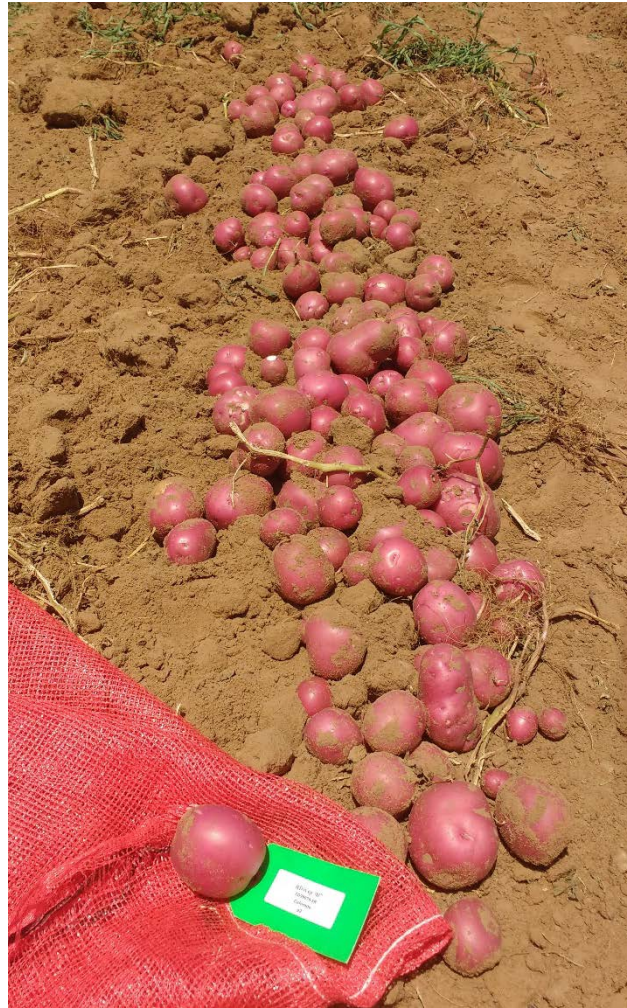


2018 Western Regional



Red/Specialty Trial

2018 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	Vine Kill	Planting	Vine Kill	Harvest	Pesticides Applied		
				N-P-K-S (lb./A)	Method	Date	Date	Date	Herbicides	Insecticides	Fungicides
Ontario Oregon (ON)	C. Shock E. Feibert M. Saunders		Sprinkler, solid set	100 N preplant, 15 N, 75 K, sprinkler applied	Mechanical	4/11/2018	9/14/2018	9/24/2018	Metolachlor, pendimethalin preemergence rimsulfuron	Imidacloprid preplant Spirotetramat abamectin	Chlorothalonil Zoxamide, chlorothalonil
Tulelake California (TUL)*	R. Wilson D. Culp K. Nicholson	Late	Sprinkler	205-0-0	Reglone / Rol	5/21/2018	9/7/2018	10/8/2018	Prowl H2O Outlook Matrix SG	Admire Pro	Maxim 4FS Quadris Luna Tranquility
San Luis Valley Colorado (SLV)	D. Holm C. Gray K. Gaudreau	Pivot		143-35-20-17-1	Reglone	5/10/2018	9/1/2018	9/27/2018	Eptam Tuscany Dual Magnum Prowl H2O	Pure Spray Green or Maxx Vibrance (Thiameth)	Quadris Endura Champ Ion++ Agri Tin Cruiser Maxx Vibrance (Mefenoxam, Fludioxonil, Sedaxane)
Aberdeen Idaho (AB)	J. Stark, R. Novy, J. Whitworth, C. Lowder	Early	Sprinkler	205-80-10Zn-5Mn	Mechanical	5/4/2018	8/10/2018	8/27/2018	TriCor 4F Matrix Eptam	Admire	
Springlake Texas (SPL)	I. Vales J. C. Miller Jr., J. Koym, D. Scheuring	Early	Pivot	124-43-37	Mechanical	3/20/2018	6/26/2018	7/2/2018	Bronc Triple, Dual Magnum Matrix, Stealth, Makaze Brawl, Gly Star Original, Metribuzin 75 CA	Movento, Minecto Pro Transform WG, Sivanto Cruiser Maxx Vibrance	Scala Luna Tranquility NUCOP
Dalhart Texas (DAL)	I. Vales J. C. Miller Jr., J. Koym, D. Scheuring	Early	Pivot	224-74-282	Reglone	5/13/2018	8/29/2018	9/17/2018	Matrix SG Herbicide, Echo Zn Chateau Herbicide SW, Acume, K-Tone, Select Max, Tricor 4F, Reglone	Cruiser Maxx Vibrance Movento, Fulfill, Beleaf 50 SC Sivanto™ prime, Torac	Curzate 60DF Aframe, Luna Tranquility Penncozeb 75DF

*

Table 2. Description of Clones - 2017 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 Chieftain	La 1354	Ia 1027-18	Lavender	Med-Large	Medium	Oblong	Lt. Red	White	Check	OR	***	CHECK
2 Red LaSoda	Triumph	Katahdin	Red-purple	Med	Med	Oval	Lt. Red	White	Check	OR	***	CHECK
Red-Purple/Yellow Flesh												
3 ATTX05175S-1R/Y	A99331-2RY □	COA99261-1RY	Purple	Large	Late	Round	Red	Yellow	TX	CO	1	
4 COTX04193S-2R/Y	ATC98515-1R/Y	ND3574-5R	Purple	Medium	Early	Round	Red	Yellow	TX	CO	1	
5 CO09079-5PW/Y	CO04117-5PW/Y	A00286-3Y	Purple	Medium	Medium	Oval	Purple/White	Yellow	CO	CO	1	
Purple												
6 Purple Majesty	All Blue	ND2008-2	Blue	Medium	Early	Oval	Purple	Purple	Check	OR	***	CHECK
7 CO08037-2P/P	CO03031-2R/R	CO97215-2P/P	White	Medium	Med-late	Oval	Purple	Purple	CO	CO	1	
Yellow Flesh												
8 Yukon Gold	Norgleam	W5279-4	Pink	Medium	Early	Oval	White	Yellow	Check	OR	***	CHECK
9 CO09128-3W/Y	A00293-2Y	CO03060-2W/Y	Lt. Purple	Med-small	Early	Oval	White	Yellow	CO	CO	1	
10 CO09128-5W/Y	A00293-2Y	CO03060-2W/Y	White	Medium	Early	Round	White	Yellow	CO	CO	1	
11 CO09218-4W/Y	ATC00293 -1W/Y	CO00412-5W/Y	White	Large	Late	Oval	White	Yellow	CO	CO	1	
Fingerling												
12 LaRatte						Finger	Yellow	Yellow	Check	-	***	CHECK
13 POR11PG62-3	Diverse	High Car	Purple	Small-Med	Med-early	Finger	Yellow/Pink Splash	Yellow	OR	OR	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	Chieftain	100	83	97	96	100	95
2	Red LaSoda	100	100	98	99	100	99
Red-Purple/Yellow Flesh							
3	ATTX05175S-1R/Y	100	100	96	99	100	99
4	COTX04193S-2R/Y	100		96	100	100	99
5	CO09079-5PW/Y	100	95	93	95	98	96
Purple							
6	Purple Majesty		94	98	97	100	97
7	CO08037-2P/P	90	96	98	100	86	94
Yellow Flesh							
8	Yukon Gold	80	98	97	96	89	92
9	CO09128-3W/Y	90	89	95	96	90	92
10	CO09128-5W/Y	100	99	96	100	92	97
11	CO09218-4W/Y	90	97	95	85	43	82
Fingerling							
12	LaRatte		98	99	100	100	99
13	POR11PG62-3		97	95	99	88	95
Mean		95	96	96	97	91	95

Table 4. Vine Size and Vine Maturity

Entry Clone/Variety	Vine Size (1-5 large)					OR ON	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 Chieftain	3.3	2.5	3.6	4.5	3.5	2.0	3.3	3.5	3.5	3.6	3.2
2 Red LaSoda	4.0	3.0	3.8	4.9	3.9	2.0	3.0	3.4	4.2	4.5	3.4
Red-Purple/Yellow Flesh											
3 ATTX05175S-1R/Y	3.3	2.0	3.3	4.4	3.2	2.0	3.3	2.8	4.4	4.8	3.4
4 COTX04193S-2R/Y		2.0	3.7	4.4	3.3	2.0		1.8	3.6	3.2	2.6
5 CO09079-5PW/Y	3.8	2.0	2.3	4.2	3.1	2.0	2.8	1.5	3.7	3.4	2.7
Purple											
6 Purple Majesty	3.3	2.0	3.9	5.0	3.5	2.0	3.0	1.5	3.8	3.9	2.8
7 CO08037-2P/P	3.0	2.3	2.6	4.4	3.1	2.0	3.0	3.6	4.1	4.9	3.5
Yellow Flesh											
8 Yukon Gold	2.5	2.5	3.6	4.1	3.2	2.0	2.0	2.0	3.8	4.8	2.9
9 CO09128-3W/Y	2.3	2.0	3.3	4.3	2.9	3.5	3.0	3.0	3.6	4.1	3.4
10 CO09128-5W/Y	2.0	1.3	3.9	4.2	2.8	2.6	2.5	2.6	3.4	4.2	3.1
11 CO09218-4W/Y	4.3	2.8	2.1	3.7	3.2	3.5	4.0	3.9	4.4	5.0	4.2
Fingerling											
12 LaRatte	3.8	2.5	3.9	4.8	3.7	2.0	3.0	2.9	5.0	3.6	3.3
13 POR11PG62-3	3.5	2.0	3.0	3.9	3.1	2.0	3.8	3.3	4.1	3.8	3.4
Mean	3	2	3	4	3	2	3	3	4	4	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 Chieftain	694	632	458	461	176	543	494	2
2 Red LaSoda	787	613	642	514	160	713	572	1
Red-Purple/Yellow Flesh								
3 ATTX05175S-1R/Y	608	550	518	372	141	307	416	1
4 COTX04193S-2R/Y	486	480		318	160	321	353	2
5 CO09079-5PW/Y	420	433	417	242	62	226	300	3
Purple								
6 Purple Majesty	561		493	407	154	465	416	1
7 CO08037-2P/P	305	354	422	270	88	373	302	2
Yellow Flesh								
8 Yukon Gold	495	438	383	347	194	328	364	1
9 CO09128-3W/Y	390	335	323	271	105	330	292	4
10 CO09128-5W/Y	513	345	379	283	165	342	338	2
11 CO09218-4W/Y	523	390	496	268	58	153	315	3
Fingerling								
12 LaRatte	359		453	275	53	126	253	1
13 POR11PG62-3	349		384	107	109	198	229	2
Mean	499	457	447	318	125	340	357	

Table 6. Yield and Percent < 4 oz

Entry	Clone/Variety	Yield < 4 oz (cwt/a)								Percent < 4 oz							
		OR	CA	CO	ID	TX	TX	Mean	Rank	OR	CA	CO	ID	TX	TX	Mean	Rank
		ON	TUL	SLV ¹	AB	SPL	DAL			ON	TUL	SLV	AB	SPL	DAL		
Red/White Flesh																	
1	Chieftain	90	73	21	70	52	78	64	1	13	12	5	15	30	14	15	1
2	Red LaSoda	56	43	31	41	56	48	46	2	7	7	5	8	35	7	11	2
Red-Purple/Yellow Flesh																	
3	ATX05175S-1R/Y	355	319	328	287	136	211	273	1	58	58	63	77	96	69	70	2
4	COTX04193S-2R/Y	213	237		224	153	222	210	3	44	49		70	96	69	66	3
5	CO09079-5PW/Y	346	337	240	210	57	156	224	2	82	78	57	87	92	69	78	1
Purple																	
6	Purple Majesty	247		113	253	128	269	202	1	44		23	62	83	58	54	1
7	CO08037-2P/P	140	215	85	173	78	142	139	2	46	61	20	64	89	38	53	2
Yellow Flesh																	
8	Yukon Gold	59	51	25	57	48	15	43	4	12	12	7	17	25	5	13	4
9	CO09128-3W/Y	250	289	259	256	104	184	223	2	64	86	80	94	99	56	80	2
10	CO09128-5W/Y	310	308	291	263	161	221	259	1	61	89	77	93	98	64	80	1
11	CO09218-4W/Y	280	201	108	226	38	63	153	3	53	52	22	84	66	42	53	3
Fingerling																	
12	LaRatte	314		188	244	26	52	165	1	87		42	89	50	41	62	2
13	POR11PG62-3	296		108	98	108	105	143	2	85		28	92	99	53	72	1
Mean		227	207	150	185	88	136	165		51	50	36	66	74	45	54	

¹ 4-6 inch for fingerling

Table 7. Yield and Percent 4-6 oz.

Entry	Clone/Variety	Yield 4-6 oz (cwt/a)						Percent 4-6 oz (%)							
		OR ON	CA TUL	ID AB	TX SPL	TX DAL	Mean Rank	OR ON	CA TUL	ID AB	TX SPL	TX DAL	Mean Rank		
Red/White Flesh															
1	Chieftain	133	122	105	50	179	118	1	19	19	23	28	33	33	1
2	Red LaSoda	80	63	66	48	141	80	2	10	10	13	30	20	20	2
Red-Purple/Yellow Flesh															
3	ATTX05175S-1R/Y	138	134	74	0	83	86	2	23	24	20	0	27	27	1
4	COTX04193S-2R/Y	148	159	75	2	68	90	1	30	33	23	1	21	21	3
5	CO09079-5PW/Y	46	69	20	4	52	38	3	11	16	8	6	23	23	2
Purple															
6	Purple Majesty	117		92	8	151	92	1	21		23	5	32	32	2
7	CO08037-2P/P	91	90	86	5	143	83	2	30	26	32	6	38	38	1
Yellow Flesh															
8	Yukon Gold	78	63	80	75	49	69	1	16	14	23	39	15	15	4
9	CO09128-3W/Y	13	29	13	1	105	32	4	3	9	5	1	32	32	2
10	CO09128-5W/Y	61	29	15	2	115	44	3	12	8	5	1	34	34	1
11	CO09218-4W/Y	139	119	35	3	44	68	2	27	31	13	5	29	29	3
Fingerling															
12	LaRatte	11		7	0	43	15	2	3		3	0	34	34	1
13	POR11PG62-3	41		3	1	23	17	1	12		3	1	12	12	2
Mean		84	88	52	15	92	64		17	19	15	9	27	27	

Table 8. Yield and Percent 6-10 oz.

								Percent 6-10 oz (%)							
Entry	Clone/Variety	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	Chieftain	279	41	212	68	114	143	1	40	6	46	39	21	21	2
2	Red LaSoda	194	31	180	32	179	123	2	25	5	35	20	25	25	1
Red-Purple/Yellow Flesh															
3	ATTX05175S-1R/Y	39	13	11	0	13	15	2	6	2	3	0	4	4	3
4	COTX04193S-2R/Y	99	14	18	0	31	32	1	20	3	6	0	10	10	1
5	CO09079-5PW/Y	10	2	11	0	10	7	3	2	1	5	0	5	5	2
Purple															
6	Purple Majesty	96		42	1	46	46	1	17		10	1	10	10	2
7	CO08037-2P/P	62	10	11	1	69	31	2	20	3	4	1	18	18	1
Yellow Flesh															
8	Yukon Gold	166	32	143	48	82	94	1	34	7	41	25	25	25	1
9	CO09128-3W/Y	1	2	1	0	37	8	3	0	0	0	0	11	11	2
10	CO09128-5W/Y	13	1	3	1	7	5	4	3	0	1	1	2	2	4
11	CO09218-4W/Y	83	14	5	0	8	22	2	16	4	2	0	5	5	3
Fingerling															
12	LaRatte	2		2	0	18	5	1	0		1	0	14	14	1
13	POR11PG62-3	4		0	0	0	1	2	1		0	0	0	0	2
Mean															
		81	16	49	12	47	41		14	3	12	7	12	12	

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 ¹	AB	SPL	DAL	Mean	Rank	ON	TUL	SLV	AB	SPL	DAL	Mean	Rank
Red/White Flesh																	
1	Chieftain	180	143	222	67	4	172	131	2	26	23	49	15	2	32	24	2
2	Red LaSoda	436	202	424	216	14	345	273	1	55	33	66	42	9	48	42	1
Red-Purple/Yellow Flesh																	
3	ATTX05175S-1R/Y	2	7	8	0	0	0	3	1	0	1	2	0	0	0	1	2
4	COTX04193S-2R/Y	12	2		0	0	0	3	2	3	0		0	0	0	1	1
5	CO09079-5PW/Y	0	0	8	0	0	0	1	3	0	0	2	0	0	0	0	3
Purple																	
6	Purple Majesty	11		42	14	0	0	13	1	2		9	3	0	0	3	2
7	CO08037-2P/P	6	4	51	0	0	20	13	2	2	1	12	0	0	5	3	1
Yellow Flesh																	
8	Yukon Gold	174	151	144	59	21	135	114	1	35	34	38	17	11	41	29	1
9	CO09128-3W/Y	0	3	0	0	0	0	0	4	0	1	0	0	0	0	0	4
10	CO09128-5W/Y	5	0	0	0	1	0	1	3	1	0	0	0	1	0	0	3
11	CO09218-4W/Y	5	1	48	1	0	0	9	2	1	0	10	0	0	0	2	2
Fingerling																	
12	LaRatte	0		42	0	0	0	8	2	0		9	0	0	0	2	2
13	POR11PG62-3	0		52	0	0	0	10	1	0		13	0	0	0	3	1
Mean		64	51	87	27	3	52	45		10	9	17	6	2	10	8	

¹ > 6 inch for fingerling

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	Chieftain	412	381	211	316	118	293	289	1	59	60	46	69	67	54	59	1
2	Red LaSoda	274	255	152	246	80	320	221	2	35	42	24	48	50	45	40	2
Red-Purple/Yellow Flesh																	
3	ATX05175S-1R/Y	177	206	178	85	0	96	124	2	29	37	34	23	0	31	26	2
4	COTX04193S-2R/Y	247	225		92	2	99	133	1	51	47		29	1	31	32	1
5	CO09079-5PW/Y	56	79	164	31	4	63	66	3	13	18	39	13	6	28	20	3
Purple																	
6	Purple Majesty	213		331	134	9	197	177	1	38		67	33	6	42	37	2
7	CO08037-2P/P	153	127	286	97	6	211	147	2	50	36	68	36	7	57	42	1
Yellow Flesh																	
8	Yukon Gold	244	206	209	223	123	131	189	1	49	47	55	64	63	40	53	1
9	CO09128-3W/Y	14	34	60	14	1	142	44	4	4	10	19	5	1	43	14	4
10	CO09128-5W/Y	74	31	86	18	3	122	56	3	14	9	23	6	2	36	15	3
11	CO09218-4W/Y	222	174	327	40	3	52	136	2	42	45	66	15	5	34	34	2
Fingerling																	
12	LaRatte	13		103	9	0	61	37	1	4		23	3	0	48	16	1
13	POR11PG62-3	45		93	3	0	23	33	2	13		24	3	0	12	10	2
Mean		165	172	183	101	27	139	127		31	35	41	27	16	38	31	

¹ 4-6 inch for fingerling

Table 11. Yield and Percent Culls

Entry	Clone/Variety	Yield Culls (cwt/a)								Percent Culls (%)							
		OR ¹	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	Chieftain	12	34	3	7	2	0	10	2	2	5	1	1	1	0	2	2
2	Red LaSoda	21	114	34	11	10	0	32	1	3	19	5	2	6	0	6	1
Red-Purple/Yellow Flesh																	
3	ATTX05175S-1R/Y	74	19	5	0	6	0	17	1	12	3	1	0	4	0	3	1
4	COTX04193S-2R/Y	14	17		2	5	0	7	3	3	3		1	3	0	2	3
5	CO09079-5PW/Y	17	17	6	1	1	7	8	2	4	4	2	0	2	3	3	2
Purple																	
6	Purple Majesty	90		8	6	17	0	24	1	16		2	2	11	0	6	1
7	CO08037-2P/P	7	8	0	0	4	0	3	2	2	2	0	0	4	0	2	2
Yellow Flesh																	
8	Yukon Gold	17	31	5	8	2	47	18	3	3	7	1	2	1	14	5	3
9	CO09128-3W/Y	126	9	3	1	0	5	24	1	32	3	1	0	0	1	6	2
10	CO09128-5W/Y	123	6	2	1	0	0	22	2	24	2	1	0	0	0	4	4
11	CO09218-4W/Y	16	14	12	1	17	37	16	4	3	4	3	0	29	24	10	1
Fingerling																	
12	LaRatte	32		120	22	0	13	38	2	9		26	8	0	11	11	2
13	POR11PG62-3	9		86	5	27	70	39	1	2		22	5	24	35	18	1
Mean		43	27	24	5	7	14	20		9	5	5	2	7	7	6	

¹ sprouted tubers were graded as culls

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	Chieftain	1.073	1.088	1.076	1.073	1.062	1.066	1.073	2	
2	Red LaSoda	1.076	1.093	1.087	1.074	1.056	1.060	1.074	1	
Red-Purple/Yellow Flesh										
3	ATTX05175S-1R/Y	1.075	1.093	1.088	1.078	1.061	1.072	1.078	1	
4	COTX04193S-2R/Y	1.078	1.080		1.071	1.062	1.060	1.070	2	
5	CO09079-5PW/Y	1.071	1.093	1.072	1.069	1.061	1.055	1.070	3	
Purple										
6	Purple Majesty	1.084		1.088	1.077	1.072	1.069	1.078	1	
7	CO08037-2P/P	1.062	1.090	1.089	1.077	1.073	1.072	1.077	2	
Yellow Flesh										
8	Yukon Gold	1.080	1.085	1.091	1.088	1.070	1.071	1.081	2	
9	CO09128-3W/Y	1.060	1.095	1.077	1.072	1.062	1.059	1.071	3	
10	CO09128-5W/Y	1.078	1.100	1.091	1.084	1.072	1.071	1.082	1	
11	CO09218-4W/Y	1.078	1.098	1.078	1.059	1.053	1.058	1.071	4	
Fingerling										
12	LaRatte	1.072		1.080	1.073	nd	1.063	1.072	2	
13	POR11PG62-3	1.078		1.088	1.074	nd	1.061	1.076	1	
Mean		1.074	1.092	1.084	1.074	1.064	1.064	1.075		

Table 13. Average Tuber Size and Tubers Per Plant

Entry	Clone/Variety	Average Tuber Size (oz)						Tubers/plant					
		OR	CA	ID	TX	TX		OR	CA	ID	TX	TX	
		ON	TUL	AB	SPL	DAL	Mean	ON	TUL	AB	SPL	DAL	Mean
Red/White Flesh													
1	Chieftain	5.7	6.2	5.7	3.9	5.6	5.4	10	10	7	4	7	8
2	Red LaSoda	7.5	7.5	7.3	3.7	7.6	6.7	9	8	6	4	7	7
Red-Purple/Yellow Flesh													
3	ATTX05175S-1R/Y	2.4	2.9	2.4	1.0	2.5	2.2	21	18	14	11	9	15
4	COTX04193S-2R/Y	3.4	3.3	2.6	1.4	2.4	2.6	12	14	11	9	10	11
5	CO09079-5PW/Y	1.8	2.3	1.9	1.4	2.6	2.0	19	18	12	4	7	12
Purple													
6	Purple Majesty	2.9		2.6	1.6	2.5	2.4	16		14	8	13	13
7	CO08037-2P/P	3.1	2.9	2.7	1.8	3.8	2.9	8	12	9	4	8	8
Yellow Flesh													
8	Yukon Gold	5.9	6.4	5.5	4.4	8.9	6.2	7	8	6	4	3	5
9	CO09128-3W/Y	1.5	1.9	1.5	0.7	2.7	1.7	22	18	17	12	10	16
10	CO09128-5W/Y	1.9	1.9	1.8	1.1	2.6	1.9	23	17	14	12	11	15
11	CO09218-4W/Y	2.6	3.1	2.3	1.1	2.6	2.3	17	13	10	5	11	11
Fingerling													
12	LaRatte	0.8		1.3	0.4	1.7	1.1	35		18	10	5	17
13	POR11PG62-3	1.7		1.5	0.9	2.1	1.6	17		6	10	8	10
Mean													
		3.2	3.8	3.0	1.8	3.7	3.0	17	13	11	8	8	11

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	Process CO/SLV	
		OR	CA	ID	Mean	CA	CO	ID	TX	TX	Mean	Rank	score (1-5 best)	fry color (4=darkest)	
		ON	TUL	AB		TUL	SLV	AB	SPL	DAL			CO/ SLV	Harvest	45°F
Red/White Flesh															
1	Chieftain	5.0	4.0	3.6	4	3.8	3.0	3.1	3.7	3.9	3.5	1	1.0	3.0	3.0
2	Red LaSoda	3.0	2.9	2.9	3	2.5	1.0	2.0	3.5	3.8	2.6	2	1.0	2.0	3.0
Red-Purple/Yellow Flesh															
3	ATTX05175S-1R/Y	5.0	3.9	3.8	4	3.8	5.0	3.6	3.2	3.6	3.8	1	5.0	1.0	2.0
4	COTX04193S-2R/Y	5.0	4.0	4.0	4	3.9		3.9	3.4	3.7	3.7	2			
5	CO09079-5PW/Y	3.0	3.3	3.6	3	2.8	3.0	3.5	2.5	3.4	3.0	3	1.0	4.0	4.0
Purple															
6	Purple Majesty	4.0		2.6	3		5.0	3.0	3.4	3.8	3.8	1		-	-
7	CO08037-2P/P	3.0	4.0	3.3	3	4.0	3.0	3.4	2.6	3.8	3.3	2		-	-
Yellow Flesh															
8	Yukon Gold	3.0	3.6	3.4	3	3.5	2.0	3.3	4.2	3.0	3.2	3	1.0	2.0	3.0
9	CO09128-3W/Y	3.0	3.6	4.4	4	2.9	1.0	4.4	3.2	3.6	3.0	4	1.0	4.0	3.0
10	CO09128-5W/Y	4.0	3.8	4.4	4	3.5	2.0	4.4	3.8	3.6	3.4	1	4.0	0.0	0.0
11	CO09218-4W/Y	2.0	4.0	4.0	3	3.1	5.0	3.8	2.5	2.7	3.4	2	3.0	3.0	2.0
Fingerling															
12	LaRatte	3.0		3.0	3		5.0	2.9	2.6	3.2	3.4	1	1.0	4.0	4.0
13	POR11PG62-3	4.0		3.4	4		2.0	3.0	3.1	3.3	2.9	2	4.0	2.0	1.0
Mean															
		4	4	4	4	3	3	3	3	3	3		2.2	2.5	2.5

Table 15. Tuber Shape and Length Width Ratio

Entry	Clone/Variety	Tuber Shape							L/W							W/T ¹					
		OR	CA	CO	ID	TX	TX		OR	CA	CO	ID	TX	TX		OR	ID	CO	TX	TX	
		ON	TUL	SLV	AB	SPL	DAL	Mean	ON	TUL	SLV	AB	SPL	DAL	Mean	ON	AB	SLV	SPL	DAL	Mean
Red/White Flesh																					
1	Chieftain	1.0	2.3	2.0	1.9	2.0	2.5	1.9	1.06	1.15	1.20	1.13	1.09	1.12	1.12	1.33	1.27	1.26	1.24	1.26	1.27
2	Red LaSoda	2.0	2.1	1.0	2.0	2.0	2.7	2.0	1.09	1.12	1.04	1.07	1.12	1.21	1.11	1.30	1.26	1.30	1.16	1.23	1.25
Red-Purple/Yellow Flesh																					
3	ATTX05175S-1R/Y	1.0	1.4	1.0	1.5	1.0	1.0	1.2	1.18	0.95	0.88	0.90	1.09	1.05	1.01	1.23	1.28	1.34	1.11	1.16	1.22
4	COTX04193S-2R/Y	1.0	1.4		1.6	1.5	2.5	1.6	1.07	1.04		1.01	1.08	1.07	1.05	1.31	1.36		1.20	1.27	1.29
5	CO09079-5PW/Y	1.0	3.4	2.0	2.9	2.0	2.4	2.3	1.02	1.37	1.30	1.44	1.18	1.37	1.28	1.39	1.19	1.23	1.17	1.15	1.22
Purple																					
6	Purple Majesty	1.0		2.0	3.0	2.0	2.5	2.1	1.24		1.41	1.36	1.39	1.40	1.36	1.19	1.23	1.19	1.14	1.10	1.17
7	CO08037-2P/P	2.0	2.5	2.0	2.8	1.4	3.3	2.3	1.20	1.27	1.40	1.42	1.19	1.50	1.33	1.29	1.09	1.07	1.09	1.10	1.13
Yellow Flesh																					
8	Yukon Gold	1.0	2.5	1.0	1.8	2.0	2.6	1.8	1.11	1.15	1.08	1.11	1.09	1.17	1.12	1.25	1.25	1.26	1.27	1.27	1.26
9	CO09128-3W/Y	1.0	2.4	2.0	1.5	1.0	2.4	1.7	1.32	1.20	1.41	1.26	1.10	1.32	1.27	1.23	1.18	1.13	1.12	1.18	1.17
10	CO09128-5W/Y	1.0	1.9	1.0	1.3	1.0	1.0	1.2	1.04	1.03	1.07	0.97	1.12	1.06	1.05	1.24	1.25	1.18	1.11	1.10	1.17
11	CO09218-4W/Y	2.0	2.4	1.0	1.5	1.4	2.4	1.8	1.16	1.27	1.12	1.08	1.12	1.36	1.18	1.25	1.27	1.36	1.24	1.21	1.27
Fingerling																					
12	LaRatte	5.0		5.0	5.0	5.0	5.0	5.0	2.48		3.75	3.26	2.36	3.71	3.11	1.33	1.12	1.21	1.08	1.15	1.18
13	POR11PG62-3	4.0		5.0	4.0	3.0	5.0	4.2	2.33		2.40	1.81	1.58	2.77	2.18	1.36	1.13	1.19	1.14	1.12	1.19
Mean		1.8	2.2	2.1	2.4	1.9	2.7	2.2	1.33	1.16	1.50	1.37	1.27	1.55	1.40	1.28	1.22	1.23	1.16	1.18	1.21

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)						Flesh Color (1 - 5 dark)					
		CA	CO	ID	TX	TX		CA	CO	ID	TX	TX	
		TUL	SLV	AB	SPL	DAL	Mean	TUL	SLV	AB	SPL	DAL	Mean
Red/White Flesh													
1	Chieftain	2.1	1.0	2.8	2.0	2.5	2.1	1.1	1.0	2.5	1.0	1.0	1.3
2	Red LaSoda	1.9	2.0	3.0	2.4	3.0	2.5	1.5	1.0	1.3	1.0	1.0	1.2
Red-Purple/Yellow Flesh													
3	ATTX05175S-1R/Y	3.3	2.0	3.0	3.5	3.5	3.1	3.4	3.0	3.0	3.4	4.3	3.4
4	COTX04193S-2R/Y	3.4		3.0	3.9	3.5	3.4	2.5		3.0	4.0	4.5	3.5
5	CO09079-5PW/Y	2.1	1.0	2/3	1.0	1.0	1.3	3.9	3.0	2.5	3.4	4.5	3.5
Purple													
6	Purple Majesty		5.0	5.0	5.0	5.0	5.0		5.0	5.0	4.0	3.5	4.4
7	CO08037-2P/P	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.5	4.5	4.8
Yellow Flesh													
8	Yukon Gold	2.5	1.0	2.5	1.0	1.0	1.6	3.0	2.0	2.5	3.5	2.8	2.8
9	CO09128-3W/Y	2.6	1.0	3.0	1.0	1.0	1.7	3.8	4.0	3.0	4.0	4.0	3.8
10	CO09128-5W/Y	1.8	1.0	2.8	1.0	1.0	1.5	4.1	4.0	3.3	4.4	4.1	4.0
11	CO09218-4W/Y	2.1	1.0	2.8	1.0	1.0	1.6	3.8	3.0	3.5	3.8	4.0	3.6
Fingerling													
12	LaRatte		1.0	2.3	1.0	1.0	1.3		3.0	2.0	2.0	2.9	2.5
13	POR11PG62-3		2.0	3.0	1.0	1.0	1.8		3.0	3.0	3.0	3.0	3.0
Mean		2.7	1.9	3.2	2.2	2.3	2.4	3.2	3.1	3.0	3.2	3.4	3.2

Table 17. Eye Depth and External Defects

Entry	Clone/Variety	OR	CA	ID	TX	TX	Eye	OR	CA	CO	ID	TX	TX	Growth	OR	CA	CO	ID	TX	TX	Knobs	OR	TX	TX	Shatter	OR	ID	TX	TX	Scab
		ON	TUL	AB	SPL	DAL	Depth	ON ¹	TUL ¹	SLV	AB	SPL	DAL	Cracks	ON ¹	TUL ¹	SLV	AB	SPL	DAL		ON	SPL	DAL	Bruise	ON	AB	SPL	DAL	
Red/White Flesh																														
1	Chieftain	2.0	3.4	2.8	3.8	3.8	3.2	0.0	0.1	5.0	5.0	5.0	5.0	5.0	0.0	0.5	4.0	4.9	5.0	4.8	4.7	5.0	5.0	5.0	4.9	5.0	4.9	5.0	5.0	5.0
2	Red LaSoda	2.0	2.5	1.8	2.8	3.5	2.5	10.0	5.0	4.0	4.8	4.9	4.8	4.6	10.0	0.5	5.0	5.0	5.0	4.8	4.9	5.0	5.0	5.0	5.0	5.0	5.0	4.8	4.9	4.9
Red-Purple/Yellow Flesh																														
3	ATTX05175S-1R/Y	4.0	3.4	3.1	3.4	3.5	3.5	0.0	0.2	5.0	5.0	5.0	5.0	5.0	0.0	0.4	4.0	5.0	5.0	5.0	4.8	5.0	5.0	5.0	4.9	5.0	5.0	5.0	5.0	5.0
4	COTX04193S-2R/Y	5.0	3.1	3.4	3.8	4.0	3.8	0.0	0.4	5.0	5.0	5.0	5.0	5.0	0.0	0.2	5.0	5.0	4.8	4.9	4.9	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
5	CO09079-5PW/Y	5.0	3.6	3.9	4.0	4.0	4.1	0.0	0.0	5.0	4.9	5.0	5.0	5.0	0.0	0.6	5.0	5.0	5.0	4.5	4.9	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Purple																														
6	Purple Majesty	4.0		3.6	4.0	4.0	3.9	10.0		5.0	5.0	5.0	5.0	5.0	0.0		4.0	5.0	5.0	4.8	4.7	5.0	5.0	5.0	4.9	5.0	5.0	5.0	5.0	5.0
7	CO08037-2P/P	4.0	4.1	4.3	4.0	3.9	4.1	0.0	0.7	5.0	5.0	5.0	5.0	5.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	5.0	4.8
Yellow Flesh																														
8	Yukon Gold	4.0	4.1	3.5	3.8	4.0	3.9	0.0	0.2	5.0	5.0	5.0	4.5	4.9	10.0	0.8	4.0	4.9	5.0	3.5	4.3	5.0	5.0	5.0	4.8	5.0	4.9	5.0	5.0	5.0
9	CO09128-3W/Y	5.0	4.3	4.0	4.5	4.0	4.4	0.0	0.0	5.0	5.0	5.0	4.3	4.8	0.0	0.3	4.0	5.0	5.0	4.0	4.5	5.0	5.0	5.0	4.9	5.0	5.0	5.0	5.0	5.0
10	CO09128-5W/Y	5.0	3.9	3.9	5.0	3.9	4.3	0.0	0.0	5.0	5.0	5.0	5.0	5.0	0.0	0.2	5.0	5.0	5.0	4.8	4.9	5.0	5.0	5.0	5.0	5.0	5.0	4.8	4.9	4.9
11	CO09218-4W/Y	4.0	4.1	4.0	5.0	4.0	4.2	0.0	0.1	4.0	5.0	5.0	4.8	4.7	10.0	0.9	4.0	5.0	5.0	3.5	4.4	5.0	5.0	5.0	4.8	5.0	5.0	5.0	5.0	5.0
Fingerling																														
12	LaRatte	4.0		3.6	5.0	4.0	4.2	0.0		5.0	5.0	5.0	5.0	5.0	0.0		4.0	4.5	5.0	2.3	3.9	5.0	5.0	5.0	5.0	5.0	4.5	5.0	5.0	4.9
13	POR11PG62-3	4.0		3.1	4.0	4.0	3.8	0.0		4.0	4.8	5.0	5.0	4.7	10.0		4.0	4.3	4.8	1.0	3.5	5.0	5.0	5.0	5.0	5.0	4.3	5.0	5.0	4.8
Mean																														
		4.0	3.7	3.5	4.1	3.9	3.8	1.5	0.7	4.8	5.0	5.0	4.9	4.9	3.1	0.4	4.3	4.9	5.0	4.0	4.6	5.0	5.0	5.0	4.9	4.9	4.9	5.0	5.0	4.9

¹o%

Table 18. Internal Defects

Entry	Clone/Variety	Percent Incidence (%) ¹											Blackspot Bruise												
		OR	CA	CO	ID	TX	TX		OR	ID	TX	TX		OR	CA	ID	TX	TX	OR ²	CA	CO ²	TX	TX		
		ON	TUL	SLV	AB	SPL	DAL	HH	ON	AB	SPL	DAL	IBS	ON	TUL	AB	SPL	DAL	VD	ON	TUL%	SLV	SPL%	DAL%	BB
Red/White Flesh																									
1	Chieftain	0.0	5.0	0.9	0.0	0.0	0.0	1.0	45.0	0.0	0.0	5.0	12.5	0.0	3.0	0.0	0.0	0.0	0.6	2.5	8.0	3.8	0.0	0.0	2.7
2	Red LaSoda	2.5	5.0	13.4	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.0	2.5	8.0	0.0	18.0	0.0	5.7	5.0	3.0	4.1	0.0	0.0	1.0
Red-Purple/Yellow Flesh																									
3	ATTX05175S-1R/Y	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	10.0	2.6	2.5	3.0	3.8	0.0	0.0	1.0
4	COTX04193S-2R/Y	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0	12.5	6.1	0.0	5.0		0.0	0.0	1.7
5	CO09079-5PW/Y	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.6	7.5	30.0	0.0	0.0	5.0	8.5	2.5	0.0	5.0	0.0	0.0	0.0
Purple																									
6	Purple Majesty	0.0		2.4	2.5	0.0	0.0	1.0	0.0	0.0	3.0	8.0	2.8	0.0		0.0	0.0	0.0	0.0	2.5		-	0.0	0.0	0.0
7	CO08037-2P/P	0.0	0.0	0.0	2.5	0.0	0.0	0.4	2.5	0.0	0.0	0.0	0.6	0.0	8.0	0.0	0.0	0.0	1.6	0.0	0.0	-	0.0	0.0	0.0
Yellow Flesh																									
8	Yukon Gold	0.0	10.0	0.9	2.5	0.0	12.5	4.3	2.5	0.0	0.0	12.5	3.8	0.0	8.0	0.0	40.0	0.0	9.6	0.0	3.0	4.5	0.0	0.0	1.0
9	CO09128-3W/Y	0.0	3.0	0.3	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	13.0	0.0	0.0	2.5	3.1	0.0	0.0	5.0	0.0	0.0	0.0
10	CO09128-5W/Y	0.0	20.0	0.5	0.0	0.0	0.0	3.4	5.0	0.0	0.0	25.0	7.5	0.0	3.0	0.0	0.0	17.5	4.1	5.0	3.0	4.6	0.0	0.0	1.0
11	CO09218-4W/Y	0.0	5.0	1.4	0.0	0.0	0.0	1.1	5.0	0.0	0.0	0.0	1.3	0.0	3.0	0.0	0.0	0.0	0.6	2.5	3.0	3.7	0.0	0.0	1.0
Fingerling																									
12	LaRatte	0.0		0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	3.0	2.0	0.0		0.0	0.0	0.0	0.0	0.0		4.8	0.0	0.0	0.0
13	POR11PG62-3	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		5.0	0.0	0.0	0.0
Mean																									
		0.2	4.8	1.7	0.6	0.0	1.0	1.2	5.2	0.0	0.2	4.1	2.6	0.8	9.4	0.0	4.7	3.7	3.3	1.7	2.8	4.4	0.0	0.0	0.7

¹ Percent based on 10 cut tubers.

² 1 to 5=none

Table 19. Disease Evaluations, Metribuzin Reaction

Entry Clone/Variety	Aberdeen			Tulelake	
	Vert. Wilt/ Early Dying ¹ Foliar	Early Blight ¹ Foliar	Metr. Reaction ²	Rating ⁴	Vert. AUDPC ³
Red/White Flesh					
1 Chieftain	5	5	MR	6	476
2 Red LaSoda	5	4	MS	5	184
Red-Purple/Yellow Flesh					
3 ATTX05175S-1R/Y	5	4	MS	6	324
4 COTX04193S-2R/Y	3	4	S	8	896
5 CO09079-5PW/Y	3	4	MS	8	749
Purple					
6 Purple Magesty	4	4	R		
7 CO08037-2P/P	5	4	S	8	705
Yellow Flesh					
8 Yukon Gold	3	3	MR	8	1134
9 CO09128-3W/Y	5	3	MR	8	856
10 CO09128-5W/Y	4	4	MS	9	1413
11 CO09218-4W/Y	5	4	MR	4	156
Fingerling					
12 LaRatte	5	5	MS		
13 POR11PG62-3	4	5	MS		

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

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

³ Area Under Disease Product Curve Based on reading taken 77, 83, 89, 96, 104 and 110 days from planting

⁴ 0 to 9=dead

Table 20. Tuber Composition

Entry	Clone/Variety	Aberdeen					Texas ⁵	
		Solids	Protein ¹	Dextrose ²	Sucrose ²	Vitamin C ³	Glycoalkaloids ⁴	µg Trolox equivalents/gfw ⁶
Red/White Flesh								
1	Chieftain	19.64	0.055	0.218	5.77	26.76	6.18	257
2	Red LaSoda	19.04	0.152	0.160	6.52	31.89	3.46	240
Red-Purple/Yellow Flesh								
3	ATTX05175S-1R/Y	21.34	0.038	0.219	5.94	31.75	6.14	188
4	COTX04193S-2R/Y	19.31	0.021	0.242	6.44	25.26	0.82	113
5	CO09079-5PW/Y	18.56	0.217	0.257	6.30	29.98	4.90	249
Purple								
6	Purple Majesty	20.80	0.006	0.128	4.44	26.61	4.05	446
7	CO08037-2P/P	21.00	0.022	0.202	5.76	30.73	3.46	452
Yellow Flesh								
8	Yukon Gold	23.13	0.035	0.217	6.50	42.58	3.43	201
9	CO09128-3W/Y	19.63	0.084	0.263	4.58	29.04	3.49	247
10	CO09128-5W/Y	21.58	0.015	0.170	6.30	26.80	4.52	158
11	CO09218-4W/Y	16.93	0.054	0.143	6.21	15.82	4.93	228
Fingerling								
12	LaRatte	19.46	0.053	0.232	7.58	25.36	5.20	273
13	POR11PG62-3	18.46	0.041	0.156	7.89	34.62	6.07	348
Mean		19.91	0.061	0.201	6.17	29.01	4.36	261

¹ % Dry Weight Basis² % Fresh Weight Basis³ % Fresh Weight Basis (mg/100g)⁴ % Fresh Weight Basis (mg/100g), using Lenepe as check with reading of 20.59

⁵ 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 methanol 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. Sample extraction was performed at TAMU and the DPPH assay was performed in Dr. Anna Hale's lab - USDA Sugar Cane Breeding, Houma, LA by Dr. Himaya Mula-Michel.

⁶ µg Trolox equivalents/gfw - Absorbance was converted to trolox equivalents based on a standard curve using the following equation: $y=284.86x - 4.9907$

Table 21. Entry Location Comments

Entry	Clone/Variety	Ontario, OR	Tulelake, CA	Center, CO	Aberdeen, ID
Red/White Flesh					
1	Chieftain	3 dull, too big, poor color	Nice		Flat, few ats (4); fairly uniform, few misshapen (2)
2	Red LaSoda	2 Irregular Shape, sprouted, 3 lumpy, 2 too big, poor color, 2 dull color, 2 large, misshapen tubers	High amount of powdery scab		Deep eyes, bumps (4); big, not pretty (2)
Red-Purple/Yellow Flesh					
3	ATTX05175S-1R/Y	dull red, colorful	Deep eyes, nice skin color		Uniform, nice shape (2); nice size, few bumps
4	COTX04193S-2R/Y	dull red, good color	Deep red skin color, prone to shatter bruise		Flat, uniform (4); nice size/shape (3)
5	CO09079-5PW/Y	russeted purple, ugly, dull, dull color, sprouted	Dull purple skin, not visually appealing		Fairly consistent color and uniformity (2) some long/oblong
Purple					
6	Purple Majesty	russet skin, 2 sprouted, dull purple, ugly skin, rough skin			Few misshapen, some elongated (3); few pear, some flat
7	CO08037-2P/P	low yield, low yield vs. Purple Majesty, skin is nice,	Deep purple skin color, susceptible to black dot		Few ats (2); uniform
Yellow Flesh					
8	Yukon Gold	greening, irregular shape, 2 too big, sprouted, skin crack	Nice		Flat (3); few misshapen/bumps (2)
9	CO09128-3W/Y	4 chain, 2 sprouted, Sprouted, Sticky Stem	Pink tinge to skin, prone to shatter bruise		Small (4); uniform, (3); some russetting good shape/size
10	CO09128-5W/Y	4 Sprouted, growth cracks, Chain	igh % of golf ball size tubers, susceptible to black dot		Small, round (4); uniform (2); some russetting/deep ends
11	CO09218-4W/Y	Chain, 3 chain, 3 sprouted, knobs	Heavy russet for specialty, prone to black dot		Uniform, some flat (3); few ats (2)
Fingerling					
12	LaRatte	2 sprouted, 2 Sprouted, chain			Misshapen (4); few "legs" (2); not real uniform, green
13	POR11PG62-3	knobs, colorful			Slight brow with a few bulging eyes (3) low yield (2) not consistent color

Table 22. Entry Location Comments Continued

Entry	Clone/Variety	Springlake, TX	Dalhart, TX
Red/White Flesh			
1	Chieftain	Nice+, Good Yield, light skin	Nice, Silver scurf, a little flat+
2	Red LaSoda	Very deep eyes, heat sprouts, Sticky stolons+, Chain tubers, light skin	Large variation in shape, Some very large tubers, High tuber number
Red-Purple/Yellow Flesh			
3	ATTX05175S-1R/Y	bright skin, not uniform size+, Very small++, high tuber set+, a little compressed, Intense skin color+++ , not uniform size, Small+, nice flesh skin color combination++, sticky stolons, Chain tubers, Nice, BOT	Parent only, Small, deep eyes, Pleasant skin color
4	COTX04193S-2R/Y		Silver scurf++, smooth skin, few eyes, uniform size and shape, small, Vascular Discoloration is red, a little flat
5	CO09079-5PW/Y	Light spectacle pattern++, Very small tubers+, Heat sprouts, small, yellow purple skin, Low tuber set, sticky flesh,	White skin, no pattern, small, Low tuber number+, Knobs, no PW/Y
Purple			
6	Purple Majesty	Very dark skin, oval to oblong, BOT, Pointy, Rough skin, Small, Marble pattern, Nice flesh pattern	Uniform size, flesh has white marbling+, silver scurf+, High yield+, nice shape
7	CO08037-2P/P	Very dark skin, round, Very few tubers+, round, white center+++ , Sticky stolons, small	Uniform shape, 90% with white center+, Noticeable eyebrows, Nice shape, shiny skin, very dark flesh
Yellow Flesh			
8	Yukon Gold	Nice, Large tubers+++ , heavy, high tuber set,	Bulging eyes, large, snaps, Lenticels, not uniform shape nor size, snaps, Very large KNOBS, large ugly, check seed source
9	CO09128-3W/Y	Very small+++ , late? Intense flesh color, road map	Small+, pointy, Knobs, growth cracks, hard to cut, High tuber number
10	CO09128-5W/Y	Small+++ , high tuber set+, Lots of tubers, very intense flesh, variable flesh color, Road map+, pink eyes	Internal heat necrosis+++ , Smalls++, uniform size+ and shape, round
11	CO09218-4W/Y	Few tubers+, Heat Sprouts+++ , low tuber number, variation for flesh color+, Very small, knobs	Knobs++, linked tubers++, very few tubers+, snaps+, buff skin, attached stolons+
Fingerling			
12	LaRatte	Very small, Attached stolons, Late, few tubers, Heat sprouts+++ , linked tubers+++++, Wrinkled, deformed	Smooth skin, very long linked tubers
13	POR11PG62-3	It does not look like a fingerling+, splashed skin pattern, late, Knobs, small pink unique pattern+, Small, bulging eye, Nice	Knobs+, wild looking, DUCKS

Table 23. Postharvest Evaluation Summary

Clone	Boiled (25 max)	Baked (25 max)	Microwaved (25 max)	Total (75 max)
9 Yukon Gold	17.4	20.8	19.8	57.9
10 A06336-2Y	17.4	19.6	18.9	55.8
11 A06336-5Y	17.1	18.8	18.8	54.7

Chipped: Aug. 21

Baked: Aug. 17

Boiled: Aug. 15

Microwaved: Aug. 24

Cooking Time: Aug. 11

Table 24. 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	Chieftain	***	64	118	143	289	131	10	494	5.4	1.073	3.5
2	Red LaSoda	***	46	80	123	221	273	32	572	6.7	1.074	2.6
Red-Purple/Yellow Flesh												
3	ATX05175S-1R/Y	1										
4	COTX04193S-2R/Y	1	210	90	32	133	3	7	353	2.6	1.070	3.7
5	CO09079-5PW/Y	1	224	38	7	66	1	8	300	2.0	1.070	3.0
Purple												
6	Purple Majesty	***	202	92	46	177	13	24	416	2.4	1.078	3.8
7	CO08037-2P/P	1	139	83	31	147	13	3	302	2.9	1.077	3.3
Yellow Flesh												
8	Yukon Gold	***	43	69	94	189	114	18	364	6.2	1.081	3.2
9	CO09128-3W/Y	1	223	32	8	44	0	24	292	1.7	1.071	3.0
10	CO09128-5W/Y	1	259	44	5	56	1	22	338	1.9	1.082	3.4
11	CO09218-4W/Y	1	153	68	22	136	9	16	315	2.3	1.071	3.4
Fingerling												
12	LaRatte	***	165	15	5	37	8	38	253	1.1	1.072	3.4
13	POR11PG62-3	1	143	17	1	33	10	39	229	1.6	1.076	2.9
Mean			175	49	36	96	38	21	331	3.2	1.078	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

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