

2014 Southwestern Regional Potato Variety Trial Report



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Description of Clones - 2014 Southwestern Regional Trial

Entry #	Clone/Cultivar	Parents		Flower Color	Vine Size	Maturity	Tuber Shape	Skin Type	Entered		Seed Source	2014 Year	2015 Status
		Female	Male						By	Use			
Specialty Trial													
Yellow Flesh													
1	Yukon Gold	Nogleam	W5279-4	Pink	Medium	Early	Oval	White	Check	Spec	CO	***	***
2	CO05035-1PW/Y	Masquerade	US147-96	Red-Purple	Large	Medium	Oblong	Pur-White	CO	Fresh	CO	1	
Colored Flesh													
3	Purple Majesty	All Blue	ND2008-2	Blue	Medium	Early	Oval	Purple	Check	Spec	CO	***	***
4	CO05028-4P/PY	AC99329-4R/Y	CO97227-2P/PW	Purple	Large	Medium	Oblong	Purple	CO	Dual	CO	1	
5	CO05028-11P/RWP	AC99329-4R/Y	CO97227-2P/PW	Blue-Purple	Med-Large	Medium	Oblong	Purple	CO	Fresh	CO	1	
6	CO05079-4P/PW	CO97216-3P/PW	CO97227-2P/PW	Blue-Purple	Medium	Medium	Oblong	Purple	CO	Fresh	CO	1	
Russet Trial													
7	Russet Norkotah	ND9687-5RU	ND9526-4RU	White	Small	Early	Long	Russet	Check	Fresh	CO	***	***
8	ATX05142-2RU	Rio Grande Russet	A97214-4	White	Large	Early	Oblong	Russet	TX	Fresh	CO	1	
9	AC05039-2RU	A99032-2TE	COA00287-1	White	Med-Small	Early	Oblong	Russet	CO	Dual	CO	1	
10	CO06057-3RU	CO98009-3RU	Premier Russet	White	Med-Large	Medium	Oblong	Russet	CO	Dual	CO	1	

Table 1. Locations, Cooperators, and Cultural Information

Locations	Cooperators	Irrigation	Trial	Fertilization (lb/A)	Harvest method	Planting Dates	Vine Kill	Harvest	Days to Vine Kill or Harvest
1. Kern Co. California (KRN)	J. Nunez J. DuBose	Sprinkler	All Trials		Machine/Hand	2/22/2014		6/2/2014	100
2. Tulelake California (TUL)	R. Wilson D. Culp K. Nicholson S. Peterson	Solid-set sprinkler	Specialty Russet	204-40-110-34S	Machine Machine	5/19/2014 5/19/2014	9/5/2014 9/5/2014	9/26/2014 9/29/2014	106 106
3. San Luis Valley Colorado (SLV)	D. Holm C. Gray	Pivot	Specialty Russet	120- 60-40-25-2.5	Machine Machine	5/16/2014 5/16/2014	9/4/2014 9/4/2014	9/29/2014 9/29/2014	108 108
4. Springlake Texas (SPR)	C. Miller, J. Koym D. Scheuring	Pivot	Specialty Russet	155-34-34	Machine/Hand Machine/Hand	4/4/2014 4/4/2014	7/12/2014 7/30/2014	7/28/2014 8/12/2014	98 116
4. Dalhart Texas (Dal)	C. Miller, J. Koym D. Scheuring	Pivot	Specialty Russet	115-50-0	Machine/Hand Machine/Hand	5/14/2014 5/14/2014	9/1/2014 9/9/2014	9/24/2014 9/29/2014	107 115

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:					
Bravo WS		x		x	x
Echo					x
Endura					
Luna Tranquility			x		x
Moncut					
Manzate					
Nucop				x	
Penncozeb					x
Omega FS00		x			
Quadris		x	x		x
Maxim 4FS		x			
Revus Top					x
Scala SC				x	x
Insecticides:					
Admire Pro		x			
Agriemek				x	
Belay			x		
Beleaf 50 Sg					x
Blackhawk				x	
Fulfill					x
Leverage 360			x		
Movovento			x	x	x
Reaper					x
Transform				x	
Tracer				x	
Venom				x	
Herbicides:					
Acumen					x
Brawl					x
Chateau					x
Choice				x	
Dual				x	
Eptam			x		
Matrix		x	x		
Metribuzin					
Prowl H2O		x			
Outlook		x	x		
Roundup				x	
Select Max					x
Sencor DF				x	
Treflan				x	
Tricor					x
Vine Killing:					
Mechanical				x	x
Reglone		x	x		
Sulfuric Acid					
Environmental Factors:					
Cool/Wet Spring					
Dry/Windy Spring					
Cool and Dry Summer					
Severe Frost					
Favorable		x			
Hot Summer		x			
Above Av. Prec.				x	x

* Spec 18.2ft Russ 20.7ft Red 18.2ft Chip 18.2ft

** Spec 9.1" Russ 11.3" Red 9.1" Chip 9.1"

*** Spec 48 Russ 44 Red 48 Chip 48

Table 3. Percent Stand and Stems/Hill for Clones in the Southwestern Regional Trial, 2014

Clone / Variety	Percent Stand					Stems per Hill			
	California	Colorado	Texas		Mean	Colorado	Texas	Mean	
	TUL	SLV	SPR	Dal		SLV	SPR		
Yellow Flesh									
1	Yukon Gold	94	98	90	100	96	2.7	1.2	1.9
2	CO05035-1PW/Y	95	93	78	100	92	4.2	1.5	2.8
Colored Flesh									
3	Purple Majesty	98	96	79	33	77	5.0	1.7	3.4
4	CO05028-4P/PY	97	99	95	100	98	3.8	1.5	2.6
5	CO05028-11P/RWP	98	100	100	79	94	3.6	1.7	2.6
6	CO05079-4P/PW	100	99	97	100	99	5.1	1.5	3.3
Russet Trial									
7	Russet Norkotah	98	98	100	100	99	3.2	1.8	2.5
8	ATX05142-2RU		98	100	100	99	2.7	1.3	2.0
9	AC05039-2RU	98	100	96	100	98	2.3	1.6	2.0
10	CO06057-3RU	95	97	96	100	97	3.7	1.7	2.7
Mean									
		97	98	93	91	95	3.6	1.5	2.6

Table 4. Vine Size and Maturity for Clones in the Southwestern Regional Trial, 2014

Clone / Variety	Vine Size (1-5=largest)				Vine Maturity (1-5=latest)				
	Colorado	Texas		Mean	Colorado	Texas		Mean	
	SLV	SPR	Dal		SLV	SPR	Dal		
Yellow Flesh									
1	Yukon Gold	3.0	3.6	3.6	3.4	2.3	3.0	3.0	2.8
2	CO05035-1PW/Y	4.0	3.5	4.0	3.8	4.0	5.0	4.5	4.5
Colored Flesh									
3	Purple Majesty	3.0	3.5	3.6	3.4	2.5	3.3	3.2	3.0
4	CO05028-4P/PY	3.8	3.8	4.4	4.0	3.0	3.4	3.6	3.3
5	CO05028-11P/RWP	4.0	3.7	4.1	3.9	3.0	3.1	3.5	3.2
6	CO05079-4P/PW	3.0	3.7	4.7	3.8	3.0	3.8	4.2	3.7
Russet Trial									
7	Russet Norkotah	2.0	3.7	3.5	3.1	1.0	2.1	2.8	2.0
8	ATX05142-2RU	3.5	3.6	4.2	3.8	3.3	3.5	3.3	3.4
9	AC05039-2RU	1.0	3.6	3.3	2.6	1.5	2.8	3.0	2.4
10	CO06057-3RU	3.0	3.6	3.7	3.4	2.3	3.2	3.6	3.0
Mean									
		3.0	3.6	3.9	3.5	2.6	3.3	3.5	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, 2014

Clone / Variety	California						Colorado			Texas						Mean		
	KRN		TUL			SLV			SPR			DAL			Cwt/A	Rank	MS	
	Cwt/A	Rank	Cwt/A	Rank	MS ¹	Cwt/A	Rank	MS	Cwt/A	Rank	MS	Cwt/A	Rank	MS				
Yellow Flesh																		
1	Yukon Gold	230	2	391	2	3.8	419	2	3.0	179	1	3.7	483	2	3.7	341	2	3.5
2	CO05035-1PW/Y	286	1	479	1	3.3	560	1	5.0	178	2	3.5	660	1	1.5	433	1	3.3
Colored Flesh																		
3	Purple Majesty	199	4	442	4	3.4	435	3	3.0	152	4	3.4	228	4	3.5	291	4	3.3
4	CO05028-4P/PY	254	1	541	1	2.9	568	1	5.0	309	1	3.0	435	3	3.4	421	1	3.6
5	CO05028-11P/RWP	248	2	465	3	3.6	542	2	5.0	250	2	3.0	598	1	3.6	421	2	3.8
6	CO05079-4P/PW	213	3	476	2	3.1	396	4	2.0	169	3	3.7	563	2	3.7	364	3	3.1
Russet Trial																		
7	Russet Norkotah	222	1	386	1	4.5	398	3	3.0	93	1	3.7	514	1	3.1	323	1	3.6
8	ATX05142-2RU	193	3				403	2	2.0	56	3	3.5	476	2	3.8	282	3	3.1
9	AC05039-2RU	219	2	353	3	3.5	366	4	2.0	89	2	2.6	363	4	2.5	278	4	2.7
10	CO06057-3RU	189	4	384	2	3.3	466	1	5.0	36	4	3.5	387	3	2.0	292	2	3.4
Mean		225		435		3.5	455		3.5	151		3.4	471		3.1	345		3.3

¹ 1=very poor to 5= excellent

Indicates high or strength

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, 2014

Clone / Variety	California						Colorado ¹			Texas ²						Mean			
	KRN			TUL			SLV			SPR			DAL			Cwt/A	Rank	%	
	Cwt/A	Rank	%	Cwt/A	Rank	%	Cwt/A	Rank	%	Cwt/A	Rank	%	Cwt/A	Rank	%				
Yellow Flesh																			
1	Yukon Gold	230	2	100	318	2	81	377	2	90	128	2	72	373	2	77	285	2	84
2	CO05035-1PW/Y	286	1	100	414	1	87	525	1	94	135	1	76	512	1	77	374	1	87
Colored Flesh																			
3	Purple Majesty	199	4	100	231	4	52	242	3	56	48	4	32	141	4	62	172	4	60
4	CO05028-4P/PY	254	1	100	390	1	72	452	1	80	139	1	45	249	3	57	297	1	71
5	CO05028-11P/RWP	248	2	100	349	2	75	422	2	78	120	2	48	324	1	54	293	2	71
6	CO05079-4P/PW	213	3	100	301	3	63	232	4	59	55	3	32	320	2	57	224	3	62
Russet Trial																			
7	Russet Norkotah	222	1	100	285	1	74	354	2	89	52	2	55	372	2	72	257	1	78
8	ATX05142-2RU	193	3	100				351	3	87	34	3	61	404	1	85	246	2	83
9	AC05039-2RU	219	2	100	272	2	77	341	4	93	55	1	61	309	3	85	239	3	83
10	CO06057-3RU	189	4	100	265	3	69	389	1	83	17	4	48	305	4	79	233	4	76
Mean		225		100	314		72	368		81	78		53	331			262		76

¹ Fingerling 2-6inch

² Fingerling 1-3inch

Table 7. Yield and Percent of U.S. No. 1's (>10oz.) for Clones in the Southwestern Regional Trial, 2014

Clone / Variety	California				Colorado ³		Texas				Mean		
	KRN ¹		TUL ²		SLV		SPR ⁴		DAL		Mean		
	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	
Yellow Flesh													
1	Yukon Gold	15	7	137	35	182	43	1	1	202	42	107	26
2	CO05035-1PW/Y	0	0	138	29	193	34	10	5	212	32	111	20
Colored Flesh													
3	Purple Majesty	0	0	21	5	18	4	0	0	34	15	15	5
4	CO05028-4P/PY	0	0	39	7	89	16	4	1	63	15	39	8
5	CO05028-11P/RWP	0	0	49	10	25	5	0	0	65	11	28	5
6	CO05079-4P/PW	0	0	27	6	11	3	0	0	90	16	26	5
Russet Trial													
7	Russet Norkotah	0	0	69	18	103	26	2	2	99	19	54	13
8	ATX05142-2RU	0	0			83	21	8	15	149	31	60	17
9	AC05039-2RU	0	0	92	26	97	26	3	3	56	15	49	14
10	CO06057-3RU	0	0	44	12	41	9	0	0	188	49	55	14
Mean		1	1	68	16	84	19	3	3	116	25	54	13

¹ > 11oz

² >12 oz on Russets >10 oz on red/specialty and Chip

Table 8. Yield and Percent of U.S. No. 1's (6 - 10oz.) for Clones in the Southwestern Regional Trial, 2014

Clone / Variety	California				Colorado		Texas				Mean		
	KRN		TUL ¹		SLV ²		SPR		DAL		Mean		
	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	
Yellow Flesh													
1	Yukon Gold	107	47	121	31	195	46	61	34	161	33	129	38
2	CO05035-1PW/Y	96	33	193	40	331	59	67	38	187	28	175	40
Colored Flesh													
3	Purple Majesty	23	12	91	21	225	52	5	3	56	24	80	22
4	CO05028-4P/PY	77	30	193	36	362	64	24	8	74	17	146	31
5	CO05028-11P/RWP	69	28	167	36	397	73	41	16	104	17	156	34
6	CO05079-4P/PW	38	18	144	30	221	56	6	4	114	20	105	26
Russet Trial													
7	Russet Norkotah	68	31	132	34	251	63	27	29	209	41	138	40
8	ATX05142-2RU	43	22			268	67	9	17	216	45	134	38
9	AC05039-2RU	104	48	112	32	244	67	25	28	178	49	132	45
10	CO06057-3RU	43	23	122	32	348	75	8	22	114	29	127	36
Mean		67	29	142	32	284	62	27	20	141	31	132	35

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, 2014

Clone / Variety	California				Texas				Mean		
	KRN		TUL ¹		SPR		DAL		Cwt/A	%	
	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%			
Yellow Flesh											
1	Yukon Gold	60	26	60	15	66	37	53	11	60	22
2	CO05035-1PW/Y	109	38	83	17	59	33	153	23	101	28
Colored Flesh											
3	Purple Majesty	47	24	118	27	43	28	51	22	65	25
4	CO05028-4P/PY	56	22	158	29	111	36	112	26	109	28
5	CO05028-11P/RWP	79	32	133	29	79	32	154	26	112	30
6	CO05079-4P/PW	45	21	129	27	48	28	116	21	85	24
Russet Trial											
7	Russet Norkotah	62	28	84	22	23	24	67	13	59	22
8	ATX05142-2RU	44	23			16	29	39	8	33	20
9	AC05039-2RU	61	28	69	19	27	30	76	21	58	25
10	CO06057-3RU	71	38	99	26	9	26	45	12	56	25
Mean		63	28	104	23	48	30	87	18	74	25

¹ 4-8oz for russets

Table 10. Yield and Percent B (<4 oz.) Tubers for Clones in the Southwestern Regional Trial, 2014

Clone / Variety	California				Colorado ¹		Texas				Mean		
	KRN		TUL		SLV		SPR		DAL		Mean		
	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	Cwt/A	%	
Yellow Flesh													
1	Yukon Gold	48	21	37	9	34	8	51	28	67	14	47	16
2	CO05035-1PW/Y	81	28	47	10	31	5	41	23	109	16	62	17
Colored Flesh													
3	Purple Majesty	129	65	170	38	188	43	91	60	87	38	133	49
4	CO05028-4P/PY	121	48	120	22	114	20	167	54	186	43	142	37
5	CO05028-11P/RWP	99	40	93	20	109	20	127	51	275	46	141	35
6	CO05079-4P/PW	130	61	141	30	164	41	113	67	243	43	158	48
Russet Trial													
7	Russet Norkotah	93	42	73	19	32	8	38	41	107	21	69	26
8	ATX05142-2RU	106	55			43	11	20	36	68	14	59	29
9	AC05039-2RU	54	24	42	12	20	6	33	37	54	15	41	19
10	CO06057-3RU	75	40	89	23	76	16	18	50	40	10	59	28
Mean		94	42	90	20	81	18	70	45	123	26	91	30

¹ Fingerling=< 6 inch

Table 11. Yield and Percent Culls/No. 2s for Clones in the Southwestern Regional Trial, 2014

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	%	
Yellow Flesh													
1	Yukon Gold	0	0	36	9	8	2	0	0	0	0	9	2
2	CO05035-1PW/Y	0	0	17	4	5	1	1	1	0	0	5	1
Colored Flesh													
3	Purple Majesty	0	0	42	9	5	1	13	8	0	0	12	4
4	CO05028-4P/PY	0	0	31	6	2	0	2	1	0	0	7	1
5	CO05028-11P/RWP	0	0	23	5	10	2	2	1	0	0	7	2
6	CO05079-4P/PW	0	0	34	7	1	0	2	1	0	0	7	2
Russet Trial													
7	Russet Norkotah	0	0	28	7	11	3	3	4	32	6	15	4
8	ATX05142-2RU	0	0			8	2	2	4	5	1	4	2
9	AC05039-2RU	0	0	39	11	5	1	1	1	0	0	9	3
10	CO06057-3RU	0	0	30	8	1	0	1	2	0	0	6	2
Mean		0	0	31	7	6	1	3	2	4	1	8	2

¹ includes over 16 oz tubers

Table 12. Specific Gravity for Clones in the Southwestern Regional Trial, 2014

Clone / Variety	California	Colorado	Texas		Mean
	TUL	SLV	SPR	DAL	
Yellow Flesh					
1 Yukon Gold	1.092	1.082	1.066	1.071	1.078
2 CO05035-1PW/Y	1.081	1.078	1.053	1.060	1.068
Colored Flesh					
3 Purple Majesty	1.082	1.084	1.066	1.065	1.074
4 CO05028-4P/PY	1.078	1.086	1.068	1.065	1.074
5 CO05028-11P/RWP	1.074	1.084	1.074	1.068	1.075
6 CO05079-4P/PW	1.087	1.083	1.081	1.073	1.081
Russet Trial					
7 Russet Norkotah	1.075	1.078	1.066	1.065	1.071
8 ATX05142-2RU		1.095	1.067	1.086	1.083
9 AC05039-2RU	1.088	1.087	1.074	1.069	1.080
10 CO06057-3RU	1.092	1.095	1.074	1.075	1.084
Mean	1.083	1.085	1.069	1.070	1.077

Table 13. Average Tuber Weight (Size) and Shape for Clones in the Southwestern Regional Trial, 2014

Clone / Variety	Weight (oz.)				Shape ¹					Length	Length	Width	
	California	Texas		Mean	California	Colorado	Texas		Mean	/ Width	/ Width	/ Thickness	
	TUL	SPR	DAL		TUL	SLV	SPR	DAL		California	Colorado	Colorado	
	TUL	SPR	DAL	Mean	TUL	SLV	SPR	DAL	Mean	TUL	SLV	SLV	
Yellow Flesh													
1	Yukon Gold	7.2	3.8	7.1	6.1	3.3	1.0	2.5	3.0	2.4	1.2	1.2	1.2
2	CO05035-1PW/Y	6.7	4.1	6.0	5.6	3.1	2.0	3.0	3.0	2.8	1.3	1.3	1.2
Colored Flesh													
3	Purple Majesty	4.1	2.5	11.8	6.1	3.3	2.0	3.0	3.0	2.8	1.9	1.5	1.2
4	CO05028-4P/PY	5.0	2.5	10.7	6.1	3.3	2.0	2.5	3.0	2.7	1.4	1.2	1.2
5	CO05028-11P/RWP	5.2	3.1	9.9	6.1	2.4	1.0	3.0	2.5	2.2	1.3	1.2	1.3
6	CO05079-4P/PW	4.5	2.6	10.6	5.9	4.0	2.0	2.5	4.0	3.1	1.6	1.5	1.2
Russet Trial													
7	Russet Norkotah	5.4	4.2	5.6	5.1	3.5	4.0	4.0	4.0	3.9	1.8	1.9	1.2
8	ATX05142-2RU		4.7	6.6	5.6		2.0	3.0	4.0	3.0		1.5	1.1
9	AC05039-2RU	6.0	4.1	5.3	5.1	3.6	3.0	4.0	4.0	3.7	1.8	1.8	1.2
10	CO06057-3RU	4.9	3.2	7.2	5.1	4.0	3.0	3.0	4.0	3.5	2.1	1.8	1.2
Mean		5.5	3.5	8.1	5.7	3.4	2.2	3.1	3.5	3.0	1.6	1.5	1.2

¹ 1=round to 5 =long

Table 14 Eye Depth and Growth Cracks for Clones in the Southwestern Regional Trial, 2014

Clone / Variety	Eye Depth ¹				Growth Cracks ²					
	California	Texas		Mean	California	Colorado	Texas		Mean	
	TUL	SPR	DAL		TUL ³	SLV	SPR	DAL		
Yellow Flesh										
1	Yukon Gold	3.1	4.0	4.0	3.7	0.5	4.0	5.0	5.0	4.7
2	CO05035-1PW/Y	3.9	4.0	4.0	4.0	0.2	4.0	5.0	5.0	4.7
Colored Flesh										
3	Purple Majesty	4.1	4.0	4.0	4.0	0.5	5.0	5.0	5.0	5.0
4	CO05028-4P/PY	3.0	4.0	4.0	3.7	1.2	4.0	5.0	5.0	4.7
5	CO05028-11P/RWP	3.8	4.0	4.0	3.9	2.7	4.0	5.0	5.0	4.7
6	CO05079-4P/PW	3.4	4.0	3.5	3.6	0.4	5.0	5.0	5.0	5.0
Russet Trial										
7	Russet Norkotah	3.6	3.5	3.0	3.4	0.8	5.0	5.0	5.0	5.0
8	ATX05142-2RU		4.0	4.0	4.0		4.0	5.0	5.0	4.7
9	AC05039-2RU	3.8	4.0	3.5	3.8	0.7	5.0	5.0	5.0	5.0
10	CO06057-3RU	3.9	4.0	3.0	3.6	1.1	5.0	5.0	5.0	5.0
Mean		3.6	4.0	3.7	3.8	0.9	4.5	5.0	5.0	4.8

¹ 1=deep to 5=shallow

² 1 to 5=none

³ % of total count

Table 15. Percent Hollow Heart/Brown Center, Verticillium Wilt Rating, Blackspot Bruising, and Fry Results for Clones in the Southwestern Regional Trial, 2014

Clone / Variety	Hollow Heart/Brown Center (%)					Vert Wilt Rating 8/19/2014 ¹ AUDPC ²		Blackspot Bruising		Fry Data ⁵		
	California	Colorado	Texas		Mean	California	California	Colorado	Colorado			
	TUL	SLV	SPR	DAL		TUL	TUL ³	SLV ⁴	SLV ⁶	SLV ⁷	MS ⁸	
Yellow Flesh												
1 Yukon Gold	13	1	3	0	4	6.1	855	0.0	4.7	2.0	2.0	4.0
2 CO05035-1PW/Y	0	1	18	0	5	3.8	325	2.5	4.9	3.0	3.0	2.0
Colored Flesh												
3 Purple Majesty	0	1	0	0	0	6.3	728	0.0				
4 CO05028-4P/PY	3	0	0	0	1	4.3	331	2.5				
5 CO05028-11P/RWP	23	2	0	0	6	4.5	377	0.0				
6 CO05079-4P/PW	5	0	0	0	1	3.6	230	0.0				
Russet Trial												
7 Russet Norkotah	15	1	0	8	6	7.8	1267	2.5	4.9	3.0	2.0	3.0
8 ATX05142-2RU		0	0	13	4				4.7	2.0	3.0	2.0
9 AC05039-2RU	0	0	0	10	3	7.5	1213	2.5	5.0	2.0	3.0	1.0
10 CO06057-3RU	33	0	0	0	8	6.0	753	0.0	4.3	1.0	1.0	5.0
Mean	10	1	2	3	4	6	675	1	4.7	2.2	2.3	2.8

¹ 0= 0 symptoms, 1= Trace, 2= 1-5% of plants show symptoms of disease, 3= 5-10%, 4= 10-20%, 5= 20-40%, 6= 40-60%, 7= 60-75%, 8= 75-90%, 9= 90-100%

² Area Under Disease Product Curve Based on reading taken 80, 92, 99 days from planting

³ Percent

⁴ 1 to 5=none

⁵ 0=light, 5= dark

⁶ at harvest

⁷ after 8 weeks at 45° F

⁸ 1-5=excellent

Table 16. Vigor and Flesh Color for Clones in the Southwestern Regional Trial, 2014

Clone / Variety	Vigor ¹					Flesh Color ²					
	California	Colorado	Texas		Mean	California	Colorado	Texas		Mean	
	KRN	SLV	SPR	DAL		TUL	SLV	SPR	DAL		
Yellow Flesh											
1 Yukon Gold	2.5	4.0	3.6	3.6	3.4	2.9	2.0	3.5	3.5	3.0	
2 CO05035-1PW/Y	3.5	4.0	3.4	3.9	3.7	3.1	3.0	3.5	2.5	3.0	
Colored Flesh											
3 Purple Majesty	2.0	3.3	3.6	2.3	2.8	5.0	4.0	3.5	4.0	4.1	
4 CO05028-4P/PY	2.8	3.8	3.7	4.3	3.6	5.0	4.0	3.5	3.5	4.0	
5 CO05028-11P/RWP	3.3	3.8	3.6	4.0	3.7	4.6	4.0	3.5	3.5	3.9	
6 CO05079-4P/PW	4.0	3.3	3.8	4.5	3.9	5.0	5.0	4.5	4.5	4.8	
Russet Trial											
7 Russet Norkotah	1.8	3.0	3.7	3.5	3.0	1.2	1.0	1.0	1.0	1.0	
8 ATX05142-2RU	3.8	3.0	3.7	4.0	3.6		1.0	1.0	1.0	1.0	
9 AC05039-2RU	1.0	3.3	3.4	3.0	2.7	1.1	1.0	1.0	1.0	1.0	
10 CO06057-3RU	2.0	3.8	3.5	3.8	3.3	1.0	1.0	1.0	1.0	1.0	
Mean	3	3.5	3.6	3.7	3.4	3.2	2.6	2.6	2.6	2.7	

¹ 1= poor, 2= fair, 3= medium, 4= vigorous, 5= very vigorous

² 1=light to 5=dark

Table 17. Notes for Clones in the Southwestern Regional Trial, 2014

Clone / Variety	California	Colorado	Texas
	TUL	SLV	SPR
Yellow Flesh			
1 Yukon Gold	Low tuber set (94%), Large size (7.2 oz), Low tuber per plant (5.3)		BOT, light set, nice shape, poor internals
2 CO05035-1PW/Y	Low culls (17.4 CWT), Low growth crack (0.2%)		nice flesh, light purple skin
			nice shape and flesh
			drop, poor shape, pinto
Colored Flesh			
3 Purple Majesty	High culls (41.5 CWT), Small size (4.1 oz), High tuber per plant (10.24)	HH	light flesh, poor skin finish, all blue like flesh, light set
4 CO05028-4P/PY	High tuber per plant (10.27), High yield (541.2 CWT), deep eye (3.0), Low fresh merit (2.9)		poor flesh, some road map, purple white flesh, variable flesh color, yield-
5 CO05028-11P/RWP	22.5% Hollow heart	Some blackspot	poor skin, red flesh, poor flesh color
6 CO05079-4P/PW	100% tuber set, High vert. wilt resistance	Stem end rotten,	heavy set, poor shape, nice smooth skin+, solid flesh color, good skin set
			nice skin, blocky, solid flesh color, smooth skin, nice shape
Russet Trial			
7 Russet Norkotah	High fresh merit (4.5), low vert. wilt resistance		very nice, BOT-, small, nice shape, smooth
8 ATX05142-2RU			heavy set, smooth, too blocky?, smooth, nice shape
9 AC05039-2RU	Low yield (353.2 CWT), low vert. wilt resistance		nice shape, small, ok shape
10 CO06057-3RU	long (2.1 L/W), 32.5% Hollow heart		small, drop, low yield
			rough, pointed, small
			nice shape, some pointed
			small, pointed
			skinny, pointed

Table 18. Summary for Clones in the Southwestern Regional Trial, 2014

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	
Yellow Flesh															
1	Yukon Gold	96	1.9	3.4	2.8	341	84	26	16	2	3.5	1.078	Oval	6.1	White
2	CO05035-1PW/Y	92	2.8	3.8	4.5	433	87	20	17	1	3.3	1.068	Oblong	5.6	Pur-White
Colored Flesh															
3	Purple Majesty	77	3.4	3.4	3.0	291	60	5	49	4	3.3	1.074	Oval	6.1	Purple
4	CO05028-4P/PY	98	2.6	4.0	3.3	421	71	8	37	1	3.6	1.074	Oblong	6.1	Purple
5	CO05028-11P/RWP	94	2.6	3.9	3.2	421	71	5	35	2	3.8	1.075	Oblong	6.1	Purple
6	CO05079-4P/PW	99	3.3	3.8	3.7	364	62	5	48	2	3.1	1.081	Oblong	5.9	Purple
Russet Trial															
7	Russet Norkotah	99	2.5	3.1	2.0	323	78	13	26	4	3.6	1.071	Long	5.1	Russet
8	ATX05142-2RU	99	2.0	3.8	3.4	282	83	17	29	2	3.1	1.083	Oblong	5.6	Russet
9	AC05039-2RU	98	2.0	2.6	2.4	278	83	14	19	3	2.7	1.080	Oblong	5.1	Russet
10	CO06057-3RU	97	2.7	3.4	3.0	292	76	14	28	2	3.4	1.084	Oblong	5.1	Russet

New Entries 2015 Southwestern Regional Trial

Entry #	Clone/Cultivar	Parents		Flower Color	Vine Size	Maturity	Tuber Shape	Skin Type	Entered By	Use	Seed Source	2014 Year	2015 Status
		Female	Male										

Specialty Trial

Specialty Trial													
Yellow Flesh													
1	Yukon Gold	Norgleam	W5279-4	Pink	Medium	Early	Oval	White	Check	Spec	CO	***	***
2	CO05035-1PW/Y	Masquerade	US147-96	Red-Purple	Large	Medium	Oblong	Pur-White	CO	Fresh	CO	1	
Colored Flesh													
3	Purple Majesty	All Blue	ND2008-2	Blue	Medium	Early	Oval	Purple	Check	Spec	CO	***	***
4	CO05028-4P/PY	AC99329-4R/Y	CO97227-2P/PW	Purple	Large	Medium	Oblong	Purple	CO	Dual	CO	1	
5	CO05028-11P/RWP	AC99329-4R/Y	CO97227-2P/PW	Blue-Purple	Med-Large	Medium	Oblong	Purple	CO	Fresh	CO	1	
6	CO05079-4P/PW	CO97216-3P/PW	CO97227-2P/PW	Blue-Purple	Medium	Medium	Oblong	Purple	CO	Fresh	CO	1	
Russet Trial													
7	Russet Norkotah	ND9687-5RU	ND9526-4RU	White	Small	Early	Long	Russet	Check	Fresh	CO	***	***
8	ATX05142-2RU	Rio Grande Russet	A97214-4	White	Large	Early	Oblong	Russet	TX	Fresh	CO	1	
9	AC05039-2RU	A99032-2TE	COA00287-1	White	Med-Small	Early	Oblong	Russet	CO	Dual	CO	1	
10	CO06057-3RU	CO98009-3RU	Premier Russet	White	Med-Large	Medium	Oblong	Russet	CO	Dual	CO	1	

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