



# 2009 Southwestern Regional Potato Variety Trial Report



## Table of Contents

Description of Clones - 2009 Southwestern Regional Trial	1
Table 1. Locations, Cooperators, and Cultural Information	2
Table 2. Plot Information and Chemical Application	3
Table 3. Percent Stand and Stems/Hill	4
Table 4. Vine Size and Vine Maturity	5
Table 5. Total Yield, Yield Rank, and Merit Scores	6
Table 6. Yield and Percent of U.S. No. 1s	7
Table 7. Yield and Percent of U.S. No. 1s > 10 oz	8
Table 8. Yield and Percent of U.S. No. 1s 6 - 10 oz	9
Table 9. Yield and percent of U.S. No. 1s 4 - 6 oz	10
Table 10. Yield and Percent of B (< 4 oz) Tubers	11
Table 11. Yield and Percent Culls/No. 2s	12
Table 12. Specific Gravity	13
Table 13. Tuber Weight (oz.) and Shape	14
Table 14. Eye Depth and Growth Cracks	15
Table 15. Percent Hollow Heart/Brown Center, Blackspot Bruising, and Fry Results	16
Table 16. Antioxidant Activity	17
Table 17. Zebra Chip evaluations	18
Table 18. Notes	19
Table 19. Summary	20
Status of Entries following the Southwestern Regional Trial- 2009 Worksheet	21
Description of Continuing/Proposed Clones for the 2010 Southwestern Regional Trial	22

Description of Clones - 2009 Southwestern Regional Trial

Entry #	Clone/Cultivar	Parents Female	Male	Flower Color	Vine Size	Maturity	Tuber Shape	Skin Type	Entered By	Use	Source	2009 Status
<b>Specialty Trial</b>												
1	Purple Majesty	All Blue	ND2008-2	Blue	Medium	Early	Oval	Purple	Check	Spec	CO	***
2	Sierra Gold	Krantz	Delta Gold	Lavender	Medium	Early	Oval	Russet	Check	Spec	Neb	***
3	Yukon Gold	Norgleam	W5279-4	Pink	Medium	Early	Oval	White	Check	Spec	CO	***
4	ATTX98493-1R/Y	P94A2-3Y	BO811-13RY	Lavender	Medium	Medium	Oblong	Red	TX	Spec	CO	1
5	ATTX98518-5PU/Y	Agria	A83350-9R	Lavender	Large	Late	Round	Purple	TX	Spec	CO	1
6	ATX9132-2Y	A8611-10	A86102-6	Purple	Large	Late	Round	Yellow	TX	Spec	CO	1
7	BTX2103-1R/Y	BO811-13	ARS-W82-21285-1		Medium	Late	Round	White	TX	Spec	CO	1
8	CO01399-10P/Y	VC1015-5P/Y	Colorado Rose	Purple	Large	Medium	Round	Purple	CO	Spec	CO	1
9	PORTX03PG25-2R/R	PA97B35-1	PA99P7-2		Medium	Late	Long	Red	TX	Spec	CO	1
10	Sierra Gold-2	Krantz	Delta	Lavender	Medium	Early	Oval	Russet	TX	Spec	Neb	1
11	Sierra Gold-3	Krantz	Delta	Lavender	Medium	Early	Oval	Russet	TX	Spec	Neb	1
12	TXYG055	Norgleam	W5279-4	Pink	Medium	Early	Oval	White	TX	Spec	CO	2
13	TXYG057	Norgleam	W5279-4	Pink	Medium	Early	Oval	White	TX	Spec	CO	2
14	TXYG079	Norgleam	W5279-4	Pink	Medium	Early	Oval	White	TX	Spec	CO	2
15	TXYG098	Norgleam	W5279-4	Pink	Medium	Early	Oval	White	TX	Spec	CO	2
16	TXYG105	Norgleam	W5279-4	Pink	Medium	Early	Oval	White	TX	Spec	CO	2
17	TXYG107	Norgleam	W5279-4	Pink	Medium	Early	Oval	White	TX	Spec	CO	2
<b>Russet Trial</b>												
18	Russet Norkotah	ND9687-5RU	ND9526-4RU	White	Small	Early	Long	Russet	Check	Fresh		***
19	AOTX95265-1RU	A89216-9	A86102-6	White	medium	Early	Oblong	Russet	TX	Fresh	CO	2
20	AOTX96265-2RU	A90621-4	A84180-8	White	Large	Late	Oblong	Russet	TX	Fresh	CO	3
21	ATX9332-12RU	A8850-1	A88288-1	White	Large	Late	Oblong	Russet	TX	Fresh	CO	1
22	ATX97232-1RU	A90609-6	COO83008-1	White	Large	Late	Oblong	Russet	TX	Fresh	CO	2
<b>Red Trial</b>												
23	Norland (Dark Red)	RedKote	ND626	Red-Purple	Small	Early	Oval	Red	Check	Fresh	CO	***
24	Red LaSoda	Triumph	Katahdin	Red-Purple	Medium	Medium	Oval	Red	Check	Fresh	CO	***
25	ATTX98453-11BR	A93490-1R	A91846-5R	Lavender	Small-Med	Early-Med	Oblong	Red	TX	Fresh	CO	1
26	ATTX01178-1R	ND5084-3R	Winema	Lavender	Medium	Medium	Round	Red	TX	Fresh	CO	1
27	COTX00104-7R	ND3574-5R	CO86218-2	Lavender	Medium	Medium	Oblong	Red	TX	Fresh	CO	3
28	NDTX5003-2R	ND3504-3R	ND2050-1R	Lavender	Small	V Early	Oblong	Red	TX	Fresh	CO	2

Table 1. Locations, Cooperators, and Cultural Information

Locations	Cooperators	Irrigation	Trial	Fertilization (lb/A)	Harvest method	Dates Plant	Vine Kill	Harvest	Days to Vine Kill
1. Kern Co. California (KRN)	J. Nunez	Sprinkler	Specialty		Machine/Hand	2/17/2009	5/2/2009	6/8/2009	74
	J. DuBose		Russet		Machine/Hand	2/17/2009	5/2/2009	6/8/2009	74
			Red		Machine/Hand	2/17/2009	5/2/2009	6/8/2009	74
2. Tulelake California (TUL)	D. Kirby	Solid-set sprinkler	Specialty	128-211-28-88	Machine	5/13/2009	9/14/2009	10/7/2009	124
	R. Wilson		Russet	165-211-28-88	Machine	5/13/2009	9/14/2009	10/5/2009	124
	B. Kliewer		Red	128-211-28-88	Machine	5/13/2009	9/14/2009	10/7/2009	124
3. San Luis Valley Colorado (SLV)	D. Holm	Pivot	Specialty	120-60-40-25-2.5 Zn	Machine	5/19/2009	9/9/2009	9/30/2009	113
	F. Goktepe		Russet	120-60-40-25-2.5 Zn	Machine	5/19/2009	9/9/2009	9/30/2009	113
			Red	120-60-40-25-2.5 Zn	Machine	5/19/2009	9/9/2009	9/30/2009	113
4. Springlake Texas (SPR )	C. Miller, J. Koym	Pivot	Specialty	117-33-33-24	Machine/Hand	4/8/2009	7/28/2009	8/3/2009	111
	D. Scheuring		Russet	201-33-33-24	Machine/Hand	4/8/2009	8/11/2009	8/17/2009	125
			Red	117-33-33-24	Machine/Hand	4/8/2009	7/28/2009	8/3/2009	111

Table 2. Plot Information, Soil Type, Fungicides, Insecticides, Herbicides, Vine Killing, and Environmental Factors.

Item	California		Colorado	Texas
	KRN	TUL	SLV	SPR
<b>Plot Information:</b>				
Row/plot	1	2	1	2
Length of plot (ft)	20'	*	25'	21'
Hill spacing (in)	9"	**	12"	9"
Row spacing (in)	32"	36"	34"	36"
Hills/plot	27	***	25	28
Number of reps	4	4	4	4
<b>Soil Type:</b>				
Fine sand				
Fine sandy loam				x
Loamy fine sand				
Sandy loam	x		x	
Silt loam				
Organic - 8%				
Mucky silty clay loam		x		
<b>Fungicides:</b>				
Bravo WS	x	x	x	x
Dithane F-45		x		x
Manzate		x		
Maxim		x		
Nu Cop				x
Quadris		x	x	x
<b>Insecticides:</b>				
Endigo ZC			x	
Fulfill			x	
Movento		x		x
Rimon				x
<b>Herbicides:</b>				
Dual Magnum			x	
Eptam	x			
Matrix		x		x
Roundup				x
Sencor DF		x		x
<b>Vine Killing:</b>				
Sulfuric Acid			x	
Mechanical	x			x
Reglone		x		
<b>Environmental Factors:</b>				
Cool/Wet Spring				
Cool and Dry Summer				
Severe Frost				
Favorable				
Hot Summer				
Above Av. Prec.				

\* Spec 18.75ft Russ 19.2ft Red 18.75ft Chip 18.75ft

\*\* Spec 9" Russ 10" Red 9" Chip 9"

\*\*\* Spec 48 Russ 44 Red 48 Chip 48

Table 3. Percent Stand and Stems/Hill for Clones in the Southwestern Regional Trial, 2009

Clone / Variety	Percent Stand			Stems per Hill			
	Colorado <sup>1</sup>	Texas <sup>2</sup>	Mean	Colorado	Texas	Mean	
	SLV	SPR		SLV	SPR		
<b>Specialty Trial</b>							
1	Purple Majesty	95	100	98	3.7	3.5	3.6
2	Sierra Gold		98	98		2.2	2.2
3	Yukon Gold	93	98	96	2.7	1.3	2.0
4	ATTX98493-1R/Y	91	98	95	4.9	2.2	3.5
5	ATTX98518-5PU/Y	94	95	94	3.3	2.0	2.7
6	ATX9132-2Y	100	100	100	8.1	5.6	6.8
7	BTX2103-1R/Y	94	97	96	5.0	3.5	4.3
8	CO01399-10P/Y	96	99	98	4.2	2.2	3.2
9	PORTX03PG25-2R/R	100	94	97	6.5	3.0	4.7
10	Sierra Gold-2		96	96		2.4	2.4
11	Sierra Gold-3		96	96		1.7	1.7
12	TXYG055	97	93	95	3.2	1.6	2.4
13	TXYG057	99	96	97	2.8	1.8	2.3
14	TXYG079	97	98	98	3.0	2.2	2.6
15	TXYG098	98	95	96	3.3	1.8	2.5
16	TXYG105	99	96	97	3.8	2.0	2.9
17	TXYG107	99	98	99	2.8	2.0	2.4
<b>Russet Trial</b>							
18	Russet Norkotah	97	98	98	5.7	2.4	4.0
19	AOTX95265-1RU	98	97	98	5.2	3.0	4.1
20	AOTX96265-2RU	99	96	98	3.6	2.4	3.0
21	ATX9332-12RU	100	97	99	3.9	2.5	3.2
22	ATX97232-1RU	100	98	99	5.1	3.3	4.2
<b>Red Trial</b>							
23	Norland (Dark Red)	98	100	99	4.0	2.6	3.3
24	Red LaSoda	98	100	99	2.9	2.2	2.5
25	ATTX98453-11BR	99	98	99	3.7	2.1	2.9
26	ATTX01178-1R	95	98	97	2.5	2.4	2.5
27	COTX00104-7R	98	99	99	3.0	2.2	2.6
28	NDTX5003-2R	93	96	94	3.2	2.2	2.7
Mean		97	97	97	4.0	2.4	3.1

<sup>1</sup>44 DAP

<sup>2</sup>60 DAP

Table 4. Vine Size and Maturity for Clones in the Southwestern Regional Trial, 2009

Clone / Variety	Vine Size (1-5=largest)			Vine Maturity (1-5=latest)			
	Colorado	Texas	Mean	Colorado	Texas	Mean	
	SLV	SPR		SLV	SPR		
<b>Specialty Trial</b>							
1	Purple Majesty	3.0	4.2	3.6	2.8	3.1	2.9
2	Sierra Gold		3.9	3.9		2.1	2.1
3	Yukon Gold	3.0	3.4	3.2	2.3	1.3	1.8
4	ATTX98493-1R/Y	2.8	3.7	3.2	2.8	3.4	3.1
5	ATTX98518-5PU/Y	3.0	3.6	3.3	2.3	2.7	2.5
6	ATX9132-2Y	4.0	3.9	4.0	3.0	2.9	3.0
7	BTX2103-1R/Y	3.0	4.4	3.7	3.0	4.1	3.5
8	CO01399-10P/Y	4.0	4.1	4.1	4.0	4.8	4.4
9	PORTX03PG25-2R/R	2.8	3.0	2.9	3.0	4.2	3.6
10	Sierra Gold-2		3.8	3.8		3.3	3.3
11	Sierra Gold-3		3.7	3.7		3.2	3.2
12	TXYG055	3.0	3.4	3.2	2.8	1.0	1.9
13	TXYG057	3.0	3.4	3.2	2.5	1.0	1.8
14	TXYG079	3.0	3.8	3.4	2.5	1.0	1.8
15	TXYG098	3.0	3.7	3.4	2.5	1.0	1.8
16	TXYG105	3.0	3.7	3.4	2.0	1.0	1.5
17	TXYG107	3.3	3.8	3.5	2.5	1.0	1.8
<b>Russet Trial</b>							
18	Russet Norkotah	3.0	3.6	3.3	2.8	1.8	2.3
19	AOTX95265-1RU	3.0	3.8	3.4	2.5	2.3	2.4
20	AOTX96265-2RU	3.5	3.8	3.7	3.0	3.7	3.4
21	ATX9332-12RU	4.0	3.9	4.0	3.0	3.7	3.3
22	ATX97232-1RU	2.8	3.9	3.3	2.3	2.8	2.5
<b>Red Trial</b>							
23	Norland (Dark Red)	2.3	3.8	3.0	1.3	1.3	1.3
24	Red LaSoda	3.8	3.7	3.7	2.8	1.8	2.3
25	ATTX98453-11BR	3.0	3.7	3.3	2.0	3.5	2.7
26	ATTX01178-1R	3.0	3.5	3.2	3.0	2.4	2.7
27	COTX00104-7R	3.3	3.5	3.4	2.8	2.9	2.8
28	NDTX5003-2R	3.0	3.7	3.4	2.0	2.6	2.3
Mean		3.1	3.7	3.5	2.6	2.5	2.6

Table 5. Total Yield, Yield Rank Within Type (Specialty, Russet, Red), and Merit Score<sup>1</sup> (MS), for Clones in the Southwestern Regional Trial, 2009

Clone / Variety	California				Colorado			Texas			Mean		
	KRN		TUL		SLV			SPR			Cwt/A	Rank	MS
	Cwt/A	Rank	Cwt/A	Rank	Cwt/A	Rank	MS	Cwt/A	Rank	MS			
<b>Specialty Trial</b>													
1 Purple Majesty	379	5	567	1	498	6	3.0	444	2	3.5	472	3	3.3
2 Sierra Gold	286	14	480	11				378	6	4.4	381	12	4.4
3 Yukon Gold	304	13	484	10	456	13	4.0	322	13	4.1	392	11	4.1
4 ATTX98493-1R/Y	373	6	417	15	493	7	2.0	395	4	3.7	420	8	2.9
5 ATTX98518-5PU/Y	210	16	506	6	458	12	3.0	348	8	3.5	381	13	3.2
6 ATX9132-2Y	109	17	348	17	460	11	2.0	60	17	1.0	244	17	1.5
7 BTX2103-1R/Y	431	3	503	7	539	2	4.0	443	3	3.9	479	2	4.0
8 CO01399-10P/Y	509	1	503	7	648	1	5.0	514	1	3.2	543	1	4.1
9 PORTX03PG25-2R/R	326	12	376	16	471	9	2.0	275	16	3.8	362	15	2.9
10 Sierra Gold-2	355	8	458	13				325	12	4.3	379	14	4.3
11 Sierra Gold-3	260	15	425	14				278	15	4.5	321	16	4.5
12 TXYG055	353	9	526	2	507	3	4.0	331	11	4.4	429	6	4.2
13 TXYG057	477	2	525	3	488	8	4.0	319	14	4.3	452	5	4.2
14 TXYG079	336	11	509	5	503	4	5.0	352	7	4.4	425	7	4.7
15 TXYG098	420	4	519	4	498	5	4.0	380	5	4.3	454	4	4.2
16 TXYG105	353	9	460	12	446	14	3.0	348	9	4.3	402	10	3.7
17 TXYG107	367	7	489	9	464	10	4.0	340	10	4.1	415	9	4.1
<b>Russet Trial</b>													
18 Russet Norkotah	340	4	415	3	505	4	2.0	447	1	3.8	427	2	3
19 AOTX95265-1RU	364	3	396	4	533	1	5.0	292	5	3.7	396	4	4
20 AOTX96265-2RU	323	5	448	2	508	3	2.0	307	4	3.7	396	3	3
21 ATX9332-12RU	398	1	476	1	521	2	3.0	387	2	3.0	445	1	3
22 ATX97232-1RU	370	2	343	5	463	5	1.0	323	3	2.7	375	5	2
<b>Red Trial</b>													
23 Norland (Dark Red)	358	4	601	1	472	4	4.0	439	2	3.0	467	3	3
24 Red LaSoda	571	1	552	3	528	2	1.0	440	1	3.1	523	1	2
25 ATTX98453-11BR	340	6	389	6	430	5	3.0	348	6	3.5	377	6	3
26 ATTX01178-1R	355	5	569	2	552	1	5.0	436	3	3.9	478	2	4
27 COTX00104-7R	471	2	515	4	490	3	1.0	390	4	3.6	467	4	2
28 NDTX5003-2R	390	3	489	5	375	6	1.0	362	5	3.7	404	5	2
Mean	362		475		492		3.1	358		3.7	418		3

<sup>1</sup> 1-5=excellent



Table 6. Yield and Percent of U.S. No. 1's (>4oz.) and Yield Rank Within Type (Specialty, Russet, Chipping) for Clones in the Southwestern Regional Trial, 2009

Clone / Variety	California						Colorado			Texas			Mean		
	KRN			TUL			SLV			SPR					
	Cwt/A	Rank	%	Cwt/A	Rank	%	Cwt/A	Rank	%	Cwt/A	Rank	%	Cwt/A	Rank	%
<b>Specialty Trial</b>															
1 Purple Majesty	379	5	100	320	12	56	306	12	61	223	16	50	307	14	65
2 Sierra Gold	285	13	100	395	5	82				336	2	89	339	8	89
3 Yukon Gold	283	14	93	347	10	72	417	9	91	271	8	84	330	10	84
4 ATTX98493-1R/Y	371	6	99	265	15	64	362	11	73	260	11	66	315	13	75
5 ATTX98518-5PU/Y	203	16	96	387	6	76	421	8	92	307	3	88	329	11	87
6 ATX9132-2Y	108	17	100	105	17	30	162	14	35	0	17	0	94	17	38
7 BTX2103-1R/Y	418	3	97	344	11	68	425	7	79	250	14	56	359	7	75
8 CO01399-10P/Y	507	1	100	315	14	63	511	1	79	412	1	80	436	1	80
9 PORTX03PG25-2R/R	326	12	100	139	16	37	239	13	51	270	9	98	244	16	67
10 Sierra Gold-2	354	8	100	352	9	77				254	12	78	320	12	84
11 Sierra Gold-3	260	15	100	320	12	75				240	15	86	273	15	85
12 TXYG055	352	9	100	409	2	78	464	3	91	283	7	86	377	5	88
13 TXYG057	476	2	100	399	4	76	433	5	89	253	13	79	390	2	86
14 TXYG079	332	11	99	414	1	81	471	2	93	305	4	87	380	4	89
15 TXYG098	418	4	100	403	3	78	447	4	90	288	5	76	389	3	86
16 TXYG105	342	10	97	356	8	77	377	10	85	265	10	76	335	9	83
17 TXYG107	361	7	98	370	7	76	427	6	92	288	6	85	362	6	87
<b>Russet Trial</b>															
18 Russet Norkotah	340	4	100	325	3	78	373	4	74	386	1	86	356	2	83
19 AOTX95265-1RU	359	3	99	306	4	77	453	2	85	231	4	79	337	4	85
20 AOTX96265-2RU	318	5	99	381	2	85	466	1	92	244	3	80	352	3	89
21 ATX9332-12RU	394	1	99	409	1	86	451	3	87	304	2	79	390	1	87
22 ATX97232-1RU	369	2	100	255	5	74	331	5	71	217	5	67	293	5	78
<b>Red Trial</b>															
23 Norland (Dark Red)	356	4	99	496	1	83	387	4	82	349	2	80	397	2	85
24 Red LaSoda	563	1	99	441	2	80	469	1	89	390	1	89	466	1	89
25 ATTX98453-11BR	327	6	96	239	6	61	315	5	73	288	4	83	292	6	78
26 ATTX01178-1R	351	5	99	378	3	66	457	2	83	267	5	61	363	4	76
27 COTX00104-7R	471	2	100	278	5	54	408	3	83	338	3	87	374	3	80
28 NDTX5003-2R	387	3	99	339	4	69	310	6	83	263	6	73	324	5	80
Mean	357		99	339		71	395		80	278		76	340		81

Table 7. Yield and Percent of U.S. No. 1's (>10oz.) for Clones in the Southwestern Regional Trial, 2009

Clone / Variety	California				Colorado		Texas <sup>2</sup>		Mean	
	KRN <sup>1</sup>		TUL <sup>1</sup>		SLV		SPR			
	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%
<b>Specialty Trial</b>										
1 Purple Majesty	3	1	14	2	42	9	25	6	21	4
2 Sierra Gold	58	20	94	20			69	18	74	19
3 Yukon Gold	69	23	95	20	182	40	52	16	100	25
4 ATTX98493-1R/Y	8	2	75	18	136	28	30	7	62	14
5 ATTX98518-5PU/Y	21	10	89	18	140	31	70	20	80	20
6 ATX9132-2Y	0	0	0	0	8	2	0	0	2	0
7 BTX2103-1R/Y	4	1	39	8	85	16	10	2	34	7
8 CO01399-10P/Y	30	6	91	18	117	18	27	5	66	12
9 PORTX03PG25-2R/R	0	0	1	0	10	2	70	26	20	7
10 Sierra Gold-2	45	13	73	16			48	15	55	14
11 Sierra Gold-3	38	15	77	18			55	20	56	17
12 TXYG055	75	21	93	18	186	37	69	21	106	24
13 TXYG057	89	19	91	17	214	44	71	22	116	25
14 TXYG079	68	20	100	20	209	42	56	16	108	24
15 TXYG098	79	19	77	15	211	42	67	18	109	23
16 TXYG105	50	14	46	10	99	22	45	13	60	15
17 TXYG107	90	24	95	19	203	44	65	19	113	27
<b>Russet Trial</b>										
18 Russet Norkotah	45	13	14	3	126	25	76	17	65	15
19 AOTX95265-1RU	83	23	24	6	229	43	56	19	98	23
20 AOTX96265-2RU	27	8	57	13	239	47	110	36	108	26
21 ATX9332-12RU	31	8	60	13	163	31	64	17	79	17
22 ATX97232-1RU	52	14	16	5	96	21	38	12	51	13
<b>Red Trial</b>										
23 Norland (Dark Red)	76	21	102	17	63	13	71	16	78	17
24 Red LaSoda	156	27	109	20	110	21	103	23	120	23
25 ATTX98453-11BR	4	1	35	9	19	4	82	24	35	10
26 ATTX01178-1R	24	7	118	21	222	40	0	0	91	17
27 COTX00104-7R	97	21	94	18	211	43	157	40	140	31
28 NDTX5003-2R	0	0	77	16	75	20	5	1	39	9
Mean	47	13	66	13	136	27	57	16	75	17

<sup>1</sup> 12-16 oz on Russets 10-14 oz on red/specialty

Table 8. Yield and Percent of U.S. No. 1's (6 - 10oz.) for Clones in the Southwestern Regional Trial, 2009

Clone / Variety	California				Colorado		Texas		Mean		
	KRN <sup>1</sup>		TUL <sup>2</sup>		SLV <sup>3</sup>		SPR				
	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	
<b>Specialty Trial</b>											
1	Purple Majesty	143	38	110	19	264	53	114	26	157	34
2	Sierra Gold	168	59	196	41			189	50	184	50
3	Yukon Gold	141	46	173	36	235	52	112	35	165	42
4	ATTX98493-1R/Y	179	48	128	31	226	46	98	25	158	37
5	ATTX98518-5PU/Y	89	42	195	39	281	61	123	35	172	44
6	ATX9132-2Y	0	0	25	7	155	34	0	0	45	10
7	BTX2103-1R/Y	174	40	167	33	340	63	51	12	183	37
8	CO01399-10P/Y	295	58	135	27	395	61	171	33	249	45
9	PORTX03PG25-2R/R	102	31	45	12	229	49	186	68	141	40
10	Sierra Gold-2	193	54	170	37			122	38	162	43
11	Sierra Gold-3	135	52	163	38			116	42	138	44
12	TXYG055	201	57	211	40	277	55	94	29	196	45
13	TXYG057	255	53	207	39	220	45	82	26	191	41
14	TXYG079	164	49	216	42	261	52	145	41	197	46
15	TXYG098	201	48	206	40	236	47	141	37	196	43
16	TXYG105	194	55	190	41	278	62	111	32	193	48
17	TXYG107	175	48	183	37	225	48	127	37	177	43
<b>Russet Trial</b>											
18	Russet Norkotah	223	65	80	19	247	49	134	30	171	41
19	AOTX95265-1RU	188	52	84	21	224	42	106	36	151	38
20	AOTX96265-2RU	196	61	140	31	227	45	91	30	164	42
21	ATX9332-12RU	239	60	168	35	289	55	114	29	202	45
22	ATX97232-1RU	218	59	78	23	235	51	75	23	152	39
<b>Red Trial</b>											
23	Norland (Dark Red)	196	55	288	48	323	69	210	48	254	55
24	Red LaSoda	274	48	249	45	359	68	210	48	273	52
25	ATTX98453-11BR	135	40	95	24	296	69	160	46	172	45
26	ATTX01178-1R	197	55	187	33	235	43	128	29	187	40
27	COTX00104-7R	233	49	136	26	198	40	151	39	179	39
28	NDTX5003-2R	162	42	170	35	234	63	143	40	177	45
Mean		181	49	157	32	260	53	125	34	178	42

<sup>1</sup> 7-12 oz on Russets<sup>2</sup> 8-12 oz on Russets<sup>3</sup> 4-10 oz

Table 9. Yield and Percent of U.S. No. 1's (4 - 6 oz.) for Clones in the Southwestern Regional Trial, 2009

Clone / Variety	California				Texas		Mean		
	KRN <sup>1</sup>		TUL <sup>2</sup>		SPR				
	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	
<b>Specialty Trial</b>									
1	Purple Majesty	130	34	196	35	84	19	137	29
2	Sierra Gold	47	16	105	22	80	21	77	20
3	Yukon Gold	53	18	79	16	107	33	80	22
4	ATTX98493-1R/Y	94	25	62	15	133	34	96	25
5	ATTX98518-5PU/Y	54	26	104	21	114	33	91	26
6	ATX9132-2Y	23	21	79	23	0	0	34	15
7	BTX2103-1R/Y	169	39	138	27	189	43	166	36
8	CO01399-10P/Y	130	26	89	18	214	42	144	28
9	PORTX03PG25-2R/R	68	21	94	25	14	5	59	17
10	Sierra Gold-2	84	24	110	24	85	26	93	25
11	Sierra Gold-3	62	24	80	19	70	25	70	23
12	TXYG055	63	18	105	20	119	36	96	25
13	TXYG057	102	21	101	19	105	33	102	24
14	TXYG079	73	22	98	19	104	29	92	24
15	TXYG098	103	25	120	23	98	26	107	24
16	TXYG105	69	20	120	26	109	31	99	26
17	TXYG107	73	20	91	19	98	29	87	22
<b>Russet Trial</b>									
18	Russet Norkotah	46	14	231	56	178	40	152	36
19	AOTX95265-1RU	57	16	198	50	71	24	108	30
20	AOTX96265-2RU	63	20	185	41	68	22	105	28
21	ATX9332-12RU	79	20	181	38	126	33	129	30
22	ATX97232-1RU	64	17	161	47	106	33	110	32
<b>Red Trial</b>									
23	Norland (Dark Red)	64	18	105	17	68	16	79	17
24	Red LaSoda	99	17	82	15	81	18	87	17
25	ATTX98453-11BR	118	35	109	28	46	13	91	25
26	ATTX01178-1R	102	29	74	13	139	32	105	24
27	COTX00104-7R	106	22	48	9	38	10	64	14
28	NDTX5003-2R	152	39	92	19	114	32	119	30
Mean		84	23	116	25	98	26	99	25

<sup>1</sup> 4-7 oz on Russets

<sup>2</sup> 4-8 oz on Russets

Table 10. Yield and Percent B (&lt;4 oz.) Tubers for Clones in the Southwestern Regional Trial, 2009

Clone / Variety	California				Colorado		Texas		Mean		
	KRN		TUL		SLV		SPR				
	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	
<b>Specialty Trial</b>											
1	Purple Majesty	104	27	232	41	191	38	221	50	187	39
2	Sierra Gold	12	4	60	13			40	11	37	9
3	Yukon Gold	20	6	54	11	39	9	51	16	41	10
4	ATTX98493-1R/Y	89	24	53	13	117	24	134	34	98	24
5	ATTX98518-5PU/Y	38	18	53	10	33	7	41	12	41	12
6	ATX9132-2Y	85	79	225	65	294	64	60	100	166	77
7	BTX2103-1R/Y	71	16	128	25	103	19	193	44	124	26
8	CO01399-10P/Y	51	10	82	16	125	19	101	20	90	16
9	PORTX03PG25-2R/R	156	48	213	57	231	49	4	2	151	39
10	Sierra Gold-2	32	9	83	18			71	22	62	16
11	Sierra Gold-3	25	10	50	12			38	14	38	12
12	TXYG055	13	4	72	14	36	7	48	14	42	10
13	TXYG057	31	6	69	13	33	7	61	19	48	11
14	TXYG079	27	8	58	11	28	6	47	13	40	10
15	TXYG098	34	8	85	16	45	9	74	19	59	13
16	TXYG105	30	8	89	19	64	14	83	24	67	17
17	TXYG107	23	6	54	11	29	6	50	15	39	10
<b>Russet Trial</b>											
18	Russet Norkotah	26	8	82	20	131	26	49	11	72	16
19	AOTX95265-1RU	31	9	87	22	62	12	58	20	60	16
20	AOTX96265-2RU	32	10	31	7	34	7	36	12	33	9
21	ATX9332-12RU	45	11	30	6	53	10	76	20	51	12
22	ATX97232-1RU	34	9	70	20	127	27	98	30	82	22
<b>Red Trial</b>											
23	Norland (Dark Red)	20	6	53	9	85	18	90	20	62	13
24	Red LaSoda	34	6	42	8	49	9	46	10	43	8
25	ATTX98453-11BR	70	21	123	32	113	26	60	17	91	24
26	ATTX01178-1R	28	8	47	8	47	9	168	39	73	16
27	COTX00104-7R	35	7	34	7	21	4	34	9	31	7
28	NDTX5003-2R	72	19	57	12	63	17	99	27	73	19
Mean		45	14	83	18	86	18	76	23	71	18

Table 11. Yield and Percent Culls/No. 2s for Clones in the Southwestern Regional Trial, 2009

Clone / Variety	California				Colorado		Texas		Mean		
	KRN		TUL <sup>1</sup>		SLV		SPR		Mean		
	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	
<b>Specialty Trial</b>											
1	Purple Majesty	0	0	15	3	1	0	0	0	4	1
2	Sierra Gold	1	0	25	5			0	0	9	2
3	Yukon Gold	21	7	83	17	0	0	0	0	26	6
4	ATTX98493-1R/Y	2	1	100	24	15	3	0	0	29	7
5	ATTX98518-5PU/Y	7	4	66	13	4	1	0	0	19	4
6	ATX9132-2Y	0	0	19	5	3	1	0	0	6	2
7	BTX2103-1R/Y	13	3	31	6	12	2	0	0	14	3
8	CO01399-10P/Y	2	0	106	21	11	2	0	0	30	6
9	PORTX03PG25-2R/R	0	0	24	6	1	0	0	0	6	2
10	Sierra Gold-2	1	0	23	5			0	0	8	2
11	Sierra Gold-3	1	0	55	13			0	0	19	4
12	TXYG055	0	0	45	9	8	2	0	0	13	3
13	TXYG057	2	0	57	11	22	4	0	0	20	4
14	TXYG079	4	1	37	7	5	1	0	0	12	2
15	TXYG098	2	0	31	6	6	1	0	0	10	2
16	TXYG105	11	3	15	3	4	1	0	0	7	2
17	TXYG107	6	2	64	13	7	2	0	0	19	4
<b>Russet Trial</b>											
18	Russet Norkotah	0	0	8	2	1	0	10	2	5	1
19	AOTX95265-1RU	5	1	3	1	18	3	1	0	7	1
20	AOTX96265-2RU	4	1	35	8	7	1	3	1	12	3
21	ATX9332-12RU	4	1	37	8	17	3	6	2	16	3
22	ATX97232-1RU	1	0	18	5	5	1	6	2	8	2
<b>Red Trial</b>											
23	Norland (Dark Red)	2	1	53	9	0	0	0	0	14	2
24	Red LaSoda	7	1	69	13	9	2	0	0	21	4
25	ATTX98453-11BR	13	4	26	7	2	1	0	0	10	3
26	ATTX01178-1R	4	1	143	25	47	9	0	0	49	9
27	COTX00104-7R	1	0	203	39	61	12	10	2	69	14
28	NDTX5003-2R	3	1	92	19	3	1	0	0	24	5
Mean		4	1	53	11	11	2	1	0	17	4

<sup>1</sup>includes over 16 oz tubers

Table 12. Specific Gravity for Clones in the Southwestern Regional Trial, 2009

Clone / Variety		California TUL	Colorado SLV	Texas SPR	Mean
<b>Specialty Trial</b>					
1	Purple Majesty	1.083	1.087	1.071	1.080
2	Sierra Gold	1.086		1.079	1.083
3	Yukon Gold	1.089	1.087	1.075	1.084
4	ATTX98493-1R/Y	1.075	1.071	1.067	1.071
5	ATTX98518-5PU/Y	1.075	1.075	1.064	1.071
6	ATX9132-2Y	1.094	1.087		1.090
7	BTX2103-1R/Y	1.086	1.084	1.069	1.080
8	CO01399-10P/Y	1.080	1.081	1.058	1.073
9	PORTX03PG25-2R/R	1.080	1.072	1.063	1.072
10	Sierra Gold-2	1.082		1.079	1.080
11	Sierra Gold-3	1.086		1.077	1.082
12	TXYG055	1.093	1.089	1.075	1.085
13	TXYG057	1.090	1.091	1.073	1.085
14	TXYG079	1.081	1.085	1.078	1.081
15	TXYG098	1.090	1.093	1.078	1.087
16	TXYG105	1.093	1.086	1.075	1.084
17	TXYG107	1.088	1.095	1.071	1.085
<b>Russet Trial</b>					
18	Russet Norkotah	1.088	1.088	1.065	1.080
19	AOTX95265-1RU	1.088	1.086	1.065	1.080
20	AOTX96265-2RU	1.100	1.091	1.073	1.088
21	ATX9332-12RU	1.107	1.101	1.080	1.096
22	ATX97232-1RU	1.096	1.091	1.071	1.086
<b>Red Trial</b>					
23	Norland (Dark Red)	1.075	1.076	1.056	1.069
24	Red LaSoda	1.086	1.087	1.062	1.078
25	ATTX98453-11BR	1.099	1.091	1.069	1.086
26	ATTX01178-1R	1.090	1.077	1.071	1.079
27	COTX00104-7R	1.077	1.072	1.057	1.069
28	NDTX5003-2R	1.090	1.088	1.071	1.083
Mean		1.087	1.085	1.070	1.081

Table 13. Average Tuber Weight (Size) and Shape for Clones in the Southwestern Regional Trial, 2009

Clone / Variety	Weight (oz.)			Shape <sup>1</sup>			Mean	
	California	Texas	Mean	California	Colorado	Texas		
	TUL	SPR		TUL	SLV	SPR		
<b>Specialty Trial</b>								
1	Purple Majesty	4.0	3.8	3.9	4.7	3.0	3.5	3.7
2	Sierra Gold	6.2	5.8	6.0	3.3		2.7	3.0
3	Yukon Gold	6.9	5.3	6.1	2.7	2.0	2.1	2.3
4	ATTX98493-1R/Y	6.3	4.2	5.2	3.5	2.0	3.3	2.9
5	ATTX98518-5PU/Y	6.6	6.0	6.3	3.9	4.0	3.8	3.9
6	ATX9132-2Y	3.0	0.9	2.0	1.3	1.0	1.0	1.1
7	BTX2103-1R/Y	4.8	3.3	4.1	2.6	2.0	2.4	2.3
8	CO01399-10P/Y	6.1	4.3	5.2	2.6	2.0	1.5	2.0
9	PORTX03PG25-2R/R	3.1	2.5	2.8	5.0	4.0	5.0	4.7
10	Sierra Gold-2	5.6	5.1	5.4	3.1		3.3	3.2
11	Sierra Gold-3	6.5	5.2	5.8	3.0		2.6	2.8
12	TXYG055	6.2	5.5	5.9	2.8	3.0	1.5	2.4
13	TXYG057	6.2	5.1	5.6	2.8	3.0	1.5	2.4
14	TXYG079	6.3	5.3	5.8	3.1	3.0	1.5	2.5
15	TXYG098	5.7	5.3	5.5	2.8	3.0	1.5	2.4
16	TXYG105	5.4	4.9	5.2	3.2	3.0	1.5	2.6
17	TXYG107	6.6	5.4	6.0	2.6	3.0	2.7	2.8
<b>Russet Trial</b>								
18	Russet Norkotah	5.1	5.7	5.4	4.3	5.0	4.0	4.4
19	AOTX95265-1RU	5.1	5.9	5.5	4.9	4.0	4.2	4.4
20	AOTX96265-2RU	7.0	8.0	7.5	3.7	4.0	3.8	3.8
21	ATX9332-12RU	7.1	5.8	6.4	4.2	4.0	4.0	4.1
22	ATX97232-1RU	5.2	5.1	5.2	4.2	4.0	3.6	3.9
<b>Red Trial</b>								
23	Norland (Dark Red)	6.7	5.3	6.0	2.5	2.0	3.0	2.5
24	Red LaSoda	7.1	6.0	6.6	2.2	2.0	3.0	2.4
25	ATTX98453-11BR	4.4	5.7	5.1	2.3	1.0	2.1	1.8
26	ATTX01178-1R	7.7	3.7	5.7	1.8	2.0	1.5	1.8
27	COTX00104-7R	8.4	7.0	7.7	3.1	2.0	2.5	2.5
28	NDTX5003-2R	6.2	4.1	5.1	1.8	1.0	1.0	1.3
Mean		5.9	5.0	5.5	3.1	2.8	2.6	2.9

<sup>1</sup> 1= round, 5=long



Table 14 Eye Depth and Growth Cracks for Clones in the Southwestern Regional Trial, 2009

Clone / Variety	Eye Depth <sup>1</sup>			Growth Cracks <sup>2</sup>			
	California	Texas	Mean	Colorado	Texas	Mean	
	TUL	SPR		SLV	SPR		
<b>Specialty Trial</b>							
1	Purple Majesty	3.2	4.0	3.6	5.0	5.0	5.0
2	Sierra Gold	3.7	4.0	3.9		5.0	5.0
3	Yukon Gold	3.8	4.0	3.9	5.0	5.0	5.0
4	ATTX98493-1R/Y	3.8	3.8	3.8	4.0	5.0	4.5
5	ATTX98518-5PU/Y	3.9	4.0	3.9	4.0	5.0	4.5
6	ATX9132-2Y	1.5	2.1	1.8	5.0	5.0	5.0
7	BTX2103-1R/Y	2.9	4.0	3.4	3.0	5.0	4.0
8	CO01399-10P/Y	3.3	4.0	3.6	4.0	5.0	4.5
9	PORTX03PG25-2R/R	3.2	4.0	3.6	5.0	5.0	5.0
10	Sierra Gold-2	3.9	4.0	4.0		4.5	4.5
11	Sierra Gold-3	3.8	4.0	3.9		5.0	5.0
12	TXYG055	4.0	4.0	4.0	5.0	5.0	5.0
13	TXYG057	3.9	4.0	4.0	3.0	5.0	4.0
14	TXYG079	4.0	4.0	4.0	5.0	5.0	5.0
15	TXYG098	3.8	4.0	3.9	4.0	5.0	4.5
16	TXYG105	4.0	4.0	4.0	5.0	5.0	5.0
17	TXYG107	3.7	3.9	3.8	4.0	5.0	4.5
<b>Russet Trial</b>							
18	Russet Norkotah	3.4	3.6	3.5	5.0	5.0	5.0
19	AOTX95265-1RU	3.2	3.9	3.5	4.0	5.0	4.5
20	AOTX96265-2RU	3.3	4.0	3.6	5.0	5.0	5.0
21	ATX9332-12RU	3.4	4.0	3.7	4.0	5.0	4.5
22	ATX97232-1RU	3.7	4.3	4.0	5.0	5.0	5.0
<b>Red Trial</b>							
23	Norland (Dark Red)	2.9	2.8	2.8	5.0	5.0	5.0
24	Red LaSoda	1.0	1.5	1.3	3.0	5.0	4.0
25	ATTX98453-11BR	2.3	3.0	2.7	4.0	5.0	4.5
26	ATTX01178-1R	2.3	4.6	3.4	2.0	5.0	3.5
27	COTX00104-7R	3.7	4.0	3.9	1.0	5.0	3.0
28	NDTX5003-2R	2.9	4.0	3.4	5.0	5.0	5.0
Mean		3.3	3.8	3.5	4.2	5.0	4.6

<sup>1</sup>1 = deep, 5 = shallow<sup>2</sup>1 = many, 5 = none

Table 15. Percent Hollow Heart/Brown Center, Blackspot Bruising, and Fry Results for Clones in the Southwestern Regional Trial, 2009

Clone / Variety	Hollow Heart/Brown Center (%)				Blackspot	Fry Data <sup>2</sup>		
	California	Colorado	Texas	Mean	Bruising <sup>1</sup>	Colorado		
	TUL	SLV	SPR		Colorado	SLV <sup>3</sup>	SLV <sup>4</sup>	MS <sup>5</sup>
<b>Specialty Trial</b>								
1	Purple Majesty	6	0	0	2			3.0
2	Sierra Gold	0		0	0			
3	Yukon Gold	0	0	0	0	4.2	2.0	3.0 2.0
4	ATTX98493-1R/Y	0	0	0	0	4.4	4.0	4.0 1.0
5	ATTX98518-5PU/Y	0	0	0	0	5.0	2.0	3.0 1.0
6	ATX9132-2Y	0	0	0	0	4.1	3.0	3.0 1.0
7	BTX2103-1R/Y	0	1	0	0	3.0	3.0	4.0 1.0
8	CO01399-10P/Y	10	0	0	3	4.1	2.0	2.0 5.0
9	PORTX03PG25-2R/R	0	0	0	0			
10	Sierra Gold-2	0		0	0			
11	Sierra Gold-3	0		0	0			
12	TXYG055	0	0	5	2	3.7	2.0	3.0 2.0
13	TXYG057	3	2	8	4	4.1	2.0	2.0 4.0
14	TXYG079	0	0	3	1	4.3	2.0	3.0 2.0
15	TXYG098	0	0	15	5	4.4	2.0	3.0 2.0
16	TXYG105	0	0	3	1	3.7	3.0	3.0 1.0
17	TXYG107	0	1	10	4	4.2	2.0	3.0 2.0
<b>Russet Trial</b>								
18	Russet Norkotah	0	0	0	0	4.3	2.0	3.0 2.0
19	AOTX95265-1RU	3	0	0	1	4.6	3.0	4.0 1.0
20	AOTX96265-2RU	5	6	0	4	3.5	1.0	2.0 4.0
21	ATX9332-12RU	0	0	0	0	2.3	3.0	3.0 1.0
22	ATX97232-1RU	5	1	18	8	4.1	1.0	2.0 3.0
<b>Red Trial</b>								
23	Norland (Dark Red)	0	0	0	0	4.2	1.0	3.0 2.0
24	Red LaSoda	6	11	5	7	3.9	2.0	3.0 1.0
25	ATTX98453-11BR	0	0	0	0	3.9	2.0	4.0 2.0
26	ATTX01178-1R	3	1	0	1	3.5	4.0	4.0 1.0
27	COTX00104-7R	0	0	3	1	4.1	4.0	4.0 1.0
28	NDTX5003-2R	0	0	0	0	4.1	2.0	3.0 2.0
Mean		1	1	2	2	4.0	2.3	3.1 2.0

<sup>1</sup> 1=severe, 5= none

<sup>2</sup> 0=light, 5= dark

<sup>3</sup> at harvest

<sup>4</sup> after 8 weeks at 45° F

<sup>5</sup> 1-5=excellent

Table 16. Antioxidant Activity as Determined by the DPPH and ABTS Assays, Total Phenolic content determined by the Folin–Ciocalteu method, and specific gravity for Clones in the Southwestern Regional Trial, 2009.

Clone / Variety	DPPH ( $\mu\text{gTE/gfw}$ )	ABTS ( $\mu\text{gTE/gfw}$ )	TP (mgCGA Eq /100gfw)	Specific Gravity
<b>Specialty Trial</b>				
1 Purple Majesty	423	775	100	1.071
2 Sierra Gold	198	607	74	1.081
3 Yukon Gold	296	702	96	1.075
4 ATTX98493-1R/Y	229	667	76	1.068
5 ATTX98518-5PU/Y	254	606	85	1.064
6 ATX9132-2Y	no data	no data	no data	no data
7 BTX2103-1R/Y	321	742	90	1.068
8 CO01399-10P/Y	229	636	76	1.058
9 PORTX03PG25-2R/R	753	778	127	1.063
10 Sierra Gold-2	209	645	82	1.079
11 Sierra Gold-3	223	626	78	1.077
12 TXYG055	238	667	81	1.074
13 TXYG057	243	729	101	1.076
14 TXYG079	273	637	87	1.078
15 TXYG098	326	723	92	1.079
16 TXYG105	243	619	81	1.075
17 TXYG107	218	610	82	1.072
<b>Russet Trial</b>				
18 Russet Norkotah	291	552	106	1.067
19 AOTX95265-1RU	235	718	94	1.067
20 AOTX96265-2RU	316	498	87	1.072
21 ATX9332-12RU	230	516	86	1.079
22 ATX97232-1RU	186	349	48	1.071
<b>Red Trial</b>				
23 Norland (Dark Red)	255	746	88	1.056
24 Red LaSoda	349	748	106	1.062
25 ATTX98453-11BR	256	446	60	1.071
26 ATTX01178-1R				
27 COTX00104-7R	193	669	67	1.056
28 NDTX5003-2R	255	771	93	1.072
Mean	278	645	86	1.070

<sup>1</sup> The assay used at Texas A&M University was based on use of two types of free radicals [DPPH assay (Brand-Williams, et al. 1995, *Levensm. Wiss. Technol.* 28:25-30) and ABTS assay (Awika et al., 2003, *J. Agric. Food Chem.* 51: 6657-6662) to evaluate antioxidant activity, and the Folin–Ciocalteu method (Singleton et. al, *Methods Enzymol.* 1999, 299, 152–178) to determine total phenolic content. Antioxidants soluble in methonal were extracted and allowed to react with the stable radicals, 2,2,-Diphenyl-1-picrylhydrazyl (DPPH)and 2,2'-azinobis(3-ethylbenzothiazoline-6-sulfonic acid) diammonium salt (ABTS). This provided a rapid evaluation of the antioxidant properties of the potato extracts based on absorbance.

Table 17. Chip color rating, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 28 entries in the Southwest Regional Chip Trial grown near Springlake and Dalhart, Texas-2009.

Variety or Selection	Chip Color <sup>1</sup> SPR	Chip Defects and Notes <sup>2</sup> SPR	Percent Zebra Defect after Chipping SPR	Percent Zebra Defect at Grading SPR
<b>Specialty Trial</b>				
1	Purple Majesty	3+	5	0
2	Sierra Gold	3	10	0
3	Yukon Gold	2	18	20
4	ATTX98493-1R/Y	2+	16 BC/Vas	6
5	ATTX98518-5PU/Y	3	1 BC	0
6	ATX9132-2Y		0	0
7	BTX2103-1R/Y	3	5	0
8	CO01399-10P/Y	2	14	3
9	PORTX03PG25-2R/R	3	keep	8
10	Sierra Gold-2	2	9	5
11	Sierra Gold-3	1+	Nice	11
12	TXYG055	2	7	30
13	TXYG057	3	28	30
14	TXYG079	3	15	13
15	TXYG098	3	0	38
16	TXYG105	3	13	28
17	TXYG107	3	6	25
<b>Russet Trial</b>				
18	Russet Norkotah	3	8	10
19	AOTX95265-1RU	2	8	18
20	AOTX96265-2RU	1+	10	20
21	ATX9332-12RU	3	1 DK	0
22	ATX97232-1RU	1+	15	0
<b>Red Trial</b>				
23	Norland (Dark Red)	2+	0	0
24	Red LaSoda	2+	20	8
25	ATTX98453-11BR	2	2 BC/Vas	10
26	ATTX01178-1R	2	13	8
27	COTX00104-7R	2	13	0
28	NDTX5003-2R	1	Keep	17

One .05" slice per tuber, at least 10 tubers per rep, three reps, 1 min 25 sec, 365oF corn oil.

<sup>1</sup>1=light, 3+=very dark

<sup>2</sup>Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

Table 18. Notes for Clones in the Southwestern Regional Trial, 2009

Clone / Variety	California	Texas
	TUL	SPR
<b>Specialty Trial</b>		
1 Purple Majesty	Uniform in shape, but has an ugly appearance	road map-alligator skin, silver scurf, yield+, small, smooth
2 Sierra Gold	Good appearance	small, very nice, BOT
3 Yukon Gold	No notes	small, rough, bad rep, BOT
4 ATTX98493-1R/Y	Pear shaped	light skin++, nice, nice shape, some pointed
5 ATTX98518-5PU/Y	No notes	large tubers, oblong, pointed, roadmap, nice shape, smooth, BOT
6 ATX9132-2Y	Very ugly, deep eyes made tuber look lumpy	drop++, deep eyes
7 BTX2103-1R/Y	Tuber flattened in shape	nice yield, uniformvery heavy set, B's, BOT
8 CO01399-10P/Y	Tuber flattened in shape	late++, poor internals, poor skin finish, drop
9 PORTX03PG25-2R/R	High number of mis-shaped tubers	pointed
10 Sierra Gold-2	No notes	Rhizoctonia, growth cracks
11 Sierra Gold-3	Good appearance	very nice
12 TXYG055	Good appearance	Rhizoctonia, small
13 TXYG057	Good appearance	large tubers
14 TXYG079	No notes	high yield, smooth, rot
15 TXYG098	Good appearance	very nice, large tubers
16 TXYG105	Good appearance	
17 TXYG107	Good appearance	Rhizoctonia, , nice+
<b>Russet Trial</b>		
18 Russet Norkotah	No notes	bad rep+, Rhizoctonia, low yield
19 AOTX95265-1RU	No notes	advance to WR, nice shape, rot, bad rep
20 AOTX96265-2RU	Uniform in shape, high number of stem end necrosis	advance to WR, large tubers, BOT-, Rhizoctonia
21 ATX9332-12RU	No notes	stem end darkening, poor skin finish, , drop+
22 ATX97232-1RU	No notes	Rhizoctonia, blocky, nice flesh, high yield, smooth, bad rep, keep
<b>Red Trial</b>		
23 Norland (Dark Red)	No notes	light skinned, sliver scurf, Rhizoctonia, drop
24 Red LaSoda	No notes	deep eyes, poor internals, nice white flesh
25 ATTX98453-11BR	Ugly, lumpy	nice shape, Red LaSoda like, deep eyes, drop
26 ATTX01178-1R	Uniform shape, skinned easily	Nice shape & color,nice internals, nice skin finish, BOT+
27 COTX00104-7R	Several oversized tubers, high number of growth cracks	large tubers, growth cracks, lenticels
28 NDTX5003-2R	High number of mis-shaped tubers, skinned easily	nice, Rhizoctonia+, nice flesh, BOT

Table 19. Summary for Clones in the Southwestern Regional Trial, 2009

Clone / Variety	Field Data				Yield Qualities					Tuber Description					
	% Stand	Stems/hill	Vine Size	Vine Mat.	Total Yield	% #1s	% >10 <sup>1</sup>	% <4	% Culls	Merit Score	Specific Gravity	Tuber Shape	Tuber Weight	Skin Color	
<b>Specialty Trial</b>															
1	Purple Majesty	98	4	4	3	472	65	4	39	1	3.3	1.083	Oval	3.9	Purple
2	Sierra Gold	98	2	4	2	381	89	19	9	2	4.4	1.084	Oval	6.0	Russet
3	Yukon Gold	96	2	3	2	392	84	25	10	6	4.1	1.071	Oval	6.1	White
4	ATTX98493-1R/Y	95	4	3	3	420	75	14	24	7	2.9	1.071	Oblong	5.2	Red
5	ATTX98518-5PU/Y	94	3	3	2	381	87	20	12	4	3.2	1.090	Round	6.3	Purple
6	ATX9132-2Y	100	7	4	3	244	38	0	77	2	1.5	1.080	Round	2.0	Yellow
7	BTX2103-1R/Y	96	4	4	4	479	75	7	26	3	4.0	1.073	Round	4.1	White
8	CO01399-10P/Y	98	3	4	4	543	80	12	16	6	4.1	1.072	Round	5.2	Purple
9	PORTX03PG25-2R/R	97	5	3	4	362	67	7	39	2	2.9	1.080	Long	2.8	Red
10	Sierra Gold-2	96	2	4	3	379	84	14	16	2	4.3	1.082	Oval	5.4	Russet
11	Sierra Gold-3	96	2	4	3	321	85	17	12	4	4.5	1.085	Oval	5.8	Russet
12	TXYG055	95	2	3	2	429	88	24	10	3	4.2	1.085	Oval	5.9	White
13	TXYG057	97	2	3	2	452	86	25	11	4	4.2	1.081	Oval	5.6	White
14	TXYG079	98	3	3	2	425	89	24	10	2	4.7	1.087	Oval	5.8	White
15	TXYG098	96	3	3	2	454	86	23	13	2	4.2	1.084	Oval	5.5	White
16	TXYG105	97	3	3	2	402	83	15	17	2	3.7	1.085	Oval	5.2	White
17	TXYG107	99	2	4	2	415	87	27	10	4	4.1	0.000	Oval	6.0	White
<b>Russet Trial</b>															
18	Russet Norkotah	98	4	3	2	427	83	15	16	1	2.9	1.080	Long	5.4	Russet
19	AOTX95265-1RU	98	4	3	2	396	85	23	16	1	4.4	1.088	Oblong	5.5	Russet
20	AOTX96265-2RU	98	3	4	3	396	89	26	9	3	2.9	1.096	Oblong	7.5	Russet
21	ATX9332-12RU	99	3	4	3	445	87	17	12	3	3.0	1.086	Oblong	6.4	Russet
22	ATX97232-1RU	99	4	3	3	375	78	13	22	2	1.9	0.000	Oblong	5.2	Russet
<b>Red Trial</b>															
23	Norland (Dark Red)	99	3	3	1	467	85	17	13	2	3.5	1.078	Oval	6.0	Red
24	Red LaSoda	99	3	4	2	523	89	23	8	4	2.0	1.086	Oval	6.6	Red
25	ATTX98453-11BR	99	3	3	3	377	78	10	24	3	3.2	1.079	Oblong	5.1	Red
26	ATTX01178-1R	97	2	3	3	478	76	17	16	9	4.4	1.069	Round	5.7	Red
27	COTX00104-7R	99	3	3	3	467	80	31	7	14	2.3	1.083	Oblong	7.7	Red
28	NDTX5003-2R	94	3	3	2	404	80	9	19	5	2.3	0.000	Oblong	5.1	Red

<sup>1</sup> KRN > 12 oz on Russets

Status of Entries following the Southwestern Regional Trial- 2009 Worksheet

Clone / Variety	Entered by	Status	Years in Trial	Average Total Yield				% of check
				2007	2008	2009	Mean	
<b>Specialty Trial</b>								
1	Purple Majesty					472	472	
2	Sierra Gold					381	381	
3	Yukon Gold			372	453	392	406	
4	ATTX98493-1R/Y					420	420	85 % of DRN&RLS
5	ATTX98518-5PU/Y					381	381	77 % of DRN&RLS
6	ATX9132-2Y					244	244	62 % of SG & YG
7	BTX2103-1R/Y					479	479	97 % of DRN&RLS
8	CO01399-10P/Y					543	543	110 % of DRN&RLS
9	PORTX03PG25-2R/R					362	362	77
10	Sierra Gold-2					379	379	99
11	Sierra Gold-3					321	321	84
12	TXYG055				408	429	419	103
13	TXYG057				412	452	432	107
14	TXYG079				432	425	429	106
15	TXYG098				388	454	421	104
16	TXYG105				390	402	396	98
17	TXYG107				422	415	419	103
<b>Russet Trial</b>								
18	Russet Norkotah			357		427	392	
19	AOTX95265-1RU					396	396	101
20	AOTX96265-2RU			401	474	396	424	108
21	ATX9332-12RU					445	445	114
22	ATX97232-1RU			383		375	379	97
<b>Red Trial</b>								
23	Norland (Dark Red)			394	473	467	445	
24	Red LaSoda			457	649	523	543	
25	ATTX98453-11BR					377	377	76
26	ATTX01178-1R					478	478	97
27	COTX00104-7R			376		467	421	85
28	NDTX5003-2R				454	404	429	87





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