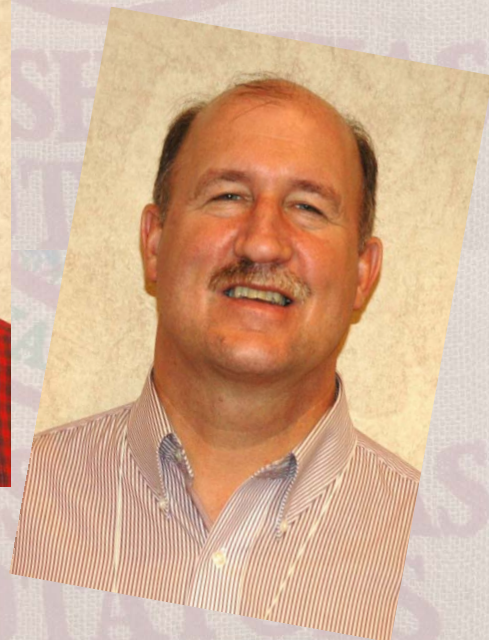


Texas Potato Breeding Report 2012



**Texas A&M AgriLife Research
Department of Horticultural Sciences
Texas A&M University**

**Creighton Miller, Douglas Scheuring, and Jeff Koym
College Station and Lubbock**

Cooperators are a major component of the Texas Potato Breeding and Variety Development Program. All of our trial and selection work is done on cooperator fields, and without them we would not be able to accomplish our tasks. Pictured (L-R) are Bruce Barrett, Springlake Potato Sales, Springlake, Jack Wallace, Jr., JW Farms, Ltd, Edinburg, and Milt Carter, CSS Farms, Dalhart. We started cooperating with Bruce and his father Frank in 1987. Their operation is on a deep sand with a hot summer growing season starting in March-April and finishing in July-September. We have worked with Jack and his father Jack Sr. since 2002. With this far South Texas location, in the lower Rio Grande Valley, we are able to have winter trials (December thru April). This location has been beneficial in working with out -of-cycle material and our ZC research. We have worked with Milt's operation since 1999. This far Northwest location in the Texas Panhandle is planted in May and harvested in September-October, which gives us a late summer/fall crop.

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Bruce Barrett of Springlake Potato Sales donated ten acres for growth of first year seedlings and advanced selections/variety trials near Springlake. Milt Carter, CSS Farms, donated seven acres for growth of first year seedlings and advanced selections/variety trials near Dalhart.

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Co-workers:

We would like to express our gratitude for the significant contributions of graduate student Sarah Turner, and student workers Angel Chappel, Elizabeth Villas, Brianna Lewis, Craig Black, Sidney Glass, and Mike Jenson. Special thanks go to Jim Winder.

Prefix Source Key for Numbered Advanced Selections:

A = cross made in Aberdeen, Idaho and selected in Idaho

AC = cross made in Aberdeen, Idaho and selected in Colorado

ADX = cross (diploid X diploid) made in Aberdeen, Idaho, and selected in Idaho

AF = cross made and selected in Maine at Aroostook Farm, Presque Isle

AND = cross made in Aberdeen, Idaho and selected in North Dakota

AO = cross made in Aberdeen, Idaho and selected in Oregon

AOA= cross made in Aberdeen, Idaho, seedling produced in Oregon, and selected in, Idaho

AOTX = cross made in Aberdeen, Idaho, tubers produced in Corvallis, Oregon greenhouse, and original field selection in Texas

ATD = cross (tetraploid X diploid) made in Aberdeen, Idaho and selected in Idaho

ATTX = cross made in Aberdeen, Idaho, tubers produced in College Station, Texas greenhouse, and original field selection in Texas

ATX = cross made in Aberdeen, Idaho and selected in Texas

B = cross made in Beltsville, Maryland and selected in Maine

BC = cross made in Beltsville, Maryland and selected in Colorado

BO = cross made in Beltsville, Maryland and selected in Oregon

BN = cross made in Beltsville, Maryland and selected in North Dakota

BTX = cross made in Beltsville, Maryland and selected in Texas

CO = cross made and selected in Colorado

COTX = cross made in Colorado and selected in Texas

DT = cross made in North Dakota and selected in Texas

FL = cross made and selected by Frito-Lay

JTTX = cross made by USDA/ARS Madison, Wisconsin, tubers produced in College Station, Texas greenhouse, and original field selection in Texas

MB = cross made in Minnesota and selected in Maine (Beltsville, Maryland program)

MN = cross made and selected in Minnesota

MS “letter” = cross made and selected in Michigan with ‘letter’ indicating year of selection with 1988(A) as year 1 of the program

MWTX = cross made by USDA/ARS Madison, Wisconsin and selected in Texas

ND = cross made and selected in North Dakota

NDA= cross made in North Dakota and selected in Idaho (Aberdeen)

NDC = cross made in North Dakota and selected in Colorado

NDO = cross made in North Dakota and selected in Oregon

NDTX = cross made in North Dakota and selected in Texas

NY = cross made and selected in New York

OR = cross made and selected in Oregon

PA = cross made and selected in Prosser, Washington

POR = cross made in Prosser, Washington and selected in Oregon

TX = cross made and selected in Texas

TXA = cross made in Texas and selected in Idaho (Aberdeen)

TXAV = cross made in Texas, selected in Idaho (Aberdeen) and reselected in Alberta, Canada

TXND = cross made in Texas and selected in North Dakota

TXNS "numbers" = Texas selections (strains) out of Russet Norkotah made by Texas program

TXYG "numbers" = Texas selections (strains) out of Yukon Gold made by Texas program

VC = cross made in Lethbridge, Alberta and selected in Colorado

Variety strain "numbers" = selections (strains) out of various varieties made by Gene Shaver in Nebraska

Variety strain "letters" = selections (strains) out of various varieties made by Warren Trank in Nebraska

Mission Statement

The mission of the Texas Potato Breeding and Variety Development Program of Texas A&M AgriLife Research is to identify and/or develop improved varieties adapted to the diverse Texas environmental conditions that will result in increased profits for the industry and provide superior products for consumers.

Impact Statement

Since the inception of the Texas Potato Breeding and Variety Development Program in 1973, 2,244,573 seedlings have been grown for selection in Texas, from which 10,516 original selections have been made. Thirteen improved varieties have been developed/co-developed and/or released from this program. Most of the russet potatoes grown in Texas in 2012 were to the improved Texas Russet Norkotah strains. When this program was initiated in 1973, the average yield of the summer crop in Texas was about 200 Cwt. /A. In 2010, the average summer crop yield in Texas was reported to be 460 Cwt. /A, the highest in the nation among 11 states with summer crop production. In addition, the farm gate value of the crop has grown from <\$20 million to about \$100 million, with an annual economic impact to the state in is estimated to exceed \$250 million. Of the new varieties developed/released in the US in the last 10 years, those developed by the Texas program collectively ranked third in total seed acreage entered into certification in 2011. Certified seed acreage of the Texas Russet Norkotah strain selections continued to increase in 2011.

ZC Research Summary

The overall objective has been to evaluate a wide range of germplasm for possible resistance /tolerance to the ZC complex (and good chip quality), in order to identify and/or develop varieties for the industry which can be more successfully grown when/where conditions for expression of ZC are present. The studies are an integral part of the Texas Potato Breeding and Variety Development Program, and in 2012 were conducted at College Station, with field plantings at Weslaco, Springlake, and Dalhart. Insecticides were applied in Springlake and Dalhart.

Our approach has been to start with the most advanced material, include multi-location and multi-season evaluations, and verification of findings under controlled caged conditions. Source material has included named varieties, materials from the Southwestern and Western Regional Trials, as well as the USPB SFA Chip trial and the Chip Potato Breeders Trial. Texas Breeding Program selections have also been included. Trial locations have included Dalhart, Springlake, and Weslaco. Some 53,000 tubers, representing more than 600 varieties/selections, have been fresh-cut evaluated or chipped for ZC. Cage verification studies have been conducted since 2008 in Weslaco.

The survival rate of plants in field was different compared to cage. Plants in the cages were more affected by early death due to psyllids or Lso infection, probably. Atlantic was usually the most susceptible to ZC with at least one tuber exhibiting ZC symptoms. Yield data collected showed an effect of psyllids or ZC on tuber production - lower yields were observed when plants were ZC infected as compared to uninfected, this was especially noticeable on Atlantic.

There are different measures that can quantify the effect of ZC but in this report our focus was on the incidence of ZC, here we report the percentage of plants with ZC symptoms based on the produced tubers. If a plant produced at list one tuber with ZC symptoms then this plant was considered ZC positive. Each trial was analyzed independently (Table 1).

All the varieties and selection included in our studies thus far and using our strategy of comparing both caged and uncaged field study, show ZC symptoms. For example, in the Weslaco 2012 cage study we observed an important percentage of ZC incidence in all the selections. In conclusion, none of our selections as of November 2012 were resistant to ZC.

Nevertheless, some varieties performed extremely well in a given year, maybe due to the environment on that year. For example NDTX059828-2W ranked first for ZC incidence in the cage study in Weslaco 2011 (table 1, 11% of the plants were ZC positive) and performed well in the field study of Weslaco 2012. Similarly BTX1544-1Y and TX03196-1W presented only a limited number of plants infected with ZC in those experiments (Table 1).

The qPCR tests conducted on this material showed that several of the plants not exhibiting tubers with ZC symptoms were positive by qPCR indicating the presence of the bacteria in the tuber samples. This means that Lso was able to move and replicate? in these plants. Although we cannot be sure of the time these plants were infected, presumably those in the cage were infected seven weeks before harvest, which should have been enough time to develop symptoms in the tubers.

We also measured other parameters such as Lso levels and total phenolics in the same tubers samples (Levy et al., publication in preparation).

Our results show that:

- As expected, a correlation between the percent of tubers with ZC and Lso titer was found in all trials.
- Similarly, a correlation between the percent of tubers with ZC and total phenolics in the tuber was found: the higher the percent of ZC in tubers from a single plant the higher the quantity of phenols in those tubers.
- There were differences in Lso quantification by qPCR among these selections which indicate they were infected with Lso. Symptom development is not correlated with the quantity of Lso.
- No single selection produced the level of tolerance across all years and all sites that would make it commercially interesting. Albeit, some selections produced remarkable results under certain conditions.

We are interested understanding the interaction between environment and those selections that produce such noticeable results.

In conclusion it is not surprising to find variable data in term of ZC incidence knowing it is expected that potato varieties perform differently in different locations, in different times of the year, in different years and possibly dealing with different psyllid populations and/or different quantities of Lso. It cannot be excluded that differences in seed quality, including viruses might have an impact on the susceptibility of the plant to insects and diseases.

In the future we will continue to work with the most promising chip selections from all US public breeding programs; these will be evaluated for yield and quality characteristics including ZC.

- The outstanding entries based on these trials will be subjected to controlled caged confirmation screening for ZC tolerance/resistance.
- Crosses between the most promising selections have been initiated to stack genes from our material and that of other programs.
- Laboratory characterization is ongoing.

Our program cooperated with a number of others at both the state and national levels. In Texas, we cooperated with Drs. Don Henne and John Jifon in Weslaco. At College Station, we cooperated with Drs. Cecilia Tamborindeguy (Entomology), Dennis Gross (Plant Pathology and Microbiology) and Elizabeth Pierson and Julien Levy (Horticulture). At Halfway, we had cooperative trials with Drs. Pat Porter and Don Henne. At Springlake and Dalhart, we had cooperative trials with Dr. Ron French. We conducted major trials at Springlake and Dalhart. We also had cooperative studies with Drs. John Trumble and Sean Prager at Riverside, CA, Joe Munyaneza at Wapato, WA, and Rich Novy at Aberdeen, ID. A very successful Field Day was conducted in July at Springlake and was well attended by many, including the above mentioned cooperators.

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Introduction

Program Summary

The Texas Potato Breeding and Variety Development Program used two locations in the 2012 growing season (Table 1). The first planting was near Springlake on 24 to 31 March and harvested on 24, 31, July, and 2 August. This location included fifteen replicated trials and first generation seedlings for selection. The second planting was near Dalhart on 7 to 11 May and harvested on 3, 10, 17, 18 September 1, and 7 October. Fifteen replicated trials, a seed increase nursery, and first year seedlings for selection were planted at this site. The Texas program entered five selections (COTX04015-3AW/Y, AOTX02136-1Ru, ATTX98453-3R, COTX02172-1R, and COTX02293-4R) in the Southwestern Regional Trials conducted in Texas, Colorado, and two sites in California. The Texas Program also had four entries in the Western Regional Red/ Specialty Trial (ATTX98453-6R, ATTX98468-5R/Y, COTX01403-4R/Y, and ATX03564-1W/Y). These trials were conducted at multiple locations in six western states.

A major focus of the program in 2012 continued on Zebra Chip Research, with emphasis on varietal tolerance/resistance. The program also continued to stress virus testing, clean-up, and minituber multiplication of a number of selected clones. A successful field day was held on 19 July at Springlake, and was well attended by over 50 growers and Zebra Chip collaborators from Mexico to Canada.

Seedling program

In 2012, 67,193 first year seedling tubers, resulting from 647 different parental combination or families (crosses), were grown for selection. Some 32,549 seedling tubers were planted on the Barrett Farm near Springlake while 34,644 were planted at CSS Farm near Dalhart. Five hundred and seven original selections were made from this material (Figure 1).

The 2012 first year seedling tubers from Texas (5,440) were grown from true seed during the fall of 2011 at College Station. These seed were from crosses made in Lubbock, Madison, WI and Aberdeen, ID. The remaining seedling tubers were provided by Rich Novy, Idaho (4,726), Solomon Yilma, Oregon (18,508), David Holm, Colorado (18,088), Susie Thompson, North Dakota (17,184), Bryan Bowen, Wisconsin (3,247).

Texas also sent second and third-size seedling tubers to Idaho (710), Colorado (3,448), and North Dakota (1,745) for first year selections.

Table 1. Trial locations, name of trial, number of entries, and number of plots evaluated in 2012.

Springlake			Dalhart		
Trial	# of Entries	# of Plots	Trial	# of Entries	# of Plots
Field day Russets (not reported)	70	70	National Chip	222	222
Field day Red/Specialty(not reported)	65	65	Western and Southwestern Regional Chip	12	48
Western and Southwestern Regional Chip	12	48	Western Regional and Advanced Texas Selection Russet	26	104
Western and Southwestern Regional Russet	27	108	Western Regional and Advanced Texas Selection Red	17	68
Western and Southwestern Regional Red	15	60	Western Regional and Advanced Texas Selection Red/Yellow Fl	9	36
Western and Southwestern Regional Red/Yellow Flesh	12	48	Western Regional Advanced Texas Selection White/Yellow Fles	9	36
Western and Southwestern Regional White/Yellow Flesh	12	48	Commercial Variety Chip	8	32
Western and Southwestern Regional Purple/ Purple Flesh	5	20	Texas Advanced Chip Selection	30	120
Southwestern Regional Fingerling	3	12	2011 Chip Selection	103	103
Texas Advanced Chip Selection	9	36	Texas Advanced Russet Selection	21	84
Texas Advanced Russet Selection	17	68	2011 Russet Selection	196	196
Texas Advanced Red Selection	8	32	Texas Advanced Red Selection	9	36
Texas Advanced Red Skin Yellow Flesh Selection	3	12	2011 Red Selection	65	65
Texas Advanced White Skin Yellow Flesh Selection	8	32	Texas Advanced Red Skin Yellow Flesh Selection	9	36
Texas Advanced Purple Skin Purple Flesh Selection	5	20	2011 Red Skin Yellow Flesh Selection	12	12
Texas Advanced Small Potato Selection	15	15	Texas Advanced White Skin Yellow Flesh Selection	14	56
Texas Advanced Fingerling Selection	21	21	2011 White Skin Yellow Flesh Selection	23	23
Total	172	715	Texas Advanced Small Potato Selection	16	64
			2011 Small Potato Selection	26	26
			Texas Advanced Fingerling Selection	25	100
			2011 Fingerling Selection	2	2
			Texas Advanced Purple Skin Purple Flesh Selection	6	24
			2011 Purple Flesh Selection	4	4
			Total	864	1497
			Total Entries and Plots	1036	2212

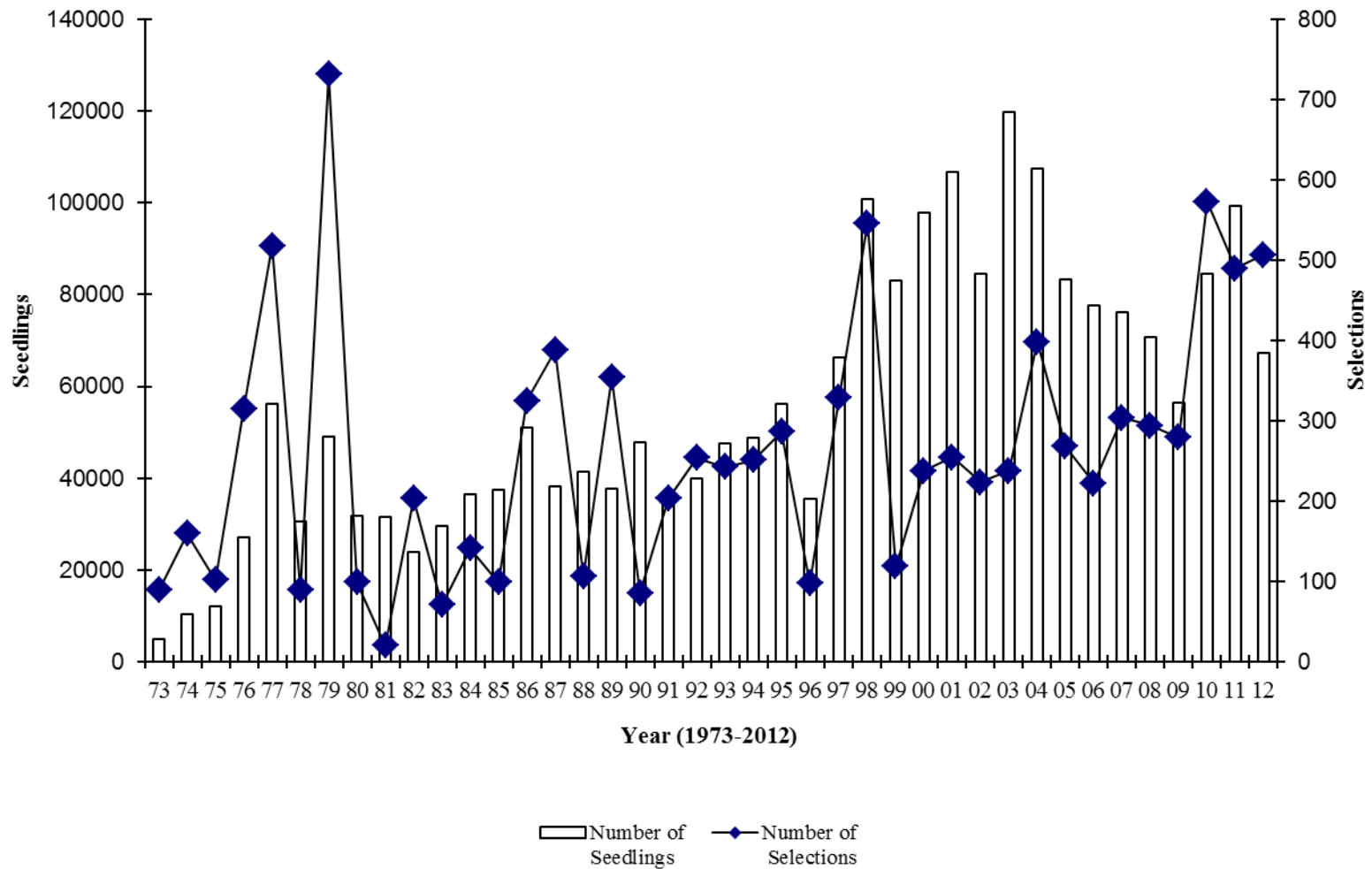


Figure. 1. Number of first year seedling tubers grown for original selection and number of selections made since the inception of the Texas Potato Variety Development Program.

Adaptation trials

The objectives of the adaptation trials were: (1) to test advanced selections and named varieties to determine their potential as replacement varieties for those presently grown in Texas, and (2) to identify potential parents for use in the Texas breeding program. Some 172 advanced selections/varieties were tested in replicated and non-replicated trials near Springlake, and 864 entries were evaluated near Dalhart. A total of 2,212 plots were planted and harvested at the two locations. A seed increase nursery was grown at the San Luis Valley Research Center, Center, Colorado, by Dr. David Holm.

Since 1973, 29,482 entries have been evaluated (Figure 2). Findings from the Texas Potato Variety Development Program trials have resulted in the release of several improved varieties which have contributed significantly to the competitiveness, sustainability, and profitability of the Texas potato industry.

Table A for each trial provides basic information regarding total yield and grade distribution of individual entries. Tables B, C, D, E, and F provide a more in-depth insight regarding variety characteristics. General notes on the entries can be found in Appendix A at the end of this report. Likewise, parentage can be found in Appendix B.

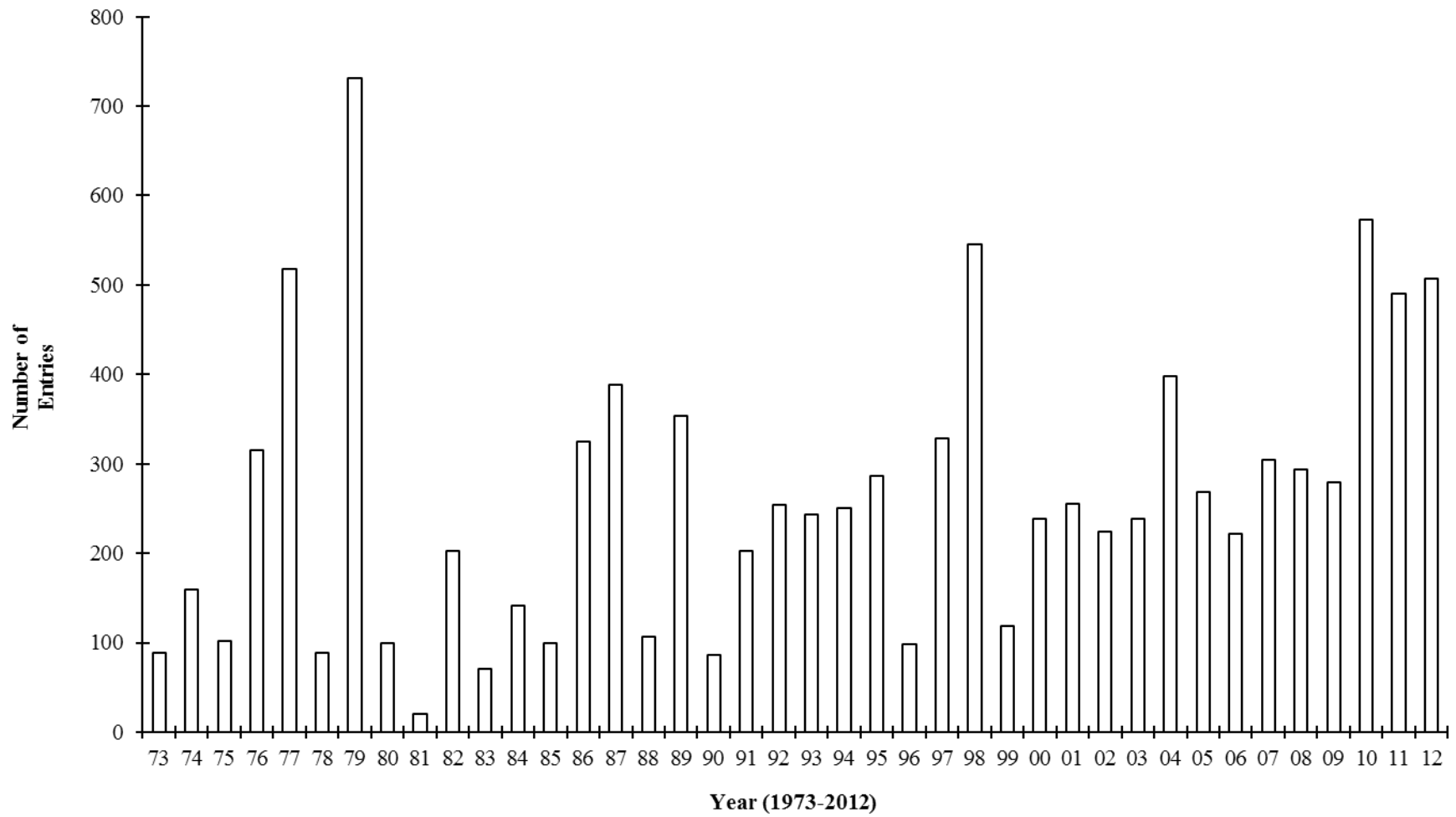


Figure 2. Number of varieties and advanced selections tested for their adaptability to Texas environmental conditions each year since the inception of the Texas Potato Variety Development Program in 1973.

Springlake Trials, 2012

Summary of growing conditions:

The trials were planted near Springlake on 24 to 31 March and harvested on 24, 31, and July, 2 August. Standard cultural practices for the area were used (Table 2). These trials were subjected to below average precipitation for the entire growing season, except for the 2nd week in July. High temperatures were 10 degrees higher and low temperatures were 7 degrees higher than normal in April and May.

Trials conducted:

- Field day Russets (not reported)
- Field day Red/Specialty(not reported)
- Western and Southwestern Regional Chip
- Western and Southwestern Regional Russet
- Western and Southwestern Regional Red
- Western and Southwestern Regional Red/Yellow
- Western and Southwestern Regional White/Yellow
- Western and Southwestern Regional Purple Skin Purple Flesh
- Southwestern Regional Fingerling
- Texas Advanced Chip Selection
- Texas Advanced Russet Selection
- Texas Advanced Red Selection
- Texas Advanced Red/Yellow Selection
- Texas Advanced White/Yellow Selection
- Texas Advanced Small Potato Selection Observation (not reported)
- Texas Advanced Fingerling Selection Observation (not reported)

Table 2. Environmental and cultural inputs for the 2012 Springlake Trials.		
Location:		
Springlake, Texas		
Soil Type		
Tivoli Fine Sand		
Seed Source		
New York, North Dakota, Colorado, Oregon, Texas and Idaho		
Date:		DAP
Planted	March 27, 2012	
Vines Killed (Red, Red/Yellow)	July 20, 2012	113
Vines Killed (Chip, White/Yellow)	July 20, 2012	113
Vines Killed (Russet)	July 27, 2012	120
Harvested (Red, Red/Yellow, White/Yellow)	July 24, 2012	117
Harvested (Chip)	July 31, 2012	124
Harvested (Russet)	August 2, 2012	125
Plot Information:		
Size of plots	21'	
Spacing between hills	9"	
Spacing between rows	36"	
Hills per plot	28	
Number of rows	2	
Number of reps	4	
Method of Harvest:		
Two-row drag digger, with hand pick up		
Fertilizer:		
Application:		
155-50-50# per acre		
Irrigation:		
Center Pivot		
Seed Treatment Applied:		
Cruiser Maxx		
Insecticide:		
Movento, Platinum, Epimek, Fulfill		
Fungicides Applied:		
None		
Herbicides Applied:		
Sencor, Roundup, Treflan		
Environmental Factors:		
<p>These trials were subjected to below average precipitation for the entire growing season, except for the 2 week in July. High temperatures were 10 degrees higher and low temperatures were 7 degrees higher than normal in April and May.</p>		

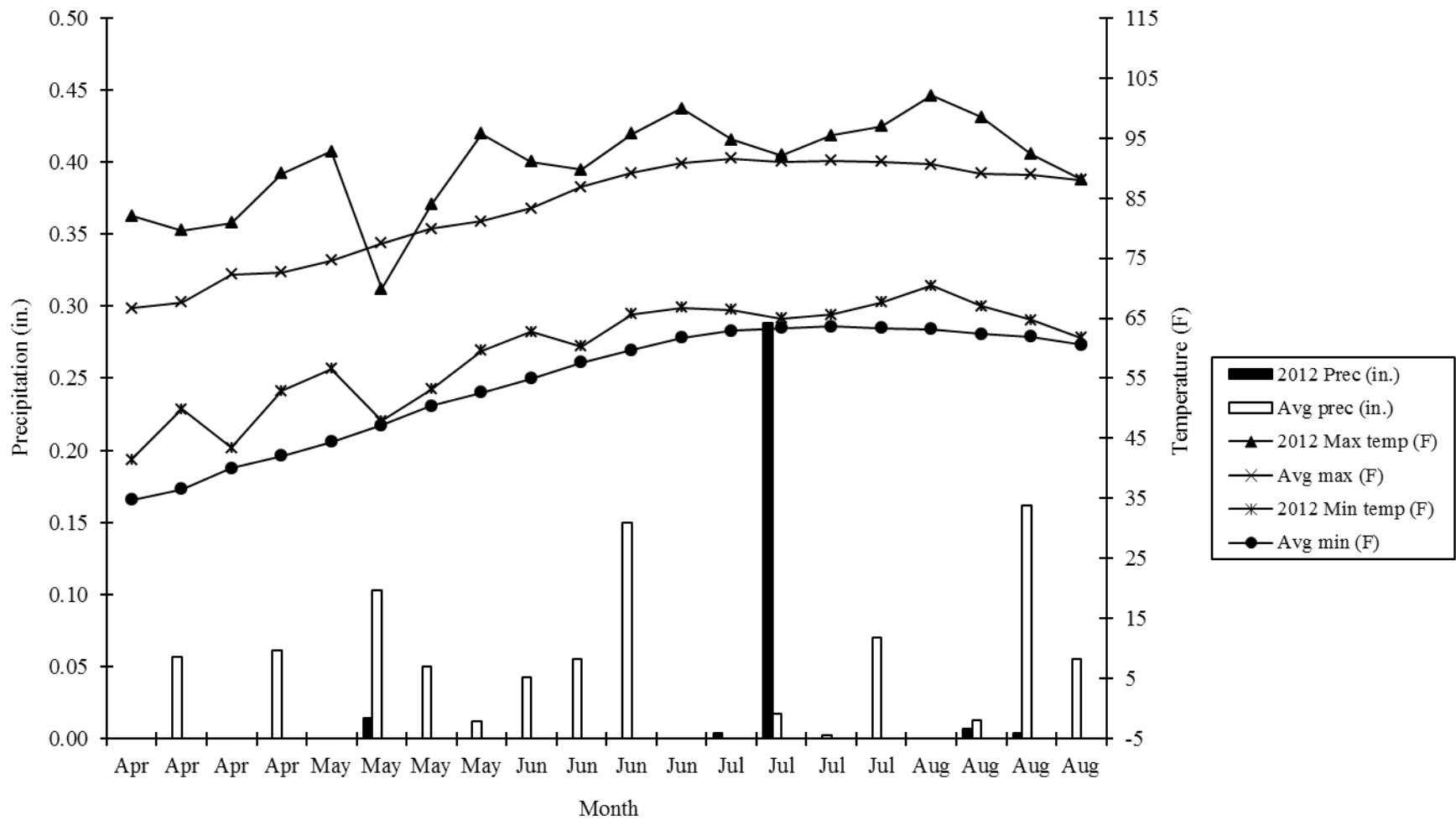


Figure 3. Weekly minimum/maximum temperatures and precipitation for the 2012 growing season near Springlake, Texas compared to the average minimum/maximum temperatures and precipitation (1949-2012).

Western and Southwestern Regional Trials

The Western Regional Trials were grown at 12 sites throughout the western United States as part of the WERA-27 project, with cooperators in California, Oregon, Washington, Idaho, Colorado, and Texas.

The Southwestern Regional Potato Research Program includes California, Colorado, and Texas. The objective is to evaluate promising advanced selections from the Texas and Colorado breeding programs. Entries that are successful in these trials are then graduated to the various Western Regional Trials.

Western and Southwestern Regional Chip Trial

This trial consisted of twelve entries, including the two check varieties Atlantic and Chipeta.

Results were as follows: (Springlake Tables 1a, 1b, 1c, 1d, 1e, and 1f)

- The outstanding entry for this trial, based on general rating and yield was CO03243-3W. AC00206-2W and AC03433-1W received best of trial designation for chip quality (Tables 1a, 1e and 1f).
- CO03243-3W had the highest total and marketable yields (Table 1a)
- Chipeta tended to oversize and had the highest yield of 10-18 oz. tubers. While CO02024-9W had the highest yield of <4 oz. tubers. A00188-3C had the highest yield of culls/No.2 tubers (Table 1a).
- CO02024-9W and A01143-3C had the highest percentage of < 4 oz. tubers (Table 1b).
- A00188-3C had the highest percentage yield of culls/No. 2 tubers (Table 1b).
- CO02321-4W had the highest specific gravity (Table 1b).
- AC03452-2W, Chipeta, and A01143-3C were the latest maturing entries while AC00206-2W was the earliest maturing entry (Table 1c).
- CO03243-3W had 18% vascular discoloration and Atlantic had 75% internal brownspot (Table 1d).
- AC00206-2W and AC03433-1W received a BOT for chip quality (Table 1f).

Comments on entries:

- CO03243-3W Round White smooth, nice, parent CR=1
- AC01151-5W Round White poor internals CR=1
- AC03452-2W Round White deep nose, heavy set+, small+ CR=1

- CO02033-1W Oblong White flat, drop+ CR=2
- CO02024-9W Oblong White uniformly small, small, nice CR=1
- Chipeta Oblong White too large, rough, large tubers+, heat sprouts CR=2
- A00188-3C Round White lots of culls, rough CR=1
- CO02321-4W Round White large tubers CR=1
- Atlantic Round White low yield, buff, poor internals, light set CR=1
- AC00206-2W Round White very nice+, size parent, too big?? CR=1
- A01143-3C Round White heat necrosis, small+, poor internals, heat sprouts++, drop+ CR=2
- AC03433-1W Round White poor shape, nice flesh CR=1

¹CR=chip color rating 1=light to 3= dark

Summary:

Overall, the outstanding entry based on general rating, marketable yield, and chip quality was CO03243-3W.

Springlake
Table 1a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 12 entries in the Western and Southwest Regional Chip Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz				
CO03243-3W	WR	360.4	302.7	149.9	93.7	59.1	0.0	57.2	0.5	4.7
AC01151-5W	WR	302.7	167.2	135.2	28.0	4.0	0.0	128.6	6.9	3.6
AC03452-2W	SW	290.1	154.9	111.7	29.7	13.5	0.0	131.5	3.6	3.6
CO02033-1W	WR	282.6	137.2	116.0	19.7	1.6	0.0	98.0	47.4	2.8
CO02024-9W	WR	271.6	111.7	84.5	27.1	0.0	0.0	155.6	4.3	3.6
Chipeta	WR	258.4	208.1	52.7	54.8	100.6	0.0	30.6	19.7	3.3
A00188-3C	WR	258.2	111.7	85.7	18.0	8.0	0.0	94.4	52.2	2.9
CO02321-4W	WR	230.9	181.7	92.5	60.5	28.7	0.0	48.4	0.9	3.9
Atlantic	WR	227.0	179.3	80.0	67.9	31.3	0.0	46.0	1.7	3.7
AC00206-2W	SW	218.3	126.7	104.6	19.0	3.1	0.0	88.0	3.6	3.9
A01143-3C	WR	216.6	63.1	50.8	7.8	4.5	0.0	124.8	28.7	2.4
AC03433-1W	WR	187.4	131.2	94.2	25.1	11.9	0.0	55.0	1.2	3.2
Average		258.7	156.3	96.5	37.6	22.2	0.0	88.2	14.2	3.4
L.S.D. (.05)		73.9	69.9	44.3	26.9	25.7		35.4	23.1	0.3

¹ 1=very poor to 5= excellent

Springlake
Table 1b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 12 entries in the Western and Southwest Regional Chip Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
CO03243-3W	WR	83.5	41.7	25.7	16.1	0.0	16.3	0.1	1.067	14.4	Round	White
AC01151-5W	WR	54.9	44.1	9.3	1.6	0.0	42.8	2.3	1.074	15.7	Round	White
AC03452-2W	SW	53.2	38.9	9.7	4.6	0.0	45.4	1.4	1.052	11.8	Round	White
CO02033-1W	WR	48.5	41.2	6.8	0.5	0.0	35.1	16.4	1.072	15.4	Oblong	White
CO02024-9W	WR	40.1	30.1	10.0	0.0	0.0	58.2	1.6	1.071	15.2	Oblong	White
Chipeta	WR	80.4	20.5	21.5	38.4	0.0	12.0	7.7	1.058	12.9	Oblong	White
A00188-3C	WR	42.5	32.1	7.2	3.1	0.0	37.6	20.0	1.069	14.8	Round	White
CO02321-4W	WR	76.9	39.8	24.5	12.7	0.0	22.7	0.4	1.081	17.0	Round	White
Atlantic	WR	77.4	34.9	30.3	12.2	0.0	21.9	0.7	1.078	16.5	Round	White
AC00206-2W	SW	57.9	47.7	8.8	1.4	0.0	40.4	1.7	1.076	16.1	Round	White
A01143-3C	WR	27.2	21.2	3.2	2.7	0.0	57.7	15.1	1.069	14.8	Round	White
AC03433-1W	WR	70.0	52.0	12.9	5.1	0.0	29.2	0.9	1.076	16.0	Round	White
Average		59.4	37.0	14.2	8.2	0.0	34.9	5.7	1.070	15.1		
L.S.D. (.05)		13.8	11.4	8.4	8.2		12.0	8.9	0.004	0.8		

Springlake
Table 1c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 12 entries in the Western and Southwest Regional Chip Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Average Number Stems/ Plant	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
CO03243-3W	WR	5.3	5.6	1.7	100	100	1.4	4.3	4.6	4.2	1
AC01151-5W	WR	7.5	3.5	1.6	90	97	1.8	3.8	4.1	3.8	3
AC03452-2W	SW	7.3	3.3	2.2	100	100	1.8	4.6	4.7	4.6	0
CO02033-1W	WR	6.2	3.7	1.8	99	100	2.3	3.8	3.8	3.9	3
CO02024-9W	WR	6.7	3.3	1.9	99	100	2.1	3.8	3.9	3.8	4
Chipeta	WR	3.6	6.2	1.9	95	97	1.6	4.5	4.8	4.7	0
A00188-3C	WR	6.2	3.4	2.3	100	100	2.4	3.9	3.9	3.7	4
CO02321-4W	WR	3.8	5.0	1.6	90	100	1.6	3.4	3.8	2.8	23
Atlantic	WR	3.5	5.3	1.5	97	100	2.0	3.3	3.7	3.4	6
AC00206-2W	SW	5.0	3.6	1.9	100	100	1.9	3.4	3.5	3.4	18
A01143-3C	WR	7.0	2.6	2.6	100	100	2.3	4.3	4.7	4.5	1
AC03433-1W	WR	3.9	4.1	1.4	87	96	1.6	3.7	4.2	3.7	3
Average		5.5	4.1	1.9	96	99	1.9	3.9	4.1	3.9	5
L.S.D. (.05)		1.4	0.7	0.2	6	ns	0.4	0.6	0.4	0.7	5

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Springlake
Table 1d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 12 entries in the Western and Southwest Regional Chip Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
CO03243-3W	WR	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	5	18	0
AC01151-5W	WR	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	10
AC03452-2W	SW	1.0	1.5	1.0	3.5	1.0	5.0	5.0	5.0	5.0	5.0	0	0	8	3
CO02033-1W	WR	1.0	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	3	0
CO02024-9W	WR	1.0	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	3	0
Chipeta	WR	1.0	3.5	1.0	3.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	3	0
A00188-3C	WR	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	3	8
CO02321-4W	WR	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	3	0
Atlantic	WR	1.0	1.5	2.5	4.0	2.5	5.0	5.0	5.0	5.0	5.0	0	0	0	75
AC00206-2W	SW	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	3	0	0	0
A01143-3C	WR	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	3	5
AC03433-1W	WR	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	3	0
Average		1.0	2.0	1.1	3.9	1.1	5.0	5.0	5.0	5.0	5.0	0	0	4	8
L.S.D. (.05)		ns	0.1	0.1	0.1	0.1	ns	ns	ns	ns	ns	ns	ns	9	12

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake
Table 1e.

Notes and general rating for all reps of 12 entries in the Western and Southwest Regional Chip
Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
CO03243-3W	WR	smooth, nice, parent, , ,	4.7, 4.7, 4.7, 4.7
AC01151-5W	WR	, , poor internals,	3.4, 3.9, 3.7, 3.5
AC03452-2W	SW	, deep nose, heavy set+, small+,	3.4, 3.6, 3.7, 3.5
CO02033-1W	WR	, flat, drop+, ,	2.5, 3, 2.5, 3.3
CO02024-9W	WR	uniformly small, small, nice, ,	3.7, 3.6, 3.6, 3.6
Chipeta	WR	, too large, rough, large tubers+, heat sprouts,	3.3, 3.4, 3.2, 3.2
A00188-3C	WR	lots of culls, rough, , ,	2.6, 3, 2.8, 3
CO02321-4W	WR	, large tubers, ,	3.7, 4, 4, 3.7
Atlantic	WR	low yield, buff, poor internals, light set, ,	3.4, 3.8, 3.7, 3.7
AC00206-2W	SW	, very nice+, size parent, too big??, heat necrosis, small+, poor internals, heat sprouts++,	3.8, 4, 4, 3.8
A01143-3C	WR	drop+,	2.5, 3, 2, 2
AC03433-1W	WR	, poor shape, nice flesh, ,	3.2, 3.4, 3, 3

Springlake
Table 1f.

Specific gravity, percent solids, chip color rating, good chip bad chip ratio, notes, percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 12 entries in the Western and Southwest Regional Chip Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Gravity	% Solids	Chip Color ²	Good/Bad Chip Ratio	Notes ³	Percent Zebra Defect	Percent Zebra Defect at Grading
CO03243-3W	WR	1.067	14.4	1	36/4	3 Stem, 1 SE	0%	0%
AC01151-5W	WR	1.074	15.7	1	18/21	6 Stem, 6 SE	0%	0%
AC03452-2W	SW	1.052	11.8	1	25/14	6 Stem	0%	0%
CO02033-1W	WR	1.072	15.4	2	21/20	15 Stem	0%	0%
CO02024-9W	WR	1.071	15.2	1	37/3		0%	0%
Chipeta	WR	1.058	12.9	2	20/24	9 Stem, 5 SE	0%	0%
A00188-3C	WR	1.069	14.8	1	29/14	11 Stem, 1 SE	0%	0%
CO02321-4W	WR	1.081	17.0	1	34/6	6 Stem	0%	0%
Atlantic	WR	1.078	16.5	1	24/14	2 Stem, 11 MB	0%	0%
AC00206-2W	SW	1.076	16.1	1	39/1	1 Stem BOT	0%	0%
A01143-3C	WR	1.069	14.8	2	31/8		3%	0%
AC03433-1W	WR	1.076	16.0	1	39/2	1 Stem BOT	0%	0%

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

¹1=poor, 5=excellent

²1=light, 3+=very dark

³BOT=Best Of Trial, 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

Western and Southwestern Regional Russet Trial

This trial consisted of 27 entries, including the three check varieties Ranger Russet, Russet Burbank, and Russet Norkotah.

Results were as follows: (Springlake Tables 2a, 2b, 2c, 2d, 2e, and 2f)

- ATX91137-1Ru had the highest total and marketable yield. ATX91137-1Ru, AOTX98152-3Ru, and TXA549-1Ru received best of trial designations and high general ratings. Stampede Russet also received a high general rating (Table 2a)
- ATX91137-1Ru and AOTX96216-2Ru had the highest yield of over 10 oz. tubers (Table 2a).
- AC00395-2RU had the highest yield of <4 oz. tubers. Russet Burbank had the highest yield of culls/No.2 tubers (Table 2a).
- A01010-1 had the highest percentage of marketable yield (Table 2b).
- CO03187-1RU had the highest percentage yield of <4 oz. tubers. Russet Burbank had the highest percentage yield of culls/No. 2 tubers (Table 2b).
- The highest specific gravity was recorded for AC00395-2RU (Table 2b).
- A02138-2, A03158-2TE, AOTX98152-3RU, CO03202-1RU, A02507-2LB, AC00395-2RU, AOTX96216-2Ru, AO00057-2, and Ranger Russet were the latest maturing clones. Stampede Russet, CO04211-4RU, and Russet Norkotah were the earliest maturing entries (Table 2c).
- A00324-1 and Russet Norkotah had 41% and 43% vascular discoloration (Table 2d).
- AOTX98152-3Ru, AO02060-3, A01010-1, and AO02183-2 received best of trial designations for chip appearance (Table 2f).
- The following entries had high levels of Zebra Chip; TXA549-1Ru (17%), CO03202-1RU (37%), Russet Burbank (14%), and Ranger Russet (28%) (Table 2f).

Comments on entries:

- ATX91137-1Ru Long Russet yield+, advance, BOT+, keep, fast bulk, larger tubers have raised eyes CR=2
- A02138-2 Long Russet skinny, pointed, drop+ CR=2
- A03158-2TE Long Russet rough, heavy set, drop for TX, long skinny+ CR=2

- AOTX98152-3Ru Oblong Russet blocky, advance, BOT+, heat necrosis CR=2
- TXA549-1Ru Oblong Russet blocky, BOT, nice, bad rep CR=2
- CO03202-1RU Long Russet too long and skinny, rough, drop CR=3
- A02507-2LB Oblong Russet blocky, drop CR=2
- AO02060-3 Oblong Russet pointed, nice, BOT-, cream colored flesh CR=1
- Russet Burbank Long Russet lots of culls, rough, small, heat necrosis CR=3
- AC00395-2RU Round Russet blocky+, small CR=2
- A01010-1 Long Russet heavy set+, tubers did not fill, long, skinny, too long and skinny CR=1
- AO02183-2 Oblong Russet poor skin finish, blocky CR=1
- AO96305-3 Long Russet heavy set, pointed CR=2
- AOTX96216-2Ru Oblong Russet oversized, rough, pointed, very early , size parent, large tubers, 84378 like, keep CR=2
- CO03276-5RU Long Russet culls+, skinny, drop++, 20% heat necrosis CR=3
- ATX9332-12Ru Long Russet poor skin finish, small, culls, drop+++ CR=3
- A99029-3E Round Russet blocky, too round CR=2
- AO00057-2 Long Russet skinny, drop CR=2
- Ranger Russet Long Russet poor shape, culls++, rough+ CR=3
- CO03276-4RU Oblong Russet small, blocky, pointed, internal?? CR=2
- Stampede Russet Long Russet blocky, nice flesh, smooth, small, light set CR=2
- CO04220-7RU Oblong Russet light set, low yield CR=2
- CO04211-4RU Round Russet blocky to round CR=3
- CO04233-1RU Oblong Russet blocky to round CR=2
- AOTX02136-1Ru Oblong Russet blocky, light set, bad rep, small, drop CR=2
- CO03187-1RU Oblong Russet blocky+, small+, smooth CR=2
- Russet Norkotah Oblong Russet blocky, some small, nice, light set CR=3

¹CR=chip color rating 1=light to 3= dark

Summary:

ATX91137-1Ru, AOTX98152-3Ru, and TXA549-1Ru were the outstanding entries in this trial.

Springlake Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 27 entries in the Western and Southwest
 Table 2a. Regional Russet Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre			Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
ATX91137-1RU	TX-CO	391.2	311.8	57.4	108.7	145.7	0.0	53.2	26.1	4.4
A02138-2	WR	347.6	214.5	60.8	94.0	59.6	1.9	76.6	54.6	3.1
A03158-2TE	WR	344.2	184.4	71.9	80.7	31.8	0.0	83.7	76.1	2.7
AOTX98152-3RU	TX-CO	341.0	243.6	75.0	82.3	86.3	0.0	93.5	4.0	4.0
TXA549-1RU	TX-CO	324.5	228.3	55.8	97.7	74.8	4.5	80.9	10.7	4.3
CO03202-1RU	WR	319.1	190.3	24.9	86.6	78.8	0.0	39.9	88.8	2.4
A02507-2LB	WR	311.3	211.9	67.4	74.8	69.7	0.0	64.5	34.9	2.8
AO02060-3	WR	307.0	235.3	44.6	109.1	81.6	0.0	60.5	11.2	3.8
Russet Burbank	WR	306.1	26.6	12.3	13.5	0.9	0.0	72.4	207.1	1.0
AC00395-2RU	WR	297.3	156.1	75.0	47.5	33.5	0.0	139.2	2.1	2.7
A01010-1	WR	290.5	235.1	60.8	96.6	77.6	0.0	24.3	31.1	3.2
AO02183-2	WR	289.5	117.9	83.8	29.2	4.8	0.0	130.9	40.8	2.5
AO96305-3	WR	286.4	183.6	52.9	89.0	41.7	0.0	72.3	30.6	2.7
AOTX96216-2RU	TX-CO	279.2	196.4	18.5	39.9	137.9	19.7	16.9	46.2	3.2
CO03276-5RU	WR	278.8	118.9	52.7	46.0	20.2	0.0	102.3	57.6	1.9
ATX9332-12RU	TX-CO	277.1	137.1	56.5	64.8	15.7	0.0	57.4	82.6	2.5
A99029-3E	WR	260.0	80.4	32.5	41.1	6.7	0.0	110.3	69.3	2.0
AO00057-2	WR	259.8	162.5	91.6	50.1	20.7	0.0	66.9	30.4	3.0
Ranger Russet	WR	257.9	95.9	28.7	38.2	29.0	0.0	58.8	103.2	2.2
CO03276-4RU	WR	235.8	122.9	61.4	61.5	0.0	0.0	88.8	24.0	2.9
Stampede Russet	TX-CO	230.2	152.8	68.6	46.3	37.9	0.0	73.1	4.3	4.2
CO04220-7RU	SWR	225.4	127.7	80.0	28.5	19.2	0.0	95.9	1.7	2.4
CO04211-4RU	SWR	223.3	166.5	80.4	69.1	16.9	0.0	55.0	1.9	3.1
CO04233-1RU	SWR	220.0	159.9	76.2	66.2	17.5	0.0	55.1	5.0	2.6
AOTX02136-1RU	SWR	185.3	121.0	71.9	31.8	17.3	0.0	61.7	2.6	3.0
CO03187-1RU	WR	182.7	75.2	45.5	28.3	1.4	0.0	99.0	8.5	2.5
Russet Norkotah	WR	181.5	124.6	64.0	40.4	20.2	0.0	51.2	5.7	3.5
Average		283.5	167.3	58.5	63.7	45.0	1.0	73.4	41.9	2.9
L.S.D. (.05)		60.2	60.2	30.0	33.7	43.9	ns	27.8	32.4	0.8

¹ 1=very poor to 5= excellent

Springlake
Table 2b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 27 entries in the Western and Southwest Regional Russet Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
ATX91137-1RU	TX-CO	79.7	14.5	27.9	37.2	0.0	13.7	6.6	1.057	12.6	Long	Russet
A02138-2	WR	61.5	17.6	27.0	17.0	0.6	22.0	15.9	1.073	15.5	Long	Russet
A03158-2TE	WR	53.1	20.8	23.4	8.9	0.0	24.5	22.4	1.068	14.6	Long	Russet
AOTX98152-3RU	TX-CO	72.4	22.7	24.0	25.7	0.0	26.6	1.1	1.074	15.8	Oblong	Russet
TXA549-1RU	TX-CO	71.0	17.5	30.3	23.1	1.5	24.4	3.1	1.074	15.8	Oblong	Russet
CO03202-1RU	WR	55.6	8.5	26.5	20.6	0.0	12.7	31.7	1.073	15.5	Long	Russet
A02507-2LB	WR	67.9	21.4	23.6	22.9	0.0	21.3	10.8	1.076	16.1	Oblong	Russet
AO02060-3	WR	76.3	14.6	35.9	25.8	0.0	19.8	3.9	1.077	16.2	Oblong	Russet
Russet Burbank	WR	8.5	4.1	4.1	0.2	0.0	24.5	67.0	1.070	14.9	Long	Russet
AC00395-2RU	WR	51.1	24.4	16.3	10.3	0.0	48.3	0.7	1.085	17.7	Round	Russet
A01010-1	WR	81.7	21.8	33.9	26.0	0.0	8.2	10.1	1.071	15.1	Long	Russet
AO02183-2	WR	40.8	29.0	10.1	1.7	0.0	45.1	14.0	1.078	16.4	Oblong	Russet
AO96305-3	WR	61.6	18.2	30.1	13.3	0.0	26.3	12.1	1.069	14.8	Long	Russet
AOTX96216-2RU	TX-CO	70.9	6.6	14.3	50.0	6.7	6.2	16.3	1.065	14.1	Oblong	Russet
CO03276-5RU	WR	43.9	19.5	16.7	7.6	0.0	36.8	19.3	1.070	15.0	Long	Russet
ATX9332-12RU	TX-CO	49.0	20.8	22.7	5.4	0.0	21.0	30.0	1.080	16.8	Long	Russet
A99029-3E	WR	31.8	13.3	16.1	2.4	0.0	43.0	25.2	1.067	14.4	Round	Russet
AO00057-2	WR	59.9	35.5	18.3	6.1	0.0	27.4	12.6	1.074	15.7	Long	Russet
Ranger Russet	WR	36.9	11.4	14.3	11.2	0.0	23.5	39.6	1.072	15.4	Long	Russet
CO03276-4RU	WR	52.2	26.4	25.8	0.0	0.0	37.3	10.4	1.073	15.6	Oblong	Russet
Stampede Russet	TX-CO	65.5	30.5	19.7	15.3	0.0	32.9	1.7	1.057	12.7	Long	Russet
CO04220-7RU	SWR	55.9	35.2	12.0	8.8	0.0	43.3	0.7	1.071	15.3	Oblong	Russet
CO04211-4RU	SWR	74.0	36.1	30.8	7.2	0.0	25.2	0.8	1.070	15.0	Round	Russet
CO04233-1RU	SWR	72.9	35.5	29.7	7.7	0.0	24.8	2.3	1.070	14.9	Oblong	Russet
AOTX02136-1RU	SWR	64.4	35.9	20.0	8.5	0.0	33.3	2.3	1.074	15.6	Oblong	Russet
CO03187-1RU	WR	41.1	24.9	15.5	0.8	0.0	54.2	4.7	1.078	16.5	Oblong	Russet
Russet Norkotah	WR	68.1	34.0	23.2	11.0	0.0	29.2	2.6	1.070	15.0	Oblong	Russet
Average		58.3	21.7	22.1	14.5	0.4	26.9	14.4	1.071	15.3		
L.S.D. (.05)		13.7	10.9	10.8	13.1	ns	10.2	10.9	0.009	1.6		

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Table 2c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 27 entries in the Western and Southwest Regional Russet Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Average Number Stems/ Plant	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
ATX91137-1RU	TX-CO	4.6	7.1	1.7	96	100	1.6	4.3	4.4	4.2	51
A02138-2	WR	6.1	4.7	2.1	100	100	1.8	4.7	4.7	4.6	34
A03158-2TE	WR	6.5	4.4	1.3	93	100	1.9	4.5	4.7	4.1	33
AOTX98152-3RU	TX-CO	5.2	5.4	2.2	91	100	2.5	4.5	4.8	4.4	31
TXA549-1RU	TX-CO	4.5	6.0	1.4	85	100	2.5	3.7	3.7	4.1	34
CO03202-1RU	WR	4.6	5.9	1.3	78	96	1.5	4.2	4.7	4.1	24
A02507-2LB	WR	5.4	5.2	1.4	74	93	2.0	4.3	4.7	4.1	15
AO02060-3	WR	3.7	7.0	2.1	100	100	2.0	4.2	4.3	4.0	88
Russet Burbank	WR	8.1	3.2	2.0	98	100	1.8	4.5	4.4	4.2	25
AC00395-2RU	WR	6.3	3.9	1.7	96	100	1.8	4.5	4.8	4.3	44
A01010-1	WR	4.0	6.0	2.0	100	100	1.5	4.3	4.4	4.2	55
AO02183-2	WR	6.6	3.7	1.6	95	100	2.1	4.0	3.9	4.0	60
AO96305-3	WR	5.6	4.2	2.1	97	100	2.1	4.4	4.4	4.2	28
AOTX96216-2RU	TX-CO	2.5	9.9	1.3	71	93	1.6	4.7	4.8	4.7	30
CO03276-5RU	WR	5.8	4.4	1.8	100	100	2.0	4.5	4.5	4.3	60
ATX9332-12RU	TX-CO	4.9	4.7	1.5	97	100	1.8	4.2	4.3	4.6	24
A99029-3E	WR	5.5	3.9	1.6	97	100	1.8	4.4	4.2	4.3	50
AO00057-2	WR	4.9	4.3	1.7	96	100	1.5	4.0	4.7	4.1	50
Ranger Russet	WR	5.7	3.9	1.5	96	100	1.8	4.5	4.7	4.3	18
CO03276-4RU	WR	5.2	3.8	1.6	95	100	1.8	4.1	4.0	4.0	79
Stampede Russet	TX-CO	4.5	4.3	1.7	93	100	1.5	3.4	3.4	3.6	88
CO04220-7RU	SWR	4.8	3.9	2.1	100	100	1.8	3.6	3.6	3.6	94
CO04211-4RU	SWR	4.1	4.5	2.1	100	100	2.0	2.9	3.0	3.0	54
CO04233-1RU	SWR	3.8	4.8	1.8	96	100	1.5	3.8	4.2	3.9	68
AOTX02136-1RU	SWR	12.2	4.2	1.7	53	58	2.0	2.4	4.3	3.6	71
CO03187-1RU	WR	4.2	3.6	2.1	100	100	1.8	3.3	3.5	3.3	58
Russet Norkotah	WR	3.1	5.0	1.9	98	100	1.6	3.2	3.4	3.3	85
Average		5.4	4.9	1.7	92	98	1.8	4.1	4.3	4.1	48
L.S.D. (.05)		ns	0.9	0.3	16.4	12	0.3	0.4	0.4	0.3	24

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

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Table 2d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 27 entries in the Western and Southwest Regional Russet Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
ATX91137-1RU	TX-CO	1.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
A02138-2	WR	1.0	4.2	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
A03158-2TE	WR	1.0	4.0	4.0	3.6	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX98152-3RU	TX-CO	1.0	3.5	4.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	3	0
TXA549-1RU	TX-CO	1.0	3.5	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	3	0
CO03202-1RU	WR	1.0	5.0	3.7	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
A02507-2LB	WR	1.0	3.5	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AO02060-3	WR	1.5	3.5	4.0	3.5	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Russet Burbank	WR	1.0	4.0	3.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AC00395-2RU	WR	1.0	2.8	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
A01010-1	WR	1.0	4.4	4.0	3.9	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AO02183-2	WR	1.0	3.0	4.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	3	0
AO96305-3	WR	1.0	4.0	4.0	3.8	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX96216-2RU	TX-CO	1.0	3.6	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO03276-5RU	WR	1.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX9332-12RU	TX-CO	1.0	3.8	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
A99029-3E	WR	1.0	2.5	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AO00057-2	WR	1.0	4.0	3.8	3.5	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Ranger Russet	WR	1.0	4.0	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	5	0	0
CO03276-4RU	WR	1.0	3.5	3.7	4.0	3.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Stampede Russet	TX-CO	1.0	3.7	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO04220-7RU	SWR	1.0	3.5	4.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	3
CO04211-4RU	SWR	1.0	2.5	4.0	3.3	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	5
CO04233-1RU	SWR	1.0	3.5	4.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX02136-1RU	SWR	1.0	3.5	4.0	3.8	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO03187-1RU	WR	1.0	3.3	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Russet Norkotah	WR	1.1	4.0	4.0	4.9	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		1.0	3.7	3.9	3.9	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
L.S.D. (.05)		ns	0.1	0.1	0.6	0.1	ns	ns	ns	ns	ns	ns	ns	ns	ns

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

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Table 2e.Notes and general rating for all reps of 27 entries in the Western and Southwest Regional Russet
Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
ATX91137-1RU	TX-CO	yield+, advance, BOT+, keep, fast bulk, larger tubers have raised eyes,	4.5, 4.5, 4.5, 4
A02138-2	WR	skinny, pointed, drop+, , ,	3.2, 2.5, 3.2, 3.3
A03158-2TE	WR	rough, heavy set, drop for TX, long skinny+, ,	2.8, 2.8, 2.3, 3
AOTX98152-3RU	TX-CO	blocky, advance, BOT+, , , heat necrosis	4, 4, 4, 4
TXA549-1RU	TX-CO	blocky, BOT, nice, , , bad rep	3.8, 5, 4.2, 4
CO03202-1RU	WR	too long and skinny, rough, drop, ,	2.5, 2.5, 2.5, 2
A02507-2LB	WR	blocky, drop, ,	2, 3, 3.5, 2.8
AO02060-3	WR	pointed, nice, BOT-, cream colored flesh,	3.5, 3.8, 4, 4
Russet Burbank	WR	lots of culls, rough, small, heat necrosis, ,	1, 1, 1, 1
AC00395-2RU	WR	blocky+, small, , ,	2.8, 2.5, 2.7, 2.7
A01010-1	WR	heavy set+, tubers did not fill, long, skinny, too long and skinny,	3.8, 3.3, 2.8, 3
AO02183-2	WR	poor skin finish, blocky, ,	2.2, 2.7, 2.5, 2.7
AO96305-3	WR	heavy set, pointed, , ,	2.8, 2.2, 2.8, 3
AOTX96216-2RU	TX-CO	oversized, rough, early, pointed, very early , size parent, large tubers, 84378 like, keep	2.5, 2.5, 4, 3.8
CO03276-5RU	WR	culls+, skinny, drop++, 20% heat necrosis, ,	2, 1.5, 2, 2
ATX9332-12RU	TX-CO	poor skin finish, small, culls, drop+++ , ,	2.5, 2.5, 2.5, 2.5
A99029-3E	WR	blocky, too round, ,	2, 1.5, 2, 2.5
AO00057-2	WR	skinny, drop, , ,	3.4, 2.5, 3.4, 2.7
Ranger Russet	WR	poor shape, culls++, rough+, ,	2.5, 2.2, 2, 2
CO03276-4RU	WR	small, blocky, pointed, internal??, ,	2.8, 2.7, 2.8, 3.4
Stampede Russet	TX-CO	blocky, nice flesh, smooth, small, light set, ,	2.8, 3, 2.8, 8
CO04220-7RU	SWR	light set, low yield, , ,	2, 2, 3, 2.5
CO04211-4RU	SWR	blocky to round, , ,	3.3, 3, 2.8, 3.4
CO04233-1RU	SWR	blocky to round, , ,	3, 2, 2.5, 3
AOTX02136-1RU	SWR	blocky, light set, , bad rep, small, drop	3.5, 2.8, 2.8, 2.8
CO03187-1RU	WR	blocky+, small+, smooth, ,	2.5, 2.5, 2.5, 2.5
Russet Norkotah	WR	blocky, some small, nice, light set, ,	4, 3.2, 3.2, 3.5

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Table 2f.

Specific gravity, percent solids, chip color rating, good chip bad chip ratio, notes, percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 27 entries in the Western and Southwest Regional Russet Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Gravity	% Solids	Chip Color ²	Good/Bad Chip Ratio	Notes ³	Percent Zebra Defect	Percent Zebra Defect at Grading
ATX91137-1RU	TX-CO	1.057	12.6	2	21/19		0%	0%
A02138-2	WR	1.073	15.5	2	6/32		0%	0%
A03158-2TE	WR	1.068	14.6	2	12/26		0%	0%
AOTX98152-3RU	TX-CO	1.074	15.8	2	23/17	2 Stem, 1 MB BOT	0%	0%
TXA549-1RU	TX-CO	1.074	15.8	2	14/15		17%	0%
CO03202-1RU	WR	1.073	15.5	3	3/27		37%	0%
A02507-2LB	WR	1.076	16.1	2	18/22		0%	3%
AO02060-3	WR	1.077	16.2	1	35/2	2 BC BOT	0%	0%
Russet Burbank	WR	1.070	14.9	3	10/32		14%	0%
AC00395-2RU	WR	1.085	17.7	2	14/26	3 BC	0%	0%
A01010-1	WR	1.071	15.1	1	16/24	1 Stem, 1 SE BOT	0%	0%
AO02183-2	WR	1.078	16.4	1	27/13	1 Stem BOT	0%	0%
AO96305-3	WR	1.069	14.8	2	24/16		10%	0%
AOTX96216-2RU	TX-CO	1.065	14.1	2	12/30	7 BC	5%	0%
CO03276-5RU	WR	1.070	15.0	3	17/24		7%	0%
ATX9332-12RU	TX-CO	1.080	16.8	3	7/32		0%	0%
A99029-3E	WR	1.067	14.4	2	12/27	4MB	10%	0%
AO00057-2	WR	1.074	15.7	2	21/19		0%	0%
Ranger Russet	WR	1.072	15.4	3	8/31		28%	0%
CO03276-4RU	WR	1.073	15.6	2	32/7		0%	0%
Stampede Russet	TX-CO	1.057	12.7	2	37/4		2%	0%
CO04220-7RU	SWR	1.071	15.3	2	32/8	1 Stem	0%	0%
CO04211-4RU	SWR	1.070	15.0	3	1/40	3 BC, 3 MB	0%	0%
CO04233-1RU	SWR	1.070	14.9	2	16/23	2 Stem, 5 SE	0%	0%
AOTX02136-1RU	SWR	1.074	15.6	2	17/23	4 Stem, 4 MB	0%	0%
CO03187-1RU	WR	1.078	16.5	2	4/35		15%	0%
Russet Norkotah	WR	1.070	15.0	3	23/15		0%	0%

One .05" slice per tuber, at least 10 tubers per rep, three reps, 1 min 25 sec, 36°F corn oil.

¹1=poor, 5=excellent

²1=light, 3+=very dark

³BOT=Best Of Trial, 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

Western and Southwestern Regional Red Trial

This trial consisted of 15 entries, including the check varieties Red LaSoda and Dark Red Norland

Results were as follows: (Springlake Tables 3a, 3b, 3c, 3d, 3e, and 3f)

- ATTX98453-6R and ATTX01178-1R had the highest general ratings and best of trial designations; BTX2332-1R also received a high general rating (Table 3a and Table 3e).
- Red LaSoda had the highest total yield and culls/No. 2 tubers (Table 3a).
- ATTX01178-1R had the highest marketable and yield of 10-18 oz. tubers. ATTX98453-3R had the highest yield of < 4 oz. tubers (Table 3a).
- ATTX01178-1R had the highest percentage of marketable yield and the highest percentage of 10-18 oz. tubers, while OR04131-2 had 85% of <4 oz. tubers. (Table 3b).
- ATTX98453-3R had the highest average number of tubers per plant. Red LaSoda, BTX2332-1R, COTX94218-1R, and CO00291-5R were the latest maturing, while Dark Red Norland, COTX02293-4R, and OR04131-2 were the earliest (Table 3c).
- Red LaSoda and ATTX98453-3R had the deepest eyes (Table 3d).

Comments on entries:

- | | | |
|----------------|------------|---|
| • Red LaSoda | Oblong Red | heavy set, deep eyes, rough, heat sprouts CR=3+ |
| • ATTX98453-3R | Oblong Red | RLS like, nice shape and color, high gravity, deep eyes, heavy set, small, drop? CR=2 |
| • BTX2332-1R | Round Red | feathering, buff, poor skin finish, silver scurf, heat sprouts, heavy set, small CR=2 |
| • ATTX01178-1R | Oblong Red | RLS like, nice shape and color, deep eyes, BOT CR=2 |
| • NDTX4784-7R | Round Red | buff skin, poor internals, small, smooth CR=2 |
| • COTX94218-1R | Oblong Red | small, feathering, silver scurf, good color, drop CR=2 |
| • ATTX98453-6R | Oblong Red | smooth, BOT, release, feathering, nice, shallow eyes, light skin color CR=2 |
| • COTX94216-1R | Oblong Red | silver scurf, drop+++, poor skin finish+ CR=3 |

- CO00291-5R Round Red beautiful color and skin, stem attachment, small+, stem end discoloration, drop CR=3
 - CO00277-2R Round Red small potato, knobs, good color, drop, silver scurf CR= 2
 - COTX02172-1R Oblong Red light set, drop?, drop CR=3
 - CO04159-1R Round Red nice skin finish, good color++, small++, hollow heart, drop CR=3+
 - Dark Red Norland Oblong Red faded color+, poor internal, poor skin finish, drop CR=3
 - COTX02293-4R Round Red nice shape and flesh, light set, drop? Small CR=2
 - OR04131-2 Round Red small potato, light set, smooth, nice skin finish, drop CR=2
- ¹CR=chip color rating 1=light to 3= dark

Summary:

ATX98453-6R, BTX2332-1R, and ATX01178-1R were the outstanding entries based on general ratings and best of trial designations.

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Table 3a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 15 entries in the Western and Southwest Regional Red Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre			Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
Red LaSoda	WR	384.8	157.8	43.2	96.3	18.3	0.0	115.0	112.0	3.5
ATTX98453-3R	SWR	318.4	121.5	56.2	55.0	10.4	0.0	189.3	7.6	3.3
BTX2332-1R	TX-CO	307.2	166.6	92.7	74.0	0.0	0.0	123.6	16.9	4.4
ATTX01178-1R	TX-CO	285.0	248.2	38.0	106.8	103.4	0.0	30.4	6.4	4.3
NDTX4784-7R	TX-CO	261.2	126.9	64.3	55.8	6.7	0.0	131.2	3.1	3.3
COTX94218-1R	TX-CO	246.3	97.8	54.3	43.6	0.0	0.0	134.7	13.8	3.1
ATTX98453-6R	WR	230.6	178.6	64.3	95.2	19.0	0.0	51.3	0.7	4.4
COTX94216-1R	TX-CO	207.3	98.9	43.7	44.4	10.7	0.0	90.2	18.2	3.1
CO00291-5R	WR	197.7	38.9	36.5	2.4	0.0	0.0	130.3	28.5	3.4
CO00277-2R	WR	177.5	42.4	19.9	22.5	0.0	0.0	103.0	32.2	2.5
COTX02172-1R	SWR	169.4	57.2	47.7	9.5	0.0	0.0	92.1	20.1	2.7
CO04159-1R	SWR	167.3	41.5	33.2	8.3	0.0	0.0	121.3	4.5	3.1
Dark Red Norland	WR	154.5	53.8	46.5	7.3	0.0	0.0	73.3	27.5	2.6
COTX02293-4R	SWR	117.5	33.0	23.7	9.3	0.0	0.0	76.4	8.1	3.1
OR04131-2	WR	85.7	3.1	3.1	0.0	0.0	0.0	70.9	11.8	3.0
Average		220.7	97.7	44.5	42.0	11.2	0.0	102.2	20.8	3.3
L.S.D. (.05)		46.1	47.7	23.6	42.4	21.3		23.4	18.8	0.4

¹ 1=very poor to 5= excellent

Springlake
Table 3b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 15 entries in the Western and Southwest Regional Red Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
Red LaSoda	WR	40.9	11.2	24.9	4.8	0.0	29.9	29.2	1.057	12.6	Oblong	Red
ATTX98453-3R	SWR	36.9	17.7	16.4	2.8	0.0	60.6	2.6	1.061	13.4	Oblong	Red
BTX2332-1R	TX-CO	53.1	31.3	21.8	0.0	0.0	41.2	5.8	1.055	12.4	Round	Red
ATTX01178-1R	TX-CO	87.1	13.5	37.9	35.8	0.0	10.8	2.0	1.059	13.0	Oblong	Red
NDTX4784-7R	TX-CO	47.4	24.6	20.5	2.3	0.0	51.3	1.3	1.062	13.5	Round	Red
COTX94218-1R	TX-CO	39.0	21.9	17.1	0.0	0.0	55.2	5.8	1.066	14.4	Oblong	Red
ATTX98453-6R	WR	77.4	28.2	41.5	7.6	0.0	22.4	0.3	1.075	15.9	Oblong	Red
COTX94216-1R	TX-CO	47.5	21.0	21.8	4.8	0.0	43.8	8.7	1.059	13.1	Oblong	Red
CO00291-5R	WR	18.9	17.8	1.1	0.0	0.0	66.1	15.0	1.056	12.6	Round	Red
CO00277-2R	WR	22.4	11.0	11.5	0.0	0.0	59.3	18.2	1.064	14.0	Round	Red
COTX02172-1R	SWR	32.4	27.7	4.7	0.0	0.0	55.9	11.7	1.060	13.3	Oblong	Red
CO04159-1R	SWR	24.6	20.0	4.7	0.0	0.0	72.8	2.5	1.063	13.7	Round	Red
Dark Red Norland	WR	34.3	29.9	4.3	0.0	0.0	47.8	18.0	1.055	12.3	Oblong	Red
COTX02293-4R	SWR	26.2	20.1	6.1	0.0	0.0	66.3	7.5	1.054	12.1	Round	Red
OR04131-2	WR	3.6	3.6	0.0	0.0	0.0	85.7	10.7	1.063	13.8	Round	Red
Average		39.5	20.0	15.6	3.9	0.0	51.3	9.3	1.061	13.3		
L.S.D. (.05)		15.2	10.0	14.0	6.7		13.9	10.1	0.003	0.6		

Springlake
Table 3c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 15 entries in the Western and Southwest Regional Red Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Average Number Stems/ Plant	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
Red LaSoda	WR	8.5	3.8	2.0	100	100	2.0	4.9	4.7	4.9	3
ATTX98453-3R	SWR	8.6	3.1	1.9	81	97	2.0	4.1	4.2	4.1	13
BTX2332-1R	TX-CO	7.2	3.6	2.4	100	100	1.8	4.8	4.8	4.6	6
ATTX01178-1R	TX-CO	3.6	6.6	1.5	90	100	1.8	4.4	4.6	4.2	0
NDTX4784-7R	TX-CO	6.3	3.4	2.3	96	100	1.8	3.7	3.8	3.8	38
COTX94218-1R	TX-CO	6.8	3.1	2.4	98	100	1.8	4.5	4.7	4.2	3
ATTX98453-6R	WR	4.2	4.6	1.5	93	97	2.1	3.6	4.1	3.5	29
COTX94216-1R	TX-CO	4.9	3.5	1.9	99	100	1.1	4.3	4.6	4.0	19
CO00291-5R	WR	6.5	2.6	1.6	85	98	1.3	4.3	4.7	4.0	1
CO00277-2R	WR	6.1	2.5	2.5	79	98	2.0	3.2	3.2	3.6	43
COTX02172-1R	SWR	5.3	2.9	2.0	81	92	2.0	3.0	3.1	3.7	23
CO04159-1R	SWR	8.4	2.1	2.0	73	80	1.3	3.3	4.2	3.4	19
Dark Red Norland	WR	4.3	3.0	2.5	100	100	1.5	2.8	2.9	3.0	25
COTX02293-4R	SWR	3.3	3.1	2.1	87	93	1.5	2.1	2.4	2.8	63
OR04131-2	WR	3.9	1.9	1.6	94	98	1.9	3.0	3.0	3.2	76
Average		5.9	3.3	2.0	90	97	1.7	3.7	3.9	3.8	24
L.S.D. (.05)		1.0	0.7	0.3	10	6	0.4	0.5	0.5	0.4	22

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Springlake
Table 3d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 15 entries in the Western and Southwest Regional Red Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
Red LaSoda	WR	1.0	3.5	1.0	2.0	3.4	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX98453-3R	SWR	1.0	3.5	1.0	2.0	2.8	5.0	5.0	5.0	5.0	2.5	0	0	0	3
BTX2332-1R	TX-CO	1.0	2.0	1.0	4.0	3.5	5.0	5.0	5.0	5.0	2.5	0	0	0	0
ATTX01178-1R	TX-CO	1.0	3.5	1.0	2.0	2.8	5.0	5.0	5.0	5.0	2.5	0	0	0	0
NDTX4784-7R	TX-CO	1.0	1.5	1.0	4.0	3.6	5.0	5.0	5.0	5.0	3.0	0	0	0	0
COTX94218-1R	TX-CO	1.0	3.5	1.0	4.0	3.5	5.0	5.0	5.0	5.0	3.0	0	0	0	0
ATTX98453-6R	WR	1.0	3.5	1.0	4.0	2.5	5.0	5.0	5.0	5.0	3.5	0	0	0	0
COTX94216-1R	TX-CO	1.0	3.5	1.0	3.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO00291-5R	WR	1.0	1.5	1.0	4.0	4.2	5.0	5.0	5.0	5.0	4.0	0	0	0	0
CO00277-2R	WR	1.0	1.5	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	3	0
COTX02172-1R	SWR	1.0	3.5	1.0	4.0	3.3	5.0	5.0	5.0	5.0	5.0	0	0	0	5
CO04159-1R	SWR	1.0	1.5	1.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
Dark Red Norland	WR	1.0	3.5	1.0	4.0	2.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX02293-4R	SWR	1.0	2.5	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
OR04131-2	WR	1.0	1.5	1.5	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		1.0	2.7	1.0	3.5	3.4	5.0	5.0	5.0	5.0	4.1	0	0	0	1
L.S.D. (.05)		ns	0.1	0.1	0.1	0.1	ns	ns	ns	ns	0.1	ns	ns	ns	ns

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake
Table 3e. Notes and general rating for all reps of 15 entries in the Western and Southwest Regional Red Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
Red LaSoda	WR	heavy set, deep eyes, rough, heat sprouts, , RLS like, nice shape and color, high gravity, deep eyes,	3, 4, 3.3, 3.5
ATTX98453-3R	SWR	heavy set, small, drop?, feathering, buff, poor skin finish, silver scurf, heat	3.2, 3.8, 3, 3
BTX2332-1R	TX-CO	sprouts, heavy set, small,	4.3, 4.5, 4.6, 4
ATTX01178-1R	TX-CO	RLS like, nice shape and color, deep eyes, BOT, ,	4, 4.5, 4.2, 4.4
NDTX4784-7R	TX-CO	, buff skin, poor internals, , small, smooth	3.3, 3.3, 3.3, 3.3
COTX94218-1R	TX-CO	small, feathering, silver scurf, good color, drop smooth, BOT, release, feathering, nice, shallow eyes,	3.2, 3, 3.2, 3
ATTX98453-6R	WR	light skin color,	4.2, 4.3, 4.5, 4.5
COTX94216-1R	TX-CO	silver scurf, drop+++, poor skin finish+, , beautiful color and skin, stem attachment, small+, , stem	3, 3.5, 3, 2.8
CO00291-5R	WR	end discoloration, drop	4, 3, 3.5, 3
CO00277-2R	WR	, small potato, knobs, good color, drop, silver scurf	2.5, 2.5, 2.5, 2.5
COTX02172-1R	SWR	light set, , drop?, drop, nice skin finish, good color++, small++, , hollow heart,	2, 3, 2.8, 2.8
CO04159-1R	SWR	drop	3, 2.8, 3, 3.5
Dark Red Norland	WR	, faded color+, poor internal, poor skin finish, drop, ,	2.5, 2.5, 2.5, 2.8
COTX02293-4R	SWR	, nice shape and flesh, light set, drop? Small,	3, 3.5, 2.8, 3
OR04131-2	WR	, small potato, light set, smooth, nice skin finish, , drop	3, 3, 3, 2.8

Springlake
Table 3f.

Specific gravity, percent solids, chip color rating, good chip bad chip ratio, notes, percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 15 entries in the Western and Southwest Regional Red Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Specific Gravity	% Solids	Chip Color ²	Good/Bad Chip Ratio	Notes ³	Percent Zebra Defect	Percent Zebra Defect at Grading
Red LaSoda	WR	1.057	12.6	3+	1/42	10 Dark	7%	0%
ATTX98453-3R	SWR	1.061	13.4	2	21/18	15 Stem, 3 SE	0%	0%
BTX2332-1R	TX-CO	1.055	12.4	2	10/30	3 Stem, 6 SE	0%	0%
ATTX01178-1R	TX-CO	1.059	13.0	2	4/35	2 Stem, 10 SE	0%	0%
NDTX4784-7R	TX-CO	1.062	13.5	2	24/17	10 Stem	0%	0%
COTX94218-1R	TX-CO	1.066	14.4	2	5/31	8 Stem	0%	0%
ATTX98453-6R	WR	1.075	15.9	2	2/28	23 Stem	0%	0%
COTX94216-1R	TX-CO	1.059	13.1	3	3/38	23 Stem, 15 Se	0%	0%
CO00291-5R	WR	1.056	12.6	3	2/32		0%	0%
CO00277-2R	WR	1.064	14.0	2	5/34	10 Stem, 2 SE	0%	0%
COTX02172-1R	SWR	1.060	13.3	3	3/33	14 Stem, 3 SE	3%	0%
CO04159-1R	SWR	1.063	13.7	3+	0/33	12 Stem	3%	0%
Dark Red Norland	WR	1.055	12.3	3	4/35	18 Stem, 1 Dark, 1 TM	0%	0%
COTX02293-4R	SWR	1.054	12.1	2	4/34	21 Stem, 12 SE, 1 TM	0%	0%
OR04131-2	WR	1.063	13.8	2	25/15	5 Stem	3%	0%

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

¹1=poor, 5=excellent

²1=light, 3+=very dark

³BOT=Best Of Trial, 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

Western and Southwestern Regional Red/Yellow Trial

This trial consisted of 12 entries.

Results were as follows: (Springlake Tables 4a, 4b, 4c, 4d, 4e, and 4f)

- ATTX01180-1R/Y received the highest general rating and a best of trial designation (Table 4a and Table 4f).
- ATTX98468-5R/Y had the highest marketable yield, while ATTX01180-1R/Y produced the highest yield of 6-10 oz. tubers (Table 4a).
- ATTX98468-5R/Y had the highest yield of <4 oz. and culls/No. 2 tubers (Table 4a).
- ATTX01180-1R/Y had the highest percentage of marketable yield. CO04067-8R/Y had the highest percentage of <4 oz. tubers (Table 4b).
- ATTX98468-5R/Y had the highest average number of tubers per plant (Table 4c).
- ATTX98468-5R/Y and CO04021-2R/Y were latest in maturity, while ATTX961014-1R/Y, ATTX961014-1BR/Y, ATTX98462-3R/Y, and COTX01403-4R/Y were the earliest in maturity (Table 4c).
- ATTX01180-1R/Y had the darkest yellow flesh color (Table 4d).

Comments on entries:

- ATTX98468-5R/Y Oblong Red light skin, feathering+, rough CR=3
- ATTX01180-1R/Y Oblong Red BOT, nice flesh, feathering, nice skin, pointed, very dark flesh, nice internals CR=3
- BTX2103-1R/Y Round Red buff skin, nice flesh, light skin, nice shape CR=3
- ATTX98510-1R/Y Round Red light skin and flesh CR=3
- CO04188-4R/Y Round Red small, light skin CR=3
- ATTX961014-1R/Y Oblong Red light skin and flesh CR=3
- ATTX961014-1BR/Y Oblong Red faded, poor skin finish CR=3
- CO04021-2R/Y Round Red small, smooth skin CR=3
- ATTX98462-3R/Y Oblong Red faded CR=3
- COTX01403-4R/Y Oblong Red nice flesh, light skin CR=3

- AC03534-2R/Y Round Red nice flesh+ CR=3
- CO04067-8R/Y Oblong Red small+ CR=3

¹CR=chip color rating 1=light to 3= dark

Summary:

ATTX01180-1R/Y was the best entry based on all factors.

Springlake
Table 4a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 12 entries in the Western and Southwestern Regional Red Skin Yellow Flesh Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz				
ATTX98468-5R/Y	WR	332.9	148.1	93.3	54.8	0.0	0.0	157.1	27.7	3.3
ATTX01180-1R/Y	TX-CO	258.2	187.9	117.2	70.7	0.0	0.0	70.4	0.0	3.7
BTX2103-1R/Y	TX-CO	248.4	139.2	96.8	42.4	0.0	0.0	108.7	0.5	3.5
ATTX98510-1R/Y	TX-CO	248.2	104.8	86.3	18.5	0.0	0.0	138.5	5.0	3.3
CO04188-4R/Y	SWR	223.5	51.0	47.2	3.8	0.0	0.0	169.7	2.8	3.2
ATTX961014-1R/Y	TX-CO	201.0	80.0	69.1	10.9	0.0	0.0	108.6	12.4	3.2
ATTX961014-1BR/Y	TX-CO	200.2	77.1	66.0	11.1	0.0	0.0	112.9	10.2	2.9
CO04021-2R/Y	WR	200.0	95.1	71.2	23.9	0.0	0.0	85.4	19.5	3.0
ATTX98462-3R/Y	TX-CO	183.1	66.7	61.2	5.5	0.0	0.0	113.9	2.4	3.0
COTX01403-4R/Y	WR	167.0	99.9	49.1	50.8	0.0	0.0	54.8	12.3	3.1
AC03534-2R/Y	SWR	163.7	34.7	30.8	4.0	0.0	0.0	103.2	25.8	2.5
CO04067-8R/Y	SWR	146.4	32.8	27.8	4.0	1.0	0.0	111.8	1.7	3.2
Average		214.4	93.1	68.0	25.0	0.1	0.0	111.2	10.0	3.1
L.S.D. (.05)		37.9	39.0	25.8	31.6	ns		24.7	10.4	0.3

¹ 1=very poor to 5= excellent

Springlake
Table 4b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 12 entries in the Western and Southwestern Regional Red Skin Yellow Flesh Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
ATTX98468-5R/Y	WR	43.3	27.7	15.6	0.0	0.0	48.1	8.6	1.069	14.9	Oblong	Red
ATTX01180-1R/Y	TX-CO	72.3	45.0	27.3	0.0	0.0	27.7	0.0	1.066	14.2	Oblong	Red
BTX2103-1R/Y	TX-CO	54.2	38.4	15.8	0.0	0.0	45.6	0.2	1.068	14.7	Round	Red
ATTX98510-1R/Y	TX-CO	42.1	34.6	7.5	0.0	0.0	55.8	2.1	1.069	14.8	Round	Red
CO04188-4R/Y	SWR	20.9	19.2	1.8	0.0	0.0	77.4	1.7	1.076	16.1	Round	Red
ATTX961014-1R/Y	TX-CO	39.4	34.6	4.8	0.0	0.0	54.8	5.8	1.066	14.3	Oblong	Red
ATTX961014-1BR/Y	TX-CO	39.0	33.3	5.7	0.0	0.0	56.0	5.0	1.068	14.6	Oblong	Red
CO04021-2R/Y	WR	46.8	35.0	11.8	0.0	0.0	43.4	9.8	1.071	15.2	Round	Red
ATTX98462-3R/Y	TX-CO	36.4	33.2	3.2	0.0	0.0	62.1	1.5	1.068	14.6	Oblong	Red
COTX01403-4R/Y	WR	57.7	33.8	23.9	0.0	0.0	35.2	7.1	1.053	12.0	Oblong	Red
AC03534-2R/Y	SWR	20.5	18.2	2.3	0.0	0.0	62.5	16.9	1.061	13.5	Round	Red
CO04067-8R/Y	SWR	19.9	17.0	2.2	0.7	0.0	78.9	1.2	1.064	14.0	Oblong	Red
Average		41.0	30.8	10.2	0.1	0.0	54.0	5.0	1.067	14.4		
L.S.D. (.05)		10.8	11.9	11.6	ns		12.4	6.4	0.003	0.6		

Springlake
Table 4c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 12 entries in the Western and Southwestern Regional Red Skin Yellow Flesh Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Average Number Stems/ Plant	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
ATTX98468-5R/Y	WR	9.9	2.8	2.6	100	100	2.0	4.6	4.7	4.7	1
ATTX01180-1R/Y	TX-CO	5.0	4.4	1.6	90	97	2.1	3.8	4.0	3.8	24
BTX2103-1R/Y	TX-CO	6.8	3.0	2.4	98	100	2.0	4.5	4.4	4.3	21
ATTX98510-1R/Y	TX-CO	7.6	2.7	2.7	100	100	2.1	4.6	4.5	4.5	9
CO04188-4R/Y	SWR	9.1	2.0	2.2	100	100	1.9	4.0	4.1	4.2	9
ATTX961014-1R/Y	TX-CO	5.8	2.9	2.3	100	100	1.5	3.4	3.4	3.4	30
ATTX961014-1BR/Y	TX-CO	5.6	3.0	1.8	96	100	1.6	3.6	3.5	3.7	23
CO04021-2R/Y	WR	6.5	2.7	1.6	91	96	1.5	4.4	4.6	4.2	3
ATTX98462-3R/Y	TX-CO	8.2	2.2	1.8	100	100	1.9	3.5	3.3	3.5	15
COTX01403-4R/Y	WR	3.5	3.8	2.2	100	100	1.5	3.3	3.5	3.3	49
AC03534-2R/Y	SWR	8.1	1.7	2.0	95	98	1.6	3.9	4.0	3.6	14
CO04067-8R/Y	SWR	6.4	1.9	2.2	96	100	2.0	4.0	3.9	3.9	18
Average		6.9	2.7	2.1	97	99	1.8	3.9	4.0	3.9	18
L.S.D. (.05)		2.3	0.5	0.2	ns	ns	0.4	0.5	0.4	0.4	19

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Springlake
Table 4d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 12 entries in the Western and Southwestern Regional Red Skin Yellow Flesh Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
ATTX98468-5R/Y	WR	3.1	3.5	1.0	4.0	3.0	5.0	5.0	5.0	5.0	3.3	0	0	0	0
ATTX01180-1R/Y	TX-CO	4.5	3.5	1.0	4.0	4.0	5.0	5.0	5.0	5.0	3.5	0	0	0	0
BTX2103-1R/Y	TX-CO	3.3	1.5	1.0	3.5	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX98510-1R/Y	TX-CO	1.5	2.5	1.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
CO04188-4R/Y	SWR	2.5	2.0	1.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX961014-1R/Y	TX-CO	2.3	3.0	1.0	4.0	3.3	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX961014-1BR/Y	TX-CO	2.0	3.4	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO04021-2R/Y	WR	3.0	2.0	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX98462-3R/Y	TX-CO	2.3	3.5	1.0	4.0	3.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX01403-4R/Y	WR	3.5	3.5	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AC03534-2R/Y	SWR	3.5	1.5	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO04067-8R/Y	SWR	3.2	3.5	1.0	3.5	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		2.9	2.8	1.0	3.9	3.3	5.0	5.0	5.0	5.0	4.7	0	0	0	0
L.S.D. (.05)		0.3	0.4	ns	0.1	0.1	ns	ns	ns	ns	0.3	2	ns	ns	ns

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake
Table 4e.

Notes and general rating for all reps of 12 entries in the Western and Southwestern Regional Red
Skin Yellow Flesh Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
ATTX98468-5R/Y	WR	, , , light skin, feathering+, dough BOT, nice flesh, feathering, nice skin, pointed, very	3.6, 3.2, 3.2, 3
ATTX01180-1R/Y	TX-CO	dark flesh, nice internals	3.8, 3.8, 3.7, 3.5
BTX2103-1R/Y	TX-CO	, , buff skin, nice flesh, light skin, nice shape	3.7, 3.7, 3.3, 3.3
ATTX98510-1R/Y	TX-CO	, , , light skin and flesh	3.3, 3.7, 3.3, 2.7
CO04188-4R/Y	SWR	, , , small, light skin	3.5, 3.2, 3, 3.2
ATTX961014-1R/Y	TX-CO	, , light skin and flesh,	3.2, 3.5, 3.2, 3
ATTX961014-1BR/Y	TX-CO	, faded, poor skin finish, ,	3, 3, 3, 2.5
CO04021-2R/Y	WR	, , , small, smooth skin	3, 2.8, 2.8, 3.2
ATTX98462-3R/Y	TX-CO	, , , faded	3, 3, 3, 3
COTX01403-4R/Y	WR	, , nice flesh, light skin,	3.2, 3, 3, 3
AC03534-2R/Y	SWR	nice flesh+, , ,	3, 3, 2, 2
CO04067-8R/Y	SWR	, , , small+	3.5, 3, 3.2, 3.2

Springlake
Table 4f.

Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, notes, percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 12 entries in the Western and Southwestern Regional Red Skin Yellow Flesh Trial

Variety or Selection	Trial	Gravity	% Solids	Chip General Rating ¹	Chip Color ²	Good/Bad Chip Ratio	Notes ³	Percent Zebra Defect	Percent Zebra Defect at Grading
ATTX98468-5R/Y	WR	1.069	14.9	0.0	3	9/29	18 Stem, 5 SE, 3 MB	0%	0%
ATTX01180-1R/Y	TX-CO	1.066	14.2	0.0	3	8/33	16 Stem	0%	0%
BTX2103-1R/Y	TX-CO	1.068	14.7	0.0	3	9/31	6 Stem, 8 SE	0%	0%
ATTX98510-1R/Y	TX-CO	1.069	14.8	0.0	3	5/36	32 Stem	0%	8%
CO04188-4R/Y	SWR	1.076	16.1	0.0	3	4/36	27 Stem, 4 MB	0%	3%
ATTX961014-1R/Y	TX-CO	1.066	14.3	0.0	3	0/40	1 HH	0%	0%
ATTX961014-1BR/Y	TX-CO	1.068	14.6	0.0	3	18/22	8 Stem, 2 SE	0%	0%
CO04021-2R/Y	WR	1.071	15.2	0.0	3	6/37	2 Stem, 7 BC, 7 BC	0%	10%
ATTX98462-3R/Y	TX-CO	1.068	14.6	0.0	3	2/38	2 Stem, 12 SE, 2 MB	0%	0%
COTX01403-4R/Y	WR	1.053	12.0	0.0	3	3/37	8 Stem, 11 MB, 6 BC	0%	0%
AC03534-2R/Y	SWR	1.061	13.5	0.0	3	26/14	13 Stem	3%	0%
CO04067-8R/Y	SWR	1.064	14.0	0.0	3	6/35	2 Stem, 2 SSE, 1 MB	2%	0%

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

¹1=poor, 5=excellent

²1=light, 3+=very dark

³BOT=Best Of Trial, 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

Western and Southwestern Regional White/Yellow Trial

This trial consisted of 12 entries, including the check variety Yukon Gold.

Results were as follows: (Springlake Tables 5a, 5b, 5c, 5d, 5e, and 5f)

- Yukon Gold and Sierra Gold had the highest general rating (Table 5a).
- COTX04015-3AW/Y produced the highest total and marketable yields and yield of 10-18 oz. tubers (Table 5a).
- ATX03564-1W/Y had the highest yield of <4 oz. tubers, while CO04099-4W/Y had the highest yield of culls/No. 2 tubers (Table 5a).
- Yukon Gold and Sierra Gold had the highest percentage of marketable yield, while CO04029-5W/Y had the highest percentage of <4 oz. tubers (Table 5b).
- CO04013-1W/Y had the highest specific gravity (Table 5b).
- CO04099-4W/Y had the highest number of tubers per plant (18.9) (Table 5c).
- Yukon Gold and TX1674-1W/Y were earlier in maturity than all of the other entries (Table 5c).
- COTX04015-3AW/Y had the darkest flesh color (Table 5d).
- CO04099-3W/Y (68%), CO04013-1W/Y (43%), and CO04029-5W/Y (33%) all had high levels of internal brownspot (Table 5d).
- Lanorma had 22 % Zebra Chip (Table 5f).

Comments on entries:

- COTX04015-3AW/Y Oblong White heart shaped, very nice flesh, advance?, pointed CR=3
- ATX03564-1W/Y Oblong White poor skin finish, drop++, heart shaped CR=2
- CO04099-3W/Y Oblong White poor skin finish, poor internals, ZC?, high yield, drop CR=3
- CO04013-1W/Y Round White heat sprouts, small potato, heavy set, poor internals, drop+ CR=3
- CO04029-5W/Y Round White small potato, heavy set, poor internals++, drop+++ CR=3
- CO04099-4W/Y Oblong White dark flesh, heavy set, many smalls, poor internals CR=3
- Sierra Gold Oblong White light set, nice CR=3
- Yukon Gold Oblong White low yield++, better rep CR=3
- Emma Round White low yield, light flesh, better rep CR=3

- TX1674-1W/Y Oblong White nice shape and flesh+, low yield, light set CR=3
- OR04036-5 Oblong White nice shape and flesh color, low yield+ CR=3
- Lanorma Oblong White very low yield++, light flesh, poor internals, heat necrosis
CR=3

¹CR=chip color rating 1=light to 3= dark

Summary:

Yukon Gold and Sierra Gold were the outstanding entries bases on appearance.

Springlake
Table 5a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 12 entries in the Western and Southwest Regional White Skin Yellow Flesh Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre			Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
COTX04015-3AW/Y	SWR	408.5	256.9	138.5	84.9	33.5	0.0	130.0	21.6	3.5
ATX03564-1Y/Y	WR	399.8	223.3	144.2	77.8	1.4	0.0	132.8	43.7	2.8
CO04099-3W/Y	SWR	388.2	170.6	106.5	58.8	5.4	0.0	189.5	28.2	2.3
CO04013-1W/Y	WR	329.5	35.6	23.0	12.6	0.0	0.0	251.9	42.0	3.1
CO04029-5W/Y	SWR	291.6	44.6	36.8	7.8	0.0	0.0	221.4	25.6	2.5
CO04099-4W/Y	SWR	289.2	117.2	72.4	44.8	0.0	0.0	125.6	46.3	2.9
Sierra Gold	TX-CO	262.7	209.2	73.6	120.7	14.9	0.0	51.9	1.7	4.0
Yukon Gold	WR	170.6	144.2	68.8	52.5	22.8	0.0	21.4	5.0	4.0
Emma	TX-CA	160.8	87.8	43.9	29.7	14.2	0.0	44.9	28.0	2.5
TX1674-1W/Y	TX-CO	153.3	93.2	62.4	30.8	0.0	0.0	47.7	12.4	3.5
OR04036-5	WR	122.4	46.7	42.9	3.8	0.0	0.0	65.3	10.4	2.5
Lanorma	TX-CA	56.2	32.8	14.0	13.8	5.0	0.0	13.7	9.7	2.4
Average		252.7	121.8	68.9	44.8	8.1	0.0	108.0	22.9	3.0
L.S.D. (.05)		67.3	61.5	34.6	28.6	12.1		41.4	20.4	0.5

¹ 1=very poor to 5= excellent

Springlake
Table 5b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 12 entries in the Western and Southwest Regional White Skin Yellow Flesh Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
COTX04015-3AW/Y	SWR	62.1	33.9	20.2	7.9	0.0	32.3	5.6	1.079	16.7	Oblong	White
ATX03564-1Y/Y	WR	56.3	36.4	19.5	0.4	0.0	33.0	10.7	1.066	14.3	Oblong	White
CO04099-3W/Y	SWR	42.8	27.0	14.5	1.2	0.0	50.0	7.2	1.077	16.2	Oblong	White
CO04013-1W/Y	WR	11.4	7.2	4.2	0.0	0.0	76.0	12.6	1.089	18.4	Round	White
CO04029-5W/Y	SWR	14.4	11.8	2.6	0.0	0.0	76.8	8.8	1.067	14.5	Round	White
CO04099-4W/Y	SWR	38.1	23.8	14.3	0.0	0.0	44.3	17.6	1.079	16.6	Oblong	White
Sierra Gold	TX-CO	80.0	28.4	45.8	5.7	0.0	19.3	0.7	1.075	15.8	Oblong	White
Yukon Gold	WR	84.2	35.3	34.4	14.5	0.0	13.2	2.6	1.073	15.5	Oblong	White
Emma	TX-CA	52.3	27.3	16.8	8.3	0.0	27.0	20.6	1.069	14.9	Round	White
TX1674-1W/Y	TX-CO	63.9	41.9	22.0	0.0	0.0	28.9	7.3	1.074	15.7	Oblong	White
OR04036-5	WR	38.7	35.5	3.2	0.0	0.0	53.1	8.2	1.058	12.8	Oblong	White
Lanorma	TX-CA	63.2	24.8	25.3	13.0	0.0	23.0	13.8	1.055	12.4	Oblong	White
Average		50.6	27.8	18.6	4.3	0.0	39.7	9.6	1.072	15.3		
L.S.D. (.05)		17.3	13.1	12.8	8.5		13.7	9.1	0.005	0.1		

Springlake
Table 5c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 12 entries in the Western and Southwest Regional White Skin Yellow Flesh Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Average Number Stems/ Plant	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
COTX04015-3AW/Y	SWR	9.8	3.5	2.1	96	100	1.9	4.4	4.5	4.4	35
ATX03564-1Y/Y	WR	10.3	3.4	1.7	92	96	1.8	4.4	4.7	4.5	8
CO04099-3W/Y	SWR	10.8	3.0	2.1	100	100	1.8	4.4	4.7	4.3	15
CO04013-1W/Y	WR	13.2	2.2	2.7	100	100	1.5	4.5	4.7	4.3	10
CO04029-5W/Y	SWR	13.3	1.8	1.9	95	100	1.8	4.3	4.3	4.2	18
CO04099-4W/Y	SWR	18.9	2.4	2.3	89	100	1.6	4.7	4.8	4.8	11
Sierra Gold	TX-CO	4.5	4.9	1.9	98	98	1.6	3.4	3.7	3.3	34
Yukon Gold	WR	5.7	5.0	1.4	59	62	1.5	3.2	3.6	3.4	21
Emma	TX-CA	6.2	4.4	1.4	31	52	1.8	2.9	4.0	3.5	13
TX1674-1W/Y	TX-CO	3.5	3.7	1.7	100	100	1.6	3.4	3.4	3.3	46
OR04036-5	WR	6.0	2.6	1.5	64	72	2.0	3.0	3.9	3.2	90
Lanorma	TX-CA	10.1	4.2	1.7	11	16	1.8	2.1	4.4	3.8	0
Average		9.4	3.4	1.9	78	83	1.7	3.7	4.2	3.9	25
L.S.D. (.05)		ns	0.9	0.4	20	18	ns	0.7	0.4	0.4	ns

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Springlake
Table 5d.

Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 12 entries in the Western and Southwest Regional White Skin Yellow Flesh Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
COTX04015-3AW/Y	SWR	4.0	3.5	2.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	0	0	0	8
ATX03564-1Y/Y	WR	1.5	3.5	1.5	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO04099-3W/Y	SWR	3.6	3.0	1.4	4.0	1.0	5.0	5.0	5.0	5.0	5.0	10	0	0	68
CO04013-1W/Y	WR	3.5	2.0	2.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	43
CO04029-5W/Y	SWR	3.5	2.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	33
CO04099-4W/Y	SWR	3.5	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Sierra Gold	TX-CO	3.2	3.5	3.5	4.0	1.0	3.5	5.0	5.0	5.0	5.0	0	0	0	0
Yukon Gold	WR	3.0	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	8	0	0	3
Emma	TX-CA	2.5	2.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	3
TX1674-1W/Y	TX-CO	3.0	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
OR04036-5	WR	2.5	3.7	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Lanorma	TX-CA	2.5	3.5	1.0	3.0	1.0	5.0	5.0	5.0	5.0	5.0	10	0	0	8
Average		3.0	3.1	1.4	3.9	1.1	4.9	5.0	5.0	5.0	5.0	2	0	0	14
L.S.D. (.05)		0.1	0.1	0.1	0.1	0.1	0.1	ns	ns	ns	ns	ns	ns	ns	29

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake
Table 5e.

Notes and general rating for all reps of 12 entries in the Western and Southwest Regional White Skin Yellow Flesh Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
COTX04015-3AW/Y	SWR	heart shaped, very nice flesh, advance?, pointed,	3, 4, 3.8, 3
ATX03564-1Y/Y	WR	poor skin finish, drop++, heart shaped, ,	2, 3, 3, 3
CO04099-3W/Y	SWR	poor skin finish, poor internals, ZC?, high yield, drop, , heat sprouts, small potato, heavy set, poor internals,	2, 2, 3, 2
CO04013-1W/Y	WR	drop+, ,	2.5, 3, 3.5, 3.5
CO04029-5W/Y	SWR	small potato, heavy set, poor internals++, drop+++ ,	2.5, 2.5, 2.5, 2.5
CO04099-4W/Y	SWR	dark flesh, heavy set, many smalls, poor internals, ,	2.5, 3, 2.5, 3.5
Sierra Gold	TX-CO	light set, nice, , ,	4, 4, 4, 4
Yukon Gold	WR	low yield++, better rep, ,	4, 4, 4, 4
Emma	TX-CA	low yield, light flesh, , better rep,	2.5, 2, 3, 2.5
TX1674-1W/Y	TX-CO	nice shape and flesh+, low yield, light set, ,	3, 3.5, 3.5, 4
OR04036-5	WR	nice shape and flesh color, low yield+, , very low yield++, light flesh, poor internals, heat	2, 2, 3, 3
Lanorma	TX-CA	necrosis, ,	2, 2.5, 2.5, 2.5

Springlake
Table 5f.

Specific gravity, percent solids, chip color rating, good chip bad chip ratio, notes, percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 12 entries in the Western and Southwest Regional White Skin Yellow Flesh Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Gravity	% Solids	Chip Color ²	Good/Bad Chip Ratio	Notes ³	Percent Zebra Defect	Percent Zebra Defect at Grading
COTX04015-3AW/Y	SWR	1.079	16.7	3	17/23	8 Stem BOT-	0%	0%
ATX03564-1Y/Y	WR	1.066	14.3	2	0/35	15 Stem, 7 SE	0%	0%
CO04099-3W/Y	SWR	1.077	16.2	3	22/8	4 MB BOT-	0%	3%
CO04013-1W/Y	WR	1.089	18.4	3	13/28	14 MB, 1 Dark	0%	0%
CO04029-5W/Y	SWR	1.067	14.5	3	2/37	20MB	3%	0%
CO04099-4W/Y	SWR	1.079	16.6	3	35/21	16 Stem, 2 IBS	0%	15%
Sierra Gold	TX-CO	1.075	15.8	3	22/20	16 Stem BOT	0%	0%
Yukon Gold	WR	1.073	15.5	3	0/40	23 Stem, 9 SE, 1 dark	0%	0%
Emma	TX-CA	1.069	14.9	3	5/36	18 Stem	0%	0%
TX1674-1W/Y	TX-CO	1.074	15.7	3	14/12	3 Stem, 3 SE	0%	0%
OR04036-5	WR	1.058	12.8	3	1/42	9 Stem, 27 SE	0%	0%
Lanorma	TX-CA	1.055	12.4	3	9/28	11 Stem, 2 BC	22%	0%

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

¹1=poor, 5=excellent

²1=light, 3+=very dark

³BOT=Best Of Trial, 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

Western and Southwestern Regional Purple/Purple Trial

This trial consisted of five entries, including the check variety Purple Majesty.

Results from the trial were as follows: (Springlake Tables 6a, 6b, 6c, 6d, and 6e)

- CO04045-4P/P and POR05PG56-1 received the highest general ratings (Table 6a).
- CO04045-4P/P had the highest total yield, yield of <4 oz. and of culls/No. 2 tubers, while Purple Majesty had the highest marketable yield (Table 6a).
- All of the entries had at least 70% of <4 oz. tubers except for Purple Majesty which had 54%. COTX05082-2P/P had the highest percentage of culls/No.2 tubers (Table 6b).
- CO04056-3P/PW had the highest tubers per plant (Table 6c).
- CO04056-3P/PW was the latest in maturity, while Purple Majesty and COTX05082-2P/P were the earliest in maturity (Table 6c).
- CO04045-4P/P and COTX05082-2P/P had the darkest purple flesh color (Table 6d).

Comments on entries:

- CO04056-3P/PW Oblong Purple heavy set, feathering+, poor skin finish, nice shape, high yield
- POR05PG56-1 Oblong Purple white and purple flesh, poor internal, nice shape, heat sprouts, road map
- Purple Majesty Oblong Purple alligator hide, lighter flesh, poor skin finish+, nice shape, yield
- CO04063-4R/R Round Purple poor skin finish+, nice flesh, drop, small potato
- COTX05082-2P/P Oblong Purple small, light set, yield-, rough, poor skin finish

Summary:

CO04056-3P/PW and POR05PG56-1 were the best entries based on all factors.

Springlake
Table 6a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 5 entries in the Western and Southwestern Regional Purple Flesh Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz				
CO04056-3P/PW	SWR	304.1	65.5	48.7	16.8	0.0	0.0	212.4	26.1	3.6
POR05PG56-1	WR	174.1	33.7	26.8	6.9	0.0	0.0	138.5	1.9	3.6
Purple Majesty	WR	171.5	74.2	29.0	43.9	1.2	0.0	90.9	6.4	3.3
CO04063-4R/R	SWR	123.4	0.0	0.0	0.0	0.0	0.0	119.6	3.8	2.9
COTX05082-2P/P	TXPUFL	104.8	18.2	14.5	3.6	0.0	0.0	82.5	4.1	3.1
Average		175.6	38.3	23.8	14.2	0.2	0.0	128.8	8.5	3.3
L.S.D. (.05)		22.5	21.7	23.9	29.3	ns		30.2	10.5	0.4

¹ 1=very poor to 5= excellent

Springlake
Table 6b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, tuber type and skin type of 5 entries in the Western and Southwestern Regional Purple Flesh Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2		
CO04056-3P/PW	SWR	21.4	16.0	5.5	0.0	0.0	70.2	8.4	Oblong	Purple
POR05PG56-1	WR	19.8	15.6	4.2	0.0	0.0	79.2	1.0	Oblong	Purple
Purple Majesty	WR	42.5	18.3	23.6	0.6	0.0	54.1	3.3	Oblong	Purple
CO04063-4R/R	SWR	0.0	0.0	0.0	0.0	0.0	97.0	3.0	Round	Purple
COTX05082-2P/P	TXPUFL	18.3	15.2	3.1	0.0	0.0	77.9	3.8	Oblong	Purple
Average		20.4	13.0	7.3	0.1	0.0	75.7	3.9		
L.S.D. (.05)		8.9	12.2	14.5	ns		11.1	4.2		

Springlake
Table 6c. Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 5 entries in the Western and Southwestern Regional Purple Flesh Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Average Number Stems/ Plant	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
CO04056-3P/PW	SWR	10.5	2.4	2.1	100	100	2.0	4.7	4.8	4.7	35
POR05PG56-1	WR	6.4	2.3	1.8	100	100	1.8	3.3	3.5	3.1	71
Purple Majesty	WR	3.9	3.7	2.3	100	100	1.6	3.1	2.7	3.1	69
CO04063-4R/R	SWR	6.3	1.6	1.7	100	100	2.0	3.2	3.6	3.0	63
COTX05082-2P/P	TXPUFL	3.6	2.6	1.7	100	100	1.9	2.9	2.9	2.8	66
Average		6.1	2.5	1.9	100	100	1.9	3.4	3.5	3.4	61
L.S.D. (.05)		1.9	0.7	0.2	ns	ns	ns	0.3	0.4	0.3	19

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Springlake
Table 6d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 5 entries in the Western and Southwestern Regional Purple Flesh Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
CO04056-3P/PW	SWR	4.8	3.5	1.0	4.0	4.5	5.0	5.0	5.0	5.0	3.5	0	0	0	0
POR05PG56-1	WR	2.5	3.5	1.0	4.0	4.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Purple Majesty	WR	3.6	3.5	1.0	4.0	4.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO04063-4R/R	SWR	4.0	1.5	2.0	4.0	4.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX05082-2P/P	TXPUFL	5.0	3.5	1.0	4.0	4.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		4.0	3.1	1.2	4.0	4.6	5.0	5.0	5.0	5.0	4.7	0	0	0	0
L.S.D. (.05)		0.1	0.1	0.1	ns	0.1	ns	ns	ns	ns	0.1	ns	ns	ns	ns

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake
Table 6e.

Notes and general rating for all reps of 5 entries in the Western and Southwestern Regional Purple
Flesh Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
CO04056-3P/PW	SWR	heavy set, feathering+, poor skin finish, , nice shape, high yield	3.7, 3.7, 3.5, 3.5
POR05PG56-1	WR	white and purple flesh, , poor internal, nice shape, heat sprouts, road map	3.8, 3.5, 3.4, 3.5
Purple Majesty	WR	alligator hide,, lighter flesh, poor skin finish+, nice shape, yield	3, 3.4, 3.5, 3.4
CO04063-4R/R	SWR	poor skin finish+, nice flesh, drop, , , small potato	2.5, 3, 3, 3
COTX05082-2P/P	TXPUFL	small, light set, , , yield-, rough, poor skin finish	2.5, 3.4, 3, 3.5

Southwestern Regional Fingerling Trial

This trial consisted of three entries, including the check varieties Purple Peruvian and Banana.

Results from the trial were as follows: (Springlake Tables 7a, 7b, 7c, 7d, and 7e)

- Purple Peruvian received the highest general ratings (Table 7a).
- Purple Peruvian had the highest total and marketable yield. Banana had the highest yield of culls/No. 2 tubers (Table 7a).
- All of the entries had < 35% marketable yield. Banana had the highest percentage of culls/No.2 tubers (Table 7b).
- Purple Peruvian had the highest tubers per plant (Table 7c).

Comments on entries:

- Purple Peruvian Long Purple rough deep eyes, darker flesh than All Blue, no heat sprouts, resistant?
- CO03134-4RF/RW Long Red very rough, drop, heat sprouts++, culls++
- Banana Long White skinny, dumb bell, rough, better rep, heat sprouts

Summary:

CO03134-4RF/RW did not perform as well as the check varieties.

Springlake
Table 7a. Total yield, total marketable yield, under 1 inch, over 3 inch, and culls/No.2 potatoes and general rating of 3 entries in the Southwest Regional Fingerling Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	Total Marketable Yield	Over 3 inch	Under 1 inch	Culls/ No.2	General Rating ¹ Grading
Purple Peruvian	SWR	178.9	58.6	15.0	84.5	20.7	3.3
CO03134-4RF/RW	SWR	165.8	53.1	23.3	45.3	44.1	2.3
Banana	SWR	115.5	30.6	4.5	34.9	45.5	2.5
Average		153.4	47.4	14.3	54.9	36.8	2.7
L.S.D. (.05)		ns	20.0	14.0	38.0	ns	ns

¹ 1=very poor to 5= excellent

Springlake
Table 7b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 3 entries in the Southwest Regional Fingerling Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Percent by Weight of Marketable Yield	Percent By Weight			Tuber Type	Skin Type
			Over 3 inch	Under 1 inch	Culls/ No. 2		
Purple Peruvian	SWR	34.8	10.1	45.7	9.4	Long	Purple
CO03134-4RF/RW	SWR	34.5	16.9	28.3	20.4	Long	Red
Banana	SWR	32.1	5.4	31.6	30.9	Long	White
Average		33.8	10.8	35.2	20.2		
L.S.D. (.05)		ns	ns	ns	ns		

Springlake
Table 7c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 3 entries in the Southwest Regional Fingerling Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Average Number Stems/ Plant	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
Purple Peruvian	SWR	17.8	1.0	1.5	100	100	2.0	4.8	4.9	4.8	0
CO03134-4RF/RW	SWR	11.4	1.2	1.6	99	100	2.0	4.4	4.5	3.9	1
Banana	SWR	9.2	1.0	2.1	85	100	2.0	4.4	4.7	3.9	8
Average		12.8	1.0	1.7	95	100	2.0	4.5	4.7	4.2	3
L.S.D. (.05)		ns	ns	0.1	ns	ns	ns	0.2	0.1	0.1	ns

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Springlake
Table 7d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 3 entries in the Southwest Regional Fingerling Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
Purple Peruvian	SWR	4.0	4.5	1.0	2.0	5.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO03134-4RF/RW	SWR	2.5	4.0	1.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Banana	SWR	1.5	4.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		2.7	4.3	1.0	3.3	3.3	5.0	5.0	5.0	5.0	5.0	0	0	0	0
L.S.D. (.05)		0.1	0.1	ns	0.1	0.1	ns	ns	ns	ns	ns	ns	ns	ns	ns

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake
Table 7e.

Notes and general rating for all reps of 3 entries in the Southwest Regional Fingerling Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
Purple Peruvian	SWR	rough deep eyes, darker flesh than All Blue, no heat sprouts, resistant?,	3.5, 3.5, 3.3, 3
CO03134-4RF/RW	SWR	, very rough, drop, heat sprouts++, culls++,	2, 2, 2, 3
Banana	SWR	skinny, dumb bell, rough, better rep, heat sprouts,	1.5, 2.5, 3, 3

Outstanding Texas Advanced Chip Selections, 2012

Overall Summary - Springlake and Dalhart: The Texas Advanced Chip Selection Trial at Springlake included 9 entries, with 30 entries planted at Dalhart. Atlantic and Chipeta were the check varieties for both locations. Based on both trials NDTX060700C-1W, NDTX071109C-1W, NDTX071217CB-1W/Y, NDTX081644CAB-2W, NDTX081648CB-13W, NDTX081648CB-1W, NDTX081648CB-2W, NDTX091908AB-2W, AOTX95295-1W, and NDTX081648CB-4W, will be re-evaluated in the 2013 season.

Texas Advanced Chip Trial

This chip trial consisted of nine entries, including the check variety Atlantic. Results were as follows: (Springlake Tables 8a, 8b, 8c, 8d, 8e, and 8f)

- NDTX071109C-1W was the outstanding entry based on general rating and best of trial designations for appearance and chip quality. NDTX081648CB-4W had a high general rating (Tables 8a, 8e, and 8f).
- ATTX03474-2W had the highest total yield. Atlantic and NDTX071109C-1W had the highest marketable yield. NDTX071084C-2W had the highest yield of <4 oz. tubers, while ATTX03474-3W had the highest yield of culls/No. 2 tubers (Table 8a).
- NDTX081648CB-4W had the highest percentage of marketable yield (Table 8b).
- NDTX071084C-2W had the highest percentage of <4 oz. tubers. ATTX03474-3W had the highest percentage of culls/No.2 tubers (Table 8b).
- Atlantic had the highest specific gravity (Table 8b).
- ATTX03474-3W, NDTX081648CB-4W, and ATTX03474-2W were the latest in maturity, while NDTX071109C-1W and NDTX060700C-1W were the earliest in maturity (Table 8c).
- Atlantic had the highest percentage of internal brownspot (Table 8d).
- NDTX071109C-1W received a best of trial designation for chip quality (Table 8f).

Comments on entries:

- ATTX03474-3W Round White heavy set+, buff, small knobs+ CR=1

- Atlantic Round White buff, heat necrosis++, poor internal++ CR=1
- NDTX071109C-1W Round White low yield, nice keep, John Wallace, NATCH, nice, TC, BOT CR=1
- NDTX071084C-2W Oblong White small CR=1
- ATTX03475-2W Oblong White buff CR=1
- NDTX081648CB-4W Round White some buff, nice TC CR=2
- ATTX03474-2W Round White nice flesh++ CR=1
- NDTX071217CB-1W/Y Round White yellow flesh CR=2
- NDTX060700C-1W Round White small, yield++, drop, very low yield+ CR=1

¹CR=chip color rating 1=light to 3= dark

Summary:

NDTX071109C-1W was the outstanding entry in this trial based on all factors. NDTX071217CB-1W/Y had nice chip quality.

Springlake
Table 8a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 9 entries in the Texas Advanced Chip Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre			Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz				
ATTX03474-3W	TXCH	310.5	125.5	103.2	22.3	0.0	127.7	57.2	3.4
Atlantic	TXCH	258.6	188.1	92.0	93.2	2.9	67.1	3.5	4.1
NDTX071109C-1W	TXCH	242.7	188.1	115.3	72.8	0.0	51.5	3.1	4.3
NDTX071084C-2W	TXCH	213.7	44.9	44.9	0.0	0.0	154.2	14.5	3.2
ATTX03475-2W	TXCH	180.5	102.3	67.1	35.3	0.0	78.1	0.0	3.4
NDTX081648CB-4W	TXCH	175.6	148.7	65.7	83.0	0.0	27.0	0.0	4.0
ATTX03474-2W	TXCH	160.4	79.5	57.4	22.1	0.0	74.7	6.2	3.0
NDTX071217CB-1W/Y	TXCH	130.0	70.5	65.7	4.8	0.0	59.5	0.0	3.5
NDTX060700C-1W	TXCH	37.0	7.8	5.9	1.9	0.0	27.7	1.6	2.0
Average		189.9	106.2	68.6	37.3	0.3	74.2	9.6	3.4
L.S.D. (.05)		56.3	47.2	34.5	27.5	ns	22.4	9.8	0.3

¹ 1=very poor to 5= excellent

Springlake
Table 8b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 9 entries in the Texas Advanced Chip Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
ATTX03474-3W	TXCH	40.0	32.8	7.1	0.0	0.0	41.7	18.3	1.067	14.5	Round	White
Atlantic	TXCH	73.0	34.5	37.6	0.9	0.0	25.4	1.6	1.080	16.8	Round	White
NDTX071109C-1W	TXCH	76.2	48.7	27.5	0.0	0.0	22.7	1.0	1.067	14.5	Round	White
NDTX071084C-2W	TXCH	21.0	21.0	0.0	0.0	0.0	72.2	6.8	1.076	16.1	Oblong	White
ATTX03475-2W	TXCH	56.7	37.2	19.5	0.0	0.0	43.3	0.0	no data	no data	Oblong	White
NDTX081648CB-4W	TXCH	84.6	37.4	47.2	0.0	0.0	15.4	0.0	no data	no data	Round	White
ATTX03474-2W	TXCH	49.6	35.8	13.8	0.0	0.0	46.6	3.9	1.069	14.8	Round	White
NDTX071217CB-1W/Y	TXCH	54.3	50.5	3.7	0.0	0.0	45.7	0.0	no data	no data	Round	White
NDTX060700C-1W	TXCH	13.5	10.6	2.9	0.0	0.0	82.6	3.9	1.077	16.3	Round	White
Average		52.1	34.3	17.7	0.1	0.0	44.0	3.9	1.073	15.5		
L.S.D. (.05)		11.6	9.8	9.6	ns		11.5	4.1	0.003	0.6		

Springlake
Table 8c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 9 entries in the Texas Advanced Chip Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Average Number Stems/ Plant	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
ATTX03474-3W	TXCH	8.4	3.1	1.9	100	100	1.5	4.8	4.8	4.8	0
Atlantic	TXCH	4.4	4.8	2.1	100	100	2.0	3.6	3.4	3.7	11
NDTX071109C-1W	TXCH	4.0	4.9	1.2	98	100	1.9	3.3	2.8	2.7	24
NDTX071084C-2W	TXCH	7.0	2.5	2.1	100	100	1.5	3.1	3.2	3.3	10
ATTX03475-2W	TXCH	3.9	3.8	1.6	96	100	2.0	3.3	3.8	3.3	30
NDTX081648CB-4W	TXCH	2.8	5.2	1.3	100	100	1.5	4.0	4.0	3.8	5
ATTX03474-2W	TXCH	3.8	3.5	1.6	100	100	1.5	3.9	4.0	4.0	30
NDTX071217CB-1W/Y	TXCH	3.3	3.2	2.1	100	100	2.0	3.3	3.4	3.3	20
NDTX060700C-1W	TXCH	1.7	2.0	2.2	77	84	2.0	2.5	2.4	2.4	10
Average		4.4	3.7	1.8	97	98	1.8	3.5	3.5	3.5	16
L.S.D. (.05)		1.1	0.5	0.1	10	6	0.2	0.1	0.8	0.7	7

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Springlake
Table 8d.

Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 9 entries in the Texas Advanced Chip Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
ATTX03474-3W	TXCH	1.0	1.5	1.4	4.0	1.8	5.0	5.0	5.0	5.0	5.0	0	0	5	0
Atlantic	TXCH	1.0	1.5	2.5	4.0	2.5	5.0	5.0	5.0	5.0	5.0	0	0	0	58
NDTX071109C-1W	TXCH	1.0	1.5	1.0	3.9	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX071084C-2W	TXCH	1.0	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX03475-2W	TXCH	1.0	3.5	2.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX081648CB-4W	TXCH	1.0	1.5	1.0	4.0	1.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX03474-2W	TXCH	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX071217CB-1W/Y	TXCH	2.5	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX060700C-1W	TXCH	1.3	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	5	0
Average		1.2	1.9	1.3	4.0	1.4	5.0	5.0	5.0	5.0	5.0	0	0	1	6
L.S.D. (.05)		0.2	0.1	0.1	ns	0.2	ns	ns	ns	ns	ns	ns	ns	ns	14

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake
Table 8e.

Notes and general rating for all reps of 9 entries in the Texas Advanced Chip Selection
Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
ATTX03474-3W	TXCH	heavy set+, buff, small knobs+, , ,	2.8, 3.5, 3.6, 3.5
Atlantic	TXCH	buff, heat necrosis++, poor internal++, , , low yield, nice keep, , John Wallace,	4, 4, 4, 4.5
NDTX071109C-1W	TXCH	NATCH, nice, TC, BOT	3.8, 4, 4.5, 5
NDTX071084C-2W	TXCH	small, , ,	3.2, 3.2, 3.2, 3.2
ATTX03475-2W	TXCH	buff, , ,	3.4, 3.4, 3.4, 3.4
NDTX081648CB-4W	TXCH	some buff, nice TC, , ,	4, 4, 4, 4
ATTX03474-2W	TXCH	nice flesh++, , ,	3, 3, 3, 3
NDTX071217CB-1W/Y	TXCH	yellow flesh, , ,	3.5, 3.5, 3.5, 3.5
NDTX060700C-1W	TXCH	small, yield++, drop, , very low yield+,	2, 2, 2, 2

Springlake
Table 8f.

Specific gravity, percent solids, chip color rating, good chip bad chip ratio, notes, percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 9 entries in the Texas Advanced Chip Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Gravity	% Solids	Chip Color ²	Good/Bad Chip Ratio	Notes ³	Percent Zebra Defect	Percent Zebra Defect at Grading
ATTX03474-3W	TXCH	1.067	14.5	1	29/11	1 SE DROP	0%	0%
Atlantic	TXCH	1.080	16.8	1	24/14	2 Stem, 11 MB	0%	0%
NDTX071109C-1W	TXCH	1.067	14.5	1	37/3	2 Stem BOT	0%	0%
NDTX071084C-2W	TXCH	1.076	16.1	1	6/4	3 Stem, 1 SE DROP	0%	0%
ATTX03475-2W	TXCH	no data	no data	1	7/3	3 Stem DROP	0%	0%
NDTX081648CB-4W	TXCH	no data	no data	2	3/7	7 Stem, DROP	0%	0%
ATTX03474-2W	TXCH	1.069	14.8	1	8/2	1 Stem	0%	0%
NDTX071217CB-1W/Y	TXCH	no data	no data	2	10/0	Nice	0%	0%
NDTX060700C-1W	TXCH	1.077	16.3	1	22/4	1 Stem, 2 MB DROP	0%	0%

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

¹1=poor, 5=excellent

²1=light, 3+=very dark

³BOT=Best Of Trial, 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

Outstanding Texas Advanced Russet Selections, 2012

Overall Summary - Springlake and Dalhart: The Texas Advanced Russet Selection Trials had 17 entries at Springlake and 21 at Dalhart. Russet Norkotah was the check variety for both locations. Based on both trials, AOTX07876-1Ru, COTX08322-11Ru, AOTX95265-1Ru, AOTX95265-3Ru, COTX08121-1Ru, COTX081214-2Ru, COTX05097-2Ru/Y, AOTX98202-1Ru, ATX84378-6Ru, COTX08322-10Ru, COTX08118-2Ru, TX08350-12Ru, TXNS410, COTX08121-4Ru, COTX08322-5Ru, and COTX08323-3Ru will be re-evaluated in the 2013 season.

Texas Advanced Russet Trial

This russet trial consisted of 17 entries, including the check varieties Russet Norkotah. Results were as follows: (Springlake Tables 9a, 9b, 9c, 9d, 9e, and 9f)

- AOTX98202-1Ru, COTX07206-1Ru, and TXNS410 were the outstanding entries based on best of trial designations. AOTX95265-3Ru also received a high general rating (Tables 9a and 9e).
- TX08350-12Ru had the highest total and marketable yield, while AOTX96216-2Ru had the highest yield of 10-18 oz. tubers (Table 9a).
- ATTX03475-7Ru and COTX05095-2Ru/Y had the highest yield of <4 oz. tubers (Table a).
- COTX08080-7Ru and AOTX96084-1Ru had the highest yield of culls/No. 2 tubers (Table 9a).
- COTX08121-3Ru had the highest percentage of marketable yield (Table 9b).
- COTX08117-1Ru and COTX08121-3Ru had the highest percentage of 10-18 oz. tubers (Table 9b).
- ATTX03475-10Ru and COTX05095-2Ru/Y had the highest percentage of <4 oz. tubers. COTX08080-7Ru and AOTX96084-1Ru had the highest percentage of culls/No.2 tubers (Table 9b).
- COTX07009-8Ru and COTX08117-1Ru had the highest specific gravity (Table 9b).
- COTX08080-7Ru, COTX07009-8Ru and ATTX03475-7Ru were the latest in maturity, while Russet Norkotah was the earliest in maturity (Table 9c).
- COTX08117-1Ru had 60% internal brownspot (Table 9d).
- TX08350-12Ru received a best of trial designation for chip quality (Table 9f).
- COTX08080-7Ru (22%) and COTX05095-2Ru/Y (18%) had high levels of Zebra Chip (Table 9f).

Comments on entries:

- TX08350-12Ru Oblong Russet small, smooth, blocky, drop CR=1
- COTX08080-7Ru Long Russet raised eyes, knobs, drop CR=2
- AOTX96084-1Ru Long Russet some culls, keep, pointed, rough, curved, lots of culls, poor shape CR=2
- COTX07009-8Ru Oblong Russet drop+ CR=1
- ATTX03475-7Ru Oblong Russet small, heavy set, round to oblong, poor shape, small potato?, drop CR=1
- AOTX95265-3Ru Long Russet BOT, large, some skinny, keep CR=2
- ATTX03475-10Ru Oblong Russet light skin, rough, pointed, poor shape, drop? CR=2
- AOTX95265-1Ru Long Russet nice, lots of culls CR=2
- AOTX98202-1Ru Oblong Russet light skin, BOT for type, keep CR=2
- ATX99013-1Ru Long Russet drop, uneven filling, skinny CR=2
- ATX84378-6Ru Oblong Russet blocky, light set, a little rough CR=2
- COTX07206-1Ru Oblong Russet drop?, very nice, keep, BOT-, culls CR=2
- COTX05095-2Ru/Y Oblong Russet small, smooth, heavy set, keep, Sierra like, nice flesh CR=3
- COTX08117-1Ru Long Russet light skin, poor internals, drop CR=2
- COTX08121-3Ru Long Russet light skin, drop CR=1
- Russet Norkotah Long Russet light set CR=3
- TXNS410 Oblong Russet BOT CR=3

¹CR=chip color rating 1=light to 3= dark

Summary:

AOTX98202-1Ru, COTX07206-1Ru, and TXNS410 were the outstanding entries based on best of trial designations for appearance. AOTX95265-3Ru also received a high general rating.

Springlake
Table 9a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 17 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre			Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
TX08350-12Ru	TXSEL	294.5	223.3	75.4	89.9	58.1	0.0	67.8	3.5	3.0
COTX08080-7Ru	TXSEL	291.8	218.5	54.6	78.8	85.0	0.0	31.1	42.2	2.0
AOTX96084-1Ru	TXSEL	263.6	168.7	36.1	63.1	69.5	0.0	53.1	41.8	3.1
COTX07009-8Ru	TXSEL	257.9	157.0	105.1	12.4	39.4	0.0	97.5	3.5	2.0
ATTX03475-7Ru	TXSEL	242.2	57.4	53.6	3.8	0.0	0.0	183.9	0.9	2.7
AOTX95265-3Ru	TXSEL	240.6	211.6	65.7	74.0	71.9	0.0	18.0	11.1	4.0
ATTX03475-10Ru	TXSEL	238.0	188.1	52.2	88.7	47.2	0.0	50.0	0.0	3.3
AOTX95265-1Ru	TXSEL	236.5	159.5	45.6	60.8	53.1	0.0	48.7	28.2	3.5
AOTX98202-1Ru	TXSEL	234.4	157.5	37.5	87.3	32.7	0.0	64.3	12.6	3.3
ATX99013-1Ru	TXSEL	228.5	169.6	50.0	64.8	54.8	0.0	41.7	17.3	3.0
ATX84378-6Ru	TXSEL	227.5	156.3	41.7	45.8	68.8	0.0	43.4	27.8	3.4
COTX07206-1Ru	TXSEL	221.9	172.5	42.7	64.5	65.3	0.0	26.3	23.2	3.3
COTX05095-2Ru/Y	TXSEL	214.9	57.2	48.9	8.3	0.0	0.0	143.5	14.2	3.0
COTX08117-1Ru	TXSEL	199.8	171.5	47.0	53.9	70.5	0.0	28.3	0.0	2.5
COTX08121-3Ru	TXSEL	182.5	161.8	24.9	68.5	68.5	0.0	12.4	8.3	2.3
Russet Norkotah	TXSEL	181.3	123.2	27.1	55.3	40.8	0.0	44.3	13.8	3.4
TXNS410	TXSEL	174.1	123.9	42.4	48.9	32.7	0.0	40.6	9.5	3.5
Average		231.2	157.5	50.0	57.0	50.5	0.0	58.5	15.2	3.0
L.S.D. (.05)		35.1	33.0	15.9	24.9	25.5		17.2	19.1	0.4

¹ 1=very poor to 5= excellent

Springlake
Table 9b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 17 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
TX08350-12Ru	TXSEL	75.8	25.6	30.5	19.7	0.0	23.0	1.2	1.066	14.3	Oblong	Russet
COTX08080-7Ru	TXSEL	74.9	18.7	27.0	29.1	0.0	10.7	14.5	1.055	12.3	Long	Russet
AOTX96084-1Ru	TXSEL	64.0	14.1	24.2	25.6	0.0	20.4	15.7	1.069	14.9	Long	Russet
COTX07009-8Ru	TXSEL	60.9	40.8	4.8	15.3	0.0	37.8	1.3	1.079	16.5	Oblong	Russet
ATTX03475-7Ru	TXSEL	23.9	22.5	1.4	0.0	0.0	75.8	0.4	1.074	15.8	Oblong	Russet
AOTX95265-3Ru	TXSEL	87.9	27.3	30.7	29.9	0.0	7.5	4.6	1.070	15.0	Long	Russet
ATTX03475-10Ru	TXSEL	78.7	22.3	37.5	18.9	0.0	21.3	0.0	1.075	15.9	Oblong	Russet
AOTX95265-1Ru	TXSEL	67.2	19.5	25.6	22.1	0.0	21.0	11.8	1.068	14.6	Long	Russet
AOTX98202-1Ru	TXSEL	66.9	16.7	36.1	14.0	0.0	27.9	5.2	1.074	15.7	Oblong	Russet
ATX99013-1Ru	TXSEL	74.9	22.0	29.5	23.4	0.0	18.2	6.9	1.067	14.4	Long	Russet
ATX84378-6Ru	TXSEL	68.0	19.0	19.4	29.6	0.0	20.1	12.0	1.071	15.1	Oblong	Russet
COTX07206-1Ru	TXSEL	78.7	20.4	29.4	28.9	0.0	12.1	9.2	1.068	14.7	Oblong	Russet
COTX05095-2Ru/Y	TXSEL	26.2	22.7	3.5	0.0	0.0	67.3	6.5	1.074	15.7	Oblong	Russet
COTX08117-1Ru	TXSEL	85.8	23.5	27.0	35.3	0.0	14.2	0.0	1.079	16.6	Long	Russet
COTX08121-3Ru	TXSEL	88.6	13.6	37.5	37.5	0.0	6.8	4.5	1.070	15.1	Long	Russet
Russet Norkotah	TXSEL	67.8	14.7	30.5	22.7	0.0	25.3	6.9	1.065	14.2	Long	Russet
TXNS410	TXSEL	71.2	24.9	30.4	15.9	0.0	24.2	4.5	1.052	11.8	Oblong	Russet
Average		68.3	21.7	25.0	21.6	0.0	25.5	6.2	1.069	14.9		
L.S.D. (.05)		9.7	7.4	10.8	9.7		7.2	7.5	0.010	1.9		

Springlake
Table 9c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 17 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Average Number Stems/ Plant	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
TX08350-12Ru	TXSEL	4.5	5.5	1.4	100	100	2.5	3.0	3.8	2.9	15
COTX08080-7Ru	TXSEL	3.3	7.4	1.7	89	100	2.0	4.8	4.8	4.8	0
AOTX96084-1Ru	TXSEL	3.9	5.6	1.9	99	100	1.5	4.0	4.2	4.0	43
COTX07009-8Ru	TXSEL	5.5	3.9	1.5	100	100	2.5	4.8	4.8	4.4	10
ATTX03475-7Ru	TXSEL	6.8	3.0	2.4	100	100	1.9	4.5	4.6	4.6	5
AOTX95265-3Ru	TXSEL	2.9	6.8	1.9	100	100	1.5	3.8	3.9	3.7	65
ATTX03475-10Ru	TXSEL	3.6	5.6	1.3	89	97	1.5	4.1	4.4	4.0	25
AOTX95265-1Ru	TXSEL	3.7	5.4	1.7	100	100	1.5	4.0	4.2	3.9	51
AOTX98202-1Ru	TXSEL	3.7	5.3	1.1	95	100	1.8	3.8	4.5	3.7	64
ATX99013-1Ru	TXSEL	3.1	6.2	1.7	100	100	1.3	3.5	3.8	3.6	78
ATX84378-6Ru	TXSEL	3.2	5.8	1.8	95	100	1.5	3.1	4.3	4.0	50
COTX07206-1Ru	TXSEL	2.8	6.4	1.6	100	100	1.5	3.6	3.8	3.8	69
COTX05095-2Ru/Y	TXSEL	5.5	3.3	2.0	100	100	1.5	3.8	4.0	3.8	58
COTX08117-1Ru	TXSEL	3.1	6.7	1.3	71	79	1.5	3.7	4.4	3.7	15
COTX08121-3Ru	TXSEL	2.6	6.5	1.8	82	89	1.5	3.6	4.0	3.6	30
Russet Norkotah	TXSEL	3.2	5.0	1.7	86	94	1.5	3.2	3.4	3.2	79
TXNS410	TXSEL	2.8	5.2	1.4	98	100	1.5	3.8	4.1	3.7	65
Average		3.8	5.5	1.6	94	98	1.7	3.8	4.2	3.8	42
L.S.D. (.05)		0.7	0.7	0.3	8	3	0.2	0.7	0.4	0.2	17

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Springlake
Table 9d.

Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 17 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
TX08350-12Ru	TXSEL	1.0	3.5	3.5	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08080-7Ru	TXSEL	1.0	4.0	2.5	4.0	2.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX96084-1Ru	TXSEL	1.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX07009-8Ru	TXSEL	1.0	3.6	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX03475-7Ru	TXSEL	1.0	3.0	3.5	4.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX95265-3Ru	TXSEL	1.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX03475-10Ru	TXSEL	1.0	3.5	3.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX95265-1Ru	TXSEL	1.0	4.0	4.0	3.8	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX98202-1Ru	TXSEL	1.0	3.5	3.8	3.8	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX99013-1Ru	TXSEL	1.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX84378-6Ru	TXSEL	1.0	3.5	4.5	4.0	4.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX07206-1Ru	TXSEL	1.0	3.5	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX05095-2Ru/Y	TXSEL	3.0	3.5	3.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08117-1Ru	TXSEL	1.0	4.0	2.5	4.0	2.5	5.0	5.0	5.0	5.0	5.0	0	0	0	60
COTX08121-3Ru	TXSEL	1.0	4.0	2.5	4.0	2.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Russet Norkotah	TXSEL	1.0	3.8	4.0	3.6	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TXNS410	TXSEL	1.0	3.5	4.0	3.6	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		1.1	3.7	3.6	3.9	3.6	5.0	5.0	5.0	5.0	5.0	0	0	0	4
L.S.D. (.05)		0.1	0.1	0.1	0.1	0.1	ns	ns	ns	ns	ns	ns	ns	ns	10

¹ 1=light to 5=dark
² 1=round to 5=long
³ 1=none to 5=heavy
⁴ 1=deep to 5=shallow
⁵ 1=light to 5=dark

⁶ 1 to 5=none
⁷ 1 to 5=none
⁸ 1 to 5=none
⁹ 1 to 5=none
¹⁰ 1 to 5=none
¹¹ Stem end vascular discoloration severely evaluated

Springlake
Table 9e.

Notes and general rating for all reps of 17 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
TX08350-12Ru	TXSEL	small, smooth, blocky, drop, , ,	3, 3, 3, 3
COTX08080-7Ru	TXSEL	raised eyes, knobs, drop, , ,	2, 2, 2, 2
AOTX96084-1Ru	TXSEL	some culls, keep, pointed, rough, curved, lots of culls, poor shape,	3.7, 3.3, 3, 2.5
COTX07009-8Ru	TXSEL	drop+, , ,	2, 2, 2, 2
ATTX03475-7Ru	TXSEL	small, heavy set, round to oblong, poor shape, small potato?, drop,	2.8, 2.5, 2.8, 2.8
AOTX95265-3Ru	TXSEL	large, some skinny, keep, , ,	4, 4, 4, 4
ATTX03475-10Ru	TXSEL	light skin, rough, pointed, poor shape, drop?, ,	3.5, 3.2, 3, 3.4
AOTX95265-1Ru	TXSEL	nice, lots of culls, ,	3.7, 3.5, 3.5, 3.3
AOTX98202-1Ru	TXSEL	light skin, BOT for type, keep, ,	2.7, 3.5, 3.2, 3.6
ATX99013-1Ru	TXSEL	drop, uneven filling, skinny y ends, ,	2.7, 3.6, 2.7, 3
ATX84378-6Ru	TXSEL	blocky, light set, a little rough, , ,	3.3, 3.3, 3.6, 3.4
COTX07206-1Ru	TXSEL	drop?, very nice, keep, BOT-, culls,	2.5, 3.5, 4, 3.2
COTX05095-2Ru/Y	TXSEL	small, smooth, heavy set, keep, Sierra like, nice flesh,	3, 3, 3, 3
COTX08117-1Ru	TXSEL	light skin, poor internals, drop, , ,	2.5, 2.5, 2.5, 2.5
COTX08121-3Ru	TXSEL	light skin, drop, , ,	2.3, 2.3, 2.3, 2.3
Russet Norkotah	TXSEL	light set, , ,	3.2, 3.5, 3.2, 3.5
TXNS410	TXSEL	BOT, , ,	3, 3.5, 3.8, 3.8

Springlake
Table 9f.

Specific gravity, percent solids, chip color rating, good chip bad chip ratio, notes, percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 17 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Gravity	% Solids	Chip Color ²	Good/Bad Chip Ratio	Notes ³	Percent Zebra Defect	Percent Zebra Defect at Grading
TX08350-12Ru	TXSEL	1.066	14.3	1	10/0	BOT	0%	0%
COTX08080-7Ru	TXSEL	1.055	12.3	2	0/9		22%	0%
AOTX96084-1Ru	TXSEL	1.069	14.9	2	20/24	1 Stem	0%	0%
COTX07009-8Ru	TXSEL	1.079	16.5	1	5/5		0%	0%
ATTX03475-7Ru	TXSEL	1.074	15.8	1	2/37	1 Stem, 2 MB	8%	0%
AOTX95265-3Ru	TXSEL	1.070	15.0	2	8/2		0%	0%
ATTX03475-10Ru	TXSEL	1.075	15.9	2	29/10		5%	0%
AOTX95265-1Ru	TXSEL	1.068	14.6	2	26/14		0%	0%
AOTX98202-1Ru	TXSEL	1.074	15.7	2	22/20	1 Stem	0%	0%
ATX99013-1Ru	TXSEL	1.067	14.4	2	28/11		0%	0%
ATX84378-6Ru	TXSEL	1.071	15.1	2	20/20	1 Dark	0%	0%
COTX07206-1Ru	TXSEL	1.068	14.7	2	25/15		0%	0%
COTX05095-2Ru/Y	TXSEL	1.074	15.7	3	12/28		18%	0%
COTX08117-1Ru	TXSEL	1.079	16.6	2	0/10	2 BC	0%	0%
COTX08121-3Ru	TXSEL	1.070	15.1	1	2/9		0%	0%
Russet Norkotah	TXSEL	1.065	14.2	3	23/15		0%	0%
TXNS410	TXSEL	1.052	11.8	3	28/10		0%	0%

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

¹1=poor, 5=excellent

²1=light, 3+=very dark

³BOT=Best Of Trial, 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

Outstanding Texas Advanced Red Selections, 2012

Overall Summary - Springlake and Dalhart: The Texas Advanced Red Selection Trials had eight entries at Springlake and nine at Dalhart. Rio Rojo, Red LaSoda and Chieftain were the check variety for both locations. Based on both trials, Chieftain, NDTX050070-1R, COTX07054-2R, ATTX06246-1R (move to small potato trial), and NDTX081572B-1R will be re-evaluated in the 2013 season.

Texas Advanced Red Trial

This trial consisted of eight entries, including the check varieties Red LaSoda, Chieftain and Rio Rojo.

Results were as follows: (Springlake Tables 10a, 10b, 10c, 10d, 10e, and 10f)

- COTX07054-2R, Chieftain, and Rio Rojo were the outstanding entries based on general ratings (Tables 10a).
- Red LaSoda had the highest total, marketable and yield of culls/No.2 tubers (Table 10a).
- NDTX050070-1R and ATTX06246-1R had the highest yield of <4 oz. tubers (Table 10a).
- NDTX4784-7R had the highest percentage of marketable yield (Table 10b).
- Red LaSoda had the highest percentage of <4 oz. tubers, while Red LaSoda, NDTX050070-1R, and ATTX06246-1R had the highest percentage of culls/No. 2 tubers (Table 10b).
- Red LaSoda was the latest maturing, while NDTX731-1R was the earliest (Table 10c).
- NDTX050070-1R and Chieftain exhibited the most feathering (Table 10d).
- Chieftain had the highest percentage of vascular discoloration at 58% (Table 10d).
- NDTX050070-1R had 25% Zebra Chip (Table 10f).

Comments on entries:

- Red LaSoda Oblong Red hollow heart, silver scurf CR=3+
- NDTX050070-1R Round Red small, nice skin, smooth, feathering CR=3
- ATTX06246-1R Round Red heavy set, small, silver scurf, buff CR=2

- COTX07054-2R Round Red heavy set, keep CR=2
- Chieftain Oblong Red feathering, poor internal+++ CR=2
- NDTX4271-5R Round Red small CR=2
- Rio Rojo Round Red nice shape CR=No Data
- NDTX731-1R Oblong Red low yield CR=3

¹CR=chip color rating 1=light to 3= dark

Summary:

COTX07054-2R, Chieftain, and Rio Rojo were the outstanding entries based on general ratings.

Springlake
Table 10a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 8 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz				
Red LaSoda	TXSEL	419.9	219.9	64.3	137.6	18.0	0.0	94.7	105.3	3.5
NDTX050070-1R	TXSEL	261.9	76.9	63.6	13.3	0.0	0.0	140.2	44.8	3.0
ATTX06246-1R	TXSEL	242.3	75.2	64.8	10.4	0.0	0.0	142.6	24.5	2.8
COTX07054-2R	TXSEL	201.2	69.0	36.5	23.2	9.3	0.0	130.0	2.2	3.7
Chieftain	TXSEL	174.8	104.8	71.2	33.5	0.0	0.0	66.7	3.3	3.8
NDTX4271-5R	TXSEL	126.2	51.9	36.8	15.0	0.0	0.0	72.9	1.4	3.3
Rio Rojo	TXSEL	116.2	57.4	49.1	8.3	0.0	0.0	58.8	0.0	4.0
NDTX731-1R	TXSEL	81.6	35.3	27.0	8.3	0.0	0.0	43.6	2.8	2.8
Average		203.0	86.3	51.7	31.2	3.4	0.0	93.7	23.0	3.4
L.S.D. (.05)		41.9	49.9	24.0	33.1	ns		23.1	15.9	0.5

¹ 1=very poor to 5= excellent

Springlake
Table 10b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 8 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
Red LaSoda	TXSEL	51.1	15.5	31.7	4.0	0.0	23.0	25.9	1.059	13.0	Oblong	Red
NDTX050070-1R	TXSEL	28.8	24.1	4.7	0.0	0.0	54.0	17.2	1.064	14.0	Round	Red
ATTX06246-1R	TXSEL	30.7	26.2	4.5	0.0	0.0	59.1	10.2	1.060	13.2	Round	Red
COTX07054-2R	TXSEL	33.0	17.6	10.9	4.5	0.0	65.9	1.2	1.072	15.4	Round	Red
Chieftain	TXSEL	58.5	40.4	18.2	0.0	0.0	39.2	2.3	1.060	13.2	Oblong	Red
NDTX4271-5R	TXSEL	40.6	29.0	11.6	0.0	0.0	58.3	1.0	1.056	12.5	Round	Red
Rio Rojo	TXSEL	49.4	42.3	7.1	0.0	0.0	50.6	0.0	1.052	11.8	Round	Red
NDTX731-1R	TXSEL	44.7	34.7	9.9	0.0	0.0	52.4	2.9	1.055	12.4	Oblong	Red
Average		42.1	28.7	12.3	1.1	0.0	50.3	7.6	1.060	13.2		
L.S.D. (.05)		15.7	9.2	10.8	ns		12.8	6.8	0.006	1.1		

Springlake
Table 10c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 8 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Average Number Stems/ Plant	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
Red LaSoda	TXSEL	7.7	4.5	2.0	100	100	2.0	4.8	4.8	4.7	0
NDTX050070-1R	TXSEL	7.5	3.0	2.6	100	100	2.3	3.7	3.8	3.7	4
ATTX06246-1R	TXSEL	9.5	2.2	1.9	98	100	1.5	3.8	3.7	4.0	14
COTX07054-2R	TXSEL	6.2	2.9	2.0	92	97	1.9	3.2	3.5	3.6	24
Chieftain	TXSEL	4.0	3.7	1.7	93	97	1.1	3.0	3.1	2.9	43
NDTX4271-5R	TXSEL	2.9	3.6	1.8	96	100	1.5	3.2	3.0	3.3	66
Rio Rojo	TXSEL	3.7	3.2	1.1	71	82	1.5	2.4	3.5	2.8	15
NDTX731-1R	TXSEL	2.2	3.2	1.9	94	100	1.3	2.3	2.2	2.2	86
Average		5.5	3.3	1.9	93	97	1.6	3.3	3.4	3.4	31
L.S.D. (.05)		1.6	0.8	0.2	10	4	0.4	0.6	0.4	0.4	10

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Springlake
Table 10d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 8 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹¹	Percent Internal Brownspot
Red LaSoda	TXSEL	1.0	3.5	1.0	2.0	3.1	5.0	5.0	5.0	5.0	5.0	5	0	0	0
NDTX050070-1R	TXSEL	1.0	2.0	1.0	4.0	3.8	5.0	5.0	5.0	5.0	3.2	0	0	0	0
ATX06246-1R	TXSEL	1.0	2.0	1.0	4.0	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	8
COTX07054-2R	TXSEL	1.0	2.0	1.0	3.5	3.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Chieftain	TXSEL	1.0	3.5	1.0	3.8	3.2	5.0	5.0	5.0	5.0	3.0	0	0	0	58
NDTX4271-5R	TXSEL	1.0	2.5	1.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	3	0	0	8
Rio Rojo	TXSEL	1.0	2.5	1.0	3.8	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX731-1R	TXSEL	1.0	3.5	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		1.0	2.7	1.0	3.6	3.6	5.0	5.0	5.0	5.0	4.5	1	0	0	9
L.S.D. (.05)		ns	0.1	ns	0.1	0.1	ns	ns	ns	ns	0.2	ns	ns	ns	14

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake
Table 10e.

Notes and general rating for all reps of 8 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
Red LaSoda	TXSEL	hollow heart, silver scurf, , ,	3, 3, 3.8, 4
NDTX050070-1R	TXSEL	, small, nice skin, smooth, feathering	3, 3, 3, 3
ATTX06246-1R	TXSEL	, heavy set, small, , silver scurf, buff	3.3, 2, 3, 3
COTX07054-2R	TXSEL	, , heavy set, keep,	3.8, 3.5, 3.8, 3.8
Chieftain	TXSEL	feathering, poor internal+++ , , ,	3.6, 3.6, 3.8, 4
NDTX4271-5R	TXSEL	, small, ,	3.5, 3.5, 3.5, 2.8
Rio Rojo	TXSEL	nice shape, , ,	4, 4, 4, 4
NDTX731-1R	TXSEL	low yield, , ,	2.5, 3, 2.5, 3

Springlake
Table 10f. Specific gravity, percent solids, chip color rating, good chip bad chip ratio, notes, percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 8 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Gravity	% Solids	Chip Color ²	Good/Bad Chip Ratio	Notes ³	Percent Zebra Defect	Percent Zebra Defect at Grading
Red LaSoda	TXSEL	1.059	13.0	3+	1/42	10 Dark	7%	0%
NDTX050070-1R	TXSEL	1.064	14.0	3	15/25	2 SE	25%	0%
ATTX06246-1R	TXSEL	1.060	13.2	2	5/32	32 Stem	0%	0%
COTX07054-2R	TXSEL	1.072	15.4	2	6/32	2 Stem, 9 SE	0%	0%
Chieftain	TXSEL	1.060	13.2	2	11/26	12 Stem, 5 MB	3%	0%
NDTX4271-5R	TXSEL	1.056	12.5	2	23/16	7 Stem, 1 MB	0%	3%
Rio Rojo	TXSEL	1.052	11.8	No Data				0%
NDTX731-1R	TXSEL	1.055	12.4	3	15/25	5 Stem, 8 SE	0%	0%

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

¹1=poor, 5=excellent

²1=light, 3+=very dark

³BOT=Best Of Trial, 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

Outstanding Texas Advanced Red/Yellow Selections, 2012

Overall Summary - Springlake and Dalhart The Texas Advanced Red Skin Yellow Flesh Selection Trials included three entries at Springlake and three at Dalhart. Based on both trials, the following entries will be tested again in 2013 in the Small Potato Trial: NDTX05184-1R/Y and COTX04193-2R/Y.

Texas Advanced Red/Yellow Trial

This trial consisted of three entries.

Results were as follows: (Springlake Tables 11a, 11b, 11c, 11d, 11e, and 11f)

- NDTX050184-1R/Y received a high general rating and a best of trial designation (Tables 11a and 11e).
- NDTX050184-1R/Y had the highest total, marketable yield and < 4 oz. tubers. (Table 11a).
- All of the entries had over 66% of < 4 oz. tubers (Table 11b).
- NDTX050184-1R/Y was later in maturity than COTX04267-1R/Y and COTX04193-2R/Y (Table 11c).
- COTX04267-1R/Y and COTX04193-2R/Y had a darker yellow flesh color than NDTX050184-1R/Y (Table 11d).

Comments on entries:

- NDTX050184-1R/Y Round Red very nice shape and color, small potato, BOT, good color, light flesh CR=3
- COTX04267-1R/Y Round Red light skin, variable flesh color CR=3
- COTX04193-2R/Y Round Red nice flesh, small CR=3

¹CR=chip color rating 1=light to 3= dark

Summary:

NDTX050184-1R/Y was the outstanding entry based on all factors.

Springlake
Table 11a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 3 entries in the Texas Advanced Red Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre			Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
NDTX050184-1R/Y	TXSEL	235.6	20.4	20.4	0.0	0.0	0.0	179.1	36.1	3.6
COTX04267-1R/Y	TXSEL	108.4	16.8	16.8	0.0	0.0	0.0	81.9	9.7	2.6
COTX04193-2R/Y	TXSEL	95.6	17.1	17.1	0.0	0.0	0.0	62.6	15.9	2.7
Average		146.5	18.1	18.1	0.0	0.0	0.0	107.9	20.6	3.0
L.S.D. (.05)		83.0	ns	ns				55.5	16.2	0.5

¹ 1=very poor to 5= excellent

Springlake
Table 11b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 3 entries in the Texas Advanced Red Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
NDTX050184-1R/Y	TXSEL	7.6	7.6	0.0	0.0	0.0	77.0	15.4	1.058	12.9	Round	Red
COTX04267-1R/Y	TXSEL	15.1	15.1	0.0	0.0	0.0	76.3	8.6	1.067	14.4	Round	Red
COTX04193-2R/Y	TXSEL	17.7	17.7	0.0	0.0	0.0	66.4	15.9	1.066	14.3	Round	Red
Average		13.5	13.5	0.0	0.0	0.0	73.2	13.3	1.064	13.9		
L.S.D. (.05)		ns	ns				ns	ns	0.002	0.4		

Springlake
Table 11c. Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 3 entries in the Texas Advanced Red Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Average Number Stems/ Plant	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
NDTX050184-1R/Y	TXSEL	10.4	1.9	1.5	100	100	1.6	4.5	4.7	4.7	0
COTX04267-1R/Y	TXSEL	4.8	1.9	0.8	100	100	2.0	3.4	3.5	3.2	9
COTX04193-2R/Y	TXSEL	6.5	1.7	1.1	100	100	1.5	3.1	3.2	3.2	49
Average		7.2	1.8	1.1	100	100	1.7	3.7	3.8	3.7	19
L.S.D. (.05)		ns	ns	ns			0.2	0.5	0.3	0.3	15

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Springlake
Table 11d.

Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 3 entries in the Texas Advanced Red Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
NDTX050184-1R/Y	TXSEL	2.0	1.5	1.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX04267-1R/Y	TXSEL	3.5	1.5	1.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX04193-2R/Y	TXSEL	3.5	1.5	1.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		3.0	1.5	1.0	4.0	3.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0
L.S.D. (.05)		0.1	ns	ns	ns	0.1	ns	ns	ns	ns	ns	ns	ns	ns	ns

¹ 1=light to 5=dark
² 1=round to 5=long
³ 1=none to 5=heavy
⁴ 1=deep to 5=shallow
⁵ 1=light to 5=dark

⁶ 1 to 5=none
⁷ 1 to 5=none
⁸ 1 to 5=none
⁹ 1 to 5=none
¹⁰ 1 to 5=none
¹¹ Stem end vascular discoloration severely evaluated

Springlake
Table 11e.

Notes and general rating for all reps of 3 entries in the Texas Advanced Red Skin Yellow Flesh
Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
NDTX050184-1R/Y	TXSEL	very nice shape and color, small potato, BOT, good color, light flesh,	4, 3.8, 3, 3.5
COTX04267-1R/Y	TXSEL	light skin, variable flesh color, , ,	2.5, 2.8, 2.5, 2.5
COTX04193-2R/Y	TXSEL	nice flesh, small, ,	2.5, 2.8, 3, 2.5

Springlake
Table 11f.

Specific gravity, percent solids, chip color rating, good chip bad chip ratio, notes, percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 3 entries in the Texas Advanced Red Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Gravity	% Solids	Chip Color ²	Good/Bad Chip Ratio	Notes ³	Percent Zebra Defect	Percent Zebra Defect at Grading
NDTX050184-1R/Y	TXSEL	1.058	12.9	3	5/35	14 Stem, 2 TM	0%	0%
COTX04267-1R/Y	TXSEL	1.067	14.4	3	27/14	8 Stem, 1 SE, 3 MB	0%	0%
COTX04193-2R/Y	TXSEL	1.066	14.3	3	7/32	26 Stem	0%	0%

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

¹1=poor, 5=excellent

²1=light, 3+=very dark

³BOT=Best Of Trial, 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

Outstanding Texas Advanced White/Yellow Selections, 2012

Overall Summary - Springlake and Dalhart The Texas Advanced White Skin Yellow Flesh Selection Trials included four entries at Springlake and 14 at Dalhart. Yukon Gold was the check variety for both locations. Based on both trials, the following entries will be tested again in 2013: NDTX081451CB-1W/Y (Small Potato Trial), COTX07382-1W/Y, COTX07382-2W/Y, and NDTX059759-3Pinto/Y.

Texas Advanced White/Yellow Trial

This trial consisted of four entries, including the check variety Yukon Gold.

Results were as follows: (Springlake Tables 12a, 12b, 12c, 12d, 12e, and 12f)

- BTX1544-2W/Y, NDTX081451CB-1W/Y, and Yukon Gold received the highest general ratings (Tables 12a).
- NDTX081451CB-1W/Y had the highest total yield, while BTX1544-2W/Y had the highest marketable yield (Table 12a).
- BTX1544-2W/Y and NDTX081451CB-1W/Y had the highest yield of < 4 oz. tubers (Table 12a).
- Yukon Gold had the highest percentage of marketable yield. NDTX081451CB-1W/Y had the highest percentage of <4 oz. tubers (Table 12b).
- NDTX081451CB-1W/Y, BTX1544-2W/Y, and COTX07382-1W/Y had the highest specific gravity (Table 12b).
- NDTX059759-3Pinto/Y and NDTX081451CB-1W/Y were the latest maturing entries, while ATTX06274-2W/Y was the earliest maturing (Table 12c).
- BTX1749-1W/Y had the darkest yellow flesh (Table 12d).
- Yukon Gold had 23% internal brownspot (Table 12d).
- NDTX081451CB-1W/Y received a best of trial designation for chip quality (Table 12f).

Comments on entries:

- NDTX081451CB-1W/Y Oblong White drop for hollow heart on one rep CR=3
- BTX1544-2W/Y Oblong White heavy set CR=3
- Yukon Gold Oblong White light set+, scab, poor internals+, drop CR=3
- COTX07382-1W/Y Oblong White light flesh, uneven color, low yield CR=3
- BTX1749-1W/Y Oblong White rough, buff, low yield CR=3
- COTX07382-2W/Y Oblong White low yield+, light flesh+ CR=3
- NDTX059759-3Pinto/Y Oblong White low yield CR=no data
- ATTX06274-2W/Y Oblong White smooth, med yield, low yield+, poor internals, drop CR=3

¹CR=chip color rating 1=light to 3= dark

Summary:

BTX1544-2W/Y, NDTX081451CB-1W/Y, and Yukon Gold were the best varieties based on general rating.

Springlake
Table 12a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 8 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre			Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
NDTX081451CB-1Y/Y	TXSEL	340.9	130.7	79.9	50.8	0.0	0.0	202.1	8.1	3.7
BTX1544-2W/Y	TXSEL	291.4	170.3	111.3	58.9	0.0	0.0	114.3	6.9	3.5
Yukon Gold	TXSEL	160.6	132.4	59.1	73.3	0.0	0.0	24.7	3.5	3.6
COTX07382-1W/Y	TXSEL	144.2	102.7	43.6	59.1	0.0	0.0	40.4	1.0	3.2
BTX1749-1W/Y	TXSEL	141.7	97.0	52.0	44.9	0.0	0.0	40.8	4.0	3.4
COTX07382-2W/Y	TXSEL	131.0	79.2	39.8	39.4	0.0	0.0	49.3	2.6	3.1
NDTX059759-3Pinto/Y	TXSEL	105.8	83.0	33.9	49.1	0.0	0.0	18.0	4.8	3.0
ATTX06274-2W/Y	TXSEL	103.0	54.8	34.9	19.9	0.0	0.0	48.2	0.0	2.5
Average		177.3	106.2	56.8	49.4	0.0	0.0	67.2	3.9	3.2
L.S.D. (.05)		72.8	51.4	30.2	ns			41.8	ns	0.3

¹ 1=very poor to 5= excellent

Springlake
Table 12b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 8 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
NDTX081451CB-1Y/Y	TXSEL	38.9	23.4	15.5	0.0	0.0	58.7	2.3	1.083	17.3	Oblong	White
BTX1544-2W/Y	TXSEL	58.5	38.1	20.4	0.0	0.0	39.3	2.3	1.083	17.3	Oblong	White
Yukon Gold	TXSEL	83.0	37.5	45.5	0.0	0.0	15.2	1.8	1.071	15.3	Oblong	White
COTX07382-1W/Y	TXSEL	71.4	30.2	41.2	0.0	0.0	28.0	0.6	1.083	17.3	Oblong	White
BTX1749-1W/Y	TXSEL	68.0	37.0	31.0	0.0	0.0	28.7	3.3	1.081	17.0	Oblong	White
COTX07382-2W/Y	TXSEL	65.8	32.0	33.8	0.0	0.0	33.2	1.0	1.081	17.0	Oblong	White
NDTX059759-3Pinto/Y	TXSEL	78.4	32.0	46.4	0.0	0.0	17.0	4.6	1.052	11.7	Oblong	White
ATX06274-2W/Y	TXSEL	50.7	31.5	19.2	0.0	0.0	49.3	0.0	1.066	14.2	Oblong	White
Average		64.3	32.7	31.6	0.0	0.0	33.7	2.0	1.075	15.9		
L.S.D. (.05)		14.4	ns	11.4			15.1	ns	0.004	0.8		

Springlake
Table 12c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 8 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Average Number Stems/ Plant	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
NDTX081451CB-1Y/Y	TXSEL	8.9	3.3	2.5	100	100	2.0	4.5	4.5	4.5	14
BTX1544-2W/Y	TXSEL	5.2	5.3	1.9	96	96	1.8	4.2	4.2	4.2	16
Yukon Gold	TXSEL	2.7	5.4	1.1	75	92	1.4	3.8	4.0	3.7	26
COTX07382-1W/Y	TXSEL	2.6	4.8	1.5	95	98	1.8	2.6	3.3	2.7	26
BTX1749-1W/Y	TXSEL	2.7	4.4	1.7	99	100	2.0	2.9	3.2	3.2	23
COTX07382-2W/Y	TXSEL	2.7	4.7	1.5	86	93	1.5	2.8	3.4	2.8	39
NDTX059759-3Pinto/Y	TXSEL	2.3	4.3	1.3	82	89	1.5	4.0	4.8	4.0	0
ATTX06274-2W/Y	TXSEL	2.3	3.8	1.6	92	97	1.6	2.7	2.6	2.6	44
Average		3.7	4.5	1.6	91	96	1.7	3.4	3.7	3.5	23
L.S.D. (.05)		2.3	1.3	0.2	16	ns	0.4	0.6	0.7	0.6	22

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Springlake
Table 12d.

Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 8 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
NDTX081451CB-1Y/Y	TXSEL	2.9	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	8	0	0	0
BTX1544-2W/Y	TXSEL	2.9	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Yukon Gold	TXSEL	2.8	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	23
COTX07382-1W/Y	TXSEL	2.6	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	3	0
BTX1749-1W/Y	TXSEL	3.4	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX07382-2W/Y	TXSEL	1.5	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX059759-3Pinto/Y	TXSEL	3.0	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX06274-2W/Y	TXSEL	2.8	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	5	0	0	18
Average		2.7	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	2	0	0	5
L.S.D. (.05)		0.3	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	15

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake
Table 12e.

Notes and general rating for all reps of 8 entries in the Texas Advanced White Skin
Yellow Flesh Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
NDTX081451CB-1Y/Y	TXSEL	, drop for hollow heart on one rep, ,	3.5, 3.8, 3.5, 3.8
BTX1544-2W/Y	TXSEL	heavy set, , ,	3.3, 3.5, 3.5, 3.5
Yukon Gold	TXSEL	light set+, scab, poor internals+, drop, , light flesh, low yield, uneven color, low	3.5, 3.3, 3.8, 3.8
COTX07382-1W/Y	TXSEL	yield	3.7, 3, 3, 3
BTX1749-1W/Y	TXSEL	rough, buff, , low yield,	3.4, 3.4, 3.4, 3.4
COTX07382-2W/Y	TXSEL	low yield+, light flesh+, , ,	3.2, 3, 3.2, 3
NDTX059759-3Pinto/Y	TXSEL	low yield, , , , smooth, med yield, low yield+, poor	3, 3, 3, 3
ATTX06274-2W/Y	TXSEL	internals, drop	2.5, 2.5, 2.5, 2.5

Springlake
Table 12f.

Specific gravity, percent solids, chip color rating, good chip bad chip ratio, notes, percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 8 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Gravity	% Solids	Chip Color ²	Good/Bad Chip Ratio	Notes ³	Percent Zebra Defect	Percent Zebra Defect at Grading
NDTX081451CB-1Y/Y	TXSEL	1.083	17.3	3	28/12	7 Stem, 1 Fus, BOT	0%	0%
BTX1544-2W/Y	TXSEL	1.083	17.3	3	25/14		8%	0%
Yukon Gold	TXSEL	1.071	15.3	3	0/40	23 Stem, 9 SE, 1 dark	0%	0%
COTX07382-1W/Y	TXSEL	1.083	17.3	3	9/21	12 Stem, 7 SE	0%	0%
BTX1749-1W/Y	TXSEL	1.081	17.0	3	8/23	18 Stem	0%	0%
COTX07382-2W/Y	TXSEL	1.081	17.0	3	14/26	17 Stem, 7 SE	0%	0%
NDTX059759-3Pinto/Y	TXSEL	1.052	11.7	no data	no data	no data	no data	0%
ATTX06274-2W/Y	TXSEL	1.066	14.2	3	22/20	16 Stem, 4 Dark	0%	0%

One .05" slice per tuber, at least 10 tubers per rep, three reps, 1 min 25 sec, 36^oF corn oil.

¹1=poor, 5=excellent

²1=light, 3+=very dark

³BOT=Best Of Trial, 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

2012 Dalhart Trials

Summary of growing conditions:

These trials were planted 10 miles southwest of Dalhart in a CSS Farms production field on 7 to 11 May and harvested on 3, 10, 17, 18 September 1, and 7 October. Standard cultural practices for the area were used (Table 3). Precipitation was higher than normal during the first week in June, first and second week in August, and second week in September. Temperatures were slightly higher during the growing season. (Figure 4).

Trials conducted:

- Chip Potato Breeders Trial (not reported)
- Western and Southwestern Regional Chip
- Western Regional and Advanced Texas Russet
- Western Regional and Advanced Texas Red
- Western Regional and Advanced Texas Red/Yellow Flesh
- Western Regional Advanced Texas White/Yellow Flesh
- Commercial Variety Chip
- Texas Advanced Chip Selection
- 2011 Chip Selection
- Texas Advanced Russet Selection
- 2011 Russet Selection
- Texas Advanced Red Selection
- 2011 Red Selection
- Texas Advanced Red Skin Yellow Flesh Selection
- 2011 Red Skin Yellow Flesh Selection
- Texas Advanced White Skin Yellow Flesh Selection
- 2011 White Skin Yellow Flesh Selection
- Texas Advanced Small Potato Selection
- 2011 Small Potato Selection
- Texas Advanced Fingerling Selection
- 2011 Fingerling Selection

- Texas Advanced Purple Skin Purple Flesh Selection
- 2011 Purple Flesh Selection

Table 3. Environmental and cultural inputs for the 2012 Dalhart Trials.		
Location:		
Dalhart, Texas		
Soil Type		
Dallum Fine Sand Loam		
Seed Source		
New York, Colorado, Oregon, Texas, and Idaho		
Date:		DAP
Planted	May 7, 2012	
Vines Killed (Red and Red Yellow Flesh)	August 28, 2012	111
Vines Killed (Chip and White Yellow Flesh)	August 28, 2012	111
Vines Killed (Russet)	September 4, 2012	117
Harvested (Nat Chip Trial)	September 3, 2012	116
Harvested (Red and Red/White Yellow Flesh)	September 10, 2012	123
Harvested (Chip)	September 17, 2012	130
Harvested (Small)	October 1, 2012	144
Harvested (Russet)	October 8, 2012	151
Plot Information:		
Size of Plots	22' 6"	
Spacing Between Hills	9"	
Spacing Between Rows	28"	
Hills Per Plot	30	
Number of Rows Per Plot	2	
Number of Reps	4	
Method of Harvest:		
Four-row digger, with hand pick up.		
Fertilizer:		
Application:		
140-134-62 # per acre		
Irrigation:		
Center Pivot		
Seed Treatment		
Cruiser Maxx		
Insecticide:		
Admire Pro, Beleaf, Epimek, Fulfill, Movento, Oberon		
Herbicides Applied:		
Sencor DF, Select Max, Matrix		
Fungicide Applied:		
Quadris, Penncozeb, Bravo, Revus Top, Scala SC, Luna Tranquility		
Environmental Factors:		
Precipitation was higher than normal during the first week in June, first and second week in August, and second week in September. Temperatures were slightly higher during the growing season.		

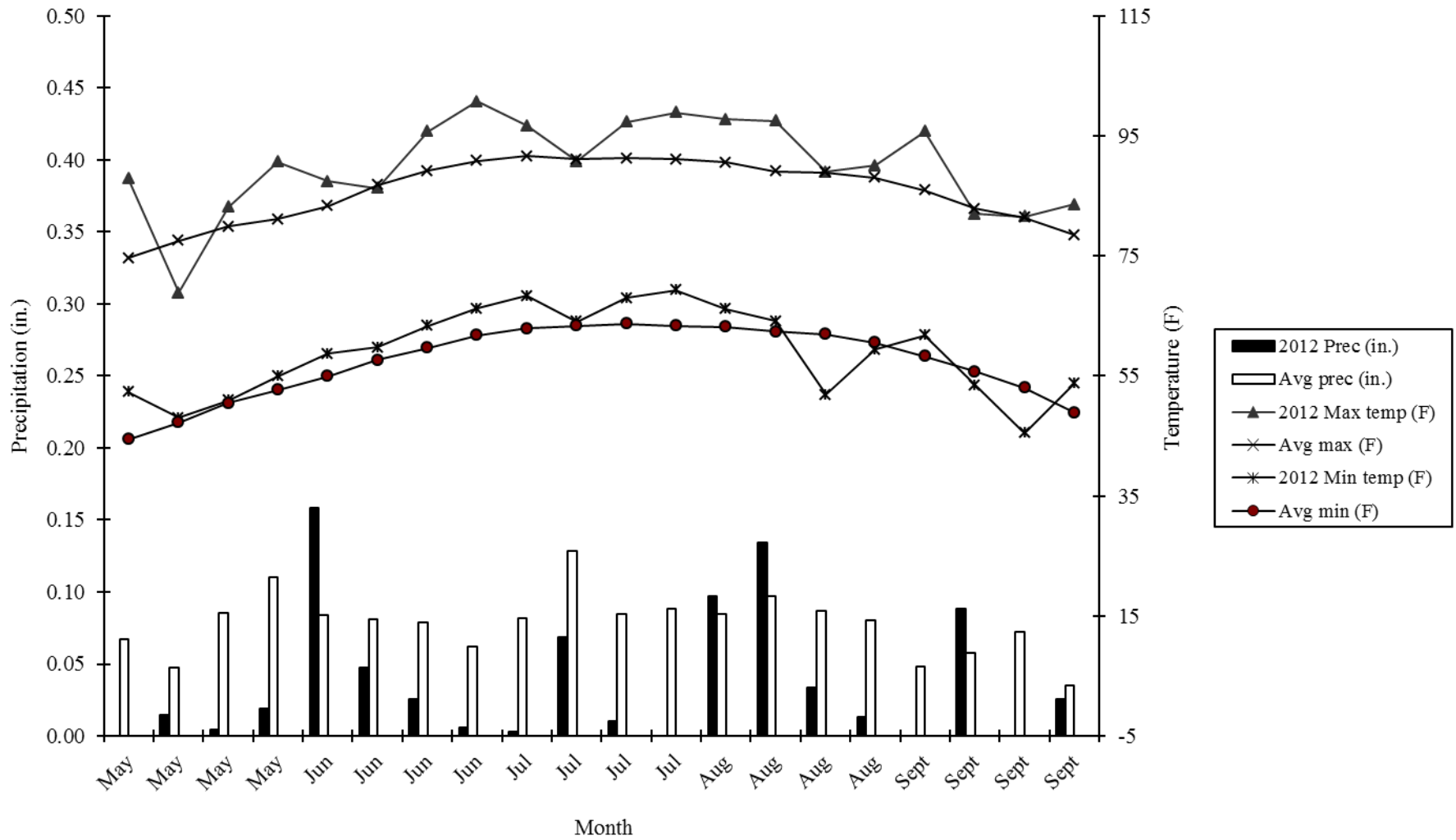


Figure 4. Weekly minimum/maximum temperatures and precipitation for the 2012-growing season near Dalhart, Texas compared to the average minimum/maximum temperatures and precipitation (1949-2012).

Western and Southwestern Regional Chip Trial

This trial consisted of twelve entries, including the check varieties Atlantic and Chipeta.

Results were as follows: (Dalhart Tables 1a, 1b, 1c, 1d, 1e, and 1f)

- AC03452-2W had a best of trial designation for chip appearance, while CO03243-3W and AC00206-2W received high general ratings and a best of trial designation for tuber appearance (Table 1f).
- CO03243-3W had the highest total and marketable yield (Table 1a).
- CO02024-9W had the highest yield of < 4 oz. tubers (Table 1a).
- A01143-3C had the highest yield of culls/No. 2 tubers (Table 1a).
- Chipeta had the highest percentage of marketable yield (Table 1b).
- CO02024-9W had the highest percentage of <4 oz. tubers, while A01143-3C had the highest percentage of culls/No. 2 tubers (Table 1b).
- Atlantic , CO02033-1W, and CO02321-4W had the highest specific gravity (Table 1b).
- AC01151-5W had the highest average number of tubers per plant (Table 1c).
- All of the entries were late in maturity (Table 1c).
- Atlantic had 43% internal brownspot (Table 1d).
- CO03243-3W, CO02024-9W, and AC03433-1W produced over 83% high quality chips (Table 1f).

Comments on entries:

- CO03243-3W Round White BOT+, nice shape CR=1
- AC00206-2W Round White very nice+, BOT+ CR= 1
- AC03452-2W Round White nice, tuber moth CR=1
- Atlantic Round Buff low yield, buff, nice shape CR=1
- CO02033-1W Oblong White too oblong, poor shape CR=1
- AC01151-5W Round White nice shape, poor internals, lots of B's CR=1
- CO02024-9W Round White lots of B's, nice shape CR=1
- Chipeta Round White low yield, rough CR=1
- A00188-3C Round White poor shape CR=1
- A01143-3C Round White poor shape, light set, rough CR=1

- CO02321-4W Round White light set, some too oblong CR=1
- AC03433-1W Round White low yield+, nice shape, light set CR=1

¹CR=chip color rating 1=light to 3= dark

Summary:

Overall, CO03243-3W, CO02024-9W, and AC03433-1W produced the highest quality chips.

Dalhart
Table 1a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 12 entries in the Western and Southwest Regional Chip Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre			Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
CO03243-3W	WR	439.1	294.3	75.7	140.0	78.6	0.0	139.8	5.0	4.0
AC00206-2W	SWR	420.3	188.8	56.6	105.8	26.3	0.0	219.5	12.0	3.9
AC03452-2W	SWR	406.8	207.4	56.0	107.2	44.2	0.0	174.9	24.5	3.8
Atlantic	WR	401.6	259.1	66.6	107.0	85.5	0.0	138.4	4.1	3.5
CO02033-1W	WR	384.2	174.9	49.8	98.1	27.0	0.0	185.2	24.1	2.6
AC01151-5W	WR	353.9	101.4	54.3	41.3	5.8	0.0	229.8	22.6	3.4
CO02024-9W	WR	353.9	106.0	53.3	47.1	5.6	0.0	245.6	2.3	3.7
Chipeta	WR	333.5	229.0	40.9	95.6	92.5	4.6	85.5	14.5	3.0
A00188-3C	WR	329.6	122.0	57.3	47.1	17.6	0.0	184.8	22.8	3.1
A01143-3C	WR	309.5	144.8	36.7	80.7	27.4	0.0	129.0	35.7	3.3
CO02321-4W	WR	242.1	159.9	30.1	73.0	56.8	0.0	79.9	2.3	3.0
AC03433-1W	WR	222.2	138.4	32.8	63.9	41.7	0.0	63.7	20.1	3.1
Average		349.7	177.2	50.8	83.9	42.4	0.4	156.3	15.8	3.4
L.S.D. (.05)		59.7	54.2	26.6	39.2	29.5	2.1	52.2	16.9	0.2

¹ 1=very poor to 5= excellent

Dalhart
Table 1b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 12 entries in the Western and Southwest Regional Chip Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
CO03243-3W	WR	66.9	17.2	31.9	17.8	0.0	32.0	1.1	1.071	15.2	Round	White
AC00206-2W	SWR	45.5	13.9	25.4	6.2	0.0	51.6	2.9	1.077	16.3	Round	White
AC03452-2W	SWR	51.5	13.7	26.9	11.0	0.0	42.7	5.8	1.066	14.3	Round	White
Atlantic	WR	64.6	16.8	26.5	21.3	0.0	34.3	1.1	1.081	16.9	Round	Buff
CO02033-1W	WR	44.9	13.0	25.1	6.8	0.0	49.2	6.0	1.081	17.0	Oblong	White
AC01151-5W	WR	28.3	15.1	11.5	1.7	0.0	65.2	6.5	1.073	15.6	Round	White
CO02024-9W	WR	30.8	15.3	13.6	1.8	0.0	68.7	0.6	1.075	15.8	Round	White
Chipeta	WR	68.7	12.2	28.4	28.1	1.3	25.9	4.1	1.070	15.0	Round	White
A00188-3C	WR	36.4	17.3	13.6	5.6	0.0	56.6	7.0	1.079	16.6	Round	White
A01143-3C	WR	46.3	11.8	26.0	8.4	0.0	42.4	11.3	1.074	15.7	Round	White
CO02321-4W	WR	65.9	12.5	30.1	23.4	0.0	33.2	0.9	1.082	17.1	Round	White
AC03433-1W	WR	62.1	15.0	28.9	18.2	0.0	29.0	8.9	1.074	15.8	Round	White
Average		51.0	14.5	24.0	12.5	0.1	44.2	4.7	1.075	15.9		
L.S.D. (.05)		13.1	ns	9.7	8.4	0.6	12.8	4.6	0.005	0.9		

Dalhart
Table 1c.

Average number of tubers per plant, average tuber weight, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 12 entries in the Western and Southwest Regional Chip Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
CO03243-3W	WR	5.7	5.1	100	1.5	4.5	4.4	4.5	3
AC00206-2W	SWR	7.6	3.6	100	1.9	4.7	4.2	4.7	10
AC03452-2W	SWR	6.4	4.1	100	1.6	4.7	4.4	4.8	13
Atlantic	WR	5.4	4.8	100	1.9	4.6	4.5	4.6	3
CO02033-1W	WR	6.1	4.1	100	1.6	4.6	3.8	4.6	23
AC01151-5W	WR	8.1	2.9	100	1.6	4.4	4.4	4.5	8
CO02024-9W	WR	7.1	3.2	100	1.9	4.5	4.1	4.4	10
Chipeta	WR	4.0	5.3	100	1.5	4.9	5.0	4.7	0
A00188-3C	WR	5.9	3.6	100	2.0	4.7	4.6	4.6	3
A01143-3C	WR	4.7	4.2	100	1.8	4.6	4.9	4.6	0
CO02321-4W	WR	3.3	5.0	94	1.5	4.4	4.1	4.5	15
AC03433-1W	WR	3.1	5.2	90	1.8	3.8	4.5	3.9	8
Average		5.6	4.3	99	1.7	4.5	4.4	4.5	8
L.S.D. (.05)		1.2	0.5	4	0.3	0.5	0.4	0.3	7

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Dalhart
Table 1d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 12 entries in the Western and Southwest Regional Chip Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
CO03243-3W	WR	1.0	1.5	2.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	0	0	0	3
AC00206-2W	SWR	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	3
AC03452-2W	SWR	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	8	0	0	8
Atlantic	WR	1.0	1.5	3.5	4.0	3.5	5.0	5.0	5.0	5.0	5.0	15	0	0	43
CO02033-1W	WR	1.0	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AC01151-5W	WR	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	3	0	0	8
CO02024-9W	WR	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Chipeta	WR	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	13	0
A00188-3C	WR	1.0	2.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
A01143-3C	WR	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	8
CO02321-4W	WR	1.0	2.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	8	0	0	0
AC03433-1W	WR	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		1.0	1.8	1.3	4.0	1.3	5.0	5.0	5.0	5.0	5.0	3	0	1	6
L.S.D. (.05)		ns	0.1	0.1	ns	0.1	ns	ns	ns	ns	ns	9	ns	ns	20

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Dalhart
Table 1e.

Notes and general rating for all reps of 12 entries in the Western and Southwest Regional
Chip Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
CO03243-3W	WR	BOT+, nice shape, , ,	4, 3.9, 3.9, 4
AC00206-2W	SWR	very nice+, BOT+, ,	3.8, 3.8, 4, 4
AC03452-2W	SWR	nice, tuber moth, , ,	3.8, 3.8, 3.9, 3.8
Atlantic	WR	low yield, buff, nice shape, ,	3.3, 3.6, 3.5, 3.5
CO02033-1W	WR	too oblong, poor shape, ,	2.5, 2.5, 2.5, 3
AC01151-5W	WR	nice shape, poor internals, lots of B's, ,	3.3, 3.6, 3.4, 3.4
CO02024-9W	WR	lots of B's, nice shape, , ,	3.6, 3.7, 3.6, 3.8
Chipeta	WR	low yield, rough, , ,	3, 3, 3, 3
A00188-3C	WR	poor shape, , ,	3, 3.3, 3, 3
A01143-3C	WR	poor shape, light set, rough, ,	3.3, 3.3, 3.3, 3.3
CO02321-4W	WR	light set, some too oblong, ,	3, 3, 3, 3
AC03433-1W	WR	low yield+, nice shape, light set, ,	3, 3, 3.3, 3

Dalhart
Table 1f.

Specific gravity, percent solids, chip color rating, good chip bad chip ratio, notes, percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 12 entries in the Western and Southwest Regional Chip Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Gravity	% Solids	Chip Color ²	Good/Bad Chip Ratio	Notes ³	Percent Zebra Defect	Percent Zebra Defect at Grading
CO03243-3W	WR	1.071	15.2	1	32/5	4Stem	0%	0%
AC00206-2W	SWR	1.077	16.3	1	27/9	3Stem, 3TM, 2Mech ,	0%	0%
AC03452-2W	SWR	1.066	14.3	1	30/8	BOT, 3Stem, 4TM, 1Mech	0%	0%
Atlantic	WR	1.081	16.9	1	29/12	6Stem, 1TM, 1HH, 1MB	0%	10%
CO02033-1W	WR	1.081	17.0	1	30/10	10Stem, Drop, Shape-	0%	5%
AC01151-5W	WR	1.073	15.6	1	23/16	3TM , 7Stem, 2Scab, 1Mech	0%	0%
CO02024-9W	WR	1.075	15.8	1	31/6	1TM/GH, 3Stem	3%	5%
Chipeta	WR	1.070	15.0	1	14/25	Drop, 13Stem	0%	0%
A00188-3C	WR	1.079	16.6	1	23/16	15Stem, 1Mech	0%	0%
A01143-3C	WR	1.074	15.7	1	29/11	8Stem	8%	0%
CO02321-4W	WR	1.082	17.1	1	27/11	10Stem	0%	0%
AC03433-1W	WR	1.074	15.8	1	33/5	1Mech,2GH, 2Stem, 1TM	0%	0%

One .05" slice per tuber, at least 10 tubers per rep, 4 reps, 1 min 25 sec, 365 °F corn oil.

¹1=poor, 5=excellent

²1=light, 3+=very dark

³BOT=Best Of Trial, 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

Western Regional and Texas Advanced Russet Trial

This trial consisted of 26 entries, including the check varieties Ranger Russet, Russet Burbank, and Russet Norkotah .

Results were as follows: (Dalhart Tables 2a, 2b, 2c, 2d, and 2e)

- A02138-2, Russet Norkotah 296, Russet Norkotah, ATX91137-1Ru, Russet Norkotah 223, AO02183-2, and Russet Norkotah 112 received high general ratings and best of trial designations (Tables 2a and 2e).
- A02138-2 had the highest total and marketable yield, while A03158-2TE and Russet Norkotah 296 had the highest yield of 10-18 oz. tubers (Table 2a)
- CO03187-1RU had the highest yield of <4 oz. tubers. Russet Burbank had the highest yield of culls/No.2 tubers (Table 2a).
- A03158-2TE and CO03202-1RU had the highest and second highest percent of marketable yield respectively (Table 2b).
- CO03187-1RU and AC00395-2RU had the highest and second highest percentage yield of <4 oz. tubers. Russet Burbank and AOTX02136-1Ru had the highest percentage yield of culls/No. 2 tubers (Table 2b).
- The highest specific gravity was recorded for ATX9332-12Ru (Table 2b).
- Ranger Russet and AO02183-2 were the latest maturing entries. A02138-2, CO03187-1RU, and Russet Norkotah were the earliest maturing entries (Table 2c).

Comments on entries:

- A02138-2 Oblong Russet nice flesh, BOT-
- CO03187-1RU Oblong Russet yield+, blocky, heavy set, small
- Russet Norkotah 296 Long Russet nice shape, yield+, BOT, pointed
- Russet Norkotah Long Russet nice shape, BOT-
- ATX91137-1Ru Long Russet some pointed, blocky, BOT,
- A01010-1 Long Russet pointed, drop, yield+
- AC00395-2RU Long Russet pointed, small, heavy set, drop
- AOTX98152-3Ru Oblong Russet blocky, yield+
- Ranger Russet Long Russet small, pointed, yield+, skinny

- Russet Norkotah 223 Long Russet some pointing
- TXA549-1Ru Oblong Russet BOT for shape, nice flesh, blocky, smooth, low yield
- AO02183-2 Long Russet yield+, skinny
- ATX9332-12Ru Oblong Russet pointed, drop+++
- Russet Burbank Long Russet rough, skinny
- CO03276-4RU Oblong Russet small, low yield, pointed
- CO03276-5RU Long Russet pointed, skinny, drop+
- A03158-2TE Long Russet skinny, too long, drop
- AO02060-3 Oblong Russet large, nice flesh, some pointing, BOT-, yield-
- AO96305-3 Long Russet long and skinny, pointed, drop
- Russet Norkotah 112 Long Russet slight pointing, BOT-, bad rep
- A99029-3E Oblong Russet small, blocky
- Stampede Russet Long Russet pointed, high yield
- A02507-2LB Oblong Russet blocky, small, light set
- CO03202-1RU Long Russet flat, long skinny, too long
- AO00057-2 Long Russet low yield+
- AOTX02136-1Ru Long Russet pointed, poor shape, raised eyes, drop

Summary:

Overall, A02138-2, Russet Norkotah 296, Russet Norkotah, and ATX91137-1Ru were the outstanding entries based on all factors.

Dalhart
Table 2a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 26 entries in the Western Regional and Texas
Advanced Selection Russet Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz				
A02138-2	WR	531.0	434.6	130.9	146.7	157.0	0.0	82.1	14.3	3.9
CO03187-1RU	WR	510.9	339.1	115.5	126.3	97.3	3.1	161.6	7.1	3.6
Russet Norkotah 296	WR	510.7	435.4	91.9	141.7	201.8	8.1	56.6	10.6	4.0
Russet Norkotah	WR	500.7	398.9	71.6	148.3	179.0	14.9	68.7	18.3	3.8
ATX91137-1RU	Tx Col	491.6	387.7	48.7	166.6	172.4	16.2	53.3	34.4	3.7
A01010-1	WR	476.7	410.7	57.3	180.5	173.0	2.5	38.8	24.7	3.3
AC00395-2RU	WR	470.0	320.5	119.1	113.0	88.4	0.0	134.6	14.9	3.3
AOTX98152-3RU	Tx Col	470.0	358.0	56.6	146.0	155.4	36.9	50.0	25.1	3.6
Ranger Russet	WR	462.4	324.4	108.9	131.9	83.6	4.4	120.1	13.5	2.9
Russet Norkotah 223	WR	460.5	353.5	70.5	135.0	147.9	12.0	74.7	20.3	3.8
TXA549-1RU	Tx Col	454.5	345.6	65.1	93.8	186.7	25.3	58.1	25.5	3.6
AO02183-2	WR	452.4	373.8	94.6	117.0	162.2	9.3	44.0	25.3	3.5
ATX9332-12RU	Tx Col	450.5	377.1	71.1	127.6	178.4	0.0	47.9	25.5	3.2
Russet Burbank	WR	442.0	340.2	74.3	164.5	101.4	0.0	58.1	43.8	2.2
CO03276-4RU	WR	435.4	351.0	105.4	163.9	81.7	0.0	82.1	2.3	3.4
CO03276-5RU	WR	433.5	327.3	101.0	139.6	86.7	0.0	93.1	13.1	3.4
A03158-2TE	WR	430.0	380.0	53.3	117.6	209.1	4.1	28.8	17.0	2.9
AO02060-3	WR	423.6	330.2	57.9	99.8	172.6	40.9	36.5	16.0	3.9
AO96305-3	WR	422.3	354.1	65.3	106.0	182.7	7.3	50.4	10.6	3.3
Russet Norkotah 112	WR	418.8	318.8	71.1	163.9	83.8	13.9	69.3	16.8	3.7
A99029-3E	WR	381.3	263.4	74.7	100.2	88.6	10.0	96.9	11.0	3.7
Stampede Russet	Tx Col	380.8	253.3	33.2	84.0	136.1	37.5	63.7	26.3	3.4
A02507-2LB	WR	334.0	268.8	62.9	89.0	117.0	14.3	46.0	4.8	3.3
CO03202-1RU	WR	328.6	282.9	46.5	97.9	138.6	8.3	27.2	10.2	3.1
AO00057-2	WR	239.0	207.0	50.6	87.5	68.9	0.0	26.3	5.6	3.5
AOTX02136-1RU	Tx Col	197.5	151.6	22.6	45.2	83.8	14.7	12.9	18.3	3.1
Average		436.4	341.5	75.9	127.5	138.0	10.8	66.8	17.5	3.4
L.S.D. (.05)		60.7	56.9	26.7	36.7	50.0	21.3	26.5	18.1	0.2

¹ 1=very poor to 5= excellent

Dalhart
Table 2b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 26 entries in the Western Regional and Texas
Advanced Selection Russet Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
A02138-2	WR	81.9	24.9	27.7	29.3	0.0	15.5	2.6	1.082	17.2	Oblong	Russet
CO03187-1RU	WR	66.7	23.0	24.7	19.0	0.6	31.4	1.4	1.083	17.3	Oblong	Russet
Russet Norkotah 296	WR	85.6	18.2	27.2	40.2	1.4	10.9	2.1	1.073	15.5	Long	Russet
Russet Norkotah	WR	79.7	14.3	29.5	35.9	2.8	13.8	3.7	1.066	14.3	Long	Russet
ATX91137-1RU	Tx Col	79.8	10.1	34.4	35.3	2.9	10.8	6.6	1.054	12.2	Long	Russet
A01010-1	WR	86.4	12.3	38.1	36.1	0.6	8.2	4.8	1.073	15.6	Long	Russet
AC00395-2RU	WR	68.5	25.7	24.4	18.4	0.0	28.2	3.3	1.081	16.9	Long	Russet
AOTX98152-3RU	Tx Col	76.5	12.3	32.1	32.2	7.2	10.6	5.6	1.079	16.7	Oblong	Russet
Ranger Russet	WR	70.3	23.4	28.9	17.9	1.0	25.9	2.8	1.082	17.2	Long	Russet
Russet Norkotah 223	WR	76.8	15.4	29.1	32.3	2.4	16.3	4.4	1.069	14.8	Long	Russet
TXA549-1RU	Tx Col	76.2	13.4	21.2	41.6	5.2	13.3	5.4	1.074	15.6	Oblong	Russet
AO02183-2	WR	82.8	21.0	26.0	35.8	2.0	9.8	5.5	1.070	15.0	Long	Russet
ATX9332-12RU	Tx Col	84.2	16.6	29.0	38.6	0.0	10.4	5.4	1.093	19.1	Oblong	Russet
Russet Burbank	WR	77.2	16.9	37.2	23.0	0.0	13.0	9.8	1.071	15.1	Long	Russet
CO03276-4RU	WR	80.6	24.0	37.8	18.8	0.0	18.9	0.5	1.078	16.3	Oblong	Russet
CO03276-5RU	WR	75.3	23.1	32.6	19.6	0.0	21.8	3.0	1.079	16.5	Long	Russet
A03158-2TE	WR	88.4	12.4	27.4	48.6	0.9	6.6	4.1	1.072	15.3	Long	Russet
AO02060-3	WR	78.4	13.9	23.9	40.6	9.3	8.7	3.5	1.080	16.8	Oblong	Russet
AO96305-3	WR	83.6	15.4	25.0	43.2	1.7	12.2	2.5	1.077	16.3	Long	Russet
Russet Norkotah 112	WR	76.6	17.4	39.8	19.4	3.0	16.5	3.9	1.073	15.5	Long	Russet
A99029-3E	WR	69.2	19.7	26.3	23.2	2.6	25.4	2.9	1.075	15.9	Oblong	Russet
Stampede Russet	Tx Col	66.5	8.8	22.3	35.4	9.9	16.5	7.1	1.067	14.5	Long	Russet
A02507-2LB	WR	81.5	18.0	26.3	37.1	4.5	12.5	1.5	1.079	16.7	Oblong	Russet
CO03202-1RU	WR	86.5	14.4	29.9	42.2	2.3	8.2	3.1	1.074	15.7	Long	Russet
AO00057-2	WR	85.4	21.0	37.0	27.4	0.0	11.3	3.2	1.079	16.5	Long	Russet
AOTX02136-1RU	Tx Col	77.2	11.6	25.8	39.7	6.8	6.8	9.2	1.069	14.9	Long	Russet
Average		78.6	17.4	29.5	31.6	2.4	15.1	3.9	1.075	15.9		
L.S.D. (.05)		8.0	6.0	9.0	10.7	4.9	5.9	4.3	0.010	2.1		

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Table 2c.

Average number of tubers per plant, average tuber weight, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 26 entries in the Western Regional and Texas Advanced Selection Russet Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
A02138-2	WR	5.9	5.8	100	1.5	4.6	1.0	4.5	100
CO03187-1RU	WR	6.8	4.9	100	1.8	4.7	1.3	4.7	93
Russet Norkotah 296	WR	5.2	6.3	100	1.5	5.0	3.0	4.8	63
Russet Norkotah	WR	5.2	6.2	100	1.5	5.0	2.0	4.7	90
ATX91137-1RU	Tx Col	4.7	6.8	100	1.5	4.8	3.3	4.7	38
A01010-1	WR	5.3	6.6	88	1.5	4.1	4.3	4.5	8
AC00395-2RU	WR	5.9	5.1	100	1.8	4.7	4.3	4.7	5
AOTX98152-3RU	Tx Col	4.2	7.2	100	2.0	4.8	3.4	4.8	38
Ranger Russet	WR	6.3	4.8	100	1.8	4.8	4.4	4.7	10
Russet Norkotah 223	WR	5.0	5.9	100	1.5	5.0	3.0	4.8	53
TXA549-1RU	Tx Col	3.9	7.5	100	2.0	4.8	3.3	4.8	45
AO02183-2	WR	4.7	6.3	100	1.5	4.9	4.4	4.8	1
ATX9332-12RU	Tx Col	4.1	7.1	100	1.5	4.8	3.8	4.8	23
Russet Burbank	WR	5.6	5.2	100	2.0	4.7	3.4	4.7	35
CO03276-4RU	WR	6.0	4.7	100	2.0	4.2	2.8	4.2	63
CO03276-5RU	WR	5.7	4.9	100	1.8	4.8	2.3	4.8	70
A03158-2TE	WR	4.1	7.3	93	1.5	4.0	3.4	4.2	35
AO02060-3	WR	3.6	7.6	100	2.0	4.4	2.9	4.3	53
AO96305-3	WR	4.5	6.0	100	1.8	4.4	4.4	4.5	5
Russet Norkotah 112	WR	4.8	5.6	100	1.8	5.0	2.5	4.8	63
A99029-3E	WR	4.5	5.5	100	2.0	4.7	3.3	4.7	43
Stampede Russet	Tx Col	3.6	6.8	100	1.5	4.8	2.9	4.7	58
A02507-2LB	WR	3.3	6.8	100	2.3	3.7	4.3	3.8	10
CO03202-1RU	WR	4.0	6.3	83	2.0	3.6	4.2	3.6	8
AO00057-2	WR	5.8	5.7	55	1.5	3.2	4.1	3.7	13
AOTX02136-1RU	Tx Col	2.6	7.7	77	1.5	4.1	2.3	4.0	73
Average		4.9	6.1	97	1.7	4.5	3.3	4.5	41
L.S.D. (.05)		1.1	0.7	12	0.2	0.3	0.6	0.3	17

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Dalhart
Table 2d.

Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 26 entries in the Western Regional and Texas Advanced Selection Russet Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
A02138-2	WR	1.0	3.5	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO03187-1RU	WR	1.0	3.5	4.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Russet Norkotah 296	WR	1.0	4.0	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
Russet Norkotah	WR	1.0	4.0	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX91137-1RU	Tx Col	1.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	10	0
A01010-1	WR	1.0	4.0	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AC00395-2RU	WR	1.0	4.0	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX98152-3RU	Tx Col	1.0	3.5	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
Ranger Russet	WR	1.0	4.0	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Russet Norkotah 223	WR	1.0	4.0	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TXA549-1RU	Tx Col	1.0	3.5	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AO02183-2	WR	1.0	4.0	4.0	3.3	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX9332-12RU	Tx Col	1.0	3.6	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Russet Burbank	WR	1.0	4.0	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO03276-4RU	WR	1.0	3.5	3.5	4.0	3.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO03276-5RU	WR	1.0	4.0	4.0	3.6	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
A03158-2TE	WR	1.0	4.0	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AO02060-3	WR	1.0	3.5	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AO96305-3	WR	1.0	4.0	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
Russet Norkotah 112	WR	1.0	4.0	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
A99029-3E	WR	1.0	3.5	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Stampede Russet	Tx Col	1.0	4.0	3.8	3.8	3.9	5.0	5.0	5.0	5.0	5.0	10	0	0	0
A02507-2LB	WR	1.0	3.5	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO03202-1RU	WR	1.0	4.5	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AO00057-2	WR	1.0	4.0	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX02136-1RU	Tx Col	1.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		1.0	3.9	4.0	3.6	4.0	5.0	5.0	5.0	5.0	5.0	1	0	0	0
L.S.D. (.05)		ns	0.1	0.1	0.1	0.1	ns	ns	ns	ns	ns	5	ns	ns	ns

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

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Table 2e. Notes and general rating for all reps of 26 entries in the Western Regional and Texas Advanced Selection Russet Trial grown near Springlake, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
A02138-2	WR	, nice flesh, BOT-, ,	3.9, 3.9, 3.8, 3.8
CO03187-1RU	WR	, yield+, blocky, heavy set, small, ,	3.3, 3.8, 3.7, 3.5
Russet Norkotah 296	WR	nice shape, yield+, BOT, pointed, ,	4, 4, 3.9, 4
Russet Norkotah	WR	nice shape, BOT-, , ,	3.8, 3.8, 3.8, 3.7
ATX91137-1RU	Tx Col	, , some pointed, blocky, BOT,	4, 3.7, 3.5, 3.6
A01010-1	WR	, pointed, drop, yield+, ,	3.5, 3, 3.2, 3.5
AC00395-2RU	WR	, , pointed, small, heavy set, drop,	3.2, 3.2, 3.2, 3.5
AOTX98152-3RU	Tx Col	blocky, yield+, , ,	3.7, 3.5, 3.5, 3.7
Ranger Russet	WR	, small, pointed, yield+, skinny, ,	3, 2.8, 2.8, 3
Russet Norkotah 223	WR	some pointing, , ,	3.7, 3.7, 3.7, 3.9
TXA549-1RU	Tx Col	, , BOT for shape, nice flesh, blocky, smooth, low yield	3.6, 3.6, 3.6, 3.7
AO02183-2	WR	yield+, skinny, , ,	3.3, 3.8, 3.6, 3.3
ATX9332-12RU	Tx Col	, pointed, drop+++, ,	3, 3.2, 3.5, 3
Russet Burbank	WR	rough, skinny, , ,	2, 2.2, 2.2, 2.5
CO03276-4RU	WR	small, low yield, pointed, , ,	3.6, 3.4, 3.4, 3.2
CO03276-5RU	WR	pointed, skinny, drop+, , ,	3.7, 3.3, 3.2, 3.3
A03158-2TE	WR	, skinny, too long, drop, ,	3, 3, 2.8, 2.8
AO02060-3	WR	large, nice flesh, some pointing, BOT-, yield-, ,	4, 3.9, 3.9, 3.9
AO96305-3	WR	, , long and skinny, pointed, drop,	3.2, 3.4, 3.4, 3.2
Russet Norkotah 112	WR	slight pointing, BOT-, bad rep, ,	3.8, 3.8, 3.6, 3.4
A99029-3E	WR	, , , small, blocky	3.6, 3.8, 3.6, 3.6
Stampede Russet	Tx Col	pointed, high yield, , ,	3.5, 3.5, 3.5, 3.2
A02507-2LB	WR	blocky, small, light set, , ,	3.6, 3.4, 3.3, 3
CO03202-1RU	WR	flat, long skinny, too long, , ,	3.4, 3.4, 2.7, 3
AO00057-2	WR	, low yield+, ,	3.5, 3.8, 3.3, 3.5
AOTX02136-1RU	Tx Col	, , , pointed, poor shape, raised eyes, drop	3.5, 3, 3, 3

Western Regional and Texas Advanced Red Trial

This trial consisted of 17 entries, including the check varieties Red LaSoda and Dark Red Norland.

Results were as follows: (Dalhart Tables 3a, 3b, 3c, 3d, and 3e)

- NDTX4784-7R and NDTX5438-11R had the highest general ratings and best of trial designations, while ATTX98453-6R and OR04131-2 received high general ratings (Table 3a and Table 3e).
- COTX94216-1R had the highest total yield and 4-6 oz. tubers. Red LaSoda had the highest yield of culls/No. 2 tubers (Table 3a).
- ATTX98453-11BR had the highest marketable and yield of 10-18 oz. tubers, while ATTX98453-3R had the highest yield of <4 oz. tubers (Table 3b).
- NDTX5438-11R had the highest percentage of marketable yield, while Dark Red Norland had the highest percentage of 10-18 oz. tubers (Table 3b).
- OR04131-2 had the highest percentage of <4 oz. tubers (Table 3b).
- ATTX98453-6R and ATTX01178-1R had the highest specific gravity (Table 3b).
- ATTX98453-6R had the highest average number of tubers per plant (Table 3c).
- COTX94216-1R and CO00291-5R were the latest maturing entries, while COTX02293-4R, ATTX98453-11BR, and OR04131-2 were the earliest maturing entries (Table 3c).
- Red LaSoda had the deepest eyes (Table 3d).

Comments on entries:

- COTX94216-1R Round Red drop, zipper eye, poor skin finish
- ATTX98453-3R Oblong Red drop, small++
- ATTX98453-6R Oblong Red nice, yield+
- COTX02293-4R Round Red keep
- ATTX98453-11BR Oblong Red drop, deep eyes, oversized rough, low yield, drop?
- NDTX4784-7R Round Red dark skin, nice flesh, no feathering, nice skin, BOT, bad rep
- NDTX5438-11R Round Red dark skin, BOT color
- AOTX91861-4R Oblong Red keep, bad bruising
- COTX02172-1R Oblong Red nice skin, drop

- BTX2332-1R Oblong Red yield+
- Red LaSoda Oblong Red deep eyes, rough,
- COTX94218-1R Round Red small, keep, lots of culls
- ATTX01178-1R Oblong Red
- OR04131-2 Round Red small, nice+, oversized not ugly
- Dark Red Norland Oblong Red
- CO00291-5R Round Red
- CO00277-2R Round Red light set, nice flesh

Summary:

Overall, ATTX98453-6R, NDTX4784-7R, and NDTX5438-11R were the outstanding entries based on all factors.

Dalhart
Table 3a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 17 entries in the Western Regional and Texas Advanced Selection Red Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz				
COTX94216-1R	TX Col	499.3	339.1	180.9	130.3	28.0	5.2	131.9	23.0	3.3
ATTX98453-3R	SW	476.0	293.9	160.3	108.7	24.9	0.0	180.0	2.1	3.5
ATTX98453-6R	WR	473.4	345.6	84.4	193.3	67.8	0.0	127.8	0.0	4.0
COTX02293-4R	SW	454.7	297.9	130.3	149.3	18.3	0.0	151.0	5.8	3.5
ATTX98453-11BR	TX Col	435.2	375.0	87.9	187.3	99.8	5.0	51.0	4.1	3.2
NDTX4784-7R	TX Col	435.0	316.1	122.8	149.3	44.0	0.0	118.9	0.0	4.0
NDTX5438-11R	TX Col	432.1	334.2	96.7	181.5	56.0	0.0	95.0	2.9	3.9
AOTX91861-4R	TX Col	399.9	327.7	104.5	175.1	48.1	0.0	72.2	0.0	3.4
COTX02172-1R	SW	399.1	240.6	84.6	117.8	38.2	0.0	158.5	0.0	3.0
BTX2332-1R	TX Col	386.4	288.7	133.2	115.3	40.2	0.0	96.7	1.0	3.6
Red LaSoda	WR	375.9	278.8	47.7	151.4	79.7	0.0	63.5	33.6	3.3
COTX94218-1R	TX Col	319.9	138.6	81.1	52.9	4.6	0.0	157.2	24.1	3.5
ATTX01178-1R	TX Col	306.2	256.4	57.9	129.4	69.1	0.0	48.7	1.0	3.2
OR04131-2	WR	243.9	124.5	33.6	90.9	0.0	0.0	119.5	0.0	4.0
Dark Red Norland	WR	224.2	163.7	36.3	74.7	52.7	16.8	43.8	0.0	3.7
CO00291-5R	WR	202.2	134.6	56.6	62.2	15.8	3.3	64.3	0.0	3.6
CO00277-2R	WR	198.9	120.3	42.3	52.3	25.7	0.0	78.6	0.0	3.5
Average		368.4	257.4	90.7	124.8	41.9	1.8	103.4	5.7	3.5
L.S.D. (.05)		61.0	71.3	44.4	49.7	30.8	8.8	48.8	18.2	0.2

¹ 1=very poor to 5= excellent

Dalhart
Table 3b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 17 entries in the Western Regional and Texas Advanced Selection Red Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
COTX94216-1R	TX Col	67.9	35.8	26.4	5.6	1.1	26.2	4.8	1.068	14.7	Round	Red
ATTX98453-3R	SW	61.9	33.7	23.0	5.2	0.0	37.6	0.4	1.070	15.1	Oblong	Red
ATTX98453-6R	WR	73.2	17.8	40.7	14.7	0.0	26.8	0.0	1.077	16.3	Oblong	Red
COTX02293-4R	SW	65.5	28.6	32.8	4.0	0.0	33.2	1.3	1.062	13.5	Round	Red
ATTX98453-11BR	TX Col	86.1	20.4	42.8	22.9	1.2	11.7	1.0	1.061	13.3	Oblong	Red
NDTX4784-7R	TX Col	72.4	28.1	34.3	10.1	0.0	27.6	0.0	1.060	13.3	Round	Red
NDTX5438-11R	TX Col	76.4	22.9	41.3	12.2	0.0	23.1	0.5	1.067	14.4	Round	Red
AOTX91861-4R	TX Col	82.0	26.1	43.8	12.0	0.0	18.0	0.0	1.067	14.4	Oblong	Red
COTX02172-1R	SW	60.3	21.2	29.5	9.6	0.0	39.7	0.0	1.069	14.8	Oblong	Red
BTX2332-1R	TX Col	74.8	32.9	29.5	12.4	0.0	25.0	0.2	1.066	14.2	Oblong	Red
Red LaSoda	WR	73.9	12.6	40.5	20.8	0.0	17.5	8.6	1.070	14.9	Oblong	Red
COTX94218-1R	TX Col	43.7	25.8	16.6	1.4	0.0	48.7	7.5	1.069	14.8	Round	Red
ATTX01178-1R	TX Col	83.8	19.4	41.8	22.7	0.0	15.8	0.3	1.077	16.3	Oblong	Red
OR04131-2	WR	50.1	14.2	35.9	0.0	0.0	49.9	0.0	1.073	15.5	Round	Red
Dark Red Norland	WR	72.7	15.9	33.3	23.4	7.8	19.5	0.0	1.064	14.0	Oblong	Red
CO00291-5R	WR	64.3	27.9	29.5	7.0	1.1	34.6	0.0	1.066	14.2	Round	Red
CO00277-2R	WR	59.9	20.2	26.7	13.0	0.0	40.1	0.0	1.071	15.1	Round	Red
Average		68.8	23.7	33.4	11.6	0.7	29.1	1.5	1.068	14.6		
L.S.D. (.05)		14.0	9.3	12.2	8.1	3.5	14.0	5.1	0.003	0.7		

Dalhart
Table 3c.

Average number of tubers per plant, average tuber weight, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 17 entries in the Western Regional and Texas Advanced Selection Red Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
COTX94216-1R	TX Col	6.6	4.9	100	1.5	4.4	4.5	4.4	8
ATTX98453-3R	SW	7.5	4.2	100	5.3	3.4	3.8	4.5	23
ATTX98453-6R	WR	10.0	5.2	71	1.9	4.2	3.2	4.2	34
COTX02293-4R	SW	6.9	4.3	100	2.0	4.5	1.0	4.0	100
ATTX98453-11BR	TX Col	4.7	6.2	96	1.6	3.9	2.5	4.5	60
NDTX4784-7R	TX Col	7.7	4.4	88	1.6	4.0	2.7	4.8	58
NDTX5438-11R	TX Col	7.4	5.4	79	1.5	4.2	3.2	4.2	30
AOTX91861-4R	TX Col	5.7	5.4	83	1.5	4.6	4.2	4.2	5
COTX02172-1R	SW	7.3	4.2	83	1.5	4.4	2.9	4.2	45
BTX2332-1R	TX Col	5.6	5.2	88	1.9	4.7	4.3	4.5	10
Red LaSoda	WR	7.4	5.8	73	1.8	4.6	3.8	4.6	11
COTX94218-1R	TX Col	6.6	3.4	92	1.6	4.1	4.1	3.9	10
ATTX01178-1R	TX Col	5.2	6.3	68	2.0	3.7	4.0	3.7	10
OR04131-2	WR	6.4	4.6	73	1.9	3.9	2.6	3.8	50
Dark Red Norland	WR	2.9	5.8	89	1.6	3.5	3.4	3.8	31
CO00291-5R	WR	7.9	4.2	57	1.3	3.4	5.0	3.2	0
CO00277-2R	WR	5.2	4.3	64	1.8	3.0	3.6	3.5	20
Average		6.5	4.9	83	1.9	4.0	3.5	4.1	30
L.S.D. (.05)		ns	1.4	ns	ns	ns	0.3	0.5	12

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Dalhart
Table 3d.

Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 17 entries in the Western Regional and Texas Advanced Selection Red Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
COTX94216-1R	TX Col	1.0	2.5	1.0	4.0	2.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX98453-3R	SW	1.0	3.5	1.0	3.2	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX98453-6R	WR	1.0	3.0	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX02293-4R	SW	1.0	2.5	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX98453-11BR	TX Col	1.0	3.5	1.0	3.0	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX4784-7R	TX Col	1.0	2.0	1.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	3	0	0	0
NDTX5438-11R	TX Col	1.0	2.0	1.0	4.0	4.4	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX91861-4R	TX Col	1.0	3.5	1.0	3.5	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX02172-1R	SW	1.0	3.5	1.0	4.0	3.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0
BTX2332-1R	TX Col	1.0	3.3	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Red LaSoda	WR	1.0	3.5	1.0	2.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX94218-1R	TX Col	1.0	2.0	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX01178-1R	TX Col	1.0	3.0	1.0	3.5	3.0	5.0	5.0	5.0	5.0	5.0	0	5	0	0
OR04131-2	WR	1.0	1.5	1.0	4.0	3.8	5.0	5.0	5.0	5.0	5.0	3	0	0	0
Dark Red Norland	WR	1.0	3.5	1.0	3.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO00291-5R	WR	1.0	2.0	1.0	4.0	3.8	5.0	5.0	5.0	5.0	5.0	3	0	0	0
CO00277-2R	WR	1.0	2.0	1.0	4.0	3.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		1.0	2.8	1.0	3.7	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
L.S.D. (.05)		ns	0.1	ns	0.1	0.1	ns	ns	ns	ns	ns	ns	ns	ns	ns

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Dalhart
Table 3e.

Notes and general rating for all reps of 17 entries in the Western Regional and Texas
Advanced Selection Red Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
COTX94216-1R	TX Col	drop, zipper eye, , , poor skin finish	3.2, 3.3, 3.2, 3.5
ATTX98453-3R	SW	drop, small+, , ,	3.2, 3.5, 3.5, 3.6
ATTX98453-6R	WR	, , , nice, yield+	4, 4, 4, 3.8
COTX02293-4R	SW	keep, , ,	3.5, 3.5, 3.5, 3.5
ATTX98453-11BR	TX Col	drop, , deep eyes, oversized rough, low yield, drop?	3, 3.3, 3.3, 3.3
NDTX4784-7R	TX Col	dark skin, nice flesh, no feathering, nice skin, BOT, bad rep	4, 4, 4, 3.8
NDTX5438-11R	TX Col	, dark skin, BOT color, high gravity?	4, 4, 3.8, 3.8
AOTX91861-4R	TX Col	keep, bad bruising, , ,	3.4, 3.4, 3.4, 3.4
COTX02172-1R	SW	nice skin, drop, , ,	3, 3, 3, 3
BTX2332-1R	TX Col	, yield+, , ,	3.7, 3.7, 3.4, 3.7
Red LaSoda	WR	, , deep eyes, rough,	3.5, 3.5, 3, 3.3
COTX94218-1R	TX Col	small, keep, lots of culls, , ,	3.7, 3.6, 3.2, 3.5
ATTX01178-1R	TX Col	, , ,	3, 3.3, 3, 3.3
OR04131-2	WR	, small, nice+, oversized not ugly,	4, 3.8, 4, 4
Dark Red Norland	WR	, , ,	3.8, 3.8, 3.5, 3.5
CO00291-5R	WR	, , ,	3.5, 3.4, 3.7, 3.7
CO00277-2R	WR	, , , light set, nice flesh	3.4, 3.5, 3.6, 3.5

Western Regional and Texas Advanced Red Skin Yellow Flesh Trial

This trial consisted of nine entries.

Results were as follows: (Dalhart Tables 4a, 4b, 4c, 4d, and 4e)

- COTX01403-4R/Y received a high general rating and a best of trial designation, while ATTX961014-1R/Y, ATTX98462-3R/Y, ATTX961014-1BR/Y, BTX2103-1R/Y, ATTX98510-1R/Y, and ATTX01180-1R/Y also received high general ratings (Table 4a and Table 4f).
- ATTX961014-1R/Y produced the highest total and marketable yield (Table 4a).
- ATTX98510-1R/Y had the highest yield of <4 oz. tubers; COTX01403-4R/Y had the highest yield of 10-18 oz. tubers (Table 4a).
- CO04021-2R/Y had the highest yield of culls/No. 2 tubers (Table 4a).
- COTX01403-4R/Y had the highest percentage of marketable yield and yield of 10-18 oz. tubers. ATTX98468-5R/Y had the highest percentage of <4 oz. tubers (Table 4b).
- ATTX961014-1R/Y had the highest average number of tubers per plant (Table 4c).
- BTX2103-1R/Y, CO04021-2R/Y, and ATTX98468-5R/Y were the latest in maturity, while ATTX961014-1R/Y, ATTX98462-3R/Y, and ATTX961014-1BR/Y were the earliest in maturity (Table 4c).
- ATTX01180-1R/Y and CO04021-2R/Y had the darkest yellow flesh color (Table 4d).

Comments on entries:

- ATTX961014-1R/Y Oblong Red
- ATTX98462-3R/Y Oblong Red nice flesh, light flesh, drop?
- ATTX961014-1BR/Y Oblong Red yield +, some rough
- BTX2103-1R/Y Round Red yield+, heavy set, deep nose
- ATTX98510-1R/Y Oblong Red small, drop, nice skin color
- COTX01403-4R/Y Oblong Red BOT, eye brows, nice size, shape, and flesh
- CO04021-2R/Y Oblong Red nice flesh, lots of culls, variable size, pointed, poor shape
- ATTX01180-1R/Y Oblong Red nice skin color, did not fade,
- ATTX98468-5R/Y Round Red low yield, nice shape and flesh

Summary:

COTX01403-4R/Y was the outstanding entry based on all factors, while ATTX961014-1R/Y, ATTX98462-3R/Y, ATTX961014-1BR/Y, BTX2103-1R/Y, ATTX98510-1R/Y, and ATTX01180-1R/Y also performed above average.

Dalhart
Table 4a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 9 entries in the Western Regional and Texas Advanced Selection Red Skin Yellow Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz				
ATTX961014-1R/Y	TX Col	554.9	391.6	119.3	204.9	67.4	0.0	152.9	10.4	4.1
ATTX98462-3R/Y	TX Col	511.3	338.5	139.6	151.0	47.9	2.1	156.6	14.1	3.8
ATTX961014-1BR/Y	TX Col	500.3	360.9	118.0	186.3	56.6	0.0	123.6	15.8	4.0
BTX2103-1R/Y	TX Col	477.3	285.6	152.9	132.8	0.0	0.0	186.3	5.4	3.7
ATTX98510-1R/Y	TX Col	441.4	242.9	122.0	113.7	7.3	0.0	195.8	2.7	3.7
COTX01403-4R/Y	WR	430.4	351.0	49.0	214.9	87.1	2.9	63.3	13.3	3.7
CO04021-2R/Y	WR	422.3	174.7	78.8	75.9	19.9	0.0	161.6	86.1	2.6
ATTX01180-1R/Y	TX Col	381.7	233.1	112.6	95.4	25.1	0.0	147.7	0.8	3.7
ATTX98468-5R/Y	WR	320.3	153.7	77.2	76.5	0.0	0.0	162.6	3.9	3.2
Average		448.9	281.3	107.7	139.0	34.6	0.6	150.0	16.9	3.6
L.S.D. (.05)		58.7	58.4	39.9	38.0	42.4	ns	43.2	22.7	0.2

¹ 1=very poor to 5= excellent

Dalhart
Table 4b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 9 entries in the Western Regional and Texas Advanced Selection Red Skin Yellow Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
ATTX961014-1R/Y	TX Col	70.6	21.4	36.9	12.3	0.0	27.6	1.8	1.071	15.2	Oblong	Red
ATTX98462-3R/Y	TX Col	66.6	27.7	29.7	9.3	0.4	30.5	2.5	1.070	15.0	Oblong	Red
ATTX961014-1BR/Y	TX Col	72.1	23.2	37.0	11.9	0.0	24.8	3.1	1.069	14.9	Oblong	Red
BTX2103-1R/Y	TX Col	59.9	32.1	27.8	0.0	0.0	39.2	0.9	1.068	14.6	Round	Red
ATTX98510-1R/Y	TX Col	54.4	27.0	25.7	1.7	0.0	45.1	0.6	1.068	14.6	Oblong	Red
COTX01403-4R/Y	WR	81.0	11.2	50.1	19.7	0.6	15.2	3.2	1.064	13.9	Oblong	Red
CO04021-2R/Y	WR	41.2	18.8	18.0	4.3	0.0	38.6	20.3	1.071	15.2	Oblong	Red
ATTX01180-1R/Y	TX Col	61.7	30.0	25.1	6.6	0.0	38.1	0.2	1.075	16.0	Oblong	Red
ATTX98468-5R/Y	WR	47.7	24.4	23.3	0.0	0.0	51.1	1.2	1.077	16.2	Round	Red
Average		61.7	24.0	30.4	7.3	0.1	34.5	3.8	1.070	15.1		
L.S.D. (.05)		9.8	8.0	8.3	10.0	ns	9.6	4.2	0.006	1.0		

Dalhart
Table 4c.

Average number of tubers per plant, average tuber weight, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 9 entries in the Western Regional and Texas Advanced Selection Red Skin Yellow Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
ATTX961014-1R/Y	TX Col	9.8	4.0	93	1.8	4.3	3.3	4.3	20
ATTX98462-3R/Y	TX Col	7.7	4.6	95	1.8	4.1	3.4	4.2	28
ATTX961014-1BR/Y	TX Col	7.4	4.9	90	1.8	4.3	3.3	4.3	23
BTX2103-1R/Y	TX Col	8.3	3.7	100	2.0	4.4	4.1	4.5	8
ATTX98510-1R/Y	TX Col	8.0	3.6	100	2.0	4.5	3.6	4.6	20
COTX01403-4R/Y	WR	4.8	6.4	90	1.6	3.8	3.6	4.0	25
CO04021-2R/Y	WR	7.3	4.1	95	1.5	4.3	4.3	4.3	5
ATTX01180-1R/Y	TX Col	6.3	4.1	100	2.0	4.2	3.5	4.3	25
ATTX98468-5R/Y	WR	6.7	3.2	94	1.6	4.2	4.2	4.3	6
Average		7.4	4.3	95	1.8	4.2	3.7	4.3	18
L.S.D. (.05)		1.7	1.0	ns	0.3		0.3	ns	11

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Dalhart
Table 4d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 9 entries in the Western Regional and Texas Advanced Selection Red Skin Yellow Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
ATTX961014-1R/Y	TX Col	2.5	3.5	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX98462-3R/Y	TX Col	2.5	3.0	1.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX961014-1BR/Y	TX Col	2.5	3.5	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
BTX2103-1R/Y	TX Col	3.4	2.0	1.0	4.0	3.3	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX98510-1R/Y	TX Col	2.5	3.5	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX01403-4R/Y	WR	3.0	3.5	1.0	3.5	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO04021-2R/Y	WR	3.5	3.5	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	8
ATTX01180-1R/Y	TX Col	3.9	3.5	1.0	4.0	3.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX98468-5R/Y	WR	3.0	2.5	1.0	3.8	3.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		3.0	3.2	1.0	3.9	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	1
L.S.D. (.05)		0.2	0.1	ns	0.3	0.1	ns	ns	ns	ns	ns	ns	ns	ns	5

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Dalhart
Table 4e.

Notes and general rating for all reps of 9 entries in the Western Regional and Texas
Advanced Selection Red Skin Yellow Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
ATTX961014-1R/Y	TX Col	, , ,	4, 4, 4.3, 4
ATTX98462-3R/Y	TX Col	, , , nice flesh, light flesh, drop?	3.9, 3.6, 3.6, 3.9
ATTX961014-1BR/Y	TX Col	yield +, , , some rough, yield+	4, 3.9, 4, 3.9
BTX2103-1R/Y	TX Col	, , yield+, heavy set, deep nose,	3.7, 3.5, 3.7, 3.7
ATTX98510-1R/Y	TX Col	small, drop, nice skin color, ,	3.7, 3.7, 3.7, 3.7
COTX01403-4R/Y	WR	BOT, eye brows, , nice size, shape, and flesh , nice flesh, lots of culls, , variable size,	3.8, 3.8, 3.8, 3.5
CO04021-2R/Y	WR	pointed, poor shape	2.5, 3, 2.5, 2.5
ATTX01180-1R/Y	TX Col	, , nice skin color, did not fade,	3.6, 3.7, 3.8, 3.8
ATTX98468-5R/Y	WR	, , , low yield, nice shape and flesh	3.3, 3.5, 3, 3

Western Regional and Texas Advanced White Skin Yellow Flesh Trial

This trial consisted of nine entries, including the check varieties Yukon Gold and Sierra Gold.

Results were as follows: (Dalhart Tables 5a, 5b, 5c, 5d, and 5e)

- Yukon Gold and Sierra Gold had the highest general rating and a best of trial designation (Table 5a and 5e).
- Yukon Gold produced the highest total, marketable yield and yield of 10-18 oz. tubers (Table 5a).
- CO04013-1W/Y had the highest yield of <4 oz. tubers, while Emma had the highest yield of culls/No. 2 tubers (Table 5a).
- Yukon Gold had the highest percentage of marketable yield, while CO04013-1W/Y had the highest percentage of <4 oz. tubers. Emma had the highest percentage of culls/No. 2 tubers (Table 5b).
- CO04013-1W/Y had the highest specific gravity (Table 5b).
- CO04013-1W/Y had the highest average number of tubers per plant (Table 5c).
- CO04013-1W/Y ATX03564-1W/Y, and Lanorma were the latest maturing entries, while Emma and OR04036-5 were the earliest maturing entries (Table 5c).
- CO04013-1W/Y, COTX04015-3AW/Y, and OR04036-5 had the darkest flesh color (Table 5d).
- CO04013-1W/Y had 100% internal brownspot (Table 5e).

Comments on entries:

- | | | |
|-------------------|---------------|--|
| • Yukon Gold | Oblong White | very nice, BOT++ |
| • Sierra Gold | Oblong White | BOT, small, |
| • CO04013-1W/Y | Round White | very poor internals+++ , drop |
| • ATX03564-1W/Y | Oblong Yellow | lots of smalls, some pointed, light flesh, pear shaped |
| • COTX04015-3AW/Y | Oblong White | nipples, pointed, drop++ |
| • TX1674-1W/Y | Oblong White | nice flesh, pointed drop |
| • Emma | Round White | rough++, drop, knobs |
| • OR04036-5 | Oblong White | small, nice skin and flesh |
| • Lanorma | Oblong White | pear shaped, white flesh, pointed, drop |

Summary:

Yukon Gold and Sierra Gold were the outstanding entries based on all factors.

Dalhart
Table 5a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 9 entries in the Western Regional and Texas Advanced Selection White Skin Yellow Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz				
Yukon Gold	WR	563.0	451.2	70.1	228.8	152.3	26.1	60.8	24.9	4.0
Sierra Gold	TX Col	486.2	344.5	104.3	177.6	62.6	2.7	122.8	16.2	4.1
CO04013-1W/Y	WR	481.4	86.5	63.3	21.8	1.5	0.0	358.9	36.1	1.6
ATX03564-1Y/Y	WR	450.5	240.2	168.4	71.8	0.0	0.0	194.2	16.2	3.0
COTX04015-3AW/Y	TX Col	448.3	217.1	78.0	118.9	20.2	0.0	188.1	43.1	3.2
TX1674-1W/Y	TX Col	403.2	268.2	73.0	157.6	37.5	0.0	109.1	25.9	3.3
Emma	CA	387.5	182.5	45.6	110.4	26.6	0.0	127.8	77.2	2.8
OR04036-5	WR	352.6	230.7	124.9	102.3	3.5	0.0	118.9	3.1	3.5
Lanorma	CA	234.8	167.6	71.4	48.7	47.5	7.5	41.5	18.3	3.1
Average		423.1	243.2	88.8	115.3	39.1	4.0	146.9	29.0	3.2
L.S.D. (.05)		42.2	48.6	42.9	36.9	29.5	15.2	46.2	ns	0.4

¹ 1=very poor to 5= excellent

Dalhart
Table 5b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 9 entries in the Western Regional and Texas Advanced Selection White Skin Yellow Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
Yukon Gold	WR	80.7	13.1	41.0	26.7	4.3	10.8	4.2	1.077	16.3	Oblong	White
Sierra Gold	TX Col	70.8	21.5	36.4	12.8	0.5	25.3	3.4	1.081	17.0	Oblong	White
CO04013-1W/Y	WR	17.9	13.3	4.3	0.3	0.0	74.3	7.8	1.090	18.6	Round	White
ATX03564-1Y/Y	WR	53.2	37.2	15.9	0.0	0.0	43.2	3.6	1.073	15.5	Oblong	Yellow
COTX04015-3AW/Y	TX Col	48.3	17.5	26.1	4.7	0.0	42.3	9.4	1.083	17.4	Oblong	White
TX1674-1W/Y	TX Col	66.7	18.4	39.2	9.2	0.0	27.0	6.2	1.087	18.0	Oblong	White
Emma	CA	48.1	12.2	28.9	7.0	0.0	33.6	18.3	1.072	15.4	Round	White
OR04036-5	WR	65.4	35.0	29.3	1.1	0.0	33.7	0.9	1.059	13.1	Oblong	White
Lanorma	CA	70.9	29.2	20.8	20.8	2.9	18.4	7.8	1.067	14.4	Oblong	White
Average		58.0	21.9	26.9	9.2	0.9	34.3	6.8	1.077	16.2		
L.S.D. (.05)		11.0	11.8	7.7	7.3	3.1	10.4	9.4	0.005	1.0		

Dalhart
Table 5c.

Average number of tubers per plant, average tuber weight, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 9 entries in the Western Regional and Texas Advanced Selection White Skin Yellow Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
Yukon Gold	WR	5.6	6.5	100	1.5	4.7	3.2	4.7	39
Sierra Gold	TX Col	6.1	5.2	100	1.8	4.8	3.0	4.8	45
CO04013-1W/Y	WR	12.7	2.4	100	1.8	4.8	4.0	4.7	9
ATX03564-1Y/Y	WR	9.1	3.3	98	1.5	4.4	3.9	4.5	13
COTX04015-3AW/Y	TX Col	7.9	3.6	100	1.9	4.8	3.2	4.7	43
TX1674-1W/Y	TX Col	5.9	4.4	100	1.5	4.4	3.3	4.5	40
Emma	CA	8.7	4.4	70	1.7	3.6	1.8	4.3	80
OR04036-5	WR	7.6	3.5	89	1.8	3.7	1.9	3.8	69
Lanorma	CA	7.3	7.7	29	1.5	2.5	4.1	3.7	5
Average		7.9	4.6	87	1.6	4.2	3.1	4.4	38
L.S.D. (.05)		2.2	1.7	14	ns	0.4	0.3	0.3	12

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Dalhart
Table 5d. Flesh color, tuber shape, degree of russetting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 9 entries in the Western Regional and Texas Advanced Selection White Skin Yellow Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russetting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
Yukon Gold	WR	3.0	3.5	2.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	5	0	0	3
Sierra Gold	TX Col	3.0	3.5	3.5	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO04013-1W/Y	WR	3.5	2.0	2.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	0	0	0	100
ATX03564-1Y/Y	WR	1.5	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX04015-3AW/Y	TX Col	3.5	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TX1674-1W/Y	TX Col	2.6	3.5	2.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Emma	CA	2.5	2.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
OR04036-5	WR	3.5	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Lanorma	CA	1.0	3.8	1.0	3.8	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		2.7	3.2	1.6	4.0	1.6	5.0	5.0	5.0	5.0	5.0	1	0	0	11
L.S.D. (.05)		0.1	0.1	0.1	0.1	0.1	ns	ns	ns	ns	ns	3	ns	ns	2

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Dalhart
Table 5e.

Notes and general rating for all reps of 9 entries in the Western Regional and Texas
Advanced Selection White Skin Yellow Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
Yukon Gold	WR	, very nice, BOT++, ,	4, 4, 4, 4
Sierra Gold	TX Col	BOT, , small,	4.5, 4, 3.9, 3.8
CO04013-1W/Y	WR	, very poor internals+++ , drop, , , lots of smalls, some pointed, light flesh,	1.5, 2, 1.5, 1.5
ATX03564-1Y/Y	WR	poor shape, pear shaped,	3, 3, 3, 3
COTX04015-3AW/Y	TX Col	, , nipples, pointed, drop++,	2.7, 3.2, 3.5, 3.2
TX1674-1W/Y	TX Col	, , nice flesh, pointed drop,	3.6, 3.4, 3.4, 2.8
Emma	CA	rough++, drop, , , knobs	2.5, 2.8, 2.7, 3.2
OR04036-5	WR	, , , small, nice skin and flesh	3.6, 3.4, 3.5, 3.5
Lanorma	CA	white flesh, , , pear shaped, pointed, drop	2.8, 3.6, 3.1, 2.8

Commercial Variety Chip Trial

The trial consisted of eight entries, including the check variety Atlantic.

Results were as follows: (Dalhart Tables 6a, 6b, 6c, 6d, 6e, and 6f)

- FL1833, FL1867, and FL2048 received high general rating and best of trial designations for appearance. FL2215 also received a high general rating. FL1867, FL2053, and FL2048 had over 82% good chips (Table 6a, 6e, and 6f).
- FL2137 had the highest total and marketable yield (Table 6a).
- FL2126 had the highest yield of <4 oz. tubers, while FL2137 had the highest yield of culls/No. 2 tubers (Table 6a).
- FL1867 had the highest percentage of marketable yield. FL2126 had the highest percentage of <4 oz. tubers (Table 6b).
- FL2126, FL2053, and FL2215 had the highest specific gravity (Table 6b).
- FL2137 and FL2215 were the latest maturing entries, while FL1867 and FL2053 were the earliest maturing entries (Table 6c).
- FL2137 had 45% internal brownspot, while Atlantic had 20% hollow heart and 28% internal brownspot (Table 6d).

Comments on entries:

- FL2137 Oblong White nice yield, very poor internals CR=1
- FL1833 Round White BOT-, yield+, some oblong, nice yellow flesh CR=1
- FL1867 Round Buff BOT, very light, lager tubers CR=1
- FL2053 Oblong White blocky, poor shape, rough CR=1
- FL2048 Round White BOT, very nice, yield+ CR=1
- FL2215 Round White small, blocky, yield+ CR=1
- FL2126 Oblong Buff light yellow flesh, lots of B's CR=1
- Atlantic Round Buff low yield, poor internals CR=1

1CR=chip color rating 1=light to 5= dark

Summary:

Based on all factors, FL1833 and FL1867 were the outstanding entries.

Dalhart
Table 6a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 8 entries in the Commercial Variety Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre			Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
FL2137	Com	571.3	380.8	128.0	178.0	74.9	0.0	174.2	16.2	3.4
FL1833	Com	523.1	378.1	123.6	178.0	76.5	2.9	131.1	11.0	3.7
FL1867	Com	486.0	360.1	90.6	170.3	99.2	4.6	109.1	12.2	3.8
FL2053	Com	483.5	296.6	71.6	142.5	82.6	0.0	182.5	4.4	2.6
FL2048	Com	477.9	358.2	62.9	196.0	99.4	4.6	107.9	7.3	3.9
FL2215	Com	457.8	271.7	82.6	131.5	57.7	0.0	181.3	4.8	3.7
FL2126	Com	401.8	131.7	66.2	48.3	17.2	0.0	269.4	0.6	3.6
Atlantic	Com	307.6	192.1	60.6	84.8	46.7	4.6	106.0	5.0	3.4
Average		463.6	296.2	85.7	141.2	69.3	2.1	157.7	7.7	3.5
L.S.D. (.05)		136.9	140.8	ns	ns	ns	ns	53.3	5.6	0.2

¹ 1=very poor to 5= excellent

Dalhart
Table 6b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 8 entries in the Commercial Variety Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
FL2137	Com	66.3	22.6	31.1	12.7	0.0	30.8	2.9	1.089	18.4	Oblong	White
FL1833	Com	71.4	23.8	32.9	14.7	0.6	25.9	2.1	1.082	17.1	Round	White
FL1867	Com	74.7	18.2	34.1	22.4	1.3	21.4	2.7	1.085	17.6	Round	Buff
FL2053	Com	58.5	14.3	28.4	15.9	0.0	40.6	0.8	1.090	18.6	Oblong	White
FL2048	Com	74.4	13.9	40.1	20.5	0.8	23.4	1.4	1.086	17.9	Round	White
FL2215	Com	57.6	18.7	27.7	11.3	0.0	41.3	1.1	1.090	18.6	Round	White
FL2126	Com	32.1	16.6	11.4	4.1	0.0	67.7	0.2	1.096	19.6	Oblong	Buff
Atlantic	Com	62.6	19.7	27.3	15.6	1.5	34.2	1.7	1.085	17.7	Round	Buff
Average		62.2	18.5	29.1	14.6	0.5	35.7	1.6	1.088	18.2		
L.S.D. (.05)		13.6	ns	13.5	10.0	ns	14.0	1.2	0.005	0.8		

Dalhart
Table 6c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 8 entries in the Commercial Variety Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
FL2137	Com	7.2	5.1	100	1.5	4.8	4.4	4.7	5
FL1833	Com	6.3	5.3	100	1.5	4.8	3.7	4.8	20
FL1867	Com	5.5	5.8	100	1.5	4.8	2.3	4.8	58
FL2053	Com	7.2	4.4	100	1.5	4.7	2.9	4.7	38
FL2048	Com	5.4	5.7	100	1.5	4.8	3.8	4.8	15
FL2215	Com	7.3	4.1	100	1.5	4.6	4.0	4.6	10
FL2126	Com	8.6	3.0	100	1.6	4.8	3.7	4.8	20
Atlantic	Com	4.9	4.4	92	1.6	4.2	3.7	4.6	20
Average		6.6	4.7	99	1.5	4.7	3.5	4.7	23
L.S.D. (.05)		0.9	ns	5.0	ns	0.4	0.6	ns	13

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Dalhart
Table 6d.

Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 8 entries in the Commercial Variety Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
FL2137	Com	2.0	3.5	2.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	0	0	0	45
FL1833	Com	2.1	1.5	2.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	8	0	5	5
FL1867	Com	1.0	1.5	3.5	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
FL2053	Com	1.0	3.5	2.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
FL2048	Com	1.0	1.5	3.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
FL2215	Com	1.0	2.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
FL2126	Com	2.0	3.5	3.5	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Atlantic	Com	1.0	1.5	3.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	20	0	0	28
Average		1.4	2.4	2.5	4.0	2.5	5.0	5.0	5.0	5.0	5.0	3	0	1	10
L.S.D. (.05)		0.4	0.1	0.1	ns	ns	ns	ns	ns	ns	ns	6	ns	ns	18

¹ 1=light to 5=dark

⁶ 1 to 5=none

² 1=round to 5=long

⁷ 1 to 5=none

³ 1=none to 5=heavy

⁸ 1 to 5=none

⁴ 1=deep to 5=shallow

⁹ 1 to 5=none

⁵ 1=light to 5=dark

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Dalhart
Table 6e.

Notes and general rating for all reps of 8 entries in the Commercial Variety Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
FL2137	Com	nice yield, very poor internals, , ,	3.6, 3.3, 3, 3.6
FL1833	Com	BOT-, yield+, some oblong, nice yellow flesh, ,	3.8, 3.8, 3.7, 3.4
FL1867	Com	BOT, very light yellow flesh, lager tubers, ,	4, 3.8, 3.7, 3.7
FL2053	Com	blocky, poor shape, rough, , ,	2.5, 3, 2.5, 2.5
FL2048	Com	BOT, very nice, yield+, , ,	3.8, 4, 3.7, 4
FL2215	Com	small, blocky, yield+, , ,	3.6, 3.6, 3.6, 3.8
FL2126	Com	light yellow flesh, lots of B's, , ,	3.7, 3.6, 3.3, 3.6
Atlantic	Com	low yield, poor internals, , ,	3.3, 3.3, 3.3, 3.6

Dalhart
Table 6f.

Specific gravity, percent solids, chip color rating, good chip bad chip ratio, notes, percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 8 entries in the Commercial Variety Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Gravity	% Solids	Chip Color ²	Good/Bad Chip Ratio	Notes ³	Percent Zebra Defect	Percent Zebra Defect at Grading
FL2137	Com	1.089	18.4	1	25/9	3TM, 6Stem, Shape-	0%	0%
FL1833	Com	1.082	17.1	1	28/7	Yellow?, 6Stem, TM/GH	0%	3%
FL1867	Com	1.085	17.6	1	38/2	Nice	0%	0%
FL2053	Com	1.090	18.6	1	36/7	6Stem	2%	0%
FL2048	Com	1.086	17.9	1	32/7	3Stem, 1TM	0%	0%
FL2215	Com	1.090	18.6	1	26/12	6Stem, 3GH, Shape-	0%	0%
FL2126	Com	1.096	19.6	1	30/9	2TM, 6Stem, Nice, Shape-	0%	0%
Atlantic	Com	1.085	17.7	1	20/20	7Stem, 6TM/GH, 9IBS	0%	0%

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

¹1=poor, 5=excellent

²1=light, 3+=very dark

³BOT=Best Of Trial, 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

Texas Advanced Chip Selection Trial

This trial consisted of 30 entries, including the check variety Atlantic.

Results were as follows: (Dalhart Tables 7a, 7b, 7c, 7d, 7e, and 7f)

- NDTX071109C-1W, NDTX081648CB-4W, and NDTX081648CB-1W were the outstanding entries for this trial based on general ratings and best of trial designations for chip quality, while NDTX071217CB-1W/Y, NDTX081644CAB-2W, NDTX091908AB-2W, NDTX091908AB-4W, JTTX91-7W, NDTX081648CB-13W, and JTTX94-1W received a high general rating and satisfactory chip quality (Tables 7a, and 7f).
- NDTX071109C-1W had the highest total yield, while NDTX081648CB-4W had the highest marketable yield. NDTX081648CB-2W had the highest yield of 4-6 oz. tubers (Table 7a).
- NDTX071109C-1W had the highest yield of over 6 oz. tubers. NDTX081644CAB-2W had the highest yield of <4 oz. tubers. NDTX081648CB-2W had the highest yield of culls/No. 2 tubers (Table 7a).
- JTTX124-2W, NDTX081648CB-4W, and NDTX071109C-1W had the highest percentage of marketable yield. JTTX75-2W had the highest percentage of 4-6 oz. tubers, while JTTX94-2W had the highest percentage of <4 oz. tubers. NDTX081648CB-2W had the highest percentage of culls/No. 2 tubers (Table 3b).
- NDTX091908AB-2W, JTTX91-7W, JTTX94-2W, and NDTX060700C-1W had the highest specific gravity (Table 7b).
- NDTX081644CAB-2W had the highest average number of tubers per plant (Table 7c).
- NDTX081644CAB-2W, Atlantic JTTX91-7W NDTX081648CB-13W NDTX8305-3W ATTX03474-3W JTTX91-6Ru and AOTX95295-1W were the latest maturing entries, while NDTX071109C-1W, JTTX94-2W, JTTX75-2W, and NDTX081651CAB-2W were the earliest maturing entries (Table 7c).
- Atlantic, NDTX081648CB-4W, TX03196-1W, and AOTX95295-1W had the highest percentage hollow heart, while Atlantic, JTTX91-6Ru, TX03196-1W, and NDTX060700C-1W had high percentages of internal brownspot (Table 7d).
- NDTX071109C-1W, NDTX081648CB-4W, and NDTX081648CB-1W received a best of trial designation for chip quality. JTTX91-8Ru had 30% zebra chip (Table 7f).

Comments on entries:

- NDTX071109C-1W Round White nice shape color and flesh, yield+, Chip note keep send to Nat Chip CR=1
- NDTX081648CB-2W Round White lots of B's, yield+, smooth, uniform, heavy set, Chip note keep send to Nat Chip CR=1
- NDTX081648CB-4W Round White hollow heart, nice shape, poor internals, Chip note keep send to Nat Chip CR=1
- NDTX071217CB-1W/Y Round White BOT for yellow flesh, move to yellow if does not chip, Chip note keep send to Nat Chip CR=2
- NDTX081648CB-1W Round White very nice shape, hollow heart, Chip note keep send to Nat Chip CR=1
- NDTX081644CAB-2W Round White very small, small potato?, heavy set, Chip note keep send to Nat Chip CR=1
- NDTX091908AB-2W Round White very smooth, very nice, Chip note keep send to Nat Chip CR=1
- Atlantic Round Buff nice shape, very poor internals CR=1
- ATTX03475-2W Oblong White poor shape for a chipper, blocky, russet skin, Chip note drop CR=1
- TX1673-1W Round White nice, shape??. some oblong, Chip note drop CR=1
- NDTX091908AB-4W Round White nice, Chip note drop CR=1
- JTTX21-1Ru Round White deep eyes, rough, Chip note drop CR=1
- NDTX071084C-2W Round White nice, small, Chip note drop CR=1
- JTTX91-7W Round White smaller tubers, Chip note drop CR=1
- NDTX081648CB-13W Round White nice, nice shape Chip note keep send to Nat Chip CR=1
- NDTX8305-3W Round White nice, Chip note drop CR=1
- ATTX03474-3W Round White nice, smooth, nice shape and flesh, Chip note drop CR=1
- JTTX94-2W Round White small, low yield, Chip note drop CR=1
- JTTX94-1W Round White nice, small, smooth, Chip note drop CR=1
- JTTX91-6Ru Round White nice shape, poor internals, Chip note drop CR=1
- JTTX94-3W Round White Chip note drop CR=1

- TX03196-1W Round White low yield, nice shape, poor internal, Chip note drop CR=1
- AOTX95295-1W Round White feathering, low yield, hollow heart, Chip note keep CR=1
- NDTX091908AB-9W Round White low yield, Chip note drop CR=1
- NDTX060700C-1W Round White very small, very poor internals, Chip note keep send to Nat Chip CR=1
- JTTX91-8Ru Round White low yield, light yellow flesh, Chip note drop CR=1
- JTTX75-2W Round White low yield, Chip note drop CR=1
- ATTX03474-2W Round White very low yield, light set, Chip note drop CR=1
- JTTX124-2W Round White drop, low yield, Chip note drop CR=1
- NDTX081651CAB-2W Oblong White low yield, Chip note drop CR=1

1CR=chip color rating 1=light to 3= dark

Summary:

Based on all factors, NDTX071109C-1W, NDTX081648CB-4W, and NDTX081648CB-1W were the outstanding entries for this trial based on general ratings and best of trial designations for chip quality. NDTX060700C-1W, NDTX071109C-1W, NDTX071217CB-1W/Y, NDTX081644CAB-2W, NDTX081648CB-13W, NDTX081648CB-1W, NDTX081648CB-2W, NDTX091908AB-2W, and NDTX081648CB-4W will be entered in the Chip Potato Breeders Trial.

Dalhart
Table 7a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 30 entries in the Texas Advanced selection
Chip Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre			Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
NDTX071109C-1W	TXSEL	516.3	424.6	76.5	201.6	146.4	7.5	80.3	3.9	3.7
NDTX081648CB-2W	TXSEL	514.8	257.8	152.5	97.9	7.5	0.0	221.3	35.7	3.8
NDTX081648CB-4W	TXSEL	513.6	426.5	135.7	153.1	137.7	0.0	85.9	1.2	3.5
NDTX071217CB-1W/Y	TXSEL	490.2	344.1	119.5	120.1	104.5	0.0	133.6	12.4	3.8
NDTX081648CB-1W	TXSEL	467.8	368.4	77.6	186.1	104.8	0.0	93.3	6.0	4.0
NDTX081644CAB-2W	TXSEL	463.4	53.7	40.0	13.7	0.0	0.0	409.3	0.4	3.6
NDTX091908AB-2W	TXSEL	452.2	249.1	119.1	108.7	21.4	0.0	187.9	15.1	3.8
Atlantic	TXSEL	418.0	305.1	80.9	128.6	95.6	4.8	104.1	3.9	3.3
ATTX03475-2W	TXSEL	413.0	328.2	86.1	122.0	120.1	2.7	76.3	5.8	2.5
TX1673-1W	TXSEL	406.8	308.7	87.1	134.2	87.3	0.0	91.7	6.4	3.7
NDTX091908AB-4W	TXSEL	394.1	274.6	69.7	68.0	136.9	0.0	97.9	21.6	3.7
JTTX21-1Ru	TXSEL	383.3	303.7	55.6	111.2	136.9	9.1	70.5	0.0	2.5
NDTX071084C-2W	TXSEL	374.4	89.2	52.1	34.6	2.5	0.0	283.1	2.1	3.7
JTTX91-7W	TXSEL	372.5	220.7	131.1	89.6	0.0	5.4	131.1	15.3	3.6
NDTX081648CB-13W	TXSEL	354.5	200.8	87.9	88.4	24.5	0.0	151.0	2.7	3.8
NDTX8305-3W	TXSEL	352.0	185.9	89.0	74.9	22.0	0.0	166.2	0.0	3.5
ATTX03474-3W	TXSEL	348.3	238.1	86.3	89.8	62.0	7.1	95.4	7.7	3.8
JTTX94-2W	TXSEL	307.0	29.5	27.4	0.0	2.1	0.0	277.5	0.0	3.4
JTTX94-1W	TXSEL	292.9	32.4	29.0	3.3	0.0	0.0	260.5	0.0	3.8
JTTX91-6Ru	TXSEL	282.1	120.3	75.5	44.8	0.0	0.0	161.8	0.0	3.6
JTTX94-3W	TXSEL	221.5	36.5	20.7	10.8	5.0	0.0	185.0	0.0	2.8
TX03196-1W	TXSEL	195.0	146.9	44.0	73.0	29.9	0.0	40.7	7.5	3.5
AOTX95295-1W	TXSEL	185.0	141.9	23.2	55.6	63.1	0.0	43.1	0.0	2.5
NDTX091908AB-9W	TXSEL	167.6	38.2	18.3	14.9	5.0	0.0	122.8	6.6	2.5
NDTX060700C-1W	TXSEL	167.0	20.1	16.6	3.5	0.0	0.0	142.3	4.6	3.2
JTTX91-8Ru	TXSEL	166.8	80.5	44.8	30.7	5.0	0.0	83.0	3.3	2.5
JTTX75-2W	TXSEL	113.7	69.7	40.7	29.0	0.0	0.0	44.0	0.0	2.0
ATTX03474-2W	TXSEL	112.6	92.3	12.4	58.1	21.8	0.0	15.3	5.0	2.0
JTTX124-2W	TXSEL	105.4	88.8	31.5	21.6	35.7	0.0	16.6	0.0	2.0
NDTX081651CAB-2W	TXSEL	52.7	20.3	12.4	7.9	0.0	0.0	32.4	0.0	2.5
Average		362.1	205.8	72.1	81.1	52.6	1.5	148.5	6.4	3.4
L.S.D. (.05)		66.9	42.2	34.5	33.9	27.8	4.7	45.8	7.2	0.1

¹ 1=very poor to 5= excellent

Dalhart
Table 7b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 15 entries in the Western Regional Russet Trial grown near Springlake, Texas-2000.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
NDTX071109C-1W	TXSEL	82.0	14.8	38.8	28.4	1.4	15.8	0.7	1.065	14.0	Round	White
NDTX081648CB-2W	TXSEL	49.8	29.1	19.3	1.5	0.0	43.3	6.9	1.069	14.9	Round	White
NDTX081648CB-4W	TXSEL	83.0	26.6	29.5	26.9	0.0	16.7	0.2	1.066	14.3	Round	White
NDTX071217CB-1W/Y	TXSEL	70.3	24.5	24.5	21.3	0.0	27.2	2.5	1.062	13.6	Round	White
NDTX081648CB-1W	TXSEL	78.7	16.7	39.2	22.8	0.0	20.0	1.3	1.065	14.1	Round	White
NDTX081644CAB-2W	TXSEL	10.1	7.6	2.5	0.0	0.0	89.8	0.1	1.077	16.3	Round	White
NDTX091908AB-2W	TXSEL	55.3	26.4	24.1	4.8	0.0	41.4	3.4	1.095	19.5	Round	White
Atlantic	TXSEL	73.3	19.4	30.9	23.0	1.1	24.7	1.0	1.088	18.2	Round	Buff
ATTX03475-2W	TXSEL	79.4	21.3	29.0	29.1	0.6	18.6	1.5	1.080	16.7	Oblong	White
TX1673-1W	TXSEL	75.9	21.6	32.9	21.4	0.0	22.6	1.5	1.068	14.6	Round	White
NDTX091908AB-4W	TXSEL	69.7	17.7	17.3	34.7	0.0	24.8	5.5	1.075	15.9	Round	White
JTTX21-1Ru	TXSEL	79.2	14.5	29.0	35.7	2.4	18.4	0.0	1.072	15.3	Round	White
NDTX071084C-2W	TXSEL	23.2	13.7	9.0	0.6	0.0	76.3	0.5	1.080	16.8	Round	White
JTTX91-7W	TXSEL	59.2	35.4	23.8	0.0	1.2	35.4	4.2	1.091	18.8	Round	White
NDTX081648CB-13W	TXSEL	56.8	25.0	25.0	6.9	0.0	42.4	0.8	1.077	16.3	Round	White
NDTX8305-3W	TXSEL	51.9	25.6	20.7	5.6	0.0	48.1	0.0	1.077	16.3	Round	White
ATTX03474-3W	TXSEL	68.3	24.7	26.0	17.6	2.0	27.6	2.2	1.077	16.2	Round	White
JTTX94-2W	TXSEL	7.7	7.1	0.0	0.5	0.0	92.3	0.0	1.092	18.9	Round	White
JTTX94-1W	TXSEL	11.0	9.9	1.1	0.0	0.0	89.0	0.0	1.079	16.5	Round	White
JTTX91-6Ru	TXSEL	42.6	26.8	15.9	0.0	0.0	57.4	0.0	1.071	15.1	Round	White
JTTX94-3W	TXSEL	20.3	8.5	8.1	3.8	0.0	79.7	0.0	1.088	18.3	Round	White
TX03196-1W	TXSEL	75.3	22.6	37.4	15.3	0.0	20.9	3.8	1.076	16.1	Round	White
AOTX95295-1W	TXSEL	76.7	12.6	30.0	34.1	0.0	23.3	0.0	1.067	14.5	Round	White
NDTX091908AB-9W	TXSEL	22.8	10.9	8.9	3.0	0.0	73.3	4.0	1.075	15.9	Round	White
NDTX060700C-1W	TXSEL	10.6	8.8	1.8	0.0	0.0	87.1	2.3	1.090	18.5	Round	White
JTTX91-8Ru	TXSEL	48.3	26.9	18.4	3.0	0.0	49.8	2.0	1.087	18.1	Round	White
JTTX75-2W	TXSEL	61.3	35.8	25.5	0.0	0.0	38.7	0.0	1.070	15.0	Round	White
ATTX03474-2W	TXSEL	80.9	10.0	51.3	19.6	0.0	14.1	5.0	1.071	15.1	Round	White
JTTX124-2W	TXSEL	84.3	29.9	20.5	33.9	0.0	15.7	0.0	1.097	19.8	Round	White
NDTX081651CAB-2W	TXSEL	42.0	21.3	20.7	0.0	0.0	58.0	0.0	1.084	17.4	Oblong	White
Average		53.3	18.9	21.0	13.5	0.3	44.6	1.7	1.077	16.2		
L.S.D. (.05)		8.2	8.1	8.9	6.0	1.0	8.1	1.8	0.010	1.7		

Dalhart
Table 7c.

Average number of tubers per plant, average tuber weight, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 30 entries in the Texas Advanced selection Chip Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
NDTX071109C-1W	TXSEL	5.4	6.3	98	2.0	4.8	1.8	4.7	60
NDTX081648CB-2W	TXSEL	9.2	3.6	100	2.0	4.6	3.5	4.8	26
NDTX081648CB-4W	TXSEL	5.5	6.0	100	1.8	4.9	2.8	4.8	15
NDTX071217CB-1W/Y	TXSEL	6.6	4.8	100	2.0	4.7	2.0	4.8	60
NDTX081648CB-1W	TXSEL	5.5	5.5	100	1.6	4.8	3.5	4.8	30
NDTX081644CAB-2W	TXSEL	13.8	2.1	100	2.0	4.5	4.0	4.6	10
NDTX091908AB-2W	TXSEL	7.1	4.1	100	1.8	4.4	3.5	4.6	23
Atlantic	TXSEL	5.7	5.2	91	1.6	4.2	4.0	4.4	10
ATTX03475-2W	TXSEL	5.3	6.1	87	2.0	3.9	3.3	4.2	35
TX1673-1W	TXSEL	4.7	5.8	97	1.9	4.3	3.0	4.4	30
NDTX091908AB-4W	TXSEL	5.5	5.3	87	2.0	4.1	3.5	4.5	25
JTTX21-1Ru	TXSEL	4.4	6.5	87	2.0	4.6	3.9	4.4	10
NDTX071084C-2W	TXSEL	8.7	2.8	100	1.9	4.8	2.9	4.8	43
JTTX91-7W	TXSEL	6.3	3.8	100	1.8	4.7	4.3	4.7	10
NDTX081648CB-13W	TXSEL	5.5	4.2	100	1.9	4.5	4.3	4.5	6
NDTX8305-3W	TXSEL	6.2	3.7	98	1.5	4.5	4.3	4.4	9
ATTX03474-3W	TXSEL	4.5	5.1	98	2.0	4.7	4.3	4.7	10
JTTX94-2W	TXSEL	12.9	2.7	67	2.0	4.2	1.8	4.6	70
JTTX94-1W	TXSEL	7.8	2.4	100	2.0	4.7	3.3	4.4	25
JTTX91-6Ru	TXSEL	5.6	3.2	100	2.0	4.2	4.0	4.1	10
JTTX94-3W	TXSEL	9.5	2.9	62	2.0	3.8	2.3	4.0	58
TX03196-1W	TXSEL	5.2	5.5	43	1.5	3.0	2.0	3.8	50
AOTX95295-1W	TXSEL	4.4	5.8	47	1.5	3.8	4.2	3.8	0
NDTX091908AB-9W	TXSEL	5.1	2.9	73	2.0	3.8	2.5	4.0	75
NDTX060700C-1W	TXSEL	7.2	2.2	72	2.0	3.4	2.5	3.4	53
JTTX91-8Ru	TXSEL	3.7	3.4	87	1.5	3.8	3.5	4.0	20
JTTX75-2W	TXSEL	6.9	4.0	27	1.5	3.0	1.0	3.2	100
ATTX03474-2W	TXSEL	4.6	5.6	29	1.6	3.0	3.5	3.3	16
JTTX124-2W	TXSEL	3.9	5.8	30	2.0	3.3	3.5	3.5	20
NDTX081651CAB-2W	TXSEL	12.7	3.5	12	1.8	2.0	1.3	3.7	95
Average		6.7	4.3	88	1.9	4.3	3.2	4.4	30
L.S.D. (.05)		2.3	0.5	18	ns	0.4	0.5	0.3	15

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

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Table 7d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 30 entries in the Texas Advanced selection Chip Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
NDTX071109C-1W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	3	0	0	0
NDTX081648CB-2W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	5	5
NDTX081648CB-4W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	30	0	0	0
NDTX071217CB-1W/Y	TXSEL	3.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX081648CB-1W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	8	0	0	0
NDTX081644CAB-2W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX091908AB-2W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
Atlantic	TXSEL	1.0	1.5	2.5	4.0	3.0	5.0	5.0	5.0	5.0	5.0	15	0	0	58
ATTX03475-2W	TXSEL	1.0	3.5	3.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	3	0	0	0
TX1673-1W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX091908AB-4W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
JTTX21-1Ru	TXSEL	1.0	2.0	2.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	10	0	0	0
NDTX071084C-2W	TXSEL	1.0	1.5	2.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
JTTX91-7W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
NDTX081648CB-13W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX8305-3W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX03474-3W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
JTTX94-2W	TXSEL	1.0	1.5	2.0	4.0	2.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
JTTX94-1W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
JTTX91-6Ru	TXSEL	1.0	1.5	3.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	70
JTTX94-3W	TXSEL	1.0	1.5	2.3	4.0	2.3	5.0	5.0	5.0	5.0	5.0	0	0	0	5
TX03196-1W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	20	0	0	30
AOTX95295-1W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	60	0	0	0
NDTX091908AB-9W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX060700C-1W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	20
JTTX91-8Ru	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
JTTX75-2W	TXSEL	1.0	2.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX03474-2W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	8	0	0	0
JTTX124-2W	TXSEL	1.0	3.5	3.0	2.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX081651CAB-2W	TXSEL	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		1.1	1.7	1.4	3.9	1.5	5.0	5.0	5.0	5.0	5.0	6	0	0	6
L.S.D. (.05)		0.1	0.1	0.1	0.1	0.2	ns	ns	ns	ns	ns	7	ns	2	5

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

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Table 7e.

Notes and general rating for all reps of 30 entries in the Texas Advanced selection Chip
Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
NDTX071109C-1W	TXSEL	nice shape color and flesh, yield+, keep send to Nat Chip, , ,	3.8, 3.7, 3.7, 3.7
NDTX081648CB-2W	TXSEL	lots of B's, yield+, smooth, uniform, keep send to Nat Chip, heavy set, ,	3.6, 4, 3.8, 3.8
NDTX081648CB-4W	TXSEL	hollow heart, nice shape, poor internals, Chip note keep send to Nat Chip, , ,	3.5, 3.5, 3.5, 3.5
NDTX071217CB-1W/Y	TXSEL	bot for yellow flesh, move to yellow if dose not chip, Chip note keep send to Nat Chip, , ,	4, 3.8, 3.8, 3.5
NDTX081648CB-1W	TXSEL	very nice shape, hollow heart, Chip note keep send to Nat Chip, , ,	4, 4, 4, 4
NDTX081644CAB-2W	TXSEL	very small, small potato?, heavy set, Chip note keep send to Nat Chip, , ,	3.5, 3.8, 3.6, 3.6
NDTX091908AB-2W	TXSEL	very smooth, very nice, Chip note keep send to Nat Chip, , ,	3.9, 3.8, 3.7, 3.8
Atlantic	TXSEL	nice shape, very poor internals, , ,	3.3, 3.3, 3.3, 3.3
ATTX03475-2W	TXSEL	poor shape for a chipper, blocky, russet skin, Chip note drop, , ,	2.5, 2.5, 2.5, 2.5
TX1673-1W	TXSEL	nice, shape??, some oblong, Chip note drop, , ,	3.7, 3.8, 3.6, 3.6
NDTX091908AB-4W	TXSEL	nice, Chip note drop, , ,	3.7, 3.7, 3.7, 3.7
JTTX21-1Ru	TXSEL	deep eyes, rough, Chip notedrop, , ,	2.5, 2.5, 2.5, 2.5
NDTX071084C-2W	TXSEL	nice, small, Chip note drop, , ,	3.6, 3.8, 3.6, 3.6
JTTX91-7W	TXSEL	smaller tubers, Chip note drop, , ,	3.6, 3.6, 3.5, 3.5
NDTX081648CB-13W	TXSEL	nice, nice shape Chip note keep send to Nat Chip, , ,	3.8, 3.8, 3.7, 3.7
NDTX8305-3W	TXSEL	nice, Chip note drop, , ,	3.6, 3.4, 3.6, 3.5
ATTX03474-3W	TXSEL	nice, smooth, nice shape and flesh, Chip note drop, , ,	3.8, 3.8, 3.8, 3.8
JTTX94-2W	TXSEL	small, Chip note drop, , low yield,	3.3, 3.3, 3.5, 3.5
JTTX94-1W	TXSEL	nice, small, smooth, Chip note drop, , ,	3.8, 3.8, 3.8, 3.8
JTTX91-6Ru	TXSEL	nice shape, poor internals, Chip note drop, , ,	3.6, 3.6, 3.6, 3.6
JTTX94-3W	TXSEL	Chip note drop, , ,	3, 3, 2.5, 2.5
TX03196-1W	TXSEL	low yield, nice shape, poor internal, Chip note drop, , ,	3.5, 3.5, 3.5, 3.5
AOTX95295-1W	TXSEL	feathering, low yield, hollow heart, Chip note keep, , ,	2.5, 2.5, 2.5, 2.5
NDTX091908AB-9W	TXSEL	low yield, Chip note drop, , ,	2.5, 2.5, 2.5, 2.5
NDTX060700C-1W	TXSEL	very small, very poor internals, Chip note keep send to Nat Chip, , ,	3, 3.3, 3, 3.3
JTTX91-8Ru	TXSEL	low yield, light yellow flesh, Chip note drop, , ,	2.5, 2.5, 2.5, 2.5
JTTX75-2W	TXSEL	low yield, Chip note drop, , ,	2, 2, 2, 2
ATTX03474-2W	TXSEL	very low yield, light set, Chip note drop, , ,	2, 2, 2, 2
JTTX124-2W	TXSEL	drop, low yield, Chip note drop, , ,	2, 2, 2, 2
NDTX081651CAB-2W	TXSEL	low yield, Chip note drop, , ,	2.5, 2.5, 2.5, 2.5

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Table 7f.

Specific gravity, percent solids, chip color rating, good chip bad chip ratio, notes, percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 30 entries in the Texas Advanced selection Chip Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Gravity	% Solids	Chip Color ²	Good/Bad Chip Ratio	Notes ³	Percent Zebra Defect	Percent Zebra Defect at Grading
NDTX071109C-1W	TXSEL	1.065	14.0	1	37/1	Nice, BOT , 1Stem	0%	0%
NDTX081648CB-2W	TXSEL	1.069	14.9	1	31/10	6Stem, 1Mech, D/K	0%	0%
NDTX081648CB-4W	TXSEL	1.066	14.3	1	36/4	1TM ,1Stem, BOT	0%	0%
NDTX071217CB-1W/Y	TXSEL	1.062	13.6	2	34/5	Yellow , 5Stem, Shape?	0%	0%
NDTX081648CB-1W	TXSEL	1.065	14.1	1	33/6	1Scab , 3Stem, BOT	0%	0%
NDTX081644CAB-2W	TXSEL	1.077	16.3	1	27/11	1Mech ,7Stem , 1TM	0%	0%
NDTX091908AB-2W	TXSEL	1.095	19.5	1	30/11	1Mech , 6Stem, 2TM	0%	0%
Atlantic	TXSEL	1.088	18.2	1	26/13	D/K , 8Stem,1GH/Mech,1TM	0%	0%
ATTX03475-2W	TXSEL	1.080	16.7	1	34/7	Nice ,5Stem,Drop, Long Drop, Shape- , 1Mech	0%	0%
TX1673-1W	TXSEL	1.068	14.6	1	16/22	D/K , 12Stem	3%	0%
NDTX091908AB-4W	TXSEL	1.075	15.9	1	32/12	3Stem	0%	0%
JTTX21-1Ru	TXSEL	1.072	15.3	1	24/16		0%	0%
NDTX071084C-2W	TXSEL	1.080	16.8	1	27/13	8Stem, 3TM, Ugly, Drop	0%	0%
JTTX91-7W	TXSEL	1.091	18.8	1	34/8	3Stem	0%	0%
NDTX081648CB-13W	TXSEL	1.077	16.3	1	32/7	3Stem, 1GH	0%	0%
NDTX8305-3W	TXSEL	1.077	16.3	1	28/12	2TM, 1GH , 5Stem	10%	0%
ATTX03474-3W	TXSEL	1.077	16.2	1	20/20	D/K, 17Stem1Mech	0%	0%
JTTX94-2W	TXSEL	1.092	18.9	1	14/26	Drop, 9IBS , 5Stem	0%	0%
JTTX94-1W	TXSEL	1.079	16.5	1	20/20	1Stem	0%	0%
JTTX91-6Ru	TXSEL	1.071	15.1	1	12/28	Drop	0%	0%
JTTX94-3W	TXSEL	1.088	18.3	1	28/12	1GH ,1Stem	0%	0%
TX03196-1W	TXSEL	1.076	16.1	1	32/8	2Stem	0%	0%
AOTX95295-1W	TXSEL	1.067	14.5	1	7/4	4Stem	0%	0%
NDTX091908AB-9W	TXSEL	1.075	15.9	1	36/0		0%	0%
NDTX060700C-1W	TXSEL	1.090	18.5	1	27/14	6TM/GH ,3Stem,	0%	0%
JTTX91-8Ru	TXSEL	1.087	18.1	1	12/28	1Mech , 1Stem	30%	0%
JTTX75-2W	TXSEL	1.070	15.0	1	36/4	Nice ,1Stem	0%	0%
ATTX03474-2W	TXSEL	1.071	15.1	1	26/16	D/K ,9Stem, Shape-	5%	0%
JTTX124-2W	TXSEL	1.097	19.8	1	32/8	2 Mech	0%	0%
NDTX081651CAB-2W	TXSEL	1.084	17.4	1	34/2	Drop, Shape- 1Stem	0%	0%

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

¹1=poor, 5=excellent

²1=light, 3+=very dark

³BOT=Best Of Trial, 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

2011 Chip Selections Trial, Dalhart

The trial consisted of 103 entries. The following 17 (COTX09022-5Ru/Y, COTX09089-1Ru, NDTX092340AB-1C-1W, NDTX102461AB-4W, NDTX102462C-2W, NDTX102462C-6W, NDTX102514ABC-5W, NDTX102557-1W, TX08352-2Ru, TX08356-1W, TX08356-8W, TX09396-1W, TX09396-3W, TX09403-14W, and TX09414-1W) will be advanced in 2013 (Table 8). ATTX07042-3W, COTX09089-1Ru, TX09396-1W, and TX09414-1W will also be entered in the National Breeders Trial.

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Table 8

Inventory weight and Chip Notes of 17 entries to be advanced from the 2011 Chip Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Inventory Weight	Chip Notes
ATTX07042-2W	11SEL	19.7	Keep Dal only
ATTX07042-3W	11SEL	46.3	keep send to Nat Chip
COTX09022-5Ru/Y	11SEL	28.7	Keep move to Chip Trial
COTX09089-1Ru	11SEL	31.7	keep send to Nat Chip
NDTX092340AB-1C-1W	11SEL	9.4	Keep Dal only
NDTX102461AB-4W	11SEL	7.9	Keep Dal only
NDTX102462C-2W	11SEL	9.9	Keep Dal only
NDTX102462C-6W	11SEL	19.3	Keep Dal only
NDTX102514ABC-5W	11SEL	15.1	Keep Dal only
NDTX102557-1W	11SEL	14.4	Keep Dal only
TX08352-2Ru	11SEL	24.5	Keep move to Chip Trial
TX08356-1W	11SEL	9.4	Keep Dal only
TX08356-8W	11SEL	11.9	Keep Dal only
TX09396-1W	11SEL	94.1	Keep send to Nat Chip
TX09396-3W	11SEL	12.4	Keep Dal only BOT-
TX09403-14W	11SEL	16.3	Keep Dal only BOT-
TX09414-1W	11SEL	27.2	Keep send to Nat Chip

Texas Advanced Russet Selection Trial, Dalhart

The trial consisted of 21 entries, including the check variety Russet Norkotah.

Results were as follows: (Dalhart Tables 9a, 9b, 9c, 9d, and 9e)

- COTX08322-11Ru, Russet Norkotah, COTX08121-1Ru , and ATX84378-6Ru were the outstanding entries for this trial, based on general rating and best of trial designations. COTX08214-2Ru, COTX08322-10Ru, TX08350-12Ru, and COTX08322-5Ru also had high general ratings (Tables 9a and 9e).
- AOTX07876-1Ru had the highest total yield, while COTX08322-11Ru had the highest marketable yield (Table 9a).
- AOTX07876-1Ru had the highest yield of 10-18 oz. tubers, while ATTX03475-7Ru had the highest yield of <4 oz. tubers (Table 9a).
- AOTX07920-5Ru had the highest yield of culls/No.2 tubers (Table 9a).
- COTX08322-11Ru had the highest percentage of marketable yield, while COTX08322-5Ru had the highest percentage of over 18 oz. tubers (Table 9b).
- ATTX03475-7Ru had the highest percentage of <4 oz. tubers, while AOTX07920-5Ru had the highest percentage of culls/No. 2 tubers (Table 9b).
- ATTX03475-7Ru had the highest specific gravity (Table 9b).
- ATTX03475-7Ru, AOTX95265-1Ru, and COTX08214-2Ru were the latest maturing entries, while Russet Norkotah, COTX08118-2Ru, and TX08350-12Ru were the earliest maturing entries (Table 9c).
- COTX08214-2Ru had the highest percentage of hollow heart (Table 9d).

Comments on entries:

- | | | |
|-------------------|---------------|--|
| • AOTX07876-1Ru | Oblong Russet | some pointed, light russet, yield parent, keep |
| • COTX08322-11Ru | Long Russet | heavy set, light russet, BOT-, flat, bruising |
| • Russet Norkotah | Long Russet | nice shape, BOT- |
| • ATTX03475-7Ru | Oblong Russet | small, drop |
| • ATX99013-1Ru | Long Russet | small, drop+++ |
| • AOTX95265-1Ru | Long Russet | pointed, keep |

- AOTX95265-3Ru Long Russet some pointed, keep++, 30% bruising
- COTX08121-1Ru Oblong Russet light set, BOT
- COTX08214-2Ru Oblong Russet flat, keep
- COTX05095-2Ru/Y Oblong Russet nice yellow flesh, keep for flesh
- AOTX98202-1Ru Oblong Russet nice, shape and flesh, bad rep
- ATX84378-6Ru Oblong Russet keep, BOT
- AOTX07920-5Ru Long Russet rough, large tubers, pointed, drop
- COTX08322-10Ru Oblong Russet keep
- AOTX02136-1Ru Long Russet pointed, poor shape, raised eyes, drop
- COTX08118-2Ru Long Russet keep?, drop?
- TX08350-12Ru Long Russet high yield, keep, light set, internals??
- TXNS410 Long Russet nice flesh, low yield
- COTX08121-4Ru Long Russet light set, keep
- COTX08322-5Ru Long Russet light set, large tubers, nice flesh
- COTX08323-3Ru Oblong Russet blocky, keep

Summary:

Based on all factors COTX08322-11Ru, Russet Norkotah, COTX08121-1Ru , and ATX84378-6Ru were the outstanding entries in this trial. Others deserving mention were COTX08214-2Ru, COTX08322-10Ru, TX08350-12Ru, and COTX08322-5Ru.

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Table 9a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 21 entries in the Texas Advanced Russet Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz				
AOTX07876-1Ru	TXSEL	599.7	429.4	74.5	164.3	190.6	68.2	63.1	39.0	3.2
COTX08322-11Ru	TXSEL	495.8	438.5	87.9	167.6	183.0	8.3	42.7	6.2	3.8
Russet Norkotah	WR	468.8	377.1	75.5	133.2	168.4	14.9	58.5	18.3	3.8
ATTX03475-7Ru	TXSEL	389.3	266.3	74.7	145.2	46.5	0.0	115.7	7.3	3.0
ATX99013-1Ru	TXSEL	380.4	296.8	47.3	121.6	128.0	17.2	46.3	20.1	2.6
AOTX95265-1Ru	TXSEL	379.4	250.6	51.4	75.5	123.6	35.1	52.7	41.1	3.2
AOTX95265-3Ru	TXSEL	334.0	249.7	45.0	100.6	104.1	0.0	63.7	20.5	3.3
COTX08121-1Ru	TXSEL	333.1	287.1	30.3	70.9	185.9	20.7	18.7	6.6	3.8
COTX08214-2Ru	TXSEL	315.3	248.1	29.9	81.3	136.9	28.2	32.4	6.6	3.7
COTX05095-2Ru/Y	TXSEL	310.3	217.6	53.1	86.3	78.2	19.5	59.1	14.1	2.7
AOTX98202-1Ru	TXSEL	298.9	241.9	63.1	79.9	98.9	0.0	41.7	15.3	3.1
ATX84378-6Ru	TXSEL	293.3	229.0	44.4	65.1	119.5	9.3	53.3	1.7	3.6
AOTX07920-5Ru	TXSEL	290.4	112.0	6.6	41.9	63.5	97.1	20.3	61.0	3.4
COTX08322-10Ru	TXSEL	274.2	223.6	38.6	66.4	118.6	5.4	33.6	11.6	3.6
AOTX02136-1RU	TXSEL	255.3	206.2	30.3	46.9	129.0	14.7	16.2	18.3	3.1
COTX08118-2Ru	TXSEL	238.5	181.3	17.4	51.9	112.0	9.1	13.3	34.8	3.4
TX08350-12Ru	TXSEL	234.0	175.3	25.1	43.8	106.4	34.8	13.3	10.6	3.7
TXNS410	TXSEL	155.2	111.0	39.2	24.1	47.7	12.9	22.0	9.3	3.5
COTX08121-4Ru	TXSEL	152.7	113.7	24.1	44.8	44.8	0.0	26.6	12.4	3.4
COTX08322-5Ru	TXSEL	123.6	60.6	1.7	0.0	58.9	62.2	0.8	0.0	3.7
COTX08323-3Ru	TXSEL	60.6	45.2	10.4	24.9	10.0	5.0	10.0	0.4	3.4
Average		303.9	226.7	41.4	77.9	107.4	22.0	38.3	16.9	3.4
L.S.D. (.05)		55.0	43.8	28.9	38.0	39.6	30.9	24.5	16.4	0.3

¹ 1=very poor to 5= excellent

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Table 9b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 21 entries in the Texas Advanced Russet Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
AOTX07876-1Ru	TXSEL	72.3	12.7	27.3	32.3	10.8	10.4	6.5	1.073	15.6	Oblong	Russet
COTX08322-11Ru	TXSEL	88.8	16.6	33.9	38.3	1.5	8.3	1.4	1.068	14.6	Long	Russet
Russet Norkotah	WR	81.1	16.8	28.0	36.3	2.8	12.2	3.9	1.066	14.3	Long	Russet
ATTX03475-7Ru	TXSEL	68.4	19.1	37.3	11.9	0.0	29.9	1.8	1.089	18.4	Oblong	Russet
ATX99013-1Ru	TXSEL	78.4	12.5	31.0	35.0	4.3	12.1	5.1	1.068	14.6	Long	Russet
AOTX95265-1Ru	TXSEL	65.9	13.3	19.8	32.9	9.3	13.6	11.2	1.072	15.3	Long	Russet
AOTX95265-3Ru	TXSEL	74.8	13.2	30.2	31.3	0.0	19.1	6.2	1.070	15.0	Long	Russet
COTX08121-1Ru	TXSEL	86.1	9.2	21.3	55.6	6.2	5.6	2.0	1.067	14.5	Oblong	Russet
COTX08214-2Ru	TXSEL	78.7	9.5	25.8	43.4	8.9	10.3	2.1	1.074	15.7	Oblong	Russet
COTX05095-2Ru/Y	TXSEL	68.7	14.8	26.2	27.6	8.5	17.8	5.0	1.074	15.7	Oblong	Russet
AOTX98202-1Ru	TXSEL	80.5	21.5	26.4	32.5	0.0	14.3	5.2	1.074	15.7	Oblong	Russet
ATX84378-6Ru	TXSEL	77.5	15.3	22.5	39.6	3.0	19.0	0.5	1.074	15.7	Oblong	Russet
AOTX07920-5Ru	TXSEL	39.5	2.3	13.8	23.4	32.1	6.9	21.5	1.077	16.3	Long	Russet
COTX08322-10Ru	TXSEL	81.4	14.1	23.5	43.8	2.2	12.0	4.5	1.071	15.2	Oblong	Russet
AOTX02136-1RU	TXSEL	81.2	11.9	17.6	51.6	5.3	6.3	7.3	1.069	14.9	Long	Russet
COTX08118-2Ru	TXSEL	75.8	7.2	21.8	46.7	3.9	5.6	14.7	1.075	15.8	Long	Russet
TX08350-12Ru	TXSEL	75.0	10.7	19.0	45.3	14.6	5.9	4.5	1.070	15.0	Long	Russet
TXNS410	TXSEL	72.5	23.9	15.5	33.0	5.6	14.8	7.2	1.068	14.6	Long	Russet
COTX08121-4Ru	TXSEL	75.9	15.3	30.7	30.0	0.0	15.5	8.5	1.075	15.9	Long	Russet
COTX08322-5Ru	TXSEL	49.0	1.3	0.0	47.7	50.3	0.7	0.0	1.063	13.8	Long	Russet
COTX08323-3Ru	TXSEL	69.0	15.6	37.5	15.9	14.6	15.9	0.5	1.071	15.2	Oblong	Russet
Average		73.4	13.2	24.2	35.9	8.8	12.2	5.7	1.072	15.3		
L.S.D. (.05)		10.5	7.3	10.2	14.7	10.1	7.2	4.7	0.006	1.0		

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Table 9c.

Average number of tubers per plant, average tuber weight, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 21 entries in the Texas Advanced Russet Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
AOTX07876-1Ru	TXSEL	5.1	7.8	97	2.0	4.8	3.4	4.7	35
COTX08322-11Ru	TXSEL	4.8	6.8	100	1.8	4.7	3.8	4.5	18
Russet Norkotah	WR	4.9	6.2	100	1.5	4.6	2.0	4.7	90
ATTX03475-7Ru	TXSEL	4.9	5.2	97	1.5	4.7	4.4	4.6	8
ATX99013-1Ru	TXSEL	3.9	6.3	100	1.5	4.4	2.3	4.2	63
AOTX95265-1Ru	TXSEL	3.9	6.4	100	1.5	4.8	4.0	4.4	15
AOTX95265-3Ru	TXSEL	3.6	6.0	100	1.8	4.7	2.5	4.7	55
COTX08121-1Ru	TXSEL	3.7	8.7	73	1.8	3.4	2.8	3.6	25
COTX08214-2Ru	TXSEL	3.0	7.3	93	1.5	4.2	4.8	4.1	0
COTX05095-2Ru/Y	TXSEL	4.2	5.5	97	1.5	4.4	2.9	4.4	45
AOTX98202-1Ru	TXSEL	4.0	5.6	87	2.0	3.5	3.8	3.6	25
ATX84378-6Ru	TXSEL	3.4	6.1	93	1.8	4.1	3.8	4.2	25
AOTX07920-5Ru	TXSEL	3.0	10.3	63	1.8	3.9	3.3	4.2	38
COTX08322-10Ru	TXSEL	5.6	6.9	47	1.5	2.9	3.5	3.3	35
AOTX02136-1RU	TXSEL	3.1	7.7	77	1.5	4.1	2.3	4.0	73
COTX08118-2Ru	TXSEL	2.8	8.9	67	1.5	3.3	2.0	3.7	68
TX08350-12Ru	TXSEL	2.8	8.9	69	1.5	3.3	2.0	3.6	75
TXNS410	TXSEL	1.7	6.4	93	1.8	4.1	3.2	4.0	48
COTX08121-4Ru	TXSEL	2.3	6.4	69	1.8	2.5	3.5	3.4	25
COTX08322-5Ru	TXSEL	2.5	11.9	27	1.5	2.0	3.5	3.3	20
COTX08323-3Ru	TXSEL	1.2	7.1	68	1.5	3.3	2.5	3.5	25
Average		3.5	7.3	82	1.6	3.9	3.1	4.0	38
L.S.D. (.05)		1.2	1.1	23	0.2	0.6	0.7	0.4	16

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

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Table 9d.

Flesh color, tuber shape, degree of russetting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 21 entries in the Texas Advanced Russet Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russetting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
AOTX07876-1Ru	TXSEL	1.0	3.5	3.0	3.5	3.0	5.0	5.0	5.0	5.0	5.0	7	0	0	0
COTX08322-11Ru	TXSEL	1.0	4.0	3.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
Russet Norkotah	WR	1.0	4.0	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX03475-7Ru	TXSEL	1.0	3.5	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX99013-1Ru	TXSEL	1.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX95265-1Ru	TXSEL	1.0	4.0	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	3	0	0	3
AOTX95265-3Ru	TXSEL	1.0	4.0	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	3	0	0	3
COTX08121-1Ru	TXSEL	1.0	3.8	4.5	4.0	4.5	5.0	5.0	5.0	5.0	5.0	5	0	0	0
COTX08214-2Ru	TXSEL	1.0	3.5	3.5	4.0	3.5	5.0	5.0	5.0	5.0	5.0	10	0	0	0
COTX05095-2Ru/Y	TXSEL	3.0	3.8	3.5	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX98202-1Ru	TXSEL	1.0	3.8	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX84378-6Ru	TXSEL	1.0	3.6	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	3	0	0	0
AOTX07920-5Ru	TXSEL	1.0	4.0	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08322-10Ru	TXSEL	1.0	3.8	3.5	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX02136-1RU	TXSEL	1.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08118-2Ru	TXSEL	1.0	4.0	3.5	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TX08350-12Ru	TXSEL	1.0	4.0	3.6	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TXNS410	TXSEL	1.0	4.0	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08121-4Ru	TXSEL	1.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	3	0
COTX08322-5Ru	TXSEL	1.0	4.5	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08323-3Ru	TXSEL	1.0	3.5	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		1.1	3.9	3.8	3.8	3.8	5.0	5.0	5.0	5.0	5.0	2	0	0	0
L.S.D. (.05)		0.1	0.1	0.1	0.1	0.1	ns	ns	ns	ns	ns	5	ns	ns	1

¹ 1=light to 5=dark
² 1=round to 5=long
³ 1=none to 5=heavy
⁴ 1=deep to 5=shallow
⁵ 1=light to 5=dark

⁶ 1 to 5=none
⁷ 1 to 5=none
⁸ 1 to 5=none
⁹ 1 to 5=none
¹⁰ 1 to 5=none
¹¹ Stem end vascular discoloration severely evaluated

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Table 9e.

Notes and general rating for all reps of 21 entries in the Texas Advanced Russet Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
AOTX07876-1Ru	TXSEL	some pointed, light russet,, , yield parent, keep	3.2, 3.2, 3.2, 3.2
COTX08322-11Ru	TXSEL	heavy set, light russet, BOT-, , flat, bruising,	3.8, 3.8, 3.8, 3.8
Russet Norkotah	WR	nice shape, BOT-, , ,	3.8, 3.8, 3.7, 3.8
ATX03475-7Ru	TXSEL	, small, drop, ,	3, 3, 3, 3
ATX99013-1Ru	TXSEL	small, drop+++ , ,	2, 3, 3, 2.5
AOTX95265-1Ru	TXSEL	, pointed, keep, ,	3.5, 3.3, 3, 3
AOTX95265-3Ru	TXSEL	some pointed, keep++, , , 30% bruising	3.6, 3.5, 3.4, 2.7
COTX08121-1Ru	TXSEL	, , light set, BOT,	3.8, 3.8, 3.8, 3.8
COTX08214-2Ru	TXSEL	flat, keep, , ,	3.7, 3.7, 3.7, 3.7
COTX05095-2Ru/Y	TXSEL	nice yellow flesh, keep for flesh, , ,	2.5, 2.7, 2.7, 2.7
AOTX98202-1Ru	TXSEL	nice, shape and flesh,, , , bad rep	3.5, 3.5, 3.5, 2
ATX84378-6Ru	TXSEL	, keep, BOT, ,	3.8, 3.7, 3.4, 3.4
AOTX07920-5Ru	TXSEL	rough, large tubers, pointed, drop, , ,	3.7, 3.7, 3, 3
COTX08322-10Ru	TXSEL	keep, , ,	3.7, 3.7, 3.5, 3.5
AOTX02136-1RU	TXSEL	, , , pointed, poor shape, raised eyes, drop	3.5, 3, 3, 3
COTX08118-2Ru	TXSEL	keep?, drop?, , ,	3.4, 3.4, 3.3, 3.3
TX08350-12Ru	TXSEL	high yield, keep, , , light set, internals??	3.7, 3.8, 3.7, 3.7
TXNS410	TXSEL	, , nice flesh, low yield,	3.4, 3.4, 3.7, 3.4
COTX08121-4Ru	TXSEL	, , light set, keep,	3.2, 3.4, 3.6, 3.3
COTX08322-5Ru	TXSEL	, light set, large tubers, nice flesh, ,	3.8, 3.8, 3.5, 3.5
COTX08323-3Ru	TXSEL	, , , blocky, keep	3.5, 3.5, 3.3, 3.3

2011 Russet Selections Trial, Dalhart

The trial consisted of 196 entries of which 24 (ATTX07023-2Ru, ATTX07039-2Ru, ATTX07039-4Ru, ATTX07039-6Ru, COTX08258-6Ru, COTX08284-1Ru, COTX09022-3Ru/Y, COTX09042-2Ru, COTX09052-1Ru, COTX09052-2Ru, COTX09053-1Ru, COTX09075-4Ru, COTX09075-7Ru, COTX09097-2Ru, COTX09097-3Ru, COTX09101-1Ru, COTX09182-5Ru, COTX09196-1Ru, COTX09150-1Ru, COTX09323-2Ru, TX08352-1Ru, TX08352-3Ru, TX08352-5Ru, and TX08352-8Ru) will be advanced in 2013 (Table 10).

Dalhart
Table 10

Inventory weight and notes of 24 entries to be advanced from
the 2011 Russet Selection Trial grown near Dalhart, Texas-
2012.

Variety or Selection	Trial	Notes	Inventory Weight
ATTX07023-2Ru	11SEL	Keep	44.2
ATTX07039-2Ru	11SEL	Keep	20.2
ATTX07039-4Ru	11SEL	Keep	28.6
ATTX07039-6Ru	11SEL	Keep	9.5
COTX08258-6Ru	11SEL	Keep	25.4
COTX08284-1Ru	11SEL	Keep	10.4
COTX09022-3Ru/Y	11SEL	Keep	14
COTX09042-2Ru	11SEL	Keep	25.4
COTX09052-1Ru	11SEL	Keep	13.7
COTX09052-2Ru	11SEL	Keep	23.7
COTX09053-1Ru	11SEL	Keep	19.8
COTX09075-4Ru	11SEL	Keep	26.6
COTX09075-7Ru	11SEL	Keep	9
COTX09097-2Ru	11SEL	Keep	20.1
COTX09097-3Ru	11SEL	Keep	13.9
COTX09101-1Ru	11SEL	Keep	26.2
COTX09182-5Ru	11SEL	Keep	8.4
COTX09196-1Ru	11SEL	Keep	23.9
COTX09150-1Ru	11SEL	Keep	10.5
COTX09323-2Ru	11SEL	Keep	9.3
TX08352-1Ru	11SEL	Keep	12.1
TX08352-3Ru	11SEL	Keep	16.3
TX08352-5Ru	11SEL	Keep	31.6
TX08352-8Ru	11SEL	Keep	10.3

Texas Advanced Red Selection Trial, Dalhart

This trial consisted of nine entries and the check varieties Red LaSoda, Rio Rojo, and Chieftain.

Results were as follows: (Dalhart Tables 11a, 11b, 11c, 11d, and 11e)

- ATTX06246-1R was the outstanding entry based on general rating and best of trial designation, while NDTX050070-1R, COTX07054-2R, and NDTX4271-5R had high general ratings (Tables 11a, and 11e).
- Chieftain had the highest total and marketable yield (Table 11a).
- Red LaSoda had the highest yield of over 10-18 oz. tubers (Table 11a).
- ATTX06246-1R had the highest yield of <4 oz. tubers, while NDTX731-1R and Red LaSoda had the highest yield of culls/No. 2 tubers (Table 11a).
- Chieftain had the highest percentage marketable yield (Table 11b).
- NDTX050070-1R had the highest percentage of over 4-6 oz. tubers. (Table 11b).
- ATTX06246-1R had the highest percentage of <4 oz. tubers, while Red LaSoda had the highest percentage of culls/No. 2 tubers (Table 11b).
- COTX07054-2R had the highest specific gravity (Table 11b)
- NDTX4271-5R , Red LaSoda, and ATTX06246-1R were the latest maturing entries, while Chieftain was the earliest maturing entry (Table 11c).
- Chieftain had the highest percentage of internal brownspot (Table 11d).

Comments on entries:

- | | | |
|------------------|------------|--|
| • Chieftain | Oblong Red | light skin, nice flesh |
| • NDTX731-1R | Round Red | rough+, deep eyes, poor skin finish, drop? |
| • NDTX050070-1R | Round Red | small++, lots of B's |
| • COTX07054-2R | Round Red | small, lots of B's |
| • NDTX4271-5R | Round Red | small, nice interior |
| • Rio Rojo | Round Red | yield-, small |
| • Red LaSoda | Oblong Red | deep eyes, rough |
| • ATTX06246-1R | Round Red | lots of B's, BOT TC, heavy set, small potato candidate |
| • NDTX081572B-1R | Round Red | no bruising, small, nice flesh, low yield, keep |

Summary:

ATTX06246-1R was the outstanding entry for this trial based on all factors. NDTX050070-1R, COTX07054-2R, and NDTX4271-5R also received high general ratings.

Dalhart Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 9 entries in the Texas Advanced Red Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz				
Chieftain	TXSEL	505.9	376.9	174.4	146.0	56.4	0.0	127.2	1.9	3.6
NDTX731-1R	TXSEL	471.7	325.2	142.7	133.8	48.7	0.0	113.0	33.4	3.2
NDTX050070-1R	TXSEL	405.5	221.9	145.4	65.8	10.8	0.0	179.4	4.1	3.8
COTX07054-2R	TXSEL	388.3	204.3	120.7	67.4	16.2	0.0	178.0	6.0	3.7
NDTX4271-5R	TXSEL	380.2	223.2	103.1	84.8	35.3	2.7	148.3	6.0	3.8
RioRojo	TXSEL	360.5	198.5	115.1	59.1	24.3	0.0	160.8	1.2	3.6
Red LaSoda	WR	360.3	254.5	59.1	135.2	60.2	0.0	72.2	33.6	3.3
ATTX06246-1R	TXSEL	347.7	106.0	79.2	26.8	0.0	0.0	241.7	0.0	4.5
NDTX081572B-1R	TXSEL	298.7	122.0	71.8	50.2	0.0	0.0	176.7	0.0	3.6
Average		391.0	225.8	112.4	85.5	28.0	0.3	155.2	9.6	3.7
L.S.D. (.05)		107.5	70.4	47.2	54.4	30.3	ns	44.8	ns	0.2

¹ 1=very poor to 5= excellent

Dalhart
Table 11b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 9 entries in the Texas Advanced Red Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
Chieftain	TXSEL	74.5	34.4	29.0	11.1	0.0	25.1	0.3	1.068	14.7	Oblong	Red
NDTX731-1R	TXSEL	69.6	32.3	27.2	10.1	0.0	24.6	5.8	1.063	13.7	Round	Red
NDTX050070-1R	TXSEL	55.1	36.9	15.4	2.8	0.0	43.9	1.0	1.068	14.7	Round	Red
COTX07054-2R	TXSEL	51.7	30.7	17.1	3.9	0.0	46.9	1.4	1.076	16.1	Round	Red
NDTX4271-5R	TXSEL	58.3	26.8	22.6	9.0	0.7	39.7	1.3	1.061	13.4	Round	Red
RioRojo	TXSEL	55.1	32.3	15.9	6.9	0.0	44.5	0.3	1.068	14.7	Round	Red
Red LaSoda	WR	70.4	17.0	37.5	15.9	0.0	21.1	8.5	1.070	14.9	Oblong	Red
ATTX06246-1R	TXSEL	30.5	23.3	7.2	0.0	0.0	69.5	0.0	1.059	13.1	Round	Red
NDTX081572B-1R	TXSEL	38.4	23.8	14.5	0.0	0.0	61.6	0.0	1.067	14.4	Round	Red
Average		56.0	28.6	20.7	6.6	0.1	41.9	2.1	1.067	14.4		
L.S.D. (.05)		8.6	11.9	9.9	6.7	ns	9.6	4.7	0.004	0.6		

Dalhart
Table 11c.

Average number of tubers per plant, average tuber weight, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 9 entries in the Texas Advanced Red Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
Chieftain	TXSEL	6.9	4.9	96	1.5	4.1	2.8	4.4	50
NDTX731-1R	TXSEL	6.2	4.9	100	1.5	4.0	3.2	4.3	38
NDTX050070-1R	TXSEL	7.2	3.6	100	2.0	4.3	3.5	4.5	23
COTX07054-2R	TXSEL	7.7	3.2	100	1.9	4.1	3.4	4.3	30
NDTX4271-5R	TXSEL	6.5	4.0	97	1.6	4.1	3.8	4.4	15
RioRojo	TXSEL	6.5	3.8	94	1.8	3.8	3.6	3.8	18
Red LaSoda	WR	7.7	5.3	73	1.8	4.6	3.8	4.6	11
ATTX06246-1R	TXSEL	8.5	2.7	96	1.5	4.3	3.8	4.5	18
NDTX081572B-1R	TXSEL	9.5	3.1	68	2.0	4.1	3.7	3.6	23
Average		7.4	3.9	92	1.7	4.1	3.5	4.3	25
L.S.D. (.05)		ns	0.7	ns	0.2	ns	0.5	0.5	17

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Dalhart
Table 11d. Flesh color, tuber shape, degree of russetting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 9 entries in the Texas Advanced Red Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russetting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
Chieftain	TXSEL	1.0	3.5	1.0	3.6	2.0	5.0	5.0	5.0	5.0	5.0	5	0	0	10
NDTX731-1R	TXSEL	1.0	2.0	1.0	2.5	3.6	5.0	5.0	5.0	5.0	5.0	3	0	0	0
NDTX050070-1R	TXSEL	1.0	2.0	1.0	4.0	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX07054-2R	TXSEL	1.0	2.0	1.0	4.0	3.6	5.0	5.0	5.0	5.0	5.0	0	0	5	0
NDTX4271-5R	TXSEL	1.0	2.5	1.0	4.0	3.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0
RioRojo	TXSEL	1.0	2.5	1.0	4.0	3.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Red LaSoda	WR	1.0	3.5	1.0	2.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX06246-1R	TXSEL	1.0	1.5	1.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX081572B-1I	TXSEL	1.0	2.0	1.0	4.0	3.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		1.0	2.4	1.0	3.6	3.4	5.0	5.0	5.0	5.0	5.0	1	0	1	1
L.S.D. (.05)		ns	0.1	ns	0.1	0.1	ns	ns	ns	ns	ns	ns	ns	ns	6

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Dalhart
Table 11e.

Notes and general rating for all reps of 9 entries in the Texas Advanced Red Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
Chieftain	TXSEL	light skin, nice flesh, , ,	3.5, 3.7, 3.6, 3.6
NDTX731-1R	TXSEL	rough+, deep eyes, poor skin finish, drop?, ,	3, 3.5, 3.2, 3
NDTX050070-1R	TXSEL	small++, lots of B's, , ,	3.8, 3.8, 3.8, 3.8
COTX07054-2R	TXSEL	small, lots of B's, , ,	3.6, 3.9, 3.6, 3.6
NDTX4271-5R	TXSEL	small, nice interior, , ,	3.8, 3.8, 3.8, 3.8
RioRojo	TXSEL	yield-, small, , ,	3.7, 3.4, 3.7, 3.5
Red LaSoda	WR	deep eyes, rough, , ,	3, 3.5, 3.3, 3.5
ATTX06246-1R	TXSEL	lots of B's, BOT TC, heavy set, small potato candidate, ,	4.5, 4.5, 4.5, 4.5
NDTX081572B-1R	TXSEL	no bruising, small, nice flesh, low yield, keep, ,	3.8, 3.4, 3.8, 3.4

2011 Red Selections Trial, Dalhart

The trial consisted of 64 entries of which one (NDTX092231C-1R, NDTX092308-4R, NDTX092308-5R, TX08363-2R, TX08375-1R, and TX08375-3R) will be advanced in 2013 (Table 9).

Dalhart
Table 12

Inventory weight of 6 entries to be Advanced from the
2011 Red Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Notes	Inventory Weight
NDTX092231C-1R	11SEL	Keep	21.4
NDTX092308-4R	11SEL	Keep	3.2
NDTX092308-5R	11SEL	Keep	8.6
TX08363-2R	11SEL	Keep	3.1
TX08375-1R	11SEL	Keep	20.7
TX08375-3R	11SEL	Keep	17.1

Texas Advanced Red/Yellow Selection Trial

This trial consisted of three entries.

Results were as follows: (Dalhart Tables 13a, 13b, 13c, 13d, and 13e)

- COTX04193-2R/Y was the outstanding entry for this trial based on general rating and best of trial designations (Table 13a, 13e).
- NDTX050184-1R/Y had the highest total yield, while COTX04267-1R/Y had the highest marketable yield (Table 13a)
- NDTX050184-1R/Y had the highest yield of over 4-6 oz. tubers, and the highest yield of <4 oz. tubers (Table 13a).
- COTX04267-1R/Y had the highest yield of culls/No. 2 tubers (Table 13a).
- COTX04267-1R/Y had the highest percentage of marketable yield (Table 13b).
- NDTX050184-1R/Y had the highest percentage over 4-6 oz. tubers (Table 13b).
- NDTX050184-1R/Y had the highest percentage of <4 oz. tubers, while COTX04267-1R/Y had the highest percentage of culls/No. 2 tubers (Table 13b).
- NDTX050184-1R/Y had the highest specific gravity (Table 13b).
- COTX04193-2R/Y was the earliest maturing entry. The other entries were later in maturity (Table 13c).
- COTX04267-1R/Y and COTX04193-2R/Y had the darkest yellow flesh color (Table 13d).

Comments on entries:

- NDTX050184-1R/Y Round Red keep, small potato, heavy set+++ FC =2.3
- COTX04267-1R/Y Oblong Red dark flesh, growth cracks, drop FC =4.1
- COTX04193-2R/Y Round Red small potato, TC, BOT FC =4.5

¹FC=Flesh color intensity, 1=very light to 5=very dark

Summary:

COTX04193-2R/Y was the outstanding entry for this trial based on all factors. It will be evaluated as a small potato.

Dalhart
Table 13a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 3 entries in the Texas Advanced Red Skin Yellow Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre			Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
NDTX050184-1R/Y	TXSEL	413.4	126.9	102.7	24.3	0.0	0.0	286.5	0.0	3.6
COTX04267-1R/Y	TXSEL	403.4	204.1	93.8	96.9	13.5	0.0	191.9	7.5	3.4
COTX04193-2R/Y	TXSEL	295.8	115.5	64.1	40.0	11.4	0.0	179.2	1.0	4.0
Average		370.9	148.9	86.8	53.7	8.3	0.0	219.2	2.8	3.7
L.S.D. (.05)		48.5	42.3	ns	30.6	ns		54.0	ns	0.1

¹ 1=very poor to 5= excellent

Dalhart
Table 13b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 3 entries in the Texas Advanced Red Skin Yellow Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
NDTX050184-1R/Y	TXSEL	30.9	25.2	5.7	0.0	0.0	69.1	0.0	1.069	14.9	Round	Red
COTX04267-1R/Y	TXSEL	50.6	23.4	23.7	3.5	0.0	47.6	1.8	1.063	13.8	Oblong	Red
COTX04193-2R/Y	TXSEL	37.9	21.0	13.9	3.0	0.0	61.8	0.3	1.058	12.9	Round	Red
Average		39.8	23.2	14.4	2.2	0.0	59.5	0.7	1.063	13.8		
L.S.D. (.05)		11.0	ns	7.4	ns		11.2	1.5	0.005	0.9		

Dalhart
Table 13c.

Average number of tubers per plant, average tuber weight, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 3 entries in the Texas Advanced Red Skin Yellow Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
NDTX050184-1R/Y	TXSEL	9.8	2.7	100	1.9	4.4	3.3	4.5	24
COTX04267-1R/Y	TXSEL	6.9	3.8	100	2.0	4.3	3.2	4.1	23
COTX04193-2R/Y	TXSEL	6.5	2.9	100	1.8	4.1	2.0	4.2	70
Average		7.7	3.1	100	1.9	4.3	2.8	4.2	39
L.S.D. (.05)		ns	ns		ns	ns	0.2	0.2	7

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Dalhart
Table 13d.

Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 3 entries in the Texas Advanced Red Skin Yellow Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
NDTX050184-1R/Y	TXSEL	2.3	2.0	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX04267-1R/Y	TXSEL	4.1	3.5	1.0	4.0	3.0	4.3	5.0	5.0	5.0	5.0	0	0	0	5
COTX04193-2R/Y	TXSEL	4.5	2.0	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		3.6	2.5	1.0	4.0	3.3	4.8	5.0	5.0	5.0	5.0	0	0	0	2
L.S.D. (.05)		0.4	0.1	ns	ns	0.1	ns	ns	ns	ns	ns	ns	ns	ns	ns

¹ 1=light to 5=dark
² 1=round to 5=long
³ 1=none to 5=heavy
⁴ 1=deep to 5=shallow
⁵ 1=light to 5=dark

⁶ 1 to 5=none
⁷ 1 to 5=none
⁸ 1 to 5=none
⁹ 1 to 5=none
¹⁰ 1 to 5=none
¹¹ Stem end vascular discoloration severely evaluated

Dalhart
Table 13e.

Notes and general rating for all reps of 3 entries in the Texas Advanced Red Skin
Yellow Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
NDTX050184-1R/Y	TXSEL	, , keep, small potato, heavy set+++,	3.6, 3.6, 3.7, 3.6
COTX04267-1R/Y	TXSEL	, dark flesh, growth cracks, drop	3.5, 3.5, 3.3, 3.3
COTX04193-2R/Y	TXSEL	, small potato, TC, BOT, ,	4, 4, 4, 4

2011 Red skin Yellow Flesh Selections Trial, Dalhart

The trial consisted of 10 entries of which 2 (TX09420-1R/Y and TX09420-3R/Y) will be advanced in 2013 (Table 14).

Dalhart
Table 14

Inventory weight of 2 entries to be advanced from the 2011 Red
Skin Yellow Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Notes	Inventory Weight
TX09420-1R/Y	11SEL	Keep red streaks in flesh	15.3
TX09420-3R/Y	11SEL	keep red streaks in flesh	18.6

Texas Advanced White/Yellow Selection Trial

This trial consisted of 14 entries, including Yukon Gold as a check variety.

Results were as follows: (Dalhart Tables 15a, 15b, 15c, 15d, and 15e)

- NDTX081451CB-1W/Y and Yukon Gold were the outstanding entries for this trial based on general ratings, while COTX07382-1W/Y received a best of trial designation. COTX07382-2W/Y and NDTX059759-3Pinto/Y received high general ratings (Tables 15a).
- NDTX081451CB-1W/Y had the highest total yield, while Yukon Gold had the highest marketable yield (Table 15a).
- Yukon Gold had the highest yield of over 10 oz. tubers, while NDTX081451CB-1W/Y had the highest yield of 4-6 oz., and <4 oz. tubers. BTX1749-1W/Y had the highest yield of culls/No. 2 tubers (Table 15a).
- Yukon Gold had the highest percentage of marketable yield (Table 15b).
- COTX07382-2W/Y and Yukon Gold had the highest percent yield of over 10 oz. tubers. NDTX081451CB-1W/Y had the highest percentage of <4 oz. tubers, while BTX1749-1W/Y had the highest percentage of culls/No. 2 tubers (Table 15b).
- NDTX081451CB-1W/Y and NDTX059759-3Pinto/Y had the highest specific gravity (Table 15b).
- NDTX081803Ab-2W/Y was the latest maturing entry, while COTX07382-1W/Y, BTX1749-1W/Y, COTX07382-2W/Y, and BTX1544-2W/Y were the earliest maturing entries (Table 15c).
- ATTX06274-2W/Y and NDTX059759-3Pinto/Y had the darkest yellow flesh (Table 15d).
- NDTX081803Ab-2W/Y had 10% hollow heart (Table 15d).

Comments on entries:

- NDTX081451CB-1W/Y Round Yellow smooth, heavy set, parent, small potato, TC, BOT
FC=2.5
- Yukon Gold Oblong White very nice, BOT++ FC=3.0
- COTX07382-1W/Y Oblong White very light flesh, check SPR data, few culls, nice shape,
BOT-, keep, nice shape, BOT- FC=1.5
- BTX1749-1W/Y Oblong White rough FC=2.5

- ATTX06274-2W/Y Oblong White poor shape, flat FC=3.5
- COTX07382-2W/Y Oblong White pointed FC=2.0
- NDTX059759-3Pinto/Y Oblong White to Neil, purple streaks, some shape problems FC=3.5
- BTX1544-2W/Y Oblong White small++, few culls FC=2.5

¹FC=Flesh color intensity, 1=very light to 5=very dark

Summary:

NDTX081451CB-1W/Y, COTX07382-1W/Y, and Yukon Gold were the outstanding entries for this trial based on all factors.

Dalhart
Table 15a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 14 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre			Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
NDTX081451CB-1Y/Y	TXSEL	570.8	123.0	103.7	19.3	0.0	0.0	446.4	1.5	4.8
Yukon Gold	WR	563.0	451.2	70.1	228.8	152.3	26.1	60.8	24.9	4.0
COTX07382-1W/Y	TXSEL	498.5	334.6	84.2	170.5	79.9	2.5	107.9	53.5	3.4
BTX1749-1W/Y	TXSEL	496.6	305.7	62.9	124.5	118.4	2.7	108.7	79.4	3.4
ATTX06274-2W/Y	TXSEL	456.1	256.0	64.5	154.1	37.3	2.3	146.2	51.6	3.3
COTX07382-2W/Y	TXSEL	368.4	279.4	74.9	90.9	113.7	4.6	75.1	9.3	3.8
NDTX059759-3Pinto/Y	TXSEL	282.7	202.2	96.2	87.5	18.5	0.0	75.1	5.4	4.0
BTX1544-2W/Y	TXSEL	255.1	125.5	58.7	54.8	12.0	0.0	127.6	2.1	3.3
NDTX081803Ab-2Y/Y	TXSEL	202.5	121.1	44.8	69.7	6.6	0.0	79.7	1.7	3.2
Average		410.4	244.3	73.3	111.1	59.9	4.2	136.4	25.5	3.7
L.S.D. (.05)		66.2	59.4	35.8	42.4	37.6	15.3	37.6	44.1	0.2

¹ 1=very poor to 5= excellent

Dalhart
Table 15b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 14 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
NDTX081451CB-1Y/Y	TXSEL	21.5	18.1	3.4	0.0	0.0	78.3	0.2	1.083	17.4	Round	Yellow
Yukon Gold	WR	80.7	13.1	41.0	26.7	4.3	10.8	4.2	1.077	16.3	Oblong	White
COTX07382-1W/Y	TXSEL	66.9	17.1	33.9	15.9	0.4	22.1	10.6	1.076	16.1	Oblong	White
BTX1749-1W/Y	TXSEL	62.9	13.3	25.6	23.9	0.5	22.4	14.2	1.084	17.6	Oblong	White
ATTX06274-2W/Y	TXSEL	56.4	14.3	33.7	8.4	0.5	32.2	10.8	1.068	14.6	Oblong	White
COTX07382-2W/Y	TXSEL	76.0	20.3	25.1	30.6	1.1	20.5	2.4	1.080	16.8	Oblong	White
NDTX059759-3Pinto/Y	TXSEL	70.7	33.8	30.4	6.5	0.0	27.1	2.2	1.085	17.6	Oblong	White
BTX1544-2W/Y	TXSEL	49.0	23.4	21.4	4.1	0.0	50.4	0.7	1.074	15.8	Oblong	White
NDTX081803Ab-2Y/Y	TXSEL	59.8	22.1	34.4	3.3	0.0	39.3	0.8	1.076	16.2	Oblong	Yellow
Average		60.4	19.5	27.7	13.3	0.8	33.7	5.1	1.078	16.5		
L.S.D. (.05)		10.3	9.2	9.1	7.3	2.7	8.8	6.7	0.004	0.8		

Dalhart
Table 15c.

Average number of tubers per plant, average tuber weight, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 14 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ⁵	Vine Size ⁴	
NDTX081451CB-1Y/Y	TXSEL	11.6	3.2	100.0	1.8	4.8	3.0	4.8	45
Yukon Gold	WR	5.6	6.5	100.0	1.5	4.7	3.2	4.7	39
COTX07382-1W/Y	TXSEL	5.8	5.6	100.0	1.6	4.6	1.0	4.6	100
BTX1749-1W/Y	TXSEL	5.1	6.5	95.8	1.9	4.4	1.3	4.5	95
ATTX06274-2W/Y	TXSEL	6.3	4.8	100.0	2.1	4.0	1.8	4.1	80
COTX07382-2W/Y	TXSEL	4.3	5.7	96.7	1.6	4.4	1.3	4.4	98
NDTX059759-3Pinto/Y	TXSEL	4.2	4.5	97.5	1.8	3.9	3.3	4.1	30
BTX1544-2W/Y	TXSEL	4.5	3.6	100.0	1.6	3.6	1.5	3.8	83
NDTX081803Ab-2Y/Y	TXSEL	13.3	3.7	26.7	2.0	2.5	4.0	3.5	10
Average		6.7	4.9	90.7	1.8	4.1	2.3	4.3	64
L.S.D. (.05)		1.0	0.9	4.1	0.3	0.4	0.3	0.4	11

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Dalhart
Table 15d.

Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 14 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
NDTX081451CB-1Y/Y	TXSEL	2.5	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Yukon Gold	WR	3.0	3.5	2.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	5	0	0	3
COTX07382-1W/Y	TXSEL	1.5	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	3	0	0	0
BTX1749-1W/Y	TXSEL	2.5	3.5	2.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX06274-2W/Y	TXSEL	3.5	3.5	2.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX07382-2W/Y	TXSEL	2.0	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX059759-3Pinto/Y	TXSEL	3.5	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
BTX1544-2W/Y	TXSEL	2.5	3.5	2.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX081803Ab-2Y/Y	TXSEL	3.0	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	10	0	0	0
Average		2.7	3.5	1.4	4.0	1.4	5.0	5.0	5.0	5.0	5.0	2	0	0	0
L.S.D. (.05)		0.1	ns	0.1	ns	0.1	ns	ns	ns	ns	ns	4	ns	ns	ns

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Dalhart
Table 15e.

Notes and general rating for all reps of 14 entries in the Texas Advanced White Skin
Yellow Flesh Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Notes Grading	General Rating Grading
NDTX081451CB-1Y/Y	TXSEL	smooth, heavy set, parent, small potato, TC, BOT, ,	4.8, 4.8, 4.8, 4.8
Yukon Gold	WR	, very nice, BOT++, , very light flesh, check SPR data, few culls, nice	4, 4, 4, 4
COTX07382-1W/Y	TXSEL	shape, BOT-, keep, nice shape, BOT-	3, 3.8, 3.5, 3.4
BTX1749-1W/Y	TXSEL	, , rough,	3.4, 3.4, 3.4, 3.4
ATTX06274-2W/Y	TXSEL	, , poor shape, flat,	3.4, 3.4, 3.2, 3.2
COTX07382-2W/Y	TXSEL	, pointed, ,	3.7, 3.9, 3.8, 3.9
NDTX059759-3Pinto/Y	TXSEL	to Neil, purple streaks, some shape problems, ,	4, 4, 4, 4
BTX1544-2W/Y	TXSEL	small++, few culls, , ,	3.3, 3.3, 3.3, 3.3
NDTX081803Ab-2Y/Y	TXSEL	, , ,	3.2, 3.2, 3.2, 3.2

2011 White/Yellow Selections Trial, Dalhart

The trial consisted of 23 entries of which two (TX08385-1W/Y and ATTX07230-1Y/RE/Y) will be advanced in 2013 (Table 12).

Dalhart
Table 16

Inventory weight of 2 entries to be advanced from the 2011
White Skin Yellow Flesh Selection Trial grown near
Dalhart, Texas-2012.

Variety or Selection	Trial	Notes	Inventory Weight
TX08385-1Y/Y	Dalhart	Keep	31.6
ATX07230-1Y/RE/Y	Dalhart	Keep and sent to Larsen	19.5

Outstanding Texas Advanced Small Potato Selections, 2012

Overall Summary - Dalhart The Texas Advanced Small Potato Selection Trial consisted of 16 at Dalhart. The following entries will be tested again in 2013: ATX05186-1R, ATX05202-3W/Y, COTX04050-1P/P, NDTX059886-1W/Y, ATTX05175-1R/Y, ATX06264-4R/Y, ATX07305-1W/Y, ATTX05186-3W/Y, ATX06264-2R/Y, NDTX071258B-1R, AOTX06598-1R, and ATTX98444-16R/Y.

Texas Advanced Small Potato Selection Trial

This trial consisted of 16 entries.

Results were as follows: (Dalhart Tables 17a, 17b, 17c, 17d, and 17e)

- ATX06254-2R, ATX05202-3W/Y, NDTX059886-1W/Y, ATX05186-2R, ATX06264-4R/Y, COTX04050-1P/P, ATTX05175-1R/Y, ATX05186-1R, and AOTX06598-1R were the outstanding entries for this trial based on general ratings (Tables 17a).
- ATX06254-2R had the highest total and marketable yield and the highest yield of < 1 inch tubers. ATX05202-3W/Y had the highest yield of over 2 inch tubers, while COTX08078-1Ru had the highest yield of culls/No.2 tubers (Table 17a)
- COTX08078-1Ru had the highest percentage of marketable tubers. ATX05202-3W/Y had the highest percentage of over 2 inch tubers (Table 17b).
- COTX08291-7W had the highest percentage of <1 inch tubers, while ATX07305-1W/Y had the highest percentage of culls/No. 2 tubers (Table 17b).
- ATX06254-2R had the highest average number of tubers per plant (Table 17c).
- ATX05186-2R, COTX04050-1P/P, and ATX08153-1W/Y were the latest maturing entries, while NDTX071258B-1R, ATX06264-4R/Y, and ATTX98444-16R/Y were the earliest maturing entries (Table 17c).
- ATX07305-1W/Y had the darkest yellow flesh. COTX04050-1P/P had very dark purple flesh (Table 17d).

Comments on entries:

- ATX06254-2R Round Red uniform size, heavy set, poor skin finish, keep
- ATX05202-3W/Y Round White lighter set, uniform size, larger tubers, not uniform flesh color, uniform shape, light buff skin, nice flesh, resend to CA
- COTX08078-1Ru Oblong Russet drop poor shape, rough
- NDTX059886-1W/Y Round Yellow poor skin finish, larger tubers, smooth, heavy set, resend to CA
- ATX05186-2R Round Red poor shape, deep eyes, drop? drop in CA
- NDTX071258B-1R Round Red nice shape, nice size, nice skin, lenticels++, drop, heavy set, poor internals, nice flesh, deep eyes, resend to CA
- ATTX05186-3W/Y Round White nice shape, yield +, uniform size profile, some buff, road map, keep, send to CA new
- ATX07305-1W/Y Round Yellow better skin finish, shape?? uneven flesh, drop++, heavy set, resend to CA
- ATX06264-4R/Y Round Red not bad shape and color, duel, small potato and regular red, some misshapen, resend to CA
- COTX04050-1P/P Round Purple nice shape, lenticels, feathering, resend to CA
- ATTX05175-1R/Y Round Red nice shape, heavy set, BOT, lighter skin color, sort by skin color, nice shape and color, keep, resend to CA
- ATX05186-1R Round Red better skin finish, deep eyes, send to CA new
- ATTX98444-16R/Y Oblong Red poor shape, pointed, drop++, (Looked good in CA trial), resend to CA
- ATX08153-1W/Y Oblong Yellow poor skin, poor shape and skin, drop++
- AOTX06598-1R Round Red great color, not bad shape, deep eyes, color, slight buff, send to CA new
- COTX08291-7W Oblong White low yield, drop+++

Summary:

ATX06254-2R, ATX05202-3W/Y, NDTX059886-1W/Y, ATX05186-2R, ATX06264-4R/Y, COTX04050-1P/P, ATTX05175-1R/Y, ATX05186-1R, and AOTX06598-1R were the outstanding entries for this trial based on all factors. ATX05202-3W/Y, COTX08078-1Ru, ATTX05186-3W/Y, ATX07305-1W/Y, ATX06264-4R/Y, COTX04050-1P/P, ATTX05175-1R/Y, ATX05186-1R, ATTX98444-16R/Y, and AOTX06598-1R will be sent to California for further evaluations.

Dalhart
Table 17a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 16 entries in the Texas Advanced Small Potato Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	Total Marketable Yield	>2 inch	< 1 inch	Culls/ No.2	General Rating ¹ Grading
ATX06254-2R	TXSEL	517.7	181.7	68.0	259.7	8.3	3.6
ATX05202-3W/Y	TXSEL	409.5	148.7	107.0	150.4	3.3	3.7
COTX08078-1Ru	TXSEL	390.0	144.4	58.9	151.0	35.7	3.5
NDTX059886-1Y/Y	TXSEL	370.1	112.0	61.6	191.0	5.4	3.6
ATX05186-2R	TXSEL	360.9	101.4	30.7	219.5	9.3	3.6
NDTX071258B-1R	TXSEL	350.6	93.1	22.0	228.2	7.3	3.5
ATX05186-3W/Y	TXSEL	347.2	75.5	14.1	234.0	23.6	3.5
ATX07305-1Y/Y	TXSEL	332.7	55.6	6.6	236.1	34.4	3.0
ATX06264-4R/Y	TXSEL	324.0	79.7	30.9	210.7	2.7	3.8
COTX04050-1P/P	TXSEL	310.1	71.8	10.2	223.0	5.2	3.6
ATX05175-1R/Y	TXSEL	303.3	46.7	5.2	241.2	10.2	3.8
ATX05186-1R	TXSEL	288.7	83.4	44.0	156.4	5.0	3.7
ATX98444-16R/Y	TXSEL	219.5	31.5	5.2	161.2	21.6	3.2
ATX08153-1Y/Y	TXSEL	211.6	41.1	1.9	163.0	5.6	3.2
AOTX06598-1R	TXSEL	206.2	64.3	19.9	115.3	6.6	3.6
COTX08291-7W	TXSEL	76.3	4.6	0.0	66.4	5.4	3.0
Average		313.6	83.5	30.4	187.9	11.8	3.5
L.S.D. (.05)		65.3	39.3	22.8	41.4	11.5	0.2

¹ 1=very poor to 5= excellent

Dalhart
Table 17b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 16 entries in the Texas Advanced Small Potato Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Percent By Weight					Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Marketable Yield	>2 inch	< 1 inch	Culls/ No. 2					
ATX06254-2R	TXSEL	35.1	13.1	50.2	1.6	1.072	15.3	Round	Red	
ATX05202-3W/Y	TXSEL	35.5	25.7	37.9	0.9	1.072	15.3	Round	White	
COTX08078-1Ru	TXSEL	37.0	15.1	38.7	9.1	1.079	16.6	Oblong	Russet	
NDTX059886-1Y/Y	TXSEL	30.3	16.2	52.0	1.5	1.073	15.6	Round	Yellow	
ATX05186-2R	TXSEL	28.2	8.5	60.6	2.6	1.070	15.0	Round	Red	
NDTX071258B-1R	TXSEL	25.5	6.1	66.5	2.0	1.066	14.3	Round	Red	
ATX05186-3W/Y	TXSEL	20.7	3.7	68.8	6.8	1.078	16.4	Round	White	
ATX07305-1Y/Y	TXSEL	16.7	2.0	70.9	10.4	1.077	16.2	Round	Yellow	
ATX06264-4R/Y	TXSEL	23.5	9.6	66.0	0.8	1.068	14.7	Round	Red	
COTX04050-1P/P	TXSEL	23.9	3.3	71.2	1.6	1.074	15.7	Round	Purple	
ATX05175-1R/Y	TXSEL	15.1	1.6	80.2	3.2	1.075	15.9	Round	Red	
ATX05186-1R	TXSEL	28.2	13.2	56.3	2.2	1.066	14.3	Round	Red	
ATX98444-16R/Y	TXSEL	14.4	2.4	73.6	9.5	1.073	15.6	Oblong	Red	
ATX08153-1Y/Y	TXSEL	19.0	0.7	77.8	2.5	1.069	14.7	Oblong	Yellow	
AOTX06598-1R	TXSEL	26.9	8.5	62.4	2.2	1.068	14.7	Round	Red	
COTX08291-7W	TXSEL	6.0	0.0	87.2	6.8	1.086	17.8	Oblong	White	
Average		24.1	8.1	63.8	4.0	1.073	15.5			
L.S.D. (.05)		8.9	4.7	11.9	3.9	0.004	0.8			

Dalhart
Table 17c.

Average number of tubers per plant, average tuber weight, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 16 entries in the Texas Advanced Small Potato Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
ATX06254-2R	TXSEL	11.2	3.0	100	2.0	4.8	3.3	4.7	15
ATX05202-3W/Y	TXSEL	7.4	3.6	100	1.9	4.3	3.6	4.4	20
COTX08078-1Ru	TXSEL	7.9	3.2	100	2.0	4.8	3.3	4.7	35
NDTX059886-1Y/Y	TXSEL	7.6	3.1	100	2.0	4.5	3.7	4.5	18
ATX05186-2R	TXSEL	8.5	2.7	100	2.0	4.8	4.0	4.8	8
NDTX071258B-1R	TXSEL	7.6	3.0	100	1.9	4.2	2.3	4.1	60
ATX05186-3W/Y	TXSEL	9.1	2.5	100	1.5	4.8	4.2	4.8	9
ATX07305-1Y/Y	TXSEL	9.5	2.2	100	1.9	4.7	3.2	4.7	38
ATX06264-4R/Y	TXSEL	8.8	2.4	100	1.9	4.8	2.3	4.8	55
COTX04050-1P/P	TXSEL	8.5	2.4	100	1.8	4.7	4.3	4.7	5
ATX05175-1R/Y	TXSEL	9.1	2.1	100	1.5	4.1	2.8	4.1	40
ATX05186-1R	TXSEL	6.0	3.1	100	2.0	4.5	3.8	4.5	20
ATX98444-16R/Y	TXSEL	6.5	2.3	96	1.6	4.1	1.8	4.2	75
ATX08153-1Y/Y	TXSEL	5.8	2.4	100	1.8	4.4	4.1	4.4	10
AOTX06598-1R	TXSEL	4.0	3.2	100	1.5	3.7	3.1	3.8	38
COTX08291-7W	TXSEL	6.1	1.0	83	1.8	3.6	4.5	3.4	0
Average		7.7	2.6	99	1.8	4.4	3.4	4.4	28
L.S.D. (.05)		1.4	0.3	7	0.3	0.3	0.6	0.3	19

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Dalhart
Table 17d.

Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 16 entries in the Texas Advanced Small Potato Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
ATX06254-2R	TXSEL	1.0	1.5	1.0	3.5	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX05202-3W/Y	TXSEL	3.0	1.5	2.0	4.5	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08078-1Ru	TXSEL	1.0	3.5	2.0	4.5	2.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX059886-1Y/Y	TXSEL	2.8	1.5	1.5	4.5	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX05186-2R	TXSEL	1.0	1.5	1.0	2.0	3.3	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX071258B-1R	TXSEL	1.0	1.5	1.0	2.0	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	10
ATTX05186-3W/Y	TXSEL	3.0	1.5	1.0	4.5	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	3
ATX07305-1Y/Y	TXSEL	3.5	2.5	1.0	4.5	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX06264-4R/Y	TXSEL	3.0	1.5	1.0	3.5	3.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX04050-1P/P	TXSEL	4.5	1.5	2.5	4.5	5.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX05175-1R/Y	TXSEL	3.5	1.5	1.0	3.5	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX05186-1R	TXSEL	1.0	1.5	1.0	2.5	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX98444-16R/Y	TXSEL	3.0	3.5	1.0	4.5	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX08153-1Y/Y	TXSEL	2.5	3.0	1.0	4.5	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX06598-1R	TXSEL	1.5	1.5	1.0	2.0	4.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08291-7W	TXSEL	1.0	3.5	2.5	4.5	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		2.3	2.0	1.3	3.7	2.6	5.0	5.0	5.0	5.0	5.0	0	0	0	1
L.S.D. (.05)		0.1	0.1	0.1	0.1	0.1	ns	ns	ns	ns	ns	ns	ns	ns	ns

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Dalhart
Table 17e.

Notes and general rating for all reps of 16 entries in the Texas Advanced Small Potato Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Grading
ATX06254-2R	TXSEL	poor skin finish, uniform size, , , , lighter set, uniform size, buff skin, resend to CA, ,	heavy set, poor skin finish, keep, , , , larger tubers, not uniform flesh color, uniform shape, light buff skin, nice flesh	3.6, 3.6, 3.6, 3.6
ATX05202-3W/Y	TXSEL			3.7, 3.7, 3.7, 3.7
COTX08078-1Ru	TXSEL	poor shape, , ,	drop poor shape, rough, , ,	3.5, 3.5, 3.5, 3.5
NDTX059886-1Y/Y	TXSEL	poor skin finish, resend to CA, , ,	larger tubers, smooth, heavy set, , ,	3.6, 3.6, 3.5, 3.6
ATX05186-2R	TXSEL	poor shape, deep eyes, no, drop in CA, , , , nice shape, nice size, lenticels, resend to CA, ,	deep eyes, drop?, , , , nice skin, lenticels++, drop, heavy set, poor internals, nice flesh, deep eyes	3.5, 3.7, 3.5, 3.7
NDTX071258B-1R	TXSEL			3.5, 3.5, 3.5, 3.5
ATTX05186-3W/Y	TXSEL	nice shape, yield +, uniform size profile, send to CA new, , ,	some buff, send to CA, , , road map, keep uneven flesh, drop+, , , heavy set, poor shape	3.5, 3.5, 3.5, 3.3
ATX07305-1Y/Y	TXSEL	better skin finish, shape??. resend to CA, , ,	duel, small potato and regular red, send to CA, some misshapen, ,	3, 3, 3, 3
ATX06264-4R/Y	TXSEL	not bad shape and color, resend to CA, , ,		3.8, 3.8, 3.8, 3.8
COTX04050-1P/P	TXSEL	, nice shape, resend to CA, ,	, lenticels, feathering, send to CA, , heavy set, BOT, lighter skin color, sort by skin color, , nice shape and color, keep	3.6, 3.6, 3.5, 3.5
ATTX05175-1R/Y	TXSEL	, nice shape light color, resend to CA, ,		3.8, 3.8, 3.8, 3.8
ATX05186-1R	TXSEL	better skin finish, send to CA new, , ,	deep eyes, send to CA, , , pointed, poor shape, drop+, , (Looked good in CA trial),	3.7, 3.7, 3.6, 3.6
ATTX98444-16R/Y	TXSEL	poor shape, resend to CA, , ,		3.2, 3, 3.2, 3.2
ATX08153-1Y/Y	TXSEL	poor skin, , ,	poor shape and skin, drop+, , ,	3.7, 3, 3, 3
AOTX06598-1R	TXSEL	great color, not bad shape, deep eyes, send to CA new, , ,	deep eyes, great color, slight buff, send to CA, , ,	3.5, 3.5, 3.7, 3.7
COTX08291-7W	TXSEL	, , low yield,	, , drop+++,	3, 3, 3, 3

2011 Small Potato Selections Trial, Dalhart

The trial consisted of 26 entries of which six (NDTX092238C-1P/W, NDTX092238C-3P/W, NDTX092238C-4P/W, COTX09040-1P/Y, TX09406-1P/P, and TX09423-2R/R) will be advanced in 2013 (Table 18).

Dalhart
Table 18

Inventory weight of 6 entries to be advanced from the 2011 Small Potato
Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Notes	Inventory Weight/# of Tubers
NDTX092238C-1P/W	11SEL	keep	16.9/126
NDTX092238C-3P/W	11SEL	keep	12.6/88
NDTX092238C-4P/W	11SEL	keep	1.9/19
COTX09040-1P/Y	11SEL	keep send to Kelly	25.9/308
TX09406-1P/P	11SEL	keep	15.6/86
TX09423-2R/R	11SEL	keep	26.4/135

Outstanding Texas Advanced Fingerling Selections, 2012

Overall Summary – The Dalhart Texas Advanced Fingerling Selection Trial consisted of 25 entries. Banana and Purple Peruvian were the checks. The following entries TX08378-3R/R, COTX08367-2R/R, COTX08056-10R, COTX08365-3P/P, COTX08365-5P/P, COTX08044-1R/R, COTX08365-4R/R, COTX08376-2R/Y, COTX08365-1P/P, and COTX08045-2R/R will be tested again in 2013.

Texas Advanced Fingerling Selection Trial

This trial consisted of 25 entries, including the check varieties Banana and Purple Peruvian.

Results were as follows: (Dalhart Tables 19a, 19b, 19c, 19d, and 19e)

- COTX08365-3P/P was the outstanding entry for this trial based on general ratings and best of trial designation. TX08378-3R/R, COTX08367-2R/R, COTX07168-1Ru, COTX08376-2R/Y, COTX08365-5P/P, COTX08044-1R/R, COTX08365-1P/P, COTX08365-4R/R, COTX08046-5R/R, and COTX08045-2R/R also received high general ratings (Table 19a).
- COTX08056-12R/R had the highest total and marketable yield (Table 19a)
- COTX08387-1R/R had the highest yield of < 1 inch tubers. COTX08061-3R/R had the highest yield of over 3 inch tubers. COTX08046-9P/P had the highest yield of culls/No. 2 tubers (Table 19a).
- COTX08044-1R/R had the highest percentage of marketable yield. COTX07168-1Ru had the highest percentage of over 3 inch tubers. Purple Peruvian had the highest percentage of <1 inch tubers. COTX08046-9P/P had the highest percentage of culls/No. 2 tubers (Table 19b).
- COTX08061-3R/R had the highest average number of tubers per plant (Table 19c).
- COTX07168-1Ru, COTX08365-1P/P, COTX08046-9P/P, and Purple Peruvian were the latest maturing entries, while COTX08061-3R/R, COTX08367-2R/R, PTTX05PG07-1W, COTX08365-5P/P, COTX08056-5R/R, COTX08056-6R/Y, and COTX08046-5R/R were the earliest maturing entries (Table 19c).

Comments on entries:

- COTX08056-12R/R Long Red drop, sweet potato shape, poor shape

- COTX08061-3R/R Long Red variegated skin, high yield drop++, pink flesh, growth cracks, pointed
- TX08378-3R/R Long Red yield+, high yield, red streaks in flesh, send to CA new
- COTX08367-2R/R Long Red yield +, silver scurf, red streaks in flesh, large, send to CA new
- COTX08056-10R Long Red better skin finish, light purple white flesh, send to CA new
- COTX08365-3P/P Long Purple nice profile, all blue type flesh, BOT, send to CA new
- COTX03187-1W Long White too big, drop
- COTX07168-1Ru Long Russet too big, move to russets
- TX08378-1R/R Long Red drop?, red streaks in flesh, growth cracks
- COTX08376-2R/Y Long Red very light yellow flesh, uneven flesh color white and yellow
- PTTX05PG07-1W Long Red drop, poor skin finish
- COTX08387-1R/R Round Red too round, too short, red streaks in flesh, nice flesh, drop
- COTX08365-5P/P Long Purple all blue like flesh, smooth skin finish, send to CA new
- COTX08056-5R/R Long Red nice size profile, variegated skin, white flesh
- COTX08044-1R/R Long Red nice, nice red flesh, send to CA new
- COTX08365-1P/P Long Purple nice color, better yield, BOT, poor yield, small, send to CA new
- COTX08365-4R/R Long Red uniform, good size profile, nice shape, send to CA new
- COTX08046-9P/P Long Purple too purple skinned, poor size profile, drop+, rough
- COTX08046-3R/R Round Red too round, rough skin, drop
- COTX08056-6R/Y Long Red white flesh, lenticels, smooth, purple streaks in yellow flesh, smooth,
- COTX08046-2R Long Red drop
- COTX08046-5R/R Long Red drop
- COTX08045-2R/R Long Red good skin finish, smooth, send to CA new - Observation
- Banana Long White small, rough
- Purple Peruvian Long White deep eyes, rough

Summary:

COTX08365-3P/P was the outstanding entry for this trial based on all factors. TX08378-3R/R, COTX08367-2R/R, COTX08056-10R, COTX08365-3P/P, COTX08365-5P/P, COTX08044-1R/R, COTX08365-4R/R, and COTX08045-2R/R will be sent to California for further evaluation.

Dalhart
Table 19a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 25 entries in the Texas Advanced Fingerling Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	Total Marketable Yield	Over 3 inch	Less than 1 inch	Culls/ No.2	General Rating ¹ Grading
COTX08056-12R/R	TXSEL	383.7	139.8	112.4	123.2	8.3	3.0
COTX08061-3R/R	TXSEL	376.3	130.3	146.2	89.4	10.4	3.0
TX08378-3R/R	TXSEL	323.6	111.2	71.6	104.5	36.3	3.8
COTX08367-2R/R	TXSEL	304.5	83.0	102.9	101.2	17.4	3.6
COTX08056-10R	TXSEL	273.8	95.4	84.6	82.1	11.6	3.5
COTX08365-3P/P	TXSEL	264.5	106.6	95.0	47.7	15.1	3.9
COTX03187-1W	TXSEL	251.4	122.8	67.8	55.6	5.2	3.0
COTX07168-1Ru	TXSEL	224.6	62.4	129.9	30.3	2.1	3.8
TX08378-1R/R	TXSEL	215.9	76.1	44.8	59.7	35.3	3.5
COTX08376-2R/Y	TXSEL	198.3	90.4	21.6	68.9	17.4	3.8
PTTX05PG07-1W	TXSEL	189.8	48.5	17.2	120.7	3.3	3.5
COTX08387-1R/R	TXSEL	185.9	23.2	14.5	136.3	11.8	3.0
COTX08365-5P/P	TXSEL	184.8	66.6	34.2	82.8	1.2	3.8
COTX08056-5R	TXSEL	178.4	76.3	2.5	99.6	0.0	3.5
COTX08044-1R/R	TXSEL	161.8	91.3	20.7	43.1	6.6	4.0
COTX08365-1P/P	TXSEL	149.6	11.8	2.1	132.1	3.5	3.6
COTX08365-4R/R	TXSEL	149.3	19.9	9.1	114.5	5.8	3.7
COTX08046-9P/P	TXSEL	141.9	27.0	0.0	60.6	54.3	3.0
COTX08046-3R/R	TXSEL	120.5	19.2	0.0	101.2	0.0	3.0
COTX08056-6R	TXSEL	114.5	48.5	17.8	46.9	1.2	3.5
COTX08046-2R	TXSEL	100.4	55.6	24.1	20.7	0.0	3.0
COTX08046-5R/R	TXSEL	99.6	9.1	38.2	29.0	23.2	3.6
COTX08045-2R/R	TXSEL	87.9	29.9	39.0	19.1	0.0	3.8
Banana	TXSEL	77.2	20.7	0.8	49.4	6.2	2.5
Purple Peruvian	TXSEL	58.9	0.0	0.0	57.0	1.9	2.5
Average		192.7	62.6	43.9	75.0	11.1	3.4
L.S.D. (.05)		36.2	22.0	28.8	29.1	13.1	0.1

¹ 1=very poor to 5= excellent

Dalhart
Table 19a.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, tuber type and skin type of 25 entries in the Texas Advanced Fingerling Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Percent By Weight				Tuber Type	Skin Type
		Total Marketable Yield	Over 3 inch	Less than 1 inch	Culls/ No. 2		
COTX08056-12R/R	TXSEL	36.3	28.7	32.7	2.2	Long	Red
COTX08061-3R/R	TXSEL	35.4	37.9	23.6	3.0	Long	Red
TX08378-3R/R	TXSEL	35.0	20.9	32.5	11.7	Long	Red
COTX08367-2R/R	TXSEL	27.2	34.2	32.9	5.7	Long	Red
COTX08056-10R	TXSEL	34.8	30.9	30.0	4.2	Long	Red
COTX08365-3P/P	TXSEL	40.2	35.7	18.1	5.9	Long	Purple
COTX03187-1W	TXSEL	48.9	27.3	21.9	1.9	Long	White
COTX07168-1Ru	TXSEL	27.3	59.2	12.6	0.9	Long	Russet
TX08378-1R/R	TXSEL	35.2	20.4	28.0	16.4	Long	Red
COTX08376-2R/Y	TXSEL	45.6	10.9	34.7	8.8	Long	Red
PTTX05PG07-1W	TXSEL	24.2	8.7	65.2	1.9	Long	Red
COTX08387-1R/R	TXSEL	12.7	7.8	72.8	6.6	Round	Red
COTX08365-5P/P	TXSEL	36.4	18.4	44.4	0.7	Long	Purple
COTX08056-5R	TXSEL	42.8	1.4	55.8	0.0	Long	Red
COTX08044-1R/R	TXSEL	56.4	12.8	26.7	4.1	Long	Red
COTX08365-1P/P	TXSEL	8.2	0.9	88.4	2.5	Long	Purple
COTX08365-4R/R	TXSEL	13.3	6.1	76.7	3.9	Long	Red
COTX08046-9P/P	TXSEL	16.2	0.0	47.9	35.9	Long	Purple
COTX08046-3R/R	TXSEL	16.0	0.0	84.0	0.0	Round	Red
COTX08056-6R	TXSEL	43.2	14.8	40.8	1.2	Long	Red
COTX08046-2R	TXSEL	55.4	24.0	20.7	0.0	Long	Red
COTX08046-5R/R	TXSEL	9.2	38.3	29.2	23.3	Long	Red
COTX08045-2R/R	TXSEL	34.0	44.3	21.7	0.0	Long	Red
Banana	TXSEL	24.0	1.1	66.4	8.5	Long	White
Purple Peruvian	TXSEL	0.0	0.0	97.1	2.9	Long	Purple
Average		30.3	19.4	44.2	6.1		
L.S.D. (.05)		11.5	8.2	13.6	5.8		

Dalhart
Table 19a.

Average number of tubers per plant, average tuber weight, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 15 entries in the Western

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ⁵	Vine Size ⁴	
COTX08056-12R/R	TXSEL	6.9	3.6	100	1.5	4.6	3.2	4.4	28
COTX08061-3R/R	TXSEL	9.7	3.3	92	1.5	4.0	1.5	4.0	93
TX08378-3R/R	TXSEL	7.0	3.0	100	2.0	4.8	3.5	4.7	28
COTX08367-2R/R	TXSEL	6.3	3.1	100	2.0	4.7	1.0	4.8	100
COTX08056-10R	TXSEL	5.3	3.3	100	1.5	4.6	3.6	4.7	20
COTX08365-3P/P	TXSEL	5.6	3.0	100	1.8	4.7	2.9	4.8	40
COTX03187-1W	TXSEL	4.9	3.4	100	1.8	4.7	3.5	4.5	20
COTX07168-1Ru	TXSEL	4.5	5.3	64	1.6	3.8	4.6	4.3	5
TX08378-1R/R	TXSEL	4.4	3.2	98	2.0	3.5	2.2	3.6	70
COTX08376-2R/Y	TXSEL	4.3	3.0	100	2.0	4.8	4.1	4.8	15
PTTX05PG07-1W	TXSEL	5.3	2.4	98	2.0	4.2	1.0	4.3	100
COTX08387-1R/R	TXSEL	5.6	2.1	100	1.8	4.3	2.2	4.4	4
COTX08365-5P/P	TXSEL	5.6	2.3	93	2.0	4.3	1.0	4.5	33
COTX08056-5R	TXSEL	4.9	2.4	100	1.5	4.0	1.0	4.4	100
COTX08044-1R/R	TXSEL	3.8	2.8	100	1.5	3.3	3.8	3.5	15
COTX08365-1P/P	TXSEL	6.3	1.5	100	1.8	4.6	4.5	4.6	8
COTX08365-4R/R	TXSEL	4.9	2.0	100	2.0	4.6	3.2	4.5	35
COTX08046-9P/P	TXSEL	4.2	2.1	100	2.0	3.8	4.1	3.8	10
COTX08046-3R/R	TXSEL	3.8	2.0	100	1.5	4.6	3.1	4.7	30
COTX08056-6R	TXSEL	2.6	3.1	92	1.5	2.9	1.0	3.3	100
COTX08046-2R	TXSEL	2.4	2.7	100	2.0	4.4	3.8	4.6	15
COTX08046-5R/R	TXSEL	3.3	4.2	47	1.5	2.5	1.5	3.6	80
COTX08045-2R/R	TXSEL	2.1	3.1	87	1.5	3.8	3.5	3.9	25
Banana	TXSEL	3.5	1.5	100	2.0	4.7	3.9	4.6	15
Purple Peruvian	TXSEL	3.2	1.2	100	2.0	4.8	4.7	4.8	0
Average		4.8	2.8	95	1.8	4.2	2.9	4.3	39
L.S.D. (.05)		1.7	0.5	7	0.2	0.3	0.8	0.3	16

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Dalhart
Table 19a.

Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 25 entries in the Texas Advanced Fingerling Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
COTX08056-12R/R	TXSEL	3.0	4.0	1.0	4.5	2.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08061-3R/R	TXSEL	2.5	4.0	1.0	4.5	2.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TX08378-3R/R	TXSEL	3.0	4.0	1.0	4.5	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08367-2R/R	TXSEL	3.0	4.5	1.0	4.5	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08056-10R	TXSEL	1.5	4.0	1.0	4.5	2.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08365-3P/P	TXSEL	3.5	4.0	1.0	4.5	4.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX03187-1W	TXSEL	1.0	4.0	2.5	4.5	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX07168-1Ru	TXSEL	1.0	3.8	3.0	4.5	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TX08378-1R/R	TXSEL	3.0	4.0	1.0	4.5	3.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08376-2R/Y	TXSEL	3.0	4.5	1.0	4.5	3.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0
PTTX05PG07-1W	TXSEL	1.0	4.0	1.0	4.5	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08387-1R/R	TXSEL	3.0	2.5	1.0	4.5	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08365-5P/P	TXSEL	3.0	4.5	1.0	4.5	4.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08056-5R	TXSEL	1.5	4.0	1.0	4.5	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08044-1R/R	TXSEL	3.0	4.0	1.0	4.5	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08365-1P/P	TXSEL	4.0	4.0	1.0	4.5	4.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08365-4R/R	TXSEL	3.0	4.5	1.0	4.5	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08046-9P/P	TXSEL	3.0	4.0	1.5	4.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08046-3R/R	TXSEL	3.5	2.5	1.0	4.5	4.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08056-6R	TXSEL	1.0	4.0	1.0	4.5	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08046-2R	TXSEL	1.5	4.0	1.0	4.5	2.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08046-5R/R	TXSEL	3.0	4.0	1.0	4.5	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08045-2R/R	TXSEL	3.0	4.0	1.0	4.5	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Banana	TXSEL	2.0	4.0	1.0	4.5	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Purple Peruvian	TXSEL	3.8	4.5	1.0	2.0	4.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		2.6	4.0	1.2	4.4	3.4	5.0	5.0	5.0	5.0	5.0	0	0	0	0
L.S.D. (.05)		0.1	0.1	0.1	0.1	0.1	ns	ns	ns	ns	ns	ns	ns	ns	ns

¹ 1=light to 5=dark
² 1=round to 5=long
³ 1=none to 5=heavy
⁴ 1=deep to 5=shallow
⁵ 1=light to 5=dark

⁶ 1 to 5=none
⁷ 1 to 5=none
⁸ 1 to 5=none
⁹ 1 to 5=none
¹⁰ 1 to 5=none
¹¹ Stem end vascular discoloration severely evaluated

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Grading
COTX08056-12R/R	TXSEL	, , no,	, , drop, sweet potato shape, poor shape, , high yield drop++, pink flesh, growth cracks, pointed	3, 3, 3, 3
COTX08061-3R/R	TXSEL	, , variegated skin,	, high yield, red streaks in flesh, send to CA,	3, 3, 3, 3
TX08378-3R/R	TXSEL	, yield+, send to CA new, ,	, silver scurf, red streaks in flesh, , large, send to CA,	3.8, 3.9, 3.8, 3.7
COTX08367-2R/R	TXSEL	, , yield +, send to Ca new,		3.6, 3.6, 3.5, 3.5
COTX08056-10R	TXSEL	better skin finish, send to CA new, , ,	light purple white flesh, send to CA, , ,	3.5, 3.5, 3.5, 3.5
COTX08365-3P/P	TXSEL	, , , nice profile, send to CA new	, , all blue type flesh, BOT, send to CA,	3.9, 3.9, 3.8, 4
COTX03187-1W	TXSEL	, , , too big	, , , too big, drop	3, 3, 3, 3
COTX07168-1Ru	TXSEL	, , , too big	, , , move to russets	3.7, 3.7, 3.7, 4
TX08378-1R/R	TXSEL	, no, ,	, drop?, red streaks in flesh, growth cracks, ,	3.4, 3.6, 3.6, 3.5
COTX08376-2R/Y	TXSEL	very light yellow flesh, , ,	uneven flesh color white and yellow, , ,	3.8, 3.8, 3.8, 3.8
PTTX05PG07-1W	TXSEL	no, , ,	poor skin finish, , , , too short, red streaks in flesh, nice flesh,	3.5, 3.5, 3.5, 3.5
COTX08387-1R/R	TXSEL	, too round, ,	drop, , smooth skin finish, all blue type flesh, send to CA, ,	3, 3, 3, 3
COTX08365-5P/P	TXSEL	, all blue like flesh, send to CA new, , nice size profile, variegated skin, white flesh, , ,		3.9, 3.9, 3.7, 3.7
COTX08056-5R	TXSEL		, , ,	3.5, 3.5, 3.5, 3.5
COTX08044-1R/R	TXSEL	nice send to CA new, , ,	nice red flesh, send to CA, , ,	4, 4, 4, 4
COTX08365-1P/P	TXSEL	, , , nice color uniform, good size profile, send to CA new,	, , better yield, BOT, poor yield, small,	3.9, 3.6, 3.5, 3.5
COTX08365-4R/R	TXSEL	, , too purple skinned, rough, poor size profile,	nice shape, send to CA, , ,	3.7, 3.7, 3.7, 3.7
COTX08046-9P/P	TXSEL	, ,	drop+, rough, , ,	3, 3, 3, 3
COTX08046-3R/R	TXSEL	too round, rough skin, , ,	drop, , ,	3, 3, 3, 3
COTX08056-6R	TXSEL	, , white flesh, lenticels, smooth,	, , purple streaks in yellow flesh, smooth,	3.5, 3.5, 3.5, 3.5
COTX08046-2R	TXSEL	, , ,	drop, , ,	3, 3, 3, 3
COTX08046-5R/R	TXSEL	, , , good skin finish, smooth, send to CA new, ,	, , ,	3.6, 3.6, 3.6, 3.6
COTX08045-2R/R	TXSEL	,	send to CA, , ,	3.8, 3.8, 3.8, 3.8
Banana	TXSEL	, , ,	, , , small, rough	2.5, 2.5, 2.5, 2.5
Purple Peruvian	TXSEL	, , ,	, , , deep eyes, rough	2.5, 2.5, 2.5, 2.5

2011 Fingerling Selections Trial, Dalhart

The trial consisted of two entries. Both (COTX09395-1R/R and TX09417-1R) will be advanced in the 2013 season (Table 20).

Dalhart
Table 20

Inventory weight of 2 entries to be advanced from the 2011 Fingerling
Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Notes	Inventory Weight/# of tubers
COTX09395-1R/R	11SEL	keep	13.7/80
TX09417-1R	11SEL	keep	8.2/71

Texas Advanced Purple Flesh Selection Trial

This trial consisted of six entries, including the check variety Purple Majesty.

Results were as follows: (Dalhart Tables 21a, 21b, 21c, 21d, and 21e)

- NDTX081618-1P/P had the highest total yield, while COTX05082-2P/P had the highest marketable yield (Table 21a)
- NDTX081618-1P/P had the highest yield of over 4-6 oz. tubers, while Purple Majesty had the highest yield <4 oz. tubers. COTX05082-2P/P had the highest yield of culls/No. 2 tubers (Table 21a).
- COTX08046-8P/P had the highest percentage of marketable yield (Table 21b).
- NDTX091886-3P/P had the highest percent yield of <4 oz. tubers, while COTX05082-2P/P had the highest percentage of culls/No. 2 tubers (Table 21b).
- NDTX091886-3P/P had the highest specific gravity (Table 21b).
- NDTX091886-3P/P was the latest maturing entry, while Purple Majesty was the earliest maturing entry (Table 21c).
- COTX05082-2P/P and COTX08046-8P/P had the darkest yellow flesh (Table 21d).

Comments on entries:

- NDTX081618-1P/P Oblong Purple nice yield, all blue type flesh
- Purple Majesty Oblong Purple small, all blue type flesh, road map, poor skin finish
- COTX05082-2P/P Oblong Purple deep eyes, keep for flesh
- CO111f2-1P/P Oblong Purple all blue type flesh, some road map
- NDTX091886-3P/P Oblong Purple smooth skin finish, send to CA new
- COTX08046-8P/P Oblong Purple darker flesh, poor shape, low yield, nice flesh

Summary:

NDTX081618-1P/P was the outstanding entry for this trial based on all factors. NDTX091886-3P/P will be sent to California for further evaluation.

Dalhart
Table 21a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 6 entries in the Texas Advanced Purple
Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz				
NDTX081618-1P/P	TXSEL	390.4	164.3	131.5	32.8	0.0	0.0	224.0	2.1	3.5
PurpleMajesty	TXSEL	369.0	99.4	77.0	21.0	1.5	0.0	261.2	8.5	3.5
COTX05082-2P/P	TXSEL	351.2	168.0	98.3	66.6	3.1	0.0	168.6	14.5	2.5
CO111f2-1P/P	TXSEL	349.3	118.0	102.1	16.0	0.0	0.0	224.0	7.3	3.5
NDTX091886-3P/P	TXSEL	305.3	58.9	37.3	21.6	0.0	0.0	243.9	2.5	3.5
COTX08046-8P/P	TXSEL	144.8	75.5	48.1	27.4	0.0	0.0	63.5	5.8	3.4
Average		318.3	114.0	82.4	30.9	0.8	0.0	197.5	6.8	3.3
L.S.D. (.05)		62.6	63.7	35.7	33.1	ns		31.4	6.3	0.1

¹ 1=very poor to 5= excellent

Dalhart
Table 21b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 6 entries in the Texas Advanced Purple Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
NDTX081618-1P/P	TXSEL	42.0	33.7	8.3	0.0	0.0	57.5	0.5	1.071	15.2	Oblong	Purple
PurpleMajesty	TXSEL	26.7	20.6	5.6	0.4	0.0	71.0	2.3	1.069	14.8	Oblong	Purple
COTX05082-2P/P	TXSEL	46.6	27.7	18.1	0.7	0.0	49.4	4.0	1.059	13.1	Oblong	Purple
CO111f2-1P/P	TXSEL	33.0	28.6	4.4	0.0	0.0	65.0	1.9	1.068	14.7	Oblong	Purple
NDTX091886-3P/P	TXSEL	19.3	12.2	7.1	0.0	0.0	79.9	0.8	1.080	16.7	Oblong	Purple
COTX08046-8P/P	TXSEL	52.2	33.3	18.9	0.0	0.0	43.8	4.0	1.064	14.0	Oblong	Purple
Average		36.6	26.0	10.4	0.2	0.0	61.1	2.3	1.069	14.7		
L.S.D. (.05)		11.9	8.6	7.9	ns		12.3	1.4	0.005	0.9		

Dalhart
Table 21c.

Average number of tubers per plant, average tuber weight, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 6 entries in the Texas Advanced Purple Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
NDTX081618-1P/P	TXSEL	8.0	3.2	100	2.0	4.1	3.8	4.1	23
PurpleMajesty	TXSEL	9.0	2.6	100	2.0	3.5	1.0	3.7	100
COTX05082-2P/P	TXSEL	7.2	3.2	100	2.0	4.2	3.6	4.3	20
CO111f2-1P/P	TXSEL	8.2	2.7	100	2.0	3.9	2.3	3.9	30
NDTX091886-3P/P	TXSEL	7.4	2.6	100	1.5	4.5	4.8	4.6	5
COTX08046-8P/P	TXSEL	3.0	3.1	100	2.0	3.8	3.0	4.0	28
Average		7.1	2.9	100	1.9	4.0	3.1	4.1	34
L.S.D. (.05)		0.9	0.4		0.1	0.2	0.5	0.1	9

¹ 1= upright, 2= semiprostrate, 3= prostrate

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

³ 1= very early, 2= early, 3= medium, 4=late, 5= very late

⁴ 1=very small, 2=small, 3=medium, 4=large, 5=very large

Dalhart
Table 21d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 6 entries in the Texas Advanced Purple Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
NDTX081618-1P/P	TXSEL	3.5	3.5	1.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
PurpleMajesty	TXSEL	3.5	3.5	1.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX05082-2P/P	TXSEL	5.0	3.5	1.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO111f2-1P/P	TXSEL	3.5	3.5	1.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX091886-3P/P	TXSEL	3.8	3.0	1.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX08046-8P/P	TXSEL	4.0	3.5	1.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		3.9	3.4	1.0	3.8	4.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
L.S.D. (.05)		0.1	0.1	ns	0.1	0.1	ns	ns	ns	ns	ns	ns	ns	ns	ns

¹ 1=light to 5=dark
² 1=round to 5=long
³ 1=none to 5=heavy
⁴ 1=deep to 5=shallow
⁵ 1=light to 5=dark

⁶ 1 to 5=none
⁷ 1 to 5=none
⁸ 1 to 5=none
⁹ 1 to 5=none
¹⁰ 1 to 5=none
¹¹ Stem end vascular discoloration severely evaluated

Dalhart
Table 21e.

Notes and general rating for all reps of 6 entries in the Texas Advanced Purple Flesh Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Grading
NDTX081618-1P/P	TXSEL	nice yield, , ,	all blue type flesh, , ,	3.5, 3.5, 3.5, 3.5
PurpleMajesty	TXSEL	, , ,	small, all blue type flesh, road map, poor skin finish, , ,	3.5, 3.5, 3.5, 3.5
COTX05082-2P/P	TXSEL	, , ,	deep eyes, keep for flesh, , ,	2.5, 2.5, 2.5, 2.5
CO111f2-1P/P	TXSEL	, , ,	all blue type flesh, some road map, ,	3.5, 3.5, 3.5, 3.5
NDTX091886-3P/P	TXSEL	smooth skin finish, send to CA new, , ,	send to CA, , ,	3.5, 3.5, 3.5, 3.5
COTX08046-8P/P	TXSEL	, , ,	darker flesh, poor shape, low yield, nice flesh, ,	3.5, 3.3, 3.5, 3.3

2011 Purple Flesh Selections Trial, Dalhart

The trial consisted of three entries. All (TX09406-3P/P, TX09423-3P/P, and TX09429-1P/P) will be advanced in the 2013 season (Table 22).

Dalhart
Table 22

Inventory weight of 3 entries to be advanced from the 2011 Purple
Flesh Selection Trial grown near Dalhart, Texas-2012.

Variety or Selection	Trial	Notes	Inventory Weight
TX09406-3P/P	11SEL	Keep send to Craig	42
TX09423-3P/P	11SEL	Keep	25.9
TX09429-1P/P	11SEL	Keep	16.3

Appendix A. General notes on potato varieties or selections- 2012.

BC=brown center
BOT=Best of Trial
D/K=drop/keep
FC=flesh color 1-5=dark
GH=green head
HH=hollow heart
IBS=internal brown spot
MB=mahogany browning
Mech=mechanical damage
SE=sugar ends
Stem = Stem end discoloration
TM=tuber moth

A00188-3C-Round Buff. Parentage (A91790-13W x Dakota Pearl). Cross was made and selected in Aberdeen. Medium-early maturity. Medium vine size.

Uses: chip.

Strengths:

Weaknesses: poor shape lots of culls, rough

Cutting Notes: growth cracks, nice shape.

Chip Notes: Chip color=1, Stem, Mech, SE, % Zebra Chip: 0%

A01010-1-Long Medium Russet. Parentage (A92303-7 x A96004-8). Cross was made and selected in Aberdeen. Medium maturity. Medium large vine size. White flower color

Uses: dual.

Strengths: heavy set+ yield+

Weaknesses: pointed, drop tubers did not fill, long, skinny, too long and skinny

Cutting Notes: blocky, small

Chip Notes: Chip color=1, Stem, SE BOT, % Zebra Chip: 0%

A01143-3C-Round White. Parentage (COA95070-8 x Chipeta). Cross was made and selected in Aberdeen. Medium late maturity. Medium vine size. White flower color

Uses: chip.

Strengths:

Weaknesses: heat necrosis, small+, poor internals, heat sprouts++, drop+ poor shape, light set, rough

Cutting Notes: small

Chip Notes: Chip color=1, Stem, % Zebra Chip: 3%, 8%

A02138-2-Oblong Light Russet. Parentage (A96563-8 x Premier R). Cross was made and selected in Aberdeen. Medium-early maturity. Medium vine size. White flower color.

Uses: dual.

Strengths: nice flesh, BOT-

Weaknesses: skinny, pointed, drop+

Cutting Notes: skinny

Chip Notes: Chip color=2, % Zebra Chip: 0%

A02507-2LB-Oblong-Long Russet. Parentage (EGA09702-2 x GemStar R). Cross was made and selected in Aberdeen. Medium-late maturity. Medium vine size. White flower color.

Uses: dual.

Strengths:

Weaknesses: blocky, small, light set drop

Cutting Notes: blocky, pear shaped

Chip Notes: Chip color=2, % Zebra Chip: 0%

A03158-2TE-Long Russet. Parentage (A98292-2 x A98104-4). Cross was made and selected in Aberdeen. Medium-late maturity. Medium vine size. White flower color.

Uses:

Strengths: heavy set,

Weaknesses: skinny, too long, drop rough drop for TX, long skinny+

Cutting Notes: blocky, nice shape

Chip Notes: Chip color=2, % Zebra Chip: 0%

A99029-3E-Oblong Russet. Parentage (A9230-5 x Summit R). Cross was made and selected in

Aberdeen. Medium maturity. Medium vine size. White flower color.

Uses: dual.

Strengths:

Weaknesses: small, blocky too round

Cutting Notes: blocky, nice

Chip Notes: Chip color=2, MB, % Zebra Chip: 10%

AC00206-2W-Round White. Parentage (AC87340-2 x Dakota Pearl). Cross was made in Aberdeen, and selected in Colorado. Medium maturity. Medium-large vine size. White flower color.

Uses: chip.

Strengths: very nice+, size parent very nice+, BOT+

Weaknesses: too big??

Cutting Notes: nice shape, hollow heart Chip Notes: Chip color= 1, 3Stem, 3TM, 2Mech 1 Stem

BOT, % Zebra Chip: 0%, 0%

AC00395-2RU-Long Russet. Parentage (A95523-12 x A84118-3). Cross was made in Aberdeen, and selected in Colorado. Late maturity. Very large vine. Light purple flower color.

Uses: dual.

Strengths: heavy set

Weaknesses: blocky+, small drop pointed, small

Cutting Notes: small

Chip Notes: Chip color=2, BC, % Zebra Chip: 0%

AC01151-5W-Oblong White. Parentage (COA96142-7 x NDA2031-2). Cross was made in Aberdeen and selected in Colorado. Medium maturity. Medium vine size. Purple flower color.

Uses: chip.

Strengths: nice shape

Weaknesses: poor internals, lots of B's

Cutting Notes: nice shape

Chip Notes: Chip color=1, Stem, SE, TM, Scab, Mech, % Zebra Chip: 0%

AC03433-1W-Round White. Parentage (A94322-8C x COA96141-4). Cross was made in Aberdeen and selected in Colorado.

Uses: chip.

Strengths nice flesh nice shape,

Weaknesses: poor shape, low yield+, light set

Chip Notes: Chip color=1

Cutting Notes: very nice shape

Chip Notes: Chip color=1, Mech, GH, Stem, TM, BOT, % Zebra Chip: 0%

AC03452-2W-Round White. Parentage (A98423-1C x COA96141-2C). Cross was made in Aberdeen, and selected in Colorado. Medium maturity. Medium-large vine size. White flower color.

Uses: chip.

Strengths: nice, heavy set+

Weaknesses: tuber moth deep nose small

Cutting Notes: nice shape

Chip Notes: Chip color=1, BOT, Stem, TM, Mech, Stem, % Zebra Chip: 0%0%

AC03534-2R/Y-Oval Red/Yellow. Parentage (ATA98472-2Y x Mazama). Cross was made in Aberdeen, and selected in Colorado. Medium maturity. Medium vine size. Purple flower color.

Uses: fresh.

Strengths: nice flesh+

Weaknesses:

Cutting Notes: very nice, BOT

Chip Notes: Chip color=3, Stem, % Zebra Chip: 3%

AO00057-2-Oblong Russet. Parentage (A91048-3 x A93116-3BSR). Cross was made in Aberdeen, and selected in Oregon. Medium maturity. Medium vine size. White flower color.

Uses: dual.

Strengths:

Weaknesses: low yield+ skinny, drop

Cutting Notes: nice, blocky

Chip Notes: Chip color=2, % Zebra Chip: 0%

AO02060-3-Oblong-long Russet. Parentage (A97201-4 x Premier Russet). Cross was made in Aberdeen, and selected in Oregon. Medium-late maturity. Small-medium vine size. White flower color.

Uses: dual.

Strengths: BOT-BOT-large, nice flesh nice

Weaknesses: pointed yield-cream colored flesh some pointing

Cutting Notes: small skinny

Chip Notes: Chip color=1, BC, BOT, % Zebra Chip: 0%

AO02183-2-Long Russet. Parentage (A97236-3 x Premier). Cross was made in Aberdeen, and selected in Oregon. Medium-late maturity. Large vine size. White flower color.

Uses: dual.

Strengths: yield+

Weaknesses: skinny poor skin finish, blocky

Cutting Notes: round

Chip Notes: Chip color=1, Stem, BOT, % Zebra Chip: 0%

AO96305-3-Long Russet. Parentage (A91018-6 x A89152-4). Cross was made in Aberdeen, and selected in Oregon. Medium maturity. Medium vine size. Red-purple flower color.

Uses: dual.

Strengths: heavy set

Weaknesses: long and skinny, pointed, drop

Cutting Notes: small skinny

Chip Notes: Chip color=2, % Zebra Chip: 10%

AOTX02136-1Ru-Oblong Russet. Parentage (A96563-8 x A92030-5). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Medium-late maturity. Small vine size. White

flower color.

Uses: fresh.

Strengths:

Weaknesses: pointed, poor shape, raised eyes, drop blocky, light set, bad rep, small, drop

Cutting Notes: nice large tubers, some rough

Chip Notes: Chip color=2, Stem, MB, % Zebra Chip: 0%

AOTX06598-1R-Round Red. Parentage (A031087-79 x ND4659-5R). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: fresh.

Strengths: Great colors, slight buff, send to CA new great color, not bad shape

Weaknesses: deep eyes

Cutting Notes: small potato

AOTX07876-1Ru-Oblong Russet. Parentage (A00715-8 X A93575-4). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: fresh.

Strengths: yield parent, keep

Weaknesses some pointed, light russet

AOTX07920-5Ru-Long Russet. Parentage (PA03NM3-4 X A01054-4). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses rough, large tubers, pointed, drop

AOTX91861-4R-Oblong Red. Parentage (Red LaSoda x ND2224-5R). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Medium-late maturity. Medium vine size. Red-purple flower color.

Uses: fresh.

Strengths: keep,

Weaknesses: bad bruising

Cutting Notes:

AOTX95265-1Ru-Long Russet. Parentage (A89216-9 x A86102-6). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Early maturity. Medium vine size. White flower color.

Uses: fresh.

Strengths: nice keep

Weaknesses: lots of culls pointed

Cutting Notes: nice shape

Chip Notes: Chip color=2, % Zebra Chip: 0%

AOTX95265-3Ru-Long Russet. Parentage (A89216-9 x A86102-6). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Medium maturity. Medium vine size.

Uses: fresh.

Strengths: large keep ++

Weaknesses: some skinny some pointed 30% bruising

Cutting Notes: small curved

Chip Notes: Chip color=2, % Zebra Chip: 0%

AOTX95295-1W-Round White. Parentage (A89804-7 X Ranger Russet). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Late maturity. Large vine size. White flower color.

Uses: fresh.

Strengths:

Weaknesses: feathering, low yield, hollow heart,

Cutting Notes:

Chip Notes: keep Chip color=1, Stem, % Zebra Chip: 0%

AOTX96075-1Ru-Long Russet. Parentage (A84118-3 x A89384-10). Cross was made in Aberdeen,

tuberling produced in Oregon, and selected in Texas. Late maturity. Large vine size. White flower color.

Uses: fresh.

Strengths:

Weaknesses:

Cutting Notes:

AOTX96084-1Ru-Oblong Russet. Parentage (A8792-1 X A86102-6). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Medium maturity. Large vine size. White flower color.

Uses: fresh.

Strengths: keep

Weaknesses: pointed, rough, curved, lots of culls, poor shape some culls

Cutting Notes: blocky

Chip Notes: Chip color=2, Stem, % Zebra Chip: 0%

AOTX96216-2Ru-Long Russet. Parentage (A89216-9 x A86102-6). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Late maturity. Large vine size. White flower color

Uses: fresh.

Strengths: size parent, large tubers, 84378 like, keep

Weaknesses: oversized, rough, early, pointed, very early

Cutting Notes: very large, blocky, nice

Chip Notes: Chip color=2, BC, % Zebra Chip: 5%

AOTX96265-2Ru-Oblong Russet. Parentage (A90621-4 X A84180-8). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Late maturity. Large vine size. White flower color

Uses: fresh.

Strengths:

Weaknesses:

Cutting Notes:

AOTX98152-3Ru-Oblong Russet. Parentage (A88338-1 X A9201-6). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Medium early maturity. Medium vine size.

Lavender flower color.

Uses: fresh.

Strengths: blocky, advance, BOT+, yield+

Weaknesses: heat necrosis

Cutting Notes: small, blocky

Chip Notes: Chip color=2, Stem, MB, BOT, % Zebra Chip: 0%

AOTX98202-1Ru-Oblong Russet. Parentage (A9201-6 X A9014-2). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Medium maturity. Medium vine size. Lavender flower color.

Uses: fresh.

Strengths: nice, shape and flesh BOT for type, keep

Weaknesses: light skin

Cutting Notes: blocky, nice shape

Chip Notes: Chip color=2, Stem, % Zebra Chip: 0%

Atlantic-Round White. Parentage (Wauseon x Lenape). Cross was-made in Beltsville, Maryland, and selected in Maine. Released in 1976 by USDA-ARS, Florida, Virginia, New Jersey and Maine Agricultural Experiment Stations. Medium maturity. Medium vine size. Pale lavender flower color.

Uses: chip.

Strengths: high yield, high specific gravity, low sugar buildup in storage, chips well directly from field short term storage at 50o, uniform tuber size and shape, tolerant to scab and Verticillium wilt, resistant to pink eye and highly resistant to race A of golden nematode, PVX and tuber net necrosis

Weaknesses: very poor internals, very susceptible to internal heat necrosis, particularly in sandy soils in warm, dry seasons, susceptible to hollow heart, shatter bruise, Rhizoctonia and storage rots, buff skin, oversize

Chip Notes: nice, hollow heart

Cutting Notes: buff skin, nice shape

Chip Notes: 2 Stem, MB, % Zebra Chip: 0%

ATTX01178-1R-Oblong Red. Parentage (ND5084-3R x Winema). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: fresh.

Strengths: RLS like, nice shape and color, BOT

Weaknesses: deep eyes

Cutting Notes: large tubers, nice shape, hollow heart

Chip Notes: Chip color=2, Stem, SE, % Zebra Chip: 0%

ATTX01180-1R/Y-Oblong Red/Yellow Parentage (ND5084-3R x A92657-1R). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas. Medium maturity. Small vine size. Lavender flower color.

Uses: specialty.

Strengths: BOT, nice flesh nice skin very dark flesh, nice internals did not fade

Weaknesses: pointed feathering

Cutting Notes: purple streaks, nice skin

Chip Notes: Chip color=3, Stem, % Zebra Chip: 0%

ATTX03474-2W-Round White. Parentage (NDTX493O-5W X C0A96141-4). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas. Medium-early maturity. Large vine size.

Uses: chip.

Strengths: nice flesh++

Weaknesses: very low yield, light set

Cutting Notes: rough

Chip Notes: drop Chip color=1, D/K, Stem, Shape-, % Zebra Chip: 5%

ATTX03474-3W-Round White. Parentage (NDTX493O-5W X C0A96141-4). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas. Late maturity. Large vine size. White

flower color.

Uses: chip.

Strengths: heavy set+ nice, smooth, nice shape and flesh

Weaknesses: buff, small knobs+

Cutting Notes: small

Chip Notes: DROP D/K, SE, Stem, Mech, % Zebra Chip: 0%

ATTX03475-10Ru-Oblong Russet. Parentage (NDTX4930-5W X NYII2). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas. Medium maturity. Medium vine size.

Uses: fresh.

Strengths light skin, rough, pointed, poor shape, drop?

Weaknesses:

Cutting Notes: small, nice shape

Chip Notes: % Zebra Chip: 5%

ATTX03475-2W-Round Buff. Parentage (NDTX4930-5W X NYII2). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas. Early maturity. Small vine size.

Uses: chip.

Strengths:

Weaknesses: poor shape for a chipper, blocky, russet skin,

Cutting Notes: shriveled, small

Chip Notes: Chip color=1, DROP, Nice, Stem, Drop, Long, Shape-, Mech % Zebra Chip: 0%

ATTX03475-7Ru-Oblong Russet. Parentage (NDTX4930-5W X NYII2). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas. Late maturity. Large vine size.

Uses: fresh.

Strengths: heavy set

Weaknesses: round to oblong, poor shape, small potato?, drop small, drop s

Cutting Notes: nice shape, small

Chip Notes: Chip color=1, Stem, MB, % Zebra Chip: 8%

ATTX05175-1R/Y-Round Red/Yellow. Parentage (A99331-2RY X COA99261-IRY). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: specialty.

Strengths: nice shape light color, heavy set, BOT, lighter skin color, sort by skin color, nice shape and color, keep, resend to CA

Weaknesses:

Cutting Notes: small potato

ATTX05186-3W/Y-Oblong White/Yellow. Parentage (A99433-5Y x VC1075-1R). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: specialty.

Strengths: keep, send to CA new nice shape, yield +, uniform size profile

Weaknesses: some buff, road map

Cutting Notes: small potato

ATTX06246-1R-Red. Parentage (Gogu Valley x Modoc) Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas

Uses: fresh.

Strengths: heavy set lots of B's, BOT TC, heavy set, small potato candidate

Weaknesses: small, silver scurf, buff

Cutting Notes: small, uniform, nice color

Chip Notes: Stem, % Zebra Chip: 0%

ATTX06274-2W/Y-Oblong White Yellow. Parentage (COA99261-IRY x VC1075-IR) Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas. Early maturity. Small vine size.

Uses: fresh.

Strengths: smooth, med yield FC=3.5

Weaknesses: low yield+, poor internals, drop poor shape, flat

Cutting Notes: nice flesh, raised eyes, FC=3.5

Chip Notes: Chip color=2, Stem, Dark, % Zebra Chip: 0%

ATTX07023-2Ru-Russet. Parentage (A01754-4 EM x A0082-6 EM 500) Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

Cutting Notes:

ATTX07039-2Ru-Russet. Parentage (Stampede Russet EM x AO0385-2 EM 400) Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

Cutting Notes:

ATTX07039-4Ru-Russet. Parentage (Stampede russet EM x AO0385-2 EM 400) Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

Cutting Notes:

ATTX07039-6Ru-Russet. Parentage (Stampede russet EM x AO0385-2 EM 400) Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

Cutting Notes:

ATTX07230-1Y/RE/Y-Yellow. Parentage (AO0286-3Y y x Modoc red 500) Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

Cutting Notes:

ATTX88481-1P/W-Oblong Purple. Parentage (A83302-1 x Bison). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

Cutting Notes:

ATTX88654-2P/Y-Oblong Purple/Yellow. Parentage (PI343201 x Gurney's Purple). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: specialty.

Strengths:

Weaknesses:

Cutting Notes:

ATTX961014-1BR/Y-Oblong Red/Yellow. Parentage (A90601-2RDY X MAZAMA). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas. Early maturity. Medium vine size. Purple flower color.

Uses: specialty.

Strengths: yield +,

Weaknesses: Faded, poor skins finish some rough

Cutting Notes: very light yellow flesh, nice shape and skin, FC=2.5

Chip Notes: Chip color=3, Stem, SE, % Zebra Chip: 0%

ATTX961014-1R/Y-Oblong Red/Yellow. Parentage (A90601-2RDY X MAZAMA). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas. Early maturity. Medium vine size. Purple flower color.

Uses: specialty.

Strengths:

Weaknesses: light skin and flesh

Cutting Notes: very light yellow flesh, nice shape and skin, red streaks in flesh FC=2.5

Chip Notes: Chip color=3, HH, % Zebra Chip: 0%

ATTX98444-16R/Y-Oblong Red/Yellow. Parentage (A83360-9R X T48YF). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: specialty.

Strengths: (Looked good in CA trial), resend to CA

Weaknesses: poor shape, pointed, poor shape, drop++,

Cutting Notes: small potato

ATTX98453-11BR-Round Red. Parentage (A93490-1R X A91846-5R). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas. Early-medium maturity. Small-medium vine size. Lavender flower color.

Uses: fresh.

Strengths:

Weaknesses: drop, deep eyes, oversized rough, low yield, drop?

Cutting Notes:

ATTX98453-3R-Round Red. Parentage (A93490-1R x A91846-5R). Cross was made in Aberdeen, tuberling produced in Texas and selected in Texas.

Uses: fresh.

Strengths: RLS like, nice shape and color, high gravity heavy set

Weaknesses: deep eyes, small, drop, small++

Cutting Notes: large, nice, flat

Chip Notes: Chip color=2, Stem, SE, % Zebra Chip: 0%

ATTX98453-6R-Round Red. Parentage (A93490-1R x A91846-5R). Cross was made in Aberdeen, tuberling produced in Texas and selected in Texas. Late maturity. Medium-large vine size. Lavender flower color.

Uses: fresh.

Strengths: nice smooth, BOT, release, shallow eyes nice, yield+

Weaknesses: feathering, light skin color

Cutting Notes: deep eyes, flat, nice skin

Chip Notes: Chip color=2, Stem, % Zebra Chip: 0%

ATTX98462-3R/Y-Oblong Red. Parentage (ATD251-5RY x BO811-13RY). Cross was made in Aberdeen, tuberling produced in Texas and selected in Texas.

Uses: fresh.

Strengths: nice flesh

Weaknesses: faded light flesh, drop?

Cutting Notes: very light flesh, hollow heart, FC=2.0

Chip Notes: Chip color=3, Stem, SE, MB, % Zebra Chip: 0%

ATTX98468-5R/Y-Oblong Red. Parentage (ATD252-5R x A93457-4R). Cross was made in Aberdeen, tuberling produced in Texas and selected in Texas.

Uses: fresh.

Strengths: nice shape and flesh

Weaknesses: low yield light skin, feathering+, rough

Cutting Notes: very nice, light skin, FC=3.2

Chip Notes: Chip color=3, Stem, SE, MB, % Zebra Chip: 0%

ATTX98510-1R/Y-Oblong Red/Yellow. Parentage (T48YF X A93456-6R). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas. Late maturity. Large vine size. Lavender flower color

Uses: specialty.

Strengths: nice skin color

Weaknesses: small, drop light skin and flesh

Cutting Notes: nice shape, light flesh and skin, FC=3.0

Chip Notes: Chip color=3, Stem, % Zebra Chip: 0%

ATX03564-1W/Y-Oblong Yellow/Yellow. Parentage (NDS5507-3YF x Granola). Cross was made in Aberdeen and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses: lots of smalls, some pointed, light flesh, poor shape, pear shaped poor skin finish, drop++, heart shaped

Cutting Notes: skinny, FC=2.5

Chip Notes: Chip color=2, Stem, SE, % Zebra Chip: 0%

ATX05186-1R-Oblong Red. Parentage (A99433-5Y x VC1075-1R). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: fresh.

Strengths: better skin finish, send to CA new

Weaknesses: deep eyes

Cutting Notes: small potato

ATX05186-2R-Oblong Red. Parentage (A99433-5Y x VC1075-1R). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses: poor shape, deep eyes, drop? Drop in CA

Cutting Notes: small potato

ATX05202-3W/Y-Oblong White/Yellow. Parentage (A00286-3Y x A99433-5Y). Cross was made in

Aberdeen and selected in Texas.

Uses: specialty.

Strengths: uniform size, buff skin uniform shape, light buff skin, nice flesh, resend to CA

Weaknesses: lighter set larger tubers, not uniform flesh color

Cutting Notes: small potato

ATX06264-4R/Y-Round Red/Yellow. Parentage (A99331-2RY x Durango Red). Cross was made in Aberdeen and selected in Texas.

Uses: specialty.

Strengths: keep resend to CA not bad shape and color, duel, small potato and regular red uniform size, heavy set

Weaknesses: some misshapen poor skin finish poor skin finish

ATX07305-1W/Y-Yellow/Yellow. Parentage (A99433-5Y x Mila) Cross was made in Aberdeen and selected in Texas

Uses: specialty.

Strengths: resend to CA better skin finish heavy set

Weaknesses: poor shape, shape?? uneven flesh, drop++,

Cutting Notes: small potato

ATX08153-1W/Y-Round Yellow/Yellow. Parentage (A00286-3Y x 93-1285-6) Cross was made in Aberdeen and selected in Texas

Uses: specialty.

Strengths:

Weaknesses: poor skin, poor shape and skin, drop++

Cutting Notes: small potato

ATX84378-6Ru-Oblong-Long Russet. Parentage (A79141-9 x ND329-1). Cross was made in Aberdeen, and selected in Texas. Medium-early maturity. Medium vine size. White flower color.

Uses: fresh.

Strengths: blocky keep, BOT

Weaknesses: light set, a little rough

Cutting Notes: large, blocky, nice dark russet

Chip Notes: Chip color=2, Dark, % Zebra Chip: 0%

ATX91137-1Ru-Oblong Russet. Parentage (A81473-2 x A8343-12) Cross was made in Aberdeen, and selected in Texas. Late maturity. Medium vine size. Lavender flower color.

Uses: fresh.

Strengths: yield+, advance, BOT+, keep, fast bulk blocky BOT,

Weaknesses: larger tubers have raised eyes some pointed,

Cutting Notes: some pointed, some dry rot

Chip Notes: Chip color=2, % Zebra Chip: 0%

ATX9332-12Ru-Oblong Russet. Parentage (A8850-1 x A88288-1). Cross was made in Aberdeen and selected in Texas. Late maturity. Large vine size. White flower color.

Uses: fresh.

Strengths:

Weaknesses: poor skin finish, small, culls, drop+++ pointed, drop+++

Cutting Notes: poor shape, purple steaks in flesh

Chip Notes: Chip color=3, % Zebra Chip: 0%

ATX99013-1Ru-Long Russet. Parentage (A8893-1 x A91186-2). Cross was made in Aberdeen and selected in Texas. Medium maturity. Medium vine size.

Uses: fresh.

Strengths:

Weaknesses: drop, uneven filling, skinny ends small, drop+++

Cutting Notes: nice shape

Chip Notes: Chip color=2, % Zebra Chip: 0%

Banana-Long White. Parentage (Grown in British Columbia for over 90 years. Research indicates that

the variety might have been introduced to early settlers and natives by Russian fur traders. The exact origin, parental lines or breeding techniques used in its development are not known.)

Uses: specialty.

Strengths:

Weaknesses: skinny, dumb bell, rough, heat sprouts small, rough

Cutting Notes: skinny, rough, FC=2.5

BTX1544-2W/Y-Oblong White/Yellow. Parentage (BO811-13 x Yukon Gold). Cross was made in Beltsville, Maryland and selected in Texas. Medium maturity. Medium vine size.

Uses: specialty.

Strengths: heavy set few culls FC=2.5

Weaknesses: small++

Cutting Notes: buff skin, nice flesh, FC=3.0

Chip Notes: % Zebra Chip: 8%

BTX1749-1W/Y-Oblong White/Yellow. Parentage (K7-6 x BO925-4). Cross was made in Beltsville, Maryland and selected in Texas. Medium maturity. Large vine size.

Uses: specialty.

Strengths: FC=2.5

Weaknesses: rough, buff, low yield

Cutting Notes: small, buff skin, FC=3.0

Chip Notes: Chip color=3, Stem, % Zebra Chip: 0%

BTX2103-1R/Y-Oblong Red/Yellow. Parentage (BO811-13 x ARS-W82-21285-1). Cross was made in Beltsville, Maryland and selected in Texas. Late maturity. Medium vine size. Red-purple flower color

Uses: specialty.

Strengths: yield+, heavy set buff skin, nice flesh, light skin, nice shape

Weaknesses: deep nose

Cutting Notes: nice shape, light skin and flesh, FC=2.6

Chip Notes: Chip color=3, Stem, SE, % Zebra Chip: 0%

BTX2332-1R-Round Red. Parentage (B1523-4 x Super Red Norland). Cross was made in Beltsville, MD and selected in Texas. Medium maturity. Large vine size. Lavender flower color

Uses: fresh.

Strengths: heavy set yield+

Weaknesses: small feathering, buff, poor skin finish, silver scurf, heat sprouts

Cutting Notes: nice shape and size, BOT, purple streaks in flesh

Chip Notes: Chip color=2, Stem, SE, % Zebra Chip: 0%

Chieftain-Round Red. Parentage (Ia1027-18 x La1354). Cross was made and selected at Iowa State University.

Uses: fresh.

Strengths: nice flesh

Weaknesses: light skin feathering, poor internal+++ feathering, light set

Cutting Notes: nice shape, light skin, poor internals (brownspot)

Chip Notes: Chip color=2, Stem, MB, % Zebra Chip: 3%

Chipeta-Oblong White. Parentage (WNC612-13 x Wischip). Cross was made in Aberdeen and selected in Colorado. Released by USDA-ARS, Aberdeen, and Colorado Agricultural Experiment Stations. Late maturity. Large vine size. Red-Reddish purple corollas and large yellow anthers.

Uses: chip and French fries.

Strengths: High yield potential, high specific gravity and low sugar accumulation in storage will occasionally chip out of 40o storage, resistant to most internal and external defects including second growth, growth cracks, hollow heart, heat necrosis and blackspot bruises. Also resistant to leaf roll-induced net necrosis, Verticillium wilt, and both foliar and tuber phases of early blight BOT-++.

Weaknesses: Irregular shape, may oversize, buff skin, variable tuber size, skin feathering, some russet patches, green heads, susceptible to Rhizoctonia, common scab, and Fusarium dry rot, late maturity, deep eyes

Chip Notes: Chip color=2

Cutting Notes: Rhizoctonia, nice shape

Chip Notes: Chip color=1 Drop, 9 Stem, 5 SE, 13 Stem, % Zebra Chip: 0%0%

CO00277-2R-Round Red. Parentage (Colorado Rose x CO94065-2R). Cross was made and selected in Colorado. Early Maturity. Medium vine size. Red-purple flower color.

Uses: fresh.

Strengths: nice flesh small potato good color

Weaknesses: light set, knobs, drop, silver scurf

Cutting Notes: nice shape, large tubers

Chip Notes: Chip color=2, Stem, SE, % Zebra Chip: 0%

CO00291-5R-Round Red. Parentage (CO94019-1R x Rio Colorado). Cross was made and selected in Colorado. Medium late maturity. Large vine size. Dark red purple flower color.

Uses: specialty.

Strengths: beautiful color and skin

Weaknesses: stem attachment, small+, stem end discoloration, drop

Cutting Notes: nice shape, deep red skin color

Chip Notes: Chip color=3, % Zebra Chip: 0%

CO02024-9W-Round White. Parentage (A91790-13W x CO95051-7W). Cross was made and selected in Colorado. Medium maturity. Medium vine size. White flower color.

Uses: chip.

Strengths: nice shape

Weaknesses: lots of B's uniformly small

Chip Notes: Chip color=1

Cutting Notes: nice

Chip Notes: Chip color=1, TM/GH, Stem, % Zebra Chip: 0%3%

CO02033-1W-Oblong White. Parentage (A91790-13W x S440). Cross was made and selected in Colorado. Medium maturity. Medium vine size. White flower color.

Uses: chip.

Strengths:

Weaknesses: too oblong, poor shape flat, drop+

Cutting Notes: flat

Chip Notes: Chip color=1 Chip color=2, Stem, Drop, Shape- , % Zebra Chip: 0% 0%

CO02321-4W-Oblong White. Parentage (NY115W x BC0894-2W). Cross was made and selected in Colorado. Medium maturity. Medium-large vine size. Purple flower color.

Uses: chip.

Strengths:

Weaknesses: large tubers light set, some too oblong

Cutting Notes: nice

Chip Notes: Chip color=1, Stem, % Zebra Chip: 0%

CO03134-4RF/RW-Long Red. Parentage (Laratte x PA97B36-3). Cross was made and selected in Colorado. Medium maturity. Medium-large vine size. Red-purple flower color.

Uses: specialty.

Strengths:

Weaknesses: very rough, drop, heat sprouts++, culls++

Cutting Notes: poor shape, red/white flesh

CO03187-1RU-Long White. Parentage (Rio Grande Russet x A9304-3). Cross was made and selected in Colorado. Very-early maturity. Medium vine size. Light purple flower color.

Uses: fresh.

Strengths: blocky smooth yield+ heavy set

Weaknesses: small+

Cutting Notes: small, skinny, rough

Chip Notes: Chip color=2, % Zebra Chip: 15%

CO03202-1RU-Long White. Parentage (AC96010-3RU x Canela Russet). Cross was made and selected

in Colorado. Late maturity. Very large-large vine size. White flower color.

Uses: dual.

Strengths:

Weaknesses: flat, long skinny, too long too long and skinny, rough, drop

Cutting Notes: skinny

Chip Notes: Chip color=3, % Zebra Chip: 37%

CO03243-3W-Round White. Parentage (BC0894-2W x A91790-13). Cross was made and selected in Colorado. Medium maturity. Large vine size. Light purple flower color.

Uses: chip.

Strengths: BOT+, nice shape smooth, nice, parent

Weaknesses:

Cutting Notes: nice size and shape

Chip Notes: Chip color=1, Stem, SE, % Zebra Chip: 0%0%

CO03276-4RU-Oblong Russet. Parentage (CO95086-8RU x Blazer Russet). Cross was made and selected in Colorado. Medium maturity. Medium large vine size. White flower color.

Uses: dual.

Strengths: blocky

Weaknesses: small, pointed, internal?? low yield

Cutting Notes: nice shape

Chip Notes: Chip color=2, % Zebra Chip: 0%

CO03276-5RU-Long Russet. Parentage (CO95086-8RU x Blazer Russet). Cross was made and selected in Colorado. Medium early maturity. Medium large vine size. Purple flower color.

Uses: dual.

Strengths:

Weaknesses: pointed, culls+, skinny, drop+++, 20% heat necrosis

Cutting Notes: blocky, some rough

Chip Notes: Chip color=3, % Zebra Chip: 7%

CO04013-1W/Y-Round White. Parentage (ATC98495-1W/Y x CO97237-5W/Y). Cross was made and selected in Colorado. Medium maturity. Medium large vine size. Purple flower color.

Uses: specialty.

Strengths: small potato, heavy set

Weaknesses: very poor internals+++ , heat sprouts, drop++

Cutting Notes: nice shape, small, FC=3.0

Chip Notes: Chip color=3, MB, Dark, % Zebra Chip: 0%

CO04021-2R/Y-Oblong Red/Yellow. Parentage (ATC98509-1R/Y x US147-96R/Y). Cross was made and selected in Colorado. Medium maturity. Large vine size. Light purple flower color.

Uses: specialty.

Strengths: nice flesh, smooth skin

Weaknesses: small lots of culls, variable size, pointed, poor shape

Cutting Notes: very large tubers, FC=3.3

Chip Notes: Chip color=3, Stem, BC, % Zebra Chip: 0%

CO04029-5W/Y-Oval White/Yellow. Parentage (ATC98515-1R/Y x PA99P35-1). Cross was made and selected in Colorado. Medium maturity. Large vine size. Red-purple flower color.

Uses: specialty.

Strengths: small potato, heavy set

Weaknesses: poor internals++, drop+++

Cutting Notes: nice shape and flesh, FC=3.3

Chip Notes: Chip color=3, MB, % Zebra Chip: 3%

CO04056-3P/PW-Oval Purple. Parentage (CO97216-1P/PW x CO97227-2P/PW). Cross was made and selected in Colorado. Medium-early maturity. Medium large vine size. Purple flower color.

Uses: specialty.

Strengths: heavy set nice shape, high yield

Weaknesses: feathering+, poor skin finish

Cutting Notes: very dark solid purple flesh

CO04063-4R/R-Oblong Red. Parentage (CO97226-2R/R x CO97222-1R/R). Cross was made and selected in Colorado. Medium-early maturity. Medium small vine size. White flower color.

Uses: specialty.

Strengths: nice flesh small potato

Weaknesses: poor skin finish+, drop

Cutting Notes: Nice shape and red-purple flesh

CO04067-8R/Y-Oval Red. Parentage (CO97232-1R/Y x ATC98444-1R/Y). Cross was made and selected in Colorado. Medium-early maturity. Large vine size. Red-purple flower color.

Uses: specialty.

Strengths:

Weaknesses: small+

Cutting Notes: nice skin and flesh, FC=3.5

Chip Notes: Chip color=3, Stem, SSE, MB, % Zebra Chip: 2%

CO04099-3W/Y-Oval White/Yellow Parentage (VC1002-3W/Y x ATC98495-1W/Y). Cross was made and selected in Colorado. Early maturity. Medium large vine size. Red-purple flower color.

Uses: specialty.

Strengths: high yield

Weaknesses: drop poor skin finish, poor internals, ZC?

Cutting Notes: nice shape, light flesh, FC=2.5

Chip Notes: Chip color=3, MB, BOT-, % Zebra Chip: 0%

CO04099-4W/Y-Round White/Yellow. Parentage (VC1002-3W/Y x ATC98495-1W/Y). Cross was made and selected in Colorado. Medium maturity. Large vine size. Red-purple flower color.

Uses: specialty.

Strengths: dark flesh, heavy set, many smalls

Weaknesses: poor internals

Cutting Notes: nice shape, dark yellow flesh, FC=3.5

Chip Notes: Chip color=3, Stem, IBS, % Zebra Chip: 0%

CO04159-1R-Round Red. Parentage (AC97521-1R/Y x CO99076-6R). Cross was made and selected in Colorado. Medium-early maturity. Medium vine size. Purple flower color.

Uses: specialty.

Strengths: nice skin finish, good color++,

Weaknesses: small++, hollow heart, drop

Cutting Notes: nice shape and skin, hollow heart

Chip Notes: Chip color=3+, Stem, % Zebra Chip: 3%

CO04188-4R/Y-Oblong Red. Parentage (ATC98515-1R/Y x ATC98444-1R/Y). Cross was made and selected in Colorado. Medium-early maturity. Large vine size. Red-purple flower color.

Uses: specialty.

Strengths:

Weaknesses: small, light skin

Cutting Notes: very nice skin and dark yellow flesh, FC=3.7

Chip Notes: Chip color=3, Stem, MB, % Zebra Chip: 0%

CO04211-4RU-Oblong Russet. Parentage (CO96045-1RU x CO98009-3RU). Cross was made and selected in Colorado. Early maturity. Small vine size. White flower color.

Uses: dual.

Strengths:

Weaknesses: blocky to round

Cutting Notes: blocky

Chip Notes: Chip color=3, BC, MB, % Zebra Chip: 0%

CO04220-7RU-Long Russet. Parentage (CO96109-7RU x Summit Russet). Cross was made and selected in Colorado. Early maturity. Medium vine size. White flower color.

Uses: dual.

Strengths:

Weaknesses: light set, low yield

Cutting Notes: some curved, hollow heart

Chip Notes: Chip color=2, Stem, % Zebra Chip: 0%

CO04233-1RU-Oblong Russet. Parentage (CO97138-3RU x Summit Russet). Cross was made and selected in Colorado. Medium-early maturity. Medium vine size. White flower color.

Uses: fresh.

Strengths:

Weaknesses: blocky to round

Cutting Notes: blocky

Chip Notes: Chip color=2, Stem, SE, % Zebra Chip: 0%

CO111f2-1 P/P-Oblong Purple/Purple. Parentage (?). Cross made and selected in Colorado.

Uses: specialty.

Strengths: high in anti-oxidants

Weaknesses: all blue type flesh, some road map

Cutting Notes: very dark flesh

COTX01403-4R/Y-Oblong Red/Yellow Parentage (VC1015-7R/Y x Winema). Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths: BOT nice size, shape, and flesh

Weaknesses: light skin eye brows

Cutting Notes: very nice shape, light skin, large tubers, FC=3.2

Chip Notes: Chip color=3, Stem, MB, BC, % Zebra Chip: 0%

COTX02172-1R-Oblong Red. Parentage (CO94065-2R x ND3574-5R). Cross was made in Colorado and selected in Texas. Medium early maturity. Medium vine size. Lavender flower color.

Uses: fresh.

Strengths: nice skin

Weaknesses: light set, drop? drop

Cutting Notes: nice shape, purple streaks in flesh

Chip Notes: Chip color=3, Stem, SE, % Zebra Chip: 3%

COTX02293-4R-Oblong Red. Parentage (CO94065-2R x ND3574-5R). Cross was made in Colorado and selected in Texas. Medium early maturity. Medium vine size. Lavender flower color.

Uses: fresh.

Strengths: keep nice shape and flesh

Weaknesses: light set, drop? Small

Cutting Notes: small, some hollow heart

Chip Notes: Chip color=2, Stem, SE, TM, % Zebra Chip: 0%

COTX03187-1W-Long White. Parentage (A93570-13 x CO96109-4RU). Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths:

Weaknesses: too big, drop

Cutting Notes: fingerling

COTX04015-3AW/Y-Oblong White/Yellow Parentage (ATC98515-1R/Y x ATC98444-1R/Y). Cross was made in Aberdeen and selected in Texas. Medium-late maturity. Large vine size. Lavender flower color

Uses: specialty.

Strengths: very nice flesh, advance?

Weaknesses: heart shaped nipples, pointed, drop++

Cutting Notes: nice shape, dark yellow flesh, best of trial, FC=3.5

Chip Notes: Chip color=3, Stem, BOT-, % Zebra Chip: 0%

COTX04050-1P/P-Oblong Purple/Purple. Parentage (CO97215-2P/P x CO97306-2P/P). Cross was made

in Colorado and selected in Texas

Uses: specialty.

Strengths: nice shape resend to CA

Weaknesses: lenticels, feathering

Cutting Notes: small potato

COTX04193-2R/Y-Oblong Red/Yellow. Parentage (ATC98515-1R/Y x ND3574-5R). Cross was made in Colorado and selected in Texas. Medium-early maturity. Small vine size.

Uses: specialty.

Strengths: nice flesh, small TC, BOT FC =4.5

Weaknesses:

Cutting Notes: small, FC=2.8

Chip Notes: Chip color=3, Stem, % Zebra Chip: 0%

COTX04267-1R/Y-Oblong Red/Yellow. Parentage (CO98012-5R x CO97232-2R/Y). Cross was made in Colorado and selected in Texas. Late maturity. Medium vine size.

Uses: specialty.

Strengths: dark flesh FC =4.1

Weaknesses: light skin, variable flesh color growth cracks, drop

Cutting Notes: light skin, feathering, FC=3.0

Chip Notes: Chip color=3, Stem, SE, MB, % Zebra Chip: 0%

COTX05082-2P/P-Oblong Purple/Purple. Parentage (CO97227-2P/P x WMSG147-3). Cross was made in Colorado and selected in Texas. Medium maturity. Small vine size.

Uses: specialty.

Strengths: keep for flesh

Weaknesses: deep eyes small, light set, yield-, rough, poor skin finish

Cutting Notes: very dark flesh, deep eyes, rough, FC=5

COTX05095-2Ru/Y-Long Russet/Yellow. Parentage (CO99045-1W/Y X AO96164-1). Cross was made

in Aberdeen and selected in Texas. Medium. Medium vine size. White flower color.

Uses: fresh.

Strengths: small, smooth, heavy set, keep, Sierra like, nice flesh nice yellow flesh, keep for flesh

Weaknesses:

Cutting Notes: small, nice yellow flesh, FC=3.0

Chip Notes: Chip color=3, % Zebra Chip: 18%

COTX07009-8Ru-Oblong Russet. Parentage (AC97306-1RU x CO99053-3RU) Cross was made in Colorado and selected in Texas. Late maturity. Large vine size. White flower color.

Uses: fresh.

Strengths:

Weaknesses: drop+

Cutting Notes: small

Chip Notes: Chip color=1, % Zebra Chip: 0%

COTX07054-2R-Oblong Red. Parentage (ATDC9801-3P x CO99076-6R) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths: heavy set, keep

Weaknesses: small, lots of B's

Cutting Notes: small, nice color

Chip Notes: Chip color=2, Stem, SE, % Zebra Chip: 0%

COTX07168-1Ru-Long Russet. Parentage (A89219-7RU x AC97306-1RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses: too big, move to russets

Cutting Notes:

COTX07206-1Ru-Long Russet. Parentage (AC97306-1RU x CO99028-2RU) Cross was made in Colorado and selected in Texas. Late maturity. Large vine size. White flower color.

Uses: fresh.

Strengths: very nice, keep, BOT-,

Weaknesses: culls drop?

Cutting Notes: skinny

Chip Notes: Chip color=2, % Zebra Chip: 0%

COTX07382-1W/Y-Oblong White/Yellow. Parentage (Blazer Russet x Innovator) Cross was made in Colorado and selected in Texas. Medium maturity. Medium vine size. White flower color.

Uses: specialty.

Strengths: check SPR data, keep few culls, nice shape, BOT-, FC=1.5

Weaknesses: light flesh, low yield, uneven color

Cutting Notes: small, nice skin and flesh, FC=3.3

Chip Notes: Chip color=3, Stem, SE, % Zebra Chip: 0%

COTX07382-2W/Y-Oblong White/Yellow. Parentage (Blazer Russet x Innovator) Cross was made in Colorado and selected in Texas. Medium maturity. Medium vine size. White flower color.

Uses: specialty.

Strengths: FC=2.0

Weaknesses: pointed low yield+, light flesh+

Cutting Notes: raised eyes, rough, ugly, FC=2.0

Chip Notes: Chip color=3, Stem, SE, % Zebra Chip: 0%

COTX08045-2R/R-Long Red/Red. Parentage (FF x KP (501) x POR01PG22-1) Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths: nice, nice red flesh, good skin finish, smooth send to CA new

Weaknesses:

Cutting Notes: fingerling

COTX08046-2R-Red. Parentage (FF x KP (501) x Magic Molly) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses: drop

Cutting Notes: fingerling

COTX08046-3R/R-Long Red/Red. Parentage (FF x KP (501) x Magic Molly) Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths:

Weaknesses: too round, rough skin, drop

Cutting Notes: fingerling

COTX08046-5R/R-Long Red/Red. Parentage (FF x KP (501) x Magic Molly) Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths:

Weaknesses: drop

COTX08046-8P/P-Oblong Purple/Purple. Parentage (FF x KP (501) x Magic Molly) Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths: darker flesh nice flesh

Weaknesses: poor shape, low yield

Cutting Notes:

COTX08046-9P/P-Long Purple/Purple. Parentage (FF x KP (501) x Magic Molly) Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths:

Weaknesses: too purple skinned, rough, poor size profile, drop+, rough

Cutting Notes: fingerling

COTX08056-10R-Red. Parentage (French Fingerling x POR01PG22-2) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths: better skin finish, light purple white flesh, send to CA new

Weaknesses:

Cutting Notes: fingerling

COTX08056-12R/R-Long Red/Red. Parentage (French Fingerling x POR01PG22-2) Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths:

Weaknesses: drop, sweet potato shape, poor shape

Cutting Notes:

COTX08056-5R/R-Red/Red. Parentage (French Fingerling x POR01PG22-2) Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths: nice size profile, variegated skin, white flesh

Weaknesses:

Cutting Notes: fingerling

COTX08056-6R/Y-Long Red/Red. Parentage (French Fingerling x POR01PG22-2) Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths: smooth,

Weaknesses: purple streaks in yellow flesh? white flesh? lenticels

Cutting Notes: fingerling

COTX08061-3R/R-Long Red/Red. Parentage (Magic Molly x POR01PG22-1) Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths: high yield

Weaknesses: drop++, pink flesh, growth cracks, pointed variegated skin

COTX08078-1Ru-Oblong Russet. Parentage (A95109-1 x Blazer Russet) Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths:

Weaknesses: poor shape, drop poor shape, rough

COTX08080-7Ru-Oblong Russet. Parentage (A95409-1 x CO02098-3RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses: raised eyes, knobs, drop

Cutting Notes: blocky, nice shape

Chip Notes: Chip color=2, % Zebra Chip: 22%

COTX08117-1Ru-Oblong Russet. Parentage (A99073-1 X Summit Russet) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses: light skin, poor internals, drop

Cutting Notes: nice shape and skin

Chip Notes: Chip color=2, BC, % Zebra Chip: 0%

COTX08118-2Ru-Long Russet. Parentage (A0008-1TE X CO98067-7RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths: keep?

Weaknesses: drop?

COTX08121-1Ru-Oblong Russet. Parentage (AC96052-1RU X Blazer Russet) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths: BOT

Weaknesses: light set,

COTX08121-3Ru-Long Russet. Parentage (AC96052-1RU X Blazer Russet) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses: light skin, drop

Cutting Notes: light russet

Chip Notes: Chip color=1, % Zebra Chip: 0%

COTX08121-4Ru-Long Russet Parentage (AC96052-1RU X Blazer Russet) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths: keep

Weaknesses: light set,

COTX08214-2Ru-Oblong Russet. Parentage (AWN86514-2 x Canela Russet) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses: flat, keep

COTX08258-6Ru-Russet. Parentage (PA98V6-1 x Blazer russet) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX08284-1Ru-Russet. Parentage (PA99N12-1 x CO99100-1RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX08291-7W-Round White. Parentage (PA99N82-4 x Summit Russet) Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths:

Weaknesses: low yield, drop+++

Cutting Notes: small potato

COTX08322-10Ru-Oblong Russet. Parentage (Blazer Russet x AC96052-1RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths: keep

Weaknesses:

COTX08322-11Ru-Long Russet. Parentage (Blazer Russet x AC96052-1RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths: BOT-heavy set

Weaknesses: light russet, flat, bruising

COTX08322-5Ru-Long Russet. Parentage (Blazer Russet x AC96052-1RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths: nice flesh

Weaknesses: light set, large tubers,

COTX08323-3Ru-Oblong Russet. Parentage (Blazer Russet x AOTX95265-4RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths: blocky, keep

Weaknesses:

COTX08365-1P/P-Long Purple/Purple. Parentage (POR01PG16-1 x CO00405-1R) Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths: nice color, better yield, BOT

Weaknesses: poor yield, small

Cutting Notes:

COTX08365-3P/P-Long Purple. Parentage (POR01PG16-1 x CO00405-1R) Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths: nice profile, all blue type flesh, BOT, send to CA new

Weaknesses:

COTX08365-4R/R-Long Red/Red. Parentage (POR01PG16-1 x CO00405-1R) Cross was made in

Colorado and selected in Texas.

Uses: specialty.

Strengths: uniform, good size profile, nice shape, send to CA new

Weaknesses:

Cutting Notes: fingerling

COTX08365-5P/P-Long Purple/Purple. Parentage (POR01PG16-1 x CO00405-1R) Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths: all blue like flesh, smooth skin finish, all blue type flesh, send to CA new

Weaknesses:

Cutting Notes: fingerling

COTX08367-2R/R-Long Red/Red. Parentage (POR01PG20-12 x CO00405-1R) Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths: yield + send to CA new

Weaknesses: silver scurf, red streaks in flesh, large

Cutting Notes: fingerling

COTX08376-1R-Red. Parentage (US147-96 x POR01PG22-1) Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths:

Weaknesses:

Cutting Notes: small potato

COTX08376-2R/Y-Long Red/Yellow. Parentage (US147-96 x POR01PG22-1) Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths:

Weaknesses: very light yellow flesh uneven flesh color white and yellow

Cutting Notes: fingerling

COTX08387-1R/R-Long Red/Red. Parentage (French Fingerling x POR01PG20-12) Cross was made in Colorado and selected in Texas.

Uses: specialty.

Strengths: nice flesh

Weaknesses: drop, too round, too short, red streaks in flesh,

Cutting Notes: fingerling

COTX09022-3Ru/Y-Russet. Parentage (A00286-3Y x CO99100-1RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX09022-5Ru/Y-Russet. Parentage (A00286-3Y x CO99100-1RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX09040-1P/Y-Purple Parentage (ATTX98500-2P/Y x POR02PG26-5) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX09042-2Ru-Russet. Parentage (CO99053-3RU x CO03202-1RU) Cross was made in Colorado

and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX09052-1Ru-Russet. Parentage (CO03202-1RU x CO98067-7RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX09052-2Ru-Russet. Parentage (CO03202-1RU x CO98067-7RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX09053-1Ru-Russet. Parentage (CO03202-1RU x CO99053-3RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX09075-4Ru-Russet. Parentage (CO03380-2RU x CO99100-1RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX09075-7Ru-Russet. Parentage (CO03202-1RU x CO99053-3RU) Cross was made in Colorado

and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX09089-1Ru-Russet. Parentage (94-10800-1 x COTX03308-3RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX09097-2Ru-Russet. Parentage (A95409-1 x CO99100-1RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX09097-3Ru-Russet. Parentage (A95409-1 x CO99100-1RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX09101-1Ru-Russet. Parentage (A96104-2 x CO03202-1RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX09150-1Ru-Russet. Parentage (AC00395-2RU x CO03380-2RU) Cross was made in Colorado

and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX09182-5Ru-Russet. Parentage (AO96365-2 x CO99100-1RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX09196-1Ru-Russet. Parentage (AO00057-2 x CO98067-7RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX09323-2Ru-Russet. Parentage (CO03374-4RU x CO98067-7RU) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX09395-1R/R-Red Parentage (POR01PG22-1 x CO03134-4RF) Cross was made in Colorado and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

COTX94216-1R-Round Red. Parentage (Purple Peruvian x Chipeta). Cross was made in Colorado and

selected in Texas. Medium maturity. Medium vine size. Purple flower color.

Uses: fresh.

Strengths:

Weaknesses: drop, zipper eye silver scurf, drop+++ , poor skin finish+

Cutting Notes: large, flat, deep eyes

Chip Notes: Chip color=3, Stem, Se, % Zebra Chip: 0%

COTX94218-1R-Round Red. Parentage (Red Ruby x Red Gold). Cross was made in Colorado and selected in Texas. Medium maturity. Large vine size. Lavender flower color.

Uses: fresh.

Strengths: good color keeps

Weaknesses: small, feathering, silver scurf, lots of culls

Cutting Notes: nice shape and skin

Chip Notes: Chip color=2, Stem, % Zebra Chip: 0%

Dark Red Norland-Oblong Red. Parentage (Redcoat x ND626). Cross was made and selected in North Dakota. Dark Red Norland is a clonal selection made by Stan Barrett of Texas and propagated by Gene Shaver, Nebraska. Early maturity. Medium vine size. Purple flower color.

Uses: fresh.

Strengths: early maturity, dark red tubers, high resistance to PVA and moderate resistance to common scab, PVY and PLRV.

Weaknesses: tuber color will fade if allowed to fully mature, tubers exhibit variable tuber color and size, enlarged lenticels, will heat sprout and hollow heart, susceptible to PVS and early and late blights, rough, deep eyes, faded red skin, rusting silver scurf+, pointed, Rhizoctonia

Cutting Notes: poor skin finish, silver scurf

Chip Notes: Chip color=3, Stem, Dark, TM, % Zebra Chip: 0%

Emma-Round White/Yellow. Parentage (Colleen x Estima). Cross was made and selected by Teagasc Crops Research Centre, Carlow, Ireland. Early maturity. Medium vine size. White flower color.

Uses: fresh.

Strengths: high yield, combines earliness with good resistance to the most common potato diseases and good skin finish.

Weaknesses: rough++, drop, knobs low yield, light flesh,

Cutting Notes: nice shape, light flesh

Chip Notes: Chip color=3, Stem, % Zebra Chip: 0%

FL1833-Round White. Parentage (??). Cross was made and selected by FRITO LAY CO.

Uses: chip.

Strengths: BOT-, yield+, some oblong, nice yellow flesh

Weaknesses:

Chip Notes: Chip color=1, Yellow?, Stem, TM/GH, % Zebra Chip : 0%

FL1867-Round White. Parentage (FL 162 x ATLANTIC). Cross was made and selected by FRITO LAY CO.

Uses: chip.

Strengths BOT, very light yellow flesh, lager tubers

Weaknesses:

Chip Notes: Chip color=1, Nice, % Zebra Chip: 0%

FL2048-Oblong White. Parentage (??). Cross was made and selected by FRITO LAY CO.

Uses: chip.

Strengths: BOT, very nice, yield+

Weaknesses:

Chip Notes: Chip color=1, Stem, TM, % Zebra Chip: 0%

FL2053-Round White. Parentage (??). Cross was made and selected by FRITO LAY CO.

Uses: chip.

Strengths:

Weaknesses: blocky, poor shape, rough

Chip Notes: Chip color=1, Stem, % Zebra Chip: 2%

FL2126-Oblong Buff. Parentage (??). Cross was made and selected by FRITO LAY CO.

Uses: chip.

Strengths:

Weaknesses: light yellow flesh, lots of B's

Chip Notes: Chip color=1, TM, Stem, Nice, Shape-, % Zebra Chip: 0%

FL2137-Oblong White Parentage (??). Cross was made and selected by FRITO LAY CO.

Uses: chip.

Strengths: nice yield

Weaknesses: very poor internals

Chip Notes: Chip color=1, TM, Stem, Shape- , % Zebra Chip: 0%

FL2215-Round White Parentage (??). Cross was made and selected by FRITO LAY CO.

Uses: chip.

Strengths: yield+

Weaknesses: small, blocky,

Chip Notes: Chip color=1, Stem, GH, Shape-, % Zebra Chip: 0%

JTTX124-2W-Round White. Parentage (20124 x 20146). Cross was made in at USDA-ARS, Madison, Wisconsin, tuberling produced in Texas, and selected in Texas.

Uses: chip.

Strengths:

Weaknesses: drop, low yield,

Chip Notes: drop Chip color=1, Mech, % Zebra Chip: 0%

JTTX21-1Ru-Round White. Parentage (Superior x 2196). Cross was made in at USDA-ARS, Madison, Wisconsin, tuberling produced in Texas, and selected in Texas.

Uses: chip.

Strengths:

Weaknesses: deep eyes, rough,

Chip Notes: drop Chip color=1, % Zebra Chip: 0%

JTTX75-2W-Round White. Parentage (Superior x 2263). Cross was made in at USDA-ARS, Madison, Wisconsin, tuberling produced in Texas, and selected in Texas.

Uses: chip.

Strengths:

Weaknesses: low yield,

Chip Notes: drop, Chip color=1 Nice, Stem, % Zebra Chip: 0%

JTTX91-6Ru-Round White. Parentage (2295 x 2259). Cross was made in at USDA-ARS, Madison, Wisconsin, tuberling produced in Texas, and selected in Texas.

Uses: chip.

Strengths: nice shape

Weaknesses: poor internals,

Chip Notes: Drop Chip color=1, % Zebra Chip: 0%

JTTX91-7W-Round White. Parentage (2295 x 2259). Cross was made in at USDA-ARS, Madison, Wisconsin, tuberling produced in Texas, and selected in Texas.

Uses: chip.

Strengths:

Weaknesses: smaller tubers,

Chip Notes: drop Chip color=1, Stem, % Zebra Chip: 0%

JTTX91-8Ru-Round White. Parentage (2295 x 2259). Cross was made in at USDA-ARS, Madison, Wisconsin, tuberling produced in Texas, and selected in Texas.

Uses: chip.

Strengths:

Weaknesses: low yield, light yellow flesh,

Chip Notes: drop Chip color=1, Mech, Stem, % Zebra Chip: 30%

JTTX94-1W-Round White. Parentage (2293 x 2268). Cross was made in at USDA-ARS, Madison, Wisconsin, tuberling produced in Texas, and selected in Texas.

Uses: chip.

Strengths: nice, smooth,

Weaknesses: small,

Chip Notes: drop Chip color=1, Stem, % Zebra Chip: 0%

JTTX94-2W-Round White. Parentage (2293 x 2268). Cross was made in at USDA-ARS, Madison, Wisconsin, tuberling produced in Texas, and selected in Texas.

Uses: chip.

Strengths:

Weaknesses: small, low yield,

Chip Notes: drop Chip color=1, IBS, Stem, % Zebra Chip: 0%

JTTX94-3W-Round White. Parentage (2293 x 2268). Cross was made in at USDA-ARS, Madison, Wisconsin, tuberling produced in Texas, and selected in Texas.

Uses: chip.

Strengths:

Weaknesses:

Chip Notes: drop Chip color=1, GH, Stem, % Zebra Chip: 0%

Lanorma-Oval White/Yellow. Parentage (Bydand x Caesar). Cross was made and selected by Den Hartigh BV, Emmeloord, Netherlands. Early maturity. Medium vine size. White flower color.

Uses: fresh.

Strengths: very good yield, fairly firm texture, free from discoloration, fairly high dry matter content

Weaknesses: very low yield++, light flesh, poor internals, heat necrosis pear shaped, white flesh, pointed, drop

Cutting Notes: nice shape, light flesh

Chip Notes: Chip color=3, Stem, BC, % Zebra Chip: 22%

NDTX050070-1R-Round Red. Parentage (ND 8375b-6R x ND 8347CB-12R). Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths: nice skin, smooth

Weaknesses: feathering small++, lots of B's

Cutting Notes: small, nice color, some rot

Chip Notes: Chip color=3, SE, % Zebra Chip: 25%

NDTX050184-1R/Y-Round Red/Yellow. Parentage (ND 028577-6RY x ND 8555-8R). Cross was made in North Dakota and selected in Texas. Late maturity. Large vine size. Lavender flower color.

Uses: specialty.

Strengths: very nice shape and color, small potato, BOT, good color, light flesh keep, small potato, heavy set+++ FC =2.3

Weaknesses:

Cutting Notes: nice skin and color, FC=2.5

Chip Notes: Chip color=3, Stem, TM, % Zebra Chip: 0%

NDTX059759-3Pinto/Y-Oblong Pinto/Yellow. Parentage (ATND 99331-2 Pinto x ND 7834-2P). Cross was made in North Dakota and selected in Texas.

Uses: specialty.

Strengths: to Neil, purple streaks FC=3.5

Weaknesses: some shape problems low yield

Cutting Notes: nice dark yellow flesh, red streaks in flesh FC=3.7

Chip Notes: Chip color=no data, % Zebra Chip: no data

NDTX059886-1W/Y-Oblong Yellow/Yellow. Parentage (ND 7192-1 x ND 8178-1Y). Cross was made in North Dakota and selected in Texas.

Uses: specialty.

Strengths: smooth, heavy set, resend to CA

Weaknesses: poor skin finish, larger tubers,

Cutting Notes: small potato

NDTX060700C-1W-Round White. Parentage (NDTX 7560C-4 x NDTX 7192-1). Cross was made in North Dakota and selected in Texas. Early maturity. Small vine size. White flower color.

Uses: chip.

Strengths: yield++

Weaknesses: very poor internals drop, very low yield+ small

Cutting Notes: small

Chip Notes: Chip color=1, keep send to Nat Chip, TM/GH, Stem, MB, DROP, % Zebra Chip:

0%

NDTX071084C-2W-Round White. Parentage (ND 6809C-3 x ND 860-2) Cross was made in North Dakota and selected in Texas. Early maturity. Medium vine size.

Uses: chip.

Strengths: nice

Weaknesses: small

Chip Notes: BOT, Chip color=1

Cutting Notes: small

Chip Notes: Chip color=1, Drop, Stem, TM, Ugly, Stem, SE, DROP, % Zebra Chip: 0%

NDTX071109C-1W-Round White. Parentage (ND 7226C-17 x ND 860-2) Cross was made in North Dakota and selected in Texas. Late maturity. Large vine size.

Uses: chip.

Strengths: nice keep, John Wallace, NATCH, nice, TC, BOT nice shape color and flesh, yield+,

Weaknesses: low yield

Chip Notes: BOT, Chip color=1

Cutting Notes: large tubers, rough, nice shape

Chip Notes: Chip color=1 keep send to Nat Chip, Nice, BOT, Stem, BOT, % Zebra Chip: 0%

NDTX071217CB-1W/Y-Round White. Parentage (ND 028801CB-1 x ND 039004B-2Y) Cross was made in North Dakota and selected in Texas. Medium maturity. Medium vine size.

Uses: specialty.

Strengths: BOT for yellow flesh, move to yellow if dose not chip,

Weaknesses:

Chip Notes: Chip color=2

Cutting Notes: nice shape, yellow flesh, FC=3.0

Chip Notes: Chip color=2, keep send to Nat Chip Yellow, Stem, Shape?, Nice, % Zebra Chip: 0%

NDTX071258B-1R-Round Red. Parentage (ND 039035B-9R x ND 4659-5R) Cross was made in North Dakota and selected in Texas.

Uses: specialty.

Strengths: nice flesh heavy set nice shape, nice size, nice skin resend to CA

Weaknesses: deep eyes lenticels++, drop, poor internals

Cutting Notes: small potato

NDTX081451CB-1W/Y-Oblong Yellow/Yellow. Parentage (Dakota Diamond x Gala) Cross was made in North Dakota and selected in Texas. Late maturity. Large vine size. White flower color

Uses: specialty.

Strengths: smooth, heavy set, parent, small potato, TC, BOT FC=2.5

Weaknesses drop for hollow heart on one rep

Cutting Notes: buff skin, very nice

Chip Notes: Chip color=3, Stem, Fusarium, BOT, % Zebra Chip: 0%

NDTX081572B-1R-Red. Parentage (ND 4659-5R x ND 028940B-102R) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths: no bruising, small, nice flesh, keep

Weaknesses: low yield

Cutting Notes: small, nice shape

NDTX081618-1P/P-Oblong Purple. Parentage (ND 7834-2P X ND 5858) Cross was made in North Dakota and selected in Texas.

Uses: specialty.

Strengths: nice yield, all blue type flesh

Weaknesses:

NDTX081644CAB-2W-Round White. Parentage (ND 8331Cb-3 X ND 028804CAb-5) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths: heavy set

Weaknesses: very small, small potato?

Chip Notes: Chip color=1 keep send to Nat Chip, Mech , Stem , TM, % Zebra Chip : 0%

NDTX081648CB-13W-White. Parentage (ND 8456-1 xND7377CB-1) Cross was made in North Dakota and selected in Texas.

Uses: chip.

Strengths: nice, nice shape

Weaknesses:

Cutting Notes: nice

Chip Notes: Chip color=1 keeps send to Nat Chip, Stem, GH, % Zebra Chip: 0%

NDTX081648CB-1W-Round White. Parentage (ND 8456-1 xND7377CB-1) Cross was made in North Dakota and selected in Texas.

Uses: chip.

Strengths: very nice shape

Weaknesses: hollow heart,

Chip Notes: Chip color=1 keeps send to Nat Chip, Scab, Stem, BOT, % Zebra Chip: 0%

NDTX081648CB-2W-Round White. Parentage (ND 8456-1 xND7377CB-1) Cross was made in North Dakota and selected in Texas.

Uses: chip.

Strengths: smooth, uniform, heavy set

Weaknesses: lots of B's, yield+,

Chip Notes: Chip color=1 keeps send to Nat Chip, Stem, Mech, D/K, % Zebra Chip: 0%

NDTX081648CB-4W-Round White. Parentage (ND 8456-1 xND7377CB-1) Cross was made in North Dakota and selected in Texas.

Uses: chip.

Strengths: nice TC nice shape

Weaknesses: some buff hollow heart, poor internals,

Chip Notes: Chip color=1 Chip color=2 keep send to Nat Chip , TM , Stem, BOT, DROP, % Zebra Chip : 0%

NDTX081651CAB-2W-Oblong White. Parentage (ND 8479C-2 X ND 039163AB-209) Cross was made in North Dakota and selected in Texas.

Uses: chip.

Strengths:

Weaknesses: low yield,

Chip Notes: Chip color=1, Drop, Shape-, Stem, % Zebra Chip: 0%

NDTX081803Ab-2W/Y-Yellow/Yellow. Parentage (793101.3 X ND 039163Ab-209) Cross was made in North Dakota and selected in Texas.

Uses: specialty.

Strengths:

Weaknesses:

Cutting Notes:

NDTX091886-3P/P-Oblong Purple. Parentage (COND 04082-8RR X ND 7519-1) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths: smooth skin finish, send to CA new

Weaknesses:

NDTX091908AB-2W-Round White. Parentage (Ebt 6-21-5 X ND 7519-1) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths: very smooth, very nice,

Weaknesses:

Chip Notes: Chip color=1 keep send to Nat Chip , Mech, Stem, TM, % Zebra Chip : 0%

NDTX091908AB-4W-Round White. Parentage (Ebt 6-21-5 X ND 7519-1) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths: nice

Weaknesses:

Chip Notes: drop Chip color=1, Stem, % Zebra Chip: 0%

NDTX091908AB-9W-Round White. Parentage (Ebt 6-21-5 X ND 7519-1) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses: low yield,

Chip Notes: drop Chip color=1, % Zebra Chip: 0%

NDTX092231C-1R-Red. Parentage (ND 049326C-2P x AND 00272-1R) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

NDTX092238C-1P/W-Purple. Parentage (ND 049326C-2P x ND 8555-8R) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

NDTX092238C-3P/W-Purple. Parentage (ND 049326C-2P x ND 8555-8R) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

NDTX092238C-4P/W-Purple. Parentage (ND 049326C-2P x ND 8555-8R) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

NDTX092308-4R-Red. Parentage (ND 059823-4R x ND 8555-8R) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

NDTX092308-5R-Red. Parentage (ND 059823-4R x ND 8555-8R) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

NDTX092340AB-1C-1W-White. Parentage (ND 060463C-1 x Etb 6-21-4) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

NDTX102461AB-4W-White. Parentage (Ivory Crisp x ND 060421Ab-1) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

NDTX102462C-2W-White. Parentage (Ivory Crisp x ND 060831C-1) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

NDTX102462C-6W-White. Parentage (Ivory Crisp x ND 060831C-1) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

NDTX102514ABC-5W-White. Parentage (Etb 6-5-5 x ND 060831C-6) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

NDTX102557-1W-White Parentage (ND 860-2 x King Harry) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths:

Weaknesses:

NDTX4271-5R-Round Red. Parentage (NDTX9-1068-1R x ND2050-1R). Cross was made in North Dakota and selected in Texas. Early to medium maturity. Medium vine size.

Uses: fresh.

Strengths: nice interior

Weaknesses: small

Cutting Notes: nice shape and skin, BOT

Chip Notes: Chip color=2, Stem, MB, % Zebra Chip: 0%

NDTX4784-7R-Round Red. Parentage (ND3574-5R x ND2050-1R). Cross was made in North Dakota and selected in Texas. Early maturity. Medium vine size. Lavender flower color

Uses: fresh.

Strengths: smooth dark skin, nice flesh, no feathering, nice skin, BOT Weaknesses: buff skin, poor internals, small

Cutting Notes: nice shape

Chip Notes: Chip color=2, Stem, % Zebra Chip: 0%

NDTX5003-2R-Round Red. Parentage (ND3504-3R x ND2050-1R). Cross was made in North Dakota and selected in Texas. Very early maturity. Small vine size. Lavender flower color

Uses: fresh.

Strengths: good color nice, yield+, nice shape

Weaknesses: feathering++, ZC?, zipper eye, drop+ light set, drop

Cutting Notes:

NDTX5438-11R-Round Red. Parentage (ND4339-10R x ND4269-9R). Cross was made in North Dakota and selected in Texas. Late maturity. Medium vine size. Lavender flower color.

Uses: fresh.

Strengths: dark skin, BOT color

Weaknesses:

Cutting Notes:

NDTX731-1R-Round Red. Parentage (ND169-10R x ND9476-5). Cross was made in North Dakota and selected in Texas. Early maturity. Medium-large vine size.

Uses: fresh.

Strengths:

Weaknesses: low yield rough+, deep eyes, poor skin finish, drop?

Cutting Notes: nice shape and skin, BOT

Chip Notes: Chip color=3, Stem, SE, % Zebra Chip: 0%

NDTX8305-3W-Round White. Parentage (ND 2471-8 x White Pearl) Cross was made in North Dakota and selected in Texas.

Uses: fresh.

Strengths: nice

Weaknesses:

Chip Notes: Chip color=1 drop, TM, GH, Stem, % Zebra Chip: 10%

OR04036-5-Blocky Yellow/Yellow. Parentage (POR02PG26-5 x AO93487-2R). Cross was made in and selected in Oregon. Early maturity. Small vine size. Purple flower color.

Uses: specialty.

Strengths: nice skin and flesh nice shape and flesh color

Weaknesses: low yield+ small

Cutting Notes: nice shape and flesh, smooth, FC=3.0

Chip Notes: Chip color=3, Stem, SE, % Zebra Chip: 0%

OR04131-2-Round Dark Red. Parentage (Mazama x Modoc). Cross was made in and selected in Oregon. Medium maturity. Small-medium vine size. Purple flower color.

Uses: fresh.

Strengths: nice+, oversized not ugly smooth, nice skin finish

Weaknesses: drop small, small potato light set

Cutting Notes: small, poor skin finish, nice shape

Chip Notes: Chip color=2, Stem, % Zebra Chip: 3%

POR05PG56-1-Blocky Purple. Parentage (POR01PG46-1 x POR01PG22-1). Cross was made in and selected in Prosser in Oregon. Early maturity. Medium vine size. Blue-purple flower color

Uses: specialty.

Strengths: nice shape white and purple flesh

Weaknesses: heat sprouts, road map poor internal

Cutting Notes: nice shape, light purple flesh, FC=3.9

PTTX05PG07-1W-Long White. Parentage (POR01PG22-1 x OR00067-7). Cross was made in Prosser, Washington, tuberling produced in Texas and selected in Texas.

Uses: specialty.

Strengths:

Weaknesses: drop, poor skin finish

Cutting Notes: fingerling

Purple Majesty-Oblong Purple/Purple. Parentage (ND2008-2 x All Blue). Cross made and selected in Colorado. Late maturity. Large vine size. Blue flower color

Uses: specialty.

Strengths: nice shape, yield

Weaknesses: small, all blue type flesh, road map, poor skin finish alligator hide, lighter flesh, poor skin finish+,

Cutting Notes: nice shape, light purple flesh, FC=3.8

Purple Peruvian-Long Purple/Purple. Parentage (ND1562-4R x NDTX9-1098-11R).

Uses: specialty.

Strengths: darker flesh than All Blue, no heat sprouts, resistant

Weaknesses: rough deep eyes

Cutting Notes: very dark flesh, deep eyes, FC=5.0

Ranger Russet-Long Russet. Parentage (Butte x A6595-3). Cross was made and selected in Aberdeen. Released in 1991 by USDA-ARS, and the Colorado, Aberdeen, Oregon and Washington Agricultural Experiment Stations. Medium-late maturity. Large vine size. White flower color.

Uses: dual.

Strengths: dual purpose, medium to high specific gravity, good fry color from 45° storage, resistance to internal defects including hollow heart, brown center, net necrosis and sugar ends, high yield of large tubers, resistance to early dying.

Weaknesses: susceptibility to scab, tendency for deep eyes, susceptibility to stress induced malformations, mediocre performance in Texas, feathering, sticky stolon, drop

Cutting Notes: poor shape

Chip Notes: Chip color=3, % Zebra Chip: 28%

Red LaSoda-Oblong Red. Parentage (Triumph x Katahdin). Cross was made and selected in Louisiana. Red LaSoda is a clonal selection from LaSoda made by Louisiana State University. Medium maturity. Medium-large vine size. Purple flower color.

Uses: fresh.

Strengths: high yields, wide adaptability nice white flesh.

Weaknesses: deep eyes, light color, occasional hollow heart, occasional growth cracks, susceptible to PVX, PVY, PVS, PVM, PLRV, early and late blights, scab, corky ring spot, bacterial wilt, and Rhizoctonia, tubers can over-size and have poor skin set.

Cutting Notes: deep eyes, flat

Chip Notes: Chip color=3+, Dark, % Zebra Chip: 7%

Rio Rojo-(Protected – PVP)-Round-oval Red. Parentage (ND1562-4R x NDTX9-1098-11R). Evaluated as NDTX4304-1R. Cross was made in North Dakota and selected in Texas. Early to medium maturity. Medium vine size. Dormancy is similar to Red LaSoda but longer than Dark Red Norland.

Uses: fresh.

Strengths: nice shape

Weaknesses: yield-, small

Cutting Notes: nice skin and shape

Chip Notes: No Data

Russet Burbank-Long Russet. Luther Burbank reported the origin of Russet Burbank in 1914 as a chimera selection from the variety Burbank by Lou Sweet. Lou Sweet was a potato grower in the western slope area of Colorado and was President of the Potato Association of America in 1920. Late maturity. Large vine size. White flower color.

Uses: dual.

Strengths: Tolerant to scab, good long term storage.

Weaknesses: susceptible to Fusarium and Verticillium wilts, PLRV, PVY and net necrosis, Jelly-end and sugar-end develop in tubers when plants are subjected to stress, stress results in knobs, pointed ends and dumbbells, many culls, Rhizoctonia++, rough, poor shape, skinny

Cutting Notes: blocky, small, hollow heart

Chip Notes: Chip color=3, % Zebra Chip: 14%

Russet Norkotah112 (Protected – PVP)-. Oblong-Long Russet. Parentage (ND9526-4Ru x ND9687-5Ru). Cross was made and selected in North Dakota. Russet Norkotah112 is a mutant strain selection made in 1989 by Texas from the variety Russet Norkotah. Early maturity. Medium-large vine size. White flower color.

Uses: fresh.

Strengths: good yield, uniform tuber shape, excellent appearance, resistance to hollow heart, some increased resistance to early dying, and environmental stresses, lower N requirement, more vigorous, and higher yielding than Russet Norkotah, heavy net, BOT.

Weaknesses: five to ten days later than Russet Norkotah. Can produce a higher percentage of misshapen tubers than Russet Norkotah Rhizoctonia thin, pointed

Cutting Notes:

Russet Norkotah223 (Protected – PVP)-. Oblong-Long Russet. Parentage (ND9526-4Ru x ND9687-5Ru). Cross was made and selected in North Dakota. Russet Norkotah223 is a mutant strain selection made in 1989 by Texas from the variety Russet Norkotah. Early maturity. Medium-large vine size.

White flower color.

Uses: fresh.

Strengths: good yield, uniform tuber shape, excellent appearance, resistance to hollow heart, some increased resistance to early dying, and environmental stresses, lower N requirement, more vigorous, and higher yielding than Russet Norkotah, heavy net, BOT.

Weaknesses: five to ten days later than Russet Norkotah. Can produce a higher percentage of misshapen tubers than Russet Norkotah Rhizoctonia thin, pointed

Cutting Notes:

Russet Norkotah296 (Protected – PVP)-Oblong-Long Russet. Parentage (ND95264Ru x ND9687-5Ru). Cross was made and selected in North Dakota. Russet Norkotah296 is a mutant strain selection made in 1989 by Texas from the variety Russet Norkotah. Early maturity. Medium vine size. White flower color.

Uses: fresh.

Strengths: nice, BOT.

Weaknesses: five to ten days later than Russet Norkotah. Can produce a higher percentage of misshapen tubers than Russet Norkotah, rot.

Cutting Notes:

Russet Norkotah-Oblong-Long Russet. Parentage (ND9526-4Ru x ND9687-5Ru). Cross was made and selected in North Dakota. Released in 1987 by the North Dakota Agricultural Experiment Station. Early-medium maturity. Medium vine size. Corolla is white and anthers are yellow-orange.

Uses: fresh.

Strengths: uniform tuber shape, excellent appearance, and resistance to hollow heart, shallow

eyes, high percentage of #1 tubers, tolerance to common scab and silver scurf, nice flesh.

Weaknesses: weak vine, susceptibility to early dying, most virus, especially PVY, and late blight, and very susceptible to Verticillium wilt and early blight Rhizoctonia.

Cutting Notes: nice shape, large tubers Chip Notes: Chip color=3 % Zebra Chip: 0%

Sierra Gold (Protected -PVP) (091)-Round-oblong Russet/Yellow. Parentage (Krantz x Delta Gold).

Cross was made and selected in Texas. Early maturity. Medium vine size.

Uses: specialty.

Strengths: BOT nice

Weaknesses: light set small,

Cutting Notes: nice, light yellow flesh, best of trial, FC=2

Chip Notes: Chip color=3, Stem BOT, % Zebra Chip: 0%

Stampede Russet-Oblong-Long Russet. Parentage (BR7091-1 x Lemhi Russet), cross made in Texas, selected in Idaho and tested extensively in Alberta, Canada. Released in 1999 by Agriculture and Agri-Food Canada and the Texas Agricultural Experiment Station. Early maturity. Medium vine size.

Lavender flower color.

Uses: fresh.

Strengths blocky, nice flesh, smooth high yield

Weaknesses: small, light set pointed

Cutting Notes: rough, some curved

Chip Notes: Chip color=2, % Zebra Chip: 2%

TX03196-1W-Round White. Parentage (NDTX4748-7R x Adora). Cross was made and selected in Texas.

Uses: chip.

Strengths: nice shape,

Weaknesses: low yield, poor internal,

Chip Notes: Chip color=1 drop, Stem, % Zebra Chip: 0%

TX08350-12Ru-Russet. Parentage (TXA549-1Ru x AC96052-1RU). Cross was made and selected in Texas.

Uses: fresh.

Strengths: high yield, keep

Weaknesses: small, smooth, blocky, light set, internals??. drop

Cutting Notes: large tubers

Chip Notes: Chip color=1, BOT, % Zebra Chip: 0%

TX08352-1Ru-Russet. Parentage (TXA549-1Ru x AOTX98137-1RU). Cross was made and selected in Texas.

Uses: fresh

Strengths:

Weaknesses:

TX08352-2Ru-Russet. Parentage (TXA549-1Ru x AOTX98137-1RU). Cross was made and selected in Texas.

Uses: fresh

Strengths:

Weaknesses:

TX08352-3Ru-Russet. Parentage (TXA549-1Ru x AOTX98137-1RU). Cross was made and selected in Texas.

Uses: fresh

Strengths:

Weaknesses:

TX08352-5Ru-Russet. Parentage (TXA549-1Ru x AOTX98137-1RU). Cross was made and selected in Texas.

Uses: fresh

Strengths:

Weaknesses:

TX08352-8Ru-Russet. Parentage (TXA549-1Ru x AOTX98137-1Ru). Cross was made and selected in Texas.

Uses: fresh

Strengths:

Weaknesses:

TX08356-1W-White. Parentage (NDTX4930-5W x 93-1285-6). Cross was made and selected in Texas.

Uses: chip

Strengths:

Weaknesses:

TX08356-8W-White. Parentage (NDTX4930-5W x 93-1285-6). Cross was made and selected in Texas.

Uses: chip

Strengths:

Weaknesses:

TX08363-2R-Red. Parentage (CO98012-5R x BTX2332-1R). Cross was made and selected in Texas.

Uses: specialty

Strengths:

Weaknesses:

TX08375-1R-Red. Parentage (CO97222-1R/R x POR02PG26-5). Cross was made and selected in Texas.

Uses: specialty

Strengths:

Weaknesses:

TX08375-3R-Red. Parentage (CO97222-1R/R x POR02PG26-5). Cross was made and selected in Texas.

Uses: specialty

Strengths:

Weaknesses:

TX08378-3R/R-Long Red. Parentage (POR01PG20-12 x POR02PG26-5). Cross was made and selected in Texas.

Uses: specialty

Strengths: yield+, high yield, red streaks in flesh, send to CA new

Weaknesses: drop?, red streaks in flesh, growth cracks

TX08385-1W/Y-Yellow. Parentage (COTX03025-1P/P x 93-1285-6). Cross was made and selected in Texas.

Uses: specialty

Strengths:

Weaknesses:

TX09396-1W-White. Parentage (Atlantic x NY139). Cross was made and selected in Texas.

Uses: chip

Strengths:

Weaknesses:

TX09396-3W-White. Parentage (Atlantic x NY139). Cross was made and selected in Texas.

Uses: chip

Strengths:

Weaknesses:

TX09403-14W-White. Parentage (NY138 x Ivory Crisp). Cross was made and selected in Texas.

Uses: chip

Strengths:

Weaknesses:

TX09406-1P/P-Purple. Parentage (A99331-2RY x CO00405-1R). Cross was made and selected in Texas.

Uses: specialty

Strengths:

Weaknesses:

TX09406-3P/P-Purple. Parentage (A99331-2RY x CO00405-1R). Cross was made and selected in Texas.

Uses: specialty

Strengths:

Weaknesses:

TX09414-1W-White. Parentage (ATTX98500-2P/Y x Chipeta). Cross was made and selected in Texas.

Uses: chip

Strengths:

Weaknesses:

TX09417-1R-Red. Parentage (ATTX98500-2P/Y x Chipeta). Cross was made and selected in Texas.

Uses: specialty

Strengths:

Weaknesses:

TX09420-1R/Y-Red. Parentage (POR03PG23-1 x COTX94218-1R). Cross was made and selected in Texas.

Uses: specialty

Strengths:

Weaknesses:

TX09420-3R/Y-Red. Parentage (POR03PG23-1 x COTX94218-1R). Cross was made and selected in Texas.

Uses: specialty

Strengths:

Weaknesses:

TX09423-2R/R-Red. Parentage (CO97215-2P/P x COTX94218-1R). Cross was made and selected in Texas.

Uses: specialty

Strengths:

Weaknesses:

TX09423-3P/P-Purple. Parentage (CO97215-2P/P x COTX94218-1R). Cross was made and selected in Texas.

Uses: specialty

Strengths:

Weaknesses:

TX09429-1P/P-Purple. Parentage (COTX0325-1P/P x COTX04050-1P/P). Cross was made and selected in Texas.

Uses: specialty

Strengths:

Weaknesses:

TX1673-1W-Round White. Parentage (Russet Nugget x CS 7802L-2). Cross was made in Texas and selected in Texas.

Uses: chip.

Strengths: nice

Weaknesses: shape? some oblong, Chip note

Chip Notes: Chip color=1 drop, D/K, Stem, % Zebra Chip: 3%

TX1674-1W/Y-Oblong White/Yellow. Parentage (Russet Nugget x Delta Gold). Cross was made and selected in Texas. Medium-late maturity. Medium-large vine size. Lavender flower color.

Uses: specialty.

Strengths: nice shape and flesh nice flesh

Weaknesses: pointed low yield, light set drop

Cutting Notes: small tubers, FC=3.0

Chip Notes: Chip color=3, Stem, SE, % Zebra Chip: 0%

TXA549-1Ru-Oval Russet. Parentage (ND9687-3Ru x ND9852-1Ru). Cross was made in Texas, selected in Aberdeen and tested extensively in Alberta, Canada. Medium-late maturity. Medium-large vine size. Purple flower color with White tips.

Uses: dual.

Strengths: BOT for shape, nice flesh, blocky, smooth

Weaknesses: low yield

Cutting Notes: blocky, nice shape

Chip Notes: Chip color=2, % Zebra Chip: 17%

TXNS410-Oblong-Long Russet. Parentage (ND9526-4Ru x ND9687-5Ru). Cross was made and selected in North Dakota. TXNS410 is a mutant strain selection made in 1989 by Texas from the variety Russet Norkotah. Early maturity. Medium-large vine size. White flower color.

Uses: fresh

Strengths: nice flesh BOT

Weaknesses: low yield

Cutting Notes: small, nice shape

Chip Notes: Chip color=3, % Zebra Chip: 0%

Yukon Gold-Oblong White/Yellow. Parentage (W5279-4 x Norgleam). Cross was made and selected in

Ontario, Canada. Released in 1980 by Agriculture Canada, The University of Guelph, and The Ontario Ministry of Agriculture & Food, Guelph, Ontario. Medium-early maturity. Medium-large vine size. Violet flower color.

Uses: specialty.

Strengths: attractive yellow flesh tubers with red eyes, good yield, resistant to mild mosaic, moderately resistant to PLRV.

Weaknesses: can exhibit some feathering, Susceptible to PVY and common scab, hollow heart and internal heat necrosis can be a problem, Plant establishment is irregular, particularly from basal end seed pieces.

Cutting Notes: light yellow flesh, nice shape, FC=2.3

Chip Notes: Chip color=3, Stem, SE, dark, % Zebra Chip: 0%

Appendix B. Parentage of potato varieties or selections-2012.

Variety or Selection	Parentage
Ackersegen	Hindenburg x Allerfruheste
Adora	Pimura x Alcmaria
Agria	Quarta x Semlo
All Blue	Unknown
Alpha	Paul Kruger x Preferent
Ambra	Duke of York x Reneta Lub B 53
Asterix	Cardinal x SVP VE 70-9
Atlantic	Wauseon x Lenape
Avalanche	DHS40-1034 9 x Maris Piper
Aziza	Smeenge 69-17 x Smeenge74-5
Banana	
Beacon Chipper	??
Binje	Munstersen x Fransen
Boulder	MS702-80 x NY88
Caesar	Monalisa x Rop B 1176
Carola	
Carrera	
Century	A6789-7 x A6680-5
Chieftain	la1027-18 x La1354
Chipeta	WNC612-13 x Wischip
Climax	Bintje x Record
Courage	
Dakota Jewel	ND2223-8R x ND649-4R
Dark Red Norland	Redkote x ND626
Day-9	
Delikat	

Variety or Selection	Parentage
Desiree	Urgenta x Depesche
Diamante	TDV54-30-8 x SVP55-89
Dore	Duke of York x BiermaA7
Eerstelling	Early Primrose x King Kidney
Eigenheimer	Blaue Riesen x Fransen
Emma	Colleen x Estima
Estima	
Fabula	
Florissant	Premiere x VK 69-491
Fortuna	
Foxton	Irene x Maris Piper
German Butter Ball	
Golden Sunburst	
Granola	3333/60 x 267 04
Green Mountain	Dunmore x Excelsior
Hertha	Dijkhuis61-133 x Konst62-374
Ilong	
Innovator	Shepody x RZ 84-2580
Irish Crispin	Amigo x DH70-699 3a
Ivory Crisp	ND292-1 x A77268-4
Kalkaska	B1254-1 X S440
Keuka Gold	Steuben x Norwis
King Harry	
Klondyke Rose	
Krasaua	Visnovske Rohlic x B53
La Rouge	LaSoda x Progress
Lanorma	Bydand x Caesar
Latona	Jaerla x Nicola

Variety or Selection	Parentage
Magic Molly	Open pollinated seed ball from Red Beauty
Maris Piper	
Mazama	ND1196-2R x Redsen
MegaChip	Wischip x FYF85
Molli	
Mondial	Spunta x Ve 66-295
Morning Gold	Olinda x Y 68-4-103
NorDonna	ND206-1R x ND821-6R
Norgold-M	ND2475-8 x A119-1
NorValley	NorChip x ND860-2
Oscar	Desiree x VK 64 491
Ottar	Dore x DsxAS-737
Penta	Bellona x Estima
Pimpernel	
Platina	
Premiere	
Primica Inta	
Prince Hairy	Hudson x PI 310925
Purple Majesty	ND2008-2 x All Blue
Purple Peruvian	ND1562-4R x NDTX9-1098-11R
Ranger Russet	Butte x A6595-3
Red Gold	G68211 x G6521-4RY
Red LaSoda	Triumph x Katahdin
Rio Rojo	ND1562-4R x NDTX9-1098-11R
Rose Gold	Abnaki x G6521-4RY
Russet Burbank	Mutant from Burbank
Russet Legend	Century Russet x WNC672-2

Variety or Selection	Parentage
Russet Norkotah	ND9526-4RU x ND9687-5Ru
Russet Norkotah112	ND9526-4RU x ND9687-5Ru
Russet Norkotah223	ND9526-4RU x ND9687-5Ru
Russet Norkotah278	ND9526-4RU x ND9687-5Ru
Russet Norkotah296	ND9526-4RU x ND9687-5Ru
Rutt	Laila x Alcmaria
Saginaw Gold	MS321-38 x Michibonne
Sangre	Viking x A6356-9
Sangre10	Viking x A6356-9
Sante	SVPY66-13-636 x AM66-42
Satina	Puntila x 99 73
Shepody	Bakeking x F58050
Sierra Gold™	Krantz x Delta Gold
Snowden	B5141-6 x Wischip
Stampede Russet	BR7091-1 x Lemhi Russet
Strobrawa	MPI55 957/54 x Mira
Super Red	
Ukama	Marijke x Sirtema
Urgenta	Furore x Katahdin
Valisa	
Viking	Redskin x Nordak
Vivaldi	TZ 77-148 x Monalisa
Vokal	Primura x Rheinhort
Winema	Redsen x ND1196-2R
Yellow Finn	
Yukon Gold	W5279-4 x NorGleam
Numbered Clones	
A00188-3CH	A91790-13W x Dakota Pearl

Variety or Selection	Parentage
A01010-1	A92303-7 x A96004-8
A01143-3C	COA95070-8 x Chipeta
A02138-2	A96563-8 x Premier R
A02507-2LB	EGA09702-2 x GemStar R
A03158-2TE	A98292-2 x A98104-4
A99029-3E	A9230-5 x Summit R
AC00206-2W	AC87340-2 x Dakota Pearl
AC00395-2RU	A95523-12 x A84118-3
AC01151-5W	COA96142-7 x NDA2031-2
AC03433-1W	A94322-8C x COA96141-4
AC03452-2W	A98423-1C x COA96141-2C
AC03534-2R/Y	ATA98472-2Y x Mazama
AO00057-2	A91048-3 x A93116-3BSR
AO02060-3	A97201-4 x Premier
AO02183-2	A97236-3 x Premier
AO96305-3	A91018-6 x A89152-4
AOTX02136-1Ru	A96563-8 x A92030-5
AOTX06598-1R	A031087-79 x ND4659-5R
AOTX07876-1Ru	A00715-8 X A93575-4
AOTX07920-5Ru	PA03NM3-4 X A01054-4
AOTX91861-4R	Red LaSoda x ND2224-5R
AOTX95265-1Ru	A89216-9 x A86102-6
AOTX95265-3Ru	A89216-9 x A86102-6
AOTX95295-1W	A89804-7 X Ranger Russet
AOTX96075-1Ru	A84118-3 x A89384-10
AOTX96084-1Ru	A8792-1 X A86102-6
AOTX96216-2Ru	A89216-9 x A86102-6
AOTX96265-2Ru	A90621-4 X A84180-8

Variety or Selection	Parentage
AOTX98152-3Ru	A88338-1 X A9201-6
AOTX98202-1Ru	A9201-6 X A9014-2
ATTX01178-1R	ND5084-3R x Winema
ATTX01180-1R/Y	ND5084-3R x A92657-1R
ATTX03474-2W	NDTX4930-5W X C0A96141-4
ATTX03474-3W	NDTX4930-5W X C0A96141-4
ATTX03475-10Ru	NDTX4930-5W X NYII2
ATTX03475-2W	NDTX4930-5W X NYII2
ATTX03475-7Ru	NDTX4930-5W X NYII2
ATTX05175-1R/Y	A99331-2RY X COA99261-IRY
ATTX05186-3W/Y	A99433-5Y x VC1075-1R
ATTX06246-1R	Gogu Valley x Modoc,
ATTX06274-2W/Y	C0A99261-IRY x VC1075-IR,
ATTX07023-2Ru	A01754-4 EM x A0082-6 EM 500,
ATTX07039-2Ru	Stampede EM x AO0385-2 EM 400,
ATTX07039-4Ru	Stampede EM x AO0385-2 EM 400,
ATTX07039-6Ru	Stampede EM x AO0385-2 EM 400,
ATTX07230-1Y/RE/Y	AO0286-3Y y x Modoc 500,
ATTX88481-1P/W	A83302-1 x Bison
ATTX88654-2P/Y	PI343201 x Gurney's
ATTX961014-1BR/Y	A90601-2RDY X MAZAMA
ATTX961014-1R/Y	A90601-2RDY X MAZAMA
ATTX98444-16R/Y	A83360-9R X T48YF
ATTX98453-11BR	A93490-1R X A91846-5R
ATTX98453-3R	A93490-1R x A91846-5R
ATTX98453-6R	A93490-1R x A91846-5R
ATTX98462-3R/Y	ATD251-5RY x BO811-13RY
ATTX98468-5R/Y	ATD252-5R x A93457-4R

Variety or Selection	Parentage
ATX98510-1R/Y	T48YF X A93456-6R
ATX03564-1W/Y	NDS5507-3YF x Granola
ATX05186-1R	A99433-5Y x VC1075-1R
ATX05186-2R	A99433-5Y x VC1075-1R
ATX05202-3W/Y	A00286-3Y x A99433-5Y
ATX06264-4R/Y	A99331-2RY x Durango
ATX07305-1W/Y	A99433-5Y x Mila
ATX08153-1W/Y	A00286-3Y x 93-1285-6
ATX84378-6Ru	A79141-9 x ND329-1
ATX91137-1Ru	A81473-2 x A8343-12,
ATX9332-12Ru	A8850-1 x A88288-1
ATX99013-1Ru	A8893-1 x A91186-2
BTX1544-2W/Y	BO811-13 x Yukon Gold
BTX1749-1W/Y	K7-6 x BO925-4
BTX2103-1R/Y	BO811-13 x ARS-W82-21285-1
BTX2332-1R	B1523-4 x Super Norland
CO00277-2R	Colorado Raised x CO94065-2R
CO00291-5R	CO94019-1R x Rio Colorado
CO02024-9W	A91790-13W x CO95051-7W
CO02033-1W	A91790-13W x S440
CO02321-4W	NY115W x BC0894-2W
CO03134-4RF/RW	Laratte x PA97B36-3
CO03187-1RU	Rio Grande x A9304-3
CO03202-1RU	AC96010-3RU x Canela
CO03243-3W	BC0894-2W x A91790-13
CO03276-4RU	CO95086-8RU x Blazer
CO03276-5RU	CO95086-8RU x Blazer
CO04013-1W/Y	ATC98495-1W/Y x CO97237-5W/Y

Variety or Selection	Parentage
CO04021-2R/Y	ATC98509-1R/Y x US147-96R/Y
CO04029-5W/Y	ATC98515-1R/Y x PA99P35-1
CO04056-3P/PW	CO97216-1P/PW x CO97227-2P/PW
CO04063-4R/R	CO97226-2R/R x CO97222-1R/R
CO04067-8R/Y	CO97232-1R/Y x ATC98444-1R/Y
CO04099-3W/Y	VC1002-3W/Y x ATC98495-1W/Y
CO04099-4W/Y	VC1002-3W/Y x ATC98495-1W/Y
CO04159-1R	AC97521-1R/Y x CO99076-6R
CO04188-4R/Y	ATC98515-1R/Y x ATC98444-1R/Y
CO04211-4RU	CO96045-1RU x CO98009-3RU
CO04220-7RU	CO96109-7RU x Summit
CO04233-1RU	CO97138-3RU x Summit
CO111f2-1 P/P	??
COTX01403-4R/Y	VC1015-7R/Y x Winema
COTX02172-1R	CO94065-2R x ND3574-5R
COTX02293-4R	CO94065-2R x ND3574-5R
COTX03187-1W	A93570-13 x CO96109-4RU
COTX04015-3AW/Y	ATC98515-1R/Y x ATC98444-1R/Y
COTX04050-1P/P	CO97215-2P/P x CO97306-2P/P
COTX04193-2R/Y	ATC98515-1R/Y x ND3574-5R
COTX04267-1R/Y	CO98012-5R x CO97232-2R/Y
COTX05082-2P/P	CO97227-2P/P x WMSG147-3
COTX05095-2Ru/Y	CO99045-1W/Y X AO96164-1
COTX07009-8Ru	AC97306-1RU x CO99053-3RU
COTX07054-2R	ATDC9801-3P x CO99076-6R
COTX07168-1Ru	A89219-7RU x AC97306-1RU
COTX07206-1Ru	AC97306-1RU x CO99028-2RU
COTX07382-1W/Y	Blazer x Innovator

Variety or Selection	Parentage
COTX07382-2W/Y	Blazer x Innovator
COTX08045-2R/R	FF x KP
COTX08046-2R	FF x KP
COTX08046-3R/R	FF x KP
COTX08046-5R/R	FF x KP
COTX08046-8P/P	FF x KP
COTX08046-9P/P	FF x KP
COTX08056-10R	French Fingerling x POR01PG22-2
COTX08056-12R/R	French Fingerling x POR01PG22-2
COTX08056-5R/R	French Fingerling x POR01PG22-2
COTX08056-6R/Y	French Fingerling x POR01PG22-2
COTX08061-3R/R	Magic Molly x POR01PG22-1
COTX08078-1Ru	A95109-1 x Blazer
COTX08080-7Ru	A95409-1 x CO02098-3RU
COTX08117-1Ru	A99073-1 X Summit
COTX08118-2Ru	A0008-1TE X CO98067-7RU
COTX08121-1Ru	AC96052-1RU X Blazer
COTX08121-3Ru	AC96052-1RU X Blazer
COTX08121-4Ru	AC96052-1RU X Blazer
COTX08214-2Ru	AWN86514-2 x Canela
COTX08258-6Ru	PA98V6-1 x Blazer
COTX08284-1Ru	PA99N12-1 x CO99100-1RU
COTX08291-7W	PA99N82-4 x Summit
COTX08322-10Ru	Blazer x AC96052-1RU
COTX08322-11Ru	Blazer x AC96052-1RU
COTX08322-5Ru	Blazer x AC96052-1RU
COTX08323-3Ru	Blazer x AOTX95265-4RU
COTX08365-1P/P	POR01PG16-1 x CO00405-1R

Variety or Selection	Parentage
COTX08365-3P/P	POR01PG16-1 x CO00405-1R
COTX08365-4R/R	POR01PG16-1 x CO00405-1R
COTX08365-5P/P	POR01PG16-1 x CO00405-1R
COTX08367-2R/R	POR01PG20-12 x CO00405-1R
COTX08376-1R	US147-96 x POR01PG22-1
COTX08376-2R/Y	US147-96 x POR01PG22-1
COTX08387-1R/R	French Fingerling x POR01PG20-12
COTX09022-3Ru/Y	A00286-3Y x CO99100-1RU
COTX09022-5Ru/Y	A00286-3Y x CO99100-1RU
COTX09040-1P/Y	ATTX98500-2P/Y x POR02PG26-5
COTX09042-2Ru	CO99053-3RU x CO03202-1RU
COTX09052-1Ru	CO03202-1RU x CO98067-7RU
COTX09052-2Ru	CO03202-1RU x CO98067-7RU
COTX09053-1Ru	CO03202-1RU x CO99053-3RU
COTX09075-4Ru	CO03380-2RU x CO99100-1RU
COTX09075-7Ru	CO03202-1RU x CO99053-3RU
COTX09089-1Ru	94-10800-1 x COTX03308-3RU
COTX09097-2Ru	A95409-1 x CO99100-1RU
COTX09097-3Ru	A95409-1 x CO99100-1RU
COTX09101-1Ru	A96104-2 x CO03202-1RU
COTX09150-1Ru	AC00395-2RU x CO03380-2RU
COTX09182-5Ru	AO96365-2 x CO99100-1RU
COTX09196-1Ru	AO00057-2 x CO98067-7RU
COTX09323-2Ru	CO03374-4RU x CO98067-7RU
COTX09395-1R/R	POR01PG22-1 x CO03134-4RF
COTX94216-1R	Peruvian x Chipeta
COTX94218-1R	Ruby x Gold
FL1833	??

Variety or Selection	Parentage
FL1867	FL 162 x ATLANTIC
FL2048	??
FL2053	??
FL2126	??
FL2137	??
FL2215	??
JTTX124-2W	20124 x 20146
JTTX21-1Ru	Superior x 2196
JTTX75-2W	Superior x 2263
JTTX91-6Ru	2295 x 2259
JTTX91-7W	2295 x 2259
JTTX91-8Ru	2295 x 2259
JTTX94-1W	2293 x 2268
JTTX94-2W	2293 x 2268
JTTX94-3W	2293 x 2268
NDTX050070-1R	ND 8375b-6R x ND 8347CB-12R
NDTX050184-1R/Y	ND 028577-6RY x ND 8555-8R
NDTX059759-3Pinto/Y	ATND 99331-2 Pinto x ND 7834-2P
NDTX059886-1W/Y	ND 7192-1 x ND 8178-1Y
NDTX060700C-1W	NDTX 7560C-4 x NDTX 7192-1
NDTX071084C-2W	ND 6809C-3 x ND 860-2
NDTX071109C-1W	ND 7226C-17 x ND 860-2
NDTX071217CB-1W/Y	ND 028801CB-1 x ND 039004B-2Y
NDTX071258B-1R	ND 039035B-9R x ND 4659-5R
NDTX081451CB-1W/Y	Dakota Diamond x Gala
NDTX081572B-1R	ND 4659-5R x ND 028940B-102R
NDTX081618-1P/P	ND 7834-2P X ND 5858
NDTX081644CAB-2W	ND 8331Cb-3 X ND 028804CAb-5

Variety or Selection	Parentage
NDTX081648CB-13W	ND 8456-1 xND7377CB-1
NDTX081648CB-1W	ND 8456-1 xND7377CB-1
NDTX081648CB-2W	ND 8456-1 xND7377CB-1
NDTX081648CB-4W	ND 8456-1 xND7377CB-1
NDTX081651CAB-2W	ND 8479C-2 X ND 039163AB-209
NDTX081803Ab-2W/Y	793101.3 X ND 039163Ab-209
NDTX091886-3P/P	COND 04082-8RR X ND 7519-1
NDTX091908AB-2W	Ebt 6-21-5 X ND 7519-1
NDTX091908AB-4W	Ebt 6-21-5 X ND 7519-1
NDTX091908AB-9W	Ebt 6-21-5 X ND 7519-1
NDTX092231C-1R	ND 049326C-2P x AND 00272-1R
NDTX092238C-1P/W	ND 049326C-2P x ND 8555-8R
NDTX092238C-3P/W	ND 049326C-2P x ND 8555-8R
NDTX092238C-4P/W	ND 049326C-2P x ND 8555-8R
NDTX092308-4R	ND 059823-4R x ND 8555-8R
NDTX092308-5R	ND 059823-4R x ND 8555-8R
NDTX092340AB-1C-1W	ND 060463C-1 x Etb 6-21-4
NDTX102461AB-4W	Ivory Crisp x ND 060421Ab-1
NDTX102462C-2W	Ivory Crisp x ND 060831C-1
NDTX102462C-6W	Ivory Crisp x ND 060831C-1
NDTX102514ABC-5W	Etb 6-5-5 x ND 060831C-6
NDTX102557-1W	ND 860-2 x King Harry
NDTX4271-5R	NDTX9-1068-1R x ND2050-1R
NDTX4784-7R	ND3574-5R x ND2050-1R
NDTX5003-2R	ND3504-3R x ND2050-1R
NDTX5438-11R	ND4339-10R x ND4269-9R
NDTX731-1R	ND169-10R x ND9476-5
NDTX8305-3W	ND 2471-8 x Pearl

Variety or Selection	Parentage
OR04036-5	POR02PG26-5 x AO93487-2R
OR04131-2	Mazama x Modoc
POR05PG56-1	POR01PG46-1 x POR01PG22-1
PTTX05PG07-1W	POR01PG22-1 x OR00067-7
TX03196-1W	NDTX4748-7R x Adora
TX08350-12Ru	TXA549-1Ru x AC96052-1RU
TX08352-1Ru	TXA549-1Ru x AOTX98137-1Ru
TX08352-2Ru	TXA549-1Ru x AOTX98137-1Ru
TX08352-3Ru	TXA549-1Ru x AOTX98137-1Ru
TX08352-5Ru	TXA549-1Ru x AOTX98137-1Ru
TX08352-8Ru	TXA549-1Ru x AOTX98137-1Ru
TX08356-1W	NDTX4930-5W x 93-1285-6
TX08356-8W	NDTX4930-5W x 93-1285-6
TX08363-2R	CO98012-5R x BTX2332-1R
TX08375-1R	CO97222-1R/R x POR02PG26-5
TX08375-3R	CO97222-1R/R x POR02PG26-5
TX08378-3R/R	POR01PG20-12 x POR02PG26-5
TX08385-1W/Y	COTX03025-1P/P x 93-1285-6
TX09396-1W	Atlantic x NY139
TX09396-3W	Atlantic x NY139
TX09403-14W	NY138 x Ivory Crisp
TX09406-1P/P	A99331-2RY x CO00405-1R
TX09406-3P/P	A99331-2RY x CO00405-1R
TX09414-1W	ATTX98500-2P/Y x Chipeta
TX09417-1R	ATTX98500-2P/Y x Chipeta
TX09420-1R/Y	POR03PG23-1 x COTX94218-1R
TX09420-3R/Y	POR03PG23-1 x COTX94218-1R
TX09423-2R/R	CO97215-2P/P x COTX94218-1R

Variety or Selection	Parentage
TX09423-3P/P	CO97215-2P/P x COTX94218-1R
TX09429-1P/P	COTX0325-1P/P x COTX04050-1P/P
TX1673-1W	Nugget x CS 7802L-2
TX1674-1W/Y	Nugget x Delta Gold
TXA549-1Ru	ND9687-3Ru x ND9852-1Ru
TXNS410	ND9526-4Ru x ND9687-5Ru

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