2022
WESTERN REGIONAL
POTATO VARIETY TRIAL REPORT

State Experiment Stations and
USDA-ARS Cooperating

California
Colorado
Idaho
Oregon
Texas
Washington

2022 WESTERN REGIONAL POTATO VARIETY TRIAL REPORT

TABLE

Western Regional Potato Variety Trial Reports (1998-2022) can be accessed at the following website.

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

Compiled by Brian Schneider

TABLE 1: 2022 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)**	R. Wilson D. Culp K. Nicholson	Late	Sprink.	150-50-200 Seed Spacing: In-Row 10" Rows 36"	18-May	3-Oct Mechanical/Chemical	112	138	Prowl H20 Outlook Matrix	Admire-Pro Vydate	Vellum Prime Quadris, Manzate Max Tranquility Maxim 4FS (seed)
2	San Luis Valley Colorado **(SLV)**	J. Chitwood-Brown D. Holm C. Gray B. Neibaum	Late	Pivot	160-60-40 Seed Spacing: In-Row 12" Rows 34"	12-May	22-Sep Mechanical	120	133	Prowl H20 Tuscany Clethodim 2E	Platinum 75 SG Leverage 360 Movento HL Sefina Inscalis	Quadris Top Elatus, Revus Top Luna Tranquility Agri Tin
3	Aberdeen Idaho **(AB)**	R. Spear R. Novy J. Whitworth C. Lowder	Late	Sprink.	270-150-50-40Sul-5Zn-5Mn Seed Spacing: In-Row 10" Rows 36"	28-Apr	20-Sep Mechanical	126	145	TriCor 4F Matrix Eptam 7E	Admire Pro	
4	Kimberly Idaho **(KIM)**	R. Spear R. Novy J. Whitworth C. Lowder	Late	Sprink.	417-273-161-85S-4Mn Seed Spacing: In-Row 10" Rows 36"	29-Apr	23-Sep	125	147	Glyphosate Dimetric, Outlook Sonalan Eptam	Luna Tranquility	Luna Tranquility Bravo Weather Stik
5	Parma Idaho **(PAR)**	M. Thornton O. Morgan R. Portenier K. Beck	Early Late	Sprink. Sprink.	177-211-200 317-211-200 Seed Spacing: In-Row 10" Rows 36"	6-Apr 19-Apr	9-Aug 19-Sep Mechanical	111 143	125 153	**Sonalan, Boundary, Epam+ Adsorb Matrix**	**Admire Pro Movento**	**Quadris, Bravo Endura, Luna T Revus Top** Quadris Top Bravo
6	Hermiston Oregon **(HRM)**	S. Sathuvalli	Early Late	Pivot Pivot	360-130-150-60-10Mg-12n-3B 395-130-150-60-10Mg-12n-3B Seed Spacing: E & L In-Row 9.25" Rows 34"	22-Mar 11-Apr	10-Aug 8-Sep	127 142	141 150	**Dual-Magnum Prowl**	**Admire Coragen Blackhawk**	**Quadris Ridimil Omega**
7	Dalhart **(DAL)** Springlake **(SPR)** Texas	I. Vales J. Koym	Early Early	Pivot Pivot	266-0-0 100-40-35 Seed Spacing:DAL / SPR In-Row 10.2" / 9.0" Rows 28" / 36"	6-May 25-Mar	18-Sep Reglone 21-Jul	108 111	135 118	Matrix SG, Glory TriCor 4F,Epam 7E PARAZONE 3SL LI 700, Reglone Makaze, Matrix Medal EC, Metribuzen 75 CA Pin-Dee 3.3 EC	Reaper ClearForm Fulfill, Movento Beleaf 50 SG Minecto Pro, Movento Oberon 4 SC Selina Inscalis Sivanto 200 SL	Minuet, MetaStart 4S Aframe, Echo 720 Manzate Max,Scala SC Penncozeb 75 DF Headline Miravis Prime, Scala NUCOP HB, Tanos Scala SC
8	Othello **(OTH)** Othello **(OTH)** Washington	M. Pavek J. Blauer	Early Late	Linear Pivot	250-200-250-0 230-400-300-0 Seed Spacing: E & L In-Row 12" / 11" Rows 32" / 32"	31-Mar 31-Mar	9-Aug 19-Sep Mechanical/Chemical	117 162	131 172	**Outlook Prowl H20 Eptam**	**Platinum**	**Priaxor, Equus Bravo, Zing**

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

TABLE 2: 2022 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
No.	Clone									(1-5(long))		(1-5(hvy russet))		(1-5(larger))		(1-5(latest))		
1	Clearwater Russet	Bannock Russet A89152-4	P	Ck	Dual	E/L	-	OR	**97**	Oblong	**3.5**	Med Russet	**3.7**	Med-Large	**3.7**	Med-Late	**3.7**	**2.1**
2	Ranger Russet	Butte A6595-3	RP	Ck	Dual	E/L	-	OR	**97**	Long	**4.4**	Med Russet	**3.2**	Med-Large	**3.3**	Medium	**3.4**	**2.5**
3	Russet Burbank	Early Rose ?	W	Ck	Dual	E/L	-	OR	**95**	Obl-Lng	**3.9**	Med Russet	**4.0**	Med-Large	**3.7**	Medium	**3.1**	**2.4**
4	Russet Norkotah	ND9687-5Rus ND9526-4Rus	W	Ck	Fresh	E/L	-	OR	**97**	Oblong	**3.5**	Med Russet	**4.0**	Medium	**2.7**	Early	**1.8**	**2.5**
5	Shepody	Bake-King F58050	W	Ck	Proc	E	-	OR	**98**	Long	**4.1**	White	**1.0**	Med-Large	**3.6**	Medium	**3.5**	**2.0**
6	A09086-1LB	A97066-42LB AC96052-1RU	RP	ID	Dual	E/L	1	OR	**97**	Oblong	**3.5**	Light Russet	**2.3**	Med-Large	**3.7**	Med-Late	**3.6**	**2.7**
7	A10594-4sto	A96953-13 A98345-1	Abort	ID	Dual	E/L	1	OR	**95**	Obl-Lng	**3.7**	Light Russet	**2.9**	Med-Large	**3.2**	Early	**2.4**	**1.9**
8	A12305-2adg	A96953-13 A02618-1	W	ID	Dual	E/L	1	OR	**92**	Obl-Lng	**3.7**	Med Russet	**3.6**	Med-Large	**4.0**	Med-Late	**4.0**	**1.9**
9	AFA5661-8	Blazer Russet AF4342-3	W	ID	Dual	E/L	1	OR	**96**	Oblong	**3.2**	Light Russet	**2.7**	Med-Large	**3.6**	Late	**4.1**	**2.1**
10	AOR11217-3	A01010-3 NDA070929B-3	PP	OR	Dual	E/L	1	OR	**96**	Obl-Lng	**3.6**	Med Russet	**3.9**	Med-Large	**3.7**	Medium	**3.2**	**2.2**
11	AOR08540-1	A02782-2 PA01N22-5	W	OR	Dual	E/L	3	OR	**95**	Obl-Lng	**3.9**	Med Russet	**3.7**	Med-Large	**3.9**	Med-Late	**3.7**	**2.5**
12	AC12090-3RU	A05214-3LB A06021-1T	W	CO	Dual	E/L	1	CO	**96**	Obl-Lng	**3.7**	Med Russet	**4.0**	Medium	**3.0**	Early	**2.3**	**2.8**
13	AOR10204-3	COA05110-3 A05066-9	P	OR	Fresh	E/L	3	OR	**94**	Obl-Lng	**3.7**	Med Russet	**4.0**	Med-Large	**3.4**	Med Early	**2.9**	**2.8**
14	CO13003-1RU	Fortress Russet AC96052-1RU	W	CO	Dual	E/L	1	CO	**96**	Oblong	**3.4**	Med Hvy Rus	**4.2**	Med-Large	**3.4**	Medium	**3.3**	**2.8**
15	CO10085-1RU	CO03364-5RU Silverton Russet	P	CO	Proc	E/L	3	CO	**96**	Oblong	**2.9**	Med Russet	**3.6**	Med-Large	**3.6**	Med-Late	**3.6**	**2.9**
16	CO11009-3RU	Fortress Russet AC96052-1RU	P	CO	Proc	E/L	3	CO	**95**	Obl-Lng	**3.8**	Med Russet	**4.0**	Med-Large	**3.8**	Med-Late	**3.8**	**2.6**

[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

TABLE 3: 2022 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	DAL	SPR[1]	OTH	Mean/Rank			TUL	SLV[2]	AB	KIM	PAR	HRM	OTH	Mean/Rank		
1	CLEARWATER R.	311	652	476	307	476	**479**	**14**	**ab**	343	444	360	202	584	563	638	**448**	**10**	**cd**
2	RANGER R.	403	771	262	147	573	**502**	**9**	**ab**	171	214	377	332	608	532	698	**419**	**14**	**de**
3	R. BURBANK	359	603	443	256	614	**505**	**8**	**ab**	.	424	300	306	745	438	622	**472**	**8**	**bcd**
4	R. NORKOTAH	456	602	142	140	626	**457**	**16**	**b**	242	248	207	230	647	413	561	**364**	**15**	**e**
5	SHEPODY	344	700	245	232	635	**481**	**13**	**ab**	.	247	.	.	.	.	.	**.**	**.**	
6	A09086-1LB	362	755	579	333	605	**575**	**3**	**ab**	509	576	380	248	701	755	720	**555**	**1**	**a**
7	A10594-4sto	401	640	576	326	609	**556**	**4**	**ab**	498	383	218	247	612	643	670	**467**	**9**	**bcd**
8	A12305-2adg	329	710	658	400	691	**597**	**1**	**a**	456	506	352	292	724	707	658	**528**	**5**	**ab**
9	AFA5661-8	320	652	570	273	488	**507**	**7**	**ab**	534	520	364	286	613	635	665	**517**	**6**	**abc**
10	AOR11217-3	297	687	403	248	557	**486**	**12**	**ab**	380	444	313	333	585	687	632	**482**	**7**	**bcd**
11	AOR08540-1	363	728	429	296	653	**543**	**5**	**ab**	451	506	388	311	632	720	712	**531**	**3**	**ab**
12	AC12090-3RU	415	577	499	264	489	**495**	**10**	**ab**	434	427	308	174	544	498	598	**426**	**12**	**de**
13	AOR10204-3	398	652	.	.	717	**589**	**2**	**ab**	.	.	368	222	699	620	734	**529**	**4**	**ab**
14	CO13003-1RU	359	589	458	310	630	**509**	**6**	**ab**	421	396	234	292	618	493	590	**435**	**11**	**de**
15	CO10085-1RU	304	615	434	330	491	**461**	**15**	**b**	430	372	320	189	535	464	635	**421**	**13**	**de**
16	CO11009-3RU	304	727	461	272	461	**488**	**11**	**ab**	474	531	320	288	614	833	668	**533**	**2**	**ab**
	Location Means	358	666	442	276	582	**514**			411	428	320	264	631	600	653	**475**		

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

[1]Springlake exluded from means.

[2]Shepody excluded from San Luis Valley trial mean

Indicates high or strength **Indicates low or weakness**

TABLE 4: 2022 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	DAL	SPR[1]	OTH	Mean/Rank			TUL	SLV[2]	AB	KIM	PAR	HRM	OTH	Mean/Rank		
1	CLEARWATER R.	205	486	100	67	469	**315**	**16**	**e**	273	332	286	112	485	425	614	**361**	**9**	**bcd**
		66	75	21	22	98	**65**	**16**		80	75	80	56	83	75	96	**78**	**8**	
2	RANGER R.	365	629	336	33	539	**467**	**5**	**abcd**	122	120	297	137	540	396	633	**321**	**13**	**de**
		90	82	128	23	94	**99**	**2**		71	56	79	41	89	75	91	**72**	**12**	
3	R. BURBANK	301	432	169	40	477	**345**	**15**	**de**	.	249	169	118	611	334	539	**337**	**12**	**cde**
		84	72	38	15	78	**68**	**15**		.	59	56	38	82	76	87	**66**	**15**	
4	R. NORKOTAH	385	431	329	24	592	**434**	**7**	**abcde**	170	160	103	157	598	268	518	**282**	**15**	**e**
		84	72	231	17	95	**121**	**1**		70	65	50	68	92	65	92	**72**	**12**	
5	SHEPODY	297	582	80	60	483	**360**	**14**	**cde**	.	123	.	.	.	.	.	**.**	**.**	
		86	83	33	26	76	**69**	**13**		.	50	.	.	.	.	.	**.**	**.**	
6	A09086-1LB	259	591	149	150	601	**400**	**9**	**abcde**	451	434	303	145	644	622	652	**464**	**1**	**a**
		71	78	26	45	99	**69**	**13**		89	75	80	59	92	82	91	**81**	**6**	
7	A10594-4sto	375	586	409	247	600	**493**	**3**	**ab**	450	266	160	188	592	555	590	**400**	**8**	**abc**
		93	92	71	76	98	**89**	**4**		90	70	73	76	97	86	88	**83**	**2**	
8	A12305-2adg	289	625	453	303	666	**508**	**1**	**a**	412	454	323	183	666	610	561	**458**	**2**	**a**
		88	88	69	76	96	**85**	**7**		90	90	92	63	92	86	85	**85**	**1**	
9	AFA5661-8	278	600	577	78	479	**483**	**4**	**abc**	482	448	321	178	565	538	536	**438**	**4**	**a**
		87	92	101	28	98	**95**	**3**		90	86	88	62	92	85	81	**83**	**2**	
10	AOR11217-3	244	547	388	81	527	**427**	**8**	**abcde**	309	344	253	221	545	549	601	**403**	**7**	**abc**
		82	80	96	33	95	**88**	**5**		81	78	81	66	93	80	95	**82**	**5**	
11	AOR08540-1	283	567	274	143	621	**436**	**6**	**abcde**	393	394	298	155	560	545	623	**424**	**5**	**ab**
		78	78	64	48	95	**79**	**8**		87	78	77	50	89	76	88	**78**	**8**	
12	AC12090-3RU	345	432	305	149	438	**380**	**11**	**bcde**	362	321	219	104	489	369	519	**341**	**11**	**cde**
		83	75	61	56	89	**77**	**9**		83	75	71	60	90	74	87	**77**	**10**	
13	AOR10204-3	358	533	.	.	618	**503**	**2**	**ab**	.	.	301	118	617	455	619	**422**	**6**	**ab**
		90	82	.	.	86	**86**	**6**		.	.	82	53	88	73	84	**76**	**11**	
14	CO13003-1RU	224	399	334	174	615	**393**	**10**	**abcde**	367	310	160	227	551	332	544	**356**	**10**	**bcde**
		62	68	73	56	98	**75**	**11**		87	78	68	78	89	67	92	**80**	**7**	
15	CO10085-1RU	171	433	374	128	469	**362**	**12**	**cde**	348	259	180	95	349	328	604	**309**	**14**	**de**
		56	70	86	39	95	**77**	**9**		81	70	56	50	65	71	95	**70**	**14**	
16	CO11009-3RU	246	615	167	140	421	**362**	**12**	**cde**	413	418	251	196	561	703	621	**452**	**3**	**a**
		81	84	36	52	91	**73**	**12**		87	79	79	68	91	84	93	**83**	**2**	
	Location Means	289	530	296	121	538	417			350	322	242	156	558	469	585	385		
		80	79	76	41	93	82			84	74	74	59	88	77	90	78		

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

[1]Springlake exluded from means.

[2]Shepody excluded from San Luis Valley trial mean

TABLE 5: 2022 Western Regional Potato Variety Trial - YIELD > 10 OZ [CWT/A (upper) & % (lower)] - EARLY AND LATE HARVEST

		U.S. No. 1's > 10 OZ - Early Harvest (CWT/A) and %								U.S. No. 1's > 10 OZ - Late Harvest (CWT/A) and %									
		ID	OR	TX		WA	Entry			CA	CO	ID			OR	WA	Entry		
No.	Clone	PAR	HRM	DAL	SPR[1]	OTH	Mean/Rank			TUL	SLV[2]	AB	KIM	PAR	HRM	OTH	Mean/Rank		
1	CLEARWATER R.	18	26	81	0	38	**41**	**15**	**e**	73	78	108	20	145	73	120	**88**	**14**	**cd**
		6	4	17	0	8	**9**	**15**		21	17	30	10	25	13	19	**19**	**12**	
2	RANGER R.	45	112	76	0	115	**87**	**9**	**cde**	36	30	61	53	271	138	295	**126**	**11**	**bcd**
		11	15	29	0	20	**19**	**8**		21	14	16	16	45	26	42	**26**	**10**	
3	R. BURBANK	48	40	48	0	255	**98**	**8**	**cde**	.	22	32	35	411	99	269	**145**	**8**	**bc**
		13	7	11	0	42	**18**	**9**		.	5	11	11	55	23	43	**25**	**11**	
4	R. NORKOTAH	101	15	22	0	182	**80**	**11**	**de**	19	18	1	41	363	23	205	**96**	**12**	**cd**
		22	3	15	0	29	**17**	**10**		8	7	1	18	56	6	37	**19**	**12**	
5	SHEPODY	157	333	14	0	470	**244**	**1**	**a**	.	30	.	.	.	.	.	**.**	**.**	
		46	48	6	0	74	**43**	**1**		.	12	.	.	.	.	.	**.**	**.**	
6	A09086-1LB	8	80	151	4	74	**78**	**12**	**de**	188	97	108	51	302	141	240	**161**	**7**	**ab**
		2	11	26	1	12	**13**	**13**		37	17	28	21	43	19	33	**28**	**7**	
7	A10594-4sto	193	192	209	20	221	**204**	**2**	**ab**	155	47	6	87	414	181	404	**185**	**3**	**ab**
		48	30	36	6	36	**38**	**2**		31	12	3	35	68	28	60	**34**	**4**	
8	A12305-2adg	56	225	248	43	208	**184**	**3**	**abc**	92	139	143	113	457	266	312	**217**	**2**	**a**
		17	32	38	11	30	**29**	**3**		20	27	41	39	63	38	47	**39**	**2**	
9	AFA5661-8	63	288	80	0	163	**149**	**5**	**abcd**	201	122	86	80	391	244	426	**221**	**1**	**a**
		20	44	14	0	33	**28**	**4**		38	24	23	28	64	38	64	**40**	**1**	
10	AOR11217-3	26	98	70	0	102	**74**	**13**	**de**	110	78	65	89	257	191	197	**141**	**9**	**bc**
		9	14	17	0	18	**15**	**11**		29	18	21	27	44	28	31	**28**	**7**	
11	AOR08540-1	30	86	80	3	140	**84**	**10**	**cde**	131	106	159	40	273	285	243	**177**	**5**	**ab**
		8	12	19	1	22	**15**	**11**		29	21	41	13	43	40	34	**32**	**6**	
12	AC12090-3RU	68	66	118	10	153	**101**	**7**	**cde**	142	116	27	28	230	101	249	**128**	**10**	**bcd**
		16	11	24	4	31	**21**	**7**		33	27	9	16	42	20	42	**27**	**9**	
13	AOR10204-3	105	116	.	.	246	**156**	**4**	**abc**	.	.	114	37	147	196	372	**173**	**6**	**ab**
		26	18	.	.	34	**26**	**5**		.	.	31	17	48	32	51	**36**	**3**	
14	CO13003-1RU	10	14	177	10	51	**63**	**14**	**de**	102	69	10	64	338	9	63	**94**	**13**	**cd**
		3	2	39	3	8	**13**	**13**		24	17	4	22	24	2	11	**15**	**14**	
15	CO10085-1RU	2	51	32	2	28	**28**	**16**	**e**	102	46	14	14	78	54	147	**65**	**15**	**d**
		1	8	7	0	6	**5**	**16**		24	12	4	7	15	12	23	**14**	**15**	
16	CO11009-3RU	36	111	141	3	137	**106**	**6**	**bcde**	187	111	47	85	298	256	295	**183**	**4**	**ab**
		12	15	31	1	30	**22**	**6**		39	21	15	30	49	31	44	**33**	**5**	
	Location Means	60	116	103	6	161	**111**			118	77	65	56	292	150	256	147		
		16	17	22	2	27	**21**			27	17	19	21	46	24	39	28		

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

[1]Springlake exluded from means.

[2]Shepody excluded from San Luis Valley trial mean

TABLE 6: 2022 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	DAL	SPR[1]	OTH	Mean/Rank			TUL	SLV[2]	AB	KIM	PAR	HRM	OTH	Mean/Rank		
1	CLEARWATER R.	102	154	126	211	139	**130**	**2**	**ab**	63	107	49	27	85	119	97	**78**	**3**	**b**
		33	24	26	69	29	**28**	**2**		18	24	14	13	14	21	15	**17**	**4**	
2	RANGER R.	36	106	62	97	73	**69**	**11**	**efgh**	39	85	34	34	30	94	81	**57**	**10**	**cde**
		9	14	24	66	13	**15**	**10**		23	40	9	10	5	18	12	**17**	**4**	
3	R. BURBANK	47	152	51	196	73	**81**	**9**	**defg**	.	165	46	33	46	66	69	**71**	**6**	**bc**
		13	25	12	76	12	**15**	**10**		.	39	15	11	6	15	11	**16**	**6**	
4	R. NORKOTAH	47	162	58	114	75	**86**	**8**	**cdef**	68	86	98	44	27	129	70	**74**	**5**	**bc**
		10	27	41	82	12	**23**	**4**		28	35	47	19	4	31	12	**25**	**1**	
5	SHEPODY	27	44	79	137	19	**42**	**15**	**gh**	.	106	.	.	.	.	.	**.**	**.**	
		8	6	32	59	3	**12**	**12**		.	43	.	.	.	.	.	**.**	**.**	
6	A09086-1LB	103	137	94	161	136	**118**	**4**	**abcd**	50	135	67	31	48	110	82	**75**	**4**	**bc**
		29	18	16	48	23	**21**	**5**		10	23	18	13	7	15	11	**14**	**9**	
7	A10594-4sto	18	42	43	70	46	**37**	**16**	**h**	41	106	54	26	9	72	32	**48**	**12**	**def**
		5	6	8	21	8	**7**	**16**		8	28	25	10	1	11	5	**13**	**10**	
8	A12305-2adg	36	59	49	93	89	**58**	**14**	**fgh**	36	47	13	44	23	49	58	**39**	**14**	**ef**
		11	8	7	23	13	**10**	**14**		8	9	4	15	3	7	9	**8**	**14**	
9	AFA5661-8	29	33	144	149	40	**62**	**12**	**efgh**	29	60	23	27	21	44	42	**35**	**15**	**f**
		9	5	25	55	8	**12**	**12**		6	12	6	9	3	7	6	**7**	**15**	
10	AOR11217-3	53	115	114	164	99	**95**	**6**	**bcdef**	63	99	54	51	30	94	88	**68**	**7**	**bc**
		18	17	28	66	18	**20**	**6**		16	22	17	15	5	14	14	**15**	**7**	
11	AOR08540-1	73	129	93	142	84	**95**	**6**	**bcdef**	47	101	26	37	29	68	96	**58**	**9**	**cde**
		20	18	22	48	13	**18**	**8**		10	20	7	12	5	9	14	**11**	**11**	
12	AC12090-3RU	68	116	143	111	83	**102**	**5**	**bcde**	46	93	80	27	45	99	70	**66**	**8**	**bcd**
		16	20	29	42	17	**20**	**6**		11	22	17	16	8	20	12	**15**	**7**	
13	AOR10204-3	22	77	.	.	83	**61**	**13**	**efgh**	.	.	23	46	34	48	65	**43**	**13**	**ef**
		6	12	.	.	12	**10**	**14**		.	.	6	21	5	8	9	**10**	**13**	
14	CO13003-1RU	135	180	41	134	151	**127**	**3**	**abc**	49	84	66	41	58	147	126	**82**	**2**	**ab**
		38	31	9	43	24	**25**	**3**		12	21	28	14	9	30	21	**19**	**3**	
15	CO10085-1RU	132	160	199	160	152	**161**	**1**	**a**	56	107	113	47	122	121	128	**99**	**1**	**a**
		43	26	46	48	31	**37**	**1**		13	29	35	25	23	26	20	**24**	**2**	
16	CO11009-3RU	54	98	64	123	79	**74**	**10**	**efgh**	39	105	51	37	33	58	62	**55**	**11**	**cdef**
		18	13	14	45	17	**16**	**9**		8	20	16	13	5	7	9	**11**	**11**	
	Location Means	61	110	91	138	89	**87**			48	99	53	37	43	88	78	**63**		
		18	17	23	53	16	**18**			13	26	18	14	7	16	12	**15**		

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

[1]Springlake exluded from means.

[2]Shepody excluded from San Luis Valley trial mean

TABLE 7: 2022 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	DAL	SPR	OTH	Mean/Rank			TUL	SLV	AB	KIM	PAR	HRM	OTH	Mean/Rank		
1	CLEARWATER R.	1.076	1.085	1.074	1.073	1.083	**1.078**	**6**	**abcd**	1.090	1.096	1.085	1.082	1.089	1.085	1.086	**1.088**	**5**	**bcde**
2	RANGER R.	1.079	1.084	1.074	1.070	1.077	**1.077**	**9**	**cde**	1.078	1.082	1.090	1.077	1.081	1.081	1.082	**1.081**	**10**	**fg**
3	R. BURBANK	1.075	1.082	1.062	1.070	1.077	**1.073**	**14**	**def**	.	1.083	1.070	1.069	1.070	1.077	1.073	**1.074**	**13**	**g**
4	R. NORKOTAH	1.078	1.073	1.057	1.063	1.074	**1.069**	**16**	**f**	1.068	1.075	1.069	1.067	1.069	1.071	1.071	**1.070**	**15**	**h**
5	SHEPODY	1.069	1.081	1.072	1.076	1.071	**1.074**	**13**	**def**	.	1.087	.	.	.	.	.	**.**	**.**	
6	A09086-1LB	1.082	1.088	1.083	1.081	1.082	**1.083**	**1**	**a**	1.093	1.103	1.094	1.086	1.089	1.093	1.089	**1.092**	**3**	**ab**
7	A10594-4sto	1.082	1.082	1.073	1.075	1.079	**1.078**	**6**	**abcd**	1.085	1.086	1.081	1.077	1.085	1.084	1.080	**1.083**	**9**	**fg**
8	A12305-2adg	1.078	1.082	1.069	1.075	1.073	**1.075**	**11**	**cde**	1.090	1.094	1.088	1.079	1.079	1.089	1.080	**1.085**	**7**	**def**
9	AFA5661-8	1.074	1.086	1.081	1.074	1.077	**1.078**	**6**	**abcd**	1.098	1.112	1.097	1.081	1.089	1.092	1.088	**1.094**	**1**	**a**
10	AOR11217-3	1.078	1.089	1.074	1.079	1.084	**1.081**	**3**	**ab**	1.088	1.093	1.089	1.076	1.085	1.093	1.089	**1.087**	**6**	**cde**
11	AOR08540-1	1.077	1.086	1.074	1.081	1.079	**1.079**	**4**	**abc**	1.088	1.091	1.086	1.076	1.085	1.086	1.084	**1.085**	**7**	**def**
12	AC12090-3RU	1.079	1.075	1.072	1.074	1.074	**1.075**	**11**	**cde**	1.081	1.083	1.083	1.080	1.072	1.078	1.077	**1.079**	**12**	**g**
13	AOR10204-3	1.072	1.080	.	.	1.068	**1.073**	**14**	**ef**	.	.	1.077	1.070	1.077	1.074	1.074	**1.074**	**13**	**g**
14	CO13003-1RU	1.079	1.079	1.069	1.074	1.077	**1.076**	**10**	**cde**	1.086	1.087	1.087	1.077	1.078	1.075	1.079	**1.081**	**10**	**fg**
15	CO10085-1RU	1.085	1.083	1.075	1.068	1.082	**1.079**	**4**	**abc**	1.094	1.092	1.090	1.074	1.096	1.086	1.091	**1.089**	**4**	**abcd**
16	CO11009-3RU	1.084	1.090	1.080	1.080	1.081	**1.083**	**1**	**a**	1.092	1.107	1.093	1.084	1.091	1.096	1.090	**1.093**	**2**	**ab**
	Mean	1.078	1.083	1.073	1.074	1.077	1.077			1.087	1.091	1.085	1.077	1.082	1.084	1.082	**1.084**		

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

TABLE 8: 2022 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 Ratio								
		Early Trial						Late Trial							Early Trial					Late Trial							Location Means[1]								
		ID	OR	TX		WA		CA	ID			OR	WA		OR	TX		WA		CA	CO	ID		OR	WA		CA	CO	TX		ID			OR	WA[2]
No.	Clone	PAR	HRM	DAL	SPR	OTH	Mean	TUL	AB	KIM	PAR	HRM	OTH	Mean	HRM	DAL	SPR	OTH	Mean	TUL	SLV	AB	KIM	HRM	OTH	Mean	TUL	SLV	DAL	SPR	AB	KIM	PAR	HRM	OTH
1	CLEARWATER R.	4.1	4.8	5.0	2.5	4.6	**4.6**	5.5	6.3	5.1	5.8	4.4	5.7	**5.5**	3.0	4.0	3.5	4.0	**3.6**	4.0	3.0	4.0	3.6	3.0	2.8	**3.4**	1.78	1.65	1.74	1.51	1.94	2.05	1.78	1.76	1.58
2	RANGER R.	6.0	5.4	5.5	2.3	6.0	**5.7**	4.1	6.3	6.6	8.1	5.0	7.0	**6.2**	4.8	4.8	4.1	4.0	**4.4**	4.0	4.0	5.0	4.5	4.8	4.0	**4.4**	2.05	1.89	2.01	1.90	2.40	2.20	2.07	2.07	1.80
3	R. BURBANK	5.6	4.6	5.3	2.3	6.8	**5.6**	.	5.6	6.0	8.7	5.2	6.9	**6.5**	3.8	4.8	3.1	3.0	**3.7**	.	5.0	3.9	3.9	4.3	3.0	**4.0**	.	2.10	2.32	1.77	2.30	2.16	2.01	1.82	1.72
4	R. NORKOTAH	6.1	4.4	4.3	2.0	6.3	**5.3**	4.6	3.7	5.0	9.0	3.8	6.6	**5.5**	3.3	4.2	3.3	4.0	**3.7**	4.0	3.0	3.5	3.8	3.0	3.0	**3.4**	1.82	1.76	1.89	1.66	2.04	1.97	1.88	1.69	1.80
5	SHEPODY	7.9	8.3	4.1	2.6	11.2	**7.9**	.	6.0	.	.	.	.	**.**	4.0	4.5	4.1	4.0	**4.2**	.	4.0	.	.	.	.	**4.0**	.	1.85	1.90	1.99	1.89	.	1.81	1.78	1.63
6	A09086-1LB	4.1	4.7	6.0	3.2	4.9	**4.9**	6.9	4.8	6.0	7.6	5.2	6.6	**6.2**	3.5	4.3	4.1	3.0	**3.7**	4.0	3.0	3.5	3.6	3.3	2.5	**3.3**	1.71	1.73	1.56	1.54	2.15	1.84	1.69	1.78	1.58
7	A10594-4sto	8.1	7.0	7.7	4.3	7.4	**7.5**	7.0	8.2	6.2	10.9	5.7	8.8	**7.8**	3.5	4.5	4.6	2.0	**3.6**	4.0	4.0	3.9	4.1	3.0	3.0	**3.7**	1.88	1.90	1.69	1.92	1.99	2.20	1.65	1.66	1.63
8	A12305-2adg	5.7	7.0	7.1	4.7	6.1	**6.5**	6.5	4.6	7.6	10.2	6.7	7.6	**7.2**	3.5	5.0	4.7	3.0	**4.0**	3.5	3.0	3.9	3.4	3.8	3.3	**3.5**	1.67	1.74	2.11	1.92	1.99	1.80	1.84	1.83	1.71
9	AFA5661-8	6.3	8.1	5.2	3.2	7.1	**6.7**	7.4	7.0	6.6	9.4	6.8	9.3	**7.8**	3.3	3.7	3.0	3.0	**3.2**	3.0	3.0	3.1	3.5	3.5	3.0	**3.2**	1.56	1.59	1.60	1.43	1.80	1.81	1.74	1.65	1.51
10	AOR11217-3	5.1	5.6	5.1	2.9	5.5	**5.3**	5.8	7.6	6.1	8.2	5.5	6.3	**6.6**	3.3	4.1	3.3	3.0	**3.4**	4.5	3.0	3.8	4.3	4.3	3.0	**3.8**	2.08	1.66	1.89	1.64	2.09	2.09	1.94	1.93	1.71
11	AOR08540-1	5.1	5.3	4.2	3.7	6.0	**5.2**	6.8	7.6	5.7	8.4	6.6	6.4	**6.9**	3.8	4.7	4.3	3.0	**3.9**	4.0	4.0	3.9	4.1	4.0	3.0	**3.8**	1.83	1.81	2.11	1.95	2.03	2.02	1.98	1.90	1.85
12	AC12090-3RU	5.4	4.9	5.3	3.9	5.6	**5.3**	6.8	5.6	5.4	7.2	4.4	6.8	**6.0**	4.0	4.5	4.5	3.0	**4.0**	4.0	3.0	3.8	3.6	3.5	3.3	**3.5**	1.90	1.66	2.03	1.89	2.10	1.97	1.91	1.84	1.85
13	AOR10204-3	7.4	5.7	.	.	6.7	**6.6**	.	4.0	5.8	8.4	6.5	7.7	**6.5**	3.8	.	.	3.3	**3.5**	.	.	3.9	3.4	4.0	4.0	**3.8**	.	.	.	.	2.09	1.71	1.57	1.95	1.82
14	CO13003-1RU	4.3	4.2	7.0	3.7	4.7	**5.1**	6.1	5.7	5.4	6.0	3.9	5.1	**5.4**	3.0	4.4	4.1	3.0	**3.6**	3.5	3.0	3.5	3.5	3.0	3.0	**3.3**	1.66	1.62	1.68	1.48	2.00	1.85	1.70	1.62	1.61
15	CO10085-1RU	3.3	4.4	3.0	2.3	4.2	**3.7**	6.1	4.4	4.7	5.0	4.0	5.3	**4.9**	2.8	2.7	4.0	3.0	**3.1**	3.0	2.0	3.6	3.4	2.8	2.0	**2.8**	1.46	1.55	1.54	1.81	1.80	1.85	1.68	1.56	1.43
16	CO11009-3RU	5.1	5.8	6.3	3.6	5.8	**5.8**	7.3	0.0	5.8	8.2	6.5	7.5	**5.9**	4.0	4.5	4.1	3.3	**4.0**	4.0	3.0	3.8	4.1	3.8	3.0	**3.6**	1.79	1.70	1.91	1.97	0.00	2.24	1.85	1.81	1.67
	Mean	5.6	5.6	5.4	3.1	6.2	**5.7**	6.2	5.5	5.9	8.1	5.4	6.9	**6.3**	3.6	4.3	3.9	3.2	**3.7**	3.8	3.3	3.8	3.8	3.6	3.1	**3.6**	1.78	1.75	1.86	1.76	1.91	1.98	1.82	1.79	1.68

[1]Parma and Hermiston; combined means of Early Harvest and Later Harvest Trials.

[2]Washington reported means of 2.07 for Idaho samples and 1.79 for Oregon samples.

Springlake excluded from means.

TABLE 9: 2022 Western Regional Potato Variety Trial - EXTERNAL DEFECTS MEANS OF LOCATIONS - GROWTH CRACKS, SECOND GROWTH, SHATTER BRUISE, SCAB AND GREENING[1]

		Growth Cracks		Second Growth		Shatter Bruise			Scab		Greening	
No.	Clone	Early Trial	Late Trial	Early Trial	Late Trial	Early Trial	Late Trial	Ab[2]	Early Trial	Late Trial	Early Trial	Late Trial
1	CLEARWATER R.	5.0	4.9	4.9	4.9	4.8	4.1 OTH 2.0	3.6	5.0	4.9	4.3	4.9
2	RANGER R.	4.9	4.4 Kim 3.6	4.8	4.3	5.0	4.4	3.6	4.7 PAR 3.7	4.6	5.0	4.6
3	R. BURBANK	4.9	4.3 Kim 3.4 Par 3.7	3.6 OTH 2.0	3.6 KIM 2.9 PAR 3.3	5.0	3.9 OTH 2.0	3.0	5.0	4.9	4.3	4.3
4	R. NORKOTAH	5.0	4.7	4.9	4.9	5.0	4.5	3.6	4.9	4.8	4.7	4.8
5	SHEPODY	4.8	.	4.3 SPR 3.6	.	5.0	.	.	4.6 PAR 3.7	.	3.7	.
6	A09086-1LB	5.0	4.9	4.7	4.8	4.7	3.7 OTH 1.0	3.2	3.9 PAR 3.0	4.6	4.0	4.1
7	A10594-4sto	5.0	4.9	4.7	4.8	5.0	4.4	3.3	4.8	4.8	4.7	3.6 OTH 1.5
8	A12305-2adg	4.9	4.7	4.9	4.5	4.8	4.3	3.2	4.8	4.8	4.0	4.7
9	AFA5661-8	5.0	4.7	4.7	4.2	5.0	4.3	4.0	4.9	4.6	5.0	4.4
10	AOR11217-3	5.0	4.9	4.9	4.8	4.8	4.6	3.1	5.0	5.0	5.0	4.7
11	AOR08540-1	5.0	4.9	4.8	4.3	4.9	4.1 OTH 2.0	3.1	5.0	5.0	4.3	3.7
12	AC12090-3RU	5.0	4.9	4.8	4.7	4.9	4.0 OTH 2.0	3.2	4.9	4.7	4.3	3.8 OTH 2.3
13	AOR10204-3	4.5	4.3	4.6	4.2 Kim 3.6	4.9	3.5 OTH 1.0	3.8	5.0	5.0	5.0	4.1
14	CO13003-1RU	4.8	4.6	5.0	4.9	5.0	4.1 OTH 2.0	2.8	4.9	4.7	4.3	4.6
15	CO10085-1RU	5.0	4.6	4.3 DAL 3.5 SPR 3.8	4.7	5.0	4.1 OTH 2.0	3.6	4.6	4.9	5.0	4.4
16	CO11009-3RU	5.0	4.7	4.8	4.7	5.0	4.4	3.0	5.0	4.9	4.0	4.5
	Mean	4.9	4.7	4.7	4.6	4.9	4.1	3.3	4.8	4.8	4.5	4.3

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

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

TABLE 10: 2022 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	CLEARWATER R.	0	1	1	1	7	4	4.4	3.6	3.2
2	RANGER R.	0	1	1	3	4	6	4.4	3.4	1.0
3	R. BURBANK	11 HRM 30 OTH 33	5	3	2	1	1	4.4	3.8	2.9
4	R. NORKOTAH	1	1	1	0	1	1	4.8	4.2	2.7
5	SHEPODY	1	0	0	.	14 OTH 20 SPR 20	.	4.4	4.9	.
6	A09086-1LB	1	1	1	1	3	1	4.4	3.7	2.3
7	A10594-4sto	16 HRM 30 OTH 40	12 HRM 55 OTH 23	4	2	0	3	4.6	4.2	1.5
8	A12305-2adg	0	1	0	1	4	3	4.6	3.9	2.3
9	AFA5661-8	1	1	1	3 PAR 13	25 OTH 30 SPR 53	14 TUL 23, OTH 25 HRM 38	4.6	4.3	2.5
10	AOR11217-3	0	1	7 DAL 30	2	2	12 OTH 23 HRM 35	4.4	3.8	4.0
11	AOR08540-1	14 DAL 60	11 HRM 44 PAR 17	2	2	1	3	4.3	4.0	3.2
12	AC12090-3RU	1	1	0	1	2	2	4.8	4.0	2.6
13	AOR10204-3	2	1	0	1	1	1	4.5	4.4	3.5
14	CO13003-1RU	2	3	16 DAL 63	1	1	4	4.5	4.0	1.5
15	CO10085-1RU	0	2	1	2	7	6 TUL 20	4.6	3.2	2.7
16	CO11009-3RU	7 DAL 33	10 AB 26 PAR 23	3 HRM 13	6 HRM 30	0	1	4.5	3.4	3.7
	Entry Means	4	3	2	2	5	4	4.5	3.9	2.6

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

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

TABLE 11: 2022 Western Regional Potato Variety Trial - FRENCH FRY COLOR (00-4.0(darkest)) AND PERCENT SUGAR ENDS

		Field Fry				Fry 45					Fry 40			% Sugar Ends[1]			
		CO SLV	OR HRM	WA OTH		CO SLV	ID KIM	OR HRM	WA OTH		ID KIM	WA OTH		ID KIM	OR HRM		
No.	Clone	L	E	L	Entry Mean	L	L	L	L	Entry Mean	L	L	Entry Mean	L	E	L	Entry Mean
1	CLEARWATER R.	1.0	0.0	0.0	**0.3**	0.0	0.4	0.5	0.0	**0.1**	0.9	2.0	**1.5**	19	0	4	**8**
2	RANGER R.	1.0	0.2	0.0	**0.4**	1.0	0.8	1.0	0.0	**0.6**	2.7	2.0	**2.3**	8	0	**25**	**11**
3	R. BURBANK	1.0	0.2	0.0	**0.4**	1.0	1.8	1.0	2.0	**1.6**	3.8	3.0	**.**	8	0	17	**8**
4	R. NORKOTAH	3.0	0.2	.	**1.6**	2.0	1.5	1.5	.	**1.8**	3.7	.	**3.7**	0	0	0	**0**
5	SHEPODY	3.0	.	.	**.**	1.0	.	.	.	**1.0**	.	.	**.**	.	0	.	**0**
6	A09086-1LB	2.0	0.2	0.0	**0.7**	2.0	1.8	1.5	2.0	**1.9**	3.7	4.0	**3.8**	4	0	**25**	**10**
7	A10594-4sto	1.0	0.2	0.0	**0.4**	1.0	0.7	0.5	0.0	**0.6**	2.2	2.0	**2.1**	4	0	0	**1**
8	A12305-2adg	2.0	0.2	0.0	**0.7**	1.0	0.6	0.5	1.0	**0.9**	2.0	3.0	**2.5**	**21**	13	17	**17**
9	AFA5661-8	1.0	0.5	0.0	**0.5**	1.0	1.1	1.5	1.0	**1.0**	2.2	1.0	**1.6**	**25**	0	8	**11**
10	AOR11217-3	1.0	0.2	0.0	**0.4**	0.0	0.6	0.0	0.0	**0.2**	2.3	2.0	**2.2**	10	0	0	**3**
11	AOR08540-1	1.0	0.5	0.0	**0.5**	1.0	1.4	1.5	2.0	**1.5**	3.6	3.0	**3.3**	13	0	**25**	**13**
12	AC12090-3RU	2.0	1.5	0.0	**1.0**	3.0	0.7	1.5	1.0	**1.6**	3.3	3.0	**3.2**	0	0	4	**1**
13	AOR10204-3	.	0.5	.	**0.5**	.	1.0	1.5	.	**1.0**	3.2	.	**3.2**	4	8	0	**4**
14	CO13003-1RU	2.0	0.2	2.0	**1.4**	1.0	1.3	1.5	3.0	**1.8**	2.9	4.0	**3.5**	**29**	0	17	**15**
15	CO10085-1RU	1.0	0.2	0.0	**0.4**	1.0	1.0	1.0	1.0	**1.0**	1.8	3.0	**2.4**	**21**	0	17	**13**
16	CO11009-3RU	0.0	0.2	0.0	**0.1**	0.0	0.5	0.2	0.0	**0.2**	1.3	0.0	**0.6**	0	0	0	**0**
	Mean	1.5	0.2	0.2	**0.6**	1.1	1.0	0.1	1.0	**1.0**	2.6	2.5	**2.5**	11	1	11	**7**

[1] Evaluations from 45F.

Storage protocol prior to frying

Aberdeen - 1 week from 50F to 45F; 2 weeks from 50F to 40F; and 6 weeks @ 45F and 6 weeks @ 40F.

Hermiston - 2 weeks from 55F to 48F, and 8 weeks @ 48F.

Kimberly - 1 week from 50F to 45F; 2 weeks from 50F to 40F; and 6 weeks @ 45F and 6 weeks @ 40F.

Othello - 3 weeks from 55F to 44F and 60 days @ 44F and 40F.

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

* Comprehensive post harvest evalutations of entries can be found in the 2022 Potato Cultivar Yield & Post Harvest Quality Evalutions - Washington State University. Contact: Jake Blauer www.potatoes.wsu.edu

TABLE 12: 2022 Western Regional Potato Variety Trial - Washington State Univeristy Postharvest Storage Trials - FRENCH FRY COLOR

		PRIOR TO STORAGE*				48°F, 60 days*				44°F, 60 days*				40°F, 60 days*				RECONDITIONED*			
No.	Clone	WA	ID	OR	Mean	WA	ID	OR	Mean	WA	ID	OR	Mean	WA	ID	OR	Mean	WA	ID	OR	Mean
1	CLEARWATER R.	0	0	0	0.0	0	0	0	0.0	0	0	0	0.0	2	0	0	0.7	2	0	0	0.7
2	RANGER R.	0	0	0	0.0	0	0	0	0.0	0	0	1	0.3	2	1	2	1.7	2	1	2	1.7
3	R. BURBANK	0	1	1	0.7	1	1	1	1.0	2	1	2	1.7	3	3	3	3.0	3	3	3	3.0
4	R. NORKOTAH	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
5	SHEPODY	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6	A09086-1LB	0	0	0	0.0	0	0	0	0.0	0	0	2	0.7	4	3	3	3.3	4	3	3	3.3
7	A10594-4sto	0	0	0	0.0	0	0	0	0.0	0	0	0	0.0	2	1	1	1.3	2	1	1	1.3
8	A12305-2adg	0	0	0	0.0	0	0	0	0.0	1	0	0	0.3	3	1	1	1.7	3	1	1	1.7
9	AFA5661-8	0	0	0	0.0	0	0	0	0.0	1	0	0	0.3	1	1	1	1.0	1	1	1	1.0
10	AOR11217-3	0	0	0	0.0	0	0	0	0.0	0	0	0	0.0	2	1	1	1.3	2	1	1	1.3
11	AOR08540-1	0	1	0	0.3	1	1	1	1.0	2	2	2	2.0	3	3	3	3.0	3	3	3	.
12	AC12090-3RU	0	0	1	0.3	0	0	1	0.3	1	1	2	1.3	3	3	3	3.0	3	3	3	3.0
13	AOR10204-3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
14	CO13003-1RU	2	1	2	1.7	1	0	0	0.3	3	2	3	2.7	4	4	4	4.0	4	4	4	4.0
15	CO10085-1RU	0	1	0	0.3	0	0	0	0.0	1	0	0	0.3	3	1	2	2.0	3	1	2	2.0
16	CO11009-3RU	0	0	0	0.0	0	0	0	0.0	0	0	0	0.0	0	2	0	0.7	0	0	0	0.0
	Mean	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.8	0.5	0.9	0.7	2.5	1.8	1.8	2.1	2.5	1.7	1.8	1.9

*Reconditioned - 21 days at 60 F following 60 days at 40 F; Samples from all states stored together at WSU

*USDA values - 0 (light) to 4 (dark); 12 tubers per sample

TABLE 13: 2022 Western Regional Potato Variety Trial - DISEASE EVALUATION AND METRIBUZIN REACTION

		Vert. Wilt/ Early Dying				Early Blight		Late Blight			Common Scab						Pectobacterium		
		AB[1]		HRM[2]		AB[1]		Corvallis[4]			AB[1]			Prosser			Fusarium	Soft	Metribuz.
		Foliar				Foliar		Foliar		Tuber	HRM	%	%Serious	Corky Ringspot			Dry Rot[1](0-5)	Rot[1]	React.[6]
No.	Clone	(0-9)	AUDPC	(0-9)	AUDPC	(0-9)	AUDPC	(1-9)	AUDPC	%	%PVY	Incid.	Defect	% Incid.	DSI[5]		F(sam)	(0-5)	AB
1	CLEARWATER R.	4.3	110	7.0	1124	3.7	91	7.5	1084	28	100	23	10	47	34	S	4.5	2.0	R
2	RANGER R.	5.3	265	8.2	1581	5.3	243	9.0	1273	15	90	41	7	62	53	S	3.1	2.5	R
3	R. BURBANK	6.7	405	8.8	1565	5.0	220	9.0	1313	25	100	21	11	34	24	S	4.0	3.7	MR
4	R. NORKOTAH	9.0	1188	9.0	1974	8.0	763	9.0	1372	25	100	24	13	.	.	.	3.3	2.1	R
5	SHEPODY	7.3	698	.	.	7.0	604	9.0	1337	18	.	22	8	.	.	.	2.9	3.7	.
6	A09086-1LB	5.3	218	7.2	978	5.3	225	2.3	45	0	100	39	10	26	17	S	3.8	2.3	MR
7	A10594-4sto	9.0	1008	8.7	1848	7.7	694	9.0	1366	0	0	33	16	20	10	MS	3.9	1.3	MR
8	A12305-2adg	5.7	317	7.3	1083	5.3	250	8.5	1096	0	0	16	14	32	24	S	3.5	3.2	MS
9	AFA5661-8	7.7	560	8.0	1256	7.0	494	3.3	160	0	10	16	12	50	34	S	4.7	1.2	R
10	AOR11217-3	7.0	418	8.5	1778	7.3	499	9.0	1264	0	85	21	13	36	17	S	4.6	1.3	MS
11	AOR08540-1	5.7	292	8.2	1471	5.3	287	6.8	735	0	65	21	16	46	29	S	3.7	3.0	R
12	AC12090-3RU	7.7	744	8.8	1785	7.7	534	.	.	.	0	19	14	41	23	S	4.1	2.9	MR
13	AOR10204-3	6.3	310	7.3	1581	6.3	335	8.0	1012	0	70	29	11	37	23	S	4.5	3.1	R
14	CO13003-1RU	.	.	8.3	1388	.	.	.	.	.	10	.	.	62	45	S	.	.	MS
15	CO10085-1RU	.	.	7.7	1405	.	.	.	.	.	0	.	.	78	62	S	.	.	S
16	CO11009-3RU	.	.	7.2	1143	.	.	.	.	.	0	.	.	45	31	S	.	.	MS
	Entry Means	6.7	502	8.0	1464	6.2	403	7.5	1005	9	49	25	12	44	30		3.9	2.5	
	LSD (.05)	**3.6**				**n.s.**		**0.9**	**228**	**7**		**n.s.**	**n.s.**				**1.1**	**1.9**	

[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=10-25%; 5=25-40%; 6=40-60%; 7=60-70%; 8=75-90%; 9=90-100% dead or dying with typcial disease symptoms.
AUDPC: Area Under the Disease Progress curve based on foliar readings taken 103, 110, and 118 days after planting.
Common Scab and Net Necrosis serious defects are number of tubers with a 3 rating (0-5 scale) or higher, divided by 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 innoculations.

[2] Evaluations made at Hermiston, Oregon; scale as indicated with highest number being most severe. Readings 120 days after planting. AUDPC based on foliar readings taken at three different dates after planting.

[4] Evaluations made at Corvallis, Oregon by Solomon Yilma; Ratings are averages for 4 reps: 1 = no foliar injury; 2 = 1-5% injury; 3 = 5-10% injury; 4 = 10-20%; 5 = 25-40% 6 = 40-60%; 7 = 60-75%; 8 = 75-90%; 9 = 90-100% injury. Percent of late blight infected tubers at harvest based on 10 randomly selected tubers per replication.

[5] Visual readings made at Prosser, Washington by Rich Quick and Launa Cimrhakl: tubers cut lengthwise, quartered and scored (0-8) based on the number of wedge sides affected. Disease Severity Index (DSI) was calculated for each replication by summing the scores (S) of each tuber evaluated (T) and dividing that number by the number of tubers evaluated multiplied by the worst possible score (8) and multiplying by 10 DSI = (∑ S)/(T*8)*100
TRV Disease Rating Based on %DSI:R=Extreme Resistance (0-1%);MR=Moderate Resistance (1.1-5%);MS=Moderately Susceptible (5.1-10%);S=Susceptible (10.1+%)

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

TABLE 14: 2022 Western Regional Potato Variety Trial - SOLIDS, DEXTROSE, SUCROSE, PROTEIN, VITAMIN C, AND GLYCOALKALOIDS - ABERDEEN

No.	Clone	Solids Oven Dry %	Sugars Dextrose (%FWB)[1]	Sugars Sucrose (%FWB)[1]	Protein (%DWB)[1]	Vitamin C (mg/100g FWB)[1]	Texas[2] µg Trolox equivalents/gfw[3]	Texas[2] AOA Levels[4]	Glycoalkaloids[5] (mg/100g FWB)[1]
1	CLEARWATER R.	21.8	0.03	0.14	7.2	32.4	135.4	M	0.8
2	RANGER R.	22.7	0.05	0.17	5.5	44.8	158.5	M	3.4
3	R. BURBANK	18.6	0.11	0.14	5.5	32.0	143.1	M	2.2
4	R. NORKOTAH	18.7	0.06	0.10	5.1	27.7	154.2	M	0.9
5	SHEPODY	.	.	.	.	.	87.0	L	
6	A09086-1LB	21.9	0.02	0.14	6.2	27.6	110.3	L	1.6
7	A10594-4sto	20.6	0.04	0.09	5.3	26.5	138.7	M	1.8
8	A12305-2adg	22.4	0.05	0.19	5.8	29.5	108.9	L	1.7
9	AFA5661-8	22.8	0.07	0.18	6.3	31.1	165.8	M	5.3
10	AOR11217-3	21.9	0.02	0.10	5.9	28.2	134.1	M	1.6
11	AOR08540-1	20.8	0.05	0.15	5.2	24.5	161.1	M	1.9
12	AC12090-3RU	21.0	0.06	0.12	5.7	30.4	162.8	M	1.6
13	AOR10204-3	17.9	0.08	0.18	5.6	21.5	.	.	0.4
14	CO13003-1RU	20.7	0.02	0.11	5.2	27.5	145.0	M	1.8
15	CO10085-1RU	23.0	0.03	0.14	5.7	35.1	191.9	M	5.8
16	CO11009-3RU	22.9	0.01	0.10	7.1	38.2	134.3	M	0.5
	Mean	**21.2**	**0.05**	**0.14**	**5.8**	**30.5**	**142.1**		**2.1**

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

[2] The assay used at Texas A&M University was based on "Use of a Free Radical Method to Evaluate Antioxidant Activity" by Brand-Williams, et al. 1995, Levensm. Wiss. Technol. 28:25-30. Antioxidants soluble in methonal were extracted and allowed to react with the stable radical, 2,2,-Diphenyl-1-picrylhydrazyl (DPPH). This provided a rapid evaluation of the antioxidant properties of the potato extracts based on absorbance.

[3] µg Trolox equivalents/gfw - Absorbance was converted to trolox equivalents based on a standard curve using the following equation: y= -.272.42x + 292.13

[4] VH=very high (>399), H=high (276-348), M=medium (134-259), L=low (67-127), VL=very low (<55) n=63 including ten check varieties

[5] Glycoalkaloids: The 2022 Lenape check grown at Aberdeen was 64.95 mg/100g

TABLE 15: 2022 Western Regional Potato Variety Trial - MERIT SCORES [1-5(best)]

No.	Clone	Process Merit: CO SLV L	OR HRM E	OR HRM L	WA OTH E	WA OTH L	Early Trial **Mean**(Rnk)		Late Trial **Mean**(Rnk)		Post-Harvest Process: WA[1] 3 State Mean	Fresh Merit: CA TUL L	CO SLV L	ID AB L	ID KIM L	OR HRM E	OR HRM L	TX DAL E	TX SPR E	WA OTH E	WA OTH L	Early Trial **Mean**(Rnk)		Late Trial **Mean**(Rnk)	
1	CLEARWATER R.	5.0	3.0	3.0	2.1	4.0	**2.5**	9	**3.0**	**1**	4.4	4.0	3.0	2.8	3.3	2.5	2.5	4.3	3.7	1.5	2.3	**3.0**	10	**3.0**	**4**
2	RANGER R.	3.0	3.0	2.5	3.0	4.4	**3.0**	6	**2.5**	**7**	3.9	3.0	1.0	2.0	1.6	2.0	2.5	3.8	3.4	2.5	2.2	**2.9**	11	**2.1**	**14**
3	R. BURBANK	4.0	2.5	2.0	1.8	1.0	**2.1**	**13**	**1.8**	**11**	2.1	.	3.0	1.6	1.4	2.0	2.0	3.6	3.5	1.0	1.6	**2.5**	**16**	**1.9**	**15**
4	R. NORKOTAH	2.0	1.5	2.5	.	.	**1.5**	**16**	**1.5**	**15**	.	4.0	1.0	3.3	3.5	2.5	1.5	3.5	3.4	3.2	2.5	**3.1**	8	**2.6**	**10**
5	SHEPODY	3.0	2.5	.	3.0	.	**2.7**	7	**1.5**	**15**	.	.	1.0	.	.	1.5	.	3.7	3.6	.	.	**2.9**	11	**1.0**	**16**
6	A09086-1LB	4.0	3.0	2.5	3.2	4.3	**3.1**	4	**2.7**	**4**	3.1	2.5	4.0	2.9	2.6	2.0	2.0	4.5	4.0	1.1	1.7	**2.9**	11	**2.6**	**10**
7	A10594-4sto	4.0	3.0	3.0	1.3	3.0	**2.1**	**13**	**2.5**	**7**	4.1	3.0	3.0	3.1	3.1	3.0	2.5	4.7	3.8	2.7	2.0	**3.5**	**2**	**2.8**	**7**
8	A12305-2adg	4.0	3.0	3.0	3.1	3.8	**3.1**	4	**2.7**	**4**	3.6	4.0	5.0	2.6	2.4	3.0	3.0	4.6	4.4	2.4	2.4	**3.6**	**1**	**3.2**	**2**
9	AFA5661-8	5.0	2.5	2.0	2.8	4.9	**2.7**	7	**3.0**	**1**	3.5	3.0	4.0	3.1	2.8	2.5	2.0	4.1	3.5	3.2	1.6	**3.3**	6	**2.8**	**7**
10	AOR11217-3	4.0	3.0	3.0	3.5	3.3	**3.3**	**1**	**2.6**	**6**	4.3	3.5	4.0	3.0	2.6	3.0	3.0	4.0	3.7	3.0	2.6	**3.4**	**3**	**3.1**	**3**
11	AOR08540-1	4.0	3.0	2.5	3.5	3.6	**3.3**	**1**	**2.5**	**7**	2.8	4.0	4.0	3.0	2.5	2.5	2.0	3.7	4.3	3.2	1.9	**3.4**	3	**2.9**	**5**
12	AC12090-3RU	3.0	2.5	2.0	1.6	1.9	**2.1**	**13**	**1.7**	**13**	2.8	2.5	3.0	3.4	3.1	2.5	3.0	4.3	4.3	1.4	2.2	**3.1**	8	**2.9**	**5**
13	AOR10204-3	.	2.5	2.5	3.9	3.0	**3.2**	**3**	**1.8**	**11**	.	.	.	2.4	2.1	3.0	2.0	.	.	2.4	3.2	**2.7**	**14**	**2.4**	**12**
14	CO13003-1RU	3.0	2.5	2.0	.	1.9	**2.5**	9	**1.7**	**13**	2.1	3.5	3.0	3.3	3.1	3.0	3.0	4.1	4.3	2.1	1.2	**3.4**	3	**2.8**	**7**
15	CO10085-1RU	4.0	2.0	2.0	2.4	2.2	**2.2**	12	**2.1**	**10**	3.2	3.0	3.0	2.4	2.5	2.5	2.0	3.3	3.4	1.0	1.4	**2.6**	**15**	**2.4**	**12**
16	CO11009-3RU	5.0	2.5	3.0	2.3	3.9	**2.4**	11	**3.0**	**1**	4.6	3.0	5.0	3.3	2.9	2.5	3.0	4.3	4.0	2.2	2.8	**3.3**	6	**3.3**	**1**
	Mean	3.8	2.6	2.5	2.7	3.2	2.6	8	2.3		3.4	3.3	3.1	2.8	2.6	2.5	2.4	4.0	3.8	2.2	2.1	3.1		2.6	

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

TABLE 16: 2022 Western Regional Potato Variety Trial - ENTRY SUMMARY[1]

Entry 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]	Fry45 Color	Combine(E&L) Merit Score[3] Process	Merit Score[3] Fresh	Observations	Disp. 2022
1	CLEARWATER R.	-	Dual	448	361	78	4.6	5.5	1.088	0.1	2.8	2.9		Check
2	RANGER R.	-	Dual	419	321	72	5.7	6.2	1.081	0.6	2.6	2.3		Check
3	R. BURBANK	-	Fresh	472	337	66	5.6	6.5	1.074	1.6	1.9	2.2		Check
4	R. NORKOTAH	-	Dual	364	282	72	5.3	5.5	1.070	1.8	1.5	2.7		Check
5	SHEPODY	-	Proc	481	360	69	7.9	7.9	1.074	1.0	2.9	2.9		Check
6	A09086-1LB	1	Dual	555	464	81	4.9	6.2	1.092	1.9	2.8	2.8	High Total (E&L) & US Yields (L); High specific graviities (E&L); Late Blight resistant; Common scab susceptible; Poorer fresh and processing merit (E); Higher process merit (L)	RTRN
7	A10594-4sto	1	Dual	467	400	83	7.5	7.8	1.083	0.6	2.4	3.1	Earlier maturing; High US yield (Early); High >10 oz yields (E&L); Higher hollow heart (E&L)-Hermiston & Othello; Good fry color from 45 F & low sugar ends; Early Die/Early Blight susceptible	RTRN
8	A12305-2adg	1	Dual	528	458	85	6.5	7.2	1.085	0.9	2.8	3.3	High Total (E) and US No. 1 Yields (E&L); High >10 oz yields (E&L); Common scab resistant (OR & ID); High process & fresh merit (L) and fresh merit (E)	RTRN
9	AFA5661-8	1	Dual	517	438	83	6.7	7.8	1.094	1.0	2.9	3.0	High % of US No. 1 yields (E&L); High specific gravity (L); Tubers with low L/W ratio; Higher Net Necrosis/Vascular Discoloration (E&L); Good fry colors from 40 F; Late Blight resistant; Common scab resistant (OR & ID); Fusarium susceptible	RTRN
10	AOR11217-3	1	Fresh	482	403	82	5.3	6.6	1.087	0.2	2.8	3.2	High specific gravity (Early); Higher Net Necrosis/Vascular Discoloration (L)-Othello & Hermiston; Good fry color from 45F & low sugar ends; Fusarium susceptible; High process and fresh merit (E) and fresh merit (L)	RTRN
11	AOR08540-1	3	Proc	531	424	78	5.2	6.9	1.085	1.5	2.8	3.0	High total yield (L)	GRAD
12	AC12090-3RU	1	Dual	426	341	77	5.3	6.0	1.079	1.6	1.8	3.0	Earlier maturing; Common scab resistant (OR & ID); Low process merit (E&L)	RTRN
13	AOR10204-3	3	Dual	529	422	76	6.6	6.5	1.074	1.0	2.4	2.5	High total and US No. 1 yields (E); Low specific gravities (E&L); Fusarium susceptible	GRAD
14	CO13003-1RU	1	Dual	435	356	80	5.1	5.4	1.081	1.8	1.9	3.0	Low >10 oz and high <4 oz yields (E&L); Poorer fry color from 44F & 40F (WA fry)	RTRN
15	CO10085-1RU	3	Dual	421	309	70	3.7	4.9	1.089	1.0	2.1	2.4	More rounded tuber shape; Lower total (E&L) and US No. 1 yields (L); Low >10 oz and high <4 oz yields (E&L); Smaller tubers with low L/W ratio (E&L); Metribuzin susceptible; Higher Vit. C; Low process and fresh merit (E)	GRAD
16	CO11009-3RU	3	Dual	533	452	83	5.8	5.9	1.093	0.2	2.8	3.3	High total and US No. 1 yields (L); High specific gravities (E &L); Good fry color from both 45F & 40F with no sugar ends; Higher protein & Vit. C	GRAD
	Mean			**476**	**383**	**77**	**5.7**	**6.4**	**1.083**	**1.0**	**2.4**	**2.9**		

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

[2] Data shown from late trial results unless early trial entry only. (Entry 5)

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

TABLE 17: 2022 Western Regional Potato Variety Trial - 3 YEAR SUMMARY OF GRADUATING ENTRIES - LATE TRIAL LOCATION MEANS

	2020						2021						2022					
Clone	Total Yield[1] (rank)	US #1 Yield[1] & %	SG	Fry 45	Merit Score Fresh	Merit Score Proc	Total Yield[1] &(rank)	US #1 Yield[1] & %	SG	Fry 45	Merit Score Fresh	Merit Score Proc	Total Yield[1] &(rank)	US #1 Yield[1] & %	SG	Fry 45	Merit Score Fresh	Merit Score Proc
AOR08540-1	649 (3/16)	519 79	1.086	0.5	3.2	3.5	643 (5/13)	450 72	1.085	1.0	2.6	2.4	531 (4/15)	424 78	1.085	1.5	2.9	3.2
AOR10204-3	740 (1/16)	481 71	1.079	0.9	2.9	2.7	674 (1/13)	518 75	1.074	0.3	2.5	1.8	529 (5/15)	422 76	1.074	1.0	2.8	3.0
CO10085-1RU	537 (13/16)	439 80	1.087	0.9	2.4	2.9	596 (8/13)	430 72	1.088	0.5	2.6	2.1	421 (14/15)	309 70	1.089	1.0	2.8	3.0
CO11009-3RU	612 (6/16)	519 84	1.094	0.2	3.3	3.9	610 (7/13)	481 78	1.091	0.3	3.1	2.9	533 (3/15)	452 83	1.093	0.2	2.9	2.5
CLEARWATER R.	608 (7/16)	512 83	1.090	0.4	2.9	3.3	552 (9/13)	444 79	1.086	0.3	3.0	3.1	448 (11/15)	361 78	1.088	0.1	3.0	3.0
R. BURBANK	576 (11/16)	397 68	1.078	1.3	2.1	2.3	520 (10/13)	306 59	1.072	0.3	2.0	1.8	472 (9/15)	337 66	1.074	1.6	1.9	1.8
RANGER R.	606 (8/16)	465 76	1.084	0.5	2.2	2.8	611 (6/13)	370 64	1.086	1.3	2.3	2.4	419 (15/15)	321 72	1.081	0.6	2.1	2.5
Trial Mean	589	470 79	1.085	0.6	2.7	3.0	586	440 74	1.082	0.6	2.6	2.3	475	385 78	1.084	1.0	2.6	2.3

3 Year Average (2020-2022)

	Total Yield[1] &(%ile)[2]	US #1 Yld[1]	%	SG	FRY 45	Merit Score Fresh	Merit Score Proc	Noted Weaknesses	Noted Strengths
AOR08540-1	608 (72)	464	76	1.085	1.0	2.9	3.0	None noted over years.	High total yields (Late)-2/3 years;
AOR10204-3	648 (84)	474	474	1.076	0.7	2.7	2.5	Lower specific gravities (E&L)-3/3 years	High total yields (Late)-2/3 years; High total yields (Early)-3 years; Larger tuber size (2/3 years)
CO10085-1RU	518 (21)	393	74	1.088	0.8	2.6	2.7	Smaller tuber size with high % and yield of undersize (E &L)-3/3 years; Low Total Yield (Early)-2/3 years; more rounded tuber shape-2/3 years; Metribuzin susceptible-3/3 years; Low process and fresh merit (Early)-2/3 years;	None noted over years
CO11009-3RU	585 (62)	484	82	1.093	0.2	3.1	3.1	Susceptible to metribuzin-3/3 years	Higher Specific Gravity (E&L)-3/3 years; Cold-sweetening resistant-3/3 years; Higher protein-2/3 years; High merit for fresh and processing (Late)-2/3 years
CLEARWATER R.	536 (37)	439	80	1.088	0.3	3.0	3.1		
R. BURBANK	523 (31)	346	64	1.075	1.1	2.0	2.0		
RANGER R.	545 (34)	385	71	1.084	0.8	2.2	2.6		
Trial Mean[3]	550	431	77	1.084	0.7	2.6	2.5		

[1] (CWT/A)

[2] Percent of entries with lower yields; e.g. 72% of all late trial entries over three years yielded lower than AOR08540-1

[3] Late Triall means of all trial entries 2020 - 2022. Merit combined late and early trials.

TABLE 18: 2022 Western Regional Potato Variety Trial - ENTRY COMMENTS - EARLY HARVEST

No	Clone	ID PAR	TX DAL	TX SPR	OR[1] HRM	WA OTH
			Entry Comments - Early Harvest			
1	Clearwater Russet	blocky	BOT, nice, great shape, good skin, peeping, good shape, high tuber number	uniform size and shape, many sprouted tubers+++, short, small++, good russet skin+, good shape++, nice, parent+, some	pty x4, typy x3, bottle x3, short x3, pixel x3	Small, not early, but typy.
2	Ranger Russet	curved	deep eyes+, large, pointed, some knobs,	deep eyes, very small, many sprouted tubers++, rough+, light skin	sticky x2, curvy x3, rot x2	Mostly typy, good length, skin not uniform.
3	Russet Burbank	typical	high tuber number+, soft stolon ends, rotten, skinny, curved, rotten stolon ends, moon shapes	uniform size and shape, small+++, short++, sprouts, high tuber number+	pty x4, bottle x3, nipple x2, nice x2, short x2	Larger, shape irrgegular. Lots of knobs.
4	Russet Norkotah	blocky	low tuber number, great shape+, intense russet skin+, dark skin, good russet skin,	dark skin, good shape, very small+++	typy x4, short x4, tuberworm x2, cracky scab x2	Skin not uniform. Mostly typy.
5	Shepody	irregular, sprouts	knobs, smooth skin++	rough shape, some sprouts, non-uniform shape, late, smooth skin+, large, small, many knobs+, light skin+	pty x4, curvy x2, bottle x4, XL x3, irregular x3	Larger, slightly irregular shape. Green sprouts.
6	A09086-1LB	patchy russet	blocky+, light russet+, very high tuber number+, BOT+, some rotten tuber, sprouting, gemmations, large	large tubers, many sprouted+++, high tuber number+, good size and shape+, some soft tubers, no russet+, golden skin	pty x2, skinning x3, typy x2, bottle x2, sticky x2	Light russet, with poor skin set, ok shape, scab.
7	A10594-4sto	pointed	WOW! BOT, huge tuber number, huge yield, great blocky shape+	good size and shape++, soft+, deep eyes, non-uniform russetting+, high yield, large, some curved, large tubers, pointed, light	typy x2, nice x3, cracky x2, blocky x3, flakey x2, deep eyes x2	Not early, some points, some typy.
8	A12305-2adg	blocky	very long tubers++, huge tuber number+, huge yield, uniform size and shape, BOT+, possibly too long, rotten, soft stolon ends, stolon end rot	BOT+, excellent size and shape, feathering++, some bruising, large, uniform shape, good skin, high tuber number++,	nice x2, skinning x4, pty x2, sticky x2, blocky x2	Poor skin set, somewhat typy.
9	AFA5661-8	curved, VD	short+, pointed, gemmation, knobs, good russet skin, good shape	very late, very short, many sprouted tubers+++, light skin	blocky x4, nice x3, lenticels x3, short x3, sticky x3	Light russet, plump, not early.
10	AOR11217-3	uniform, pear shape	good intense russet skin, good shape, pointed	short+, a few sprouted tubers, good shape, uneven russet skin	pixel x3, curvy x2, skinning x2, pty x4, bottle x3, tip curve x2	Good length, dark skin, typy, poor skin set on some.
11	AOR08540-1	curved	very long+, pointed++, high tuber number+, soft stolon ends, growth cracks, rotten stolon ends	good shape and size++, nice russet skin+, some sprouts	pty x4, bottle x4	Typy, smaller, not early.
12	AC12090-3RU	blocky	high tuber number+, high yield, blocky, very nice, blocky shape, BOT, good shape, very nice intense russet skin+	BOT+, very good size and shape+++, excellent russet skin+, good length,	pink x2, lenticels x3, rot x3, typy x4	Not early, rough skin type, some typy.
13	AOR10204-3	irregular, pointed	.	.	skinning x2, pty x4, typy x2, bottle x3, curvy x2	Larger, poor skin set, some pointy tubers.
14	CO13003-1RU	small	good size, good shape+, blocky+, good intense russet skin+, BOT+, nice	wide russet net skin, BOT+, very nice shape and size++, nice russet netting+, a little flat+	short x4, typy x4, skinning x2, pixel x3	Typy, dark skin, not early.
15	CO10085-1RU	small	bad shape, oval, attached stolons+, sprouting, linked tubers+, gemmations+, DROP+, non-uniform size and shape, pointed, knobs+,	very late, many baby tubers, high tuber number+, non-uniform size and shape++, some large ones, knobs+, many sprouts+++,	short x2, bottle x4, R x2, tip curve x3, nipple x4, pty x2	Not early, some lenticils, a lot of rot.
16	CO11009-3RU	small, blocky	high tuber number, blocky, deep eyes, good size and shape+	good russet skin++, nice, good size and shape+, roundish eyes+, some pointed+	pixel x3, typy x3, curvy x3	Ok size and length, poor skin set, darker skin.

TABLE 19: 2022 Western Regional Potato Variety Trial - ENTRY COMMENTS - LATE HARVEST

		Entry Comments - Late Harvest						
		CA	CO	ID[⊥]			OR[⊥]	WA
No.	Clone	TUL	SLV	AB	KIM	PAR	HRM	OTH
1	Clearwater Russet	nice tuber shape	skin texture	Flat, misshapen (3); typy nice russet	Uniform, bad rot (4); few points, few misshapen	pear shape, blocky	short x2, typy x4, nipple x3, pixel x3, pty x4, rot x2	Typy, short, some round, smaller.
2	Ranger Russet	curved long tuber shape, lumpy	shatter bruise	Curves, points, lumpy, skinny (3)	Bad rot and gc curves (4); deep eyes, misshapen (3); points (2)	typical, curved	curvy x4, pty x3, deep eyes x3, rot x4	Mostly typy, long, a few irregular shapes.
3	Russet Burbank	.	.	Points, misshapen (3); bad knobs, very bad JE	Misshapen, bad gc bad knobs (4); points (3); curves (2) bad HH	typical, curved	deep eyes x2, bottle x3, pty x4, rot x2	Larger, shape a bit irregular. Knobs.
4	Russet Norkotah	nice tuber shape	.	Uniform, small (4)	Uniform, curves, bumps (2)	blocky	typy x4, short x3, tuberworm x3, pty x3	Mostly typy, ok length and skin.
5	Shepody	.	powdery scab	Patchy skin (4); blocky/typy (3)	.	.	.	.
6	A09086-1LB	uniform tuber shape	soft rot, light russet, rough	Typy (3); patchy skin, points, small (2)	Bad rot, flat (4); typy, blotchy skin (3); deeper eyes	blocky, non-uniform	deep eyes x2, rot x4, pty x4, stripey x3, flakey x2	Spotty russeting, some oval shaped, short.
7	A10594-4sto	uniform tuber shape	small, curve, pink inside, brown center, pointed, hail damage	Points typy/blocky (4);	Uniform (4); low yield (2)	rough skin, blocky	stripey x2, flakey x4, deep eyes x4, sticky x4, typy x3, blocky x2, nice x2	Severe greening, light russeting, plump.
8	A12305-2adg	nice russeting	scurf, good size and shape, nice	Typy/blocky, uniform (4); nice skin (3); bad rot	Typy (3); bad rot, lumpy, big (2)	pointed, curved	pty x3, skinning x2, typy x2, stripey x4, rot x3, curvy x2	Ugly, spotty skin, shape is irregular.
9	AFA5661-8	lumpy tuber shape	red undertone	Blocky (4); uniform (2)	Typy, flat (3); bad rot, variable size, misshapen (2)	blocky, alligator hyde, non-uniform	spr x4, chain x2, lenticels x2, typy x2, blocky x2, sticky x2, skinning x3	Light russeting, scab, irregular shape.
10	AOR11217-3	long tubers	pink inside, powdery scab, blocky	Uniform, typy (3); few points, curves (2) very bad HH bad green bad rot	Misshapen (3); flat, points (2) bad HH	pear shape	pty x4, pixel x3, curvy x3, typy x3	Shape a bit irregular, smaller. Short.
11	AOR08540-1	nice russeting	pink inside	Points (3); curves, typy (2)	Bad rot, bad green (4); bad points, length (3); typy, curves (2) bad HH	curved	pty x2, bottle x3, curvy x3, irregular x2, stripey x4, flakey x2, rot x2	Some points, irregular shapes, greening an issue.
12	AC12090-3RU	red hue skin color	.	Typy (4); variable size, bumps, few misshapen, nice skin (2)	Typy (4); points, uniform, nice skin, bad rot (2)	red eyes, blocky	rot x4, typy x4, lenticels x3, FM x2, pink x3	Mostly typy, red tint to skin, severe greening.
13	AOR10204-3	.	small	Points (4); patchy, small (3)	Bad rot, misshapen, typy, short (2)	pointed	skinning x4, pty x4, GC x2, bottle x3, DB x2	Pointy, good length, irregular shapes.
14	CO13003-1RU	few culls	GC*	Typy (4); uniform (3) bad HH	Points (2) few curves bad HH	uniform, blocky	typy x3, short x4, sticky x3, FM x2, rot x2, pty x2	Shorter, mostly typy, some elephant hide.
15	CO10085-1RU	non uniform tuber shape	nice	Typy (4); uniform, nice skin (3)	Misshapen (3); smaller, uniform (2) sprouts at fry	dumbbell	pty x2, traingular x2, lenticels x2, short x4, spr x4, rot x3	Short, small ones, round.
16	CO11009-3RU	lumpy tuber shape	shatter bruise, brown center	0	Uniform (3); bad rot, typy (2) bad HH	blocky	typy x3, pixel x3, curvy x3	Typy, good skin. Tubers a bit lumpy.