

2014 Western Regional Red/Specialty Trial

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Table 1. Western Regional Red/Specialty Potato Variety Trial - Locations, Cooperators, and Cultural Information

Locations	Cooperators	Trial	Irrigation	Fertilizer N-P-K-S (lb./A)	Planting Date	Vine Kill Date	Vine Kill Method	Harvest Date	Pesticides Applied		
									Herbicides	Insecticides	Fungicides
Ontario Oregon (ON)	C. Shock E. Feibert M.Saunders		Sprinkler, solid set	247-10-160-110s-9Zn	4/16/2014	9/18/2015	Mechanical	9/24/2014	Prowl H2O Dual Magnum Matrix	Admire Movento	Bravo Quadris Opti
Tulelake California (TUL)*	R. Wilson D. Culp K. Nicholson S. Peterson	Late	Sprinkler	204-40-110-34s	5/19/2014	9/5/2014	Roll/Reglone	9/26/2014	Matrix	Admire	Maxim 4FS Quadris Omega F500 Bravo Weatherstick
San Luis Valley Colorado (SLV)	D. Holm, C. Gray	Late	Pivot	120-60-40-25-2.5 Zn	5/16/2014	9/4/2014	Reglone	9/29/2014	Outlook Eptam 7E Matrix SG	Leverage 360 Belay Movento	Quadris Luna Tranquility
Aberdeen Idaho (AB)	J. Stark, R. Novy, J. Whitworth, P. Bain,	Early	Sprinkler	255-160-60	5/5/2014	8/19/2014	Mechanical	9/9/2014	Eptam 7E TriCor 4F Matrix	Admire Pro	Echo Manzate flowable Gavel
Springlake Texas (SPL)**	J. C. Miller Jr., J. Koym, D. Scheuring	Early	Pivot	155-34-34	3/31/2014	7/12/2014	Mechanical	7/28/2014	Sencor, Roundup Dual Treflan Choice	Movento, Blackhawk Agrimek, Transform Venom, Cruiser Maxx Tracer	Scala Bravo Nucop
Dalhart Texas (DAL)***	J. C. Miller Jr., J. Koym, D. Scheuring	Early	Pivot	115-50-0	5/14/2014	9/1/2014	Mechanical	9/22/2014	Select Max, Tricor Chateau Brawl Acumen	Beleaf Fulfill Movento Reaper	Quadris, Scala SC Penncozeb, Luna Tranquility Bravo, Echo Revus Top

*
**These trials were subjected to above average precipitation for May, June, July and August and a freeze on May 14th.
***These trials were subjected to above average precipitation for the entire growing season.

Table 2. Description of Clones - 2014 Western Regional Red/Specialty Trial

Clone/Variety	Parents		Flower Color	Vine Size	Maturity	Tuber Shape	Skin Type	Flesh Color	Entered			DISPO
	Female	Male							By	Seed	Year	
Red/White Flesh												
1 Chieftan	La 1354	Ia 1027-18	Lavender	Med-Large	Med	Oblong	Lt. Red	White	Check	OR	***	
2 Red LaSoda	Triumph	Katahdin	Red-purple	Med	Med	Oval	Lt. Red	White	Check	OR	***	
3 CO05228-4R	CO99256-2R	CO00292-9R	Red-Purple	Medium	Early	Oblong	Red	White	CO	CO	1	
4 NDA050237B-1R	ND028678-1RY	ND028770B-4R	Dk Red-purple	Large	Med-late	Oval	Red	White	ID	ID	1	
5 NDTX5438-11R	ND4339-10R	ND4269-9R	Lavender	Medium	Late	Round	Red	White	TX	CO	2	
Red-Purple/Yellow Flesh												
6 A05180-3PY	Pinto (ATND9331-2)	VC1075-1R	Dk Red-purple	Medium	Medium	Round	Purple	yellow	ID	OR	1	
7 ATTX98444S-16R/Y	A83360-9R	T48YF	Lavender	Large	Med-Early	Oblong	Red	Yellow	TX	CO	1	
8 CO04067-8R/Y	CO97232-1R/Y	ATC98444-1R/Y	Red-Purple	Large	Med-Early	Oval	Red	Yellow	CO	CO	2	
9 CO05037-2R/Y	AC99330-1P/Y	CO97227-2P/PW	Red-Purple	Medium	Medium	Oblong	Red	Yellow	CO	CO	1	
10 AC05175-3P/Y	A99331-2R/Y	COA99261-1RY	Dark Purple	Small	Very Early	Oval	Purple	Yellow	CO	CO	1	
Yellow Flesh												
11 Yukon Gold	Nogleam	W5279-4	Pink	Med	Early	Oval	White	Yellow	Check	OR	***	
12 A02267-1Y	Inca Gold	ND5256-7R	Med Red-purple	M-large	Med-late	Round	Yellow	Yellow	ID	OR	2	
13 A05182-7RY	ATND93331-2	A99433-5Y	White	Medium	Med-late	Round	Yellow/Pink Eye	Yellow	ID	OR	1	
14 ATX05202S-3W/Y	A00286-3Y	A99433-5Y	Lavender	Large	Late	Round	White	Yellow	TX	CO	1	
15 CO04099-3W/Y	VC1002-3W/Y	ATC98495-1W/Y	Red-Purple	Med-Large	Early	Oval	White	Yellow	CO	CO	2	
16 CO05037-3W/Y	AC99330-1P/Y	CO97227-2P/PW	Light Purple	Med-Large	Early	Round	White	Yellow	CO	CO	1	
17 NDA081451CB-1CY	Dakota Diamond	ND 039173CAB-22	White	Medium	Med-early	Round	Yellow	Yellow	ID	ID	1	

Table 3. Percent Stand

Entry	Clone/Variety	Percent Stand					Mean
		CA TUL	CO SLV	ID AB	TX SPL	TX DAL	
Red/White Flesh							
1	Chieftan	100	96	98	100	100	99
2	Red LaSoda	99	99	99	100	100	99
3	CO05228-4R	94	98	81	68	92	87
4	NDA050237B-1R	99	98	98	100	100	99
5	NDTX5438-11R	83	98	86	94	94	91
Red-Purple/Yellow Flesh							
6	A05180-3PY	97	99	99	100	75	94
7	ATTX98444S-16R/Y	99	99	99	100	100	99
8	CO04067-8R/Y	98	96	99	100	42	87
9	CO05037-2R/Y	99	100	96	100	100	99
10	AC05175-3P/Y	99	97	98	100	77	94
Yellow Flesh							
11	Yukon Gold	90	99	99	90	100	96
12	A02267-1Y	97	96	96	82	100	94
13	A05182-7RY	98	100	99	100	100	99
14	ATX05202S-3W/Y	98	99	96	97	100	98
15	CO04099-3W/Y	98	98	98	100	100	99
16	CO05037-3W/Y	97	94	98	66	83	87
17	NDA081451CB-1CY	99	100	99	100	100	100
Mean		97	98	96	94	92	95

Table 4. Vine Size and Vine Maturity

Entry	Clone/Variety	Vine Size (1-5 large)					Vine Maturity (1-5 late)				
		CO	ID	TX	TX	Mean	CO	ID	TX	TX	Mean
		SLV	AB	SPL	DAL		SLV	AB	SPL	DAL	
Red/White Flesh											
1	Chieftan	3.5	3.0	3.8	3.7	3.5	3.3	3.0	3.4	2.6	3.1
2	Red LaSoda	3.8	2.0	3.9	4.0	3.4	3.0	2.0	4.0	3.8	3.2
3	CO05228-4R	2.3	2.0	3.6	3.4	2.8	2.0	2.5	3.2	3.0	2.7
4	NDA050237B-1R	4.0	3.0	4.0	3.9	3.7	3.3	2.9	4.4	4.5	3.8
5	NDTX5438-11R	3.0	2.5	3.5	3.5	3.1	2.8	3.5	3.4	3.8	3.4
Red-Purple/Yellow Flesh											
6	A05180-3PY	4.0	2.0	3.9	3.8	3.4	3.0	3.0	4.5	4.5	3.7
7	ATTX98444S-16R/Y	4.0	3.0	4.1	4.1	3.8	3.0	2.5	3.8	3.9	3.3
8	CO04067-8R/Y	3.3	1.5	3.7	3.5	3.0	2.5	2.0	3.2	3.8	2.9
9	CO05037-2R/Y	3.5	1.5	3.6	3.1	2.9	3.3	3.0	3.6	3.2	3.3
10	AC05175-3P/Y	1.5	1.5	3.4	3.6	2.5	1.0	2.0	3.2	2.6	2.2
Yellow Flesh											
11	Yukon Gold	3.0	1.5	3.6	3.6	2.9	2.0	1.5	3.0	3.0	2.4
12	A02267-1Y	4.0	3.0	3.5	4.1	3.7	2.8	3.5	4.6	4.3	3.8
13	A05182-7RY	4.0	3.0	3.9	3.9	3.7	3.8	4.3	4.9	4.5	4.4
14	ATX05202S-3W/Y	4.0	2.0	4.0	4.1	3.5	3.8	2.5	5.0	4.8	4.0
15	CO04099-3W/Y	3.8	2.0	3.9	3.6	3.3	3.0	2.5	3.8	3.2	3.1
16	CO05037-3W/Y	3.0	1.0	3.1	3.5	2.7	2.8	1.3	3.9	4.0	3.0
17	NDA081451CB-1CY	4.0	3.0	4.0	4.4	3.8	3.5	3.5	4.9	4.6	4.1
Mean		3.5	2.2	3.7	3.7	3.3	2.9	2.7	3.9	3.8	3.3

Table 5. Total Yield

Entry Clone/Variety	Total Yield (cwt/A)						Mean	Rank
	OR ON	CA TUL	CO SLV	ID AB	TX SPL	TX DAL		
Red/White Flesh								
1 Chieftan	703	532	616	462	236	743	611	1
2 Red LaSoda	554	422	595	428	298	679	536	2
3 CO05228-4R	308	355	424	246	87	354	337	5
4 NDA050237B-1R	680	363	557	398	155	490	498	3
5 NDTX5438-11R	477	360	513	255	91	519	425	4
Red-Purple/Yellow Flesh								
6 A05180-3PY	708	506	581	467	211	435	539	1
7 ATTX98444S-16R/Y	519	432	486	393	189	469	460	2
8 CO04067-8R/Y	452	397	453	163	159	256	344	4
9 CO05037-2R/Y		287	389	134	126	215	256	5
10 AC05175-3P/Y	403	353	389	250	166	395	358	3
Yellow Flesh								
11 Yukon Gold	777	416	394	320	179	483	478	4
12 A02267-1Y	711	433	581	389	146	509	525	3
13 A05182-7RY	385	432	512	251	338	515	419	7
14 ATX05202S-3W/Y	848	432	601	494	149	472	569	2
15 CO04099-3W/Y	597	436	454	473	223	376	467	5
16 CO05037-3W/Y	566	386	439	404	149	508	461	6
17 NDA081451CB-1CY	848	558	459	581	255	618	613	1
Mean	596	418	497	359	186	473	464	

Table 6. Yield and Percent < 4 oz

Entry	Clone/Variety	Yield < 4 oz (Cwt)								Percent < 4 oz							
		OR	CA	CO	ID	TX	TX	Mean	Rank	OR	CA	CO	ID	TX	TX	Mean	Rank
		ON	TUL	SLV	AB	SPL	DAL			ON	TUL	SLV	AB	SPL	DAL		
Red/White Flesh																	
1	Chieftan	36	43	41	39	32	117	55	5	5	8	7	8	14	16	9	5
2	Red LaSoda	34	40	38	35	48	129	55	4	6	10	6	8	16	19	10	4
3	CO05228-4R	124	148	133	156	56	259	164	1	40	42	31	64	64	73	50	1
4	NDA050237B-1R	106	114	109	88	46	253	134	2	16	31	20	22	30	52	28	2
5	NDTX5438-11R	104	57	46	65	34	145	83	3	22	16	9	25	38	28	20	3
Red-Purple/Yellow Flesh																	
6	A05180-3PY	165	87	93	121	131	167	127	5	23	17	16	26	62	38	24	5
7	ATTX98444S-16R/Y	392	212	155	307	168	426	298	1	76	49	32	78	89	91	65	2
8	CO04067-8R/Y	166	204	127	92	88	124	142	3	37	51	28	56	55	49	44	3
9	CO05037-2R/Y		192	201	119	103	191	176	2		67	52	89	82	89	74	1
10	AC05175-3P/Y	43	127	121	206	72	156	130	4	11	36	31	82	43	39	40	4
Yellow Flesh																	
11	Yukon Gold	310	29	29	58	51	67	99	7	40	7	7	18	28	14	17	7
12	A02267-1Y	297	101	119	130	86	307	191	5	42	23	20	34	58	60	36	6
13	A05182-7RY	102	152	195	151	258	419	204	3	26	35	38	60	76	81	48	1
14	ATX05202S-3W/Y	197	132	105	195	103	368	199	4	23	31	17	40	69	78	38	5
15	CO04099-3W/Y	244	136	165	314	118	232	218	2	41	31	36	66	53	62	47	2
16	CO05037-3W/Y	204	180	173	249	59	92	180	6	36	47	39	62	39	18	40	4
17	NDA081451CB-1CY	261	126	125	267	190	531	262	1	31	23	27	46	74	86	42	3
Mean		174	122	116	152	97	234	160		30	31	25	46	52	53	37	

Table 7. Yield and Percent 4-6 oz.

Entry	Clone/Variety	Yield 4-6 oz (Cwt/A)							Percent 4-6 oz (%)						
		OR	CA	ID	TX	TX	Mean	Rank	OR	CA	ID	TX	TX	Mean	Rank
		ON	TUL	AB	SPL	DAL			ON	TUL	AB	SPL	DAL		
Red/White Flesh															
1	Chieftan	85	71	72	129	63	73	4	12	13	15	55	8	10	4
2	Red LaSoda	39	59	27	135	84	52	5	7	14	6	45	12	8	5
3	CO05228-4R	83	113	71	27	47	78	3	27	32	29	31	13	20	1
4	NDA050237B-1R	102	118	84	81	89	98	1	15	33	21	52	18	17	3
5	NDTX5438-11R	95	81	77	44	99	88	2	20	23	30	48	19	18	2
Red-Purple/Yellow Flesh															
6	A05180-3PY	169	117	119	70	125	133	1	24	23	25	33	29	20	1
7	ATTX98444S-16R/Y	94	140	66	21	43	86	2	18	32	17	11	9	15	4
8	CO04067-8R/Y	109	98	28	62	47	71	4	24	25	17	39	18	17	3
9	CO05037-2R/Y		50	13	24	24	29	5		18	10	19	11	10	5
10	AC05175-3P/Y	50	116	38	80	121	81	3	12	33	15	48	31	18	2
Yellow Flesh															
11	Yukon Gold	224	58	60	66	53	99	6	29	14	19	37	11	15	7
12	A02267-1Y	193	119	131	45	111	139	3	27	28	34	31	22	22	2
13	A05182-7RY	91	134	50	63	74	87	7	24	31	20	19	14	18	6
14	ATX05202S-3W/Y	199	135	147	32	83	141	2	23	31	30	21	18	20	5
15	CO04099-3W/Y	176	144	119	80	69	127	4	29	33	25	36	18	21	4
16	CO05037-3W/Y	128	113	115	57	137	123	5	23	29	28	38	27	21	3
17	NDA081451CB-1CY	242	194	206	61	78	180	1	29	35	35	24	13	22	1
Mean		130	110	84	63	79	99		21	26	22	35	17	17	

Table 8. Yield and Percent 6-10 oz.

Entry	Clone/Variety	Yield 6-10 oz (Cwt/A)						Percent 6-10 oz (%)							
		OR	CA	ID	TX	TX	Mean	Rank	OR	CA	ID	TX	TX	Mean	Rank
		ON	TUL	AB	SPL	DAL			ON	TUL	AB	SPL	DAL		
Red/White Flesh															
1	Chieftan	185	170	165	74	305	206	1	26	32	36	31	41	27	2
2	Red LaSoda	102	125	134	88	227	147	2	18	30	31	29	33	23	3
3	CO05228-4R	80	78	18	4	38	54	5	26	22	7	4	11	13	5
4	NDA050237B-1R	216	101	124	28	104	136	4	32	28	31	18	21	22	4
5	NDTX5438-11R	172	153	93	13	165	146	3	36	43	36	14	32	29	1
Red-Purple/Yellow Flesh															
6	A05180-3PY	260	190	145	9	77	168	1	37	38	31	4	18	25	1
7	ATTX98444S-16R/Y	26	61	19	0	0	27	4	5	14	5	0	0	5	4
8	CO04067-8R/Y	126	47	14	8	30	54	3	28	12	9	5	12	12	3
9	CO05037-2R/Y		35	2	0	0	12	5		12	1	0	0	3	5
10	AC05175-3P/Y	127	95	6	12	81	77	2	32	27	2	7	20	16	2
Yellow Flesh															
11	Yukon Gold	203	136	130	61	161	158	1	26	33	41	34	33	27	1
12	A02267-1Y	166	156	99	4	75	124	4	23	36	25	2	15	20	2
13	A05182-7RY	123	112	47	0	22	76	7	32	26	19	0	4	16	6
14	ATX05202S-3W/Y	313	115	110	5	21	140	3	37	27	22	3	4	18	4
15	CO04099-3W/Y	144	119	30	12	52	86	6	24	27	6	5	14	14	7
16	CO05037-3W/Y	195	77	34	32	171	119	5	34	20	8	21	34	19	3
17	NDA081451CB-1CY	292	196	101	2	9	150	2	34	35	17	1	1	18	5
Mean		171	116	75	21	90	111		28	27	19	11	17	18	

Table 9. Yield and Percent >10 oz.

Entry	Clone/Variety	Yield >10 oz (Cwt/A)								Percent >10 oz (%)							
		OR	CA	CO	ID	TX	TX			OR	CA	CO	ID	TX	TX		
		ON	TUL	SLV	AB	SPL	DAL	Mean	Rank	ON	TUL	SLV	AB	SPL	DAL	Mean	Rank
Red/White Flesh																	
1	Chieftan	354	211	160	154	1	228	221	1	50	40	26	33	0	31	36	2
2	Red LaSoda	348	122	196	138	27	240	209	2	63	29	33	32	9	35	38	1
3	CO05228-4R	16	8	10	0	0	10	9	5	5	2	2	0	0	3	2	5
4	NDA050237B-1R	249	21	46	89	0	44	90	3	37	6	8	22	0	9	16	3
5	NDTX5438-11R	98	59	75	17	0	111	72	4	20	16	15	7	0	21	16	4
Red-Purple/Yellow Flesh																	
6	A05180-3PY	105	72	117	50	0	64	81	1	15	14	20	11	0	15	15	1
7	ATTX98444S-16R/Y	0	6	20	0	0	0	5	5	0	1	4	0	0	0	1	5
8	CO04067-8R/Y	47	3	14	5	0	0	14	3	11	1	3	3	0	0	3	3
9	CO05037-2R/Y		4	28	0	0	0	8	4		1	7	0	0	0	2	4
10	AC05175-3P/Y	168	9	7	0	1	38	44	2	42	3	2	0	1	9	11	2
Yellow Flesh																	
11	Yukon Gold	25	157	137	60	1	202	116	1	3	38	35	19	1	42	27	1
12	A02267-1Y	37	28	61	3	0	16	29	4	5	7	10	1	0	3	5	4
13	A05182-7RY	63	17	10	0	0	0	18	5	16	4	2	0	0	0	4	5
14	ATX05202S-3W/Y	123	27	68	21	0	0	48	2	14	6	11	4	0	0	7	2
15	CO04099-3W/Y	17	22	10	6	0	22	15	7	3	5	2	1	0	6	3	6
16	CO05037-3W/Y	37	6	6	3	0	107	32	3	6	1	1	1	0	21	6	3
17	NDA081451CB-1CY	47	22	15	2	0	0	17	6	6	4	3	0	0	0	3	7
Mean		108	47	58	32	2	64	61		19	10	11	8	1	11	12	

Table 10. Yield and Percent 4 -10 oz.

Entry	Clone/Variety	Yield 4-10 oz (Cwt/A)								Percent 4-10 oz (%)							
		OR	CA	CO	ID	TX	TX	Mean	Rank	OR	CA	CO	ID	TX	TX	Mean	Rank
		ON	TUL	SLV	AB	SPL	DAL			ON	TUL	SLV	AB	SPL	DAL		
Red/White Flesh																	
1	Chieftan	270	241	402	237	203	368	303	1	38	45	65	51	86	49	50	3
2	Red LaSoda	141	184	328	161	223	310	225	4	26	44	55	38	75	46	41	5
3	CO05228-4R	163	191	279	89	31	85	161	5	53	54	66	36	36	24	47	4
4	NDA050237B-1R	318	219	392	208	109	193	266	2	47	60	70	52	70	39	54	2
5	NDTX5438-11R	266	234	387	170	57	264	264	3	56	65	75	67	62	51	63	1
Red-Purple/Yellow Flesh																	
6	A05180-3PY	429	307	350	264	80	202	310	1	61	61	60	57	38	46	57	1
7	ATTX98444S-16R/Y	120	201	303	85	21	43	151	4	23	47	62	22	11	9	33	4
8	CO04067-8R/Y	236	145	295	42	71	77	159	3	52	37	65	26	45	30	42	3
9	CO05037-2R/Y		85	159	15	24	24	71	5		30	41	11	19	11	23	5
10	AC05175-3P/Y	177	211	261	44	93	202	179	2	44	60	67	18	56	51	48	2
Yellow Flesh																	
11	Yukon Gold	427	194	226	190	127	320	272	3	55	47	57	59	71	66	57	1
12	A02267-1Y	359	275	380	229	49	91	267	4	50	64	65	59	33	18	51	2
13	A05182-7RY	214	246	302	98	63	22	176	7	56	57	59	39	19	4	43	7
14	ATX05202S-3W/Y	512	250	413	256	37	21	290	2	60	58	69	52	25	4	49	5
15	CO04099-3W/Y	320	263	264	149	91	74	214	6	54	60	58	32	41	20	45	6
16	CO05037-3W/Y	323	190	256	149	89	270	238	5	57	49	58	37	60	53	51	3
17	NDA081451CB-1CY	534	391	304	307	63	9	309	1	63	70	66	53	25	1	51	4
Mean		301	225	312	158	84	152	227		50	53	62	42	45	31	47	

Table 11. Yield and Percent Culls

Entry	Clone/Variety	Yield Culls (Cwt/A)								Percent Culls (%)							
		OR	CA	CO	ID	TX	TX			OR	CA	CO	ID	TX	TX		
		ON	TUL	SLV	AB	SPL	DAL	Mean	Rank	ON	TUL	SLV	AB	SPL	DAL	Mean	Rank
Red/White Flesh																	
1	Chieftan	44	37	13	33	0	30	31	2	6	7	2	7	0	4	5	2
2	Red LaSoda	31	76	32	94	0	0	47	1	6	18	5	22	0	0	10	1
3	CO05228-4R	6	8	2	0	0	0	3	5	2	2	0	0	0	0	1	5
4	NDA050237B-1R	8	10	10	13	0	0	8	3	1	3	2	3	0	0	2	3
5	NDTX5438-11R	9	9	5	2	0	0	5	4	2	3	1	1	0	0	1	4
Red-Purple/Yellow Flesh																	
6	A05180-3PY	10	39	21	32	0	2	21	2	1	8	4	7	0	1	4	2
7	ATTX98444S-16R/Y	6	13	8	1	0	0	6	3	1	3	2	0	0	0	1	3
8	CO04067-8R/Y	3	45	17	24	0	55	29	1	1	11	4	15	0	21	10	1
9	CO05037-2R/Y	0	6	0	0	0	0	1	5		2	0	0	0	0	1	5
10	AC05175-3P/Y	15	6	0	0	0	0	4	4	4	2	0	0	0	0	1	4
Yellow Flesh																	
11	Yukon Gold	14	37	2	11	0	0	13	3	2	9	1	4	0	0	3	2
12	A02267-1Y	18	28	21	26	12	0	19	1	3	7	4	7	8	0	4	1
13	A05182-7RY	6	18	5	2	17	0	6	6	2	4	1	1	5	0	2	6
14	ATX05202S-3W/Y	16	23	15	21	9	0	15	2	2	5	2	4	6	0	3	3
15	CO04099-3W/Y	15	16	16	4	14	0	10	4	3	4	4	1	6	0	2	4
16	CO05037-3W/Y	2	11	4	3	1	2	4	7	0	3	1	1	1	0	1	7
17	NDA081451CB-1CY	6	19	14	6	2	0	9	5	1	3	3	1	1	0	2	5
Mean		12	24	11	16	3	5	14		2	5	2	4	2	2	3	

Table 12. Specific Gravity

Entry	Clone/Variety	Specific Gravity						Mean	Rank
		OR ON	CA TUL	CO SLV	ID AB	TX SPL	TX DAL		
Red/White Flesh									
1	Chieftan	1.074	1.080	1.079	1.073	1.064	1.063	1.072	1
2	Red LaSoda	1.073	1.082	1.079	1.067	1.061	1.057	1.070	3
3	CO05228-4R	1.073	1.080	1.081	1.073	1.063	1.063	1.072	2
4	NDA050237B-1R	1.073	1.073	1.069	1.058	1.052	1.049	1.062	5
5	NDTX5438-11R	1.065	1.070	1.069	1.062	1.058	1.057	1.063	4
Red-Purple/Yellow Flesh									
6	A05180-3PY	1.071	1.081	1.074	1.070	1.058	1.057	1.068	4
7	ATTX98444S-16R/Y	1.082	1.089	1.089	1.083	1.074	1.072	1.082	1
8	CO04067-8R/Y	1.070	1.083	1.081	1.073	1.064	1.065	1.073	3
9	CO05037-2R/Y		1.090	1.089	1.079	1.070	1.070	1.079	2
10	AC05175-3P/Y	1.082	1.065	1.072	1.063	1.065	1.055	1.067	5
Yellow Flesh									
11	Yukon Gold	1.068	1.091	1.084	1.081	1.066	1.071	1.077	3
12	A02267-1Y	1.076	1.080	1.072	1.067	1.044	1.060	1.066	7
13	A05182-7RY	1.063	1.081	1.081	1.070	1.059	1.059	1.069	6
14	ATX05202S-3W/Y	1.078	1.089	1.079	1.074	1.052	1.063	1.072	4
15	CO04099-3W/Y	1.096	1.093	1.088	1.084	1.064	1.073	1.083	1
16	CO05037-3W/Y	1.072	1.076	1.077	1.073	1.058	1.068	1.071	5
17	NDA081451CB-1CY	1.086	1.094	1.091	1.082	1.062	1.070	1.081	2
Mean		1.075	1.082	1.080	1.072	1.061	1.063	1.072	

Table 13. Average Tuber Size and Tubers Per Plant

Entry	Clone/Variety	Average Tuber Size (oz)						Tubers/plant					
		OR	CA	ID	TX	TX	Mean	OR	CA	ID	TX	TX	Mean
		ON	TUL	AB	SPL	DAL		ON	TUL	AB	SPL	DAL	
Red/White Flesh													
1	Chieftan	8.0	7.5	6.9	4.4	6.1	6.6	7.2	6.5	6.7	4.4	7.8	6.5
2	Red LaSoda	9.7	7.5	7.5	4.7	5.9	7.1	4.7	5.3	5.7	5.2	7.5	5.7
3	CO05228-4R	3.3	3.9	2.6	2.2	2.7	2.9	7.3	8.8	11.6	4.6	9.3	8.3
4	NDA050237B-1R	5.6	4.4	4.9	3.2	3.8	4.4	9.9	7.6	8.0	3.9	8.9	7.7
5	NDTX5438-11R	5.7	5.7	4.4	3.6	4.6	4.8	7.3	7.0	6.7	2.4	7.8	6.2
Red-Purple/Yellow Flesh													
6	A05180-3PY	4.9	5.5	4.4	2.4	3.4	4.1	11.9	8.8	10.7	7.4	11.3	10.0
7	ATTX98444S-16R/Y	2.9	3.6	2.4	1.5	2.5	2.6	15.1	11.0	16.1	10.6	12.0	13.0
8	CO04067-8R/Y	4.4	3.6	2.5	2.3	3.2	3.2	8.8	10.3	6.5	5.7	12.9	8.8
9	CO05037-2R/Y		2.7	2.0	1.5	2.1	2.1		10.2	6.9	7.0	6.4	7.6
10	AC05175-3P/Y	7.1	4.2	2.1	2.8	3.6	4.0	4.7	7.8	12.2	4.8	10.5	8.0
Yellow Flesh													
11	Yukon Gold	3.9	7.6	5.3	3.8	7.1	5.6	16.7	5.6	5.9	4.3	4.4	7.4
12	A02267-1Y	3.7	4.9	4.0	2.3	3.1	3.6	15.5	8.5	9.8	6.3	10.5	10.1
13	A05182-7RY	4.5	3.7	2.5	1.8	2.4	3.0	6.9	12.1	9.8	15.8	13.9	11.7
14	ATX05202S-3W/Y	4.8	4.7	3.7	1.9	2.5	3.5	14.6	8.8	13.7	6.8	12.2	11.2
15	CO04099-3W/Y	3.6	4.4	2.7	2.4	3.2	3.2	13.9	9.4	17.8	8.0	7.6	11.3
16	CO05037-3W/Y	4.6	3.7	3.0	3.5	5.4	4.0	10.8	10.0	14.1	8.4	7.4	10.1
17	NDA081451CB-1CY	4.2	4.8	3.5	2.0	2.8	3.5	16.8	10.8	16.3	10.7	14.0	13.7
Mean		5.1	4.9	3.8	2.7	3.8	4.0	10.8	8.7	10.5	6.8	9.7	9.3

Table 14. Tuber Uniformity, Fresh Merit Score, Process Merit Score and Process Color

Entry	Clone/Variety	Tuber Uniformity (1-5 excellent)			Fresh Merit Score (1-5 best)								Process Merit score (1-5 best)	Process CO/SLV	
		CA	ID	Mean	CA	CO	ID	TX	TX	Mean	Rank	CO/SLV		fry color (4=darkest)	
		TUL	AB		TUL	SLV	AB	SPL	DAL				Harvest	45°F	
Red/White Flesh															
1	Chieftan	3.8	2.0	2.9	3.3	5.0	3.0	3.4	3.3	3.6	2	1.0	4.0	3.0	
2	Red LaSoda	3.6	2.0	2.8	3.0	1.0	1.3	3.4	3.6	2.4	5	1.0	3.0	3.0	
3	CO05228-4R	4.0	4.5	4.3	3.8	1.0	3.0	3.4	3.7	3.0	4	3.0	2.0	1.0	
4	NDA050237B-1R	3.9	3.0	3.4	3.5	5.0	2.3	3.7	3.8	3.7	1	1.0	4.0	4.0	
5	NDTX5438-11R	3.9	3.5	3.7	3.8	3.0	3.0	3.5	4.0	3.5	3	1.0	4.0	4.0	
Red-Purple/Yellow Flesh															
6	A05180-3PY	3.5	2.8	3.2	3.1	5.0	2.3	3.5	3.6	3.5	2	1.0	3.0	3.0	
7	ATTX98444S-16R/	3.3	4.3	3.8	3.5	4.0	4.0	4.0	3.8	3.9	1	1.0	3.0	3.0	
8	CO04067-8R/Y	3.4	3.3	3.3	3.3	2.0	1.8	3.5	3.2	2.7	5	3.0	2.0	2.0	
9	CO05037-2R/Y	4.1	4.8	4.5	3.5	1.0	3.7	2.5	3.8	2.9	4	3.0	2.0	1.0	
10	AC05175-3P/Y	3.9	5.0	4.5	3.5	1.0	3.0	4.0	3.5	3.0	3	3.0	2.0	1.0	
Yellow Flesh															
11	Yukon Gold	3.5	2.0	2.8	3.4	1.0	1.8	3.7	3.7	2.7	7	1.0	2.0	4.0	
12	A02267-1Y	3.0	2.5	2.8	3.0	5.0	2.3	3.5	3.0	3.3	4	5.0	1.0	1.0	
13	A05182-7RY	3.8	3.0	3.4	3.3	4.0	3.7	3.8	3.8	3.7	2	1.0	3.0	3.0	
14	ATX05202S-3W/Y	3.8	3.0	3.4	3.8	5.0	2.7	3.9	4.0	3.9	1	5.0	1.0	2.0	
15	CO04099-3W/Y	3.5	4.3	3.9	3.5	3.0	3.0	3.7	3.6	3.3	5	5.0	1.0	0.0	
16	CO05037-3W/Y	3.7	4.3	4.0	3.1	2.0	3.3	3.5	3.5	3.1	6	3.0	2.0	3.0	
17	NDA081451CB-1C	4.0	4.0	4.0	3.6	3.0	3.3	3.8	3.5	3.5	3	1.0	3.0	3.0	
Mean		3.7	3.4	3.6	3.4	3.0	2.8	3.6	3.6	3.3		2.3	2.5	2.4	

Table 15. Tuber Shape and Length Width Ratio

Entry	Clone/Variety	Tuber Shape					Mean	L/W			Mean	W/T ¹		Mean
		CA TUL	CO SLV	ID AB	TX SPL	TX DAL		CA TUL	CO SLV	ID AB		CO SLV	ID AB	
Red/White Flesh														
1	Chieftan	2.9	2.0	3.0	2.5	3.0	2.7	1.3	1.2	1.1	1.2	1.3	1.4	1.4
2	Red LaSoda	2.8	2.0	3.2	3.0	3.0	2.8	1.2	1.0	1.2	1.1	1.3	1.5	1.4
3	CO05228-4R	1.5	1.0	1.1	2.5	2.0	1.6	1.0	1.1	1.1	1.1	1.1	1.3	1.2
4	NDA050237B-1R	1.9	1.0	2.0	2.6	2.5	2.0	1.0	1.1	1.0	1.1	1.2	1.3	1.2
5	NDTX5438-11R	1.8	1.0	1.6	2.4	3.0	2.0	1.1	1.1	1.2	1.1	1.2	1.4	1.3
Red-Purple/Yellow Flesh														
6	A05180-3PY	2.3	1.0	1.1	2.0	3.0	1.9	1.1	1.0	1.0	1.0	1.2	1.1	1.2
7	ATTX98444S-16R/Y	2.6	1.0	1.0	2.0	3.0	1.9	1.1	1.1	1.1	1.1	1.3	1.3	1.3
8	CO04067-8R/Y	2.1	2.0	1.3	2.5	2.0	2.0	1.1	1.2	1.1	1.1	1.2	1.3	1.2
9	CO05037-2R/Y	4.8	5.0	5.0	3.0	4.0	4.4	2.0	1.9	2.1	2.0	1.2	2.3	1.8
10	AC05175-3P/Y	1.4	1.0	1.0	2.0	3.0	1.7	1.1	1.1	1.0	1.0	1.2	1.2	1.2
Yellow Flesh														
11	Yukon Gold	3.1	2.0	2.8	2.5	3.0	2.7	1.2	1.2	1.1	1.2	1.3	1.4	1.3
12	A02267-1Y	2.5	2.0	2.3	2.5	2.0	2.3	1.1	1.3	1.1	1.1	1.3	1.3	1.3
13	A05182-7RY	2.3	1.0	1.7	2.0	2.0	1.8	1.1	1.2	1.2	1.2	1.2	1.5	1.3
14	ATX05202S-3W/Y	2.8	2.0	1.5	2.0	2.0	2.1	1.2	1.3	1.1	1.2	1.2	1.3	1.3
15	CO04099-3W/Y	3.0	2.0	1.6	2.0	3.0	2.3	1.1	1.2	1.1	1.1	1.2	1.4	1.3
16	CO05037-3W/Y	2.0	4.0	1.1	4.0	4.0	3.0	1.1	1.1	1.1	1.1	1.3	1.5	1.4
17	NDA081451CB-1CY	1.6	1.0	1.3	2.0	2.0	1.6	1.1	1.2	1.1	1.1	1.1	1.2	1.2
Mean		2.4	1.8	1.9	2.4	2.7	2.3	1.2	1.2	1.2	1.2	1.2	1.4	1.3

¹Width/thickness ratio or width/depth ratio. This info might be good to tell us how round or flat a potato is looking at it from the end.

Table 16. Skin and Flesh Color

Entry	Clone/Variety	Skin Color (1 - 5 dark)					Mean	Flesh Color (1 - 5 dark)					Mean
		CA	CO	ID	TX	TX		CA	CO	ID	TX	TX	
		TUL	SLV	AB	SPL	DAL		TUL	SLV	AB	SPL	DAL	
Red/White Flesh													
1	Chieftan	1.9	2.0	3.0	3.5	3.0	2.7	1.0	1.0	1.0	1.0	1.0	1.0
2	Red LaSoda	1.6	1.0	2.8	3.4	3.6	2.5	1.4	1.0	1.0	1.0	1.0	1.1
3	CO05228-4R	3.4	2.0	3.8	4.0	3.8	3.4	1.0	1.0	1.0	1.0	1.0	1.0
4	NDA050237B-1R	2.9	2.0	3.7	4.1	4.0	3.3	1.0	1.0	1.0	1.0	1.0	1.0
5	NDTX5438-11R	2.6	3.0	3.3	3.8	4.0	3.3	1.0	1.0	1.0	1.0	1.0	1.0
Red-Purple/Yellow Flesh													
6	A05180-3PY	4.1	3.0	5.0	4.5	5.0	4.3	2.8	3.0	2.5	2.0	3.0	2.7
7	ATTX98444S-16R/Y	2.6	2.0	2.3	3.8	3.7	2.9	3.5	4.0	3.5	3.0	3.5	3.5
8	CO04067-8R/Y	2.1	3.0	3.3	3.7	3.5	3.1	3.9	4.0	4.0	3.0	4.0	3.8
9	CO05037-2R/Y	2.6	3.0	2.8	3.8	3.5	3.1	3.4	3.0	3.0	3.0	3.5	3.2
10	AC05175-3P/Y	4.3	5.0	5.0	4.5	5.0	4.8	3.0	3.0	2.7	3.5	2.6	3.0
Yellow Flesh													
11	Yukon Gold	1.8		1.5	1.0	1.0	1.3	3.0	3.0	2.3	3.5	3.5	3.1
12	A02267-1Y	1.9		1.0	1.0	1.0	1.2	2.8	3.0	2.5	3.5	2.0	2.8
13	A05182-7RY	1.6		1.3	1.0	1.0	1.2	2.6	3.0	2.6	2.5	2.5	2.6
14	ATX05202S-3W/Y	1.9		1.3	1.0	1.0	1.3	3.3	3.0	2.7	3.0	3.0	3.0
15	CO04099-3W/Y	2.1		1.3	1.0	1.0	1.3	3.5	4.0	4.3	3.5	3.5	3.8
16	CO05037-3W/Y	2.0		1.0	3.7	4.0	2.7	3.3	4.0	2.5	1.0	1.0	2.4
17	NDA081451CB-1CY	1.8		1.0	1.0	1.0	1.2	3.3	4.0	2.5	3.0	3.5	3.3
Mean		2.4	2.6	2.5	2.9	2.9	2.6	2.6	2.7	2.4	2.3	2.4	2.5

Table 17. Eye Depth and External Defects

Entry	Clone/Variety	External Defects											Growth Cracks	Knobs					Shatter Bruise	Scab						
		OR	CA	ID	TX	TX	Eye Depth	OR	CA	CO	ID	TX		TX	OR	CA	CO	TX		TX	OR	ID	TX	TX		
		ON	TUL	AB	SPL	DAL		ON ¹	TUL ¹	SLV	AB	SPL	DAL		ON ¹	TUL ¹	SLV	SPL	DAL		ON ¹	AB	SPL	DAL	Scab	
Red/White Flesh																										
1	Chieftan	4.0	3.4	2.8	3.7	4.0	3.6	1.3	1.7	4.0	4.5	5.0	5.0	4.6	1.4	1.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.7
2	Red LaSoda	2.2	2.8	1.3	2.0	2.0	2.0	2.1	3.6	4.0	2.3	5.0	5.0	4.1	1.6	2.3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.3
3	CO05228-4R	4.9	3.8	3.8	4.0	4.0	4.1	0.0	0.3	5.0	5.0	5.0	5.0	5.0	0.2	0.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	
4	NDA050237B-1R	4.0	4.0	3.2	4.0	4.0	3.8	0.0	1.3	4.0	5.0	5.0	5.0	4.8	0.0	0.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.8	
5	NDTX5438-11R	5.0	3.8	3.8	4.0	4.0	4.1	0.0	0.4	4.0	5.0	5.0	5.0	4.8	0.3	0.3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.7	
Red-Purple/Yellow Flesh																										
6	A05180-3PY	3.6	3.6	3.0	3.0	3.5	3.3	0.4	3.9	3.0	3.5	5.0	5.0	4.1	0.4	0.3	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.2	
7	ATTX98444S-16R/Y	4.7	3.3	3.0	4.0	4.0	3.8	0.0	0.3	4.0	5.0	5.0	5.0	4.8	0.7	0.4	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.7	
8	CO04067-8R/Y	5.0	3.9	3.5	4.0	4.0	4.1	9.0	7.9	3.0	1.5	5.0	3.0	3.1	0.3	0.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.3	
9	CO05037-2R/Y		3.6	4.0	4.0	4.0	3.9		0.0	5.0	5.0	5.0	5.0	5.0		0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.7	
10	AC05175-3P/Y	4.2	2.9	2.8	4.0	3.5	3.5	0.4	0.1	5.0	5.0	5.0	5.0	5.0	1.4	0.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.6	
Yellow Flesh																										
11	Yukon Gold	3.7	3.8	3.0	4.0	4.0	3.7	0.0	0.0	5.0	4.8	5.0	5.0	4.9	1.4	0.3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	3.8	
12	A02267-1Y	4.5	3.4	2.5	4.0	3.5	3.6	0.0	0.0	5.0	5.0	5.0	5.0	5.0	1.6	0.6	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	3.9	
13	A05182-7RY	3.0	3.6	3.3	4.0	4.0	3.6	0.0	0.0	4.0	5.0	5.0	5.0	4.8	0.2	0.8	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.9	
14	ATX05202S-3W/Y	5.0	4.4	4.0	4.0	4.0	4.3	0.0	0.5	4.0	5.0	5.0	5.0	4.8	0.8	1.1	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.3	
15	CO04099-3W/Y	4.0	3.4	3.0	4.0	4.0	3.7	0.0	0.0	4.0	5.0	5.0	5.0	4.8	1.5	0.4	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.1	
16	CO05037-3W/Y	5.0	3.7	3.8	4.0	4.0	4.1	0.0	0.3	5.0	5.0	5.0	5.0	5.0	0.1	0.3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.6	
17	NDA081451CB-1CY	4.9	3.9	4.0	4.0	4.0	4.2	0.0	0.2	4.0	5.0	5.0	5.0	4.8	0.3	0.3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.5	
Mean		4.2	3.6	3.2	3.8	3.8	3.7		1.2		4.5	5.0	4.9	4.7		0.5		5.0	5.0		4.9	5.0	5.0	5.0	4.4	

¹ % total tubers

Table 18. Internal Defects

Entry	Clone/Variety	Percent Incidence (%) ¹											Blackspot Bruise												
		OR	CA	CO	ID	TX	TX	HH	OR	CA	ID	TX	TX	IBS	OR	CA	ID	TX	TX	CA	CO ²	TX	TX	BB	
		ON	TUL	SLV	AB	SPL	DAL		ON	TUL	AB	SPL	DAL		ON	TUL	AB	SPL	DAL	VD	TUL%	SLV	SPL		DAL
Red/White Flesh																									
1	Chieftan	0	0	3	3	0	0	1	0	0	0	15	15	6	0	0	0	0	0	0	10	5	0	0	3
2	Red LaSoda	3	0	18	0	8	0	5	8	3	0	0	0	2	0	3	0	0	0	1	0	5	0	0	0
3	CO05228-4R	0	0	0	0	0	0	0	8	0	0	0	0	2	0	0	0	0	0	0	3	5	0	0	1
4	NDA050237B-1R	0	0	0	3	0	3	1	0	0	0	3	0	1	0	0	0	0	0	0	0	5	0	0	0
5	NDTX5438-11R	3	0	0	0	0	0	0	0	3	0	0	0	1	0	5	0	0	0	1	0	5	0	0	0
Red-Purple/Yellow Flesh																									
6	A05180-3PY	0	0	0	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0
7	ATTX98444S-16R/Y	0	0	0	0	0	0	0	3	0	0	0	0	1	0	3	0	0	0	1	3	5	0	0	1
8	CO04067-8R/Y	0	3	0	5	0	0	1	0	0	0	0	0	0	0	5	0	0	0	1	3	4	0	0	1
9	CO05037-2R/Y		0	0	0	0	0	0		0	0	0	0	0		20	0	0	0	5	0	5	0	0	0
10	AC05175-3P/Y	0	0	0	0	0	0	0	10	0	0	0	0	2	0	0	0	0	0	0	0	5	0	0	0
Yellow Flesh																									
11	Yukon Gold	0	13	0	13	3	0	5	0	0	0	23	0	5	0	3	0	0	0	1	0	5	0	0	0
12	A02267-1Y	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	1	0	5	0	0	0
13	A05182-7RY	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0	0	0	0	3	4	0	0	1
14	ATX05202S-3W/Y	0	3	0	0	0	0	0	3	0	0	0	0	1	8	0	0	0	0	0	3	5	0	0	1
15	CO04099-3W/Y	0	15	1	0	0	3	3	20	5	0	25	0	10	0	0	0	0	0	0	3	4	0	0	1
16	CO05037-3W/Y	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	0	0	1
17	NDA081451CB-1CY	0	0	0	0	0	0	0	8	3	0	0	0	2	0	0	0	0	0	0	3	5	0	0	1
Mean		0	2	1	2	1	0	1	1	0	4	1	2	2	3	0	0	0	1	1	2	5	0	0	1

¹ Percent based on 10 cut tubers averaged from 7 sites.

² 1 to 5=none

Table 19 Disease Evaluations, Metribuzin Reaction

Entry Clone/Variety	Aberdeen			Tulelake	
	Vert. Wilt/ Early Dying ¹	Early Blight ¹	Metr. Reaction ²	8/19/2014 ³	AUDPC ⁴
	Foliar	Foliar			
Red/White Flesh					
1 Chieftan	2.5	2.5	R	5.0	397.5
2 Red LaSoda	2.0	2.0		4.6	355.5
3 CO05228-4R	2.5	2.0	MS	5.0	483.8
4 NDA050237B-1R	2.5	2.5	R	2.9	116.8
5 NDTX5438-11R	3.5	3.0	R	3.9	348.1
Red-Purple/Yellow Flesh					
6 A05180-3PY	2.5	2.0	MS	4.0	320.0
7 ATTX98444S-16R/Y	2.0	2.0	R	3.8	354.9
8 CO04067-8R/Y	2.0	1.5	S	7.0	908.8
9 CO05037-2R/Y	2.0	3.0	S	6.1	783.8
10 AC05175-3P/Y	3.0	2.0	MS	7.9	1237.5
Yellow Flesh					
11 Yukon Gold	2.0	2.0		7.0	934.4
12 A02267-1Y	3.0	2.0	S	5.4	591.3
13 A05182-7RY	2.5	3.0	VS	2.8	204.1
14 ATX05202S-3W/Y	4.0	4.0	R	2.9	195.3
15 CO04099-3W/Y	2.0	2.5	R	4.1	375.6
16 CO05037-3W/Y	2.0	1.0	R	8.1	1177.5
17 NDA081451CB-1CY	3.0	2.5	R	2.8	169.5
Mean	2.5	2.3		4.9	526.7

¹ Evaluations made at Aberdeen, ID by Potato Variety Team; scale as indicated with lowest number being most severe. For 1 to 5 5=no symptoms; 1=90-100% dead or dying with typical disease symptoms.

² Metribuzin reaction measured at Aberdeen, ID. VR=very resistant, R=Resistant, MR=Moderately resistant, MS=moderately susceptible, S=susceptible VS=very susceptible

³ Vert wilt rating 0-9 9=worst 90-100% plants show symptoms

⁴ Area Under Disease Product Curve Based on reading taken 80, 92, 99 days from planting

Table 20. Tuber Composition

Entry	Clone/Variety	Aberdeen, Idaho					
		Solids	Protein ¹	Dextrose ²	Sucrose ²	Vitamin C ³	TGA ⁴
Red/White Flesh							
1	Chieftan	19.8	4.5	0.105	0.180	24.7	8.0
2	Red LaSoda	18.1	5.3	0.349	0.215	30.3	4.9
3	CO05228-4R	19.8	5.8	0.094	0.247	33.2	6.0
4	NDA050237B-1R	16.2	5.4	0.298	0.162	16.4	4.4
5	NDTX5438-11R	17.3	4.5	0.215	0.161	24.3	1.3
Red-Purple/Yellow Flesh							
6	A05180-3PY	20.0	5.1	0.113	0.290	25.4	2.3
7	ATTX98444S-16R/Y	21.7	5.4	0.045	0.216	28.6	7.8
8	CO04067-8R/Y	19.8	6.1	0.038	0.257	23.3	5.2
9	CO05037-2R/Y	21.8	6.4	0.035	0.330	33.3	5.5
10	AC05175-3P/Y	17.4	4.4	0.046	0.363	28.0	2.4
Yellow Flesh							
11	Yukon Gold	22.0	6.0	0.092	0.374	38.9	6.1
12	A02267-1Y	18.2	4.9	0.021	0.312	27.5	5.0
13	A05182-7RY	18.8	4.9	0.075	0.298	20.6	4.3
14	ATX05202S-3W/Y	20.1	6.3	0.035	0.215	22.9	9.0
15	CO04099-3W/Y	22.1	5.8	0.011	0.212	27.3	5.7
16	CO05037-3W/Y	19.9	4.8	0.020	0.272	22.8	9.2
17	NDA081451CB-1CY	21.6	5.6	0.043	0.244	29.1	4.9
Mean		19.7	5.4	0.1	0.3	26.9	5.4

^{1/} % Dry Weight Basis^{2/} % Fresh Weight Basis^{3/} % Fresh Weight Basis (mg/100g)^{4/} % Fresh Weight Basis (mg/100g), using Lenepe as check with reading of 43.7

Table 21. Entry Location Comments

Entry	Clone/Variety	Aberdeen, ID	Tulelake, CA	Center, CO
Red/White Flesh				
1	Chieftan	attached stolons	Larger average tuber size (7.5 oz), uniform shape, long shape (1.28 L/W)	
2	Red LaSoda	big, deep ends	Lumpy, deep eyes (2.8), long shape (1.2 L/W)	
3	CO05228-4R	not attractive skin, poor yellowed plants	Dark skin color (3.4), small average tuber size (3.9 oz)	
4	NDA050237B-1R	skinned	Blackdot, vert. wilt resistance, smooth, round (1.02 L/W)	
5	NDTX5438-11R	shattered, poor looking plants	Round (1.08 L/W), low cull totals (9 CWT)	
Red-Purple/Yellow Flesh				
6	A05180-3PY	some growth cracks, plants yellowed maybe herbicide damage	Blackdot, high shatter (2.8), irregular shape, high skinning (2.9)	
7	ATTX98444S-16R/Y	small, lt red, deep eyes	Good skin color (2.6)	Light red skin, nice yellow flesh
8	CO04067-8R/Y	GC, not good, some herbicide damage	Bright internal color (3.9), smooth skin	
9	CO05037-2R/Y	fingerling, few, some herbicide damage	Long shape (1.96), pink vascular coloring, smooth skin	
10	AC05175-3P/Y	small dk purple, uniform	High vert. wilt susceptibility, dark skin color (4.3), low yield (353 CWT)	Nice yellow flesh
Yellow Flesh				
11	Yukon Gold	big, scab	Blackdot, pink eyes, long shape (1.24 L/W), high hollow heart (12.5%)	
12	A02267-1Y	misshaped	Purple eyes, smooth, irregular shape	Nice yellow flesh, pointed, rough
13	A05182-7RY	oval, champain w/pink eyes	Pink eyes, smooth, pink/yellow skin	White skin
14	ATX05202S-3W/Y	pear shape	smooth, light yellow flesh, nice skin appearance (4.0)	Pointed
15	CO04099-3W/Y	russetting on skin	Blackdot, high hollow heart (15%)	Nice yellow flesh, deep eyes
16	CO05037-3W/Y	flat	High vert. wilt susceptibility, shallow pink eyes, uniform shape, nice skin appearance (4.4)	Nice yellow flesh
17	NDA081451CB-1CY	attached stolons	Blackdot, some tubers uniform and nice, light yellow (1.8), high yield (558 CWT)	Nice yellow flesh

Table 22. Entry Location Comments Continued

Entry	Clone/Variety	Springlake, TX	Dalhart, TX
Red/White Flesh			
1	Chieftan	nice, deep eyes, light skin	light skin color, nice shape, some IBS, rough, poor internals
2	Red LaSoda	nice, yield+, rough, deep eyes, nice yield	some feathering, nice skin color, deep eyes, some brown center
3	CO05228-4R	small potato, uniform, nice skin, light set, nice shape, small, smooth	nice small size, small, nice skin
4	NDA050237B-1R	nice skin, very nice skin and flesh, BOT-, very dark skin, ,	nice dark skin color, small, nice shape
5	NDTX5438-11R	nice dark skin, BOT-, nice shape, deep eyes, low yield, tuber moth	nice shape and flesh, nice skin color, BOT-
Red-Purple/Yellow Flesh			
6	A05180-3PY	nice flesh, some feathering, light flesh, nice skin, rough, deeper eyes, stem attachment	nice color, rough, silver scurf, some feathering
7	ATTX98444S-16R/Y	small, all B's or smaller, heavy set, smooth, BOT for small potato, nice size	BOT for small size, some faded skin, nice shape
8	CO04067-8R/Y	nice flesh, good skin set, small, light skin, poor shape, better shape	small, light set, dark yellow flesh, growth cracks++
9	CO05037-2R/Y	heavy set, pointed, nice flesh, drop, too small, too oblong, poor shape+	not much curve, slight purple streaks in flesh, fingerling, nice flesh, silver scurf
10	AC05175-3P/Y	small, nice size, good skin set, smooth, nice flesh and skin, stem attachment, BOT for P/Y	silver scurf, rough, deep eyes, very nice skin, some feathering, light flesh
Yellow Flesh			
11	Yukon Gold	BOT, light set, nice shape, poor internals	nice shape and flesh
12	A02267-1Y	poor internals, small potato+, some road map, nice shape and flesh, light set	small, rough, light flesh, deep eyes
13	A05182-7RY	light skin, heavy set, yield+, heavy set+, white skin, small potato, nice, BOT-	heavy set, sticky stolon, smooth skin, not red skin, nice small shape
14	ATX05202S-3W/Y	nice small potato size, BOT, nice size for small potato	very nice small shape, BOT
15	CO04099-3W/Y	sticky stolons, red eyes, nice flesh, uniform, nice size, small, road map, lenticels, poor internals	nice flesh, red eyes, nice shape
16	CO05037-3W/Y	blocky, russet+, small	Russet not yellow flesh
17	NDA081451CB-1CY	nice size, small potato, uniform size, very light russet, some buff, nice flesh	nice shape and size, small, nice flesh, sticky stolons++

Table 23. Summary Means

Entry	Clone/Variety	Year	Yield Summary ¹							Quality		
			<4 oz.	4-6 oz.	6-10 oz.	4-10 oz.	>10 oz.	Culls	Total	Tuber Size oz./tuber	Spec. grav.	Fresh Merit ²
Red/White Flesh												
1	Chieftan	***	55	73	206	303	221	31	611	6.6	1.072	3.6
2	Red LaSoda	***	55	52	147	225	209	47	536	7.1	1.070	2.4
3	CO05228-4R	1	164	78	54	161	9	3	337	2.9	1.072	3.0
4	NDA050237B-1R	1	134	98	136	266	90	8	498	4.4	1.062	3.7
5	NDTX5438-11R	2	83	88	146	264	72	5	425	4.8	1.063	3.5
Red-Purple/Yellow Flesh												
6	A05180-3PY	1	127	133	168	310	81	21	539	4.1	1.068	3.5
7	ATTX98444S-16R/Y	1	298	86	27	151	5	6	460	2.6	1.082	3.9
8	CO04067-8R/Y	2	142	71	54	159	14	29	344	3.2	1.073	2.7
9	CO05037-2R/Y	1	176	29	12	71	8	1	256	2.1	1.079	2.9
10	AC05175-3P/Y	1	130	81	77	179	44	4	358	4.0	1.067	3.0
Yellow Flesh												
11	Yukon Gold	***	99	99	158	272	116	13	478	5.6	1.077	2.7
12	A02267-1Y	2	191	139	124	267	29	19	525	3.6	1.066	3.3
13	A05182-7RY	1	204	87	76	176	18	6	419	3.0	1.069	3.7
14	ATX05202S-3W/Y	1	199	141	140	290	48	15	569	3.5	1.072	3.9
15	CO04099-3W/Y	2	218	127	86	214	15	10	467	3.2	1.083	3.3
16	CO05037-3W/Y	1	180	123	119	238	32	4	461	4.0	1.071	3.1
17	NDA081451CB-1CY	1	262	180	150	309	17	9	613	3.5	1.081	3.5
Mean			184	112	105	224	36	9	461	3.6	1.074	3.3

¹Mean weight fractions do not equal total average because some locations do not take measurements for all criteria.²Scale = 1-5 best

Table 24. 2-Year Summary of Graduating Entries

Entry	Clone/Variety	Year	Yield Summary ¹						Tuber Characteristics	Quality	
			<4 oz.	4-6 oz.	6-10 oz.	>10 oz.	Culls	Total	Tuber Size oz./tuber	Spec. grav.	Fresh Merit ²
Red/White Flesh											
1	Chieftan	***	57	91	188	166	20	566	6.2	1.072	3.5
2	Red LaSoda	***	52	54	129	170	41	499	7.1	1.069	2.9
5	NDTX5438-11R	2	87	89	126	62	5	389	4.8	1.064	3.5
Red-Purple/Yellow Flesh											
8	CO04067-8R/Y	2	142	77	41	9	25	335	3.1	1.074	2.6
Yellow Flesh											
11	Yukon Gold	***	71	72	142	111	15	433	6.0	1.078	2.9
12	A02267-1Y	2	150	107	88	20	16	442	3.6	1.067	3.7
15	CO04099-3W/Y	2	183	101	69	12	10	415	3.3	1.083	3.3
Mean			106	84	112	78	19	440	4.9	1.072	3.2

¹Mean weight fractions do not equal total average because some locations do not take measurements for all criteria.

² Scale = 1-5 best

Table 23. Summary Means

Entry	Clone/Variety	Year	Yield Summary ¹							Tuber Characteristics	Quality	
			<4 oz.	4-6 oz.	6-10 oz.	4-10 oz.	>10 oz.	Culls	Total	Tuber Size oz./tuber	Spec. grav.	Fresh Merit ²
Red/White Flesh												
1	Chieftan	***	58	110	170	284	110	8	521	5.8	1.072	3.4
2	Red LaSoda	***	49	57	112	185	130	35	462	7.1	1.068	3.3
3	NDTX5438-11R	1	90	90	107	208	51	6	353	4.9	1.065	3.5
4	CO04159-1R	1	52	39	35	87	6	4	143	3.2	1.066	2.7
Red-Purple/Yellow Flesh												
5	CO04067-8R/Y	1	142	83	29	130	4	22	326	3.0	1.075	2.5
Yellow Flesh												
6	Yukon Gold	***	43	45	127	169	105	17	388	6.4	1.079	3.1
7	A02267-1Y	1	110	76	52	139	10	13	358	3.6	1.067	4.0
8	CO04099-3W/Y	1	148	75	51	120	9	9	363	3.4	1.083	3.3
Mean			86	72	85	165	53	14	364	4.7	1.072	3.2

^{1/}Mean weight fractions do not equal total average because some locations do not take measurements for all criteria.

^{2/} Scale = 1-5 best