

2010 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. Colorado and Texas Chipping Results	17
Table 17. Zebra Chip Evaluations	18
Table 18. Notes	19
Table 19. Summary	20
Status of Entries following the Southwestern Regional Trial- 2011 Worksheet	21
Description of Continuing/Proposed Clones for the 2011 Southwestern Regional Trial	22

Description of Clones - 2010 Southwestern Regional Trial

Entry #	Clone/Cultivar	Parents Female	Male	Flower Color	Vine Size	Maturity	Tuber Shape	Skin Type	Entered By	Use	Source	2010 Status
Specialty Trial												
1	Purple Majesty	All Blue	ND2008-2	Blue	Medium	Early	Oval	Purple	Check	Spec	CO	***
2	Yukon Gold	Norgleam	W5279-4	Pink	Medium	Early	Oval	White	Check	Spec	CO	***
3	ATTX88654-2P/Y	PI34320	Gurney's Purple		Small	Early	Oblong	Purple	TX	Spec	CO	1
4	ATTX98510-1R/Y	T48YF	A93456-6R		Large	Late	Oblong	Red	TX	Spec	CO	1
5	ATTX01180-1R/Y	ND5084-3R	A92657-1R	Lavender	Small	Medium	Oblong	Red	TX	Spec	CO	1
6	BTX2103-1R/Y	BO811-13	ARS-W82-21285-1	Red-Purple	Medium	Late	Round	White	TX	Spec	CO	2
7	CO01399-10P/Y	VC1015-5P/Y	Colorado Rose	Purple	Large	Medium	Round	Purple	CO	Spec	CO	2
8	COTX01403-4R/Y	VC1015-7R/Y	Winema		Small	Early	Oblong	Red	TX	Spec	CO	1
9	TC02072-3P/P	All Blue	NDC4069-1R/R	Blue-Purple	Medium	V Early-Early	Long	Purple	CO	Spec	CO	1
10	TX1674-1W/Y	Russet Nugget	Delta Golg	Lavender	Medium	Medium	Oblong	White	TX	Spec	CO	1
Russet Trial												
11	Russet Norkotah	ND9687-5RU	ND9526-4RU	White	Small	Early	Long	Russet	Check	Fresh	CO	***
12	AOTX96084-1RU	A8792-1	A86102-6	White	Large	Medium	Long	Russet	TX	Fresh	CO	1
13	AOTX98152-3RU	A88338-1	A9201-6	Lavender	Large	Early	Oblong	Russet	TX	Fresh	CO	1
14	ATX9332-12RU	A8850-1	A88288-1	White	Large	Late	Oblong	Russet	TX	Fresh	CO	2
Red Trial												
15	Norland (Dark Red)	RedKote	ND626	Red-Purple	Small	Early	Oval	Red	Check	Fresh	CO	***
16	Red LaSoda	Triumph	Katahdin	Red-Purple	Medium	Medium	Oval	Red	Check	Fresh	CO	***
17	AOTX91861-4R	Red LaSoda	ND2224-5R	Red-Purple	Medium	Medium-Late	Oblong	Red	TX	Fresh	CO	2
18	ATTX98453-11BR	A93490-1R	A91846-5R	Lavender	Small-Med	Early-Med	Oblong	Red	TX	Fresh	CO	2
19	NDTX5003-2R	ND3504-3R	ND2050-1R	Lavender	Small	V Early	Oblong	Red	TX	Fresh	CO	3
20	NDTX5438-11R	ND4339-10R	ND4269-9R	Lavender	Medium	Late	Round	Red	TX	Fresh	CO	1
Chip Trial												
21	Atlantic	Wauseon	B5141-6	Red-Purple	Medium	Medium	Round	Buff	Check	Chip	CO	***
22	Chipeta	WNC612-13	Wischip	Purple	Large	Med-Late	Oval	White	Check	Chip	CO	***
23	AC01151-5W	COA96142-7	NDA2031-2	Purple	Medium	Medium	Round	White	CO	Chip	CO	1
24	CO02024-9W	A91790-13W	CO95051-7W	White	Medium	Medium	Round	White	CO	Chip	CO	1
25	CO02033-1W	A91790-13W	S440	White	Medium	Medium	Round	White	CO	Chip	CO	1
26	CO02321-4W	NY115W	BC0894-2W	Purple	Med-Large	Medium	Round	White	CO	Chip	CO	1

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 or Harvest
1. Kern Co. California (KRN)	J. Nunez J. DuBose	Sprinkler	All Trials		Machine/Hand	17-Feb-10		7-Jun-10	110
2. Tulelake California (TUL)	D. Kirby R. Wilson B. Kliewer	Solid-set sprinkler	Specialty (Reds)	195.05	Machine	13-May-10	16-Sep-10	7-Oct-10	126
			Russet	195.05	Machine	13-May-10	16-Sep-10	7-Oct-10	126
			Chip	210	Machine	19-May-10	28-Sep-10	13-Oct-10	132
3. San Luis Valley Colorado (SLV)	D. Holm	Pivot	Specialty	120- 60-40- 2.5Zn	Machine	14-May-10	1-Sep-10	27-Sep-10	110
			Russet	120- 60-40- 2.5Zn	Machine	14-May-10	1-Sep-10	27-Sep-10	110
			Red	120- 60-40- 2.5Zn	Machine	14-May-10	1-Sep-10	27-Sep-10	110
4. Springlake Texas (SPR)	C. Miller, J. Koym D. Scheuring	Pivot	Specialty	201-33-33-24	Machine/Hand	31-Mar-10	3-Aug-10	2-Aug-10	125
			Russet	201-33-33-24	Machine/Hand	31-Mar-10	16-Aug-10	26-Aug-10	138
			Red	117-33-33-24	Machine/Hand	31-Mar-10	23-Jul-10	2-Aug-10	114
			Chip	201-33-33-24	Machine/Hand	31-Mar-10	28-Jul-10	24-Aug-10	119
4. Dalhart Texas (Dal)	C. Miller, J. Koym D. Scheuring	Pivot	Chip	189-57-0	Machine/Hand	6-May-10	20-Aug-10	4-Oct-10	106

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

Item	California		Colorado	Texas	
	KRN	TUL	SLV	SPR	Dal
Plot Information:					
Row/plot	1	2	1	2	2
Length of plot (ft)	20'	*	25'	21'	15'
Hill spacing (in)	9"	**	12"	9"	9"
Row spacing (in)	32"	36"	34"	36"	28"
Hills/plot	27	***	25	28	20
Number of reps	4	4	4	4	4
Soil Type:					
Fine sand				x	
Fine sandy loam					x
Loamy fine sand					
Sandy loam	x		x		
Silt loam					
Organic - 8%					
Mucky silty clay loam		x			
Fungicides:					
Headline					x
Echo 720 Ag					x
Revus Top					x
Scala SC					x
Super Tin				x	
Endura		x			x
Bravo WS		x	x	x	
Dithane F-45				x	
Manzate		x			
Quadris		x	x	x	
Blocker		x			
Insecticides:					
Beleaf 50 Sg					x
EPI-MEK 0.15 EC					x
Admire Pro				x	
Agrimek				x	
Tracer				x	
Venom				x	
Abacus				x	
Leverage		x			
Endigo ZC			x		
Fulfill			x	x	x
Movento		x		x	x
Rimon				x	
Coragen		x			
Herbicides:					
Charger					x
Framework					x
Chateau					x
Select Max					x
Treflan				x	
Metribuzin		x			
Prowl		x			
Outlook		x			
Dual Magnum			x		x
Matrix		x			
Roundup				x	
Sencor DF		x		x	x
Vine Killing:					
Sulfuric Acid			x		
Mechanical				x	x
Reglone		x			
Environmental Factors:					
Cool/Wet Spring		x			
Cool and Dry Summer					
Severe Frost		x			
Favorable					
Hot Summer					
Above Av. Prec.				x	x

* 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, 2010

Clone / Variety	Percent Stand				Stems per Hill		
	Colorado ¹	Texas ²		Mean	Colorado	Texas	Mean
	SLV	SPR	Dal		SLV	SPR	
Specialty Trial							
1 Purple Majesty	99	99		99	4.1	3.4	3.8
2 Yukon Gold	97	79		88	1.8	1.6	1.7
3 ATTX88654-2P/Y	96	98		97	2.7	2.2	2.5
4 ATTX98510-1R/Y	96	100		98	3.6	3.1	3.4
5 ATTX01180-1R/Y	96	98		97	3.4	2.9	3.2
6 BTX2103-1R/Y	95	100		98	2.8	2.6	2.7
7 CO01399-10P/Y	100	88		94	2.4	2.0	2.2
8 COTX01403-4R/Y	96	89		93	2.9	2.5	2.7
9 TC02072-3P/P	100	86		93	4.0	4.0	4.0
10 TX1674-1W/Y	98	100		99	2.4	2.9	2.7
Russet Trial							
11 Russet Norkotah	100	96		98	2.5	1.9	2.2
12 AOTX96084-1RU	100	94		97	2.8	3.1	3.0
13 AOTX98152-3RU	100	93		97	3.4	2.7	3.1
14 ATX9332-12RU	99	98		99	2.9	1.7	2.3
Red Trial							
15 Norland (Dark Red)	95	89		92	2.8	3.1	3.0
16 Red LaSoda	97	82		90	2.6	2.3	2.5
17 AOTX91861-4R	100	100		100	2.2	2.2	2.2
18 ATTX98453-11BR	99	60		80	3.5	2.4	3.0
19 NDTX5003-2R	98	94		96	2.5	2.5	2.5
20 NDTX5438-11R	99	97		98	2.5	3.6	3.1
Chip Trial							
21 Atlantic	94	82	96	91	3.0	1.4	2.2
22 Chipeta	100	96	100	99	2.6	2.2	2.4
23 AC01151-5W	96	96	100	97	2.3	1.5	1.9
24 CO02024-9W	96	97	100	98	2.6	2.1	2.4
25 CO02033-1W	100	88	100	96	3.0	1.9	2.5
26 CO02321-4W	95	90	100	95	2.1	1.4	1.8
Mean	98	92	99	95	2.8	2.4	2.6

¹44 DAP

²60 DAP

Table 4. Vine Size and Maturity for Clones in the Southwestern Regional Trial, 2010

Clone / Variety	Vine Size (1-5=largest)				Vine Maturity (1-5=latest)			
	Colorado	Texas		Mean	Colorado	Texas		Mean
	SLV	SPR	Dal		SLV	SPR	Dal	
Specialty Trial								
1 Purple Majesty	3.3	4.5		3.9	2.3	1.5		1.9
2 Yukon Gold	3.3	3.8		3.6	2.0	2.6		2.3
3 ATTX88654-2P/Y	4.0	4.0		4.0	3.0	5.0		4.0
4 ATTX98510-1R/Y	3.8	4.4		4.1	2.3	4.7		3.5
5 ATTX01180-1R/Y	3.5	4.3		3.9	2.0	3.7		2.9
6 BTX2103-1R/Y	3.3	4.7		4.0	2.0	5.0		3.5
7 CO01399-10P/Y	4.3	4.5		4.4	3.3	5.0		4.2
8 COTX01403-4R/Y	3.0	3.8		3.4	2.0	3.1		2.6
9 TC02072-3P/P	3.3	4.0		3.7	1.8	5.0		3.4
10 TX1674-1W/Y	2.5	3.7		3.1	3.0	3.6		3.3
Russet Trial								
11 Russet Norkotah	2.3	3.7		3.0	2.3	1.9		2.1
12 AOTX96084-1RU	3.0	3.7		3.4	2.0	2.1		2.1
13 AOTX98152-3RU	3.0	4.1		3.6	2.5	2.9		2.7
14 ATX9332-12RU	3.8	4.3		4.1	3.0	3.6		3.3
Red Trial								
15 Norland (Dark Red)	2.3	4.0		3.2	1.5	3.2		2.4
16 Red LaSoda	4.3	4.1		4.2	3.0	2.7		2.9
17 AOTX91861-4R	2.3	3.9		3.1	1.8	3.8		2.8
18 ATTX98453-11BR	2.5	2.6		2.6	2.0	4.1		3.1
19 NDTX5003-2R	3.0	3.8		3.4	1.8	3.7		2.8
20 NDTX5438-11R	3.5	4.1		3.8	2.8	3.4		3.1
Chip Trial								
21 Atlantic	3.8	4.6	4.6	4.3	3.3	3.8	3.6	3.6
22 Chipeta	5.0	4.7	4.9	4.9	3.0	5.0	5.0	4.3
23 AC01151-5W	3.5	4.4	4.6	4.2	3.0	4.4	3.6	3.7
24 CO02024-9W	3.0	4.1	4.4	3.8	3.0	4.9	4.5	4.1
25 CO02033-1W	3.3	4.0	4.4	3.9	3.0	4.5	4.0	3.8
26 CO02321-4W	3.5	4.2	4.3	4.0	3.0	4.0	3.5	3.5
Mean	3.3	4.1	4.5	3.7	2.5	3.7	4.0	3.1

Table 5. Total Yield, Yield Rank Within Type (Specialty, Russet, Red, and Chip), and Merit Score¹ (MS), for Clones in the Southwestern Regional Trial, 2010

Clone / Variety	California				Colorado			Texas						Mean		
	KRN		TUL		SLV			SPR			DAL			Cwt/A	Rank	MS
	Cwt/A	Rank	Cwt/A	Rank	Cwt/A	Rank	MS	Cwt/A	Rank	MS	Cwt/A	Rank	MS			
Specialty Trial																
1 Purple Majesty	293	6	460	7	528	5	4.0	267	2	2.9				427	5	3.5
2 Yukon Gold	382	3	414	8	439	9	3.0	208	5	3.8				412	7	3.4
3 ATTX88654-2P/Y	222	10	478	6	576	2	1.0	136	8	2.8				425	6	1.9
4 ATTX98510-1R/Y	422	1	515	5	628	1	2.0	209	4	3.7				522	1	2.9
5 ATTX01180-1R/Y	243	8	529	4	451	7	2.0	146	7	3.8				408	8	2.9
6 BTX2103-1R/Y	366	4	532	3	532	4	4.0	133	9	3.0				477	3	3.5
7 CO01399-10P/Y	402	2	605	1	546	3	4.0	62	10	2.3				518	2	3.2
8 COTX01403-4R/Y	305	5	568	2	468	6	4.0	302	1	3.6				447	4	3.8
9 TC02072-3P/P	252	7	326	10	440	8	4.0	179	6	3.9				339	9	4.0
10 TX1674-1W/Y	229	9	365	9	345	10	2.0	210	3	3.5				313	10	2.8
Russet Trial																
11 Russet Norkotah	286	2	361	4	402	4	1.0	134	2	3.4				350	4	2.2
12 AOTX96084-1RU	222	4	375	3	516	3	5.0	113	3	3.4				371	3	4.2
13 AOTX98152-3RU	343	1	490	1	557	1	5.0	267	1	3.9				463	1	4.5
14 ATX9332-12RU	280	3	468	2	525	2	5.0	107	4	3.0				424	2	4.0
Red Trial																
15 Norland (Dark Red)	312	4	515	3	465	4	3.0	335	1	2.9				431	4	3.0
16 Red LaSoda	394	2	572	1	617	1	1.0	252	2	3.4				528	1	2.2
17 AOTX91861-4R	430	1	544	2	484	3	3.0	199	3	3.4				486	2	3.2
18 ATTX98453-11BR	203	6	430	6	337	6	3.0	83	5	3.1				323	6	3.1
19 NDTX5003-2R	290	5	445	5	407	5	2.0	80	6	3.1				381	5	2.6
20 NDTX5438-11R	323	3	500	4	511	2	5.0	167	4	3.6				445	3	4.3
Chip Trial																
21 Atlantic	414	1	558	1	482	2	4.0	176	2	3.1	370	4	3.6	456	1	3.8
22 Chipeta	349	2	528	2	521	1	5.0	38	6	2.8	276	6	2.5	418	2	3.8
23 AC01151-5W	334	3	477	5	407	6	1.0	80	5	1.9	409	1	3.1	407	3	2.1
24 CO02024-9W	263	6	521	3	416	5	1.0	119	4	3.0	371	3	3.1	393	6	2.1
25 CO02033-1W	286	5	454	6	439	3	2.0	151	3	1.8	407	2	3.0	397	5	2.5
26 CO02321-4W	319	4	505	4	428	4	1.0	211	1	3.7	340	5	3.4	398	4	2.2
Mean	314		482		480		3.0	168		3.2	362		3.1	421		3.1

¹ 1-5=excellent

Table 6. Yield and Percent of U.S. No. 1's (>4oz.) and Yield Rank Within Type (Specialty, Russet, Red, and Chip) for Clones in the Southwestern Regional Trial, 2010

Clone / Variety	California						Colorado			Texas						Mean		
	KRN			TUL			SLV			SPR			DAL			Mean		
	Cwt/A	Rank	%	Cwt/A	Rank	%	Cwt/A	Rank	%	Cwt/A	Rank	%	Cwt/A	Rank	%	Cwt/A	Rank	%
Specialty Trial																		
1 Purple Majesty	209	6	71	210	9	46	276	9	52	13	7	5				232	8	54
2 Yukon Gold	326	2	85	354	7	86	402	5	92	119	2	57				361	5	88
3 ATTX88654-2P/Y	169	7	76	368	6	77	510	2	89	25	6	19				349	6	82
4 ATTX98510-1R/Y	349	1	83	384	4	75	538	1	86	41	4	20				424	1	81
5 ATTX01180-1R/Y	155	8	64	420	3	79	309	7	69	37	5	25				295	7	72
6 BTX2103-1R/Y	288	3	79	383	5	72	463	3	87	11	8	8				378	3	79
7 CO01399-10P/Y	281	4	70	481	1	80	438	4	80	0	9	0				400	2	77
8 COTX01403-4R/Y	247	5	81	474	2	83	401	6	86	162	1	54				374	4	84
9 TC02072-3P/P	73	10	29	108	10	33	141	10	32	0	9	0				107	10	32
10 TX1674-1W/Y	145	9	63	235	8	64	298	8	86	45	3	22				226	9	72
Russet Trial																		
11 Russet Norkotah	241	2	84	272	4	75	369	4	92	104	2	78				294	4	84
12 AOTX96084-1RU	163	4	73	288	3	77	470	2	91	87	3	77				307	3	83
13 AOTX98152-3RU	263	1	77	399	1	81	464	3	83	220	1	82				375	1	81
14 ATX9332-12RU	212	3	76	378	2	81	486	1	93	76	4	71				359	2	85
Red Trial																		
15 Norland (Dark Red)	257	3	83	432	3	84	422	4	91	147	1	44				370	3	86
16 Red LaSoda	333	2	85	474	1	83	539	1	87	109	2	43				449	1	85
17 AOTX91861-4R	365	1	85	452	2	83	453	2	94	61	3	30				423	2	87
18 ATTX98453-11BR	87	6	43	295	6	69	244	6	72	2	5	3				209	6	65
19 NDTX5003-2R	199	5	69	336	5	76	331	5	81	0	6	0				289	5	76
20 NDTX5438-11R	222	4	69	382	4	76	436	3	85	16	4	10				347	4	78
Chip Trial																		
21 Atlantic	354	1	86	454	2	81	433	2	90	161	2	92	366	3	99	402	1	88
22 Chipeta	285	2	82	456	1	86	468	1	90	30	6	78	268	6	97	369	2	88
23 AC01151-5W	279	3	84	341	5	71	351	6	86	52	5	65	376	2	92	337	4	83
24 CO02024-9W	212	6	81	373	4	72	369	4	89	83	3	70	360	4	97	328	6	84
25 CO02033-1W	219	5	77	338	6	74	384	3	87	70	4	46	377	1	93	329	5	83
26 CO02321-4W	273	4	85	433	3	86	361	5	84	194	1	92	330	5	97	349	3	88
Mean	239		74	366		75	398		83	72		42	346		96	334		79

Table 7. Yield and Percent of U.S. No. 1's (>10oz.) for Clones in the Southwestern Regional Trial, 2010

Clone / Variety	California				Colorado		Texas				Mean	
	KRN ¹		TUL ²		SLV		SPR		DAL		Mean	
	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%
Specialty Trial												
1 Purple Majesty	4	1	13	3	35	7	0	0			17	4
2 Yukon Gold	23	6	95	23	216	49	0	0			111	26
3 ATTX88654-2P/Y	4	2	85	18	283	49	0	0			124	23
4 ATTX98510-1R/Y	7	2	85	17	185	29	0	0			92	16
5 ATTX01180-1R/Y	0	0	132	25	37	8	0	0			56	11
6 BTX2103-1R/Y	0	0	46	9	135	25	0	0			60	11
7 CO01399-10P/Y	0	0	175	29	109	20	0	0			95	16
8 COTX01403-4R/Y	11	4	165	29	125	27	29	10			100	20
9 TC02072-3P/P	0	0	1	0	0	0	0	0			0	0
10 TX1674-1W/Y	0	0	30	8	70	20	0	0			33	10
Russet Trial												
11 Russet Norkotah	6	2	31	9	190	47	0	0			76	19
12 AOTX96084-1RU	3	2	32	9	291	56	1	1			109	22
13 AOTX98152-3RU	24	7	76	16	190	34	50	19			97	19
14 ATX9332-12RU	0	0	70	15	305	58	0	0			125	24
Red Trial												
15 Norland (Dark Red)	26	8	80	16	159	34	0	0			88	19
16 Red LaSoda	6	1	231	40	288	47	0	0			175	29
17 AOTX91861-4R	12	3	124	23	231	48	0	0			122	24
18 ATTX98453-11BR	0	0	72	17	60	18	0	0			44	12
19 NDTX5003-2R	0	0	109	24	75	18	0	0			61	14
20 NDTX5438-11R	0	0	80	16	103	20	0	0			61	12
Chip Trial												
21 Atlantic	14	3	98	18	158	33	22	12	92	25	91	20
22 Chipeta	2	0	232	44	185	36	0	0	32	12	113	23
23 AC01151-5W	0	0	38	8	59	14	0	0	32	8	32	8
24 CO02024-9W	0	0	21	4	71	17	0	0	38	10	33	8
25 CO02033-1W	0	0	33	7	75	17	5	3	53	13	40	9
26 CO02321-4W	20	6	185	37	105	25	22	10	85	25	99	23
Mean	6	2	90	18	144	29	5	2	55	15	79	16

¹ > 11oz

² 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, 2010

Clone / Variety	California				Colorado		Texas				Mean	
	KRN		TUL ¹		SLV ²		SPR		DAL		Cwt/A	%
	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%		
Specialty Trial												
1 Purple Majesty	119	41	73	16	240	45	0	0			144	34
2 Yukon Gold	218	57	171	41	186	42	53	25			192	47
3 ATTX88654-2P/Y	88	40	168	35	228	40	0	0			161	38
4 ATTX98510-1R/Y	200	47	173	34	353	56	10	5			242	46
5 ATTX01180-1R/Y	100	41	195	37	272	60	12	8			189	46
6 BTX2103-1R/Y	148	41	190	36	328	62	0	0			222	46
7 CO01399-10P/Y	146	36	197	33	330	60	0	0			224	43
8 COTX01403-4R/Y	137	45	215	38	275	59	59	20			209	47
9 TC02072-3P/P	36	14	25	8	141	32	0	0			67	18
10 TX1674-1W/Y	88	39	91	25	228	66	12	6			136	43
Russet Trial												
11 Russet Norkotah	176	61	73	20	179	45	57	42			143	42
12 AOTX96084-1RU	98	44	86	23	179	35	45	40			121	34
13 AOTX98152-3RU	169	49	130	27	274	49	100	37			191	42
14 ATX9332-12RU	156	56	128	27	181	34	33	31			155	39
Red Trial												
15 Norland (Dark Red)	163	52	221	43	264	57	23	7			216	51
16 Red LaSoda	231	59	176	31	251	41	36	14			219	43
17 AOTX91861-4R	239	56	218	40	221	46	10	5			226	47
18 ATTX98453-11BR	31	15	140	33	184	55	0	0			118	34
19 NDTX5003-2R	92	32	149	33	256	63	0	0			166	43
20 NDTX5438-11R	105	33	188	38	333	65	0	0			209	45
Chip Trial												
21 Atlantic	226	55	236	42	275	57	122	70	242	65	245	55
22 Chipeta	162	46	176	33	283	54	19	50	207	75	207	52
23 AC01151-5W	175	53	177	37	291	71	38	47	219	53	215	54
24 CO02024-9W	101	38	177	34	298	72	42	35	235	63	203	52
25 CO02033-1W	120	42	162	36	309	70	51	34	234	57	206	51
26 CO02321-4W	182	57	175	35	256	60	147	70	218	64	208	54
Mean	142	44	158	32	254	54	33	21	226	63	186	44

¹ 8-12 oz on Russets

² 4-10 oz

Table 9. Yield and Percent of U.S. No. 1's (4 - 6 oz.) for Clones in the Southwestern Regional Trial, 2010

Clone / Variety	California				Texas				Mean	
	KRN		TUL ¹		SPR		DAL			
	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%
Specialty Trial										
1 Purple Majesty	87	30	124	27	13	5			105	28
2 Yukon Gold	85	22	88	21	66	32			86	22
3 ATTX88654-2P/Y	77	35	115	24	25	19			96	29
4 ATTX98510-1R/Y	141	33	126	24	31	15			134	29
5 ATTX01180-1R/Y	55	23	93	18	25	17			74	20
6 BTX2103-1R/Y	140	38	147	28	11	8			143	33
7 CO01399-10P/Y	135	34	109	18	0	0			122	26
8 COTX01403-4R/Y	100	33	94	17	74	24			97	25
9 TC02072-3P/P	37	15	83	25	0	0			60	20
10 TX1674-1W/Y	56	25	113	31	34	16			85	28
Russet Trial										
11 Russet Norkotah	59	21	168	47	48	36			114	34
12 AOTX96084-1RU	62	28	170	45	41	36			116	37
13 AOTX98152-3RU	70	20	193	39	71	26			131	30
14 ATX9332-12RU	57	20	180	38	43	40			118	29
Red Trial										
15 Norland (Dark Red)	68	22	131	25	123	37			99	24
16 Red LaSoda	96	24	67	12	73	29			81	18
17 AOTX91861-4R	114	26	110	20	51	26			112	23
18 ATTX98453-11BR	56	28	82	19	2	3			69	23
19 NDTX5003-2R	108	37	78	18	0	0			93	27
20 NDTX5438-11R	117	36	113	23	16	10			115	29
Chip Trial										
21 Atlantic	114	28	120	22	18	10	32	9	89	19
22 Chipeta	121	35	48	9	10	27	29	11	66	18
23 AC01151-5W	104	31	126	26	14	18	125	31	118	29
24 CO02024-9W	111	42	174	33	41	34	87	23	124	33
25 CO02033-1W	99	35	144	32	14	9	90	22	111	29
26 CO02321-4W	72	22	73	14	26	12	26	8	57	15
Mean	90	29	118	25	33	19	65	17	101	26

¹4-8 oz on Russets

Table 10. Yield and Percent B (<4 oz.) Tubers for Clones in the Southwestern Regional Trial, 2010

Clone / Variety	California				Colorado		Texas				Mean	
	KRN		TUL		SLV		SPR		DAL		Mean	
	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%
Specialty Trial												
1 Purple Majesty	74	25	231	50	248	47	194	73			184	41
2 Yukon Gold	36	9	51	12	33	8	79	38			40	10
3 ATTX88654-2P/Y	45	20	92	19	53	9	108	79			63	16
4 ATTX98510-1R/Y	49	12	119	23	84	13	163	78			84	16
5 ATTX01180-1R/Y	78	32	91	17	135	30	107	74			101	26
6 BTX2103-1R/Y	53	15	122	23	53	10	115	87			76	16
7 CO01399-10P/Y	114	28	99	16	103	19	58	93			105	21
8 COTX01403-4R/Y	47	15	66	12	54	12	98	32			56	13
9 TC02072-3P/P	174	69	203	62	299	68	127	71			225	66
10 TX1674-1W/Y	70	30	120	33	44	13	156	75			78	25
Russet Trial												
11 Russet Norkotah	44	15	72	20	25	6	19	14			47	14
12 AOTX96084-1RU	44	20	71	19	29	6	17	15			48	15
13 AOTX98152-3RU	58	17	70	14	57	10	33	12			62	14
14 ATX9332-12RU	54	19	49	10	16	3	26	24			40	11
Red Trial												
15 Norland (Dark Red)	38	12	76	15	40	9	185	55			51	12
16 Red LaSoda	32	8	35	6	32	5	144	57			33	6
17 AOTX91861-4R	25	6	60	11	29	6	138	70			38	8
18 ATTX98453-11BR	73	36	79	18	89	26	80	97			80	27
19 NDTX5003-2R	77	27	75	17	67	16	80	100			73	20
20 NDTX5438-11R	95	29	88	18	72	14	150	90			85	20
Chip Trial												
21 Atlantic	42	10	74	13	39	8	7	4	0	0	39	8
22 Chipeta	42	12	23	4	31	6	7	18	0	0	24	6
23 AC01151-5W	48	14	86	18	54	13	12	15	20	5	52	13
24 CO02024-9W	48	18	125	24	39	9	24	20	4	1	54	13
25 CO02033-1W	31	11	95	21	49	11	7	5	13	3	47	11
26 CO02321-4W	23	7	40	8	49	11	6	3	0	0	28	7
Mean	58	20	89	19	70	15	82	50	6	2	70	17

Table 11. Yield and Percent Culls/No. 2s for Clones in the Southwestern Regional Trial, 2010

Clone / Variety	California				Colorado		Texas				Mean	
	KRN		TUL ¹		SLV		SPR		DAL		Mean	
	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%
Specialty Trial												
1 Purple Majesty	10	3	19	4	4	1	61	23			11	3
2 Yukon Gold	20	5	10	2	4	1	10	5			11	3
3 ATTX88654-2P/Y	8	4	18	4	13	2	3	2			13	3
4 ATTX98510-1R/Y	25	6	12	2	6	1	5	2			14	3
5 ATTX01180-1R/Y	11	4	18	3	7	2	2	1			12	3
6 BTX2103-1R/Y	25	7	27	5	15	3	7	5			22	5
7 CO01399-10P/Y	7	2	25	4	5	1	5	7			12	2
8 COTX01403-4R/Y	10	3	27	5	13	3	42	14			17	4
9 TC02072-3P/P	5	2	15	5	0	0	52	29			7	2
10 TX1674-1W/Y	15	6	11	3	3	1	8	4			10	3
Russet Trial												
11 Russet Norkotah	2	1	16	4	8	2	10	8			9	2
12 AOTX96084-1RU	16	7	16	4	18	3	9	8			17	5
13 AOTX98152-3RU	22	6	20	4	35	6	15	5			26	6
14 ATX9332-12RU	13	5	42	9	22	4	6	5			26	6
Red Trial												
15 Norland (Dark Red)	17	5	8	2	3	1	3	1			9	3
16 Red LaSoda	29	7	63	11	46	7	0	0			46	9
17 AOTX91861-4R	40	9	32	6	2	0	0	0			25	5
18 ATTX98453-11BR	43	21	56	13	4	1	0	0			34	12
19 NDTX5003-2R	14	5	34	8	9	2	0	0			19	5
20 NDTX5438-11R	6	2	31	6	2	0	0	0			13	3
Chip Trial												
21 Atlantic	17	4	31	6	10	2	7	4	4	1	15	3
22 Chipeta	22	6	50	9	22	4	2	4	8	3	26	6
23 AC01151-5W	6	2	50	10	3	1	16	20	13	3	18	4
24 CO02024-9W	3	1	23	4	7	2	12	10	8	2	10	2
25 CO02033-1W	37	13	21	5	6	1	74	49	17	4	20	6
26 CO02321-4W	24	7	32	6	17	4	10	5	10	3	21	5
Mean	17	6	27	6	11	2	14	8	10	3	18	4

¹includes over 16 oz tubers

Table 12. Specific Gravity for Clones in the Southwestern Regional Trial, 2010

Clone / Variety	California	Colorado	Texas		Mean
	TUL	SLV	SPR	DAL	
Specialty Trial					
1 Purple Majesty	1.079	1.093	1.041		1.086
2 Yukon Gold	1.091	1.089	1.059		1.090
3 ATTX88654-2P/Y	1.080	1.085	1.111		1.083
4 ATTX98510-1R/Y	1.072	1.083	1.109		1.078
5 ATTX01180-1R/Y	1.077	1.084	1.084		1.081
6 BTX2103-1R/Y	1.084	1.085	1.083		1.085
7 CO01399-10P/Y	1.074	1.085	1.129		1.080
8 COTX01403-4R/Y	1.068	1.071	1.087		1.070
9 TC02072-3P/P	1.088	1.088	1.044		1.088
10 TX1674-1W/Y	1.096	1.095	1.061		1.096
Russet Trial					
11 Russet Norkotah	1.077	1.081	1.055		1.079
12 AOTX96084-1RU	1.080	1.082	1.049		1.081
13 AOTX98152-3RU	1.087	1.092	1.058		1.090
14 ATX9332-12RU	1.095	1.103	1.058		1.099
Red Trial					
15 Norland (Dark Red)	1.069	1.071	1.034		1.070
16 Red LaSoda	1.082	1.084	1.036		1.083
17 AOTX91861-4R	1.075	1.072	1.027		1.074
18 ATTX98453-11BR	1.075	1.085	1.041		1.080
19 NDTX5003-2R	1.075	1.087	1.036		1.081
20 NDTX5438-11R	1.073	1.071	1.028		1.072
Chip Trial					
21 Atlantic	1.093	1.102	1.056	1.071	1.089
22 Chipeta	1.086	1.107	1.034	1.052	1.082
23 AC01151-5W	1.083	1.097	1.045	1.056	1.079
24 CO02024-9W	1.087	1.094	1.039	1.062	1.081
25 CO02033-1W	1.097	1.103	1.044	1.057	1.086
26 CO02321-4W	1.092	1.106	1.058	1.066	1.088
Mean	1.082	1.088	1.058	1.061	1.083

Table 13. Average Tuber Weight (Size) and Shape for Clones in the Southwestern Regional Trial, 2010

Clone / Variety	Weight (oz.)				Shape ¹				
	California	Texas		Mean	California	Colorado	Texas		Mean
	TUL	SPR	DAL		TUL	SLV	SPR	DAL	
Specialty Trial									
1 Purple Majesty	3.5	1.8		3.5	4.6	2.0	3.5		3.3
2 Yukon Gold	6.2	3.3		6.2	2.4	2.0	3.0		2.2
3 ATTX88654-2P/Y	5.2	1.7		5.2	2.2	2.0	2.4		2.1
4 ATTX98510-1R/Y	5.1	1.7		5.1	2.2	2.0	2.0		2.1
5 ATTX01180-1R/Y	5.5	1.9		5.5	2.5	3.0	3.4		2.8
6 BTX2103-1R/Y	4.9	1.2		4.9	2.4	1.0	1.5		1.7
7 CO01399-10P/Y	6.0	0.8		6.0	2.4	2.0	1.5		2.2
8 COTX01403-4R/Y	6.5	3.2		6.5	2.2	2.0	3.5		2.1
9 TC02072-3P/P	3.1	1.1		3.1	4.7	4.0	3.8		4.4
10 TX1674-1W/Y	4.4	1.9		4.4	3.6	4.0	3.8		3.8
Russet Trial									
11 Russet Norkotah	5.2	3.8		5.2	4.0	5.0	4.4		4.5
12 AOTX96084-1RU	5.4	3.6		5.4	4.1	5.0	3.9		4.6
13 AOTX98152-3RU	6.0	4.7		6.0	3.8	3.0	3.6		3.4
14 ATX9332-12RU	6.7	2.9		6.7	4.2	5.0	3.6		4.6
Red Trial									
15 Norland (Dark Red)	6.7	3.3		6.7	2.2	2.0	3.5		2.1
16 Red LaSoda	8.0	2.7		8.0	2.0	2.0	3.0		2.0
17 AOTX91861-4R	6.4	2.0		6.4	1.7	1.0	1.5		1.4
18 ATTX98453-11BR	5.6	1.1		5.6	1.9	2.0	2.0		2.0
19 NDTX5003-2R	5.8	1.1		5.8	1.8	1.0	1.5		1.4
20 NDTX5438-11R	5.4	1.3		5.4	1.9	1.0	2.4		1.5
Chip Trial									
21 Atlantic	5.8	2.8	5.4	5.6	1.3	2.0	2.4	3.0	2.1
22 Chipeta	8.6	1.4	4.7	6.7	1.4	2.0	2.3	1.5	1.6
23 AC01151-5W	5.2	1.5	3.0	4.1	1.2	2.0	2.0	1.5	1.6
24 CO02024-9W	4.7	1.2	3.9	4.3	1.2	2.0	2.5	1.5	1.6
25 CO02033-1W	4.9	2.4	3.6	4.3	1.2	2.0	3.5	3.5	2.2
26 CO02321-4W	7.3	2.9	5.5	6.4	1.3	2.0	2.8	3.5	2.3
Mean	5.7	2.2	4.4	5.5	2.5	2.4	2.8	2.4	2.5

¹ 1= round, 5=long

Table 14 Eye Depth and Growth Cracks for Clones in the Southwestern Regional Trial, 2010

Clone / Variety	Eye Depth ¹				Growth Cracks ²			
	California	Texas		Mean	Colorado	Texas		Mean
	TUL	SPR	DAL		SLV	SPR	DAL	
Specialty Trial								
1 Purple Majesty	2.8	5.0		2.8	5.0	5.0		5.0
2 Yukon Gold	3.7	4.5		3.7	5.0	5.0		5.0
3 ATTX88654-2P/Y	1.6	3.5		1.6	4.0	5.0		4.0
4 ATTX98510-1R/Y	2.4	4.5		2.4	4.0	5.0		4.0
5 ATTX01180-1R/Y	3.2	4.5		3.2	4.0	5.0		4.0
6 BTX2103-1R/Y	2.5	4.5		2.5	4.0	5.0		4.0
7 CO01399-10P/Y	3.0	4.5		3.0	4.0	5.0		4.0
8 COTX01403-4R/Y	3.1	4.0		3.1	4.0	5.0		4.0
9 TC02072-3P/P	3.7	5.0		3.7	5.0	5.0		5.0
10 TX1674-1W/Y	3.8	4.5		3.8	5.0	5.0		5.0
Russet Trial								
11 Russet Norkotah	3.6	3.7		3.6	5.0	5.0		5.0
12 AOTX96084-1RU	3.4	4.0		3.4	4.0	5.0		4.0
13 AOTX98152-3RU	3.7	4.4		3.7	4.0	5.0		4.0
14 ATX9332-12RU	4.0	4.0		4.0	5.0	5.0		5.0
Red Trial								
15 Norland (Dark Red)	2.8	2.0		2.8	4.0	5.0		4.0
16 Red LaSoda	1.1	1.5		1.1	2.0	4.8		2.0
17 AOTX91861-4R	1.7	4.5		1.7	4.0	5.0		4.0
18 ATTX98453-11BR	2.5	4.5		2.5	4.0	5.0		4.0
19 NDTX5003-2R	2.4	4.4		2.4	4.0	5.0		4.0
20 NDTX5438-11R	2.9	4.5		2.9	4.0	5.0		4.0
Chip Trial								
21 Atlantic	2.8	4.5	4.5	3.7	5.0	5.0	5.0	5.0
22 Chipeta	3.3	4.5	4.5	3.9	3.0	5.0	5.0	4.0
23 AC01151-5W	3.2	4.5	4.5	3.9	5.0	5.0	5.0	5.0
24 CO02024-9W	3.5	4.5	4.5	4.0	5.0	5.0	5.0	5.0
25 CO02033-1W	3.7	4.5	4.5	4.1	4.0	5.0	5.0	4.5
26 CO02321-4W	2.9	4.5	4.5	3.7	5.0	5.0	5.0	5.0
Mean	3.0	4.2	4.5	3.1	4.3	5.0	5.0	4.3

¹1 = deep, 5 = shallow²1 = many, 5 = none

Table 15. Percent Hollow Heart/Brown Center, Blackspot Bruising, and Fry Results for Clones in the Southwestern Regional Trial, 2010

Clone / Variety	Hollow Heart/Brown Center (%)				Mean	Blackspot	Fry Data ²		
	California	Colorado	Texas			Bruising ¹	Colorado		
	TUL	SLV	SPR	DAL		Colorado	SLV ³	SLV ⁴	MS ⁵
Specialty Trial									
1 Purple Majesty	3	0	0		2	---	---	---	---
2 Yukon Gold	8	0	0		4	5.0	1.0	3.0	2.0
3 ATTX88654-2P/Y	3	23	0		13	4.6	2.0	2.0	1.0
4 ATTX98510-1R/Y	3	13	0		8	4.3	1.0	1.0	2.0
5 ATTX01180-1R/Y	0	0	0		0	3.6	3.0	3.0	1.0
6 BTX2103-1R/Y	0	0	0		0	3.5	1.0	1.0	5.0
7 CO01399-10P/Y	0	0	0		0	5.0	1.0	0.0	5.0
8 COTX01403-4R/Y	3	0	0		2	4.4	2.0	3.0	1.0
9 TC02072-3P/P	0	0	0		0	---	---	---	---
10 TX1674-1W/Y	0	0	0		0	5.0	1.0	1.0	3.0
Russet Trial									
11 Russet Norkotah	3	1	0		2	5.0	1.0	1.0	2.0
12 AOTX96084-1RU	13	0	0		7	5.0	1.0	1.0	5.0
13 AOTX98152-3RU	0	1	5		1	4.7	0.0	0.0	5.0
14 ATX9332-12RU	0	0	3		0	3.1	1.0	1.0	5.0
Red Trial									
15 Norland (Dark Red)	0	0	0		0	4.7	1.0	2.0	1.0
16 Red LaSoda	0	16	0		8	4.6	4.0	4.0	1.0
17 AOTX91861-4R	0	0	0		0	4.3	1.0	2.0	1.0
18 ATTX98453-11BR	0	0	0		0	4.7	3.0	3.0	1.0
19 NDTX5003-2R	0	0	0		0	4.5	3.0	2.0	1.0
20 NDTX5438-11R	0	0	0		0	4.4	1.0	3.0	1.0
Chip Trial									
21 Atlantic	3	3	0	5	4	4.1			2.0
22 Chipeta	0	1	0	0	0	4.4			3.0
23 AC01151-5W	5	1	0	3	3	4.5			4.0
24 CO02024-9W	10	0	0	0	3	3.7			4.0
25 CO02033-1W	0	3	0	0	1	3.8			3.0
26 CO02321-4W	0	0	0	8	3	4.1			3.0
Mean	2	2	0	3	2	4.4	1.6	1.8	2.6

¹ 1=severe, 5= none

² 0=light, 5= dark

³ at harvest

⁴ after 8 weeks at 45° F

⁵ 1-5=excellent

Table 16. Colorado and Texas Chipping Results for Clones in the Southwestern Regional Trial, 2010

Clone / Variety	Chip Color ¹					
	Colorado				Texas ⁴	
	40 ²	R40 ²	50 ³	R50 ³	SPR	DAL
21 Atlantic	3.5	4.0	2.5	2.5	1	2
22 Chipeta	4.5	3.5	2.5	3.5	3	2
23 AC01151-5W	3.0	2.5	1.5	1.0	1	2
24 CO02024-9W	3.0	2.0	1.0	1.5		1
25 CO02033-1W	2.5	3.5	2.5	1.5	3	1
26 CO02321-4W	2.5	3.0	2.0	1.5	1	1

¹ 1=light, 5=dark

²40°F Storage protocol prior to frying

Initial storage temperature 55°F

Holding temperature 40°F

Weeks to holding temperature 5

Weeks at holding temperature 5

Reconditioning temp. (if applicable) 60°F

Number of weeks reconditioning 3

³50°F Storage protocol prior to frying

Initial storage temperature 55°F

Holding temperature 50°F

Weeks to holding temperature 5

Weeks at holding temperature 5

Reconditioning temp. (if applicable) 60°F

Number of weeks reconditioning 3

⁴ Chipped immediately following harvest

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-2010.

Clone / Variety	Chip Color ¹	Chip Color ¹	Chip Defects and Notes ²	Chip Defects and Notes ²	Percent Zebra Defect after Chipping	Percent Zebra Defect after Chipping	Percent Zebra Defect at Grading	Percent Zebra Defect at Grading
	SPR	DAL	SPR	DAL	SPR	DAL	SPR	DAL
Specialty Trial								
1 Purple Majesty								
2 Yukon Gold	3		61 vas, 2 zc, 1 dark		2		0	
3 ATTX88654-2P/Y	2	2	24 vas, BOT, nice	1 dark, 2 GH	0	0	0	0
4 ATTX98510-1R/Y	3	3	13 zc, 124 vas, 18 dark (1 fresh zc)	47 dark, 5 GH, 1 BC	7	2	5	0
5 ATTX01180-1R/Y	3		40 vas		0		5	
6 BTX2103-1R/Y	3		31 vas/ dark		0		0	0
7 CO01399-10P/Y	3		38 vas/ dark		0		0	
8 COTX01403-4R/Y	3	3	31 vas, 2 zc, 9 dark	18 dark	5	3	0	0
9 TC02072-3P/P								
10 TX1674-1W/Y	3		34 vas, 11 dark, 2 bruise, BOT		0		0	3
Russet Trial								
11 Russet Norkotah	2	3	2 dark, 2 fresh ZC	2 TM	8	0	8	0
12 AOTX96084-1RU	2	3	1 dark	1 dark	9	3	5	0
13 AOTX98152-3RU							23	0
14 ATX9332-12RU							5	0
Red Trial								
15 Norland (Dark Red)	3		1 zc, 2 mottle, 23 vas, 7 dark		3		0	0
16 Red LaSoda	3		17 vas, 1 zc, 11 dark		3		0	0
17 AOTX91861-4R	3		28 dark, 3 zc		8		0	0
18 ATTX98453-11BR	3		39 vas/dark		0		0	3
19 NDTX5003-2R	2		19 vas, 4 dark		0		0	
20 NDTX5438-11R	3		26 vas, 14 dark		0		0	0
Chip Trial								
21 Atlantic	1	2	17 Dark	1 GH; 1HH, 1BC	4	0	23	0
22 Chipeta	3	2	7 dark		3	11	10	0
23 AC01151-5W	1	2	1 dark		0	0	10	0
24 CO02024-9W		1				10	20	0
25 CO02033-1W	3	1	7 dark	1 HH	7	0	23	0
26 CO02321-4W	1	1		BOT-	3	0	5	0

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

¹1=light, 3+=very dark

²Vas=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, 2010

Clone / Variety	California	Texas	
	TUL	SPR	DAL
Specialty Trial			
1 Purple Majesty	A lot of small tubers	rough+, white in flesh, rough, silver scurf, nice, BOT	
2 Yukon Gold	62% of plants show symptoms of vert wilt	very nice, BOT	oversized, smooth, ZC+
3 ATTX88654-2P/Y		poor shape+, drop++, stem attachment, deep indentation at stem	light flesh, silver scurf, heat sprouts, drop, deep nose and eyes
4 ATTX98510-1R/Y		nice flesh, BOT	heavy set, drop++
5 ATTX01180-1R/Y		sticky stolon, dark flesh and skin, feathering, BOT, ZC??	
6 BTX2103-1R/Y	Problem with scab, very low appearance rating	silver scurf, small, drop, B size, sticky stolon, 10% heat sprouts	drop?, heat sprouts, silver scurf
7 CO01399-10P/Y	Low vert wilt rating (less than 5% plants show symptoms)	drop, small, drop, heat sprouts, stolon attachment	
8 COTX01403-4R/Y	75% of plants show symptoms of vert wilt	blocky, large tubers, nice flesh, BOT, 10% heat sprouts	large tubers, heat sprouts, smooth
9 TC02072-3P/P	Very uniform in shape	fingerling?, rough, solid flesh, nice, smooth, very dark flesh, small, shape-	
10 TX1674-1W/Y	Pear shaped tubers	nice shape and skin	keep, nice flesh, drop
Russet Trial			
11 Russet Norkotah	Very high vert wilt rating (90% plants show symptoms)	small, 12% rot	nice rep, skinny
12 AOTX96084-1RU		blocky, small	keep
13 AOTX98152-3RU		BOT, blocky, nice	large tubers, rough
14 ATX9332-12RU	Nice looking tubers	small, ugly net, drop, blocky	small
Red Trial			
15 Norland (Dark Red)	80% of plants show symptoms of vert wilt	poor skin finish, escape small potato problem, deep eyes, 30% heat sprouts, light skin, yield+	road map, deep eyes
16 Red LaSoda	Problem with scab and skinned easily	large tubers, deep eyes, light skin, yield+	rough, deep eyes
17 AOTX91861-4R	Problem with scab	nice, small, poor skin finish, stem attachment, smooth	silver scurf
18 ATTX98453-11BR	Problem with scab, easily skinned, knobs and growth cracks	stem attachment, nice shape, yield-	heat sprouts, small
19 NDTX5003-2R	Problem with scab, easily skinned, black scurf, and had 84% stand	small+, ugly eyes, poor skin finish, nice flesh, nice shape, yield-	
20 NDTX5438-11R		nice skin color, stem attachment, small, yield+, nice	heat sprouts, smooth, nice +
Chip Trial			
21 Atlantic	Problem with black scurf	yield+, sticky stolon, poor internals, bad rep, nice shape	4% heat necrosis
22 Chipeta	Problem with black scurf, also had a lot of large tubers	sticky stolon, late, drop, yield-, drop	low yield, small
23 AC01151-5W	Problem with black scurf and knobs	sticky stolon, drop, small, nice shape, chain tubers, poor internals, sticky stolon, small, small	feathering, deep nose, small, heavy set, light set
24 CO02024-9W	Problem with black scurf	small, pear shape, ZC++poor shape, drop+, heavy set, small	feathering, heavy set, small, nice and uniform, rough+
25 CO02033-1W	Problem with black scurf	rough, heat sprouts, drop, poor shape, drop	heavy set, poor shape,
26 CO02321-4W	Problem with black scurf	sticky stolon, BOT, nice, small	

Table 19. Summary for Clones in the Southwestern Regional Trial, 2010

Clone / Variety	Field Data				Yield Qualities					Tuber Description				
	% Stand	Stems/hill	Vine Size	Vine Mat.	Total Yield	% #1s	% >10 ¹	% <4	% Culls	Merit Score	Specific Gravity	Tuber Shape	Tuber Weight	Skin Color
Specialty Trial														
1 Purple Majesty	99	4	4	2	427	54	4	41	3	3.5	1.086	Oval	3.5	Purple
2 Yukon Gold	88	2	4	2	412	88	26	10	3	3.4	1.090	Oval	6.2	White
3 ATTX88654-2P/Y	97	2	4	4	425	82	23	16	3	1.9	1.083	Oblong	5.2	Purple
4 ATTX98510-1R/Y	98	3	4	4	522	81	16	16	3	2.9	1.078	Oblong	5.1	Red
5 ATTX01180-1R/Y	97	3	4	3	408	72	11	26	3	2.9	1.081	Oblong	5.5	Red
6 BTX2103-1R/Y	98	3	4	4	477	79	11	16	5	3.5	1.085	Round	4.9	White
7 CO01399-10P/Y	94	2	4	4	518	77	16	21	2	3.2	1.080	Round	6.0	Purple
8 COTX01403-4R/Y	93	3	3	3	447	84	20	13	4	3.8	1.070	Oblong	6.5	Red
9 TC02072-3P/P	93	4	4	3	339	32	0	66	2	4.0	1.088	Long	3.1	Purple
10 TX1674-1W/Y	99	3	3	3	313	72	10	25	3	2.8	1.096	Oblong	4.4	White
Russet Trial														
11 Russet Norkotah	98	2	3	2	350	84	19	14	2	2.2	1.079	Long	5.2	Russet
12 AOTX96084-1RU	97	3	3	2	371	83	22	15	5	4.2	1.081	Long	5.4	Russet
13 AOTX98152-3RU	97	3	4	3	463	81	19	14	6	4.5	1.090	Oblong	6.0	Russet
14 ATX9332-12RU	99	2	4	3	424	85	24	11	6	4.0	1.099	Oblong	6.7	Russet
Red Trial														
15 Norland (Dark Red)	92	3	3	2	431	86	19	12	3	3.0	1.070	Oval	6.7	Red
16 Red LaSoda	90	2	4	3	528	85	29	6	9	2.2	1.083	Oval	8.0	Red
17 AOTX91861-4R	100	2	3	3	486	87	24	8	5	3.2	1.074	Oblong	6.4	Red
18 ATTX98453-11BR	80	3	3	3	323	65	12	27	12	3.1	1.080	Oblong	5.6	Red
19 NDTX5003-2R	96	3	3	3	381	76	14	20	5	2.6	1.081	Oblong	5.8	Red
20 NDTX5438-11R	98	3	4	3	445	78	12	20	3	4.3	1.072	Round	5.4	Red
Chip Trial														
21 Atlantic	91	2	4	4	456	88	20	8	3	3.8	1.089	Round	5.6	Buff
22 Chipeta	99	2	5	4	418	88	23	6	6	3.8	1.082	Oval	6.7	White
23 AC01151-5W	97	2	4	4	407	83	8	13	4	2.1	1.079	Round	4.1	White
24 CO02024-9W	98	2	4	4	393	84	8	13	2	2.1	1.081	Round	4.3	White
25 CO02033-1W	96	2	4	4	397	83	9	11	6	2.5	1.086	Round	4.3	White
26 CO02321-4W	95	2	4	4	398	88	23	7	5	2.2	1.088	Round	6.4	White

¹ KRN > 12 oz on Russets

Status of Entries following the Southwestern Regional Trial- 2010 Worksheet

Clone / Variety	Entered by	Status	Years in Trial	Average Total Yield					
				2008	2009	2010	Mean	% of check	
Specialty Trial									
1	Purple Majesty	Check	***			427	427		
2	Yukon Gold	Check	***		392	412	402		
3	ATTX88654-2P/Y	TX	Rep	1		425	425		
4	ATTX98510-1R/Y	TX	Grad	1		522	522	107	% of DRN&RLS
5	ATTX01180-1R/Y	TX	Rep	1		408	408	84	% of DRN&RLS
6	BTX2103-1R/Y	TX	Drop	2	479	477	478	98	% of DRN&RLS
7	CO01399-10P/Y	CO	Drop	2		518	518	106	% of DRN&RLS
8	COTX01403-4R/Y	TX	Drop	1		447	447	92	% of DRN&RLS
9	TC02072-3P/P	CO	Drop	1		339	339	79	
10	TX1674-1W/Y	TX	Rep	1		313	313	78	
Russet Trial									
11	Russet Norkotah	Check	***		427	350	388		
12	AOTX96084-1RU	TX	Drop	1		371	371	96	
13	AOTX98152-3RU	TX	Drop	1		463	463	119	
14	ATX9332-12RU	TX	Drop	2	445	424	435	112	
Red Trial									
15	Norland (Dark Red)	Check	***		467	431	449		
16	Red LaSoda	Check	***		523	528	525		
17	AOTX91861-4R	TX	Drop	2		486	486	100	
18	ATTX98453-11BR	TX	Drop	2	377	323	350	72	
19	NDTX5003-2R	TX	Grad	3	404	381	392	81	
20	NDTX5438-11R	TX	Rep	1		445	445	91	
Chip Trial									
21	Atlantic	Check	***			456	456		
22	Chipeta	Check	***			418	418		
23	AC01151-5W	CO	Drop	1		407	407	99	
24	CO02024-9W	CO	Drop	1		393	393	95	
25	CO02033-1W	CO	Drop	1		397	397	96	
26	CO02321-4W	CO	Drop	1		398	398	97	

Description of Clones - 2011 Southwestern Regional Trial

Entry #	Clone/Cultivar	Parents Female Male	Flower Color	Vine Size Maturity	Tuber Shape	Skin Type	Entered By	Use	Source	2011 Status ¹
Specialty Trial										
1	Purple Majesty									***
2	Yukon Gold									***
3	ATTX88654-2P/Y									Rep
4	ATTX01180-1R/Y									Rep
5	TX1674-1W/Y									Rep
6	CO03027-2R/R						CO			New
7	CO03094-5RF/RW						CO			New
8	CO04013-1W/Y						CO			New
9	CO04021-2R/Y						CO			New
10	CO04045-4P/P						CO			New
11	CO04061-1R/RW						CO			New
12	CO04117-5PW/Y						CO			New
Russet Trial										
13	Russet Norkotah									***
14	AC00395-2RU						CO			New
15	AOTX96075-1Ru						TX			New
16	CO03017-2RU/Y						CO			New
17	CO03187-1RU						CO			New
18	CO03202-1RU						CO			New
19	CO03276-4RU						CO			New
20	CO03276-5RU						CO			New
21	CO03308-3RU						CO			New
Red Trial										
22	Norland (Dark Red)									***
23	Red LaSoda									***
24	NDTX5438-11R						TX			Rep
25	COTX02172-1R						TX			New
Chip Trial										
26	Atlantic									***
27	Chipeta									***
28	AC03433-1W						CO			New
29	CO03243-3W						CO			New

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