric values represent means across all trial locations.

<sup>2</sup> Data shown from late trial results, unless the entry was in the early trial only.

TABLE 16: 1999 Western Regional Potato Variety Trial - 3 YEAR SUMMARY OF GRADUATING ENTRIES

Clone	1997						1998						1999					
	Total Yield <sup>1</sup> &(rank)	US #1 Yield <sup>1</sup> & %	SG	Fry 45	Merit Score Fresh	Proc	Total Yield <sup>1</sup> &(rank)	US #1 Yield <sup>1</sup> & %	SG	Fry 45	Merit Score Fresh	Proc	Total Yield <sup>1</sup> &(rank)	US #1 Yield <sup>1</sup> & %	SG	Fry 45	Merit Score Fresh	Proc
AC87084-3	505 (14/17)	443 77	1.089	2.1	3.1	3.5	409 (13/17)	344 83	1.083	2.2	3.4	2.6	437 (13/14)	365 84	1.088	1.4	2.6	2.5
AO87277-6	582 (7/17)	559 78	1.087	1.3	4.6	3.4	482 (5/17)	364 78	1.085	0.6	3.0	4.2	590 (4/14)	484 83	1.089	0.5	3.2	4.0
NDD840-1	547 (10/17)	480 83	1.077	2.5	1.8	3.1	384 (15/17)	289 77	1.078	1.9	2.4	2.5	411 (14/14)	308 73	1.079	2.3	2.0	2.0
R. BURBANK	538 (11/17)	437 64	1.082	1.6	2.7	3.2	482 (6/17)	265 56	1.077	1.6	1.9	2.1	569 (6/14)	355 63	1.083	1.1	2.0	2.8
<b>Trial Mean</b>	548	441 80	1.081	1.9	3.2	2.7	452	332 74	1.077	1.9	2.9	2.6	536	414 77	1.082	1.2	2.8	2.8

Clone	3 Year Average (1997-1999)						
	Total Yield <sup>1</sup>	US #1 Yield <sup>1</sup> & %	SG	FRY 45	Merit Score Fresh	Proc	
AC87084-3	450	384 81	1.087	1.9	3.0	2.9	
AO87277-6	551	469 81	1.087	0.8	3.6	3.9	
NDD840-1	447	359 78	1.078	2.2	2.1	2.5	
R. BURBANK	530	352 61	1.081	1.4	2.2	2.7	
<b>Trial Mean<sup>2</sup></b>	512	396 77	1.080	1.7	3.0	2.7	

<sup>1</sup> (CWT/A)<sup>2</sup> Mean of all trial entries 1997-1999