

TEXAS POTATO BREEDING REPORT 2017



TEXAS A&M AGRILIFE RESEARCH
DEPARTMENT of HORTICULTURAL SCIENCE
TEXAS A&M UNIVERSITY

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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 = AORTX = cross made in Aberdeen, Idaho, tuberlings 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, tuberlings 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, tuberlings 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

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

Other Codes:

North Dakota

A =

B = Late Blight

C = Colorado Potato Beetle

Idaho

T = Selected in Tetonia

E = Early selection

Texas

Spl = Splash

RE = Red Eye

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, 2,610,935 seedlings have been grown for selection in Texas, from which 12,350 original selections have been made. Sixteen improved varieties have been developed/co-developed and/or released from this program. Most of the russet potatoes grown in Texas in 2016 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. Virtually all the russet potatoes grown in Texas in 2017 were the improved Texas Russet Norkotah strains. Over the past several years, Texas recorded the highest summer crop yields in the nation (ranging from 440-465 Cwt/a) among the nine states producing a summer crop.

In addition, the farm gate value of the crop has grown from less than \$20 million to about \$120 million, with an annual economic impact to the state in is estimated to exceed \$300 million. In 2016, the three Texas Russet Norkotah selections (TXNS112, TXNS278, and TXNS296) collectively ranked in the third position among the top 50 US varieties in acres accepted for seed certification. Russet Burbank and Frito varieties ranked above these three selections. Certified seed acreage of the Texas Russet Norkotah strain selections continued to increase in 2016.

Zebra Chip 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), 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 2017 were conducted at College Station, with field cage plantings at Springlake.

Our approach has been to start with the most advanced material and now includes species material as well. Trials 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 National Chip Processor Trial. Texas Breeding Program selections have also been included. Trial locations have included Dalhart and Springlake. Some 53,000 tubers, representing more than 800 varieties/selections, were fresh-cut evaluated or chipped for ZC. The observed incidence of ZC was .30% in 2017. Cage verification studies have been conducted since 2010 in Springlake.

In 2017, field cages and greenhouse ZC studies were conducted using artificial infestation using *Lso* positive psyllids. Seventy genotypes were evaluated in the field and 50 were evaluated in the greenhouse. These included chip clones from the National Chip Processing Trial, advanced clones with crop wild introgressions, diploids, Texas selections with putative ZC tolerance, and selections from the Potato Mini-Core Collection. We again confirmed that there is wide genetic variability among varieties/selections for ZC expression; however, no immunity was found.

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 control 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 several others at both the state and national levels. In Texas, we cooperated with Ismael Badillo and Adrian Silva in Weslaco and Charlie Rush in Amarillo. At College Station, we cooperated with Drs. Cecilia Tamborindeguy (Entomology), and Elizabeth Pierson and Julien Levy (Horticulture). We conducted major trials at Springlake and Dalhart. We also had cooperative studies with Drs. John Trumble at Riverside, CA, and Rich Novy at Aberdeen, ID. A very successful Field Day was conducted in July at Springlake and was well attended by many, including many of the above-mentioned cooperators.

Introduction

Program Summary

The Texas Potato Breeding and Variety Development Program used two locations in the 2017 growing season (Table 1). The first planting was near Springlake on March 21st to 27th and harvested on July 2nd, 4th, 24th, and 28th. This location included twenty-one replicated trials, first generation seedlings for selection, a spacing/fertility trial with three advanced Texas selection and two check varieties. The second planting was near Dalhart on May 15th to 19th and harvested on September 3rd, 11th, and 22nd. Nineteen replicated trials, a seed increase nursery, first year seedlings for selection were planted at this site.

The Texas program entered three selections (COTX00104-6R, NDTX059759-3RY/Y Pinto, and PORTX03PG25-2R/R) in the Western Regional Red/ Specialty Trial, two selections in the Western Regional Russet Trial (COTX09022-3RuRE/Y and TX08352-5Ru) and one selection in the Western Regional Chip Trial (NDTX081648CB-13W). The program also entered two selections in the Southwest Regional Red/ Specialty Trial (AOTX05043-1Ru and COTX05095-2RU). These trials were conducted at multiple locations in six western states.

The Texas Program had sixteen entries (AORTX09032-3W, AORTX09033-4W, AORTX09037-1W/Y, AORTX09037-4W/Y, AORTX10247-1W/Y, NDTX113030C-3W, AORTX09033-11W, AORTX09037-5W/Y, AORTX09144-2W, COTX12235-2W, COTX12428-1W, NDTX113467CB-1W, NDTX12203AB-1W, NDTX1244-3W/Y, NDTX1246-3W/Y, and TX13563-1W) in the Potato USA Fast-Track National Chip Processing Trial. One Texas entry (NDTX081648CB-13W) was entered in the National Snack Food Trial.

The program also continued to stress virus testing, clean-up, and minituber multiplication of several selected clones. A successful field day was held on 13 July at Springlake and was well attended by over 70 growers and collaborators from Mexico to Canada.

Single Hill Selections

In 2017, 56,014 first year seedling tubers, resulting from 369 different parental combination or families (crosses), were grown for selection. Some 3,936 seedling tubers were planted on the Barrett Farm near Springlake while 52,078 were planted at CSS Farm near Dalhart. A total of 360 (0.6% selection rate) original selections were made from this material (Figure 1).

True Potato Seedling Tuber Production

The 2017 first year seedling tubers from Texas (15,966) were grown from true seed during the fall of 2016 at College Station. These seed were from crosses made in Lubbock and College Station. The remaining seedling tubers were provided by Rich Novy, Idaho (7,097), David Holm, Colorado (20,019), and Susie Thompson, North Dakota (8,563). Texas also sent second and third-size seedling tubers to Idaho (1,154), Colorado (9,710), and North Dakota (5,810) for first year selections.

Table 1. Trial locations, name of trial, number of entries, and number of plots evaluated in 2017.

Springlake			Dalhart		
Trial	# of Entries	# of Plots	Trial	# of Entries	# of Plots
Field day Russets (not reported)	104	104	National Chip	157	195
Field day Red/Specialty(not reported)	100	100	Western and Southwestern Regional Chip	26	101
Western and Southwestern Regional Chip	18	65	Western and Southwestern Regional Russet	26	101
Southwestern Regional Russet	10	36	Western and Southwestern Regional Red	4	16
Western and Southwestern Regional Red	4	16	Western and Southwestern Regional Red/Yellow	7	28
Western and Southwestern Regional Red/Yellow	7	28	Western and Southwestern Regional White/Yellow	8	32
Western and Southwestern Regional White/Yellow	8	32	Southwestern Regional and Texas Advanced Purple/Purple Selection	10	36
Southwestern Regional and Texas Advanced Purple/Purple Selection	8	32	Texas Advanced Chip Selection	43	115
Texas Advanced Chip Selection	31	65	2016 Chip Selection	126 (8 advanced)	126
Texas Advanced Russet Selection	13	52	Texas Advanced Russet Selection	23	74
Texas Advanced Red Selection	11	44	2016 Russet Selection	60 (4 advanced)	60
Texas Advanced Red/Yellow Selection	5	20	Texas Advanced Red Selection	19	67
Texas Advanced White/Yellow Selection	5	20	2016 Red Selection	29 (3 advanced)	29
Texas Advanced Small Potato Selection	18	72	Texas Advanced Red/Yellow Selection	4	16
Texas Advanced Purple/Yellow Selection	6	18	2016 Red/Yellow Flesh Selection	12 (1 advanced)	12
Commercial Specialty (not reported)	8	32	Texas Advanced White/Yellow Selection	5	20
Mico Trial (not reported)	3	24	2016 White/Yellow Flesh Selection	34 (4 advanced)	34
Space Fertility (not reported)	2	60	Texas Advanced Small Potato Selection	20	79
Total	152	820	2016 Small Potato Selection	12 (2 advanced)	12
			Texas Advanced Fingerling Selection	6	15
			2016 Fingerling Potato Selection	3 (0 advanced)	3
			Commercial Specialty	8	32
			2016 Purple/Purple Selection	4 (2 advanced)	4
			Total	642	1203
			Total Entries and Plots	794	2023

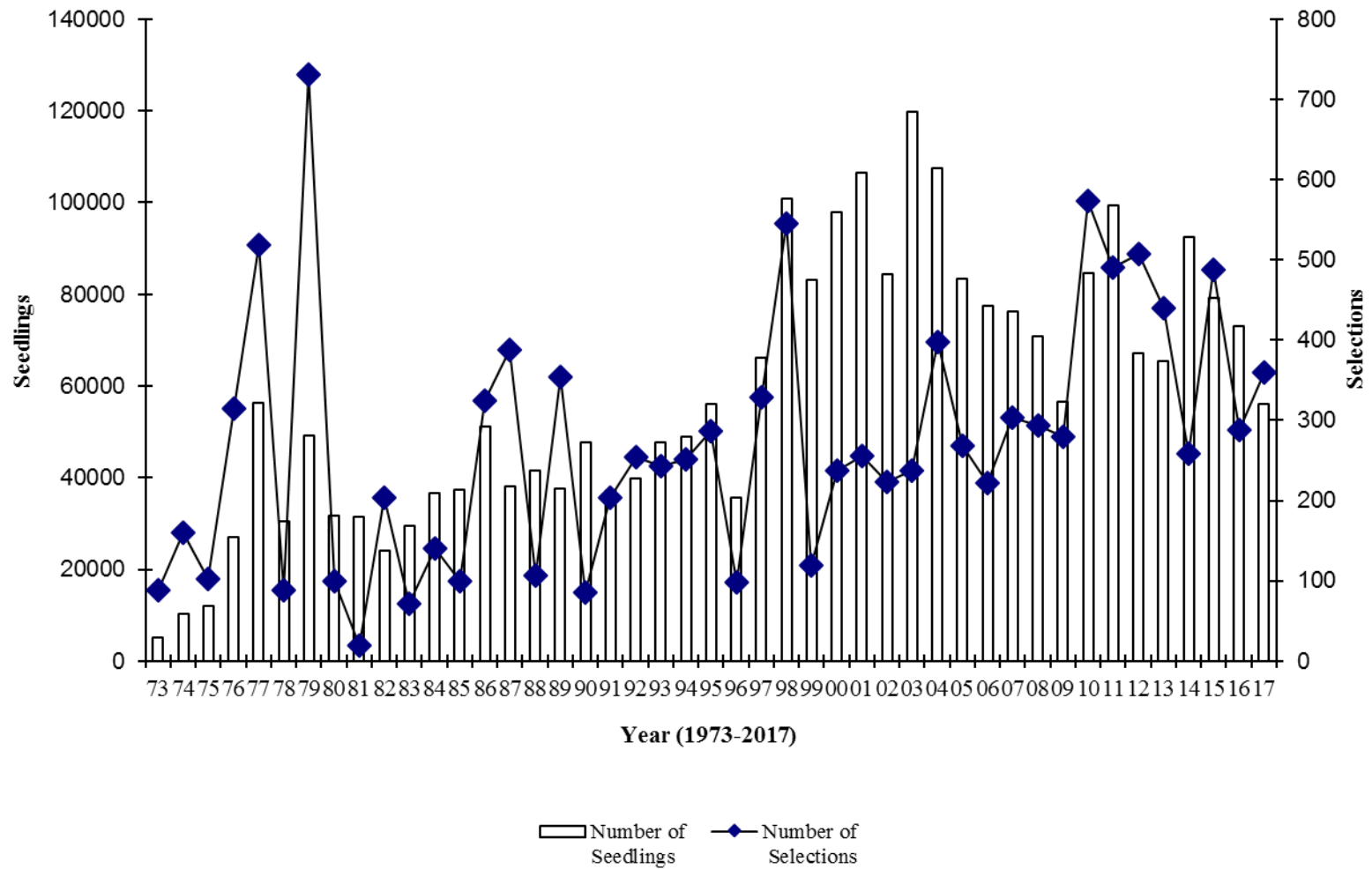


Figure. 1. Number of first year seedling tubers grown for original selection and number of selections made since the inception of the Texas Potato Variety Development Program.

Second-Year Field Selections

Out of 280 second-year clones, 69 were selected (25%).

Breeding trials

The objectives of the breeding 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 152 advanced selections/varieties were tested in replicated and non-replicated trials near Springlake, and 642 entries were evaluated near Dalhart. A total of 2,023 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, a total of 34,772 entries have been evaluated in replicated trials (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 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.

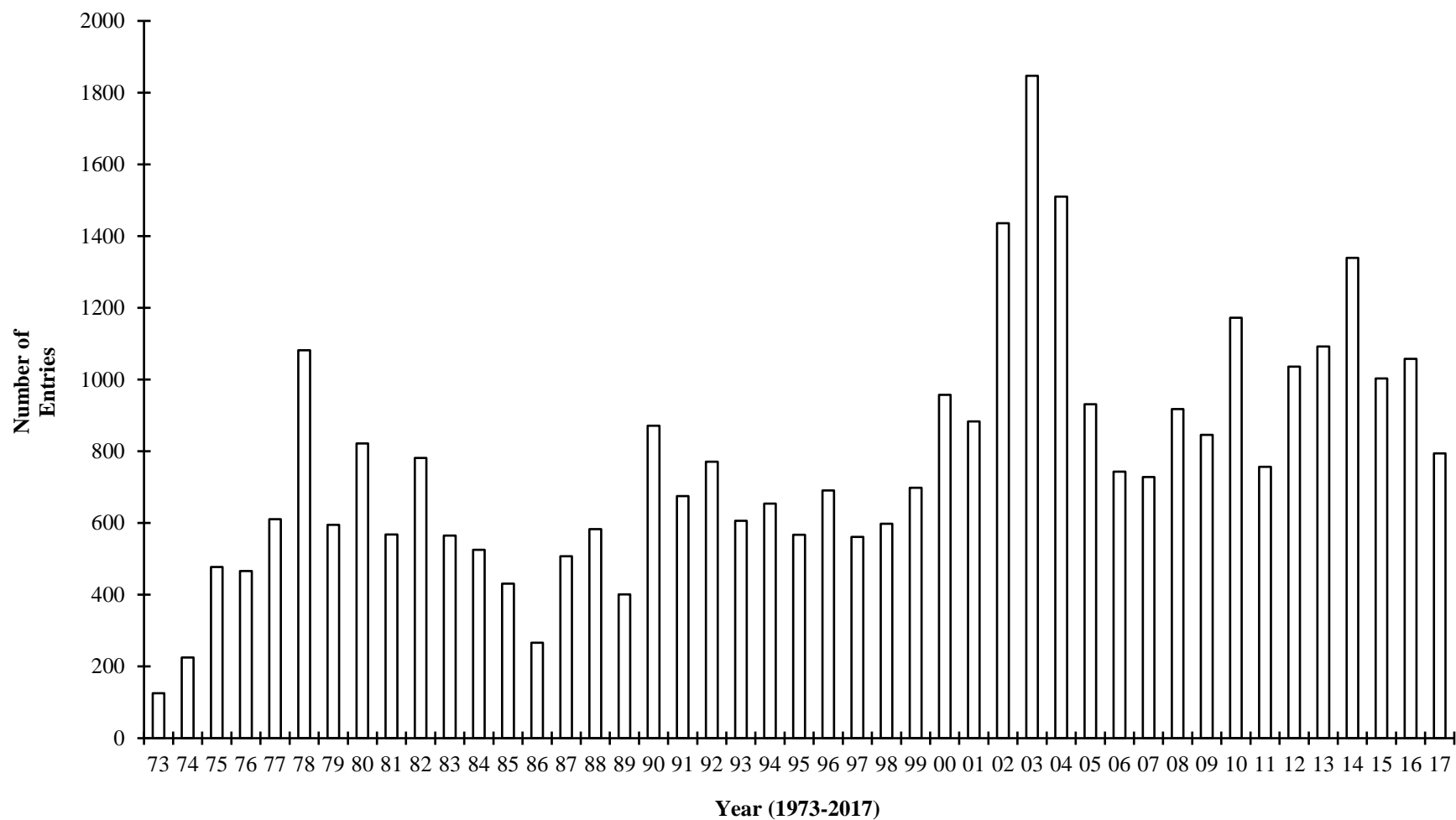


Figure 2. Number of varieties and advanced selections tested for their adaptability to Texas environmental conditions each year since the inception of the Texas Potato Variety Development Program in 1973.

Springlake Trials, 2017

Summary of growing conditions:

The trials were planted near Springlake (34.11N, 102.30W) on March 21st to 27th and harvested on July 2nd, 4th, 24th, and 28th. Standard cultural practices for the area were used (Table 2). These trials were subjected to above average precipitation in the last week of June, first and last week of July, and second week of August. They were also subjected to a psyllid infestation in the first and second weeks of June.

Trials conducted:

- Field day Russets (not reported)
- Field day Red/Specialty (not reported)
- Western and Southwestern Regional Chip
- Southwestern Regional Russet
- Western and Southwestern Regional Red
- Western and Southwestern Regional Red/Yellow
- Western and Southwestern Regional White/Yellow
- Southwest Regional and Texas Advanced Purple Skin Selection
- 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
- Texas Advanced Purple Skin Selection
- Spacing Fertility Trial (not reported)
- Commercial Specialty Trial (not reported)
- Glycoalkaloids Trial (not reported)
- Micro-organism Trial (not reported)

Table 2. Environmental and cultural inputs for the 2017 Springlake Trials.		
Location:		
Springlake, Texas		
Soil Type		
Tivoli Fine Sand		
Seed Source		
Oregon Colorado, Nebraska, Texas, North Dakota, Idaho, and Canada		
Date:		DAP
Planted	March 23, 2017	
Vines Killed (Red, Red/Yellow, Small)	June 27, 2017	94
Vines Killed (Chip, White Yellow)	June 27, 2017	94
Vines Killed (Russet)	July 17, 2017	114
Harvested (Small Potatoes, White/Yellow.)	July 2, 2017	99
Harvested (Red, Red/Yellow, Small Potatoes)	July 4, 2017	101
Harvested (Chip)	July 28, 2017	125
Harvested (Russet)	July 24, 2017	121
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:		
108-25-25# per acre		
Irrigation:		
Center Pivot		
Seed Treatment Applied:		
Cruiser Maxx		
Insecticide:		
Movento, Minecto Pro, Transform WG, Sivanto		
Fungicides Applied:		
Scala, Luna Tranquility, NUCOP		
Herbicides Applied:		
Roundup, Dual Magnum, Matrix, Stealth, Makaze, Brawl, Gly Star Original, Metribuzin 75 CA		
Environmental Factors:		
These trials were subjected to above average precipitation in the last week of June, first and last week of July, and second week of August. They were also subjected to a psyllid infestation in the first and second weeks of June.		

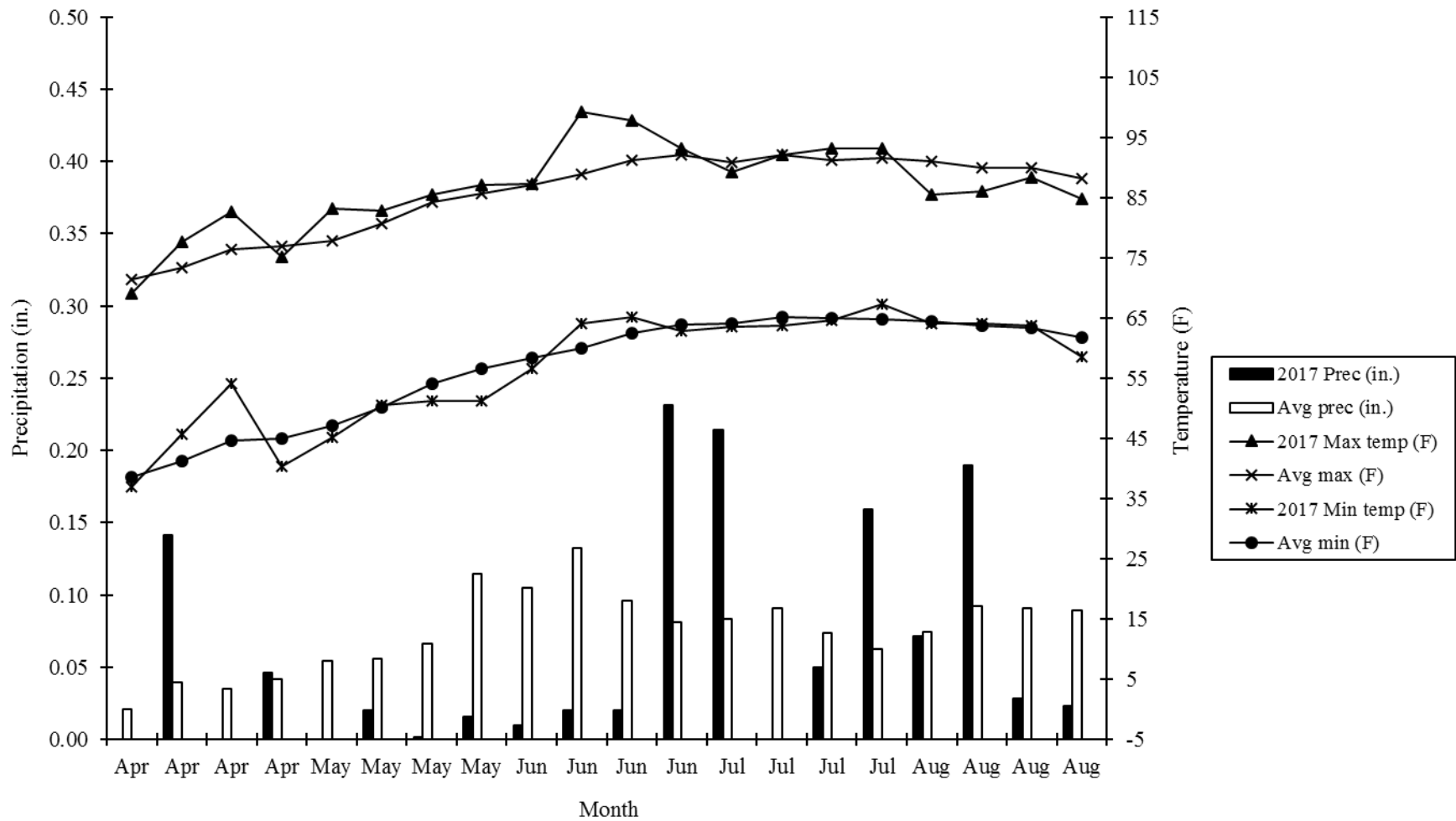


Figure 3. Weekly minimum/maximum temperatures and precipitation for the 2017 growing season near Springlake, Texas compared to the average minimum/maximum temperatures and precipitation (1949-2017).

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, Springlake

This trial consisted of eighteen entries, including the two check varieties Atlantic and Snowden.

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

- The outstanding entries for this trial, based on general rating, yield, and chip quality was NY 152 (Table 1a and 1f).
- Lamoka and AC01144-1W had the highest ratio of good chips (Table 1f).
- Atlantic had the highest total and marketable yield (Table 1a)
- NY 152 had the highest yield of less than 4 oz. tubers. (Table 1a).
- Atlantic had the highest percentage of U.S. No. 1's
- Olympus had the highest percentage of less than 4 oz. tubers (Table 1b).
- Lamoka and Atlantic had the highest specific gravity (Table 1b).
- MSW485-2 had the highest percentage of hollow heart and vascular discoloration. Atlantic had the highest percentage internal brown spot (Table 1d).
- Atlantic had 3% ZC defect at grading.
- Olympus and AOR09034-3 had over 10% Zebra Chip at chipping (Table f).

Comments on entries:

- Atlantic Round White buff skin, larger tubers, ZC 3%, poor internals, CR=3.7
Chip Notes: 47% good chip
- NDTX081648CB-13W Round White lighter skin, looks clean, a little flat, heat sprouts+,
sticky stolon+, CR=4.6 Chip Notes: 20% good chip

- NDA081453CAB-2C Round White deer damage+, nice skin and shape, BOT, nice flesh, CR=3.5 Chip Notes: 30% good chip
- NY 152 Round White parent, lots of tubers, very uniform, size and shape, nice shape, buff skin, CR=2.2 Chip Notes: 28% good chip
- Olympus Round White uniform size and shape, poor internals, CR=3.6 Chip Notes: 20% good chip
- Snowden Round White buff skin, rough shape, CR=3.6 Chip Notes: 40% good chip
- W5955-1 Round White not uniform size, buff skin, nice shape+, CR=3.3 Chip Notes: 50% good chip
- MSV030-4 Round White mixed skin color, sticky stolon, nice flesh, CR=4.2 Chip Notes: 0% good chip
- MSW485-2 Round White hollow heart, sticky stolon++, CR=4.0 Chip Notes: 13% good chip
- TX09396-1W Round White large tubers, not uniform shape, nice shape, pear shape, sticky stolon, flat, feathering, CR=4.1 Chip Notes: 10% good chip
- W2978-3 Round White very small tubers, smooth skin+, nice shape, few eyes, CR=2.5 Chip Notes: 59% good chip
- AOR09034-3 Round White smaller, uniform shape and size, nice shape, nice skin finish, CR=3.0 Chip Notes: 56% good chip
- AC01144-1W Round White fewer tubers, deer damage, very small tubers, nice shape and size, sticky stolons++, mixed, CR=3.4 Chip Notes: 60% good chip
- B2727-2 Round White lots of deer damage, large tubers, oval, uniform shape, CR=3.1 Chip Notes: 58% good chip
- Lamoka Round White Bruce likes, buff skin, nice size, shape and flesh, some rot, CR=2.5 Chip Notes: 63% good chip
- OR09256-2 Round White very small, tubers gone, uneven shape, sticky stolon+, nice flesh, CR=3.5 Chip Notes: 28% good chip
- MSV358-3 Round White smaller, uniform shape and size, buff skin, pear shaped, CR=3.8 Chip Notes: 10% good chip
- MSX540-4 Round White buff skin, CR=3.6 Chip Notes: 35% good chip

¹CR=chip rating 1=light to 5= dark

Summary:

Overall, the outstanding entry based on general rating, marketable yield, and chip quality was NY 152.

Springlake
Table 1a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 18 entries in the Western, Southwestern Regional and Commercial Chip Trial grown near Springlake, Texas-2017.

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 Field	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz					
Atlantic	WR	287.0	193.6	69.7	94.7	29.2	1.9	89.0	2.4	3.5	3.5
NDTX081648CB-13W	WR	279.2	127.9	83.7	42.9	1.4	0.0	134.3	16.9	3.1	3.3
NDA081453CAB-2C	WR	255.7	137.4	87.3	50.1	0.0	0.0	110.1	8.1	3.5	3.6
NY 152	Hig ZC	254.0	108.9	82.8	26.1	0.0	0.0	139.8	5.3	3.7	3.5
Olympus	Real	208.6	80.9	61.9	19.0	0.0	0.0	127.7	0.0	3.3	3.3
Snowden	WR	196.4	105.4	66.0	38.4	1.0	0.0	90.9	0.0	3.4	3.3
W 5955-1	Hig ZC	193.4	107.3	65.0	39.2	3.1	0.0	69.3	16.8	3.1	3.2
MSV030-4	Hig ZC	182.6	84.7	51.7	30.8	2.2	0.0	87.5	10.4	3.1	3.0
MSW 485-2	Hig ZC	181.0	80.2	44.8	35.4	0.0	0.0	91.3	9.5	2.9	3.0
TX09396-1W	Hig ZC	177.1	126.4	53.2	59.5	13.7	0.0	47.4	3.4	2.9	3.0
W2978-3	Real	174.5	67.0	52.2	14.8	0.0	0.0	93.9	13.7	3.1	3.2
AOR09034-3	WR	174.2	81.9	60.3	21.6	0.0	0.0	86.1	6.2	3.1	3.1
AC01144-1W	WR	165.0	66.4	48.9	17.5	0.0	0.0	97.3	1.3	3.1	3.1
B 2727-2	Hig ZC	163.7	125.5	50.3	66.6	8.6	0.0	36.3	1.9	3.0	2.6
Lamoka	Hig ZC	136.5	79.0	53.1	21.8	4.1	0.0	57.2	0.3	3.1	2.9
OR09256-2	WR	118.9	56.7	34.9	19.7	2.1	0.0	61.5	0.6	2.7	2.5
MSV358-3	Hig ZC	114.1	44.8	30.4	14.3	0.0	0.0	51.5	17.8	2.6	2.5
MSX540-4	Hig ZC	108.2	71.7	43.7	28.0	0.0	0.0	36.5	0.0	2.7	2.7
Average		187.2	97.0	57.8	35.6	3.6	0.1	83.8	6.4	3.1	3.1
L.S.D. (.05)		36.0	58.3	23.6	24.4	8.7		30.6	8.4	0.4	0.5

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 18 entries in the Western, Southwestern Regional and Commercial Chip Trial grown near Springlake, Texas-2017.

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				
Atlantic	WR	67.6	24.4	31.5	11.7	0.8	30.9	0.7	1.072	15.3	Round	White
NDTX081648CB-13W	WR	46.5	29.7	16.3	0.5	0.0	48.0	5.5	1.056	12.4	Round	White
NDA081453CAB-2C	WR	53.9	33.7	20.1	0.0	0.0	43.1	3.0	1.067	14.5	Round	White
NY 152	Hig ZC	42.3	31.9	10.4	0.0	0.0	55.7	2.0	1.062	13.6	Round	White
Olympus	Real	38.4	29.4	9.0	0.0	0.0	61.6	0.0	1.062	13.6	Round	White
Snowden	WR	53.1	33.4	19.2	0.5	0.0	46.9	0.0	1.064	13.9	Round	White
W 5955-1	Hig ZC	55.9	33.5	20.9	1.5	0.0	36.0	8.1	1.060	13.2	Round	White
MSV030-4	Hig ZC	47.0	29.0	17.1	0.9	0.0	46.4	6.6	1.062	13.6	Round	White
MSW 485-2	Hig ZC	44.0	24.1	19.8	0.0	0.0	51.8	4.2	1.059	13.0	Round	White
TX09396-1W	Hig ZC	71.8	30.3	32.7	8.8	0.0	26.0	2.2	1.056	12.5	Round	White
W2978-3	Real	36.9	29.2	7.7	0.0	0.0	54.8	8.3	1.059	13.1	Round	White
AOR09034-3	WR	45.6	34.4	11.2	0.0	0.0	50.6	3.8	1.064	13.9	Round	White
AC01144-1W	WR	39.7	29.6	10.1	0.0	0.0	59.6	0.7	1.053	12.0	Round	White
B 2727-2	Hig ZC	75.2	31.3	39.0	4.9	0.0	23.7	1.1	1.067	14.4	Round	White
Lamoka	Hig ZC	59.5	42.8	13.8	2.9	0.0	40.2	0.2	1.073	15.5	Round	White
OR09256-2	WR	47.0	27.6	17.2	2.2	0.0	52.5	0.5	1.063	13.7	Round	White
MSV358-3	Hig ZC	38.4	25.2	13.2	0.0	0.0	45.8	15.8	1.054	12.2	Round	White
MSX540-4	Hig ZC	66.6	41.0	25.7	0.0	0.0	33.4	0.0	1.064	13.9	Round	White
Average		51.6	31.1	18.6	1.9	0.0	44.8	3.5	1.062	13.6		
L.S.D. (.05)		9.8	ns	9.0	4.2	ns	9.4	3.7	0.004	0.5		

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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 18 entries in the Western, Southwestern Regional and Commercial Chip Trial grown near Springlake, Texas-2017.

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	
Atlantic	WR	5.4	4.5	2.1	98	100	1.9	3.7	3.0	3.7	9
NDTX081648CB-13W	WR	7.5	3.1	2.5	100	100	1.8	5.0	4.6	4.9	1
NDA081453CAB-2C	WR	5.9	3.6	2.4	100	100	2.0	3.2	3.4	3.3	8
NY 152	Hig ZC	6.6	3.2	1.9	100	100	2.3	3.9	3.6	3.9	5
Olympus	Real	6.3	2.7	1.7	92	100	1.5	3.4	3.3	3.6	10
Snowden	WR	4.4	3.7	3.1	100	100	2.1	4.0	3.7	4.1	4
W 5955-1	Hig ZC	4.4	3.6	1.6	96	100	1.8	3.8	4.6	3.7	0
MSV030-4	Hig ZC	4.5	3.4	1.8	96	100	1.5	2.9	3.7	3.0	4
MSW 485-2	Hig ZC	4.7	3.2	2.0	100	100	1.9	4.2	4.3	4.1	1
TX09396-1W	Hig ZC	3.5	4.2	1.2	92	100	1.5	3.2	5.0	3.3	0
W2978-3	Real	5.0	2.8	1.9	107	100	2.0	3.4	3.0	3.6	21
AOR09034-3	WR	4.8	3.0	2.3	100	100	2.0	3.9	3.3	3.9	13
AC01144-1W	WR	4.8	2.9	1.7	100	100	1.5	3.0	3.6	3.3	9
B 2727-2	Hig ZC	3.1	5.0	1.4	84	89	1.9	2.8	3.6	3.1	6
Lamoka	Hig ZC	2.8	4.0	2.0	100	100	1.8	3.6	3.3	3.7	15
OR09256-2	WR	3.3	3.0	2.0	100	100	2.0	3.8	3.2	3.7	19
MSV358-3	Hig ZC	3.0	3.1	1.2	96	100	1.5	3.1	3.7	3.3	1
MSX540-4	Hig ZC	2.5	3.7	1.4	95	100	1.6	3.8	4.4	3.7	0
Average		4.6	3.5	1.9	98	99	1.8	3.6	3.7	3.7	7
L.S.D. (.05)		1.4	0.4	0.3	ns	4	0.3	0.3	3.6	0.3	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 18 entries in the Western, Southwestern Regional and Commercial Chip Trial grown near Springlake, Texas-2017.

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
Atlantic	WR	1.0	2.5	2.0	3.8	2.0	5.0	5.0	5.0	5.0	4.1	5	0	10	20
NDTX081648CB-13W	WR	1.0	2.4	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.1	0	0	5	3
NDA081453CAB-2C	WR	1.0	2.2	1.0	4.0	1.0	5.0	5.0	5.0	5.0	3.9	0	0	5	0
NY 152	Hig ZC	1.5	2.3	1.9	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
Olympus	Real	1.5	2.1	1.9	4.0	1.9	5.0	5.0	5.0	5.0	4.3	3	0	25	10
Snowden	WR	1.0	2.2	2.1	3.6	2.0	5.0	5.0	5.0	5.0	4.1	0	0	15	0
W 5955-1	Hig ZC	1.5	2.3	1.8	4.0	1.5	5.0	5.0	5.0	5.0	4.1	3	0	20	5
MSV030-4	Hig ZC	1.0	2.4	2.5	3.9	3.0	5.0	5.0	5.0	5.0	4.0	0	0	10	0
MSW 485-2	Hig ZC	1.0	1.9	1.1	3.9	1.0	5.0	5.0	5.0	5.0	3.8	13	0	38	3
TX09396-1W	Hig ZC	1.4	2.7	1.1	3.9	1.0	5.0	5.0	5.0	5.0	3.6	0	0	25	0
W2978-3	Real	1.0	2.3	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
AOR09034-3	WR	1.0	2.0	1.1	3.9	1.0	5.0	5.0	5.0	5.0	3.9	0	0	3	3
AC01144-1W	WR	1.0	1.8	1.4	4.0	1.0	5.0	5.0	5.0	5.0	4.3	0	3	28	0
B 2727-2	Hig ZC	1.0	3.1	1.5	4.0	2.0	5.0	5.0	5.0	5.0	3.9	0	0	3	0
Lamoka	Hig ZC	1.0	2.5	1.9	3.9	2.0	5.0	5.0	5.0	5.0	4.3	0	0	3	0
OR09256-2	WR	1.0	2.2	1.6	3.9	1.5	5.0	5.0	5.0	5.0	4.1	0	0	5	0
MSV358-3	Hig ZC	1.0	2.3	1.9	3.9	1.5	5.0	5.0	5.0	5.0	4.1	0	0	5	0
MSX540-4	Hig ZC	1.5	2.6	1.1	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	20	5
Average		1.1	2.3	1.5	3.9	1.5	5.0	5.0	5.0	5.0	4.0	1	0	12	3
L.S.D. (.05)		0.1	0.4	0.3	0.1	0.1	ns	ns	ns	ns	0.3	ns	ns	18	8

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 18 entries in the Western, Southwestern Regional and Commercial Chip Trial grown near Springlake, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Atlantic	WR	, , ,	buff skin, larger tubers, ZC 10%, , poor internals,	3.6, 3.6, 3.4, 3.5	3.7, 3.6, 3.5, 3.3
NDTX081648CB-13W	WR	lighter skin, looks clean, a little flat, ,	heat sprouts+, sticky stolon+, flat, , ,	3, 3, 3, 3.2	3.4, 3.2, 3, 3.6
NDA081453CAB-2C	WR	deer prints, deer damage, ,	nice skin and shape, deer damage, BOT, nice flesh	3.7, 3.5, 3.6, 3.2	3.8, 3.2, 3.6, 3.6
NY 152	Hig ZC	parent, lots of tubers, very uniform, size and shape, , ,	nice shape, buff skin, , ,	3.8, 3.7, 3.6, 3.5	3.7, 3.6, 3.6, 3.2
Olympus	Real	, , ,	uniform size and shape, , poor internals,	3.6, 3.6, 2.6, 3.2	3.5, 3.4, 3, 3.3
Snowden	WR	, , ,	buff skin, rough shape, , ,	3.6, 3.2, 3.5, 3.4	3.5, 3, 3.2, 3.3
W 5955-1	Hig ZC	not uniform size, , ,	buff skin, nice shape+, , ,	2.8, 3, 3.5, 3.2	2.8, 3.5, 3.2, 3.4
MSV030-4	Hig ZC	, , ,	mixed skin color, , , sticky stolon, nice flesh	2.5, 3.2, 3.2, 3.4	2.5, 3, 3.5, 2.8
MSW 485-2	Hig ZC	, , ,	hollow heart, sticky stolon++, ,	3.5, 2.3, 2.8, 3	3, 2.2, 3.4, 3.3
TX09396-1W	Hig ZC	large tubers, not uniform shape, ,	larger tubers, nice shape, pear shape, sticky stolon, flat, feathering	3.6, 2.5, 2.5, 2.8	3, 2.5, 3.2, 3.2
W2978-3	Real	, , , very small tubers	smooth skin+, nice shape, few eyes, ,	3.5, 3.5, 2.6, 2.8	3.8, 3.3, 2.8, 2.8
AOR09034-3	WR	smaller, uniform shape and size, , ,	nice shape, small, nice skin finish,	3.5, 2.8, 2.5, 3.5	3.3, 2.6, 2.8, 3.6
AC01144-1W	WR	fewer tubers, deer damage, , , very small tubers	nice shape and size, sticky stolons++, mixed,	3.4, 3.5, 2.6, 2.8	3.5, 3.6, 2, 3.2
B 2727-2	Hig ZC	lots of deer damage, some large tubers, large tubers, oval, ,	uniform shape, deer damage, larger tubers, deer damage,	2.7, 3.3, 3, 3	2.5, 2.6, 2.8, 2.6
Lamoka	Hig ZC	Bruce likes, David not a bad red, , ,	buff skin, nice size, shape and flesh, some rot, ,	3.3, 2.5, 3, 3.4	3.6, 1.5, 3.2, 3.3
OR09256-2	WR	very small, , , tubers gone?	uneven shape, sticky stolon+, , nice flesh,	2.6, 2.6, 3, 2.5	2.5, 2.8, 2.8, 2
MSV358-3	Hig ZC	smaller, uniform shape and size, , ,	buff skin, pear shaped, , ,	2.5, 2.3, 3, 2.5	2.3, 2, 3, 2.5
MSX540-4	Hig ZC	, , ,	buff skin, , ,	3.2, 2.6, 2.5, 2.5	2.5, 2.6, 3.2, 2.5

Springlake
Table 1f.

Specific gravity, percent solids, chip quality rating, percentage good chip, bad chip, vascular discoloration, bruise, stem end discoloration, apical bruise, notes, percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 18 entries in the Western, Southwestern Regional and Commercial Chip Trial grown near Springlake, Texas-2017.

Variety or Selection	Trial	Gravity	% Solids	Chip Color ²	Chip Quality ³	%Good Chip	%Bad Chip	% Vas	% Bruise	%Stem	%Apical Bruise	Notes ³	Percent Zebra Defect	Percent Zebra Defect at Grading
Atlantic	WR	1.072	15.3	1.5	3.7	47	53	7	10	34	0	1mech	0	0
NDTX081648CB-13W	WR	1.056	12.4	1.8	4.6	20	80	38	0	43	0	3 immature	0	0
NDA081453CAB-2C	WR	1.067	14.5	2.3	3.5	30	70	21	5	44	0		0	0
NY 152	Hig ZC	1.062	13.6	1.0	2.2	28	72	36	2	34	0	dull color	0	0
Olympus	Real	1.062	13.6	2.3	3.6	20	80	36	0	37	0	1hh	10	0
Snowden	WR	1.064	13.9	1.8	3.6	40	60	3	3	55	0		0	0
W 5955-1	Hig ZC	1.060	13.2	1.7	3.3	50	50	0	0	43	8		0	0
MSV030-4	Hig ZC	1.062	13.6	2.0	4.2	0	100	37	8	55	0		0	0
MSW 485-2	Hig ZC	1.059	13.0	1.8	4.0	13	87	65	5	11	6		0	0
TX09396-1W	Hig ZC	1.056	12.5	2.5	4.1	10	90	51	0	39	0		0	0
W2978-3	Real	1.059	13.1	1.0	2.5	59	41	5	0	28	0	3?	0	0
AOR09034-3	WR	1.064	13.9	1.5	3.0	56	44	5	3	34	0		10	0
AC01144-1W	WR	1.053	12.0	1.3	3.4	60	40	10	0	30	0		0	0
B 2727-2	Hig ZC	1.067	14.4	1.5	3.1	58	43	3	28	13	0		0	0
Lamoka	Hig ZC	1.073	15.5	1.3	2.5	63	38	3	0	35	0		0	0
OR09256-2	WR	1.063	13.7	2.0	3.5	28	73	25	3	45	0	1bc	0	0
MSV358-3	Hig ZC	1.054	12.2	1.3	3.8	10	90	14	0	53	27		0	0
MSX540-4	Hig ZC	1.064	13.9	1.3	3.6	35	65	28	10	28	0		0	0
Average		1.062	13.6	1.6		35	65	21	4	37	2		1	0
L.S.D. (.05)		0.004	0.47	0.6		19.6	19.6	21.5	7	22.5	8.6		ns	ns

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, 6+=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

Southwestern Regional Russet Trial, Springlake

This trial consisted of ten entries, including the check variety Russet Norkotah.

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

- CO09076-3RU and COTX09022-3RuRE/Y had the highest total yield, while Reveille Russet had the highest marketable yield. Reveille Russet received best of trial designations and high general ratings (Table 2a and 2e).
- Reveille Russet had the highest yield of over 10 oz. tubers (Table 2a).
- CO09076-3RU had the highest yield of less than 4 oz. and culls/No.2 tubers (Table 2a).
- Reveille Russet had the highest percentage of marketable yield (Table 2b).
- Fortress Russet had the highest percentage yield of less than 4 oz. tubers. Russet Burbank had the highest percentage yield of culls/No. 2 tubers (Table 2b).
- Fortress Russet had the highest specific gravity (Table 2b).
- CO09036-2RU and Fortress Russet were the latest maturing clones. AOTX05043-1Ru was the earliest maturing entry (Table 2c).

Comments on entries:

- CO09076-3RU Long Russet knobs, heat sprouts, long, pointed, rough++, poor shape+, many culls, drop, pointes, long skinny
- COTX09022-3RuRE/Y Oblong Russet nice, high yield, pretty, round to oval, round shape, nice looking, nice skin, some flat, specialty, very nice flesh, red eyes, uneven russetting, flat, blocky
- CO09165-6W Long White long, uniform size, nice white flesh, some IBS, high set, white skin
- CO09036-2RU Long Russet pointed, pear shape, nice skin color, heterogenous size, few very large tubers, heat sprouts+, feathering+, flat, slight vascular discoloration
- Reveille Russet Long Russet larger, lighter skin than Rus Nork, nice skin color, shape and size, deer damage+, nice shape and size, 3 heart

- | | | |
|-------------------|---------------|---|
| | | shaped, very nice, ZC 10%, very slight vascular discoloration, BOT+ |
| • CO09205-2RU | Long Russet | nice tuber shape, heat sprouts, medium size, heterogenous size, pointed, blocky |
| • Fortress Russet | Long Russet | some heat sprouts, chain tubers, heterogenous size, small, blocky, no purple streaking, not uniform russetting, ZC 10%, |
| • Russet Norkotah | Long Russet | nice shape, less deer damage than Reveille Russet |
| • COTX05095-2RU/Y | Oblong Russet | small, deer damage+, pointed, blocky, light yellow flesh, too round |
| • AOTX05043-1Ru | Oblong Russet | smaller tubers, round, pear shaped+, pointed+, poor shape+, blocky+ |

Summary:

Reveille Russet was the outstanding entry based on all factors.

Springlake
Table 2a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 10 entries in the Southwestern Regional Russet Trial grown near Springlake, Texas-2017.

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 Field	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz					
CO09076-3RU	SW	414.0	216.6	74.8	96.1	45.6	2.1	57.0	138.3	2.7	2.6
COTX09022-3RuRE/Y	WR	398.2	265.7	128.1	99.2	38.4	0.0	128.1	4.5	3.9	3.7
CO09165-6W	SW	386.9	292.5	125.5	109.6	57.4	0.0	74.2	20.2	3.6	3.1
CO09036-2RU	SW	380.2	255.2	108.4	100.3	46.6	4.3	105.3	15.4	3.1	3.4
Reveille Russet	TXAVRU	373.6	336.4	56.7	163.2	116.5	0.0	28.9	8.3	4.2	4.1
CO09205-2RU	SW	361.1	270.2	149.0	93.2	28.0	2.4	74.7	13.8	3.6	3.9
Fortress Russet	CO	314.6	112.9	73.8	32.3	6.9	0.0	188.8	12.9	3.1	3.0
Russet Norkotah	WR	271.4	193.8	71.0	80.6	42.2	0.0	64.0	13.7	3.9	3.5
COTX05095-2RU/Y	SW	250.8	98.2	51.6	35.0	11.5	0.0	136.9	15.7	2.6	1.9
AOTX05043-1RU	SW	200.9	77.1	57.7	15.2	4.1	0.0	109.2	14.6	3.0	2.5
Average		335.2	211.9	89.7	82.5	39.7	0.9	96.7	25.7	3.4	3.2
L.S.D. (.05)		60.9	62.3	27.6	30.8	32.5	ns	45.1	23.8	0.4	0.7

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 10 entries in the Southwestern Regional Russet Trial grown near Springlake, Texas-2017.

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				
CO09076-3RU	SW	51.8	17.8	23.3	10.7	0.5	13.9	33.8	1.064	14.0	Long	Russet
COTX09022-3RuRE/Y	WR	66.6	32.2	25.0	9.4	0.0	32.3	1.2	1.070	15.1	Oblong	Russet
CO09165-6W	SW	75.0	33.3	27.8	13.9	0.0	20.0	5.1	1.058	12.8	Long	White
CO09036-2RU	SW	67.3	28.6	26.3	12.3	1.2	27.6	4.0	1.064	13.9	Long	Russet
Reveille Russet	TXAVRU	89.6	15.0	44.6	29.9	0.0	8.2	2.2	1.064	13.9	Long	Russet
CO09205-2RU	SW	74.6	40.9	25.9	7.8	0.6	20.7	4.1	1.061	13.4	Long	Russet
Fortress Russet	CO	36.6	23.3	11.1	2.2	0.0	59.5	3.9	1.071	15.1	Long	Russet
Russet Norkotah	WR	71.2	26.2	29.4	15.7	0.0	23.7	5.1	1.060	13.2	Long	Russet
COTX05095-2RU/Y	SW	39.0	20.6	13.9	4.5	0.0	54.8	6.2	1.068	14.6	Oblong	Russet
AOTX05043-1RU	SW	38.8	29.8	7.4	1.6	0.0	53.4	7.8	1.063	13.8	Oblong	Russet
Average		61.0	26.8	23.5	10.8	0.2	31.4	7.3	1.064	14.0		
L.S.D. (.05)		11.4	7.2	7.3	6.9	ns	13.7	6.7	0.005	0.8		

Springlake
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 10 entries in the Southwestern Regional Russet Trial grown near Springlake, Texas-2017.

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	Length/ With	With/ Thickness
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴			
CO09076-3RU	SW	6.5	5.3	2.0	100	100	1.5	3.6	3.8	3.6	25	2.0	1.2
COTX09022-3RuRE/Y	WR	7.9	4.2	2.7	100	100	1.5	3.9	2.9	4.0	51	1.4	1.3
CO09165-6W	SW	6.6	4.8	1.8	96	100	1.5	3.2	2.5	3.3	64	2.1	1.2
CO09036-2RU	SW	7.6	4.1	1.9	100	100	1.5	3.8	4.6	3.8	9	2.1	1.2
Reveille Russet	TXAVRU	4.7	6.5	1.3	100	100	1.5	3.6	3.6	3.6	21	1.8	1.2
CO09205-2RU	SW	6.8	4.4	2.0	100	100	1.5	3.0	3.2	3.1	44	1.9	1.2
Fortress Russet	CO	7.8	3.4	2.3	98	100	1.5	4.2	4.3	4.1	15	1.6	1.2
Russet Norkotah	WR	4.9	4.6	2.4	100	100	1.5	3.5	2.0	3.6	83	2.0	1.2
COTX05095-2RU/Y	SW	6.7	3.3	2.2	100	100	1.5	3.4	3.3	3.3	33	1.7	1.2
AOTX05043-1RU	SW	4.8	3.4	1.5	100	100	1.5	3.3	1.3	3.3	96	1.6	1.2
Average		6.4	4.4	2.0	99	100	1.5	3.5	3.1	3.6	44	1.8	1.2
L.S.D. (.05)		1.4	0.6	ns	ns	ns	ns	0.2	0.5	0.2	15	0.24	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 2d.

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 10 entries in the Southwestern Regional Russet Trial grown near Springlake, Texas-2017.

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 ¹¹	Percent Internal Brownspot
CO09076-3RU	SW	1.1	4.1	3.7	4.0	3.9	5.0	5.0	5.0	5.0	3.6	0	0	38	0
COTX09022-3RuRE/Y	WR	3.5	2.7	3.1	4.0	3.0	5.0	5.0	5.0	5.0	4.0	0	0	3	0
CO09165-6W	SW	1.0	4.3	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.3	0	0	20	5
CO09036-2RU	SW	1.2	4.0	3.9	4.0	4.0	5.0	5.0	5.0	5.0	3.5	0	0	65	0
Reveille Russet	TXAVRU	1.5	3.9	3.8	4.0	3.9	5.0	5.0	5.0	5.0	4.0	0	0	18	0
CO09205-2RU	SW	1.1	3.7	3.9	4.0	3.7	5.0	5.0	5.0	5.0	4.5	3	0	5	3
Fortress Russet	CO	1.5	3.3	3.4	3.9	3.6	5.0	5.0	5.0	5.0	4.2	0	0	10	0
Russet Norkotah	WR	1.5	3.8	3.9	3.9	4.0	5.0	5.0	5.0	5.0	4.1	0	0	8	0
COTX05095-2RU/Y	SW	3.0	2.5	2.7	3.9	3.0	5.0	5.0	5.0	5.0	4.0	0	0	20	0
AOTX05043-1RU	SW	1.2	2.9	3.4	4.0	3.8	5.0	5.0	5.0	5.0	4.1	0	0	10	0
Average		1.7	3.5	3.3	4.0	3.4	5.0	5.0	5.0	5.0	4.0	0	0	20	1
L.S.D. (.05)		0.6	0.6	0.5	ns	0.6	ns	ns	ns	ns	ns	ns	ns	20	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 2e.

Notes and general rating for all reps of 10 entries in the Southwestern Regional Russet Trial grown near Springlake, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
CO09076-3RU	SW	knobs, heat sprouts, long, pointed, heat sprouts, heat sprouts, pointed, knobs, heat sprouts, knobs	, , rough++, poor shape+, many culls, drop, pointes, long skinny	3, 2.8, 2.6, 2.5	2.3, 2.5, 2.5, 3.2
COTX09022-3RuRE/Y	WR	nice , high yield, pretty, round to oval, round shape, nice looking, nice skin, round, some flat, round, some light russet skin, light skin, long, light skin, long, light skin, long uniform size	, , very nice flesh, red eyes, uneven russetting, flat, blocky	4.5, 3.6, 3.8, 3.7	3.6, 3.8, 3.6, 3.8
CO09165-6W	SW	pointed, pear shape, heat sprouts, heat sprouts, pointed, nice skin color, heat sprouts, heterogenous size, few lighter skin than Rus Nork, BOT, deer damage, nice skin color, shape and size, deer damage+, nice shape	nice white flesh, , some IBS, high set, long, white skin pointed, heat sprouts+, , feathering+, flat, slight vascular discoloration	3.3, 3.6, 3.6, 3.8	3, 3.5, 3, 3
CO09036-2RU	SW	nice tuber shape, heat sprouts, medium size, heterogenous size, heat sprouts, pointed, heat sprouts	some heat sprouts, chain tubers, heterogenous size, nice shape, blocky, , heat sprouts+	3, 3.5, 3.2, 2.6	2.8, 3.5, 3.6, 3.8
Reveille Russet	TXAVRU	heterogenous size, small, small, nice shape, lees deer damage than RR, nice shape, lees deer damage than RR, nice shape, nice shape	BOT, very nice, ZC 10%, very slight vascular discoloration, ,	4.6, 4.3, 3.6, 4.2	3.6, 3.8, 4.6, 4.5
CO09205-2RU	SW	heterogenous size, small, small, nice shape, lees deer damage than RR, nice shape, lees deer damage than RR, nice shape, nice shape	, , ,	3.5, 3.5, 3.6, 3.6	4, 3.6, 3.6, 4.2
Fortress Russet	CO	small, round, deer damage+, pointed, small, round,	blocky, , light yellow flesh, too round,	3.6, 2.8, 3,	3.5, 2.8, 2.6,
Russet Norkotah	WR	smaller tubers, pointed, small, round, pointed	, , small, pear shaped+, pointed+, poor shape+, blocky+	4, 4, 3.6, 3.8	2.6, 3.8, 3.8, 3.6
COTX05095-2RU/Y	SW	small, round, deer damage+, pointed, small, round,	blocky, , light yellow flesh, too round,	2.8, 2.6, 2.5,	2.8, 0, 2.8,
AOTX05043-1RU	SW	smaller tubers, pointed, small, round, pointed	, , small, pear shaped+, pointed+, poor shape+, blocky+	3.6, 2.6, 2.5, 3.2	2.5, 2.3, 2, 3

Western and Southwestern Regional Red Trial, Springlake

This trial consisted of four entries, including the check varieties Red LaSoda and Chieftain.

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

- Chieftain and COTX00104-6R had the highest general rating (Table 3a).
- Chieftain had the highest total and marketable yield. PORTX03PG25-2R/R had the highest yield of less than 4 oz. tubers (Table 3a).
- Chieftain had the highest percentage of marketable yield. PORTX03PG25-2R/R had the highest percent of less than 4 oz. tubers (Table 3b).
- PORTX03PG25-2R/R had the highest average number of tubers per plant (Table 3c).
- Red LaSoda had the deepest eyes (Table 3d).

Comments on entries:

- | | | |
|--------------------|-------------|---|
| • Chieftain | Oblong Red | deer, light skin, nice shape, large tubers, parent BOT- |
| • Red LaSoda | Round Red | deer, large tubers, very white flesh, deep eyes |
| • PORTX03PG25-2R/R | Long Purple | oblong fingerling, late, heavy set, smaller, very dark flesh |
| • COTX00104-6R | Round Red | very dark skin, low tuber set, intense red skin, russetting, large tubers, road map, early, Drop, BOT++ |

Summary:

Chieftain was the outstanding entry based on all factors. PORTX03PG25-2R/R has potential for a specialty fingerling market.

Springlake
Table 3a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 4 entries in the Western Regional Red Trial grown near Springlake, Texas-2017.

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 Field	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz					
Chieftain	WR	325.5	250.6	141.7	84.7	24.2	0.0	71.9	3.0	4.3	4.4
Red LaSoda	WR	307.9	222.8	111.3	86.9	24.5	0.0	62.2	22.8	3.5	4.0
PORTX03PG25-2R/R	WR	244.6	34.2	34.2	0.0	0.0	0.0	200.7	9.7	3.5	3.9
COTX00104-6R	WR	234.0	170.4	110.1	60.3	0.0	0.0	59.6	3.9	3.9	4.3
Average		278.0	169.5	99.3	58.0	12.2	0.0	98.6	9.9	3.8	4.1
L.S.D. (.05)		53.1	57.1	54.1	51.8	16.5	ns	26.3	13.4	0.3	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 4 entries in the Western Regional Red Trial grown near Springlake, Texas-2017.

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	WR	76.8	42.4	27.0	7.5	0.0	22.3	0.9	1.056	12.5	Oblong	Red
Red LaSoda	WR	71.3	36.1	26.8	8.4	0.0	20.2	8.5	1.055	12.3	Round	Red
PORTX03PG25-2R/R	WR	14.1	14.1	0.0	0.0	0.0	81.8	4.2	1.055	12.4	Long	Purple
COTX00104-6R	WR	73.0	46.9	26.0	0.0	0.0	25.3	1.7	1.048	11.2	Round	Red
Average		58.8	34.9	19.9	4.0	0.0	37.4	3.8	1.054	12.1		
L.S.D. (.05)		10.8	13.8	18.7	5.4	ns	7.0	6.3	0.006	0.3		

Springlake
Table 3c.

Average number of tubers per plant, tuber weight, number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, and percent dead vine at vine kill of 4 entries in the Western Regional Red Trial grown near Springlake, Texas-2017.

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	
Chieftain	WR	7.1	3.8	2.0	100	100	1.5	3.7	3.5	3.4	19
Red LaSoda	WR	6.3	4.1	2.1	100	100	1.6	4.1	3.6	4.4	13
PORTX03PG25-2R/R	WR	13.9	1.5	2.4	100	100	1.5	3.5	3.9	3.5	3
COTX00104-6R	WR	5.0	3.9	1.4	92	100	1.9	2.8	3.9	3.1	4
Average		8.1	3.3	2.0	98	100	1.6	3.5	3.7	3.6	9
L.S.D. (.05)		2.2	0.7	0.4	5	ns	ns	0.2	ns	0.4	6

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 4 entries in the Western Regional Red Trial grown near Springlake, Texas-2017.

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
Chieftain	WR	1.0	3.0	1.0	3.1	2.5	5.0	5.0	5.0	5.0	3.0	3	0	0	0
Red LaSoda	WR	1.0	2.5	1.0	1.5	3.3	5.0	5.0	5.0	5.0	2.9	0	0	15	0
PORTX03PG25-2R/R	WR	4.0	4.0	1.0	4.0	4.3	5.0	5.0	5.0	5.0	3.5	0	0	0	0
COTX00104-6R	WR	1.0	2.5	1.0	3.9	4.3	5.0	5.0	5.0	5.0	3.8	5	0	0	3
Average		1.8	3.0	1.0	3.1	3.6	5.0	5.0	5.0	5.0	3.3	2	0	4	1
L.S.D. (.05)		ns	ns	ns	0.2	0.4	ns	ns	ns	ns	0.5	ns	ns	7	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 4 entries in the Western Regional Red Trial grown near Springlake, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Chieftain	WR	DEER, , light skin,	nice shape, BOT-, large tubers, parent, ,	4.6, 4, 4, 4.5	4.5, 4, 4.6, 4.5
Red LaSoda	WR	DEER, , ,	large tubers, very white flesh, deep eyes, , ,	3.5, 3.5, 3.6, 3.5	3.5, 4, 4.5, 3.8
PORTX03PG25-2R/R	WR	oblong fingerling, late, heavy set, smaller, very dark skin, Drop, low tuber set, , intense red skin,	fingerling, very dark flesh, , ,	4, 3, 3.5, 3.5	3.6, 3.6, 4.2, 4
COTX00104-6R	WR	russetting	large tubers, road map, early, BOT++, ,	4, 3.8, 3.8, 4	4.3, 4.2, 4.2, 4.5

Western and Southwestern Regional Red/Yellow Trial, Springlake

This trial consisted of seven entries.

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

- AC03534-2R/Y, CO05035-1PW/Y, NDTX059759-3RY/Y Pinto, and COA07365-4RY had best of trial designations, while CO05035-1PW/Y and NDTX059759-3RY/Y Pinto had the highest general ratings (Table 4a and 4f).
- AC03534-2R/Y had the highest total yield, while CO05035-1PW/Y had the highest marketable yield (Table 4a).
- CO05035-1PW/Y had the highest yield of 4-6 oz. tubers. ATTX05175S-1R/Y and AC03534-2R/Y had the highest yield of less than 4 oz. tubers (Table 4a).
- NDTX059759-3RY/Y Pinto had the highest percentage of marketable yield. ATTX05175S-1R/Y, CO09079-5PW/Y, and ATX02263-1R/Y had the highest percentage of less than 4 oz. tubers (Table 4b).
- ATTX05175S-1R/Y and AC03534-2R/Y had the highest average number of tubers per plant (Table 4c).
- ATTX05175S-1R/Y and NDTX059759-3RY/Y Pinto were the latest in maturity, while CO09079-5PW/Y was the earliest in maturity (Table 4c).
- ATTX05175S-1R/Y and CO09079-5PW/Y had the darkest yellow flesh color (Table 4d).

Comments on entries:

- | | | |
|-------------------|--------------------|--|
| • AC03534-2R/Y | Round Red | high tuber set, intense skin color++, nice shape and small size, smooth, nice, lots of B's, some road map, BOT, FC=3.1 |
| • CO05035-1PW/Y | Round Purple-White | little internal green, heat sprout, spectacle, yellow green, light purple, shocking color combination, high set, nice shape, some internal problems, large tubers, road map, BOT, FC=2.6 |
| • ATTX05175S-1R/Y | Round Red | late, lighter and not bad, high tuber set, lots of B's, small, uniform, some deep eyes, FC=3.5 |

- NDTX059759-3RY/Y Pinto Oblong Red-Yellow David likes color, spectacle, pleasant color, elegant, nice color combination, very light purple streaks, flat, BOT, FC=3.3
- COA07365-4RY Oblong Red high tuber se, intense skin color, medium flesh, uniform, pretty, deer damage, looks good, smooth, very nice, lots of B's, BOT, FC=3.2
- CO09079-5PW/Y Oblong Purple-White David likes, spectacle, small++, pear shape+, FC=3.6
- ATX02263-1R/Y Oblong Red oblong, bright skin color, small potato, poor shape??, nice skin, uniform, road map, FC=2.4

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

Summary:

AC03534-2R/Y, CO05035-1PW/Y, NDTX059759-3RY/Y Pinto, and COA07365-4RY were the outstanding entries 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 7 entries in the Western and Southwestern Regional Red/Yellow Trial grown near Springlake, Texas-2017.

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 Field	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz					
AC03534-2R/Y	WR	270.3	81.6	75.7	5.9	0.0	0.0	176.8	11.9	3.9	3.8
CO05035-1PW/Y	WR	260.5	150.6	125.3	25.2	0.0	0.0	100.3	9.7	3.1	4.3
ATTX05175s-1R/Y	TXADVR/Y	235.8	48.6	48.6	0.0	0.0	0.0	178.4	8.8	3.2	3.4
NDTX059759-3RY/Y Pinto	WR	184.1	110.5	74.2	36.3	0.0	0.0	65.3	8.3	3.7	4.3
COA07365-4RY	WR	183.6	58.6	56.4	2.2	0.0	0.0	122.0	2.9	3.8	3.8
CO09079-5PW/Y	SW	177.9	30.6	27.5	3.1	0.0	0.0	134.7	12.6	3.1	3.6
ATX02263-1R/Y	TXADVR/Y	116.3	13.7	13.7	0.0	0.0	0.0	87.6	15.0	3.4	2.9
Average		204.1	70.6	60.2	10.4	0.0	0.0	123.6	9.9	3.5	3.7
L.S.D. (.05)		60.5	50.8	15.1	10.2	ns	ns	53.0	6.9	0.5	0.4

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 7 entries in the Western and Southwestern Regional Red/Yellow Trial grown near Springlake, Texas-2017.

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				
AC03534-2R/Y	WR	30.7	28.4	2.3	0.0	0.0	65.0	4.3	1.055	12.3	Round	Red
CO05035-1PW/Y	WR	55.7	46.6	9.1	0.0	0.0	40.5	3.8	1.059	13.1	Round	Purple-White
ATTX05175s-1R/Y	TXADVR/Y	20.6	20.6	0.0	0.0	0.0	75.8	3.6	1.059	13.0	Round	Red
NDTX059759-3RY/Y Pinto	WR	61.9	40.7	21.2	0.0	0.0	33.8	4.3	1.055	12.4	Oblong	Red-Yellow
COA07365-4RY	WR	31.0	30.1	0.9	0.0	0.0	67.3	1.7	1.063	13.8	Oblong	Red
CO09079-5PW/Y	SW	18.7	17.0	1.8	0.0	0.0	74.0	7.3	1.058	12.9	Oblong	Purple-White
ATX02263-1R/Y	TXADVR/Y	11.9	11.9	0.0	0.0	0.0	75.5	12.6	1.060	13.3	Oblong	Red
Average		32.9	27.9	5.0	0.0	0.0	61.7	5.4	1.059	13.0		
L.S.D. (.05)		16.9	15.1	3.6	ns	ns	16.6	3.1	0.004	0.3		

Springlake
Table 4c.

Average number of tubers per plant, tuber weight, number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, and percent dead vine at vine kill of 7 entries in the Western and Southwestern Regional Red/Yellow Trial grown near Springlake, Texas-2017.

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	
AC03534-2R/Y	WR	12.9	1.8	2.5	93	100	2.0	3.7	3.6	3.7	15
CO05035-1PW/Y	WR	8.4	2.8	1.7	93	98	1.5	3.5	3.9	3.6	10
ATTX05175s-1R/Y	TXADVY/Y	14.2	1.4	1.5	79	100	1.5	3.1	4.2	3.3	4
NDTX059759-3RY/Y Pinto	WR	5.2	3.1	1.7	83	100	1.5	3.5	4.2	3.5	1
COA07365-4RY	WR	7.5	2.1	2.4	96	100	1.6	3.7	3.5	3.7	16
CO09079-5PW/Y	SW	8.1	1.9	1.8	95	100	1.5	3.2	3.3	3.3	23
ATX02263-1R/Y	TXADVY/Y	5.5	1.7	1.5	91	100	1.5	2.9	3.6	3.1	10
Average		8.8	2.1	1.9	90	100	1.6	3.4	3.8	3.4	11
L.S.D. (.05)		3.0	0.5	0.5	ns	ns	0.1	0.3	0.4	0.2	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 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 7 entries in the Western and Southwestern Regional Red/Yellow Trial grown near Springlake, Texas-2017.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁵	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
AC03534-2R/Y	WR	3.1	2.0	1.0	4.0	3.5	5.0	5.0	5.0	5.0	4.1	0	0	0	0
CO05035-1PW/Y	WR	2.6	2.0	1.0	4.0	4.3	5.0	5.0	5.0	5.0	4.4	0	0	5	10
ATX05175s-1R/Y	TXADVR/Y	3.5	2.0	1.0	3.5	3.9	5.0	5.0	5.0	5.0	3.4	0	0	5	0
NDTX059759-3RY/Y Pinto	WR	3.3	3.0	1.0	4.0	4.1	5.0	5.0	5.0	5.0	3.4	0	0	0	3
COA07365-4RY	WR	3.2	3.0	1.0	4.0	4.1	5.0	5.0	5.0	5.0	4.0	0	0	0	0
CO09079-5PW/Y	SW	3.6	3.0	1.0	3.6	3.7	5.0	5.0	5.0	5.0	4.0	0	0	8	0
ATX02263-1R/Y	TXADVR/Y	2.4	3.0	1.0	4.0	3.8	5.0	5.0	5.0	5.0	4.0	0	0	0	0
Average		3.1	2.6	1.0	3.9	3.9	5.0	5.0	5.0	5.0	3.9	0	0	3	2
L.S.D. (.05)		0.4			0.1	ns	ns	ns	ns	ns	0.4	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 4e.

Notes and general rating for all reps of 7 entries in the Western and Southwestern Regional Red/Yellow Trial grown near Springlake, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
AC03534-2R/Y	WR	high tuber no, intense skin color++, , Good color, David nice shape and small,	small, smooth, nice, lots of B's, , some road map, BOT,	4.5, 4, 3.6, 3.6	4.2, 3.6, 3.6, 3.8
CO05035-1PW/Y	WR	little internal green, David heat sprout,spectacle, yellow green, light purple, shocking color combination, green	high set, nice shape, some internal problems, large tubers, road map, BOT,	3.5, 3, 3, 3	4.5, 4.5, 4.4, 3.8
ATTX05175s-1R/Y	TXADVR/Y	late, David lighter and not bad, high tuber no,	lots of B's, small, uniform, some deep eyes, ,	2.5, 3, 3.5, 3.7	3.5, 3.5, 3.8, 2.8
NDTX059759-3RY/Y Pinto	WR	David like color, spectacle, pleasant color, elegant, nice color combination,	30% very light purple streaks, BOT, 70% very light purple streaks, 30% very light purple streaks, 60% very	3.6, 3.5, 3.8, 3.8	4.5, 3.7, 4.3, 4.5
COA07365-4RY	WR	high tuber no, intense skin color, medium flesh, uniform, Pretty, DEER, David looks good, intense red skin,	smooth, very nice, BOT, lots of B's, ,	4.5, 3.5, 3.6, 3.6	4.4, 3.6, 3.6, 3.6
CO09079-5PW/Y	SW	David likes, spectacle, small++, , ,	pear shape+, small potato, ,	3, 3.5, 3, 3	3.5, 3.6, 3.6, 3.6
ATX02263-1R/Y	TXADVR/Y	oblong, , bright skin color,	small potato, oblong, poor shape??, nice skin, uniform, road map, ,	3, 3.6, 3.6, 3.5	2.5, 3, 3.5, 2.5

Western and Southwestern Regional White/Yellow Trial, Springlake

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

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

- CO09128-5W/Y and A06336-5Y had high general ratings and best of trial notations, while Yukon Gold and CO09127-3W/Y also had high general ratings (Table 5a and 5e).
- CO09127-3W/Y had the highest total yield, while Yukon Gold had the highest marketable and yield of over 10 oz. tubers (Table 5a).
- CO09127-3W/Y had the highest yield of less than 4 oz. tubers (Table 5a).
- Yukon Gold had the highest percentage of marketable yield, while CO09128-5W/Y and CO09128-3W/Y had the highest percentage of less than 4 oz. tubers (Table 5b).
- Yukon Gold had the highest specific gravity (Table 5b).
- CO09128-5W/Y and CO09128-3W/Y had the highest number of tubers per plant (Table 5c).
- CO09218-4W/Y was the latest in maturity, while CO09128-5W/Y, CO09127-3W/Y, and CO09128-3W/Y were the earliest in maturity (Table 5c).
- CO09128-5W/Y had the darkest yellow flesh color (Table 5d).

Comments on entries:

- | | | |
|----------------|--------------------------|---|
| • CO09127-3W/Y | Round White | nice skin color, smaller than Yukon Gold, medium, nice flesh, feathering, lots of B's, high set, FC=3.3 |
| • Yukon Gold | Oblong White | large tubers, nice shape, poor internals++, FC=2.8 |
| • CO09218-4W/Y | Oblong White | uniform, small tubers, pear shape, heat sprouts++, poor internals++, drop+++, FC=3.5 |
| • CO09128-5W/Y | Round White | small, lots of B's, uniform shape and size, parent, BOT for small potato, FC=3.7 |
| • A06336-5Y | Round Champagne/Pine Eye | small, medium, smooth, nice shape and skin, heat sprouts, BOT- for small potato, FC=3.0 |

- CO09128-3W/Y Round White lots of very small tubers, high set, parent, nice for small potato, FC=3.3
- A06336-2Y Oblong Champagne/Pine Eye Bruce likes, skin color??. red eye, poor shape, FC=2.7

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

Summary:

CO09128-5W/Y and A06336-5Y were the outstanding entries bases on all factors.

Springlake
Table 5a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 7 entries in the Western and Southwestern Regional White/Yellow Trial grown near Springlake, Texas-2017.

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 Field	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz						10-18 oz
CO09127-3W/Y	10.000	246.8	32.7	24.9	7.8	0.0	0.0	213.7	0.5	3.8	3.6
Yukon Gold	8.000	244.2	188.4	41.3	109.4	37.7	0.0	53.6	2.2	4.0	3.6
CO09218-4W/Y	13.000	214.0	46.2	38.7	7.4	0.0	0.0	145.4	22.5	2.5	2.1
CO09128-5W/Y	12.000	195.7	2.2	2.2	0.0	0.0	0.0	193.4	0.0	2.3	3.8
A06336-5Y	9.000	157.3	20.0	19.4	0.7	0.0	0.0	137.2	0.0	2.3	3.8
CO09128-3W/Y	11.000	136.2	0.0	0.0	0.0	0.0	0.0	136.2	0.0	2.0	3.5
A06336-2Y	WR	131.5	26.5	25.8	0.8	0.0	0.0	102.5	2.5	2.0	2.8
Average		189.4	45.1	21.8	18.0	5.4	0.0	140.3	4.0	2.7	3.3
L.S.D. (.05)		44.3	28.3	10.5	21.2	6.0	ns	31.0	6.5	0.5	0.1

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 7 entries in the Western and Southwestern Regional White/Yellow Trial grown near Springlake, Texas-2017.

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				
CO09127-3W/Y	10.000	13.4	10.1	3.3	0.0	0.0	86.4	0.2	1.061	13.5	Round	White
Yukon Gold	8.000	76.8	16.6	44.4	15.8	0.0	22.4	0.8	1.069	14.9	Oblong	White
CO09218-4W/Y	13.000	21.9	18.0	3.8	0.0	0.0	68.2	9.9	1.050	11.4	Oblong	White
CO09128-5W/Y	12.000	1.0	1.0	0.0	0.0	0.0	99.0	0.0	1.064	14.0	Round	White
A06336-5Y	9.000	12.8	12.2	0.6	0.0	0.0	87.2	0.0	1.059	13.1	Round	Champagne/Pine Eye
CO09128-3W/Y	11.000	0.0	0.0	0.0	0.0	0.0	100.0	0.0	1.054	12.2	Round	White
A06336-2Y	WR	20.5	19.9	0.5	0.0	0.0	77.8	1.7	1.062	13.7	Oblong	Champagne/Pine Eye
Average		20.9	11.1	7.5	2.3	0.0	77.3	1.8	1.060	13.2		
L.S.D. (.05)		5.4	4.8	4.4	2.2	ns	4.8	2.6	0.003	0.4		

Springlake
Table 5c.

Average number of tubers per plant, tuber weight, number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, and percent dead vine at vine kill of 7 entries in the Western and Southwestern Regional White/Yellow Trial grown near Springlake, Texas-2017.

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	
CO09127-3W/Y	10.000	11.2	1.8	3.9	100	100	2.0	3.7	3.3	3.7	25
Yukon Gold	8.000	4.3	4.7	1.5	98	100	1.5	3.7	3.4	3.8	26
CO09218-4W/Y	13.000	8.8	2.0	2.2	81	100	1.5	3.6	5.0	3.7	0
CO09128-5W/Y	12.000	12.4	1.3	4.5	100	100	1.8	3.8	3.0	3.9	35
A06336-5Y	9.000	7.5	1.8	2.9	100	100	1.8	3.6	3.5	3.7	21
CO09128-3W/Y	11.000	12.2	0.9	2.4	100	100	1.5	3.3	3.3	3.5	29
A06336-2Y	WR	4.7	2.3	2.9	100	100	1.5	3.8	3.6	3.8	24
Average		8.7	2.1	2.9	97	100	1.6	3.6	3.6	3.7	23
L.S.D. (.05)		2.2	0.3	0.5	6	ns	ns	0.2	0.2	ns	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 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 7 entries in the Western and Southwestern Regional White/Yellow Trial grown near Springlake, Texas-2017.

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
CO09127-3W/Y	10.000	3.3	2.0	1.0	3.8	2.0	5.0	5.0	5.0	5.0	3.0	0	0	0	3
Yukon Gold	8.000	2.8	3.0	1.0	3.8	1.0	5.0	5.0	5.0	5.0	2.4	10	0	0	38
CO09218-4W/Y	13.000	3.5	3.0	1.5	4.0	1.0	5.0	5.0	5.0	5.0	3.8	10	0	0	18
CO09128-5W/Y	12.000	3.7	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
A06336-5Y	9.000	3.0	2.0	1.5	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO09128-3W/Y	11.000	3.3	1.5	1.5	4.0	1.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
A06336-2Y	WR	2.7	3.0	1.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		3.2	2.2	1.2	3.9	1.4	5.0	5.0	5.0	5.0	4.2	3	0	0	8
L.S.D. (.05)		ns	ns	ns	ns	ns	ns	ns	ns	ns	0.4	7	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 5e.

Notes and general rating for all reps of 7 entries in the Western and Southwestern Regional White/Yellow Trial grown near Springlake, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
CO09127-3W/Y	10.000	nice skin color, smaller than YG, , medium,	nice flesh and skin, feathering, lots of B's, high set,	nice skin co 4, 3.5, 4, 3.5	3.5, 3.6, 3.7, 3.5
Yukon Gold	8.000	large tubers, , ,	larger tubers, nice shape, poor internals++, , ,	large tubers, 4, 4, 4, 4	3.8, 3.6, 3.5, 3.5
CO09218-4W/Y	13.000	, uniform, small tubers, ,	pear shape, heat sprouts++, , drop+++ , poor internals++ , uniform, si	2, 2, 3, 3	2.5, 2, 2, 2
CO09128-5W/Y	12.000	, , , small	BOT for small potato, lots of B's, uniform shape and size, parent,	, , , smallBC 2, 3, 2, 2	3.8, 3.7, 3.8, 3.8
A06336-5Y	9.000	, small, medium, ,	small, smooth, nice shape and skin, heat sprouts, BOT- for small potato, nice skin	, small, med 3, 2, 2, 2	3.8, 3.7, 3.7, 3.8
CO09128-3W/Y	11.000	lots of very small tubers, , ,	, , very small tubers, high set, parent, nice for small potato,	lots of very : 2, 2, 2, 2	3.5, 3.5, 3.5, 3.5
A06336-2Y	WR	, Bruce likes, David not a bad red, ,	skin color??, red eye, poor shape, ,	2, 2, 2, 2	2.8, 2.8, 2.8, 2.8

Outstanding Texas Advanced Chip Selections, 2017

Overall Summary- Springlake and Dalhart: The Texas Advanced Chip Selection Trial at Springlake included twenty-nine entries, with forty-four entries planted at Dalhart. Atlantic was the check variety for both locations. Based on both trials 37 clones will be re-evaluated in the 2018 season. (AORTX09032-3W, AORTX09033-11W, AORTX09033-4W, AORTX09037-1W/Y, AORTX09037-4W/Y, AORTX09037-5W/Y, AORTX09144-2W, ATX11482-3W, ATX13126-3W, ATX13126-5Ru, ATX13127-1Ru, ATX13134-3W/Y, COTX12235-2W, COTX12428-1W, COTX14284-2Ru/Y, NDTX059828-2WZC, NDTX113030C-3W, NDTX12135-1W, NDTX12203AB-1W, NDTX1244-3W/Y, NDTX1246-3W, NDTX1246-5W/Y, NDTX13224CAB-1W, NDTX13280CB-3W, NDTX14362AB-1W, NDTX14475-1W, TX05249-10W, TX09396-1W, TX12483-6W, TX12484-1WZC, TX12484-2WZC, TX12484-3WZC, TX13580-1W, TX14668-3WZC, TX14695-2WZC, TX14710-4WZC, and TX14710-7WZC). The following clones will be entered in the National Chip Processing Trial (AORTX09037-5W/Y, AORTX09144-2W, COTX12235-2W, COTX12428-1W, NDTX12203AB-1W, NDTX1244-3W/Y, NDTX1246-3W, TX14695-2W ZC, TX13580-1W, TX12483-6W, NDTX14362AB-1W, and NDTX1246-5W/Y)

Texas Advanced Chip Trial, Springlake

This chip trial consisted of twenty-nine entries, including the check variety Atlantic.

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

- Atlantic, NDTX1244-3W/Y, and AORTX09037-1W/Y had the highest general ratings for tuber appearance. (Tables 6a).
- Atlantic had the highest total and marketable yield. NDTX1244-3W/Y had the highest yield of less than 4 oz. tubers (Table 6a).
- Atlantic had the highest percentage of marketable yield (Table 6b).
- TX12474-1R/R had the highest percentage of less than 4 oz. tubers (Table 6b).
- Atlantic, TX12484-3W ZC, TX05249-10W, and TX12483-5W had the highest specific gravity (Table 6b).
- AORTX09037-4W/Y, AORTX09144-2W, NDTX113030C-3W were the latest in maturity, while NDTX1246-5W/Y, TX12484-3W ZC, TX12484-1W ZC, AORTX09033-4W, and NDTX12203AB-1W were the earliest in maturity (Table 6c).

- NDTX12203AB-1W had the best chip rating and 60% percent good chips (Table 6f).

Comments on entries:

- Atlantic Round White buff skin, larger tubers, ZC 10%, poor internals, CR=3.7, Chip Notes: 47% good chip, 1mech
- NDTX1244-3W/Y Round White high uniform set, small, sticky stolon, parent for small, CR=4.0, Chip Notes: 30% good chip, 1 dark
- AORTX09037-1W/Y Round White nice shape, small, light yellow flesh, very round, TC, CR=4.3, Chip Notes: 21% good chip
- NDTX1246-3W Round White sticky stolon, heat sprouts, flat, not yellow flesh, CR=3.2, Chip Notes: 39% good chip
- COTX12428-1W Round White heat sprouts++, smooth skin, CR=5.3, Chip Notes: 0% good chip, 5 dark
- AORTX09033-11W Round White small, lots of tubers, growth cracks+, rough, nice flesh, drop, CR=3.6, Chip Notes: 58% good chip
- AORTX09037-4W/Y Round White heat sprouts, pear shape, uneven flesh, CR=4.3, Chip Notes: 20% good chip
- TX12484-2W ZC Round White poor shape, nice skin, pink eyes+, CR=3.7, Chip Notes: 5% good chip
- TX12483-4W Round White not uniform size and shape, larger tubers, sticky stolon+, nice flesh, rough, deep stolon attachment, shoulder, uneven skin, CR=3.4, Chip Notes: 50% good chip
- AORTX09033-4W Round White hollow heart, growth crack, nice skin, culls, CR=3.6, Chip Notes: 40% good chip
- COTX12235-2W Round White uneven russetting, growth cracks, CR=4.4, Chip Notes: 35% good chip
- TX12484-3W ZC Round White smooth skin, nice flesh, CR=3.5, Chip Notes: 16% good chip
- TX12484-1W ZC Round White some large tubers, mixed yellow and white skin, poor shape, pink eyes, light skin, CR=3.5, Chip Notes: 24% good chip
- AORTX10247-1W/Y Round White sticky stolon, uneven skin color, flat, CR=4.0, Chip Notes: 30% good chip

- NDTX1246-5W/Y Round White mixed white and yellow flesh, CR=4.3, Chip Notes: 41% good chip, 9 dark
- TX12483-6W Round White russet skin, uneven russetting, circular russet defect, alligator skin, CR=3.4, Chip Notes: 40% good chip, 1 dark
- AORTX09032-3W Round White small, uniform size and shape, light set, smooth skin, CR=4.0, Chip Notes: 35% good chip
- AORTX09144-2W Round White uniform shape, CR=5.0, Chip Notes: 10% good chip, 18 brown/dark
- NDTX113467CB-1W Round White small, sticky stolon, heat sprouts, uniform size and shape, CR=4.0, Chip Notes: 55% good chip, 5 dark
- TX05249-10W Round White russet skin, smooth shiny skin, nice size, nice flesh, CR=3.0, Chip Notes: 55% good chip
- TX12483-5W Round White mixed white and yellow flesh, nice flesh, shoulders, CR=3.4, Chip Notes: 53% good chip, different from other rep, looks greasy and/or more yellow
- NDTX113030C-3W Round White very small, light skin color, sticky stolon, CR=3.5, Chip Notes: 50% good chip, 1 mech
- NDTX12135-1W Round White very low yield, heat sprouts, small, light set, CR=3.4, Chip Notes: 50% good chip, 4 brown/dark
- TX12474-1R/R Round Red red skin, small uniform size and shape, road map, poor internals, drop, CR=4.8, Chip Notes: 0% good chip, 21 dark
- AORTX09033-14W Round White deer damage, small, light set, smooth skin, very nice flesh, light shiny skin, CR=4.2, Chip Notes: 45% good chip
- TX13580-1W Round White very low yield, small, low set, buff skin, nice skin, shape, and flesh, CR=3.3, Chip Notes: 47% good chip, 5 dark
- TX09429-1P/P Round Purple small purple skin and flesh, very few tubers, purple, road map+, some white streaks in flesh+, silver scurf, CR=4.0, Chip Notes: 16% good chip, 3 dark
- ATTX11484-3W Round White very low yield, mixed skin color, very small, CR=4.8, Chip Notes: 21% good chip, 13 dark
- NDTX12203AB-1W Round White CR=2.5, Chip Notes: 60% good chip

¹CR=chip rating 1=light to 5= dark

Summary:

NDTX12203AB-1W was the outstanding entry, based chip quality.

Atlantic had the highest yield.

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Table 6a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 29 entries in the Texas Advanced Chip Selection Trial grown near Springlake, Texas-2017.

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 Field	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz					
Atlantic	WR	287.0	193.6	69.7	94.7	29.2	1.9	89.0	2.4	3.5	3.5
NDTX1244-3W/Y	NATCH 17 Tier 1	282.8	21.4	21.4	0.0	0.0	0.0	248.9	12.4	3.0	3.6
AORTX09037-1W	NATCH 17 Tier 2	216.4	71.9	37.3	34.6	0.0	0.0	136.9	7.6	3.3	3.4
NDTX1246-3W	NATCH 17 Tier 1	207.4	52.5	41.5	11.1	0.0	0.0	127.2	27.7	3.0	3.0
COTX12428-1W	NATCH 17 Tier 1	178.4	40.1	33.9	6.2	0.0	0.0	107.9	30.4	3.4	3.3
AORTX09033-11W	NATCH 17 Tier 1	176.3	19.4	19.4	0.0	0.0	0.0	76.1	80.9	3.3	1.5
AORTX09037-4W/Y	NATCH 17 Tier 2	173.5	58.1	34.6	23.5	0.0	0.0	105.1	10.4	3.2	3.2
TX12484-2W ZC	TXCH	166.2	68.5	47.5	19.4	1.6	0.0	96.3	1.4	2.9	3.3
TX12483-4W	TXCH	159.8	73.1	40.8	30.9	1.4	0.0	85.7	1.0	2.8	3.1
AORTX09033-4W	NATCH 17 Tier 2	159.7	55.3	31.8	23.5	0.0	0.0	68.5	36.0	3.3	2.6
COTX12235-2W	NATCH 17 Tier 1	150.0	32.5	32.5	0.0	0.0	0.0	102.3	15.2	3.2	2.8
TX12484-3W ZC	TXCH	134.6	60.6	40.3	18.9	1.4	0.0	74.0	0.0	2.7	3.2
TX12484-1W ZC	TXCH	123.1	54.6	28.3	24.9	1.4	0.0	68.5	0.0	2.5	3.0
AORTX10247-1W/Y	NATCH 17 Tier 2	122.4	44.3	27.7	16.6	0.0	0.0	78.1	0.0	2.8	2.5
NDTX1246-5W/Y	TXCH	115.8	40.4	24.5	15.9	0.0	0.0	73.3	2.1	3.1	3.0
TX12483-6W	TXCH	105.4	33.2	25.8	7.4	0.0	0.0	71.2	1.0	1.3	2.7
AORTX09032-3W	NATCH 17 Tier 2	102.3	40.1	36.0	4.1	0.0	0.0	62.2	0.0	3.2	2.6
AORTX09144-2W	NATCH 17 Tier 1	98.8	30.4	16.6	13.8	0.0	0.0	65.0	3.4	3.0	2.0
NDTX113467CB-1W	NATCH 17 Tier 1	96.8	14.6	11.8	2.8	0.0	0.0	76.7	5.5	3.0	2.3
TX05249-10W	TXCH	90.6	36.6	22.1	14.5	0.0	0.0	53.9	0.0	2.7	3.1
TX12483-5W	TXCH	88.7	53.7	33.4	20.3	0.0	0.0	35.0	0.0	2.6	2.7
NDTX113030C-3W	NATCH 17 Tier 2	87.8	35.3	26.3	9.0	0.0	0.0	52.5	0.0	2.6	2.5
NDTX12135-1W	TXCH	84.4	11.8	11.8	0.0	0.0	0.0	71.2	1.4	2.2	2.3
TX12474-1R/R	TXCH	80.7	2.5	2.5	0.0	0.0	0.0	75.8	2.3	2.7	2.8
AORTX09033-14W	TXCH	74.7	25.2	20.5	4.6	0.0	0.0	49.6	0.0	2.4	2.6
TX13580-1W	TXCH	71.3	15.6	13.7	1.8	0.0	0.0	55.3	0.4	2.5	2.5
TX09429-1P/P	TXCH	58.6	15.2	12.0	3.3	0.0	0.0	43.3	0.0	1.9	2.2
ATTX11484-3W	TXCH	54.6	26.7	12.2	13.1	1.4	0.0	27.0	1.0	2.0	2.1
NDTX12203AB-1W	NATCH 17 Tier 1	27.5	4.0	4.0	0.0	0.0	0.0	23.5	0.0	1.5	1.5
Average		130.2	42.5	26.9	14.3	1.3	0.1	79.3	8.4	2.7	2.7
L.S.D. (.05)		49.7	27.6	14.6	23.6	23.6	ns	32.2	1.8	ns	0.6

¹ 1=very poor to 5= excellent

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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 29 entries in the Texas Advanced Chip Selection Trial grown near Springlake, Texas-2017.

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				
Atlantic	WR	67.6	24.4	31.5	11.7	0.8	30.9	0.7	1.072	15.3	Round	White
NDTX1244-3W/Y	NATCH 17 Tier 1	7.6	7.6	0.0	0.0	0.0	88.0	4.4	1.059	13.0	Round	White
AORTX09037-1W	NATCH 17 Tier 2	33.2	17.3	16.0	0.0	0.0	63.3	3.5	1.060	13.3	Round	White
NDTX1246-3W	NATCH 17 Tier 1	25.3	20.0	5.3	0.0	0.0	61.3	13.3	1.069	14.8	Round	White
COTX12428-1W	NATCH 17 Tier 1	22.5	19.0	3.5	0.0	0.0	60.5	17.1	1.052	11.8	Round	White
AORTX09033-11W	NATCH 17 Tier 1	11.0	11.0	0.0	0.0	0.0	43.1	45.9	1.067	14.5	Round	White
AORTX09037-4W/Y	NATCH 17 Tier 2	33.5	19.9	13.5	0.0	0.0	60.6	6.0	1.061	13.4	Round	White
TX12484-2W ZC	TXCH	41.1	28.5	11.6	1.0	0.0	58.0	0.9	1.063	13.7	Round	White
TX12483-4W	TXCH	43.2	25.9	16.6	0.8	0.0	55.9	0.9	1.064	13.9	Round	White
AORTX09033-4W	NATCH 17 Tier 2	34.6	19.9	14.7	0.0	0.0	42.9	22.5	1.056	12.6	Round	White
COTX12235-2W	NATCH 17 Tier 1	21.7	21.7	0.0	0.0	0.0	68.2	10.1	1.050	11.4	Round	White
TX12484-3W ZC	TXCH	44.9	30.1	13.8	0.9	0.0	55.1	0.0	1.070	14.9	Round	White
TX12484-1W ZC	TXCH	45.0	23.9	19.8	1.4	0.0	55.0	0.0	1.062	13.6	Round	White
AORTX10247-1W/Y	NATCH 17 Tier 2	36.2	22.6	13.6	0.0	0.0	63.8	0.0	1.054	12.1	Round	White
NDTX1246-5W/Y	TXCH	35.7	21.5	14.2	0.0	0.0	62.9	1.4	1.062	13.6	Round	White
TX12483-6W	TXCH	34.2	26.8	7.3	0.0	0.0	65.3	0.6	1.066	14.2	Round	White
AORTX09032-3W	NATCH 17 Tier 2	39.2	35.1	4.1	0.0	0.0	60.8	0.0	1.056	12.5	Round	White
AORTX09144-2W	NATCH 17 Tier 1	30.8	16.8	14.0	0.0	0.0	65.8	3.5	1.045	10.5	Round	White
NDTX113467CB-1W	NATCH 17 Tier 1	15.0	12.1	2.9	0.0	0.0	79.3	5.7	1.069	14.8	Round	White
TX05249-10W	TXCH	44.2	25.3	18.9	0.0	0.0	55.8	0.0	1.070	15.0	Round	White
TX12483-5W	TXCH	56.4	33.5	22.9	0.0	0.0	43.6	0.0	1.071	15.3	Round	White
NDTX113030C-3W	NATCH 17 Tier 2	40.2	29.9	10.2	0.0	0.0	59.8	0.0	1.054	12.2	Round	White
NDTX12135-1W	TXCH	13.4	13.4	0.0	0.0	0.0	85.2	1.4	1.068	14.6	Round	White
TX12474-1R/R	TXCH	2.4	2.4	0.0	0.0	0.0	95.1	2.5	1.046	10.7	Round	Red
AORTX09033-14W	TXCH	35.9	28.7	7.2	0.0	0.0	64.1	0.0	1.061	13.3	Round	White
TX13580-1W	TXCH	19.5	17.4	2.1	0.0	0.0	79.9	0.6	1.062	13.5	Round	White
TX09429-1P/P	TXCH	31.3	24.2	7.2	0.0	0.0	68.7	0.0	1.063	13.7	Round	Purple
ATTX11484-3W	TXCH	47.4	21.8	23.7	1.8	0.0	50.2	2.4	1.064	13.9	Round	White
NDTX12203AB-1W	NATCH 17 Tier 1	14.6	14.6	0.0	0.0	0.0	85.4	0.0	1.062	13.6	Round	White
Average		32.0	21.2	10.2	0.6	0.0	63.0	4.9	1.061	13.4		
L.S.D. (.05)		11.3	8.0	9.1	4.9	ns	11.2	1.9	0.001	0.8		

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Table 6c.

Average number of tubers per plant, tuber weight, number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness of 29 entries in the Texas Advanced Chip Selection Trial grown near Springlake, Texas-2017.

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	Length/ With	With/ Thickness
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴			
Atlantic	WR	5.4	4.5	2.1	98	100	1.9	3.7	3.0	3.7	9	1.14	1.24
NDTX1244-3W/Y	NATCH 17 Tier 1	12.6	1.9	2.3	100	100	1.5	4.0	3.5	4.3	10	1.00	1.04
AORTX09037-1W	NATCH 17 Tier 2	6.0	3.0	2.4	100	100	2.0	3.8	3.5	3.8	10	1.03	1.13
NDTX1246-3W	NATCH 17 Tier 1	7.1	2.4	2.5	100	100	2.0	3.8	3.3	3.7	15	1.03	1.36
COTX12428-1W	NATCH 17 Tier 1	6.0	2.5	2.9	100	100	1.5	3.6	3.5	3.8	30	1.20	1.20
AORTX09033-11W	NATCH 17 Tier 1	6.8	2.2	2.3	100	100	2.0	3.5	2.8	3.6	25	0.96	1.24
AORTX09037-4W/Y	NATCH 17 Tier 2	5.6	2.5	2.1	100	100	1.5	4.0	4.7	4.2	0	1.03	1.17
TX12484-2W ZC	TXCH	4.4	3.1	2.0	98	100	1.5	3.3	2.9	3.6	32	1.16	1.24
TX12483-4W	TXCH	4.4	3.0	1.6	100	100	1.7	3.7	4.0	3.7	3	1.00	1.27
AORTX09033-4W	NATCH 17 Tier 2	4.4	3.0	1.9	100	100	2.5	3.0	2.5	3.2	30	1.06	1.24
COTX12235-2W	NATCH 17 Tier 1	4.9	2.5	1.6	96	100	1.5	3.0	4.2	3.2	0	0.86	1.35
TX12484-3W ZC	TXCH	4.0	2.9	1.6	81	95	2.0	2.8	2.4	3.2	42	1.20	1.21
TX12484-1W ZC	TXCH	3.7	2.9	1.6	86	100	2.0	3.1	2.5	3.3	38	1.26	1.25
AORTX10247-1W/Y	NATCH 17 Tier 2	5.4	2.4	1.5	82	79	2.0	2.0	4.0	3.0	5	1.00	1.35
NDTX1246-5W/Y	TXCH	4.2	2.3	2.4	96	100	2.0	3.8	2.3	3.9	55	0.97	1.23
TX12483-6W	TXCH	3.6	2.3	2.0	94	100	2.0	3.1	3.4	3.2	15	1.06	1.27
AORTX09032-3W	NATCH 17 Tier 2	3.6	2.3	2.4	93	100	2.0	3.0	4.0	3.3	0	1.17	1.11
AORTX09144-2W	NATCH 17 Tier 1	3.6	2.2	1.9	86	100	2.0	4.5	4.8	4.5	0	1.03	1.26
NDTX113467CB-1W	NATCH 17 Tier 1	4.5	1.8	2.1	100	100	2.0	3.7	3.0	3.6	25	1.00	1.18
TX05249-10W	TXCH	3.0	3.0	1.3	77	89	1.5	3.0	2.9	3.2	23	1.01	1.18
TX12483-5W	TXCH	2.4	3.2	1.5	86	90	1.5	3.5	4.1	3.5	2	1.00	1.20
NDTX113030C-3W	NATCH 17 Tier 2	3.2	2.3	1.1	86	100	1.5	3.3	4.8	3.5	0	1.09	1.23
NDTX12135-1W	TXCH	3.7	1.9	2.8	98	100	2.0	3.4	2.7	3.4	30	1.03	1.16
TX12474-1R/R	TXCH	4.8	1.5	1.2	50	90	1.3	2.3	4.2	2.7	2	1.12	1.03
AORTX09033-14W	TXCH	3.3	2.1	1.6	68	92	2.0	3.0	2.9	3.4	22	1.03	1.27
TX13580-1W	TXCH	2.9	2.0	1.6	93	100	1.8	3.4	3.4	3.5	12	0.96	1.26
TX09429-1P/P	TXCH	2.6	2.0	2.0	93	100	2.0	3.5	2.7	3.6	37	1.10	1.15
ATTX11484-3W	TXCH	2.0	2.2	1.3	79	100	1.7	2.7	3.5	3.6	8	0.96	1.18
NDTX12203AB-1W	NATCH 17 Tier 1	1.4	1.7	2.0	100	100	2.5	2.5	2.5	3.0	30	1.00	1.11
Average		4.5	2.5	1.9	91	98	1.8	3.3	3.4	3.5	18	1.05	1.21
L.S.D. (.05)		1.7	0.4	0.3	14	ns	0.2	0.4	0.3	0.3	8	0.07	0.07

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 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 29 entries in the Texas Advanced Chip Selection Trial grown near Springlake, Texas-2017.

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
Atlantic	WR	1.0	2.5	2.0	3.8	2.0	5.0	5.0	5.0	5.0	4.1	5	0	10	20
NDTX1244-3W/Y	NATCH 17 Tier 1	1.5	1.0	1.0	3.8	1.0	5.0	5.0	5.0	5.0	3.8	0	0	0	0
AORTX09037-1W	NATCH 17 Tier 2	1.5	2.3	1.5	4.0	1.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
NDTX1246-3W	NATCH 17 Tier 1	1.0	2.2	1.5	4.0	1.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
COTX12428-1W	NATCH 17 Tier 1	1.2	2.0	1.2	4.0	1.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
AORTX09033-11W	NATCH 17 Tier 1	1.0	2.0	1.2	4.0	1.0	2.0	5.0	5.0	5.0	4.0	0	0	20	0
AORTX09037-4W/Y	NATCH 17 Tier 2	2.0	2.2	1.3	4.0	1.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
TX12484-2W ZC	TXCH	1.0	2.6	1.0	3.7	1.0	5.0	5.0	5.0	5.0	4.3	0	0	27	0
TX12483-4W	TXCH	1.0	1.8	1.5	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	17	0
AORTX09033-4W	NATCH 17 Tier 2	1.0	2.5	1.2	4.0	1.0	3.0	5.0	5.0	5.0	4.5	20	0	0	0
COTX12235-2W	NATCH 17 Tier 1	1.0	1.0	1.5	4.0	1.0	4.0	5.0	5.0	5.0	4.5	0	0	10	0
TX12484-3W ZC	TXCH	1.0	2.8	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.3	0	0	0	0
TX12484-1W ZC	TXCH	1.0	2.9	1.1	3.9	1.0	5.0	5.0	5.0	5.0	4.0	3	0	3	0
AORTX10247-1W/Y	NATCH 17 Tier 2	2.5	2.2	1.5	4.0	1.0	5.0	5.0	5.0	5.0	3.8	0	0	0	0
NDTX1246-5W/Y	TXCH	2.3	2.0	1.3	4.0	1.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
TX12483-6W	TXCH	1.0	2.2	3.2	4.0	2.5	5.0	5.0	5.0	5.0	4.5	0	0	7	0
AORTX09032-3W	NATCH 17 Tier 2	1.0	2.2	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
AORTX09144-2W	NATCH 17 Tier 1	1.0	2.0	1.2	4.0	1.0	5.0	5.0	5.0	5.0	4.5	10	0	0	0
NDTX113467CB-1W	NATCH 17 Tier 1	1.0	2.0	1.5	4.0	1.0	5.0	5.0	5.0	5.0	4.5	0	0	10	0
TX05249-10W	TXCH	1.3	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
TX12483-5W	TXCH	1.0	1.9	1.5	3.9	1.0	5.0	5.0	5.0	5.0	4.2	0	0	13	0
NDTX113030C-3W	NATCH 17 Tier 2	1.0	2.0	1.2	3.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	10	10
NDTX12135-1W	TXCH	1.0	1.8	1.3	4.0	1.0	5.0	5.0	5.0	5.0	4.1	0	0	0	0
TX12474-1R/R	TXCH	3.5	1.0	1.5	4.0	4.5	5.0	5.0	5.0	5.0	3.9	0	0	0	93
AORTX09033-14W	TXCH	1.0	2.2	1.0	4.0	1.0	5.0	5.0	5.0	5.0	3.7	0	0	3	0
TX13580-1W	TXCH	1.0	1.7	1.4	4.0	1.0	5.0	5.0	5.0	5.0	4.3	0	0	0	0
TX09429-1P/P	TXCH	4.5	1.7	1.2	4.0	5.0	5.0	5.0	5.0	5.0	3.7	0	0	0	0
ATTX11484-3W	TXCH	1.2	2.1	1.3	4.0	1.0	5.0	5.0	5.0	5.0	4.3	0	0	0	0
NDTX12203AB-1W	NATCH 17 Tier 1	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
Average		1.4	2.0	1.3	3.9	1.3	4.8	5.0	5.0	5.0	4.2	1	0	4	4
L.S.D. (.05)		0.1	0.4	0.2	0.1	0.0	0.1				ns	3		9	8

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 29 entries in the Texas Advanced Chip Selection Trial grown near Springlake, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Atlantic	WR	, , ,	buff skin, larger tubers, ZC 10%, , poor internals,	3.6, 3.6, 3.4, 3.5	3.7, 3.6, 3.5, 3.3
NDTX1244-3W/Y	NATCH 17 Tier 1	, , ,	high set, small, uniform set, sticky stolon, parent for small, , ,	3, , ,	3.6, , ,
AORTX09037-1W	NATCH 17 Tier 2	, , ,	nice shape, small, TC?, light yellow flesh, very round, , ,	3.3, , ,	3.4, , ,
NDTX1246-3W	NATCH 17 Tier 1	, , ,	sticky stolon, heat sprouts, flat, not yellow flesh, , ,	3, , ,	3, , ,
COTX12428-1W	NATCH 17 Tier 1	, , ,	heat sprouts++, smooth skin, , ,	3.4, , ,	3.3, , ,
AORTX09033-11W	NATCH 17 Tier 1	small lots of tubers, , ,	growth cracks+, rough, nice flesh, drop, , ,	3.3, , ,	1.5, , ,
AORTX09037-4W/Y	NATCH 17 Tier 2	, , ,	heat sprouts, pear shape, uneven flesh, , ,	3.2, , ,	3.2, , ,
TX12484-2W ZC	TXCH	, , ,	poor shape, nice skin, pink eyes+, , ,	2.8, 2.8, 3,	3.3, 3.2, 3.4,
TX12483-4W	TXCH	, not uniform size and shape, ,	larger tubers, sticky stolon+, nice flesh, rough, deep stolon attachment, shoulder, uneven skin, ,	2.8, 2.6, 3,	3.2, 3, 3.1,
AORTX09033-4W	NATCH 17 Tier 2	, , ,	hollow heart, growth crack, nice skin, culls, , ,	3.3, , ,	2.6, , ,
COTX12235-2W	NATCH 17 Tier 1	, , ,	uneven russetting, growth cracks, , ,	3.2, , ,	2.8, , ,
TX12484-3W ZC	TXCH	, , ,	smooth skin, nice flesh, , ,	2.8, 2.6, 2.6,	3.6, 3, 3.1,
TX12484-1W ZC	TXCH	, some large tubers, mixed yellow and white skin, ,	poor shape, pink eyes, light skin, ,	2, 2.8, 2.6,	2.6, 3.2, 3.2,
AORTX10247-1W/Y	NATCH 17 Tier 2	, , ,	sticky stolon, uneven skin color, flat, , ,	2.8, , ,	2.5, , ,
NDTX1246-5W/Y	TXCH	, , only three tubers,	mixed white and yellow flesh, , ,	3, 3.2, ,	2.6, 3.3, ,
TX12483-6W	TXCH	russet skin, , ,	uneven russetting, circular russet defect, alligator skin,	2, 2, 0,	2.6, 3, 2.6,
AORTX09032-3W	NATCH 17 Tier 2	small, uniform size and shape, , ,	light set, smooth skin, , ,	3.2, , ,	2.6, , ,
AORTX09144-2W	NATCH 17 Tier 1	, , ,	uniform shape, , ,	3, , ,	2, , ,
NDTX113467CB-1W	NATCH 17 Tier 1	, , ,	small, sticky stolon, heat sprouts, uniform size and shape, , ,	3, , ,	2.3, , ,
TX05249-10W	TXCH	, , russet skin,	smooth shiny skin, nice size, nice flesh, , ,	2.8, 2.5, ,	3, 3.2, ,
TX12483-5W	TXCH	, , ,	mixed white and yellow flesh, nice flesh, shoulders,	2.6, 2, 3.2,	2.5, 2.5, 3.2,
NDTX113030C-3W	NATCH 17 Tier 2	very small, , ,	light skin color, sticky stolon, , ,	2.6, , ,	2.5, , ,
NDTX12135-1W	TXCH	, very low yield, , red skin, small, red skin, small uniform size and shape,	heat sprouts, small, light set, ,	2.6, 1.5, 2.6,	2.3, 1.5, 3.2,
TX12474-1R/R	TXCH	red skin,	small, road map, poor internals, drop, , ,	2.8, 3.2, 2,	2.5, 3, 2.8,
AORTX09033-14W	TXCH	deer damage (paw prints+), , ,	small, light set, smooth skin, very nice flesh, , light shiny skin,	2.5, 2, 2.8,	2.5, 2, 3.2,
TX13580-1W	TXCH	, very low yield, , small purple skin and flesh, few tubers, very few	, small, low set, buff skin, nice skin, shape, and flesh,	2.6, 2, 2.8,	2.5, 2, 3.1,
TX09429-1P/P	TXCH	tubers, purple,	road map+, some white streaks in flesh+, silver scurf, ,	2.8, 1.5, 1.5,	3.1, 1, 2.6,
ATTX11484-3W	TXCH	, very low yield, ,	mixed skin color, very small, ,	2.5, 1.5, 2,	1.6, 1.5, 3.1,
NDTX12203AB-1W	NATCH 17 Tier 1	, , ,	, , ,	1.5, , ,	1.5, , ,

Springlake
Table 6f.

Specific gravity, percent solids, chip color rating, good chip, bad chip, percentage vascular discoloration, bruise, stem end discoloration, apical bruise notes, percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 29 entries in the Texas Advanced Chip Selection Trial grown near Springlake, Texas-2017.

Variety or Selection	Trial	Gravity	% Solids	Chip Color ²	Chip Quality ³	% Good Chip	% Bad Chip	% Vas	% Bruise	% Stem	% Apical Bruise	Notes ³	Percent Zebra Defect	Percent Zebra Defect at Grading
Atlantic	WR	1.072	15.3	1.3	3.7	47	53	7	9	32	0	1 mech	0	3
NDTX1244-3W/Y	NATCH 17 Tier 1	1.059	13.0	3.0	4.0	30	70	23	0	7	0	1 dark	0	0
AORTX09037-1W	NATCH 17 Tier 2	1.060	13.3	3.0	4.3	21	79	23	5	11	0		0	0
NDTX1246-3W	NATCH 17 Tier 1	1.069	14.8	1.0	3.2	39	61	0	0	25	0		0	0
COTX12428-1W	NATCH 17 Tier 1	1.052	11.8	3.0	5.3	0	100	14	0	0	0	15 dark	0	0
AORTX09033-11W	NATCH 17 Tier 1	1.067	14.5	1.0	3.6	58	42	5	2	11	0		0	0
AORTX09037-4W/Y	NATCH 17 Tier 2	1.061	13.4	2.0	4.3	20	80	11	0	25	0		0	0
TX12484-2W ZC	TXCH	1.063	13.7	1.0	3.7	5	95	68	2	23	0		0	0
TX12483-4W	TXCH	1.064	13.9	1.5	3.4	50	50	0	5	41	0		0	0
AORTX09033-4W	NATCH 17 Tier 2	1.056	12.6	1.0	3.6	40	60	5	2	20	0		0	0
COTX12235-2W	NATCH 17 Tier 1	1.050	11.4	3.0	4.4	35	65	0	0	30	0		0	0
TX12484-3W ZC	TXCH	1.070	14.9	1.5	3.5	16	84	11	2	36	0		0	0
TX12484-1W ZC	TXCH	1.062	13.6	1.5	3.5	24	76	18	0	48	0		0	0
AORTX10247-1W/Y	NATCH 17 Tier 2	1.054	12.1	4.0	4.0	30	70	20	0	11	0		0	0
NDTX1246-5W/Y	TXCH	1.062	13.6	3.5	4.3	41	59	5	0	20	0	9 dark	0	0
TX12483-6W	TXCH	1.066	14.2	1.0	3.4	40	60	16	7	32	0	1 dark	0	0
AORTX09032-3W	NATCH 17 Tier 2	1.056	12.5	3.0	4.0	35	65	16	7	9	0		0	0
AORTX09144-2W	NATCH 17 Tier 1	1.045	10.5	5.0	5.0	10	90	0	0	2	0	18 brown/dark	0	0
NDTX113467CB-1W	NATCH 17 Tier 1	1.069	14.8	2.0	4.0	55	45	0	0	9	0	5 dark	0	0
TX05249-10W	TXCH	1.070	15.0	1.0	3.0	55	45	7	0	14	0	0	0	0
TX12483-5W	TXCH	1.071	15.3	2.5	3.4	53	47	9	0	27	0	different from other rep, looks greasy and/or more yellow	0	0
NDTX113030C-3W	NATCH 17 Tier 2	1.054	12.2	1.0	3.5	50	50	5	0	16	0	1 mech	0	0
NDTX12135-1W	TXCH	1.068	14.6	2.5	3.4	50	50	14	0	34	0	4 brown/dark	0	0
TX12474-1R/R	TXCH	1.046	10.7	5.0	4.8	0	100	0	0	0	0	21 dark	0	0
AORTX09033-14W	TXCH	1.061	13.3	1.7	4.2	43	57	45	14	18	0		0	0
TX13580-1W	TXCH	1.062	13.5	1.5	3.3	47	53	18	0	16	0	5 dark	0	0
TX09429-1P/P	TXCH	1.063	13.7	5.0	4.0	16	84	0	0	57	0	3 dark	0	0
ATTX11484-3W	TXCH	1.064	13.9	4.0	4.8	21	79	2	0	34	0	13 dark	0	0
NDTX12203AB-1W	NATCH 17 Tier 1	1.062	13.6	1.0	2.5	60	40	11	0	7	0	0	0	0
Average		1.061	13.4	2.3	3.9	34	66	12	2	21	0		0	0
L.S.D. (.05)		0.002	0.76		0.44	18	18	10	7	18				

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

²Color of Good Chip 1=light, 5+=very dark

³1Chip Quality 1=Excellent to 5=very Poor

⁵BOT=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, 2017

Overall Summary- Springlake and Dalhart: The Texas Advanced Russet Selection Trials had thirteen entries at Springlake and twenty-three at Dalhart. Russet Norkotah was the check variety for both locations. Based on both trials 15 clones will be re-evaluated in the 2018 season (ATX11379-1Ru, ATX12058-1Ru, ATX13108-2Ru, COTX08322-10Ru, COTX09022-3RuRE/Y, COTX10080-2Ru, COTX13215-1Ru, COTX13215-2Ru, COTX14132-1Ru, COTX14250-1Ru, RussetNorkotah278, RussetNorkotah296, Stampede Russet, TX13590-9Ru, and TXA549-1Ru).

Texas Advanced Russet Trial, Springlake

This russet trial consisted of thirteen entries, including the check variety Russet Norkotah.

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

- TX08352-5Ru and was the outstanding entry based on general rating and best of trial designation. COTX10080-2Ru and ATX10675-1Ru also received high general ratings (Tables 7a and 7e).
- TX08352-5Ru had the highest total, marketable yield, 4-6 oz., 6-10 oz., and less than 4 oz. tubers (Table 7a).
- TX13590-9Ru and TXA549-1Ru had the highest yield of culls/No. 2 tubers (Table 7a).
- ATX10675-1Ru had the highest percentage of marketable yield. TX13590-9Ru had the highest yield of over 6 oz. tubers (Table 7b).
- COTX09052-2Ru had the highest percentage of less than 4 oz. tubers. (Table 7b).
- TX13590-9Ru had the highest specific gravity (Table 7b).
- TXA549-1Ru and COTX10080-2Ru were the latest in maturity, while Russet Norkotah and ATX12015-2Ru were the earliest in maturity (Table 7c).

Comments on entries:

- TX08352-5Ru Long Russet high yield, very nice shape, flesh, and skin, nice skin finish, BOT++
- TX13590-9Ru Long Russet high yield, heat sprouts, light skin
- TXA549-1Ru Long Russet high yield, dislike shape, blocky, flat
- ATX12015-2Ru Long Russet pointed+, skinny, rough, light set, small, uneven russetting

- COTX10080-2Ru Long Russet nice russet skin, blocky, knobs, nice shape, flat, some internal problems, feathering++, nice flesh, BOT-
- COTX08322-10Ru Long Russet flat, heterogenous size+, several large tubers, low yield, feathering+, blocky, very light vascular discoloration, rough
- Russet Norkotah Long Russet nice shape, less deer damage than Reveille Russet
- ATX10675-1Ru Long Russet nice, blocky, very nice shape++, feathering, BOT
- Russet Norkotah278 Long Russet low yield, heat sprouts, ZC 20%, light eye color, nice skin
- ATX11952-1Ru Long Russet blocky, uneven russetting+, nice white flesh, heat sprouts, light skin, scab
- Russet Norkotah296 Long Russet Bruce likes, nice shape and skin
- Stampede Russet Long Russet several large tubers, nice, low yield, very nice shape and skin, ZC 10%, nice flesh, parent
- TX13512-1Ru Long Russet heat sprouts, nice shape, low yield+, ZC 10%, uneven russetting between tubers, mixed, flat, pointed, blocky
- COTX09052-2Ru Long Russet heterogenous size, nice skin color, nice shape, small, light set

Summary:

TX08352-5Ru and COTX10080-2Ru were the outstanding entries based on all factors.

Springlake
Table 7a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 13 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2017.

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 Field	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz					
TX08352-5Ru	WR	432.1	335.9	143.6	154.9	37.3	0.0	93.5	2.7	3.8	4.4
TX13590-9Ru	TXRU	390.0	304.2	54.6	161.1	88.5	0.0	65.0	20.7	3.0	3.5
TXA549-1Ru	TXAVRU	376.8	293.9	64.3	117.5	112.0	0.0	58.8	24.2	3.2	3.8
ATX12015-2Ru	TXRU	343.6	255.1	122.0	120.3	12.8	0.0	74.7	13.8	2.7	3.3
COTX10080-2Ru	TXRU	339.5	275.4	88.0	147.1	40.3	0.0	59.6	4.5	3.6	4.0
COTX08322-10Ru	TXRU	289.3	190.7	86.4	91.1	13.1	0.0	90.6	8.1	2.5	3.3
Russet Norkotah	WR	271.4	193.8	71.0	80.6	42.2	0.0	64.0	13.7	3.9	3.5
ATX10675-1Ru	TXRU	269.1	235.3	72.8	127.4	35.1	0.0	24.7	9.2	3.6	3.9
Russet Norkotah278	TXRU	241.2	180.1	66.2	100.3	13.7	0.0	51.3	9.7	3.6	3.8
ATX11952-1Ru	TXRU	240.5	172.9	79.2	85.0	8.6	0.0	58.9	8.7	2.9	2.9
Russet Norkotah296	TXRU	215.7	162.3	53.4	88.2	20.7	0.0	48.6	4.8	3.7	3.6
Stampede Russet	TXRU	190.8	124.5	51.6	44.9	27.9	5.5	53.0	7.8	2.8	3.1
TX13512-1Ru	TXRU	174.2	134.7	38.9	65.0	30.8	8.8	28.2	2.6	2.7	2.9
COTX09052-2Ru	TXRU	168.1	100.8	66.0	31.8	2.9	0.0	67.1	0.3	2.6	3.0
Average		281.6	211.4	75.6	101.1	34.7	1.0	59.9	9.3	3.2	3.5
L.S.D. (.05)		61.1	51.4	30.4	35.6	21.1	ns	20.3	6.6	0.5	0.5

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 13 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2017.

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				
TX08352-5Ru	WR	78.0	33.2	36.4	8.4	0.0	21.4	0.6	1.057	12.7	Long	Russet
TX13590-9Ru	TXRU	78.0	14.0	41.3	22.7	0.0	16.7	5.3	1.068	14.6	Long	Russet
TXA549-1Ru	TXAVRU	78.0	17.1	31.2	29.7	0.0	15.6	6.4	1.062	13.6	Long	Russet
ATX12015-2Ru	TXRU	74.5	37.0	34.2	3.3	0.0	21.9	3.6	1.061	13.4	Long	Russet
COTX10080-2Ru	TXRU	81.0	26.2	43.2	11.6	0.0	17.6	1.3	1.053	11.9	Long	Russet
COTX08322-10Ru	TXRU	65.7	30.4	31.2	4.1	0.0	31.2	3.2	1.057	12.7	Long	Russet
Russet Norkotah	WR	71.2	26.2	29.4	15.7	0.0	23.7	5.1	1.060	13.2	Long	Russet
ATX10675-1Ru	TXRU	87.3	26.6	47.9	12.8	0.0	9.2	3.5	1.055	12.4	Long	Russet
Russet Norkotah278	TXRU	74.0	27.4	41.5	5.1	0.0	22.2	3.8	1.057	12.7	Long	Russet
ATX11952-1Ru	TXRU	71.4	34.1	34.3	3.0	0.0	25.1	3.5	1.060	13.2	Long	Russet
Russet Norkotah296	TXRU	75.0	23.8	41.8	9.3	0.0	22.9	2.1	1.063	13.7	Long	Russet
Stampede Russet	TXRU	65.5	26.6	23.9	15.1	2.7	27.6	4.2	1.050	11.5	Long	Russet
TX13512-1Ru	TXRU	74.9	21.5	36.3	17.2	7.3	16.6	1.3	1.063	13.8	Long	Russet
COTX09052-2Ru	TXRU	56.3	37.5	17.5	1.3	0.0	43.6	0.1	1.057	12.6	Long	Russet
Average		73.6	27.3	35.0	11.4	0.7	22.5	3.1	1.059	13.0		
L.S.D. (.05)		7.9	9.0	10.5	7.3	ns	7.0	2.2	0.005	0.8		

Springlake
Table 7c.

Average number of tubers per plant, tuber weight, number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness of 13 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2017.

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	Length/ With	With/ Thickness
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴			
TX08352-5Ru	WR	7.7	4.8	1.5	71	98	1.5	3.9	3.6	3.8	43	1.72	1.18
TX13590-9Ru	TXRU	5.8	5.6	2.5	100	100	2.0	3.9	4.2	3.8	15	1.51	1.17
TXA549-1RU	TXAVRU	5.4	5.7	2.2	100	100	2.0	4.5	5.0	4.5	0	1.60	1.06
ATX12015-2Ru	TXRU	6.7	4.2	1.7	71	100	2.0	3.9	2.4	3.8	65	2.08	1.21
COTX10080-2Ru	TXRU	6.0	4.9	1.7	71	96	1.5	3.3	5.0	3.6	1	1.90	1.15
COTX08322-10Ru	TXRU	6.3	3.9	2.1	96	98	1.8	3.8	3.5	3.8	46	1.52	1.19
Russet Norkotah	WR	4.9	4.6	2.4	100	100	1.5	3.5	2.0	3.6	83	1.97	1.19
ATX10675-1Ru	TXRU	4.0	5.5	1.2	89	99	1.5	3.2	3.6	3.3	34	1.76	1.22
Russet Norkotah278	TXRU	4.4	4.5	2.3	100	100	1.5	3.4	3.2	3.5	49	1.97	1.18
ATX11952-1Ru	TXRU	4.8	4.1	2.0	98	100	2.1	3.5	3.6	3.6	38	1.58	1.22
Russet Norkotah296	TXRU	4.0	4.5	1.8	71	100	1.5	3.5	3.3	3.6	44	2.05	1.19
Stampede Russet	TXRU	4.2	4.4	1.7	83	89	1.5	3.1	2.6	3.4	57	1.87	1.18
TX13512-1Ru	TXRU	3.8	5.2	1.4	57	71	1.6	2.9	3.8	3.4	23	1.71	1.13
COTX09052-2Ru	TXRU	4.3	3.3	1.4	87	95	1.5	2.7	2.9	3.0	54	1.75	1.26
Average		5.2	4.7	1.9	85	96	1.7	3.5	3.5	3.6	39	1.79	1.18
L.S.D. (.05)		1.1	0.5	0.2	ns	8	0.2	0.3	0.7	0.3	16	0.16	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 13 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2017.

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
TX08352-5Ru	WR	1.2	3.7	3.7	4.0	3.6	5.0	5.0	5.0	5.0	4.4	0	0	0	0
TX13590-9Ru	TXRU	1.5	3.8	3.5	4.0	3.5	5.0	5.0	5.0	5.0	4.0	0	0	0	20
TXA549-1RU	TXAVRU	1.2	3.5	2.6	4.0	2.6	5.0	5.0	5.0	5.0	4.0	0	0	0	0
ATX12015-2Ru	TXRU	1.3	3.6	3.2	4.0	3.1	5.0	5.0	5.0	5.0	3.0	0	0	0	0
COTX10080-2Ru	TXRU	1.4	3.9	3.8	4.0	3.7	5.0	5.0	5.0	5.0	2.8	0	0	18	5
COTX08322-10Ru	TXRU	1.2	3.4	3.2	4.0	3.2	5.0	5.0	5.0	5.0	3.5	0	0	10	0
Russet Norkotah	WR	1.5	3.8	3.9	3.9	4.0	5.0	5.0	5.0	5.0	4.1	0	0	8	0
ATX10675-1Ru	TXRU	1.3	3.8	3.5	4.0	3.7	5.0	5.0	5.0	5.0	3.6	0	0	0	0
Russet Norkotah278	TXRU	1.5	3.9	4.0	4.0	4.0	5.0	5.0	5.0	5.0	4.3	0	0	0	0
ATX11952-1Ru	TXRU	1.3	3.3	2.9	4.0	3.0	5.0	5.0	4.5	5.0	3.3	0	0	25	0
Russet Norkotah296	TXRU	1.4	3.9	3.9	3.8	4.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
Stampede Russet	TXRU	1.2	3.8	4.0	4.0	4.0	5.0	5.0	5.0	5.0	4.7	0	0	0	0
TX13512-1Ru	TXRU	1.5	3.6	3.4	4.0	3.2	5.0	5.0	5.0	5.0	3.5	0	0	10	5
COTX09052-2Ru	TXRU	1.2	3.4	3.6	4.0	3.5	5.0	5.0	5.0	5.0	4.1	0	0	0	0
Average		1.3	3.6	3.5	4.0	3.5	5.0	5.0	5.0	5.0	3.8	0	0	5	2
L.S.D. (.05)		0.2	0.3	0.3	0.1	0.3	ns	ns	ns	ns	0.5	ns	ns	13	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 13 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
TX08352-5Ru	WR	, , , high yield, BOT	high yield, very nice shape, flesh, and skin, BOT++, nice skin finish,	3, 3.6, 4.2, 4.5	4, 4.4, 4.4, 4.6
TX13590-9Ru	TXRU	high yield, heat sprouts, , ,	light skin, , ,	3, , ,	3.5, , ,
TXA549-1RU	TXAVRU	high yield, dislike shape, , ,	blocky, flat, , ,	3.2, , ,	3.8, , ,
ATX12015-2Ru	TXRU	pointed+, skinny, ,	rough, pointed, skinny, light set, small, uneven russetting, ,	2.6, 2.8, ,	3.3, 3.3, ,
COTX10080-2Ru	TXRU	, nice russet skin, blocky, knobs, , flat, heterogenous size+, several large tubers, low yield,	nice skin and shape, flat, some internal problems, BOT- , feathering++, nice flesh, feathering+, blocky flat, very light vascular discoloration, , rough,	3.4, 3.8, 3.3, 4	4.2, 4.3, 3.8, 3.6
Russet Norkotah	WR	nice shape, lees deer damage than RR, , nice shape,	, , ,	4, 4, 3.6, 3.8	2.6, 3.8, 3.8, 3.6
ATX10675-1Ru	TXRU	nice, blocky, nice shape, ,	very nice shape++, feathering, BOT, ,	3.6, 3.6, 3.5, 3.8	4.2, 3.8, 3.8, 3.6
Russet Norkotah278	TXRU	, , low yield,	heat sprouts, ZC 20%, light eye color, nice skin, ,	3.6, 3.5, 3.6, 3.6	3.8, 3.6, 4, 3.8
ATX11952-1Ru	TXRU	, , ,	blocky, uneven russetting+, nice flesh , light skin, very white flesh, heat sprouts, uneven russetting, light skin,	2.8, 2.5, 2.6, 3.5	3.6, 3, 3.4, 1.5
Russet Norkotah296	TXRU	Bruce likes, David not a bad red, , ,	nice shape and skin, , ,	3.7, 3.6, 3.8, 3.7	3.6, 3.6, 3.6, 3.5
Stampede Russet	TXRU	several large tubers, , nice,	low yield, very nice shape and skin ZC 10%, nice flesh, parent, , ,	3.5, 2.3, 2.5,	3, 2.8, 3.6,
TX13512-1Ru	TXRU	heat sprouts, low yield, nice shape,	low yield+, ZC 10%, uneven russetting, between tubers, mixed?, flat, pointed, uneven russetting, blocky	2.8, 1.5, 2.8, 3.6	2.8, 2, 3.4, 3.3
COTX09052-2Ru	TXRU	heterogenous size, nice skin color, nice shape, , small	light set, nice skin, small, nice shape, flat, small, nice shape	2.3, 3.5, 2.2, 2.3	3, 3.6, 2.6, 2.6

Outstanding Texas Advanced Red Selections, 2017

Overall Summary- Springlake and Dalhart: The Texas Advanced Red Selection Trials had twelve entries at Springlake and twenty at Dalhart. Red LaSoda was the check variety for both locations. Based on both trials 19 clones will be re-evaluated in the 2018 season. (ATX08121-5R, COTX00104-6R, COTX02293-4R, COTX07054-2R, COTX14035-1R, COTX14035-2R, COTX14087-1R, COTX14128-1R, COTX14107-3R, COTX14107-4R, NDTX12248Y-1R, NDTX13105-1R, NDTX4784-7R, TX14612-1R, TX14615-3R, TX14615-4R, TX14619-2R, TX14621-2R, and TX14632-2R)

Texas Advanced Red Trial, Springlake

This trial consisted of twelve entries, including the check variety Red LaSoda.

Results were as follows: (Springlake Tables 8a, 8b, 8c, 8d, and 8e)

- TX14615-3R was the outstanding entry based on general rating and best of trial notation, while Red LaSoda, COTX07054-2R, and TX14615-4R also had high general ratings (Table 8a and 8e).
- Red LaSoda had the highest total and marketable yield (Table 8a).
- TX14615-3R and TX12472-4R had the highest yield of less than 4 oz. tubers (Table 8a).
- Red LaSoda had the highest percentage of marketable yield (Table 8b).
- TX12472-4R had the highest percentage of less than 4 oz. tubers (Table 8b).
- ATX08121-5R had the highest specific gravity (Table 8b).
- COTX07054-2R had the highest average number of tubers per plant (Table 8c).
- TX12472-4R was the latest in maturing, while TX13524-2R and ATX08121-5R were the earliest in maturing (Table 8c).

Comments on entries:

- Red LaSoda Red Round deer damage, large tubers, very white flesh, deep eyes
- TX14615-3R Red Round few tubers, nice bright skin, bad rep, feathering, TC, parent, BOT
- ATX08121-5R Red Round uneven dull red color+++, too light for Bruce, nice shape, lenticels

- COTX07054-2R Red Round late++, intense skin color+, nice shape, very slight vascular discoloration, attached stolon, pear shaped, small
- TX14615-4R Red Round nice, David says not bad looking, nice skin color and shape, very white flesh
- BTX2332-1R Red Round very nice, uniform, nice shape
- TX12472-4R Red Round light skin color, late, ZC, nice skin color, high set, small, black dot??. poor internals??
- TX11448-2R Red Round deeper red, Bruce like, David likes and round shape, dull skin color, nice skin color and shape, late, very small, attached stolon, some deep eyes
- ATTX05186-2R Red Round heat sprout, deer damage, light set, nice flesh, poor internals+, light skin, road map, uniform small
- NDTX1458-2R Red Round oblong, nice skin
- TX13524-2R Red Round road mapping
- NDTX5438-11R Red Round intense red skin, few tubers, low yield, smooth skin, nice flesh

Summary:

TX14615-3R was the outstanding entry based on all factors. Red LaSoda, COTX07054-2R, and TX14615-4R also deserve mention.

Springlake
Table 8a.

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 Texas Advanced Red Selection Trial grown near Springlake, Texas-2017.

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 Field	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz					
Red LaSoda	WR	307.9	222.8	111.3	86.9	24.5	0.0	62.2	22.8	3.5	4.0
TX14615-3R	TXRD	232.3	70.2	56.0	14.2	0.0	0.0	162.1	0.0	2.8	3.0
ATX08121-5R	TXRD	202.9	61.7	53.2	8.5	0.0	0.0	135.7	5.5	3.3	3.6
COTX07054-2R	TXRD	196.0	66.2	54.8	11.4	0.0	0.0	121.2	8.6	3.0	3.7
TX14615-4R	TXRD	183.9	92.7	76.7	15.9	0.0	0.0	86.4	4.8	3.8	3.8
BTX2332-1R	TXRD	171.5	103.0	54.6	48.4	0.0	0.0	68.5	0.0	3.0	3.6
TX12472-4R	TXRD	160.5	18.8	18.8	0.0	0.0	0.0	140.0	1.7	3.0	3.3
TX11448-2R	TXRD	156.1	26.4	25.1	1.4	0.0	0.0	127.6	2.1	3.3	3.3
ATTX05186-2R	TXRD	133.8	14.7	14.7	0.0	0.0	0.0	117.2	1.9	3.1	2.9
NDTX1458-2R	TXRD	125.8	78.8	50.5	28.3	0.0	0.0	47.0	0.0	3.0	3.5
TX13524-2R	TXRD	95.4	42.9	42.9	0.0	0.0	0.0	48.4	4.1	1.5	1.5
NDTX5438-11R	TXRD	75.0	34.4	26.3	8.1	0.0	0.0	40.6	0.0	2.8	2.4
Average		170.1	69.4	48.7	18.6	2.0	0.0	96.4	4.3	3.0	3.2
L.S.D. (.05)		43.8	39.0	23.7	22.5	8.9		38.8	ns	ns	0.8

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 12 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2017.

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	71.3	36.1	26.8	8.4	0.0	20.2	8.5	1.055	12.3	Red	Round
TX14615-3R	TXRD	56.1	25.5	6.6	0.0	0.0	67.9	0.0	1.048	11.0	Red	Round
ATX08121-5R	TXRD	29.7	25.6	4.1	0.0	0.0	67.8	2.5	1.063	13.7	Red	Round
COTX07054-2R	TXRD	33.6	28.3	5.3	0.0	0.0	61.8	4.6	1.069	14.8	Red	Round
TX14615-4R	TXRD	50.4	41.7	8.6	0.0	0.0	47.0	2.6	1.051	11.6	Red	Round
BTX2332-1R	TXRD	60.1	31.9	28.2	0.0	0.0	39.9	0.0	1.051	11.6	Red	Round
TX12472-4R	TXRD	11.5	11.5	0.0	0.0	0.0	87.5	1.0	1.060	13.1	Red	Round
TX11448-2R	TXRD	17.0	16.0	0.9	0.0	0.0	81.6	1.4	1.053	11.9	Red	Round
ATTX05186-2R	TXRD	12.1	12.1	0.0	0.0	0.0	86.6	1.3	1.057	12.7	Red	Round
NDTX1458-2R	TXRD	62.6	40.1	22.5	0.0	0.0	37.4	0.0	1.048	11.1	Red	Round
TX13524-2R	TXRD	44.9	44.9	0.0	0.0	0.0	50.7	4.3	1.060	13.1	Red	Round
NDTX5438-11R	TXRD	44.3	32.0	12.2	0.0	0.0	55.7	0.0	1.041	9.9	Red	Round
Average		41.1	28.8	9.6	0.7	0.0	58.7	2.2	1.054	12.2		
L.S.D. (.05)		14.2	11.8	7.6	2.9		13.6	ns	0.003	0.4		

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 12 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2017.

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	6.3	4.1	2.1	100	100	1.6	4.1	3.6	4.4	13
TX14615-3R	TXRD	7.5	2.8	1.7	73	96	1.5	2.9	2.7	3.3	48
ATX08121-5R	TXRD	6.2	2.7	2.3	100	100	2.1	3.8	2.1	3.8	65
COTX07054-2R	TXRD	8.3	2.3	2.1	51	87	2.0	3.5	3.6	3.7	15
TX14615-4R	TXRD	5.4	2.8	1.9	68	100	2.0	3.3	3.3	3.5	40
BTX2332-1R	TXRD	3.8	3.7	2.0	100	100	1.5	3.5	3.8	3.6	5
TX12472-4R	TXRD	7.8	1.7	2.1	94	98	1.5	3.7	4.1	3.7	9
TX11448-2R	TXRD	7.2	2.0	1.8	69	89	1.5	3.4	3.1	3.5	44
ATTX05186-2R	TXRD	7.2	1.6	2.8	98	100	1.8	3.6	3.6	3.7	15
NDTX1458-2R	TXRD	2.7	3.9	1.2	54	100	1.5	3.0	2.5	2.8	50
TX13524-2R	TXRD	3.9	2.0	1.7	100	100	1.5	3.5	2.0	3.7	75
NDTX5438-11R	TXRD	5.3	2.5	1.2	26	48	1.6	1.5	3.4	2.6	16
Average		6.0	2.7	1.9	78	93	1.7	3.3	3.1	3.5	33
L.S.D. (.05)		1.8	0.5	ns	7	6	0.2	0.3	0.4	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 8d. 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 12 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2017.

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
Red LaSoda	WR	1.0	2.5	1.0	1.5	3.3	5.0	5.0	5.0	5.0	2.9	0	0	15	0
TX14615-3R	TXRD	1.0	2.3	1.0	4.0	4.1	5.0	5.0	5.0	5.0	3.8	0	0	0	0
ATX08121-5R	TXRD	1.4	2.4	1.0	3.5	2.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
COTX07054-2R	TXRD	1.6	2.4	1.0	4.0	3.6	5.0	5.0	5.0	5.0	3.3	0	13	0	0
TX14615-4R	TXRD	1.0	2.5	1.0	4.0	3.0	5.0	5.0	5.0	5.0	3.0	0	0	0	0
BTX2332-1R	TXRD	1.0	2.0	1.0	4.0	3.5	5.0	5.0	5.0	5.0	3.5	0	0	0	0
TX12472-4R	TXRD	1.1	2.1	1.0	4.0	2.1	5.0	5.0	5.0	5.0	3.9	0	0	0	0
TX11448-2R	TXRD	1.2	2.3	1.0	3.5	4.1	5.0	5.0	5.0	5.0	4.0	0	0	0	0
ATTX05186-2R	TXRD	1.1	2.3	1.0	3.6	2.7	5.0	5.0	5.0	5.0	4.1	0	0	0	20
NDTX1458-2R	TXRD	1.0	3.0	1.0	4.0	3.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
TX13524-2R	TXRD	1.0	2.0	1.0	4.0	3.8	5.0	5.0	5.0	5.0	4.0	0	0	0	0
NDTX5438-11R	TXRD	1.0	2.5	1.0	4.0	4.0	5.0	5.0	5.0	5.0	3.2	0	0	0	3
Average		1.1	2.3	1.0	3.7	3.3	5.0	5.0	5.0	5.0	3.7	0	1	1	2
L.S.D. (.05)		0.2	0.2		0.3	0.3					0.3		11	5	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 8e.

Notes and general rating for all reps of 12 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Red LaSoda	WR	DEER, , ,	large tubers, very white flesh, deep eyes, , ,	3.5, 3.5, 3.6, 3.5	3.5, 4, 4.5, 3.8
TX14615-3R	TXRD	few tubers, nice bright skin, , ,	bad rep, BOT, feathering, TC?, parent, , very light skin, nice shape, uneven skin color, ,	2, 3.6, ,	2, 4, ,
ATX08121-5R	TXRD	uneven dull red color+++ , , too light for Bruce	lenticels, nice shape and skin color, very slight vascular	3.5, 2.5, 3.6, 3.5	3.6, 3.2, 3.8, 3.8
COTX07054-2R	TXRD	late++ , , intense skin color+,	discoloration, , , attached stolon, pear shaped, small	3, 3, 3, 3	3.6, 3.5, 4.2, 3.6
TX14615-4R	TXRD	nice, David not bad looking, , ,	nice skin color and shape, very white flesh, , ,	3.8, , ,	3.8, , ,
BTX2332-1R	TXRD	, , ,	very nice, uniform, nice shape, , , , ZC, nice skin color, , high set, small, light skin color, ZC, black dot??, poor internals??	3, , ,	3.6, , ,
TX12472-4R	TXRD	light skin color, , late, deeper red, Bruce like, David looks good and round	nice skin color and shape, late, very small, attached	3.5, 2, 3.6, 3	3.3, 3, 3.5, 3.5
TX11448-2R	TXRD	shape, , dull skin color,	stolon, some deep eyes, small, light set, nice flesh, poor internals+, light skin,	3.8, 2.5, 3.5, 3.5	3.6, 2.6, 3, 4
ATX05186-2R	TXRD	heat sprout, DEER, , ,	road map, uniform small,	3.5, 3, 2.5, 3.5	2, 3.3, 2.8, 3.6
NDTX1458-2R	TXRD	, , ,	oblong, nice skin, , ,	3, , ,	3.5, , ,
TX13524-2R	TXRD	road mapping, , ,	road map, , ,	1.5, , ,	1.5, , ,
NDTX5438-11R	TXRD	intense red skin, , , few tubers	low yield, smooth skin, , nice flesh,	2, 3.6, 3.2, 2.5	1.5, 3, 3.6, 1.5

Outstanding Texas Advanced Red/Yellow Selections, 2017

Overall Summary- Springlake and Dalhart. The Texas Advanced Red Skin Yellow Flesh Selection Trials included five entries at Springlake and four entries at Dalhart. Sierra Rose was the check variety for both locations. Based on both trials 6 clones will be re-tested in 2018. ATTX10265-4R/Y, BTX2103-1R/Y, NDTX059759-3RY/YPinto, NDTX13264B-1R/Y, Sierra Rose, and TX14646-1W-R/YPinto)

Texas Advanced Red/Yellow Selection Trial, Springlake

This trial consisted of five entries including the check variety Sierra Rose.

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

- Sierra Rose was the outstanding entry based on general rating and best of trial designation (Table 9a and 9e).
- ATTX10265-4R/Y had the highest total yield, while ATTX98514-1R/Y had the highest marketable yield (Table 9a)
- ATTX10265-4R/Y had the highest yield of over 4-6 oz. and less than 4 oz. tubers (Table 9a).
- ATTX98514-1R/Y had the highest percentage of marketable yield and 4-6 oz. tubers (Table 9b).
- BTX2103-1R/Y had the highest percentage of less than 4 oz. tubers (Table 9b).
- Sierra Rose had the highest specific gravity (Table 9b).
- ATTX10265-4R/Y had the highest average number of tubers per plant (Table 9c).
- ATTX10265-4R/Y and ATTX98514-1R/Y were the latest in maturity, while BTX2103-1R/Y was the earliest in maturity (Table 9c).
- ATTX10265-4R/Y and BTX2103-1R/Y had the darkest yellow flesh color (Table 9d).

Comments on entries:

- ATTX10265-4R/Y Oblong Red nice uniform, small, heat sprouts, light skin color, nice, medium red skin color, nice shape, large tubers, lots of B's, FC=3.7
- ATTX98514-1R/Y Oblong Red light skin color++, pear shaped, smooth, nice shape, poor internals, FC=3.4
- Sierra Rose Oblong Red intense skin color+++, smooth, very nice, pear shaped, BOT+, FC=3.1

- TX12471-1R/Y Oblong Red intense skin color++, deer damage, small, mixed skin color, feathering, flat, FC=3.5
- BTX2103-1R/Y Round Red small+, large tubers, FC=3.7

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

Summary:

Sierra Rose was the outstanding entry based on all factors.

Springlake
Table 9a.

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 Texas Advanced Red/Yellow Selection Trial grown near Springlake, Texas-2017.

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 Field	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz					
ATTX10265-4R/Y	TXR/Y	205.0	89.4	66.6	22.8	0.0	0.0	104.1	11.6	3.4	3.5
ATTX98514-1R/Y	TXR/Y	145.5	94.9	61.2	33.7	0.0	0.0	39.6	11.1	3.1	3.5
Sierra Rose	TXR/Y	136.4	84.2	57.7	26.4	0.0	0.0	40.6	11.6	3.8	3.9
TX12471-1R/Y	TXR/Y	132.4	75.7	50.0	25.7	0.0	0.0	54.6	2.1	3.3	3.0
BTX2103-1R/Y	TXR/Y	111.0	34.6	29.7	4.8	0.0	0.0	69.1	7.3	3.0	3.5
Average		146.1	75.7	53.0	22.7	0.0	0.0	61.6	8.7	3.3	3.5
L.S.D. (.05)		ns	ns	ns	ns			33.6	ns	ns	ns

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 5 entries in the Texas Advanced Red/Yellow Selection Trial grown near Springlake, Texas-2017.

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				
ATTX10265-4R/Y	TXR/Y	39.4	29.2	10.2	0.0	0.0	53.4	7.2	1.043	10.2	Oblong	Red
ATTX98514-1R/Y	TXR/Y	65.2	42.4	22.8	0.0	0.0	28.1	6.7	1.043	10.1	Oblong	Red
Sierra Rose	TXR/Y	61.8	42.3	19.5	0.0	0.0	29.9	8.3	1.062	13.6	Oblong	Red
TX12471-1R/Y	TXR/Y	54.6	37.5	17.1	0.0	0.0	43.6	1.7	1.053	11.9	Oblong	Red
BTX2103-1R/Y	TXR/Y	31.6	26.7	5.0	0.0	0.0	62.0	6.4	1.057	12.7	Round	Red
Average		50.5	35.6	14.9	0.0	0.0	43.4	6.1	1.052	11.7		
L.S.D. (.05)		ns	ns	8.0			15.3	ns	0.005	0.8		

Springlake
Table 9c.

Average number of tubers per plant, tuber weight, number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, and percent dead vine at vine kill of 5 entries in the Texas Advanced Red/Yellow Selection Trial grown near Springlake, Texas-2017.

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	
ATX10265-4R/Y	TXR/Y	6.8	2.4	1.8	94	100	1.5	3.9	4.5	3.8	5
ATX98514-1R/Y	TXR/Y	3.5	3.4	1.1	66	98	1.5	3.3	4.6	3.5	1
Sierra Rose	TXR/Y	3.4	3.4	1.6	93	100	1.5	3.8	3.2	3.8	41
TX12471-1R/Y	TXR/Y	4.8	2.7	1.5	58	84	1.5	3.5	4.0	3.7	13
BTX2103-1R/Y	TXR/Y	4.5	2.3	1.5	73	89	1.8	3.5	2.7	3.7	70
Average		4.6	2.8	1.5	77	94	1.6	3.6	3.8	3.7	26
L.S.D. (.05)		1.4	ns	ns	19	9	ns	0.2	0.4	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

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 5 entries in the Texas Advanced Red/Yellow Selection Trial grown near Springlake, Texas-2017.

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
ATTX10265-4R/Y	TXR/Y	3.7	3.0	1.0	4.0	3.5	5.0	5.0	5.0	5.0	3.0	0	0	0	0
ATTX98514-1R/Y	TXR/Y	3.4	3.0	1.0	4.0	3.0	5.0	5.0	5.0	5.0	3.3	5	0	0	8
Sierra Rose	TXR/Y	3.1	3.0	1.0	4.0	3.8	5.0	5.0	5.0	5.0	4.0	0	0	0	0
TX12471-1R/Y	TXR/Y	3.5	3.0	1.0	4.0	3.8	5.0	5.0	5.0	5.0	2.6	0	0	0	0
BTX2103-1R/Y	TXR/Y	3.7	2.5	1.0	4.0	3.9	5.0	5.0	5.0	5.0	4.0	0	0	0	0
Average		3.5	2.9	1.0	4.0	3.6	5.0	5.0	5.0	5.0	3.4	1	0	0	2
L.S.D. (.05)		ns	0.0			ns					0.4	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 9e.

Notes and general rating for all reps of 5 entries in the Texas Advanced Red/Yellow Selection Trial grown near Springlake, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
ATTX10265-4R/Y	TXR/Y	nice uniform, medium, small, heat sprouts, light skin color, nice, medium red skin color	nice shape, small, lots of B's, large tubers, small, lots of B's	4, 2, 3.8, 3.8	3.6, 2.5, 4, 4
ATTX98514-1R/Y	TXR/Y	, light skin color++, ,	poor flesh?, pear shaped, light skin color, smooth, nice shape, , nice shape, poor internals	3.5, 3.5, 3.5, 2	3.4, 3.8, 3.6, 3.3
Sierra Rose	TXR/Y	, intense skin color+++, ,	BOT+, smooth, very nice, pear shaped,	3, 4, 4, 4	4, 3.8, 3.6, 4.3
TX12471-1R/Y	TXR/Y	intense skin color++, deer damage, , small,	mixed skin color, nice skin feathering, , flat	3, 4, 2.5, 3.5	2, 3.7, 3.6, 2.6
BTX2103-1R/Y	TXR/Y	small+, , ,	large tubers, , ,	3, 3, ,	3.7, 3.2, ,

Outstanding Texas Advanced White/Yellow Selections, 2017

Overall Summary- Springlake and Dalhart. The Texas Advanced White Skin Yellow Flesh Selection Trials included seven entries at Springlake and fourteen at Dalhart. Yukon Gold was the check variety for both locations. Based on both trials 11 clones will be re-tested in 2018. (AORTX11913-3Wre/Y, ATTX11591-1W/Y, ATTX11591-3W/Y, ATX11567-1W/Y, BTX1749-1W/Y, COTX10097-2W/Y, COTX14220-2W/Y, ORTX13SP218-1W-P/Y, Sierra Gold, TX14602-2W/Y, and TX14670-2W/Y)

Texas Advanced White/Yellow Trial, Springlake

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

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

- Sierra Gold was the outstanding entry based on general rating and best of trial designation. AORTX11913-3Wre/Y and COTX10097-2W/Y also had high general ratings (Tables 10a and 10e).
- Yukon Gold had the highest total and marketable yield (Table 10a).
- AORTX11913-3Wre/Y had the highest yield of less than 4 oz. tubers (Table 10a).
- Yukon Gold and Sierra Gold had the highest percentage of marketable yield. COTX05249-3WRE/Y had the highest percentage of less than 4 oz. tubers (Table 10b).
- Yukon Gold and BTX1749-1W/Y had the highest specific gravity (Table 10b).
- AORTX11913-3Wre/Y had the highest average number of tubers per plant (Table 10b).
- AORTX11913-3Wre/Y was the latest in maturity, while COTX10097-2W/Y and COTX05249-3WRE/Y were the earliest in maturity (Table 10c).
- COTX10097-2W/Y had the darkest yellow flesh (Table 10d).

Comments on entries:

- Yukon Gold Oblong White large tubers, nice shape, poor internals++, FC=2.8
- TXWL-1 Oblong White deep eyes, rough, high yield, bad rep, FC=1.0
- Sierra Gold Oblong Russet BOT++, FC=3.0
- AORTX11913-3Wre/Y Oblong White Red Eye red eye, nice skin, low set, FC=1.0
- COTX10097-2W/Y Oblong White nice flesh, smooth, road map, low set, FC=3.3

- BTX1749-1W/Y Oblong White very few tubers, low set, nice shape, FC=2.5
- COTX05249-3WRE/Y Round White not red eye, low set, round, drop++, FC=2.0

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

Summary:

Sierra Gold was the outstanding entry based on all factors.

Springlake
Table 10a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 7 entries in the Texas Advanced White/Yellow Trial grown near Springlake, Texas-2017.

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 Field	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz					
Yukon Gold	WR	244.2	188.4	41.3	109.4	37.7	0.0	53.6	2.2	4.0	3.6
TXWL-1	TXWH/Y	190.1	105.6	41.3	47.7	16.6	0.0	83.8	0.7	3.6	2.4
Sierra Gold	TXWH/Y	138.3	110.3	42.2	44.3	23.9	0.0	28.0	0.0	4.0	4.0
AORTX11913-3Wre/Y	TXWH/Y	134.5	30.5	25.6	3.7	1.2	0.0	102.0	2.0	2.8	3.7
COTX10097-2W/Y	TXWH/Y	124.3	32.7	22.0	10.7	0.0	0.0	91.6	0.0	3.3	3.7
BTX1749-1W/Y	TXWH/Y	106.7	59.7	22.8	36.9	0.0	0.0	47.0	0.0	2.8	3.5
COTX05249-3WRE/Y	TXWH/Y	65.6	6.7	5.2	1.5	0.0	0.0	57.6	1.4	2.0	1.5
Average		143.4	76.3	28.6	36.3	11.3	0.0	66.2	0.9	3.2	3.2
L.S.D. (.05)		78.0	42.8	15.8	29.8	9.5		ns	ns	0.6	0.2

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 7 entries in the Texas Advanced White/Yellow Trial grown near Springlake, Texas-2017.

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	76.8	16.6	44.4	15.8	0.0	22.4	0.8	1.069	14.9	Oblong	White
TXWL-1	TXWH/Y	55.4	22.6	23.6	9.2	0.0	44.4	0.2	1.055	12.3	Oblong	White
Sierra Gold	TXWH/Y	79.4	30.5	31.6	17.3	0.0	20.6	0.0	1.068	14.6	Oblong	Russet
AORTX11913-3Wre/Y	TXWH/Y	20.5	17.7	2.1	0.7	0.0	78.3	1.2	1.053	12.0	Oblong	White Red Eye
COTX10097-2W/Y	TXWH/Y	27.0	18.5	8.5	0.0	0.0	73.0	0.0	1.067	14.5	Oblong	White
BTX1749-1W/Y	TXWH/Y	56.4	22.1	34.3	0.0	0.0	43.6	0.0	1.069	14.9	Oblong	White
COTX05249-3WRE/Y	TXWH/Y	9.5	7.3	2.2	0.0	0.0	87.8	2.7	1.055	12.3	Round	White
Average		46.4	19.3	21.0	6.1	0.0	52.9	0.7	1.062	13.6		
L.S.D. (.05)		11.5	7.3	8.4	4.7		11.0	ns	0.004	0.5		

Springlake
Table 10c.

Average number of tubers per plant, tuber weight, number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, and percent dead vine at vine kill of 7 entries in the Texas Advanced White/Yellow Trial grown near Springlake, Texas-2017.

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	
Yukon Gold	WR	4.3	4.7	1.5	98	100	1.5	3.7	3.4	3.8	26
TXWL-1	TXWH/Y	4.2	3.7	2.6	100	100	1.5	4.0	3.8	3.9	14
Sierra Gold	TXWH/Y	2.9	4.4	1.7	79	89	1.5	3.3	3.6	3.6	10
AORTX11913-3Wre/Y	TXWH/Y	5.5	1.9	3.2	98	100	1.5	4.8	4.6	3.5	1
COTX10097-2W/Y	TXWH/Y	5.2	2.3	3.6	89	88	1.9	3.1	3.1	3.4	24
BTX1749-1W/Y	TXWH/Y	2.5	3.6	2.1	86	98	1.7	3.5	3.6	3.7	17
COTX05249-3WRE/Y	TXWH/Y	4.1	1.8	2.0	61	75	1.6	2.7	3.2	3.2	20
Average		4.1	3.2	2.4	87	93	1.6	3.6	3.6	3.6	16
L.S.D. (.05)		ns	0.4	0.5	13	12	ns	0.5	0.3	0.4	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 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 7 entries in the Texas Advanced White/Yellow Trial grown near Springlake, Texas-2017.

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
Yukon Gold	WR	2.8	3.0	1.0	3.8	1.0	5.0	5.0	5.0	5.0	2.4	10	0	0	38
TXWL-1	TXWH/Y	1.0	3.5	1.0	1.5	1.0	5.0	5.0	5.0	5.0	3.0	3	0	0	0
Sierra Gold	TXWH/Y	3.0	3.0	3.0	3.8	3.5	5.0	5.0	5.0	5.0	3.8	0	0	0	0
AORTX11913-3Wre/Y	TXWH/Y	1.0	3.0	1.0	2.9	1.0	5.0	5.0	5.0	5.0	3.7	0	0	0	0
COTX10097-2W/Y	TXWH/Y	3.3	2.9	1.5	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
BTX1749-1W/Y	TXWH/Y	2.5	3.0	2.5	4.0	2.0	5.0	5.0	5.0	5.0	3.3	0	0	0	0
COTX05249-3WRE/Y	TXWH/Y	2.0	2.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
Average		2.2	2.9	1.6	3.4	1.5	5.0	5.0	5.0	5.0	3.5	2	0	0	5
L.S.D. (.05)		0.1	0.3	0.0	0.4	0.0					0.4	5			3

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 7 entries in the Texas Advanced White/Yellow Trial grown near Springlake, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Yukon Gold	WR	large tubers, , ,	larger tubers, nice shape, poor internals++, , ,	4, 4, 4, 4	3.8, 3.6, 3.5, 3.5
TXWL-1	TXWH/Y	, , ,	deep eyes, rough, high yield, bad rep,	3.5, 3.5, 4, 3.5	2, 2.5, 2.5, 2.5
Sierra Gold	TXWH/Y	, , ,	BOT++, , ,	4, 4, ,	4, 4, ,
AORTX11913-3Wre/Y	TXWH/Y	, , ,	red eye, nice skin, , , low set	3.5, 2, 3.5, 2	3.8, 3.6, 3.6, 3.6
COTX10097-2W/Y	TXWH/Y	, , ,	nice flesh, smooth, road map, low set,	3.5, 3, 3, 3.5	3.6, 3.8, 3.6, 3.8
BTX1749-1W/Y	TXWH/Y	few tubers, , very few tubers,	low set, nice shape, , ,	2, 3, , 3.5	3.5, 3.5, , 3.5
COTX05249-3WRE/Y	TXWH/Y	, , ,	not red eye, low set, round, drop++, , ,	2, 2, 2, 2	1.5, 1.5, 1.5, 1.5

Outstanding Texas Advanced Small Potato Selections, 2017

Overall Summary – Springlake and Dalhart. The Texas Advanced Small Potato Selection Trials consisted of twenty entries at Springlake and twenty entries at Dalhart. Based on both trials 14 clones will be re-tested in 2018. (AORTX11913-4P, ATTX98444S-16R/Y, ATX05186-1R, ATX05202S-3W/Y, ATX06264S-4R/Y, ATX11533-1W/Y, ATX11548-1R, COTX03134-1W, COTX04050S-1P/P, COTX10073S-1W, COTX10138S-7W/Y, NDTX081451CBS-1Y/Y, NDTX1287B-1W, and TX09406S-1P/P)

Texas Advanced Small Potato Selection Trial, Springlake

This trial consisted of twenty entries.

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

- COTX10138S-7W/Y, COTX03134-1W, COTX04050S-1P/P, ATTX98444S-16R/Y, and COTX10073S-1W were the outstanding entries for this trial based on best of trial notations, while COTX04193S-2R/Y and ATX08121-3P/Y also had high general ratings (Table 11a and 11e).
- ATX06264S-4R/Y had the highest total yield, while COTX10138S-7W/Y had the highest marketable yield, while ATX06264S-4R/Y had the highest yield of oversized tubers (Table 11a).
- NDTX102816CABS-1W and TX13582-3W had over 90% marketable tubers. ATX06264S-4R/Y and ATTX98444S-16R/Y had the highest percentage of oversized sized tubers (Table 11b).
- COTX10138S-7W/Y had the highest average number of tubers per plant (Table 11c).
- AORTX11913-4P, NDTX081451CBS-1Y/Y, and NDTX1287B-1W were the latest in maturity, while COTX04193S-2R/Y and ATX08121-3P/Y were the earliest in maturity (Table 11c).
- COTX04193S-2R/Y had the darkest yellow flesh. TX09406S-1P/P and COTX04050-1P/P had very dark purple flesh (Table 11d).

Comments on entries:

- NDTX113037C-2W Round White feathering, poor shape, rough, ZC, drop+++ , FC=1.0
- ATX06264S-4R/Y Round Red nice red skin+, small, larger tubers, move to red trial, heat sprouts, many culls, FC=3.2
- COTX10138S-7W/Y Oblong White chip, some purple eyes, high set, nice skin, light flesh, mixed, BOT, FC=2.0

- COTX10138S-7W/Y Oblong White lots of small tubers, some purple eyes, FC=2.0
- COTX03134-1W Oblong White uniformly small, lots of small tubers, high set, road map+, flat, parent for tuber number, poor skin, poor shape, BOT for tuber number, FC=1.0
- TX12471-6W/Y Oblong White chip? +, nice skin, light flesh, some larger, too large, FC=2.4
- COTX04050S-1P/P Oblong Purple more white streaks in flesh, uniform size, nice shape and size, nice flesh color, feathering, road map, BOT, FC=4.5
- AORTX11913-4P Oblong Purple very dark skin, nice shape, white flesh, some vascular discoloration, FC=1.0
- ATTX05175S-1R/Y Round Red late, lighter and not bad, high tuber no, lots of B's, small, uniform, some deep eyes, FC=3.5
- ATTX98444S-16R/Y Round Red uniform size and shape, high set, ZC, feathering, BOT-, FC=3.2
- ATX05186S-1R Round Red very nice size and shape, white flesh, nice skin, light set, FC=1.0
- TX09406S-1P/P Round Purple some white streaking, nice skin finish, feathering, very dark skin color, FC=4.5
- COTX04193S-2R/Y Oblong Red nice red skin color++, uniform size and shape, some feathering, white streaks in flesh, light set++, FC=3.8
- ATX08121-3P/Y Round Purple small, blackberry color, nice skin, shape and flesh, TC, FC=2.5
- ATX05202S-3W/Y Round White very nice shape and flesh, ZC, FC=3.2
- COTX10073S-1W Round White ZC, very nice, high set+, no feathering, BOT, FC=1.0
- NDTX081451CBS-1Y/Y Oblong White low yield, white and yellow flesh mixed, heat sprouts, feathering+++, poor shape, FC=2.0
- NDTX1287B-1W Oblong White some buff skin, nice shape, feathering++, FC=1.0
- NDTX102816CABS-1W Oblong White very nice size, white flesh, feathering, high set, 20% ZC, low set, FC=1.0
- TX13582-3W Round White white and yellow flesh mixed, feathering, buff skin, light set, FC=1.0
- TX13582-5W Oblong White small, feathering, nice shape, light set, FC=1.0

¹FC=flesh color rating 1=light to 5= dark

Summary:

COTX101385-7W/Y, COTX03134-1W, COTX04050S-1P/P, ATTX98444S-16R/Y, and COTX10073S-1W were the outstanding entries for this trial based on all factors. COTX04193S-2R/Y and ATX08121-3P/Y also deserve mention.

Springlake
Table 11a.

Total yield, marketable, over sized, and culls/No.2 potatoes and general rating of 20 entries
in the Texas Advanced Small Potato Selection Trial grown near Springlake, Texas-2017.

Variety or Selection	Trial	Total Yield Cwt/A	Marketable Yield	Over Sized	Culls/ No.2	General Rating ¹ Grading
ATX06264S-4R/Y	TXSM	354.2	161.8	89.5	13.3	3.1
COTX101385-7W/Y	TXSM	338.8	304.2	16.6	1.4	4.4
COTX10138S-7W/Y	TXSM	329.0	262.7	32.7	0.9	4.0
COTX03134-1W	TXSM	263.4	232.0	11.5	8.5	3.7
TX12471-6W/Y	TXSM	262.3	142.1	59.6	0.9	3.3
COTX04050S-1P/P	TXSM	258.4	200.3	28.9	0.3	3.3
AORTX11913-4P	TXSM	256.5	176.0	38.9	2.8	3.7
ATTX05175s-1R/Y	TXADVR/Y	284.4	178.4	48.6	8.8	3.4
ATTX98444S-16R/Y	TXSM	217.6	173.0	21.1	2.4	3.8
ATX05186S-1R	TXSM	206.9	165.1	19.5	2.9	3.8
TX09406S-1P/P	TXSM	195.5	141.6	27.0	0.0	3.5
COTX04193S-2R/Y	TXSM	189.6	145.4	19.8	4.7	4.1
ATX08121-3P/Y	TXP	206.7	165.3	20.7	0.0	4.0
ATX05202S-3W/Y	TXSM	177.5	134.8	20.5	1.6	3.6
COTX10073S-1W	TXSM	172.6	126.7	22.6	0.6	3.5
NDTX081451CBS-1Y/Y	TXSM	170.8	122.6	19.8	8.7	2.3
NDTX1287B-1W	TXSM	163.5	110.3	25.2	2.8	3.7
NDTX102816CABS-1W	TXSM	161.2	146.6	6.7	1.1	3.0
TX13582-3W	TXSM	151.4	146.6	2.4	0.0	3.5
TX13582-5W	TXSM	131.7	114.4	8.6	0.0	3.3
Average		224.6	167.5	27.0	3.1	3.5
L.S.D. (.05)		72.1	48.6	18.4	3.9	0.5

¹ 1=very poor to 5= excellent

Springlake
Table 11b.

Percent by weight of marketable, oversized, and culls/No.2 potatoes, specific gravity, tuber type and skin type of 20 entries in the Texas Advanced Small Potato Selection Trial grown near Springlake, Texas-2017.

Variety or Selection	Trial	Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Marketable Yield	Over Sized	Culls/ No. 2				
ATX06264S-4R/Y	TXSM	47.1	24.3	4.4	1.061	13.5	Round	Red
COTX101385-7W/Y	TXSM	89.7	4.9	0.4	1.065	14.1	Oblong	White
COTX10138S-7W/Y	TXSM	79.7	10.0	0.3	1.066	14.2	Oblong	White
COTX03134-1W	TXSM	88.2	4.3	3.2	1.073	15.5	Oblong	White
TX12471-6W/Y	TXSM	54.5	22.6	0.4	1.057	12.6	Oblong	White
COTX04050S-1P/P	TXSM	77.6	11.1	0.2	1.068	14.6	Oblong	Purple
AORTX11913-4P	TXSM	68.5	15.2	1.0	1.054	12.1	Oblong	Purple
ATTX05175s-1R/Y	TXADVR/Y	63.0	17.0	3.0	1.059	13.0	Round	Red
ATTX98444S-16R/Y	TXSM	81.4	8.7	1.2	1.073	15.5	Round	Red
ATX05186S-1R	TXSM	82.0	8.4	1.2	1.062	13.5	Round	Red
TX09406S-1P/P	TXSM	75.3	12.4	0.0	1.063	13.7	Round	Purple
COTX04193S-2R/Y	TXSM	76.5	10.5	2.6	1.056	12.6	Oblong	Red
ATX08121-3P/Y	TXP	79.9	10.0	0.0	1.060	13.3	Round	White
ATX05202S-3W/Y	TXSM	79.6	9.8	0.8	1.066	14.3	Round	White
COTX10073S-1W	TXSM	71.9	13.8	0.6	1.068	14.6	Round	White
NDTX081451CBS-1Y/Y	TXSM	74.4	9.3	7.1	1.060	13.2	Oblong	White
NDTX1287B-1W	TXSM	67.0	15.5	1.9	1.069	14.7	Oblong	White
NDTX102816CABS-1W	TXSM	90.7	4.3	0.8	1.081	16.9	Oblong	White
TX13582-3W	TXSM	96.6	1.7	0.0	1.068	14.7	Round	White
TX13582-5W	TXSM	87.2	6.4	0.0	1.068	14.6	Oblong	White
Average		76.5	11.0	1.5	1.065	14.1		
L.S.D. (.05)		9.5	4.6	2.2	0.0	0.6		

Springlake
Table 11c.

Average number of tubers per plant, tuber weight, number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, and percent dead vine sat vine kill of 20 entries in the Texas Advanced Small Potato Selection Trial grown near Springlake, Texas-2017.

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	
ATX06264S-4R/Y	TXSM	12.5	2.3	2.4	94	98	1.6	3.3	4.3	3.5	1
COTX101385-7W/Y	TXSM	20.4	1.4	4.1	95	100	2.0	3.5	3.6	3.6	8
COTX10138S-7W/Y	TXSM	18.6	1.5	3.8	99	100	1.9	3.4	3.6	3.5	6
COTX03134-1W	TXSM	17.8	1.3	4.0	100	100	2.0	3.9	4.2	3.8	3
TX12471-6W/Y	TXSM	10.2	2.5	2.8	90	88	1.6	2.5	3.3	2.9	24
COTX04050S-1P/P	TXSM	11.4	1.9	2.6	100	100	1.8	4.1	3.9	4.2	10
AORTX11913-4P	TXSM	10.8	2.0	3.6	96	100	1.8	4.1	4.8	4.2	1
ATTX05175s-1R/Y	TXADVR/Y	15.3	1.6	1.6	79	100	1.5	3.1	4.2	3.3	4
ATTX98444S-16R/Y	TXSM	10.9	1.7	2.3	99	98	1.5	3.8	3.6	3.8	11
ATX05186S-1R	TXSM	9.5	1.8	3.6	100	100	1.6	3.8	4.1	3.8	5
TX09406S-1P/P	TXSM	7.6	2.1	3.7	97	98	1.9	3.5	3.1	3.6	39
COTX04193S-2R/Y	TXSM	7.0	2.3	2.8	100	100	1.6	3.2	2.8	3.6	53
ATX08121-3P/Y	TXP	10.9	1.6	2.9	100	100	1.5	3.3	2.8	3.5	60
ATX05202S-3W/Y	TXSM	7.3	2.0	2.5	90	100	1.8	3.7	4.0	3.8	7
COTX10073S-1W	TXSM	6.5	2.2	2.2	98	100	1.5	3.7	4.0	3.7	5
NDTX081451CBS-1Y/Y	TXSM	8.1	1.7	3.0	100	100	2.0	3.9	4.6	4.0	3
NDTX1287B-1W	TXSM	5.5	2.4	2.7	100	100	1.5	4.0	4.9	4.1	0
NDTX102816CABS-1W	TXSM	8.6	1.6	3.7	100	100	2.0	3.6	3.7	3.7	13
TX13582-3W	TXSM	8.0	1.6	2.8	100	100	1.5	3.1	3.9	3.5	3
TX13582-5W	TXSM	4.8	2.3	2.8	93	96	1.5	3.0	3.9	3.5	8
Average		10.6	1.9	3.0	97	99	1.7	3.5	3.9	3.7	13
L.S.D. (.05)		2.8	0.3	0.5	7	4	0.2	0.3	0.4	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

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 20 entries in the Texas Advanced Small Potato Selection Trial grown near Springlake, Texas-2017.

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
ATX06264S-4R/Y	TXSM	3.2	2.0	1.0	4.3	4.2	5.0	5.0	5.0	5.0	2.4	0	0	0	0
COTX101385-7W/Y	TXSM	2.0	3.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX10138S-7W/Y	TXSM	2.0	3.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	3.6	0	0	0	0
COTX03134-1W	TXSM	1.0	3.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	3.0	0	0	0	0
TX12471-6W/Y	TXSM	2.4	3.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	3.5	0	0	0	0
COTX04050S-1P/P	TXSM	4.5	3.0	1.0	4.0	5.0	5.0	5.0	5.0	5.0	2.0	0	0	0	0
AORTX11913-4P	TXSM	1.0	3.0	1.0	4.0	5.0	5.0	5.0	5.0	5.0	2.5	0	3	0	0
ATTX05175s-1R/Y	TXADVR/Y	3.5	2.0	1.0	3.5	3.9	5.0	5.0	5.0	5.0	3.4	0	0	5	0
ATTX98444S-16R/Y	TXSM	3.2	2.0	1.0	3.5	3.6	5.0	5.0	5.0	5.0	2.8	0	0	0	0
ATTX05186S-1R	TXSM	1.0	2.0	1.0	4.0	4.2	5.0	5.0	5.0	5.0	3.6	0	0	0	0
TX09406S-1P/P	TXSM	4.5	2.0	1.0	4.0	5.0	5.0	5.0	5.0	5.0	2.5	0	0	0	0
COTX04193S-2R/Y	TXSM	3.8	2.5	1.0	4.0	4.3	5.0	5.0	5.0	5.0	2.7	0	0	0	0
ATX08121-3P/Y	TXP	2.5	2.0	1.0	4.0	4.6	5.0	5.0	5.0	5.0	4.0	0	0	0	0
ATX05202S-3W/Y	TXSM	3.2	2.0	1.5	5.0	1.0	5.0	5.0	5.0	5.0	2.7	0	0	0	0
COTX10073S-1W	TXSM	1.0	2.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	2.8	0	0	0	0
NDTX081451CBS-1Y/Y	TXSM	2.0	3.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	2.0	0	0	0	0
NDTX1287B-1W	TXSM	1.0	3.0	1.0	4.0	2.5	5.0	5.0	5.0	5.0	2.0	0	0	0	0
NDTX102816CABS-1W	TXSM	1.0	3.0	1.0	3.8	1.0	5.0	5.0	5.0	5.0	2.4	0	0	0	0
TX13582-3W	TXSM	1.0	2.0	2.0	4.0	1.0	5.0	5.0	5.0	5.0	2.0	0	0	0	0
TX13582-5W	TXSM	1.0	2.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	2.5	0	0	0	0
Average		2.2	2.5	1.1	4.0	2.6	5.0	5.0	5.0	5.0	2.9	0	0	0	0
L.S.D. (.05)		0.2	0.0	0.0	0.1	0.1					0.5		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

Springlake
Table 11e.

Notes and general rating for all reps of 20 entries in the Texas Advanced Small Potato Selection Trial grown near Springlake, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Grading
ATX06264S-4R/Y	TXSM	, nice red skin+, ,	nice color, small, larger tubers, move to red trial, heat sprouts, many culls,	2.5, 3.8, 3, 3
COTX10138S-7W/Y	TXSM	chip?, , ,	some purple eyes, high set, nice skin, light flesh, BOT, mixed,	4.5, 4.3, 4.5,
COTX10138S-7W/Y	TXSM	, , , lots of small tubers	some purple eyes, , ,	3.8, 4, 4, 4
COTX03134-1W	TXSM	uniformly small, lots of small tubers, ,	BOT for tuber number, high set, road map+, flat, parent for tuber number, poor skin, poor shape, ,	3.8, 3.8, 3.3, 4
TX12471-6W/Y	TXSM	, chip?+, ,	nice skin, light flesh, some larger, too large,	3.6, 3.6, 3, 3
COTX04050S-1P/P	TXSM	, , ,	more white streaks in flesh, uniform size, nice shape and size, BOT, nice flesh color, feathering, road map,	3, 3, 3.5, 3.6
AORTX11913-4P	TXSM	, , ,	very dark skin, nice shape, white flesh, , , some vascular discoloration	3.7, 3.6, 3.7, 3.8
ATTX05175s-1R/Y	TXADVR/Y	late, David lighter and not bad, high tuber no,	lots of B's, small, uniform, some deep eyes, ,	3.5, 3.5, 3.8, 2.8
ATTX98444S-16R/Y	TXSM	, , ,	uniform size and shape, high set, BOT-, ZC?, feathering,	3.7, 4, 3.8, 3.8
ATX05186S-1R	TXSM	, , ,	very nice size and shape, white flesh, nice skin, light set, ,	3.8, 3.8, 3.6, 3.8
TX09406S-1P/P	TXSM	, , ,	some white streaking, nice skin finish, feathering, very dark skin color, , some white streaking	3.4, 3.5, 3.6, 3.4
COTX04193S-2R/Y	TXSM	nice red skin color++, uniform size and shape, ,	some feathering, , feathering, white streaks in flesh, light set++	4, 4.2, 4, 4
ATX08121-3P/Y	TXP	small black berry color, , ,	small, nice skin, shape and flesh, TC?, , ,	4, , ,
ATX05202S-3W/Y	TXSM	, , ,	very nice shape and flesh, nice flesh, ZC, ,	3.5, 3.7, 3.6,
COTX10073S-1W	TXSM	, , ,	, ZC, very nice, BOT, high set+, no feathering	3.8, 3.4, 3.4, 3.3
NDTX081451CBS-1Y/Y	TXSM	, , ,	low yield, white and yellow flesh mixed, heat sprouts, low set, feathering+++, poor shape	1, 2.5, 3, 2.5
NDTX1287B-1W	TXSM	, , ,	some buff skin, nice shape, feathering+++, ,	3.7, 3.6, ,
NDTX102816CABS-1W	TXSM	, , ,	very nice size, white flesh, feathering, high set, 20%ZC, , low set	4, 3.8, 2, 2
TX13582-3W	TXSM	, , ,	white and yellow flesh mixed, feathering, buff skin, light set, ,	3.5, 3.5, ,
TX13582-5W	TXSM	, , ,	small, feathering, nice shape, light set, ,	3.6, 3, ,

Outstanding Texas Advanced Fingerling Selections, 2017

Overall Summary – Springlake and Dalhart. The Texas Advanced Fingerling Selection Trial consisted of six entries in in Dalhart. Banana was the check. Based on the Dalhart trial 1 clone will be re-tested in 2018. (PORTX03PG25-2R/R)

Outstanding Texas Advanced Purple Skin Selections, 2017

Overall Summary – Springlake and Dalhart. The Texas Advanced Purple Skin Selection Trial consisted of eight entries in Springlake and ten entries in Dalhart. Purple Majesty was the check. Based on both trials 6 clones will be re-tested in 2018. (ATX08121-3P/Y, ATX11549-1P/Y, ATX11556-1P/Y, COTX10138-19P/Y, and TX14629-1P/P)

Southwest and Texas Advanced Purple Skin Selection Trial, Springlake

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

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

- TX14626-2R/R/Y was the outstanding entry based on general rating and best of trial designation. ATX08121-3P/Y also received a high general rating (Table 12a and 12e).
- TX14626-2R/R/Y had the highest total and marketable yield (Table 12a).
- ATX08121-3P/Y had the highest yield of under 4 oz. tubers, while NDTX092237C-2R/WR had the highest yield of culls/No. 2 tubers (Table 12a)
- TX14626-2R/R/Y had highest percentage of marketable yield, while NDTX091886-3P/P had the highest percentage of less than 4 oz. tubers. NDTX092237C-2R/WR had the highest percentage of culls/No. 2 tubers (Table 12b).
- NDTX092237C-2R/WR had the highest average number of tubers per plant (Table 12c).
- TX14626-2R/R/Y, NDTX092237C-2R/WR, and CO08037-2P/P were the latest in maturity, while ATX08121-3P/Y and NDTX091886-3P/P were the earliest in maturity (Table 12c).
- NDTX092237C-2R/WR had the darkest yellow flesh. ATTX98493-2P/P, TX09406S-1P/P, CO08037-2P/P, and NDTX091886-3P/P had darker purple flesh color than Purple Majesty (Table 12d).

Comments on entries:

- TX14626-2R/Y Round Purple intense red skin, nice, feathering+, nice size, parent, chip if high gravity, TC, BOT, FC=2.0
- NDTX092237C-2R/WR Round Purple very late++, attached stolons, very small tubers+++, nice skin color, high set, lots of culls, uneven flesh, 20% dark spots in flesh, drop, FC=3.8
- ATX08121-3P/Y Round Purple small, nice skin, shape and flesh, TC, FC=2.5
- ATTX98493-2P/P Oblong Purple small tubers+, almost black skin+, very late+, heat sprouts, gray skin color, road map+, nice shape, marbled flesh, FC=4.3
- TX09406S-1P/P Round Purple high tuber set++, small+, uniform, gray skin color, poor skin finish, road map, marbled flesh, FC=4.5
- Purple Majesty Oblong Purple high tuber set, road map, uneven shape, poor skin finish, marbled flesh, FC=3.9
- CO08037-2P/P Round Purple round, few tubers, small, some white streaking, nice shape, good skin finish, FC=4.5
- NDTX091886-3P/P Round Purple few tubers, small, poor internals, 100% dark spots in flesh, drop+, FC=4.5

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

Summary:

COTX10138-19P/Y, ATX08121-3P/Y, and ATTX98493-2P/P were the outstanding entries based on all factors.

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 Southwest Regional and Texas Advanced Purple Skin Selection Trial grown near Springlake, Texas-2017.

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 Field	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz					
TX14626-2R/R	TXP	271.7	143.1	97.5	45.6	0.0	0.0	114.8	13.8	4.8	4.2
NDTX092237C-2R/WR	TXP	232.7	10.5	10.5	0.0	0.0	0.0	19.2	202.9	2.4	1.5
ATX08121-3P/Y	TXP	186.0	20.7	20.7	0.0	0.0	0.0	165.3	0.0	4.0	4.0
ATTX98493-2P/P	TXP	183.0	17.7	17.7	0.0	0.0	0.0	155.1	10.2	2.4	2.7
TX094065-1P/P	TXP	175.7	14.0	14.0	0.0	0.0	0.0	160.2	1.4	3.7	3.4
Purple Majesty	SW	171.6	27.8	24.0	3.8	0.0	0.0	134.0	9.8	2.7	2.7
CO08037-2P/P	SW	107.5	19.2	19.2	0.0	0.0	0.0	83.0	5.4	1.8	2.8
NDTX091886-3P/P	TXP	61.3	1.6	1.6	0.0	0.0	0.0	59.7	0.0	1.8	1.9
Average		173.7	31.8	25.7	6.2	0.0	0.0	111.4	30.4	2.9	2.9
L.S.D. (.05)		54.1	11.2	8.2	3.9			44.4	30.7	0.9	0.6

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 Southwest Regional and Texas
Advanced Purple Skin Selection Trial grown near Springlake, Texas-2017.

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				
TX14626-2R/R	TXP	52.7	35.9	16.8	0.0	0.0	42.2	5.1	1.047	11.0	Round	Purple
NDTX092237C-2R/WR	TXP	4.6	4.6	0.0	0.0	0.0	9.4	86.0	1.031	8.0	Round	Purple
ATX08121-3P/Y	TXP	11.2	11.2	0.0	0.0	0.0	88.8	0.0	1.060	13.3	Round	Purple
ATTX98493-2P/P	TXP	9.3	9.3	0.0	0.0	0.0	86.0	4.8	1.063	13.7	Oblong	Purple
TX094065-1P/P	TXP	8.8	8.8	0.0	0.0	0.0	90.5	0.7	1.062	13.5	Round	Purple
Purple Majesty	SW	14.3	12.9	1.5	0.0	0.0	79.9	5.8	1.064	13.9	Oblong	Purple
CO08037-2P/P	SW	18.3	18.3	0.0	0.0	0.0	77.0	4.7	1.062	13.6	Round	Purple
NDTX091886-3P/P	TXP	2.0	2.0	0.0	0.0	0.0	98.0	0.0	1.062	13.5	Round	Purple
Average		15.1	12.9	2.3	0.0	0.0	71.5	13.4	1.056	12.6		
L.S.D. (.05)		4.9	4.3	1.5			5.2	5.8	0.006	1.0		

Springlake
Table 12c.

Average number of tubers per plant, tuber weight, number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, and percent dead vine at vine kill of 8 entries in the Southwest Reginal and Texas Advanced Purple Skin Selection Trial grown near Springlake, Texas-2017.

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	
TX14626-2R/R/Y	TXP	6.8	3.3	2.0	100	100	1.5	3.8	4.0	3.7	10
NDTX092237C-2R/WR	TXP	20.8	0.9	1.5	70	100	1.5	2.6	4.3	2.9	3
ATX08121-3P/Y	TXP	10.4	1.5	2.9	100	100	1.5	3.3	2.8	3.5	60
ATTX98493-2P/P	TXP	12.2	1.2	4.2	100	100	1.6	3.6	3.7	3.6	13
TX094065-1P/P	TXP	11.3	1.4	4.3	95	97	2.0	3.6	2.9	3.6	50
Purple Majesty	SW	7.8	1.8	2.9	100	100	1.8	3.8	3.3	3.8	34
CO08037-2P/P	SW	5.4	1.7	1.4	89	100	1.5	2.5	4.2	2.9	3
NDTX091886-3P/P	TXP	3.7	1.4	3.3	100	100	1.5	3.8	3.1	3.7	47
Average		9.8	1.6	2.8	94	100	1.6	3.4	3.5	3.5	27
L.S.D. (.05)		3.7	0.1	0.9	13	3	0.2	0.2	0.3	0.2	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

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 Southwest Regional and Texas Advanced Purple Skin Selection Trial grown near Springlake, Texas-2017.

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
TX14626-2R/R	TXP	2.0	2.5	1.0	4.0	4.5	5.0	5.0	5.0	5.0	2.5	0	0	0	0
NDTX092237C-2R/WR	TXP	3.8	2.0	1.0	4.0	4.3	5.0	5.0	5.0	5.0	3.2	0	0	0	0
ATX08121-3P/Y	TXP	2.5	2.0	1.0	4.0	4.6	5.0	5.0	5.0	5.0	4.0	0	0	0	0
ATTX98493-2P/P	TXP	4.3	3.0	1.0	4.0	5.0	5.0	5.0	5.0	5.0	3.9	0	0	0	0
TX094065-1P/P	TXP	4.5	2.0	1.0	4.0	5.0	5.0	5.0	5.0	5.0	3.9	0	0	0	0
Purple Majesty	SW	3.9	3.5	1.0	4.0	4.9	5.0	5.0	5.0	5.0	3.9	0	0	0	0
CO08037-2P/P	SW	4.5	2.0	1.0	4.0	5.0	5.0	5.0	5.0	5.0	3.6	0	0	0	0
NDTX091886-3P/P	TXP	4.5	2.5	1.0	4.0	5.0	5.0	5.0	5.0	5.0	3.8	0	0	0	0
Average		3.7	2.4	1.0	4.0	4.8	5.0	5.0	5.0	5.0	3.6	0	0	0	0
L.S.D. (.05)		0.2	0.0			0.2					0.3				

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 Southwest Regional and Texas Advanced Purple Skin Selection Trial grown near Springlake, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
TX14626-2R/R	TXP	BOT, intense red skin, , , very late++, attached stolons, very small tubers+++ , ,	nice, feathering+, nice size, parent, TC, chip if high gravity, , ,	4.8, , ,	4.2, , ,
NDTX092237C-2R/WR	TXP	nice skin color,	late, high set, lots of culls, uneven flesh, drop, , , 20% dark spots in flesh	2, 2, 2, 3.6	1, 1.5, 1.5, 2
ATX08121-3P/Y	TXP	, , ,	small, nice skin, shape and flesh, TC?, , ,	4, , ,	4, , ,
ATTX98493-2P/P	TXP	, small tubers+, almost black skin+, , very late+	late, heat sprouts, marble flesh, gray skin color, road map+, nice shape, some white streaks in flesh	2.5, 3.5, 1.5, 2	3, 3, 2.5, 2.3
TX094065-1P/P	TXP	high tuber no++, small+, , ,	uniform, gray skin color, poor skin finish, road map, marbled flesh, ,	3.5, 3.8, 3.8, 3.5	3.5, 3.6, 3.5, 3
Purple Majesty	SW	high tuber no, , ,	road map, uneven shape, poor skin finish, marbled flesh, ,	3.8, 2, 2.5, 2.5	3, 2.6, 2.8, 2.3
CO08037-2P/P	SW	round, few tubers, ,	small, some white streaking, , nice shape, good skin finish,	2.5, 1.5, 2, 1	3.8, 2.8, 2.8, 1.8
NDTX091886-3P/P	TXP	few tubers, small, ,	, small, poor internals, 50% dark spots in flesh, 100% dark spots in flesh, drop+, 100% dark spots in flesh	, 2.5, 2, 1	, 2.8, 1.3, 1.5

2017 Dalhart Trials

Summary of growing conditions:

The second planting was near Dalhart (36.08N, 102.6W) 10 miles southwest of Dalhart in a CSS Farms production field on May 15th to 19th and harvested on September 3rd, 11th, and 22nd. Standard cultural practices for the area were used (Table 3). Precipitation was significantly higher than normal during the growing season (Figure 4).

Trials conducted:

- National Chip Processing Trial (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
- Texas Advanced Chip Selection
- 2016 Chip Selection
- Texas Advanced Russet Selection
- 2016 Russet Selection
- Texas Advanced Red Selection
- 2016 Red Selection
- Texas Advanced Red/Yellow Selection
- 2016 Red /Yellow Selection
- Texas Advanced White/Yellow Selection
- 2016 White/Yellow Selection
- Texas Advanced Small Potato Selection
- 2016 Small Potato Selection
- Texas Advanced Fingerling Selection
- 2016 Fingerling Potato Selection
- Southwest Regional and Texas Advanced Purple Skin Selection
- 2016 Purple Skin Selection
- Commercial Specialty (not reported)
- Micro-organism treatment (not reported)

Table 3. Environmental and cultural inputs for the 2017 Dalhart Trials.		
Location:		
Dalhart, Texas		
Soil Type		
Dallum Fine Sand Loam		
Seed Source		
New York, Colorado, Oregon, Texas, and Idaho		
Date:		
		DAP
Planted	May 15, 2017	
Vines Killed (Red and Red Yellow Flesh)	August 18, 2017	93
Vines Killed (Chip and White Yellow Flesh)	August 18, 2017	93
Vines Killed (Russet)	August 30, 2017	105
Harvested (Nat Chip Trial, Chip)	September 3, 2017	108
Harvested (Red and Red/White Yellow Flesh)	September 11, 2017	116
Harvested (Small)	September 11, 2017	116
Harvested (Russet)	September 22, 2017	127
Plot Information:		
Size of Plots	18' 9.6"	
Spacing Between Hills	9.4"	
Spacing Between Rows	28"	
Hills Per Plot	24	
Number of Rows Per Plot	2	
Number of Reps	4	
Method of Harvest:		
Four-row drag digger, with hand pick up		
Fertilizer:		
Application:		
206-190-10 # per acre		
Irrigation:		
Center Pivot		
Seed Treatment		
Cruiser Maxx		
Insecticide:		
Fulfill		
Herbicides Applied:		
K-Tone, Para-Shot 3, Cornerstone 5 Plus, Zidual, StareDown, Select Max, Marix SG, Reglone, ETX		
Fungicide Applied:		
Curzate 60DF		
Environmental Factors:		
Precipitation was higher than normal during August.		

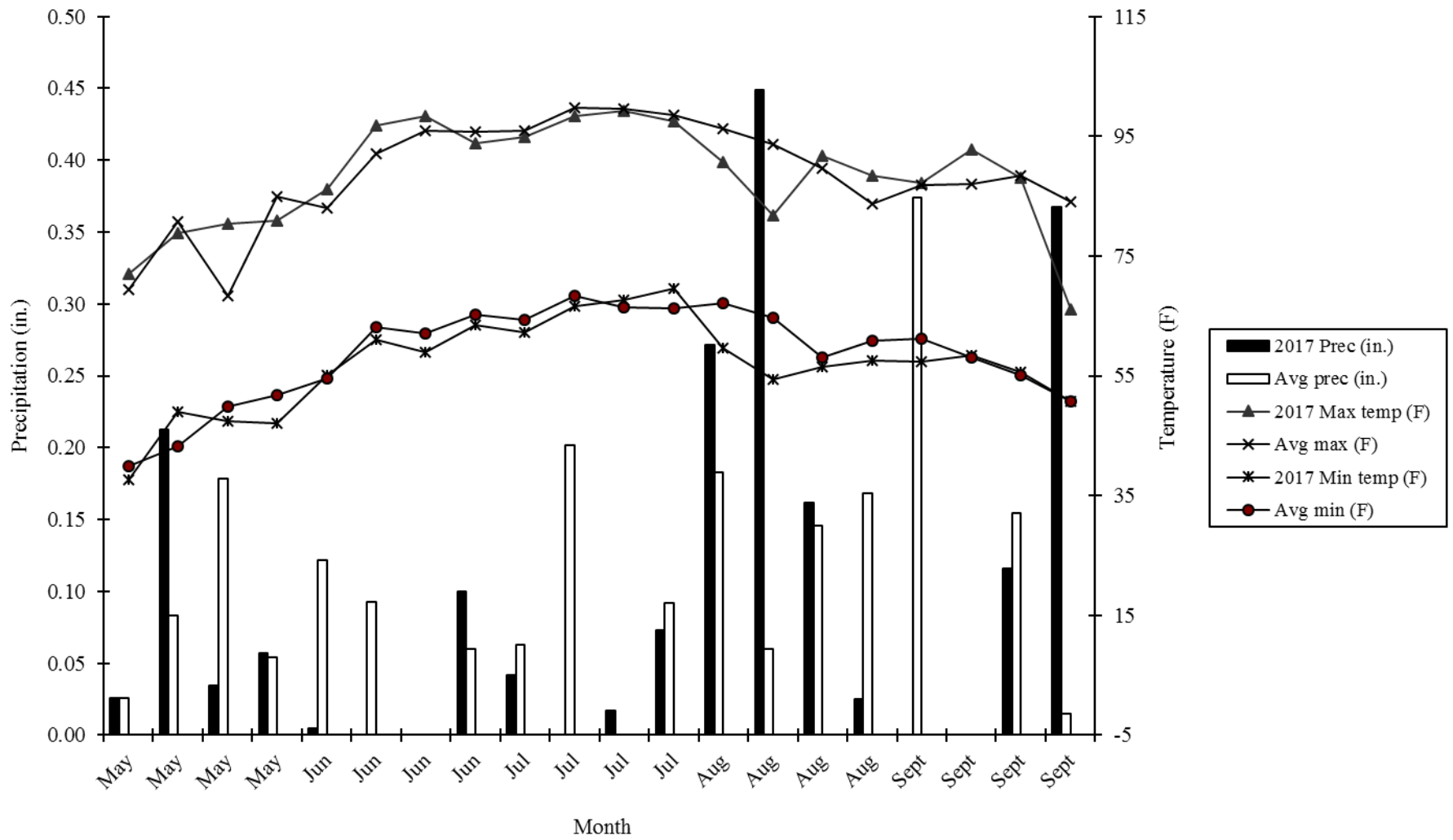


Figure 4. Weekly minimum/maximum temperatures and precipitation for the 2017-growing season near Dalhart, Texas compared to the average minimum/maximum temperatures and precipitation (1949-2017).

Western and Southwestern Regional Chip Trial, Dalhart

This trial consisted of nineteen entries including the check varieties Atlantic and Snowden.

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

- AOR09034-3 was the outstanding entry based on general rating and best of trial designation for tuber appearance. Lamoka, W2978-3, NY 152, Waneta, AOR09034-3, Atlantic, NDTX081648CB-13W, and MSV358-3 had high general rating for tuber appearance. W2978-3 and Waneta received a best of trial designation for chip quality. Lamoka and W2978-3 had over 83% good chips (Table 1a, 1e, and 1f).
- Lamoka had the highest total and marketable yield, while NY 152 had the highest yield of 4-6 oz. tubers (Table 1a).
- Waneta had the highest yield of over 10-18 oz. tubers, while MSW485-2 had the highest yield of less than 4 oz. tubers (Table 1a).
- B2727-2, Waneta, and Lamoka had the highest percentage of marketable yield (Table 1b).
- MSW485-2 had the highest percentage of less than 4 oz. tubers (Table 1b).
- MSV030-4, B2727-2, and MSX540-4 had the highest specific gravity (Table 1b).
- MSW485-2, AOR09034-3, and W2978-3 had the highest average number of tubers per plant (Table 1c).
- W5955-1, MSW485-2, NDTX081648CB-13W, Olympus, MSV030-4, and TX09396-1W were the latest in maturity, while Lamoka and W2978-3 were the earliest in maturity (Table 1c).
- Atlantic had the highest percent hollow heart and internal brown spot (Table 1d).
- Waneta had the best chipping quality out of storage followed by NY 152 and B2727-2. After two weeks of reconditioning, NY 152, B2727-2, Waneta, and Lamoka, had acceptable chip quality ratings.

Comments on entries:

- Lamoka Round White rough++, high tuber set+, rough skin, large tubers, enlarged lenticels, CR=2.3, Chip Notes: 83% Good chip
- W2978-3 Round White nice size, nice light smooth skin+, very uniform size and shape+, high tuber set, some knobs, shiny, CR=1.6, Chip Notes: 85% good chip, BOT

- NY 152 Round White nice, nice smooth skin+, uniform size and shape++, high tuber set, snap cut, shiny, CR=2.1, Chip Notes: 69% good chip, nice
- Waneta Round White mixed, large tubers, nice, uniform size and shape, high yield, CR=1.9, Chip Notes: 78% good chip, BOT
- AOR09034-3 Round White smooth skin++, medium-large tubers, high tuber set, uniform size and shape+, nice, snap cut, very nice+, light skin, small, shiny, excellent chip size, a little compressed, CR=3.5, Chip Notes: 45% good chip, BOT
- Atlantic Round White enlarged lenticels+, knobs, growth cracks, large tubers, rough, CR=3.7, Chip Notes: 35% good chip, 1 ROT
- NDA081453CAB-2C Round White large+, smooth skin, snap cut, large tubers+, CR=3.1, Chip Notes: 55% good chip, 1IBS
- MSW485-2 Round White too small, very uniform size and shape+, deep eyes+, blemished skin, attached stolons, high tuber set, CR=3.4, Chip Notes: 69% good chip, 1 dark
- NDTX081648CB-13W Round White nice, attached stolons, smooth skin+, shiny, small, snap cut, high tuber set+, very uniform size and shape, enlarged lenticels, CR=3.5, Chip Notes: 24% good chip, 1 IBS
- MSV358-3 Round White uniform size, good chip size, very high tuber set, knobs, enlarged lenticels, large tubers, CR=3.0, Chip Notes: 55% good chip, 3GH
- Snowden Round White knobs, enlarged lenticels, chunky, some attached stolons, CR=3.0, Chip Notes: 48% good chip
- MSX540-4 Round White soil attached to skin, large tubers+, CR=3.5, Chip Notes: 55% good chip
- OR09256-2 Round White soil attached to skin+++, russet skin, CR=3.7, Chip Notes: 35% good chip, 1 dark
- W5955-1 Round White not uniform size, high tuber set, not smooth skin, enlarged lenticels, uniform size, some pear shaped, CR=3.2, Chip Notes: 49% good chip
- B2727-2 Round White nice skin, oblong-long+, blemished skin++, large tubers, CR=2.3, Chip Notes: 69% good chip
- Olympus Round White skin darker than other chippers, CR=3.4, Chip Notes: 16% good chip

- MSV030-4 Round White CR=3.3, Chip Notes: 15% good chip, scab
- AC01144-1W Round White nice smooth skin, uniform shape, light skin, nice,
compressed, knobs, CR=2.8, Chip Notes: 72% good chip
- TX09396-1W Round White some feathering, a little flat, snap cut, large tubers, CR=3.6,
Chip Notes: 28% good chip

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

Summary:

Lamoka and W2978-3 were the outstanding entries based on all factors.

Dalhart
Table 1a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 19 entries in the Western and Southwestern Regional
Chip Trial grown near Dalhart, Texas-2017.

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 Field	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz					
Lamoka	Hig ZC	674.0	580.7	302.1	198.1	80.4	0.0	93.3	0.0	3.9	4.0
W2978-3	Real	613.2	465.5	311.1	131.1	23.3	0.0	147.7	0.0	4.1	4.6
NY 152	Hig ZC	605.5	489.3	326.0	137.3	26.1	0.0	116.2	0.0	4.4	4.4
Waneta	Hig ZC	550.4	484.1	206.0	182.5	95.6	0.0	66.3	0.0	3.7	4.2
AOR09034-3	WR	543.7	360.5	301.9	58.6	0.0	183.2	0.0	4.2	4.6	
Atlantic	WR	492.5	377.1	180.2	125.9	71.0	0.0	91.4	24.1	3.6	3.5
NDA081453CAB-2C	WR	478.6	402.7	192.4	133.1	77.2	0.0	76.0	0.0	3.5	3.8
MSW 485-2	Hig ZC	478.6	278.5	230.4	46.2	2.0	0.0	200.1	0.0	3.2	3.9
NDTX081648CB-13W	WR	467.0	299.9	240.6	59.3	0.0	0.0	167.1	0.0	4.1	4.0
MSV 358-3	Hig ZC	464.5	304.6	206.0	83.2	15.4	0.0	148.5	11.4	3.3	4.0
Snowden	WR	464.0	354.0	203.8	137.0	13.2	0.0	94.6	15.4	3.3	3.6
MSX 540-4	Hig ZC	453.1	378.3	166.1	182.5	29.8	0.0	74.7	0.0	3.2	3.7
OR09256-2	WR	449.8	296.7	248.7	47.9	0.0	0.0	153.2	0.0	3.4	3.7
W 5955-1	Hig ZC	439.4	353.3	192.9	113.5	46.9	0.0	86.1	0.0	3.5	3.7
B 2727-2	Hig ZC	433.2	391.5	159.6	157.1	74.7	0.0	41.7	0.0	3.5	3.6
Olympus	Real	397.2	241.3	175.5	61.6	4.2	0.0	155.9	0.0	3.3	3.7
MSV030-4	Hig ZC	376.4	298.9	177.3	97.8	23.8	0.0	77.5	0.0	3.4	3.6
AC01144-1W	WR	364.9	229.6	183.5	46.2	0.0	0.0	130.6	4.7	3.5	3.5
TX09396-1W	Hig ZC	327.9	279.3	152.9	97.8	28.5	0.0	48.7	0.0	2.7	3.5
Average		477.6	361.4	218.8	110.3	32.2	0.0	113.3	2.9	3.6	3.9
L.S.D. (.05)		117.9	112.9	76.5	61.5	32.5		43.7	ns	0.6	0.5

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 19 entries in the Western and Southwestern Regional Chip Trial grown near Dalhart, Texas-2017.

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				
Lamoka	Hig ZC	86.0	44.4	29.6	12.0	0.0	14.0	0.0	1.073	15.6	Round	White
W2978-3	Real	75.9	50.7	21.3	3.8	0.0	24.1	0.0	1.066	14.2	Round	White
NY 152	Hig ZC	80.8	53.7	22.4	4.7	0.0	19.2	0.0	1.067	14.4	Round	White
Waneta	Hig ZC	87.9	36.4	33.8	17.7	0.0	12.1	0.0	1.064	13.9	Round	White
AOR09034-3	WR	65.3	54.8	10.4	0.0	0.0	34.7	0.0	1.067	14.4	Round	White
Atlantic	WR	70.5	35.0	23.3	12.2	0.0	19.9	9.6	1.072	15.3	Round	White
NDA081453CAB-2C	WR	83.8	40.1	27.9	15.9	0.0	16.2	0.0	1.072	15.3	Round	White
MSW 485-2	Hig ZC	57.6	48.8	8.4	0.3	0.0	42.4	0.0	1.065	14.2	Round	White
NDTX081648CB-13W	WR	63.5	51.2	12.2	0.0	0.0	36.5	0.0	1.068	14.7	Round	White
MSV 358-3	Hig ZC	63.9	44.0	16.9	3.1	0.0	32.8	3.2	1.063	13.7	Round	White
Snowden	WR	73.3	44.0	26.6	2.7	0.0	21.3	5.4	1.067	14.5	Round	White
MSX 540-4	Hig ZC	83.3	36.1	41.5	5.7	0.0	16.7	0.0	1.074	15.8	Round	White
OR09256-2	WR	66.8	56.8	9.9	0.0	0.0	33.2	0.0	1.073	15.5	Round	White
W 5955-1	Hig ZC	81.4	44.1	26.5	10.8	0.0	18.6	0.0	1.061	13.3	Round	White
B 2727-2	Hig ZC	89.7	39.7	33.6	16.4	0.0	10.3	0.0	1.074	15.7	Round	White
Olympus	Real	58.1	42.0	15.1	0.9	0.0	41.9	0.0	1.065	14.0	Round	White
MSV030-4	Hig ZC	79.9	47.1	25.6	7.1	0.0	20.1	0.0	1.075	15.9	Round	White
AC01144-1W	WR	62.1	49.0	13.1	0.0	0.0	35.3	2.6	1.056	12.5	Round	White
TX09396-1W	Hig ZC	84.1	45.3	29.6	9.1	0.0	15.9	0.0	1.067	14.5	Round	White
Average		74.4	45.4	22.5	6.4	0.0	24.5	1.1	1.068	14.6		
L.S.D. (.05)		12.3	11.0	10.8	5.5		8.4	ns	0.005	1.0		

Dalhart
Table 1c.

Average number of tubers per plant, tuber weight, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness of 19 entries in the Western and Southwestern Regional Chip Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines	Length/ With	With/ Thickness
						Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴			
Lamoka	Hig ZC	9.1	5.0	100	100	2.5	3.7	3.6	3.8	18	1.19	1.25
W2978-3	Real	10.6	3.9	100	100	2.1	3.8	3.6	3.9	15	1.25	1.22
NY 152	Hig ZC	10.2	4.0	100	100	2.0	3.8	4.0	4.0	5	1.10	1.20
Waneta	Hig ZC	7.3	5.1	98	100	2.0	4.1	4.3	4.1	3	1.21	1.23
AOR09034-3	WR	10.6	3.4	100	100	2.0	4.1	4.5	4.4	5	1.07	1.10
Atlantic	WR	7.1	4.6	100	100	2.0	4.0	3.8	4.0	11	1.10	1.21
NDA081453CAB-2C	WR	6.2	5.2	100	100	2.1	4.2	4.4	4.3	1	0.97	1.41
MSW 485-2	Hig ZC	10.7	3.0	100	100	2.0	4.5	4.7	4.4	0	0.95	1.21
NDTX081648CB-13W	WR	8.9	3.5	100	100	2.0	4.4	4.7	4.5	0	1.15	1.23
MSV 358-3	Hig ZC	9.6	3.4	100	100	2.0	4.3	4.5	4.4	3	1.13	1.16
Snowden	WR	7.3	4.3	98	100	1.8	4.2	4.5	4.2	0	1.04	1.21
MSX 540-4	Hig ZC	6.4	4.8	100	100	2.0	3.4	4.6	3.4	0	1.10	1.28
OR09256-2	WR	8.4	3.6	100	100	2.0	4.5	4.3	4.6	8	1.11	1.12
W 5955-1	Hig ZC	6.6	4.5	100	100	2.0	4.5	4.8	4.7	0	1.09	1.15
B 2727-2	Hig ZC	5.2	5.6	100	100	2.1	4.2	4.3	4.2	4	1.28	1.13
Olympus	Real	7.8	3.3	96	100	2.0	4.5	4.7	4.6	0	1.08	1.16
MSV030-4	Hig ZC	6.0	4.2	98	100	2.0	4.5	4.7	4.6	1	1.04	1.21
AC01144-1W	WR	7.6	3.2	92	100	2.0	4.0	4.3	4.2	0	1.01	1.18
TX09396-1W	Hig ZC	4.8	4.6	90	100	2.0	4.7	4.7	4.7	0	1.19	1.20
Average		7.9	4.2	98	100	2.0	4.2	4.4	4.3	4	1.11	1.20
L.S.D. (.05)		1.9	0.6	ns		0.1	ns	0.4	0.7	8	0.10	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

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 19 entries in the Western and Southwestern Regional Chip Trial grown near Dalhart, Texas-2017.

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
Lamoka	Hig ZC	1.0	2.0	2.0	3.9	1.0	5.0	5.0	5.0	5.0	4.0	3	0	0	0
W2978-3	Real	1.0	2.0	1.0	4.6	1.0	5.0	5.0	5.0	4.9	3.6	3	0	3	0
NY 152	Hig ZC	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
Waneta	Hig ZC	1.0	1.8	1.0	4.3	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
AOR09034-3	WR	1.0	1.0	1.0	4.1	1.0	5.0	5.0	5.0	5.0	3.8	8	0	0	0
Atlantic	WR	1.0	1.0	2.5	3.9	1.0	4.6	5.0	5.0	4.7	4.0	30	0	5	15
NDA081453CAB-2C	WR	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	3.9	3	0	0	10
MSW 485-2	Hig ZC	1.0	1.0	1.0	3.1	1.0	5.0	5.0	5.0	5.0	3.4	10	0	15	0
NDTX081648CB-13W	WR	1.0	2.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.3	3	0	0	0
MSV 358-3	Hig ZC	1.0	1.0	2.5	4.0	1.0	5.0	5.0	5.0	4.8	4.0	0	0	0	0
Snowden	WR	1.0	1.0	2.3	3.8	1.0	5.0	5.0	5.0	4.8	4.0	0	0	0	0
MSX 540-4	Hig ZC	1.0	1.8	1.5	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
OR09256-2	WR	1.0	1.0	3.0	4.5	1.0	5.0	5.0	5.0	5.0	4.0	5	0	0	0
W 5955-1	Hig ZC	1.0	1.0	1.0	4.3	1.0	5.0	5.0	5.0	5.0	4.0	23	0	3	0
B 2727-2	Hig ZC	1.0	2.5	1.0	5.0	1.0	5.0	5.0	5.0	5.0	3.8	0	0	0	0
Olympus	Real	1.0	1.0	2.3	4.1	1.0	5.0	5.0	5.0	5.0	4.5	20	0	3	0
MSV030-4	Hig ZC	1.0	1.3	1.8	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	3	0
AC01144-1W	WR	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	4.8	4.3	0	0	0	0
TX09396-1W	Hig ZC	1.0	1.5	1.0	4.1	1.0	5.0	5.0	5.0	5.0	11.6	0	0	5	5
Average		1.0	1.4	1.5	4.1	1.0	5.0	5.0	5.0	4.9	4.4	6	0	2	2
L.S.D. (.05)			0.4	0.4	0.3		ns			ns	ns	10		4	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 1e.

Notes and general rating for all reps of 19 entries in the Western and Southwestern Regional Chip Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Lamoka	Hig ZC	, , , nice size, smooth skin+, very uniform size and shape+, high tuber set, ,	rough++, high tuber set+, rough skin, large tubers, enlarged lenticels	3.5, 4, 4, 4	4, 3.8, 4, 4.2
W2978-3	Real	nice, smooth skin+, uniform size and shape++, , high tuber set,	very light skin+, some knobs, nice smooth skin, high tuber set, shiny,	4.5, 4, 3.8, 4	4.2, 4.6, 4.8, 4.8
NY 152	Hig ZC	, , ,	snap cut, nice smooth skin, shiny, ,	4.5, 4, 4.5, 4.6	4.6, 4.5, 3.5, 4.8
Waneta	Hig ZC	mixed, , , smooth skin++, medium-large tubers, high tuber set, uniform size and shape+, ,	large tubers, nice, uniform size and shape, , high yield nice, snaps cut, high tuber number, uniform, smooth skin+, very nice+, BOT, light skin, small, shiny,	4, 3.8, 3.6, 3.5	4.6, 4.3, 4.2, 3.8
AOR09034-3	WR	enlarged lenticels, , ,	knobs, enlarged lenticels, growth cracks, , large tubers, rough	4.5, 4.5, 3.8, 4	4.3, 4.8, 4.3, 4.8
Atlantic	WR	large+, smooth skin, ,	knobs, enlarged lenticels, growth cracks, , large tubers, rough	3, 3.8, 4, 3.5	2.8, 4, 3.6, 3.6
NDA081453CAB-2C	WR	large+, smooth skin, ,	snap cut, large tubers+, , , small+, very uniform size and shape+, deep eyes+, blemished skin, attached stolons, high tuber set	4, 3.6, 3, 3.5	3.6, 3.8, 3.8, 4
MSW 485-2	Hig ZC	too small, , ,	attached stolons, smooth skin+, nice shiny, small, snap cut, high tuber set+, very uniform size and shape, uniform size, good chip size,, very high tuber set,	2.5, 3.6, 3.5, 3	3.6, 3.6, 3.8, 4.5
NDTX081648CB-13W	WR	nice, smooth skin, uniform size and shape, , ,	cut, high tuber set+, very uniform size and shape, uniform size, good chip size,, very high tuber set, knobs, enlarged lenticels, large tubers	4.5, 4.2, 3.8, 4	4, 4.5, 3.6, 3.8
MSV 358-3	Hig ZC	, , ,	knobs, enlarged lenticels, chunky, some attached stolons, ,	3.5, 4.5, 2, 3	4.5, 4.8, 2.8, 3.8
Snowden	WR	, , ,	stolons, ,	3, 3.8, 3, 3.5	2.8, 4.3, 3.8, 3.6
MSX 540-4	Hig ZC	, , dirty skin, soil attached to skin,	large tubers+, , ,	2.5, 3.5, 3.6, 3	3.3, 3.8, 3.5, 4.2
OR09256-2	WR	dirty skin, soil attached to skin+++, , ,	soil sticks to skin, russet skin, , rough skin , , not smooth skin, enlarged lenticels, uniform size, some pear shaped	3.5, 3.6, 2.8, 3.5	3.6, 3.8, 3.6, 3.8
W 5955-1	Hig ZC	not uniform size, , , high tuber set	some pear shaped	2.5, 4, 3, 4.5	4, 4, 3, 3.8
B 2727-2	Hig ZC	oblong++, , nice skin,	oblong-long+, blemished skin++, large tubers, ,	3.5, 3.6, 3, 3.8	3.5, 3.6, 3.5, 3.8
Olympus	Real	skin darker than other chippers, , ,	, , ,	3.5, 3.5, 2.6, 3.5	3.6, 3.6, 3.5, 4.2
MSV030-4	Hig ZC	, , ,	, , ,	2.5, 4, 4, 3	2.5, 3.6, 4.6, 3.6
AC01144-1W	WR	, , , nice smooth skin, uniform shape	light skin, nice, compressed, , knobs,	4, 4, 2, 4	3.6, 4, 2.6, 3.8
TX09396-1W	Hig ZC	, , large,	some feathering, , a little flat, snap cut, large tubers	2, 2.5, 3.2, 3	3.5, 3.5, 3.2, 3.8

Dalhart
Table 1f.

Specific gravity, percent solids, chip color , chip quality rating, % good chip, bad chip, vascular discoloration, bruise, stem end discoloration, apical bruise notes, 6 weeks storage chip quality rating, and reconditioning chip rating of 19 entries in the Western and Southwestern Regional Chip Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Gravity	% Solids	Chip Color ²	Chip Quality ³	% Good Chip	% Bad Chip	% Vas	% Bruise	% Stem	% Apical Bruise	Notes ⁴	6 Weeks Storage Chip Rating ⁵	Reconditioning Chip Rating ⁶
Lamoka	Hig ZC	1.073	15.6	1.3	2.3	83	17	0	7	10	0		3.4	2.8
W2978-3	Real	1.066	14.2	1.0	1.6	85	15	8	5	3	0	BOT, , ,	3.3	3.3
NY 152	Hig ZC	1.067	14.4	1.0	2.1	69	31	18	3	10	0	, , , nice	3.1	1.9
Waneta	Hig ZC	1.064	13.9	1.3	1.9	78	22	0	10	12	0	BOT, , ,	2.5	2.3
AOR09034-3	WR	1.067	14.4	1.3	3.5	45	55	24	29	0	0		4.5	3.4
Atlantic	WR	1.072	15.3	2.0	3.7	35	65	3	47	13	0	, , , 1 ROT	4.5	3.9
NDA081453CAB-2C	WR	1.072	15.3	1.8	3.1	55	45	23	8	5	0	, 1IBS?, ,	3.5	3.5
MSW 485-2	Hig ZC	1.065	14.2	1.8	3.4	69	31	13	29	10	0	, 1 dark, ,	4.0	3.9
NDTX081648CB-13W	WR	1.068	14.7	1.8	3.5	24	76	41	25	8	0	, 1IBS, ,	4.8	3.9
MSV 358-3	Hig ZC	1.063	13.7	1.3	3.0	55	45	18	13	13	0	, , 3GH,	4.9	3.3
Snowden	WR	1.067	14.5	1.8	3.0	48	53	38	0	15	0		4.8	3.5
MSX 540-4	Hig ZC	1.074	15.8	1.8	3.5	55	45	16	15	26	0		4.0	3.0
OR09256-2	WR	1.073	15.5	2.3	3.7	35	65	58	11	5	0	, , 1 dark,	4.4	3.3
W 5955-1	Hig ZC	1.061	13.3	2.0	3.2	49	51	5	33	13	0		4.1	3.6
B 2727-2	Hig ZC	1.074	15.7	1.5	2.3	69	31	5	26	0	0		3.1	2.1
Olympus	Real	1.065	14.0	2.0	3.4	16	84	65	0	19	0		3.6	3.1
MSV030-4	Hig ZC	1.075	15.9	1.3	3.3	15	85	64	10	7	0	scab, , ,	3.4	3.3
AC01144-1W	WR	1.056	12.5	1.5	2.8	72	28	23	25	5	0		3.4	3.3
TX09396-1W	Hig ZC	1.067	14.5	2.8	3.6	28	73	31	36	0	0		4.1	3.3
Average		1.068	14.6	3.0		52	48	24	17	9	0		3.9	3.2
L.S.D. (.05)		0.005	1.0	0.7		31	31	38	34	ns			0.5	0.5

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

¹ 1=poor, 5=excellent

² Good Chip Color 1=light, 5+=very dark

³ Chip Quality 1=Excellent to 5= Very Poor

⁴ BOT=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

⁵ Stored six weeks at 42°F then chipped immediately.

⁶ Reconditioned two weeks at 65°F

Western Regional and Texas Advanced Russet Trial, Dalhart

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

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

- Russet Norkotah, COTX09022-3RuRE/Y, A08009-2TE, TX08352-5Ru, and CO09205-2RU received high general ratings (Tables 2a).
- Russet Norkotah had the highest total and marketable yield, while TX08352-5Ru had the highest yield of over 10 oz. tubers (Table 2a).
- COTX05095-2RU/Y had the highest yield of less than 4 oz. tubers, while Shepody had the highest yield of culls/No.2 tubers (Table 2a).
- AO06191-1, TX08352-5Ru, and AOR06070-1KF had the highest percentage of marketable yield (Table 2b).
- CO09036-2RU had the highest percentage of less than 4 oz. tubers. Russet Burbank had the highest percentage of culls/No. 2 tubers (Table 2b).
- CO09036-2RU and AOR06070-1KF had the highest specific gravity (Table 2b).
- A03141-6 and Fortress Russet were the latest in maturity, while A06030-23 was the earliest in maturity (Table 2c).
- AO06191-1 and CO08065-2RU had over 53% hollow heart CO09205-2RU had the highest percentage of internal brown spot (Table 2d).

Comments on entries:

- Russet Norkotah Long Russet high tuber set, enlarged lenticels+, very nice shape+, uniform size and shape, good russeting, some moon shaped, hearts, pointy
- COTX09022-3RuRE/Y Oblong Russet high tuber set++, pink-red eyes, blocky, nice, unique, 20% SE
- COTX05095-2RU/Y Long Russet most tubers are medium-small, small+, uniform size and shape+, nice yellow flesh, high tuber, 50%, 20% SE
- A08433-4VR Oblong Russet small, a little flat, nice, 30%, 10% SE

- A08009-2TE Long Russet light eyes, high tuber set, pointy+, nice, attached stolons, long, culls, 10%, 10% SE
- TX08352-5Ru Oblong Russet uniformly large tubers+, nice shape and skin, knobs, enlarged lenticels, a little pointy
- A07061-6 Long Russet light skin+, high tuber set, 10%, 20% SE
- AOR07781-5 Long Russet nice skin, nice size, long lumpy, 10% green tubers, knobs
- CO09205-2RU Long Russet very nice+, nice shape, high tuber set, skinny, many eyes, pointy
- A03141-6 Long Russet knobs, culls+, many eyes, flat, long+, skinning, pointy, soft stem end, 30%, 30% SE
- Shepody Long White knobs++, light skin, attached stolons, many culls, smooth skin, 20% SE, ugly skin+
- CO09076-3RU Long Russet very long tubers pointy+, knobs++, growth cracks, nice skin
- CO09165-6W V Long White light skin+, long++, skinny, pointy, many culls, smooth skin, too long, not as light skin as other reps
- A06030-23 Long Russet light eyes+, knobs, enlarged lenticels, 10% SE
- AOR06070-1KF Long Russet long+++, pointy+++ (culls), skinny, 90% SE
- CO08231-1RU Long Russet not uniform size, nice shape
- Ranger Russet Long Russet rustic, knobs+
- Reveille Russet Oblong Russet knobs++, enlarged lenticels, low tuber set
- AO03123-2 Long Russet long++, enlarged lenticels, very low tuber set, skinny, light skin color, 10% SE
- CO08155-2RU/Y Oblong Russet not uniform russet skin+
- Fortress Russet Oblong Russet low tuber number, medium size, no pink streaks+++
- Russet Burbank Long Russet knobs++, skinny, ugly, many culls, does not like Texas
- AO06191-1 Long Russet knobs, low tuber number, very large++, uniformly large, nice shape, intense russet skin
- CO09036-2RU Long Russet small+, pointy+ (culls), attached stolons, very low tuber set+, nice russet skin, 30% SE
- AOTX05043-1Ru Oblong Russet low tuber number+, enlarged lenticels, blocky, not uniform size
- CO08065-2RU Oblong Russet low tuber set+, enlarged lenticels, blocky, flat, nice russet skin

Summary:

Russet Norkotah, COTX09022-3RuRE/Y, A08009-2TE, TX08352-5Ru, and CO09205-2RU 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 and Southwestern Regional Russet Trial grown near Dalhart, Texas-2017.

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				
Russet Norkotah	WR	597.5	486.1	188.4	200.3	97.3	9.7	75.7	26.1	4.4
COTX09022-3RuRE/Y	WR	574.5	428.7	177.3	187.7	63.8	0.0	141.8	4.0	4.3
COTX05095-2RU/Y	SW	541.4	370.4	195.6	161.1	13.7	0.0	166.3	4.7	4.0
A08433-4VR	WR	537.2	357.7	164.3	165.8	27.6	0.0	150.4	29.0	4.0
A08009-2TE	WR	522.8	366.4	138.3	172.3	55.9	0.0	55.9	100.5	4.4
TX08352-Ru	WR	522.0	433.0	123.5	177.1	132.4	0.0	43.0	46.0	4.4
A07061-6	WR	493.3	373.6	150.2	184.7	38.7	0.0	104.8	14.9	4.2
AOR07781-5	WR	478.1	363.2	81.2	177.5	104.5	17.4	47.4	50.1	4.0
CO09205-2RU	WR	477.4	350.3	115.9	154.4	79.9	3.0	93.3	30.8	4.4
A03141-6	WR	451.6	300.4	57.6	130.3	112.5	0.0	42.9	108.2	3.7
Shepody	WR	449.1	256.2	96.6	94.6	65.0	0.0	49.2	143.7	3.7
CO09076-3RU	SW	440.6	317.5	90.9	134.8	91.9	0.0	59.6	63.6	4.1
CO09165-6W	SW	424.5	322.5	110.2	148.5	63.8	0.0	55.6	46.4	3.5
A06030-23	WR	419.8	340.9	102.3	185.2	53.4	0.0	48.7	30.3	4.0
AOR06070-1KF	WR	407.1	333.2	87.1	155.7	90.4	5.0	31.3	37.7	3.7
CO08231-1RU	WR	400.7	299.9	121.6	139.0	39.2	0.0	96.8	4.0	3.9
Ranger Russet	WR	396.7	279.0	102.5	139.5	37.0	0.0	67.3	50.4	3.6
Reveille Russet	TXADVRU	394.7	301.4	97.6	129.6	74.2	0.0	37.2	56.1	3.7
AO03123-2	WR	384.8	298.4	104.3	140.8	53.4	0.0	45.4	41.0	3.6
CO08155-2RU/Y	WR	383.3	279.3	102.0	152.4	24.8	0.0	85.6	18.4	3.9
Fortress Russet	CO	341.9	244.3	100.6	136.4	7.3	0.0	86.1	11.6	3.4
Russet Burbank	WR	335.9	168.8	61.8	83.9	23.1	0.0	29.5	137.5	2.8
AO06191-1	WR	321.0	274.3	49.4	116.9	108.0	15.4	18.9	12.4	4.0
CO09036-2RU	SW	293.9	176.5	89.9	73.7	12.9	0.0	80.2	37.2	3.4
AOTX05043-1RU	SW	293.7	208.5	111.7	71.5	25.3	0.0	83.9	1.2	3.6
CO08065-2RU	WR	267.4	194.4	78.9	103.3	12.2	0.0	59.3	13.7	3.3
Average		428.9	312.5	111.5	143.0	58.0	1.9	71.4	43.1	3.8
L.S.D. (.05)		94.0	85.2	36.1	59.9	36.6	ns	28.7	34.7	0.3

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 and Southwestern Regional Russet Trial grown near Dalhart, Texas-2017.

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				
Russet Norkotah	WR	81.2	31.3	33.6	16.3	1.6	12.8	4.5	1.061	13.4	Long	Russet
COTX09022-3RuRE/Y	WR	74.3	30.7	32.9	10.7	0.0	25.1	0.7	1.073	15.6	Long	Russet
COTX05095-2RU/Y	SW	68.5	36.1	30.0	2.4	0.0	30.7	0.9	1.064	14.0	Long	Russet
A08433-4VR	WR	65.3	30.0	30.4	4.8	0.0	28.6	6.1	1.062	13.5	Long	Russet
A08009-2TE	WR	70.0	26.5	32.8	10.7	0.0	10.7	19.3	1.067	14.4	Long	Russet
TX08352-Ru	WR	82.8	23.5	34.0	25.3	0.0	8.3	8.9	1.058	12.9	Long	Russet
A07061-6	WR	75.6	30.5	36.7	8.4	0.0	21.4	3.1	1.066	14.3	Long	Russet
AOR07781-5	WR	75.4	16.8	37.4	21.1	3.7	9.8	11.1	1.074	15.7	Long	Russet
CO09205-2RU	WR	72.9	25.3	31.2	16.5	0.5	19.8	6.8	1.055	12.3	Long	Russet
A03141-6	WR	65.7	12.8	28.4	24.4	0.0	9.5	24.7	1.062	13.5	Long	Russet
Shepody	WR	57.2	21.4	21.6	14.1	0.0	11.4	31.4	1.070	15.0	Long	White
CO09076-3RU	SW	71.7	20.8	30.1	20.8	0.0	13.6	14.7	1.064	14.0	Long	Russet
CO09165-6W	SW	75.4	26.5	34.7	14.2	0.0	13.3	11.3	1.060	13.2	Long	White
A06030-23	WR	81.8	25.2	44.2	12.4	0.0	11.8	6.4	1.073	15.5	Long	Russet
AOR06070-1KF	WR	82.0	21.8	37.8	22.4	1.1	7.6	9.3	1.076	16.0	Long	Russet
CO08231-1RU	WR	74.8	30.7	34.7	9.5	0.0	24.3	0.9	1.066	14.3	Long	Russet
Ranger Russet	WR	71.5	26.0	36.3	9.3	0.0	16.3	12.2	1.070	15.0	Long	Russet
Reveille Russet	TXADVRU	78.2	25.2	35.7	17.4	0.0	8.9	12.9	1.063	13.7	Long	Russet
AO03123-2	WR	75.4	26.0	34.7	14.7	0.0	13.0	11.6	1.066	14.3	Long	Russet
CO08155-2RU/Y	WR	73.3	26.7	39.4	7.3	0.0	22.1	4.6	1.065	14.1	Long	Russet
Fortress Russet	CO	71.4	30.4	39.1	1.8	0.0	24.9	3.7	1.067	14.5	Long	Russet
Russet Burbank	WR	48.5	18.5	23.8	6.2	0.0	9.5	42.1	1.057	12.7	Long	Russet
AO06191-1	WR	84.7	16.3	35.6	32.9	5.5	5.7	4.1	1.073	15.6	Long	Russet
CO09036-2RU	SW	54.2	31.0	20.0	3.2	0.0	32.2	13.6	1.062	13.6	Long	Russet
AOTX05043-1RU	SW	69.9	37.1	24.5	8.3	0.0	29.8	0.3	1.068	14.7	Long	Russet
CO08065-2RU	WR	73.0	29.7	38.1	5.3	0.0	21.5	5.5	1.077	16.3	Long	Russet
Average		72.1	26.0	33.0	13.1	0.5	17.0	10.4	1.066	14.3		
L.S.D. (.05)		10.7	6.7	ns	7.6	2.1	7.3	7.2	0.007	1.2		

Dalhart
Table 2c.

Average number of tubers per plant, tuber weight, number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness of 26 entries in the Western and Southwestern Regional Russet Trial grown near Dalhart, Texas-2017.

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	Length/ With	With/ Thickness
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴			
Russet Norkotah	WR	6.4	6.2	1.7	100	100	2.1	3.7	3.5	3.7	23	2.34	1.21
COTX09022-3RuRE/Y	WR	7.6	5.1	2.5	100	100	2.0	4.5	4.6	4.6	0	1.59	1.26
COTX05095-2RU/Y	SW	8.6	4.3	1.8	100	100	2.1	3.7	3.4	3.7	19	2.01	1.14
A08433-4VR	WR	7.9	4.6	2.0	100	100	2.0	4.5	4.6	4.6	0	2.01	1.24
A08009-2TE	WR	7.3	5.6	2.1	100	100	2.0	4.5	4.5	4.5	0	2.32	1.14
TX08352-Ru	WR	4.8	7.3	1.6	97	100	2.2	4.1	3.9	4.1	28	2.03	1.14
A07061-6	WR	7.2	4.7	2.4	100	100	2.0	4.4	4.5	4.5	0	2.15	1.13
AOR07781-5	WR	4.1	7.8	1.8	100	100	1.9	4.4	4.7	4.6	0	2.41	1.18
CO09205-2RU	WR	5.8	5.5	1.6	94	100	2.0	4.2	4.4	4.3	3	2.52	1.15
A03141-6	WR	4.1	7.4	1.8	96	100	2.0	4.4	4.8	4.5	0	2.56	1.20
Shepody	WR	4.8	6.3	2.0	90	100	2.1	3.6	3.5	3.9	33	1.78	1.22
CO09076-3RU	SW	4.8	6.2	1.8	100	100	2.0	4.2	4.3	4.3	6	2.59	1.20
CO09165-6W	SW	5.7	5.0	2.1	100	100	2.3	4.0	4.0	4.1	5	2.98	1.18
A06030-23	WR	4.4	6.5	1.7	100	100	2.5	3.6	3.4	3.7	23	2.15	1.18
AOR06070-1KF	WR	4.2	6.5	1.9	98	100	2.0	4.3	4.3	4.3	0	2.80	1.11
CO08231-1RU	WR	5.9	4.5	1.8	98	100	2.0	4.1	4.0	4.3	11	2.23	1.15
Ranger Russet	WR	5.0	5.5	1.8	98	100	2.0	4.3	4.3	4.4	0	2.59	1.15
Reveille Russet	TXADVRU	4.1	6.4	1.6	96	100	2.0	4.3	4.3	4.3	0	1.86	1.19
AO03123-2	WR	4.3	5.9	1.9	100	100	2.0	4.3	4.5	4.4	0	2.84	1.19
CO08155-2RU/Y	WR	5.0	5.2	1.9	100	100	2.1	3.8	3.5	4.0	6	1.96	1.15
Fortress Russet	CO	4.8	4.8	1.5	100	104	2.0	4.7	4.8	4.7	0	1.81	1.12
Russet Burbank	WR	4.2	5.4	2.0	100	100	2.0	4.3	4.3	4.4	0	2.75	1.03
AO06191-1	WR	2.5	8.6	1.5	80	100	2.0	4.5	4.7	4.6	3	2.07	1.14
CO09036-2RU	SW	4.2	4.5	2.1	100	100	2.0	4.4	4.5	4.4	3	2.26	1.02
AOTX05043-1RU	SW	4.1	4.7	1.6	96	100	2.0	3.9	3.5	4.0	18	2.00	1.07
CO08065-2RU	WR	3.2	5.6	1.7	89	100	2.0	4.4	4.4	4.4	0	1.83	1.17
Average		5.2	5.8	1.9	97	100	2.0	4.2	4.2	4.3	7	2.25	1.16
L.S.D. (.05)		1.4	0.9	0.3	9	ns	0.2	0.5	0.6	0.4	12	0.23	0.09

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 and Southwestern Regional Russet Trial grown near Dalhart, Texas-2017.

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
Russet Norkotah	WR	1.0	4.2	4.0	3.8	4.0	5.0	5.0	5.0	5.0	4.0	18	0	0	0
COTX09022-3RuRE/Y	WR	2.5	3.0	3.5	4.0	3.3	5.0	5.0	5.0	5.0	3.9	8	0	0	0
COTX05095-2RU/Y	SW	2.5	3.5	3.2	4.0	3.1	5.0	5.0	5.0	5.0	4.1	0	0	0	0
A08433-4VR	WR	1.0	3.8	3.6	4.0	3.6	5.0	5.0	5.0	5.0	4.0	0	0	0	0
A08009-2TE	WR	1.0	4.0	3.6	4.0	3.7	5.0	5.0	5.0	5.0	4.0	0	0	13	8
TX08352-Ru	WR	1.0	4.4	3.6	4.0	3.5	5.0	5.0	5.0	5.0	4.5	7	0	0	0
A07061-6	WR	1.0	4.0	2.0	4.0	2.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
AOR07781-5	WR	2.0	4.4	3.9	3.7	4.0	5.0	5.0	5.0	4.6	3.8	33	0	0	0
CO09205-2RU	WR	1.0	4.1	3.7	4.0	3.6	5.0	5.0	5.0	5.0	4.0	43	0	3	20
A03141-6	WR	1.0	4.5	2.8	3.8	3.0	5.0	5.0	5.0	4.6	3.5	0	0	0	0
Shepody	WR	1.0	4.1	1.0	4.0	1.0	5.0	5.0	5.0	3.9	4.0	13	3	5	5
CO09076-3RU	SW	1.0	4.6	3.8	4.0	3.9	4.6	5.0	5.0	3.9	3.9	3	0	3	0
CO09165-6W	SW	1.0	4.6	1.3	4.0	1.3	5.0	5.0	5.0	5.0	4.1	3	0	5	0
A06030-23	WR	1.0	4.1	3.6	4.0	4.0	5.0	5.0	5.0	4.6	4.0	13	0	0	0
AOR06070-1KF	WR	1.0	4.7	3.7	4.0	3.9	5.0	5.0	5.0	5.0	4.0	5	0	0	0
CO08231-1RU	WR	1.0	3.7	3.2	4.0	3.6	5.0	5.0	5.0	5.0	4.0	13	0	0	0
Ranger Russet	WR	1.0	3.8	3.4	3.7	3.6	5.0	5.0	5.0	4.3	4.0	3	0	5	0
Reveille Russet	TXADVURU	1.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	3.9	3.9	5	0	0	0
AO03123-2	WR	1.0	4.4	2.3	3.9	2.8	5.0	5.0	5.0	5.0	4.0	15	0	0	0
CO08155-2RU/Y	WR	2.3	3.9	2.8	4.0	3.4	5.0	5.0	5.0	5.0	4.0	3	0	0	0
Fortress Russet	CO	1.0	3.5	3.5	4.0	3.0	5.0	5.0	5.0	5.0	3.6	20	0	0	0
Russet Burbank	WR	1.0	4.3	3.7	3.9	3.6	5.0	5.0	5.0	4.3	4.0	3	0	0	0
AO06191-1	WR	1.0	4.5	4.1	4.0	4.1	5.0	5.0	5.0	4.6	4.0	65	3	0	0
CO09036-2RU	SW	1.0	3.6	3.7	4.0	3.8	5.0	5.0	5.0	5.0	4.0	0	0	0	0
AOTX05043-1RU	SW	1.0	3.6	3.5	4.0	3.0	5.0	5.0	5.0	5.0	4.3	3	0	0	0
CO08065-2RU	WR	1.0	3.8	4.0	4.0	3.8	5.0	5.0	5.0	5.0	4.5	53	0	0	5
Average		1.2	4.0	3.3	3.9	3.3	5.0	5.0	5.0	4.8	4.0	12	0	1	1
L.S.D. (.05)		0.1	0.2	0.2	0.1	0.2				0.5	0.2	14	ns	ns	8

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 2e.

Notes and general rating for all reps of 26 entries in the Western and Southwestern Regional Russet Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Notes Grading	General Rating Grading
Russet Norkotah	WR	high tuber set, enlarged lenticels+, very nice shape+, uniform size and shape, good russetting, some moon shaped, hearts, pointy	4.4, 4.6, 4.4, 4
COTX09022-3RuRE/Y	WR	high tuber set++, pink-red eyes, blocky, 20% SE, nice, unique,	4.3, 4.2, 4.2, 4.4
COTX05095-2RU/Y	SW	most tubers are medium-small, small+, uniform size and shape+, nice yellow flesh, 50% SE, high tuber set, 20% SE	4, 4, 3.8, 4.2
A08433-4VR	WR	10% SE, small, a little flat, 30SE, nice	4, 3.6, 4.2, 4.2
A08009-2TE	WR	light eyes, high tuber set, pointy+, 10% SE, nice, 10% SE, attached stolons, long, culls	4.4, 4.4, 4.4, 4.2
TX08352-Ru	WR	uniformly large tubers+, nice shape and skin, knobs, enlarged lenticels, a little pointy,	4.6, 4.2, 4.5,
A07061-6	WR	light skin+, , high tuber set, 10% SG, 20% SG,	4.2, 4.2, 4, 4.2
AOR07781-5	WR	nice skin, nice size, long lumpy, 10% green tubers, knobs,	4.4, 3.8, 3.8, 3.8
CO09205-2RU	WR	very nice+, nice shape, high tuber set, skinny, many eyes, pointy	4.5, 4.3, 4.8, 3.8
A03141-6	WR	knobs, 30% SG, culls+, many eyes, flat, long+, skinning, pointy, 30% SG, soft stem end,	3.6, 3.8, 3.8, 3.6
Shepody	WR	knobs++, light skin, attached stolons 20% SE, many culls, smooth skin, ugly skin+,	3.8, 3.8, 3.6, 3.6
CO09076-3RU	SW	very long tubers pointy+, knobs++, , growth cracks, nice skin	4, 4.2, 4.2, 4
CO09165-6W	SW	light skin+, long++, skinny, pointy, many culls, smooth skin, too long, not as light skin as other reps	3.6, 3.4, 3.5, 3.6
A06030-23	WR	light eyes+, knobs enlarged lenticels, 10% SE, ,	3.8, 3.8, 3.8, 4.4
AOR06070-1KF	WR	long+++, pointy+++ (culls), 90% SE, skinny,	3.6, 3.6, 4.2, 3.5
CO08231-1RU	WR	not uniform size, nice shape, ,	4, 3.6, 4.2, 3.8
Ranger Russet	WR	rustic, knobs+, ,	3.6, 3.6, 3.6, 3.6
Reveille Russet	TXADVURU	knobs++, enlarged lenticels, , low tuber set	4, 3.8, 3.6, 3.5
AO03123-2	WR	long++, enlarged lenticels, 10% SE, very low tuber set, skinny, light skin color,	4, 3.3, 3.6, 3.6
CO08155-2RU/Y	WR	not uniform russet skin+, , ,	3.6, 4.2, 4, 3.6
Fortress Russet	CO	low tuber number, medium size, no pink streaks+++, , ,	3, 3.6, 3.6,
Russet Burbank	WR	knobs++, skinny, ugly, many culls, does not like Texas,	2.8, 2.8, 2.8, 2.8
AO06191-1	WR	knobs, low tuber number, very large++, uniformly large, nice shape, intense russet skin,	3.6, 4.6, 4, 3.8
CO09036-2RU	SW	small+, pointy+ (culls), attached stolons, very low tuber set+, nice russet skin, 30% SE,	3.6, 2.5, 3.6, 3.8
AOTX05043-1RU	SW	low tuber number+, enlarged lenticels, blocky, not uniform size,	3.6, 3.6, 3.5, 3.5
CO08065-2RU	WR	low tuber set+, enlarged lenticels, blocky, flat, nice russet skin,	2.8, 3.6, 3.3, 3.4

Western Regional and Texas Advanced Red Trial, Dalhart

This trial consisted of four entries, including the check varieties Red LaSoda and Chieftain.

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

- Chieftain had the highest general rating (Table 3a).
- Chieftain had the highest total and marketable yield, while PORTX03PG25-2R/R had the highest yield of less than 4 oz. tubers (Table 3b).
- PORTX03PG25-2R/R had the highest yield of 4-6 oz. tubers (Table 3a).
- Chieftain had the highest percentage of marketable yield, while PORTX03PG25-2R/R had the highest percentage of less than 4 oz. tubers (Table 3b).
- Chieftain had the highest specific gravity (Table 3b).
- Chieftain had the highest average number of tubers per plant (Table 3c).
- Red LaSoda, PORTX03PG25-2R/R and COTX00104-6R were the latest in maturity, while Chieftain was the earliest in maturity (Table 3c).
- Red LaSoda had the deepest eyes and the highest percentage of vascular discoloration (Table 3d).

Comments on entries:

- | | | |
|--------------------|-----------|---|
| • Chieftain | Round Red | skin lighter than Red LaSoda++, high tuber set, shallow eyes, large tubers |
| • Red LaSoda | Round Red | ugly, large tubers, deep eyes++ |
| • COTX00104-6R | Round Red | enlarged lenticels+++, soil attached to skin, low tuber set++, shallow eyes, new market class, oblong shape, dull skin, not shiny |
| • PORTX03PG25-2R/R | Long Red | long fingerling++, low tuber set+, knobs, silver scurf, uniform size |

Summary:

Chieftain was the outstanding entry 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 4 entries in the Western Regional Red Trial grown near Dalhart, Texas-2017.

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 Field	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz						10-18 oz
Chieftain	WR	668.3	537.5	210.5	208.3	118.7	0.0	130.8	0.0	4.0	4.3
Red LaSoda	WR	542.9	432.2	166.1	171.5	94.6	3.2	98.8	8.7	3.7	3.5
COTX00104-6R	WR	318.8	249.5	101.5	122.4	25.6	0.0	57.6	11.7	3.0	3.5
PORTX03PG25-2R/R	WR	151.2	0.0	0.0	0.0	0.0	0.0	151.2	0.0	2.8	3.0
Average		420.3	304.8	119.5	125.6	59.7	0.8	109.6	5.1	3.4	3.6
L.S.D. (.05)		71.5	58.1	33.2	47.7	37.1	4.1	37.6	7.3	0.4	0.3

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 4 entries in the Western Regional Red Trial grown near Dalhart, Texas-2017.

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	WR	80.4	31.6	31.2	17.7	0.0	19.6	0.0	1.059	13.0	Round	Red
Red LaSoda	WR	79.3	30.6	30.8	17.9	0.7	18.4	1.6	1.053	12.0	Round	Red
COTX00104-6R	WR	77.8	31.4	39.8	6.7	0.0	18.4	3.8	1.046	10.7	Round	Red
PORTX03PG25-2R/R	WR	0.0	0.0	0.0	0.0	0.0	100.0	0.0	1.055	12.4	Long	Red
Average		59.4	23.4	25.4	10.6	0.2	39.1	1.4	1.053	12.0		
L.S.D. (.05)		4.5	5.6	10.2	7.8	ns	3.7	2.1	0.003	0.6		

Dalhart
Table 3c.

Average number of tubers per plant, tuber weight, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness of 4 entries in the Western Regional Red Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines	Length/ With	With/ Thickness
						Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴			
Chieftain	WR	9.8	4.6	100	100	2.1	4.0	3.4	4.0	28	1.21	1.22
Red LaSoda	WR	7.3	5.0	100	100	2.0	4.5	4.5	4.5	1	1.25	1.29
COTX00104-6R	WR	4.5	4.7	100	100	2.0	4.0	4.2	4.1	9	1.35	1.09
PORTX03PG25-2R/R	WR	4.6	2.2	100	100	2.1	4.1	4.3	4.2	1	2.64	1.00
Average		6.5	4.1	100	100	2.1	4.1	4.1	4.2	10	1.61	1.15
L.S.D. (.05)		1.4	0.4			ns	ns	0.4	ns	10	0.14	0.06

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 4 entries in the Western Regional Red Trial grown near Dalhart, Texas-2017.

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
Chieftain	WR	1.0	1.0	1.0	4.0	2.5	5.0	5.0	5.0	5.0	4.0	13	0	3	3
Red LaSoda	WR	1.0	1.5	1.0	3.0	3.0	5.0	5.0	5.0	5.0	4.0	5	0	33	0
COTX00104-6R	WR	1.0	1.5	1.0	4.4	4.0	5.0	5.0	5.0	5.0	4.0	0	0	5	0
PORTX03PG25-2R/R	WR	4.0	5.0	1.0	4.0	4.0	5.0	5.0	5.0	5.0	4.0	0	0	0	3
Average		1.8	2.3	1.0	3.8	3.4	5.0	5.0	5.0	5.0	4.0	4	0	10	1
L.S.D. (.05)			0.4		0.2	ns						ns		20	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 4 entries in the Western Regional Red Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Chieftain	WR	skin lighter than Red LaSoda++, high tuber set, shallow eyes, , ,	high tuber set, large tubers, ,	4.8, 3.6, 3.8, 3.8	4.4, 4.5, 4.4, 4
Red LaSoda	WR	deep eyes, large, ugly, , enlarged lenticels+++ , soil attached to skin, low tuber	large tubers, deep eyes++, , , shallow eyes, new market class, oblong shape, dull skin,	3.8, 3.5, 3.8, 3.5	3.5, 3.6, 3.4, 3.6
COTX00104-6R	WR	set++, ,	not shiny, enlarged lenticels+, , low tuber number+, sliver scurf+++ , fingerling, uniform	3.6, 2.5, 3, 3	3.5, 3.5, 3.4, 3.6
PORTX03PG25-2R/R	WR	long fingerling++, low tuber set+, knobs, , , sliver scurf	size, ,	3, 3, 2.5, 2.5	2.6, 2.8, 3.2, 3.5

Western Regional and Texas Advanced Red/Yellow Trial, Dalhart

This trial consisted of seven entries.

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

- AC03534-2R/Y received the highest general rating (Table 4a).
- AC03534-2R/Y had the highest total yield, while CO05035-1PW/Y had the highest marketable yield (Table 4a).
- AC03534-2R/Y had the highest yield of less than 4 oz. tubers, while CO05035-1PW/Y had the highest yield of 6-10 oz. and 10-18 oz. tubers (Table 4a).
- CO09079-5PW/Y had the highest yield and percentage of culls/No. 2 tubers (Table 4a, 4b).
- CO05035-1PW/Y had the highest percentage of marketable yield. ATTX05175S-1R/Y had the highest percentage of less than 4 oz. tubers (Table 4b).
- ATTX05175S-1R/Y had the highest specific gravity (Table 4b).
- AC03534-2R/Y had the highest average number of tubers per plant (Table 4c).
- NDTX059759-3RY/Y Pinto and CO05035-1PW/Y were the latest maturing, while CO09079-5PW/Y was the earliest in maturity (Table 4c).

Comments on entries:

- | | | |
|-------------------|-----------|--|
| • AC03534-2R/Y | Round Red | not uniform size, nice skin color+, small, silver scurf+, high tuber set+, attached stolons, uniform size and shape, not uniform yellow flesh color+, 60% SE, FC=1.9 |
| • ATTX05175S-1R/Y | Round Red | uniform size and shape+, high tuber set+, skin color variation between tubers, very small+++, FC=3.2 |
| • ATX02263-1R/Y | Round Red | silver scurf++++, not uniform size, some long and pointy, oval, medium size++, intense red skin color+, smooth skin, high tuber set+, small++, uniform size and shape, nice skin, FC=2.4 |
| • CO05035-1PW/Y | Round Red | not uniform shape+++, several long tubers, no purple skin, late, light pattern, large tubers+++, |

- CO09079-5PW/Y Oblong Purple-White pointy, some PW pattern gone, attached stolons+, high tuber set+, pear shaped, FC=2.6
 lost purple color+++ , not uniform size and shape, knobs+, small+++ , pointy, few tubers, high tuber set, FC=2.7
- COA07365-4RY Round Red intense skin color+, silver scurf+, small+++ , uniform size, FC=2.6
- NDTX059759-3RY/Y Pinto Oblong Red-Yellow unique pattern, smooth skin, low tuber set++, healthy+, eye catching, few eyes, flat, spectacle skin pattern, shiny, 20%, 20%, 80% pink streak, smooth skin, attached stolons, healthy skin, no silver scurf, flat+, nice, FC=2.5

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

Summary:

AC03534-2R/Y was the outstanding entry based on all factors.

Dalhart
Table 4a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 7 entries in the Western and Southwestern Regional Red/Yellow Trial grown near Dalhart, Texas-2017.

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 Field	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz					
AC03534-2R/Y	WR	514.4	214.0	105.0	96.3	12.7	0.0	300.4	0.0	3.6	4.3
ATTX05175s-1R/Y	TXADVR/Y	248.5	45.7	38.7	7.0	0.0	0.0	201.8	1.0	3.8	2.7
ATX02263-1R/Y	TXADVR/Y	456.8	153.2	129.8	23.3	0.0	0.0	269.1	34.5	3.9	3.8
CO05035-1PW/Y	WR	376.6	338.9	127.8	129.6	81.4	0.0	37.7	0.0	2.9	3.5
CO09079-5PW/Y	SW	267.1	47.9	47.9	0.0	0.0	0.0	172.5	46.7	2.9	2.9
COA07365-4RY	WR	315.3	96.6	73.7	22.8	0.0	0.0	216.7	2.0	3.4	3.5
NDTX059759-3RY/Y Pinto	WR	169.1	87.6	56.8	27.8	3.0	0.0	81.4	0.0	3.5	3.5
Average		335.4	140.5	82.8	43.8	13.9	0.0	182.8	12.0	3.4	3.5
L.S.D. (.05)		94.7	84.0	ns	35.2	20.6		47.9	22.3	0.4	0.4

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 7 entries in the Western and Southwestern Regional Red/Yellow Trial grown near Dalhart, Texas-2017.

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				
AC03534-2R/Y	WR	37.6	17.6	17.9	2.1	0.0	62.4	0.0	1.046	10.7	Round	Red
ATTX05175s-1R/Y	TXADVR/Y	18.5	15.6	2.9	0.0	0.0	81.2	0.3	1.061	13.4	Round	Red
ATX02263-1R/Y	TXADVR/Y	32.7	28.2	4.5	0.0	0.0	58.7	8.6	1.058	12.9	Round	Red
CO05035-1PW/Y	WR	89.8	34.9	33.7	21.2	0.0	10.2	0.0	1.052	11.8	Round	Red
CO09079-5PW/Y	SW	18.5	18.5	0.0	0.0	0.0	63.8	17.7	1.050	11.4	Oblong	Purple-White
COA07365-4RY	WR	29.0	22.0	7.0	0.0	0.0	70.5	0.5	1.060	13.2	Round	Red
NDTX059759-3RY/Y Pinto	WR	50.1	32.3	16.4	1.3	0.0	49.9	0.0	1.053	12.1	Oblong	Red-Yellow
Average		39.4	24.1	11.8	3.5	0.0	56.7	3.9	1.054	12.2		
L.S.D. (.05)		11.5	ns	7.3	2.9		12.1	4.7	0.002	0.5		

Dalhart
Table 4c.

Average number of tubers per plant, tuber weight, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness of 7 entries in the Western and Southwestern Regional Red/Yellow Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines	Length/ With	With/ Thickness
						Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴			
AC03534-2R/Y	WR	13.8	2.5	100	100	2.1	4.1	4.1	4.1	4	0.99	1.16
ATTX05175s-1R/Y	TXADVR/Y	8.0	2.1	100	100	2.0	4.3	4.3	4.3	0	0.89	1.24
ATX02263-1R/Y	TXADVR/Y	11.7	2.6	100	100	2.0	4.2	4.1	4.2	6	1.36	1.11
CO05035-1PW/Y	WR	4.8	5.3	100	100	2.0	4.5	4.5	4.6	0	1.54	1.15
CO09079-5PW/Y	SW	8.4	2.2	100	100	2.4	3.5	3.5	3.8	34	1.41	1.15
COA07365-4RY	WR	9.6	2.2	100	100	2.4	4.0	4.0	4.1	5	1.14	1.13
NDTX059759-3RY/Y Pinto	WR	3.9	3.0	100	100	2.0	4.6	4.8	4.6	0	1.29	1.38
Average		8.6	2.8	100	100	2.1	4.2	4.2	4.2	7	1.23	1.19
L.S.D. (.05)		2.0	0.5			0.2	0.4	0.5	0.4	14	0.06	0.07

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 7 entries in the Western and Southwestern Regional Red/Yellow Trial grown near Dalhart, Texas-2017.

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
AC03534-2R/Y	WR	1.9	1.0	1.0	4.0	3.3	5.0	5.0	5.0	5.0	4.0	0	0	0	5
ATTX05175s-1R/Y	TXADVR/Y	3.2	1.0	1.0	3.6	3.1	5.0	5.0	5.0	5.0	4.0	0	0	10	0
ATX02263-1R/Y	TXADVR/Y	2.4	2.0	1.0	4.0	3.5	5.0	5.0	5.0	5.0	4.0	0	0	0	0
CO05035-1PW/Y	WR	2.6	2.8	1.0	3.9	4.0	5.0	5.0	5.0	5.0	4.0	25	0	20	40
CO09079-5PW/Y	SW	2.7	2.6	1.0	4.0	1.8	5.0	5.0	5.0	4.6	4.0	0	0	30	0
COA07365-4RY	WR	2.6	1.4	1.0	4.0	3.6	5.0	5.0	5.0	5.0	4.0	0	0	0	0
NDTX059759-3RY/Y Pinto	WR	2.5	3.0	1.0	4.0	4.0	5.0	5.0	5.0	5.0	4.0	0	0	6	0
Average		2.5	2.0	1.0	3.9	3.3	5.0	5.0	5.0	4.9	4.0	4	0	9	6
L.S.D. (.05)		0.3	0.4		0.1	0.3				ns		ns		ns	17

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 7 entries in the Western and Southwestern Regional Red/Yellow Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
AC03534-2R/Y	WR	not uniform size, nice skin color+, small, high tuber set, sliver scurf,	high tuber set+, small, attached stolons+, stem end discoloration (60%), sliver scurf, uniform size and	2.8, 3.5, 4, 4	3.8, 3.8, 4.8, 4.8
ATTX05175s-1R/Y	TXADVR/Y	small+, uniform size and shape+, high tuber set+, high tuber set, not uniform skin color, skin color variation	very small+++ , uniform size and shape, , ,	4, 3.8, 3.6, 3.6	2.6, 2.5, 3, 2.6
ATX02263-1R/Y	TXADVR/Y	high tuber set, sliver scurf, not uniform size, some long and pointy, oval, medium size++, intense red skin	sliver scurf+++ , high tuber set+, small++, uniform size and shape, , nice skin	3.8, 3.8, 3.8, 4	3.6, 3.6, 3.6, 4.2
CO05035-1PW/Y	WR	not uniform shape+++ , several long tubers, very large tubers+, no purple skin, , late?, light pattern	large tubers+++ , pointy, some PW pattern gene, attached stolons+, high tuber set+, pear shaped	2.6, 2.4, 3.3, 3.2	3.5, 3.5, 3.5, 3.5
CO09079-5PW/Y	SW	small+++ , lost purple color+++ , not uniform size and shape, ,	knobs+, small+++ , pointy, no PW pattern, few tubers, high tuber set, PW pattern gone	2.3, 2.6, 3.2, 3.4	3.2, 2.3, 3.4, 2.8
COA07365-4RY	WR	small+, intense skin color+, , ,	sliver scurf+, small+++ , uniform size, ,	3.5, 2.8, 3.6, 3.8	3.4, 3.3, 3.5, 3.8
NDTX059759-3RY/Y Pinto	WR	unique pattern, smooth skin, flat, low tuber set++, healthy+, eye catching, few eyes, flat, spectacle skin	nice pattern, 20% pink streak, smooth skin, shiny, 20% pink streak, low tuber number+, attached stolons, nice	3.8, 2.8, 3.6, 3.6	3.6, 3.4, 3.6, 3.4

Western Regional and Texas Advanced White/Yellow Trial, Dalhart

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

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

- Yukon Gold, CO09127-3W/Y, A06336-2Y, and A06336-5Y had the highest general ratings (Table 5a).
- Yukon Gold had the highest total, marketable yield and yield of over 10 oz. tubers (Table 5a).
- CO09128-5W/Y had the highest yield of less than 4 oz. tubers, while A06336-2Y had the highest yield and percentage of culls/No. 2 tubers (Table 5a, 5b).
- Yukon Gold had the highest percentage of marketable yield, while CO09128-3W/Y had the highest percentage of less than 4 oz. tubers (Table 5b).
- Yukon Gold had the highest specific gravity (Table 5b).
- A06336-5Y had the highest average number of tubers per plant (Table 5c).
- CO09218-4W/Y was the latest in maturity, while CO09128-3W/Y and A06336-5Y were the earliest in maturity (Table 5c).
- CO09128-5W/Y had the darkest flesh color and the highest percentage of internal brown spot (Table 5d).

Comments on entries:

- Yukon Gold Round White large not uniform, knobs+, very large tubers+++, smooth skin, no silver scurf, FC=2.3
- CO09127-3W/Y Round White high tuber set+, dirt attached to skin+, uniform size and shape+, FC=3.0
- A06336-2Y Round Champagne/Pine Eye high tuber set+, pink eyes+++, pointy+++, not uniform shape+, shiny skin++, smooth skin, pointy++, pear shaped+, FC=2.4
- A06336-5Y Round Champagne/Pine Eye attached mini tubers, snowmen, high tuber set++, small, uniform size and shape+, chain tubers, FC=2.4
- CO09128-5W/Y Round White small+++, uniform size and shape+++, high tuber set, angular tuber shape, scab, pink eyes, FC=3.2

- CO09128-3W/Y Round White low tuber set, small++, shiny skin+, smooth skin, not uniform shape, FC=2.5
- CO09218-4W/Y Round White few tubers, secondary mini tubers, low tuber set+, chain tubers+, small++, knobs, FC=2.7

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

Summary:

Yukon Gold, CO09127-3W/Y, A06336-2Y, and A06336-5Y were the best 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 7 entries in the Western and Southwestern Regional White/Yellow Trial grown near Dalhart, Texas-2017.

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 Field	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz					
Yukon Gold	WR	478.9	379.1	116.4	123.9	138.8	0.0	35.5	64.3	3.6	4.1
CO09127-3W/Y	SW	469.9	243.5	157.9	72.0	13.7	0.0	226.4	0.0	4.1	4.0
A06336-2Y	WR	468.5	152.7	134.6	18.1	0.0	0.0	249.7	66.0	3.7	4.0
A06336-5Y	WR	404.7	143.7	124.4	19.4	0.0	0.0	247.5	13.4	3.8	4.2
CO09128-5W/Y	SW	373.4	46.2	46.2	0.0	0.0	0.0	327.2	0.0	3.8	3.9
CO09128-3W/Y	SW	206.3	21.3	21.3	0.0	0.0	0.0	184.9	0.0	3.4	3.4
CO09218-4W/Y	SW	144.5	44.7	44.7	0.0	0.0	0.0	85.4	14.4	2.8	2.8
Average		363.7	147.3	92.2	33.3	21.8	0.0	193.8	22.6	3.6	3.8
L.S.D. (.05)		103.7	56.3	47.2	21.8	18.9		81.2	17.7	0.5	0.5

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 7 entries in the Western and Southwestern Regional White/Yellow Trial grown near Dalhart, Texas-2017.

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	78.9	23.9	26.0	28.9	0.0	7.3	13.8	1.067	14.5	Round	White
CO09127-3W/Y	SW	51.8	33.5	15.1	3.2	0.0	48.2	0.0	1.062	13.6	Round	White
A06336-2Y	WR	31.9	28.3	3.6	0.0	0.0	53.2	14.9	1.055	12.3	Round	Champagne/Pine Eye
A06336-5Y	WR	41.5	34.3	7.2	0.0	0.0	55.8	2.7	1.052	11.8	Round	Champagne/Pine Eye
CO09128-5W/Y	SW	12.4	12.4	0.0	0.0	0.0	87.6	0.0	1.064	13.9	Round	White
CO09128-3W/Y	SW	10.8	10.8	0.0	0.0	0.0	89.2	0.0	1.049	11.3	Round	White
CO09218-4W/Y	SW	29.5	29.5	0.0	0.0	0.0	60.3	10.2	1.046	10.7	Round	White
Average		36.7	24.7	7.4	4.6	0.0	57.4	6.0	1.056	12.6		
L.S.D. (.05)		14.9	12.1	5.5	3.7		13.8	6.3	0.002	0.4		

Dalhart
Table 5c.

Average number of tubers per plant, tuber weight, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness of 7 entries in the Western and Southwestern Regional White/Yellow Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines	Length/ With	With/ Thickness
						Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴			
Yukon Gold	WR	4.6	7.0	100	100	1.8	3.9	3.9	4.0	19	1.21	1.25
CO09127-3W/Y	SW	10.0	3.2	100	100	2.3	3.7	3.7	3.7	14	1.07	1.22
A06336-2Y	WR	11.9	2.7	100	100	2.3	4.3	3.8	4.2	16	1.34	1.22
A06336-5Y	WR	13.5	2.1	100	100	2.3	3.7	3.6	3.7	13	1.13	1.13
CO09128-5W/Y	SW	9.1	4.3	100	100	2.3	3.8	3.9	3.9	8	0.94	1.22
CO09128-3W/Y	SW	5.1	6.5	100	100	2.1	3.8	3.5	3.8	18	1.22	1.18
CO09218-4W/Y	SW	3.5	4.0	68	100	2.0	4.5	4.6	4.5	0	1.21	1.20
Average		8.2	4.3	95	100	2.1	4.0	3.8	4.0	12	1.16	1.20
L.S.D. (.05)		2.8	ns	10		ns	0.5	0.4	0.4	ns	0.16	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

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 7 entries in the Western and Southwestern Regional White/Yellow Trial grown near Dalhart, Texas-2017.

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	2.3	2.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	5	0	0	5
CO09127-3W/Y	SW	3.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	10	0	0	0
A06336-2Y	WR	2.4	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	5
A06336-5Y	WR	2.4	1.1	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
CO09128-5W/Y	SW	3.2	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	5	0	0	25
CO09128-3W/Y	SW	2.5	1.3	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
CO09218-4W/Y	SW	2.7	1.8	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
Average		2.6	1.4	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	3	0	0	5
L.S.D. (.05)		0.3	0.4									ns			11

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 7 entries in the Western and Southwestern Regional White/Yellow Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Yukon Gold	WR	large+++ , large not uniform, knobs+,	very large tubers+++ , smooth skin, no silver scurf, , dirt attached to skin+, uniform size and shape+, high tuber set, ,	3.8, 3, 3.8, 3.6	4.5, 3.8, 4.4, 3.6
CO09127-3W/Y	SW	, high tuber set, ,		4.4, 4.4, 3.6, 3.8	4, 4.3, 3.6, 4
A06336-2Y	WR	high tuber set, pink eyes++, pointy+++ , not uniform shape,	pink eyes+++ , high tuber set, shiny skin++, smooth skin, pointy++, pear shaped+, not uniform, ,	4.4, 3.6, 3.6, 3.2	4.6, 3, 4.4, 4
A06336-5Y	WR	, very high tuber set, attached mini tubers, snowmen,	high tuber set+,, small, uniform size and shape+, chain tubers,	3.6, 4.5, 3.4, 3.5	4, 4.6, 4.3, 4
CO09128-5W/Y	SW	small+++ , , uniform size and shape+, high tuber set	small+++ , uniform size, angular tuber shape, very uniform size and shape++, scab, , pink eyes	3.8, 3.6, 3.8, 3.8	3.5, 3.8, 4.2, 4.2
CO09128-3W/Y	SW	low tuber set, small, , small	small++ , shiny skin+, few tubers, smooth skin, not uniform shape	3.5, 3.6, 3.4, 3	3.2, 3.6, 3.2, 3.4
CO09218-4W/Y	SW	few tubers, secondary mini tubers, , low tuber set	chain tubers+, small++ , , knobs, low tuber set,	2.5, 2.6, 3.5, 2.6	2.5, 2.8, 2.8, 3

Texas Advanced Chip Selection Trial, Dalhart

This trial consisted of forty-four entries, including the check variety Atlantic.

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

- NDTX12203AB-1W, NDTX14362AB-1W, TX12483-6W, COTX12235-2W, AORTX09033-4W, and COTX12428-1W were the outstanding entries for this trial based on best of trial designation for chip quality, while AORTX09037-1W/Y had a high general rating and a best of trial designation for tuber appearance. AORTX09037-5W/Y, NDTX12203AB-1W, AORTX09037-4W/Y, and COTX12235-2W had high general ratings for tuber appearance. NDTX12203AB-1W, NDTX1246-5W/Y, NDTX14362AB-1W, TX12483-6W, and COTX12235-2W had over 81% good chips (Tables 6a, 6e, and 6f).
- AORTX09037-1W/Y had the highest total yield, while NDTX1246-5W/Y had the highest marketable yield. AORTX09037-1W/Y had the highest yield of 4-6 oz. tubers (Table 6a).
- AORTX09037-5W/Y had the highest yield of less than 4 oz. tubers (Table 6a).
- TX14668-3W ZC had the highest percentage of marketable yield. AORTX09037-1W/Y had the highest percentage of 4-6 oz. tubers, while AORTX10247-1W/Y had the highest percentage of less than 4 oz. tubers (Table 6b).
- NDTX1246-5W/Y and TX14710-4W ZC had the highest specific gravity (Table 6b).
- AORTX09037-1W/Y and AORTX09037-5W/Y had the highest average number of tubers per plant (Table 6c).
- TX12483-5W, ORTX14SP113-3W, AORTX09037-3W/Y, and TX13580-1W were the latest in maturity, while NDTX1463AB-1W, AORTX09037-5W/Y, TX12484-3W ZC, and NDTX1462ABC-1W were the earliest in maturity (Table 6c).
- AORTX09033-4W, AORTX09037-3W/Y, and Atlantic had the highest percentage hollow heart (Table 6d).
- TX12484-2W ZC NDTX102514ABC-5W ATTX11484-3W NDTX1246-3W, TX09396-1W, and Atlantic had the highest percentage of internal brown spot (Table 6d).
- Most entries had acceptable chip quality values from the field except Atlantic, ORTX14SP113-3W, TX09429-1P/P, TX12474-1P/R, and NDTX14467CAB-2W (Table 6f).

- NDTX12203AB-1W, NDTX1246-5W/Y, TX13580-1W, and NDTX1463AB-17W had acceptable chip quality values out of storage. NDTX1246-5W/Y, NDTX14362AB-1W, TX12483-6W, COTX12235-2W, NDTX14475-1W, NDTX14352ABY-1W, NDTX1463AB-4W, TX12483-5W, and AORTX10247-1W/Y had acceptable chip quality ratings after reconditioning (Table 6f).

Comments on entries:

- AORTX09037-1W/Y Round White smooth skin++, high tuber set+++ , uniform size and shape+, BOT+, CR=2.7, Chip Notes: 51% good chip
- AORTX09037-5W/Y Round White smooth skin, very high tuber set++, scab, uniform size and shape+, CR=2.1, Chip Notes: 72% good chip, nice+
- NDTX12203AB-1W Round White high tuber set++, large tubers, compressed, smooth skin, snap cut, uniform size and shape+, CR=1.7, Chip Notes: 88% good chip, nice, BOT+
- Atlantic Round Buff knobs, enlarged lenticels+, growth cracks, large tubers, rough, CR=3.7, Chip Notes: 35% good chip, 1 ROT
- ORTX14SP113-3W Round White not uniform size, too small, high tuber set, dull skin, uniform size and shape, attached stolons, CR=3.9, Chip Notes: 17% good chip, 4 vert
- NDTX1246-5W/Y Round White yellow skin, high tuber set, uniform shape, scab++, uniform size+, good chip size, BOT CR= 1.8, Chip Notes: 83% good chip, nice
- TX14710-4W ZC Round White CR=2.6, Chip Notes: 30% good chip
- NDTX1246-3W Round White smooth skin+, high tuber set, uniform size+ and shape, scab+, nice, a little flat, CR=2.8, Chip Notes: 59% good chip, 1 vert, nice, 1 leopard spot
- NDTX14362AB-1W Round White large, blemished skin, CR=1.5, Chip Notes: 100% good chip, BOT
- TX12484-2W ZC Round White champagne skin++, pink eyes++, pink tint to skin, large tubers, mixed+, scab, ugly skin, CR=2.6, Chip Notes: 31% good chip
- TX14668-3W ZC Round White very large tubers++, CR=3.3, Chip Notes: 34% good chip
- TX12484-3W ZC Round White nice smooth skin, high tuber set, mixed colors, uniform size and shape, blemished skin, large tubers, CR=2.7, Chip Notes: 57% good chip

- TX05249-10W Round White not uniform size, snap cut+, scab, knobs, pear shaped, large tubers, nice, smooth skin, high tuber set, shoulders, CR=3.0, Chip Notes: 50% good chip, 1Vert
- TX12483-6W Round White mixed, russet skin+, nice+, shoulders, CR=2.2, Chip Notes: 81% good chip, BOT
- NDTX1244-3W/Y Round White yellow smooth skin, mixed rep dropped this rep, some green, bright skin, nice, drop for hollow heart, CR=2.3, Chip Notes: 54% good chip, 1IBS
- AORTX09144-2W Round White snap cut, nice, CR=2.1, Chip Notes: 66% good chip, 1 mechanical, nice
- NDTX113030C-3W Round White nice, smooth skin, high tuber set, shoulders, CR=2.0, Chip Notes: 58% good chip, nice, 1 mech; 1 brown, bruise/scab; larger tuber;
- AORTX09037-3W/Y Round White low tuber set, smooth skin, shiny, 50% brown center, uniform size and shape, CR=3.0, Chip Notes: 43% good chip, 3 IBS
- AORTX09037-4W/Y Round White smooth skin+++ , shiny++, nice, uniform size and shape+, small, CR=2.8, Chip Notes: 61% good chip, 2GH
- TX12484-1W ZC Oblong White oblong+, some long, knobs, a few very large, mixed? ++, smooth skin+, shiny, snap cut, nice skin and size, CR=2.8, Chip Notes: 46% good chip
- COTX12235-2W Round White egg shaped, nice skin, uniform size and shape, smooth skin+++ , shiny++, uniform size and shape+++ , scab, CR=1.8, Chip Notes: 90% good chip, BOT+, smaller tuber?
- TX14710-7W ZC Round White knobs, scab+, a little flat+, smooth skin, shiny, CR=3.2, Chip Notes: 35% good chip
- TX13580-1W Round White small, late? +, not uniform size, few tubers, compressed, CR=2.6, Chip Notes: 33% good chip, nice
- TX09429-1P/P Oblong Purple oblong+++ , not a chipper (maybe French fry), some rot, some white flesh streaks+, bronze skin+, purple skin and flesh, CR= 3.5, Chip Notes: 46% good chip
- NDTX14475-1W Oblong White very few tubers, ugly skin, 30% brown center, few tubers, blemished skin, CR=2.0, Chip Notes: 66% good chip, nice
- TX14695-2W ZC Oblong White oblong-long, smooth skin, too big and long, drop for shape, CR=2.1, Chip Notes: 75% good chip, nice

- AORTX09033-4W Oblong White very large tubers++, low tuber set, scab+, bruised, ugly, knobs, growth cracks, drop CR=2.7, Chip Notes: 60% good chip, BOT
- NDTX1463AB-17W Round White nice size, uniform size and shape, some pears, nice, drop (IBS), CR=3.1, Chip Notes: 46% good chip, 1IBS
- AORTX09033-11W Round White large, scab+, knobs, CR=2.4, Chip Notes: 54% good chip, 1IBS, nice
- AORTX09032-3W Round White smooth skin, not uniform size, very few tubers+, nice skin, knobs, CR=2.2, Chip Notes: 67% good chip, 2GH,
- NDTX12135-1W Round White uniform size and shape, blemished skin, small, scab+, CR=2.4, Chip Notes: 67% good chip, nice
- NDTX14352ABY-1W Round White few tubers, blemished skin, CR=3.1, Chip Notes: 33% good chip
- COTX12428-1W Round White smooth skin, nice, CR=2.8, Chip Notes: 61% good chip, BOT
- NDTX12243YC-2W Round White large, snap cut, low tuber set, knobs, CR=3.2, Chip Notes: 26% good chip, 3GH, 1IBS
- NDTX1462ABC-1W Round White low tuber set, knobs, large tubers, CR=2.1, Chip Notes: 68% good chip
- NDTX14467CAB-2W Round White not uniform size, snap cut, bruised, CR=3.5, Chip Notes: 30% good chip, 2 Leopard spot
- NDTX1463AB-4W Round White knobs, growth cracks, CR=2.4, Chip Notes: 51% good chip
- NDTX113467CB-1Ru Round White high tuber set, very few tubers, russet skin+, mixed rep dropped this rep, few tubers, CR=2.6, Chip Notes: 62% good chip, 1GH
- TX12474-1R/R Round Purple low tuber set, 80% pigmented spots, bronze skin+, road map skin, drop, CR=4.0, Chip Notes: 8% good chip, 11 spots; DROP++, spots++
- TX12483-5W Round White ugly skin++, scab, very few tubers, ugly shape, CR=2.6, Chip Notes: 55% good chip
- TX14681-4W Round White small, smooth skin, nice, few tubers, CR=3.4, Chip Notes: 32% good chip
- NDTX1463AB-1W Round White large tubers, knobs, CR=2.5, Chip Notes: 55% good chip
- AORTX10247-1W/Y Round White CR=2.0, Chip Notes: 60% good chip

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

Summary:

AORTX09037-1W/Y and AORTX09037-5W/Y are best for chips out of the field based on yield, small tubers, high tuber number, and chip quality. NDTX1246-5W/Y has potential to be chipped out of cold storage. NDTX12203AB-1W, NDTX14362AB-1W, TX12483-6W, COTX12235-2W, AORTX09033-4W, and COTX12428-1W were the outstanding entries for this trial based on best of trial designation for and chip quality.

Dalhart
Table 6a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 44 entries in the Texas Chip Trial grown near Dalhart, Texas-2017.

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 Field	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz					
AORTX09037-1W/Y	NATCH 17 Tier 2	622.2	386.5	325.5	57.3	3.7	0.0	235.6	0.1	4.3	4.1
AORTX09037-5W/Y	NATCH 17 Tier 1	614.4	349.0	252.7	89.6	6.7	0.0	265.1	0.2	4.2	4.2
NDTX12203AB-1W	NATCH 17 Tier 1	529.0	387.8	261.2	121.6	5.0	0.0	138.0	3.2	3.9	4.2
Atlantic	WR	492.5	377.1	180.2	125.9	71.0	0.0	91.4	24.1	3.6	3.5
ORTX14SP113-3W	TXCH	484.3	232.7	183.4	40.1	9.3	0.0	249.6	2.0	2.9	3.8
NDTX1246-5W/Y	TXCH	645.5	478.6	324.4	154.2	0.0	0.0	156.2	10.6	4.3	3.8
TX14710-4W ZC	TXCH	471.7	357.5	195.6	113.2	48.7	0.0	113.2	1.0	3.5	3.6
NDTX1246-3W	NATCH 17 Tier 1	468.9	275.8	220.9	54.9	0.0	0.0	193.1	0.0	3.7	3.9
NDTX14362AB-1W	TXCH	452.3	332.7	216.5	108.2	7.9	0.0	119.2	0.5	3.8	3.8
TX12484-2W ZC	TXCH	448.3	368.2	174.3	149.2	44.7	0.0	78.2	2.0	3.3	3.0
TX14668-3W ZC	TXCH	427.2	373.1	161.1	155.4	56.6	0.0	54.1	0.0	3.5	3.5
TX12484-3W ZC	TXCH	415.3	287.2	170.1	94.6	22.6	0.0	128.1	0.0	3.5	3.7
TX05249-10W	TXCH	413.6	328.2	205.6	98.6	24.1	0.0	85.4	0.0	3.7	3.8
TX12483-6W	TXCH	402.4	249.0	194.4	53.1	1.5	0.0	153.4	0.0	3.2	3.5
NDTX1244-3W/Y	NATCH 17 Tier 1	398.7	241.5	186.4	53.4	1.7	0.0	156.6	0.5	3.7	3.5
AORTX09144-2W	NATCH 17 Tier 1	388.3	278.4	172.8	81.4	24.2	0.0	92.0	17.9	3.6	3.7
NDTX113030C-3W	NATCH 17 Tier 2	381.1	244.0	160.9	72.7	10.4	0.0	137.0	0.0	3.8	3.9
AORTX09037-3W/Y	TXCH	377.8	208.0	156.9	44.4	6.7	0.0	169.8	0.0	3.0	3.8
AORTX09037-4W/Y	NATCH 17 Tier 2	373.2	191.9	169.6	20.9	1.5	0.0	179.7	1.6	3.6	4.0
TX12484-1W ZC	TXCH	370.6	299.9	169.6	120.4	9.9	0.0	67.8	3.0	3.2	3.5
COTX12235-2W	NATCH 17 Tier 1	363.7	145.7	130.6	15.1	0.0	0.0	218.0	0.0	3.9	4.1
TX14710-7W ZC	TXCH	361.0	224.4	161.6	51.4	11.4	0.0	136.5	0.0	3.4	3.2
TX13580-1W	TXCH	358.0	214.0	170.1	43.9	0.0	0.0	144.0	0.0	2.6	3.1
TX09429-1P/P	TXCH	339.0	202.1	168.8	33.3	0.0	0.0	130.6	6.3	3.2	3.3
NDTX14475-1W	TXCH	314.6	191.7	147.5	44.2	0.0	0.0	122.6	0.3	3.0	3.2
TX14695-2W ZC	TXCH	313.3	254.0	114.2	113.9	25.8	0.0	59.3	0.0	3.0	3.7
AORTX09033-4W	NATCH 17 Tier 2	312.8	254.0	80.2	107.5	66.3	0.0	52.9	6.0	2.9	2.7
NDTX1463AB-17W	TXCH	312.5	218.1	162.9	50.6	4.6	0.0	88.4	6.0	3.0	3.5
AORTX09033-11W	NATCH 17 Tier 1	311.8	212.0	131.1	67.5	13.4	0.0	85.9	13.9	3.1	3.3
AORTX09032-3W	NATCH 17 Tier 2	300.1	201.1	134.6	60.1	6.5	0.0	99.1	0.0	3.2	3.2
NDTX12135-1W	TXCH	299.4	151.2	121.4	29.8	0.0	0.0	148.2	0.0	3.3	3.3
NDTX14352ABY-1W	TXCH	290.0	139.7	115.2	22.2	2.3	0.0	150.3	0.0	3.3	3.3
COTX12428-1W	NATCH 17 Tier 1	283.1	160.6	114.9	42.0	3.7	0.0	122.4	0.1	3.1	3.4
NDTX12243YC-2W	TXCH	278.2	195.6	90.4	75.0	30.3	0.0	77.7	4.9	3.2	2.8
NDTX1462ABC-1W	TXCH	274.6	233.4	125.6	78.9	28.8	0.0	41.2	0.0	2.6	3.1
NDTX14467CAB-2W	TXCH	266.4	153.2	112.0	39.7	1.5	0.0	110.7	2.5	3.1	3.3
NDTX1463AB-4W	TXCH	254.9	152.6	118.2	34.4	0.0	0.0	78.8	23.5	3.3	3.0
Average		436.5	289.0	194.4	79.9	14.7	0.0	144.6	2.9	3.5	3.7
L.S.D. (.05)		109.5	94.2	60.8	43.7	23.2		54.3	ns	0.5	0.4

¹ 1=very poor to 5= excellent

Dalhart
Table 6 a. cont

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 44 entries in the Texas Chip Trial grown near Dalhart, Texas-2017.

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 Field	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz						10-18 oz
NDTX113467CB-1Ru	TXCH	237.6	134.3	104.3	30.0	0.0	103.3	0.0	2.7	2.9	
TX12474-1P/R	TXCH	232.0	115.2	106.0	9.2	0.0	114.9	1.9	2.7	3.0	
TX12483-5W	TXCH	221.4	157.1	94.6	52.4	10.2	52.6	11.7	2.2	2.6	
TX14681-4W	TXCH	216.0	131.6	123.1	6.5	2.0	84.4	0.0	2.9	3.0	
NDTX1463AB-1W	TXCH	180.1	136.7	72.5	52.3	11.9	37.4	6.0	2.7	2.7	
AORTX10247-1W/Y	TXCH	168.8	30.8	30.8	0.0	0.0	138.0	0.0	2.6	2.6	
Average		209.3	117.6	88.5	25.1	4.0	0.0	88.4	3.2	2.6	2.8
L.S.D. (.05)		109.5	94.2	60.8	43.7	23.2		54.3	ns	0.5	0.4

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 44 entries in the Texas Chip Trial grown near Dalhart, Texas-2017.

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				
AORTX09037-1W/Y	NATCH 17 Tier 2	61.9	51.8	9.5	0.6	0.0	38.1	0.0	1.065	14.1	Round	White
AORTX09037-5W/Y	NATCH 17 Tier 1	57.5	41.6	14.8	1.1	0.0	42.5	0.0	1.065	14.1	Round	White
NDTX12203AB-1W	NATCH 17 Tier 1	72.9	48.7	23.5	0.8	0.0	26.6	0.5	1.068	14.6	Round	White
Atlantic	WR	70.5	35.0	23.3	12.2	0.0	19.9	9.6	1.072	15.3	Round	Buff
ORTX14SP113-3W	TXCH	47.9	37.9	8.1	1.9	0.0	51.7	0.4	1.062	13.7	Round	White
NDTX1246-5W/Y	TXCH	74.0	49.9	24.1	0.0	0.0	24.3	1.7	1.074	15.7	Round	White
TX14710-4W ZC	TXCH	75.8	41.5	24.0	10.3	0.0	24.0	0.2	1.076	16.1	Round	White
NDTX1246-3W	NATCH 17 Tier 1	58.5	47.6	10.9	0.0	0.0	41.5	0.0	1.072	15.3	Round	White
NDTX14362AB-1W	TXCH	73.5	47.9	23.9	1.8	0.0	26.3	0.1	1.067	14.6	Round	White
TX12484-2W ZC	TXCH	83.1	35.9	37.7	9.5	0.0	15.3	1.6	1.062	13.5	Round	White
TX14668-3W ZC	TXCH	87.6	38.8	35.3	13.6	0.0	12.4	0.0	1.059	13.0	Round	White
TX12484-3W ZC	TXCH	68.9	40.6	23.4	4.8	0.0	31.1	0.0	1.064	14.0	Round	White
TX05249-10W	TXCH	79.6	49.6	24.1	6.0	0.0	20.4	0.0	1.062	13.6	Round	White
TX12483-6W	TXCH	60.6	47.6	12.6	0.4	0.0	39.4	0.0	1.064	14.0	Round	White
NDTX1244-3W/Y	NATCH 17 Tier 1	60.2	47.4	12.2	0.6	0.0	39.7	0.1	1.071	15.1	Round	White
AORTX09144-2W	NATCH 17 Tier 1	73.1	44.9	21.2	7.0	0.0	23.0	4.0	1.068	14.7	Round	White
NDTX113030C-3W	NATCH 17 Tier 2	64.3	42.9	18.8	2.6	0.0	35.7	0.0	1.071	15.1	Round	White
AORTX09037-3W/Y	TXCH	53.0	40.6	10.9	1.5	0.0	47.0	0.0	1.064	13.9	Round	White
AORTX09037-4W/Y	NATCH 17 Tier 2	52.4	46.0	5.9	0.4	0.0	47.2	0.4	1.065	14.1	Round	White
TX12484-1W ZC	TXCH	80.9	45.3	32.7	2.9	0.0	18.3	0.8	1.061	13.4	Oblong	White
COTX12235-2W	NATCH 17 Tier 1	37.6	34.4	3.2	0.0	0.0	62.4	0.0	1.064	13.8	Round	White
TX14710-7W ZC	TXCH	62.2	44.8	13.7	3.6	0.0	37.8	0.0	1.062	13.6	Round	White
TX13580-1W	TXCH	61.1	49.9	11.1	0.0	0.0	38.9	0.0	1.066	14.2	Round	White
TX09429-1P/P	TXCH	58.7	49.2	9.4	0.0	0.0	39.0	2.3	1.060	13.3	Oblong	Purple
NDTX14475-1W	TXCH	64.8	46.3	18.5	0.0	0.0	35.2	0.1	1.069	14.9	Round	White
TX14695-2W ZC	TXCH	81.3	36.8	36.6	7.9	0.0	18.7	0.0	1.066	14.2	Oblong	White
AORTX09033-4W	NATCH 17 Tier 2	79.7	26.2	33.4	20.2	0.0	17.6	2.7	1.068	14.7	Round	White
NDTX1463AB-17W	TXCH	69.8	50.8	17.4	1.6	0.0	28.5	1.7	1.067	14.4	Round	White
AORTX09033-11W	NATCH 17 Tier 1	67.8	42.1	21.5	4.2	0.0	27.9	4.4	1.070	15.1	Round	White
AORTX09032-3W	NATCH 17 Tier 2	68.7	46.5	20.3	1.9	0.0	31.3	0.0	1.067	14.4	Round	White
NDTX12135-1W	TXCH	49.1	40.7	8.4	0.0	0.0	50.9	0.0	1.062	13.6	Round	White
NDTX14352ABY-1W	TXCH	47.0	38.1	7.6	1.3	0.0	53.0	0.0	1.064	13.9	Round	White
COTX12428-1W	NATCH 17 Tier 1	54.5	39.5	13.3	1.7	0.0	45.5	0.1	1.063	13.8	Round	White
NDTX12243YC-2W	TXCH	71.1	32.9	27.3	10.9	0.0	27.1	1.8	1.070	14.9	Round	White
NDTX1462ABC-1W	TXCH	84.7	45.2	28.8	10.6	0.0	15.3	0.0	1.058	12.9	Round	White
NDTX14467CAB-2W	TXCH	57.7	41.9	15.1	0.8	0.0	41.0	1.3	1.062	13.6	Round	White
NDTX1463AB-4W	TXCH	60.2	46.4	13.9	0.0	0.0	30.5	9.2	1.052	11.9	Round	White
Average		65.6	44.2	18.1	3.3	0.0	33.5	0.9	1.066	14.3		
L.S.D. (.05)		12.9	9.8	9.6	4.9		12.2	ns	0.008	1.5		

Dalhart
Table 6 b.cont

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 44 entries in the Texas Chip Trial grown near Dalhart, Texas-2017.

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				
NDTX113467CB-1Ru	TXCH	59.8	49.5	10.3	0.0	0.0	40.2	0.0	1.066	14.3	Round	Russet
TX12474-1P/R	TXCH	50.0	45.7	4.4	0.0	0.0	49.2	0.8	1.055	12.3	Round	Purple
TX12483-5W	TXCH	70.3	43.1	23.2	3.9	0.0	23.4	6.4	1.068	14.6	Round	White
TX14681-4W	TXCH	61.1	57.3	2.9	1.0	0.0	38.9	0.0	1.070	15.0	Round	White
NDTX1463AB-1W	TXCH	76.6	39.7	29.7	7.2	0.0	21.1	2.3	1.063	13.7	Round	White
AORTX10247-1W/Y	TXCH	18.2	18.2	0.0	0.0	0.0	81.8	0.0	1.066	14.3	Round	White
Average		56.0	42.3	11.7	2.0	0.0	42.4	1.6	1.065	14.1		
L.S.D. (.05)		12.9	9.8	9.6	4.9		12.2	ns	0.008	1.5		

Dalhart
Table 6c.

Average number of tubers per plant, tuber weight, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, and percent dead vine at vine kill of 44 entries in the Texas Chip Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Average	Average	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
		Tubers/ Plant	Tuber Weight In oz.			Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
AORTX09037-1W/Y	NATCH 17 Tier 2	13.1	3.2	100	100	2.0	4.5	4.6	4.5	0
AORTX09037-5W/Y	NATCH 17 Tier 1	13.1	3.2	100	100	2.5	3.6	3.2	3.6	54
NDTX12203AB-1W	NATCH 17 Tier 1	8.9	4.0	100	100	2.3	4.0	3.9	4.2	18
Atlantic	WR	7.1	4.6	100	100	2.0	4.0	3.8	4.0	11
ORTX14SP113-3W	TXCH	11.9	2.7	100	100	2.0	4.5	4.8	4.6	0
NDTX1246-5W/Y	TXCH	12.2	3.6	100	100	2.0	3.9	3.7	3.9	12
TX14710-4W ZC	TXCH	7.7	4.1	100	100	2.0	4.0	4.0	4.2	10
NDTX1246-3W	NATCH 17 Tier 1	10.1	3.1	100	100	2.0	4.0	3.6	4.0	23
NDTX14362AB-1W	TXCH	7.7	4.0	100	100	2.0	3.5	3.5	3.5	10
TX12484-2W ZC	TXCH	6.7	4.5	100	100	2.0	4.1	4.0	4.1	13
TX14668-3W ZC	TXCH	5.9	4.8	86	100	2.0	4.5	4.5	4.5	3
TX12484-3W ZC	TXCH	7.3	3.9	96	100	2.5	3.5	3.2	3.7	38
TX05249-10W	TXCH	6.9	4.1	100	100	2.0	4.3	4.3	4.3	4
TX12483-6W	TXCH	8.8	3.1	100	100	2.1	4.0	3.8	4.0	13
NDTX1244-3W/Y	NATCH 17 Tier 1	8.7	3.1	100	100	2.1	4.3	4.2	4.4	10
AORTX09144-2W	NATCH 17 Tier 1	6.7	4.0	100	100	2.0	4.5	4.4	4.5	2
NDTX113030C-3W	NATCH 17 Tier 2	7.4	3.6	100	100	2.0	4.3	4.5	4.3	6
AORTX09037-3W/Y	TXCH	8.5	3.0	100	100	2.0	4.5	4.7	4.6	0
AORTX09037-4W/Y	NATCH 17 Tier 2	10.1	2.5	100	100	2.0	4.4	4.5	4.5	1
TX12484-1W ZC	TXCH	6.0	4.2	100	100	2.4	3.9	3.8	4.0	33
COTX12235-2W	NATCH 17 Tier 1	9.6	2.5	85	100	2.0	4.4	4.1	4.4	4
TX14710-7W ZC	TXCH	8.0	3.1	96	100	2.3	4.0	4.0	4.0	5
TX13580-1W	TXCH	8.7	2.8	100	100	2.0	4.5	4.7	4.6	0
TX09429-1P/P	TXCH	8.0	2.8	100	100	2.5	3.1	3.4	3.7	33
NDTX14475-1W	TXCH	8.1	3.0	92	100	2.0	4.0	4.0	3.9	20
TX14695-2W ZC	TXCH	5.2	4.2	94	100	2.5	3.7	3.7	3.8	8
AORTX09033-4W	NATCH 17 Tier 2	4.4	5.0	96	96	2.4	3.8	3.6	3.8	20
NDTX1463AB-17W	TXCH	6.0	3.5	100	100	2.2	4.0	4.3	4.1	0
AORTX09033-11W	NATCH 17 Tier 1	5.2	4.1	96	100	2.4	3.8	3.7	3.8	23
AORTX09032-3W	NATCH 17 Tier 2	6.2	3.3	96	100	2.1	4.5	4.3	4.4	8
NDTX12135-1W	TXCH	7.0	2.8	100	100	2.1	4.0	4.0	4.1	14
NDTX14352ABY-1W	TXCH	6.8	2.8	97	100	2.0	4.5	4.3	4.5	0
COTX12428-1W	NATCH 17 Tier 1	7.4	3.0	75	88	2.0	3.4	3.9	3.9	8
NDTX12243YC-2W	TXCH	5.1	4.5	92	94	2.1	3.9	3.7	4.0	24
NDTX1462ABC-1W	TXCH	3.9	4.7	100	100	2.3	3.2	3.2	3.6	30
NDTX14467CAB-2W	TXCH	6.2	3.0	94	100	2.3	3.6	3.6	3.8	1
NDTX1463AB-4W	TXCH	5.1	3.4	86	100	2.5	3.3	3.7	3.5	8
Average		8.7	3.5	98	99	2.1	4.1	4.0	4.1	13
L.S.D. (.05)		2.2	0.6	ns	ns	0.2	0.5	0.6	0.4	18

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 6 c. cont

Average number of tubers per plant, tuber weight, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, and percent dead vine at vine kill of 44 entries in the Texas Chip Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
						Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
NDTX113467CB-1Ru	TXCH	5.2	3.0	77	100	2.3	3.9	3.9	3.9	16
TX12474-1P/R	TXCH	6.4	2.5	96	100	2.1	4.0	4.1	4.1	1
TX12483-5W	TXCH	3.9	3.8	100	100	2.0	4.5	4.8	4.6	0
TX14681-4W	TXCH	4.8	3.0	100	100	2.3	3.2	3.5	3.3	10
NDTX1463AB-1W	TXCH	2.9	4.4	72	94	2.5	3.2	3.3	3.5	17
AORTX10247-1W/Y	TXCH	5.1	2.2	50	100	2.0	4.5	4.0	4.5	5
Average		4.7	3.2	83	99	2.2	3.9	3.9	4.0	8
L.S.D. (.05)		2.2	0.6	ns	ns	0.2	0.5	0.6	0.4	18

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 44 entries in the Texas Chip Trial grown near Dalhart, Texas-2017.

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
AORTX09037-1W/Y	NATCH 17 Tier 2	3.0	1.0	1.3	4.0	1.0	5.0	5.0	4.3	5.0	4.0	5	0	0	13
AORTX09037-5W/Y	NATCH 17 Tier 1	2.0	1.0	1.0	4.0	1.0	5.0	5.0	4.8	5.0	4.5	15	0	0	0
NDTX12203AB-1W	NATCH 17 Tier 1	1.0	1.0	1.0	3.9	1.0	5.0	5.0	5.0	5.0	4.0	0	0	3	0
Atlantic	WR	1.0	1.0	2.5	3.9	1.0	4.6	5.0	5.0	4.7	4.0	30	0	5	15
ORTX14SP113-3W	TXCH	1.0	1.0	1.7	3.8	1.0	5.0	5.0	5.0	5.0	4.0	0	0	7	0
NDTX1246-5W/Y	TXCH	3.0	1.0	1.0	3.9	1.0	5.0	5.0	3.9	5.0	4.0	0	0	0	0
TX14710-4W ZC	TXCH	1.0	2.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
NDTX1246-3W	NATCH 17 Tier 1	1.0	1.0	1.0	3.9	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
NDTX14362AB-1W	TXCH	1.0	1.0	2.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	10	0	20	0
TX12484-2W ZC	TXCH	1.0	1.8	1.0	4.0	1.0	5.0	5.0	4.8	5.0	3.8	5	3	8	0
TX14668-3W ZC	TXCH	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	5	0	5	0
TX12484-3W ZC	TXCH	1.0	2.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	3	0
TX05249-10W	TXCH	1.0	1.0	1.0	4.0	1.0	5.0	5.0	4.8	4.8	4.0	0	0	3	3
TX12483-6W	TXCH	1.0	1.0	2.5	4.0	1.0	5.0	5.0	5.0	5.0	4.3	0	0	0	0
NDTX1244-3W/Y	NATCH 17 Tier 1	1.8	1.0	1.0	3.6	1.0	5.0	5.0	5.0	5.0	3.9	28	0	3	0
AORTX09144-2W	NATCH 17 Tier 1	1.0	1.7	1.0	4.3	1.0	5.0	5.0	5.0	5.0	4.3	0	0	0	7
NDTX113030C-3W	NATCH 17 Tier 2	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	3.9	5	0	0	0
AORTX09037-3W/Y	TXCH	2.0	1.8	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	30	0	5	3
AORTX09037-4W/Y	NATCH 17 Tier 2	2.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	3	0	0	0
TX12484-1W ZC	TXCH	1.0	2.1	1.0	3.9	1.0	5.0	5.0	5.0	5.0	4.0	5	0	0	0
COTX12235-2W	NATCH 17 Tier 1	1.0	1.0	1.0	4.3	1.0	5.0	5.0	4.8	5.0	4.0	0	0	0	0
TX14710-7W ZC	TXCH	1.3	1.8	1.0	4.0	1.0	5.0	5.0	4.3	4.8	4.0	0	0	0	0
TX13580-1W	TXCH	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
TX09429-1P/P	TXCH	5.0	3.0	1.0	4.5	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
NDTX14475-1W	TXCH	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	3.0	15	0	0	0
TX14695-2W ZC	TXCH	1.0	3.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.3	20	0	3	3
AORTX09033-4W	NATCH 17 Tier 2	1.0	1.5	1.0	4.0	1.0	5.0	5.0	4.3	4.8	3.8	33	10	3	0
NDTX1463AB-17W	TXCH	1.0	1.2	1.0	4.3	1.0	5.0	5.0	5.0	5.0	4.0	13	0	3	37
AORTX09033-11W	NATCH 17 Tier 1	1.0	1.5	1.0	4.0	1.0	5.0	5.0	4.3	4.8	3.9	3	0	5	0
AORTX09032-3W	NATCH 17 Tier 2	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	4.8	4.0	3	0	0	0
NDTX12135-1W	TXCH	1.0	1.3	1.0	3.9	1.0	5.0	5.0	4.3	5.0	3.8	3	0	3	3
NDTX14352ABY-1W	TXCH	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	10
COTX12428-1W	NATCH 17 Tier 1	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	3.9	3	0	0	10
NDTX12243YC-2W	TXCH	1.0	1.3	1.0	4.0	1.0	5.0	5.0	5.0	4.8	3.8	20	0	0	0
NDTX1462ABC-1W	TXCH	1.0	1.5	1.5	4.0	1.0	5.0	5.0	5.0	4.5	4.0	0	0	0	0
NDTX14467CAB-2W	TXCH	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	15	0	0	0
NDTX1463AB-4W	TXCH	1.0	1.0	1.0	4.0	1.0	4.7	5.0	5.0	4.7	4.0	7	0	0	0
Average		1.3	1.3	1.1	4.0	1.0	5.0	5.0	4.8	4.9	4.0	7	0	2	3
L.S.D. (.05)		0.2	0.3	ns	0.3		ns		0.4	ns	0.3	18	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

Dalhart
Table 6 d. cont

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 44 entries in the Texas Chip Trial grown near Dalhart, Texas-2017.

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
NDTX113467CB-1Ru	TXCH	1.0	1.0	1.5	4.0	1.0	5.0	5.0	5.0	5.0	4.0	3	0	3	0
TX12474-1P/R	TXCH	4.0	2.0	1.0	5.0	1.0	5.0	5.0	5.0	5.0	3.9	0	0	0	70
TX12483-5W	TXCH	1.0	1.0	1.8	4.0	1.0	5.0	5.0	4.8	5.0	4.0	3	0	3	0
TX14681-4W	TXCH	1.0	1.8	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	5	0	0	0
NDTX1463AB-1W	TXCH	1.0	2.0	1.0	4.0	1.0	5.0	5.0	5.0	4.7	4.0	7	0	3	7
AORTX10247-1W/Y	TXCH	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
Average		1.5 0.2	1.5 0.3	1.2 ns	4.2 0.3	1.0	5.0 ns	5.0	5.0 0.4	4.9 ns	4.0 0.3	3 18	0 ns	1 ns	13 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

Dalhart Notes and general rating for all reps of 44 entries in the Texas Chip Trial grown near Dalhart, Texas-2017.
Table 6c.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
AORTX09037-1W/Y	NATCH 17 Tier 2	smooth skin+, high tuber set+++ , uniform size and shape+, BOT+, ...	high tuber set+, scab, smooth skin, .	4.6, 4.6, 4, 4	4.5, 4, 4.2, 3.8
AORTX09037-5W/Y	NATCH 17 Tier 1	high tuber set, smooth skin, uniform size and shape, .	very high tuber set+, scab, uniform size and shape+, . , high tuber set+, large tubers, compressed, smooth skin, snap cut, uniform size and shape+	4.5, 4, 4.2, 4.2	4.4, 4.2, 3.8, 4.5
NDTX12203AB-1W	NATCH 17 Tier 1	, uniform size and shape, .	knobs, enlarged lenticels, growth cracks, , large tubers, rough	3.8, 4, 3.8, 3.8	4.2, 3.8, 4.5, 4.2
Atlantic	WR	enlarged lenticels, .	, small, high tuber set, dull skin, uniform size and shape, attached stolons,	3, 3.8, 4, 3.5	2.8, 4, 3.6, 3.6
ORTX14SP113-3W	TXCH	small, not uniform size, . too small?.		3, 2.6, 3,	3.6, 3.8, 4,
NDTX1246-5W/Y	TXCH	, yellow skin, BOT, high tuber set, uniform shape, .	, scab+, uniform size+, good chip size,	, 4.5, 4.2, 4.2	, 3.8, 3.8, 3.8
TX14710-4W ZC	TXCH	3.5, ...	3.6, ...
NDTX1246-3W	NATCH 17 Tier 1	, smooth skin, high tuber set, uniform size and shape, .	uniform size+, scab+, nice, smooth skin, a little flat,	3.6, 3.8, 3.8, 3.5	3.8, 4.4, 3.8
NDTX14362AB-1W	TXCH	large, ...	blemished skin, ...	3.8, ...	3.8, ...
TX12484-2W ZC	TXCH	champagne skin+, pink eyes+, pink tint to skin, .	large tubers, pink skin+, mixed+, scab, ugly skin	3, 2.8, 3.8, 3.5	3.3, 2.6, 3.3, 2.8
TX14668-3W ZC	TXCH	large+, ...	very large tubers+, ...	3.8, 2.8, 3.6, 3.6	3.8, 2.8, 3.8, 3.6
TX12484-3W ZC	TXCH	nice smooth skin, high tuber set, . , mixed colors, uniform size and shape	, blemished skin, large tubers, .	3.5, 3, 3.8, 3.8	3.6, 3.6, 3.8, 3.8
TX05249-10W	TXCH	not uniform size, some large tubers, ...	snap cut+, , scab, knobs, pear shaped, large tubers, nice, smooth skin, high tuber set, shoulders	3.5, 3.8, 3.6, 3.8	3.6, 4, 3.6, 4
TX12483-6W	TXCH	, russet skin+, mixed?.	russet skin+, , nice+, shoulders, mixed rep dropped this rep, , some green, bright skin, nice drop for hollow heart,	2.5, 3.6, 3.3, 3.2	3.3, 3.2, 3.8, 3.8
NDTX1244-3W/Y	NATCH 17 Tier 1	yellow smooth skin ...		4.2, 3.6, 3.8, 3.2	3.8, 3.3, 3.2, 3.8
AORTX09144-2W	NATCH 17 Tier 1	...	snap cut, nice, ...	3.6, 3.8, 3.5,	3.6, 3.8, 3.8,
NDTX113030C-3W	NATCH 17 Tier 2 , nice, smooth skin, high tuber set, shoulders smooth skin, shiny, 50% brown center , uniform size and shape,	4, 3.5, 3.8, 3.8	3.8, 3.5, 3.6, 4.5
AORTX09037-3W/Y	TXCH	, low tuber set,	smooth skin+++ , shiny+, nice, uniform size and shape+, small,	3.2, 3.3, 2.5, 3	3.5, 3.8, 3.6, 4.2
AORTX09037-4W/Y	NATCH 17 Tier 2	... oblong+, some long, knobs, a few very large , mixed?+...	smooth skin+, shiny, snap cut, nice skin and size, . smooth skin+++ , shiny+, , uniform size and shape+++ , scab,	3.6, 3.2, 3.6, 3.8	4, 4, 4, 4
TX12484-1W ZC	TXCH	...	smooth skin+, shiny, snap cut, nice skin and size, . smooth skin+++ , shiny+, , uniform size and shape+++ , scab,	2.5, 3.3, 3.5, 3.6	3.3, 3.3, 3.6, 3.8
COTX12235-2W	NATCH 17 Tier 1	, Easter eggs, nice skin, uniform size and shape,		3.6, 3.6, 4.2, 4	4.2, 4, 4.2, 4
TX14710-7W ZC	TXCH	...	knobs, scab+, , a little flat+, smooth skin, shiny	3.6, 3.6, 3, 3.5	2.8, 3.3, 2.5, 4
TX13580-1W	TXCH	small, late?+, ...	not uniform size, , few tubers, compressed , some rot, some white flesh streaks+, bronze skin+, purple skin and flesh,	2.5, 2.6, 2.6, 2.8	3.2, 2.8, 3, 3.4
TX09429-1P/P	TXCH	oblong+++ , not a chipper (maybe French fry), ...	ugly skin, 30% brown center, few tubers, blemished skin, .	3, 3, 3.6, 3.3	3.3, 3.5, 3.2, 3.3
NDTX14475-1W	TXCH	, very few tubers, .		4, 2, .	3.5, 2.8, .
TX14695-2W ZC	TXCH	oblong+++ , oblong-long,	smooth skin, too big and long, drop for shape, . scab+, bruised, large tubers+, ugly, drop, knobs, growth cracks, .	3.5, 2.6, 3, 2.8	4, 3.6, 3.6, 3.5
AORTX09033-4W	NATCH 17 Tier 2	, very large tubers+, low tuber set, .		2.8, 2.8, 3, 3	2.6, 2.8, 2.8, 2.6
NDTX1463AB-17W	TXCH	nice size, uniform size and shape, .	, some pears, nice, drop (IBS).	3.5, 3, 2.6,	3.4, 3.4, 3.6,
AORTX09033-11W	NATCH 17 Tier 1	, large,	scab+, knobs, ...	3, 3.3, 3, 3.2	3.6, 3.8, 2.6, 3.3
AORTX09032-3W	NATCH 17 Tier 2	smooth skin, not uniform size, very few tubers, .	, few tubers, , nice skin, knobs	3.6, 2, 3.6, 3.5	4, 2.5, 2.6, 3.8
NDTX12135-1W	TXCH	uniform size and shape, .	blemished skin, , small, scab+, .	3.8, 2.8, 2.6, 3.8	4, 2.8, 2.8, 3.6
NDTX14352ABY-1W	TXCH	...	few tubers, blemished skin, .	2.6, 3.6, 3.6,	2.8, 3.5, 3.6,
COTX12428-1W	NATCH 17 Tier 1	...	smooth skin, nice, .	2.5, 3.5, 3.8, 2.6	3, 3, 4, 3.5
NDTX12243YC-2W	TXCH	, large,	snap cut, low tuber set, knobs, .	3.6, 2.8, 3.5, 3	3.3, 2.8, 2.5, 2.6
NDTX1462ABC-1W	TXCH	low tuber set, ...	knobs, large tubers, .	2, 3.2, .	2.6, 3.6, .
NDTX14467CAB-2W	TXCH	...	, , not uniform size, snap cut, bruised,	3, 2.6, 3.6, 3	3, 3.2, 3.3, 3.6
NDTX1463AB-4W	TXCH	oblong, ...	, , knobs, growth cracks,	3.5, 3, 3.5,	2.6, 3.5, 3,

Dalhart
Table 6 e. cont

Notes and general rating for all reps of 44 entries in the Texas Chip Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
NDTX113467CB-1Ru	TXCH	high tuber set, , very few tubers, russet skin+, ,	mixed rep dropped this rep, few tubers, ,	4.2, 2, 2, 2.5	4, 2.7, 2.5, 2.3
TX12474-1P/R	TXCH	low tuber set, , ,	80% pigmented spots, 70% pigmented spots, bronze skin+, 70% pigmented spots, road map skin, drop, 60%	2, 2.5, 2.6, 3.5	3.2, 3.3, 2.5, 3
TX12483-5W	TXCH	, very few tubers, ,	ugly skin++, scab, very few tubers, ugly shape	1.5, 2, 2.5, 2.6	2.5, 2.6, 2.5, 2.8
TX14681-4W	TXCH	small, , ,	smooth skin, nice, few tubers, , ,	2.5, 3.2, ,	3, 3, ,
NDTX1463AB-1W	TXCH	, oblong, ,	, large tubers, knobs, ,	2.5, 3, 2.5,	2.8, 2.8, 2.5,
AORTX10247-1W/Y	TXCH	, , ,	, , ,	2.6, , ,	2.6, , ,

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Table 6f.

Specific gravity, percent solids, chip color rating, good chip, bad chip, percentage vascular discoloration, bruise, stem end discoloration, apical bruise notes, percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 44 entries in the Texas Chip Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Gravity	% Solids	Chip Color ²	Chip Quality ³	% Good Chip	% Bad Chip	% Vas	% Bruise	% Stem	% Apical Bruise	Notes ³	6 Weeks Storage Chip Rating ⁵	Reconditioning Chip Rating ⁶
AORTX09037-1W/Y	NATCH 17 Tier 2	1.065	14.1	2.8	2.7	51	49	13	21	15	0	, , ,	3.8	3.3
AORTX09037-5W/Y	NATCH 17 Tier 1	1.065	14.1	1.8	2.1	72	28	10	12	5	0	nice, nice, ,	3.9	3.8
NDTX12203AB-1W	NATCH 17 Tier 1	1.068	14.6	1.8	1.7	88	12	5	5	3	0	nice, BOT, , BOT	2.6	2.9
Atlantic	WR	1.072	15.3	2.0	3.7	35	65	3	47	13	0	, , , 1 ROT	4.5	3.9
ORTX145P113-3W	TXCH	1.062	13.7	2.3	3.9	17	83	36	27	7	0	, , 4 vert,	5.0	4.2
NDTX1246-5W/Y	TXCH	1.074	15.7	3.0	1.8	83	17	0	7	7	0	, nice, ,	2.7	2.3
TX14710-4W ZC	TXCH	1.076	16.1	1.0	2.6	30	70	30	30	10	0	, , ,	3.0	3.5
NDTX1246-3W	NATCH 17 Tier 1	1.072	15.3	1.5	2.8	59	41	8	15	14	0	1 vert, nice, , 1 lepard	3.6	2.6
NDTX14362AB-1W	TXCH	1.067	14.6	2.0	1.5	100	0	0	0	0	0	BOT, , ,	3.0	2.5
TX12484-2W ZC	TXCH	1.062	13.5	2.0	2.6	31	69	35	17	18	0	, , ,	4.0	3.3
TX14668-3W ZC	TXCH	1.059	13.0	2.3	3.3	34	66	10	41	15	0	, , ,	4.1	3.4
TX12484-3W ZC	TXCH	1.064	14.0	1.8	2.7	57	43	11	18	14	0	, , ,	3.5	2.3
TX05249-10W	TXCH	1.062	13.6	1.5	3.0	50	50	5	25	15	0	1Vert, , ,	3.6	3.4
TX12483-6W	TXCH	1.064	14.0	2.3	2.2	81	19	0	11	8	0	, , BOT,	4.3	2.5
NDTX1244-3W/Y	NATCH 17 Tier 1	1.071	15.1	2.3	2.3	54	46	5	25	13	0	, , , IBS	3.0	2.9
AORTX09144-2W	NATCH 17 Tier 1	1.068	14.7	2.0	3.2	66	34	12	15	3	0	1 mechanical, nice, ,	4.5	3.5
NDTX113030C-3W	NATCH 17 Tier 2	1.071	15.1	1.8	2.6	58	43	15	3	15	0	nice, 1 mech; 1 brown, , bruise/scab; larger tuber; ?	3.6	3.0
AORTX09037-3W/Y	TXCH	1.064	13.9	1.8	3.0	43	57	16	26	3	0	1IBS, 2 IBS, ,	4.4	3.9
AORTX09037-4W/Y	NATCH 17 Tier 2	1.065	14.1	2.5	2.8	61	39	22	12	0	0	, 1GH, , 1GH	4.9	4.5
TX12484-1W ZC	TXCH	1.061	13.4	1.5	2.8	46	54	12	24	18	0	, , ,	4.1	3.4
COTX12235-2W	NATCH 17 Tier 1	1.064	13.8	1.0	1.8	90	10	3	3	3	0	BOT, BOT, , smaller tuber?	3.0	2.4
TX14710-7W ZC	TXCH	1.062	13.6	1.8	3.2	35	65	33	15	18	0	, , ,	4.0	3.5
TX13580-1W	TXCH	1.066	14.2	1.5	2.6	33	67	36	23	8	0	, nice, ,	2.6	2.8
TX09429-1P/P	TXCH	1.060	13.3	5.0	3.5	41	54	0	54	0	0	, , ,	4.1	4.3
NDTX14475-1W	TXCH	1.069	14.9	3.0	2.0	66	34	0	24	10	0	, nice, ,	3.0	2.5
TX14695-2W ZC	TXCH	1.066	14.2	1.3	2.1	75	25	16	0	8	0	nice, , ,	3.4	2.6
AORTX09033-4W	NATCH 17 Tier 2	1.068	14.7	1.8	2.7	60	40	5	29	3	0	, , BOT,	3.3	3.4
NDTX1463AB-17W	TXCH	1.067	14.4	2.3	3.1	46	54	4	24	22	0	, , IBS,	2.8	2.5
AORTX09033-11W	NATCH 17 Tier 1	1.070	15.1	1.5	2.4	54	46	19	16	9	0	1IBS, , nice	3.3	3.1
AORTX09032-3W	NATCH 17 Tier 2	1.067	14.4	1.5	2.2	67	33	8	13	5	0	1GH, , 1GH	3.9	3.4
NDTX12135-1W	TXCH	1.062	13.6	2.0	2.4	67	33	10	15	8	0	, nice, ,	3.5	3.0
NDTX14352ABY-1W	TXCH	1.064	13.9	1.0	3.1	33	67	18	19	30	0	, , ,	3.3	2.3
COTX12428-1W	NATCH 17 Tier 1	1.063	13.8	1.0	2.8	61	39	22	13	4	0	, BOT, ,	3.5	3.5
NDTX12243YC-2W	TXCH	1.070	14.9	1.8	3.2	26	74	23	21	20	0	3GH, , 1IBS,	3.9	3.0
NDTX1462ABC-1W	TXCH	1.058	12.9	2.0	2.1	68	32	16	16	0	0	, , ,	3.3	3.3
NDTX14467CAB-2W	TXCH	1.062	13.6	1.8	3.5	30	70	29	36	0	0	, 2 Lepord, ,	3.1	2.8
NDTX1463AB-4W	TXCH	1.052	11.9	1.7	2.4	51	49	36	10	3	0	, , ,	3.2	2.5
Average		1.065	14.2	1.9		55	45	14	19	9	0		3.6	3.1
L.S.D. (.05)		0.008	1.5	ns		31	31	ns	ns	ns			0.5	0.6

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

²Good Chip Color1=light, 5+=very dark

³Chip Quality 1=Excellent to 5= Very Poor

⁴BOT=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

⁵Stored six weeks at 42°F then chipped immediately.

⁶Reconditioned two weeks at 65°F

Dalhart
Table 6 f. cont

Specific gravity, percent solids, chip color rating, good chip, bad chip, percentage vascular discoloration, bruise, stem end discoloration, apical bruise notes, percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 44 entries in the Texas Chip Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Gravity	% Solids	Chip Color ²	Chip Quality ³	% Good Chip	% Bad Chip	% Vas	% Bruise	% Stem	% Apical Bruise	Notes ³	6 Weeks Storage Chip Rating	Reconditioning Chip Rating
NDTX113467CB-1Ru	TXCH	1.066	14.3	3.0	2.6	62	38	8	13	15	0	,, 1GH,	4.1	3.3
TX12474-1P/R	TXCH	1.055	12.3	5.0	4.0	8	93	0	0	0	0	11 spots; DROP, spots, DROP, SPOTS, spots	4.9	3.9
TX12483-5W	TXCH	1.068	14.6	1.8	2.6	55	45	3	13	27	0	,,,	3.5	2.5
TX14681-4W	TXCH	1.070	15.0	2.0	3.4	32	68	8	60	0	0	,,,	4.5	4.0
NDTX1463AB-1W	TXCH	1.063	13.7	1.6	2.5	55	45	17	21	7	0	,,,	3.2	3.3
AORTX10247-1W/Y	TXCH	1.066	14.3	1.6	2.0	60	40	30	0	10	0	,,,	2.5	2.0
Average		1.065	14.1	2.5		45	55	11	18	10	0		3.8	3.2
L.S.D. (.05)		0.008	1.5	ns		31	31	ns	ns	ns			0.5	0.6

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

²Good Chip Color 1=light, 5+=very dark

³Chip Quality 1=Excellent to 5= Very Poor

⁴BOT=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

⁵Stored six weeks at 42°F then chipped immediately.

⁶Reconditioned two weeks at 65°F

2016 Chip Selections Trial, Dalhart

The trial consisted of 121 entries. The following eight clones (ATX11482-3W, ATX13126-3W, ATX13126-5Ru, ATX13127-1Ru, ATX13134-3W/Y, COTX14284-2Ru/Y, NDTX13224CAB-1W, and NDTX13280CB-3W) will be advanced in 2018 (Table 7).

Dalhart
Table 7

Inventory weight of 8 entries to be advanced
from the 2016 Chip Selection Trial grown
near Dalhart, Texas-201.

Variety or Selection	Trial	Inventory Weight
ATX11482-3W	16SELChip171	16.2
ATX13126-3W	16SELChip189	10.9
ATX13126-5Ru	16SELChip191	7
ATX13127-1Ru	16SELChip192	3.4
ATX13134-3W/Y	16SELChip199	13.3
COTX14284-2Ru/Y	16SELChip206	13.3
NDTX13224CAB-1W	16SELChip217	8
NDTX13280CB-3W	16SELChip231	10.4

Texas Advanced Russet Selection Trial, Dalhart

The trial consisted of twenty-three entries including the check variety Russet Norkotah.

Results were as follows: (Dalhart Tables 8a, 8b, 8c, 8d, and 8e)

- Russet Norkotah278 and COTX10080-2Ru were the best entries for this trial based on general rating and best of trial designation, while Russet Norkotah, TX13590-9Ru, and ATX12058-1Ru had high general ratings (Tables 8a and 8e).
- Russet Norkotah had the highest total and marketable yield, while Russet Norkotah278 and TXA549-1Ru had the highest yield of over 10 oz. tubers (Table 8a).
- NDTX12237Y-3Ru/Y had the highest yield and percentage of less than 4 oz. tubers, while ATX12015-2Ru had the highest yield and percentage of culls/No.2 tubers (Table 8a, 8b).
- Russet Norkotah278 and COTX13215-2Ru had the highest percentage of marketable yield, while Russet Norkotah278 had the highest percentage of over 10-18 oz. tubers (Table 8b).
- COTX13413-1Ru, ORTX14SP017-2Ru, and ATX12058-1Ru had the highest specific gravity, while TX14607-4Ru had very low gravity (Table 8b).
- TXA549-1Ru and COTX10080-2Ru were the latest in maturity, while NDTX12237Y-1Ru, TX14607-4Ru, and Russet Norkotah296 were the earliest in maturity (Table 8c).

Comments on entries:

- Russet Norkotah Long Russet high tuber set, enlarged lenticels+, very nice shape+, uniform size and shape, good russeting, some moon shaped, hearts, pointed
- TXA549-1Ru Oblong Russet high tuber set, pointed, angular, blocky
- TX13590-9Ru Long Russet high tuber set+, blocky, uniform size, nice, uniform russeting
- ATX12058-1Ru Long Russet nice, uniform size and shape, medium size tubers, high tuber set+, a little angular, light skin, light russet, 20% SE
- Russet Norkotah278 Long Russet nice shape and size, very nice skin, size and shape, BOT
- COTX10080-2Ru Long Russet high tuber set, nice uniform size and shape, large tubers, uniform russet skin, nice, BOT

- NDTX12237Y-3Ru/Y Oblong Russet small++, nice yellow flesh, not uniform size+, high tuber set, pear shaped
- ATX12015-2Ru Long Russet skinny+, pointed++, high tuber set, knobs, popping eyes, nice smooth russet skin
- NDTX12237Y-1Ru Oblong Russet small+, roundish++, not much russeting++, light skin, not uniform russeting
- COTX08322-10Ru Long Russet uniform size and shape, nice, high tuber set, nice russet skin, a little angular, long, wide eyes, many eyes
- Stampede Russet Oblong Russet pointed, uniform russet skin, nice shape, blocky
- COTX13215-2Ru Long Russet not uniform size, uniform size, not uniform russet skin, high tuber set
- ATX11952-1Ru Long Russet nice russet skin, very large tubers, knobs, high tuber set
- Russet Norkotah296 Long Russet uniform size and shape
- NDTX12237Y-7Ru/Y Long Russet angular shaped++, blocky, low tuber number
- COTX13215-1Ru Long Russet
- COTX13413-1Ru Long Russet attached stolons+++, low tuber number, nice shape, ugly, bowling pins
- ATX10675-1Ru Long Russet many culls, nice shape, enlarged lenticels, nice skin, blocky
- ORTX14SP017-2Ru Oblong Russet low tuber number+, medium size, cream colored flesh, blocky
- TX14607-4Ru Long Russet low tuber number, not uniform size
- TX14605-4Ru Long Russet low tuber set, small
- TX14596-1Ru Long Russet very nice russet skin+, very low tuber number+, nice shape+, pointed
- TX13512-1Ru Long Russet low tuber number+++, nicer shape, knobs, pointed+, not uniform size and shape

Summary:

Russet Norkotah278 and COTX10080-2Ru were the best entries in this trial based on a combination of factors.

Dalhart
Table 8a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 23 entries in the Texas Advanced Russet Trial grown near Dalhart, Texas-2017.

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				
Russet Norkotah	WR	597.5	486.1	188.4	200.3	97.3	9.7	75.7	26.1	4.4
TXA549-1Ru	TXRU	545.2	411.1	85.4	259.2	66.5	0.0	98.3	35.7	3.8
TX13590-9Ru	TXRU	524.3	420.0	124.1	192.4	103.5	0.0	82.7	21.6	4.1
ATX12058-1Ru	TXRU	514.1	410.9	93.3	197.6	119.9	0.0	83.4	19.9	4.0
Russet Norkotah278	TXRU	484.6	403.7	68.5	162.4	172.8	9.9	71.0	0.0	4.2
COTX10080-2Ru	TXRU	461.0	368.4	90.1	151.4	126.9	11.2	60.6	20.9	4.1
NDTX12237Y-3Ru/Y	TXRU	405.4	170.3	117.2	47.4	5.7	0.0	201.3	33.8	3.6
ATX12015-2Ru	TXRU	399.7	259.7	51.6	117.4	90.6	0.0	48.7	91.4	3.7
NDTX12237Y-1Ru	TXRU	395.7	193.1	121.6	68.5	3.0	0.0	184.9	17.6	3.3
COTX08322-10Ru	TXRU	354.5	293.2	69.8	130.1	93.3	0.0	43.9	17.4	3.8
Stampede Russet	TXRU	350.3	267.6	75.7	111.0	80.9	0.0	63.6	19.1	3.9
COTX13215-2Ru	TXRU	344.3	287.5	87.1	131.8	68.5	0.0	44.2	12.7	3.5
ATX11952-1Ru	TXRU	344.3	248.5	51.6	84.9	112.0	0.0	39.5	56.4	3.6
Russet Norkotah296	TXRU	309.3	255.2	74.0	129.1	52.1	0.0	42.2	11.9	3.9
NDTX12237Y-7Ru/Y	TXRU	278.3	195.6	59.6	91.9	44.2	0.0	55.9	26.8	3.1
COTX13215-1Ru	TXRU	260.2	188.7	79.4	109.2	0.0	0.0	71.5	0.0	3.5
COTX13413-1Ru	TXRU	258.7	155.9	57.8	86.9	11.2	0.0	68.8	34.0	3.4
ATX10675-1Ru	TXRU	257.2	165.1	47.4	70.0	47.7	0.0	40.5	51.6	3.4
ORTX14SP017-2Ru	TXRU	255.2	193.1	67.3	102.8	23.1	0.0	62.1	0.0	3.4
TX14607-4Ru	TXRU	220.4	139.0	64.5	74.5	0.0	0.0	81.4	0.0	3.2
TX14605-4Ru	TXRU	200.6	108.2	72.5	35.7	0.0	0.0	81.4	10.9	3.0
TX14596-1Ru	TXRU	152.9	106.0	50.1	39.7	16.1	0.0	44.9	2.0	3.0
TX13512-1Ru	TXRU	118.7	94.1	28.8	21.6	43.7	0.0	15.4	9.2	3.3
Average		349.2	253.1	79.4	113.7	60.0	1.3	72.3	22.6	3.6
L.S.D. (.05)		86.7	72.7	30.5	42.8	43.8	ns	23.4	28.0	0.4

¹ 1=very poor to 5= excellent

Dalhart
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 23 entries in the Texas Advanced Russet Trial grown near Dalhart, Texas-2017.

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
Russet Norkotah	WR	81.2	31.3	33.6	16.3	1.6	12.8	4.5	1.061	13.4	Long	Russet
TXA549-1Ru	TXRU	75.4	15.7	47.5	12.2	0.0	18.0	6.6	1.070	15.0	Oblong	Russet
TX13590-9Ru	TXRU	80.4	23.8	37.1	19.5	0.0	15.5	4.1	1.070	15.1	Long	Russet
ATX12058-1Ru	TXRU	79.7	18.2	38.3	23.2	0.0	16.3	4.0	1.076	16.0	Long	Russet
Russet Norkotah278	TXRU	83.6	14.6	33.8	35.2	1.8	14.6	0.0	1.060	13.3	Long	Russet
COTX10080-2Ru	TXRU	79.1	19.9	32.6	26.7	2.6	13.6	4.7	1.054	12.1	Long	Russet
NDTX12237Y-3Ru/Y	TXRU	42.2	28.8	12.0	1.4	0.0	49.9	7.9	1.061	13.3	Oblong	Russet
ATX12015-2Ru	TXRU	66.0	12.7	29.6	23.7	0.0	11.5	22.6	1.069	14.7	Long	Russet
NDTX12237Y-1Ru	TXRU	48.5	29.9	17.9	0.7	0.0	46.8	4.7	1.061	13.4	Oblong	Russet
COTX08322-10Ru	TXRU	82.1	19.8	38.2	24.0	0.0	13.4	4.5	1.057	12.7	Long	Russet
Stampede Russet	TXRU	76.5	21.7	31.9	23.0	0.0	18.0	5.5	1.052	11.7	Long	Russet
COTX13215-2Ru	TXRU	83.7	24.2	37.9	21.6	0.0	12.6	3.7	1.067	14.4	Long	Russet
ATX11952-1Ru	TXRU	72.3	15.2	24.9	32.3	0.0	11.4	16.3	1.063	13.8	Long	Russet
Russet Norkotah296	TXRU	82.1	24.2	40.9	17.0	0.0	13.5	4.3	1.059	13.0	Long	Russet
NDTX12237Y-7Ru/Y	TXRU	69.3	21.8	33.1	14.4	0.0	20.0	10.7	1.064	13.9	Long	Russet
COTX13215-1Ru	TXRU	72.5	30.5	42.0	0.0	0.0	27.5	0.0	1.068	14.7	Long	Russet
COTX13413-1Ru	TXRU	60.1	22.2	33.7	4.2	0.0	26.5	13.4	1.080	16.7	Long	Russet
ATX10675-1Ru	TXRU	65.9	18.8	28.1	19.0	0.0	15.1	19.1	1.065	14.1	Long	Russet
ORTX14SP017-2Ru	TXRU	74.7	27.0	39.5	8.1	0.0	25.3	0.0	1.078	16.4	Oblong	Russet
TX14607-4Ru	TXRU	63.1	29.3	33.8	0.0	0.0	36.9	0.0	1.044	10.4	Long	Russet
TX14605-4Ru	TXRU	56.3	36.0	20.3	0.0	0.0	39.2	4.5	1.074	15.7	Long	Russet
TX14596-1Ru	TXRU	69.0	38.0	21.4	9.7	0.0	30.0	0.9	1.075	15.9	Long	Russet
TX13512-1Ru	TXRU	80.4	21.4	24.1	34.9	0.0	11.9	7.6	1.056	12.6	Long	Russet
Average		71.5	23.7	31.8	16.0	0.3	21.8	6.5	1.064	14.0		
L.S.D. (.05)		8.9	8.2	11.4	9.3	ns	5.4	7.8	0.006	1.2		

Dalhart
Table 8c.

Average number of tubers per plant, tuber weight, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, and percent dead vine at vine kill of 23 entries in the Texas Advanced Russet Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
						Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
Russet Norkotah	WR	6.4	6.2	100	100	2.1	3.7	3.5	3.7	23
TXA549-1Ru	TXRU	6.3	5.9	100	100	2.0	4.5	4.8	4.5	0
TX13590-9Ru	TXRU	6.1	5.8	100	100	2.4	4.1	4.3	4.3	3
ATX12058-1Ru	TXRU	5.8	5.9	100	100	2.0	4.3	4.4	4.3	3
Russet Norkotah278	TXRU	5.4	6.1	100	100	2.5	3.3	3.5	3.6	48
COTX10080-2Ru	TXRU	4.6	6.8	90	100	2.0	4.5	4.7	4.6	0
NDTX12237Y-3Ru/Y	TXRU	7.7	3.5	100	100	2.3	3.7	3.6	3.8	26
ATX12015-2Ru	TXRU	4.3	6.4	91	100	2.0	4.5	4.5	4.5	1
NDTX12237Y-1Ru	TXRU	7.2	3.7	96	100	1.9	3.4	2.7	3.6	63
COTX08322-10Ru	TXRU	3.7	6.2	95	100	2.0	4.1	4.1	4.4	10
Stampede Russet	TXRU	4.4	5.3	100	100	2.1	3.8	3.5	3.7	36
COTX13215-2Ru	TXRU	4.0	5.8	94	100	2.0	4.3	4.3	4.5	3
ATX11952-1Ru	TXRU	3.1	7.3	76	100	2.5	3.5	3.4	3.6	18
Russet Norkotah296	TXRU	3.5	5.9	100	100	2.3	3.4	3.3	3.7	48
NDTX12237Y-7Ru/Y	TXRU	3.6	5.3	92	96	2.4	3.5	3.4	3.6	38
COTX13215-1Ru	TXRU	3.7	4.8	75	100	2.0	4.5	4.5	4.5	0
COTX13413-1Ru	TXRU	3.8	4.7	65	100	2.0	4.4	4.3	4.4	0
ATX10675-1Ru	TXRU	3.0	5.7	89	100	2.0	3.9	3.8	4.0	8
ORTX14SP017-2Ru	TXRU	3.5	5.0	94	100	2.0	4.5	4.5	4.5	0
TX14607-4Ru	TXRU	3.5	4.3	83	100	2.5	3.5	3.3	3.5	30
TX14605-4Ru	TXRU	3.2	4.3	67	100	2.5	3.8	4.2	4.0	5
TX14596-1Ru	TXRU	2.4	4.4	46	96	2.0	4.4	4.4	4.5	0
TX13512-1Ru	TXRU	1.5	6.6	44	83	2.1	4.1	4.5	4.4	0
Average		4.4	5.5	87	99	2.2	4.0	4.0	4.1	16
L.S.D. (.05)		1.0	0.7	15	ns	0.2	0.3	0.4	0.3	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

Dalhart
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 23 entries in the Texas Advanced Russet Trial grown near Dalhart, Texas-2017.

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
Russet Norkotah	WR	1.0	4.2	4.0	3.8	4.0	5.0	5.0	5.0	5.0	4.0	18	0	0	0
TXA549-1Ru	TXRU	1.0	3.2	2.6	4.0	2.6	5.0	5.0	5.0	5.0	4.0	40	0	0	0
TX13590-9Ru	TXRU	1.0	3.5	3.0	4.0	3.0	5.0	5.0	5.0	5.0	4.0	25	0	0	0
ATX12058-1Ru	TXRU	1.0	3.8	2.9	4.0	2.9	5.0	5.0	5.0	5.0	3.9	0	0	5	0
Russet Norkotah278	TXRU	1.0	4.2	4.0	4.0	3.9	5.0	5.0	5.0	5.0	4.0	0	0	0	0
COTX10080-2Ru	TXRU	1.0	4.1	4.0	4.0	3.9	5.0	5.0	5.0	5.0	4.0	20	0	0	10
NDTX12237Y-3Ru/Y	TXRU	2.5	3.0	2.8	4.0	2.7	5.0	5.0	5.0	5.0	4.0	0	0	5	0
ATX12015-2Ru	TXRU	1.0	4.0	3.3	4.0	3.3	5.0	5.0	5.0	4.6	4.0	0	0	0	0
NDTX12237Y-1Ru	TXRU	2.0	2.6	2.0	4.0	2.1	5.0	5.0	5.0	5.0	4.0	0	0	0	0
COTX08322-10Ru	TXRU	1.0	4.1	3.8	3.8	3.4	5.0	5.0	5.0	5.0	4.0	0	0	5	5
Stampede Russet	TXRU	1.0	4.1	3.3	3.9	3.5	5.0	5.0	5.0	5.0	4.0	5	0	0	0
COTX13215-2Ru	TXRU	1.0	3.5	2.9	3.8	2.9	5.0	5.0	5.0	5.0	4.0	15	0	0	0
ATX11952-1Ru	TXRU	1.0	4.1	3.3	4.0	3.4	5.0	5.0	5.0	4.6	4.0	10	0	0	0
Russet Norkotah296	TXRU	1.0	4.1	4.0	3.8	3.8	5.0	5.0	5.0	5.0	4.0	0	0	0	0
NDTX12237Y-7Ru/Y	TXRU	2.7	3.6	2.7	4.0	2.9	5.0	5.0	5.0	5.0	4.0	0	0	15	0
COTX13215-1Ru	TXRU	1.0	3.5	3.0	3.8	3.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
COTX13413-1Ru	TXRU	1.0	3.3	2.8	4.0	2.9	5.0	5.0	5.0	5.0	4.0	60	0	0	0
ATX10675-1Ru	TXRU	1.0	3.9	3.9	4.0	3.8	5.0	5.0	5.0	5.0	4.0	5	0	0	0
ORTX14SP017-2Ru	TXRU	2.0	3.3	2.7	4.0	2.8	5.0	5.0	5.0	5.0	4.0	5	0	0	5
TX14607-4Ru	TXRU	1.0	3.5	2.6	4.0	2.6	5.0	5.0	5.0	5.0	4.0	0	0	0	0
TX14605-4Ru	TXRU	1.0	3.3	2.8	4.0	2.8	5.0	5.0	5.0	5.0	4.0	10	0	0	0
TX14596-1Ru	TXRU	1.0	3.7	2.8	4.0	2.9	5.0	5.0	5.0	5.0	4.0	0	0	0	0
TX13512-1Ru	TXRU	1.0	3.6	2.6	4.0	3.0	5.0	5.0	5.0	5.0	4.0	48	0	0	0
Average		1.2	3.7	3.1	3.9	3.1	5.0	5.0	5.0	5.0	4.0	11	0	1	1
L.S.D. (.05)		0.0	0.2	0.2	0.1	0.3				ns	ns	18		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 8e.

Notes and general rating for all reps of 23 entries in the Texas Advanced Russet Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Notes Grading	General Rating Grading
Russet Norkotah	WR	high tuber set, enlarged lenticels+, very nice shape+, uniform size and shape, good russetting, some moon	4.4, 4.6, 4.4, 4
TXA549-1Ru	TXRU	high tuber set, pointy, angular, blocky, , ,	3.8, , ,
TX13590-9Ru	TXRU	high tuber set+, blocky, uniform size, nice, uniform russetting	4, 4, 4.2, 4
ATX12058-1Ru	TXRU	nice, uniform size and shape, medium size tubers, high tuber set+, a little angular, light skin, light russet, 20%	4.2, 4.2, 3.8, 3.8
Russet Norkotah278	TXRU	nice shape and size, BOT, very nice skin, size and shape, ,	4, 4.4, ,
COTX10080-2Ru	TXRU	high tuber set, nice uniform size and shape, BOT, large tubers, uniform russet skin, nice	4.3, 4.3, 4.3, 3.6
NDTX12237Y-3Ru/Y	TXRU	small++, nice yellow flesh, not uniform size+, high tuber set, pear shaped	3.6, 3.5, 3.8, 3.6
ATX12015-2Ru	TXRU	skinny+, pointy++, high tuber set, knobs, popping eyes, nice smooth russet skin	3.6, 4, 3.4, 3.6
NDTX12237Y-1Ru	TXRU	small+, roundish++, not much russetting++, light skin, too round, not uniform russetting,	3.3, 3.3, 3.6, 3
COTX08322-10Ru	TXRU	, uniform size and shape, nice, high tuber set, nice russet skin, a little angular, long, wide eyes, many eyes	3.6, 3.6, 4.4, 3.5
Stampede Russet	TXRU	pointy, uniform russet skin, nice shape, blocky, , not uniform size, uniform size, not uniform russet skin,	4, 3.8, 4, 3.7
COTX13215-2Ru	TXRU	high tuber set	3, 3.6, 3.6, 3.6
ATX11952-1Ru	TXRU	nice russet skin, , very large tubers knobs, high tuber set,	3.3, 3.3, 3.6, 4
Russet Norkotah296	TXRU	uniform size and shape, , ,	4, 3.8, ,
NDTX12237Y-7Ru/Y	TXRU	angular shaped++, blocky, low tuber number,	3, 3.3, 2.6, 3.5
COTX13215-1Ru	TXRU	, , ,	3.5, , ,
COTX13413-1Ru	TXRU	attached stolons+++ , low tuber number, nice shape, ugly, bowling pins, ,	3.5, 3.5, 3.3, 3.2
ATX10675-1Ru	TXRU	many culls, nice shape, , enlarged lenticels, nice skin, blocky	3.4, 3, 3.4, 3.6
ORTX14SP017-2Ru	TXRU	low tuber number+, medium size, cream colored flesh, blocky, ,	3, 3.6, 3.8, 3
TX14607-4Ru	TXRU	low tuber number, not uniform size, , ,	3.2, , ,
TX14605-4Ru	TXRU	low tuber set, small, ,	2.8, 3.2, ,
TX14596-1Ru	TXRU	very nice russet skin+, very low tuber number+, nice shape+, pointy,	3.6, 3.2, 3, 2
TX13512-1Ru	TXRU	low tuber number+++, nicer shape, knobs, pointy+, not uniform size and shape,	2.6, 3.6, 3.6, 3.2

2017 Russet Selections Trial, Dalhart

The trial consisted of sixty entries of which four (ATX11379-1Ru, ATX13108-2Ru, COTX14132-1Ru, and COTX14250-1Ru) will be advanced in 2018 (Table 9).

Dalhart
Table 9

Inventory weight and notes of 4 entries to be
advanced from the 2016 Russet Selection Trial
grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Inventory Weight
ATX11379-1Ru	16SELRus116	27.5
ATX13108-2Ru	16SELRus125	21.4
COTX14132-1Ru	16SELRus138	34.3
COTX14250-1Ru	16SELRus144	42

Texas Advanced Red Selection Trial, Dalhart

This trial consisted of twenty entries including the check variety Red LaSoda.

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

- TX14619-2R and TX14612-1R were the best entries based on general rating (Tables 10a).
- TX14612-1R had the highest total yield, while NDTX12248Y-1R had the highest marketable and yield of 4-6 oz. tubers (Table 10a).
- TX14619-1R had the highest yield of over 10 oz. tubers (Table 10a).
- ATTX05186-2R had the highest yield of less than 4 oz. tubers, while TX14612-1R had the highest yield of culls/No. 2 tubers (Table 10a).
- TX14619-1R had the highest percentage marketable yield, while TX14615-4R, NDTX12248Y-1R, and TX11448-2R had the highest percentage of 4-6 oz. TX14611-1R had the highest percentage of less than 4 oz. tubers, while TX14621-3R had the highest percentage of culls/No. 2 tubers. (Table 10b).
- TX14614-3R and NDTX12248Y-1R had the highest specific gravity (Table 10b)
- TX14611-1R and BTX2332-1R were the latest in maturity, while TX14615-4R, TX14621-2R and TX14615-3R were the earliest in maturity (Table 10c).
- Red LaSoda had the highest percentage of vascular discoloration (Table 10d).

Comments on entries:

- TX14612-1R Oblong Red high tuber set, large tubers, growth cracks+, silver scurf++, uniform size, nice, new market type based on shape
- NDTX12248Y-1R Round Red light skin color+, medium size, high tuber set++++, silver scurf+, TC?
- ATX08121-5R Round Red high tuber set++++, not uniform skin color and size, medium size+, uniform size, silver scurf++++, large tubers+, shiny skin
- TX14615-3R Round Red nice skin color+++ , intense red skin color, silver scurf+++ , large tubers, black bruising on skin+, high tuber set++
- Red LaSoda Round Red deep eyes, ugly, large tubers, deep eyes++
- TX14619-2R Round Red oblong, silver scurf, uniform size and shape, pink spots in flesh

- TX14621-2R Round Red not uniform size+, silver scurf+, large tubers+
- COTX07054-2R Round Red not uniform size, nice red skin color+, (tint of orange), uniform size and shape, silver scurf+++ , small++, attached stolons+, silver scurf less than other reps, high tuber set
- TX14622-2R Round Red low tuber set, intense red skin color, silver scurf+++ , large tubers+, black bruising on skin+
- TX14615-4R Round Red high tuber set+, light skin color, nice skin color+, low tuber set, not uniform size, few tubers, oval, silver scurf+++ , uniform shape, scab
- TX14614-3R Round Red low tuber set, not uniform size, small, silver scurf++++ , not uniform size, high tuber set, SE 80%
- TX13524-2R Round Red small+++ , not uniform size, silver scurf+++ , high tuber set
- TX11448-2R Round Red not uniform size+, high tuber set, small, nice skin color, deep bud end, silver scurf+++ , shiny skin
- NDTX1458-2R Oblong Red oblong+++ , light skin color, low tuber set, medium, silver scurf+++ , very large tubers
- ATTX05186-2R Round Red small++, not uniform size, high tuber set, uniform size and shape, silver scurf+++ , attached stolons
- TX14619-1R Oblong Red long to oblong, low tuber set, silver scurf++ , large tubers++++ , growth cracks+, uniform size, black bruising on skin
- BTX2332-1R Round Red low tuber set+, silver scurf+++ , some large tubers, not uniform size
- TX14611-1R Round Red small++, not uniform size+, low tuber set++, silver scurf+++ , attached stolons
- TX14622-1R Round Red attached stolons, very low tuber set, very large tubers+++ , silver scurf+++ , growth cracks
- TX14621-3R Round Red deep bud end, very low tuber set, silver scurf+ , growth cracks, lots of culls, drop

Summary:

TX14612-1R, NDTX12248Y-1R, and ATX08121-5R were the outstanding entries for this trial.

Dalhart
Table 10a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 20 entries in the Texas Advanced Red Selection Trial grown near Dalhart, Texas-2017.

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 Field	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz					
TX14612-1R	TXRD	696.1	457.3	269.6	134.6	53.1	0.0	135.0	103.8	3.6	3.8
NDTX12248Y-1R	TXRD	665.3	509.7	276.6	173.8	59.3	0.0	155.7	0.0	3.9	3.7
ATX08121-5R	TXRD	651.7	499.0	254.7	172.3	72.0	0.0	152.7	0.0	3.4	3.7
TX14615-3R	TXRD	595.8	464.2	224.2	148.5	91.6	0.0	131.6	0.0	3.9	3.6
Red LaSoda	WR	542.9	432.2	166.1	171.5	94.6	3.2	98.8	8.7	3.7	3.5
TX14619-2R	TXRD	499.5	381.3	167.8	181.7	31.8	0.0	118.2	0.0	3.4	4.0
TX14621-2R	TXRD	448.8	268.1	154.4	80.9	32.8	0.0	180.7	0.0	3.0	3.5
COTX07054-2R	TXRD	422.5	202.8	125.9	65.0	11.9	0.0	216.2	3.5	3.4	3.6
TX14622-2R	TXRD	419.0	356.0	153.2	105.3	97.6	0.0	36.2	26.8	3.2	3.4
TX14615-4R	TXRD	416.8	297.4	183.0	105.3	9.2	0.0	108.5	10.9	3.4	3.6
TX14614-3R	TXRD	392.7	215.0	151.9	53.9	9.2	0.0	177.7	0.0	3.2	3.3
TX13524-2R	TXRD	387.0	174.8	130.1	44.7	0.0	0.0	212.3	0.0	3.3	3.5
TX11448-2R	TXRD	385.8	264.9	159.9	88.6	16.4	0.0	120.9	0.0	3.3	3.2
NDTX1458-2R	TXRD	374.1	324.7	148.5	110.2	66.0	0.0	49.4	0.0	3.4	3.3
ATTX05186-2R	TXRD	351.8	124.1	97.8	26.3	0.0	0.0	227.6	0.0	3.1	2.9
TX14619-1R	TXRD	326.5	294.7	67.5	108.7	118.4	0.0	20.4	11.4	2.9	2.8
BTX2332-1R	TXRD	305.4	243.5	114.9	97.8	30.8	0.0	61.8	0.0	2.8	3.1
TX14611-1R	TXRD	248.7	94.6	73.0	21.6	0.0	0.0	154.2	0.0	2.9	2.9
TX14622-1R	TXRD	242.0	169.1	85.2	50.9	33.0	0.0	34.0	39.0	2.6	2.6
TX14621-3R	TXRD	198.6	117.7	58.1	59.6	0.0	0.0	22.3	58.6	2.0	2.4
Average		428.6	294.6	153.1	100.1	41.4	0.2	120.7	13.1	3.2	3.3
L.S.D. (.05)		95.8	82.3	45.7	40.2	33.2	ns	48.6	16.8	0.5	0.3

¹ 1=very poor to 5= excellent

Dalhart
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 20 entries in the Texas Advanced Red Selection Trial grown near Dalhart, Texas-2017.

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				
TX14612-1R	TXRD	65.3	38.6	19.2	7.6	0.0	19.7	15.0	1.053	12.0	Oblong	Red
NDTX12248Y-1R	TXRD	76.6	41.5	26.3	8.8	0.0	23.4	0.0	1.059	13.0	Round	Red
ATX08121-5R	TXRD	76.8	39.0	26.7	11.1	0.0	23.2	0.0	1.058	12.9	Round	Red
TX14615-3R	TXRD	78.0	37.7	24.8	15.5	0.0	22.0	0.0	1.050	11.4	Round	Red
Red LaSoda	WR	79.3	30.6	30.8	17.9	0.7	18.4	1.6	1.053	12.0	Round	Red
TX14619-2R	TXRD	76.3	33.6	36.4	6.4	0.0	23.7	0.0	1.052	11.8	Round	Red
TX14621-2R	TXRD	56.4	34.0	16.2	6.2	0.0	43.6	0.0	1.057	12.6	Round	Red
COTX07054-2R	TXRD	47.0	29.5	15.0	2.6	0.0	52.0	1.0	1.062	13.7	Round	Red
TX14622-2R	TXRD	81.8	35.6	24.2	22.0	0.0	8.6	9.6	1.051	11.6	Round	Red
TX14615-4R	TXRD	71.9	44.1	25.3	2.4	0.0	25.2	2.9	1.052	11.7	Round	Red
TX14614-3R	TXRD	55.6	38.0	15.5	2.1	0.0	44.4	0.0	1.059	13.1	Round	Red
TX13524-2R	TXRD	45.2	33.7	11.5	0.0	0.0	54.8	0.0	1.050	11.5	Round	Red
TX11448-2R	TXRD	68.8	41.3	23.1	4.4	0.0	31.2	0.0	1.049	11.3	Round	Red
NDTX1458-2R	TXRD	86.6	39.7	29.6	17.4	0.0	13.4	0.0	1.047	10.9	Oblong	Red
ATTX05186-2R	TXRD	35.6	28.6	7.1	0.0	0.0	64.4	0.0	1.058	12.9	Round	Red
TX14619-1R	TXRD	90.3	20.0	34.3	36.0	0.0	6.5	3.2	1.056	12.4	Oblong	Red
BTX2332-1R	TXRD	79.0	38.1	32.0	8.9	0.0	21.0	0.0	1.049	11.3	Round	Red
TX14611-1R	TXRD	35.2	28.1	7.1	0.0	0.0	64.8	0.0	1.058	12.9	Round	Red
TX14622-1R	TXRD	67.2	35.0	19.9	12.3	0.0	16.7	16.1	1.049	11.2	Round	Red
TX14621-3R	TXRD	52.5	27.0	25.5	0.0	0.0	12.4	35.1	1.056	12.5	Round	Red
Average		66.3	34.7	22.5	9.1	0.0	29.5	4.2	1.054	12.1		
L.S.D. (.05)		10.1	7.6	7.6	6.2	ns	9.0	6.8	0.003	0.6		

Dalhart
Table 10c.

Average number of tubers per plant, average tuber weight, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 20 entries in the Texas Advanced Red Selection Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
						Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
TX14612-1R	TXRD	10.4	4.5	100	100	2.3	4.0	3.6	4.0	33
NDTX12248Y-1R	TXRD	10.4	4.4	100	100	2.4	3.6	3.5	3.6	30
ATX08121-5R	TXRD	9.9	4.4	100	100	2.4	3.6	3.0	3.7	41
TX14615-3R	TXRD	8.6	4.6	100	100	2.0	3.3	2.6	3.4	80
Red LaSoda	WR	7.3	5.0	100	100	2.0	4.5	4.5	4.5	1
TX14619-2R	TXRD	7.5	4.5	100	100	2.5	3.3	3.4	3.7	45
TX14621-2R	TXRD	9.8	3.4	100	92	2.3	3.0	2.5	3.3	78
COTX07054-2R	TXRD	9.6	3.0	98	100	2.3	4.2	4.4	4.3	4
TX14622-2R	TXRD	5.1	5.5	79	100	2.5	3.3	3.3	3.5	30
TX14615-4R	TXRD	7.3	4.0	98	96	2.3	2.9	2.5	3.1	64
TX14614-3R	TXRD	8.9	3.0	100	100	2.3	4.0	3.8	4.1	26
TX13524-2R	TXRD	8.3	3.2	100	100	2.1	4.0	3.8	4.1	21
TX11448-2R	TXRD	7.2	3.6	94	100	2.4	3.8	3.8	3.8	10
NDTX1458-2R	TXRD	4.7	5.3	69	100	2.5	3.4	3.1	3.6	34
ATTX05186-2R	TXRD	9.6	2.5	100	100	2.0	4.3	4.4	4.4	0
TX14619-1R	TXRD	3.4	7.5	73	88	2.1	3.1	3.1	3.1	31
BTX2332-1R	TXRD	4.9	4.2	94	100	2.0	4.3	4.7	4.5	0
TX14611-1R	TXRD	6.4	2.6	100	100	2.0	4.5	4.8	4.7	1
TX14622-1R	TXRD	3.1	5.7	73	92	2.1	3.8	3.5	3.6	21
TX14621-3R	TXRD	3.2	4.8	48	83	2.3	3.0	3.0	3.3	48
Average		7.3	4.3	91	98	2.2	3.7	3.6	3.8	30
L.S.D. (.05)		2.0	0.6	14	5	0.2	0.5	0.6	0.5	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 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 20 entries in the Texas Advanced Red Selection Trial grown near Dalhart, Texas-2017.

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
TX14612-1R	TXRD	1.0	3.0	1.0	5.0	3.5	3.5	5.0	5.0	5.0	4.0	0	0	0	0
NDTX12248Y-1R	TXRD	1.0	1.5	1.0	3.8	3.0	5.0	5.0	5.0	5.0	3.9	5	10	0	0
ATX08121-5R	TXRD	1.0	1.4	1.0	3.6	2.5	5.0	5.0	5.0	5.0	4.0	5	0	5	0
TX14615-3R	TXRD	1.0	1.5	1.0	3.8	3.5	5.0	5.0	5.0	5.0	4.0	0	0	0	0
Red LaSoda	WR	1.0	1.5	1.0	3.0	3.0	5.0	5.0	5.0	5.0	4.0	5	0	33	0
TX14619-2R	TXRD	1.0	1.5	1.0	5.0	3.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
TX14621-2R	TXRD	1.0	1.0	1.0	4.0	3.0	5.0	5.0	5.0	5.0	4.0	10	0	0	0
COTX07054-2R	TXRD	1.0	1.0	1.0	3.9	3.4	5.0	5.0	5.0	5.0	4.0	0	0	0	0
TX14622-2R	TXRD	1.0	1.5	1.0	4.0	3.3	5.0	5.0	5.0	5.0	4.0	0	0	0	0
TX14615-4R	TXRD	1.0	2.0	1.0	4.0	2.6	5.0	5.0	5.0	5.0	4.0	5	0	5	0
TX14614-3R	TXRD	1.0	1.0	1.0	3.8	2.9	5.0	5.0	5.0	5.0	4.0	0	0	0	0
TX13524-2R	TXRD	1.0	1.1	1.0	3.8	2.9	5.0	5.0	5.0	5.0	4.0	5	0	0	0
TX11448-2R	TXRD	1.0	1.0	1.0	3.5	2.9	5.0	5.0	5.0	5.0	4.0	0	0	0	0
NDTX1458-2R	TXRD	1.0	3.0	1.0	4.0	3.0	5.0	5.0	5.0	5.0	4.0	10	0	0	0
ATTX05186-2R	TXRD	1.0	1.0	1.0	3.9	2.0	5.0	5.0	5.0	5.0	4.0	0	0	10	0
TX14619-1R	TXRD	1.0	3.0	1.0	4.0	2.9	4.3	5.0	5.0	5.0	4.0	10	0	0	0
BTX2332-1R	TXRD	1.0	1.6	1.0	4.0	2.9	5.0	5.0	5.0	5.0	4.0	0	0	0	0
TX14611-1R	TXRD	1.0	1.0	1.0	4.0	2.5	5.0	5.0	5.0	5.0	4.0	0	0	0	0
TX14622-1R	TXRD	1.0	2.1	1.0	4.0	3.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
TX14621-3R	TXRD	1.0	1.0	1.0	4.0	2.5	4.3	5.0	5.0	5.0	4.0	0	0	0	0
Average		1.0	1.6	1.0	4.0	2.9	4.9	5.0	5.0	5.0	4.0	3	1	3	0
L.S.D. (.05)			0.1		0.1	0.2	0.3				0.0	ns	ns	11	

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 10e.

Notes and general rating for all reps of 20 entries in the Texas Advanced Red Selection Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
TX14612-1R	TXRD	oblong, high tuber set, oblong, ,	large tubers, growth cracks+, sliver scurf++, uniform size, high tuber set, nice, new market type based on	3.6, 3.6, ,	3.8, 3.8, ,
NDTX12248Y-1R	TXRD	light skin color+, high tuber set+, medium size, high tuber set++, not uniform skin color, medium size+, uniform size, , sliver scurf	high tuber set+++ , sliver scurf+ , TC? , , high tuber set+, sliver scurf+++ , large tubers+, not uniform size, high tuber set, shiny skin,	3.6, 3.6, 4.2, 4	3.6, 3.8, 3.8, 3.6
ATX08121-5R	TXRD	nice skin color+++ , high tuber set, intense red skin color, ,	sliver scurf+++ , large tubers, black bruising on skin+, high tuber set+, ,	3, 3.6, 3.5, 3.5	3.8, 3.8, 3.6, 3.6
TX14615-3R	TXRD			3.8, 3.6, 3.6, 4.4	3.6, 3.6, 3.6, 3.6
Red LaSoda	WR	deep eyes, large, ugly, ,	large tubers, deep eyes++ , , sliver scurf, uniform size and shape, pink spots in flesh, , ,	3.8, 3.5, 3.8, 3.5	3.5, 3.6, 3.4, 3.6
TX14619-2R	TXRD	oblong, sliver scurf, uniform size, , ,		3.4, , ,	4, , ,
TX14621-2R	TXRD	not uniform size+, , , , small, not uniform size, , nice red skin color+, (tint of orange)	sliver scurf+, large tubers+, not uniform size, , uniform size and shape, sliver scurf+++ , small++ , attached stolons+, sliver scurf less than other reps, high sliver scurf+++ , large tubers+, black bruising on skin+, , ,	3.3, 2.6, ,	3.5, 3.5, ,
COTX07054-2R	TXRD			3.6, 2.8, 3, 4	3.8, 3.6, 3.3, 3.6
TX14622-2R	TXRD	large+, , low tuber set, intense red skin color high tuber set+, light skin color, sliver scurf, nice skin color+, low tuber set , not uniform size, few tubers		2.8, 3.5, 2.5, 3.8	3.3, 3.6, 3, 3.6
TX14615-4R	TXRD		sliver scurf+++ , uniform shape, scab, , sliver scurf+++ , not uniform size, stem end	3.4, 2.8, 2.8, 4.4	3.6, 3.6, 3.4, 3.6
TX14614-3R	TXRD	low tuber set, not uniform size, small, sliver scurf	discoloration (80%), high tuber set, sliver scurf+++ , small+++ , not uniform size, high tuber set,	2.5, 3.4, 3.2, 3.6	2.6, 3.5, 3.3, 3.6
TX13524-2R	TXRD	small+++ , not uniform size, , , sliver scurf not uniform size, high tuber set, small, nice skin color,		2.8, 3.5, 3.2, 3.8	3.4, 3.6, 3.6, 3.4
TX11448-2R	TXRD	deep bud end	sliver scurf+++ , not uniform shape, shiny skin, ,	3, 3.5, 4, 2.8	2.8, 3.3, 3.4, 3.3
NDTX1458-2R	TXRD	oblong+++ , light skin color, low tuber set, , medium small++ , not uniform size, high tuber set, uniform size and shape,	low tuber number, sliver scurf+++ , very large tubers, ,	3.3, 3.3, 3.3, 3.6	3.2, 3.2, 3.4, 3.4
ATX05186-2R	TXRD		sliver scurf+++ , small+, attached stolons, , sliver scurf++ , large tubers+++ , growth cracks+, uniform size, low tuber number, black bruising on skin, low tuber set, sliver scurf+++ , some large tubers, not uniform size, ,	2.5, 2.8, 4, 3	2.8, 2.8, 3.2, 2.8
TX14619-1R	TXRD	long, large tubers+, oblong, , low tuber set		3.2, 2.6, 2.8, 2.8	2.6, 2.8, 2.8, 2.8
BTX2332-1R	TXRD	, low tuber set, large,	sliver scurf+++ , low tuber set+, not uniform size, small, attached stolons,	2.5, 2.6, 3, 3	3.2, 2.8, 3, 3.2
TX14611-1R	TXRD	small++ , not uniform size, low tuber set+, , attached stolons, very low tuber set, , very large tubers+	sliver scurf+++ , very large tubers++ , growth cracks, low tuber number, ,	2.8, 2.6, 3.2, 3	3.3, 2.3, 3.5, 2.5
TX14622-1R	TXRD		sliver scurf+ , growth cracks, very few tubers, lots of culls, ,	2.5, 2, 3, 2.8	2.8, 2.5, 2.6, 2.5
TX14621-3R	TXRD	deep bud end, cracks, drop, very low tuber set, ,		2, 2, ,	2.8, 2, ,

2016 Red Selections Trial, Dalhart

The trial consisted of twenty-nine entries of which three (COTX14035-1R, NDTX13105-1R, and TX14632-2R) will be advanced in 2018 (Table 11).

Dalhart
Table 11

Inventory weight of 3 entries to be Advanced from
the 2016 Red Selection Trial grown near Dalhart,
Texas-2017.

Variety or Selection	Trial	Inventory Weight
COTX14035-1R	16SELRed021	25.9
NDTX13105-1R	16SELRed039	15.1
TX14632-2R	16SELRed049	16.2

Texas Advanced Red/Yellow Selection Trial, Dalhart

This trial consisted of four entries including the check variety Sierra Rose.

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

- ATTX10265-4R/Y had the highest general rating and best of trial notation (Table 12a and 12f).
- ATTX10265-4R/Y had the highest total yield, while Sierra Rose had the highest marketable yield (Table 12a)
- ATTX10265-4R/Y had the highest yield of 4-6 oz., less than 4 oz. and culls/No. 2 tubers (Table 12a).
- Sierra Rose had the highest percentage of marketable yield, while ATTX98514-1R/Y had the highest percentage of 4-6 oz. tubers (Table 12b).
- ATTX10265-4R/Y had the highest percentage of less than 4 oz. tubers, while ATTX98514-1R/Y had the highest percentage culls/No. 2 tubers (Table 12b).
- Sierra Rose and BTX2103-1R/Y had the highest specific gravity (Table 12b).
- ATTX10265-4R/Y had the highest average number of tubers per plant (Table 12c).
- ATTX10265-4R/Y was the latest in maturity, while BTX2103-1R/Y was the earliest in maturity (Table 12c).
- ATTX10265-4R/Y had the darkest yellow flesh color (Table 12d).

Comments on entries:

- ATTX10265-4R/Y Round Red high tuber set+++ , but attractive, skinny skin, light skin color but appealing, soft appearance, yellow flesh combines well with skin color, skin has orange tint, uniform size and shape+, flat+, small+, silver scurf +, nice shiny skin+, smooth skin+, BOT, FC=3.2
- Sierra Rose Oblong Red medium size, medium tuber set, not uniform size, silver scurf+++ , good rep, high tuber set, large tubers, few tubers, scab, uniform size and shape, FC=2.1
- ATTX98514-1R/Y Round Red low tuber set+++ , not uniform shape nor color++, light skin color, silver scurf+, pear shaped, growth cracks, FC=2.8
- BTX2103-1R/Y Round Red not uniform size and shape, silver scurf++, ugly, knobs, angular tubers+, scab, pointed, FC=2.7

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

Summary:

ATTX10265-4R/Y was the best entry for this trial.

Dalhart
Table 12a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 4 entries in the Texas Advanced Red/Yellow Selection Trial grown near Dalhart, Texas-2017.

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 Field	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz					
ATTX10265-4R/Y	TXRD/Y	426.5	144.7	121.9	22.8	0.0	0.0	245.8	36.0	4.4	4.1
Sierra Rose	TXRD/Y	327.4	254.5	98.8	109.0	46.7	0.0	68.8	4.2	3.2	3.6
ATTX98514-1R/Y	TXRD/Y	196.9	126.1	82.4	39.2	4.5	0.0	48.9	21.8	2.7	2.6
BTX2103-1R/Y	TXRD/Y	183.0	81.2	47.9	33.3	0.0	0.0	83.4	18.4	2.6	2.7
Average		283.4	151.6	87.8	51.1	12.8	0.0	111.7	20.1	3.2	3.2
L.S.D. (.05)		61.4	51.9	ns	35.9	17.2		31.6	ns	0.3	0.6

¹ 1=very poor to 5= excellent

Dalhart
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 4 entries in the Texas Advanced Red/Yellow Selection Trial grown near Dalhart, Texas-2017.

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				
ATTX10265-4R/Y	TXRD/Y	32.0	26.6	5.3	0.0	0.0	59.8	8.2	1.049	11.2	Round	Red
Sierra Rose	TXRD/Y	78.2	31.2	33.4	13.7	0.0	20.6	1.2	1.060	13.2	Oblong	Red
ATTX98514-1R/Y	TXRD/Y	63.2	41.2	20.0	2.0	0.0	24.0	12.9	1.049	11.3	Round	Red
BTX2103-1R/Y	TXRD/Y	42.3	23.5	18.8	0.0	0.0	47.9	9.7	1.060	13.3	Round	Red
Average		53.9	30.6	19.4	3.9	0.0	38.1	8.0	1.055	12.2		
L.S.D. (.05)		9.8	ns	10.3	4.0		14.8	ns	0.002	0.5		

Dalhart
Table 12c.

Average number of tubers per plant, tuber weight, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, and percent dead vine at vine kill of 4 entries in the Texas Advanced Red/Yellow Selection Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
						Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
ATTX10265-4R/Y	TXRD/Y	11.2	2.5	100	100	2.0	4.4	4.3	4.7	10
Sierra Rose	TXRD/Y	6.1	4.2	94	84	2.1	3.6	3.6	3.9	21
ATTX98514-1R/Y	TXRD/Y	3.6	3.9	70	100	2.3	3.7	3.9	3.9	14
BTX2103-1R/Y	TXRD/Y	4.7	2.7	88	100	2.1	3.4	3.4	3.6	33
Average		6.4	3.3	88	96	2.1	3.8	3.8	4.0	19
L.S.D. (.05)		1.3	0.7	16	ns	ns	ns	ns	0.5	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

Dalhart
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 4 entries in the Texas Advanced Red/Yellow Selection Trial grown near Dalhart, Texas-2017.

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
ATTX10265-4R/Y	TXRD/Y	3.2	1.6	1.0	4.0	2.5	5.0	5.0	5.0	5.0	4.8	5	0	0	0
Sierra Rose	TXRD/Y	2.1	2.5	1.0	4.0	2.8	5.0	5.0	5.0	5.0	4.0	0	0	0	0
ATTX98514-1R/Y	TXRD/Y	2.8	2.0	1.0	4.0	2.6	5.0	5.0	5.0	5.0	4.0	5	0	0	45
BTX2103-1R/Y	TXRD/Y	2.7	1.1	1.0	4.0	2.8	5.0	5.0	5.0	5.0	3.9	0	0	0	0
Average		2.7	1.8	1.0	4.0	2.7	5.0	5.0	5.0	5.0	4.2	3	0	0	11
L.S.D. (.05)		0.3	0.6		ns	ns					0.4	ns			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

Dalhart
Table 12e.

Notes and general rating for all reps of 4 entries in the Texas Advanced Red/Yellow Selection Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
ATTX10265-4R/Y	TXRD/Y	high tuber set+++ , light skin++ , but attractive, BOT, skinny skin, light skin color but appealing, soft sliver scurf, medium size, medium tuber set, oblong,	uniform size and shape+ , flat+ , small+ , high tuber set, some silver+ scurf, nice shiny skin+ , smooth skin+ , , large tubers, sliver scurf++ , few tubers, scab, uniform size and shape,	4.4, 4.4, 4.2, 4.5	4.2, 4.4, 4, 3.8
Sierra Rose	TXRD/Y	not uniform size, sliver scurf+ , good rep, high tuber set low tuber set++ , not uniform shape nor color++ , light skin color, ,	sliver scurf+ , few tubers+ , pear shaped, growth cracks, ,	3.2, 3, 2.8, 3.6	3.6, 3.5, 2.6, 4.5
ATTX98514-1R/Y	TXRD/Y	not uniform size and shape, sliver scurf+ , ugly, knobs,	angular tubers+ , sliver scurf+ , scab, pointy,	2.8, 2.6, 2.6, 2.6	2.8, 2.6, 2.5, 2.6
BTX2103-1R/Y	TXRD/Y			2.6, 2.8, 2.6, 2.5	2.6, 2.6, 2.8, 2.6

2016 Red Skin Yellow Flesh Selections Trial, Dalhart

The trial consisted of twelve entries of which one (NDTX13264B-1R/Y) will be advanced in 2018 (Table 13).

Dalhart
Table 13

Inventory weight of 1 entries to be advanced from the
2016 Red Skin Yellow Flesh Selection Trial grown near
Dalhart, Texas-2017.

Variety or Selection	Trial	Inventory Weight
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NDTX13264B-1R/Y

16SELR/Y060

14.9

Texas Advanced White/Yellow Selection Trial, Dalhart

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

Results were as follows: (Dalhart Tables 14a, 14b, 14c, 14d, and 14e)

- AORTX11913-3Wre/Y, COTX10097-2W/Y, Yukon Gold, and ATX10325-1W/Y were the best entries for this trial based on general rating (Tables 14a).
- AORTX11913-3Wre/Y had the highest total yield, while TXWL-1 had the highest marketable yield (Table 14a).
- BTX1749-1W/Y had the highest yield of 4-6 oz. tubers, while TXWL-1 had the highest yield of over 10 oz. tubers. AORTX11913-3Wre/Y had the highest yield of less than 4 oz. tubers. Yukon Gold had the highest yield of culls/No. 2 tubers (Table 14a).
- TXWL-1 had the highest percentage of marketable yield. ATX08215-6W/Y had the highest percentage of 4-6 oz. tubers, while TXWL-1 had the highest percentage of over 10 oz. tubers (Table 14b).
- COTX05249-3W/Y had the highest percentage of less than 4 oz. tubers. Yukon Gold had the highest percentage of culls/No. 2 tubers (Table 14b).
- BTX1749-1W/Y and TX14602-2W/Y had the highest specific gravity (Table 13b).
- AORTX11913-3Wre/Y had the highest average tubers per plant (Table 14c).
- AORTX11913-3Wre/Y and ATX08215-6W/Y were the latest in maturity, while COTX10097-2W/Y and BTX1749-1W/Y were the earliest in maturity (Table 14c).
- ATX08215-7W/Y had the darkest yellow flesh (Table 14d).
- TX14675-1W/Y and ATX10325-1W/Y had very high percentages of internal brown spot (Table 14e).

Comments on entries:

- AORTX11913-3Wre/Y Round White-Red Eye very high tuber set+++ , smooth skin, uniform size and shape+, specialty, red eyes with shadow, shiny smooth skin, FC=1.0
- TX14670-2W/Y Round White not uniform size+, large tubers+, rough looking skin+, not uniform flesh color, knobs, enlarged lenticels, FC=1.5

- TX14602-2W/Y Round White large tubers++, smooth skin, high tuber set, rough skin, FC=2.5
- TXWL-1 Round White-Red Eye large tubers++, deep eyes, pink splash, high yield++, wild looking, deep eyes, ugly, FC=1.0
- BTX1749-1W/Y Round White not uniform size, high tuber set, ugly skin, large tubers++, soil attached to skin, knobs+, black bruising of skin, FC=2.5
- COTX10097-2W/Y Oblong White not uniform size and shape, high tuber set, FC=2.7
- Yukon Gold Round White uniform, knobs+, very large tubers+++, smooth skin, no silver scurf, FC=2.3
- TX14675-1W/Y Round White high tuber set, medium-large, smooth skin, uniform size and shape, FC=1.9
- ATX10325-1W/Y Round White high tuber set++, variation in color intensity, small, smooth skin, shiny, FC=2.3
- Sierra Gold Oblong Russet low tuber set, knobs+, not uniform size, large tubers+, FC=2.3
- TX14669-2W/Y Round White very small, angular shaped, attached stolons, knobs, FC=2.1
- COTX05249-3W/Y Round White low tuber set, angular tubers+, small+++, uniform, not red eye, soil attached to skin, drop, FC=2.0
- ATX08215-7W/Y Oblong White enlarged lenticels, small, knobs, low tuber number, FC=3.5
- ATX08215-6W/Y Round White low tuber set+, attached stolons, growth cracks, knobs, skin blemished, smooth skin, FC=2.7

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

Summary:

AORTX11913-3Wre/Y, TX14670-2W/Y, TX14602-2W/Y, COTX10097-2W/Y, and Yukon Gold, were the best entries for this trial.

Dalhart
Table 14a.

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/Yellow Selection Trial grown near Dalhart, Texas-2017

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 Field	General Rating ¹ Grading
			Total Yield	4-6 oz	6-10 oz	10-18 oz					
AORTX11913-3Wre/Y	TXW/Y	724.4	314.8	189.7	83.2	42.0	0.0	409.6	0.0	4.6	4.9
TX14670-2W/Y	TXW/Y	599.5	434.4	208.0	110.7	115.7	0.0	124.9	40.2	3.3	3.8
TX14602-2W/Y	TXW/Y	576.9	379.0	210.8	116.8	51.3	0.0	176.4	21.5	3.5	3.7
TXWL-1	TXW/Y	575.2	518.8	170.1	177.5	171.3	0.0	56.4	0.0	3.6	3.7
BTX1749-1W/Y	TXW/Y	569.5	463.5	214.2	136.3	113.0	0.0	76.5	29.5	3.4	3.8
COTX10097-2W/Y	TXW/Y	503.0	312.8	156.2	129.3	27.3	0.0	168.3	21.8	3.6	4.0
Yukon Gold	WR	478.9	379.1	116.4	123.9	138.8	0.0	35.5	64.3	3.6	4.1
TX14675-1W/Y	TXW/Y	449.6	270.8	167.3	69.5	34.0	0.0	178.7	0.0	3.7	3.8
ATX10325-1W/Y	TXW/Y	418.7	148.3	126.1	22.2	0.0	0.0	250.6	19.9	3.7	4.0
Sierra Gold	TXW/Y	363.4	301.9	93.7	103.6	104.6	0.0	43.4	18.2	3.3	3.5
TX14669-2W/Y	TXW/Y	310.5	179.1	107.2	71.8	0.0	0.0	127.1	4.3	3.1	3.1
COTX05249-3W/Y	TXW/Y	270.8	72.5	54.6	17.9	0.0	0.0	192.6	5.7	3.2	3.3
ATX08215-7W/Y	TXW/Y	264.6	98.8	74.0	24.8	0.0	0.0	148.5	17.4	3.2	2.9
ATX08215-6W/Y	TXW/Y	264.4	205.8	107.0	73.0	25.8	0.0	58.6	0.0	3.0	3.2
Average		455.0	291.4	142.5	90.0	58.8	0.0	146.2	17.3	3.5	3.7
L.S.D. (.05)		75.0	61.1	41.3	34.8	32.0		33.3	26.2	0.3	0.4

¹ 1=very poor to 5= excellent

Dalhart
Table 14b.

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/Yellow Selection Trial grown near Dalhart, Texas-2017

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				
AORTX11913-3Wre/Y	TXW/Y	43.5	26.0	11.6	5.8	0.0	56.5	0.0	1.051	11.5	Round	White-Red Eye
TX14670-2W/Y	TXW/Y	72.9	34.8	18.7	19.4	0.0	20.8	6.3	1.061	13.4	Round	White
TX14602-2W/Y	TXW/Y	65.7	36.6	20.2	8.9	0.0	30.6	3.7	1.070	15.0	Round	White
TXWL-1	TXW/Y	90.2	29.5	30.9	29.8	0.0	9.8	0.0	1.052	11.8	Round	White-Red Eye
BTX1749-1W/Y	TXW/Y	81.3	37.5	24.5	19.3	0.0	14.0	4.7	1.071	15.3	Round	White
COTX10097-2W/Y	TXW/Y	61.9	31.1	25.2	5.7	0.0	33.5	4.6	1.067	14.4	Oblong	White
Yukon Gold	WR	78.9	23.9	26.0	28.9	0.0	7.3	13.8	1.067	14.5	Round	White
TX14675-1W/Y	TXW/Y	60.0	37.3	15.4	7.3	0.0	40.0	0.0	1.063	13.8	Round	White
ATX10325-1W/Y	TXW/Y	35.0	29.6	5.3	0.0	0.0	59.9	5.1	1.063	13.8	Round	White
Sierra Gold	TXW/Y	83.6	25.9	28.7	29.0	0.0	11.7	4.6	1.066	14.3	Oblong	Russet
TX14669-2W/Y	TXW/Y	57.7	34.5	23.2	0.0	0.0	41.0	1.4	1.059	13.1	Round	White
COTX05249-3W/Y	TXW/Y	26.6	19.1	7.5	0.0	0.0	70.7	2.7	1.057	12.8	Round	White
ATX08215-7W/Y	TXW/Y	37.3	28.0	9.3	0.0	0.0	56.1	6.7	1.054	12.2	Oblong	White
ATX08215-6W/Y	TXW/Y	78.6	40.5	26.6	11.5	0.0	21.4	0.0	1.046	10.8	Round	White
Average		62.4	31.0	19.5	11.8	0.0	33.8	3.8	1.061	13.3		
L.S.D. (.05)		7.2	6.5	7.8	6.0		5.3	5.6	0.003	0.5		

Dalhart
Table 14c.

Average number of tubers per plant, tuber weight, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, and percent dead vine at vine kill of 14 entries in the Texas Advanced White/Yellow Selection Trial grown near Dalhart, Texas-2017

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
						Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
AORTX11913-3Wre/Y	TXW/Y	16.1	3.0	100	100	2.0	4.6	4.7	4.6	0
TX14670-2W/Y	TXW/Y	6.8	7.6	100	100	2.0	3.6	3.6	3.8	30
TX14602-2W/Y	TXW/Y	9.5	4.1	100	100	2.2	4.2	3.7	4.2	3
TXWL-1	TXW/Y	7.0	5.5	100	100	2.1	4.1	4.0	4.1	15
BTX1749-1W/Y	TXW/Y	7.6	5.0	100	100	2.4	3.5	3.2	3.7	39
COTX10097-2W/Y	TXW/Y	8.9	3.8	100	100	2.4	3.1	2.8	3.3	65
Yukon Gold	WR	4.6	7.0	100	100	1.8	3.9	3.9	4.0	19
TX14675-1W/Y	TXW/Y	8.3	3.7	100	100	2.4	3.0	3.4	3.7	31
ATX10325-1W/Y	TXW/Y	9.1	3.2	100	100	2.2	3.8	3.5	3.8	25
Sierra Gold	TXW/Y	4.8	6.9	89	78	2.0	3.6	3.8	3.8	5
TX14669-2W/Y	TXW/Y	5.8	3.9	94	100	2.0	4.2	3.9	4.2	2
COTX05249-3W/Y	TXW/Y	6.9	2.7	96	100	2.3	3.8	3.8	3.8	14
ATX08215-7W/Y	TXW/Y	3.9	6.0	92	100	2.3	4.0	3.9	4.2	15
ATX08215-6W/Y	TXW/Y	4.3	4.2	81	100	2.0	4.5	4.7	4.6	0
Average		7.4	4.8	97	98	2.1	3.8	3.8	4.0	19
L.S.D. (.05)		1.9	2.2	ns	7	0.3	0.5	0.4	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

Dalhart
Table 14d.

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/Yellow Selection Trial grown near Dalhart, Texas-2017

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
AORTX11913-3Wre/Y	TXW/Y	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.8	25	0	5	0
TX14670-2W/Y	TXW/Y	1.5	1.6	1.0	3.9	1.0	5.0	5.0	5.0	5.0	4.0	0	5	0	0
TX14602-2W/Y	TXW/Y	2.5	2.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	7	0	0	0
TXWL-1	TXW/Y	1.0	2.3	1.0	3.1	1.0	5.0	5.0	5.0	5.0	3.8	0	0	0	0
BTX1749-1W/Y	TXW/Y	2.5	1.1	1.0	3.9	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	5
COTX10097-2W/Y	TXW/Y	2.7	2.8	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
Yukon Gold	WR	2.3	2.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	5	0	0	5
TX14675-1W/Y	TXW/Y	1.9	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	15	0	0	45
ATX10325-1W/Y	TXW/Y	2.3	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	80
Sierra Gold	TXW/Y	2.3	2.7	1.0	4.0	3.7	5.0	5.0	5.0	5.0	4.0	0	0	0	0
TX14669-2W/Y	TXW/Y	2.1	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	7	0
COTX05249-3W/Y	TXW/Y	2.0	1.0	1.0	3.8	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
ATX08215-7W/Y	TXW/Y	3.5	2.3	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
ATX08215-6W/Y	TXW/Y	2.7	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	15
Average		2.1	1.7	1.0	3.9	1.2	5.0	5.0	5.0	5.0	4.0	4	0	1	11
L.S.D. (.05)		0.2	0.4		0.1	0.1					0.2	10		ns	21

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 14e.

Notes and general rating for all reps of 14 entries in the Texas Advanced White/Yellow Selection Trial grown near Dalhart, Texas-2017

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
AORTX11913-3Wre/Y	TXW/Y	very high tuber set+++ , smooth skin, uniform size and shape+, specialty, ,	very high tuber set+++ , red eyes with shadow, shiny smooth skin,	4.6, 4.4, 4.6, 4.8	4.8, 4.9, 4.8, 4.9
TX14670-2W/Y	TXW/Y	large tubers, not uniform size+, , ,	large tubers+, , rough looking skin+, not uniform flesh color, knobs, enlarged lenticels	3.5, 2.8, 3.3, 3.4	3.8, 3.8, 3.8, 3.8
TX14602-2W/Y	TXW/Y	, , ,	large tubers++, smooth skin, high tuber set, rough skin,	3.6, 3.8, 3.2,	3.8, 3.8, 3.6,
TXWL-1	TXW/Y	large++, deep eyes, pink splash, high yield+, , ,	high yield+, wild looking, deep eyes, ugly, large tubers	3.6, 3.8, 3.6, 3.5	3.8, 3.8, 3.8, 3.4
BTX1749-1W/Y	TXW/Y	large tubers, not uniform size, , high tuber set, ugly skin,	large tubers+, ugly skin, soil attached to skin, knobs+, black bruising of skin,	3.3, 3.6, 3.3, 3.2	4, 4, 3.6, 3.6
COTX10097-2W/Y	TXW/Y	oblong, , ,	not uniform size and shape, high tuber set, ,	3.4, 3.8, 3.6, 3.6	4.6, 3.8, 3.8, 3.6
Yukon Gold	WR	large+++ , uniform, knobs+,	very large tubers+++ , smooth skin, no silver scurf, ,	3.8, 3, 3.8, 3.6	4.5, 3.8, 4.4, 3.6
TX14675-1W/Y	TXW/Y	, high tuber set, ,	medium-large, smooth skin, , , uniform size and shape	3.6, 3.8, 3.8, 3.4	3.8, 4, 3.6, 3.6
ATX10325-1W/Y	TXW/Y	high tuber set+, variation in color intensity, small, ,	high tuber set, smooth skin, shiny, , ,	3.5, 4.3, 3.4,	3.5, 4.5, 4,
Sierra Gold	TXW/Y	large, low tuber set, , few tubers,	knobs+, not uniform size, large tubers+, , ,	3.3, 3.6, , 3	3.2, 3.8, , 3.6
TX14669-2W/Y	TXW/Y	, , ,	very small, angular shaped, attached stolons, knobs, angular tubers+, drop, small++, uniform, not red eye, soil attached to skin	3.6, 3, 2.8,	2.8, 3.2, 3.2,
COTX05249-3W/Y	TXW/Y	low tuber set, small, ,	soil attached to skin	3, 3.5, 3, 3.2	3.2, 3.2, 3.4, 3.4
ATX08215-7W/Y	TXW/Y	enlarged lenticels, small, ,	knobs, low tuber number, , ,	3.2, 3.2, ,	2.6, 3.2, ,
ATX08215-6W/Y	TXW/Y	low tuber set+, , ,	attached stolons, growth cracks, knobs, skin blemished, smooth skin, low tuber number,	3, 3, 3.3, 2.8	2.5, 3.5, 3.8, 2.8

2016 White/Yellow Selections Trial, Dalhart

The trial consisted of thirty-four entries of which four (ATX11591-1W/Y, ATX11591-3W/Y, ATX11567-1W/Y, and TX14646-1W-R/Y Pinto) will be advanced in 2018 (Table 15).

Dalhart
Table 15

Inventory weight of 4 entries to be advanced from
the 2016 White Skin Yellow Flesh Selection Trial
grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Inventory Weight
ATTX11591-1W/Y	16SELW/Y073	18.5
ATTX11591-3W/Y	16SELW/Y075	23.5
ATX11567-1W/Y	16SELW/Y084	31.5
TX14646-1W-R/Y Pinto	16SELW/Y095	21.4

Texas Advanced Small Potato Selection Trial, Dalhart

This trial consisted of twenty entries.

Results were as follows: (Dalhart Tables 16a, 16b, 16c, 16d, and 16e)

- ATX08121-3P/Y, TX12471-6W/Y, COTX10138-19P/Y, TX12472-4R, TX09406S-1P/P, NDTX081451CBS-1Y/Y, COTX04050S-1P/P, COTX10138S-7W/Y, and COTX10073S-1W were the best entries based on general rating (Tables 16a).
- ATX08121-3P/Y had the highest total yield, TX12472-4R had the highest marketable yield. ATX08121-3P/Y had the highest yield of oversized tubers (Table 16a).
- COTX03134-1W had the highest yield of culls/No. 2 tubers (Table 16b).
- ATTX98444S-16R/Y had the highest percentage of marketable tubers (Table 16b).
- ATX08121-3P/Y and ATX08121-3P/Y had the highest average number of tubers per plant (Table 16c).
- ATX05186S-1R, NDTX081451CBS-1Y/Y, AORTX11913-4P/W, COTX10073S-1W, and NDTX1287B-1W were the latest in maturity, while COTX04193S-2R/Y, ATX08121-3P/Y, and TX09406S-1P/P were the earliest in maturity (Table 16c).
- COTX04193S-2R/Y, ATTX98444S-16R/Y, and ATTX05175S-1R/Y had the darkest yellow flesh. TX09406S-1P/P and COTX04050S-1P/P had very dark purple flesh (Table 16d).

Comments on entries:

- ATX08121-3P/Y Round Purple some silver scurf, dark violet skin, nice, less silver scurf than others, 40% brown center, plump, uniform size and shape, better skin health than others, uniformly small, FC=2.3
- ATX05202S-3W/Y Round White dull skin color, uniform size, high tuber set+, too large for small, FC=3.4
- ATX05186S-1R Round Red high tuber set++, light red skin, too large for small, move to red trial, FC=1.0
- TX12471-6W/Y Round White very uniform size and shape+, high tuber set++, large for small, smooth, shiny skin, FC=2.7

- COTX10138-19P/Y Round Purple silver scurf++, shiny skin, large tubers+, FC=2.8
- TX12472-4R Round Red high tuber set+, light skin silver scurf+, uniform size and shape, FC=1.5
- TX09406S-1P/P Round Purple shiny, late, very uniform size and shape+, very high tuber set, silver scurf+++, marble flesh color+, round purple (almost black), FC=4.5
- NDTX081451CBS-1Y/Y Round White high tuber set+, shiny skin+, smooth skin, FC=2.8
- COTX04050S-1P/P Round Purple high tuber set++, shiny, very round, uniform size and shape+, silver scurf+, watch for mixed white flesh, almost black flesh, FC=4.6
- ATX06264S-4R/Y Round Red intense red skin color+, not uniform shape, large for small, silver scurf, 20% red vascular discoloration, FC=4.1
- ATTX05175S-1R/Y Round Red small uniform size and shape, high tuber set, not uniform skin color, skin color variation between tubers, very small+++, FC=3.2
- ATTX98444S-16R/Y Round Red low tuber set, medium size, not small, high tuber set, not uniform color, ugly skin, silver scurf, FC=3.5
- AORTX11913-4P/W Round Purple attached stolons+, not uniform skin color, FC=1.0
- COTX10138S-7W/Y Round White nice, smooth yellow skin, purple splash, TC, mixed purple eye, high tuber set+, uniform size and shape, shiny skin, FC=2.5
- TX13582-5W Round White high tuber set, dull skin color++, ugly skin, compressed tubers, FC=1.0
- TX13582-3W Round White few tubers, dull skin color++, snap cut, enlarged lenticels+, ugly skin, compressed tubers+, FC=1.0
- NDTX102816CABS-1W Round White not uniform size, high tuber set, smooth skin+, hard to cut+, shiny skin, FC=1.0
- TX13582-4W Round White high tuber set, dull skin color+, ugly skin, FC=1.0
- COTX10073S-1W Round White smooth skin+, shiny skin+, uniform size and shape, 20% SE, FC=1.3
- COTX04193S-2R/Y Round Red silver scurf+, large for small, 60% red vascular discoloration, FC=4.0

- NDTX1287B-1W Round Red medium size, large for small, enlarged lenticels+, uniform size and shape, few tubers, 50% SE, FC=1.0
- ATTX05175S-1R/Y Round Red low tuber set, light skin, high tuber set, uniform size and shape, not uniform color, combination of light and dark skin color++, nice flesh, size ok for small, FC=3.5
- COTX03134-1W Round Red high tuber set, uniform size and shape, shiny skin, knobs++, FC=1.0

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

Summary:

ATX08121-3P/Y, ATX06264S-4R/Y, TX12471-6W/Y, COTX10138-19P/Y, TX12472-4R, TX09406S-1P/P, NDTX081451CBS-1Y/Y, COTX04050S-1P/P, COTX10138S-7W/Y, and COTX10073S-1W were the best entries in this trial.

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Table 16a.

Total yield, marketable yield, over sized, and general rating of 20 entries in the Texas Advanced
Small Potato Selection Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Total Yield Cwt/A	Marketable Yield	Over Sized	Culls/ No.2	General Rating ¹ Grading	General Rating ¹ Grading
ATX08121-3P/Y	TXP/P	652.7	319.3	333.4	0.0	3.8	4.1
ATX05202S-3W/Y	TXSM	545.2	346.3	198.9	0.0	3.3	3.7
ATX05186S-1R	TXSM	539.9	355.0	184.9	0.0	3.3	3.7
TX12471-6W/Y	TXSM	523.1	377.1	146.0	0.0	3.4	4.4
COTX10138-19P/Y	TXP/P	482.4	174.3	291.0	17.1	3.6	4.0
TX12472-4R	TXSM	480.4	389.5	90.9	0.0	3.4	4.1
TX09406S-1P/P	TXSM	454.1	322.0	132.1	0.0	3.6	4.1
NDTX081451CBS-1Y/Y	TXSM	432.0	347.6	84.4	0.0	3.6	4.5
COTX04050S-1P/P	TXSM	432.0	341.1	87.9	3.0	3.4	4.3
ATX06264S-4R/Y	TXSM	430.7	313.5	117.2	0.0	3.2	3.7
ATX05175s-1R/Y	TXADV/R/Y	411.6	201.8	208.8	1.0	3.8	2.7
ATX098444S-16R/Y	TXSM	393.5	351.8	41.7	0.0	3.0	3.8
AORTX11913-4P/W	TXSM	374.0	319.4	54.6	0.0	2.7	3.2
COTX10138S-7W/Y	TXSM	369.6	317.0	52.6	0.0	3.5	4.4
TX13582-5W	TXSM	338.4	279.0	59.3	0.0	3.1	3.4
TX13582-3W	TXSM	319.7	247.3	67.8	4.7	3.2	3.3
NDTX102816CABS-1W	TXSM	317.5	271.6	45.9	0.0	3.4	3.9
TX13582-4W	TXSM	309.1	260.9	48.2	0.0	2.9	3.4
COTX10073S-1W	TXSM	306.8	254.2	52.6	0.0	3.1	4.0
COTX04193S-2R/Y	TXSM	295.7	193.4	99.8	2.5	3.2	3.7
NDTX1287B-1W	TXSM	286.2	207.0	79.2	0.0	3.0	3.9
ATX05175S-1R/Y	TXSM	217.7	187.7	27.6	2.5	3.3	3.2
COTX03134-1W	TXSM	215.2	160.1	14.9	40.2	3.3	3.0
Average		420.4	299.1	119.9	1.4	3.3	3.8
L.S.D. (.05)		73.0	56.4	39.6	6.6	0.3	0.33

¹ 1=very poor to 5= excellent

Dalhart
Table 16b.

Percent by weight of marketable yeild, over sized, specific gravity, tuber type and skin type of 20 entries in the Texas Advanced Small Potato Selection Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Marketable Yield	Over Sized	Culls/ No. 2				
ATX08121-3P/Y	TXP/P	49.0	51.0	0.0	1.061	13.3	Round	Purple
ATX05202S-3W/Y	TXSM	63.8	36.2	0.0	1.064	13.8	Round	White
ATX05186S-1R	TXSM	65.7	34.3	0.0	1.056	12.5	Round	Red
TX12471-6W/Y	TXSM	71.9	28.1	0.0	1.058	12.9	Round	White
COTX10138-19P/Y	TXP/P	36.2	60.3	3.5	1.047	10.8	Round	Purple
TX12472-4R	TXSM	81.3	18.7	0.0	1.065	14.2	Round	Red
TX09406S-1P/P	TXSM	71.4	28.6	0.0	1.057	12.7	Round	Purple
NDTX081451CBS-1Y/Y	TXSM	80.4	19.6	0.0	1.056	12.6	Round	White
COTX04050S-1P/P	TXSM	79.1	20.2	0.7	1.067	14.5	Round	Purple
ATX06264S-4R/Y	TXSM	73.0	27.0	0.0	1.056	12.4	Round	Red
ATTX05175s-1R/Y	TXADVR/Y	49.0	50.8	0.2	1.061	13.4	Round	Red
ATTX98444S-16R/Y	TXSM	89.6	10.4	0.0	1.068	14.7	Round	Red
AORTX11913-4P/W	TXSM	85.1	14.9	0.0	1.051	11.7	Round	Purple
COTX10138S-7W/Y	TXSM	84.8	15.2	0.0	1.059	13.0	Round	White
TX13582-5W	TXSM	82.8	17.2	0.0	1.067	14.4	Round	White
TX13582-3W	TXSM	77.7	21.1	1.2	1.064	14.0	Round	White
NDTX102816CABS-1W	TXSM	85.6	14.4	0.0	1.082	17.1	Round	White
TX13582-4W	TXSM	84.8	15.2	0.0	1.061	13.4	Round	White
COTX10073S-1W	TXSM	82.7	17.3	0.0	1.087	18.0	Round	White
COTX04193S-2R/Y	TXSM	65.5	33.5	1.0	1.050	11.5	Round	Red
NDTX1287B-1W	TXSM	72.8	27.2	0.0	1.073	15.5	Round	White
ATTX05175S-1R/Y	TXSM	87.5	11.8	0.8	1.060	13.3	Round	Red
COTX03134-1W	TXSM	75.4	6.2	18.4	1.067	14.5	Round	White
Average		73.0	26.7	0.3	1.062	13.5		
L.S.D. (.05)		7.0	7.1	1.8	0.010	2.0		

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Table 16c.

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 20 entries in the Texas Advanced Small Potato Selection Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
						Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
ATX08121-3P/Y	TXP/P	21.3	2.1	100	100	2.4	3.5	3.2	3.7	53
ATX05202S-3W/Y	TXSM	12.9	2.8	100	100	2.0	4.0	3.9	4.0	10
ATX05186S-1R	TXSM	14.8	2.5	100	100	2.0	4.4	4.7	4.6	1
TX12471-6W/Y	TXSM	13.2	2.7	100	100	2.1	4.1	4.0	4.1	11
COTX10138-19P/Y	TXP/P	11.6	2.9	100	100	2.1	3.9	3.5	3.9	26
TX12472-4R	TXSM	14.5	2.2	100	100	2.0	4.1	4.1	4.2	1
TX09406S-1P/P	TXSM	13.2	2.3	100	100	2.3	3.7	3.4	3.8	24
NDTX081451CBS-1Y/Y	TXSM	12.9	2.2	100	100	2.0	4.7	4.8	4.7	0
COTX04050S-1P/P	TXSM	13.9	2.1	100	100	2.0	4.2	4.4	4.3	4
ATX06264S-4R/Y	TXSM	12.1	2.4	100	100	2.1	4.1	4.3	4.3	1
ATTX05175s-1R/Y	TXADVR/Y	14.4	1.9	100	100	2.0	4.3	4.3	4.3	0
ATTX98444S-16R/Y	TXSM	11.5	2.3	100	100	2.0	4.1	3.9	4.1	13
AORTX11913-4P/W	TXSM	16.1	1.6	100	100	1.8	4.7	4.9	4.8	0
COTX10138S-7W/Y	TXSM	12.9	1.9	92	100	2.1	3.9	3.8	4.1	16
TX13582-5W	TXSM	12.4	1.8	100	100	2.0	4.1	4.0	4.2	9
TX13582-3W	TXSM	10.5	2.1	100	100	2.1	3.9	3.9	4.2	14
NDTX102816CABS-1W	TXSM	10.5	2.0	100	100	2.0	4.3	4.2	4.3	10
TX13582-4W	TXSM	12.0	1.8	100	100	2.0	4.3	4.0	4.3	5
COTX10073S-1W	TXSM	9.9	2.1	100	100	2.1	4.4	4.7	4.6	1
COTX04193S-2R/Y	TXSM	8.2	2.4	100	100	2.1	3.5	2.9	3.6	61
NDTX1287B-1W	TXSM	8.2	2.4	100	100	2.1	4.5	4.7	4.7	0
ATTX05175S-1R/Y	TXSM	8.6	1.7	100	100	2.1	4.1	3.9	4.1	11
COTX03134-1W	TXSM	7.8	1.8	100	100	2.0	4.5	4.4	4.6	0
Average		12.9	2.2	100	100	2.1	4.1	4.0	4.2	13
L.S.D. (.05)		2.5	0.3	ns		ns	0.4	0.5	0.4	14

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 16d.

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 20 entries in the Texas Advanced Small Potato Selection Trial grown near Dalhart, Texas-2017.

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
ATX08121-3P/Y	TXP/P	2.3	1.0	1.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	10	0	0	0
ATX05202S-3W/Y	TXSM	3.4	2.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
ATX05186S-1R	TXSM	1.0	1.0	1.0	3.7	3.5	5.0	5.0	5.0	5.0	4.3	0	0	0	0
TX12471-6W/Y	TXSM	2.7	1.1	1.0	4.1	1.0	5.0	5.0	5.0	5.0	4.3	0	0	0	0
COTX10138-19P/Y	TXP/P	2.8	1.0	1.0	4.0	4.9	5.0	5.0	5.0	5.0	4.8	15	0	5	15
TX12472-4R	TXSM	1.5	1.0	1.0	4.0	2.6	5.0	5.0	5.0	5.0	4.0	0	0	0	0
TX09406S-1P/P	TXSM	4.5	1.3	1.0	4.5	5.0	5.0	5.0	5.0	5.0	3.5	0	0	0	0
NDTX081451CBS-1Y/Y	TXSM	2.8	1.0	1.0	4.5	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX04050S-1P/P	TXSM	4.6	1.0	1.0	4.0	5.0	5.0	5.0	5.0	5.0	3.8	0	0	0	0
ATX06264S-4R/Y	TXSM	4.1	1.0	1.0	3.9	3.9	5.0	5.0	5.0	5.0	4.3	0	0	0	0
ATTX05175s-1R/Y	IXADV/R/Y	3.2	1.0	1.0	3.6	3.1	5.0	5.0	5.0	5.0	4.0	0	0	10	0
ATTX98444S-16R/Y	TXSM	3.5	1.0	1.0	3.7	3.4	5.0	5.0	5.0	5.0	4.0	0	0	0	0
AORTX11913-4P/W	TXSM	1.0	1.2	1.0	4.0	4.3	5.0	5.0	5.0	5.0	4.0	0	0	0	0
COTX10138S-7W/Y	TXSM	2.5	1.0	1.0	4.5	1.0	5.0	5.0	5.0	5.0	4.8	0	0	0	0
TX13582-5W	TXSM	1.0	1.0	1.5	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
TX13582-3W	TXSM	1.0	1.0	1.4	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
NDTX102816CABS-1W	TXSM	1.0	1.3	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
TX13582-4W	TXSM	1.0	1.0	1.1	4.0	1.0	5.0	5.0	5.0	5.0	3.9	0	0	0	0
COTX10073S-1W	TXSM	1.3	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
COTX04193S-2R/Y	TXSM	4.0	1.0	1.0	4.0	4.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
NDTX1287B-1W	TXSM	1.0	1.3	1.5	4.8	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
ATTX05175S-1R/Y	TXSM	3.5	1.0	1.0	3.7	3.5	5.0	5.0	5.0	5.0	4.0	0	0	0	0
COTX03134-1W	TXSM	1.0	1.1	1.0	3.7	1.0	5.0	5.0	5.0	3.9	4.3	0	0	0	0
Average		2.4	1.1	1.1	4.0	2.7	5.0	5.0	5.0	5.0	4.2	1	0	1	1
L.S.D. (.05)		0.2	0.2	0.1	0.3					0.2	0.3	ns		7	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 16e.

Notes and general rating for all reps of 20 entries in the Texas Advanced Small Potato Selection Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
ATX08121-3P/Y	TXP/P	, , ,	some sliver scurf, dark violet skin, nice, less sliver scurf than others, 40% brown center, plump, uniform	3.8, 3.8, 4, 3.6	3.8, 4, 4.5, 4.2
ATX05202S-3W/Y	TXSM	, , ,	dull skin color, uniform size, high tuber set+, too large for small,	2.6, 3.8, 3.4, 3.5	3.6, 3.8, 3.8, 3.6
ATX05186S-1R	TXSM	, high tuber set+, light red skin, ,	too large for small, high tuber set+, move to red trial, ,	2.6, 3.4, 3.6, 3.5	3.4, 4, 3.6, 3.8
TX12471-6W/Y	TXSM	, high tuber set+, ,	very uniform size and shape+, high tuber set++, large for small, smooth skin, shiny skin,	3.5, 3.6, 2.8, 3.6	4.6, 4.2, 4.2, 4.6
COTX10138-19P/Y	TXP/P	, , ,	sliver scurf++, shiny skin, large tubers+, ,	3.6, 3.6, 3.6, 3.6	4.5, 3.5, 3.6, 4.4
TX12472-4R	TXSM	high tuber set+, sliver scurf, , , light skin	sliver scurf+, high tuber set, uniform size and shape, very uniform size and shape+, round, very high tuber set, sliver scurf++, marble flesh color+, round purple	3, 3.5, 3.6, 3.6	4.2, 4.2, 4, 3.8
TX09406S-1P/P	TXSM	high tuber set+, sliver scurf+, round, shiny, late?,	high tuber set+, shiny skin, shiny skin+, smooth skin, ,	3.6, 3.8, 3.3, 3.6	4.4, 3.8, 3.8, 4.5
NDTX081451CBS-1Y/Y	TXSM	, , ,	,	3.6, 3.5, ,	4.5, 4.4, ,
COTX04050S-1P/P	TXSM	, high tuber set++, shiny, sliver scurf, ,	high tuber set+, very round, uniform size and shape+, sliver scurf+, watch for mixed white flesh, almost black	2.6, 3.6, 3.6, 3.8	4.2, 4.2, 4, 4.6
ATX06264S-4R/Y	TXSM	, , intense red skin color, not uniform shape, small uniform size and shape, high tuber set, high	sliver scurf, 20% red vascular discoloration,	2.6, 3.3, 3.4, 3.6	3.5, 3.5, 3.8, 3.8
ATX05175s-1R/Y	TXADVR/1	tuber set, small, not uniform skin color, uniform size	very small+++ , uniform size and shape, , ,	4, 3.8, 3.6, 3.6	2.6, 2.5, 3, 2.6
ATX098444S-16R/Y	TXSM	low tuber set, medium size, not small, high tuber set, not uniform color	ugly skin, sliver scurf, high tuber set, ,	2.5, 3.2, 3.6, 2.8	3.5, 4, 3.6, 4
AORTX11913-4P/W	TXSM	, , ,	attached stolons+, not uniform skin color, ,	2.6, 2.6, 3,	3.5, 3, 3,
COTX10138S-7W/Y	TXSM	nice, smooth yellow skin, , high tuber set, purple splash	TC?, mixed purple eye, high tuber set+, smooth, uniform size and shape, smooth skin, shiny skin,	3, 3.5, 3.8, 3.5	4.5, 4.6, 4.6, 4
TX13582-5W	TXSM	, , ,	high tuber set, dull skin color++, ugly skin, compressed tubers, ,	2.8, 3.2, 3, 3.2	3.3, 3.3, 3.5, 3.5
TX13582-3W	TXSM	, few tubers, ,	dull skin color++, snap cut, enlarged lenticels+, ugly skin, compressed tubers+,	3, 3.2, 3.2, 3.4	3.2, 2.8, 3.4, 3.6
NDTX102816CABS-1W	TXSM	not uniform size, , , high tuber set	smooth skin+, hard to cut+, high tuber set, shiny skin, ,	2.8, 3.4, 3.4, 3.8	4, 3.6, 3.6, 4.2
TX13582-4W	TXSM	, , ,	high tuber set, dull skin color+, ugly skin, ,	2.8, 2.6, 3.2, 3	3.6, 3.5, 3.3, 3
COTX10073S-1W	TXSM	, , ,	smooth skin+, shiny skin+, uniform size and shape, 20% stem end discoloration,	2.8, 3.2, 3, 3.5	4.2, 3.6, 4, 4.2
COTX04193S-2R/Y	TXSM	sliver scurf+, , ,	large for small, sliver scurf, , 60% red vascular discoloration,	2.6, 3.3, 3.4, 3.6	3.6, 3.8, 3.6, 3.6
NDTX1287B-1W	TXSM	oblong, medium size, not small, ,	large for small, enlarged lenticels+, 50% stem end discoloration, uniform size and shape, 60% stem end	2.6, 3.2, 3, 3.2	4, 4.2, 3.5, 4
ATX05175S-1R/Y	TXSM	round, low tuber set, , light skin, high tuber set, uniform size and shape, not uniform color	combination of light and dark skin color++, nice flesh, size ok for small, ,	2.5, 3.3, 3.8, 3.4	2.6, 3, 3.5, 3.6

2016 Small Potato Selections Trial, Dalhart

The trial consisted of twelve entries of which two (ATX11533-1W/Y and ATX11548-1R) will be advanced in 2018 (Table 17).

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Table 17

Inventory weight of 2 entries to be advanced from the
2016 Small Potato Selection Trial grown near Dalhart,
Texas-2017.

Variety or Selection	Trial	Inventory Weight
ATX11533-1W/Y	16SELSmall007	20.8
ATX11548-1R	16SELSmall008	18.6

Texas Advanced Fingerling Selection Trial, Dalhart

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

Results were as follows: (Dalhart Tables 18a, 18b, 18c, 18d, and 18e)

- COTX13008-5W had the highest general rating (Table 18a).
- AORTX13021-4/W had the highest total yield, while COTX13008-5W had the highest marketable yield (Table 18a)
- AORTX13021-4/W had the highest yield of oversized tubers. Banana had the highest yield of culls/No. 2 tubers (Table 18a).
- COTX08365F-1P/P had the highest percentage of marketable yield. AORTX13021-4/W had the highest percentage of oversized tubers (Table 18b).
- COTX13008-5W had the highest average number of tubers per plant (Table 18c).
- COTX08365F-1P/P, AORTX13021-4/W, COTX13008-5W, and AORTX13077-3W were the latest in maturity, while ATX12077-5W and Banana were the earliest in maturity (Table 18c).

Comments on entries:

- COTX08365F-3P/P Long Purple scurf, poor set, rough, large tubers, no rot, nice skin, FC=3.8
- AORTX13021-4/W Long White fingerling, large, uniform size and shape, lots of eyes, the pattern inside reflects eye density, FC=1.0
- COTX13008-5W Long White large+++ , uniform size and shape, knobs, high tuber set, too large for fingerling, FC=1.0
- AORTX13077-3W Long White too large for fingerling, nice skin, knobs, uniform size, FC=1.0
- ATX12077-5W Long White low tuber set, large tubers, FC=1.0
- COTX08365F-1P/P Long Purple low tuber set+++ , ok size+ , white splash flesh, many tubers with melted stolon ends (12/178) bud end (3/178), silver scurf, FC=4.1
- Banana Long White drop++ , find better check, knobs+++ , yellow flesh, FC=3.0

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

Summary:

None of the entries performed satisfactorily.

Dalhart
Table 18a.

Total yield, marketable yield, over sized, and culls/No.2 potatoes and general rating of 6 entries in the Texas Advanced Fingerling Selection Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Total Yield Cwt/A	Marketable Yield	Over 18 oz.	Culls/No.2	General Rating ¹ Field	General Rating ¹ Grading
AORTX13021-4/W	TXFing	498.5	49.7	419.0	29.8	3.2	3.2
COTX13008-5W	TXFing	309.6	109.7	189.7	10.2	3.1	3.3
AORTX13077-3W	TXFing	272.1	60.6	181.7	29.8	2.8	3.0
ATX12077-5W	TXFing	202.6	95.3	107.2	0.0	2.5	2.8
COTX08365F-1P/P	TXFing	82.2	78.9	3.2	0.0	1.6	2.5
Banana	TXFing	54.4	17.1	0.0	37.2	1.0	2.3
Average		236.5	68.6	150.2	17.8	2.4	2.9
L.S.D. (.05)		104.8	36.6	36.6	10.6	0.3	0.1

¹ 1=very poor to 5= excellent

Dalhart
Table 18b.

Percent by weight of marketable yield, over sized, and culls/No.2 potatoes, specific gravity, tuber type and skin type of 6 entries in the Texas Advanced Fingerling Selection Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Marketable Yield	Over 18 oz.	Culls/ No. 2				
AORTX13021-4/W	TXFing	10.0	84.1	6.0	1.064	14.0	Long	White
COTX13008-5W	TXFing	35.8	60.1	4.2	1.059	13.0	Long	White
AORTX13077-3W	TXFing	22.3	66.8	10.9	1.058	12.9	Long	White
ATX12077-5W	TXFing	47.1	52.9	0.0	1.058	12.8	Long	White
COTX08365F-1P/P	TXFing	95.4	4.6	0.0	1.047	10.8	Long	Purple
Banana	TXFing	31.8	0.0	68.2	1.058	12.9	Long	White
Average		40.4	44.7	14.9	1.057	12.8		
L.S.D. (.05)		13.4	10.1	8.2	0.005	0.9		

Dalhart
Table 18c.

Average number of tubers per plant, tuber weight, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, and percent dead vine at vine kill of 6 entries in the Texas Advanced Fingerling Selection Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
						Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
AORTX13021-4/W	TXFing	5.6	6.0	100	100	2.0	4.5	4.5	4.5	0
COTX13008-5W	TXFing	6.2	3.3	100	100	2.0	4.5	4.5	4.5	3
AORTX13077-3W	TXFing	5.3	3.5	100	100	2.0	4.5	4.5	4.5	0
ATX12077-5W	TXFing	4.8	2.9	100	100	2.5	3.5	3.5	3.5	5
COTX08365F-1P/P	TXFing	5.1	1.1	91	100	2.0	4.5	4.7	4.5	0
Banana	TXFing	2.3	1.6	100	100	2.3	4.0	3.9	4.0	11
Average		4.9	3.1	98	100	2.1	4.3	4.3	4.3	3
L.S.D. (.05)		ns	0.2	ns		ns	0.3	0.3	0.3	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

Dalhart
Table 18d. 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 Fingerling Selection Trial grown near Dalhart, Texas-2017.

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
AORTX13021-4/W	TXFing	1.0	5.0	1.0	3.5	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
COTX13008-5W	TXFing	1.0	5.0	1.0	3.8	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
AORTX13077-3W	TXFing	1.0	5.0	1.0	3.5	1.0	5.0	5.0	5.0	3.5	4.0	0	0	0	0
ATX12077-5W	TXFing	1.0	5.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
COTX08365F-1P/P	TXFing	4.1	5.0	1.0	4.0	5.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
Banana	TXFing	3.0	5.0	1.0	4.0	1.0	5.0	5.0	5.0	3.5	4.0	0	0	5	0
Average		1.9	5.0	1.0	3.8	1.7	5.0	5.0	5.0	4.5	4.0	0	0	1	0
L.S.D. (.05)		0.2			ns	0.0				0.0				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 18e.

Notes and general rating for all reps of 6 entries in the Texas Advanced Fingerling Selection Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
AORTX13021-4/W	TXFing	fingerling, large, uniform size and shape, , ,	lots of eyes, the pattern inside reflect eyes density, , ,	3.2, , ,	3.2, , ,
COTX13008-5W	TXFing	large+++ , uniform size and shape, , knobs,	high tuber set, too large for fingerling, , , too large for fingerling, nice skin, knobs, uniform size ,	3.2, 3.2, 3, 2.8	3.4, 3.4, 3.3, 3.2
AORTX13077-3W	TXFing	, , ,	, ,	2.8, , ,	3, , ,
ATX12077-5W	TXFing	low tuber set, , ,	large tubers, few tubers, , ,	2.5, , ,	2.8, , ,
COTX08365F-1P/P	TXFing	low tuber set+++ , , ,	low tuber set+, ok size+, white splash flesh, many tubers with melted stolon ends (12/178) bud end	1.5, 1.5, 1.5, 2	2.4, 2.6, 2.5, 2.5
Banana	TXFing	drop++ , find better check, knobs+++ , ,	knobs, yellow flesh, ,	1, 1, 1, 1	2.4, 2.3, 2.3, 2.3

Texas Advanced Purple Skin Selection Trial, Dalhart

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

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

- ATTX98493-2P/P, TX14626-2R/Ry, Purple Majesty, COTX10138-19P/Y, ATX08121-3P/Y, and TX14626-1R/Ry were the best entries based on general rating (Tables 19a).
- ATTX98493-2P/P had the highest total yield. TX14626-2R/Ry had the highest marketable yield. ATTX98493-2P/P had the highest yield of less than 4 oz. tubers. NDTX092237C-2P/WR had the highest yield of culls/No. 2 tubers (Table 19a).
- TX14626-2R/Ry had the highest percentage of marketable yield (Table 19b).
- ATX08121-3P/Y had the highest percent yield of less than 4 oz. tubers (Table 19b).
- ATTX98493-2P/P had the highest number of tubers per plant (Table 19c).
- NDTX092237C-2P/WR, TX14626-2R/Ry, and CO08037-2P/P were the latest in maturity, while TX14626-1R/Ry, ATTX98493-2P/P, and ATX08121-3P/Y were the earliest in maturity (Table 19c).

Comments on entries:

- ATTX98493-2P/P Round Purple high tuber set++, white center, silver scurf+++, translucent core, FC=3.5
- NDTX092237C-2P/WR Round Purple not uniform size, high tuber set, deep eyes++, pink/red flesh, late, parent for skin and flesh, wild looking+, silver scurf++, 40% dark pigmentation near skin, drop+, FC=3.5
- TX14626-2R/Ry Round Red intense red skin, large tubers, silver scurf+++, skin blemished, yellow flesh with purple streaks, FC=2.0
- Purple Majesty Oblong Purple high tuber set, silver scurf++, not uniform shape, white core, FC=3.0
- COTX10138-19P/Y Round Purple silver scurf++, shiny skin, large tubers+, FC=2.8
- NDTX091886-3P/P Round Purple silver scurf+++, snap cut, skin blemished, white core, no white core, 40% pigmentation spots, retest for chipping, FC=3.8

- ATX08121-3P/Y Round Purple some silver scurf, dark violet skin, nice, less silver scurf than others, 40% brown center, plump, uniform size and shape, better skin health than others, uniformly small, FC=2.3
- TX14626-1R/R Y Round Red intense red skin, silver scurf, flesh white with tint of pink, FC=1.0
- TX09406S-1P/P Round Purple high tuber set, round, silver scurf++, angular tuber shape, best internal flesh, parent for flesh color, FC=4.4
- CO08037-2P/P Round Purple low tuber set+++, silver scurf++, white core+, FC=3.6

¹FC=flesh color rating 1=light to 5= dark

Summary:

ATX98493-2P/P, TX14626-2R/R Y, Purple Majesty, COTX10138-19P/Y, ATX08121-3P/Y, and TX14626-1R/R Y were the best entries based on all factors.

Dalhart
Table 19a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 10 entries in the Southwest Regional and Texas
Advanced Purple Skin Selection Trial grown near Dalhart, Texas-2017.

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 Field	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz						10-18 oz
ATTX98493-2P/P	TXP/P	564.8	194.6	132.3	56.8	5.5	0.0	360.0	10.2	3.9	4.5
NDTX092237C-2P/WR	TXP/P	488.1	230.6	174.5	47.2	8.9	0.0	210.3	47.2	3.4	3.3
TX14626-2R/R	TXP/P	472.2	313.5	181.0	110.7	21.8	0.0	136.0	22.6	3.7	4.0
Purple Majesty	SW	439.2	142.7	118.4	21.1	3.2	0.0	271.8	24.6	3.8	4.4
COTX10138-19P/Y	TXP/P	429.7	238.3	121.6	75.2	41.5	0.0	174.3	17.1	3.6	4.0
NDTX091886-3P/P	TXP/P	415.8	117.2	89.6	27.6	0.0	0.0	298.6	0.0	3.8	3.7
ATX08121-3P/Y	TXP/P	383.8	64.5	50.4	14.2	0.0	0.0	319.3	0.0	3.8	4.1
TX14626-1R/R	TXP/P	367.4	165.8	110.2	23.8	31.8	0.0	201.6	0.0	3.8	4.0
TX094065-1P/P	TXP/P	362.4	119.7	75.5	44.2	0.0	0.0	242.8	0.0	3.6	3.8
CO08037-2P/P	SW	180.7	85.1	50.0	29.5	5.6	0.0	95.7	0.0	2.9	2.6
Average		410.4	167.2	110.4	45.0	11.8	0.0	231.0	12.2	3.6	3.8
L.S.D. (.05)		68.3	41.4	42.2	28.5	13.2		62.4	14.8	0.3	0.3

¹ 1=very poor to 5= excellent

Dalhart
Table 19b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 10 entries in the Southwest Regional and Texas Advanced Purple Skin Selection Trial grown near Dalhart, Texas-2017.

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				
ATTX98493-2P/P	TXP/P	34.4	23.2	10.3	0.9	0.0	63.8	1.8	1.058	12.8	Round	Purple
NDTX092237C-2P/WR	TXP/P	47.2	36.0	9.6	1.7	0.0	43.2	9.5	1.048	11.0	Round	Purple
TX14626-2R/R/Y	TXP/P	66.1	38.6	22.9	4.6	0.0	29.1	4.8	1.045	10.5	Round	Red
Purple Majesty	SW	32.6	27.0	4.9	0.6	0.0	61.5	5.9	1.060	13.2	Oblong	Purple
COTX10138-19P/Y	TXP/P	55.4	28.1	17.6	9.7	0.0	40.6	4.0	1.047	10.8	Round	Purple
NDTX091886-3P/P	TXP/P	28.2	21.5	6.7	0.0	0.0	71.8	0.0	1.070	14.9	Round	Purple
ATX08121-3P/Y	TXP/P	16.8	13.4	3.5	0.0	0.0	83.2	0.0	1.061	13.3	Round	Purple
TX14626-1R/R/Y	TXP/P	45.1	30.0	6.5	8.6	0.0	54.9	0.0	1.053	12.0	Round	Red
TX094065-1P/P	TXP/P	33.7	20.8	12.9	0.0	0.0	66.3	0.0	1.061	13.3	Round	Purple
CO08037-2P/P	SW	45.5	26.3	16.9	2.3	0.0	54.5	0.0	1.057	12.7	Round	Purple
Average		40.5	26.5	11.2	2.9	0.0	56.9	2.6	1.056	12.5		
L.S.D. (.05)		8.8	9.5	6.1	3.2		9.0	3.1	0.002	0.5		

Dalhart
Table 19c.

Average number of tubers per plant, tuber weight, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics, and percent dead vine at vine kill of 10 entries in the Southwest Regional and Texas Advanced Purple Skin Selection Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
						Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
ATX98493-2P/P	TXP/P	14.3	2.7	100	100	2.5	3.5	3.2	3.7	33
NDTX092237C-2P/WR	TXP/P	11.4	2.9	100	100	2.0	4.5	4.6	4.6	1
TX14626-2R/R	TXP/P	8.1	3.9	100	100	2.0	4.1	4.0	4.2	10
Purple Majesty	SW	11.4	2.6	100	100	2.1	4.2	3.7	4.0	20
COTX10138-19P/Y	TXP/P	8.4	3.5	100	100	2.1	3.9	3.5	3.9	26
NDTX091886-3P/P	TXP/P	10.6	2.7	100	100	2.1	4.0	3.8	3.9	16
ATX08121-3P/Y	TXP/P	11.6	2.3	100	100	2.4	3.5	3.2	3.7	53
TX14626-1R/R	TXP/P	8.0	3.1	92	100	2.0	3.5	3.0	3.7	35
TX094065-1P/P	TXP/P	9.5	2.6	100	100	2.0	3.8	3.3	3.9	31
CO08037-2P/P	SW	4.3	2.9	50	100	2.2	4.2	4.4	4.4	7
Average		9.7	2.9	94	100	2.1	3.9	3.7	4.0	23
L.S.D. (.05)		2.0	0.5	5		0.2	0.4	0.6	0.4	21

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 19d.

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 10 entries in the Southwest Regional and Texas Advanced Purple Skin Selection Trial grown near Dalhart, Texas-2017.

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
ATTX98493-2P/P	TXP/P	3.5	1.0	1.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX092237C-2P/WR	TXP/P	3.5	2.0	1.0	2.5	4.0	5.0	5.0	5.0	5.0	4.0	0	0	0	5
TX14626-2R/R/Y	TXP/P	2.0	1.0	1.0	4.0	4.0	5.0	5.0	5.0	5.0	3.3	5	0	0	0
Purple Majesty	SW	3.0	2.1	1.0	4.0	5.0	5.0	5.0	5.0	5.0	4.8	0	0	0	0
COTX10138-19P/Y	TXP/P	2.8	1.0	1.0	4.0	4.9	5.0	5.0	5.0	5.0	4.8	15	0	5	15
NDTX091886-3P/P	TXP/P	3.8	1.1	1.0	4.0	5.0	5.0	5.0	5.0	5.0	3.4	0	0	0	0
ATX08121-3P/Y	TXP/P	2.3	1.0	1.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	10	0	0	0
TX14626-1R/R/Y	TXP/P	1.0	1.0	1.0	4.0	4.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
TX094065-1P/P	TXP/P	4.4	1.0	1.0	4.0	5.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
CO08037-2P/P	SW	3.6	1.8	1.0	4.0	5.0	5.0	5.0	5.0	5.0	4.7	0	0	0	0
Average		3.0	1.3	1.0	3.9	4.7	5.0	5.0	5.0	5.0	4.3	3	0	1	2
L.S.D. (.05)		0.2	0.2		0.0	0.0					0.5	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

Dalhart
Table 19e.

Notes and general rating for all reps of 10 entries in the Southwest Regional and Texas Advanced Purple Skin Selection Trial grown near Dalhart, Texas-2017.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
ATX98493-2P/P	TXP/P	high tuber set+, round, , , not uniform size, high tuber set, deep eyes+, pink/red	high tuber set+, white center, silver scurf+++ , plump light core, , parent for skin and flesh, drop+, wild looking+, sliver	4.2, 3.8, 3.6, 4	4.2, 4.4, 4.6, 4.6
NDTX092237C-2P/WR	TXP/P	flesh, , late?	scurf++, deep eyes, 40% dark pigmentation near skin, large tubers, sliver scurf+++ , skin blemished, yellow	3.5, 3.6, 3.4, 3.2	3.4, 3.3, 3.3, 3.3
TX14626-2R/R	TXP/P	intense red skin, , ,	flesh with purple streaks, ,	4, 3.6, 3.6, 3.6	4, 4.2, 3.8, 3.8
Purple Majesty	SW	high tuber set, oblong, , ,	sliver scurf++ , not uniform shape, white core, ,	4.4, 3.8, 3.8, 3.2	4.4, 4.2, 4.4, 4.4
COTX10138-19P/Y	TXP/P	, , ,	sliver scurf++ , shiny skin, large tubers+ ,	3.6, 3.6, 3.6, 3.6	4.5, 3.5, 3.6, 4.4
NDTX091886-3P/P	TXP/P	, , ,	sliver scurf+++ , snap cut, skin blemished, white core, no white core, 40% pigmentation spots, retest for	3.6, 3.8, 3.8, 3.8	3.6, 3.8, 3.6, 3.6
ATX08121-3P/Y	TXP/P	, , ,	some sliver scurf, dark violet skin, nice, less sliver scurf than others, 40% brown center, plump, uniform size	3.8, 3.8, 4, 3.6	3.8, 4, 4.5, 4.2
TX14626-1R/R	TXP/P	intense red skin, , ,	sliver scurf, flesh white with tint of pink, , ,	3.8, , ,	4, , ,
TX094065-1P/P	TXP/P	high tuber set, round, , ,	sliver scurf++ , angular tuber shape, best internal flesh, parent for flesh color, ,	4.2, 3.8, 3.3, 3.2	4.2, 3.8, 3.6, 3.4
CO08037-2P/P	SW	low tuber set+++ , , ,	sliver scurf++ , low tuber number, white core+ , ,	3, 2.8, 2.8,	2.6, 2.6, 2.6,

2016 Purple Skin Selection Trial, Dalhart

The trial consisted of four entries of which two (ATX11549-1P/Y and TX14629-1P/P) will be advanced in 2018 (Table 20).

Dalhart
Table 20

Inventory weight of 2 entries to be advanced from the
2016 Purple Skin Selection Trial grown near Dalhart,
Texas-2017.

Variety or Selection	Trial	Inventory Weight
ATX11549-1P/Y	16SELP016	21.8
TX14629-1P/P	16SELP019	26.4

Appendix A. General notes on potato varieties or selections- 2017.

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
Sugar=sugar ends
SE = Stem end discoloration
TM=tuber moth
CR=Chip quality rating
ZC=Zebra chip

A03141-6-Long Russet. Parentage (A098083-9 x Premier Russet). Cross was made and selected in Idaho. Early maturity. Medium-small vine size. White flower color.

Uses: dual

Strength:

Weakness: knobs, stem end discoloration, flat, long+, skinning, pointy culls+, soft stem end, many eyes

Cutting Notes: not uniform skin set

A06030-23-Long Russet-Oblong Russet. Parentage (A99133-6 x Premier Russet). Cross was made and selected in Idaho. Medium early maturity. Small vine size. Whiter flower color.

Uses: dual

Strength:

Weakness: growth cracks, pressure cracks, oblong, stem end discoloration, light eyes+, knobs enlarged lenticels

Cutting Notes:

A06336-2Y-Oblong Champagne/Pine Eye/Yellow. Parentage (VC1009-1W/Y x US 147-96 R/Y). Cross was made and selected in Idaho. Medium-early maturity. Medium vine size. Light purple flower color.

Uses: fresh

Strength: shiny skin++, smooth skin high tuber set+, pink eyes+++Bruce likes, David not a bad

rep

Weakness: pointed+++ , not uniform shape+, skin color??, poor shape, pear shaped+, FC=2.4, FC=2.7

Cutting Notes: medium yellow flesh, pink sprouts, nice skin, easy to cut

, -Round Champagne/Pine Eye/Yellow. Parentage (VC1009-1W/Y x US 147-96 R/Y). Cross was made and selected in Idaho. Medium-early maturity. Medium vine size. Light purple flower color.

Uses: fresh

Strength: BOT- for small potato, medium, smooth, nice shape and skin, high tuber set++, uniform size and shape+,

Weakness: heat sprouts, attached mini tubers, snowmen, chain tubers, FC=2.4, FC=3.0

Cutting Notes: shiny skin, dark yellow flesh, yellow skin with pink tint, medium size, champagne skin color, shiny skin, intense yellow flesh

A07061-6-Blocky Russet. Parentage (Targhee Russet x Clearwater Russet). Cross was made and selected in Idaho. Medium maturity. Medium vine size. Red-purple flower color.

Uses: dual

Strength: high tuber set,

Weakness: light skin+, stem end discoloration

Cutting Notes: light russet

A08009-2TE-Long Russet. Parentage (A00727-1 x A02060-3TE). Cross was made and selected in Idaho. Medium maturity. Medium vine size. White flower color.

Uses: dual

Strength: light eyes, high tuber set

Weakness: stem end discoloration attached stolons, long, culls pointed+

Cutting Notes: nice russet skin, pressure cracks

A08433-4VR-Long Russet. Parentage (A01667-3 x AOND95249-1Russ). Cross was made and selected in Idaho. Medium maturity. Large vine size. White flower color

Uses: dual

Strength: nice, uniform size and shape

Weakness: small, a little flat, stem end discoloration

Cutting Notes: nice, uniform size and shape

AC01144-1W-Round White. Parentage (COA96141-2 x Willamette). Cross was made in Idaho and selected in Colorado. Medium maturity. Medium-large vine size. White flower color

Uses: chip

Strength: nice smooth skin, uniform shape, light skin, nice,

Weakness: sticky stolons++, mixed, compressed, knobs fewer tubers, deer damage, very small tubers

Chip Notes: Dal Chip Color= 1.5 Chip Quality= 2.8 good chip= 72 % SPR Chip Color= 1.3 Chip Quality= 3.4 good chip= 60 %

Cutting Notes: few eyes, large tubers, greenish flesh

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

Uses: fresh

Strength: uniform size and shape, high tuber set+, intense skin color++, good color, nice shape and small, smooth, nice, lots of B's, BOT,

Weakness: attached stolons+, stem end discoloration sliver scurf+, not uniform size, some road map, not uniform yellow flesh color, FC=1.9, FC=3.1

Cutting Notes: dark yellow flesh, medium size tubers, shallow eyes, translucent neuron pattern (flesh), vascular discoloration

Actrice-Oblong White/Yellow. Parentage (DENISE x AGATA). Cross made in Holland.

Uses: fresh

Strength: nice flesh and shape, very high tuber set+, smooth skin, shiny skin+, medium size tubers+, uniform size and shape

Weakness: road map, scab, shape less uniform than other reps, buff skin ZC 10%, FC=3.2, FC=3

Cutting Notes: lots of knobs, yellow flesh,

Alegria Oblong Yellow/Yellow. Parentage (Divina x 3.169 010-86). Cross was made and selected by Norika. Medium maturity. Medium-large vine size. White flower color.

Uses:

Strength: shallow eye yellow flesh, nice, high set, large tubers+

Weakness: pear shaped, buff skin a little flat FC=3.7, FC=3

Cutting Notes: shallow eye yellow flesh, nice, a little flat, medium yellow flesh

AO03123-2-Long Russet. Parentage (A98082-17 x Premier R). Cross was made in Idaho and selected in Oregon. Medium-late maturity. Medium-small vine size. White flower color.

Uses: dual

Strength:

Weakness: long++, enlarged lenticels very low tuber set, skinny, light skin color, stem end discoloration

Cutting Notes: not uniform size and shape, storage

AO06191-1-Long Russet. Parentage (A99134-1 x AC92009-4RU). Cross was made in Idaho and selected in Oregon. Medium-early maturity. Medium vine size.

Uses: dual

Strength: nice shape, intense russet skin

Weakness: knobs, low tuber number, very large++, uniformly large

Cutting Notes: pressure cracks, good storage

AOR06070-1KF (020)-Oblong Russet. Parentage (Premier R x AO96164-1). Cross was made in Idaho and selected in Oregon.

Uses: process

Strength:

Weakness: long+++, pointed+++ (culls), skinny, stem end discoloration

Cutting Notes: growth cracks, pressure cracks

AOR07781-5-Long Russet Parentage (PA92A08-17 x PALB03035-6). Cross was made in Idaho and selected in Oregon. Medium maturity. Medium vine size. White flower color

Uses: dual

Strength: nice skin, nice size

Weakness: long lumpy, 10% green tubers, knobs

Cutting Notes: growth cracks, light yellow/greenish flesh

AOR09034-3-Round White. Parentage (Boulder x A03449-2C). Cross was made in Idaho and selected in Oregon. Medium maturity. Large vine size. White flower color.

Uses: chip

Strength: smooth skin++, medium-large tubers, high tuber set, uniform size and shape+, nice, snaps cut, uniform, very nice+, BOT, light skin, small, shiny, excellent chip size

Weakness: smaller a little compressed

Chip Notes: Dal Chip Color= 1.25 Chip Quality= 3.475 good chip= 45 % SPR Chip Color= 1.5 Chip Quality= 3 good chip= 56 %

Cutting Notes: greenish flesh, some purple streaks, internal brown spots, green skin, nice shape size

AORTX09032-3W-Round White. Parentage (A03449-2C x Ivory Crisp). Cross was made in Idaho, tuberling produced in Oregon and selected in Texas.

Uses: chip

Strength: nice skin small, uniform size and shape smooth skin

Weakness: not uniform size, very few tubers+, light set knobs

Chip Notes: Dal Chip Color= 1.5 Chip Quality= 2.2 good chip= 67 % SPR Chip Color= 3.0 Chip Quality= 4.0 good chip= 35 %

Cutting Notes: small tubers, green (1), uniform size and shape

AORTX09033-11W-Round White. Parentage (CO96141-4W x Ivory Crisp). Cross was made in Idaho, tuberling produced in Oregon and selected in Texas.

Uses: chip

Strength: nice flesh

Weakness: drop large, scab+, knobs small lots of tubers, growth cracks+, rough,

Chip Notes: Dal Chip Color= 1.5 Chip Quality= 2.4 good chip= 54 % SPR Chip Color= 1.0 Chip

Quality= 3.6 good chip= 58 % IBS, nice

Cutting Notes: medium size, uniform size, medium sprouts, not firm

AORTX09033-14W-Oblong White. Parentage (CO96141-4W x Ivory Crisp). Cross was made in Idaho, tuberling produced in Oregon and selected in Texas.

Uses: chip

Strength: smooth skin, very nice flesh, light shiny skin

Weakness: drop, deer damage, small, light set

Chip Notes: SPR Chip Color= 1.7 Chip Quality= 4.2 good chip= 43 %

Cutting Notes: variable size, half shriveled

AORTX09033-4W-Oblong White. Parentage (CO96141-4W x Ivory Crisp). Cross was made in Idaho, tuberling produced in Oregon and selected in Texas.

Uses: chip

Strength: nice skin

Weakness: culls hollow heart, growth crack, very large tubers++, low tuber set, scab+, bruised, ugly, drop, knobs, growth cracks,

Chip Notes: Dal Chip Color= 1.8 Chip Quality= 2.7 good chip= 60 % SPR Chip Color= 1.0 Chip Quality= 3.6 good chip= 40 %

Cutting Notes: small, some large tubers

AORTX09037-1W/Y-Round White. Parentage (Fasan x Ivory Crisp). Cross was made in Idaho, tuberling produced in Oregon and selected in Texas.

Uses: chip

Strength: smooth skin++, high tuber set+++, uniform size and shape+, BOT+, nice shape, small, TC, light yellow flesh, very round,

Weakness:

Chip Notes: Dal Chip Color= 2.8 Chip Quality= 2.7 good chip= 51 % SPR Chip Color= 3.0 Chip Quality= 4.3 good chip= 21 %

Cutting Notes: yellow flesh, BOT, uniform size and shape, good storage

AORTX09037-3W/Y-Round White/Yellow. Parentage (Fasan x Ivory Crisp). Cross was made in Idaho, tuberling produced in Oregon and selected in Texas.

Uses: chip

Strength: uniform size and shape smooth skin, shiny

Weakness: low tuber set, 50% brown center

Chip Notes: Dal Chip Color= 1.8 Chip Quality= 3.0 good chip= 43 % 3IBS

Cutting Notes: long sprouts, brown center, vascular discoloration

AORTX09037-4W/Y-Oblong White. Parentage (Fasan x Ivory Crisp). Cross was made in Idaho, tuberling produced in Oregon and selected in Texas.

Uses: chip

Strength: smooth skin+++ , shiny++ , nice, uniform size and shape+ , small,

Weakness: heat sprouts, pear shape, uneven flesh

Chip Notes: Dal Chip Color= 2.5 Chip Quality= 2.8 good chip= 61 % SPR Chip Color= 2.0 Chip Quality= 4.3 good chip= 20 % 2GH

Cutting Notes: yellow flesh, nice, good storage

AORTX09037-5W/Y-Round White. Parentage (Fasan x Ivory Crisp). Cross was made in Idaho, tuberling produced in Oregon and selected in Texas.

Uses: chip

Strength: smooth skin, very high tuber set++ , uniform size and shape+

Weakness: scab

Chip Notes: Dal Chip Color= 1.8 Chip Quality= 2.1 good chip= 72 % nice+

Cutting Notes: vascular discoloration, very long sprouts, yellow flesh

AORTX09144-2W-Round White. Parentage (A02516-102LB x PALB03016-3). Cross was made in Idaho, tuberling produced in Oregon and selected in Texas.

Uses: chip

Strength: uniform shape, snap cut, nice

Weakness:

Chip Notes: Dal Chip Color= 2.0 Chip Quality= 3.2 good chip= 66 % SPR Chip Color= 5.0 Chip

Quality= 5.0 good chip= 10 % 18 brown/dark, 1 mechanical, nice
Cutting Notes: internal bruising, keep, mix of yellow and white

AORTX10247-1W/Y-Oblong White. Parentage (Lady Britta x NY139). Cross was made in Idaho, tuberling produced in Oregon and selected in Texas.

Uses: chip

Strength: smooth, nice shape and size, nice yellow flesh,

Weakness: sticky stolon, uneven skin color, flat

Chip Notes: Dal Chip Color= 1.6 Chip Quality= 2 good chip= 60 % SPR Chip Color= 4.0 Chip
Quality= 4.0 good chip= 30 %

Cutting Notes: small, 1/2 shriveled, small, dark flesh, mixed of white and yellow flesh

AORTX11913-3Wre/Y-Round White-Red Eye/Yellow. Parentage (A03576-5Y x NDA050237B-1R).
Cross was made in Idaho, tuberling produced in Oregon and selected in Texas.

Uses: fresh

Strength: nice skin very high tuber set+++ , smooth skin, uniform size and shape+, specialty, red
eyes with shadow, shiny smooth skin,

Weakness: low set FC=1.0

Cutting Notes: small, uniform tuber size and shape, pink and yellow skin, white flesh,

AORTX11913-4P/W-Oblong Purple. Parentage (A03576-5Y x NDA050237B-1R). Cross was made in
Idaho, tuberling produced in Oregon and selected in Texas.

Uses: fresh

Strength: very dark skin, nice shape, white flesh, tasteful selections

Weakness: not uniform size, attached stolons+, not uniform skin color some vascular
discoloration FC=1.0

Cutting Notes: bad seed (many rotten tubers), dark purple skin, very white flesh, 2 in sprouts

AORTX13021-4/W-White. Parentage (A06021-1T x A98345-1). Cross was made in Idaho, tuberling
produced in Oregon and selected in Texas.

Uses: fresh

Strength: uniform size and shape fingerling

Weakness: medium size tubers large, lots of eyes, the pattern inside reflects eyes density, FC=1.0

Cutting Notes: medium size tubers

AORTX13077-3W-White. Parentage (A071012-4BF x A06084-1TE). Cross was made in Idaho, tuberling produced in Oregon and selected in Texas.

Uses: fresh

Strength: uniform size nice skin

Weakness: too large for fingerling, knobs, FC=1.0

Cutting Notes: large fingerling

AORTX13175-1WSPL-White-Splash/Yellow. Parentage (Barbara x CO02321-4W). Cross was made in Idaho, tuberling produced in Oregon and selected in Texas.

Uses: fresh

Strength:

Weakness: Deleted

Cutting Notes: internal brown spot

AOTX05043-1Ru-Oblong Russet. Parentage (A99032-2TE x Summit Russet). Cross was made in Idaho, tuberling produced in Oregon and selected in Texas. Early maturity. Small vine size. White flower color

Uses: fresh

Strength:

Weakness: low tuber number+, enlarged lenticels, blocky, not uniform size, smaller tubers, round, pear shaped+, pointed+, poor shape+

Cutting Notes: pointy light russet, skinning, not uniform size

Atlantic-Round White. Parentage (Wauseon x Lenape). Cross was-made in Beltsville, MD, 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

Strength: buff skin, nice shape

Weakness: knobs, enlarged lenticels+, growth cracks, large tubers, rough, ZC 10%, poor internals

Chip Notes: Dal Chip Color= 2.0 Chip Quality= 3.7 good chip= 35 % Chip Color= 1.3 Chip Quality= 3.7 good chip= 47 % 1 ROT, 1mech

Cutting Notes: not uniform size

ATTX05175S-1R/Y-Round Red/Yellow. Parentage (A99331-2RY X COA99261-IRY). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength: combination of light and dark skin color++, nice flesh, size ok for small lighter and not bad, high tuber no, lots of B's, small, uniform, uniform size and shape

Weakness: skin color variation between tubers, late, some deep eyes low tuber set, light skin FC=3.5 FC=3.2

Cutting Notes: half shriveled, nice yellow flesh, uniform size and shape dark yellow flesh, small, skinning

ATTX05186-2R-Oblong Red. Parentage (A99433-5Y x VC1075-1R). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength: high tuber set, uniform size and shape nice flesh

Weakness: sliver scurf+++, attached stolons, heat sprout, deer, small, light set poor internals+, not uniform size,

Cutting Notes: small, uniform size and shape

ATTX07230-4Y/RE/Y-Round Red/Yellow. Parentage (AO0286-3Y y x Modoc red 500). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes: light yellow flesh

ATTX10265-4R/Y-Oblong Red/Yellow. Parentage (A02267-2PY X US 147-96RIY). Cross was made in Idaho, tuberling produced in Texas and selected in Texas.

Uses: fresh

Strength: light skin++, but attractive, BOT, skinny skin, light skin color but appealing, soft appearance, yellow flesh combines well with skin color, skin has orange tint, uniform size and shape+, high tuber set+++ , nice uniform, medium, small nice shape lots of B's

Weakness: nice shiny skin+, smooth skin silver+ scurf flat large tubers heat sprouts, light skin color FC=3.7 FC=3.2

Cutting Notes: very nice looking, very dark yellow flesh, decent seed, nice skin-flesh combo, medium red skin, intense yellow flesh

ATTX11484-3W-Round White. Parentage (A05158-2C X 00-3115-11). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: chip

Strength:

Weakness: very low yield, mixed skin color, very small

Chip Notes: SPR Chip Color= 4.0 Chip Quality= 4.8 good chip= 21 % 13 dark

Cutting Notes: grey flesh, brown spots, drop very small tubers, 1/4 shriveled

ATTX11591-1W/Y-White/Yellow. Parentage (A05175-7RY x A05201-1Y). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes:

ATTX98444S-16R/Y-Oblong Red/Yellow. Parentage (A83360-9R X T48YF). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength: uniform size and shape, high set, BOT-medium size,

Weakness: not small low tuber set high tuber set, not uniform color, ugly skin, sliver scurf, ZC, feathering, FC=3.2, FC=3.5

Cutting Notes: dark intense yellow flesh, small, uniform size and shape

ATX98493-2P/P-Purple/Purple. Parentage (P94A2-3Y X BO811-13RY). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength: high tuber set++, round, nice shape small tubers+, almost black skin, very late+, heat sprouts, marble flesh, gray skin color, road map+, plump light core

Weakness: silver scurf+++, white center FC=4.3 FC=3.5

Cutting Notes: small tubers, purple flesh, internal lighter flesh, marble purple flesh, small

ATX98514-1R/Y-Oblong Red/Yellow. Parentage (T51YF X A93456-6R). Cross was made in Idaho, tuberling produced in Texas and selected in Texas.

Uses: fresh

Strength: smooth, nice shape

Weakness: light skin color++, poor flesh, pear shaped, light skin color poor internals, low tuber set++, not uniform shape nor color++, light skin color, sliver scurf+, few tubers+, pear shaped, growth cracks, FC=2.8, FC=3.4

Cutting Notes: internal necrosis, medium yellow flesh

ATX02263-1R/Y-Red/Yellow. Parentage (Inca Gold x A92653-6R). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength: oval, medium size++, intense red skin color+, smooth skin, high tuber set+, small++, uniform size and shape, nice skin, uniform, oblong, bright skin color, small potato

Weakness: road map, poor shape?? sliver scurf++++, not uniform size, some long and pointed, FC=2.4 FC=2.4

Cutting Notes: small, medium yellow, pointy, knobs, heterogenous size and shape

ATX05186S-1R-Oblong Red. Parentage (A99433-5Y x VC1075-1R). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength: high tuber set+, move to red trial

Weakness: light red skin, too large for small very nice size and shape, white flesh, nice skin, light set, FC=1.0, FC=1.0

Cutting Notes: medium size tubers, white to light yellow flesh, move to reds, too large for small groups

ATX05202S-3W/Y-Oblong White/Yellow. Parentage (A00286-3Y x A99433-5Y). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength: very nice shape and flesh, nice flesh uniform size, high tuber set+

Weakness: dull skin color too large for small, ZC, FC=3.2, FC=3.4

Cutting Notes: medium yellow flesh, uniform size and shape

ATX06264S-4R/Y-Round Red/Yellow. Parentage (A99331-2RY x Durango Red). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength: nice red skin+, nice color, small, intense red skin color+,

Weakness: not uniform shape, large for small, sliver scurf, 20% red vascular discoloration, move to red trial, heat sprouts, many culls, FC=3.2FC=4.1

Cutting Notes: dark yellow flesh, good storage, uniform size and shape

ATX08121-3P/Y-Purple/Yellow. Parentage (A02267-5PY x CO98012-5R). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength: dark violet skin, nice, less sliver scurf than others small black berry color, small, nice skin, shape and flesh, TC, plump, uniform size and shape, better skin health than others, uniformly small

Weakness: 40% brown center some sliver scurf FC=2.5FC=2.3

Cutting Notes: purple skin, dark yellow flesh, round, bad seed quality, uniform size and shape

ATX08121-5R-Oblong Red. Parentage (A02267-5PY x CO98012-5R). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength: high tuber set+++ , nice shape medium size+ , uniform size shiny skin

Weakness: uneven dull red color+++ , too light for Bruce lenticels sliver scurf++++ , large tubers+ , not uniform size,

Cutting Notes: heat sprouts, small, uniform size and shape, poor seed quality

ATX08215-6W/Y-Round White/Yellow. Parentage (COA00272-1C x A02257-1Y). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength: smooth skin

Weakness: low tuber set+ , attached stolons, growth cracks, knobs, skin blemished, FC=2.7

Cutting Notes:

ATX08215-7W/Y- Oblong White/Yellow Parentage (COA00272-1C x A02257-1Y). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength:

Weakness: enlarged lenticels, small, knobs, low tuber number, FC=3.5

Cutting Notes:

ATX09044-2W/Y-White/Yellow. Parentage (COA04189-1DY x Jaerla). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes:

ATX10325-1W/Y-Round White/Yellow. Parentage (A02267-1Y x Teena). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength: high tuber set++, small, smooth skin, shiny

Weakness: variation in color intensity FC=2.3

Cutting Notes:

ATX10675-1Ru-Long Russet. Parentage (A05379-217 x Dakota Trailblazer). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength: BOT, nice skin, blocky very nice shape++,

Weakness: feathering many culls enlarged lenticels

Cutting Notes: pointy, green heads, some shriveled seed

ATX11379-1Ru-Russet. Parentage (AO00057-2 x Clearwater Russet). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes:

ATX11482-3W-White. Parentage (A05158-2C x M5). Cross was made in Idaho, tuberling produced in Texas and selected in Texas.

Uses: chip

Strength:

Weakness:

Cutting Notes:

ATX11533-1W/Y-White. Parentage (V15-71 x A03449-2C). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes:

ATX11548-1R-Red. Parentage (NDA050237B-1R x NDA050204-1R). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes:

ATX11567-1W/Y-White. Parentage (A02267-1Y x A05201-1Y). Cross was made in Idaho, tuberling produced in Texas and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes:

ATX11952-1Ru-Long Russet. Parentage (A02515-2 x A98196-5). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength: nice russet skin, very large tubers nice flesh, light skin, very white flesh, high tuber set

Weakness: knobs blocky, uneven russetting+, heat sprouts, scab

Cutting Notes: pointed shriveled tubers, pear shape, ugly,

ATX12015-2Ru (033)-Long Russet. Parentage (A03158-2TE x PA08NCBD2-2). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength: nice smooth russet skin high tuber set

Weakness: knobs, popping eyes skinny++, rough, light set, small, uneven russetting, pointed+++,

Cutting Notes: shriveled seed, heterogeneous shape, large

ATX12058-1Ru (034)-Long Russet. Parentage (A01010-1 x A07030-12TE). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength: nice, uniform size and shape, medium size tubers, high tuber set+,

Weakness: a little angular, light skin, light russet, 20% stem end discoloration

Cutting Notes: some shriveling

ATX12077-5W (087)-Long White. Parentage (A071012-4BF x A06084-1TE). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength:

Weakness: low tuber set, large tubers, few tubers, FC=1.0

Cutting Notes:

ATX13108-2Ru-Russet. Parentage (Dakota Trailblazer x A061071-3CSR). Cross was made in Idaho and selected in Texas. Medium-late maturity.

Uses:

Strength:

Weakness:

Cutting Notes:

ATX13126-3W-White. Parentage (MSR061-1 x CO95051-7W). Cross was made in Idaho and selected in Texas. Medium-late maturity.

Uses:

Strength:

Weakness:

Cutting Notes:

ATX13126-5Ru-Russet. Parentage (MSR061-1 x CO95051-7W). Cross was made in Idaho and selected in Texas. Medium-late maturity.

Uses:

Strength:

Weakness:

Cutting Notes:

ATX13127-1Ru-Russet. Parentage (W2717-5 x CO02321-4W). Cross was made in Idaho and selected in Texas. Medium-late maturity.

Uses:

Strength:

Weakness:

Cutting Notes:

ATX13134-3W/Y-White/Yellow. Parentage (NDA081451CB-1CY x CO02321-4W). Cross was made in Idaho and selected in Texas. Medium-late maturity.

Uses:

Strength:

Weakness:

Cutting Notes:

B2727-2-White. Parentage (B0766-3 x B2135-163) Cross was made and selected in Beltsville, MD.

Uses: chip

Strength: nice skin, uniform shape

Weakness: lots of deer damage, large tubers, oval oblong-long+, blemished skin++, large tubers,

Chip Notes: Dal Chip Color= 1.5 Chip Quality= 2.3 good chip= 69 % SPR Chip Color= 1.5 Chip

Quality= 3.1 good chip= 58 %

Cutting Notes: oblong shape, light russeted skin, difficult to see eyes

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: fresh

Strength:

Weakness: drop++, find better check, knobs+++, yellow flesh, FC=3.0

Cutting Notes: knobs, irregular shapes

BTX1749-1W/Y-Oblong White/Yellow. Parentage (K7-6 x BO925-4). Cross was made in Beltsville, MD and selected in Texas. Medium maturity. Large vine size.

Uses: fresh.

Strength: nice shape high tuber set,

Weakness: ugly skin, large tubers++not uniform size very few tubers, low set, soil attached to skin, knobs+, black bruising of skin, FC=2.5, FC=2.5

Cutting Notes: medium yellow flesh

BTX2103-1R/Y-Round Red/Yellow. Parentage (BO811-13 x ARS-W82-21285-1). Cross was made in Beltsville, MD and selected in Texas. Late maturity. Medium vine size. Red-purple flower color.

Uses: fresh

Strength: dark yellow flesh large tubers

Weakness: small not uniform size and shape, sliver scurf++, ugly, knobs translucent neuron pattern (flesh), angular tubers+, scab, pointed, FC=2.7 FC=3.7

Cutting Notes: dark yellow flesh, half shriveled, very good taste according to Gerard

BTX2332-1R-Oblong 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

Strength: very nice, uniform, nice shape large

Weakness: not uniform size sliver scurf+++, low tuber set+

Cutting Notes: uniform size and shape

Chieftain-Round Red. Parentage (Ia1027-18 x La1354). Cross was made and selected at Iowa State University.

Uses: fresh

Strength: high tuber set, shallow eyes, nice shape, BOT-, large tubers, parent

Weakness: skin lighter than Red LaSoda++, Deer damage, light skin,

Cutting Notes:

CO05035-1PW/Y-Oblong Purple-White/Yellow. Parentage (Masquerade x US147-96). Cross was made and selected in Colorado. Medium maturity. Large vine size. Red-purple flower color.

Uses: fresh

Strength: spectacle, yellow green, light purple, shocking color combination, high set, nice shape, BOT

Weakness: pear shaped not uniform shape+++ , several long tubers, no purple skin, late, light pattern, large tubers+++ , pointed, some PW pattern gene, attached stolons+ , some internal problems, large tubers, road map little internal green, heat sprout, FC=2.6FC=2.6

Cutting Notes: dark yellow flesh, large tubers, pinto skin

CO08037-2P/P-Oval Purple/Purple. Parentage (CO03031-2R/Rx CO97215-2P/P). Cross was made and selected in Colorado. Medium maturity. Medium vine size. White flower color

Uses: fresh

Strength: nice shape, good skin finish

Weakness: few tubers, small, some white streaking, low tuber set+++ , sliver scurf++ , white core+ , FC=3.6 FC=4.5

Cutting Notes: medium size tubers, intense dark purple flesh, white center, hollow heart

CO08065-2RU (022)-Oblong Russet. Parentage (Premier Russet x AC98043-2RU). Cross was made and selected in Colorado. Medium maturity. Medium-large vine size. White flower color.

Uses: fresh

Strength: nice russet skin

Weakness: low tuber set+ , enlarged lenticels, blocky, flat

Cutting Notes: very nice, good storage, uniform

CO08155-2RU/Y (023)-Oblong Russet/Yellow. Parentage (Fortress Russet x Innovator). Cross was made and selected in Colorado. Medium maturity. Medium vine size. White flower color.

Uses: fresh

Strength:

Weakness: not uniform russet skin+

Cutting Notes: nice russet skin, uniform size

CO08231-1RU-Long Russet. Parentage (Crestone Russet x Sage Russet). Cross was made and selected in Colorado. Medium maturity. Large vine size. White flower color.

Uses: fresh

Strength: nice shape

Weakness: not uniform size

Cutting Notes: greenish flesh

CO09036-2RU-Long Russet. Parentage (AO98282-5 x CO03267-4RU). Cross was made and selected in Colorado. Medium maturity. Large vine size. White flower color.

Uses: dual

Strength: nice russet skin color

Weakness: attached stolons, very low tuber set+, small heterogenous size, few very large tubers, heat sprouts+, feathering+, flat, slight vascular discoloration pointed, pear shape, 30% stem end discoloration

Cutting Notes: pointed, medium size tubers, uniform size, hard to cut

CO09076-3RU-Oblong Russet. Parentage (CO03380-2RU x CO03202-1RU). Cross was made and selected in Colorado. Medium maturity. Large vine size. White flower color.

Uses: fresh

Strength: nice skin

Weakness: heat sprouts, rough++, poor shape+, many culls, drop, pointed, long skinny knobs++, growth cracks very long tubers pointed+

Cutting Notes: nice, long tubers, nice uniform shape and size

CO09079-5PW/Y- Oblong Purple-White/Yellow. Parentage (CO04117-5PW/Y x A00286-3Y). Cross was made and selected in Colorado. Medium-early maturity. Medium vine size. Purple flower color.

Uses: fresh

Strength: David likes, pinto, high tuber set, small potato

Weakness: small++, pear shape+, lost purple color+++, not uniform size and shape, knobs+,

small+++ , pointy, few tubers, FC=2.7 FC=3.6

Cutting Notes: pinto skin, medium to intense yellow flesh

CO09127-3W/Y-Oblong White/Yellow. Parentage (A00293-2Y x CO00412-5W/Y). Cross was made and selected in Colorado. Early maturity. Small vine size.

Uses: fresh

Strength: uniform size and shape lots of B's, high set, nice skin color, smaller than Yukon Gold, medium, nice flesh high tuber set+,

Weakness: dirt attached to skin+, feathering, FC=3.3, FC=3.0

Cutting Notes: dark intense yellow flesh

CO09128-3W/Y-Oval White/Yellow. Parentage (A00293-2Y x CO03060-2W/Y). Cross was made and selected in Colorado. Early maturity. Small vine size. Light purple flower color.

Uses: fresh

Strength: shiny skin+, smooth skin lots of very small tubers, high set, parent, nice for small potato

Weakness: low tuber set not uniform shape, FC=2.5FC=3.3

Cutting Notes: intense yellow flesh, oval shape, nice skin, shiny

CO09128-5W/Y-Round White/Yellow. Parentage (A00293-2Y x CO03060-2W/Y). Cross was made and selected in Colorado. Early maturity. Medium small vine size. White flower color.

Uses: fresh

Strength: small, BOT for small potato, lots of B's, uniform shape and size+++ , high tuber set, parent

Weakness: pink eyes angular tuber shape, scab, FC=3.7 FC=3.2

Cutting Notes: dark intense yellow flesh, uniform size and shape, round tubers

C

O09165-6W-Long White. Parentage (AC02188-1RU x Crestone Russet). Cross was made and selected in Colorado. Early maturity. Medium small vine size. White flower color

Uses: fresh

Strength: high set, white skin long, uniform size, nice white flesh smooth skin

Weakness: too long, not as light skin as other reps light skin+, long++, skinny, pointed, many culls some internal brown spot

Cutting Notes: long tubers, light russet

CO09205-2RU-Oblong Russet. Parentage (AOA95154-1 x CO95086-8RU). Cross was made and selected in Colorado.

Uses: dual

Strength: very nice+, nice shape, high tuber set

Weakness: skinny, many eyes, pointed heat sprouts, medium size, heterogenous size, pointed, nice shape, blocky

Cutting Notes: very nice, a little flat, lemony color flesh, nice uniform size and shape

CO09218-4W/Y-Oval White/Yellow. Parentage (ATC00293-1W/Y x CO00412-5W/Y). Cross was made and selected in Colorado. Late maturity. Large vine size. White flower color

Uses: fresh

Strength: uniform

Weakness: few tubers, secondary mini tubers, low tuber set+, chain tubers+, small++, knobs, small tubers, pear shape, heat sprouts++, drop+++, poor internals++, FC=3.5 FC=2.7

Cutting Notes: medium yellow flesh, large tubers, hard to cut, oval, flat, good storage

CO99076-6R-Red. Parentage (AC91848-1 x Rio Colorado). Cross was made and selected in Colorado.

Uses: fresh

Strength: BOT+, very nice shape, size, and skin, shallow eyes, round, very intense red skin color++, uniform size and shape

Weakness: sliver scurf+, not uniform size+, rot+

Cutting Notes: dark red skin, shallow round, nice red skin white flesh

COA07365-4RY-Oval Red/Yellow. Parentage (US147-96 x CO99256-2R). Cross was made and selected in Colorado. Medium-early maturity. Medium vine size. Red-purple flower color.

Uses: fresh

Strength: smooth, very nice, BOT, lots of B's, looks good high tuber no, intense skin color,

medium flesh, uniform, pretty,

Weakness: deer damage sliver scurf+, small+++ , FC=3.2 FC=2.6

Cutting Notes: dark red skin, skinning, anthocyanin streaking, uniform size and shape, yellow flesh, very nice skin

COTX00104-6R- Round Red. Parentage (ND3574-5R X C086218-2). Cross was made in Colorado and selected in Texas. Early maturity. Medium vine size. Purple flower color.

Uses: fresh

Strength: intense red skin very dark skin new market class, oblong shape BOT++

Weakness: russetting, large tubers, road map, early Drop, low tuber set dull skin, not shiny enlarged lenticels+++ , soil attached to skin, low tuber set++ , shallow eyes,

Cutting Notes: uniform size and shape, medium shallow, medium tubers, round

COTX03134-1W-Round White. Parentage (Laratte x PA97B36-3). Cross was made in Colorado and selected in Texas. Late maturity. Small vine size. Red purple flower color.

Uses: fresh

Strength: uniformly small, lots of small tubers, BOT for tuber number, high set, parent for tuber number shiny skin

Weakness: road map+, flat poor skin, poor shape, knobs++ , FC=1FC=1.0

Cutting Notes: mixed? nice, small potato, translucent flesh Some shrinkage, rock star, Canada and Britain Seed Co

COTX04050S-1P/P-Oblong Purple/Purple. Parentage (CO97215-2P/P x CO97306-2P/P). Cross was made in Colorado and selected in Texas

Uses: fresh

Strength: almost black flesh uniform size, nice shape and size, BOT, nice flesh color high tuber set++ , shiny, very round,

Weakness: more white streaks in flesh feathering, road map, sliver scurf+, watch for mixed white flesh FC=4.5 FC=4.6

Cutting Notes: small, uniform size and shape, dark purple skin, dark purple flesh, uniform size and shape, good storage

COTX04193S-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: fresh

Strength: nice red skin color++, uniform size and shape

Weakness: lighter skin color some feathering, white streaks in flesh, light set++, sliver scurf+, large for small, 60% red vascular discoloration, FC=4.0, FC=3.8

Cutting Notes: small, uniform size and shape, silver scurf, skin bronzing, pink vascular

COTX05095-2Ru/Y-Oblong Russet/Yellow. Parentage (CO99045-1W/Y x AO96164-1). Cross was made in Colorado and selected in Texas. Medium maturity. Medium vine size. White flower color

Uses: fresh

Strength: uniform size and shape+, nice yellow flesh high tuber set

Weakness: most tubers are medium-small, small+ deer damage+, pointed, blocky, light yellow flesh, too round, 50% stem end discoloration, 20% stem end discoloration

Cutting Notes: yellow flesh, nice, lighter skin color, small uniform size and shape

COTX05249-3W/Y-Round White/Yellow. Parentage (CO00320-1R x ATC98509-1R/Y) Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness: low tuber set, angular tubers+, drop, small+++, not red eye, low set, round, drop++, soil attached to skin, FC=2.0FC=2.0

Cutting Notes:

COTX07054-2R (009)-Oblong Red. Parentage (ATDC9801-3P x CO99076-6R) Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength: intense skin color+, (tint of orange), uniform size and shape nice shape and skin color sliver scurf less than other reps

Weakness: sliver scurf+++, small++, attached stolon+, not uniform size very slight vascular

discoloration, pear shaped, small late++

Cutting Notes: uniform size and shape

COTX08322-10Ru-long Russet. Parentage (Blazer Russet x AC96052-1RU). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength: uniform size and shape, nice, high tuber set, nice russet skin

Weakness: a little angular, long, wide eyes, many eyes flat, heterogenous size+, several large tubers, low yield, feathering+, blocky very light vascular discoloration, rough

Cutting Notes: blocky, nice, healthy seed, BOT, medium sprouts

COTX08365F-1P/P-Long Purple/Purple. Parentage (POR01PG16-1 x CO00405-1R) Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength: no rot, nice skin ok size+

Weakness: scurf, poor set, rough, large tubers low tuber set+++, white splash flesh, many tubers with melted stolon ends (12/178) bud end (3/178), sliver scurf, FC=4.1 FC=3.8

Cutting Notes: purple flesh, outer white ring

COTX09022-3RuRE/Y-Oblong Red Eye Russet/Yellow. Parentage (A00286-3Y x CO99100-1RU) Cross was made in Colorado and selected in Texas. Medium early. Large vine size. White flower color

Uses: fresh

Strength: pretty, round to oval, round shape, nice looking, nice skin nice, unique high tuber set++, pink-red eyes, blocky

Weakness: uneven russetting some flat, 20% stem end discoloration

Cutting Notes: nice yellow flesh, uniform shape and size, oblong to round

COTX09052-2Ru-Long Russet. Parentage (CO03202-1RU x CO98067-7RU) Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength: nice skin color, nice shape

Weakness: small, light set heterogenous size

Cutting Notes: shriveled, mystery russet, oblong small, baby baker, shriveled seed

COTX10012-1WRDspl/Y-White-Red-Splash/Yellow. Parentage (A00286-3Y x ATC00293-1W/Y).

Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes: intense yellow flesh

COTX10013-6RuRDspl/Y-Russet-Red-Splash/Yellow. Parentage (A00286-3Y x CO98067-7RU). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes: intense, yellow flesh

COTX10073S-1W-Round White. Parentage (A97066-42LB x Alpine Russet). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength: smooth skin+, shiny skin+, uniform size and shape

Weakness: 20% stem end very nice, BOT, high set+, no feathering discoloration, ZC, FC=1.0, FC=1.3

Cutting Notes: light yellow flesh, uniform tuber size and shape

COTX10080-2Ru-Long Russet. Parentage (CO03364-5RU x CO98067-7RU). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength: high tuber set, nice uniform size and shape, BOT, large tubers, uniform russet skin, nice

Weakness:

Cutting Notes: honey comb russet skin, nice uniform size and shape

COTX10097-2W/Y-Oblong White/Yellow. Parentage (CO04067-10W/Y x CO00412-5W/Y). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength: high tuber set nice flesh, smooth

Weakness: not uniform size and shape road map, low set, FC=3.3FC=2.7

Cutting Notes: dark yellow, small

COTX10118-1WRE/Y-White-Red Eye/Yellow. Parentage (07S019 x AC03534-2R/Y). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes: pink splashed skin, yellow flesh

COTX10118-4WPUE/Y-White-Purple Eye/Yellow. Parentage (07S019 x AC03534-2R/Y). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes: purple splash, yellow flesh, very poor seed quality

COTX10138-15WPUE/Y-Oblong White. Parentage (AC99329-7PW/Y x AC03534-2R/Y). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes: very intense yellow, purple eye

COTX10138-19P/Y-Oblong Purple/Yellow. Parentage (AC99329-7PW/Y x AC03534-2R/Y). Cross

was made in Colorado and selected in Texas.

Uses: fresh

Strength: shiny skin, large tubers+,

Weakness: sliver scurf++,

Cutting Notes: drop, purple skin, bad seed (rotten), yellow flesh, translucent center intense yellow flesh FC=2.8 FC=2.8

COTX10138S-7W/Y-Round White/Yellow. Parentage (AC99329-7PW/Y x AC03534-2R/Y). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength: chip??, high set, nice skin, light flesh, BOT nice, smooth yellow skin, purple splash high tuber set+, smooth, uniform size and shape, shiny skin, TC

Weakness: some purple eyes mixed, lots of small tubers FC=2.5, FC=2.0

Cutting Notes: medium yellow flesh, small, uniform size and shape

COTX12235-2W-Round White. Parentage (AC00206-2W x AC03433-1W). Cross was made in Colorado and selected in Texas.

Uses: chip

Strength: nice skin, uniform size and shape, smooth skin+++, shiny++, uniform size and shape+++

Weakness: egg shaped, uneven russetting, growth cracks, scab

Chip Notes: Dal Chip Color= 1.0 Chip Quality= 1.8 good chip= 90 % SPR Chip Color= 3.0 Chip Quality= 4.4 good chip= 35 % BOT+, smaller tuber?

Cutting Notes: translucent center, small, uniform size and shape

COTX12428-1W-Round White. Parentage (MSQ070-1 x CO02024-9W). Cross was made in Colorado and selected in Texas.

Uses: chip

Strength: smooth skin+, nice

Weakness: heat sprouts++,

Chip Notes: Dal Chip Color= 1.0 Chip Quality= 2.8 good chip= 61 % SPR Chip Color= 3.0 Chip

Quality= 5.3 good chip= 0 % 5 dark, BOT

Cutting Notes: small, decent size chipper, small, vascular discoloration

COTX13008-5W-Long White. Parentage (Fortress Russet x CO06057-3RU). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength: high tuber set uniform size and shape

Weakness: large+++ , knobs too large for fingerling, FC=1.0

Cutting Notes: orange flesh

COTX13215-1Ru-Long Russet. Parentage (A02507-2LB x CO05110-6RU). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes: oblong

COTX13215-2Ru-Long Russet. Parentage (A02507-2LB x CO05110-6RU). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength: uniform size, high tuber set

Weakness: not uniform size not uniform russet skin

Cutting Notes: vascular discoloration, some shriveling, BOT, uniform shape and size

COTX13366-1W-White. Parentage (CO07070-10W x CO02321-4W). Cross was made in Colorado and selected in Texas.

Uses:

Strength:

Weakness:

Cutting Notes: many shriveled tubers, drop

COTX13413-1Ru-Long Russet. Parentage (Dakota Trailblazer x AO02183-2). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength: nice shape

Weakness: attached stolons+++, low tuber number ugly, bowling pins

Cutting Notes: two sets of tubers? shriveled seed

COTX14035-1R-Red. Parentage (CO99076-6R x NDC081655-1R). Cross was made in Colorado and selected in Texas.

Uses:

Strength:

Weakness:

Cutting Notes:

COTX14132-1Ru-Russet. Parentage (POR06V12-3 x AC05039-2RU). Cross was made in Colorado and selected in Texas.

Uses:

Strength:

Weakness:

Cutting Notes:

COTX14250-1Ru-Russet. Parentage (AF3362-1 x A06021-1T). Cross was made in Colorado and selected in Texas.

Uses:

Strength:

Weakness:

Cutting Notes:

COTX14284-2Ru/Y-Russet/Yellow. Parentage (CO97237-4RU/Y x AC06358-1W/Y). Cross was made in Colorado and selected in Texas.

Uses:

Strength:

Weakness:

Cutting Notes:

Electra-Round White. Parentage (C1992/42 x Picasso). Cross made in Ireland

Uses: fresh

Strength: high tuber set+

Fortress Russet-Oblong Russet. Parentage (AWN86514-2 x A89384-10). Cross was made and selected in Colorado. Medium maturity. Large vine size. White flower color.

Uses: fresh

Strength: no pink streaks+++ , no purple streaking

Weakness: some heat sprouts, chain tubers, heterogenous size, small, blocky low tuber number, medium size not uniform russetting, ZC 10%,

Cutting Notes: medium size, purple flesh streaks some pink flesh

Lamoka-Round White. Parentage (NY120 x NY115). Clone entered by Cornell University.

Uses: chip

Strength: high tuber set+, Bruce likes buff skin, nice size, shape and flesh

Weakness: some rot rough++ rough skin, large tubers, enlarged lenticels,

Chip Notes: Dal Chip Color= 1.25 Chip Quality= 2.3 good chip= 83 % SPR Chip Color= 1.3

Chip Quality= 2.5 good chip= 63 %

Cutting Notes: decent size, not very attractive

MSV358-3-Round White. Parentage (MSP239-1 x OP). Cross was made and selected at Michigan State University.

Uses: fresh

Strength: uniform size, good chip size, very high tuber set uniform shape and size

Weakness: buff skin, pear shaped smaller, knobs, enlarged lenticels, large tubers,

Chip Notes: Dal Chip Color= 1.2 Chip Quality= 3.0 good chip= 55 %

Cutting Notes: nice, BOT, uniform size and shape

MSV030-4-Round White. Parentage (Beacon Chipper x MSG227-2). Cross was made and selected at Michigan State University.

Uses: chip

Strength: nice flesh,

Weakness: mixed skin color, sticky stolon scab

Chip Notes: Dal Chip Color= 1.3 Chip Quality= 3.3 good chip= 15 % SPR Chip Color= 2 Chip Quality= 4.2 good chip= 0 %

Cutting Notes: variable size and shape, hard to cut, nice shape and size

MSV358-3-Round White. Parentage (MSP239-1 x OP). Cross was made and selected at Michigan State University.

Uses: chip

Strength: good chip size, very high tuber set smaller, uniform shape and size, buff skin

Weakness: pear shaped, knobs, enlarged lenticels, large tubers

Chip Notes: Dal Chip Color=1.2 Chip Quality=3.0 good chip=55 % SPR Chip Color= 1.3 Chip Quality= 3.8 good chip= 10 %

Cutting Notes: nice, BOT, uniform size and

MSW485-2-Round White. Parentage (MSQ070-1 x MSR156-7). Cross was made and selected at Michigan State University.

Uses: fresh

Strength: very uniform size and shape high tuber set,

Weakness: too small, deep eyes+, blemished skin, hollow heart, sticky stolon++

Chip Notes: Dal Chip Color= 1.7 Chip Quality= 3.3 good chip= 69 % SPR Chip Color= 1.8 Chip Quality= 4 good chip= 13 % 1 dark

Cutting Notes: small/decent size, uniform size and shape

MSX540-4-Round White. Parentage (R061-1 x Lamoka). Cross was made and selected at Michigan State University.

Uses: chip

Strength:

Weakness: buff skin dirty skin, soil attached to skin, large tubers,

Chip Notes: Dal Chip Color= 1.75 Chip Quality= 3.45 good chip= 55 % SPR Chip Color= 1.3

Chip Quality= 3.6 good chip= 35 %

Cutting Notes: large tubers, oblong, dark eyes, large, hard to cut, a little flat

NDA081453CAB-2C-Round White. Parentage (Dakota Diamond x ND 039173CAB-22). Cross made in North Dakota and selected in Idaho. Medium-early maturity. Medium vine size. White flower color.

Uses: chip

Strength: smooth skin, snap cut nice skin and shape, BOT, nice flesh

Weakness: deer damage large+

Chip Notes: Dal Chip Color= 1.7 Chip Quality= 3.1 good chip= 55 % SPR Chip Color= 2.3 Chip Quality= 3.5 good chip= 30 % 1IBS,

Cutting Notes: shiny skin, too large

NDTX059759-3RY/Y Pinto-Oblong Pinto/Yellow. Parentage (ATND 99331-2 Pinto x ND 7834-2P). Cross was made in North Dakota and selected in Texas.

Uses: fresh

Strength: BOT David like color, spectacle, pleasant color, elegant, nice color combination unique pattern, smooth skin healthy+, eye catching, few eyes no silver scurf

Weakness: low tuber set++very light purple streaks flat, shiny, 20% pink streak, 80% pink streak, nice smooth skin, shiny, 20% pink streak, attached stolons FC=3.3 FC=2.5

Cutting Notes: pinto skin, anthocyanin streaking yellow flesh +pink streaks

NDTX059828-2W-Oblong White. Parentage (ND 4659-5R x ND 8524B-1R). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength: ZC tolerant

Weakness: poor skin color, red eyes

Chip Notes: drop, keep-, CR=1

Cutting Notes: variable size, not a good chipper, but ZC tolerant, large tubers

NDTX081451CBS-1Y/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: fresh

Strength: high tuber set+, shiny skin+, smooth skin

Weakness: low yield, white and yellow flesh mixed, heat sprouts, low set, feathering+++ , poor shape, FC=2.0 FC=2.8

Cutting Notes: dark yellow flesh, small tubers, good storage, not uniform tuber size and shape

NDTX081648CB-13W-Round White. Parentage (ND 8456-1 xND7377CB-1) Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength: nice shiny, small, snap cut, high tuber set+, very uniform size and shape, nice, smooth skin, looks clean,

Weakness: attached stolon, enlarged lenticels a little flat, heat sprouts+, sticky stolon+

Chip Notes: Dal Chip Color= 1.7 Chip Quality= 3.5 good chip= 24 % SPR Chip Color= 1.8 Chip Quality= 4.6 good chip= 20 % 1IBS, 20% Good Chip

Cutting Notes: some oblong tubers

NDTX091886-3P/P-Round Purple/Purple. Parentage (COND 04082-8RR X ND 7519-1) Cross was made in North Dakota and selected in Texas.

Uses: fresh

Strength: snap cut retest for chipping

Weakness: sliver scurf+++few tubers, small, poor internals, 100% dark spots in flesh, drop+, skin blemished, white core, no white core, 40% pigmentation spots, FC=3.8, FC=4.5

Cutting Notes: intense purple flesh uniform size and shape, dark purple flesh, marble pattern

NDTX092237C-2P/WR-Purple/Red. Parentage (ND 049326C-2P x ND 7834-2P) Cross was made in North Dakota and selected in Texas.

Uses: fresh Strength nice skin color, high set parent for skin and flesh high tuber set:

Weakness: drop+, wild looking+, sliver scurf++deep eyes+, pink/red flesh, late not uniform

size 40% dark pigmentation near skin, very late++, attached stolon, very small tubers+++, lots of culls, uneven flesh, drop, 20% dark spots in flesh, FC=3.8, FC=3.5

Cutting Notes: medium pink flesh, nice looking, oblong, magenta skin white flesh with purple

NDTX102816CABS-1W-Round White. Parentage (ND060476CAb-6 x ND7519-1). Cross was made in North Dakota and selected in Texas.

Uses: fresh

Strength: high tuber set, smooth skin+, hard to cut+, shiny skin, very nice size, white flesh

Weakness: not uniform size, feathering 20% ZC, low set, FC=1.0, FC=1.0

Cutting Notes: very white flesh, lots of tubers but variable sizes, some shriveled

NDTX113030C-3W-Oblong White. Parentage (Dakota Diamond x ND7192-1). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength: nice, smooth skin, high tuber set

Weakness: shoulders very small, light skin color, sticky stolon

Chip Notes: Dal Chip Color= 1.8 Chip Quality= 2.6 good chip= 58 % SPR Chip Color= 1.0 Chip Quality= 3.5 good chip= 50 % 1 mech, nice, 1 mech; 1 brown, bruise/scab; larger tuber;

Cutting Notes: small, few tubers, not uniform size and shape

NDTX113037C-2W-Round White. Parentage (Dakota Pearl x ND060705C-8). Cross was made in North Dakota and selected in Texas.

Uses:

Strength:

Weakness: Deleted

Cutting Notes: feathering, poor shape, drop+++, rough, ZC, FC=1.0

NDTX113467CB-1Ru-Oblong White. Parentage (ND060485Cb-1 x ND7519-1). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength: high tuber set uniform size and shape

Weakness: very few tubers, russet skin+, mixed rep dropped this rep, few tubers small, sticky stolon, heat sprouts

Chip Notes: Dal Chip Color= 3 Chip Quality= 2.6 good chip= 62 % SPR Chip Color= 2.0 Chip Quality= 4.0 good chip= 55 % 5 dark, 1GH

Cutting Notes: lemony flesh color, uniform size and shape, variation for russet skin net size

NDTX12135-1W-Round White. Parentage (ND8559-20 x M3). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength: uniform size and shape

Weakness: very low yield, heat sprouts, small, light set, blemished skin, small, scab+,

Chip Notes: Dal Chip Color= 2.0 Chip Quality= 2.4 good chip= 67 % SPR Chip Color= 2.5 Chip Quality= 3.4 good chip= 50 % 4 brown/dark, nice

Cutting Notes: sprouting, medium sprouts, 1/4 shrinkage

NDTX12203AB-1W-Round White. Parentage (ND028598c-1 x M2). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength: smooth skin, snap cut, uniform size and shape+, high tuber set++,

Weakness: large tubers, compressed

Chip Notes: Dal Chip Color= 1.8 Chip Quality= 1.7 good chip= 88 % SPR Chip Color= 1.0 Chip Quality= 2.5 good chip= 60 % BOT+

Cutting Notes: russet skin, BOT, uniform size and shape

NDTX12237Y-1RuY-Oblong Russet/Yellow. Parentage (793101.3 x Russet Norkotah) Cross was made in North Dakota and selected in Texas.

Uses: fresh

Strength:

Weakness: small+, roundish++, not much russeting++, light skin, too round, not uniform russeting

Cutting Notes: yellow flesh, should it be /W?, shriveled seed, chip? Yellow lemon flesh

NDTX12237Y-3Ru/Y-Oblong Russet/Yellow. Parentage (793101.3 x Russet Norkotah) Cross was made in North Dakota and selected in Texas.

Uses: fresh

Strength: high tuber set nice yellow flesh

Weakness: small++, not uniform size+, pear shaped

Cutting Notes: dark yellow flesh, intense russet

NDTX12237Y-7Ru/Y-Long Russet/Yellow. Parentage (793101.3 x Russet Norkotah) Cross was made in North Dakota and selected in Texas.

Uses: fresh

Strength:

Weakness: angular shaped++, blocky, low tuber number

Cutting Notes: medium yellow flesh, blocky, hard to cut

NDTX12243YC-2W-Round White. Parentage (90245.1 x ND7799c-1). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength: snap cut

Weakness: large, low tuber set, knobs

Cutting Notes: not uniform size and shape, large, hard to cut,

Chip Notes: Dal Chip Color= 1.8 Chip Quality= 3.2 good chip= 26 %, 3GH, 1IBS

NDTX12248Y-1R-Round Red. Parentage (95043.11 x Dakota Ruby) Cross was made in North Dakota and selected in Texas.

Uses: fresh

Strength: high tuber set++, medium size TC

Weakness: light skin color, sliver scurf+,

Cutting Notes:

NDTX1244-3W/Y-Round White. Parentage (AND07358-1Y x ND7192-3). Cross was made in North

Dakota and selected in Texas.

Uses: chip

Strength: nice bright skin yellow smooth skin high set uniform set parent for small

Weakness: mixed rep dropped this rep, some green small sticky stolon, drop for hollow heart

Chip Notes: Dal Chip Color= 2.3 Chip Quality= 2.3 good chip= 54 % SPR Chip Color= 3.0 Chip Quality= 4.0 good chip= 30 %, 1 dark, 1IBS

Cutting Notes: yellow flesh x of yellow and white flesh, medium sprouts, uniform size and shape, small

NDTX1246-3W-Round White. Parentage (AND07358-1Y x ND8304-2). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength: smooth skin+, high tuber set, uniform size and shape, a little flat

Weakness: sticky stolon, heat sprouts, flat, not yellow flesh, scab+,

Chip Notes: Dal Chip Color= 1.5 Chip Quality= 2.8 good chip= 59 % SPR Chip Color= 1.0 Chip Quality= 3.2 good chip= 39 %, 1 vert, nice, 1 leopard spot

Cutting Notes: small tubers, good seed, very long sprouts, small

NDTX1246-5W/Y-Round White/Yellow. Parentage (AND07358-1Y x ND8304-2). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength: yellow skin, BOT, high tuber set, uniform shape good chip size

Weakness: scab++mixed white and yellow flesh

Chip Notes: Dal Chip Color= 3.0 Chip Quality= 1.8 good chip= 83 % SPR Chip Color= 3.5 Chip Quality= 4.3 good chip= 41 %, 9 dark, nice

Cutting Notes: dark yellow flesh, sprouts, some shriveling, not good storage, long sprouts

NDTX1287B-1W-Round White. Parentage (ND8559-20 x ND7379B-6). Cross was made in North Dakota and selected in Texas.

Uses: fresh

Strength: nice shape medium size uniform size and shape

Weakness: few tubers some buff skin, feathering++, not small, large for small, enlarged lenticels+, 50% stem end discoloration, FC=1.0, FC=1.0

Cutting Notes: small tubers, uniform size and shape, good seed, russet

NDTX13105-1R-Red. Parentage (ATND99331-2PintoY x ND7132-1R). Cross was made in North Dakota and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes:

NDTX13224CAB-1W-White. Parentage (ND039104CAB-3 x Dakota Pearl). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness:

Cutting Notes:

NDTX13264B-1R/Y-Red/Yellow. Parentage (ND071179B-10R x ND5858). Cross was made in North Dakota and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes:

NDTX13280CB-3W-White. Parentage (ND081452CB-1 x ND7519-1). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness:

Cutting Notes:

NDTX14311CAB-1W-White. Parentage (ND092095C-1 x ND102809AB-2). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness: deleted

Cutting Notes: 1/2 shrinkage, brown center, uniform size and shape

NDTX14352ABY-1W-Round White. Parentage (ND102809AB-2 x Eva). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness: few tubers, blemished skin

Chip Notes: Dal Chip Color= 1.0 Chip Quality= 3.1 good chip= 33 %

Cutting Notes: some shriveled, hollow heart, brown center

NDTX14362AB-1W-Round White. Parentage (ND102809AB-2 x ND028984B-1). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness: large, blemished skin,

Chip Notes: Dal Chip Color= 2.0 Chip Quality= 1.5 good chip= 100 % BOT

Cutting Notes: greenish flesh

NDTX14467CAB-2W-Round White. Parentage (ND113306C-4 x ND102809AB-2). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength: snap cut

Weakness: not uniform size, bruised

Chip Notes: Dal Chip Color= 1.8 Chip Quality= 3.5 good chip= 30 % 2 Leopard spots

Cutting Notes: knobs brown spot,

NDTX1446CB-2W-White. Parentage (Dakota Diamond x Missaukee). Cross was made in North Dakota and selected in Texas.

Uses:

Strength:

Weakness: deleted

Cutting Notes: large, hollow heart, vascular discoloration

NDTX14475-1W-Oblong White. Parentage (ND113317-5 x ND113057-1). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness: very few tubers, ugly skin, 30% brown center, few tubers, blemished skin

Chip Notes: Dal Chip Color= 3.0 Chip Quality= 2.0 good chip= 66 %, nice

Cutting Notes: hollow heart

NDTX1458-2R-Oblong Red. Parentage (Dakota Jewel x ND113203-2R) Cross was made in North Dakota and selected in Texas.

Uses: fresh

Strength: nice skin

Weakness: light skin color, low tuber set, medium, low tuber number, sliver scurf+++ , very large tubers

Cutting Notes: uniform shape and size, poor seed quality

NDTX1462ABC-1W-Round White. Parentage (Dakota Pearl x ND102800ABC-1). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness: low tuber set, knobs, large tubers

Chip Notes: Dal Chip Color= 2.0 Chip Quality= 2.1 good chip= 68 %

Cutting Notes: not uniform size and shape

NDTX1463AB-12W-White. Parentage (Dakota Pearl x ND102809AB-2). Cross was made in North Dakota and selected in Texas.

Uses:

Strength:

Weakness: deleted

Cutting Notes: large brown spots, hollow heart

NDTX1463AB-16W-White. Parentage (Dakota Pearl x ND102809AB-2). Cross was made in North Dakota and selected in Texas.

Uses:

Strength:

Weakness: deleted

Cutting Notes: brown center, hollow heart

NDTX1463AB-17W-Round White. Parentage (Dakota Pearl x ND102809AB-2). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength: nice size, uniform size and shape

Weakness: some pears, nice, drop (IBS)

Chip Notes: Dal Chip Color= 2.3 Chip Quality= 3.1 good chip= 46 %, 1IBS

Cutting Notes: neuron pattern flesh

NDTX1463AB-19W-White. Parentage (Dakota Pearl x ND102800ABC-1). Cross was made in North Dakota and selected in Texas.

Uses:

Strength:

Weakness: deleted

Cutting Notes: knobs, brown center

NDTX1463AB-1W-Round White. Parentage (Dakota Pearl x ND102809AB-2). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness: large tubers, knobs

Chip Notes: Dal Chip Color= 1.6 Chip Quality= 2.5 good chip= 55 %

Cutting Notes: 1/2 shriveled

NDTX1463AB-4W-Round White. Parentage (Dakota Pearl x ND102809AB-2). Cross was made in North Dakota and selected in Texas.

Uses:

Strength:

Weakness: knobs, growth cracks

Chip Notes: Dal Chip Color=1.7 Chip Quality=2.4 good chip= 51% Good Chip

Cutting Notes: not uniform size and shape

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

Strength: intense red skin smooth skin, nice flesh

Weakness: few tubers, low yield

Cutting Notes: dark red skin color, poor seed quality

NY 152-Round White. Parentage (B38-14 x Marcy). Clone entered by Cornell University.

Uses: chip

Strength: parent, lots of tubers, very uniform, size and shape, nice shape, buff skin, nice, nice smooth skin+, uniform size and shape++, high tuber set, snap cut, shiny

Weakness:

Chip Notes: Dal Chip Color= 1 Chip Quality= 2.1 good chip= 69. % SPR Chip Color= 1 Chip Quality= 2.2 good chip= 28 %, nice, dull color

Cutting Notes: uniform size and shape, small

Olympus-Round White. Parentage (Atlantic x 12601 ab (1)). Clone entered by the Real Potato Company.

Uses: chip

Strength: uniform size and shape

Weakness: poor internals skin darker than other chippers

Chip Notes: Dal Chip Color= 2 Chip Quality= 3.4 good chip= 16 % SPR Chip Color= 2.3 Chip Quality= 3.6 good chip= 20 %

Cutting Notes: attached stolons

OR09256-2-Round Buff. Parentage (Dakota Diamond x Russet Norkotah). Cross made and selected in Oregon. Medium-late maturity. Medium-large vine size. White flower color.

Uses: chip

Strength: nice flesh

Weakness: very small, tubers gone, uneven shape, sticky stolon+, dirty skin, soil attached to skin+++ , russet skin, rough skin

Chip Notes: Dal Chip Color= 2.2 Chip Quality= 3.7 good chip= 35 % SPR Chip Color= 2 Chip Quality= 3.5 good chip= 28 %, 1 dark,

Cutting Notes: appropriate size tubers, uniform shape

ORTX14SP017-2Ru-Oblong Russet. Parentage (OR09158-119 x PA99N2-1) Cross was made in Oregon and selected in Texas.

Uses: fresh

Strength:

Weakness: low tuber number+, medium size, cream colored flesh, blocky

Cutting Notes: some shriveled tubers, pointy

ORTX14SP113-3W-Round White. Parentage (PIROLA x A93575-4PVY). Cross was made in Oregon and selected in Texas.

Uses: chip

Strength: high tuber set, uniform size and shape

Weakness: not uniform size, too small, dull skin, attached stolons

Chip Notes: Dal Chip Color= 2.3 Chip Quality= 3.9 good chip= 17 %, 4 vert

Cutting Notes: half shriveled

PORTX03PG25-2R/R-Round Red/Red. Parentage (PA97B35-1 x PA99P7-2). Cross was made in Prosser, WA, tuberling grown in Oregon and selected in Texas.

Uses: fresh.

Strength: long fingerling++, uniform size, late, heavy set, very dark flesh

Weakness: low tuber set+, knobs, sliver scurf, smaller

Cutting Notes: small tubers, uniform size, pointy, dark red flesh, juicy flesh, niche, some skinning? Intense red flesh, long

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: fresh Strengths: high tuber set

Weakness: sliver scurf++road map, uneven shape, poor skin finish, marbled flesh, white core, FC=3.0, FC=3.9

Cutting Notes: medium size tubers, dark purple flesh, intense purple flesh, marble pattern

Ranger Russet-Long Russet. Parentage (Butte x A6595-3). Cross was made and selected in Idaho. Released in 1991 by USDA-ARS, and the Colorado, Idaho, Oregon and Washington Agricultural Experiment Stations. Medium-late maturity. Large vine size. White flower color.

Uses: fresh

Strength:

Weakness: rustic, knobs+

Cutting Notes: medium sprouts

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

Strength: large tubers, very white flesh

Weakness: deer damage, deep eyes++, ugly

Cutting Notes: deep eyes large tubers, dark red skin

Reveille Russet-Oblong Russet. Parentage (A81473-2 x A8343-12) Cross was made in Idaho and selected in Texas. Medium maturity. Medium vine size. Lavender flower color.

Uses: fresh

Strength: BOT++, very nice, larger tubers and lighter skin than Russet Norkotah, nice skin color, shape and size

Weakness: knobs++, enlarged lenticels, low tuber set, deer damage+, 3 heart shaped, ZC 10%, very slight vascular discoloration

Cutting Notes: growth cracks (well healed), nice shape and size

Russet Burbank-Long Russet. Luther Burbank reported the origin of Russet Burbank in 1914 as a chimeric 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: fresh

Strength:

Weakness: knobs++, skinny, ugly, many culls, does not like Texas

Cutting Notes: growth cracks, pointed, pressure cracks

Russet Norkotah²⁷⁸-Oblong-Long Russet. Parentage (ND95264Ru x ND9687-5Ru). Russet Norkotah cross was made and selected in North Dakota. Russet Norkotah 278 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

Strength: nice shape and size, BOT, very nice skin, light eye color, nice skin

Weakness: low yield, heat sprouts, ZC 20%,

Cutting Notes: nice shape, 1/2 shriveled seed

Russet Norkotah²⁹⁶-Oblong-Long Russet. Parentage (ND95264Ru x ND9687-5Ru). Russet Norkotah

ross was made and selected in North Dakota. Russet Norkotah 296 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

Strength: nice shape and skin, uniform size and shape

Weakness:

Cutting Notes: small, nice shape, hollow heart, 1/2 shriveled seed

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

Strength: high tuber set, very nice shape+, uniform size and shape, good russetting, less deer damage than Reveille Russet

Weakness: enlarged lenticels+, some moon shaped, hearts, pointy

Cutting Notes: nice shape and size, uniform size and shape, oblong

Shepody-Long White. Parentage (Bake King x F58050). Selected in New Brunswick, Canada and released by Agriculture Canada, New Brunswick in 1980. Medium-late maturity. Medium vine size. Light violet flower color with white tips.

Uses: dual

Strength:

Weakness: knobs++, light skin, attached stolons 20% SE, many culls, smooth skin, ugly skin+

Cutting Notes: not uniform shape, long

Sierra Gold (056)-Round-Oblong Russet/Yellow. Parentage (Krantz x Delta Gold). Cross was made and selected in Texas. Early maturity. Medium vine size.

Uses: fresh

Strength: large tubers+, BOT++,

Weakness: low tuber set, few tubers, knobs+, not uniform size, FC=3.0, FC=2.3

Cutting Notes: uniform size and shape

Sierra Rose-Oblong Red/Yellow. Parentage (A90601-2RDY X Mazama). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas. Early maturity. Medium vine size. Purple flower color

Uses: fresh

Strength: high tuber set, large tubers, intense skin color+++ , BOT+, smooth, very nice, uniform size and shape

Weakness: scab, few tubers, not uniform size, sliver scurf+++ , medium size, medium tuber set pear shaped, FC=3.1, FC=2.1

Cutting Notes: dark skin color, medium size, medium yellow flesh, lots of silver scurf, small

Snowden-Oblong White. Parentage (B5141-6 x Wischip). Cross was made and selected at the University of Wisconsin. Medium-late maturity. Large vine size. White flower color.

Uses: chip

Strength: buff skin

Weakness: knobs, enlarged lenticels, chunky, some attached stolons, rough shape,

Chip Notes: Dal Chip Color= 1.7 Chip Quality= 2.9 good chip= 47 % SPR Chip Color= 1.8 Chip Quality= 3.6 good chip= 40 % CR=1.8, CR=1.8, 40% good chip, 48% good chip

Cutting Notes: medium

Stampede Russet-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

Strength: very nice shape and skin uniform russet skin, nice shape, blocky several large tubers, nice

Weakness: pointed low yield,

Cutting Notes: nice shape, some shriveled, 1/2 shriveled seed ZC 10%,

Taisiya-Oblong White/Yellow. Parentage (??). Clone entered by Real Potato Company.

Uses: fresh

Strength: nice skin and flesh, high tuber set++

TX05249-10W- Round White. Parentage (Gem Russet x A91790-13). Cross was made and selected in Texas.

Uses: chip

Strength: high tuber set snap cut+, smooth shiny skin, nice size, nice flesh,

Weakness: shoulders, scab, knobs, pear shaped, large tubers, russet skin not uniform size

Chip Notes: Dal Chip Color= 1.5 Chip Quality= 3.0 good chip= 50 % SPR Chip Color= 1.0 Chip Quality= 3.0 good chip= 55 %, 1Vert

Cutting Notes: some shriveling, uniform size and shape, good storage, not shriveled

TX08352-5Ru-Long Russet. Parentage (TXA549-1Ru x AOTX98137-1RU). Cross was made and selected in Texas.

Uses: fresh

Strength: high yield, very nice shape, flesh, and skin, BOT++, nice skin, finish, uniformly large tubers+,

Weakness: knobs, enlarged lenticels, a little pointy

Cutting Notes: very big, chunky, very large, knobs, ugly, hollow heart, long

TX09396-1W- Round White Parentage (Atlantic x NY139) Cross was made and selected in Texas.

Uses: chip

Strength: nice shape, snap cut

Weakness: pear shape, sticky stolon, flat, feathering, large tubers, not uniform shape, a little flat some feathering

Chip Notes: Dal Chip Color= 2.75 Chip Quality= 3.575 good chip= 27.5 % SPR Chip Color= 2.5 Chip Quality= 4.1 good chip= 10 %

Cutting Notes: uniform size and shape, nice

TX09406S-1P/P-Round Purple/Purple. Parentage (A99331-2RY x CO00405-1R) Cross was made and selected in Texas.

Uses: fresh

Strength: very dark skin color (almost black), shiny, very uniform size and shape+, very high

tuber set,

Weakness: late, sliver scurf+++ , marble flesh color+ , some white streaking, feathering FC=4.5, FC=4.5

Cutting Notes: bad seed (rotten), dark purple flesh, soft marble pattern, uniform size and shape

TX09429-1P/P-Oblong Purple Parentage (COTX0325-1P/P x COTX04050-1P/P) Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength: purple skin and flesh

Weakness: not a chipper (maybe French fry), some rot, some white flesh streaks+ , bronze skin+ small purple skin and flesh, very few tubers, purple, road map+ , some white streaks in flesh+ , silver scurf

Chip Notes: Dal Chip Color= 5.0 Chip Quality= 3.5 good chip= 46 % SPR Chip Color= 5.0 Chip Quality= 4.0 good chip= 16 % , 3 dark

Cutting Notes: dark purple flesh, good seed quality, long sprouts, appropriate size tubers, small, some white flesh marks

TX11448-2R-Oblong Red Parentage (Rio Rojo x COTX94218-1R) Cross was made and selected in Texas.

Uses: fresh

Strength: high tuber set deeper red, Bruce like, David looks good and round shape nice skin color and shape shiny skin

Weakness: dull skin color late, very small, attached stolon, some deep eyes not uniform size+ , deep bud end, sliver scurf+++ ,

Cutting Notes: medium, very uniform size, scab, for Bruce B

TX12471-1R/Y-Oblong Red/Yellow. Parentage (COTX94218-1R x CO04021-2R/Y). Cross was made and selected in Texas.

Uses: fresh

Strength: intense skin color++ , nice skin

Weakness: deer damage, small, mixed skin color feathering, flat, FC=3.5

Cutting Notes: medium yellow flesh, mixed with white flesh, rotting, drop, mix?, bad seed, ugly, not uniform shape and size

TX12471-6W/Y-Round White/Yellow. Parentage (COTX94218-1R x CO04021-2R/Y). Cross was made and selected in Texas.

Uses: fresh

Strength: nice skin very uniform size and shape+, high tuber set++, smooth skin, shiny skin

Weakness: chip? +, light flesh, large for small FC=2.4FC=2.7

Cutting Notes: small/medium tubers, medium yellow flesh, nice, small

TX12472-4R-Round Red/Yellow. Parentage (COTX94218-1R x COTX04188-3R/Y). Cross was made and selected in Texas.

Uses: fresh

Strength: uniform size and shape, high tuber set+, nice skin color, high set

Weakness: sliver scurf+, light skin color, late, ZC, black dot??, poor internals?? FC=1.5

Cutting Notes: small, champagne skin color small,

TX12474-1R/R-Round Purple/Red. Parentage (CO04045-4P/P x CO03027-2R/R). Cross was made and selected in Texas.

Uses: chip

Strength: small uniform size and shape

Weakness: low tuber set, 80% pigmented spots, bronze skin+, road map skin, drop road map, poor internals, drop,

Chip Notes: Dal Chip Color= 5 Chip Quality= 4 good chip= 8 %Chip Color=5.0 Chip Quality=4.8 good chip=0%, 11 spots; DROP++, spots++, 21 dark

Cutting Notes: uneven pink flesh, good seed dark red/pink spots,

TX12483-4W-Oblong White. Parentage (TX08402 x Snowden). Cross was made and selected in Texas.

Uses: chip

Strength: nice flesh,

Weakness: not uniform size and shape, larger tubers, sticky stolon+, rough, deep stolon

attachment, shoulder, uneven skin

Chip Notes: SPR Chip Color= 1.5 Chip Quality= 3.4 good chip= 50 %

Cutting Notes: dark apical end attached stolons, bud ends

TX12483-5W-Round White. Parentage (TX08402 x Snowden). Cross was made and selected in Texas.

Uses: chip

Strength: nice flesh,

Weakness: mixed white and yellow flesh, shoulders very few tubers, ugly skin++, scab, ugly shape

Chip Notes: Dal Chip Color= 1.8 Chip Quality= 2.6 good chip= 55 % SPR Chip Color= 2.5 Chip Quality= 3.4 good chip= 53 % different from other rep, looks greasy and/or more yellow

Cutting Notes: good seed, not uniform shape, hollow heart

TX12483-6W-Round White. Parentage (TX08402 x Snowden). Cross was made and selected in Texas.

Uses: chip

Strength: nice shape

Weakness: russet skin, uneven russetting, circular russet defect, alligator skin mixed, russet skin+, shoulders,

Chip Notes: Dal Chip Color= 2.3 Chip Quality= 2.2 good chip= 81 % SPR Chip Color= 1.0 Chip Quality= 3.4 good chip= 40 % 1 dark, BOT

Cutting Notes: russet skin, good seed quality, large, translucent flesh, darkening, nice shape and size, not uniform russetting

TX12484-1W ZC-Oblong White. Parentage (TX08402 x NDTX059828-2W). Cross was made and selected in Texas.

Uses: chip

Strength: smooth skin+, shiny, snap cut, nice skin and size

Weakness: some long, knobs, a few very large, mixed? ++, mixed yellow and white skin, poor shape, pink eyes, light skin

Chip Notes: Dal Chip Color= 1.5 Chip Quality= 2.8 good chip= 46 % SPR Chip Color= 1.5 Chip Quality= 3.5 good chip= 24 %

Cutting Notes: some sprouts 1/4 in, medium seed quality, nice uniform shape and size, 1 brown center (fusarium?)

TX12484-2W ZC-Round White. Parentage (TX08402 x NDTX059828-2W). Cross was made and selected in Texas.

Uses: chip

Strength: nice skin,

Weakness: poor shape, pink eyes+, champagne skin++, large tubers, mixed+, scab, ugly skin,

Chip Notes: Dal Chip Color= 2.0 Chip Quality= 2.6 good chip= 31 % SPR Chip Color= 1.0 Chip Quality= 3.7 good chip= 5 %

Cutting Notes: variable size, vascular discoloration, good seed, not shriveled

TX12484-3W ZC-Round White. Parentage (TX08402 x NDTX059828-2W). Cross was made and selected in Texas.

Uses: chip

Strength: smooth skin, nice flesh, high tuber set, uniform size and shape,

Weakness: mixed colors, skin blemished skin, large tubers

Chip Notes: Dal Chip Color= 1.8 Chip Quality= 2.7 good chip= 57 % SPR Chip Color= 1.5 Chip Quality= 3.5 good chip= 16 %

Cutting Notes: large tubers, shriveled seed, long sprouts, lots of tubers, all shriveled

TX13512-1Ru-Long Russet. Parentage (Stampede Russet x TXA549-1Ru). Cross was made and selected in Texas.

Uses: fresh

Strength: nice shape,

Weakness: heat sprouts, low yield, ZC 10%, uneven russetting between tubers, mixed, flat, pointed, blocky, knobs

Cutting Notes: blocky, nice skin, shriveled tubers, not uniform size and shape round to oblong

TX13524-2R-Round Red. Parentage (NDTX4271-5R x ATTX06246-1R). Cross was made and selected in Texas.

Uses: fresh

Strength: high tuber set

Weakness: small+++ , not uniform size, sliver scurf+++ , rood mapping

Cutting Notes: small, half shriveled, small, uniform size and shape

TX13563-1W-Round White. Parentage (Snowden x ATX05202-3W/Y). Cross was made and selected in Texas.

Uses: chip

Strength:

Weakness: Deleted

Chip Notes:

Cutting Notes: petite tubers

TX13580-1W-Round White. Parentage (Waneta x 00-3315-11). Cross was made and selected in Texas.

Uses: chip

Strength: nice skin, shape, and flesh,

Weakness: very low yield, small, low set, buff skin, late? +, small, not uniform size, few tubers, compressed,

Chip Notes: Dal Chip Color= 1.5 Chip Quality= 2.6 good chip= 33 % SPR Chip Color= 1.5 Chip Quality= 3.3 good chip= 47 %, 5 dark, nice

Cutting Notes: stolons attached, shriveled seed, most shriveled

TX13582-3W-Round White. Parentage (Waneta x PALB03016-3). Cross was made and selected in Texas.

Uses: fresh

Strength: snap cut,

Weakness: few tubers, dull skin color++, enlarged lenticels+, ugly skin, compressed tubers+, white and yellow flesh mixed, feathering, buff skin, light set, FC=1.0, FC=1.0

Cutting Notes: small, long sprouts, 75% shriveled

TX13582-4W-Round White. Parentage (Waneta x PALB03016-3). Cross was made and selected in

Texas.

Uses: fresh

Strength: high tuber set

Weakness: dull skin color+, ugly skin, FC=1.0

Cutting Notes: long sprouts, shrinkage 1/2

TX13582-5W-Round White. Parentage (Waneta x PALB03016-3). Cross was made and selected in

Texas.

Uses: fresh

Strength: nice shape, high tuber set,

Weakness: light set, small, feathering, dull skin color++, ugly skin, compressed tubers, FC=1.0,
FC=1.0

Cutting Notes: small tubers, russet skin, 1/2 shrinkage, medium sprouts, uniform shape and size

TX13590-9Ru-Long Russet. Parentage (PALB03016-3 x Waneta). Cross was made and selected in

Texas.

Uses: fresh

Strength: high tuber set+, blocky, uniform size, nice, uniform russetting, high yield

Weakness: heat sprouts, light skin

Cutting Notes: small, uniform size and shape

TX14596-1Ru-Russet. Parentage (Russet Burbank x A02138-2). Cross was made and selected in Texas.

Uses: fresh

Strength: very nice russet skin+, nice shape+

Weakness: very low tuber number+, pointed

Cutting Notes: knobs, growth cracks, not uniform size and shape

TX14602-2W/Y-Round White/Yellow. Parentage (COTX05095-2Ru/Y x Atlantic). Cross was made and selected in Texas.

Uses: chip

Strength: large tubers++, smooth skin, high tuber set

Weakness: rough skin, FC=2.5

Cutting Notes:

TX14605-4Ru-Long Russet. Parentage (TX08351-5Ru x A02138-2). Cross was made and selected in Texas.

Uses: fresh

Strength:

Weakness: hollow heart, oblong, low tuber set, small

Cutting Notes: hollow heart

TX14607-4Ru-Long Russet. Parentage (TX08352-5Ru x A02138-2). Cross was made and selected in Texas.

Uses: fresh

Strength:

Weakness: low tuber number, not uniform size

Cutting Notes: vascular discoloration, small tubers, nice skin

TX14611-1R-Round Red. Parentage (BTX2332-1R x COTX04050-1P/P). Cross was made and selected in Texas.

Uses: fresh

Strength:

Weakness: small++, not uniform size+, low tuber set++, sliver scurf+++, attached stolons

Cutting Notes: excellent seed quality, uniform size and shape

TX14612-1R-Oblong Red. Parentage (BTX2332-1R x NDTX4784-7R). Cross was made and selected in Texas.

Uses: fresh

Strength: high tuber set, uniform size, nice, new market type based on shape

Weakness: large tubers, growth cracks+, sliver scurf++,

Cutting Notes: decent seed quality, brown center, oblong

TX14614-1R-Red. Parentage (COTX02172-1R x BTX2332-1R). Cross was made and selected in Texas.

Uses: fresh

Strength:

Weakness: Deleted

Cutting Notes:

TX14614-3R-Round Red. Parentage (COTX02172-1R x BTX2332-1R). Cross was made and selected in Texas.

Uses: fresh

Strength: high tuber set

Weakness: low tuber set, not uniform size, small, sliver scurf, sliver scurf+++ , stem end discoloration (80%)

Cutting Notes:

TX14615-3R-Round Red. Parentage (COTX02172-1R x NDTX4784-7R). Cross was made and selected in Texas.

Uses: fresh

Strength: nice bright skin, intense red skin color, high tuber set++ BOT,

Weakness: few tubers, feathering, sliver scurf+++ , large tubers, black bruising on skin+

Cutting Notes: shallow eyes, not uniform shape and size

TX14615-4R-Round Red. Parentage (COTX02172-1R x NDTX4784-7R). Cross was made and selected in Texas.

Uses: fresh

Strength: nice, David not bad looking, nice skin color and shape, very white flesh, high tuber set+, uniform shape

Weakness: light skin color low tuber set, not uniform size, few tubers, oval, sliver scurf+++ , scab

Cutting Notes: internal brown spots, very poor seed quality

TX14619-1R-Oblong Red. Parentage (NDTX4784-7R x BTX2332-1R). Cross was made and selected in Texas.

Uses: fresh

Strength: uniform size,

Weakness: large tubers+, long to oblong, low tuber set, sliver scurf++, growth cracks+, black bruising on skin

Cutting Notes: large tubers, poor seed, oblong

TX14619-2R-Round Red. Parentage (NDTX4784-7R x BTX2332-1R). Cross was made and selected in Texas.

Uses: fresh

Strength: uniform size and shape,

Weakness: sliver scurf, pink spots in flesh

Cutting Notes: decent seed quality

TX14621-2R-Round Red. Parentage (NDTX4784-7R x NDTX081648CB-4W). Cross was made and selected in Texas.

Uses: fresh

Strength:

Weakness: not uniform size+, sliver scurf+, large tubers+

Cutting Notes: poor seed, uniform shape and size

TX14621-3R-Round Red. Parentage (NDTX4784-7R x NDTX081648CB-4W). Cross was made and selected in Texas.

Uses: fresh

Strength:

Weakness: deep bud end, drop, very low tuber set, sliver scurf+, growth cracks, very few tubers, lots of culls

Cutting Notes: poor seed, uniform shape and size

TX14622-1R- Round Red. Parentage (NDTX5438-11R x NDTX4784-7R). Cross was made and selected in Texas.

Uses: fresh

Strength:

Weakness: attached stolons, very low tuber set, very large tubers+++, sliver scurf+++, growth cracks

Cutting Notes: nice skin color, very large, not uniform shape and size

TX14622-2R- Round Red. Parentage (NDTX5438-11R x NDTX4784-7R). Cross was made and selected in Texas.

Uses: fresh

Strength: intense red skin color,

Weakness: low tuber set, very large, not uniform shape and size, sliver scurf+++, black bruising on skin+

Cutting Notes: very large, not uniform shape and size

TX14626-1R/R Y-Round Red/Red. Parentage (TX09420-1R/Y x NDTX4784-7R). Cross was made and selected in Texas.

Uses: fresh

Strength: intense red skin,

Weakness: sliver scurf, flesh white with tint of pink, FC=1.0

Cutting Notes: pink flesh pattern, oval

TX14626-2R/R Y-Round Red/Yellow. Parentage (TX09420-1R/Y x NDTX4784-7R). Cross was made and selected in Texas.

Uses: fresh

Strength: BOT, intense red skin, nice, nice size, parent, TC, chip if high gravity,

Weakness: feathering+, large tubers, sliver scurf+++, skin blemished, yellow flesh with purple streaks, FC=2.0 FC=2.0

Cutting Notes: pink streaking flesh pattern, poor seed quality, not uniform size and shape

TX14632-2R-Red. Parentage (ATTX05186-3W/Y x NDTX059759-3Pinto/Y). Cross was made and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes:

TX14646-1W-R/Y Pinto-Red Pinto/Yellow. Parentage (NDTX059759-3Pinto x BTX2332-1R). Cross was made and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes:

TX14668-3W ZC-Round White. Parentage (Waneta x ATTX07042-3W). Cross was made and selected in Texas.

Uses: fresh

Strength:

Weakness: very large tubers++,

Chip Notes: Dal Chip Color= 2.3 Chip Quality= 3.3 good chip= 34 %

TX14669-2W/Y-Round White/Yellow. Parentage (AC00206-2W x ATTX07042-3W). Cross was made and selected in Texas.

Uses: fresh

Strength:

Weakness: very small, angular shaped, attached stolons, knobs, FC=2.1

Cutting Notes:

TX14669-4W/Y-White/Yellow. Parentage (AC00206-2W x ATTX07042-3W). Cross was made and selected in Texas.

Uses: fresh

Strength:

Weakness: Deleted

Cutting Notes: drop, translucent flesh

TX14670-2W/Y-Round White/Yellow. Parentage (MSN190-2 x ATTX07042-3W). Cross was made and selected in Texas.

Uses: fresh

Strength:

Weakness: not uniform size+, large tubers+, rough looking skin+, not uniform flesh color, knobs, enlarged lenticels, FC=1.5

Cutting Notes:

TX14675-1W/Y-Round White/Yellow. Parentage (NDTX081648CB-4W x Waneta). Cross was made and selected in Texas.

Uses: chip

Strength: high tuber set, medium-large, smooth skin, uniform size and shape

Weakness: FC=1.9

Cutting Notes:

TX14675-3W/Y-White/Yellow. Parentage (NDTX081648CB-4W x Waneta). Cross was made and selected in Texas.

Uses: fresh

Strength:

Weakness: Deleted

Cutting Notes:

TX14681-4W-Round White. Parentage (NDTX060700C-1W x BTX2332-1R). Cross was made and selected in Texas.

Uses: chip

Strength: smooth skin, nice,

Weakness: small, few tubers

Chip Notes: Dal Chip Color= 2 Chip Quality= 3.4 good chip= 32 %

Cutting Notes: medium tubers

TX14695-2W ZC-Round White. Parentage (TX09396-1W x AOR07793-1). Cross was made and selected in Texas.

Uses: chip

Strength: smooth skin,

Weakness: long, too big and long, drop for shape, CR=2.1,

Chip Notes: Dal Chip Color= 1.3 Chip Quality= 2.1 good chip= 75 %, nice

Cutting Notes: for Sam, knobs, not a chipper, type oblong, not uniform size and shape

TX14697-5W. Parentage (AF4386-16 x MST191-2Y). Cross was made and selected in Texas.

Uses: chip

Strength:

Weakness: Deleted

Cutting Notes: not uniform size and shape

TX14710-4W ZC-Round White. Parentage (TX05249-11W x AOR07793-1). Cross was made and selected in Texas.

Uses: chip

Strength:

Weakness:

Chip Notes: Dal Chip Color= 1.0 Chip Quality= 2.6 good chip= 30 %

Cutting Notes: for Sam, uniform size and shape

TX14710-7W ZC-Round White. Parentage (TX05249-11W x AOR07793-1). Cross was made and selected in Texas.

Uses: chip

Strength: smooth skin, shiny

Weakness: knobs, scab+, a little flat+,

Chip Notes: Dal Chip Color= 1.8 Chip Quality= 3.2 good chip= 35 %

Cutting Notes: for Sam, not uniform size or shape, second set of tubers

TXA549-1Ru-Oval Russet. Parentage (ND9687-3Ru x ND9852-1Ru). Cross was made in Texas,

selected in Idaho and tested extensively in Alberta, Canada. Medium-late maturity. Medium-large vine size. Purple flower color with white tips.

Uses: fresh

Strength: high tuber set,

Weakness: pointed, angular, blocky, dislike shape, blocky, flat

Cutting Notes: nice shape, round to oblong

TXWL-1-Oblong White. Parentage (Triumph x Katahdin).

Uses: fresh

Strength: high yield, pink splash,

Weakness: deep eyes, rough, large tubers++, wild looking, ugly, FC=1.0, FC=1.0

Cutting Notes: dark yellow skin with pink splashes

W5955-1-Round White. Parentage (Pike x with Dakota Pearl). Cross made and selected at the University Wisconsin.

Uses: chip

Strength: high tuber set, uniform size, nice shape+

Weakness: not uniform size, not smooth skin, enlarged lenticels, some pear-shaped, buff skin

Chip Notes: Dal Chip Color= 2 Chip Quality= 3.1 good chip= 49% SPR Chip Color= 1.7 Chip Quality= 3.3 good chip= 50 %

Cutting Notes: greenish flesh, buff skin, uniform size and shape, hard to cut

W2978-3-Round White. Parentage (Monticello x Dakota Pearl). Cross made and selected at the University Wisconsin.

Uses: chip

Strength: nice size, nice smooth skin+, very uniform size and shape+, high tuber set, very light skin+, shiny,

Weakness: some knobs, very small tubers, few eyes

Chip Notes: Dal Chip Color= 1 Chip Quality= 1.6 good chip= 85 % SPR Chip Color= 1 Chip Quality= 2.5 good chip= 59 %, BOT

Cutting Notes:

Waneta-Oblong White. Parentage (??). Cross made and selected at Cornell University.

Uses: chip

Strength: nice, uniform size and shape, high yield

Weakness: mixed, large tubers,

Chip Notes: Dal Chip Color= 1.2 Chip Quality= 1.9 good chip= 78 %

Cutting Notes:

Wendy-Oblong White/Yellow. Parentage (??). Cross was made by Norika.

Uses: fresh

Strength: BOT++, parent, small, nice skin finish, high tuber set++,

Weakness:

Cutting Notes: oblong, yellow fresh, dirt spots on skin, ugly skin, dirty spots

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 and Food, Guelph, Ontario. Medium-early maturity. Medium-large vine size. Violet flower color.

Uses: fresh

Strength: large tubers, nice shape, smooth skin, no silver scurf,

Weakness: poor internals++, large not uniform, knobs+, very large tubers+++, FC=2.8

Cutting Notes: nice, large tubers, medium yellow skin, few eyes, hard to cut, not uniform shape and size

Appendix B. Parentage of potato varieties or selections-2017.

Variety or Selection	Parentage
Ackersegen	Hindenburg x Allerfrueste
Actrice	DENISE x AGATA
Adora	Pimura x Alcmaria
Agria	Quarta x Semlo
Alegria	Divina x 3.169 010-86
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
Baltic Cream	?
Banana	?
Beacon Chipper	??
Bettina	?
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	Binje x Record
Courage	
Dakota Jewel	ND2223-8R x ND649-4R
Dark Red Norland	Redkote x ND626
Day-9	
Delikat	
Desiree	Urgenta x Depesche
Diamante	TDV54-30-8 x SVP55-89
Dore	Duke of York x BiermaA7

Variety or Selection	Parentage
Eerstelling	Early Primrose x King Kidney
Eigenheimer	Blaue Riesen x Fransen
Electra	C1992/42 x Picasso
Emma	Colleen x Estima
Estima	
Fabula	
Florissant	Premiere x VK 69-491
Fortress Russet	AWN86514-2 x A89384-10
Fortuna	
Foxton	Irene x Maris Piper
Gasora	?
German Butter Ball	
Golden Sunburst	
Granola	3333 60 x 267 04
Green Mountain	Dunmore x Excelsior
Hertha	Dijkhuis61-133 x Konst62-374
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	
Krasaua	Visnovske Rohlic x B53
La Rouge	LaSoda x Progress
Lamoka	NY120 x NY115
Lanorma	Bydand x Caesar
Latona	Jaerla x Nicola
Magic Molly	Open pollinated seed ball from Red Beauty
Maris Piper	
Mazama	ND1196-2R x Redsen
MegaChip	Wischip x FYF85
Merlin	Cara x 93/2
Modoc	ND1196-2R x ND2225-1R
Molli	
Mondial	Spunta x Ve 66-295
Morning Gold	Olinda x Y 68-4-103
Nectar	Famosa x Red Cara
NorDonna	ND206-1R x ND821-6R
Norgold-M	ND2475-8 x A119-1
NorValley	NorChip x ND860-2

Variety or Selection	Parentage
Olympus	Atlantic x 12601 ab
Oscar	Desiree x VK 64 491
Ottar	Dore x DsxAS-737
Pacific Russet	NDA8694-3 x Century Russet
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
Red LaSoda-	Triumph x Katahdin
Reveille Russet-	A81473-2 x A8343-12
Rio Rojo	ND1562-4R x NDTX9-1098-11R
Rodeo	Mondial x Bimonda
Rosara	Secura x 2605 77
Rose Gold	Abnaki x G6521-4RY
Russet Burbank	Mutant from Burbank
Russet Legend	Century Russet x WNC672-2
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	Bake King x F58050
Sierra Gold™	Krantz x Delta Gold
Sierra Rose	A90601-2RDY X MAZAMA
Smiley	?
Snowden	B5141-6 x Wischip
Soraya	?

Variety or Selection	Parentage
Sprint	SIRCO x MIN 72-74
Stampede Russet	BR7091-1 x Lemhi Russet
Strobrawa	MPI55 957/54 x Mira
Super Red	
Taisiya-	??
Tebina	?
Ukama	Marijke x Sirtema
Urgenta	Furore x Katahdin
US Blue	?
Valisa	
Viking	Redskin x Nordak
Vivaldi	TZ 77-148 x Monalisa
Vokal	Primura x Rheinhort
Waneta	??
Winema	Redsen x ND1196-2R
Yellow Finn	
Yukon Gold	W5279-4 x NorGleam
Numbered Clones	
A03141-6	A098083-9 x Premier Russet
A06030-23	A99133-6 x Premier Russet
A06336-2Y	VC1009-1W/Y x US 147-96 R/Y
A06336-5Y	VC1009-1W/Y x US 147-96 R/Y
A07061-6	Targhee Russet x Clearwater Russet
A08009-2TE	A00727-1 x A02060-3TE
A08433-4VR	A01667-3 x AOND95249-1Russ
AC01144-1W	COA96141-2 x Willamette
AC03534-2R/Y	ATA98472-2Y x Mazama
AO03123-2	A98082-17 x Premier R
AO06191-1	A99134-1 x AC92009-4RU
AOR06070-1KF	Premier R x AO96164-1
AOR07781-5	PA92A08-17 x PALB03035-6
AOR09034-3	Boulder x A03449-2C
AORTX09032-3W	A03449-2C x Ivory Crisp
AORTX09033-11W	CO96141-4W x Ivory Crisp
AORTX09033-14W	CO96141-4W x Ivory Crisp
AORTX09033-4W	CO96141-4W x Ivory Crisp
AORTX09037-1W/Y	Fasan x Ivory Crisp
AORTX09037-3W/Y	Fasan x Ivory Crisp
AORTX09037-4W/Y	Fasan x Ivory Crisp
AORTX09037-5W/Y	Fasan x Ivory Crisp

Variety or Selection	Parentage
AORTX09144-2W	A02516-102LB x PALB03016-3
AORTX10247-1W/Y	Lady Britta x NY139
AORTX11913-3Wre/Y	A03576-5Y x NDA050237B-1R
AORTX11913-4P/W	A03576-5Y x NDA050237B-1R
AORTX13021-4/W	A06021-1T x A98345-1
AORTX13077-3W	A071012-4BF x A06084-1TE
AORTX13175-1WSPL	Barbara x CO02321-4W
AOTX05043-1Ru	A99032-2TE x Summit Russet
ATX05175S-1R/Y	A99331-2RY X COA99261-IRY
ATX05175S-1R/Y	A99331-2RY X COA99261-IRY
ATX05186-2R	A99433-5Y x VC1075-1R
ATX07230-4Y/RE/Y	AO0286-3Y y x Modoc red 500
ATX10265-4R/Y	A02267-2PY X US 147-96RIY
ATX11484-3W	A05158-2C X 00-3115-11
ATX11591-1W/Y	A05175-7RY x A05201-1Y
ATX98444S-16R/Y	A83360-9R X T48YF
ATX98493-2P/P	P94A2-3Y X BO811-13RY
ATX98514-1R/Y	T51YF X A93456-6R
ATX02263-1R/Y	Inca Gold x A92653-6R
ATX05186S-1R	A99433-5Y x VC1075-1R
ATX05202S-3W/Y	A00286-3Y x A99433-5Y
ATX06264S-4R/Y	A99331-2RY x Durango Red
ATX08121-3P/Y	A02267-5PY x CO98012-5R
ATX08121-5R	A02267-5PY x CO98012-5R
ATX08215-6W/Y	COA00272-1C x A02257-1Y
ATX08215-7W/Y	COA00272-1C x A02257-1Y
ATX09044-2W/Y	COA04189-1DY x Jaerla
ATX10325-1W/Y	A02267-1Y x Teena
ATX10675-1Ru	A05379-217 x Dakota Trailblazer
ATX11379-1Ru	AO00057-2 x Clearwater Russet
ATX11482-3W	A05158-2C x M5
ATX11533-1W/Y	V15-71 x A03449-2C
ATX11548-1R	NDA050237B-1R x NDA050204-1R
ATX11567-1W/Y	A02267-1Y x A05201-1Y
ATX11952-1Ru	A02515-2 x A98196-5
ATX12015-2Ru	A03158-2TE x PA08NCBD2-2
ATX12058-1Ru	A01010-1 x A07030-12TE
ATX12077-5W	A071012-4BF x A06084-1TE
ATX13108-2Ru	Dakota Trailblazer x A061071-3CSR
ATX13126-3W	MSR061-1 x CO95051-7W

Variety or Selection	Parentage
ATX13126-5Ru	MSR061-1 x CO95051-7W
ATX13127-1Ru	W2717-5 x CO02321-4W
ATX13134-3W/Y	NDA081451CB-1CY x CO02321-4W
B2727-2	B0766-3 x B2135-163
BTX1749-1W/Y	K7-6 x BO925-4
BTX2103-1R/Y	BO811-13 x ARS-W82-21285-1
BTX2332-1R	B1523-4 x Super Red Norland
CO05035-1PW/Y	Masquerade x US147-96
CO08037-2P/P	CO03031-2R/Rx CO97215-2P/P
CO08065-2RU	Premier Russet x AC98043-2RU
CO08155-2RU/Y	Fortress Russet x Innovator
CO08231-1RU	Crestone Russet x Sage Russet
CO09036-2RU	AO98282-5 x CO03267-4RU
CO09076-3RU	CO03380-2RU x CO03202-1RU
CO09079-5PW/Y	CO04117-5PW/Y x A00286-3Y
CO09127-3W/Y	A00293-2Y x CO00412-5W/Y
CO09128-3W/Y	A00293-2Y x CO03060-2W/Y
CO09128-5W/Y	A00293-2Y x CO03060-2W/Y
CO09165-6W	AC02188-1RU x Crestone Russet
CO09205-2RU	AOA95154-1 x CO95086-8RU
CO09218-4W/Y	ATC00293-1W/Y x CO00412-5W/Y
CO99076-6R	AC91848-1 x Rio Colorado
COA07365-4RY	US147-96 x CO99256-2R
COTX00104-6R	ND3574-5R X C086218-2
COTX03134-1W	Laratte x PA97B36-3
COTX04050S-1P/P	CO97215-2P/P x CO97306-2P/P
COTX04193S-2R/Y	ATC98515-1R/Y x ND3574-5R
COTX05095-2Ru/Y	CO99045-1W/Y x AO96164-1
COTX05249-3W/Y	CO00320-1R x ATC98509-1R/Y
COTX07054-2R	ATDC9801-3P x CO99076-6R
COTX08322-10Ru	Blazer Russet x AC96052-1RU
COTX08365F-1P/P	POR01PG16-1 x CO00405-1R
COTX09022-3RuRE/Y	A00286-3Y x CO99100-1RU
COTX09052-2Ru	CO03202-1RU x CO98067-7RU
COTX10012-1WRDspl/Y	A00286-3Y x ATC00293-1W/Y
COTX10013-6RuRDspl/Y	A00286-3Y x CO98067-7RU
COTX10073S-1W	A97066-42LB x Alpine Russet
COTX10080-2Ru	CO03364-5RU x CO98067-7RU
COTX10097-2W/Y	CO04067-10W/Y x CO00412-5W/Y
COTX10118-1WRE/Y	07S019 x AC03534-2R/Y

Variety or Selection	Parentage
COTX10118-4WPUE/Y	07S019 x AC03534-2R/Y
COTX10138-15WPUE/Y	AC99329-7PW/Y x AC03534-2R/Y
COTX10138-19P/Y	AC99329-7PW/Y x AC03534-2R/Y
COTX10138S-7W/Y	AC99329-7PW/Y x AC03534-2R/Y
COTX12235-2W	AC00206-2W x AC03433-1W
COTX12428-1W	MSQ070-1 x CO02024-9W
COTX13008-5W	Fortress Russet x CO06057-3RU
COTX13215-1Ru	A02507-2LB x CO05110-6RU
COTX13215-2Ru	A02507-2LB x CO05110-6RU
COTX13366-1W	CO07070-10W x CO02321-4W
COTX13413-1Ru	Dakota Trailblazer x AO02183-2
COTX14035-1R	CO99076-6R x NDC081655-1R
COTX14132-1Ru	POR06V12-3 x AC05039-2RU
COTX14250-1Ru	AF3362-1 x A06021-1T
COTX14284-2Ru/Y	CO97237-4RU/Y x AC06358-1W/Y
MSV030-4	Beacon Chipper x MSG227-2
MSV358-3	MSP239-1 x OP
MSV358-3	MSP239-1 x OP
MSW485-2	MSQ070-1 x MSR156-7
MSX540-4	R061-1 x Lamoka
NDA081453CAB-2C	Dakota Diamond x ND 039173CAB-22
NDTX059759-3RY/Y Pinto	ATND 99331-2 Pinto x ND 7834-2P
NDTX059828-2W	ND 4659-5R x ND 8524B-1R
NDTX081451CBS-1Y/Y	Dakota Diamond x Gala
NDTX081648CB-13W	ND 8456-1 x ND7377CB-1
NDTX091886-3P/P	COND 04082-8RR X ND 7519-1
NDTX092237C-2P/WR	ND 049326C-2P x ND 7834-2P
NDTX102816CABS-1W	ND060476CAb-6 x ND7519-1
NDTX113030C-3W	Dakota Diamond x ND7192-1
NDTX113037C-2W	Dakota Pearl x ND060705C-8
NDTX113467CB-1Ru	ND060485Cb-1 x ND7519-1
NDTX12135-1W	ND8559-20 x M3
NDTX12203AB-1W	ND028598c-1 x M2
NDTX12237Y-1RuY	793101.3 x Russet Norkotah
NDTX12237Y-3Ru/Y	793101.3 x Russet Norkotah
NDTX12237Y-7Ru/Y	793101.3 x Russet Norkotah
NDTX12243YC-2W	90245.1 x ND7799c-1
NDTX12248Y-1R	95043.11 x Dakota Ruby
NDTX1244-3W/Y	AND07358-1Y x ND7192-3
NDTX1246-3W	AND07358-1Y x ND8304-2

Variety or Selection	Parentage
NDTX1246-5W/Y	AND07358-1Y x ND8304-2
NDTX1287B-1W	ND8559-20 x ND7379B-6
NDTX13105-1R	ATND99331-2PintoY x ND7132-1R
NDTX13224CAB-1W	ND039104CAB-3 x Dakota Pearl
NDTX13264B-1R/Y	ND071179B-10R x ND5858
NDTX13280CB-3W	ND081452CB-1 x ND7519-1
NDTX14311CAB-1W	ND092095C-1 x ND102809AB-2
NDTX14352ABY-1W	ND102809AB-2 x Eva
NDTX14362AB-1W	ND102809AB-2 x ND028984B-1
NDTX14467CAB-2W	ND113306C-4 x ND102809AB-2
NDTX1446CB-2W	Dakota Diamond x Missaukee
NDTX14475-1W	ND113317-5 x ND113057-1
NDTX1458-2R	Dakota Jewel x ND113203-2R
NDTX1462ABC-1W	Dakota Pearl x ND102800ABC-1
NDTX1463AB-12W	Dakota Pearl x ND102809AB-2
NDTX1463AB-16W	Dakota Pearl x ND102809AB-2
NDTX1463AB-17W	Dakota Pearl x ND102809AB-2
NDTX1463AB-19W	Dakota Pearl x ND102800ABC-1
NDTX1463AB-1W	Dakota Pearl x ND102809AB-2
NDTX1463AB-4W	Dakota Pearl x ND102809AB-2
NDTX5438-11R	ND4339-10R x ND4269-9R
NY 152	B38-14 x Marcy
OR09256-2	Dakota Diamond x Russet Norkotah
ORTX14SP017-2Ru	OR09158-119 x PA99N2-1
ORTX14SP113-3W	PIROLA x A93575-4PVY
PORTX03PG25-2R/R	PA97B35-1 x PA99P7-2
TX05249-10W	Gem Russet x A91790-13
TX08352-5Ru	TXA549-1Ru x AOTX98137-1RU
TX09396-1W	Atlantic x NY139
TX09406S-1P/P	A99331-2RY x CO00405-1R
TX09429-1P/P	COTX0325-1P/P x COTX04050-1P/P
TX11448-2R	Rio Rojo x COTX94218-1R
TX12471-1R/Y	COTX94218-1R x CO04021-2R/Y
TX12471-6W/Y	COTX94218-1R x CO04021-2R/Y
TX12472-4R	COTX94218-1R x COTX04188-3R/Y
TX12474-1R/R	CO04045-4P/P x CO03027-2R/R
TX12483-4W	TX08402 x Snowden
TX12483-5W	TX08402 x Snowden
TX12483-6W	TX08402 x Snowden
TX12484-1W ZC	TX08402 x NDTX059828-2W

Variety or Selection	Parentage
TX12484-2W ZC	TX08402 x NDTX059828-2W
TX12484-3W ZC	TX08402 x NDTX059828-2W
TX13512-1Ru	Stampede Russet x TXA549-1Ru
TX13524-2R	NDTX4271-5R x ATTX06246-1R
TX13563-1W	Snowden x ATX05202-3W/Y
TX13580-1W	Waneta x 00-3315-11
TX13582-3W	Waneta x PALB03016-3
TX13582-4W	Waneta x PALB03016-3
TX13582-5W	Waneta x PALB03016-3
TX13590-9Ru	PALB03016-3 x Waneta
TX14596-1Ru	Russet Burbank x A02138-2
TX14602-2W/Y	COTX05095-2Ru/Y x Atlantic
TX14605-4Ru	TX08351-5Ru x A02138-2
TX14607-4Ru	TX08352-5Ru x A02138-2
TX14611-1R	BTX2332-1R x COTX04050-1P/P
TX14612-1R	BTX2332-1R x NDTX4784-7R
TX14614-1R	COTX02172-1R x BTX2332-1R
TX14614-3R	COTX02172-1R x BTX2332-1R
TX14615-3R	COTX02172-1R x NDTX4784-7R
TX14615-4R	COTX02172-1R x NDTX4784-7R
TX14619-1R	NDTX4784-7R x BTX2332-1R
TX14619-2R	NDTX4784-7R x BTX2332-1R
TX14621-2R	NDTX4784-7R x NDTX081648CB-4W
TX14621-3R	NDTX4784-7R x NDTX081648CB-4W
TX14622-1R	NDTX5438-11R x NDTX4784-7R
TX14622-2R	NDTX5438-11R x NDTX4784-7R
TX14626-1R/R/Y	TX09420-1R/Y x NDTX4784-7R
TX14626-2R/R/Y	TX09420-1R/Y x NDTX4784-7R
TX14632-2R	ATTX05186-3W/Y x NDTX059759-3Pinto/Y
TX14646-1W	NDTX059759-3Pinto x BTX2332-1R
TX14668-3W ZC	Waneta x ATTX07042-3W
TX14669-2W/Y	AC00206-2W x ATTX07042-3W
TX14669-4W/Y	AC00206-2W x ATTX07042-3W
TX14670-2W/Y	MSN190-2 x ATTX07042-3W
TX14675-1W/Y	NDTX081648CB-4W x Waneta
TX14675-3W/Y	NDTX081648CB-4W x Waneta
TX14681-4W	NDTX060700C-1W x BTX2332-1R
TX14695-2W ZC	TX09396-1W x AOR07793-1
TX14697-5W	AF4386-16 x MST191-2Y
TX14710-4W ZC	TX05249-11W x AOR07793-1

Variety or Selection	Parentage
TX14710-7W ZC	TX05249-11W x AOR07793-1
TXA549-1Ru	ND9687-3Ru x ND9852-1Ru
TXWL-1	Triumph x Katahdin

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