

Texas Potato Breeding Report 2018



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

Isabel Vales, Creighton Miller, Douglas Scheuring, and Jeff Koym
College Station and Lubbock

Shown on the cover is Reveille Russet a 2015 release by the Texas Potato Breeding and Variety Development Potato Program. It is a medium-early, high count carton, fresh market russet with wide adaptability.

Table of Contents

	Page
Acknowledgements.....	iv
Mission Statement	1
Impact Statement	1
Zebra Chip Research Summary	2
Introduction.....	2
Springlake Trials, 2018.....	8
Western and Southwestern Regional Trials	11
Texas Advanced and Commercial Red Trial, Springlake	11
Western and Southwestern Regional Red/Yellow Trial, Springlake.....	18
Western and Southwestern Regional White/Yellow Trial, Springlake	24
Western Regional and Texas Advanced Purple Skin Selection Trial, Springlake	31
Western Regional Fingerling Trial, Springlake	38
Texas Advanced Russet Trial, Springlake	44
Texas Advanced Red/White Trial, Springlake.....	52
Texas Advanced Red/Yellow Selection Trial, Springlake	59
Texas Advanced White/Yellow Trial, Springlake	66
Texas Advanced Small Potato Selection Trial, Springlake	73
Texas Advanced Fingerling Selection Trial, Springlake	80
2018 Dalhart Trials	86
Western and Southwestern Regional Chip Trial, Dalhart	89
Western Regional and Texas Advanced Russet Trial, Dalhart.....	99
Western Regional and Texas Advanced Red Trial, Dalhart	107
Western Regional and Texas Advanced Red/Yellow Trial, Dalhart	114
Western Regional and Texas Advanced White/Yellow Trial, Dalhart.....	121
Western Regional and Texas Advanced Purple Skin Selection Trial, Dalhart	128
Western Regional and Texas Advanced Selection Fingerling Trial, Dalhart.....	135
Texas Advanced Chip Selection Trial, Dalhart	141
2018 4 Hill Chip Selections Trial, Dalhart	155
Texas Advanced Russet Selection Trial, Dalhart	157
2018 4 Hill Russet Selections Trial, Dalhart	165
Texas Advanced Red Selection Trial, Dalhart.....	167
2018 4 Hill Red Selections Trial, Dalhart.....	174
2018 4 Hill Red Skin Yellow Flesh Selections Trial, Dalhart	183
Texas Advanced White/Yellow Selection Trial, Dalhart	185

2018 4 Hill White/Yellow Selections Trial, Dalhart	192
Texas Advanced Small Potato Selection Trial, Dalhart.....	194
2018 4 Hill Small Potato Selections Trial, Dalhart.....	201
2018 4 Hill Fingerling Selection Trial, Dalhart	203
Appendix A. General notes on potato varieties or selections- 2018.....	205
Appendix B. Parentage of potato varieties or selections-2018	266
Appendix C. Disposition of Clones	278
Index of Varieties and Clones	283

Mention of a trade name or proprietary product does not constitute a guarantee or warranty of the product by Texas A&M AgriLife Research and does not imply its approval to the exclusion of other products that also may be suitable.

This publication reports research involving pesticides. It does not contain recommendations for their use, nor does it imply that the uses discussed here have been registered. Appropriate state and federal agencies must register all uses of pesticides before they can be recommended.

Commercial companies are mentioned in this publication solely for providing specific information. Mention of a company does not constitute a guarantee or warranty of its products by Texas A&M AgriLife Research or an endorsement over products of other companies not mentioned.

All programs, activities, information, services and facilities of Texas A&M AgriLife Research are available to everyone without regard to race, color, religion, sex, age, national origin, or physical or mental handicap.

Acknowledgements

This work was conducted at the Texas A&M AgriLife Research and Extension Center at Lubbock, the Department of Horticultural Sciences, College Station, and at field sites near Bushland, Springlake, and Dalhart. Financial support for this work was partially provided by the Texas A&M AgriLife Research, USDA/NIFA Special Research Grants Program- Potato Research (Agreement # 2017-34141-27336), Potatoes USA, USDA/SCRI, T3 AgriLife.

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

Texas Cooperators:

Luis Cisneros-Zevallos, Texas A&M University, College Station, Texas
Terry Wheeler, Texas A&M AgriLife Research, Lubbock, Texas
Russell Wallace, Texas A&M AgriLife Extension, Lubbock, Texas
Ismael Badillo and Adrian Silva, Texas A&M AgriLife Research, Weslaco, Texas
Charlie Rush, Texas A&M AgriLife Research, Amarillo, Texas
Cecilia Tamboringuy, Julien Levy, and Betsy Pierson, Texas AgriLife Research, College Station, Texas

Western Regional Cooperators:

Rob Wilson, Kevin Nicholson, and Darrin Culp, Tulelake, California
David Holm, Caroline Grey, Katie Gaudreau, Sastry Jayanty, and Samuel Essah, Center, Colorado
Rich Novy, Jonathan Whitworth, and Brian Schneider, Aberdeen, Idaho
Jeff Stark, Chelsey Lowder, University of Idaho, Aberdeen, Idaho
Brain Charlton, Klamath Falls, Oregon
Clint Shock, Malheur, Oregon
Rick Knowles and Mark Pavek, Pullman, Washington
Chuck Brown and Roy Navarre, Prosser, Washington

Southwestern Regional Cooperators:

Jaspreet Sidhu, Joe Nunez, and Jed DuBose, Bakersfield, California
Rob Wilson, Kevin Nicholson, and Darrin Culp, Tulelake, California
David Holm, Caroline Grey, Trina Zavislan, and Samuel Essah, Center, Colorado

NCPT Cooperators:

Rich Novy, Brian Schneider, and Jonathan Whitworth, USDA-ARS, Aberdeen, Idaho
David Holm, Carolyn Keller, Caroline Grey, Katie Gaudreau, Sastry Jayanty, Samuel Essah, and Andrew Houser, Colorado State University, San Luis Valley Research Center, Center, Colorado
Susie Thompson, Gary A. Secor, and Neil Gudmestad, North Dakota State University, Fargo, North Dakota
Sagar Sathuvalli and Solomon Yilma, Oregon State University, Corvallis, Oregon
Shelley Jansky and Andy Hamernik, USDA-ARS, Madison, Wisconsin
Darrin Haagensohn, USDA-ARS, East Grand Forks, Minnesota
Laura Shannon, University of Minnesota, St. Paul, Minnesota
David Douches, Joseph Coombs, Chris Long, Trina Zavislan, and Willie Kirk, Michigan State University, East Lansing, Michigan
Craig Yencho and Mark Clough, North Carolina State University, Raleigh, North Carolina
Jeff Endelman, University of Wisconsin, Madison, Wisconsin
Walter De Jong, Cornell University, Ithaca, New York
Greg Porter, University of Maine, Orono, Maine
Charlie Higgins, Jeff Bishop and Ryan Krabill, Potatoes USA

Grower Cooperators:

Bruce Barrett, Steve Barrett, Tim Gonzales, Cliff Black, and Craig Black, Springlake Potato Sales, Springlake, Texas
Milt Carter, Luis Huaracha, Brian Zens, Lucila Carpio, Jerry Henderson, and John Scheuring, CSS Farms, Dalhart, Texas
Kelly Kuball, Tasteful Selections, Bakersfield, California

Breeder Seed Increase:

David Holm, Caroline Grey, Carolyn Keller, and Katie Gaudreau, Colorado State University, San Luis Valley Research Center, Center, Colorado
Sandy Aarestad, Valley Tissue Culture, Inc., Halstad, Minnesota
Tom Smith and Vicki Lee, Summit Plant Laboratory, Inc., Fort Collins, Colorado
Rob Campbell and Amanda Leo, California-Oregon Seed, Inc., Oakdale, California
Matt Barrow and Milt Carter, CSS Farms, Colorado City, Colorado

Seed Contributors:

Richard Barrett and Keith Barrett, Richard Barrett Produce, Muleshoe, Texas
Bruce Barrett, Springlake Potato Sales, Springlake, Texas
Jack Wallace, Wallace Farms, Edinburg, Texas
Milt Carter and Adam Naslund, CSS Farms, Cody, Nebraska

Charlie Higgins, Potatoes USA

General Supply Contributors:

Bruce Barrett and Cliff Black, Springlake Potato Sales, Springlake, Texas

Luis Huaracha, Lucila Carpio, and John Scheuring, CCS Farms, Dalhart, Texas

Co-workers:

We would like to express our gratitude for the significant contributions of Technical Assistant Mike Jenson, Technical Assistant Angel Chappell and student workers, Sydnee Coats, Ao Jiao, Ashley Carter, Meghan Teale, Ruth Preslar and Cade Cadena, Graduate Students Sam Vigue, Jeewan Pandey Sanjeev Gautam.

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, 2,683,238 seedlings have been grown for selection in Texas, from which 12,930 original selections have been made. Seventeen improved varieties have been developed/co-developed and/or released from this program. Most of the russet potatoes grown in Texas in 2018 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. 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 2017, 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 2018.

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 2018 were conducted in greenhouses in College Station, with field cage plantings at Bushland.

We evaluated the most advanced materials, crop wild relatives, and improved diploids. 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 Potatoes USA National Chip Processor Trial. Texas Breeding Program selections have also been included. Trial locations have included Dalhart and Springlake. The observed incidence of ZC was 2.5% in 2018. Cage artificial infestation with psyllids have been conducted since 2010.

In 2018, field cages and greenhouse ZC studies were conducted using artificial infestation using Lso positive psyllids. Sixteen 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 evaluate with the most promising ZC tolerant chip selections for yield and quality characteristics including ZC. Crosses between the most promising selections have been initiated to study the genetics of ZC tolerance and introgress ZC tolerance in breeding materials.

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 also had cooperative studies with Drs. Rich Novy at Aberdeen, ID, David Douches at Michigan State, and John Bamberg US Potato Genebank.

Introduction

Program Summary

The Texas Potato Breeding and Variety Development Program used two locations in the 2018 growing season (Table 1). The first planting was near Springlake on March 20st to 25th and harvested on July 2nd, 4th, and August 6th. This location included fifteen replicated trials, first generation seedlings for selection, a maturity trial with seven advanced Texas selections and a commercial microorganism test trial. The second planting was near Dalhart on May 13th to 16th and harvested on September 10th, 17th, and 24nd. Twenty replicated trials, the national

chip processing trial, a seed increase nursery, first year seedlings for selection, and a commercial microorganism test trial were planted at this site.

The Texas program entered two selections (ATTX05175s-1R/Y, COTX04193s-2R/Y) in the Western Regional Red/ Specialty Trial, and two selections in the Western Regional Russet Trial (AOTX05043-1Ru and COTX05095-2Ru/Y). The program also entered one selection in the Southwest Regional Red/ Specialty Trial (ATX02263-1R/Y). These trials were conducted at multiple locations in six western states.

The Texas program had twelve entries (AORTX09037-5W/Y, AORTX09144-2W, COTX12235-2W, COTX12428-1W, NDTX12203AB-1W, NDTX1244-3W/Y, NDTX1246-3W, TX14695-2W ZC, TX13580-1W, TX12483-6W, NDTX1246-5W/Y, and NDTX14362AB-1W) in the Potato USA Fast-Track National Chip Processing Trial. Seven entries were (NDTX12135-1W, NDTX14362AB-1W, NDTX14475-1W, TX12484-1W ZC, TX12484-2W ZC, TX12484-3W ZC, TX14710-4W ZC) entered in the Early Generation Southern Selection 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 12 July at Springlake and was well attended by over 70 growers and collaborators from Mexico to Canada.

Single Hill Selections

In 2018, 73,286 first year seedling tubers, resulting from 403 different parental combination or families (crosses), were grown for selection. Some 29,718 seedling tubers were planted on the Barrett Farm near Springlake while 51,778 were planted at CSS Farm near Dalhart. These included seedling tubers were provided by Rich Novy, Idaho (10,582), David Holm, Colorado (20,019), and Susie Thompson, North Dakota (10,819). A total of 580 (0.8% selection rate) original selections were made from this material (Figure 1).

True Potato Seedling Tuber Production

The 2018 first year seedling tubers from Texas (31,942) were grown from true seed during the fall of 2017 at College Station and Lubbock. These seed were from crosses made in College Station. Texas also sent second and third-size seedling tubers to Idaho (6,765), Colorado (26,339), North Dakota (12,326), and Laura Shannon, Minnesota (3,000) for first year selections. TPS seed (5,000) were also sent to Minnesota.

Table 1. Trial locations, name of trial, number of entries, and number of plots evaluated in 2018.

Springlake			Dalhart		
Trial	# of Entries	# of Plots	Trial	# of Entries	# of Plots
Field day Russets (not reported)	95	95	National Chip	147	195
Field day Red/Specialty(not reported)	85	85	Western and Southwestern Regional Chip	16	64
Western and Southwestern Regional Red	7	32	Western and Southwestern Regional Russet	26	104
Western and Southwestern Regional Red/Yellow	4	16	Western and Southwestern Regional Red	8	32
Western and Southwestern Regional White/Yellow	12	48	Western and Southwestern Regional Red/Yellow	5	20
Western Regional and Texas Advanced Purple/Purple Selection	7	25	Western and Southwestern Regional White/Yellow	13	50
Western Regional and Texas Advanced Fingerling Selection	4	16	Western Regional and Texas Advanced Purple/Purple Selection	6	22
Texas Advanced Russet Selection	19	61	Western Regional and Texas Advanced Fingerling Selection	4	16
Texas Advanced Red Selection	18	54	Texas Advanced Chip Selection	38	134
Texas Advanced Red/Yellow Selection	6	18	2018 4Hill Chip Selection	118 (23 advanced)	118
Texas Advanced White/Yellow Selection	9	33	Texas Advanced Russet Selection	17	68
Texas Advanced Small Potato Selection	12	45	2018 4Hill Russet Selection	122 (18 advanced)	122
Maturity Trial	7	105	Texas Advanced Red Selection	17	54
Mico Trial (not reported)	3	76	2018 4Hill Red Selection	7 (1 advanced)	7
Total	108	709	Texas Advanced Red/Yellow Selection	5	20
			2018 4Hill Red/Yellow Flesh Selection	29 (5 advanced)	29
			Texas Advanced White/Yellow Selection	11	40
			2018 4Hill White/Yellow Flesh Selection	62 (10 advanced)	10
			Texas Advanced Small Potato Selection	13	50
			2018 4Hill Small Potato Selection	15 (1 advanced)	15
			2018 4Hill Fingerling Potato Selection	6 (1 advanced)	6
			Total	659	1176
			Total Entries and Plots	767	1885

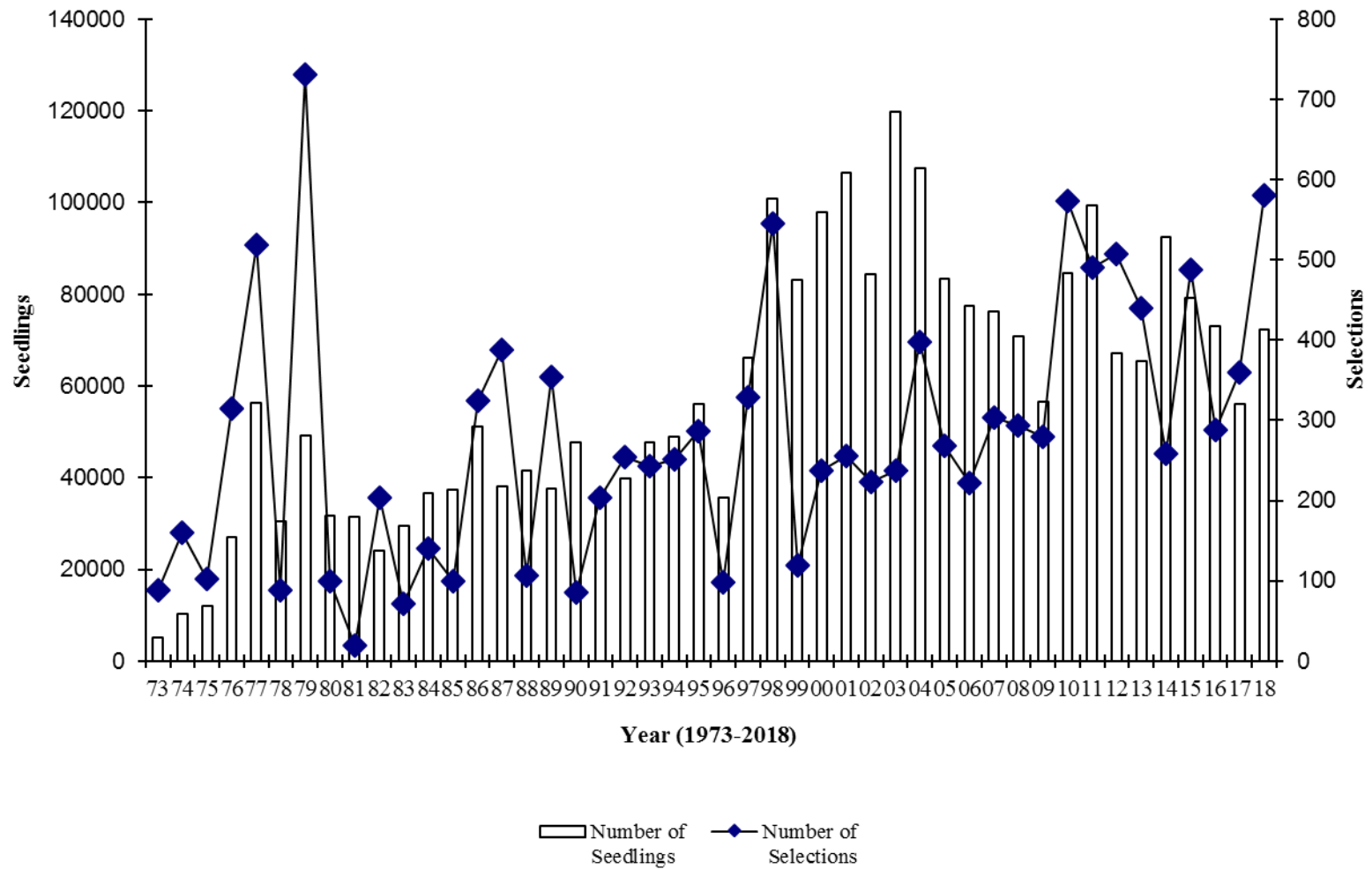


Figure. 1. Number of first year seedling tubers grown for original selection and number of selections made since the inception of the Texas Potato Variety Development Program.

Second-Year Field Selections

Out of 359 second-year clones, 59 were selected (16%).

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 108 advanced selections/varieties were tested in replicated and non-replicated trials near Springlake, and 659 entries were evaluated near Dalhart. A total of 1,885 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 35,539 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.

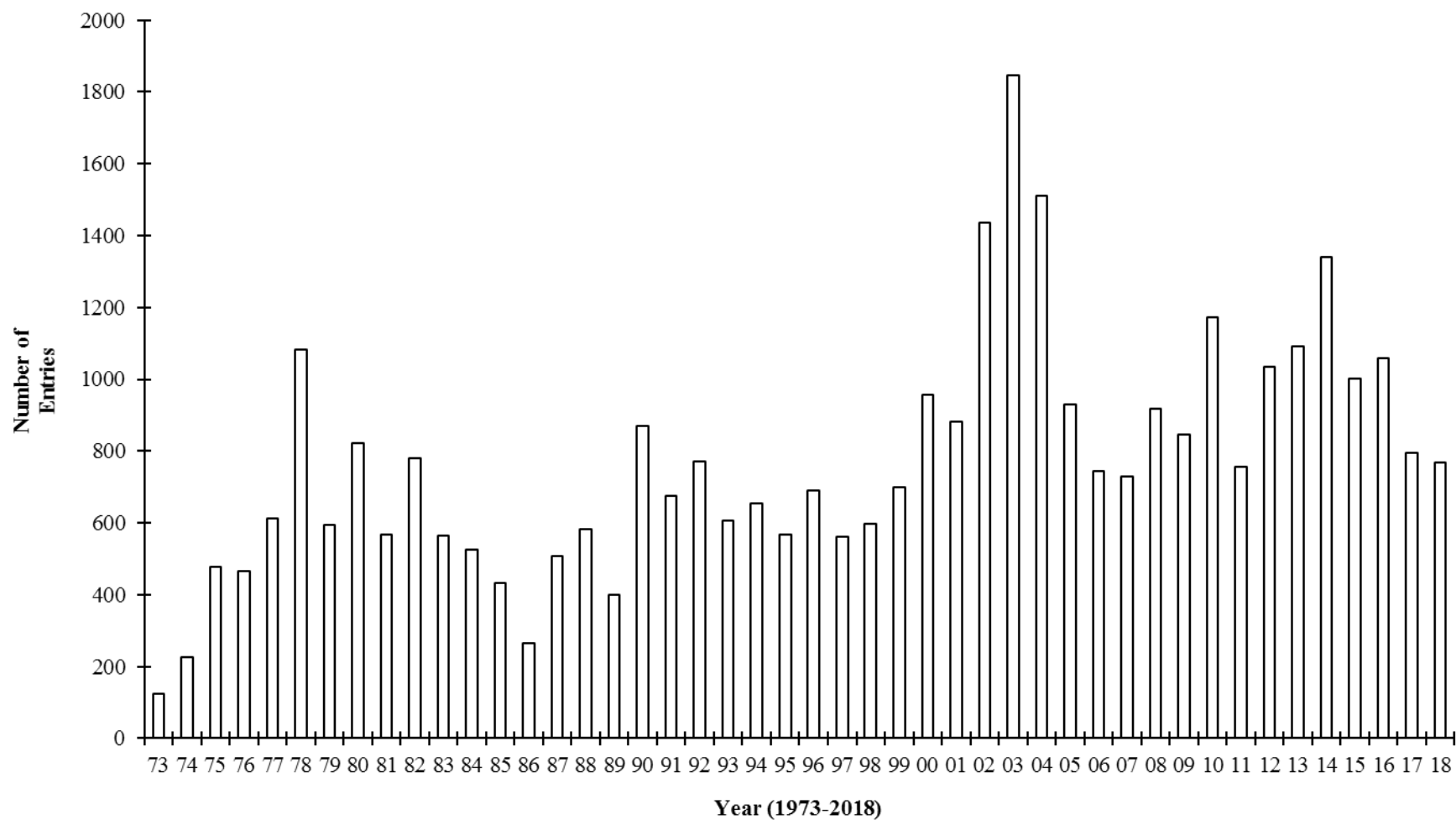


Figure 2. Number of varieties and advanced selections tested for their adaptability to Texas environmental conditions each year since the inception of the Texas Potato Variety Development Program in 1973.

Springlake Trials, 2018

Summary of growing conditions:

The trials were planted near Springlake (34° 8'5.65"N, 102°21'51.42" W) on March 20st to 25th and harvested on July 2nd, 4th, 24th, and August 6th. Standard cultural practices for the area were used (Table 2). These trials were subjected to below average precipitation.

Trials conducted:

- Field day Russets (not reported)
- Field day Red/Specialty (not reported)
- Texas Advanced and Commercial Red
- Western and Southwestern Regional Red/Yellow
- Western and Southwestern Regional White/Yellow
- Western Regional and Texas Advanced Purple Skin Selection
- Western Regional and Texas Advanced Fingerling Selection
- Texas Advanced Russet Selection
- Texas Advanced Red Selection
- Texas Advanced Red/Yellow Selection
- Texas Advanced White/Yellow Selection
- Texas Advanced Small Potato Selection
- Maturity Trial (not reported)
- Micro-organism Trial (not reported)

Table 2. Environmental and cultural inputs for the 2018 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 20, 2018	
Vines Killed (Red, Red/Yellow, Small)	June 26, 2018	96
Vines Killed (Chip, White Yellow)	June 26, 2018	96
Vines Killed (Russet)	July 23, 2018	123
Harvested (Small Potatoes, White/Yellow,)	July 2, 2018	102
Harvested (Red, Red/Yellow)	July 2, 2018	102
Harvested (Russet)	August 6, 2018	136

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:

124-43-37# per acre

Irrigation:

Center Pivot

Seed Treatment Applied:

Cruiser Maxx Vibrance

Insecticide:

Movento, Minecto Pro, Transform WG, Sivanto

Fungicides Applied:

Scala, Luna Tranquility, NUCOP

Herbicides Applied:

Bronc Triple, Dual Magnum, Matrix, Stealth, Makaze, Brawl, Gly Star Original, Metribuzin 75 CA

Environmental Factors:

These trials were subjected to below average precipitation

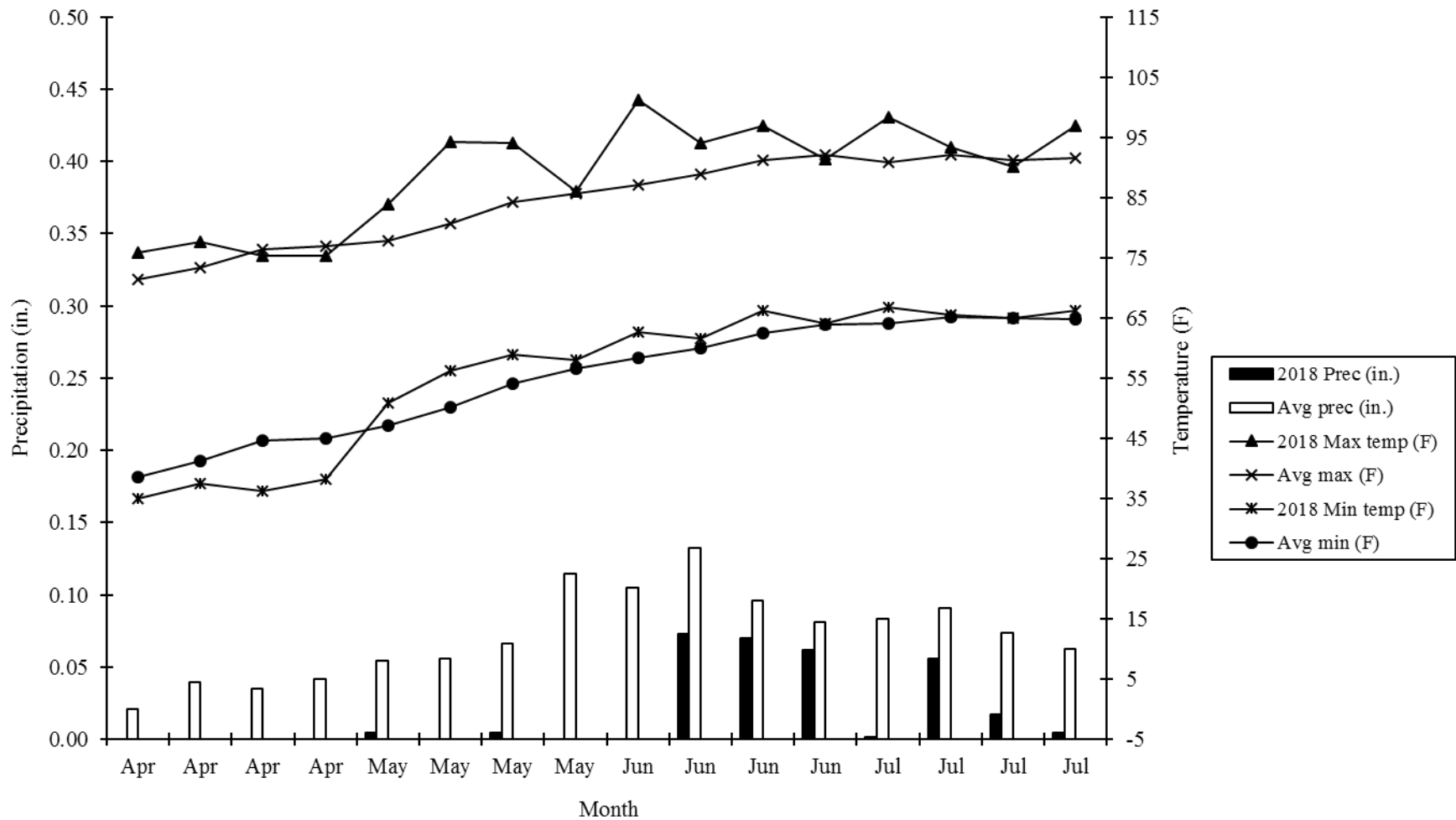


Figure 3. Weekly minimum/maximum temperatures and precipitation for the 2018 growing season near Springlake, Texas compared to the average minimum/maximum temperatures and precipitation (1949-2018).

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.

Texas Advanced and Commercial Red Trial, Springlake

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

Results: (Springlake Tables 1a, 1b, 1c, 1d, and 1e)

- CO99076-5R and MSX569-1R had the highest general ratings and best of trial designation. CO98012-6R also had a best of trial designation (Table 1a).
- MSW343-2R had the highest total yield, while Chieftain had the highest marketable yield. CO98012-6R had the highest yield of less than 4 oz. tubers (Table 1a).
- Chieftain had the highest percentage of marketable yield. NDTX071258Bs-1R had the highest percent of less than 4 oz. tubers (Table 1b).
- CO98012-6R had the highest average number of tubers per plant (Table 1c).
- Red LaSoda was the latest in maturity, while MSX569-1R and NDTX071258Bs-1R were the earliest in maturity (Table 1c).
- CO99076-5R, MSX569-1R, and CO98012-6R had the darkest red skin color.
- Red LaSoda had the deepest eyes and a high percentage of vascular discoloration (Table 1d).

Comments on entries:

- MSW343-2R Oval Red Medium skin intensity, deep eyes (not as much as Red LaSoda), High tuber number, Red LaSoda Replacement, Sticky stolons
- CO99076-5R Round Red BOT+++ , very intense red skin, uniform size and shape, Large tubers+, bright skin color, smooth skin, Nice

- MSX569-1R Oval Red BOT++, Intense skin color+, smooth, Nice tuber shape, Beautiful, uniform size and shape, pink flesh streaks++, large stolon
- Chieftain Oval Red Light skin, Nice+, Good Yield
- CO98012-6R Round Red BOT+, Small+, intense red skin +, not uniform size, nice, late?
- Red LaSoda Oval Red Light skin, Very deep eyes, heat sprouts, Sticky stolons+, Chain tubers
- NDTX071258Bs-1R Round Red Small+++, not uniform size, do not advance, bright skin, darker red eyes, lenticels, discontinue

Summary:

CO99076-5R and MSX569-1R were the best entries based on all factors.

Springlake
Table 1a.

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 Regional Red Trial grown near Springlake, Texas-2018.

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					
MSW343-2R	Real	227.5	112.4	71.2	33.2	8.0	0.0	114.4	0.7	3.8	3.8
CO99076-5R	Real	216.6	116.9	66.9	34.4	15.6	0.0	97.3	2.4	4.4	4.5
MSX569-1R	Real	183.7	72.4	53.9	17.5	1.0	0.0	109.6	1.7	4.1	4.3
Chieftain	WRRD	175.6	121.9	49.6	68.3	4.0	0.0	52.0	1.7	3.9	3.7
CO98012-6R	Real	161.2	30.9	24.5	6.3	0.0	0.0	130.0	0.3	4.0	3.6
Red LaSoda	WRRD	159.7	93.5	47.7	32.2	13.7	0.0	56.4	9.8	3.7	3.5
NDTX071258Bs-1R	WRRD	93.0	3.1	3.1	0.0	0.0	0.0	87.5	2.5	3.4	2.8
Average		173.9	78.7	45.3	27.4	6.0	0.0	92.5	2.7	3.9	3.7
L.S.D. (.05)		50.2	39.3	16.2	33.2	8.7		34.7	3.8	0.3	0.3

¹ 1=very poor to 5= excellent

Springlake
Table1b.

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 Regional Red Trial grown near Springlake, Texas-2018.

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				
MSW343-2R	Real	49.6	31.4	14.6	3.5	0.0	50.1	0.3	1.054	12.2	Oval	Red
CO99076-5R	Real	54.4	31.4	16.1	7.0	0.0	44.5	1.1	1.068	14.6	Round	Red
MSX569-1R	Real	39.6	29.6	9.4	0.6	0.0	59.6	0.9	1.059	13.0	Oval	Red
Chieftain	WRRD	68.4	29.4	35.8	3.2	0.0	30.5	1.0	1.062	13.5	Oval	Red
CO98012-6R	Real	20.5	16.3	4.2	0.0	0.0	79.3	0.2	1.064	13.8	Round	Red
Red LaSoda	WRRD	55.0	29.1	19.2	6.7	0.0	37.8	7.1	1.056	12.5	Oval	Red
NDTX071258Bs-1R	WRRD	4.3	4.3	0.0	0.0	0.0	92.6	3.1	1.069	14.8	Round	Red
Average		41.7	24.5	14.2	3.0	0.0	56.3	2.0	1.062	13.5		
L.S.D. (.05)		11.4	8.9	11.8	4.1	0.0	10.5	2.8	0.004	0.6		

Springlake
Table 1c. 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 7 entries in the Western Regional Red Trial grown near Springlake, Texas-2018.

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	Length cm	With cm	Thickness cm
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴						
MSW343-2R	Real	5.2	3.7	1.6	99	99	1.6	2.3	3.4	2.5	8	1.09	1.10	7.5	6.9	6.3
CO99076-5R	Real	4.9	3.9	2.0	85	95	1.5	3.4	3.1	3.6	16	1.06	1.12	7.5	7.1	6.3
MSX569-1R	Real	4.5	3.5	2.9	87	96	1.9	3.1	2.7	3.2	19	1.08	1.21	7.3	6.8	5.6
Chieftain	WRRD	4.0	3.9	2.0	89	96	1.5	3.6	3.5	3.6	6	1.09	1.24	7.8	7.1	5.7
CO98012-6R	Real	6.2	2.1	1.8	96	99	1.4	2.7	3.8	2.9	5	1.08	1.14	6.6	6.1	5.4
Red LaSoda	WRRD	3.5	3.7	2.2	92	99	2.1	3.8	4.2	3.8	5	1.12	1.16	7.9	7.0	6.0
NDTX071258Bs-1R	WRRD	4.6	1.8	2.8	88	94	2.1	2.5	2.6	2.7	29	1.06	1.11	5.7	5.4	4.9
Average		4.7	3.2	2.2	91	97	1.7	3.0	3.3	3.2	13	1.08	1.15	7.2	6.6	5.7
L.S.D. (.05)		ns	0.2	0.4	8	ns	0.3	0.6	0.3	0.5	8	ns	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

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 7 entries in the Western Regional Red Trial grown near Springlake, Texas-2018.

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
MSW343-2R	Real	1.0	2.0	1.4	3.8	2.6	4.8	5.0	5.0	5.0	4.3	0	0	0	0
CO99076-5R	Real	1.0	1.0	1.1	4.4	4.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
MSX569-1R	Real	1.0	2.0	1.0	4.5	4.0	5.0	5.0	5.0	5.0	4.8	0	0	0	0
Chieftain	WRRD	1.0	2.0	1.0	3.8	2.0	5.0	5.0	5.0	5.0	3.8	0	0	0	0
CO98012-6R	Real	1.0	1.0	1.5	3.8	4.0	4.5	5.0	5.0	5.0	4.5	0	0	0	0
Red LaSoda	WRRD	1.0	2.0	1.0	2.8	2.4	4.9	5.0	5.0	5.0	4.0	0	0	18	0
NDTX071258Bs-1	WRRD	1.0	1.0	1.0	3.9	3.5	5.0	5.0	5.0	5.0	4.5	0	0	0	0
Average		1.0	1.6	1.1	3.8	3.2	4.9	5.0	5.0	5.0	4.3	0	0	3	0
L.S.D. (.05)					0.3	0.2	ns				0.4			7	

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 7 entries in the Western Regional Red Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
MSW343-2R	Real	Medium skin intensity, deep eyes (not as much as Red LaSoda), , , BOT, very intense red skin, smooth, uniform size and shape, BOT, BOT, BOT	Deep eyes, similar to Red LaSoda+, , High tuber number, Red LaSoda Replacement, Sticky stolons	3.8, 3.6, 4, 3.8	3.6, 3.8, 4, 3.8
CO99076-5R	Real	Intense skin color+, smooth, BOT+, ,	BOT++, uniform size and shape, Large tubers+, bright skin color, smooth skin, BOT, , Nice	4.5, 4.5, 4, 4.4	4.5, 4.8, 4.5, 4
MSX569-1R	Real	Light skin, , , Small+, intense red skin, not uniform size, nice, BOT+, ,	Nice tuber shape, nice skin color+, Beautiful, uniform size and shape, pink flesh streaks++, BOT+, pink flesh	3.6, 4.3, 4, 4.3	3.8, 4.2, 4.5, 4.5
Chieftain	WRRD	Light skin, , , Small+, intense red skin, not uniform size, nice, BOT+, ,	Nice+, Good Yield, , Worse rep	4, 4, 4, 3.6	4, 3.8, 3.8, 3.2
CO98012-6R	Real	Light skin, deep eyes, , ,	Small+, late?, Intense skin color, Very deep eyes, heat sprouts, Sticky stolons+, Chain tubers, Worse rep	3.6, 4.4, 4.3, 3.5	3.6, 3.6, 3.6, 3.6
Red LaSoda	WRRD	Light skin, deep eyes, , ,	Small+++ , do not advance, bright skin, darker red eyes, lenticels	3.8, 3.8, 3.8, 3.5	3.5, 3.5, 3.6, 3.2
NDTX071258Bs-1R	WRRD	Small,+++ not uniform size, , ,		3.4, 3.4, 3.6, 3.2	2.8, 2.8, 2.8, 2.6

Western and Southwestern Regional Red/Yellow Trial, Springlake

This trial consisted of four entries.

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

- COTX04193s-2R/Y had the highest general rating and a best of trial designation (Table 2a and 2f).
- COTX04193s-2R/Y had the highest total yield and yield of less than 4 oz. tubers (Table 2a).
- All the entries had over 92% of less than 4 oz. tubers (Table 2b).
- ATTX05175s-1R/Y had the highest average number of tubers per plant (Table 2c).
- ATTX05175s-1R/Y was the latest in maturity, while COTX04193s-2R/Y was the earliest in maturity (Table 2c).
- COTX04193s-2R/Y had the darkest yellow flesh color (Table 2d).

Comments on entries:

- COTX04193s-2R/Y Round Red BOT, Intense skin color+++ , not uniform size, small+, nice flesh skin color combination++, sticky stolons, Chain tubers, Nice, FC=4.0
- ATTX05175s-1R/Y Round Red bright skin, not uniform size+, Very small++, high tuber set+, a little compressed, FC=3.4
- ATX02263-1R/Y Oval Red DROP, Intense red skin++, Low tuber set++, Small, pear shape, FC=2.1
- CO09079-5PW/Y Oval White-Purple Light spectacle pattern++, Very small tubers+, Heat sprouts, yellow purple skin, Low tuber set, FC=3.4

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

Summary:

COTX04193s-2R/Y is a good candidate for the small potato market.

Springlake
Table 2a.

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 and Southwestern Regional Red/Yellow Trial grown near Springlake, Texas-2018.

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					
COTX04193s-2R/Y	WRRY	160.3	2.0	2.0	0.0	0.0	153.3	4.9	3.3	3.4	
ATTX05175s-1R/Y	WRRY	141.4	0.0	0.0	0.0	0.0	135.5	5.9	2.8	3.2	
ATX02263-1R/Y	SW	77.5	2.2	1.6	0.6	0.0	71.7	3.6	2.7	2.6	
CO09079-5PW/Y	WRRY	62.0	3.7	3.7	0.0	0.0	56.9	1.5	2.8	2.5	
Average		110.3	2.0	1.8	0.2	0.0	104.4	4.0	2.9	2.9	
L.S.D. (.05)		47.8	ns	ns	ns	0.0	42.3	ns	0.3	0.3	

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 4 entries in the Western and Southwestern Regional Red/Yellow Trial grown near Springlake, Texas-2018.

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				
COTX04193s-2R/Y	WRRY	1.3	1.3	0.0	0.0	0.0	95.8	3.0	1.062	13.5	Round	Red
ATTX05175s-1R/Y	WRRY	0.0	0.0	0.0	0.0	0.0	95.8	4.2	1.061	13.4	Round	Red
ATX02263-1R/Y	SW	1.9	1.5	0.4	0.0	0.0	94.6	3.6	1.058	12.8	Oval	Red
CO09079-5PW/Y	WRRY	5.3	5.3	0.0	0.0	0.0	92.7	2.0	1.061	13.4	Oval	White-Purple
Average		2.1	2.0	0.1	0.0	0.0	94.7	3.2	1.060	13.3		
L.S.D. (.05)		ns	ns	ns	0.0	0.0	ns	ns	ns	ns		

Springlake
Table 2c. Average number of tubers and stems per plant, tuber weight, percent stand 40 and 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness, length cm, with cm, and thickness cm of 4 entries in the Western and Southwestern Regional Red/Yellow Trial grown near Springlake, Texas-2018.

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	Length cm	With cm	Thickness cm
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴						
COTX04193s-2R/Y	WRRY	9.3	1.4	2.7	100	100	1.9	3.6	3.6	3.7	11	1.08	1.20	5.9	5.5	4.6
ATTX05175s-1R/Y	WRRY	11.3	1.0	2.5	91	99	1.5	3.3	4.4	3.3	0	1.09	1.11	5.2	4.8	4.3
ATX02263-1R/Y	SW	5.8	1.5	1.8	54	63	1.6	2.3	3.8	2.6	1	1.12	1.14	5.6	5.0	4.4
CO09079-5PW/Y	WRRY	4.0	1.4	1.8	87	95	1.5	2.0	3.7	2.3	4	1.18	1.17	6.0	5.1	4.4
Average		7.6	1.3	2.2	83	89	1.6	2.8	3.9	3.0	4	1.12	1.15	5.7	5.1	4.4
L.S.D. (.05)		1.4	0.3	0.2	14	16	0.0	0.7	0.3	0.7	ns	ns	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 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 and Southwestern Regional Red/Yellow Trial grown near Springlake, Texas-2018.

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
COTX04193s-2R/Y	WRRY	4.0	1.5	1.1	3.8	3.9	4.9	5.0	5.0	5.0	4.6	0	0	0	0
ATTX05175s-1R/Y	WRRY	3.4	1.0	1.0	3.4	3.5	4.3	5.0	5.0	5.0	4.6	0	0	3	0
ATX02263-1R/Y	SW	2.1	2.1	1.3	4.1	4.0	5.0	5.0	5.0	5.0	4.9	0	0	0	0
CO09079-5PW/Y	WRRY	3.4	2.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
Average		3.2 0.3	1.7 0.2	1.1 ns	3.8 0.3	3.1 0.2	4.8 0.3	5.0	5.0	5.0	4.7 ns	0	0	1 ns	0

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 4 entries in the Western and Southwestern Regional Red/Yellow Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
COTX04193s-2R/Y	WRRY	Intense skin color+++ , not uniform size,	Small+, nice flesh skin color combination++, sticky stolons, Chain tubers, Nice, BOT	3.5, 3.3, 3.3, 3.2	3, 3.5, 3.5, 3.5
ATTX05175s-1R/Y	WRRY	Small+++ , bright skin, not uniform size+ , ,	Very small++, high tuber set+, a little compressed,	3, 3.2, 2.6, 2.3	3, 3.2, 3.2, 3.2
ATX02263-1R/Y	SW	Intense red skin++, Low tuber set++ ,	Small, pear shape, Few tubers++ , Heat sprouts, light spectacle pattern+, small, yellow	3.4, 2.6, 2.5, 2.2	3, 2.5, 2.5, 2.5
CO09079-5PW/Y	WRRY	Light spectacle pattern++ , Very small tubers+,	purple skin, , Low tuber set, sticky flesh,	3.2, 3.2, 2.3, 2.3	2.5, 2.5, 2.5, 2.5

Western and Southwestern Regional White/Yellow Trial, Springlake

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

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

- Wendy had high general rating and best of trial designation, while Yukon Gold, CO09128-5W/Y, and CO10097-2W/Y also had high general ratings (Table 3a and 3e).
- Wendy had the highest total and marketable yield (Table 3a).
- CO09128-5W/Y had the highest yield of less than 4 oz. tubers (Table 3a).
- Yukon Gold had the highest percentage of marketable yield, while CO09128-3W/Y and CO09128-5W/Y had the highest percentage of less than 4 oz. tubers. CO10098-5W/Y had over 47% culls (Table 3b).
- CO10098-4W/Y had the highest specific gravity (Table 3b).
- CO10098-4W/Y, CO09128-5W/Y, and CO09128-3W/Y had the highest number of tubers per plant (Table 3c).
- Wendy, CO10064-1W/Y, and Soraya were the latest in maturity, while CO09128-5W/Y and CO09128-3W/Y were the earliest in maturity (Table 3c).
- CO10098-5W/Y and CO09128-5W/Y had the darkest yellow flesh color (Table 3d).

Comments on entries:

- Wendy Oval White BOT, Nice, smooth skin++, shiny skin, Medium size+, very nice flesh, Uniform shape and size, FC=3.6
- Yukon Gold Oval White Nice, Large tubers+++, heavy, high tuber set, FC=3.5
- CO10098-4W/Y Round White Not uniform size, late?, Small+, high tuber set, soapy flesh, Sprouts++, secondary growth++, FC=4.0
- CO09128-5W/Y Round White Small+, high tuber set+, very intense flesh, variable flesh color, Road map+, pink eyes, FC=4.4
- CO10097-2W/Y Round White Uniform size and shape, Nice, watery flesh, soapy flesh++, Medium size+, nice, Good size, russetting, FC=3.5
- CO10064-1W/Y Round White Small+, Pink eyes+, FC=3.1

- Alegria Oval White Large tubers+, lemon flesh, Nice shape, Smooth skin, medium-large tubers, Medium size, FC=3.5
- AC10376-1W/Y Round White Very few tubers, Secondary growth+, FC=3.5
- Soraya Long White Few tubers, smooth skin, oblong to long+, beautiful flesh+, Knobs, Variation for color flesh, nice, FC=4.0
- CO09128-3W/Y Round White Very small+, late?, intense flesh color, road map, soapy flesh+, FC=4.0
- CO10098-5W/Y Round White Few tubers, Soapy flesh, Knobs+++, VERY intense flesh, snowmen, beautiful flesh, FC=4.7
- CO09218-4W/Y Round White Few tubers+, Heat Sprouts+++, low tuber number, variation for flesh color+, knobs, FC=3.8

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

Summary:

Wendy was the best entry based on all factors.

Springlake
Table 3a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 12 entries in the Western and Southwestern Regional White/Yellow Trial grown near Springlake, Texas-2018.

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					
WENDY	Hig	266.3	147.5	139.0	8.5	0.0	0.0	115.3	3.5	3.6	3.8
Yukon Gold	WRWY	193.9	144.2	75.2	47.7	21.3	0.0	47.7	2.1	3.9	4.2
CO10098-4W/Y	SW	181.6	1.9	1.9	0.0	0.0	0.0	135.9	43.9	3.2	3.5
CO09128-5W/Y	WRWY	164.6	3.7	1.7	0.9	1.1	0.0	160.9	0.0	3.5	3.8
CO10097-2W/Y	SW	162.2	40.1	32.3	7.8	0.0	0.0	121.7	0.4	3.3	3.9
CO10064-1W/Y	SW	144.7	9.0	8.3	0.8	0.0	0.0	131.0	4.6	3.3	3.6
ALEGRIA	Hig	141.6	78.8	48.9	26.4	3.5	0.0	58.1	4.7	3.4	3.7
AC10376-1W/Y	SW	116.8	8.2	6.7	1.5	0.0	0.0	90.1	18.5	2.8	3.0
SORAYA	Hig	114.9	69.0	49.4	19.5	0.0	0.0	42.4	3.6	3.3	3.7
CO09128-3W/Y	WRWY	104.7	0.8	0.8	0.0	0.0	0.0	103.9	0.0	3.3	3.2
CO10098-5W/Y	SW	63.3	0.0	0.0	0.0	0.0	0.0	32.0	31.3	2.8	2.5
CO09218-4W/Y	WRWY	57.6	2.7	2.7	0.0	0.0	0.0	38.2	16.8	2.7	2.5
Average		142.7	42.2	30.6	9.4	2.2	0.0	89.8	10.8	3.2	3.4
L.S.D. (.05)		70.5	63.4	62.8	9.9	4.9	0.0	33.9	10.1	0.5	0.5

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 12 entries in the Western and Southwestern Regional White/Yellow Trial grown near Springlake, Texas-2018.

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				
WENDY	Hig	45.8	41.3	4.5	0.0	0.0	52.5	1.7	1.055	12.3	Oval	White
Yukon Gold	WRWY	73.7	37.9	25.2	10.6	0.0	25.1	1.2	1.070	15.0	Oval	White
CO10098-4W/Y	SW	0.9	0.9	0.0	0.0	0.0	73.9	25.1	1.078	16.4	Round	White
CO09128-5W/Y	WRWY	2.3	1.1	0.5	0.8	0.0	97.7	0.0	1.072	15.4	Round	White
CO10097-2W/Y	SW	25.3	20.3	5.0	0.0	0.0	74.4	0.3	1.067	14.5	Round	White
CO10064-1W/Y	SW	6.1	5.5	0.6	0.0	0.0	90.7	3.2	1.076	16.1	Round	White
ALEGRIA	Hig	54.9	34.9	18.0	2.0	0.0	41.8	3.3	1.068	14.7	Oval	White
AC10376-1W/Y	SW	5.9	5.0	0.9	0.0	0.0	75.7	18.4	1.061	13.3	Round	White
SORAYA	Hig	60.1	41.5	18.6	0.0	0.0	36.2	3.7	1.056	12.5	Long	White
CO09128-3W/Y	WRWY	0.7	0.7	0.0	0.0	0.0	99.3	0.0	1.062	13.6	Round	White
CO10098-5W/Y	SW	0.0	0.0	0.0	0.0	0.0	52.1	47.9	1.074	15.7	Round	White
CO09218-4W/Y	WRWY	4.2	4.2	0.0	0.0	0.0	64.5	31.3	1.053	12.0	Round	White
Average		23.3	16.1	6.1	1.1	0.0	65.3	11.3	1.066	14.3		
L.S.D. (.05)		10.2	11.0	5.8	2.1	0.0	12.1	9.3	0.003	0.5		

Springlake
Table 3c. Average number of tubers and stems per plant, tuber weight, percent stand 40 and 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness, length cm, with cm, and thickness cm of 12 entries in the Western and Southwestern Regional White/Yellow Trial grown near Springlake, Texas-2018.

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	Length cm	With cm	Thickness cm
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴						
WENDY	Hig	6.3	3.8	1.5	80	96	1.5	3.7	4.7	3.6	0	1.14	1.16	7.1	6.3	5.4
Yukon Gold	WRWY	3.8	4.4	1.7	90	96	1.4	3.7	3.8	3.6	6	1.09	1.27	8.0	7.3	5.8
CO10098-4W/Y	SW	12.9	1.2	3.1	99	100	2.0	3.8	3.8	3.8	9	1.06	1.18	5.4	5.1	4.3
CO09128-5W/Y	WRWY	12.0	1.1	3.0	98	100	1.8	3.9	3.4	3.9	16	1.12	1.11	5.5	5.0	4.4
CO10097-2W/Y	SW	6.2	2.4	2.1	69	90	1.9	3.4	3.7	3.5	9	1.10	1.10	6.6	6.0	5.5
CO10064-1W/Y	SW	8.8	1.5	2.1	75	90	1.6	3.2	4.7	3.3	0	1.06	1.19	5.8	5.5	4.6
ALEGRIA	Hig	3.6	3.3	2.0	93	99	1.5	4.0	4.3	4.0	1	1.12	1.21	7.7	6.9	5.7
AC10376-1W/Y	SW	5.2	1.8	1.7	86	99	1.5	2.6	4.0	2.7	6	1.07	1.13	5.7	5.3	4.7
SORAYA	Hig	3.1	3.2	1.8	78	93	1.6	3.3	4.7	3.4	0	1.54	1.12	8.6	5.6	5.0
CO09128-3W/Y	WRWY	12.5	0.7	2.0	79	96	1.9	3.2	3.6	3.3	10	1.10	1.12	5.0	4.6	4.1
CO10098-5W/Y	SW	7.5	1.0	1.9	63	71	1.5	1.8	4.3	2.2	1	1.05	1.19	5.2	4.9	4.1
CO09218-4W/Y	WRWY	5.2	1.1	1.5	54	85	1.9	1.6	4.4	2.1	0	1.12	1.24	6.0	5.3	4.3
Average		7.3	2.1	2.0	80	93	1.7	3.2	4.1	3.3	5	1.13	1.17	6.4	5.6	4.8
L.S.D. (.05)		1.8	0.3	1.0	12	11	0.2	0.4	0.4	0.3	5	0.06	0.04			

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 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 Western and Southwestern Regional White/Yellow Trial grown near Springlake, Texas-2018.

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
WENDY	Hig	3.6	2.3	1.0	5.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
Yukon Gold	WRWY	3.5	2.0	1.0	3.8	1.0	5.0	5.0	5.0	5.0	3.8	0	0	0	40
CO10098-4W/Y	SW	4.0	1.0	2.0	5.0	1.0	5.0	5.0	5.0	5.0	3.8	0	0	0	25
CO09128-5W/Y	WRWY	4.4	1.0	1.8	5.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO10097-2W/Y	SW	3.5	1.0	2.8	4.8	1.0	4.5	5.0	5.0	5.0	3.6	0	0	0	0
CO10064-1W/Y	SW	3.1	1.0	1.9	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	43
ALEGRIA	Hig	3.5	2.0	1.4	4.0	1.0	5.0	5.0	5.0	5.0	4.1	0	0	0	0
AC10376-1W/Y	SW	3.5	1.4	1.5	4.0	1.0	5.0	5.0	5.0	5.0	4.8	0	0	0	0
SORAYA	Hig	4.0	3.8	1.0	5.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
CO09128-3W/Y	WRWY	4.0	1.0	1.8	4.5	1.0	5.0	5.0	5.0	5.0	4.8	0	0	0	0
CO10098-5W/Y	SW	4.7	1.5	3.3	5.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
CO09218-4W/Y	WRWY	3.8	1.4	2.3	5.0	1.0	5.0	5.0	5.0	5.0	3.9	0	0	0	0
Average		3.8	1.6	1.8	4.6	1.0	5.0	5.0	5.0	5.0	4.1	0	0	0	9
L.S.D. (.05)		0.1	0.2	0.4	0.3		0.2				0.3				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 3e.

Notes and general rating for all reps of 12 entries in the Western and Southwestern Regional White/Yellow Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
WENDY	Hig	Nice, smooth skin+, , ,	Nice, shiny skin, smooth skin+, Medium size+, very nice flesh, Uniform shape and size, BOT	3.8, 3.4, 3.6, 3.6	3.6, 3.6, 3.8, 4.3
Yukon Gold	WRWY	Nice, large, , ,	Large tubers+++ , heavy, high tuber set,	4, 3.5, 4, 4	4, 4.2, 4.6, 3.8
CO10098-4W/Y	SW	, , Not uniform size, late?, Small	Small+, high tuber set, soapy flesh, Sprouts++, small, secondary growth++, ,	3.2, 3.2, 2.8, 3.4	4, 3.4, 3.2, 3.3
CO09128-5W/Y	WRWY	Small+, high tuber set+, , ,	Lots of tubers, small++, very intense flesh, variable flesh color, Road map+, pink eyes	3.6, 3.6, 3.5, 3.3	3.8, 3.8, 3.6, 3.8
CO10097-2W/Y	SW	, , Uniform size and shape,	Nice, watery flesh, soapy flesh++, Medium size+, nice, Good size, russetting	2.6, 3.5, 3.5, 3.5	3.8, 3.8, 3.8, 4
CO10064-1W/Y	SW	, , ,	Small+, Pink eyes+, ,	3.4, 3, 3.4, 3.3	3.6, 3.4, 3.6, 3.6
ALEGRIA	Hig	Large tubers+, , ,	Large tubers, lemon flesh, Nice shape, Smooth skin, medium-large tubers, Medium size	3, 3.5, 3.4, 3.6	3.6, 3.6, 3.8, 3.6
AC10376-1W/Y	SW	No tubers?, , ,	Very few tubers, , Secondary growth+,	1, 3.3, 3.5, 3.4	1.5, 3.5, 3.5, 3.6
SORAYA	Hig	Few tubers, oblong++, , smooth skin,	Few tubers, oblong to long+, beautiful flesh+, Knobs, Variation for color flesh, nice	3, 3, 3.5, 3.8	3.5, 3.6, 3.6, 4.2
CO09128-3W/Y	WRWY	Very small+, , , late?	Small+++ , intense flesh color, road map, soapy flesh+, , Soapy flesh, Knobs+++ , very very intense flesh,	3.3, 3.2, 3.2, 3.3	3.2, 3.2, 3.2, 3.3
CO10098-5W/Y	SW	, Few tubers, ,	snowmen, beautiful flesh	3, 2.6, 2.8, 2.8	2.8, 2.5, 2.3, 2.3
CO09218-4W/Y	WRWY	, Few tubers+, ,	Heat Sprouts+++ , low tuber number, variation for flesh color+, Very small, few tubers+, knobs ,	3.3, 2.6, 2, 2.8	3, 2.5, 2.3, 2.3

Western Regional and Texas Advanced Purple Skin Selection Trial, Springlake

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

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

- Purple Majesty had a best of trial designation, while COTX10138-19P/Y had high general rating (Table 4a).
- TX14629-1P/P had the highest total and marketable yield (Table 4a).
- TX14629-1P/P had the highest yield of less than 4 oz. tubers (Table 4a).
- Purple Majesty and CO08037-2P/P had the highest percentage of less than 4 oz. tubers. (Table 4b).
- TX14629-1P/P and Purple Majesty had the highest number of tubers per plant (Table 4c).
- TX14629-1P/P and CO08037-2P/P were the latest in maturity, while COTX10138-19P/Y was the earliest in maturity (Table 4c).
- Purple Majesty and CO08037-2P/P had the darkest purple flesh color (Table 4d).

Comments on entries:

- TX14629-1P/P Oval Purple Shiny, Dislike shape, wrinkled+, Lighter flesh++, white center+++, Rotting+, internal problems, large tubers, ugly, DROP, FC=2.3
- COTX10138-19P/Y Round Purple Not uniform size, Dislike shape, Sticky stolons+, some large tubers, Scab++, growth cracks, Small, nice, shiny skin, DROP, FC=3.5
- Purple Majesty Oval Purple BOT, Very dark skin, oval to oblong, Pointy, Rough skin, Small, Marble pattern, Nice flesh pattern, FC=4.0
- CO08037-2P/P Round Purple Very dark skin, round, Very few tubers+, white center+++, Sticky stolons, small, FC=4.5

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

Summary:

Purple Majesty was the best entry based on all factors.

Springlake
Table 4a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 4 entries in the Western Reginal and Texas Advanced Purple Skin Selection Trial grown near Springlake, Texas-2018.

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					
TX14629-1P/P	TXP/P	215.9	45.5	35.4	10.1	0.0	158.0	12.4	3.0	3.3
COTX10138-19P/Y	TXP/P	157.0	43.1	26.4	15.5	1.1	105.4	8.4	2.8	3.5
Purple Majesty	WRPu	154.3	8.8	7.9	0.9	0.0	128.1	17.5	3.3	3.4
CO08037-2P/P	WRPu	88.1	5.9	5.0	0.9	0.0	78.3	3.9	2.6	2.6
Average		153.8	25.8	18.7	6.8	0.3	117.5	10.6	2.9	3.2
L.S.D. (.05)		39.8	18.6	15.1	7.2	ns	0.0	ns	0.4	0.3

¹ 1=very poor to 5= excellent

Springlake
Table 4b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 4 entries in the Western Reginal and Texas
Advanced Purple Skin Selection Trial grown near Springlake, Texas-2018.

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				
TX14629-1P/P	TXP/P	22.6	17.3	5.3	0.0	0.0	71.4	6.0	1.070	15.032	Oval	Purple
COTX10138-19P/Y	TXP/P	27.9	17.0	10.3	0.6	0.0	66.3	5.8	1.060	13.159	Round	Purple
Purple Majesty	WRPu	5.5	4.9	0.5	0.0	0.0	83.1	11.4	1.072	15.443	Oval	Purple
CO08037-2P/P	WRPu	6.4	5.2	1.2	0.0	0.0	89.1	4.5	1.073	15.515	Round	Purple
Average		15.6	11.1	4.3	0.1	0.0	77.5	6.9	1.069	14.8		
L.S.D. (.05)		13.1	9.1	5.6	ns	0.0	ns	3.9	0.003	0.5		

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, percent dead vine at vine kill, length/with, and with/thickness of 4 entries in the Western Regional and Texas Advanced Purple Skin Selection Trial grown near Springlake, Texas-2018.

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	Length cm	With cm	Thickness cm
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴						
TX14629-1P/P	TXP/P	9.5	2.4	2.3	64	80	1.8	3.2	4.1	3.7	3	1.20	1.17	7.4	6.2	5.3
COTX10138-19P/Y	TXP/P	5.3	2.4	2.4	99	100	1.5	3.8	3.4	3.9	15	1.07	1.16	7.0	6.5	5.6
Purple Majesty	WRPu	8.1	1.6	2.2	94	97	2.3	3.8	3.8	3.9	8	1.39	1.14	6.6	4.8	4.2
CO08037-2P/P	WRPu	4.0	1.8	2.6	90	100	1.5	2.3	4.1	2.6	1	1.19	1.09	6.3	5.2	4.8
Average		6.7	2.1	2.4	87	94	1.8	3.3	3.8	3.5	7	1.21	1.14	6.8	5.7	5.0
L.S.D. (.05)		1.7	ns	0.4	9	ns	0.3	0.7	0.2	0.3	3	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

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 4 entries in the Western Regional and Texas Advanced Purple Skin Selection Trial grown near Springlake, Texas-2018.

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
TX14629-1P/P	TXP/P	2.3	2.3	1.9	4.0	5.0	5.0	5.0	5.0	5.0	3.8	3	0	0	48
COTX10138-19P/	TXP/P	3.5	1.5	1.9	4.0	5.0	5.0	5.0	5.0	5.0	5.0	10	0	8	0
Purple Majesty	WRPu	4.0	2.0	3.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	3	0	0	3
CO08037-2P/P	WRPu	4.5	1.4	1.0	4.0	5.0	5.0	5.0	5.0	5.0	4.4	0	0	0	0
Average		3.6	1.8	1.9	4.0	5.0	5.0	5.0	5.0	5.0	4.5	4	0	2	13
L.S.D. (.05)		0.4	0.4	0.2	ns						0.4	5		ns	7

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 4 entries in the Western Reginal and Texas Advanced Purple Skin Selection Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
TX14629-1P/P	TXP/P	Shiny, Dislike shape, Wrinkled,	Lighter flesh++, white center+++ , Rotting+, wrinkled, internal problems, , large tubers, ugly, Drop	3.3, 3, 3.2, 2.6	3.5, 3.3, 3.4, 3
COTX10138-19P/Y	TXP/P	, Not uniform size, Dislike shape,	Sticky stolons+, some large tubers, Scab++, growth cracks, Small, nice, shiny skin	2.8, 2.8, 2.6, 2.8	3.4, 3.3, 3.4, 3.8
Purple Majesty	WRPu	Very dark skin, oval to oblong, BOT, Pointy, ,	Rough skin, Small, Marble pattern, Nice flesh pattern Few tubers, round, white center+++ , Sticky stolons,	3.6, 3.3, 3.3, 3	3.6, 3.5, 3.5, 3
CO08037-2P/P	WRPu	Very dark skin, round, Very few tubers+, ,	small, , Few tubers	3, 2.5, 2, 3	2.6, 2.6, 2.6, 2.5

Western Regional Fingerling Trial, Springlake

This trial consisted of two entries, including the check variety LaRatte .

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

- POR11PG62-3 had the highest yield of less than 4 oz. tubers (Table 5a).
- POR11PG62-3 had the highest percentage of less than 4 oz. tubers. LaRatte had over 50% culls (Table 5b).
- Both entries were late in maturity (Table 5c).

Comments on entries:

- POR11PG62-3 Oblong White-Red It does not look like a fingerling+, late, Knobs, small pink unique pattern+, Small, bulging eye, Nice, FC=3.0
- LaRatte Long White Very small, linked tubers++, Attached stolons, Late, few tubers, Heat sprouts+++, Wrinkled, deformed, FC=2.0

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

Summary:

Neither of the entries perform satisfactorily.

Springlake
Table 5a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 2 entries in the Western Regional Fingerling Trial grown near Springlake, Texas-2018.

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					
POR11PG62-3	WRFing	109.4	1.1	1.1	0.0	0.0	0.0	108.4	0.0	2.7	3.1
LaRatte	WRFing	52.7	0.0	0.0	0.0	0.0	0.0	26.1	26.6	2.1	2.6
Average		81.1	0.5	0.5	0.0	0.0	0.0	67.2	13.3	2.4	2.9
L.S.D. (.05)		32.8	ns	ns	0.0	0.0	0.0	31.9	8.3	ns	0.3

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, tuber type and skin type of 2 entries in the Western Regional Fingerling Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Percent By Weight of U.S. No. 1				Percent By Weight			Tuber Type	Skin Type
		Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2		
POR11PG62-3 LaRatte	WRFing	0.8	0.8	0.0	0.0	0.0	99.2	0.0	Oblong	White-Red
	WRFing	0.0	0.0	0.0	0.0	0.0	49.2	50.8	Long	White
Average		0.4	0.4	0.0	0.0	0.0	74.2	25.4		
L.S.D. (.05)		ns	ns	0.0	0.0	0.0	9.2	8.3		

Springlake
Table 5c.

Average number of tubers and stems per plant, tuber weight, percent stand 40 and 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness, length cm, with cm, and thickness cm of 2 entries in the Western Regional Fingerling Trial grown near Springlake, Texas-2018.

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	Length cm	With cm	Thickness cm
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴						
POR11PG62-3 LaRatte	WRFing	9.9	0.9	2.3	96	99	1.8	2.9	4.1	3.0	1	1.58	1.14	6.3	4.0	3.5
	WRFing	9.8	0.4	2.4	96	100	3.0	3.7	5.0	3.9	0	2.36	1.08	6.8	2.9	2.7
Average L.S.D. (.05)		9.9 ns	0.7 ns	2.4 0.2	96 ns	100 ns	2.4 0.3	3.3 0.6	4.5 0.2	3.4 0.5	1 ns	1.97 0.40	1.11 ns	6.56	3.44	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

Springlake
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 2 entries in the Western Regional Fingerling Trial grown near Springlake, Texas-2018.

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
POR11PG62-3 LaRatte	WRFing	3.0	3.0	1.0	4.0	2.5	5.0	5.0	5.0	4.8	5.0	0	0	0	0
	WRFing	2.0	5.0	1.0	5.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		2.5	4.0	1.0	4.5	1.8	5.0	5.0	5.0	4.9	5.0	0	0	0	0
L.S.D. (.05)										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 5e.

Notes and general rating for all reps of 2 entries in the Western Regional Fingerling Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
POR11PG62-3	WRFing	It does not look like a fingerling+, splashed skin pattern, late, , Knobs, Very small, linked tubers++, , Attached stolons, Late,	Pink splashes, small pink unique pattern+, , Small, bulging eye, Nice Heat sprouts+++ , linked tubers+++ , Wrinkled, deformed,	2.5, 2.5, 2.6, 3	2.8, 3, 3.2, 3.5
LaRatte	WRFing	few tubers		2, 2.5, 2, 2	2.5, 2.6, 2.6, 2.6

Texas Advanced Russet Trial, Springlake

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

Results: (Springlake Tables 6a, 6b, 6c, 6d, and 6e)

- Reveille Russet Neb, Russet Norkotah dal, COTX10080-2Ru, Reveille Russet, and TX08352-5Ru were the best entries based on general rating and best of trial designation. ATX12058-1Ru COTX14132-1Ru also received high general ratings (Tables 6a and 6e).
- Reveille Russet Neb had the highest total, marketable yield, and 10-18 oz. tubers, while ATX12058-1Ru had the highest yield of 6-10oz. tubers (Table 6a).
- Russet Norkotah dal and ATX13108-2Ru had the highest yield of culls/No. 2 tubers (Table 6a).
- Reveille Russet Neb, Reveille Russet, TX08352-5Ru, ATX11379-1Ru, and TXA549-1Ru, had the highest percentage of marketable yield. Reveille Russet Neb and ATX11379-1Ru had the highest yield of over 6 oz. tubers (Table 6b).
- COTX13215-1Ru had the highest percentage of less than 4 oz. tubers. ATX13108-2Ru had the highest percentage of culls/No. 2 tubers (Table 6b).
- ATX12058-1Ru and COTX09022-3RuRE/Y had the highest specific gravity (Table 6b).
- COTX10080-2Ru, COTX14132-1Ru, and COTX14250-1Ru were the latest in maturity, while Stampede Russet, TX08352-5Ru, Russet Norkotah296, and Russet Norkotah dal were the earliest in maturity (Table 6c).
- COTX10080-2Ru, Russet Norkotah296, and Russet Norkotah278 had very high percentages of internal brownspot (Table 6d).

Comments on entries:

- Reveille Russet Neb Long Russet BOT, nice shape and size, knobs, High yield, uniform size and shape, some skin color variation, skinning+, bulging eyes, soft rot 10%
- Russet Norkotah dal Long Russet BOT, heavy russet, curved, thin++, pointy+, high set, skinning, high yield, wider than Russet Norkotah

- ATX12058-1Ru Long Russet light skin+, golden skin, higher tuber set, not uniform russet, knobs, large, Uniform size, medium size+++, uniform shape, creamy flesh+
- COTX10080-2Ru Long Russet BOT, pointy+, nice russeting, high set of smalls++, *under skin brown spots?+, high set, nice shape, medium size, uniform russet skin
- COTX09022-3RuRE/Y Oblong Russet red eyes, russet, not uniform size, a few linked tubers, roundish, Netted russet, Good yield, not uniform russet++, no fresh marks, nice, *under skin brown spots?
- Reveille Russet Long Russet BOT, nice shape++, medium russet, uniform size and shape++, beautiful shape, high tuber no, skin blemishes, nice size
- TX08352-5Ru Long Russet BOT+, large, blocky+, nice shape and size+++, nice, good skin * boarder under skin brown spots?, nice russet skin+
- TX13590-9Ru Oblong Russet not uniform shape nor size, small, nice shape, roundish+, angular, not uniform russet skin +
- COTX14132-1Ru Long Russet nice medium russeting, pointy, nice uniform russet
- Russet Norkotah296 VLong Russet curved tubers, pointy++, nice size and shape, long+, thin, good russet skin, soft rot
- ATX11379-1Ru Long Russet not uniform shape, Bulky, attached stolons
- Russet Norkotah278 Long Russet low tuber set, curved, Skinny, pointy++, more eyes than regular Russet Norkotah, long+, nice, not uniform russet skin
- COTX14250-1Ru Long Russet curved tubers, light russet, nice, not uniform russet skin+++, nice shape, nice, long, pointy
- ATX13108-2Ru VLong Russet skinny, curved tubers, Sprouts+, long
- COTX13215-2Ru Long Russet blocky, not uniform size, light russet, small, not uniform russet skin, angular+++, DROP+
- COTX08322-10Ru Long Russet not uniform size, Blocky+, Roundish, Not uniform size,
- Stampede Russet Oblong Russet very low tuber set, very few tubers, pointy, refresh seed, skin blemishes, ugly, not uniform russet skin+
- TXA549-1Ru Long Russet not uniform shape and size, few tubers, DROP

- COTX13215-1Ru Oblong Russet few tubers+, light russet, blocky

Summary:

Reveille Russet Neb, Russet Norkotah dal, COTX10080-2Ru, Reveille Russet, TX08352-5Ru were the best entries based on all factors.

Springlake
Table 6a.

Total yield, total yield of U.S. No.1, over 18 oz, under 4 oz and culls/No.2 potatoes and general rating of 19 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Total Yield cwt/a	U.S. No. 1 cwt/a			Over 18 oz cwt/a	Under 4 oz. cwt/a	Culls/ No.2 cwt/a	General Rating ¹ Field	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz						10-18 oz
Reveille Russet Neb	TXRU	219.9	184.3	28.0	80.6	75.7	4.3	19.7	11.6	3.8	4.3
Russet Norkotah dal	TXRU	218.3	159.0	42.4	60.7	56.0	0.0	23.7	35.6	3.6	3.9
ATX12058-1Ru	TXRU	212.3	155.7	40.3	88.0	27.5	0.0	40.3	16.2	3.5	3.8
COTX10080-2Ru	TXRU	203.6	121.7	49.6	62.4	9.7	0.0	71.6	10.3	3.5	3.8
COTX09022-3RuRE/Y	TXRU	202.8	122.0	68.6	51.2	2.2	0.0	76.2	4.5	3.6	3.9
Reveille Russet	TXRU	199.9	171.6	25.7	75.6	70.4	1.7	23.5	3.0	3.7	4.3
TX08352-5Ru	TXRU	184.1	153.2	26.8	66.7	59.6	4.3	19.9	6.7	3.7	4.4
TX13590-9Ru	TXRU	180.2	118.4	56.0	39.1	23.3	2.6	49.6	9.6	1.5	3.5
COTX14132-1Ru	TXRU	172.9	129.3	22.1	50.5	56.7	0.0	43.6	0.0	3.6	3.8
Russet Norkotah296	TXRU	155.5	117.9	24.4	47.0	46.5	4.3	17.8	15.4	3.5	3.7
ATX11379-1Ru	TXRU	146.9	123.1	22.8	71.2	29.0	0.0	19.4	4.4	2.8	3.5
Russet Norkotah278	TXRU	144.7	107.7	21.8	48.9	37.0	2.1	13.5	21.4	3.5	3.7
COTX14250-1Ru	TXRU	142.4	110.3	26.1	44.6	39.6	8.8	17.1	6.2	3.4	3.5
ATX13108-2Ru	TXRU	141.1	84.4	17.3	35.3	31.8	0.0	26.3	30.4	3.0	3.3
COTX13215-2Ru	TXRU	123.6	95.8	26.6	39.4	29.7	0.0	27.3	0.6	3.5	3.5
COTX08322-10Ru	TXRU	120.5	85.9	23.2	43.7	19.0	0.0	31.6	2.9	3.0	3.4
Stampede Russet	TXRU	95.2	67.1	27.3	37.3	2.4	0.0	24.9	3.2	2.8	2.8
TXA549-1Ru	TXRU	84.4	70.5	15.2	31.8	23.5	0.0	13.8	0.0	3.3	3.3
COTX13215-1Ru	TXRU	31.8	16.6	16.6	0.0	0.0	0.0	15.2	0.0	3.0	3.3
Average		156.8	115.5	30.6	51.3	33.7	1.5	30.3	9.6	3.3	3.7
L.S.D. (.05)		59.3	52.1	19.0	ns	25.2	ns	18.8	10.4	ns	0.3

¹ 1=very poor to 5= excellent

Springlake
Table 6b.

Percent by weight of U.S. No. 1, over 18 oz, under 4 oz, culls/No.2 potatoes, specific gravity, tuber type and skin type of 19 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2018.

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					
Reveille Russet Neb	TXRU	82.0	13.9	34.5	33.5	68.0	1.9	9.7	6.5	1.065	14.1	Long	Russet
Russet Norkotah dal	TXRU	71.9	19.9	28.2	23.8	52.0	0.0	11.7	16.4	1.063	13.8	Long	Russet
ATX12058-1Ru	TXRU	73.1	19.0	41.3	12.7	54.0	0.0	19.3	7.6	1.080	16.7	Long	Russet
COTX10080-2Ru	TXRU	58.5	24.1	30.1	4.3	34.4	0.0	36.1	5.4	1.056	12.6	Long	Russet
COTX09022-3RuRE/Y	TXRU	58.8	32.3	25.4	1.1	26.4	0.0	38.5	2.7	1.081	17.0	Oblong	Russet
Reveille Russet	TXRU	83.4	11.8	40.5	31.1	71.7	1.0	14.5	1.1	1.063	13.8	Long	Russet
TX08352-5Ru	TXRU	81.5	14.8	36.0	30.7	66.6	2.8	12.1	3.6	1.061	13.3	Long	Russet
TX13590-9Ru	TXRU	67.0	31.4	25.3	10.2	35.5	0.9	26.9	5.2	1.075	15.9	Oblong	Russet
COTX14132-1Ru	TXRU	74.8	12.8	29.2	32.8	62.0	0.0	25.2	0.0	1.063	13.7	Long	Russet
Russet Norkotah296	TXRU	75.7	14.8	31.3	29.5	60.9	2.7	10.9	10.8	1.065	14.2	Very Long	Russet
ATX11379-1Ru	TXRU	83.8	15.5	48.5	19.8	68.3	0.0	13.2	3.0	1.074	15.7	Long	Russet
Russet Norkotah278	TXRU	73.2	15.6	33.2	24.4	57.6	2.0	9.7	15.2	1.066	14.2	Long	Russet
COTX14250-1Ru	TXRU	75.9	17.7	30.7	27.5	58.2	6.1	13.0	5.0	1.062	13.6	Long	Russet
ATX13108-2Ru	TXRU	59.8	12.3	25.0	22.5	47.5	0.0	18.6	21.6	1.070	15.0	Very Long	Russet
COTX13215-2Ru	TXRU	77.7	22.9	32.3	22.5	54.8	0.0	21.8	0.5	1.073	15.6	Long	Russet
COTX08322-10Ru	TXRU	71.5	25.3	33.1	13.2	46.2	0.0	26.6	1.9	1.061	13.5	Long	Russet
Stampede Russet	TXRU	70.5	29.0	39.6	1.9	41.5	0.0	26.5	3.0	1.060	13.2	Oblong	Russet
TXA549-1Ru	TXRU	83.6	18.0	37.7	27.9	65.6	0.0	16.4	0.0	1.069	14.9	Long	Russet
COTX13215-1Ru	TXRU	52.2	52.2	0.0	0.0	0.0	0.0	47.8	0.0	1.069	14.9	Oblong	Russet
Average		72.4	21.2	31.7	19.4		0.9	21.0	5.8	1.067	14.5		
L.S.D. (.05)		10.9	10.3	ns	9.7		ns	9.7	6.0	0.0	0.7		

Springlake
Table 6c.

Average number of tubers and stems per plant, tuber weight, percent stand 40 and 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness, length cm, with cm, and thickness cm of 19 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Number Stems/ Plant	Average Tuber Weight In oz.	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines	Length/ With	With/ Thickness	Length cm	With cm	Thickness cm
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴						
Reveille Russet Neb	TXRU	2.8	1.3	6.8	83	95	1.5	3.1	3.9	3.3	23	1.90	1.18	12.5	6.6	5.6
Russet Norkotah dal	TXRU	3.2	1.9	5.7	98	100	1.5	3.7	3.4	3.6	46	2.32	1.18	13.7	5.9	5.0
ATX12058-1Ru	TXRU	3.9	1.6	5.2	63	90	1.5	3.4	3.7	3.4	24	1.62	1.25	10.5	6.5	5.2
COTX10080-2Ru	TXRU	4.9	1.4	3.8	71	92	1.6	3.4	4.5	3.5	4	1.81	1.14	10.5	5.8	5.1
COTX09022-3RuRE/Y	TXRU	4.2	2.3	4.1	97	100	1.5	4.0	2.9	4.0	68	1.31	1.29	8.6	6.5	5.1
Reveille Russet	TXRU	2.7	1.5	7.0	58	86	1.5	3.0	3.8	3.1	21	1.84	1.15	12.3	6.7	5.8
TX08352-5Ru	TXRU	2.1	1.5	7.2	80	98	1.5	3.1	3.3	3.3	39	1.71	1.20	11.6	6.8	5.7
TX13590-9Ru	TXRU	3.4	2.7	4.5	93	99	1.5	4.0	3.9	3.9	18	1.64	1.13	9.8	6.0	5.3
COTX14132-1Ru	TXRU	2.6	1.3	5.6	93	100	1.5	3.4	4.5	3.3	5	1.92	1.14	11.7	6.1	5.3
Russet Norkotah296	TXRU	2.1	1.5	6.8	96	97	1.5	3.2	3.4	3.3	43	2.33	1.11	13.0	5.6	5.0
ATX11379-1Ru	TXRU	2.0	1.5	6.2	86	100	1.5	3.8	3.8	3.7	20	1.67	1.09	10.2	6.1	5.6
Russet Norkotah278	TXRU	2.0	1.2	6.3	85	98	1.5	3.1	3.7	3.2	38	2.44	1.13	13.8	5.7	5.0
COTX14250-1Ru	TXRU	1.9	1.4	6.6	78	93	1.5	3.7	4.4	3.7	5	2.03	1.11	12.6	6.2	5.6
ATX13108-2Ru	TXRU	2.0	1.7	5.9	75	100	1.5	3.7	3.8	3.8	15	2.27	1.10	12.7	5.6	5.1
COTX13215-2Ru	TXRU	2.2	1.4	5.4	71	87	1.8	3.5	3.6	3.6	28	1.54	1.27	10.6	6.9	5.4
COTX08322-10Ru	TXRU	2.2	1.5	4.5	91	98	1.5	3.4	2.8	3.4	61	1.46	1.25	9.5	6.5	5.2
Stampede Russet	TXRU	1.8	1.2	4.8	85	91	1.5	3.1	3.3	3.0	39	1.75	1.19	11.0	6.3	5.3
TXA549-1Ru	TXRU	1.5	1.7	5.0	82	93	1.5	3.5	4.0	3.7	10	1.65	1.13	10.9	6.6	5.8
COTX13215-1Ru	TXRU	2.2	1.2	2.4	39	50	1.5	2.0	4.0	3.6	15	1.44	1.23	9.9	6.9	5.6
Average		2.6	1.6	5.5	80	93	1.5	3.4	3.7	3.5	27	1.82	1.17	11.3	6.3	5.4
L.S.D. (.05)		1.0	0.2	1.0	10	8	ns	0.3	0.3	0.3	14	0.12	0.06	0.9	0.4	0.3

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

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

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

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

Springlake
Table 6d.

Flesh color, tuber shape, degree of russetting, 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 Texas Advanced Russet Selection Trial grown near Springlake, Texas-2018.

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
Reveille Russet Neb	TXRU	1.0	4.0	3.0	4.0	3.0	5.0	5.0	5.0	5.0	3.8	0	0	0	18
Russet Norkotah dal	TXRU	1.0	4.5	4.0	4.0	4.5	5.0	5.0	5.0	5.0	5.0	0	0	0	28
ATX12058-1Ru	TXRU	1.5	3.6	3.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	3
COTX10080-2Ru	TXRU	1.0	4.0	4.4	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	60
COTX09022-3RuRE/Y	TXRU	4.0	3.0	3.5	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	10	5
Reveille Russet	TXRU	1.0	4.0	3.0	4.0	3.0	5.0	5.0	5.0	5.0	3.9	0	0	0	10
TX08352-5Ru	TXRU	1.0	4.5	3.8	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	5	25
TX13590-9Ru	TXRU	1.0	3.6	3.0	4.0	3.6	5.0	5.0	5.0	5.0	5.0	0	0	8	13
COTX14132-1Ru	TXRU	1.0	4.5	4.0	4.0	4.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Russet Norkotah296	TXRU	1.0	5.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	48
ATX11379-1Ru	TXRU	1.0	4.0	4.0	3.8	4.0	5.0	5.0	5.0	5.0	5.0	0	0	10	0
Russet Norkotah278	TXRU	1.0	4.9	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	3	45
COTX14250-1Ru	TXRU	1.0	4.0	3.5	4.0	3.5	5.0	5.0	5.0	5.0	4.8	3	0	5	30
ATX13108-2Ru	TXRU	1.0	5.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX13215-2Ru	TXRU	1.0	3.8	3.3	4.0	3.3	5.0	5.0	5.0	5.0	5.0	0	0	8	3
COTX08322-10Ru	TXRU	1.0	3.6	3.5	4.0	3.6	5.0	5.0	5.0	5.0	5.0	0	0	0	3
Stampede Russet	TXRU	1.0	3.8	3.0	4.0	3.6	5.0	5.0	5.0	5.0	4.2	0	0	0	8
TXA549-1Ru	TXRU	1.0	4.5	3.0	4.0	3.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX13215-1Ru	TXRU	1.0	3.8	3.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		1.2	4.1	3.5	4.0	3.7	5.0	5.0	5.0	5.0	4.8	0.1	0	3	16
L.S.D. (.05)		0.0	0.2	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.3	ns	0.0	ns	20.4

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 6c.

Notes and general rating for all reps of 19 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Reveille Russet Neb	TXRU	nice shape and size, knobs, High yield,	uniform size and shape, some skin color variation, bacterial rot 10%, BOT, skinning+, bulging eyes, soft thin+, pointy+, high set, curved, skinning, BOT, high yield, wider than Russet Norkotah	4, 3.6, ,	4.2, 4, 4.8, 4
Russet Norkotah dal	TXRU	skinny, heavy russet, curved, pointy, , , light skin+, golden skin, higher tuber set, not uniform russet, knobs, large, ,	Uniform size, medium size+++ , uniform shape, creamy flesh+, , high set of smalls++ , *under skin brown spots?+, , high set, nice shape, medium size, BOT, pointy, not uniform	3.6, 3.6, ,	3.6, 3.8, 3.8, 4.3
ATX12058-1Ru	TXRU	russet, knobs, large, ,	Netted russets, roundish red eyes, Good yield, round, not uniform russet++ , no fresh marks, nice, *under skin uniform size and shape, nice shape+, BOT, beautiful shape, high tuber no. skin blemishes, nice size	3.6, 3.3, ,	3.8, 4.2, 3.6, 3.6
COTX10080-2Ru	TXRU	pointy+, nice russetting, , , red eyes, russet not uniform size, a few linked tubers, roundish, not uniform russet, ,	boarder under skin brown spots?, nice russet skin, BOT small, roundish+, angular, not uniform skin russet+, small	3.4, 3.5, ,	3.8, 3.5, 4.3, 3.4
COTX09022-3RuRE/Y	TXRU	russet, knobs, large, ,	uniform size and shape, nice shape+, BOT, beautiful shape, high tuber no. skin blemishes, nice size	3.6, 3.6, ,	3.6, 4, 3.8, 4.2
Reveille Russet	TXRU	nice shape, medium russet uniform size and shape, , ,	blocky+, nice shape and size++ , BOT, nice, good skin * boarder under skin brown spots?, nice russet skin, BOT small, roundish+, angular, not uniform skin russet+, small	3.8, 3.6, ,	4, 3.8, 4.6, 4.6
TX08352-5Ru	TXRU	blocky, nice shape, large, ,	small	3.6, 3.8, ,	4, 4.6, 4.4, 4.6
TX13590-9Ru	TXRU	not uniform shape and size, small, nice shape,	small	3.4, 2.5, 0, 0	3.5, 3.4, 3.5, 3.5
COTX14132-1Ru	TXRU	nice medium russetting, pointy, , ,	nice uniform russet, , , nice size and shape, long+, pointy, thin, good russet skin, soft rot	3.6, , ,	3.8, , ,
Russet Norkotah296	TXRU	curved tubers, pointy, , ,	Bulky, attached stolons, , , Skinny, pointy++ , more eyes than regular Russet Norkotah, long+, nice, not uniform russet skin, not uniform russet skin+++ , nice shape, nice, long, pointy	3.5, 3.5, ,	3.8, 3.6, 3.6, 3.6
ATX11379-1Ru	TXRU	not uniform shape, , ,	Bulky, attached stolons, , , Skinny, pointy++ , more eyes than regular Russet Norkotah, long+, nice, not uniform russet skin, not uniform russet skin+++ , nice shape, nice, long, pointy	2.8, , ,	3.5, , ,
Russet Norkotah278	TXRU	low tuber set, pointy, curved, , ,	Curved, Sprouts, long, , ,	3.4, 3.5, ,	3.5, 3.8, 3.8, 3.8
COTX14250-1Ru	TXRU	curved tubers, light russet, , nice,	not uniform russet skin, angular+++ , , DROP+ , Blocky, Roundish, Not uniform size, Root marks on tuber	3.3, 3.5, ,	3.3, 3.6, 3.6, 3.6
ATX13108-2Ru	TXRU	skinny, curved tubers, sprouts, , ,	very few tubers, pointy, refresh seed, skin blemishes, ugly, not uniform russet skin+,	3, , ,	3.3, , ,
COTX13215-2Ru	TXRU	blocky, not uniform size, light russet, small, ,	not uniform russet skin, angular+++ , , DROP+ , Blocky, Roundish, Not uniform size, Root marks on tuber	3.5, 3.4, ,	3.6, 3.5, 3.3, 3.4
COTX08322-10Ru	TXRU	blocky, not uniform size, , ,	very few tubers, pointy, refresh seed, skin blemishes, ugly, not uniform russet skin+,	3.4, 2.5, ,	3.4, 3.4, 3.4, 3.4
Stampede Russet	TXRU	very low tuber set, , ,	few tubers, DROP, , ,	2, 3.5, ,	2, 2.6, 3.3, 3.2
TXA549-1Ru	TXRU	not uniform shape and size, , ,	blocky , few tubers, bulky, , ,	3.3, , ,	3.3, , ,
COTX13215-1Ru	TXRU	few tubers, light russet, blocky, , ,	blocky , few tubers, bulky, , ,	3, , ,	3.3, , ,

Texas Advanced Red/White Trial, Springlake

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

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

- ATX08121-5R and COTX02293-4R were the best entries based on general rating and best of trial designation, while TX14632-2R, NDTX13105-1R, and TX14615-4R also had high general ratings (Table 7a and 7e).
- ATX08121-5R had the highest total yield, while Red LaSoda dal had the highest marketable yield (Table 7a).
- ATX08121-5R and NDTX12248Y-1R had the highest yield of 4-10 oz. tubers, while COTX07054-2R had the highest yield of less than 4 oz. tubers (Table 7a).
- COTX00104-6R had the highest percentage of marketable yield (Table 7b).
- COTX07054-2R and COTX14035-1R had the highest percentage of less than 4 oz. tubers (Table 7b).
- COTX07054-2R had the highest specific gravity (Table 7b).
- COTX07054-2R and TX14632-2R had the highest average number of tubers per plant (Table 7c).
- Red LaSoda dal, COTX14128-1R, and COTX14107-4R were the latest in maturity, while TX14615-4R, TX14619-2R, TX14615-3R, COTX02293-4R, TX14632-2R, and COTX14107-3R were the earliest in maturity (Table 7c).

Comments on entries:

- ATX08121-5R Round Red BOT+++ , Light skin color+ , nice shape , Medium tubers , high tuber set , Medium size , nice+ , dark red eyes+ , Attractive , red-orange skin color
- COTX07054-2R Round Red Small tubers+ , high tuber set+ , shiny , nice+
- Red LaSoda dal Oval Red Light skin , deep eyes , Knobs , attached stolon , high yield , Smaller than other Red LaSoda++ , flat
- COTX02293-4R Round Red BOT++ , Small , Nice . Intense bright color , medium size , Beautiful skin color+ , Nice+ , shiny , uniform shape and size
- TX14632-2R Round Red Nice , small - medium
- NDTX13105-1R Oval Red Small , Nice , shiny , creamy flesh

- TX14615-4R Oval Red Intense skin color++, Shiny, nice skin color, Nice+
- NDTX12248Y-1R Round Red Very light skin+, Bright light color, Nice, Red eyes
- TX14619-2R Oval Red Skin map, Netted scab
- TX14615-3R Oval Red Angular tubers, Shiny skin+, nice, Bright skin, smooth
- COTX14035-1R Round Red Very intense skin color, Shiny
- COTX00104-6R Oval Red Few tubers, Very intense skin color++, Road map
- NDTX4784-7R Oval Red Intense skin color+, Nice skin color, Very few tubers
- COTX14107-3R Round Red Very few tubers, intense skin color
- TX14612-1R Oval Red Very Intense color++, few tubers++, nice skin,
- TX14621-2R Oval Red Very few tubers++, Road map
- COTX14128-1R Oval Red Very few tubers
- COTX14107-4R Round Red Very few tubers

Summary:

ATX08121-5R and COTX02293-4R were the best 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 18 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2018.

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					
ATX08121-5R	TXRD	183.1	68.5	47.5	13.5	7.4	0.0	113.6	1.1	3.6	3.7
COTX07054-2R	TXRD	165.1	20.7	18.1	2.6	0.0	0.0	143.8	0.6	3.5	3.5
Red LaSoda dal	TXRD	159.7	85.3	47.0	31.7	6.6	5.2	64.0	5.3	3.5	3.4
COTX02293-4R	TXRD	147.1	43.2	28.9	14.3	0.0	0.0	103.9	0.0	3.8	3.8
TX14632-2R	TXRD	143.8	28.3	16.6	11.8	0.0	0.0	115.5	0.0	3.4	3.6
NDTX13105-1R	TXRD	135.0	29.0	23.5	5.5	0.0	0.0	103.7	2.3	3.2	3.6
TX14615-4R	TXRD	112.9	39.0	31.2	7.9	0.0	0.0	73.1	0.7	3.3	3.6
NDTX12248Y-1R	TXRD	106.5	57.7	39.2	18.5	0.0	0.0	48.1	0.7	3.1	3.3
TX14619-2R	TXRD	104.3	50.1	27.3	13.8	9.0	0.0	51.9	2.4	3.4	2.6
TX14615-3R	TXRD	85.7	43.4	26.1	15.1	2.2	0.0	41.8	0.5	3.0	2.9
COTX14035-1R	TXRD	84.0	15.6	13.1	2.4	0.0	0.0	68.5	0.0	3.4	3.3
COTX00104-6R	TXRD	78.4	45.2	26.1	11.9	7.2	3.5	26.4	3.3	2.9	3.1
NDTX4784-7R	TXRD	62.0	26.4	19.0	7.4	0.0	0.0	35.6	0.0	2.8	2.4
COTX14107-3R	TXRD	49.7	15.1	12.4	2.7	0.0	0.0	34.6	0.0	2.5	2.0
TX14612-1R	TXRD	42.0	23.6	16.3	6.2	1.1	1.7	15.2	1.5	2.3	2.0
TX14621-2R	TXRD	36.5	17.3	14.0	3.3	0.0	0.0	19.1	0.0	2.3	1.8
COTX14128-1R	TXRD	35.8	14.3	11.8	2.5	0.0	0.0	20.1	1.5	2.5	2.0
COTX14107-4R	TXRD	25.3	10.1	2.0	3.6	4.5	0.0	15.2	0.0	2.5	1.5
Average		97.6	35.2	23.3	9.7	2.1	0.6	60.8	1.1	3.0	2.9
L.S.D. (.05)		49.7	27.6	ns	ns	ns	ns	33.7	ns	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 18 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2018.

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				
ATX08121-5R	TXRD	39.7	29.0	7.0	3.7	0.0	60.0	0.4	1.074	15.7	Round	Red
COTX07054-2R	TXRD	12.1	10.7	1.3	0.0	0.0	87.5	0.4	1.080	16.8	Round	Red
Red LaSoda dal	TXRD	49.4	28.9	17.2	3.3	3.2	44.8	2.6	1.055	12.3	Oval	Red
COTX02293-4R	TXRD	30.8	20.9	9.8	0.0	0.0	69.2	0.0	1.064	13.9	Round	Red
TX14632-2R	TXRD	19.7	11.5	8.2	0.0	0.0	80.3	0.0	1.064	14.0	Round	Red
NDTX13105-1R	TXRD	21.5	17.4	4.1	0.0	0.0	76.8	1.7			Oval	Red
TX14615-4R	TXRD	34.2	27.4	6.8	0.0	0.0	65.1	0.7			Oval	Red
NDTX12248Y-1R	TXRD	53.7	35.8	17.9	0.0	0.0	46.0	0.3			Round	Red
TX14619-2R	TXRD	48.0	26.2	13.3	8.6	0.0	49.7	2.3	1.048	11.1	Oval	Red
TX14615-3R	TXRD	51.0	31.7	16.9	2.5	0.0	48.4	0.6	1.054	12.1	Oval	Red
COTX14035-1R	TXRD	18.5	15.6	2.9	0.0	0.0	81.5	0.0	1.058	12.9	Round	Red
COTX00104-6R	TXRD	57.0	32.0	13.9	11.0	5.3	34.1	3.7	1.055	12.3	Oval	Red
NDTX4784-7R	TXRD	41.1	30.5	10.7	0.0	0.0	58.9	0.0	1.050	11.5	Oval	Red
COTX14107-3R	TXRD	30.5	25.0	5.4	0.0	0.0	69.5	0.0			Round	Red
TX14612-1R	TXRD	52.1	39.7	11.0	1.4	5.8	38.9	3.1	1.049	11.3	Oval	Red
TX14621-2R	TXRD	46.5	38.2	8.3	0.0	0.0	53.5	0.0			Oval	Red
COTX14128-1R	TXRD	39.9	32.9	7.0	0.0	0.0	56.1	4.1			Oval	Red
COTX14107-4R	TXRD	39.9	7.9	14.2	17.8	0.0	60.1	0.0			Round	Red
Average		38.1	25.6	9.8	2.7	0.8	60.0	1.1	1.059	13.1		
L.S.D. (.05)		14.1	10.6	ns	4.8	ns	15.0	ns	0.003	0.5		

Springlake
Table 7c.

Average number of tubers and stems per plant, tuber weight, percent stand 40 and 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness, length cm, with cm, and thickness cm of 18 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2018.

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	Length cm	With cm	Thickness cm
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴						
ATX08121-5R	TXRD	5.1	3.2	2.4	93	92	1.8	3.4	3.4	3.6	11	1.06	1.19	7.0	6.5	5.5
COTX07054-2R	TXRD	7.3	1.9	3.6	95	100	2.1	3.8	3.2	3.9	18	1.05	1.17	6.1	5.8	5.0
Red LaSoda dal	TXRD	4.1	3.4	2.7	86	92	2.1	4.0	4.2	4.2	6	1.08	1.19	7.4	6.8	5.7
COTX02293-4R	TXRD	6.4	2.6	3.2	67	78	2.0	2.8	3.3	3.0	15	1.12	1.09	7.0	6.3	5.7
TX14632-2R	TXRD	7.6	2.6	3.7	64	61	1.5	2.0	3.2	3.9	20	1.08	1.17	1.7	1.5	1.3
NDTX13105-1R	TXRD	4.4	2.5	1.9	79	100	1.5	3.8	3.8	3.7	5	1.04	1.19	1.7	1.6	1.4
TX14615-4R	TXRD	4.1	2.5	3.6	80	92	1.8	3.5	2.9	3.5	23	1.14	1.16	7.0	6.1	5.3
NDTX12248Y-1R	TXRD	3.1	3.6	2.6	54	73	1.5	3.2	3.8	3.7	4	1.05	1.21	6.8	6.5	5.4
TX14619-2R	TXRD	4.5	2.7	2.4	54	71	1.5	2.6	3.3	2.8	10	1.18	1.16	1.9	1.6	1.4
TX14615-3R	TXRD	3.9	3.0	2.7	55	63	1.6	3.0	3.3	3.7	14	1.08	1.20	6.9	6.4	5.3
COTX14035-1R	TXRD	3.3	2.4	2.0	57	86	1.5	1.5	4.0	1.5	0	1.09	1.07	1.5	1.4	1.3
COTX00104-6R	TXRD	2.6	3.8	2.1	58	74	2.0	1.8	3.9	2.1	1	1.16	1.12	7.1	6.2	5.5
NDTX4784-7R	TXRD	4.1	2.7	2.0	34	45	1.5	1.5	3.8	2.5	1	1.08	1.09	6.1	5.7	5.2
COTX14107-3R	TXRD	3.6	2.1	1.6	32	54	1.5	1.0	3.3	1.5	5	1.07	1.13	1.5	1.4	1.2
TX14612-1R	TXRD	2.6	3.4	2.2	29	36	1.5	1.1	3.9	2.6	4	1.19	1.19	7.3	6.2	5.2
TX14621-2R	TXRD	3.3	2.6	1.8	27	35	1.8	1.3	3.8	2.1	1	1.11	1.12	5.1	4.6	4.1
COTX14128-1R	TXRD	3.0	2.8	2.3	14	36	1.5	1.0	4.2	2.0	0	1.10	1.21	1.8	1.7	1.4
COTX14107-4R	TXRD	2.5	2.9	2.1	25	29	2.0	1.0	4.2	1.8	0	1.08	1.03	1.3	1.2	1.1
Average		4.2	2.8	2.5	56	68	1.7	2.3	3.6	2.9	8	1.10	1.15	4.7	4.3	3.7
L.S.D. (.05)		1.6	0.4	0.6	9	14	ns	0.6	0.3	0.6	7	ns	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 18 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2018.

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
ATX08121-5R	TXRD	1.0	1.6	1.0	3.8	2.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX07054-2R	TXRD	1.0	1.0	1.0	4.5	3.8	5.0	5.0	5.0	5.0	4.8	0	0	0	0
Red LaSoda dal	TXRD	1.0	2.0	1.0	3.3	2.5	5.0	5.0	5.0	4.0	4.3	0	0	0	0
COTX02293-4R	TXRD	1.0	1.1	1.0	4.4	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TX14632-2R	TXRD	1.0	1.5	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX13105-1R	TXRD	1.0	2.0	1.0	3.8	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TX14615-4R	TXRD	1.0	2.8	1.0	4.6	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX12248Y-1R	TXRD	1.0	1.3	1.0	3.8	2.6	5.0	5.0	5.0	5.0	4.9	0	0	0	0
TX14619-2R	TXRD	1.0	2.0	1.5	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TX14615-3R	TXRD	1.0	2.4	1.0	3.8	3.3	5.0	5.0	5.0	5.0	4.4	0	0	0	3
COTX14035-1R	TXRD	1.0	1.0	1.0	3.8	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX00104-6R	TXRD	1.0	2.5	2.0	4.0	4.5	4.2	5.0	5.0	5.0	4.8	5	0	0	0
NDTX4784-7R	TXRD	1.0	1.9	1.1	3.8	4.0	5.0	5.0	5.0	5.0	4.9	0	0	0	0
COTX14107-3R	TXRD	1.0	1.0	1.0	3.8	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TX14612-1R	TXRD	1.0	2.4	1.0	4.3	4.3	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TX14621-2R	TXRD	1.0	1.5	1.3	4.0	3.8	5.0	5.0	5.0	5.0	4.6	0	0	0	0
COTX14128-1R	TXRD	1.0	2.0	1.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX14107-4R	TXRD	1.0	1.0	1.0	3.8	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		1.0 ns	1.7 0.3	1.1 0.1	4.0 0.2	3.6 0.3	5.0 0.2	5.0 0.0	5.0 0.0	4.9 0.0	4.9 0.3	0 ns	0 ns	0 0	0 0

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 18 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
ATX08121-5R	TXRD	Light skin color+, nice shape, Medium tubers, high tuber set, BOT+, ,	Medium size, nice+, Light skin, dark red eyes+, BOT, , Attractive, red-orange skin color	3.8, 4.1, 2.6, 4	3.5, 3.8, 3.8, 3.8
COTX07054-2R	TXRD	, Small tubers+, high tuber set, ,	Small+, shiny, nice, , Lots of tubers Knobs, attached stolon, high yield, Smaller than other	3.5, 3.8, 3.6, 3	3.5, 3.6, 3.2, 3.6
Red LaSoda dal	TXRD	Light skin, deep eyes, , , Small, , Nice. Intense bright color, medium size,	Red LaSoda++, flat, , Beautiful skin color+, BOT, Nice+, shiny, uniform shape and size,	3.6, 3.6, 3.5, 3.4	3.5, 3.4, 3.3, 3.2
COTX02293-4R	TXRD	BOT+,		3.6, 3.4, 4, 4	3.8, 3.8, 3.8, 3.8
TX14632-2R	TXRD	, , ,	Nice, small - medium, , ,	3.4, , ,	3.6, , ,
NDTX13105-1R	TXRD	Small, , ,	Nice, shiny, creamy flesh, , ,	3.2, , ,	3.6, , ,
TX14615-4R	TXRD	Intense skin color, , ,	Shiny, nice skin color, Nice+, Intense skin color,	3.4, 2.6, 3.2, 3.8	3.6, 3.6, 3.4, 3.6
NDTX12248Y-1R	TXRD	Very light skin+, Bright light color, ,	, Nice, Light skin, Red eyes	2.6, 3.8, 3, 2.8	3, 3.8, 3.3, 3
TX14619-2R	TXRD	Skin map, , ,	Netted scab, , ,	3.4, , ,	2.6, , ,
TX14615-3R	TXRD	, , ,	Angular tubers, Shiny skin+, nice, , Bright skin, smooth	2.8, 3.2, 3.2, 2.8	2.6, 3.5, 2.6, 3
COTX14035-1R	TXRD	Very intense skin color, , ,	Shiny, , ,	3.4, , ,	3.3, , ,
COTX00104-6R	TXRD	Few tubers, , ,	Very intense skin color++, few tubers+, , , Road map	3, 2.6, 2.5, 3.5	2.8, 2.8, 2.8, 3.8
NDTX4784-7R	TXRD	Intense skin color, , ,	Nice skin color, Very few tubers, , Intense red skin	3.4, 2.5, 2.6, 2.5	3.3, 1.5, 2, 2.8
COTX14107-3R	TXRD	Very few tubers, intense skin color, , ,	Very few tubers, , ,	2.5, , ,	2, , ,
TX14612-1R	TXRD	Very Intense color++, few tubers++, , ,	Few tubers+++, nice skin, , , Intense skin color	2.6, 2.6, 2, 2	2.6, 2.5, 1.5, 1.5
TX14621-2R	TXRD	, , ,	, Very few tubers++, Road map,	2, 2.5, 2.6, 2	2, 1.5, 2, 1.5
COTX14128-1R	TXRD	Very few tubers, , ,	Very few tubers, , ,	2.5, , ,	2, , ,
COTX14107-4R	TXRD	, , ,	Very few tubers, , ,	2.5, , ,	1.5, , ,

Texas Advanced Red/Yellow Selection Trial, Springlake

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

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

- ATTX10265-4R/Y and NDTX059759-3RY/YPinto were the best entries based on general rating and best of trial designation, while TX14646-1W-R/YPinto had the highest general rating (Table 8a and 8e).
- Sierra Rose had the highest total yield, while TX14646-1W-R/YPinto had the highest marketable yield (Table 8a)
- Sierra Rose had the highest yield of over 4-6 oz., while TX14646-1W-R/YPinto had the highest yield of 6-10 oz. tubers. ATTX10265-4R/Y had the highest yield of less than 4 oz. tubers (Table 8a).
- TX14646-1W-R/YPinto had the highest percentage of marketable yield and 6-10 oz. tubers (Table 8b).
- ATTX10265-4R/Y had the highest percentage of less than 4 oz. tubers (Table 8b).
- NDTX13264B-1R/Y had the highest specific gravity (Table 8b).
- NDTX13264B-1R/Y had the highest average number of tubers per plant (Table 8c).
- NDTX059759-3RY/YPinto and NDTX13264B-1R/Y were the latest in maturity, while BTX2103-1R/Y was the earliest in maturity (Table 8c).
- TX14646-1W-R/YPinto and BTX2103-1R/Y had the darkest yellow flesh color (Table 8d).

Comments on entries:

- | | | | |
|------------------|------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • Sierra Rose | Oval | Red | Nice+, uniform, Oblong, Flat+, Nice pattern, Skin color radiation, angular, heavy, nice flesh, Beautiful skin pattern, hard to cut, pink streaks (40%), FC=3.3 |
| • ATTX10265-4R/Y | Oval | Red | BOT, Uniform size, nice, heat sprouts, High tuber number, Healthy looking tubers, A little flat+, pleasant combination, Nice++, keep, no pink streaks, FC=3.4 |

- TX14646-1W-R/YPinto Oval White-Red beautiful skin pattern, shiny, smooth skin, Similar to Harlequin, not flat, very nice+, yellow/pink flesh all over, FC=3.5
- NDTX059759-3RY/YPinto Oval White-Red BOT, Some large tubers, Flat++, few eyes, Not uniform, High tuber number, Smooth skin, nice+, pink streaks in flesh (50%), pink streaks (10%), Intense flesh color, Large tubers, FC=3.0
- BTX2103-1R/Y Oval Red Not uniform, Small tubers++, Uneven skin color, Yellow lemon color+, snaps+, FC=3.6
- NDTX13264B-1R/Y Round Red Intense red skin, *Lots of pink streaks in flesh, pink streaks near the stolon attachment point, FC=2.0

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

Summary:

ATTX10265-4R/Y and NDTX059759-3RY/YPinto were the best entries based on all factors.

Springlake
Table 8a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 6 entries in the Texas Advanced Red/Yellow Selection
Trial grown near Springlake, Texas-2018.

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
Sierra Rose	TXRD/Y	207.5	104.1	72.4	28.5	3.1	0.0	100.6	2.8	3.6	3.7
ATX10265-4R/Y	TXRD/Y	195.9	28.9	28.3	0.7	0.0	0.0	159.0	8.0	3.8	3.8
TX14646-1W-R/YPinto	TXRD/Y	192.9	134.8	52.5	82.3	0.0	0.0	58.1	0.0	3.7	4.2
NDTX059759-3RY/YPinto	TXRD/Y	139.8	70.9	36.3	34.6	0.0	0.0	69.0	0.0	3.6	3.7
BTX2103-1R/Y	TXRD/Y	136.4	37.7	31.6	6.0	0.0	0.0	98.0	0.7	3.4	3.2
NDTX13264B-1R/Y	TXRD/Y	123.8	36.6	36.6	0.0	0.0	0.0	87.1	0.0	3.0	3.6
Average		166.1	68.8	43.0	25.3	0.5	0.0	95.3	1.9	3.5	3.7
L.S.D. (.05)		ns	18.9	13.1	9.0	ns	0.0	40.4	ns	ns	ns

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 6 entries in the Texas Advanced Red/Yellow Selection Trial grown near Springlake, Texas-2018.

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				
Sierra Rose	TXRD/Y	51.0	35.9	13.8	1.3	0.0	47.6	1.4	1.068	14.6	Oval	Red
ATTX10265-4R/Y	TXRD/Y	14.7	14.3	0.4	0.0	0.0	80.9	4.4	1.054	12.1	Oval	Red
TX14646-1W-R/YPinto	TXRD/Y	69.9	27.2	42.7	0.0	0.0	30.1	0.0	1.059	13.0	Oval	White-Red
NDTX059759-3RY/YPinto	TXRD/Y	53.6	27.4	26.2	0.0	0.0	46.4	0.0	1.059	13.0	Oval	White-Red
BTX2103-1R/Y	TXRD/Y	27.6	23.8	3.8	0.0	0.0	71.9	0.5	1.063	13.8	Oval	Red
NDTX13264B-1R/Y	TXRD/Y	29.6	29.6	0.0	0.0	0.0	70.4	0.0	1.070	15.0	Round	Red
Average		41.1	26.4	14.5	0.2	0.0	57.9	1.1	1.062	13.6		
L.S.D. (.05)		8.7	5.5	5.9	ns	0.0	8.4	0.0	0.002	0.3		

Springlake
Table 8c.

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 6 entries in the Texas Advanced Red/Yellow Selection Trial grown near Springlake, Texas-2018.

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			
Sierra Rose	TXRD/Y	5.2	3.6	2.0	85	91	1.5	3.8	3.9	3.8	13	1.31	1.19
ATTX10265-4R/Y	TXRD/Y	6.8	2.4	2.0	95	99	1.6	3.8	4.4	3.9	6	1.06	1.31
TX14646-1W-R/YPinto	TXRD/Y	4.9	4.6	2.0	71	71	2.0	3.3	3.8	3.5	5	1.17	1.32
NDTX059759-3RY/YPinto	TXRD/Y	3.8	3.2	2.3	95	96	1.5	3.9	4.7	3.8	3	1.18	1.37
BTX2103-1R/Y	TXRD/Y	4.5	2.5	2.0	82	99	1.6	3.2	3.3	3.4	13	1.06	1.34
NDTX13264B-1R/Y	TXRD/Y	8.6	2.4	2.6	36	50	3.0	3.0	4.6	4.5	0	1.06	1.21
Average		5.6	3.1	2.1	77	84	1.9	3.5	4.1	3.8	6	1.14	1.29
L.S.D. (.05)		1.5	0.3	ns	11	9	0.2	0.3	ns	0.2	ns	0.07	0.04

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

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

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

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

Springlake
Table 8d.

Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 6 entries in the Texas Advanced Red/Yellow Selection Trial grown near Springlake, Texas-2018.

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
Sierra Rose	TXRD/Y	3.3	2.5	1.0	4.0	2.9	5.0	5.0	5.0	5.0	4.8	0	0	0	0
ATTX10265-4R/Y	TXRD/Y	3.4	2.3	1.0	4.0	2.5	5.0	5.0	5.0	5.0	5.0	3	0	0	0
TX14646-1W-R/YPinto	TXRD/Y	3.5	2.0	1.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX059759-3RY/YPinto	TXRD/Y	3.0	2.5	1.0	4.0	2.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
BTX2103-1R/Y	TXRD/Y	3.6	2.4	1.0	4.0	2.4	5.0	5.0	5.0	5.0	4.8	0	0	0	0
NDTX13264B-1R/Y	TXRD/Y	2.0	1.5	1.0	4.0	4.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
Average		3.1 ns	2.2 ns	1.0 0.0	4.0 0.0	3.1 ns	5.0 0.0	5.0 0.0	5.0 0.0	5.0 0.0	4.8 ns	0 ns	0 0	0 0	0 0

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 6 entries in the Texas Advanced Red/Yellow Selection Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Sierra Rose	TXRD/Y	Nice, uniform, Oblong, Flat, Nice pattern, good color combination	Skin color radiation, Nice, Flat, angular, heavy, nice flesh, Beautiful skin pattern, hard to cut, pink streaks	3.8, 3.6, 3.6, 3.4	4, 3.8, 3.3, 3.8
ATTX10265-4R/Y	TXRD/Y	Uniform size, nice, heat sprouts, High tuber number, Nice, BOT, Healthy looking tubers	A little flat+, nice, pleasant combination, Nice+, keep, , no pink streaks	3.8, 3.5, 4.3, 3.5	3.6, 3.8, 4, 3.8
TX14646-1W-R/YPinto	TXRD/Y	Nice, beautiful skin pattern, shiny, smooth skin, , ,	Similar to Harlequin, not flat, very nice; @yellow/pink flesh all over, , ,	3.7, , ,	4.2, , ,
NDTX059759-3RY/YPinto	TXRD/Y	Some large tubers, Flat, few eyes, Not uniform, High tuber number, BOT	Smooth skin, flat+, nice+, pink streaks in flesh (50%), pink streaks (10%), Intense flesh color, Large tubers	3.2, 3.4, 3.2, 4.4	3.3, 3.8, 3.6, 4.2
BTX2103-1R/Y	TXRD/Y	Not uniform, , , Small tubers++	Uneven skin color, Yellow lemon color+, snaps+, ,	3.3, 3.5, 3.5, 3.2	2.6, 3.3, 3.3, 3.6
NDTX13264B-1R/Y	TXRD/Y	Intense red skin, , ,	*Lots of pink streaks in flesh, pink streaks near the stolon attachment point, , ,	3, , ,	3.6, , ,

Texas Advanced White/Yellow Trial, Springlake

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

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

- AORTX11913-3Wre/Y and ATX11567-1W/Y were the best entries based on general rating (Tables 9a).
- ATTX11591-3W/Y had the highest total and marketable yield (Table 9a).
- AORTX11913-3Wre/Y had the highest yield of less than 4 oz. tubers (Table 9a).
- Yukon Gold dal and ATTX11591-3W/Y had the highest percentage of marketable yield. COTX10097-2W/Y had the highest percentage of less than 4 oz. tubers (Table 9b).
- COTX10097-2W/Y and BTX1749-1W/Y had the highest specific gravity (Table 9b).
- AORTX11913-3Wre/Y had the highest average number of tubers per plant (Table 9b).
- AORTX11913-3Wre/Y and ATX11567-1W/Y were the latest in maturity, while Yukon Gold dal and BTX1749-1W/Y were the earliest in maturity (Table 9c).
- ATTX11591-3W/Y and ATX11567-1W/Y had the darkest yellow flesh. Yukon Gold dal and TX14602-2W/Y had high percentages of internal brownspot (Table 9d).

Comments on entries:

- ATTX11591-3W/Y Oval White Large, angular, FC=4.5
- AORTX11913-3Wre/Y Round White Shiny+, Heat sprouts+++,*pink eye shade+, nice, smooth skin+, smooth cut, High tuber number, FC=1.0
- ATX11567-1W/Y Oval White Knobs, lemon flesh, Smooth skin, High tuber number, FC=4.0
- COTX10097-2W/Y Round White Nice flesh, Uniform size, medium size++, FC=3.5
- Sierra Gold Oval Russet uniform tubers, Uniform size, Russet, nice++, Golden+, attractive, FC=2.6
- TX14670-2W/Y Oval Russet Relaxed russet+, washed out yellow flesh+, Not good russet pattern, Rough skin, FC=2.5

- Yukon Gold dal Oval White Smaller than other Yukon, Large, Heavy tubers, Smooth skin, FC=2.5
- TX14602-2W/Y Round Russet Nice russet pattern, snap cut, Large tubers, FC=3.3
- BTX1749-1W/Y Oval Russet Dirty look, Russet, Large, few tubers, golden, Relaxed russet pattern, Rough skin, FC=2.6

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

Summary:

AORTX11913-3Wre/Y and ATX11567-1W/Y were the best entries 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 9 entries in the Texas Advanced White/Yellow Trial grown near Springlake, Texas-2018.

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					
ATTX11591-3W/Y	TXW/Y	211.9	142.4	63.6	60.2	18.7	0.0	63.6	5.9	3.6	3.5
AORTX11913-3Wre/Y	TXW/Y	196.1	57.0	39.4	15.3	2.2	0.0	124.8	14.3	3.7	3.8
ATX11567-1W/Y	TXW/Y	181.9	78.5	53.6	22.8	2.1	0.0	97.5	5.9	3.5	3.8
COTX10097-2W/Y	TXW/Y	139.4	24.0	20.4	3.6	0.0	0.0	113.0	2.3	3.5	3.6
Sierra Gold	TXW/Y	132.3	80.6	47.2	30.1	3.4	0.0	51.7	0.0	3.8	3.7
TX14670-2W/Y	TXW/Y	131.2	46.2	36.5	9.8	0.0	0.0	84.2	0.8	3.4	3.6
Yukon Gold dal	TXW/Y	130.6	88.7	45.3	29.6	13.8	0.0	40.1	1.8	3.6	3.7
TX14602-2W/Y	TXW/Y	123.7	58.0	47.2	8.6	2.2	0.0	63.3	2.4	3.4	3.6
BTX1749-1W/Y	TXW/Y	109.5	64.6	41.3	19.7	3.6	0.0	43.9	1.0	3.5	3.4
Average		150.7	71.1	43.8	22.2	5.1	0.0	75.8	3.8	3.5	3.6
L.S.D. (.05)		36.4	22.8	ns	13.4	5.1	0.0	24.8	ns	0.1	0.2

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 9 entries in the Texas Advanced White/Yellow Trial grown near Springlake, Texas-2018.

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				
ATTX11591-3W/Y	TXW/Y	67.2	30.0	28.4	8.8	0.0	30.0	2.8	1.062	13.6	Oval	White
AORTX11913-3Wre/Y	TXW/Y	28.8	20.1	7.7	1.0	0.0	63.6	7.7	1.061	13.4	Round	White
ATX11567-1W/Y	TXW/Y	44.5	31.8	11.9	0.8	0.0	51.8	3.6	1.066	14.4	Oval	White
COTX10097-2W/Y	TXW/Y	17.0	14.9	2.1	0.0	0.0	81.3	1.7	1.073	15.6	Round	White
Sierra Gold	TXW/Y	58.8	34.8	21.4	2.7	0.0	41.2	0.0	1.070	15.0	Oval	Russet
TX14670-2W/Y	TXW/Y	34.3	27.0	7.3	0.0	0.0	65.1	0.7	1.065	14.2	Oval	Russet
Yukon Gold dal	TXW/Y	67.6	34.6	22.8	10.3	0.0	31.1	1.2	1.065	14.1	Oval	White
TX14602-2W/Y	TXW/Y	46.4	38.1	6.7	1.6	0.0	51.9	1.7	1.069	14.9	Round	Russet
BTX1749-1W/Y	TXW/Y	59.1	38.2	17.7	3.2	0.0	40.1	0.8	1.076	16.1	Oval	Russet
Average		47.1	29.9	14.0	3.2	0.0	50.7	2.2	1.068	14.6		
L.S.D. (.05)		9.2	11.0	7.8	3.3	0.0	10.1	ns	0.003	0.6		

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, percent dead vine at vine kill, length/with, and with/thickness of 9 entries in the Texas Advanced White/Yellow Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Average Stems/ Plant	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines	Length/ With	With/ Thickness	Length cm	With cm	Thickness cm
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴						
ATTX11591-3W/Y	TXW/Y	4.8	3.6	2.0	89	100	1.5	4.2	4.2	4.0	0	1.02	1.20	7.7	7.6	6.4
AORTX11913-3Wre/Y	TXW/Y	6.2	2.6	2.4	99	100	1.5	4.4	5.0	4.3	0	1.10	1.15	7.1	6.5	5.6
ATX11567-1W/Y	TXW/Y	4.3	3.6	1.8	76	97	1.5	3.9	4.7	3.9	0	1.05	1.11	6.9	6.6	5.9
COTX10097-2W/Y	TXW/Y	4.3	2.9	2.3	98	100	2.0	3.2	3.9	3.2	5	1.09	1.21	6.5	6.0	4.9
Sierra Gold	TXW/Y	3.1	3.8	1.4	76	93	1.5	3.5	3.7	3.6	10	1.09	1.24	7.6	7.0	5.6
TX14670-2W/Y	TXW/Y	4.3	2.9	2.2	79	89	1.6	3.7	3.6	3.7	8	1.12	1.22	7.0	6.2	5.1
Yukon Gold dal	TXW/Y	2.9	4.2	1.3	78	91	1.5	3.7	3.3	3.6	19	1.07	1.23	7.5	7.0	5.7
TX14602-2W/Y	TXW/Y	3.8	2.9	1.5	85	93	1.6	3.0	3.9	3.2	0	1.14	1.13	7.3	6.4	5.7
BTX1749-1W/Y	TXW/Y	2.4	3.8	1.9	92	99	2.0	3.5	3.4	3.5	18	1.10	1.26	7.5	6.8	5.4
Average		4.0	3.4	1.9	86	96	1.6	3.7	4.0	3.7	7	1.09	1.20	7.2	6.7	5.6
L.S.D. (.05)		1.1	0.2	0.7	11	ns	0.2	0.2	0.2	0.2	3	ns	0.05			

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 9 entries in the Texas Advanced White/Yellow Trial grown near Springlake, Texas-2018.

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
ATTX11591-3W/Y	TXW/Y	4.5	2.0	2.0	3.8	2.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
AORTX11913-3Wre/Y	TXW/Y	1.0	1.5	1.1	4.0	1.0	4.8	5.0	5.0	5.0	5.0	0	0	0	0
ATX11567-1W/Y	TXW/Y	4.0	2.0	1.3	3.9	1.5	5.0	5.0	5.0	5.0	4.0	0	0	0	0
COTX10097-2W/Y	TXW/Y	3.5	1.5	2.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Sierra Gold	TXW/Y	2.6	2.5	3.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TX14670-2W/Y	TXW/Y	2.5	2.0	3.0	5.0	2.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Yukon Gold dal	TXW/Y	2.5	2.0	1.0	3.8	1.0	5.0	5.0	5.0	5.0	4.5	0	0	0	83
TX14602-2W/Y	TXW/Y	3.3	1.3	2.5	4.0	2.0	4.8	5.0	5.0	5.0	4.0	0	0	0	33
BTX1749-1W/Y	TXW/Y	2.6	2.0	2.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		2.9	1.9	2.0	4.1	1.8	4.9	5.0	5.0	5.0	4.6	0	0	0	13
		0.3	0.2	0.2	0.0	0.2	ns	0.0	0.0	0.0	0.2	0	6	0	0

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 9 entries in the Texas Advanced White/Yellow Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
ATTX11591-3W/Y	TXW/Y	, , ,	Large, angular, , ,	3.6, , ,	3.5, , ,
AORTX11913-3Wre/Y	TXW/Y	Sprouting+++ , , Shiny,	Heat sprouts+ , *pink eye shade+ , nice, smooth skin+ , shiny+ , smooth cut , , High tuber number	3.8, 3.6, 3.6, 3.6	3.6, 3.8, 3.6, 4
ATX11567-1W/Y	TXW/Y	, , ,	, Knobs, lemon flesh, Smooth skin, High tuber number	3.6, 3.3, 3.4, 3.5	3.8, 3.8, 3.8, 3.8
COTX10097-2W/Y	TXW/Y	, , ,	Nice flesh, Medium size, Uniform size, medium size+ ,	3.5, 3.4, 3.5, 3.5	3.8, 3.6, 3.6, 3.3
Sierra Gold	TXW/Y	Russet, uniform tubers, Uniform size, ,	Russet, nice+ , Golden+ , , attractive	3.6, 3.8, 3.8, 3.8	3.5, 3.6, 3.8, 3.8
TX14670-2W/Y	TXW/Y	, , ,	Relaxed russet+ , washed out yellow flesh+ , not uniform yellow flesh, Not good russet pattern, Rough skin	3.5, 3.3, 3.6, 3.3	3.6, 3.6, 3.6, 3.6
Yukon Gold dal	TXW/Y	, , ,	Smaller than other Yukon, Large, Heavy tubers, Smooth skin	3.6, 3.6, 3.4, 3.6	3.6, 3.8, 3.8, 3.6
TX14602-2W/Y	TXW/Y	, , ,	Russet , Nice russet pattern, snap cut, Large tubers	3.4, 3.4, 3.4, 3.4	3.5, 3.5, 3.6, 3.6
BTX1749-1W/Y	TXW/Y	Dirty look, , ,	Russet, Large, few tubers, golden, Relaxed russet pattern, Rough skin	3.4, 3.5, 3.5, 3.5	3.2, 3.2, 3.5, 3.6

Texas Advanced Small Potato Selection Trial, Springlake

This trial consisted of twelve entries.

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

- TX09406s-1P/P and COTX10138s-7W/Y were the best entries for this trial based on general ratings and best of trial notations (Table 10a and 10e).
- COTX10138s-7W/Y had the highest total, marketable, and yield of oversized tubers (Table 10a).
- COTX04050s-1P/P had the highest yield of culls/No. 2 tubers (Table 10a).
- COTX03134-1W had over 90% marketable tubers. AORTX11913-4P and COTX10073s-1W had the highest percentage of oversized sized tubers (Table 10b).
- COTX10138s-7W/Y and COTX03134-1W had the highest average number of tubers per plant (Table 10c).
- AORTX11913-4P, COTX04050s-1P/P, NDTX1287B-1W, NDTX081451CBs-1Y/Y, and ATX05186s-1R were the latest in maturity, while ATTX98444s-16R/Y and TX09406s-1P/P were the earliest in maturity (Table 10c).
- ATX05202s-3W/Y had the darkest yellow flesh. COTX04050-1P/P had very dark purple flesh. COTX10138s-7W/Y had a high percentage of internal brownspot (Table 10d).

Comments on entries:

- | | | |
|-------------------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • COTX10138s-7W/Y | Round White | BOT, High tuber set+++ , smooth skin, Not uniform flesh color, purple splash in some, very uniform size and shape+, Nice, Flesh problems, careful, Lots of small tubers, FC=2.1 |
| • TX09406s-1P/P | Round Purple | BOT+, High tuber set++, very intense skin color+, Small, uniform size and shape, nice, Make potato chips, FC=3.9 |
| • AORTX11913-4P | Round Purple | Intense purple skin+, low tuber set, not uniform size, Sticky stolons+, *mixed of darker purple and lighter in skin color+, Skin color radiation, FC=1.0 |
| • COTX03134-1W | Round White | Very very small+++ , uniform size and shape, high tuber set+, road map, tuber linking, snap, uniformly small, |

- Parent for high tuber number and small tubers, heat sprouts, FC=1.0
- ATX06264s-4R/Y Round Red Intense red skin color, *Mixed (darker and lighter skin), FC=2.8
 - ATTX98444s-16R/Y Round Red Low tuber set, Uniform small tubers, Nice, Smooth skin, Nice skin color, FC=2.9
 - ATX05202s-3W/Y Round White Low tuber set+, Sticky stolons+, Uniform size, Bruised skin, FC=3.3
 - COTX10073s-1W Round White Smooth skin, low tuber set++, Few tubers+, Nice, Nice tuber type, FC=1.0
 - COTX04050s-1P/P Round Purple Very intense purple+, late+, Lots of heat sprouts++, Attached stolons++, chain tubers, heat susceptible, DROP, FC=5.0
 - NDTX1287B-1W Round White Low tuber set+, Dirty look+, Bruising+, Brown bruises on skin, FC= 1.0
 - NDTX081451CBs-1Y/Y Oval White Very low tuber set, FC=3.0
 - ATX05186s-1R Round Red Very few tubers, FC=2.5

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

Summary:

TX09406s-1P/P and COTX10138s-7W/Y were the best entries for this trial based on all factors.

Springlake
Table 10a.

Total yield, total yield of U.S. No.1, oversized and culls/No.2 potatoes and general rating of 12 entries in the Texas Advanced Small Potato Selection Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Total Yield Cwt/A	Total Marketable Yield	Over Sized	Culls/ No.2	General Rating ¹ Field	General Rating ¹ Grading
COTX10138S-7W/Y	TXSM	201.6	155.6	44.4	1.6	3.6	4.0
TX09406S-1P/P	TXSM	150.5	113.4	35.8	1.4	3.3	3.9
AORTX11913-4P	TXSM	122.8	71.2	51.1	0.5	3.2	3.5
COTX03134-1W	TXSM	122.8	115.3	1.9	5.6	2.9	3.3
ATX06264S-4R/Y	TXSM	115.8	74.7	37.0	4.2	2.9	3.3
ATX98444S-16R/Y	TXSM	96.0	78.3	16.6	1.1	2.8	3.4
ATX05202S-3W/Y	TXSM	73.9	50.1	20.9	2.9	2.6	3.0
COTX10073S-1W	TXSM	67.4	42.5	24.9	0.0	2.5	2.8
COTX04050S-1P/P	TXSM	59.8	38.4	1.9	19.5	2.4	2.5
NDTX1287B-1W	TXSM	59.7	37.9	20.6	1.3	2.5	2.6
NDTX081451CBS-1Y/Y	TXSM	27.0	21.4	5.5	0.0	2.0	2.0
ATX05186-1R	TXSM	15.9	13.1	2.8	0.0	2.0	3.2
Average		92.8	67.7	21.9	3.2	2.7	3.1
L.S.D. (.05)		35.5	24.6	17.0	3.2	0.3	0.3

¹ 1=very poor to 5= excellent

Springlake
Table 10b.

Percent by weight of U.S. No. 1, oversized and culls/No.2 potatoes, specific gravity, tuber type and skin type of 12 entries in the Texas Advanced Small Potato Selection Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Marketable Yield	Over Sized	Culls/ No. 2				
COTX10138S-7W/Y	TXSM	77.8	21.4	0.8	1.066	14.4	Round	White
TX09406S-1P/P	TXSM	75.3	23.9	0.7	1.065	14.2	Round	Purple
AORTX11913-4P	TXSM	59.2	40.5	0.3			Round	Purple
COTX03134-1W	TXSM	94.0	1.7	4.3	1.081	16.9	Round	White
ATX06264S-4R/Y	TXSM	64.3	32.2	3.4	1.059	13.1	Round	Red
ATX98444S-16R/Y	TXSM	83.5	15.1	1.4	1.077	16.2	Round	Red
ATX05202S-3W/Y	TXSM	67.5	29.1	3.4	1.069	14.8	Round	White
COTX10073S-1W	TXSM	63.4	36.6	0.0	1.073	15.6	Round	White
COTX04050S-1P/P	TXSM	63.8	3.4	32.8	1.073	15.6	Round	Purple
NDTX1287B-1W	TXSM	64.2	33.4	2.4	1.072	15.4	Round	White
NDTX081451CBS-1Y/Y	TXSM	79.5	20.5	0.0	1.061	13.3	Oval	White
ATX05186-1R	TXSM	82.6	17.4	0.0			Round	Red
Average		72.9	22.9	4.1	1.070	14.9		
L.S.D. (.05)		9.8	9.9	4.0	0.002	0.4		

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, percent dead vine at vine kill, length/with, and with/thickness of 12 entries in the Texas Advanced Small Potato Selection Trial grown near Springlake, Texas-2018.

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	
COTX10138S-7W/Y	TXSM	11.7	1.5	3.5	100	99	2.3	3.1	3.9	3.0	3
TX09406S-1P/P	TXSM	8.1	1.5	2.3	96	100	1.9	3.2	3.4	3.3	19
AORTX11913-4P	TXSM	6.1	1.7	2.1	97	100	2.1	3.9	4.9	3.9	0
COTX03134-1W	TXSM	11.8	0.9	3.8	96	100	2.1	2.7	4.2	2.8	1
ATX06264S-4R/Y	TXSM	6.5	1.6	2.3	87	94	1.9	2.8	4.2	2.9	1
ATX98444S-16R/Y	TXSM	5.4	1.5	2.4	98	100	1.9	3.8	3.4	3.8	13
ATX05202S-3W/Y	TXSM	4.2	1.6	2.5	88	93	2.1	3.8	4.2	3.9	3
COTX10073S-1W	TXSM	3.3	1.9	1.7	84	88	1.4	3.4	3.7	3.3	9
COTX04050S-1P/P	TXSM	5.3	0.9	1.9	94	99	1.5	3.3	4.9	3.4	0
NDTX1287B-1W	TXSM	3.1	1.6	2.1	86	99	1.5	3.8	5.0	3.8	0
NDTX081451CBS-1Y/Y	TXSM	1.9	1.2	2.9	100	100	2.0	3.8	4.8	3.6	0
ATX05186-1R	TXSM	2.6	0.7	1.3	64	71	2.0	1.5	4.8	2.8	0
Average		5.8	1.4	2.4	91	95	1.9	3.2	4.3	3.4	4
L.S.D. (.05)		0.3	2.2	0.3	9	6	0.3	0.6	0.4	0.6	4

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 12 entries in the Texas Advanced Small Potato Selection Trial grown near Springlake, Texas-2018.

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
COTX10138S-7W/Y	TXSM	2.1	1.1	1.0	4.5	1.0	4.0	4.0	5.0	5.0	5.0	0	0	0	18
TX09406S-1P/P	TXSM	3.9	1.0	1.0	4.4	5.0	5.0	5.0	5.0	5.0	4.4	0	0	0	0
AORTX11913-4P	TXSM	1.0	1.5	1.0	4.5	4.0	5.0	5.0	5.0	5.0	4.5	0	0	5	0
COTX03134-1W	TXSM	1.0	1.0	2.0	5.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX06264S-4R/Y	TXSM	2.8	1.9	1.0	4.0	3.6	5.0	5.0	5.0	5.0	4.5	0	0	0	0
ATTX98444S-16R/Y	TXSM	2.9	1.0	1.0	4.0	3.5	5.0	5.0	5.0	5.0	4.5	0	0	0	10
ATX05202S-3W/Y	TXSM	3.3	1.3	1.6	5.0	1.0	5.0	5.0	5.0	5.0	4.4	0	0	0	0
COTX10073S-1W	TXSM	1.0	1.4	1.5	4.6	1.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
COTX04050S-1P/P	TXSM	5.0	1.0	1.0	5.0	5.0	5.0	5.0	5.0	5.0	4.5	3	0	0	0
NDTX1287B-1W	TXSM	1.0	1.3	2.0	4.6	1.0	5.0	5.0	5.0	5.0	3.5	0	0	0	0
NDTX081451CBS-1Y/Y	TXSM	3.0	2.0	1.0	5.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX05186-1R	TXSM	2.5	1.0	1.0	4.0	3.5	5.0	5.0	5.0	5.0	4.5	0	0	0	0
Average		2.4	1.3	1.3	4.6	2.6	4.9	4.9	5.0	5.0	4.5	0	0	0	2
		0.3	0.3	0.1	0.2	0.1	ns	ns	0.0	0.0	0.1	ns	0	2	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 10e.

Notes and general rating for all reps of 12 entries in the Texas Advanced Small Potato Selection Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
COTX10138S-7W/Y	TXSM	High tuber set+++ , smooth skin, , ,	Nice, lots of tubers, mixed? Not uniform flesh color, High tuber set, purple splash in some, very uniform size	3.5, 3.6, 3.6, 3.5	3.6, 4.2, 4.2, 4
TX09406S-1P/P	TXSM	High tuber set++ , very intense skin color+ , BOT, , Small, uniform size and shape,	Small uniform tubers, lots of tubers, High tuber set, nice, BOT, Uniform size and shape, Make potato chips	3.6, 3.5, 3.4, 2.8	4, 4.2, 4, 3.2
AORTX11913-4P	TXSM	Intense purple skin+ , low tuber set, Not uniform size, , Very very small+++ , uniform size and shape, high	skin color+ , sticky stolons, Skin color radiation, High tuber set, small, uniform, road map, tuber linking,	2.3, 3, 2.6, 2.6	3.5, 3.5, 3.5, 3.5
COTX03134-1W	TXSM	tuber set, ,	snap, Road map skin, uniformly small, Parent for high *Mixed (darker and lighter skin), Nice skin color,	2.8, 3.3, 3, 2.5	3.3, 3.3, 3.3, 3.3
ATX06264S-4R/Y	TXSM	Intense red skin color, , ,	*Variable skin color, Uniform small tubers, Nice, uniform size and shape,	2.6, 3.3, 3.2, 2.6	3, 3.5, 3.5, 3
ATX98444S-16R/Y	TXSM	Red skin, small+ , uniform size+ , , Low tuber set,	Smooth skin, Nice skin color	2.5, 3.2, 2.6, 3	3.2, 3.6, 3.2, 3.5
ATX05202S-3W/Y	TXSM	Low tuber set+ , , ,	Sticky stolons+ , Uniform size, , Bruised skin	2.6, 2.8, 2.6, 2.4	3.2, 3.3, 3, 2.6
COTX10073S-1W	TXSM	Smooth skin, low tuber set++ , , ,	Few tubers+ , , Nice, Nice tuber type	2.5, 2.6, 2.5, 2.5	2.6, 2.8, 2.8, 3
COTX04050S-1P/P	TXSM	Very intense purple+ , late+ , , ,	Lots of heat sprouts++ , Attached stolons++ , Drop, chain tubers, heat susceptible, ,	2.6, 2.5, 2, 2.3	2.5, 2.5, 2.5, 2.5
NDTX1287B-1W	TXSM	, Low tuber set+ , ,	Dirty look+ , Bruising+ , , Brown bruises on skin	2.5, 2.6, 2.5, 2.3	2.8, 2.6, 2.6, 2.5
NDTX081451CBS-1Y/Y	TXSM	Very low tuber set, , ,	Very few tubers, , ,	2, , ,	2, , ,
ATX05186-1R	TXSM	, , ,	Very few tubers, , ,	2, , ,	3.2, , ,

Texas Advanced Fingerling Selection Trial, Springlake

This trial consisted of two entries including the check variety Banana.

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

- PORTX03PG25-2R/R had twice the total yield as Banana (Table 11a).
- PORTX03PG25-2R/R had over 92% marketable tubers, while Banana had over 33% culls/No. 2 tubers. (Table 11b).
- PORTX03PG25-2R/R had the more average number of tubers per plant (Table 11c).
- PORTX03PG25-2R/R was earlier in maturity (Table 11c).
- PORTX03PG25-2R/R had the dark red flesh. (Table 11d).

Comments on entries:

- Banana Long White Heat sprouts++, linked tubers++, not uniform shape nor size, Large fingerling, FC=2.1
- PORTX03PG25-2R/R Oblong Red Nice+, not fingerling, Small+, rain drops, Dark skin, uniform size and shape, produce minitubers, Some wrinkled, high tuber set, FC=3.5

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

Summary:

PORTX03PG25-2R/R was superior to Banana.

Springlake
Table 11a.

Total yield, total marketable yield and culls/No.2 potatoes and general rating of 2 entries
in the Texas Advanced Fingerling Selection Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Total Yield Cwt/A	Total Marketable Yield	Culls/ No.2	General Rating ¹ Field	General Rating ¹ Grading
Banana	TXFing	64.6	43.2	21.4	2.6	2.7
PORTX03PG25-2R/R	TXFing	129.6	120.0	9.7	3.3	3.4
Average		97.1	81.6	15.6	2.9	3.1
L.S.D. (.05)		38.1	40.8	4.1	ns	0.4

¹ 1=very poor to 5= excellent

Springlake
Table 11b.

Percent by weight of marketable yield and culls/No.2 potatoes, tuber type and skin type of 2 entries in the Texas Advanced Fingerling Selection Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Percent Total Marketable Yield	Percent Culls/ No. 2	Tuber Type	Skin Type
Banana	TXFing	66.7	33.3	Long	White
PORTX03PG25-2R/R	TXFing	92.3	7.7	Oblong	Red
Average		79.5	20.5		
L.S.D. (.05)		9.8	9.8		

Springlake
Table 11c. Average number of tubers and stems per plant, tuber weight, percent stand 40 and 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness, length cm, with cm, and thickness cm of 2 entries in the Texas Advanced Fingerling Selection Trial grown near Springlake, Texas-2018.

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	Length cm	With cm	Thickness cm
							Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴						
Banana	TXFing	6.5	0.9	2.2	89	96	2.5	3.2	4.1	3.5	3	2.63	1.12	9.1	3.5	3.1
PORTX03PG25-2R/R	TXFing	9.8	1.2	2.4	93	94	1.6	2.9	3.7	3.2	6	1.81	1.07	7.0	3.8	3.6
Average		8.2	1.0	2.3	91	95	2.1	3.0	3.9	3.3	4	2.22	1.10	8.0	3.7	3.3
L.S.D. (.05)		ns	ns	0.1	ns	ns	0.3	ns	ns	ns	ns	0.42	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 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 2 entries in the Texas Advanced Fingerling Selection Trial grown near Springlake, Texas-2018.

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
Banana	TXFing	2.1	5.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
PORTX03PG25-2R/R	TXFing	3.5	3.0	1.0	4.0	5.0	5.0	5.0	5.0	5.0	4.5	0	0	3	0
Average		2.8	4.0	1.0	4.0	3.0	5.0	5.0	5.0	5.0	4.8	0	0	1	0
L.S.D. (.05)		0.3												ns	

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake
Table 11e.

Notes and general rating for all reps of 2 entries in the Texas Advanced Fingerling Selection Trial grown near Springlake, Texas-2018.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Banana	TXFing	Heat sprouts, linked tubers, Heat sprouts, Linked tubers, not uniform shape nor size,	Heat sprouts (less than LaRatte), Large fingerling, Heat sprouts (less than LaRatte), Not uniform size, nor shape	2.5, 2.8, 2.6, 2.5	2.5, 2.8, 2.8, 2.8
PORTX03PG25-2R/R	TXFing	Nice, not fingerling, Small, rain drops, Dark skin, Small	Nice, uniform size and shape, produce minitubers, , , Some wrinkled, high tuber set	3.6, 2.6, 3.5, 3.4	3.6, 3.5, 3, 3.6

2018 Dalhart Trials

Summary of growing conditions:

The trials were planted 10 miles southwest of Dalhart (35°58'15.31"N, 102°44'36.33"W) in a CSS Farms production field on May 13th to 16th and harvested on September 10th, 17th, and 24nd. 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
- Western Regional and Texas Advanced Selection Purple Flesh
- Western Regional Texas Advanced Selection Fingerling
- Texas Advanced Chip Selection
- 2018 4hill Chip Selection
- Texas Advanced Russet Selection
- 2018 4hill Russet Selection
- Texas Advanced Red Selection
- 2018 4hill Red Selection
- Texas Advanced Red/Yellow Selection
- 2018 4hill Red /Yellow Selection
- Texas Advanced White/Yellow Selection
- 2018 4hill White/Yellow Selection
- Texas Advanced Small Potato Selection
- 2018 4hill Small Potato Selection
- 2018 4hill Fingerling Potato Selection
- 2018 4hill Purple Skin Selection
- Micro-organism treatment (not reported)

Table 3. Environmental and cultural inputs for the 2018 Dalhart Trials.

Location:		
Dalhart, Texas		
Soil Type		
Dallum Fine Sand Loam		
Seed Source		
New York, Colorado, Oregon, Texas, and Idaho		
Date:		DAP
Planted	May 13, 2018	
Vines Killed (Red, Chip)	August 29, 2018	106
Vines Killed (Red, White Yellow Flesh, Russet)	September 4, 2018	111
Harvested (Nat Chip Trial, Chip)	September 10, 2018	117
Harvested (Red and Red/White Yellow Flesh)	September 17, 2018	124
Harvested (Russet)	September 24, 2018	131
Plot Information:		
Size of Plots	18' 9.6"	
Spacing Between Hills	10.2"	
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:		
224-74-282 # per acre		
Irrigation:		
Center Pivot		
Seed Treatment		
Cruiser Maxx Vibrance		
Insecticide:		
Movento, Fulfill, Beleaf 50 SG, Revus Top, Scala SC, Sivanto™ prime, Torac		
Herbicides Applied:		
Matrix SG Herbicide, Echo Zn, Chateau Herbicide SW, Acumen, K-Tone, Select Max, Reglone, Tricor 4F		
Fungicide Applied:		
Curzate 60DF, Aframe, Luna Tranquility, Penncozeb 75DF		
Environmental Factors:		
Precipitation was higher than normal during the growing season. 23 inches Irrigation 12 inches		
Rain		

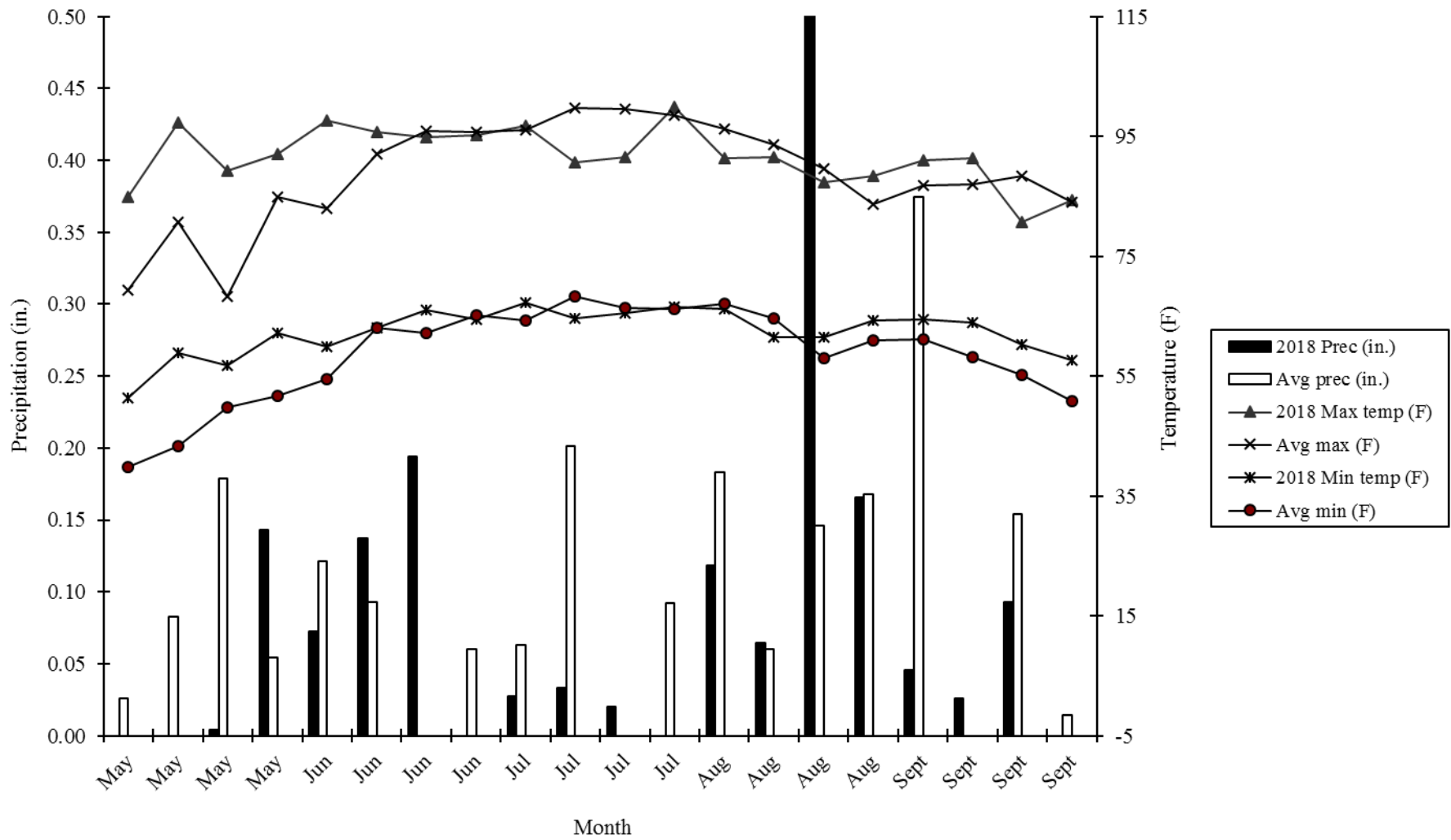


Figure 4. Weekly minimum/maximum temperatures and precipitation for the 2018-growing season near Dalhart, Texas compared to the average minimum/maximum temperatures and precipitation (1949-2018).

Western and Southwestern Regional Chip Trial, Dalhart

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

Results: (Dalhart Tables 1a, 1b, 1c, 1d, 1e, 1f, and 1g)

- NY152, CO10073-7W, Snowden, CO10076-4W, and AOR09034-3 were the best entries based on general rating for tuber appearance. CO10073-7W received a best of trial designation for chip quality. NY152 and CO10073-7W had over 78% good chips (Table 1a and 1f).
- NY152 had the highest total, marketable and yield of 4-6 oz. tubers (Table 1a).
- MSV313-2 had the highest yield of over 10 oz. tubers, while MSW485-2 had the highest yield of less than 4 oz. tubers (Table 1a).
- Lamoka, MSV313-2, and Atlantic had the highest percentage of marketable yield (Table 1b).
- MSW044-1 had the highest percentage of less than 4 oz. tubers (Table 1b).
- Atlantic, MSX540-4, and MSV030-4 had the highest specific gravity (Table 1b).
- NY152, CO10073-7W, CO10076-4W, AOR09034-3, and MSW485-2 had the highest average number of tubers per plant (Table 1c).
- CO10073-7W was the earliest in maturity (Table 1c).
- MSX540-4 and MSW485-2 had the highest percent of vascular discoloration, while NDA081453CAB-2C and Atlantic had the highest percent of hollow heart and internal brown spot (Table 1d).
- NY152 and CO10073-7W had acceptable chip quality ratings and percent of good chip for out of the field chipping (Table 1f).
- CO10073-7W and CO10076-4W had the best chipping quality out of storage, while NY152 and CO10073-7W had the highest percentage of good chips. After two weeks of reconditioning, NY152 had the best chipping quality score and the highest percentage of good chips (Table 1g).

Comments on entries:

- NY152 Round White Buff skin++, not uniform skin appearance, not uniform size, tubers from the first few plants are larger, Uniform size and shape+, high tuber number+, medium size, CR=1.5, Chip Notes:79% Good chip, Nice

- CO10073-7W Round White Green heads, Uniform size+ and shape, nice, buff skin, medium size+, greens/rot, high tuber set, some large, CR=1.4, Chip Notes:78% Good chip, BOT
- MSV358-3 Round White Not uniform size, Buff skin+, large, few tubers, snaps, nice flesh, nice white flesh, uniform size and shape, medium size, CR=1.8, Chip Notes:58% Good chip
- Snowden Round White Nice, medium size tubers, Large, buff skin+, medium-large tubers+, some attached stolons+, rough looks, high yield, CR=1.6, Chip Notes:50% Good chip
- CO10076-4W Round White Uniform size+, knobs, medium-large tubers, high tuber set, flesh browns fast, nice, some attached stolons, uniform shape, CR=1.6, Chip Notes:68% Good chip, Insect
- AOR09034-3 Round White Smaller, Medium size+, Shoulders, Smooth skin, some attached stolons, nice, snap+, very uniform size and shape++, high tuber number, CR=2.0, Chip Notes:73% Good chip, 2 IBS
- MSX540-4 Round White A little flat+, Large tubers in the first few plants, the rest have uniform small-medium tubers, rough, CR=1.6, Chip Notes:70% Good chip
- MSV030-4 Round White Not uniform size+, Buff skin+, medium-large tubers, a little flat, some attached stolons, CR=2.0, Chip Notes:58% Good chip, 2 Mechanical damage
- NDA081453CAB-2C Oval White Very large++, smooth skin, shiny, not uniform shape, Few tubers, ugly, CR=2.5, Chip Notes:51% Good chip, 2 IBS, 1 Mech, 1 Sugar end
- MSW485-2 Oval White Heat sprouts+, chain tubers, nice, uniform size, attached stolons++, rough, some large tubers, small tubers+, CR=2.3, Chip Notes:44% Good chip, 3 Sugar ends
- AC01144-1W Oval White Most tubers are small and medium, some large tubers+, Buff skin+, attached stolons+, very light skin, smooth, medium size, CR=1.6, Chip Notes:61% Good chip
- Lamoka Oval White Nice uniform size and shape, medium size, Large, oval to oblong, Low tuber set in this rep, Not uniform shape - not typical Lamoka?, very large tubers++, CR=1.9, Chip Notes:53% Good chip, 2 GH

- MSV313-2 Oval White Russet skin+++ , very large+++ , few tubers, CR= 2.3, Chip Notes:58% Good chip
- NDTX081648CB-13W Oval White Large, not uniform size and shape++ , smaller than other reps, looks different than other plots?, some attached stolons, a little flat, CR=3.0, Chip Notes:38% Good chip, 2 Sugar ends, 4 Sugar ends, 1 Sugar end, 1 IBS, 1 sugar end, DROP
- Atlantic Oval White Very large+ , Not uniform size and shape, ugly, rough, CR=2.5, Chip Notes:30% Good chip, 1 HH
- MSW044-1 Oval White buff skin, snaps+ , uniform size and shape+++ , very light skin, few tubers, smooth skin+++ , nice, juicy, CR=2.4, Chip Notes:68% Good chip

¹CR=chip quality rating 1=light to 6= dark

Summary:

NY152 and CO10073-7W were the best entries based on all factors.

Dalhart
Table 1a.

Total yield, total yield of U.S. No.1, over 18 oz, under 4 oz and culls/No.2 potatoes and general rating of 16 entries in the Western and Southwestern Regional Chip Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Total Yield cwt/a	U.S. No. 1 cwt/a			Over 18 oz cwt/a	Under 4 oz. cwt/a	Culls/ No.2 cwt/a	General Rating ¹ Field	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz						10-18 oz
NY 152	Hig	640.4	417.5	275.2	118.7	23.6	0.0	222.8	0.0	3.9	4.4
CO10073-7W	SW	578.6	352.8	218.0	118.1	16.7	0.0	225.8	0.0	3.8	4.2
MSV358-3	Hig	577.7	316.9	168.4	105.7	42.8	0.0	258.1	2.7	3.7	3.9
Snowden	WRCH	575.8	393.0	179.6	171.4	42.1	3.2	179.6	0.0	3.8	4.0
CO10076-4W	SW	569.2	344.3	213.0	126.5	4.8	0.0	224.9	0.0	3.7	4.1
AOR09034-3	WRCH	553.0	298.1	216.7	69.1	12.4	0.0	254.9	0.0	3.9	4.3
MSX540-4	Hig	551.8	407.7	165.6	184.4	57.7	0.0	144.1	0.0	3.7	3.7
MSV030-4	Hig	527.6	375.4	192.4	162.0	21.0	0.0	152.1	0.0	3.6	3.8
NDA081453CAB-2C	WRCH	500.3	384.1	83.3	203.6	97.2	59.3	54.9	2.1	3.5	3.5
MSW485-2	Hig	474.7	197.0	147.1	35.5	14.4	0.0	277.7	0.0	3.5	3.8
AC01144-1W	WRCH	471.1	285.7	172.0	92.0	21.7	0.0	183.7	1.6	3.8	4.0
Lamoka	Hig	455.7	388.2	105.0	185.1	98.1	13.0	54.5	0.0	3.7	3.8
MSV313-2	Hig	454.6	386.9	81.4	150.8	154.7	22.2	45.5	0.0	3.5	3.6
NDTX081648CB-13W	Hig	450.0	308.6	146.2	105.5	57.0	0.0	139.8	1.6	3.5	3.6
Atlantic	WRCH	428.1	345.7	98.1	121.0	126.5	16.5	62.7	3.2	3.5	3.6
MSW044-1	Hig	365.8	137.7	116.2	21.5	0.0	0.0	228.1	0.0	3.7	3.7
Average		510.9	333.7	161.1	123.2	49.4	7.1	169.3	0.7	3.7	3.9
L.S.D. (.05)		79.9	82.0	60.3	46.5	34.1	21.5	43.3	ns	0.2	0.2

¹ 1=very poor to 5= excellent

Dalhart
Table 1b.

Percent by weight of U.S. No. 1, over 18 oz, under 4 oz, culls/No.2 potatoes, specific gravity, tuber type and skin type of 16 entries in the Western and Southwestern Regional Chip Trial grown near Dalhart, Texas-2018.

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				
NY 152	Hig	64.3	42.5	18.0	3.7	0.0	35.7	0.0	1.072	15.3	Round	White
CO10073-7W	SW	60.8	37.6	20.4	2.8	0.0	39.2	0.0	1.073	15.5	Round	White
MSV358-3	Hig	53.8	27.9	17.8	8.1	0.0	45.6	0.6	1.073	15.4	Oval	White
Snowden	WRCH	68.8	31.2	30.2	7.4	0.7	30.5	0.0	1.075	15.9	Oval	White
CO10076-4W	SW	59.8	37.2	21.8	0.8	0.0	40.2	0.0	1.070	15.0	Round	White
AOR09034-3	WRCH	53.4	38.5	12.6	2.4	0.0	46.6	0.0	1.077	16.3	Round	White
MSX540-4	Hig	74.1	30.2	33.4	10.5	0.0	25.9	0.0	1.086	17.8	Oval	White
MSV030-4	Hig	70.8	36.6	30.4	3.7	0.0	29.2	0.0	1.081	17.0	Oval	White
NDA081453CAB-2C	WRCH	77.3	17.7	40.5	19.1	10.9	11.2	0.5	1.077	16.2	Oblong	White
MSW485-2	Hig	41.1	31.3	7.1	2.7	0.0	58.9	0.0	1.078	16.3	Round	White
AC01144-1W	WRCH	60.3	36.3	19.5	4.5	0.0	39.3	0.3	1.066	14.3	Round	White
Lamoka	Hig	84.7	23.9	40.2	20.7	2.9	12.4	0.0	1.080	16.8	Oblong	White
MSV313-2	Hig	85.4	18.1	33.4	33.9	4.7	9.9	0.0	1.075	15.8	Oblong	White
NDTX081648CB-13W	Hig	68.8	32.9	23.3	12.5	0.0	30.8	0.4	1.073	15.4	Oblong	White
Atlantic	WRCH	80.5	23.1	27.8	29.6	3.8	14.8	0.8	1.091	18.7	Oval	Buff
MSW044-1	Hig	37.9	32.1	5.9	0.0	0.0	62.1	0.0	1.079	16.6	Round	White
Average		65.1	31.1	23.9	10.2	1.4	33.3	0.2	1.077	16.2		
L.S.D. (.05)		9.3	10.2	6.9	6.9	4.4	8.2	ns	0.007	1.2		

Dalhart
Table 1c.

Average number of tubers, tuber weight, percent stand 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness, length cm, with cm, and thickness cm of 16 entries in the Western and Southwestern Regional Chip Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines	Length/ With	With/ Thickness	Length cm	With cm	Thickness cm
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴						
NY 152	Hig	11.0	4.3	100	1.5	4.6	4.2	4.7	9	1.07	1.09	7.2	6.8	6.2
CO10073-7W	SW	11.3	3.7	100	1.9	4.6	3.6	4.6	33	1.06	1.20	7.2	6.8	5.7
MSV358-3	Hig	10.6	4.0	100	1.9	4.4	4.1	4.6	6	1.09	1.16	7.6	6.9	6.0
Snowden	WRCH	9.1	4.8	98	1.5	4.7	4.8	4.7	0	1.03	1.21	7.4	7.2	5.9
CO10076-4W	SW	11.7	3.7	96	1.9	4.2	4.5	4.4	3	1.06	1.17	6.9	6.5	5.6
AOR09034-3	WRCH	11.4	3.6	98	1.5	4.8	4.7	4.8	1	1.04	1.09	7.0	6.8	6.2
MSX540-4	Hig	8.3	4.9	100	1.5	4.9	4.8	4.9	1	1.08	1.22	7.9	7.3	6.0
MSV030-4	Hig	7.9	4.9	100	1.6	4.8	4.2	4.8	6	1.04	1.20	7.2	7.0	5.8
NDA081453CAB-2C	WRCH	5.5	6.7	98	1.5	4.7	4.6	4.8	3	1.01	1.28	7.5	7.5	5.8
MSW485-2	Hig	11.9	2.9	100	1.8	4.8	5.0	4.8	1	1.06	1.15	6.8	6.4	5.6
AC01144-1W	WRCH	8.3	4.2	100	1.5	4.3	4.3	4.5	3	1.13	1.12	7.5	6.7	5.9
Lamoka	Hig	5.5	6.6	92	1.6	4.4	4.2	4.6	8	1.16	1.21	8.2	7.1	5.9
MSV313-2	Hig	4.5	7.5	100	1.5	4.9	4.9	4.9	0	1.11	1.17	7.7	6.9	5.9
NDTX081648CB-13W	Hig	8.4	4.5	91	1.5	4.5	4.9	4.6	1	1.15	1.22	7.9	6.9	5.7
Atlantic	WRCH	5.4	6.4	92	1.5	4.5	4.1	4.7	5	1.10	1.19	7.5	6.8	5.7
MSW044-1	Hig	9.4	2.8	100	1.6	4.6	4.9	4.7	0	1.10	1.15	6.8	6.2	5.4
Average		8.8	4.7	98	1.6	4.6	4.5	4.7	5	1.08	1.18	7.4	6.9	5.8
L.S.D. (.05)		1.6	0.6	ns	0.2	0.3	0.4	0.2	5	ns	ns	0.7	ns	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 16 entries in the Western and Southwestern Regional Chip Trial grown near Dalhart, Texas-2018.

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
NY 152	Hig	1.0	1.0	2.1	4.0	1.0	5.0	5.0	5.0	5.0	4.8	0	0	5	8
CO10073-7W	SW	1.0	1.5	1.8	4.0	1.0	5.0	5.0	5.0	5.0	5.0	23	0	0	0
MSV358-3	Hig	1.0	1.9	2.3	4.0	1.3	5.0	5.0	5.0	4.5	4.8	0	0	0	3
Snowden	WRCH	1.0	2.0	2.5	3.6	1.0	5.0	5.0	5.0	5.0	5.0	13	0	23	3
CO10076-4W	SW	1.0	1.1	1.5	4.0	1.0	5.0	5.0	5.0	4.5	4.8	3	0	20	0
AOR09034-3	WRCH	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	3.9	0	0	8	0
MSX540-4	Hig	1.5	2.0	1.5	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	50	0
MSV030-4	Hig	1.0	2.0	2.0	4.0	1.0	5.0	5.0	5.0	5.0	4.5	0	0	13	3
NDA081453CAB-2C	WRCH	1.0	2.9	1.0	4.0	1.0	5.0	5.0	5.0	4.0	4.0	3	3	3	60
MSW485-2	Hig	1.0	1.0	1.0	3.8	1.0	5.0	5.0	5.0	5.0	3.9	3	0	43	0
AC01144-1W	WRCH	1.0	1.5	1.1	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	18	0
Lamoka	Hig	1.5	3.0	1.0	4.0	1.0	5.0	5.0	5.0	4.5	3.6	5	0	3	3
MSV313-2	Hig	1.0	3.0	3.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	10	3
NDTX081648CB-13W	Hig	1.0	3.0	1.0	3.9	1.0	5.0	5.0	5.0	4.3	5.0	0	0	3	3
Atlantic	WRCH	1.0	2.3	2.5	4.0	1.0	5.0	5.0	5.0	4.8	4.0	15	0	0	48
MSW044-1	Hig	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.1	0	0	5	0
Average		1.1	1.9	1.6	3.9	1.0	5.0	5.0	5.0	4.8	4.5	3.9	0	13	8
L.S.D. (.05)		ns	0.2	0.3	0.1	ns				0.4	0.4	9.6	0.0	14.6	12.5

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Dalhart
Table 1e.

Notes and general rating for all reps of 16 entries in the Western and Southwestern Regional Chip Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
NY 152	Hig	Buff skin++, not uniform skin appearance, not uniform size, tubers from the first few plants are larger, Uniform size and	buff skin, nice uniform size and shape, , high tuber number+, medium size,	3.6, 3.8, 3.8, 4.2	4.4, 4.4, 4.3, 4.5
CO10073-7W	SW	, Green heads, Uniform size+ and shape,	nice, buff skin, uniform size and shape+, medium size+, greens/rot, , high tuber set, some large	3.7, 3.5, 4, 3.8	4.4, 4.2, 4, 4.3
MSV358-3	Hig	Not uniform size, , Buff skin, large, few tubers,	, snaps, nice flesh, snow, nice white flesh, buff skin, uniform size and shape, medium size	3.6, 3.7, 3.7, 3.8	3.8, 3.8, 4, 4
Snowden	WRCH	Nice, medium size tubers, Large, buff skin+, , russet skin	medium-large tubers+, buff skin, some attached stolons+, , rough looks, high yield	4, 3.8, 3.6, 3.8	3.8, 3.8, 3.8, 4.5
CO10076-4W	SW	Uniform size, Knobs, ,	medium-large tubers, high tuber set, flesh browns fast, , nice, some attached stolons, uniform size and shape	3.8, 3.6, 3.7, 3.7	4.4, 3.8, 3.7, 4.4
AOR09034-3	WRCH	Smaller, Medium size, Shoulders, Smooth skin, uniform size A little flat, Large tubers in the first few plants, the rest have	some attached stolon, medium size, nice, snap+, very uniform size and shape+, high tuber number	3.8, 3.8, 4, 3.8	4.2, 4.2, 4.2, 4.5
MSX540-4	Hig	uniform small-medium tubers, ,	large tubers+, , rough, a little flat	3.8, 3.6, 3.8, 3.7	3.6, 3.8, 3.7, 3.6
MSV030-4	Hig	Not uniform size, Buff skin+, ,	medium-large tubers, a little flat, , , not uniform size, large, some attached stolons	3.6, 3.7, 3.4, 3.8	3.8, 3.8, 3.8, 3.7
NDA081453CAB-2C	WRCH	Very large++, smooth skin, shiny, not uniform shape, Few tubers, Too large	VERY large++, , ugly,	3.6, 3.5, 3.4, 3.4	3.6, 3.5, 3.4, 3.6
MSW485-2	Hig	, Heat sprouts+, chain tubers, Small	nice, uniform size, attached stolons++, , rough, some large tubers, small tubers+	3.6, 3.6, 3.3, 3.6	4.2, 3.6, 3.7, 3.7
AC01144-1W	WRCH	Most tubers are small and medium, some large tubers+, , Buff skin,	, , buff skin, attached stolons+, very light skin, smooth, medium size	4, 3.7, 3.8, 3.8	4.2, 3.8, 3.7, 4.2
Lamoka	Hig	Nice uniform size and shape, medium size, Large, oval to oblong, Low tuber set in this rep, Not uniform shape - not typical	very large tubers++, , ,	4.3, 3.5, 3.5, 3.6	4, 3.8, 3.5, 3.8
MSV313-2	Hig	Russet skin+++ , large++ , ,	very large+++ , , few tubers, too large	3.6, 3.5, 3.6, 3.4	3.6, 3.6, 3.6, 3.6
NDTX081648CB-13W	Hig	, Large, not uniform size and shape++, , Smaller than other reps, looks different than other plots?	large, not uniform size nor shape, , some attached stolons, a little flat	3.4, 3.4, 3.4, 3.6	3.6, 3.5, 3.6, 3.6
Atlantic	WRCH	Very large+, Not uniform size and shape, ,	very large+, ugly, large, rough,	3.4, 3.4, 3.5, 3.5	3.6, 3.6, 3.5, 3.6
MSW044-1	Hig	Small, uniform size and shape++, , , Smooth skin	small+++ , buff skin, snaps+, uniform size and shape+, very light skin, few tubers, smooth skin++, nice, juicy	3.8, 4, 3.5, 3.6	3.7, 3.7, 3.6, 3.8

Dalhart
Table 1f.

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 16 entries in the Western and Southwestern Regional Chip Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Gravity	% Solids	Chip Rating ¹	Chip Color ²	% Good Chip	% Bad Chip	% Vas	% Bruise	% Stem	% Apical Bruise	Notes ³	% Zebra Chip Chipping	6 Weeks Storage Chip Rating	Reconditioning Chip Rating
NY 152	Hig	1.072	15.3	1.5	1.1	79	21	1	0	20	0	, , , Nice	0	1.9	1.4
CO10073-7W	SW	1.073	15.5	1.4	1.0	78	22	0	3	20	0	, , , BOT	0	1.5	1.4
MSV358-3	Hig	1.073	15.4	1.8	1.0	58	43	5	10	28	0	, , ,	0	4.0	3.0
Snowden	WRCH	1.075	15.9	1.6	1.3	50	50	3	4	35	0	, , ,	0	3.5	1.8
CO10076-4W	SW	1.070	15.0	1.6	1.5	68	33	0	0	30	0	, , , 1 Insect	0	1.7	1.5
AOR09034-3	WRCH	1.077	16.3	2.0	1.3	73	27	3	0	20	0	2 IBD, , ,	0	3.1	1.9
MSX540-4	Hig	1.086	17.8	1.6	1.4	70	30	0	3	25	0	, , ,	0	2.0	2.0
MSV030-4	Hig	1.081	17.0	2.0	1.1	58	42	0	3	34	0	, 2 Mech, ,	0	2.5	1.6
NDA081453CAB-2C	WRCH	1.077	16.2	2.5	1.6	51	49	0	3	36	0	, , 2 IBS, 1 Mech, 1 Sugar end	0	3.6	3.4
MSW485-2	Hig	1.078	16.3	2.3	1.1	44	56	12	9	28	0	, 3 Sugar ends, ,	0	3.1	2.6
AC01144-1W	WRCH	1.066	14.3	1.6	1.0	61	39	0	0	39	0	, , ,	0	1.9	1.8
Lamoka	Hig	1.080	16.8	1.9	1.1	53	48	3	8	33	0	, 1 GH, , 1 GH	0	3.0	1.6
MSV313-2	Hig	1.075	15.8	2.3	1.3	58	43	10	0	33	0	, , ,	0	2.9	1.8
NDTX081648CB-13W	Hig	1.073	15.4	3.0	1.5	38	63	0	0	40	0	2 Sugar ends, 4 Sugar ends, 1 Sugar end, DROP, 1 IBS, 1 sugar end	0	3.5	3.3
Atlantic	WRCH	1.091	18.7	2.5	1.3	30	70	8	26	33	0	1 HH, , ,	0	3.9	3.6
MSW044-1	Hig	1.079	16.6	2.4	1.6	68	32	16	0	33	0	, , ,	0	2.1	1.8
Average		1.077	16.2	2.0	1.3	58	42	4	4	30	0		0.0	2.8	2.1
L.S.D. (.05)		0.007	1.2	0.7	0.3	ns	ns	ns	0	ns	0		0.0	0.0	0.0

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

¹1=poor, 5=excellent

²1=light, 3+=very dark

³BOT=Best Of Trial, Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

Dalhart
Table 1g.

Chip color rating, good chip, bad chip, percentage vascular discoloration, bruise, stem end discoloration, apical bruise and notes of 16 entries in the Western and Southwestern Regional Chip Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Chipping 6 Weeks of Storage								Notes ³	Chipping Recondition for 2 Weeks								
		Chip Rating ¹	Chip Color ²	% Good Chip	% Bad Chip	% Vas	% Bruise	% Stem	% Apical Bruise		Chip Rating1	Chip Color2	% Good Chip	% Bad Chip	% Vas	% Bruise	% Stem	% Apical Bruise	Notes3
NY 152	Hig	1.9	1.3	60	40	8	3	18	0	0, 4 Dark, 1 Sugar, BOT, 0	1.4	1.3	91	9	3	6	0	0	0, 0, 0, 0
CO10073-7W	SW	1.5	1.0	68	33	5	0	20	0	1 GH, 1 GH, 1 BC, BOT	1.4	1.1	91	9	3	0	0	0	0, 1 GH, 1 Dark, 0
MSV358-3	Hig	4.0	3.1	3	98	3	5	0	0	1 Dark, 8 Sugar, 10 Dark, 1 BC, 8 Dark, 8 Sugar	3.0	1.4	26	74	0	0	9	0	8 Dark, 4 Dark, 8 Dark, 0
Snowden	WRCH	3.5	1.9	13	88	0	0	21	0	5 Dark, 7 Dark, 10 Dark, 4 Dark	1.8	1.4	75	25	3	3	6	0	0, 1 Dark, 1 GH, 0, 2 Dark
CO10076-4W	SW	1.7	1.2	49	51	0	0	33	0	1 GH, 1 BC, , 0, 3 BC	1.5	1.0	81	19	9	0	6	0	0, 0, 0, 1 Dark
AOR09034-3	WRCH	3.1	2.3	30	70	10	0	20	0	0, 6 BC, 6 Dark, 4 Dark	1.9	1.0	78	22	0	0	0	0	Dark, 2 Brown Center , 0, 1 Dark
MSX540-4	Hig	2.0	2.0	43	58	23	5	30	0	0, 0, 0, BOT	2.0	1.1	78	22	0	6	9	0	0, 1 GH, 1 Dark, Shape-, 0
MSV030-4	Hig	2.5	1.6	48	53	8	3	45	0	0, 1 Sugar, 1 Sugar, Nice	1.6	1.4	67	33	16	7	11	0	0, 0, 0, 0
NDA081453CAB-2C	WRCH	3.6	1.9	5	95	3	8	5	0	7 BC, 1 Dark, 10 Dark, 3 BC, 2 GH, 8 BC	3.4	1.6	13	88	59	3	0	0	Dark, 2 Brown Center, 5 Brown Center
MSW485-2	Hig	3.1	1.8	8	92	32	0	18	0	0, 9 Dark, 4 Sugar, 3 Dark	2.6	1.4	41	59	47	0	9	0	0, 0, 1 Dark, 0
AC01144-1W	WRCH	1.9	1.3	34	66	10	0	56	0	0, 0, 0, Nice	1.8	1.3	59	41	19	0	31	0	0, 0, 0, 1 Dark
Lamoka	Hig	3.0	1.8	34	66	8	15	23	0	0, 1GH, 1 GH, 6 Dark, 0	1.6	1.1	75	25	3	0	13	0	1 Dark, 1 GH, 1 GH, 0
MSV313-2	Hig	2.9	2.1	44	56	11	5	28	0	0, 5 BC, 0, 0	1.8	1.1	63	38	19	3	6	0	0, 0, 3 Brown Center , 0
NDTX081648CB-13W	Hig	3.5	2.0	3	98	12	0	21	0	10 Dark, 5 Sugar, 2 Dark, 1 GH, 2 BC, 7 Sugar, 0	3.3	1.5	14	86	38	6	31	0	0, Shape-, 3 Dark, 0
Atlantic	WRCH	3.9	2.9	3	98	3	8	48	0	2 IHN, 1 BC, Stem end also dark, 7 BC, 1 GH, 3 Dark	3.6	1.5	16	84	0	6	16	0	7 Dark, 5 Dark, 6 Dark, 1 Dark
MSW044-1	Hig	2.1	1.8	44	56	15	6	36	0	0, 0, 0, 0	1.8	1.3	84	16	13	0	0	0	0, 0, 1 HH, 0
Average		2.8	1.9	30	70	9	4	26	0		2.1	1.3	59	41	14	3	9	0	
L.S.D. (.05)		0.6	0.9	20	20	ns	ns	ns	0		0.6	ns	26	26	24	ns	ns	0	

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

¹1=poor, 5=excellent

²1=light, 3+=very dark

³BOT=Best Of Trial, Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar enew, PB= pressure bruise, GH=greenheaw, Z=zebra

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: (Dalhart Tables 2a, 2b, 2c, 2d, and 2e)

- TX08352-5Ru Neb, Russet Norkotah, and AOR06576-1 received high general ratings and best of trial designations, while AOR07821-1, A08433-4VR, A07061-6, COTX05095-2Ru/Y, CO09205-2RU, A06030-23, AO02183-2, Ranger Russet, Reveille Russet Neb, A07769-4, and A10021-5TE also received high general ratings (Tables 2a).
- AOR06576-1 had the highest total, marketable, and yield of 4-6 oz. tubers, while TX08352-5Ru Neb had the highest yield of over 10 oz. tubers (Table 2a).
- CO08231-1RU had the highest yield of less than 4 oz. tubers, while Reveille Russet Neb had the highest yield of culls/No.2 tubers (Table 2a).
- A07769-4, A07061-6, and COTX05095-2Ru/Y had the highest percentage of marketable yield (Table 2b).
- CO09036-2RU had the highest percentage of less than 4 oz. tubers. Reveille Russet Neb and Russet Burbank had the highest percentage of culls/No. 2 tubers (Table 2b).
- A071012-4BF, AO06191-1, and Ranger Russet had the highest specific gravity (Table 2b).
- AOR07821-1, A08433-4VR, A071012-4BF AO02183-2, Ranger Russet, CO08231-1RU, A07769-4, CO10091-1RU, and CO09036-2RU were the latest in maturity, while TX08352-5Ru Neb, Russet Norkotah, and AOTX05043-1Ru were the earliest in maturity (Table 2c).
- A06030-23 had over 25% hollow heart AO02183-2, Shepody and A10021-5TE had the highest percentage of vascular discoloration (Table 2d).

Comments on entries:

- AOR06576-1 Long Russet BOT+, Light russet, not uniform size, Very high tuber number+++, uniform size and shape, golden russet skin+, medium size, Knobs++, parent for high tuber number
- AOR07821-1 Oblong Russet Very high tuber number+++, good russet skin, small-medium size, Blocky, Knobs, small-medium, large, a little angular++

- TX08352-5Ru Neb Oblong Russet BOT+++ , Knobs, nice skin, large+, uniform size++, blocky++, nice skin, nice shape+, Parent, cross with PVY res, nice
- A08433-4VR Oblong Russet High tuber number+, not uniform size or shape, nice skin, Small uniform size, not good skin set, a little flat
- Russet Norkotah Long Russet BOT, Some moon shapes, nice size, Nice shape+, Nice russet skin, several with damaged skin, enlarged lenticels, high tuber number
- A071012-4BF Long Russet Knobs+++ , not uniform size, not good russet skin, large tuber number, greens
- A07061-6 Oblong White Light skin (too light), smooth skin++, nice shape, oblong, some buff skins, nice long white+, uniform shape
- COTX05095-2Ru/Y Oblong Russet Some nice shapes+, knobs, Road map, light skin, not good russet skin, Medium size, Include in NFPT (French Fry Processing trials), nice flesh, check specific gravity/ chips, Promote, Parent, cross with heavy russet yellow flesh, high tuber number, nice shape, yellow flesh
- CO09205-2RU Long Russet Very high tuber number+, small-medium size+, nice skin+, Golden russet skin, nice, some nice shapes, most are small, moons, 20% SE, uniform shape, a little pointy+, few tubers
- A06030-23 Long Russet Nice skin, blocky+, knobs+, growth cracks, light eyes, Medium size, good russet skin, large, many eyes, nice shape, high tuber number
- AO02183-2 Long Russet Knobs+, skinny+, Very small, Nice skin, nice shape, high tuber number, nice type, few tubers, pointy+, enlarged lenticels
- Ranger Russet Oblong Russet Knobs, High tuber number+++ , small+, noticeable eyes, not uniform size, Parent for high tuber number, SE, nice, medium
- Reveille Russet Neb Oblong Russet Knobs+++++, nice skin, nice shape, uniform size, green heads, nice russet skin, enlarged lenticels, 40% SE,
- CO08231-1RU Oblong Russet Nice russet skin, one big heart+, not uniform size+, light russet skin, skin blemishes, medium-small+, round to oblong

- A07769-4 Oblong Russet Smaller, nice skin, very light russet or not good skin set, nice shape, Uniform size, golden russet, few tubers, deformed tubers, it does not look russet, enlarged lenticels
- Shepody Oblong White Light skin++, large, Smooth skin++, Knobs, white, not uniform shape
- CO10087-4RU Long Russet Knobs++, growth cracks+, high tuber number, not uniform size, Some nice shapes+, nice skin+, 70% SE, few tubers
- A10021-5TE VLong Russet Thin, pointy++++, Very long++++, nice, skinny, high tuber number
- AOR07781-5 Long Russet Intense russet skin, knobs++, Pointy++, high yield, long, noticeable eyes, little tubers on eyes, greens, noticeable lighter eyes, rough, soft ends (stolon side)
- CO08155-2RU/Y Oblong Russet Not uniform russet skin+++, nice shape++, Small tubers, enlarged lenticels++, medium-small, low tuber set, Parent for yellow flesh russet, uniformed size
- CO10091-1RU Oval Russet Small roundish+, Round-long, some blocky+, medium, enlarged lenticels, Few tubers, pointy, skin with bee hives area, medium size+, uniform shape and size, very few tubers, not uniform russet skin
- Russet Burbank Long Russet Knobs+++, pointy++, medium russet skin, skinny, Growth cracks, deformed tubers, curved
- AOTX05043-1Ru Oblong Russet Low yield, Not uniform size, Small-medium, low tuber number, nice shape+, medium size+
- AO06191-1 Long Russet Low tuber number++, nice russet skin++, some nice blocky shapes, good skin, nice rep, a little angular
- CO09036-2RU Long Russet Good russet, skinny++, pointy+++, Very small tubers++, small, few tubers+
- CO09076-3RU Long Russet Good skin, long, pointy+++++, Knobs++, pointy, few tubers+, skin blemishes

Summary:

TX08352-5Ru Neb, Russet Norkotah, and AOR06576-1 were the best entries based on all factors.

Dalhart
Table 2a.

Total yield, total yield of U.S. No.1, over 18 oz, under 4 oz and culls/No.2 potatoes and general rating of 26 entries in the Western and Southwestern Regional Russet Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Total Yield cwt/a	U.S. No. 1 cwt/a			Over 18 oz cwt/a	Under 4 oz. cwt/a	Culls/ No.2 cwt/a	General Rating ¹ Field	General Rating ¹ Grading		
			Total Yield	4-6 oz	6-10 oz						10-18 oz	
AOR06576-1	WRRU	692.8	491.4	125.1	189.0	177.3	53.5	230.8	93.3	54.5	4.2	4.4
AOR07821-1	WRRU	623.2	432.6	114.4	194.5	123.8	8.5	132.2	114.6	67.5	4.0	4.3
TX08352-5Ru Neb	TXRU	584.8	420.5	74.4	147.3	198.8	55.6	254.4	21.7	86.9	4.5	4.7
A08433-4VR	WRRU	548.2	412.3	121.3	169.1	121.9	5.0	127.0	82.8	48.0	3.8	4.4
Russet Norkotah	WRRU	523.0	420.7	110.5	171.8	138.4	18.1	156.5	43.5	40.7	4.2	4.6
A071012-4BF	WRRU	522.5	365.8	78.5	124.7	162.7	32.5	195.2	48.3	76.0	3.8	3.8
A07061-6	WRRU	508.8	426.0	114.8	182.3	128.8	0.0	128.8	57.4	25.4	4.1	4.5
COTX05095-2Ru/Y	WRRU	483.4	395.8	114.4	169.3	112.1	3.0	115.1	79.4	5.3	3.8	4.3
CO09205-2RU	WRRU	481.1	347.7	115.3	159.0	73.4	0.0	73.4	92.0	41.4	3.9	4.0
A06030-23	WRRU	463.7	346.8	91.5	125.8	129.5	28.1	157.6	47.8	41.0	4.1	4.3
AO02183-2	WRRU	453.7	353.7	89.2	162.2	102.3	3.2	105.5	50.6	46.2	3.7	4.2
Ranger Russet	WRRU	449.3	337.5	113.5	143.7	80.3	2.7	83.0	75.3	33.9	3.8	4.2
Reveille Russet Neb	TXRU	448.2	306.8	58.1	95.9	152.8	3.4	156.3	28.6	109.4	3.9	4.1
CO08231-1RU	WRRU	445.2	284.1	115.3	101.8	67.0	3.0	70.0	148.3	9.8	3.6	3.8
A07769-4	WRRU	442.2	377.7	62.5	141.2	174.1	17.4	191.5	31.8	15.3	3.9	4.1
Shepody	WRRU	440.4	299.9	93.3	130.4	76.2	0.0	76.2	64.1	76.4	3.8	3.8
CO10087-4RU	SW	418.0	290.1	44.2	119.0	127.0	9.8	136.8	39.4	78.7	3.8	3.9
A10021-5TE	WRRU	399.5	310.7	45.5	133.6	131.5	46.4	178.0	24.0	18.3	3.7	4.1
AOR07781-5	WRRU	384.4	275.7	52.8	105.9	116.9	15.6	132.5	27.9	65.2	3.8	3.7
CO08155-2RU/Y	WRRU	372.9	290.6	114.2	109.4	67.0	6.2	73.2	62.2	14.0	3.8	3.9
CO10091-1RU	SW	324.2	234.5	101.8	96.8	35.9	0.0	35.9	79.2	10.5	3.6	3.6
Russet Burbank	WRRU	299.7	198.4	64.5	88.5	45.3	0.0	45.3	30.4	70.9	3.4	3.5
AOTX05043-1Ru	WRRU	297.2	209.6	75.7	85.3	48.5	0.0	48.5	84.0	3.7	3.5	3.6
AO06191-1	WRRU	264.7	196.1	33.4	53.5	109.1	24.3	133.4	19.7	24.7	3.5	3.6
CO09036-2RU	WRRU	262.9	125.8	53.8	69.1	3.0	0.0	3.0	108.4	28.6	3.4	3.3
CO09076-3RU	WRRU	259.4	164.3	37.1	57.7	69.5	25.6	95.2	30.9	38.7	3.5	3.2
Average		438.2	319.8	85.2	128.0	106.7	13.9	61.0	43.5	3.8	3.8	4.0
L.S.D. (.05)		105.9	85.5	28.7	40.6	54.0	22.2	36.6	28.9	0.2	0.2	0.3

¹ 1=very poor to 5= excellent

Dalhart
Table 2b.

Percent by weight of U.S. No. 1, over 18 oz, under 4 oz, 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-2018.

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				
AOR06576-1	WRRU	71.0	18.2	26.9	25.9	7.7	13.5	7.8	1.064	13.9	Long	Russet
AOR07821-1	WRRU	67.5	17.9	31.7	17.8	1.9	20.0	10.6	1.070	14.9	Oblong	Russet
TX08352-5Ru Neb	TXRU	72.6	13.0	25.4	34.2	9.0	3.9	14.5	1.060	13.3	Oblong	Russet
A08433-4VR	WRRU	74.6	22.4	30.4	21.7	0.9	15.4	9.2	1.071	15.1	Oblong	Russet
Russet Norkotah	WRRU	80.8	21.7	33.3	25.8	3.0	8.3	8.0	1.058	12.9	Long	Russet
A071012-4BF	WRRU	71.4	14.6	25.2	31.6	5.4	8.8	14.4	1.086	17.8	Long	Russet
A07061-6	WRRU	83.7	23.1	36.0	24.6	0.0	11.6	4.7	1.070	14.9	Oblong	White
COTX05095-2Ru/Y	WRRU	82.3	24.1	34.9	23.3	0.7	15.9	1.1	1.067	14.4	Oblong	Russet
CO09205-2RU	WRRU	71.6	24.1	33.6	14.0	0.0	19.7	8.7	1.068	14.7	Long	Russet
A06030-23	WRRU	74.7	19.7	27.1	27.9	6.1	10.4	8.8	1.075	15.9	Long	Russet
AO02183-2	WRRU	78.0	20.0	37.0	21.0	0.7	11.5	9.8	1.066	14.3	Long	Russet
Ranger Russet	WRRU	74.6	25.3	31.7	17.6	0.6	17.4	7.5	1.082	17.1	Oblong	Russet
Reveille Russet Neb	TXRU	67.9	13.3	21.7	32.9	0.7	6.5	24.9	1.065	14.2	Oblong	Russet
CO08231-1RU	WRRU	63.8	25.7	22.6	15.5	0.7	33.3	2.2	1.076	16.1	Oblong	Russet
A07769-4	WRRU	85.5	14.9	32.3	38.4	3.7	7.3	3.5	1.074	15.7	Oblong	Russet
Shepody	WRRU	68.6	21.4	29.6	17.5	0.0	14.8	16.7	1.076	16.0	Oblong	White
CO10087-4RU	SW	70.7	11.3	29.2	30.1	2.1	9.3	17.9	1.076	16.1	Long	Russet
A10021-5TE	WRRU	78.1	11.3	33.3	33.5	11.2	5.8	4.8	1.073	15.6	Very Long	Russet
AOR07781-5	WRRU	71.1	14.0	26.3	30.7	3.7	7.0	18.3	1.077	16.3	Long	Russet
CO08155-2RU/Y	WRRU	78.4	31.7	30.0	16.7	1.7	16.6	3.2	1.077	16.2	Oblong	Russet
CO10091-1RU	SW	73.6	31.9	32.5	9.2	0.0	23.5	2.9	1.073	15.5	Oval	Russet
Russet Burbank	WRRU	66.0	21.3	30.1	14.6	0.0	10.1	24.0	1.062	13.6	Long	Russet
AOTX05043-1Ru	WRRU	71.4	25.9	29.5	15.9	0.0	27.5	1.1	1.074	15.7	Oblong	Russet
AO06191-1	WRRU	74.3	12.2	19.6	42.4	9.8	7.1	8.8	1.083	17.3	Long	Russet
CO09036-2RU	WRRU	49.1	20.4	27.6	1.1	0.0	41.1	9.8	1.069	14.8	Long	Russet
CO09076-3RU	WRRU	65.7	15.5	22.0	28.2	7.9	11.6	14.8	1.064	13.9	Long	Russet
Average		72.6	19.8	29.2	23.5	3.0	14.5	9.9	1.071	15.2		
L.S.D. (.05)		11.8	6.2	ns	9.9	4.7	10.2	6.5	0.0	0.9		

Dalhart
Table 2c.

Average number of tubers, tuber weight, percent stand 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness, length cm, with cm, and thickness cm of 26 entries in the Western and Southwestern Regional Russet Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines	Length/ With	With/ Thickness	Length cm	With cm	Thickness cm
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴						
AOR06576-1	WRRU	7.1	7.2	100	1.5	4.7	3.2	4.7	48	2.17	1.18	12.6	5.8	4.9
AOR07821-1	WRRU	6.6	7.4	100	1.5	4.9	4.5	4.9	3	1.82	1.29	11.8	6.5	5.0
TX08352-5Ru Neb	TXRU	4.4	9.8	100	1.5	4.5	2.4	4.6	78	1.62	1.21	10.9	6.7	5.6
A08433-4VR	WRRU	6.5	6.2	100	1.5	4.9	4.5	5.0	5	1.80	1.26	11.4	6.3	5.0
Russet Norkotah	WRRU	5.3	7.2	100	1.5	4.6	2.3	4.6	85	2.14	1.17	12.4	5.8	5.0
A071012-4BF	WRRU	5.0	7.8	96	1.5	4.6	4.5	4.7	4	1.95	1.18	12.2	6.3	5.3
A07061-6	WRRU	5.9	6.3	100	1.5	4.5	4.0	4.6	15	1.82	1.20	11.3	6.2	5.2
COTX05095-2Ru/Y	WRRU	6.3	6.0	94	1.5	4.3	3.1	4.5	61	1.72	1.15	10.1	5.9	5.1
CO09205-2RU	WRRU	6.7	5.7	92	1.5	4.1	3.2	4.2	51	2.10	1.14	11.7	5.6	4.9
A06030-23	WRRU	4.8	7.4	96	1.5	3.9	3.5	4.0	40	1.87	1.13	11.5	6.2	5.5
AO02183-2	WRRU	5.1	6.3	100	1.5	4.9	4.5	4.9	4	2.56	1.08	12.6	4.9	4.6
Ranger Russet	WRRU	5.6	5.9	100	1.5	4.5	4.4	4.6	8	2.13	1.14	11.9	5.6	4.9
Reveille Russet Neb	TXRU	4.6	8.7	86	1.5	4.4	3.9	4.7	25	1.67	1.22	10.8	6.5	5.3
CO08231-1RU	WRRU	7.2	4.7	98	1.5	4.8	4.1	4.8	15	1.90	1.09	11.0	5.8	5.4
A07769-4	WRRU	3.8	8.6	100	1.6	3.7	4.3	3.8	8	1.81	1.18	11.4	6.3	5.4
Shepody	WRRU	5.2	6.2	100	1.5	5.0	3.5	5.0	43	1.63	1.33	10.8	6.7	5.0
CO10087-4RU	SW	3.7	8.1	100	1.6	4.3	2.8	4.3	66	1.87	1.14	11.4	6.1	5.3
A10021-5TE	WRRU	3.9	8.0	96	1.5	4.1	3.6	4.1	24	2.47	1.18	13.1	5.3	4.5
AOR07781-5	WRRU	4.0	7.4	95	1.5	4.9	3.6	4.9	39	2.24	1.13	13.3	6.0	5.3
CO08155-2RU/Y	WRRU	6.7	6.3	79	1.5	4.4	3.6	4.7	31	1.92	1.22	11.7	6.1	5.0
CO10091-1RU	SW	5.5	5.5	80	1.5	3.5	4.3	3.9	14	1.60	1.24	10.7	6.7	5.4
Russet Burbank	WRRU	3.7	6.2	96	1.5	4.0	3.5	4.1	39	2.52	1.16	13.1	5.2	4.5
AOTX05043-1Ru	WRRU	4.4	5.6	89	1.5	3.8	3.0	3.1	59	1.83	1.14	11.4	6.3	5.5
AO06191-1	WRRU	2.6	9.2	83	1.5	4.1	3.5	4.4	33	2.05	1.14	12.3	6.0	5.3
CO09036-2RU	WRRU	3.8	6.0	100	1.5	4.8	4.8	4.8	3	2.48	1.11	11.6	4.7	4.2
CO09076-3RU	WRRU	4.7	7.0	58	1.5	3.1	3.9	3.9	23	2.21	1.17	11.7	5.3	4.6
Average		5.1	6.9	94	1.5	4.3	3.7	4.4	31	2.00	1.18	11.7	5.9	5.1
L.S.D. (.05)		1.6	1.2	16	ns	0.4	0.4	0.3	14	0.22	0.06	1.2	0.3	0.3

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-2018.

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
AOR06576-1	WRRU	1.0	4.4	3.0	3.9	3.0	4.8	5.0	5.0	4.0	5.0	3	0	28	3
AOR07821-1	WRRU	1.0	3.6	3.5	4.0	3.5	5.0	5.0	5.0	3.8	4.8	3	0	35	0
TX08352-5Ru Neb	TXRU	1.0	3.5	3.8	4.4	3.5	4.3	5.0	5.0	4.5	4.5	3	0	3	0
A08433-4VR	WRRU	1.0	3.6	3.3	4.0	3.4	5.0	5.0	5.0	5.0	5.0	5	0	28	0
Russet Norkotah	WRRU	1.0	4.6	4.0	3.9	4.0	5.0	5.0	5.0	4.3	5.0	13	0	5	0
A071012-4BF	WRRU	1.0	4.3	3.3	3.9	3.5	5.0	5.0	5.0	3.0	5.0	15	0	8	0
A07061-6	WRRU	1.0	3.5	1.1	4.0	1.0	4.8	5.0	5.0	4.9	5.0	0	5	30	0
COTX05095-2Ru/Y	WRRU	3.0	3.5	2.5	4.0	2.5	5.0	5.0	5.0	5.0	5.0	0	0	35	0
CO09205-2RU	WRRU	1.0	3.9	3.5	3.9	3.5	4.5	5.0	5.0	5.0	5.0	13	0	20	0
A06030-23	WRRU	1.0	3.8	3.7	4.0	3.5	4.0	5.0	5.0	4.3	5.0	25	0	15	0
AO02183-2	WRRU	1.0	4.5	4.0	3.8	3.8	5.0	5.0	5.0	4.0	5.0	3	0	65	0
Ranger Russet	WRRU	1.0	3.6	2.9	4.0	2.9	5.0	5.0	5.0	4.5	5.0	3	0	13	0
Reveille Russet Neb	TXRU	1.0	3.5	3.5	4.0	3.5	5.0	5.0	5.0	3.0	5.0	0	0	23	0
CO08231-1RU	WRRU	1.0	3.1	3.0	4.4	2.9	5.0	5.0	5.0	4.8	5.0	5	0	28	0
A07769-4	WRRU	1.0	3.6	3.1	3.9	2.9	5.0	5.0	5.0	5.0	5.0	0	0	33	0
Shepody	WRRU	1.0	3.5	1.0	4.0	1.0	4.5	5.0	5.0	3.8	4.5	0	0	45	0
CO10087-4RU	SW	1.0	4.1	3.8	4.0	3.8	3.4	5.0	5.0	4.0	5.0	8	3	5	5
A10021-5TE	WRRU	1.0	4.8	3.5	3.9	3.7	5.0	5.0	5.0	4.5	5.0	0	0	63	0
AOR07781-5	WRRU	3.0	4.3	4.0	3.8	3.4	5.0	5.0	5.0	3.5	5.0	8	0	5	0
CO08155-2RU/Y	WRRU	2.3	3.1	3.0	4.0	2.5	5.0	5.0	5.0	5.0	5.0	0	0	18	0
CO10091-1RU	SW	1.0	2.9	4.0	4.3	3.9	4.5	5.0	5.0	5.0	5.0	0	0	23	0
Russet Burbank	WRRU	1.0	4.0	3.5	4.0	3.5	5.0	5.0	5.0	3.3	5.0	0	0	20	0
AOTX05043-1Ru	WRRU	1.0	3.1	3.5	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	10	0
AO06191-1	WRRU	1.0	4.0	4.0	3.9	4.0	5.0	5.0	5.0	4.8	5.0	8	0	23	3
CO09036-2RU	WRRU	1.0	4.1	3.8	4.0	3.8	4.8	5.0	5.0	4.9	5.0	0	0	8	3
CO09076-3RU	WRRU	1.0	4.0	3.9	4.0	3.9	4.5	5.0	5.0	3.9	5.0	0	0	28	0
Average		1.2	3.8	3.3	4.0	3.2	4.8	5.0	5.0	4.3	5.0	4.2	0	23	0
L.S.D. (.05)		0.1	0.3	0.3	0.2	0.2	0.4	0.0	0.0	0.7	ns	8.5	0.0	20.5	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

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-2018.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
AOR06576-1	WRRU	Light russet, not uniform size, Very high tuber number+, uniform size and shape, golden russet skin+, medium size, BOT+, , Knobs	high tuber number+++ , parent for high tuber number, long, knobs	4, 4.5, 4.5, 3.8	4.5, 4.4, 4.8, 3.7
AOR07821-1	WRRU	Very high tuber number, medium size, Large tuber number, good russet skin, small-medium size, Blocky, A little angular	Knobs, High tuber number++, small-medium, large, a little angular+,	4, 3.8, 4, 4.2	4.4, 3.8, 4.4, 4.6
TX08352-5Ru Neb	TXRU	Knobs, nice skin, large, uniform size++, Nice skin, bulky, BOT++, blocky+, nice skin, nice shape,	large, blocky+, BOT+, uniformed size and shape+, Parent, cross with PVY res, Bulky, nice, BOT, large	4.5, 4.5, 4.5, 4.5	4.8, 4.6, 4.6, 4.6
A08433-4VR	WRRU	High tuber number, not uniform size or shape, nice skin, Small uniform size, Not good skin set,	, , high tuber number, uniform size, a little flat	3.7, 3.6, 3.7, 4.2	4.5, 4.3, 4.2, 4.5
Russet Norkotah	WRRU	Some moon shapes, nice size, Nice shape, nice skin, Nice russet skin, BOT,	Several with damaged skin, , enlarged lenticels, high tuber number, nice shape	4, 4, 4.5, 4.2	4.5, 4.5, 4.5, 4.8
A071012-4BF	WRRU	Knobs++, Long, not uniform size, not good russet skin,	, large tuber number, knobs+, , greens	4.2, 4, 3.6, 3.5	4.2, 3.8, 3.5, 3.7
A07061-6	WRRU	Light skin (too light), Long white, smooth skin+, nice shape, oblong,	some buff skins , smooth skin, , nice long white, nice shape, uniform shape	4, 4.5, 4, 3.8	4.6, 4.6, 4.2, 4.7
COTX05095-2Ru/Y	WRRU	Some nice shapes+, knobs, Road map, light skin, Not good russet skin, Medium size	Include in NFPT (French Processing trials), nice flesh, Check specific gravity/chips, Promote, Parent, cross with heavy russet yellow flesh, high tuber number,	4, 3.5, 3.7, 4	4.2, 4.2, 4.3, 4.5
CO09205-2RU	WRRU	Very high tuber number+, small-medium size+, nice skin+, Golden russet skin, nice, some nice shapes, most are small, ,	high tuber number, moons, 20% SE, nice skin, uniform shape, medium, SE, a little pointy+, few tubers	4.4, 3.8, 3.8, 3.6	4, 4.4, 4.2, 3.5
A06030-23	WRRU	Nice skin, blocky, knobs+, growth cracks, light eyes, Medium size, good russet skin,	Blocky, large, many eyes, nice shape, high tuber number	4.2, 3.8, 4, 4.3	4.3, 4.3, 4.2, 4.4
AO02183-2	WRRU	Knobs, skinny+, Very small, Nice skin, nice shape, Long, high tuber number	nice type, knobs, few tubers, pointy+, enlarged lenticels, high tuber number	3.7, 3.3, 3.8, 3.8	4.5, 3.6, 4.2, 4.3
Ranger Russet	WRRU	Knobs, High tuber number+, small, , Noticeable eyes, not uniform size	Parent for high tuber number, high tuber number, SE, nice, medium, small	3.8, 3.7, 3.8, 3.7	4.3, 4.3, 4.3, 3.8
Reveille Russet Neb	TXRU	Knobs+++ , nice skin, nice shape, uniform size, green heads, nice russet skin, uniform size,	knobs+++ , , knobs, enlarged lenticels, 40% SE,	4, 3.7, 4, 3.8	3.8, 4.3, 4.2, 4.2
CO08231-1RU	WRRU	Nice russet skin, one big heart+, not uniform size+, Small+, light russet skin,	skin blemishes, medium-small+, not uniform size, round to oblong	3.6, 3.5, 3.7, 3.6	3.8, 3.8, 3.8, 3.7
A07769-4	WRRU	Smaller, nice skin, Very light russet or not good skin set, nice shape, Uniform size, golden russet, Few tubers	nice shape, deformed tubers, It does not look russet, , enlarged lenticels	3.8, 4.2, 4, 3.5	4.3, 4, 4.4, 3.8
Shepody	WRRU	Light skin++, large, Smooth skin+, Knobs, white,	, smooth skin+, not uniform shaped,,	3.8, 3.6, 4, 3.8	4.2, 4, 3.7, 3.4
CO10087-4RU	SW	Knobs, growth cracks, high tuber number, not uniform size, Some nice shapes+, nice skin+, knobs,	Knobs, 70% SE, , growth cracks , few tubers, nice shape	4, 3.6, 4, 3.7	4, 4, 3.8, 3.6
A10021-5TE	WRRU	Thin, pointy+, Very long+++ , pointy, ,	, nice, pointy, very long++, skinny, high tuber number	3.6, 3.7, 3.6, 4	3.8, 4.4, 4.2, 3.8
AOR07781-5	WRRU	Intense russet skin, Good russet skin, knobs++, Pointy, high yield, long, noticeable eyes, little tubers on eyes	greens , long, noticeable lighter eyes, Test for zc tolerance and parent, ask Rich, pointy, rough, point, soft ends (stolon side)	3.8, 3.8, 4, 3.5	3.7, 3.8, 3.8, 3.3
CO08155-2RU/Y	WRRU	Not uniform russet skin, nice shape++, Small tubers, , Not uniform russet skin	Parent for yellow flesh russet, nice shape, medium size, enlarged lenticels,	3.6, 3.6, 3.8, 4	4, 3.6, 4, 3.8
CO10091-1RU	SW	Small roundish, Round-long, some blocky+, medium, enlarged lenticels, Few tubers, pointy	roundish, skin with bee hives area, medium size+, uniform shape and size, very few tubers, not uniform russet skin	3.8, 3.6, 3.8, 3.3	3.8, 3.8, 3.8, 3
Russet Burbank	WRRU	Knobs+++ , pointy++, medium russet skin, skinny, Growth cracks	, deformed tubers, skinny, curved, pointy	3.3, 3.3, 3.4, 3.4	3.5, 3.6, 3.3, 3.6
AOTX05043-1Ru	WRRU	Low yield, few tubers, Not uniform size, Small-medium,	low tuber number, nice shape+, medium size+, ,	3.5, 3.6, 3.5, 3.4	3.5, 3.6, 3.6, 3.6
AO06191-1	WRRU	Low tuber number++, nice russet skin++, , Some nice blocky shapes,	few tubers+, nice shape, good skin, nice rep, nice shape, a little angular,	3.5, 3.4, 3.7, 3.4	3.5, 4, 3.5, 3.5
CO09036-2RU	WRRU	Good russet, skinny+, pointy+, Very small tubers++, ,	long, skinny+, pointy+, small,, few tubers+, pointy,	3.6, 3.3, 3.4, 3.3	3.7, 3.7, 3.2, 2.5
CO09076-3RU	WRRU	Good skin, long, pointy++, Knobs+, pointy , ,	few tubers+, pointy+++ , knobs, skin blemishes, ,	3.5, 3.4, 3.4, 3.7	2.8, 3.2, 3.4, 3.4

Western Regional and Texas Advanced Red Trial, Dalhart

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

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

- CO06215-2R and CO99076-5R had the highest general ratings (Table 3a).
- Red LaSoda had the highest total and marketable yield, while NDTX071258Bs-1R had the highest yield of less than 4 oz. tubers (Table 3b).
- NDTX071258Bs-1R had the highest yield of 4-6 oz. tubers (Table 3a).
- MSX569-1R, Chieftain, and MSW343-2R had the highest percentage of marketable yield, while NDTX071258Bs-1R had the highest percentage of less than 4 oz. tubers (Table 3b).
- CO99076-5R had the highest specific gravity (Table 3b).
- NDTX071258Bs-1R and CO98012-6R had the highest average number of tubers per plant (Table 3c).
- Red LaSoda and CO98012-6R were the latest in maturity, while MSX569-1R and NDTX071258Bs-1R were the earliest in maturity (Table 3c).
- Red LaSoda and MSW343-2R had the deepest eyes (Table 3d).

Comments on entries:

- | | | | |
|--------------|-------|-----|-----------------------------------------------------------------------------------------------------------------------------------|
| • Red LaSoda | Oval | Red | Large variation in shape, large tubers were oblong, High tuber number, Very large |
| • MSW343-2R | Round | Red | Medium size, deep eyes, rounder than LaSoda, more intense skin color than LaSoda, Silver scurf, stem end darkening, Shiny skin, |
| • MSX569-1R | Round | Red | Silver scurf+, lenticels+, a little angular, pointy, Pink flesh around vascular ring++, Medium-small, Very intense red skin color |
| • CO06215-2R | Oval | Red | Nice, shallow eyes, intense skin color, Stem end+, Shiny, smooth |
| • Chieftain | Oval | Red | Nice, Silver scurf, a little flat+ |
| • CO98012-6R | Round | Red | Silver scurf+++, nice uniform size and shape, smaller than rep1, Shiny |
| • CO99076-5R | Oval | Red | Some skin blemishes, Silver scurf, Beautiful skin color |

- NDTX071258Bs-1R Round Red Parent for small, Small+++, uniform size, mini LaSoda

Summary:

MSW343-2R and CO06215-2R were the best entries based on all factors.

Dalhart
Table 3a.

Total yield, total yield of U.S. No.1, over 18 oz, under 4 oz and culls/No.2 potatoes and general rating of 8 entries in the Western Regional Red Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Total Yield cwt/a	U.S. No. 1 cwt/a			Over 18 oz cwt/a	Under 4 oz. cwt/a	Culls/ No.2 cwt/a	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
Red LaSoda	WRRD	712.9	533.1	141.4	178.9	212.8	132.2	47.6	0.0	3.8
MSW343-2R	Real	593.5	483.6	186.2	161.5	135.9	0.0	109.8	0.0	4.1
MSX569-1R	Real	585.7	407.0	229.7	149.4	27.9	0.0	178.7	0.0	3.8
CO06215-2R	SWRD	585.5	429.0	175.7	151.9	101.4	0.0	156.5	0.0	4.3
Chieftain	WRRD	542.9	453.4	179.1	113.9	160.4	11.7	77.8	0.0	3.9
CO98012-6R	Real	465.8	237.7	152.8	78.5	6.4	0.0	228.1	0.0	3.9
CO99076-5R	Real	413.9	347.7	124.9	85.8	137.0	0.0	59.3	6.9	4.3
NDTX071258Bs-1R	WRRD	371.1	118.1	87.2	30.9	0.0	0.0	253.0	0.0	3.7
Average		533.9	376.2	159.6	118.9	97.7	18.0	138.8	0.9	4.0
L.S.D. (.05)		105.9	95.8	39.7	43.6	65.4	11.3	42.3	ns	ns

¹ 1=very poor to 5= excellent

Dalhart
Table 3b.

Percent by weight of U.S. No. 1, over 18 oz, under 4 oz, culls/No.2 potatoes, specific gravity, tuber type and skin type of 8 entries in the Western Regional Red Trial grown near Dalhart, Texas-2018.

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	WRRD	74.2	20.5	25.5	28.2	19.0	6.8	0.0	1.060	13.3	Oval	Red
MSW343-2R	Real	81.1	31.3	26.6	23.2	0.0	18.9	0.0	1.058	12.8	Round	Red
MSX569-1R	Real	69.7	38.8	25.9	4.9	0.0	30.3	0.0	1.054	12.2	Round	Red
CO06215-2R	SWRD	74.2	30.4	26.2	17.6	0.0	25.8	0.0	1.071	15.2	Oval	Red
Chieftain	WRRD	83.6	33.6	20.8	29.1	2.3	14.2	0.0	1.066	14.2	Oval	Red
CO98012-6R	Real	50.2	32.1	16.5	1.6	0.0	49.8	0.0	1.067	14.5	Round	Red
CO99076-5R	Real	83.8	30.9	20.5	32.5	0.0	14.6	1.5	1.069	14.7	Oval	Red
NDTX071258Bs-1R	WRRD	31.4	23.4	8.0	0.0	0.0	68.6	0.0	1.063	13.7	Round	Red
Average		68.5	30.1	21.3	17.1	2.7	28.6	0.2	1.063	13.8		
L.S.D. (.05)		8.0	6.1	6.2	8.2	2.2	8.1	ns	0.003	0.6		

Dalhart
Table 3c.

Average number of tubers, tuber weight, percent stand 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness, length cm, with cm, and thickness cm of 8 entries in the Western Regional Red Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines	Length/ With	With/ Thickness	Length cm	With cm	Thickness cm
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴						
Red LaSoda	WRRD	7.1	7.6	100	1.5	4.8	4.5	4.9	5	1.21	1.23	7.7	6.4	5.2
MSW343-2R	Real	8.3	5.2	100	1.5	4.4	3.5	4.5	29	1.09	1.09	6.5	5.9	5.5
MSX569-1R	Real	10.7	4.2	96	1.6	4.4	3.1	4.4	61	1.14	1.20	6.8	6.0	5.0
CO06215-2R	SWRD	9.4	4.6	100	1.5	4.8	3.9	4.8	16	1.11	1.18	6.8	6.1	5.2
Chieftain	WRRD	7.1	5.6	100	1.6	4.5	3.6	4.5	21	1.12	1.26	7.1	6.4	5.1
CO98012-6R	Real	11.1	3.0	100	1.5	4.9	4.2	5.0	8	1.04	1.19	6.3	6.0	5.1
CO99076-5R	Real	6.6	5.9	78	1.6	4.0	3.7	4.3	16	1.14	1.12	7.0	6.1	5.5
NDTX071258Bs-1R	WRRD	11.4	2.4	100	1.5	4.3	3.4	4.3	43	1.04	1.19	6.1	5.9	5.0
Average		9.0	4.8	97	1.5	4.5	3.7	4.6	25	1.11	1.18	6.8	6.1	5.2
L.S.D. (.05)		1.8	0.0	6	ns	0.3	0.4	0.2	13	0.08	0.06	0.4	ns	0.2

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 8 entries in the Western Regional Red Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹¹	Percent Internal Brownspot
Red LaSoda	WRRD	1.0	2.7	1.0	3.5	3.0	4.8	5.0	4.8	4.8	4.5	0	0	0	0
MSW343-2R	Real	1.0	1.3	1.0	3.6	3.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0
MSX569-1R	Real	1.0	1.4	1.0	4.0	4.5	5.0	5.0	5.0	5.0	4.8	3	0	0	0
CO06215-2R	SWRD	1.0	2.1	1.0	4.5	4.1	5.0	5.0	5.0	5.0	5.0	0	0	10	0
Chieftain	WRRD	1.0	2.5	1.0	3.8	2.5	5.0	5.0	5.0	4.8	5.0	0	0	0	5
CO98012-6R	Real	1.0	1.0	1.0	4.0	4.8	5.0	5.0	5.0	5.0	5.0	3	0	0	0
CO99076-5R	Real	1.0	1.8	1.0	4.5	4.4	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX071258Bs-1R	WRRD	1.0	1.0	1.0	3.8	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		1.0	1.7	1.0	4.0	3.9	5.0	5.0	5.0	4.9	4.9	1	0	1	1
L.S.D. (.05)		0.0	0.4		0.1	0.2	ns		ns	ns	ns	ns	0	5	2

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Dalhart
Table 3e.

Notes and general rating for all reps of 8 entries in the Western Regional Red Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Notes Grading	General Rating Grading
Red LaSoda	WRRD	Large variation in shape, large tubers are 3-, Some large tubers, High tuber number, Very large	4, 3.8, 3.7, 3.7
MSW343-2R	Real	Medium size, deep eyes, rounder than LaSoda, more intense skin color than LaSoda, Silver scurf, stem end darkening, Shiny skin,	4.2, 4.2, 4, 3.8
MSX569-1R	Real	Silver scurf+, lenticels+, a little angular, pointy, Pink flesh around vascular ring++, Medium-small,, Very intense red skin color	3.6, 3.6, 4, 4
CO06215-2R	SWRD	Nice, shallow eye, intense skin color, , Stem end+, Shiny, smooth	4.5, 3.7, 4.3, 4.5
Chieftain	WRRD	Nice, Silver scurf, a little flat+, ,	4, 3.8, 3.8, 3.8
CO98012-6R	Real	Silver scurf+++ , nice uniform size and shape, smaller than rep1, , Shiny	4.6, 3.6, 3.6, 3.8
CO99076-5R	Real	Some skin blemishes, Silver scurf, , Beautiful skin color	3.8, 4.5, 4.5, 4.5
NDTX071258Bs-1R	WRRD	Parent for small, Small+++ , uniform size, mini LaSoda, ,	3.4, 3.8, 3.8, 3.8

Western Regional and Texas Advanced Red/Yellow Trial, Dalhart

This trial consisted of five entries.

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

- NCB2607-3 received the highest general rating and a best of trial designation (Table 4a).
- NCB2607-3 had the highest total yield, while ATX02263-1R/Y had the highest marketable yield (Table 4a).
- NCB2607-3 had the highest yield of less than 4 oz. and 4-6 oz. tubers (Table 4a).
- CO09079-5PW/Y had the highest yield and percentage of culls/No. 2 tubers (Table 4a, 4b).
- ATX02263-1R/Y had the highest percentage of marketable yield. All of the entries had over 60% of less than 4 oz. tubers (Table 4b).
- NCB2607-3 and ATTX05175s-1R/Y had the highest specific gravity (Table 4b).
- NCB2607-3 and ATX02263-1R/Y had the highest average number of tubers per plant (Table 4c).
- ATTX05175s-1R/Y was the latest in maturity, while CO09079-5PW/Y was the earliest in maturity (Table 4c).
- COTX04193s-2R/Y, ATTX05175s-1R/Y, and CO09079-5PW/Y had the darkest yellow flesh (Table 4d).

Comments on entries:

- | | | | |
|-------------------|-------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • NCB2607-3 | Round | Red | BOT, Small, very uniform size, high tuber number+, not shiny, not smooth skin (save as uniform size and shape plus high tuber number Parent), FC=3.9 |
| • ATX02263-1R/Y | Oval | Red | Pear shape+, small, smooth skin, Parent, High tuber number, uniform size, rain drop shape, FC=3.0 |
| • COTX04193s-2R/Y | Oval | Red | Silver scurf++, smooth skin, few eyes (Save as parent, Tasteful Selections?, send for Dallas Extension children), uniform size and shape, small, VD is red, a little flat, FC=4.5 |
| • ATTX05175s-1R/Y | Round | Red | Parent only, Small, deep eyes, Pleasant skin color, FC=4.3 |
| • CO09079-5PW/Y | Oval | White | no pattern, small, Low tuber number+, Knobs, no PW/Y, FC=4.5 |

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

Summary:

NCB2607-3 was the best entry based on all factors.

Dalhart
Table 4a.

Total yield, total yield of U.S. No.1, over 18 oz, under 4 oz and culls/No.2 potatoes and general rating of 5 entries in the Western and Southwestern Regional Red/Yellow Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Total Yield cwt/a	U.S. No. 1 cwt/a			Over 18 oz cwt/a	Under 4 oz. cwt/a	Culls/ No.2 cwt/a	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
NCB2607-3	Real	492.6	150.8	126.5	24.3	0.0	0.0	341.8	0.0	4.4
ATX02263-1R/Y	SW	428.7	163.1	101.8	50.6	10.8	0.0	265.6	0.0	3.9
COTX04193s-2R/Y	WRRY	320.8	99.1	68.4	30.7	0.0	0.0	221.7	0.0	3.7
ATX05175s-1R/Y	WRRY	307.5	96.1	83.3	12.8	0.0	0.0	211.4	0.0	3.6
CO09079-5PW/Y	WRRY	226.3	62.5	52.2	10.3	0.0	0.0	156.5	7.3	3.4
Average		355.2	114.3	86.4	25.7	2.2	0.0	239.4	1.5	3.8
L.S.D. (.05)		87.8	33.6	24.7	14.2	ns	0.0	69.5	ns	0.2

¹ 1=very poor to 5= excellent

Dalhart
Table 4b.

Percent by weight of U.S. No. 1, over 18 oz, under 4 oz, culls/No.2 potatoes, specific gravity, tuber type and skin type of 5 entries in the Western and Southwestern Regional Red/Yellow Trial grown near Dalhart, Texas-2018.

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				
NCB2607-3	Real	30.7	25.6	5.0	0.0	0.0	69.3	0.0	1.073	15.5	Round	Red
ATX02263-1R/Y	SW	38.4	23.7	12.2	2.4	0.0	61.6	0.0	1.067	14.5	Oval	Red
COTX04193s-2R/Y	WRRY	31.5	21.6	9.8	0.0	0.0	68.5	0.0	1.060	13.2	Oval	Red
ATTX05175s-1R/Y	WRRY	30.8	27.2	3.6	0.0	0.0	69.2	0.0	1.072	15.4	Round	Red
CO09079-5PW/Y	WRRY	30.1	25.3	4.8	0.0	0.0	67.6	2.3	1.055	12.4	Oval	White
Average		32.3	24.7	7.1	0.5	0.0	67.3	0.5	1.065	14.2		
L.S.D. (.05)		ns	ns	4.6	ns	0.0	ns	ns	0.003	0.4		

Dalhart
Table 4c.

Average number of tubers, tuber weight, percent stand 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness, length cm, with cm, and thickness cm of 5 entries in the Western and Southwestern Regional Red/Yellow Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines	Length/ With	With/ Thickness	Length cm	With cm	Thickness cm
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴						
NCB2607-3	Real	11.9	3.0	100	1.8	4.3	3.7	4.5	26	1.10	1.13	6.5	5.9	5.2
ATX02263-1R/Y	SW	11.1	2.8	100	1.5	4.6	3.8	4.6	26	1.30	1.17	7.3	5.6	4.8
COTX04193s-2R/Y	WRRY	9.7	2.4	100	1.6	4.2	3.2	4.4	43	1.07	1.27	6.6	6.2	4.9
ATTX05175s-1R/Y	WRRY	8.9	2.5	100	1.9	4.2	4.8	4.4	3	1.05	1.16	6.2	5.9	5.1
CO09079-5PW/Y	WRRY	6.6	2.6	98	2.3	3.9	3.4	4.2	41	1.37	1.15	7.6	5.7	5.0
Average		9.6	2.7	100	1.8	4.2	3.8	4.4	28	1.18	1.18	6.8	5.9	5.0
L.S.D. (.05)		2.1	0.0	ns	0.3	0.3	0.5	ns	ns	0.15	0.05	0.4	ns	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 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 5 entries in the Western and Southwestern Regional Red/Yellow Trial grown near Dalhart, Texas-2018.

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
NCB2607-3	Real	3.9	1.0	1.0	3.9	4.4	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX02263-1R/Y	SW	3.0	2.5	1.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX04193s-2R/Y	WRRY	4.5	2.5	1.0	4.0	3.5	5.0	5.0	5.0	4.8	5.0	0	0	13	0
ATTX05175s-1R/Y	WRRY	4.3	1.0	1.0	3.5	3.5	5.0	5.0	5.0	5.0	5.0	0	0	10	0
CO09079-5PW/Y	WRRY	4.5	2.4	1.0	4.0	1.0	5.0	5.0	5.0	4.5	5.0	0	0	5	0
Average		4.0	1.9	1.0	3.9	3.3	5.0	5.0	5.0	4.9	5.0	0	0	6	0
L.S.D. (.05)		0.2	0.1	0.0	0.1	0.1	0.0	0.0	0.0	ns	0.0	0	0	ns	0

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 5 entries in the Western and Southwestern Regional Red/Yellow Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Notes Grading	General Rating Grading
NCB2607-3	Real	Small, very uniform size, high tuber number+, BOT, Not shiny, not smooth skin (save as uniform size and shape plus high tuber number Parent), , uniform size and shape	4.6, 4.4, 4, 4.5
ATX02263-1R/Y	SW	Pear shape+, small, smooth skin, Parent, High tuber number, uniform size, rain drop shape, , Silver scurf++, smooth skin, few eyes (Save as parent, Tasteful Selections?, send for Dallas	3.7, 4, 4.2, 3.8
COTX04193s-2R/Y	WRRY	Extension children), uniform size and shape, small, VD is red, a little flat	3.8, 3.8, 3.6, 3.7
ATX05175s-1R/Y	WRRY	Parent only, Small, deep eyes, Pleasant skin color, ,	3.5, 3.7, 3.6, 3.7
CO09079-5PW/Y	WRRY	White skin, no pattern, small, Low tuber number+, Knobs, no PW/Y,	3.5, 3.3, 3.5, 3.2

Western Regional and Texas Advanced White/Yellow Trial, Dalhart

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

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

- CO10097-2W/Y had the highest general rating (Table 5a).
- FOB136-181 had the highest total, marketable and yield of over 10 oz. tubers (Table 5a).
- CO09128-5W/Y had the highest yield of less than 4 oz. tubers, while Wendy had the highest yield of culls/No. 2 tubers (Table 5a, 5b).
- Yukon Gold and CO10097-2W/Y had the highest percentage of marketable yield, while CO10098-5W/Y had the highest percentage of less than 4 oz. tubers. Soraya had the highest percentage of culls/No. 2 tubers (Table 5b).
- CO10098-4W/Y, CO10064-1W/Y, and CO10098-5W/Y had the highest specific gravity (Table 5b).
- AC10376-1W/Y, CO09128-5W/Y, CO09128-3W/Y, and CO09218-4W/Y had the highest average number of tubers per plant (Table 5c).
- All the entries were late in maturity (Table 5c).
- CO09128-5W/Y, CO09128-3W/Y, CO10098-4W/Y, CO09218-4W/Y, Soraya, and CO10098-5W/Y had the darkest flesh color. Alegria and CO09128-5W/Y had the highest percentage of vascular discoloration, while CO09128-5W/Y and CO10098-4W/Y had the highest percentage of internal brown spot (Table 5d).

Comments on entries:

- FOB136-181 Oblong White Knobs+, very large++, Not uniform size nor shape, high yield+, ugly skin, FC=3.0
- CO10097-2W/Y Round White Buff skin+, uniform size and shape++, snaps, High tuber number, nice, FC=3.8
- Wendy Oblong White Knobs++, Large, smooth skin, FC=3.2
- AC10376-1W/Y Oval White Knobs+++, high tuber number+, Small+, angular+, pointed, FC=3.4
- CO09128-5W/Y Round White *Internal heat necrosis+++, Smalls++, uniform size+ and shape, FC=4.1

- CO09128-3W/Y Oval White Small, pointy, Knobs, growth cracks, hard to cut, High tuber number, small, FC=4.0
- Yukon Gold Oval White Bulging eyes, large, snaps, Lenticels, knobs+, not uniform shape nor size, ugly, Very large knobs, large ugly, check seed source, FC=2.8
- Alegria Oblong White Knobs+, pointy+, angular+, smooth skin+, FC=3.3
- CO10098-4W/Y Round White Skin blemishes, small uniform size+, *internal heat necrosis+, knobs, FC=4.3
- CO10064-1W/Y Oval White Few tubers, small, Uniform size, pointy, FC=3.3
- CO09218-4W/Y Oval White Knobs++, linked tubers++, very few tubers+, snaps+, buff skin, attached stolons+, FC=4.0
- Soraya Long White Knobs++, bulging eyes, skin blemishes+, Very few tubers, pointy, DROP+++, FC=4.0
- CO10098-5W/Y Oval White Very few tubers++, Knobs+++, Parent for color, VERY intense dark yellow flesh, DROP++, FC=4.8

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

Summary:

CO10097-2W/Y was the best entry based on all factors.

Dalhart
Table 5a.

Total yield, total yield of U.S. No.1, over 18 oz, under 4 oz and culls/No.2 potatoes and general rating of 13 entries in the Western and Southwestern Regional White/Yellow Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Total Yield cwt/a	U.S. No. 1 cwt/a			Over 18 oz cwt/a	Under 4 oz. cwt/a	Culls/ No.2 cwt/a	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
FOB136-181	Real	566.0	380.2	88.5	104.6	187.1	89.5	47.6	48.7	3.7
CO10097-2W/Y	SW	501.5	368.3	182.6	127.7	58.1	3.0	127.4	2.7	4.4
Wendy	Hig	418.2	294.1	86.9	95.5	111.6	0.0	40.0	84.2	3.5
AC10376-1W/Y	SW	401.5	170.7	129.3	41.4	0.0	0.0	182.1	48.7	3.5
CO09128-5W/Y	WRWY	342.3	121.7	115.1	6.6	0.0	0.0	220.5	0.0	3.6
CO09128-3W/Y	WRWY	330.4	142.1	105.2	36.8	0.0	0.0	183.7	4.6	3.6
Yukon Gold	WRWY	328.1	239.3	49.2	81.9	108.2	26.5	15.1	47.1	3.0
Alegria	Hig	324.3	177.5	108.0	69.5	0.0	0.0	103.4	43.3	3.5
CO10098-4W/Y	SW	312.3	133.2	98.6	31.6	3.0	0.0	168.6	10.5	3.7
CO10064-1W/Y	SW	311.8	183.0	100.9	65.7	16.5	0.0	120.1	8.7	3.5
CO09218-4W/Y	WRWY	152.6	51.9	44.4	7.5	0.0	0.0	63.4	37.3	2.7
Soraya	Hig	151.9	80.8	38.7	39.4	2.7	0.0	10.7	60.4	2.7
CO10098-5W/Y	SW	99.5	3.9	3.9	0.0	0.0	0.0	57.4	38.2	1.6
Average		326.2	180.5	88.6	54.5	37.5	9.2	103.1	33.4	3.3
L.S.D. (.05)		100.5	63.1	32.9	36.7	23.5	11.5	30.6	ns	0.4

¹ 1=very poor to 5= excellent

Dalhart
Table 5b.

Percent by weight of U.S. No. 1, over 18 oz, under 4 oz, culls/No.2 potatoes, specific gravity, tuber type and skin type of 13 entries in the Western and Southwestern Regional White/Yellow Trial grown near Dalhart, Texas-2018.

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				
FOB136-181	Real	68.1	15.5	18.4	34.2	15.8	8.0	8.1	1.066	14.3	Oblong	White
CO10097-2W/Y	SW	73.4	36.2	25.3	11.9	0.7	25.3	0.5	1.069	14.8	Round	White
Wendy	Hig	69.9	21.0	23.4	25.6	0.0	10.0	20.1	1.072	15.3	Oblong	White
AC10376-1W/Y	SW	42.9	32.3	10.6	0.0	0.0	45.7	11.4	1.062	13.5	Oval	White
CO09128-5W/Y	WRWY	35.1	33.0	2.1	0.0	0.0	64.9	0.0	1.071	15.1	Round	White
CO09128-3W/Y	WRWY	41.4	32.0	9.4	0.0	0.0	57.1	1.5	1.059	13.0	Oval	White
Yukon Gold	WRWY	74.5	15.0	23.7	35.8	7.5	4.4	13.6	1.071	15.2	Oval	White
Alegria	Hig	54.3	33.5	20.8	0.0	0.0	32.7	13.0	1.063	13.8	Oblong	White
CO10098-4W/Y	SW	42.0	31.5	9.7	0.9	0.0	55.2	2.8	1.084	17.6	Round	White
CO10064-1W/Y	SW	57.8	33.8	19.3	4.6	0.0	40.1	2.1	1.085	17.7	Oval	White
CO09218-4W/Y	WRWY	39.8	34.2	5.6	0.0	0.0	43.9	16.3	1.058	12.9	Oval	White
Soraya	Hig	38.3	17.2	20.0	1.1	0.0	4.9	56.8	1.059	13.0	Long	White
CO10098-5W/Y	SW	2.1	2.1	0.0	0.0	0.0	72.6	25.3	1.085	17.7	Oval	White
Average		49.2	25.9	14.5	8.8	1.8	35.8	13.2	1.069	14.9		
L.S.D. (.05)		14.0	9.6	8.8	5.9	1.6	15.6	18.9	0.0	0.6		

Dalhart
Table 5c.

Average number of tubers, tuber weight, percent stand 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness, length cm, with cm, and thickness cm of 13 entries in the Western and Southwestern Regional White/Yellow Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines	Length/ With	With/ Thickness	Length cm	With cm	Thickness cm
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴						
FOB136-181	Real	5.2	8.1	100	1.5	4.7	4.2	4.7	13	1.51	1.15	8.9	5.9	5.1
CO10097-2W/Y	SW	8.3	4.7	96	1.8	4.4	4.4	4.4	9	1.12	1.14	6.8	6.1	5.3
Wendy	Hig	5.4	6.8	85	1.5	4.0	4.6	4.1	2	1.43	1.20	8.6	6.0	5.0
AC10376-1W/Y	SW	10.8	3.1	89	1.5	4.0	4.8	4.3	3	1.34	1.17	7.5	5.6	4.8
CO09128-5W/Y	WRWY	10.8	2.6	92	1.9	4.2	4.2	4.2	9	1.06	1.10	5.9	5.6	5.1
CO09128-3W/Y	WRWY	10.2	2.7	90	1.8	3.9	4.1	4.3	10	1.32	1.18	7.3	5.5	4.7
Yukon Gold	WRWY	3.0	8.9	89	1.5	4.0	4.8	4.1	2	1.17	1.27	7.5	6.4	5.0
Alegria	Hig	9.3	3.9	69	1.5	3.5	4.9	4.4	0	1.45	1.20	8.4	5.8	4.8
CO10098-4W/Y	SW	8.4	2.8	96	1.6	4.0	4.6	4.0	3	1.12	1.21	6.9	6.2	5.1
CO10064-1W/Y	SW	6.8	3.7	90	1.5	4.5	5.0	4.5	0	1.15	1.22	7.1	6.2	5.0
CO09218-4W/Y	WRWY	10.6	2.6	43	1.6	2.7	5.0	3.7	0	1.36	1.21	7.8	5.7	4.7
Soraya	Hig	5.6	6.0	33	1.5	2.5	5.0	3.6	0	1.83	1.16	10.2	5.6	4.9
CO10098-5W/Y	SW	4.7	3.2	47	1.5	1.8	5.0	3.5	1	1.48	1.18	7.6	5.2	4.4
Average		7.6	4.5	78	1.6	3.7	4.6	4.1	4	1.33	1.18	7.7	5.8	4.9
L.S.D. (.05)		2.7	0.0	16	0.2	0.6	0.4	0.5	6	0.19	0.07	0.9	0.3	0.3

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 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 Western and Southwestern Regional White/Yellow Trial grown near Dalhart, Texas-2018.

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
FOB136-181	Real	3.0	3.5	1.5	4.0	1.0	5.0	5.0	5.0	3.3	5.0	0	3	0	0
CO10097-2W/Y	SW	3.8	1.4	1.5	4.0	1.0	5.0	5.0	5.0	5.0	5.0	5	0	8	3
Wendy	Hig	3.2	3.0	1.0	4.0	1.0	5.0	5.0	5.0	3.0	5.0	0	0	10	0
AC10376-1W/Y	SW	3.4	2.0	1.3	4.0	1.0	5.0	5.0	5.0	3.0	5.0	0	0	15	0
CO09128-5W/Y	WRWY	4.1	1.0	1.1	3.9	1.0	5.0	5.0	4.8	4.8	5.0	0	0	18	25
CO09128-3W/Y	WRWY	4.0	2.4	1.0	4.0	1.0	4.3	5.0	5.0	4.0	5.0	0	0	3	0
Yukon Gold	WRWY	2.8	2.6	1.0	4.0	1.0	4.5	5.0	5.0	3.5	5.0	13	0	0	13
Alegria	Hig	3.3	3.2	1.0	4.0	1.0	5.0	5.0	5.0	4.0	5.0	0	0	20	0
CO10098-4W/Y	SW	4.3	1.0	1.0	4.0	1.0	5.0	5.0	5.0	4.0	5.0	0	0	10	30
CO10064-1W/Y	SW	3.3	2.0	1.0	4.0	1.0	5.0	5.0	5.0	4.5	5.0	0	0	0	0
CO09218-4W/Y	WRWY	4.0	2.4	1.5	4.0	1.0	4.8	5.0	5.0	3.5	5.0	0	0	0	0
Soraya	Hig	4.0	4.0	1.0	4.0	1.0	5.0	5.0	5.0	2.0	5.0	0	0	0	13
CO10098-5W/Y	SW	4.8	2.5	1.0	4.0	1.0	5.0	5.0	5.0	1.8	5.0	0	0	8	0
Average		3.7	2.4	1.1	4.0	1.0	4.9	5.0	5.0	3.6	5.0	1.3	0	7	6
L.S.D. (.05)		0.3	0.4	0.1	0.0	0.0	ns		ns	0.8	0.0	ns	0.0	ns	10.4

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 13 entries in the Western and Southwestern Regional White/Yellow Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Notes Grading	General Rating Grading
FOB136-181	Real	Knobs+, very large++, Not uniform size nor shape, high yield+, strong, ugly skin	3.6, 3.6, 3.8, 3.6
CO10097-2W/Y	SW	Buff skin+, uniform size and shape++, snaps, chipper?+, High tuber number, nice, ,	4.5, 4.6, 4.6, 4
Wendy	Hig	Knobs++, , Large, smooth skin,	3.5, 3.5, 3.5,
AC10376-1W/Y	SW	Knobs+++, high tuber number+, Small+, angular+, pointed,	3.4, 3.4, 3.6, 3.5
CO09128-5W/Y	WRWY	*Internal heat necrosis+++, Smalls++, uniform size+ and shape, , round,	3.8, 3.5, 3.6, 3.5
CO09128-3W/Y	WRWY	Small, pointy, Knobs, growth cracks, hard to cut, , High tuber number, small	3.4, 3.5, 3.6, 3.8
Yukon Gold	WRWY	Bulging eyes, large, snaps, Lenticels, knobs+, not uniform shape nor size, ugly, snaps, Very large KNOBS, large ugly, check seed source,	2.8, 2.8, 3.4, 2.8
Alegria	Hig	KNOBS+, pointy+, angular+, smooth skin+, , ,	3.6, 3.5, 3.4,
CO10098-4W/Y	SW	Skin blemishes, small uniform size+, *internal heat necrosis+, knobs, ,	3.6, 3.6, 3.8, 3.6
CO10064-1W/Y	SW	Few tubers, small, , Uniform size, pointy,	3.3, 3.5, 3.6, 3.5
CO09218-4W/Y	WRWY	Knobs++, linked tubers++, very few tubers+, snaps+, buff skin, attached stolons+, ,	2.8, 2, 3, 3
Soraya	Hig	Knobs++, bulging eyes, skin blemishes+, DROP+++, Very few tubers, , pointy ,	2.8, 2, 3.4,
CO10098-5W/Y	SW	Very few tubers++, Knobs+++, Parent for color, DROP++, VERY intense dark yellow flesh, ,	2, 2, 1, 1.5

Western Regional and Texas Advanced Purple Skin Selection Trial, Dalhart

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

Results: (Dalhart Tables 6a, 6b, 6c, 6d, and 6e)

- ATX11549-1P/Y and ATX08121-3P/Y had the highest general ratings (Table 6a).
- ATX11549-1P/Y had the highest total yield, while COTX10138-19P/Y had the highest marketable yield (Table 6a).
- ATX08121-3P/Y had the highest yield of less than 4 oz. tubers (Table 6a).
- COTX10138-19P/Y and ATX11549-1P/Y had the highest percentage of marketable yield, while ATX08121-3P/Y and ATX11556-1P/Y had the highest percentage of less than 4 oz. tubers. (Table 6b).
- ATX08121-3P/Y and ATX11556-1P/Y had the highest number of tubers per plant (Table 6c).
- CO08037-2P/P was the latest in maturity, while ATX11549-1P/Y was the earliest in maturity (Table 6c).
- CO08037-2P/P had the darkest purple flesh color, while ATX11556-1P/Y had the darkest yellow flesh (Table 6d).

Comments on entries:

- ATX11549-1P/Y Oval Purple TC? Wait to see in replicated trials, Medium size, high yield, Halloween potato, nice, FC=3.0
- Purple Majesty Oval Purple Uniform size, flesh has white marbling+, silver scurf+, High yield+, nice shape, white center, FC=3.5
- ATX08121-3P/Y Round Purple TC? Promote?, ask Kelly, Very uniform size and shape+, smooth skin, high tuber number+, shiny, uniformly small+, nice skin, FC=3.0
- ATX11556-1P/Y Round Purple High tuber number, small+, smooth skin, FC=3.5
- COTX10138-19P/Y Round Purple Medium-large, silver scurf++, dull skin, large, angular, grey skin+, DROP+, FC=3.3

- CO08037-2P/P Oblong Purple Uniform shape, 90% with white center+, Noticeable eyebrows, shiny skin, very dark flesh, FC=4.5

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

Summary:

ATX11549-1P/Y and ATX08121-3P/Y were the best entries bases on all factors.

Dalhart
Table 6a.

Total yield, total yield of U.S. No.1, over 18 oz, under 4 oz and culls/No.2 potatoes and general rating of 6 entries in the Western Regional and Texas Advanced Purple Skin Selection Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Total Yield cwt/a	U.S. No. 1 cwt/a			Over 18 oz cwt/a	Under 4 oz. cwt/a	Culls/ No.2 cwt/a	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
ATX11549-1P/Y	TXP/P	475.9	302.9	133.6	91.5	77.8	47.6	125.4	0.0	4.2
Purple Majesty	WRPu	465.1	196.5	151.0	45.5	0.0	0.0	268.6	0.0	3.8
ATX08121-3P/Y	TXP/P	452.1	160.1	151.0	6.6	2.5	0.0	291.9	0.0	4.3
ATX11556-1P/Y	TXP/P	451.6	173.9	135.0	31.6	7.3	0.0	277.7	0.0	3.8
COTX10138-19P/Y	TXP/P	448.9	324.6	119.0	78.7	127.0	14.9	109.4	0.0	3.7
CO08037-2P/P	WRPu	373.1	230.8	142.5	68.6	19.7	0.0	142.3	0.0	3.8
Average		444.4	231.5	138.7	53.8	39.0	10.4	202.5	0.0	3.9
L.S.D. (.05)		ns	56.2	ns	18.5	37.9	10.7	25.8	0.0	0.2

¹ 1=very poor to 5= excellent

Dalhart
Table 6b.

Percent by weight of U.S. No. 1, over 18 oz, under 4 oz, culls/No.2 potatoes, specific gravity, tuber type and skin type of 6 entries in the Western Regional and Texas Advanced Purple Skin Selection Trial grown near Dalhart, Texas-2018.

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				
ATX11549-1P/Y	TXP/P	63.7	28.1	19.2	16.3	10.0	26.3	0.0	1.066	14.2	Oval	Purple
Purple Majesty	WRPu	42.2	32.4	9.8	0.0	0.0	57.8	0.0	1.069	14.8	Oval	Purple
ATX08121-3P/Y	TXP/P	35.3	33.2	1.5	0.5	0.0	64.7	0.0	1.070	15.1	Round	Purple
ATX11556-1P/Y	TXP/P	38.6	30.1	6.9	1.5	0.0	61.4	0.0	1.054	12.1	Round	Purple
COTX10138-19P/Y	TXP/P	71.8	26.8	17.9	27.2	3.2	25.0	0.0	1.057	12.7	Round	Purple
CO08037-2P/P	WRPu	61.7	38.1	18.4	5.1	0.0	38.3	0.0	1.072	15.4	Oblong	Purple
Average		52.2	31.5	12.3	8.5	2.2	45.6	0.0	1.065	14.1		
L.S.D. (.05)		5.4	ns	4.4	5.0	2.4	4.8	0.0	0.002	0.4		

Dalhart
Table 6c.

Average number of tubers, tuber weight, percent stand 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness, length cm, with cm, and thickness cm of 6 entries in the Western Reginal and Texas Advanced Purple Skin Selection Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines	Length/ With	With/ Thickness	Length cm	With cm	Thickness cm
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴						
ATX11549-1P/Y	TXP/P	7.1	4.9	100	1.5	5.0	2.5	4.9	70					
Purple Majesty	WRPu	13.5	2.5	100	1.5	5.0	3.9	5.0	16	1.40	1.10	7.5	5.4	4.8
ATX08121-3P/Y	TXP/P	14.2	2.3	100	1.6	4.5	3.2	4.5	55					
ATX11556-1P/Y	TXP/P	15.0	2.3	96	1.5	4.6	3.9	4.7	15					
COTX10138-19P/Y	TXP/P	7.2	4.5	100	1.5	4.2	3.8	4.3	19					
CO08037-2P/P	WRPu	8.5	3.8	86	1.5	4.3	4.9	4.4	1	1.50	1.10	8.3	5.5	5.1
Average		10.9	3.4	97	1.5	4.6	3.7	4.6	29	1.45	1.10	7.9	5.5	5.0
L.S.D. (.05)		2.5	0.3	ns	ns	ns	0.4	ns	13	0.09	0.05	0.2	0.2	0.2

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 6 entries in the Western Regional and Texas Advanced Purple Skin Selection Trial grown near Dalhart, Texas-2018.

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
ATX11549-1P/Y	TXP/P	3.0	2.5	1.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	10	0	0	0
Purple Majesty	WRPu	3.5	2.5	1.0	4.0	5.0	5.0	5.0	5.0	4.8	5.0	0	0	0	8
ATX08121-3P/Y	TXP/P	3.0	1.0	1.0	3.9	5.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX11556-1P/Y	TXP/P	3.5	1.3	1.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX10138-19P/Y	TXP/P	3.3	1.4	1.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	18	0	20	3
CO08037-2P/P	WRPu	4.5	3.3	1.0	3.9	5.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
Average		3.5	2.0	1.0	4.0	5.0	5.0	5.0	5.0	5.0	4.9	5	0	3	2
L.S.D. (.05)		0.2	0.2	0.0	ns					ns	ns	ns	0.0	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 6e. Notes and general rating for all reps of 6 entries in the Western Reginal and Texas Advanced Purple Skin Selection Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Notes Grading	General Rating Grading
ATX11549-1P/Y	TXP/P	TC? Wait to see in replicated trials, Medium size, high yield, Halloween potato, nice, , ,	4.2, , ,
Purple Majesty	WRPu	Uniform size, flesh has white marbling+, silver scurf+, High yield+, nice shape, , white center	3.7, 3.8, 3.8, 4
ATX08121-3P/Y	TXP/P	TC? Promote?, ask Kelly, Very uniform size and shape+, smooth skin, high tuber number+, shiny, uniformly small+, nice skin,	4.5, 4.3, 4.3, 4
ATX11556-1P/Y	TXP/P	High tuber number, small+, smooth skin, , ,	3.8, 3.7, ,
COTX10138-19P/Y	TXP/P	Medium-large, silver scurf++, dull skin, DROP+, large, angular, grey skin+, Uniform shape, 90% with white center+, Noticeable eyebrows, , Nice shape, shiny	3.6, 3.7, 3.8, 3.6
CO08037-2P/P	WRPu	skin, very dark flesh	3.8, 3.8, 3.7, 3.8

Western Regional and Texas Advanced Selection Fingerling Trial, Dalhart

This trial consisted of four entries, including the check varieties LaRatte and Banana .

Results: (Dalhart Tables 7a, 7b, 7c, 7d, and 7e)

- PORTX03PG25-2R/R had the highest general rating (Table 7a).
- PORTX03PG25-2R/R had the highest marketable yield, while POR11PG62-3 had the highest yield of less than 4 oz. and culls/No. 2 tubers (Table 7a).
- PORTX03PG25-2R/R had the highest percentage of marketable yield (Table 7b).
- POR11PG62-3 had the highest percentage of less than 4 oz. tubers and 35% culls/No. 2 tubers (Table 5b).
- PORTX03PG25-2R/R was the latest in maturity, while LaRatte and Banana were earlier in maturity (Table 7c).

Comments on entries:

- PORTX03PG25-2R/R Oblong Red A little large, grow for less time, Many eyes in large tubers, Unique shape, skin and flesh, Uniform size and shape, FC=4.0
- POR11PG62-3 Long White Knobs+, wild looking, DUCKS, FC=3.0
- Banana Long White *Very long, linked tubers, Knobs, FC=3.0
- LaRatte Long White Smooth skin, * very long linked tubers, FC=2.9

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

Summary:

PORTX03PG25-2R/R was the best entry.

Dalhart
Table 7a.

Total yield, total yield of U.S. No.1, over 18 oz, under 4 oz and culls/No.2 potatoes and general rating of 4 entries in the Western Regional and Texas Advanced Selection Fingerling Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Total Yield cwt/a	U.S. No. 1 cwt/a			Over 18 oz cwt/a	Under 4 oz. cwt/a	Culls/ No.2 cwt/a	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
PORTX03PG25-2R/R	TXFing	273.2	244.3	201.1	43.2	0.0	0.0	12.6	16.2	3.7
POR11PG62-3	WRFing	197.9	22.9	22.9	0.0	0.0	0.0	105.5	69.5	3.3
Banana	TXFing	126.5	89.2	61.8	27.5	0.0	0.0	18.1	19.2	3.3
LaRatte	WRFing	126.1	61.1	43.5	17.6	0.0	0.0	51.7	13.3	3.2
Average		180.9	104.4	82.3	22.1	0.0	0.0	47.0	29.6	3.4
L.S.D. (.05)		39.3	34.2	34.4	21.9			0.0	15.6	0.1

¹ 1=very poor to 5= excellent

Dalhart
Table 7b.

Percent by weight of U.S. No. 1, over 18 oz, under 4 oz, culls/No.2 potatoes, specific gravity, tuber type and skin type of 4 entries in the Western Regional and Texas Advanced Selection Fingerling Trial grown near Dalhart, Texas-2018.

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				
PORTX03PG25-2R/R	TXFing	89.4	72.8	16.6	0.0	0.0	4.8	5.8	1.062	13.6	Oblong	Red
POR11PG62-3	WRFing	12.2	12.2	0.0	0.0	0.0	52.6	35.2	1.061	13.5	Long	White
Banana	TXFing	70.0	48.8	21.2	0.0	0.0	14.2	15.8	1.066	14.2	Long	White
LaRatte	WRFing	47.7	34.5	13.2	0.0	0.0	41.9	10.4	1.063	13.8	Long	White
Average		54.8	42.1	12.7	0.0	0.0	28.4	16.8	1.063	13.7		
L.S.D. (.05)		12.6	6.2	ns	0.0	0.0	13.7	6.4	0.002	0.3		

Dalhart
Table 7c.

Average number of tubers, tuber weight, percent stand 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness, length cm, with cm, and thickness cm of 4 entries in the Western Regional and Texas Advanced Selection Fingerling Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines	Length/ With	With/ Thickness	Length cm	With cm	Thickness cm
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴						
PORTX03PG25-2R/R	TXFing	7.6	2.9	92	1.6	3.7	4.0	3.9	11	2.42	1.06	10.0	4.1	3.8
POR11PG62-3	WRFing	7.8	2.1	88	1.5	3.6	3.8	3.9	19	2.77	1.12	10.7	3.9	3.5
Banana	TXFing	4.9	1.9	100	1.5	4.8	3.6	4.8	23	4.02	1.04	14.1	3.5	3.4
LaRatte	WRFing	5.4	1.7	100	1.6	4.5	3.6	4.8	21	3.71	1.15	12.9	3.5	3.0
Average		6.4	2.2	95	1.6	4.1	3.7	4.3	18	3.23	1.09	11.9	3.7	3.4
L.S.D. (.05)		1.6	0.2	ns	ns	0.2	0.2	0.2	ns	0.42	ns	2.1	ns	0.4

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 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 4 entries in the Western Regional and Texas Advanced Selection Fingerling Trial grown near Dalhart, Texas-2018.

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
PORTX03PG25-2R/R	TXFing	4.0	3.5	1.0	4.0	4.0	5.0	5.0	5.0	3.8	5.0	0	0	0	0
POR11PG62-3	WRFing	3.0	5.0	1.0	4.0	1.0	5.0	5.0	5.0	1.0	5.0	0	0	0	0
Banana	TXFing	3.0	5.0	1.0	4.0	1.0	5.0	5.0	5.0	2.0	5.0	0	0	0	3
LaRatte	WRFing	2.9	5.0	1.0	4.0	1.0	5.0	5.0	5.0	2.3	5.0	0	0	0	3
Average		3.2	4.6	1.0	4.0	1.8	5.0	5.0	5.0	2.3	5.0	0	0	0	1
L.S.D. (.05)		0.2													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 7e.

Notes and general rating for all reps of 4 entries in the Western Regional and Texas Advanced Selection Fingerling Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Notes Grading	General Rating Grading
PORTX03PG25-2R/R	TXFing	A little large, grow for less time, Many eyes in large tubers, Unique shape, skin and flesh, Uniform size and shape	3.7, 3.7, 3.8, 3.7
POR11PG62-3	WRFing	Knobs+, wild looking, DUCKS, ,	3.3, 3.3, 3.3, 3.3
Banana	TXFing	, *Very long, linked tubers, , Knobs	3.2, 3.3, 3.4, 3.3
LaRatte	WRFing	Smooth skin, * very long linked tubers, , ,	3, 3.4, 3.2, 3.3

Texas Advanced Chip Selection Trial, Dalhart

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

Results: (Dalhart Tables 8a, 8b, 8c, 8d, 8e, 8f, and 8g)

- COTX12235-2W, NDTX12203AB-1W, AORTX09033-11W, and AORTX09033-4W were the best entries for this trial based on best of trial designation for chip quality, while AORTX09037-1W/Y, AORTX09037-4W/Y, NDTX14362AB-1W, and NDTX12203AB-1W had a high general rating and a best of trial designation for tuber appearance. COTX14284-2W/Y, NDTX1244-3W/Y, AORTX09144-2W, NDTX1246-5W/Y, AORTX09037-4W/Y, COTX12235-2W, Atlantic dal, and TX12484-2WZC had high general ratings for tuber appearance. NDTX1246-5W/Y, NDTX12135-1W, AORTX09037-5W/Y, and NDTX1246-3W had the highest values for chip quality, while NDTX12135-1W, NDTX1246-3W, and NDTX12203AB-1W had over 80% good chips (Tables 8a, 8e, and 8f).
- COTX14284-2W/Y had the highest total and marketable yield. COTX14284-2W/Y had the highest yield of 4-6 oz. tubers (Table 8a).
- AORTX09037-5W/Y had the highest yield of less than 4 oz. tubers (Table 8a).
- TX05249-10W and TX09396-1W had the highest percentage of marketable yield. NDTX12135-1W had the highest percentage of 4-6 oz. tubers, while ATX13127-1Ru had the highest percentage of less than 4 oz. tubers (Table 8b).
- NDTX1246-3W, NDTX113030C-3W, and ATX13134-3W/Y had the highest specific gravity (Table 8b).
- AORTX09037-5W/Y, AORTX09037-1W/Y, COTX14284-2W/Y, and NDTX1246-5W/Y had the highest average number of tubers per plant (Table 8c).
- NDTX1244-3W/Y, NDTX14475-1W/Y, COTX14284-2W/Y, AORTX09144-2W, AORTX09037-4W/Y, NDTX1246-3W, NDTX113030C-3W, AORTX09032-3W, Atlantic dal, ATX11482-3W, and NDTX1246-5W/Y were the latest in maturity, while AORTX09037-5W/Y and NDTX13280CB-3W were the earliest in maturity (Table 8c).
- ATX13126-5Ru and NDTX13224CAB-1W had the highest percentage hollow heart (Table 8d).
- ATX13126-3W, COTX12428-1W, and AORTX09037-4W/Y had the highest percentage of vascular discoloration. ATX13134-3W/Y, AORTX09144-2W, NDTX113030C-3W, NDTX14475-1W/Y, TX09396-1W, NDTX1246-3W, and Atlantic dal had the highest percentage of internal brown spot (Table 8d).

- NDTX1246-5W/Y, NDTX12135-1W, AORTX09037-5W/Y, and NDTX1246-3W had the highest scores for chip quality values for chipping out of the field. NDTX12135-1W, NDTX1246-3W, and NDTX12203AB-1W had the highest percentages of good chips for chipping out of the field (Table 8f).
- AORTX09037-1W/Y, ATX11482-3W, TX13580-1W, and NDTX14475-1W/Y had the highest scores for chip quality values for chipping out of storage. AORTX09037-1W/Y and AORTX09144-2W had the highest percentage of good chips for chipping out of storage. ATX11482-3W, COTX12235-2W, AORTX09032-3W, TX13580-1W, TX12484-3WZC, AORTX09037-1W/Y, TX12484-2WZC, NDTX113030C-3W, NDTX14475-1W/Y, AORTX09144-2W, and NDTX12135-1W had the highest scores for chip quality values for chipping after reconditioning. TX13580-1W, AORTX09032-3W, ATX11482-3W, and AORTX09037-1W/Y had the highest percentage of good chips for chipping after reconditioning (Table 8g).

Comments on entries:

- COTX14284-2W/Y Round White Medium-large, nice, High tuber number++, Large tubers, pink-purple eyes, fresh market yellow?, unique type, CR=3.8, Chip Notes:29% Good chip, DROP
- AORTX09037-1W/Y Round White BOT++, medium size, Some large tubers, some skin color variation, Very high tuber number++ Advance Fast, Impressive yield, WINNER, very uniform, SCAB, CR=2.3, Chip Notes:71% Good chip, 1 IBS, 1 GH
- NDTX14475-1W/Y Oval White DROP for shape++, smooth skin, yellow flesh, Angular++, attached stolons, High tuber number++, deep eyes, Shape issues, CR=1.8, Chip Notes:58% Good chip, Nice, 1 GH, 1 HH
- NDTX1244-3W/Y Round White smooth skin, nice, Not uniform size, high tuber number, High tuber set, very light skin, uniform size and shape, A little angular+, Nice skin, deep eyes+, skin blemishes, possible chip shape problems, CR=2.5, Chip Notes: 50% Good chip Nice, Shape-
- AORTX09037-5W/Y Round White BOT+, Smaller tubers, uniform size and shape++, high tuber number++, a little small, Small-medium , Nice size, advance, Not uniform skin texture, , Snaps, CR=1.5, Chip Notes:75% Good chip, Nice, 2 IBS

- NDTX1246-3W Oval White Some large, Not uniform shape, Too large, flat+++, angular+, DROP+, CR=1.5, Chip Notes:83 % Good chip, Nice
- AORTX09144-2W Oval White DROP++, BOT, High tuber set+, medium size, nice, a little flat, buff skin, some variation for high tuber number and skin type, Heat sprouts, knobs, Linked tubers, CR=2.9, Chip Notes:68% Good chip, Ugly
- NDTX1246-5W/Y Oval White Golden skin+, uniform size and shape+, high tuber number+, TC, intense yellow flesh+, Fresh market yellow?, CR=1.4, Chip Notes:79% Good chip, Nice color, Nice+
- AORTX09037-4W/Y Round White BOT, Nice, high tuber number+, some variation for skin color, Round, uniform shape, not uniform size, TC, Snaps, breaks at cutting, Scab, not uniform skin type, CR=2.9, Chip Notes:66% Good chip, DROP?
- COTX12235-2W Round White Uniform size and shape+++, nice, High tuber number++, smooth skin+, one greenhead had purple pigment, CR=1.8, Chip Notes:68% Good chip, 1 GH, BOT
- AORTX09032-3W Round White Not uniform size+, mixed? (some russets), Medium size, uniform size and shape, High tuber number+, nice, no uniform size, nice white flesh, CR=1.8, Chip Notes:62% Good chip
- Atlantic dal Oblong Buff some large tubers++, not uniform size, Large+, high tuber number, Rounder than other reps, CR=2.1, Chip Notes:56% Good chip, 3 IBS
- NDTX113030C-3W Oval White DROP, High tuber number+, large+, uniform size, a little flat+, hard to cut, CR=1.9, Chip Notes:71% Good chip
- NDTX14362AB-1W Round White BOT, uniform size and shape++, medium size++, many tubers between plots (right side), Large++, uniform size++, Advance to NCPT, CR=2.3, Chip Notes:70% Good chip, Nice, DROP
- TX12484-2WZC Oval White Pinkish skin+++, some large tubers, smooth skin, Large, very hard to cut+, Use as parent, unique skin, CR=2.4, Chip Notes:52% Good chip

- NDTX12203AB-1W Round White BOT, Uniform size and shape+++ , Smooth skin, high tuber number, TC, clean, CR=1.8, Chip Notes:80% Good chip, Nice, Oily centers, BOT
- NDTX12135-1W Round White Uniform size and shape, smooth skin+, nice, mixed? (some russets), a little flat, Advance, medium size, high tuber number, CR=1.4, Chip Notes:90% Good chip
- ATX11482-3W Oval White DROP, Not uniform size++, mixed russet and smooth skin, round to oval, Large tubers++, attached stolons, snaps+, CR=1.8, Chip Notes:49% Good chip, 8 Oily centers
- TX13580-1W Oval White DROP, Late? Attached tubers, not uniform size++, angular tubers, snaps when cut, Mixed flesh?, Buff skin, CR=2.5, Chip Notes:51% Good chip, 1 GH
- ATX13134-3W/Y Round White Medium-large tuber, smooth skin+, high tuber set, Large, green heads, nice, CR=1.9, Chip Notes:50% Good chip, Nice color
- COTX12428-1W Round White Uniform size and shape, nice, Some large+, smooth skin, Small, CR=2.0, Chip Notes:66% Good chip, Nice
- TX12484-3WZC Oval White Nice shape, uniform size and shape+, advance, keep all seed, keep, ZC tolerant, High tuber number, Smooth skin, nice, advance, fingerprint, Small tubers are round, large are oblong, nice flesh, CR=2.0, Chip Notes:71% Good chip, Color-, 1 GH
- TX14710-4WZC Oval Buff Not uniform size, small, Smooth skin, nice white flesh, Large, dirty skin, culls, CR=2.5, Chip Notes:49% Good chip, DROP, Nice
- TX05249-10W Oval White DROP+, Some large tubers++, green heads, shape deformities, not uniform size, rotten, CR=3.4, Chip Notes:30% Good chip, 1 GH
- TX14710-7WZC Oval White DROP, Not uniform size and shape+, Uniform size, a little flat+, Smooth, Mixed russet+, knobs, attached stolons, CR=3.6, Chip Notes:15% Good chip, IBS, DROP+, 5 IBS
- ATX13126-5Ru Oval White DROP+, not uniform size, Too large, mixed white and yellow flesh, CR=3.0, Chip Notes:50% Good chip, Shape-, 1 GH, 1 HH

- NDTX13280CB-3W Oval White DROP, uniform size and shape, smooth skin, nice, CR=1.8, Chip Notes:75% Good chip, Shape-, DROP?
- AORTX09033-11W Round White Knobs, Few tubers , CR=1.6, Chip Notes:70% Good chip, BOT, Nice
- TX12484-1WZC Oval White Oval to oblong, not uniform size and shape, Smooth skin+, Large, nice white flesh+, Mixed skin type?, CR=2.8, Chip Notes:41% Good chip
- TX14695-2WZC Oval White Oblong+, smooth skin, not uniform size, Round to long, uniform, Few tubers, Rotten , Some GH, pointy, mixed?, CR=2.6, Chip Notes:70% Good chip, Shape-, DROP?, Shape-, BOT, Shape-
- ATX13126-3W Oblong White DROP, not uniform size+, Some large tubers, CR=4.0, Chip Notes:0% Good chip, 1 GH, DROP
- TX12483-6W Round White DROP+, Russet+++ , few tubers+, Golden russet, small, not uniform size++, dirty look, Rotten, angular, CR=1.9, Chip Notes:58% Good chip, Shape-,
- NDTX13224CAB-1W Oval Russet DROP , CR=3.0, Chip Notes:20% Good chip, 1 IBS, DROP?
- TX09396-1W Round White DROP++, Knobs, Few tubers+, not uniform size, Large, Netted scales, CR=2.2, Chip Notes:43% Good chip, Shape-
- AORTX09033-4W Oval White DROP++, Low yield, Some large tubers+, a little flat, Very few tubers++, snaps, Very large++, CR=2.0, Chip Notes:67% Good chip, BOT, 1 GH, Shape-
- TX14668-3WZC Oval White DROP+++, very few tubers++, buff skin, some large+, Large tubers+++, mixed?, attached stolons, CR=3.3, Chip Notes:43% Good chip, DROP, Shape-
- NDTX059828-2WZC Oval White Pink skin++, CR=3.0, Chip Notes:20% Good chip
- ATX13127-1Ru Oval White DROP+, not uniform size, Small russet, low tuber number, CR=2.0, Chip Notes:60% Good chip

¹CR=chip quality rating 1=light to 6= dark

Summary:

NDTX1246-5W/Y, NDTX12135-1W, AORTX09037-5W/Y, and NDTX1246-3W had the highest values for chip quality for chipping out of the field, while NDTX12135-1W, NDTX1246-3W, and NDTX12203AB-1W

had over 80% good chips for chipping out of the field. AORTX09037-1W/Y, ATX11482-3W, TX13580-1W, and NDTX14475-1W/Y had the highest scores for chip quality values for chipping out of storage. AORTX09037-1W/Y and AORTX09144-2W had the highest percentage of good chips for chipping out of storage. ATX11482-3W, COTX12235-2W, AORTX09032-3W, TX13580-1W, TX12484-3WZC, AORTX09037-1W/Y, TX12484-2WZC, NDTX113030C-3W, NDTX14475-1W/Y, AORTX09144-2W, and NDTX12135-1W had the highest scores for chip quality values for chipping after reconditioning. TX13580-1W, AORTX09032-3W, ATX11482-3W, and AORTX09037-1W/Y had the highest percentage of good chips for chipping after reconditioning.

Dalhart
Table 8a.

Total yield, total yield of U.S. No.1, over 18 oz, under 4 oz and culls/No.2 potatoes and general rating of 38 entries in the Texas Advanced Chip Selection Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Total Yield cwt/a	U.S. No. 1 cwt/a			Over 18 oz cwt/a	Under 4 oz. cwt/a	Culls/ No.2 cwt/a	General Rating ¹ Field	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz						10-18 oz
COTX14284-2W/Y	TXCH	726	506	214.4	139.7	151.6	11.0	209	0.0	3.8	4.3
AORTX09037-1W/Y	NCPT18 Tier 2	695	462	173.9	178.9	109.6	11.0	221	0.0	3.9	4.6
NDTX14475-1W/Y	EGSS18	636	429	198.1	136.1	94.9	0.0	206	0.0	3.8	3.9
NDTX1244-3W/Y	NCPT18 Tier 2	618	430	194.9	136.1	98.8	5.9	181	1.1	3.7	4.3
AORTX09037-5W/Y	TXCH	607	351	168.4	128.6	54.2	0.0	256	0.0	4.1	4.6
NDTX1246-3W	NCPT18 Tier 2	604	431	173.4	162.7	94.9	0.0	165	8.0	3.7	3.7
AORTX09144-2W	NCPT18 Tier 2	594	436	163.4	175.0	97.9	0.0	156	1.6	3.7	4.2
NDTX1246-5W/Y	NCPT18 Tier 1	576	349	194.0	107.8	46.9	0.0	227	0.0	3.8	4.3
AORTX09037-4W/Y	TXCH	567	394	200.0	127.2	66.3	0.0	173	0.0	3.9	4.1
COTX12235-2W	NCPT18 Tier 2	543	355	165.0	123.8	65.9	0.0	188	0.0	4.0	4.2
AORTX09032-3W	TXCH	538	367	172.0	127.2	67.9	0.0	171	0.0	3.7	3.9
Atlantic dal	TXCH	531	411	115.8	118.7	176.6	14.0	106	0.0	3.6	4.2
NDTX113030C-3W	TXCH	531	385	167.7	108.7	108.2	0.0	146	0.0	3.7	3.7
NDTX14362AB-1W	EGSS18	528	408	151.2	136.1	120.8	6.4	112	1.4	3.8	4.3
TX12484-2WZC	EGSS18	521	382	147.3	135.0	99.7	4.6	131	3.0	3.7	3.8
NDTX12203AB-1W	NCPT18 Tier 2	514	357	182.6	125.6	48.5	0.0	157	0.0	3.9	4.3
NDTX12135-1W	EGSS18	501	375	196.3	115.3	63.1	2.7	124	0.0	3.8	4.3
ATX11482-3W	TXCH	501	396	144.9	124.2	127.2	14.3	90	0.0	3.5	3.8
TX13580-1W	NCPT18 Tier 1	500	301	161.7	96.8	42.6	12.6	187	0.0	3.5	3.7
ATX13134-3W/Y	TXCH	484	369	155.1	139.3	74.8	6.4	108	0.0	3.7	3.8
COTX12428-1W	NCPT18 Tier 2	478	326	133.8	98.6	93.3	12.8	140	0.0	3.7	3.7
TX12484-3WZC	EGSS18	476	335	143.0	132.0	59.9	3.2	136	2.5	3.8	3.9
TX14710-4WZC	EGSS18	447	329	110.5	117.4	101.1	0.0	111	7.5	3.5	3.6
TX05249-10W	TXCH	423	369	115.5	132.0	121.0	8.5	44	2.3	3.5	3.7
TX14710-7WZC	TXCH	422	271	140.9	65.9	64.5	0.0	133	17.4	3.5	3.6
ATX13126-5Ru	TXCH	420	319	67.7	108.0	143.7	55.8	45	0.0	3.4	3.5
NDTX13280CB-3W	TXCH	393	222	151.0	59.5	11.4	0.0	171	0.0	3.7	3.7
AORTX09033-11W	TXCH	379	255	129.7	89.9	35.0	0.0	116	7.8	3.6	3.6
TX12484-1WZC	EGSS18	366	234	103.9	70.7	59.3	0.0	132	0.0	3.5	3.5
TX14695-2WZC	NCPT18 Tier 1	365	288	116.9	98.1	73.0	0.0	75	2.1	3.4	3.4
ATX13126-3W	TXCH	330	235	94.3	65.4	75.5	5.9	89	0.0	3.4	3.4
TX12483-6W	NCPT18 Tier 1	329	225	113.2	76.6	35.5	0.0	103	0.0	3.4	3.5
NDTX13224CAB-1W	TXCH	315	198	109.8	87.9	0.0	0.0	117	0.0	3.6	3.6
TX09396-1W	TXCH	307	268	93.6	104.3	69.9	0.0	33	7.0	3.4	3.5
AORTX09033-4W	TXCH	289	234	89.5	67.5	76.9	17.6	38	0.0	3.3	3.2
TX14668-3WZC	ZC Susceptible Check	270	230	49.0	57.9	123.1	6.4	27	6.2	3.1	3.0
NDTX059828-2WZC	TXCH	207	161	76.0	85.1	0.0	0.0	46	0.0	3.5	3.5
ATX13127-1Ru	TXCH	203	70	69.5	0.0	0.0	0.0	134	0.0	3.3	3.4
Average		473.7	334.9	142.7	112.4	79.8	5.4	131.6	1.8	3.6	3.8
L.S.D. (.05)		89.0	83.3	32.9	47.9	51.4	ns	35.4	ns	0.2	0.3

¹ 1=very poor to 5= excellent

Dalhart
Table 8b.

Percent by weight of U.S. No. 1, over 18 oz, under 4 oz, culls/No.2 potatoes, specific gravity, tuber type and skin type of 38 entries in the Texas Advanced Chip Selection Trial grown near Dalhart, Texas-2018.

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				
COTX14284-2W/Y	TXCH	69.7	29.5	18.9	21.3	1.4	28.9	0.0	1.071	15.1	Round	White
AORTX09037-1W/Y	NCPT18 Tier 2	66.4	25.1	25.9	15.4	1.6	32.0	0.0	1.076	16.0	Round	White
NDTX14475-1W/Y	EGSS18	67.8	31.0	21.5	15.3	0.0	32.2	0.0	1.075	15.9	Oval	White
NDTX1244-3W/Y	NCPT18 Tier 2	69.4	31.7	22.1	15.7	1.0	29.4	0.2	1.076	16.1	Round	White
AORTX09037-5W/Y	TXCH	57.0	28.1	20.9	8.0	0.0	43.0	0.0	1.075	15.9	Round	White
NDTX1246-3W	NCPT18 Tier 2	70.8	28.6	26.6	15.6	0.0	27.7	1.5	1.081	17.0	Oval	White
AORTX09144-2W	NCPT18 Tier 2	73.0	27.7	29.1	16.2	0.0	26.7	0.3	1.075	15.8	Oval	White
NDTX1246-5W/Y	NCPT18 Tier 1	60.0	33.6	19.0	7.5	0.0	40.0	0.0	1.078	16.5	Oval	White
AORTX09037-4W/Y	TXCH	68.1	35.8	21.8	10.6	0.0	31.9	0.0	1.078	16.4	Round	White
COTX12235-2W	NCPT18 Tier 2	64.5	30.6	22.6	11.3	0.0	35.5	0.0	1.071	15.2	Round	White
AORTX09032-3W	TXCH	67.7	32.4	23.1	12.1	0.0	32.3	0.0	1.075	15.8	Round	White
Atlantic dal	TXCH	77.4	22.1	22.2	33.1	2.3	20.3	0.0	1.078	16.4	Oblong	Buff
NDTX113030C-3W	TXCH	72.3	32.0	20.1	20.3	0.0	27.7	0.0	1.082	17.1	Oval	White
NDTX14362AB-1W	EGSS18	77.4	29.0	25.8	22.7	1.4	20.9	0.3	1.072	15.4	Round	White
TX12484-2WZC	EGSS18	73.1	28.3	25.9	19.0	0.8	25.5	0.6	1.072	15.3	Oval	White
NDTX12203AB-1W	NCPT18 Tier 2	68.8	35.4	24.1	9.2	0.0	31.2	0.0	1.071	15.1	Round	White
NDTX12135-1W	EGSS18	74.8	40.0	23.3	11.5	0.5	24.7	0.0	1.076	16.0	Round	White
ATX11482-3W	TXCH	79.3	28.9	25.0	25.3	2.8	18.0	0.0	1.073	15.5	Oval	White
TX13580-1W	NCPT18 Tier 1	59.5	32.4	19.4	7.7	2.4	38.1	0.0	1.075	15.9	Oval	White
ATX13134-3W/Y	TXCH	76.4	32.2	28.3	16.0	1.3	22.3	0.0	1.081	16.9	Round	White
COTX12428-1W	NCPT18 Tier 2	67.3	28.3	20.9	18.1	2.2	30.5	0.0	1.072	15.4	Round	White
TX12484-3WZC	EGSS18	70.6	30.5	28.1	12.0	0.7	28.1	0.5	1.070	15.1	Oval	White
TX14710-4WZC	EGSS18	73.6	25.0	26.3	22.2	0.0	24.9	1.5	1.079	16.6	Oval	Buff
TX05249-10W	TXCH	87.1	27.2	31.0	28.9	2.0	10.4	0.5	1.070	14.9	Oval	White
TX14710-7WZC	TXCH	63.2	33.0	15.0	15.2	0.0	32.8	4.1	1.071	15.2	Oval	White
ATX13126-5Ru	TXCH	76.0	16.1	25.7	34.2	13.3	10.7	0.0	1.074	15.7	Oval	White
NDTX13280CB-3W	TXCH	56.9	39.0	15.1	2.7	0.0	43.1	0.0	1.070	15.0	Oval	White
AORTX09033-11W	TXCH	67.2	34.5	23.3	9.4	0.0	31.0	1.8	1.077	16.3	Round	White
TX12484-1WZC	EGSS18	63.6	28.4	19.2	15.9	0.0	36.4	0.0	1.070	15.1	Oval	White
TX14695-2WZC	NCPT18 Tier 1	77.6	32.4	27.0	18.2	0.0	21.9	0.5	1.072	15.3	Oval	White
ATX13126-3W	TXCH	70.9	28.8	19.8	22.3	1.9	27.1	0.0	1.062	13.6	Oblong	White
TX12483-6W	NCPT18 Tier 1	68.7	35.2	23.0	10.5	0.0	31.3	0.0	1.074	15.7	Round	White
NDTX13224CAB-1W	TXCH	62.8	34.9	27.9	0.0	0.0	37.2	0.0	1.073	15.5	Oval	Russet
TX09396-1W	TXCH	87.0	31.6	33.3	22.2	0.0	11.0	2.0	1.077	16.2	Round	White
AORTX09033-4W	TXCH	81.9	33.9	23.5	24.5	4.9	13.2	0.0	1.072	15.3	Oblong	White
TX14668-3WZC	ZC Susceptible Check	86.6	22.4	23.9	40.3	1.5	10.5	1.4	1.068	14.6	Oval	White
NDTX059828-2WZC	TXCH	77.9	36.7	41.2	0.0	0.0	22.1	0.0	1.059	13.0	Round	White
ATX13127-1Ru	TXCH	34.2	34.2	0.0	0.0	0.0	65.8	0.0	1.079	16.5	Round	White
Average		71.1	30.6	24.0	16.5	1.1	27.3	0.4	1.073	15.6		
L.S.D. (.05)		7.6	6.7	ns	8.9	2.5	7.4	ns	0.0	0.7		

Dalhart
Table 8c.

Average number of tubers, tuber weight, percent stand 60 days after planting, plant characteristics, and percent dead vine at vine kill of 38 entries in the Texas Advanced Chip Selection Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
COTX14284-2W/Y	TXCH	11.2	4.7	100	1.5	4.9	3.6	4.8	23
AORTX09037-1W/Y	NCPT18 Tier 2	11.8	4.3	100	1.8	4.3	3.8	4.5	23
NDTX14475-1W/Y	EGSS18	10.2	4.6	100	1.5	4.9	4.0	4.9	20
NDTX1244-3W/Y	NCPT18 Tier 2	10.4	4.3	100	1.5	5.0	4.8	5.0	1
AORTX09037-5W/Y	TXCH	11.9	3.7	100	2.0	4.0	2.8	4.2	66
NDTX1246-3W	NCPT18 Tier 2	9.8	4.5	100	1.5	4.8	3.8	4.7	18
AORTX09144-2W	NCPT18 Tier 2	10.1	4.3	100	1.5	4.9	4.8	4.9	0
NDTX1246-5W/Y	NCPT18 Tier 1	11.0	3.8	100	2.0	4.5	3.4	4.6	46
AORTX09037-4W/Y	TXCH	10.3	4.0	100	1.5	4.9	4.8	4.9	1
COTX12235-2W	NCPT18 Tier 2	10.5	3.8	100	1.8	4.2	3.8	4.4	10
AORTX09032-3W	TXCH	9.0	4.6	100	1.5	4.6	4.9	4.7	0
Atlantic dal	TXCH	6.4	6.4	98	1.5	4.6	4.2	4.7	10
NDTX113030C-3W	TXCH	7.8	4.9	100	1.5	4.7	4.1	4.6	10
NDTX14362AB-1W	EGSS18	7.5	5.1	100	1.6	4.3	3.3	4.4	41
TX12484-2WZC	EGSS18	8.0	4.8	100	1.8	4.3	4.6	4.3	4
NDTX12203AB-1W	NCPT18 Tier 2	9.2	4.3	96	1.9	4.2	3.4	4.4	30
NDTX12135-1W	EGSS18	7.8	4.6	100	2.0	4.0	3.9	4.1	14
ATX11482-3W	TXCH	6.1	6.0	100	1.7	4.6	4.3	4.5	5
TX13580-1W	NCPT18 Tier 1	11.0	3.6	92	1.6	4.4	4.7	4.5	1
ATX13134-3W/Y	TXCH	8.0	4.8	93	1.6	4.4	3.8	4.6	26
COTX12428-1W	NCPT18 Tier 2	8.4	4.3	100	2.1	3.8	3.9	4.2	18
TX12484-3WZC	EGSS18	8.3	4.2	100	1.9	3.9	3.6	4.1	19
TX14710-4WZC	EGSS18	6.9	4.8	100	1.9	3.9	3.9	3.8	11
TX05249-10W	TXCH	5.6	6.3	90	1.5	4.2	4.7	4.5	1
TX14710-7WZC	TXCH	8.4	4.4	86	1.5	3.9	4.4	4.3	3
ATX13126-5Ru	TXCH	4.0	7.7	100	2.0	4.2	4.7	4.4	0
NDTX13280CB-3W	TXCH	6.9	4.2	100	2.1	3.8	2.0	3.9	80
AORTX09033-11W	TXCH	6.5	4.2	100	2.2	3.6	4.2	3.8	5
TX12484-1WZC	EGSS18	8.6	4.1	78	2.3	3.4	3.5	3.7	35
TX14695-2WZC	NCPT18 Tier 1	6.2	5.0	89	1.9	3.3	3.7	3.6	19
ATX13126-3W	TXCH	5.1	4.7	100	2.3	3.4	4.8	3.9	0
TX12483-6W	NCPT18 Tier 1	6.5	4.0	92	2.3	3.6	4.0	3.8	16
NDTX13224CAB-1W	TXCH	9.7	3.8	63	1.5	3.8	3.4	4.5	35
TX09396-1W	TXCH	9.4	6.0	54	1.7	2.3	4.8	3.9	2
AORTX09033-4W	TXCH	6.2	6.0	61	1.8	2.9	3.7	3.8	21
TX14668-3WZC	ZC Susceptible Check	5.3	7.0	53	1.6	3.0	5.0	3.8	0
NDTX059828-2WZC	TXCH	5.7	4.3	63	2.0	2.0	3.3	3.5	45
ATX13127-1Ru	TXCH	6.2	2.4	100	2.0	3.7	5.0	4.0	0
Average		8.3	4.8	92	1.8	4.0	4.0	4.3	18
L.S.D. (.05)		1.8	0.8	13	0.2	0.5	0.5	0.3	15

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

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

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

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

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 38 entries in the Texas Advanced Chip Selection Trial grown near Dalhart, Texas-2018.

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
COTX14284-2W/Y	TXCH	3.7	1.0	1.0	3.9	1.0	5.0	5.0	5.0	4.7	5.0	0	0	0	0
AORTX09037-1W/Y	NCPT18 Tier 2	3.1	1.0	1.0	4.5	1.0	5.0	5.0	4.3	5.0	4.8	3	0	0	15
NDTX14475-1W/Y	EGSS18	3.0	1.3	1.0	3.6	1.0	5.0	5.0	5.0	4.8	4.5	0	0	0	38
NDTX1244-3W/Y	NCPT18 Tier 2	1.9	1.0	1.0	3.7	1.0	5.0	5.0	5.0	4.8	4.0	10	0	3	20
AORTX09037-5W/Y	TXCH	2.1	1.0	1.5	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	5	0
NDTX1246-3W	NCPT18 Tier 2	1.0	2.0	1.0	4.0	1.0	5.0	5.0	5.0	4.8	5.0	0	0	3	30
AORTX09144-2W	NCPT18 Tier 2	1.0	1.9	1.5	4.0	1.0	4.6	5.0	5.0	4.0	4.8	3	0	0	48
NDTX1246-5W/Y	NCPT18 Tier 1	4.0	2.0	1.4	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AORTX09037-4W/Y	TXCH	2.4	1.3	1.4	4.0	1.0	5.0	5.0	4.3	4.8	5.0	0	0	15	0
COTX12235-2W	NCPT18 Tier 2	1.0	1.0	1.0	4.1	1.0	5.0	5.0	5.0	5.0	4.4	3	0	5	0
AORTX09032-3W	TXCH	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.8	5	0	0	0
Atlantic dal	TXCH	1.0	2.5	3.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	13	0	0	25
NDTX113030C-3W	TXCH	1.0	1.6	1.1	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	3	40
NDTX14362AB-1W	EGSS18	1.0	1.4	1.0	3.8	1.0	5.0	5.0	5.0	4.8	4.8	3	0	3	0
TX12484-2WZC	EGSS18	1.0	2.4	1.0	4.0	1.0	5.0	5.0	5.0	4.5	4.5	5	0	3	3
NDTX12203AB-1W	NCPT18 Tier 2	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX12135-1W	EGSS18	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.1	0	0	0	10
ATX11482-3W	TXCH	1.0	2.0	2.0	4.0	2.0	5.0	5.0	5.0	5.0	5.0	10	0	3	0
TX13580-1W	NCPT18 Tier 1	1.0	1.5	1.9	4.0	1.8	5.0	5.0	5.0	4.8	5.0	5	0	3	0
ATX13134-3W/Y	TXCH	2.8	1.0	1.0	4.0	1.0	5.0	5.0	5.0	4.8	5.0	0	0	0	53
COTX12428-1W	NCPT18 Tier 2	1.0	1.3	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	5	0	15	10
TX12484-3WZC	EGSS18	1.0	1.8	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	3	0	0	0
TX14710-4WZC	EGSS18	1.0	2.5	1.3	4.0	1.0	5.0	5.0	5.0	4.8	5.0	3	0	5	0
TX05249-10W	TXCH	1.0	2.1	1.1	4.0	1.0	5.0	5.0	5.0	5.0	3.9	5	0	0	10
TX14710-7WZC	TXCH	2.1	2.5	1.3	4.0	1.0	4.8	5.0	5.0	4.3	5.0	3	0	0	23
ATX13126-5Ru	TXCH	1.0	2.0	3.0	4.0	3.0	5.0	5.0	5.0	5.0	4.0	50	0	0	0
NDTX13280CB-3W	TXCH	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	20	0	0	5
AORTX09033-11W	TXCH	1.0	1.9	1.0	4.0	1.0	5.0	5.0	5.0	4.5	4.8	3	0	0	3
TX12484-1WZC	EGSS18	1.0	1.9	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TX14695-2WZC	NCPT18 Tier 1	1.0	3.5	1.6	4.0	1.5	5.0	5.0	5.0	4.8	5.0	0	0	3	5
ATX13126-3W	TXCH	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	0	0	25	0
TX12483-6W	NCPT18 Tier 1	1.0	2.1	3.5	4.0	3.0	5.0	5.0	5.0	4.8	5.0	0	0	0	0
NDTX13224CAB-1W	TXCH	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	30	0	10	10
TX09396-1W	TXCH	1.3	2.7	1.0	4.0	1.0	5.0	5.0	4.3	4.7	4.3	7	0	0	37
AORTX09033-4W	TXCH	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.8	8	0	0	3
TX14668-3WZC	ZC Susceptible Check	1.0	2.0	1.8	4.0	1.0	5.0	5.0	5.0	4.5	5.0	0	0	0	5
NDTX059828-2WZC	TXCH	1.0	1.5	1.0	4.0	1.5	5.0	5.0	4.0	5.0	5.0	0	0	0	0
ATX13127-1Ru	TXCH	1.0	1.0	3.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		1.4	1.7	1.3	4.0	1.2	5.0	5.0	4.9	4.8	4.8	5	0	3	11
L.S.D. (.05)		0.2	0.4	0.2	0.1	0.2	ns	ns	0.3	ns	0.4	9.2		14.0	0.0

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 38 entries in the Texas Advanced Chip Selection Trial grown near Dalhart, Texas-2018.
Table 8e.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
COTX14284-2W/Y	TXCH	Medium-large, nice, High tuber number, .	Large tubers, high tuber number+, TC, High tuber number, pink-purple eyes, fresh market yellow?, unique type.	3.7, 4, 3.8.	4, 4.5, 4.5.
AORTX09037-1W/Y	NCPT18 Tier 2	High tuber number, medium size, BOT, Some large tubers, some skin color variation, .	Very high tuber number+, BOT, Advance Fast, Impressive yield, WINNER, very uniform, High tuber number, SCAB	4.2, 3.7, 3.8, 3.8	4.8, 4.8, 4.6, 4.3
NDTX14475-1W/Y	EGSS18	,, High tuber number, round,	smooth skin, yellow flesh, Angular+, attached stolons, DROP for shape+, High tuber number+, deep eyes, Shape issues	3.7, 3.8, 4, 3.7	4.3, 3.8, 3.8, 3.7
NDTX1244-3W/Y	NCPT18 Tier 2	, Round, smooth skin, nice, Not uniform size, high tuber number, Smaller tubers, uniform size and shape+, Round, high tuber number+, a little small, Small-medium, BOT	High tuber set, very light skin, uniform size and shape, A little angular+, Nice skin, deep eyes, skin blemishes, deep eyes, possible chip shape problems	3.6, 3.8, 3.6, 3.8	4.4, 4.2, 4.3, 4.2
AORTX09037-5W/Y	TXCH		Nice size, advance, Not uniform skin texture, , Snaps, BOT, High tuber number, uniform size and shape+	4, 3.7, 4, 4.5	4.4, 4.4, 4.5, 4.9
NDTX1246-3W	NCPT18 Tier 2	, Some large, a little flat+, , Not uniform shape	Too large, flat+,+, angular+, DROP+, ,	3.7, 3.5, 3.8, 3.7	3.6, 3.6, 3.8, 3.6
AORTX09144-2W	NCPT18 Tier 2	, High tuber set, medium size, nice, a little flat., ,	High tuber set, buff skin, DROP+, BOT, some variation for high tuber number and skin type, Heat sprouts, knobs, DROP, Linked tubers	3.6, 3.8, 3.6, 3.8	4.5, 4.6, 3.8, 3.8
NDTX1246-5W/Y	NCPT18 Tier 1	, Golden skin+, uniform size and shape, high tuber number, , Nice, high tuber number, some variation for skin color, Round, uniform shape, not uniform size.	Uniform size and shape+, TC, High tuber number+, intense yellow flesh+, , Fresh market yellow?	3.6, 4, 4, 3.7	3.8, 4.5, 4.5, 4.2
AORTX09037-4W/Y	TXCH	Not uniform size+, nice, Round+ , , High tuber number, smooth skin, nice	High tuber number, TC, BOT, Snaps, breaks at cutting, Scab, not uniform skin type	3.8, 4.2, 3.6, 3.8	3.7, 4.6, 3.6, 4.5
COTX12235-2W	NCPT18 Tier 2	Uniform size and shape+, nice, Round+ , , High tuber number, smooth skin, nice	Uniform size, one greenhead had purple pigment, High tuber number, Smooth skin, round, uniform size and shape	3.8, 3.8, 4, 4.2	3.8, 4, 4.5, 4.4
AORTX09032-3W	TXCH	Not uniform size+, mixed? (some russets), Medium size, uniform size and shape,	High tuber number+, nice, no uniform size, , nice white flesh	3.6, 3.4, 4, 3.7	4.3, 3.7, 3.8, 3.8
Atlantic dal	TXCH	Buff skin+, some large tubers+, not uniform size, , ,	Large+, high tuber number, , Variable shape, Rounder than other reps	3.5, 3.8, 3.5, 3.7	4.2, 4.3, 4, 4.4
NDTX113030C-3W	TXCH	, , ,	High tuber number+, large+, DROP, uniform size, a little flat+, hard to cut	3.6, 3.5, 3.8, 3.8	3.6, 3.8, 3.6, 3.8
NDTX14362AB-1W	EGSS18	, Round uniform size and shape+, medium size+, BOT, many tubers between plots (right side),	Large+, uniform size+, Advance to NCPT, Uniform shape, ,	3.6, 4.2, 3.7, 3.8	4, 4.6, 4, 4.5
TX12484-2WZC	EGSS18	Pinkish skin+,+, some large tubers, .	Tint of pink skin+, smooth skin, Large, very hard to cut+, Use as parent, unique skin,	3.5, 3.6, 3.8, 3.8	3.7, 3.8, 3.8, 3.8
NDTX12203AB-1W	NCPT18 Tier 2	, Round, uniform size and shape+, BOT, ,	Uniform size and shape+, Smooth skin, high tuber number, TC, clean,	3.7, 4.4, 3.6, 4	4, 4.4, 4.4, 4.4
NDTX12135-1W	EGSS18	Uniform size and shape, Round, smooth skin, nice, mixed? (some russets), ,	a little flat, Smooth skin, Advance, medium size, high tuber number, ,	3.8, 3.7, 3.8, 3.7	4.2, 4.2, 4.2, 4.4
ATX11482-3W	TXCH	Not uniform size+, mixed russet and smooth skin, DROP, round to oval, .	Large tubers+, attached stolons, snaps+, ,	3.5, 3.4, 3.5,	3.6, 4, 3.8,
TX13580-1W	NCPT18 Tier 1	Late? Attached tubers, DROP, Not uniform size+, ,	Not uniform size+, angular tubers, snaps when cut, Mixed flesh?, Buff skin	3.4, 3.4, 3.5, 3.6	3.5, 3.7, 3.7, 3.8
ATX13134-3W/Y	TXCH	, , ,	Medium-large tuber, smooth skin+, high tuber set, , Large, green heads, nice	3.7, 3.7, 3.5, 3.7	3.8, 3.7, 3.6, 4.2
COTX12428-1W	NCPT18 Tier 2	Uniform size and shape, nice, Round, , Some large	Large+, smooth skin, Small, .	3.8, 3.6, 3.6, 3.6	3.7, 3.7, 3.7, 3.7
TX12484-3WZC	EGSS18	Nice shape, uniform size and shape+, advance, keep all seed, Round+, keep, ZC tolerant, , High tuber number	Smooth skin, nice, advance, fingerprint, Small tubers are round, large are oblong, nice flesh, Large, Nice, nice white flesh	3.7, 3.7, 3.7, 4.2	4, 4, 3.7, 3.8
TX14710-4WZC	EGSS18	Oval, buff skin, not uniform size, Round, small, ,	Smooth skin, Not uniform size, nice white flesh, Large, dirty skin, culls,	3.5, 3.6, 3.6, 3.4	3.5, 3.7, 3.6, 3.6
TX05249-10W	TXCH	Oval, Some large tubers, Some large, green heads, shape deformities,	Some large tubers+, not uniform size+, DROP+, rotten,	3.6, 3.6, 3.4, 3.5	3.7, 3.8, 3.6, 3.5
TX14710-7WZC	TXCH	Not uniform size and shape+, , Oval,	Uniform size, a little flat+, Smooth, Mixed russet+, knobs, DROP, attached stolons	3.4, 3.4, 3.5, 3.6	3.8, 3.8, 3.4, 3.5
ATX13126-5Ru	TXCH	DROP, not uniform size, , ,	Too large, DROP, mixed white and yellow flesh, , ,	3.4, , ,	3.5, , ,
NDTX13280CB-3W	TXCH	, Round, uniform size and shape, .	smooth skin, DROP, Uniform size and shape+, nice , ,	3.7, 3.7, ,	3.6, 3.8, ,
AORTX09033-11W	TXCH	, Oval, knobs, ,	Few tubers , , ,	3.7, 3.6, 3.6, 3.4	3.4, 3.7, 3.7, 3.4
TX12484-1WZC	EGSS18	, Oval to oblong, not uniform size and shape, .	Smooth skin, Large, smooth skin, nice white flesh+, , Mixed skin type?	3.5, 3.5, 3.5, 3.6	3.4, 3.6, 3.6, 3.5
TX14695-2WZC	NCPT18 Tier 1	Oblong+, smooth skin, not uniform size, , Round to long	Long, uniform, Few tubers, Rotten , Some GH, pointy, mixed?	3.5, 3.4, 3.4, 3.4	3.8, 3, 3.3, 3.5
ATX13126-3W	TXCH	DROP, not uniform size+, , ,	Not uniform size , Some large tubers, ,	3.4, 3.4, ,	3.4, 3.4, ,
TX12483-6W	NCPT18 Tier 1	Russet+, few tubers+, Golden russet, small, not uniform size+, Russet?, dirty look.,	Russet+, Rotten, DROP+, angular,	3.4, 3.3, 3.4, 3.3	3.6, 3.4, 3.4, 3.4
NDTX13224CAB-1W	TXCH	, , ,	DROP , , ,	3.6, , ,	3.6, , ,
TX09396-1W	TXCH	Knobs, Few tubers not uniform size, .	Large, few tubers, DROP+, Netted scales, .	3.5, 3.2, 3.6,	3.4, 3.4, 3.6,
AORTX09033-4W	TXCH	Low yield, few tubers+, Some large tubers+, a little flat, .	Very few tubers, DROP+, snaps, Very large+, ,	3, 3.5, 3.3, 3.4	2.8, 3.6, 2.8, 3.5
TX14668-3WZC	ZC Susceptible Check	DROP, Very few tubers+, buff skin, , Some large+	Large tubers+,+, few tubers+, DROP+, mixed?, , attached stolons	3.2, 2.5, 3.3, 3.4	3, 3, 3, 3
NDTX059828-2WZC	TXCH	Pink skin, , ,	Pinkish skin, , ,	3.5, , ,	3.5, , ,
ATX13127-1Ru	TXCH	, , , DROP, not uniform size	, , , Small russet, low tuber number, DROP	, , , 3.3	, , , 3.4

Dalhart
Table 8f.

Specific gravity, percent solids, chip color rating, good chip, bad chip, percentage vascular discoloration, bruise, stem end discoloration, apical bruise notes, of 38 entries in the Texas Advanced Chip Selection Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Gravity	% Solids	Chip Rating ¹	Chip Color ²	% Good Chip	% Bad Chip	% Vas	% Bruise	% Stem	% Apical Bruise	Notes ³	6 Weeks Storage Chip Rating	Reconditioning Chip Rating
COTX14284-2W/Y	TXCH	1.071	15.1	3.8	2.8	29	71	0	7	64	0	, DROP, ,	4.8	4.5
AORTX09037-1W/Y	NCPT18 Tier 2	1.076	16.0	2.3	2.6	71	29	0	3	22	0	, 1 IBS, 1 GH,	2.0	1.6
NDTX14475-1W/Y	EGSS18	1.075	15.9	1.8	2.8	58	42	3	0	22	0	, , Nice, 1 GH, 1 HH	2.5	2.0
NDTX1244-3W/Y	NCPT18 Tier 2	1.076	16.1	2.5	2.6	50	50	3	10	37	0	Nice, Shape-, ,	2.8	2.5
AORTX09037-5W/Y	TXCH	1.075	15.9	1.5	1.3	75	25	0	7	13	0	, , Nice, 2 IBS	3.3	3.0
NDTX1246-3W	NCPT18 Tier 2	1.081	17.0	1.5	1.3	83	18	0	0	18	0	, , Nice,	3.5	2.6
AORTX09144-2W	NCPT18 Tier 2	1.075	15.8	2.9	2.0	68	33	0	0	13	0	, , Ugly,	3.1	2.0
NDTX1246-5W/Y	NCPT18 Tier 1	1.078	16.5	1.4	3.0	79	21	0	3	18	0	, Nice color, Nice, Nice	2.9	2.3
AORTX09037-4W/Y	TXCH	1.078	16.4	2.9	1.5	66	34	5	5	25	0	DROP?, , ,	4.4	4.1
COTX12235-2W	NCPT18 Tier 2	1.071	15.2	1.8	1.0	68	32	5	3	22	0	, 1 GH, BOT,	2.8	1.5
AORTX09032-3W	TXCH	1.075	15.8	1.8	1.3	62	38	11	3	25	0	, , ,	2.9	1.5
Atlantic dal	TXCH	1.078	16.4	2.1	1.4	56	44	3	3	33	0	, , 3 IBS,	3.9	3.5
NDTX113030C-3W	TXCH	1.082	17.1	1.9	1.6	71	29	0	17	12	0	, , ,	3.3	1.9
NDTX14362AB-1W	EGSS18	1.072	15.4	2.3	1.1	70	30	0	3	28	0	Nice, DROP, ,	2.8	2.5
TX12484-2WZC	EGSS18	1.072	15.3	2.4	1.3	52	48	7	9	33	0	, , ,	2.6	1.6
NDTX12203AB-1W	NCPT18 Tier 2	1.071	15.1	1.8	1.3	80	20	0	3	17	0	BOT, , Nice, Oily centers	2.7	2.9
NDTX12135-1W	EGSS18	1.076	16.0	1.4	1.3	90	10	0	5	5	0	, , ,	3.5	2.0
ATX11482-3W	TXCH	1.073	15.5	1.8	1.2	49	51	3	3	18	0	, , 8 Oily centers,	2.0	1.3
TX13580-1W	NCPT18 Tier 1	1.075	15.9	2.5	1.3	51	49	20	0	28	0	, 1 GH, ,	2.0	1.5
ATX13134-3W/Y	TXCH	1.081	16.9	1.9	2.8	50	50	0	0	50	0	, Nice color, Nice,	3.0	2.3
COTX12428-1W	NCPT18 Tier 2	1.072	15.4	2.0	1.4	66	34	6	10	19	0	, , Nice,	3.4	2.3
TX12484-3WZC	EGSS18	1.070	15.1	2.0	1.1	71	29	0	0	27	0	, Color-, 1 GH,	3.0	1.5
TX14710-4WZC	EGSS18	1.079	16.6	2.5	1.3	49	51	0	8	44	0	DROP?, , Nice	3.3	2.6
TX05249-10W	TXCH	1.070	14.9	3.4	1.5	30	70	0	20	48	0	1 GH, ,	3.4	2.8
TX14710-7WZC	TXCH	1.071	15.2	3.6	1.8	15	85	13	7	64	0	IBS, DROP, , , 5 IBS, DROP	3.5	3.3
ATX13126-5Ru	TXCH	1.074	15.7	3.0	1.0	50	50	0	0	33	0	Shape-, 1 GH, 1 HH, , ,	3.5	3.0
NDTX13280CB-3W	TXCH	1.070	15.0	1.8	1.0	75	25	0	0	25	0	Shape-, DROP?, , ,	4.3	3.8
AORTX09033-11W	TXCH	1.077	16.3	1.6	1.3	70	30	5	0	25	0	BOT, , Nice,	3.0	3.0
TX12484-1WZC	EGSS18	1.070	15.1	2.8	1.0	41	59	0	15	45	0	, , ,	4.2	3.4
TX14695-2WZC	NCPT18 Tier 1	1.072	15.3	2.6	1.0	70	30	13	3	15	0	Shape-, DROP?, Shape-, BOT, Shape-	3.4	2.5
ATX13126-3W	TXCH	1.062	13.6	4.0	1.8	0	100	5	13	78	0	1 GH, DROP, ,	4.5	4.3
TX12483-6W	NCPT18 Tier 1	1.074	15.7	1.9	1.3	58	43	3	8	33	0	Shape-, , ,	4.3	2.3
NDTX13224CAB-1W	TXCH	1.073	15.5	3.0	1.0	20	80	10	0	60	0	1 IBS, DROP?, , ,	4.0	3.5
TX09396-1W	TXCH	1.077	16.2	2.2	1.2	43	57	0	4	46	0	, Shape-, ,	3.8	2.8
AORTX09033-4W	TXCH	1.072	15.3	2.0	1.0	67	33	0	8	23	0	BOT, , 1 GH, Shape-,	3.5	3.0
TX14668-3WZC	ZC Susceptible Check	1.068	14.6	3.3	1.1	43	57	0	16	41	0	DROP, , , Shape-	3.8	3.1
NDTX059828-2WZC	TXCH	1.059	13.0	3.0	1.0	20	80	0	20	60	0	, , ,	4.0	2.5
ATX13127-1Ru	TXCH	1.079	16.5	2.0	1.0	60	40	0	0	40	0	, , ,	4.0	4.0
Average		1.074	15.6	2	1	56	44	3	6	32	0		3	3
L.S.D. (.05)		0.004	0.7	1	1	30	30	ns	0	26	0		0	0

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

¹Chip Quality Rating 1=Light 6 =Dark

²1=light, 3+=very dark

³BOT=Best Of Trial, Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

Variety or Selection	Trial	Chipping 6 Weeks of Storage										Chipping Recondition for 2 Weeks									
		Chip Rating ¹	Chip Color ²	% Good Chip	% Bad Chip	% Vas	% Bruise	% Stem	% Apical Bruise	Notes ³	Chip Rating1	Chip Color2	% Good Chip	% Bad Chip	% Vas	% Bruise	% Stem	% Apical Bruise	Notes3		
COTX14284-2W/Y	TXCH	4.8	4.2	0	100	0	0	0	0	10 Dark, Drop, 10 Dark, Drop, 10 Dark, Drop, 0	4.5	3.2	0	100	0	0	0	0	7 Dark, DROP?, 7 Dark, DROP?, 7 Dark, DROP?,		
AORTX09037-1W/Y	NCPT18 Tier 2	2.0	3.0	68	33	15	0	15	15	BOT, 1 GH, 0, 0	1.6	3.0	84	16	3	0	10	0	Nice, 0, 0, 1 GH		
NDTX14475-1W/Y	EGSS18	2.5	3.0	15	85	33	5	48	48	0, 0, 0, 0	2.0	3.1	38	62	27	3	26	0	0, 0, 0, Nice Color		
NDTX1244-3W/Y	NCPT18 Tier 2	2.8	3.1	33	67	17	3	48	48	Nice, 0, 0, 0	2.5	3.0	51	49	18	9	21	0	0, 0, 0, 0		
AORTX09037-5W/Y	TXCH	3.3	3.1	25	75	0	15	18	18	10 Dark, 7 Dark, 0, 0	3.0	3.0	41	59	3	6	6	0	3 Dark, 5 Dark, 1 Brown Center, 5 Dark		
NDTX1246-3W	NCPT18 Tier 2	3.5	3.3	28	73	5	0	55	55	3 Dark, 0, 0, 2 Dark, Sprouting 2	2.6	2.3	58	42	11	7	16	0	1 GH, 1 Dark, 0, 1 Dark, 0		
AORTX09144-2W	NCPT18 Tier 2	3.1	2.9	67	33	0	8	15	15	0, 2 Dark, 2 Dark, 0	2.0	1.5	69	31	10	0	11	0	1 Dark, 1 Vert, 1 Dark, 0		
NDTX1246-5W/Y	NCPT18 Tier 1	2.9	3.4	43	57	3	15	24	24	0, 0, 2 Dark, Nice, 4 Dark	2.3	3.3	46	54	4	3	9	0	2 Brown Center, Nice, 5 Brown Center, 1 Dark, 1 GH, 1 Dry Rot		
AORTX09037-4W/Y	TXCH	4.4	3.5	0	100	0	0	0	0	10 Dark, 9 Dark, 10 Dark, 10 Dark	4.1	3.0	0	100	13	0	0	0	8 Dark, 7 Dark, 5 Dark, 8 Dark		
COTX12235-2W	NCPT18 Tier 2	2.8	1.6	31	69	13	5	49	49	0, 0, 0, 1 Dark	1.5	1.0	70	30	0	0	24	0	0, 1 Dark, 1 GH, 0		
AORTX09032-3W	TXCH	2.9	2.1	40	60	25	0	8	8	Nice, 1GH, 6 Dark, 2 Dark, 2 Dark	1.5	1.3	88	13	3	3	0	0	Nice, Dark, 0, 1 Brown Center		
Atlantic dal	TXCH	3.9	3.3	10	90	8	10	18	18	3 BC, 2 BC, 1 HH, 0, 10 Dark	3.5	1.0	6	94	0	3	19	0	7 Dark, 6 Dark, 1 Brown Center, 4 Dark, 4 Dark		
NDTX113030C-3W	TXCH	3.3	2.4	38	63	3	0	10	10	3 Dark, 4 Dark, Sprouting 2, 7 Dark, 2 Dark, 4 Sugar	1.9	1.5	67	33	13	3	3	0	0, 1 Dark, 2 Dark, 0		
NDTX14362AB-1W	EGSS18	2.8	3.0	11	89	28	0	36	36	6 BC, 4 Dark, 0, 0	2.5	2.0	48	52	22	0	0	0	0, 5 Dark, 4 Brown Center, 0		
TX12484-2WZC	EGSS18	2.6	2.0	39	61	9	2	23	23	Sprouting 1, Nice, 2 Dark, 9 Sugar	1.6	1.0	58	42	3	13	9	0	0, 0, 1 Dark, 0		
NDTX12203AB-1W	NCPT18 Tier 2	2.7	2.8	29	71	15	0	49	49	0, 3 Sugar, 0, 0	2.9	2.8	28	72	6	3	6	0	0, 7 Dark, 2 Dark, 7 Dark		
NDTX12135-1W	EGSS18	3.5	2.5	10	90	24	5	35	35	1 Dark, 1 HH, 1 Dark, 4 Dark, 3 Dark	2.0	1.3	76	24	12	3	3	0	1 Dark, 1 Dark, 0, 0		
ATX11482-3W	TXCH	2.0	2.0	43	57	17	10	30	30	0, 0, 0, 0	1.3	2.3	86	14	11	4	4	0	0, 0, 0		
TX13580-1W	NCPT18 Tier 1	2.0	1.1	40	60	20	5	31	31	0, BOT, 0, 1 BC, Mixed Flesh Color	1.5	1.0	88	12	0	6	0	0	0, 1 Brown Center, Mixed W/Y flesh, 1 GH		
ATX13134-3W/Y	TXCH	3.0	3.1	28	73	5	3	55	55	0, 0, 2 GH, 2 Dark, 0	2.3	3.0	48	52	19	7	19	0	0, 1 GH, 1 Dark, 0		
COTX12428-1W	NCPT18 Tier 2	3.4	1.4	25	75	0	0	28	28	2 Sugar, Sprouting 1, 3 BC, 5 BC, 7 Dark	2.3	1.0	59	41	19	3	0	0	3 Dark, 1 Scab, 1 Brown Center, 0		
TX12484-3WZC	EGSS18	3.0	1.3	30	70	0	0	15	15	Dark, Sprouting 4, 7 Dark, 6 Sugar, 9 Dark, Sprouting	1.5	1.0	78	22	6	0	6	0	1 Dark, 0, 1 Brown Center, 1 HH, 0		
TX14710-4WZC	EGSS18	3.3	2.5	0	100	41	8	51	51	0, 0, 0, Nice	2.6	1.3	21	79	42	3	34	0	0, 0, 0, 0		
TX05249-10W	TXCH	3.4	2.5	13	87	18	18	39	39	0, 4 Dark, 0, 1HHN	2.8	1.4	21	79	30	3	13	0	1 Brown Center, 1 Brown Center, 1 Brown Center, 5 Dark		
TX14710-7WZC	TXCH	3.5	2.6	0	100	16	0	84	84	0, 0, 0, 0	3.3	2.5	9	91	14	6	63	3	0, 0, 1 Dark, 0		
ATX13126-5Ru	TXCH	3.5	3.0	40	60	0	20	30	30	1 GH, 0, 0, 0	3.0	3.0	50	50	0	13	0	0	3 GH, Mixed W/Y, DROP?, , ,		
NDTX13280CB-3W	TXCH	4.3	3.5	0	100	0	0	0	0	10 Dark, 10 Dark, 0, 0	3.8	2.0	14	86	0	0	0	0	5 Dark, 8 Dark, ,		
AORTX09033-11W	TXCH	3.0	1.8	30	70	15	0	15	15	3 Dark, 10 Dark, 0, 1 HHN, 2 Dark	3.0	1.5	46	54	7	6	6	0	2 Dark, 2 Dark, 2 Dark, 0		
TX12484-1WZC	EGSS18	4.2	2.0	0	100	3	0	3	3	10 Dark, Sprouting 3, 10 Dark, 10 Dark, 8 Dark	3.4	1.0	29	71	3	0	3	0	0, 8 Dark, 8 Dark, 7 Dark		
TX14695-2WZC	NCPT18 Tier 1	3.4	1.3	28	73	3	0	23	23	2 Dark, 3 Sugar, 3 Dark, 2 BC, 5 Dark, 4 Dark	2.5	1.0	36	64	12	3	3	0	3 Brown Center, 3 Dark, 0, 3 Dark, 1 Brown Center, 1 GH		
ATX13126-3W	TXCH	4.5	4.3	0	100	5	5	10	10	1 BC, 5 Dark, 10 Dark, Drop, 0, 0	4.3	2.0	0	100	0	0	0	0	7 Dark, 8 Dark, ,		
TX12483-6W	NCPT18 Tier 1	4.3	2.3	3	98	3	3	14	14	2 Dark, Drop, 10 Dark, Drop, 10 Dark, 9 Dark	2.3	1.1	52	48	22	3	25	0	0, 0, 0, 3 Dark		
NDTX13224CAB-1W	TXCH	4.0	3.0	0	100	0	0	0	0	10 BC/Dark, Drop, 0, 0, 0	3.5	2.0	0	100	0	0	13	0	1 Dark, 6 Brown Center, , ,		
TX09396-1W	TXCH	3.8	2.7	3	97	27	3	31	31	4 Dark, 6 Dark, 0, 0	2.8	1.3	49	51	18	8	8	0	1 Dark, 2 GH, 0, 0,		
AORTX09033-4W	TXCH	3.5	2.3	31	69	0	6	8	8	ark, Flesh Color Mix, 6 Dark, 4 Dark, 1 Vert, 2 BC, 3	3.0	1.8	43	57	15	4	0	0	Mixed Y/W, 8 Dark, 4 Dark, 1 Vert, 0		
TX14668-3WZC	ZC Susceptible Check	3.8	3.3	10	90	3	5	39	39	2 Dark, 5 Dark, 2 Dark, 3 Dark	3.1	1.8	31	69	20	3	6	0	0, 3 Dark, 2 Dark, 4 Dark		
NDTX059828-2WZC	TXCH	4.0	2.0	10	90	0	0	0	0	9 Dark, Sprouting 1, , ,	2.5	1.0	63	38	0	0	0	0	3 Dark, Shape?, , ,		
ATX13127-1Ru	TXCH	4.0	3.5	10	90	20	0	10	10	, , , 6 Dark, Sprouting 1, Mixed Flesh Color, Drop	4.0	3.0	0	100	0	0	78	0	, , , 2 HH		
Average		3.3	2.6	22	78	10	4	25	25		3	2	43	57	10	3	12	0			
L.S.D. (.05)		0.7	0.7	19	19	ns	ns	24	19		0.6	0.7	24	24	ns	ns	18	ns			

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

¹Chip Quality Rating 1=Light 6=Dark

²1=light, 3+=very dark

³BOT=Best Of Trial, Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

2018 4 Hill Chip Selections Trial, Dalhart

The trial consisted of 121 entries. The following twenty eight clones (ATX10333-1W, ATX10389-1W, COTX13230-1W, COTX13231-1W, COTX13231-4W, COTX13231-5W, COTX13244-1W, COTX13244-3W, COTX13263-2W, COTX15345-1Y/Y, COTX15425-1Y/Y, COTX15500-1Yre/Y, COTX15500-2Ryspl/Y, NDTX13315CB-1W, NDTX14134Y-3W, NDTX1432Y-2Y/Y, NDTX1443-2W, NDTX1444-3W, NDTX1444-4W, NDTX1444-5W, NDTX1452CB-3W, NDTX1482YB-1W, and NDTX1488-1Y) will be advanced in 2019 (Table 9).

Dalhart
Table 9

Inventory weight of 23 entries to be advanced from the 2018 4 hill Chip Selection Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Inventory Weight
ATTX10333-1W	4Hill18Chip006	10.9
ATTX10389-1W	4Hill18Chip009	20
COTX13230-1W	4Hill18Chip021	17.7
COTX13231-1W	4Hill18Chip022	20.9
COTX13231-4W	4Hill18Chip024	16.6
COTX13231-5W	4Hill18Chip025	13.3
COTX13244-1W	4Hill18Chip026	1.8
COTX13244-3W	4Hill18Chip028	4.1
COTX13263-2W	4Hill18Chip030	10
COTX15345-1Y/Y	4Hill18Chip042	14.5
COTX15425-1Y/Y	4Hill18Chip043	9.4
COTX15500-1Yre/Y	4Hill18Chip045	19.7
COTX15500-2Ryspl/Y	4Hill18Chip046	20.2
NDTX13315CB-1W	4Hill18Chip047	8.5
NDTX14134Y-3W	4Hill18Chip058	8.3
NDTX1432Y-2Y/Y	4Hill18Chip063	11.5
NDTX1443-2W	4Hill18Chip073	11.2
NDTX1444-3W	4Hill18Chip076	20.7
NDTX1444-4W	4Hill18Chip077	11.3
NDTX1444-5W	4Hill18Chip078	24.4
NDTX1452CB-3W	4Hill18Chip091	15.5
NDTX1482YB-1W	4Hill18Chip096	22.8
NDTX1488-1Y	4Hill18Chip109	11.5

Texas Advanced Russet Selection Trial, Dalhart

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

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

- Russet Norkotah dal was the best entry for this trial based on general rating and best of trial designation, while all the entries had high general ratings (Tables 10a and 10e).
- Russet Norkotah dal had the highest total and marketable yield, while TXA549-1Ru and COTX14132-1Ru had the highest yield of over 10 oz. tubers (Table 10a).
- COTX09022-3RuRE/Y had the highest yield of less than 4 oz. tubers, while ATX12058-1Ru had the highest yield of culls/No.2 tubers (Table 10a).
- COTX13215-1Ru and COTX13215-2Ru had the highest percentage of marketable yield, while COTX13215-2Ru and COTX14250-1Ru had the highest percentage of over 10-18 oz. tubers (Table 10b).
- ATX12058-1Ru and TXA549-1Ru had the highest specific gravity, while Stampede Russet had very low gravity (Table 10b).
- COTX14132-1Ru, COTX14250-1Ru, ATX13108-2Ru, TXA549-1Ru, and COTX10080-2Ru were the latest in maturity, while RussetNorkotah278, Russet Norkotah dal, and RussetNorkotah296 were the earliest in maturity (Table 10c).
- ATX13108-2Ru, ATX12058-1Ru, COTX10080-2Ru, COTX09022-3RuRE/Y, COTX08322-10Ru, and COTX13215-2Ru had the highest percentages of vascular discoloration (Table 10d).

Comments on entries:

- Russet Norkotah dal Long Russet BOT, skinny, High tuber number+++ , pointy+, nice, better than in WR
- COTX09022-3RuRE/Y Oval Russet High yield+, roundish++, pink eyes+, high tuber number, red eyes, some bruising, SE 30%, not uniform russet
- RussetNorkotah296 Long Russet Knobs SE, nicer shape than regular Norkotah, enlarged lenticels+, wider, DROP
- TX13590-9Ru Oblong Russet High yield+, short oval to oblong, round to oblong, Move to SW or WR++, blocky, nice shape, blocky, nice, bulky, medium

- ATX12058-1Ru Oblong Russet Knobs+++ , bulky, Golden russet+, high tuber number+, nice shape, uniform size and shape, light skin, Parent, Cross with heavy russet
- TXA549-1Ru Oblong Russet Large+, bulky, some nice shapes, Skin blemishes, rough, Parent for size and shape, high tuber number, blocky, Sister clone of Stampede Russet, better than stampede, graduated but was not released
- COTX14132-1Ru Oblong Russet Some nice shapes+, High yield, a little angular, Bulky, very good skin+++ , Parent, large, nice flesh, dark skin+, a little flat
- RussetNorkotah278 Neb Long Russet High yield, nice, darker skin, deeper eyes, skin blemishes, pointy, soft end +, skinny
- COTX08322-10Ru Oblong Russet Some nice shapes, Bulky, Nice shape, medium size, SE, Skin blemishes, Uniform shape and size++, most medium size
- COTX13215-2Ru Oblong Russet Light skin, nice shape+, Few tubers, skin blemishes+++ , uniform size and shape+, SE 30%
- ATX13108-2Ru Oblong Russet pointy+, a little pointy, enlarged lenticels
- COTX13215-1Ru Oblong Russet Roundish+, not uniform size or shape, Near hole in field, Medium size, Golden skin, nice shape+, few tubers, large, skin blemishes+, light skin
- RussetNorkotah278 Long Russet Lower yield than plot 011, Nice skin and shape, bag fell off trailer
- COTX14250-1Ru Long Russet Bulky++, large+, Nice shape+, few tubers+, very large, skin blemishes++, nice size and skin, uniform size and shape+
- COTX10080-2Ru Oblong Russet Nice russet skin, not uniform size, some nice shapes, few tubers+, rotten, medium size, very nice skin, Compare: Bad rep, low tuber number, DROP, SE+, few tubers, nice skin
- Stampede Russet Long Russet Curved, Very few tubers, a little pointy, few tubers, nice white flesh, not uniform size
- ATX11379-1Ru Oblong Russet DROP, Roundish+, Small tubers, enlarged lenticels+, small, round to oblong

Summary:

Russet Norkotah dal, COTX09022-3RuRE/Y, RussetNorkotah296, TX13590-9Ru, ATX12058-1Ru, TXA549-1Ru, COTX14132-1Ru, and RussetNorkotah278 Neb were the best entries in this trial based on a combination of factors.

Dalhart
Table 10a.

Total yield, total yield of U.S. No.1, over 18 oz, under 4 oz and culls/No.2 potatoes and general rating of 17 entries in the Texas Advanced Russet Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Total Yield cwt/a	U.S. No. 1 cwt/a			Over 18 oz cwt/a	Under 4 oz. cwt/a	Culls/ No.2 cwt/a	General Rating ¹ Field	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz						10-18 oz
Russet Norkotah dal	TXRU	531.2	420.0	124.7	133.6	161.7	21.3	62.9	27.0	4.1	4.6
COTX09022-3RuRE/Y	TXRU	527.6	392.1	146.0	155.6	90.6	0.0	126.3	9.2	4.1	4.6
RussetNorkotah296	TXRU	450.2	347.5	83.5	125.6	138.4	24.3	47.4	31.1	3.9	4.5
TX13590-9Ru	TXRU	438.3	359.2	102.0	101.4	155.8	16.7	44.8	17.6	3.9	4.2
ATX12058-1Ru	TXRU	438.1	350.5	68.4	109.4	172.7	8.9	37.1	41.6	3.8	4.4
TXA549-1RU	TXRU	437.7	330.1	47.8	92.2	190.1	41.4	28.1	38.0	3.8	4.2
COTX14132-1Ru	TXRU	436.1	326.0	54.9	92.7	178.4	58.1	27.9	24.0	3.9	4.3
RussetNorkotah278 Neb	TXRU	429.7	345.5	62.5	110.7	172.3	6.4	46.9	30.9	3.9	4.6
COTX08322-10Ru	TXRU	402.2	339.3	82.8	116.9	139.6	18.5	33.9	10.5	3.9	4.3
COTX13215-2Ru	TXRU	386.9	335.9	54.7	87.2	194.0	6.2	29.7	15.1	3.7	4.2
ATX13108-2Ru	TXRU	364.7	297.6	83.7	82.4	131.5	21.3	41.2	4.6	3.7	4.1
COTX13215-1Ru	TXRU	345.0	305.7	70.5	99.3	135.9	0.0	33.4	5.9	3.7	3.9
RussetNorkotah278	TXRU	330.6	268.1	89.7	95.9	82.6	17.2	36.6	8.7	3.8	4.0
COTX14250-1Ru	TXRU	326.9	245.3	23.1	60.6	161.5	58.3	5.5	17.8	3.8	4.2
COTX10080-2Ru	TXRU	323.7	273.6	73.0	99.3	101.4	16.9	33.2	0.0	3.7	4.1
Stampede Russet	TXRU	258.1	192.6	54.0	63.1	75.5	15.3	35.9	14.2	3.6	3.7
ATX11379-1Ru	TXRU	247.4	180.6	64.7	77.2	38.7	0.0	41.2	25.6	3.5	3.7
Average		392.6	312.3	75.6	100.2	136.5	19.5	41.9	18.9	3.8	4.2
L.S.D. (.05)		117.3	99.0	30.2	ns	65.5	25.7	16.6	ns	0.2	0.4

¹ 1=very poor to 5= excellent

Dalhart
Table 10b.

Percent by weight of U.S. No. 1, over 18 oz, under 4 oz, culls/No.2 potatoes, specific gravity, tuber type and skin type of 17 entries in the Texas Advanced Russet Trial grown near Dalhart, Texas-2018.

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 dal	TXRU	79.5	23.5	25.1	30.9	3.8	12.3	4.5	1.059	13.1	Long	Russet
COTX09022-3RuRE/Y	TXRU	75.1	27.0	30.4	17.7	0.0	23.3	1.6	1.079	16.5	Oval	Russet
RussetNorkotah296	TXRU	77.4	18.6	28.0	30.9	5.3	10.4	6.9	1.063	13.7	Long	Russet
TX13590-9Ru	TXRU	83.1	23.1	23.1	36.9	3.8	10.0	3.1	1.074	15.8	Oblong	Russet
ATX12058-1Ru	TXRU	79.8	16.2	26.3	37.3	1.7	8.6	9.9	1.081	16.9	Oblong	Russet
TXA549-1RU	TXRU	76.6	11.9	21.6	43.2	9.0	6.9	7.5	1.084	17.5	Oblong	Russet
COTX14132-1Ru	TXRU	73.3	12.5	21.4	39.4	14.6	6.9	5.3	1.075	15.9	Oblong	Russet
RussetNorkotah278 Neb	TXRU	80.7	15.2	25.2	40.3	1.9	11.1	6.4	1.064	14.0	Long	Russet
COTX08322-10Ru	TXRU	84.2	20.9	29.0	34.3	4.6	8.9	2.4	1.067	14.4	Oblong	Russet
COTX13215-2Ru	TXRU	86.6	14.3	22.4	50.0	2.1	7.6	3.7	1.074	15.7	Oblong	Russet
ATX13108-2Ru	TXRU	81.4	23.1	22.5	35.9	5.9	11.4	1.2	1.078	16.5	Oblong	Russet
COTX13215-1Ru	TXRU	87.0	20.2	27.7	39.1	0.0	10.2	2.8	1.077	16.3	Oblong	Russet
RussetNorkotah278	TXRU	82.1	26.9	28.8	26.4	4.7	11.0	2.1	1.063	13.7	Long	Russet
COTX14250-1Ru	TXRU	75.1	8.0	17.6	49.5	18.5	1.8	4.6	1.069	14.9	Long	Russet
COTX10080-2Ru	TXRU	83.3	20.1	31.1	32.0	6.4	10.3	0.0	1.068	14.7	Oblong	Russet
Stampede Russet	TXRU	76.9	20.9	24.9	31.1	4.9	13.9	4.3	1.057	12.7	Long	Russet
ATX11379-1Ru	TXRU	72.8	26.2	29.2	17.4	0.0	17.0	10.2	1.079	16.6	Oblong	Russet
Average		79.7	19.3	25.5	34.8	5.1	10.7	4.5	1.071	15.2		
L.S.D. (.05)		ns	5.7	ns	12.5	6.4	4.0	ns	0.0	1.5		

Dalhart
Table 10c.

Average number of tubers, tuber weight, percent stand 60 days after planting, plant characteristics, percent dead vine at vine kill, length/with, and with/thickness, length cm, with cm, and thickness cm of 17 entries in the Texas Advanced Russet Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines	Length/ With	With/ Thickness	Length cm	With cm	Thickness cm
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴						
Russet Norkotah dal	TXRU	5.7	6.8	100	1.5	4.5	2.6	4.5	71	2.10	1.07	12.1	5.8	5.4
COTX09022-3RuRE/Y	TXRU	7.0	5.7	100	1.5	4.6	3.3	4.7	48	1.32	1.28	8.9	6.7	5.3
RussetNorkotah296	TXRU	4.7	7.0	100	1.5	4.0	2.8	4.0	58	2.12	1.08	11.8	5.6	5.2
TX13590-9Ru	TXRU	4.4	7.2	100	1.5	4.1	3.6	4.2	16	1.63	1.14	10.3	6.4	5.6
ATX12058-1Ru	TXRU	4.3	8.1	91	1.5	4.5	3.9	4.7	20	1.76	1.13	11.0	6.3	5.6
TXA549-1RU	TXRU	3.4	9.3	100	1.5	4.4	4.6	4.4	9	1.63	1.13	10.6	6.5	5.7
COTX14132-1Ru	TXRU	3.9	8.9	91	1.5	3.9	4.0	4.0	15	1.61	1.18	10.7	6.6	5.6
RussetNorkotah278 Neb	TXRU	4.6	6.8	100	1.5	4.8	3.2	4.8	51	2.36	1.12	12.6	5.4	4.8
COTX08322-10Ru	TXRU	3.9	7.7	98	1.6	4.0	3.7	4.0	33	1.67	1.12	10.7	6.4	5.7
COTX13215-2Ru	TXRU	4.5	8.6	75	1.5	3.8	3.9	4.5	26	1.60	1.10	10.3	6.4	5.8
ATX13108-2Ru	TXRU	3.8	7.1	100	1.5	4.7	4.3	4.7	13	2.08	1.07	11.5	5.5	5.1
COTX13215-1Ru	TXRU	4.4	7.2	81	1.5	4.0	3.9	4.4	20	1.55	1.16	10.5	6.8	5.8
RussetNorkotah278	TXRU	3.9	6.9	92	1.5	3.9	2.5	4.0	78	2.01	1.07	11.6	5.7	5.4
COTX14250-1Ru	TXRU	4.4	11.5	55	1.5	3.3	4.2	4.4	10	1.73	1.09	11.4	6.6	6.1
COTX10080-2Ru	TXRU	3.8	7.2	86	1.5	4.3	4.6	4.3	4	1.90	1.10	11.3	6.0	5.4
Stampede Russet	TXRU	5.2	6.5	61	1.5	3.1	3.7	3.7	33	1.97	1.07	11.2	5.7	5.4
ATX11379-1Ru	TXRU	3.0	5.9	100	1.5	4.2	3.8	4.2	25	1.57	1.03	10.2	6.5	6.3
Average		4.4	7.6	90	1.5	4.1	3.7	4.3	31	1.80	1.12	11.0	6.2	5.5
L.S.D. (.05)		1.2	0.9	18	ns	0.5	0.5	0.3	14	0.20	0.07	0.7	0.4	0.4

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 17 entries in the Texas Advanced Russet Trial grown near Dalhart, Texas-2018.

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
Russet Norkotah dal	TXRU	1.0	4.1	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	8	3	13	0
COTX09022-3RuRE/Y	TXRU	3.0	2.4	2.5	4.0	2.5	4.8	5.0	5.0	5.0	5.0	0	0	35	10
RussetNorkotah296	TXRU	1.0	4.4	3.5	4.0	3.3	5.0	5.0	5.0	4.8	5.0	8	0	20	0
TX13590-9Ru	TXRU	1.0	3.5	3.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	8	0	23	0
ATX12058-1Ru	TXRU	1.0	3.8	2.5	4.0	2.5	4.8	5.0	5.0	4.1	4.8	0	0	55	0
TXA549-1RU	TXRU	1.0	3.9	3.0	4.0	3.0	4.8	5.0	5.0	4.3	5.0	23	0	23	10
COTX14132-1Ru	TXRU	1.0	3.9	4.0	4.0	3.9	5.0	5.0	5.0	4.8	5.0	0	0	23	0
RussetNorkotah278 Neb	TXRU	1.0	4.5	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	10	0	25	0
COTX08322-10Ru	TXRU	1.0	3.6	3.0	4.0	3.5	5.0	5.0	5.0	5.0	4.8	0	0	35	3
COTX13215-2Ru	TXRU	1.0	3.8	2.8	4.0	2.8	4.8	5.0	5.0	4.9	3.9	8	0	35	0
ATX13108-2Ru	TXRU	1.0	3.9	2.9	4.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	65	0
COTX13215-1Ru	TXRU	1.0	3.7	2.5	4.0	2.5	4.5	5.0	5.0	5.0	4.8	10	0	30	3
RussetNorkotah278	TXRU	1.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	4.8	5.0	3	0	13	3
COTX14250-1Ru	TXRU	1.0	4.0	3.4	4.0	3.4	5.0	5.0	5.0	4.1	5.0	0	0	23	5
COTX10080-2Ru	TXRU	1.0	3.8	3.6	4.0	3.8	5.0	5.0	5.0	5.0	5.0	10	3	48	0
Stampede Russet	TXRU	1.0	4.1	3.5	4.0	3.5	5.0	5.0	5.0	5.0	5.0	5	0	3	0
ATX11379-1Ru	TXRU	1.0	3.0	3.0	4.0	3.0	4.0	5.0	5.0	5.0	5.0	17	0	7	0
Average		1.1	3.8	3.2	4.0	3.3	4.9	5.0	5.0	4.8	4.9	6	0	28	2
L.S.D. (.05)			0.2	0.2	ns	0.4	0.3			0.5	0.3	11	0	23	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 10e.

Notes and general rating for all reps of 17 entries in the Texas Advanced Russet Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Russet Norkotah dal	TXRU	Long, skinny, High tuber number, , High yield, pointy	high tuber number++, pointy, , nice BOT, better than in WR	4, 4.5, 4, 4	4.9, 4.6, 4, 4.9
COTX09022-3RuRE/Y	TXRU	High yield+, roundish, pink eyes+, high tuber number, ,	roundish+, red eyes, some bruising, SE 30%, not uniform russet, ,	4, 4.2, ,	4.8, 4.4, ,
RussetNorkotah296	TXRU	, , , Knobs	SE, nicer shape than regular norkotah, enlarged lenticels+, DROP, wider,	3.8, 3.8, 4.2, 3.8	4.4, 4.4, 4.8, 4.3
TX13590-9Ru	TXRU	High yield+, short oval to oblong, , round to oblong,	Move to SW or WR++, blocky, oval to oblong, nice shape, blocky, nice, bulky, medium	3.8, 3.8, 4, 3.8	4.2, 4.2, 4.4, 4
ATX12058-1Ru	TXRU	Knobs++, bulky, , Golden russet+, knobs,	high tuber number+, nice shape, uniform size and shape, light skin, , Parent, Cross with heavy russet, nice shape	3.8, 3.8, 3.7, 3.8	4.5, 4.6, 3.8, 4.5
TXA549-1RU	TXRU	, Large+, bulky, , some nice shapes	Skin blemishes, rough, Parent for size and shape, very large+, bulky, nice shape, very large, high tuber number, blocky, Sister	3.7, 4, 3.8, 3.8	4, 4, 4.6, 4
COTX14132-1Ru	TXRU	Some nice shapes+, High yield, a little angular, , Bulky, nice skin	very good skin++, Parent, large, nice skin, nice flesh, dark skin+, a little flat	4, 4, 3.7, 4	4.3, 4.5, 4, 4.5
RussetNorkotah278 Neb	TXRU	High yield, , ,	nice, darker skin, deeper eyes, skin blemishes, pointy, soft end +, skinny	4.2, 3.8, 3.7, 3.8	4.9, 4.6, 4.3, 4.4
COTX08322-10Ru	TXRU	Some nice shapes, Bulky , Nice shape, medium size,	SE, Skin blemishes, Uniform shape and size++, nice shape, most medium size	3.6, 4, 4, 3.8	4.3, 4.4, 4.3, 4
COTX13215-2Ru	TXRU	, Light skin, nice shape+, Few tubers,	skin blemishes, uniform size and shape, uniform shape and size, skin blemishes, SE 30%, skin blemishes, very light skin, nice shape	3.6, 3.8, 3.7, 3.7	4.3, 4.5, 4, 4
ATX13108-2Ru	TXRU	Long pointy, , ,	, a little pointy, enlarged lenticels, ,	3.6, 3.6, 3.7, 3.7	4, 4, 4.2, 4.3
COTX13215-1Ru	TXRU	Roundish, not uniform size or shape, Near hole in field, Medium size, Golden skin	roundish, nice shape+, few tubers, large, skin blemishes+, light skin	3.6, 3.6, 3.7, 3.8	4, 3.6, 4.4, 3.7
RussetNorkotah278	TXRU	Lower yield than plot 011, Nice skin and shape, ,	bag fell off trailer, , ,	3.7, 4, 3.8, 3.7	4, 3.8, 4.3, 3.8
COTX14250-1Ru	TXRU	Bulky+, large, Nice shape, few tubers, ,	very large, bulky, skin blemishes++, few tubers+, nice size and skin, uniform size and shape, large, nice shape	4, 3.4, 3.6, 4	4.8, 3.8, 3.8, 4.5
COTX10080-2Ru	TXRU	Nice russet skin, not uniform size, some nice shapes, Few tubers+, nice shape+, rotten, , Nice uniform size	very nice skin, Compare: Bad rep, low tuber number, DROP, SE+, few tubers, nice skin	3.8, 3.5, 3.6, 3.8	4.8, 3.4, 3.6, 4.5
Stampede Russet	TXRU	Curved, pointy, Very few tubers, ,	a little pointy, few tubers , nice white flesh, not uniform size	3.7, 3.2, 3.6, 3.7	4, 3.5, 3.8, 3.6
ATX11379-1Ru	TXRU	Roundish+, Small tubers, ,	enlarged lenticels+, DROP, small, round to oblong,	3.4, 3.5, 3.5,	3.6, 3.7, 3.7,

2018 4 Hill Russet Selections Trial, Dalhart

The trial consisted of 123 entries of which seventeen (ATTX10007-1Ru, ATTX10008-1Ru, ATTX10067-1Ru, ATTX10378-3Ru/Y, ATX11382-2Ru, ATX13018-1Ru, ATX13018-2Ru, ATX13046-1Ru, ATX13065-3Ru, ATX14003-1Ru, COTX13029-2Ru/Y, COTX14016-1Ru, COTX14263-1Ru, COTX15023-1Ru, COTX15144-1Ru, COTX15271-1Ru, Dal17001RuRua, and Dal17001RuRub) will be advanced in 2019 (Table 11).

Dalhart
Table 11

Inventory weight of 17 entries to be advanced
from the 2018 4 hill Russet Selection Trial
grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Inventory Weight
ATTX10007-1Ru	4Hill18Rus238	4.2
ATTX10008-1Ru	4Hill18Rus239	21.1
ATTX10067-1Ru	4Hill18Rus244	15.4
ATTX10378-3Ru/Y	4Hill18Rus248	10.6
ATX11382-2Ru	4Hill18Rus256	20.8
ATX13018-1Ru	4Hill18Rus271	14.4
ATX13018-2Ru	4Hill18Rus272	14.3
ATX13046-1Ru	4Hill18Rus273	34.6
ATX13065-3Ru	4Hill18Rus282	9.5
ATX14003-1Ru	4Hill18Rus285	11
COTX13029-2Ru/Y	4Hill18Rus311	10.6
COTX14016-1Ru	4Hill18Rus315	10.1
COTX14263-1Ru	4Hill18Rus319	8.2
COTX15023-1Ru	4Hill18Rus327	20
COTX15144-1Ru	4Hill18Rus336	19.7
COTX15271-1Ru	4Hill18Rus349	21
Dal17001RuRua	4Hill18Rus356	13
Dal17001RuRub	4Hill18Rus356	13

Texas Advanced Red Selection Trial, Dalhart

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

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

- NDTX4784-7R was the best entry based on general rating and best of trial designation, while ATX08121-5R, COTX14107-4R, and NDTX12248Y-1R also had high general ratings (Tables 12a and 12e).
- Red LaSoda dal had the highest total, marketable, and yield of over 10 oz. tubers, while NDTX4784-7R had the highest yield of 4-6 oz. tubers (Table 12a).
- NDTX13105-1R had the highest yield of less than 4 oz. tubers, while COTX00104-6R had the highest yield of culls/No. 2 tubers (Table 12a).
- NDTX12248Y-1R and TX14612-1R had the highest percentage marketable yield, while TX14632-2R had the highest percentage of 4-6 oz. tubers. COTX14035-1R had the highest percentage of less than 4 oz. tubers (Table 12b).
- COTX07054-2R had the highest specific gravity (Table 12b)
- Red LaSoda dal and COTX00104-6R were the latest in maturity, while TX14615-3R, COTX02293-4R, and ATX08121-5R were the earliest in maturity (Table 12c).
- TX14615-3R had the highest percentage of internal brownspot (Table 12d).

Comments on entries:

- Red LaSoda dal Oblong Red high tuber number, Very large++, Lenticels, robust
- NDTX4784-7R Round Red BOT, Nice+, very uniform size and shape, it went to WR in the past, seed was refreshed two years ago, Strong, uniformly round
- NDTX13105-1R Oval Red High tuber number, not uniform size, Silver scurf
- NDTX12248Y-1R Oval Red Shallow eyes, medium size, Uniform size and shape
- TX14612-1R Oblong Red Ugly, DROP+, angular tubers+, Very large+
- ATX08121-5R Round Red Nice high tuber number, Uniform size and shape+
- COTX14107-4R Round Red Intense skin color, nice
- TX14619-2R Oblong Red Intense red skin
- COTX14035-1R Round Red Intense skin color, shiny, Smooth skin

- COTX00104-6R Oval Red DROP, Too large, lenticels++, netted skin, dull skin+, snaps, Bad skin, scurf, Very large+, Oblong, ugly skin
- COTX07054-2R Round Red Not uniform
- COTX14107-3R Round Red Intense skin color, Small
- TX14615-3R Oval Red DROP, Few tubers, Silver scurf
- TX14615-4R Oval Red Pear shaped
- COTX02293-4R Round Red Medium-small, nice tubers but not many, Silver scurf
- TX14632-2R Round Red Very uniform medium size, smooth skin, shiny, Pointy

Summary:

NDTX4784-7R, ATX08121-5R, COTX14107-4R, and NDTX12248Y-1R were the best entries for this trial.

Dalhart
Table 12a.

Total yield, total yield of U.S. No.1, over 18 oz, under 4 oz and culls/No.2 potatoes and general rating of 16 entries in the Texas Advanced Red Selection Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Total Yield cwt/a	U.S. No. 1 cwt/a			Over 18 oz cwt/a	Under 4 oz. cwt/a	Culls/ No.2 cwt/a	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
Red LaSoda dal	TXRD	591.6	471.1	85.1	149.9	236.1	79.6	41.0	0.0	3.9
NDTX4784-7R	TXRD	535.3	434.5	185.5	133.2	115.8	0.0	100.9	0.0	4.5
NDTX13105-1R	TXRD	523.0	303.4	176.6	114.4	12.4	0.0	219.6	0.0	3.6
NDTX12248Y-1R	TXRD	495.3	419.6	149.2	159.0	111.4	0.0	75.7	0.0	4.1
TX14612-1R	TXRD	472.9	407.5	109.8	135.4	162.2	18.5	46.9	0.0	3.6
ATX08121-5R	TXRD	453.4	350.7	149.6	103.4	97.7	0.0	102.7	0.0	4.1
COTX14107-4R	TXRD	434.7	339.5	168.4	121.7	49.4	0.0	95.2	0.0	4.3
TX14619-2R	TXRD	401.3	313.9	130.4	86.0	97.5	0.0	87.4	0.0	3.9
COTX14035-1R	TXRD	400.8	199.5	141.4	58.1	0.0	0.0	201.3	0.0	3.8
COTX00104-6R	TXRD	395.1	322.6	65.4	105.5	151.7	28.6	27.0	16.9	3.4
COTX07054-2R	TXRD	388.5	222.8	118.5	82.1	22.2	0.0	165.6	0.0	3.7
COTX14107-3R	TXRD	373.8	232.9	139.6	81.4	11.9	0.0	140.9	0.0	3.8
TX14615-3R	TXRD	323.5	251.0	108.9	99.3	42.8	0.0	72.5	0.0	3.6
TX14615-4R	TXRD	321.0	242.1	110.3	86.3	45.5	0.0	78.9	0.0	3.6
COTX02293-4R	TXRD	307.5	207.7	116.5	63.4	27.8	0.0	99.7	0.0	3.6
TX14632-2R	TXRD	307.0	230.2	129.5	78.2	22.4	0.0	76.9	0.0	3.8
Average		420.3	309.3	130.3	103.6	75.4	7.9	102.0	1.1	3.8
L.S.D. (.05)		99.5	88.6	38.0	39.3	52.8	19.5	26.0	ns	0.2

¹ 1=very poor to 5= excellent

Dalhart
Table 12b.

Percent by weight of U.S. No. 1, over 18 oz, under 4 oz, culls/No.2 potatoes, specific gravity, tuber type and skin type of 16 entries in the Texas Advanced Red Selection Trial grown near Dalhart, Texas-2018.

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 dal	TXRD	79.8	13.8	26.1	40.0	13.3	6.9	0.0	1.060	13.3	Oblong	Red
NDTX4784-7R	TXRD	80.5	35.0	24.8	20.8	0.0	19.5	0.0	1.057	12.6	Round	Red
NDTX13105-1R	TXRD	58.2	34.2	21.4	2.6	0.0	41.8	0.0	1.059	13.0	Oval	Red
NDTX12248Y-1R	TXRD	84.5	29.8	32.1	22.6	0.0	15.5	0.0	1.061	13.4	Oval	Red
TX14612-1R	TXRD	85.8	23.1	28.8	33.9	4.2	10.0	0.0	1.055	12.4	Oblong	Red
ATX08121-5R	TXRD	77.4	33.3	23.4	20.6	0.0	22.6	0.0	1.058	12.8	Round	Red
COTX14107-4R	TXRD	78.1	38.7	28.0	11.4	0.0	21.9	0.0	1.065	14.1	Round	Red
TX14619-2R	TXRD	78.0	33.1	21.0	23.9	0.0	22.0	0.0	1.054	12.1	Oblong	Red
COTX14035-1R	TXRD	49.8	35.1	14.6	0.0	0.0	50.2	0.0	1.061	13.4	Round	Red
COTX00104-6R	TXRD	81.8	17.5	26.5	37.8	6.6	7.1	4.5	1.060	13.1	Oval	Red
COTX07054-2R	TXRD	55.8	30.0	20.8	5.0	0.0	44.2	0.0	1.073	15.6	Round	Red
COTX14107-3R	TXRD	62.3	37.3	21.8	3.2	0.0	37.7	0.0	1.060	13.3	Round	Red
TX14615-3R	TXRD	77.5	33.5	30.8	13.2	0.0	22.5	0.0	1.049	11.3	Oval	Red
TX14615-4R	TXRD	76.0	34.9	26.5	14.6	0.0	24.0	0.0	1.051	11.7	Oval	Red
COTX02293-4R	TXRD	67.3	38.0	20.3	9.0	0.0	32.7	0.0	1.056	12.4	Round	Red
TX14632-2R	TXRD	74.8	42.2	25.3	7.2	0.0	25.2	0.0	1.061	13.5	Round	Red
Average		73.0	31.9	24.5	16.6	1.5	25.2	0.3	1.059	13.0		
L.S.D. (.05)		7.3	6.9	ns	8.6	3.1	6.0	ns	0.004	0.8		

Dalhart
Table 12c.

Average number of tubers, tuber weight, percent stand 60 days after planting, plant characteristics, and percent dead vine at vine kill of 16 entries in the Texas Advanced Red Selection Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
Red LaSoda dal	TXRD	5.1	8.7	100	1.5	4.7	4.4	4.8	4
NDTX4784-7R	TXRD	7.8	5.1	98	1.5	4.1	3.4	4.2	44
NDTX13105-1R	TXRD	10.5	3.6	100	1.8	4.0	3.3	4.0	48
NDTX12248Y-1R	TXRD	6.7	5.6	96	1.5	4.3	3.7	4.6	26
TX14612-1R	TXRD	7.9	6.7	74	1.5	3.6	3.7	4.1	28
ATX08121-5R	TXRD	6.8	4.9	100	1.5	4.4	2.3	4.6	80
COTX14107-4R	TXRD	7.8	4.4	92	2.0	3.6	3.0	3.8	55
TX14619-2R	TXRD	7.7	5.0	81	2.3	3.6	3.5	3.8	18
COTX14035-1R	TXRD	9.2	3.3	96	1.5	4.0	3.3	4.0	48
COTX00104-6R	TXRD	5.8	7.7	65	1.5	3.5	4.3	4.1	8
COTX07054-2R	TXRD	8.4	3.3	100	1.8	3.8	3.4	4.0	40
COTX14107-3R	TXRD	9.1	3.9	81	1.5	3.8	3.6	4.0	28
TX14615-3R	TXRD	6.2	4.9	79	1.6	3.4	2.5	3.7	71
TX14615-4R	TXRD	6.7	4.7	82	1.6	3.4	3.2	3.8	49
COTX02293-4R	TXRD	6.6	3.8	92	2.2	3.8	2.3	4.0	85
TX14632-2R	TXRD	17.2	4.6	29	1.5	2.0	3.9	4.5	5
Average		8.1	5.0	85	1.7	3.7	3.4	4.1	40
L.S.D. (.05)		2.1	0.8	17	0.2	0.5	0.4	0.4	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

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 16 entries in the Texas Advanced Red Selection Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Flesh Color ¹	Tuber Shape ²	Degree of Russeting ³	Eye Depth ⁴	Skin Color ⁵	Growth Cracks ⁶	Shatter Bruise ⁷	Scab ⁸	Knobs ⁹	Feathering ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹¹	Percent Internal Brownspot
Red LaSoda dal	TXRD	1.0	3.5	1.0	3.5	3.0	5.0	5.0	5.0	5.0	4.8	0	0	8	0
NDTX4784-7R	TXRD	1.0	1.0	1.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX13105-1R	TXRD	1.0	2.0	1.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX12248Y-1R	TXRD	1.0	2.0	1.0	4.0	2.5	5.0	5.0	5.0	5.0	4.5	0	0	0	0
TX14612-1R	TXRD	1.0	3.0	1.0	4.0	4.0	3.3	5.0	5.0	5.0	5.0	8	0	0	13
ATX08121-5R	TXRD	1.0	1.6	1.0	3.8	3.0	5.0	5.0	5.0	5.0	5.0	5	0	3	3
COTX14107-4R	TXRD	1.0	1.0	1.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TX14619-2R	TXRD	1.0	2.5	1.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	5	0
COTX14035-1R	TXRD	1.0	1.5	1.0	3.8	4.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX00104-6R	TXRD	1.0	2.8	1.0	4.0	4.0	4.5	5.0	4.8	5.0	5.0	0	0	3	0
COTX07054-2R	TXRD	1.0	1.5	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX14107-3R	TXRD	1.0	1.5	1.0	3.8	4.5	5.0	5.0	5.0	5.0	5.0	0	0	0	5
TX14615-3R	TXRD	1.0	2.0	1.0	4.0	3.8	5.0	5.0	5.0	5.0	4.5	0	0	0	23
TX14615-4R	TXRD	1.0	2.5	1.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	3
COTX02293-4R	TXRD	1.0	1.0	1.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TX14632-2R	TXRD	1.0	1.0	1.0	4.0	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		1.0	1.9	1.0	3.9	3.8	4.9	5.0	5.0	5.0	4.9	1	0	1	3
L.S.D. (.05)			0.2			0.2	0.3		ns	0.0	ns	ns		ns	ns

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Dalhart
Table 12e.

Notes and general rating for all reps of 16 entries in the Texas Advanced Red Selection Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Notes Grading	General Rating Grading
Red LaSoda dal	TXRD	high tuber number, Very large++, Lenticels, robust, Nice , very uniform size and shape, Nice, it went to WR in the past, seed was refreshed two	4, 4, 3.8, 3.8
NDTX4784-7R	TXRD	years ago, BOT, Strong, uniformly round	4.5, 4.5, 4.5, 4.3
NDTX13105-1R	TXRD	High tuber number, not uniform size, Silver scurf, ,	3.6, 3.6, ,
NDTX12248Y-1R	TXRD	Shallow eyes, medium size, , Uniform size and shape,	4.3, 4, 4.3, 3.8
TX14612-1R	TXRD	Ugly, DROP+, angular tubers+, Very large+, , Oblong	3.5, 3.4, 3.6, 3.8
ATX08121-5R	TXRD	Nice high tuber number, Uniform size and shape+, ,	4.4, 4.3, 3.8, 3.8
COTX14107-4R	TXRD	Intense skin color, nice, , ,	4.3, , ,
TX14619-2R	TXRD	, Intense red skin, ,	4, 3.8, ,
COTX14035-1R	TXRD	Intense skin color, shiny, Smooth skin, ,	3.8, 3.7, ,
COTX00104-6R	TXRD	Too large, lenticels++, netted skin, dull skin+, snaps, Bad skin, scurf, Very large+, Oblong, ugly skin, DROP	3.5, 3.4, 3.4, 3.4
COTX07054-2R	TXRD	Not uniform, , ,	3.5, 3.6, 3.6, 4
COTX14107-3R	TXRD	Intense skin color , Small, ,	3.8, 3.7, ,
TX14615-3R	TXRD	Few tubers, DROP, , Silver scurf,	3.6, 3.7, 3.6, 3.5
TX14615-4R	TXRD	Pear shaped, , ,	3.4, 3.7, 3.7, 3.7
COTX02293-4R	TXRD	Medium-small, nice tubers but not many, , Silver scurf,	3.7, 3.5, 3.6,
TX14632-2R	TXRD	Very uniform medium size, smooth skin, shiny, Pointy, ,	4, 3.6, ,

2018 4 Hill Red Selections Trial, Dalhart

The trial consisted of seven entries of which one (ATTX11617-2R) will be advanced in 2019 (Table 13).

Dalhart
Table 13

Inventory weight of 1 entry to be advanced from
the 2018 4 hill Red Selection Trial grown near
Dalhart, Texas-2018.

Variety or Selection	Trial	Inventory Weight
ATTX11617-2R	4Hill18Red142	22.1

Texas Advanced Red/Yellow Selection Trial, Dalhart

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

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

- NDTX059759-3RY/YPinto had the highest general rating (Table 14a).
- ATTX10265-4R/Y had the highest total yield, while NDTX059759-3RY/YPinto had the highest marketable yield (Table 14a)
- ATTX10265-4R/Y had the highest yield of 4-6 oz., less than 4 oz. and culls/No. 2 tubers (Table 14a).
- TX14646-1W-R/YPinto had the highest percentage of marketable yield, while BTX2103-1R/Y had the highest percentage of 4-6 oz. tubers (Table 14b).
- ATTX10265-4R/Y had the highest percentage of less than 4 oz. tubers (Table 14b).
- NDTX059759-3RY/YPinto had the highest specific gravity (Table 14b).
- ATTX10265-4R/Y had the highest average number of tubers per plant (Table 14c).
- NDTX059759-3RY/YPinto was the latest in maturity, while Sierra Rose and BTX2103-1R/Y were the earliest in maturity (Table 14c).
- ATTX10265-4R/Y, NDTX059759-3RY/YPinto, and BTX2103-1R/Y had the darkest yellow flesh color (Table 14d).

Comments on entries:

- | | | | | |
|---|-----------------------|--------|-----|-----------------------------------------------------------------------------------------------------------------------------------|
| • | ATTX10265-4R/Y | Oval | Red | Parent for flesh color, pointy+, snowmen+, Beautiful yellow flesh, Pears, very nice skin flesh combination+, Shiny skin, FC=4.5 |
| • | NDTX059759-3RY/YPinto | Oblong | Red | Flat+, nice unique pattern, some pink in flesh, Uniform size, 50% pink flesh, 20% pink flesh, Smooth skin, 20% pink flesh, FC=4.0 |
| • | Sierra Rose | Oblong | Red | Refresh seed, Silver scurf+, few tubers, FC=3.0 |
| • | BTX2103-1R/Y | Oval | Red | DROP, Very few tubers, angular+, A little flat, Shape problems, FC=4.0 |
| • | TX14646-1W-R/YPinto | Oblong | Red | Unique pattern, Use as parent, Few tubers, bloody flesh, Less flat than Harlequin, Large, FC=3.0 |

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

Summary:

NDTX059759-3RY/YPinto was the best entry for this trial.

Dalhart
Table 14a.

Total yield, total yield of U.S. No.1, over 18 oz, under 4 oz and culls/No.2 potatoes and general rating of 5 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/a			Over 18 oz cwt/a	Under 4 oz. cwt/a	Culls/ No.2 cwt/a	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
ATTX10265-4R/Y	TXRD/Y	380.2	209.6	148.5	51.2	9.8	0.0	170.7	0.0	3.6
NDTX059759-3RY/Y Pinto	TXRD/Y	336.1	257.2	105.2	78.0	73.9	0.0	73.2	5.7	4.0
Sierra Rose	TXRD/Y	261.0	203.4	89.7	63.8	49.9	0.0	57.7	0.0	3.6
BTX2103-1R/Y	TXRD/Y	251.4	166.8	97.9	52.6	16.2	0.0	84.6	0.0	3.4
TX14646-1W-R/YPinto	TXRD/Y	194.5	173.2	52.8	49.0	71.4	6.4	14.9	0.0	3.6
Average		284.6	202.0	98.8	58.9	44.2	1.3	80.2	1.1	3.6
L.S.D. (.05)		ns	ns	44.5	ns	25.3	ns	48.3	ns	0.1

¹ 1=very poor to 5= excellent

Dalhart
Table 14b.

Percent by weight of U.S. No. 1, over 18 oz, under 4 oz, culls/No.2 potatoes, specific gravity, tuber type and skin type of 5 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	54.4	38.8	13.6	2.1	0.0	45.6	0.0	1.049	11.3	Oval	Red
NDTX059759-3RY/Y Pinto	TXRD/Y	77.5	31.6	23.1	22.8	0.0	20.9	1.7	1.067	14.5	Oblong	Red
Sierra Rose	TXRD/Y	78.4	34.9	24.6	18.9	0.0	21.6	0.0	1.064	13.9	Oblong	Red
BTX2103-1R/Y	TXRD/Y	67.3	39.3	21.9	6.1	0.0	32.7	0.0	1.063	13.8	Oval	Red
TX14646-1W-R/YPinto	TXRD/Y	88.2	26.2	23.9	38.1	4.2	7.6	0.0	1.061	13.3	Oblong	Red
Average		73.2	34.2	21.4	17.6	0.8	25.7	0.3	1.061	13.4		
L.S.D. (.05)		8.9	ns	ns	9.8	ns	8.9	ns	0.003	0.6		

Dalhart
Table 14c.

Average number of tubers, tuber weight, 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 Dalhart, Texas-2017.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
ATTX10265-4R/Y	TXRD/Y	8.3	3.3	100	1.5	4.6	4.0	4.7	19
NDTX059759-3RY/Y Pinto	TXRD/Y	4.9	5.0	100	1.5	4.3	5.0	4.4	0
Sierra Rose	TXRD/Y	4.1	5.1	92	1.5	4.0	3.5	4.1	18
BTX2103-1R/Y	TXRD/Y	4.9	4.1	94	1.8	3.9	3.5	4.0	16
TX14646-1W-R/Y Pinto	TXRD/Y	6.2	6.9	34	1.5	2.5	4.3	4.2	8
Average		5.7	4.9	84	1.6	3.8	4.0	4.2	12
L.S.D. (.05)		2.1	0.6	11	ns	0.6	0.9	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 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 5 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 ¹¹	Percent Internal Brownspot
ATTX10265-4R/Y	TXRD/Y	4.5	2.5	1.0	4.0	3.0	5.0	5.0	5.0	3.3	5.0	3	0	0	3
NDTX059759-3RY/Y Pinto	TXRD/Y	4.0	3.0	1.0	4.8	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Sierra Rose	TXRD/Y	3.0	3.0	1.0	4.0	3.0	5.0	5.0	4.5	5.0	5.0	0	0	0	0
BTX2103-1R/Y	TXRD/Y	4.0	2.5	1.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TX14646-1W-R/Y Pinto	TXRD/Y	3.0	3.0	1.0	4.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average		3.7	2.8	1.0	4.2	3.2	5.0	5.0	4.9	4.7	5.0	1	0	0	1
L.S.D. (.05)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	ns	0.3	0.0	ns	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 14e.

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

Variety or Selection	Trial	Notes Grading	General Rating Grading
ATTX10265-4R/Y	TXRD/Y	Parent for flesh color, pointy+, snowmen+, Beautiful yellow flesh, Pears, very nice skin flesh combination+, , Shiny skin	3.6, 3.7, 3.6, 3.6
NDTX059759-3RY/Y Pinto	TXRD/Y	Flat+, nice unique pattern, some pink in flesh, Uniform size, 50% pink flesh, 20% pink flesh, Smooth skin, 20% pink flesh	4, 4.2, 3.8, 3.8
Sierra Rose	TXRD/Y	Refresh seed, Silver scurf+, few tubers, , ,	3.5, 3.7, 3.6, 3.6
BTX2103-1R/Y	TXRD/Y	Very few tubers, angular+, A little flat, Shape problems, DROP,	3.3, 3.4, 3.4, 3.4
TX14646-1W-R/Y Pinto	TXRD/Y	Unique pattern, Use as parent, Few tubers, bloody flesh, Less flat than Harlequin, Large	3.7, 3.5, 3.5, 3.6

2018 4 Hill Red Skin Yellow Flesh Selections Trial, Dalhart

The trial consisted of twenty-one entries of which five (ATTX10270-2P/Y, ATTX10286-1R/Y, ATX11586-1R/Y, ATX11593-1R/Y, and TX16714-2R/Y) will be advanced in 2019 (Table 15).

Dalhart
Table 15

Inventory weight of 5 entries to be advanced from the
2018 4 hill Red Skin Yellow Flesh Selection Trial grown
near Dalhart, Texas-2018.

Variety or Selection	Trial	Inventory Weight
ATX10270-2P/Y	4Hill18R/Y149	3.6
ATX10286-1R/Y	4Hill18R/Y151	6.5
ATX11586-1R/Y	4Hill18R/Y160	18.4
ATX11593-1R/Y	4Hill18R/Y162	4.5
TX16714-2R/Y	4Hill18R/Y172	7.5

Texas Advanced White/Yellow Selection Trial, Dalhart

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

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

- ATTX11591-1W/Y, AORTX11913-3Wre/Y, TX14602-2W/Y, and Sierra Gold were the best entries for this trial based on general ratings (Tables 16a).
- AORTX11913-3Wre/Y had the highest total, marketable yield, and 4-10 oz. tubers (Table 16a).
- BTX1749-1W/Y had the highest yield of over 10 oz. tubers. AORTX11913-3Wre/Y had the highest yield of less than 4 oz. tubers. ATX11567-1W/Y had the highest yield of culls/No. 2 tubers (Table 16a).
- Sierra Gold, BTX1749-1W/Y, and Yukon Gold dal had the highest percentage of marketable yield, while Yukon Gold dal and BTX1749-1W/Y had the highest percentage of over 10 oz. tubers (Table 16b).
- ATTX11591-1W/Y and COTX14220-2W/Y had the highest percentage of less than 4 oz. tubers (Table 16b).
- TX14602-2W/Y and COTX10097-2W/Y had the highest specific gravity (Table 16b).
- AORTX11913-3Wre/Y had the highest average tubers per plant (Table 16c).
- AORTX11913-3Wre/Y, ATX11567-1W/Y, TX14602-2W/Y, ATTX11591-3W/Y, ATTX11591-1W/Y, and Yukon Gold dal were the latest in maturity, while COTX14220-2W/Y was the earliest in maturity (Table 16c).
- COTX14220-2W/Y, ATTX11591-3W/Y, and ATTX11591-1W/Y had the darkest yellow flesh (Table 16d).
- TX14670-2W/Y, AORTX11913-3Wre/Y, and ATX11567-1W/Y had the highest percentage of vascular discoloration, while TX14602-2W/Y, ATTX11591-3W/Y, and AORTX11913-3Wre/Y had the highest percentage of internal brown spot (Table 16e).

Comments on entries:

- AORTX11913-3Wre/Y Round White-Red Eye Very high yield++, high tuber number++, TC as Parent, Chip?, Pink splash, Parent for high tuber

				number and high yield, *white/pink, smooth skin, uniform size and shape, FC=1.4
•	TX14602-2W/Y	Round	White	TC, advance to yellow trial, Uniform size and shape, lacks shine+, Yukon class but medium size, very round, Buff skin+, FC=3.4
•	ATX11567-1W/Y	Round	White	High yield, shiny++, angular++, parent+, shiny flesh color, Uniform size and shape, DROP, FC=3.9
•	TX14670-2W/Y	Round	White	Large, buff skin+++, Uniform shape, not uniform size, a little flat, DROP, FC=2.5
•	ATTX11591-3W/Y	Round	White	Angular, High tuber number, small, intense flesh color+, Parent for intense flesh color, Buff skin, uniform size, FC=4.5
•	COTX10097-2W/Y	Oval	White	Shiny, uniform size, Not uniform shape, Buff skin, angular, mixed skin type, nice flesh color+, FC=3.8
•	Sierra Gold	Oblong	Russet	Nice, high yield, medium, FC=3.0
•	BTX1749-1W/Y	Oval	White	Large++, buff skin+, dirty, snaps, a little flat, nice flesh color++, FC=3.6
•	ATTX11591-1W/Y	Round	White	Shiny skin, move to smalls, Parent for intense flesh color, Small, DROP, FC=4.3
•	Yukon Gold dal	Oval	White	Large, A little angular, nice yellow flesh, typical Yukon, FC=2.9
•	COTX14220-2W/Y	Round	White	Small pears, TC as parent for flesh color, Small shiny, move to smalls, FC=4.6

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

Summary:

ATTX11591-1W/Y, AORTX11913-3Wre/Y, TX14602-2W/Y, and Sierra Gold were the best entries for this trial.

Dalhart
Table 16a.

Total yield, total yield of U.S. No.1, over 18 oz, under 4 oz and culls/No.2 potatoes and general rating of 11 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Total Yield cwt/a	U.S. No. 1 cwt/a			Over 18 oz cwt/a	Under 4 oz. cwt/a	Culls/ No.2 cwt/a	General Rating ¹ Grading	
			Total Yield	4-6 oz	6-10 oz					10-18 oz
AORTX11913-3Wre/Y	TXW/Y	765.0	517.0	238.4	205.9	72.8	3.0	231.1	14.0	4.3
TX14602-2W/Y	TXW/Y	615.9	426.9	198.1	160.4	68.4	8.9	177.8	2.3	4.0
ATX11567-1W/Y	TXW/Y	608.3	451.4	165.6	248.0	37.7	0.0	136.8	20.1	3.8
TX14670-2W/Y	TXW/Y	580.0	434.2	155.6	196.1	82.6	19.4	126.3	0.0	3.8
ATTX11591-3W/Y	TXW/Y	525.3	375.5	180.0	137.3	58.3	4.3	145.5	0.0	3.6
COTX10097-2W/Y	TXW/Y	508.4	394.0	197.7	152.6	43.7	0.0	114.4	0.0	3.7
Sierra Gold	TXW/Y	489.1	413.2	156.7	147.1	109.4	14.0	62.0	0.0	4.0
BTX1749-1W/Y	TXW/Y	476.8	410.7	119.2	140.0	151.5	11.4	54.7	0.0	3.8
ATTX11591-1W/Y	TXW/Y	431.6	233.7	143.7	70.5	19.5	0.0	198.0	0.0	4.5
Yukon Gold dal	TXW/Y	394.9	335.6	93.8	119.7	122.2	8.7	33.4	17.2	3.8
COTX14220-2W/Y	TXW/Y	342.7	179.4	124.9	54.5	0.0	0.0	163.4	0.0	3.7
Average		521.6	379.2	161.2	148.4	69.6	6.3	131.2	4.9	3.9
L.S.D. (.05)		113.1	83.1	44.9	61.4	43.1	ns	45.4	ns	0.4

¹ 1=very poor to 5= excellent

Dalhart
Table 16b.

Percent by weight of U.S. No. 1, over 18 oz, under 4 oz, culls/No.2 potatoes, specific gravity, tuber type and skin type of 11 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Dalhart, Texas-2018.

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	67.9	32.2	27.2	8.5	0.4	30.0	1.6	1.068	14.6	Round	White-Red Eye
TX14602-2W/Y	TXW/Y	69.6	32.5	25.7	11.4	1.1	28.9	0.4	1.079	16.6	Round	White
ATX11567-1W/Y	TXW/Y	74.8	27.3	41.0	6.5	0.0	21.9	3.3	1.072	15.4	Round	White
TX14670-2W/Y	TXW/Y	74.9	26.9	33.9	14.1	3.1	22.0	0.0	1.069	14.8	Round	White
ATTX11591-3W/Y	TXW/Y	72.4	33.9	27.1	11.4	0.8	26.8	0.0	1.067	14.5	Round	White
COTX10097-2W/Y	TXW/Y	77.7	39.1	30.2	8.5	0.0	22.3	0.0	1.076	16.1	Oval	White
Sierra Gold	TXW/Y	84.6	32.2	29.9	22.5	2.8	12.6	0.0	1.073	15.6	Oblong	Russet
BTX1749-1W/Y	TXW/Y	86.0	25.0	29.3	31.8	2.6	11.4	0.0	1.073	15.6	Oval	White
ATTX11591-1W/Y	TXW/Y	51.2	32.2	14.7	4.3	0.0	48.8	0.0	1.064	13.9	Round	White
Yukon Gold dal	TXW/Y	84.7	23.5	29.2	32.0	2.7	8.1	4.5	1.073	15.5	Oval	White
COTX14220-2W/Y	TXW/Y	52.4	36.4	16.1	0.0	0.0	47.6	0.0	1.068	14.6	Round	White
Average		72.4	31.0	27.7	13.7	1.2	25.5	0.9	1.071	15.2		
L.S.D. (.05)		8.6	ns	9.2	6.8	ns	6.3	2.5	0.002	0.4		

Dalhart
Table 16c.

Average number of tubers, tuber weight, percent stand 60 days after planting, plant characteristics, and percent dead vine at vine kill of 11 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
AORTX11913-3Wre/Y	TXW/Y	14.0	4.0	100	1.5	4.7	4.8	4.7	1
TX14602-2W/Y	TXW/Y	10.7	4.2	100	1.5	4.6	4.6	4.7	4
ATX11567-1W/Y	TXW/Y	9.4	4.7	100	1.5	4.5	4.7	4.7	1
TX14670-2W/Y	TXW/Y	8.7	4.9	100	1.5	4.5	3.6	4.5	23
ATTX11591-3W/Y	TXW/Y	9.0	4.6	100	1.8	4.4	4.5	4.5	2
COTX10097-2W/Y	TXW/Y	8.5	4.4	100	1.8	4.1	3.4	4.1	45
Sierra Gold	TXW/Y	5.5	6.4	100	1.5	4.6	3.8	4.7	15
BTX1749-1W/Y	TXW/Y	5.9	6.5	92	1.6	4.3	3.7	4.4	26
ATTX11591-1W/Y	TXW/Y	10.7	2.9	100	1.7	4.0	4.5	4.0	5
Yukon Gold dal	TXW/Y	4.8	6.8	91	1.5	4.1	4.5	4.3	9
COTX14220-2W/Y	TXW/Y	7.2	3.5	100	1.5	3.9	3.1	4.1	60
Average		8.6	4.8	98	1.6	4.3	4.1	4.4	17
L.S.D. (.05)		1.9	0.6	ns	ns	ns	0.4	0.3	13

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

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

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

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

Dalhart
Table 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 11 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Dalhart, Texas-2018.

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
AORTX11913-3Wre/Y	TXW/Y	1.4	1.0	1.0	4.0	2.0	4.8	5.0	5.0	4.8	5.0	5	0	33	18
TX14602-2W/Y	TXW/Y	3.4	1.0	1.5	4.0	2.0	5.0	5.0	5.0	4.8	5.0	8	0	13	38
ATX11567-1W/Y	TXW/Y	3.9	1.0	1.0	3.8	2.0	5.0	5.0	5.0	4.3	5.0	0	0	30	5
TX14670-2W/Y	TXW/Y	2.5	1.1	1.4	4.1	1.0	5.0	5.0	5.0	4.8	5.0	3	0	38	5
ATTX11591-3W/Y	TXW/Y	4.5	1.0	1.0	3.8	1.3	5.0	5.0	5.0	4.7	5.0	3	0	7	33
COTX10097-2W/Y	TXW/Y	3.8	1.8	1.5	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	5	0
Sierra Gold	TXW/Y	3.0	3.5	3.8	4.5	3.8	5.0	5.0	5.0	4.8	3.8	0	0	20	3
BTX1749-1W/Y	TXW/Y	3.6	2.5	1.5	3.9	1.0	5.0	5.0	5.0	5.0	5.0	3	0	8	3
ATTX11591-1W/Y	TXW/Y	4.3	1.0	1.0	3.9	1.0	5.0	5.0	5.0	4.7	5.0	0	0	23	13
Yukon Gold dal	TXW/Y	2.9	2.5	1.0	3.9	2.0	5.0	5.0	5.0	4.3	5.0	15	0	5	13
COTX14220-2W/Y	TXW/Y	4.6	1.0	1.3	4.0	1.5	5.0	5.0	5.0	5.0	5.0	30	0	0	0
Average		3.4	1.6	1.4	4.0	1.7	5.0	5.0	5.0	4.7	4.9	6.0	0	16	12
L.S.D. (.05)		0.3	0.2	0.2	0.2	0.3	ns			ns	0.0	11.0	0.0	18.0	15.0

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 16e.

Notes and general rating for all reps of 11 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Notes Grading	General Rating Grading
AORTX11913-3Wre/Y	TXW/Y	Very high yield++, high tuber number++, TC as Parent, Chip?, Pink splash, Parent for high tuber number and high yield, *white/pink, smooth skin, uniform size and shape	4.7, 4.5, 4, 4
TX14602-2W/Y	TXW/Y	TC, advance to yellow trial, Uniform size and shape, medium size, lacks shine+, Yukon class but medium size, very round, Buff skin+, DROP for fresh market+,	4.6, 4, 3.8, 3.7
ATX11567-1W/Y	TXW/Y	Angular, High yield, shiny++, angular++, parent+, shiny flesh color, Uniform size and shape, no for fresh market, DROP	3.8, 3.5, 4, 3.8
TX14670-2W/Y	TXW/Y	Large, buff skin+++, Uniform shape, not uniform size, a little flat, DROP for fresh market+	4, 3.6, 3.8, 3.6
ATTX11591-3W/Y	TXW/Y	Angular, High tuber number, small, angular, intense flesh color+, Parent for intense flesh color, Buff skin, uniform size,	3.5, 3.6, 3.8,
COTX10097-2W/Y	TXW/Y	Shiny, uniform size, Not uniform shape, , Buff skin, angular, mixed skin type, nice flesh color+	3.7, 3.6, 3.6, 3.7
Sierra Gold	TXW/Y	Nice, , Nice rep, high yield, medium, Russet	3.8, 4, 4.5, 3.7
BTX1749-1W/Y	TXW/Y	Large++, buff skin, dirty, snaps, a little flat, Buff skin, no for fresh market, nice flesh color++	3.8, 3.8, 3.8, 3.8
ATTX11591-1W/Y	TXW/Y	, Shiny skin, move to smalls, Parent for intense flesh color, Small, DROP, parent for intense flesh color,	4.8, 4.6, 4,
Yukon Gold dal	TXW/Y	Large, , A little angular, nice yellow flesh, Typical Yukon	3.4, 3.6, 4.4, 3.6
COTX14220-2W/Y	TXW/Y	Small pears, TC as parent for flesh color, Small shiny, move to smalls, ,	3.6, 3.7, ,

2018 4 Hill White/Yellow Selections Trial, Dalhart

The trial consisted of sixty six entries of which ten (COTX15338-1Y/Y, ATTX11633-1RYPinto/Y, ATTX11633-2R/Y, ATTX11676-1Y/Y, ATTX10327-2Y/Y, ATTX11633-4R/Y, COTX15425-2Y/Y, ATTX11633-3R/Y, ATTX10327-3Y/Y, and ATTX10301-1Pyspl/Y) will be advanced in 2019 (Table 17).

Dalhart
Table 17

Inventory weight of 10 entries to be advanced from
the 2018 4 Hill White Skin Yellow Flesh Selection
Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Inventory Weight
ATTX10301-1Pyspl/Y	4Hill18W/Y185	27.9
ATTX10327-2Y/Y	4Hill18W/Y187	8.8
ATTX10327-3Y/Y	4Hill18W/Y188	10
ATTX11633-1RYPinto/Y	4Hill18W/Y200	7
ATTX11633-2R/Y	4Hill18W/Y201	7
ATTX11633-3R/Y	4Hill18W/Y202	9.7
ATTX11633-4R/Y	4Hill18W/Y203	8.8
ATTX11676-1Y/Y	4Hill18W/Y212	8.7
COTX15338-1Y/Y	4Hill18W/Y223	2.7
COTX15425-1Y/Y	4Hill18W/Y225	8.8

Texas Advanced Small Potato Selection Trial, Dalhart

This trial consisted of twenty entries.

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

- ATX05202s-3W/Y and COTX10138s-7W/Y were the best entries based on general ratings (Tables 18a).
- ATX05202s-3W/Y had the highest total yield, COTX10138s-7W/Y had the highest marketable yield. ATX05202s-3W/Y had the highest yield of oversized tubers (Table 18a).
- COTX03134-1W had the highest yield of culls/No. 2 tubers (Table 18b).
- COTX03134-1W had the highest percentage of marketable tubers (Table 18b).
- NDTX081451CBs-1Y/Y, AORTX11913-4P, and ATX11548-1R had the highest average number of tubers per plant (Table 18c).
- All entries were medium to late in maturity, (Table 18c).
- ATTX98444S-16R/Y had the darkest yellow flesh. COTX04050s-1P/P had very dark purple flesh (Table 18d).

Comments on entries:

- | | | | | |
|---|--------------------|-------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • | ATX05202s-3W/Y | Oval | White | High yield+, high tuber number+, nice skin, not small++, a little flat, Rotten, not small, a little angular, Parent for tuber number, uniform size, Cross with yellows, move to yellow, FC=3.5 |
| • | NDTX081451CBs-1Y/Y | Round | White | Parent, Not small+++, shiny skin, uniform size+, smooth skin, High yield, FC=3.8 |
| • | AORTX11913-4P | Oval | Purple | DROP+++, attached stolons++, a little flat, not small+, rotten, high tuber number, Not uniform skin color, SE, FC=1.0 |
| • | ATX11548-1R | Round | Red | Intense skin color+, red vascular discoloration, Not uniform size, high tuber number, FC=1.0 |
| • | ATX06264s-4R/Y | Oval | Red | not small+, shiny skin, pleasant skin-flesh combination, Parent for skin and flesh color-cross with uniform size |

- and shape+, Not uniform size, Beautiful intense yellow flesh+, FC=4.0
- ATX05186s-1R Round Red DROP, Not small+++ , uniform size, medium LaSoda, SE, nice skin, FC=1.0
 - COTX04050s-1P/P Round Purple Grey skin++, marble pattern, very dark flesh, High tuber number, uniform size and shape, white center, FC=4.6
 - COTX10138s-7W/Y Round White DROP, Uniform size and shape+, some do not have splashes, Parent - cross with 3Wre/Y, purple splash around eyes+, high tuber number, shiny, FC=2.4
 - COTX10073s-1W Round White Uniform size+, some with purple splashes, not small, SE+++ , Nice smooth skin, Shiny skin, FC=1.0
 - TX09406s-1P/P Round Purple Rotten, grey skin+, uniform flesh, uniform size and shape, Marble pattern+, some white center++, FC=3.9
 - ATTX98444s-16R/Y Round Red A little flat+, nice flesh, Uniformly small, red skin, pleasant flesh combination, Netted scab, silver scurf, FC=3.9
 - COTX03134-1W Round White Parent for small and high tuber number, high, snaps, KNOBS, road map, skin mixed yellow and white+, DROP+, FC=1.0
 - NDTX1287B-1W Round White Uniform size and shape, buff skin, Not small, FC=1.0

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

Summary:

ATX05202s-3W/Y and COTX10138s-7W/Y were the best entries in this trial.

Dalhart
Table 18a.

Total yield, marketable yield, over sized, and culls/No.2 potatoes and general rating of
13 entries in the Texas Advanced Small Potato Selection Trial grown near Dalhart,
Texas-2018.

Variety or Selection	Trial	Total Yield cwt/a	Marketable Yield cwt/a	Over Sized cwt/a	Culls/ No.2 cwt/a	General Rating ¹ Grading
ATX05202S-3W/Y	TXSM	578.4	102.5	470.8	5.0	4.0
NDTX081451CBS-1Y/Y	TXSM	548.4	107.3	441.1	0.0	3.8
AORTX11913-4P	TXSM	528.0	141.4	386.6	0.0	3.5
ATX11548-1R	TXSM	519.8	147.8	372.0	0.0	3.6
ATX06264S-4R/Y	TXSM	474.0	113.5	360.6	0.0	3.7
ATX05186-1R	TXSM	447.7	90.4	357.4	0.0	3.7
COTX04050S-1P/P	TXSM	436.7	118.1	318.7	0.0	3.7
COTX10138S-7W/Y	TXSM	431.9	168.2	263.8	0.0	4.0
COTX10073S-1W	TXSM	398.1	113.9	284.1	0.0	3.8
TX09406S-1P/P	TXSM	354.4	119.7	234.7	0.0	3.8
ATTX98444S-16R/Y	TXSM	351.6	130.6	221.0	0.0	3.6
COTX03134-1W	TXSM	295.8	160.1	121.3	14.4	3.6
NDTX1287B-1W	TXSM	284.1	77.1	207.0	0.0	3.6
Average		434.5	122.3	310.7	1.5	3.7
L.S.D. (.05)		78.0	37.1	73.5	ns	0.2

¹ 1=very poor to 5= excellent

Dalhart
Table 18b.

Percent by weight of U.S. No. 1, over 18 oz, under 4 oz, culls/No.2 potatoes, specific gravity, tuber type and skin type of 13 entries in the Texas Advanced Small Potato Selection Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
		Total Marketable Yield	Over Sized	Culls/ No. 2				
ATX05202S-3W/Y	TXSM	17.8	81.3	0.8	1.084	17.5	Oval	White
NDTX081451CBS-1	TXSM	19.3	80.7	0.0	1.072	15.3	Round	White
AORTX11913-4P	TXSM	27.4	72.6	0.0	1.057	12.6	Oval	Purple
ATX11548-1R	TXSM	29.2	70.8	0.0	1.067	14.5	Round	Red
ATX06264S-4R/Y	TXSM	23.7	76.3	0.0	1.064	13.9	Oval	Red
ATX05186-1R	TXSM	21.1	78.9	0.0	1.067	14.4	Round	Red
COTX04050S-1P/P	TXSM	27.3	72.7	0.0	1.069	14.8	Round	Purple
COTX10138S-7W/Y	TXSM	38.8	61.2	0.0	1.067	14.4	Round	White
COTX10073S-1W	TXSM	29.1	70.9	0.0	1.080	16.7	Round	White
TX09406S-1P/P	TXSM	35.3	64.7	0.0	1.062	13.6	Round	Purple
ATTX98444S-16R/Y	TXSM	37.3	62.7	0.0	1.071	15.3	Round	Red
COTX03134-1W	TXSM	54.9	39.9	5.3	1.070	15.0	Round	White
NDTX1287B-1W	TXSM	26.8	73.2	0.0	1.084	17.5	Round	White
Average		29.8	69.7	0.5	1.070	15.0		
L.S.D. (.05)		9.0	9.2	ns	0.006	1.1		

Dalhart
Table 18c.

Average number of tubers, tuber weight, percent stand 60 days after planting, plant characteristics, and percent dead vine at vine kill of 13 entries in the Texas Advanced Small Potato Selection Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
ATX05202S-3W/Y	TXSM	11.6	3.6	100	1.5	4.9	4.3	4.9	6
NDTX081451CBS-1Y	TXSM	13.5	3.0	100	1.5	4.9	4.8	4.9	1
AORTX11913-4P	TXSM	15.7	2.4	100	1.5	4.9	4.8	5.0	1
ATX11548-1R	TXSM	13.4	2.8	100	1.5	4.5	4.9	4.5	0
ATX06264S-4R/Y	TXSM	11.4	3.1	100	1.5	4.4	4.4	4.4	11
ATX05186-1R	TXSM	9.1	3.9	100	1.5	4.3	4.9	4.4	0
COTX04050S-1P/P	TXSM	12.8	2.5	100	1.5	4.9	5.0	4.9	0
COTX10138S-7W/Y	TXSM	11.6	2.8	100	1.5	4.2	3.9	4.3	15
COTX10073S-1W	TXSM	10.6	2.8	100	1.6	4.3	5.0	4.4	0
TX09406S-1P/P	TXSM	11.5	2.4	96	1.6	3.9	3.7	4.0	20
ATX98444S-16R/Y	TXSM	11.2	2.3	100	1.5	4.7	3.9	4.8	15
COTX03134-1W	TXSM	11.6	1.9	100	1.6	4.3	4.0	4.5	10
NDTX1287B-1W	TXSM	7.1	2.9	100	1.5	5.0	4.9	5.0	0
Average		11.6	2.8	100	1.5	4.5	4.5	4.6	6
L.S.D. (.05)		2.2	0.6	ns	ns	0.3	0.3	0.3	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

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 13 entries in the Texas Advanced Small Potato Selection Trial grown near Dalhart, Texas-2018.

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
ATX05202S-3W/Y	TXSM	3.5	2.3	1.0	4.0	1.0	5.0	5.0	5.0	4.5	5.0	3	0	40	0
NDTX081451CBS-1Y/Y	TXSM	3.0	1.3	1.0	4.0	2.0	5.0	5.0	5.0	4.8	5.0	0	3	38	0
AORTX11913-4P	TXSM	1.0	2.0	1.0	4.0	4.2	5.0	5.0	5.0	5.0	5.0	0	0	50	3
ATX11548-1R	TXSM	1.0	1.8	1.0	3.9	4.0	5.0	5.0	5.0	5.0	5.0	0	0	30	0
ATX06264S-4R/Y	TXSM	4.0	1.9	1.0	3.9	3.7	5.0	5.0	5.0	5.0	5.0	0	0	10	0
ATX05186-1R	TXSM	1.0	1.0	1.0	3.8	3.5	5.0	5.0	5.0	5.0	5.0	0	0	48	0
COTX04050S-1P/P	TXSM	4.6	1.0	1.0	4.0	5.0	5.0	5.0	5.0	4.8	5.0	0	0	0	0
COTX10138S-7W/Y	TXSM	2.4	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	3	0	25	0
COTX10073S-1W	TXSM	1.0	1.0	1.0	4.0	3.0	5.0	5.0	5.0	4.5	5.0	0	0	70	0
TX09406S-1P/P	TXSM	3.9	1.0	1.0	4.0	5.0	4.8	5.0	5.0	5.0	5.0	0	0	0	0
ATX98444S-16R/Y	TXSM	3.9	1.1	1.0	4.0	3.1	5.0	5.0	5.0	5.0	5.0	0	0	5	10
COTX03134-1W	TXSM	1.0	1.0	1.0	4.5	1.0	5.0	5.0	5.0	3.5	5.0	3	5	20	8
NDTX1287B-1W	TXSM	1.0	1.4	1.4	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	13	0
Average		2.4	1.4	1.0	4.0	2.9	5.0	5.0	5.0	4.8	5.0	1	1	27	2
L.S.D. (.05)		0.1	0.3	0.1	0.2	0.8	ns	0.0	0.0	0.4	0.0	ns	0	23	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 13 entries in the Texas Advanced Small Potato Selection Trial grown near Dalhart, Texas-2018.

Variety or Selection	Trial	Notes Grading	General Rating Grading
ATX05202S-3W/Y	TXSM	High yield+, high tuber number+, nice skin, not small++, a little flat, Rotten, not small, a little angular, Parent for tuber number, uniform size, Cross with yellows, move to yellow	4, 3.8, 4, 4.3
NDTX081451CBS-1Y	TXSM	Parent, Not small+++ , shiny skin , uniform size+, smooth skin, High yield,	3.8, 3.7, 3.8, 3.7
AORTX11913-4P	TXSM	DROP+++ , attached stolons++ , a little flat, not small+, rotten, high tuber number, Not uniform skin color, SE	3.4, 3.4, 3.7, 3.4
ATX11548-1R	TXSM	Intense skin color+, red vascular discoloration, Not uniform size, high tuber number, ,	3.5, 3.6, ,
ATX06264S-4R/Y	TXSM	not small+, shiny skin, pleasant skin-flesh combination, Parent for skin and flesh color-cross with uniform size and shape+, Not uniform size, shiny, Beautiful intense yellow flesh+	3.7, 3.8, 3.6, 3.6
ATX05186-1R	TXSM	Not small+++ , uniform size, DROP, medium LaSoda, SE, , nice skin	3.6, 3.8, 3.8, 3.5
COTX04050S-1P/P	TXSM	Grey skin++ , marble pattern, very dark flesh, , High tuber number, uniform size and shape, white center	3.6, 3.7, 3.8, 3.6
COTX10138S-7W/Y	TXSM	Uniform size and shape+, DROP, some do not have splashes, Parent - cross with 3Wre/Y, purple splash around eyes+, high tuber number, shiny, ,	3.7, 4.2, 4.2, 3.8
COTX10073S-1W	TXSM	Uniform size+, some with purple splashes, not small, SE+++ , Nice smooth skin, Shiny skin	3.7, 3.7, 3.8, 3.8
TX09406S-1P/P	TXSM	Rotten, grey skin+, uniform flesh, uniform size and shape, Marble pattern+, some white center++ ,	3.6, 3.7, 4, 3.8
ATX98444S-16R/Y	TXSM	A little flat+, nice flesh, Uniformly small, red skin, pleasant flesh combination, , Netted scab, silver scurf	3.6, 3.6, 3.5, 3.6
COTX03134-1W	TXSM	Parent for small and high tuber number, high tuber number, snaps, KNOBS, road map, skin mixed yellow and white+, DROP+, ,	3.7, 3.6, 3.5, 3.4
NDTX1287B-1W	TXSM	Uniform size and shape, buff skin, , Not small,	3.7, 3.6, 3.6, 3.6

2018 4 Hill Small Potato Selections Trial, Dalhart

The trial consisted of sixteen entries of which one (NDTX1467C-1R) will be advanced in 2019 (Table 19).

Dalhart
Table 19

Inventory weight of 1 entry to be advanced from the
2018 4 hill Small Potato Selection Trial grown near
Dalhart, Texas-2018.

Variety or Selection

Trial

Inventory Weight

NDTX1467C-1R

4Hill18Small132

1.9

2018 4 Hill Fingerling Selection Trial, Dalhart

The trial consisted of six entries of which one (ATX11586-2R/Y) will be advanced in 2019 (Table 20).

Dalhart
Table 20

Inventory weight of 1 entry to be advanced from the
2018 4 hill Fingerling Selection Trial grown near
Dalhart, Texas-2018.

Variety or Selection	Trial	Inventory Weight
NDTX1467C-1R	4Hill18Fing139	38.5

Appendix A. General notes on potato varieties or selections- 2018.

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

A06030-23-Long 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: nice shape, high tuber number Nice skin, Medium size, good russet skin, large

Weakness: blocky+, knobs+, growth cracks, light eyes, many eyes

Cutting Notes: nice russet skin, pressure cracks

A07061-6-Blocky White. 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: nice long white+, nice shape, uniform shape smooth skin++, nice shape, oblong

Weakness: Light skin (too light), some buff skins

Cutting Notes: lighter skin, pressure cracks

A071012-4BF-Long Russet. Parentage (A85331-7 x A01054-4). Cross was made and selected in Idaho. Medium late maturity. Medium-large vine size. White flower color.

Uses: dual

Strength:

Weakness: Knobs+++ , Long, not uniform size, not good russet skin, large tuber number, greens

Cutting Notes: light russeting

A07769-4- Oblong Russet. Parentage (PA01N32-1 x Premier Russet). Cross was made and selected in Idaho. Medium early maturity. Small vine size. Red-purple flower color.

Uses: dual

Strength: nice skin++, Uniform size, golden russet

Weakness: very light russet or not good skin set, deformed tubers, it does not look russet, enlarged lenticels Smaller few tubers

Cutting Notes: golden skin, bulky, light russeting

A08433-4VR-Oblong 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: High tuber number+ nice skin uniform size+

Weakness: not uniform size or shape, small, not good skin set a little flat

Cutting Notes: uneven russeting, pointy

A10021-5TE-Very Long Russet. Parentage (A03921-2 x Mountain Gem Rus). Cross was made and selected in Idaho. Early maturity. Small vine size. White flower color.

Uses: dual

Strength: nice, high tuber number

Weakness: thin, pointy++++, Very long+++++, skinny

Cutting Notes: nice russet skin

AC01144-1W- Oval 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: uniform

Weakness: most tubers are small and medium, some large tubers+, buff skin+, attached stolons+, light set, small

Chip Notes: CR=1.6, 61% Good chip

Cutting Notes: small

AC10376-1W/Y-Oval White. Parentage (Gala x Granola). Cross was made in Idaho and selected in Colorado. Medium late maturity. Large vine size. White flower color

Uses: fresh

Strength: high tuber number+,

Weakness: very few tubers, secondary growth+, knobs+++ small+, angular+, pointed, FC=3.4, FC=3.5

Cutting Notes: oval, intense yellow flesh

Alegria- Oval White. Parentage (Divina x 3.169 010-86). Cross was made and selected in Germany. Medium maturity. Medium-large vine size.

Uses: fresh

Strength: large tubers+, lemon flesh, nice shape, smooth skin, medium-large tubers, medium size,

Weakness: KNOBS+, pointy+, angular+, FC=3.3, FC=3.5

Cutting Notes: yellow greenish flesh

AO02183-2-Oblong 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: Nice skin, nice shape, high tuber number+, nice type

Weakness: knobs+, skinny+, very small, few tubers, pointy+, enlarged lenticels

Cutting Notes: pointy, skinny

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 russet skin++, some nice blocky shapes nice shape+, good skin

Weakness: Low tuber number++, few tubers+, a little angular

Cutting Notes: nice russet skin, bulky

AOR06576-1-Long Russet. Parentage (AO0487-22LB x A93575-4). Cross was made in Idaho and selected in Oregon. Late maturity. Medium-large vine size. White flower color.

Uses: fresh

Strength: Very high tuber number+, uniform size and shape, golden russet skin+, medium size,

BOT+, high tuber number+++, parent for high tuber number

Weakness: light russet, not uniform size, knobs++,

Cutting Notes:

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: Intense russet skin, Good russet skin high yield, Test for zc tolerance and parent, ask

Rich

Weakness: knobs++, pointy++, noticeable eyes, little tubers on eyes, greens, long, noticeable lighter eyes, rough, soft ends (stolon side)

Cutting Notes: yellow flesh, deep eyes, blocky

AOR07821-1-Oblong Russet. Parentage (WHA4052-1 x Clearwater Russet). Cross was made in Idaho and selected in Oregon. Medium-maturity. Medium vine size. Lavender-Purple flower color.

Uses: process

Strength: very high tuber number+++, medium size, good russet skin, blocky

Weakness: small-medium size a little angular+, knobs

Cutting Notes: flat, enlarged lenticels

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: nice, snap+, very uniform size and shape+, high tuber number Smaller, Medium size

Smooth skin, uniform size

Weakness: Shoulders some attached stolon

Chip Notes: CR=2.0, 73% Good chip, 2 IBD

Cutting Notes: nice skin, uniform size and shape

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: medium size, uniform size and shape, high tuber number+, nice white flesh

Weakness: not uniform size+, mixed? (some russets)

Chip Notes: CR=1, 62% Good chip

Cutting Notes: knobs, not uniform size and shape

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

Uses: chip

Strength:

Weakness: knobs, few tubers

Chip Notes: CR=1.6, 70% Good chip, BOT, Nice

Cutting Notes: skinny, scab, flat, shriveled

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

Uses: chip

Strength: snaps

Weakness: very large++, low yield, some large tubers+, a little flat, very few tubers++, DROP++

Chip Notes: CR=2.0, 67% Good chip, BOT, 1 GH, Shape-

Cutting Notes: skinny, uniform size

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: very high tuber number++ advance fast, impressive yield, WINNER, very uniform,

medium size, BOT++

Weakness: SCAB, some large tubers, some skin color variation

Chip Notes: CR=2.3, 71% Good chip, 1 IBS, 1 GH

Cutting Notes: scab, uniform size and shape, small tubers, round

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

Uses: chip

Strength: Nice, high tuber number+, uniform shape, TC, BOT, snaps, breaks at cutting

Weakness: scab not uniform size some variation for skin color

Chip Notes: CR=2.9, 66% Good chip, DROP?

Cutting Notes: uniform, greenheads

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: snaps, BOT+, nice size, advance uniform size and shape+++, high tuber number++, small-medium

Weakness: smaller tubers, not uniform skin texture

Chip Notes: CR=1.5, 75% Good chip, Nice, 2 IBS

Cutting Notes: uniform size and shape, nice skin

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

Uses: chip

Strength: BOT High tuber set+, medium size, nice

Weakness: a little flat, buff skin, some variation for high tuber number and skin type, heat sprouts, knobs, linked tubers, DROP++

Chip Notes: CR=2.9, 68% Good chip, ugly

Cutting Notes: not uniform tuber size, some shriveling

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: smooth skin, uniform size and shape, shiny+*pink eye shade+, nice, smooth skin+, smooth cut, high tuber number, TC as Parent, Chip?, pink splash, parent for high tuber number

Weakness: Heat sprouts+++ , FC=1.4, FC= 1.0

Cutting Notes: small, uniform, light yellow flesh

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

Uses: fresh

Strength: high tuber number, Intense purple skin+,

Weakness: DROP+++ , attached stolons++ , a little flat, not small+, rotten, not uniform skin color, SE, sticky stolons+, *mixed of darker purple and lighter in skin color+, skin color radiation, low tuber set, not uniform size, FC=1.0, FC=1.0

Cutting Notes: not uniform size, attached stolons

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: nice shape+, medium size+

Weakness: low yield, few tubers, not uniform size, small-medium, low tuber number

Cutting Notes: some wrinkled

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: internals? poor internals

Chip Notes: CR=2.5, 30% Good chip1 HH

Cutting Notes: very large, ugly

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: bright skin, Very small++, high tuber set+ Pleasant skin color

Weakness: not uniform size+ a little compressed, parent only small, deep eyes FC=3.4, FC=4.3

Cutting Notes: very intense yellow flesh

ATTX10007-1Ru-Russet. Parentage (A02060-3TE x A05013-5TE). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength:

Weakness:

ATTX10008-1Ru-Russet. Parentage (A02060-3TE x Stampede Russet). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength:

Weakness:

ATTX10067-1Ru-Russet. Parentage (A01010-1 x Stampede Russet). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength:

Weakness:

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: uniform size, nice very nice skin flesh combination+, shiny skin parent for flesh color beautiful yellow flesh high tuber number, BOT, healthy looking tubers nice++, keep, no pink streaks

Weakness: a little flat+, heat sprouts pointy+, snowmen+, pears, FC=4.5, FC=3.4

Cutting Notes: nice seed, small

ATTX10270-2P/Y-Purple/Yellow. Parentage (A02267-5PY x NorDonna). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength:

Weakness:

ATTX10286-1R/Y-Red/Yellow. Parentage (US 147-96R/Y x NorDonna). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength:

Weakness:

ATTX10301-1Pyspl/Y-Purple Splash/Yellow. Parentage (A03576-5Y x NorDonna). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength:

Weakness:

ATTX10327-2Y/Y-Yellow /Yellow. Parentage (A03576-5Y x CO00412-5W/Y). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength:

Weakness:

ATTX10327-3Y/Y- Yellow/Yellow. Parentage (A03576-5Y x CO00412-5W/Y). Cross was made in

Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength:

Weakness:

ATTX10333-1W-White Parentage (AFA3976TPS-1 x NY139). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: chip

Strength:

Weakness:

ATTX10378-3Ru/Y-Russet/Yellow. Parentage (Granola x CO00412-5W/Y). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength:

Weakness:

ATTX10389-1W-White. Parentage (Marike x NY139). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: chip

Strength:

Weakness:

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

Uses: fresh

Strength: shiny skin, move to smalls, parent for intense flesh color, small,

Weakness: DROP, FC=4.3

Cutting Notes: intense yellow flesh

ATTX11591-3W/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: high tuber number, small intense flesh color+, parent for intense flesh color, buff skin, uniform size

Weakness: large, angular+, FC=4.5, FC=4.5

Cutting Notes: intense yellow flesh

ATTX11617-2R-Red. Parentage (US147-96R/Y x ND8555-8R). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength:

Weakness:

ATTX11633-1RYPinto/Y-Red Yellow pinto/Yellow. Parentage (Pinto x ND8555-8R). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength:

Weakness:

ATTX11633-2R/Y-Red/Yellow. Parentage (Pinto x ND8555-8R). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength:

Weakness:

ATTX11633-3R/Y-Red/Yellow. Parentage (Pinto x ND8555-8R). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength:

Weakness:

ATTX11633-4R/Y-Red/Yellow. Parentage (Pinto x ND8555-8R). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength:

Weakness:

ATTX11676-1Y/Y-Yellow/Yellow. Parentage (POR02PG26-5 x Mila). Cross was made in Idaho, tuberling produced in Texas, and selected in Texas.

Uses: fresh

Strength:

Weakness:

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: nice flesh, uniformly small, red skin, pleasant flesh combination, uniform size+, nice, smooth skin, nice skin color

Weakness: a little flat+, netted scab, silver scurf, low tuber set, FC=3.9, FC=2.9

Cutting Notes: small, intense yellow flesh, shriveled seed

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

Uses: fresh

Strength: intense red skin++, small, smooth skin, parent, high tuber number, uniform size

Weakness: low tuber set++, small, pear shape, few tubers++, rain drop shape FC=2.1, FC=3.0

Cutting Notes: pointy, intense red skin color,

ATX05186s-1R- Round Red. Parentage (A99433-5Y x VC1075-1R). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength: pretty red, nice skin, nice size uniform size, nice skin

Weakness: not small+++ , DROP, medium LaSoda, SE, very few tubers, FC=2.5, FC=1.0,
FC=1.0

Cutting Notes: nice skin

ATX05202s-3W/Y-Oblong White/Yellow. Parentage (A00286-3Y x A99433-5Y). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength: high yield+, high tuber number+, nice skin, cross with yellows, move to yellow

Weakness: not small++, a little flat, rotten, a little angular low tuber set+, sticky stolons+, bruised skin, FC=3.3, FC=3.5

Cutting Notes: uniform size, intense yellow flesh

ATX06264s-4R/Y-Round Red/Yellow. Parentage (A99331-2RY x Durango Red). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength: shiny skin, pleasant skin-flesh combination, parent for skin and flesh color-cross with uniform size and shape+, nice skin color,

Weakness: not small+, not uniform size*mixed (darker and lighter skin), FC=2.8, FC=4.0

Cutting Notes: intense yellow flesh, rotten tubers

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

Uses: fresh

Strength: TC? promote?, ask Kelly, very uniform size and shape+, smooth skin, high tuber number+, shiny, uniformly small+, nice skin

Weakness: FC=3.0

Cutting Notes: uniform size and shape

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

Uses: fresh

Strength: nice shape, Medium tubers, high tuber set, BOT+++ , Medium size, nice+, dark red eyes+, Attractive, red-orange skin color Uniform size and shape+

Weakness: Light skin color+

Cutting Notes: cream flesh

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

Uses: fresh

Strength:

Weakness: not uniform shape, bulky, attached stolons roundish+, small tubers, enlarged lenticels+, DROP, small, round to oblong

Cutting Notes: blocky, nice russet skin

ATX11382-2Ru-Russet. Parentage (AO01114-4 x A01325-1). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength:

Weakness:

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

Uses: chip

Strength: snaps+

Weakness: not uniform size++, mixed russet and smooth skin, DROP, round to oval, large tubers++, attached stolons

Chip Notes: CR=1.8, 49% Good chip, 8 Oily centers

Cutting Notes: large tubers

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

Uses: fresh

Strength:

Weakness:

Cutting Notes: Dropped at Dalhart cutting, growth cracks, few tubers

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

Uses: fresh

Strength: Intense skin color+, high tuber number

Weakness: red vascular discoloration, not uniform size FC=1.0

Cutting Notes: intense skin color

ATX11549-1P/Y-Oval Purple/Yellow. Parentage (Huckleberry Gold x ND8555-8R. Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength: medium size, high yield, Halloween potato, nice

Weakness: TC? Wait to see in replicated trials FC=3.0

Cutting Notes: large tubers

ATX11556-1P/Y-Round Purple/Yellow. Parentage (A99331-2RY x NDA050237B-1R. Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength: high tuber number, small+, smooth skin

Weakness: FC=3.5

Cutting Notes: round, clean skin

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

Uses: fresh

Strength: lemon flesh, smooth skin, high tuber number, high yield, shiny++ parent+, shiny flesh color, uniform size and shape

Weakness: knobs angular+++ no for fresh market, DROP, FC=3.9, FC=4.0

Cutting Notes: very intense yellow flesh

ATX11586-1R/Y-Red/Yellow. Parentage (A05173-2RY x Mila). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength:

Weakness:

ATX11586-2R/Y-Red/Yellow. Parentage (A05173-2RY x Mila). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength: fingerling

Weakness:

ATX11593-1R/Y-Red/Yellow. Parentage (A05175-7RY x POR02PG26-5). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength:

Weakness:

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

Uses: fresh

Strength: light skin+, golden skin, higher tuber set Uniform size, medium size+++ , uniform shape, creamy flesh+ parent, cross with heavy russet, nice shape

Weakness: not uniform russet, large knobs+++ , bulky

Cutting Notes: light russet skin, golden skin color

ATX13018-1Ru-Russet. Parentage (A06015-13TE x A06084-1TE). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength:

Weakness:

ATX13018-2Ru-Russet. Parentage (A06015-13TE x A06084-1TE). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength:

Weakness:

ATX13046-1Ru-Russet. Parentage (Blazer Russet x AO02183-2). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength:

Weakness:

ATX13065-3Ru-Russet. Parentage (NDA070929B-1 x Premier Russet). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength:

Weakness:

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

Uses: fresh

Strength:

Weakness: skinny, curved tubers, sprouts+ pointy+, a little pointy, enlarged lenticels

Cutting Notes: not uniform size

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

Uses: chip

Strength:

Weakness: DROP, not uniform size++, some large tubers

Chip Notes: CR=4.0, 0% Good chip, 1 GH, DROP

Cutting Notes: small, nice skin

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

Uses: chip

Strength:

Weakness: DROP+, not uniform size, too large, mixed white and yellow flesh,

Chip Notes: CR=3.0, 50% Good chip, Shape-, 1 GH, 1 HH

Cutting Notes: dislike shape

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

Uses: chip

Strength:

Weakness: DROP+, not uniform size, small russet, low tuber number,

Chip Notes: CR=2.0, 60% Good chip

Cutting Notes: small, rough skin

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

Uses:

Strength: Medium-large tuber, smooth skin+, high tuber set nice

Weakness: Large, green heads

Chip Notes: CR=1.9, 50% Good chip, Nice color, Nice

Cutting Notes: nice skin, uniform

ATX14003-1Ru-Russet. Parentage (A07001-7TE x CO99100-1Ru). Cross was made in Idaho and selected in Texas.

Uses: fresh

Strength:

Weakness:

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: *very long, linked tubers, knobs, heat sprouts++, linked tubers++, not uniform shape nor size, large fingerling, more culls, some large , FC=2.1, FC=3.0

Cutting Notes: ugly, yellow flesh

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: golden, relaxed russet pattern, snaps nice flesh color++

Weakness: dirty look large, few tubers rough skin, a little flat, no for fresh market, FC=2.6, FC=3.6

Cutting Notes: uniform size

BTX2103-1R/Y-Oblong 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: yellow lemon color+, snaps+,

Weakness: not uniform, small tubers++, uneven skin color, very few tubers, angular+, a little flat, shape problems, DROP, FC=4.0, FC=3.6

Cutting Notes: medium size tubers

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

Uses: fresh

Strength: nice+, good yield

Weakness: silver scurf, a little flat+ light skin,

Cutting Notes: nice shape

CO06215-2R-Oval Red Parentage (??). Cross was made and selected in Colorado.

Uses: fresh

Strength: nice, shallow eye, intense skin color, shiny, smooth

Weakness: stem end+,

Cutting Notes: ,

CO08037-2P/P-Round 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: uniform shape very dark skin, round, nice shape, shiny skin, very dark flesh

Weakness: 90% with white center+, noticeable eyebrows very few tubers+, white center+++
sticky stolons, small, FC=4.5, FC=4.5

Cutting Notes: intense purple flesh and skin

CO08155-2RU/Y-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: nice shape++, parent for yellow flesh russet, nice shape, medium size, uniformed size

Weakness: not uniform russet skin+++
small tubers, enlarged lenticels++, medium-small, low tuber set

Cutting Notes: nice russetting, uniform size and shape

CO08231-1RU-Oblong 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 russet skin

Weakness: one big heart+, not uniform size+, small+ light russet skin, skin blemishes, medium-small+, not uniform size, round to oblong

Cutting Notes: small, light russet

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: good russet

Weakness: skinny++, pointy+++, very small tubers++, long, small, few tubers+

Cutting Notes: skinny, nice russetting

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: good skin

Weakness: long, pointy+++++, knobs++, pointy, few tubers+, skin blemishes

Cutting Notes: a little flat

CO09079-5PW/Y-Oval 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:

Weakness: no pattern, small, low tuber number+, knobs, no PW/Y, Light spectacle pattern++, Very small tubers+, heat sprouts, pattern+, small, yellow purple skin, Low tuber set, sticky flesh, FC=3.4, FC=4.5

Cutting Notes: very 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: hard to cut, high tuber number intense flesh color

Weakness: small, pointy, knobs, growth cracks small, very small+, late?, road map, soapy flesh+,
FC=4.0, FC=4.0

Cutting Notes: small

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: uniform size+ and shape, round, high tuber set+, very intense flesh,

Weakness: *internal heat necrosis+++, smalls++, variable flesh color, road map+, pink eyes,
FC=4.4, FC=4.1

Cutting Notes: intense yellow flesh, flat

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

Uses: dual

Strength: very high tuber number+, nice skin+, golden russet skin, nice, some nice shapes
uniform shape

Weakness: small-medium size, most are small, moons, 20% SE a little pointy+, few tubers

Cutting Notes: pointy

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: snaps+

Weakness: knobs+++, linked tubers++, very few tubers+, buff skin, attached stolons+, few
tubers+, heat sprouts+++, low tuber number, variation for flesh color+, FC=3.8, FC=4.0

Cutting Notes: intense yellow flesh

CO10064-1W/Y-Round White/Yellow. Parentage (CO00412-5W/Y x CO04099-4W/Y). Cross was made and selected in Colorado. Medium maturity. Large vine size. Purple flower color

Uses: fresh

Strength: Uniform size

Weakness: few tubers, small pointy, small+, pink eyes+, FC=3.1, FC=3.3

Cutting Notes: oval, flat

CO10073-7W-Round White. Parentage (CO02321-4W x CO02024-9W). Cross was made and selected in Colorado. Late maturity. Large vine size. White flower color

Uses: chip

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

Weakness: green heads greens/rot, some large

Chip Notes: CR=1.4, 78% Good chip, BOT

Cutting Notes:

CO10076-4W-Round White. Parentage (CO03243-3W x CO02024-9W). Cross was made and selected in Colorado. Medium maturity. Medium small vine size. White flower color

Uses: chip

Strength: uniform size high tuber set nice

Weakness: knobs, medium-large tubers, flesh browns fast, some attached stolons

Chip Notes: CR=1.6, 68% Good chip, 1 Insect

Cutting Notes: large

CO10087-4RU-Long Oblong Russet. Parentage (CO03367-1RU x Mercury Russet). Cross was made and selected in Colorado. Early maturity. Medium vine size. White flower color

Uses: fresh

Strength: high tuber number, some nice shapes+, nice skin+, nice shape

Weakness: knobs++, growth cracks+, not uniform size, 70% SE, few tubers

Cutting Notes: very nice russeting, uniform size and shape

CO10091-1RU-Oblong Russet. Parentage (CO03371-4RU CO98067-7RU). Cross was made and selected in Colorado. Medium maturity. Medium vine size. White flower color

Uses: fresh

Strength: uniform shape and size

Weakness: small roundish+, round-long, some blocky+, medium, enlarged lenticels, few tubers, pointy, skin with bee hives area, medium size+, very few tubers, not uniform russet skin

Cutting Notes: nice russeting, a little flat

CO10097-2W/Y-Round White/Yellow. Parentage (CO04067-10W/Y x CO00412-5W/Y). Cross was made and selected in Colorado. Medium maturity. Large vine size. White flower color

Uses: fresh

Strength: uniform size and shape++, snaps, high tuber number, nice, good size

Weakness: buff skin+, chipper?+, watery flesh, soapy flesh++, medium size+ russeting, FC=3.5, FC=3.8

Cutting Notes:

CO10098-4W/Y-Round White/Yellow. Parentage (CO04099-3W/Y x CO04099-4W/Y). Cross was made and selected in Colorado. Medium maturity. Medium large vine size. Dark red purple flower color.

Uses: fresh

Strength: high tuber set small uniform size+

Weakness: not uniform size, late?, small+, soapy flesh, sprouts++, secondary growth++, skin blemishes *internal heat necrosis+, knobs, FC=4.3, FC=4.0

Cutting Notes: oval, very intense yellow flesh

CO10098-5W/Y-Oblong White/Yellow. Parentage (CO04099-3W/Y x CO04099-4W/Y). Cross was made and selected in Colorado. Medium maturity. Medium vine size. Red purple flower color.

Uses: fresh

Strength: beautiful flesh parent for color very intense dark yellow flesh,

Weakness: very few tubers++, knobs+++, DROP++, Soapy flesh, snowmen, FC=4.7, FC=4.8

Cutting Notes: nice shape, uniform

CO98012-6R-Round Red. Parentage (A79543-4R x AC91844-2). Cross was made and selected in Colorado. Medium maturity. Medium vine size. Purple flower color

Uses: fresh

Strength: nice uniform size and shape, shiny, intense red skin nice, BOT+

Weakness: silver scurf+++ small+ not uniform size

Cutting Notes:

CO99076-5R-Round Red. Parentage (AC91848-1 x Rio Colorado). Cross was made and selected in Colorado.

Uses: fresh

Strength: beautiful skin color BOT+++ , very intense red skin, uniform size and shape, large tubers+, bright skin color, smooth skin, Nice

Weakness: some skin blemishes, silver scurf

Cutting Notes:

COTX00104-6R-Oval 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: snaps, very intense skin color++

Weakness: bad skin, scurf, very large+, oblong, ugly skin, drop, too large, lenticels++, netted skin, dull skin+, road map, few tubers

Cutting Notes: reddish purplish skin color

COTX02293-4R-Red. Parentage (NDC5281-2R x ND3574-5R). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength: intense bright color, medium size, BOT++, beautiful skin color+, nice+, shiny, uniform shape and size medium-small, nice tubers

Weakness: but not many, silver scurf

Cutting Notes: intense skin color, nice shape

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: parent for small and high tuber number+, snaps, very small+++ , uniform size and shape
Weakness: knobs, road map, skin mixed yellow and white+, DROP+, road map, tuber linking
heat sprouts, FC=1.0, FC=1.0
Cutting Notes: small

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: very dark flesh, high tuber number, uniform size and shape, very intense purple+
Weakness: grey skin++, marble pattern, white center, late+, lots of heat sprouts++, attached stolons++, Drop, chain tubers, heat susceptible, FC=5.0, FC=4.6
Cutting Notes: small

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: smooth skin, few eyes (Save as parent, Tasteful Selections?, send for Dallas Extension children), uniform size and shape, small Intense skin color+++, Small+, nice flesh skin color combination++ Nice, BOT
Weakness: silver scurf++, VD is red, a little flat, not uniform size sticky stolons, chain tubers
FC=4.0, FC=4.5
Cutting Notes: very intense yellow flesh

COTX05095-2Ru/Y-Long 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: Some nice shapes+, include in NFPT (French Processing trials), nice flesh, check specific gravity/ chips, Promote, Parent, cross with heavy russet yellow flesh, high tuber number, nice shape, light skin, yellow flesh
Weakness: knobs, road map, light skin, not good russet skin, medium size
Cutting Notes: yellow flesh, bulky, shrinkage

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

Uses: fresh

Strength: high tuber set, shiny, nice, lots of tubers

Weakness: not uniform small tubers+

Cutting Notes: uniform size and shape

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

Uses: fresh

Strength: some nice shapes, bulky, nice shape, medium size uniform shape and size++, nice shape, most medium size

Weakness: blocky, not uniform size, roundish, not uniform size, root marks on tuber SE, skin blemishes,

Cutting Notes: nice russet skin, parent

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: red eyes good yield, round high yield+, roundish+, high tuber number,

Weakness: not uniform size, a few linked tubers, not uniform russet, Netted russets no fresh marks, *under skin brown spots? some bruising, SE 30%

Cutting Notes: chip it, roundish

COTX10073s-1W-Oblong White. Parentage (A97066-42LB x Alpine Russet). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength: nice, nice tuber type uniform size+ nice smooth skin++, shiny skin

Weakness: low tuber set++, few tubers+, some with purple splashes, not small, SE+++ , FC=1.0 , FC=1.0

Cutting Notes: small, uniform size and shape, creamy flesh

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

Uses: fresh

Strength: nice russeting, nice shape, medium size, BOT, uniform russet skin, nice russet skin some nice shapes

Weakness: pointy+ high set of smalls++, *under skin brown spots?+, not uniform size, few tubers+, rotten, low tuber number, DROP, SE+, few tubers

Cutting Notes: uniform size and shape, nice russet skin

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: shiny, uniform size nice flesh color+, medium size, uniform size, medium size+

Weakness: not uniform shape, buff skin, angular, mixed skin type, FC=3.8, FC=3.5

Cutting Notes: oblong, intense yellow flesh

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: medium-large small, nice, shiny skin

Weakness: silver scurf++, dull skin, DROP+, large, angular, grey skin+, not uniform size, dislike shape, sticky stolons+, some large tubers, scab++, growth cracks FC=3.3, FC=3.5

Cutting Notes:

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

Weakness: mixed? not uniform flesh color, purple splash in some, flesh problems, careful, lots of

small tubers, DROP, some do not have splashes, Parent - cross with 3Wre/Y, purple splash around eyes+, FC=2.4, FC=2.1

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

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

Uses: chip

Strength: uniform size and shape+++ , nice, high tuber number++ , smooth skin+ , nice

Weakness: one greenhead had purple pigment

Chip Notes: CR=1.8, 68% Good chip, 1 GH, BOT

Cutting Notes: small, uniform size and shape, nice skin

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

Uses: chip

Strength: Uniform size and shape, nice, smooth skin, Small

Weakness: some large, large+ ,

Chip Notes: CR=2.0, 66% Good chip, Nice

Cutting Notes: some shriveled, small

COTX13029-2Ru/Y-Russet/Yellow. Parentage (AC06358-2W/Y x CO07039-3RU/Y). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes:

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

Uses: fresh

Strength: medium size, golden skin, nice shape+ ,

Weakness: few tubers, light russet, blocky, few tubers bulky roundish+, not uniform size or shape, near hole in field skin blemishes+, light skin

Cutting Notes: shriveled

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

Uses: fresh

Strength: nice shape+, uniform size and shape+

Weakness: blocky, not uniform size, light russet, small, not uniform russet skin, angular+++,
light skin Few tubers, skin blemishes+++, SE 30%, DROP+

Cutting Notes: golden skin color

COTX13230-1W-White. Parentage (AC06358-2W/Y x CO07044-3RU/Y). Cross was made in Colorado and selected in Texas.

Uses: chip

Strength:

Weakness:

Chip Notes:

Cutting Notes:

COTX13231-1W-White. Parentage (AC98016-6W x Wischip). Cross was made in Colorado and selected in Texas.

Uses: chip

Strength:

Weakness:

Chip Notes:

Cutting Notes:

COTX13231-4W-White. Parentage (AC98016-6W x Wischip). Cross was made in Colorado and selected in Texas.

Uses: chip

Strength:
Weakness:
Chip Notes:
Cutting Notes:

COTX13231-5W-White. Parentage (AC98016-6W x Wischip). Cross was made in Colorado and selected in Texas.

Uses: chip
Strength:
Weakness:
Chip Notes:
Cutting Notes:

COTX13244-1W-White. Parentage (AC07116-2W x CO02321-4W). Cross was made in Colorado and selected in Texas.

Uses: chip
Strength:
Weakness:
Chip Notes:
Cutting Notes:

COTX13244-3W-White. Parentage (AC07116-2W x CO02321-4W). Cross was made in Colorado and selected in Texas.

Uses: chip
Strength:
Weakness:
Chip Notes:
Cutting Notes:

COTX13263-2W-White. Parentage (CO02024-9W x Wischip). Cross was made in Colorado and selected in Texas.

Uses: chip
Strength:
Weakness:
Chip Notes:
Cutting Notes:

COTX14016-1Ru-Russet. Parentage (Payette Russet x Pomerelle Russet). Cross was made in Colorado and selected in Texas.

Uses: fresh
Strength:
Weakness:
Chip Notes:
Cutting Notes:

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

Uses: fresh
Strength: intense skin color, shiny, smooth skin, very intense skin color, shiny
Weakness:
Cutting Notes: beautiful skin color

COTX14035-2R-Red. Parentage (CO99076-6R x NDC081655-1R). Cross was made in Colorado and selected in Texas.

Uses: fresh
Strength:
Weakness:
Cutting Notes: Dropped at cutting for Dalhart intense red skin

COTX14087-1R-Red. Parentage (CO06024-7RU x CO08071-6RU). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes: Dropped at cutting for Dalhart bad storage, rotten, shriveled, intense red skin

COTX14107-3R-Round Red. Parentage (CO07322-3R x NDC081655-1R). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength: Intense skin color, Small

Weakness: Very few tubers

Cutting Notes:

COTX14107-4R-Round Red. Parentage (CO07322-3R x NDC081655-1R). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength: Intense skin color, nice

Weakness: very few tubers

Cutting Notes: intense skin color,

COTX14128-1R-Oval Red. Parentage (NDTX5438-11R x CO05211-4R). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness: very few tubers

Cutting Notes: Dropped at cutting for Dalhart intense skin color, silver scurf

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

Uses: fresh

Strength: nice medium russeting nice uniform russetSome nice shapes+, high yield bulky, very good skin+++ , Parent, large, nice flesh, dark skin+

Weakness: pointy, a little angular a little flat

Cutting Notes: possibly PVY resistant

COTX14220-2W/Y-Round White/Yellow. Parentage (AC07281-1W/Y x Yukon Nugget). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength: TC as parent for flesh color, small shiny, move to smalls

Weakness: small pears, FC=4.6

Cutting Notes: very intense yellow flesh, smooth skin

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

Uses: fresh

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

Weakness: bulky++, large+, few tubers+, very large, skin blemishes++, curved tubers, light russet, not uniform russet skin+++, pointy

Cutting Notes: very large, bulky, keep eye on this clone

COTX14263-1Ru-Russet. Parentage (AO03123-2 x POR06V12-3). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes:

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

Uses: chip

Strength: medium-large, nice, high tuber number++, large tubers, TC, pink-purple eyes, fresh market yellow?, unique type,

Weakness:

Chip Notes: CR=3.8, 29% Good chip, DROP

Cutting Notes: very large tubers, deep eyes, nice yellow flesh, purple sprouts

COTX15023-1Ru-Russet. Parentage (A03921-2 x CO08065-2RU). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes:

COTX15144-1Ru-Russet. Parentage (CO08065-2RU x CO09337-1RU). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes:

COTX15271-1Ru-Russet. Parentage (A03921-2 x Mercury Russet). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes:

COTX15338-1Y/Y-Yellow/Yellow. Parentage (CO99045-1W/Y x Saikai 35). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes:

COTX15345-1Y/Y-Yellow/Yellow. Parentage (CO05037-3W/Y x CO00412-5W/Y). Cross was made in

Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness:

Chip Notes:

Cutting Notes:

COTX15425-1Y/Y-Yellow/Yellow. Parentage (CO10003-3W/Y x CO10018-3W/Y). Cross was made in Colorado and selected in Texas.

Uses: chip

Strength:

Weakness:

Cutting Notes:

COTX15425-2Y/Y-Yellow/Yellow. Parentage (CO10003-3W/Y x CO10018-3W/Y). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes:

COTX15500-1Yre/Y-Yellow Red Eye/Yellow. Parentage (CO10097-2W/Y x CO10018-3W/Y). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness:

Chip Notes:

Cutting Notes:

COTX15500-2Ryspl/Y-Red Splash/Yellow. Parentage (CO10097-2W/Y x CO10018-3W/Y). Cross was made in Colorado and selected in Texas.

Uses: fresh

Strength:

Weakness:

Chip Notes:

Cutting Notes:

Dal17001RuRua

Dal17001RuRub

FOB136-181-Oblong White. Parentage (??). Clone entered by Real Potatoes.

Uses: Fresh

Strength: high yield+, strong

Weakness: knobs+, very large++, not uniform size nor shape, ugly skin, FC=3.0, Cutting

Notes: ,

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

Uses: chip

Strength: nice uniform size and shape, medium size, large, oval to oblong

Weakness: low tuber set in this rep, not uniform shape - not typical Lamoka? very large tubers++,

Chip Notes: CR=1.9, 53% Good chip, 1 GH, , 1 GH

Cutting Notes:

LaRatte-Long White. Parentage (??). Clone originated in France.

Uses: fresh

Strength: Smooth skin,

Weakness: * very long linked tubers, very small, linked tubers++, attached stolons, late, few tubers, heat sprouts+++, wrinkled, deformed, FC=2.0, FC=2.9

Cutting Notes: yellow flesh, nice

MSV030-4-Round White. Parentage (Beacon Chipper x MSG227- 2). Cross was made and selected at Michigan State University.

Uses: chip

Strength:

Weakness: not uniform size, buff skin+, medium-large tubers, a little flat, not uniform size, large, some attached stolons

Chip Notes: CR=2.0, 58% Good chip, 2 Mech

Cutting Notes: buff skin, nice shape

MSV313-2-Round White. Parentage (??). Cross was made and selected at Michigan State University.

Uses: chip

Strength:

Weakness: russet skin+++ , large++ , very large+++ , few tubers, too large

Chip Notes: CR=2.3, 58% Good chip

Cutting Notes: a little flat

MSV358-3-Round White. Parentage (MSP239-1 x OP). Cross was made and selected at Michigan State University.

Uses: chip

Strength: snaps, nice flesh, snow, nice white flesh uniform size and shape, medium size

Weakness: not uniform size, buff skin, large, few tubers

Chip Notes: CR=1.8, 58% Good chip

Cutting Notes: nice shape, uniform size and shape

MSW044-1-Round White. Parentage (??). Cross was made and selected at Michigan State University.

Uses: chip

Strength: uniform size and shape+++ , smooth skin+++ , small+++ , snaps+ , very light skin, nice, juicy

Weakness: buff skin, few tubers

Chip Notes: CR=2.4, 68% Good chip

Cutting Notes: small, flat

MSW343-2R-Red. Parentage (??). Cross was made and selected at Michigan State University.

Uses: fresh

Strength: high tuber number, Red LaSoda replacement, rounder than LaSoda, more intense skin color than LaSoda, shiny skin

Weakness: medium skin intensity, deep eyes (not as much as Red LaSoda), sticky stolons silver scurf, stem end darkening

Cutting Notes:

MSW485-2-Round White. Parentage (MSQ070-1 x MSR156-7). Cross was made and selected at Michigan State University.

Uses: chip

Strength: small nice, uniform size

Weakness: heat sprouts+, chain tubers, attached stolons++, rough, some large tubers

Chip Notes: CR=2.3, 44% Good chip, 3 Sugar ends

Cutting Notes: attached stolons

MSX540-4-Round White. Parentage (R061-1 x Lamoka). Cross was made and selected at Michigan State University.

Uses: chip

Strength: uniform small-medium tubers

Weakness: a little flat+, large tubers in the first few plants large tubers+, rough

Chip Notes: CR=1.6, 70% Good chip

Cutting Notes: uniform size and shape

MSX569-1R-Red. Parentage (??). Cross was made and selected at Michigan State University.

Uses: fresh

Strength: intense skin color+, smooth, BOT++, nice tuber shape, nice skin color+, beautiful, uniform size and shape medium-small, very intense red skin color

Weakness: pink flesh streaks++, large stolon sear silver scurf+, lenticels+, a little angular, pointy, pink flesh around vascular ring++

Cutting Notes:

NCB2607-3-Round Red. Parentage (??). Cross made by and selected by North Carolina University.

Uses: fresh

Strengths: small, very uniform size, high tuber number+, BOT (save as uniform size and shape plus high tuber number Parent), uniform size and shape,,

Weakness: not shiny, not smooth skin FC=3.9

Cutting Notes:

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, shiny

Weakness: very large++, not uniform shape, few tubers, too large, ugly

Chip Notes: keep, CR=2.5, 51% Good chip, 2 IBS, 1 Mech, 1 Sugar end

Cutting Notes: too large

NDTX059759-3RY/YPinto-Oblong Red Pinto/Yellow. Parentage (ATND 99331-2 Pinto x ND 7834-2P). Cross was made in North Dakota and selected in Texas.

Uses: fresh

Strength: high tuber number, BOT, smooth skin, nice, nice unique pattern uniform size, smooth skin, some large tubers few eyes intense flesh color, large tubers

Weakness: Flat+, some pink in flesh 50% pink flesh, 20% pink flesh, 20% pink flesh pink streaks in flesh (50%), pink streaks (10%) FC=4.0, FC=3.0

Cutting Notes: nice pattern

NDTX059828-2WZC-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: pink skin++,

Chip Notes: CR=3.0, 20% Good chip

Cutting Notes: pinkish flesh

NDTX071258Bs-1R-Red. Parentage (ND 039035B-9R x ND 4659-5R). Cross was made in North Dakota and selected in Texas.

Uses: fresh

Strength: Parent for small, small+++, uniform size, mini LaSoda, bright skin

Weakness: not uniform size, do not advance darker red eyes, lenticels

Cutting Notes: small

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: Parent, shiny skin, uniform size+, smooth skin, high yield,

Weakness: very low tuber set, very few tubers, not small+++, FC=3.0, FC=3.8

Cutting Notes: uniform 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:

Weakness: large+, not uniform size and shape++, smaller than other reps, looks different than other plots?, some attached stolons, a little flat

Chip Notes: CR=3.0, 38% Good chip, 2 Sugar ends, 4 Sugar ends, 1 Sugar end, DROP, 1 IBS, 1 sugar end

Cutting Notes: very flat

NDTX113030C-3W-Oblong White. Parentage (Dakota Diamond x ND7192-1). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength: high tuber number+, uniform size, hard to cut

Weakness: large+, DROP, a little flat+

Chip Notes: CR=1.9, 71% Good chip

Cutting Notes: large tubers

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, round, smooth skin+, nice, Advance, medium size, high tuber number

Weakness: mixed? (some russets), a little flat

Chip Notes: CR=1.4, 90% Good chip

Cutting Notes:

NDTX12203AB-1W-Round White. Parentage (ND028598c-1 x M2). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength: BOT, uniform size and shape++, smooth skin, high tuber number, TC, clean

Weakness:

Chip Notes: CR=1.8, 80% Good chip, BOT, Nice, Oily centers

Cutting Notes: nice skin, uniform size and shape

NDTX12248Y-1R-Red. Parentage (95043.11 x Dakota Ruby). Cross was made in North Dakota and selected in Texas.

Uses: fresh

Strength: shallow eyes, medium size, uniform size and shape, very light skin+, bright light color, nice, light skin

Weakness: Red eyes

Cutting Notes: shriveled, creamy flesh

NDTX1244-3W/Y-Round White. Parentage (AND07358-1Y x ND7192-1). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength: smooth skin, nice, high tuber number, high tuber set, very light skin, uniform size and shape, nice skin

Weakness: not uniform size, a little angular+ deep eyes+, skin blemishes, possible chip shape problems,

Chip Notes: CR=2.5, 50% Good chipNice, Shape-

Cutting Notes: small, skinny

NDTX1246-3W-Oval White. Parentage (AND07358-1Y x ND8304-2). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness: some large, a little flat++, not uniform shape, too large, flat+++, angular+, DROP+

Chip Notes: CR=1.5, 83% Good chip, Nice

Cutting Notes: a little flat

NDTX1246-5W/Y-Oval White. Parentage (AND07358-1Y x ND8304-2). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength: golden skin+, uniform size and shape+, TC, high tuber number+, intense yellow flesh+, fresh market yellow?

Weakness:

Chip Notes: CR=1.4, 79% Good chip, Nice color, Nice+

Cutting Notes: uniform size and shape, small

NDTX1287B-1W-Round White. Parentage (ND8559-20 x ND7379B-6). Cross was made in North Dakota and selected in Texas.

Uses: fresh

Strength: uniform size and shape

Weakness: low tuber set+, dirty look+, bruising+, brown bruises on skin, buff skin, not small, FC=1.0, FC=1.0

Cutting Notes: rough skin

NDTX13105-1R-Oval Red. Parentage (ATND99331-2PintoY x ND7132-1R). Cross was made in North Dakota and selected in Texas.

Uses: fresh

Strength: high tuber number small, nice, shiny, creamy flesh

Weakness: not uniform size, silver scurf

Cutting Notes: nice

NDTX13224CAB-1W-Oval White. Parentage (ND039104CAB-3 x Dakota Pearl). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness: DROP

Chip Notes: CR=3.0, 20% Good chip, 1 IBS, DROP?

Cutting Notes: nice skin

NDTX13264B-1R/Y-Round Red/Yellow. Parentage (ND071179B-10R x ND5858). Cross was made in North Dakota and selected in

Uses: fresh

Strength: intense red skin

Weakness: *Lots of pink streaks in flesh, pink streaks near the stolon attachment point, FC=2.0

Cutting Notes: intense skin color, yellow pink flesh

NDTX13280CB-3W-Oval White. Parentage (ND081452CB-1 x ND7519-1). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength: uniform size and shape++, smooth skin

Weakness: DROP

Chip Notes: CR=1.8, 75% Good chip, Shape-, DROP?

Cutting Notes: nice

NDTX13315CB-1W-White. Parentage (ND092181CB-16 x ND7519-1). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness:

Cutting Notes:

NDTX14134Y-3W-White. Parentage (Waneta x ND860-2). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness:

Cutting Notes:

NDTX1432Y-2Y/Y-Yellow/Yellow. Parentage (93057.1 x ND7799c-1). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness:

Cutting Notes:

NDTX14362AB-1W-Round White. Parentage (ND102809AB-2 x ND028984B-1). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength: uniform size and shape++, medium size++, BOT, many tubers between plots (right side) Advance to NCPT

Weakness:

Chip Notes: CR=2.3, 70% Good chip, Nice, DROP

Cutting Notes: uniform size and shape

NDTX1443-2W-White. Parentage (Dakota Crisp x ND860-2). Cross was made in North Dakota and

selected in Texas.

Uses: chip

Strength:

Weakness:

Cutting Notes:

NDTX1444-3W-White. Parentage (Dakota Crisp x ND7799c-1). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness:

Cutting Notes:

NDTX1444-4W-White. Parentage (Dakota Crisp x ND7799c-1). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness:

Cutting Notes:

NDTX1444-5W-White. Parentage (Dakota Crisp x ND7799c-1). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness:

Cutting Notes:

NDTX14475-1W/Y-Oval White/Yellow. Parentage (ND113317-5 x ND113057-1). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength: smooth skin, yellow flesh, high tuber number++

Weakness: angular++, attached stolons, drop for shape++, deep eyes, shape issues

Chip Notes: CR=1.8, 58% Good chip, Nice, 1 GH, 1 HH

Cutting Notes: very small

NDTX1452CB-3W-White. Parentage (Dakota Diamond x ND102857CB-1). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness:

Cutting Notes:

NDTX1467C-1R-Red. Parentage (Dakota Ruby x ND113300C-3RSY). Cross was made in North Dakota and selected in Texas.

Uses: fresh

Strength: small

Weakness:

Cutting Notes:

NDTX1482YB-1W-White. Parentage (Eva x Missaukee). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness:

Cutting Notes:

NDTX1488-1Y-White. Parentage (Gala x ND860-2). Cross was made in North Dakota and selected in Texas.

Uses: chip

Strength:

Weakness:

Cutting Notes:

NDTX4784-7R-Round Red. Parentage (ND3574-5R x ND2050-1R). Cross was made in North Dakota and selected in Texas. Early maturity. Medium vine size. Lavender flower color

Uses: fresh

Strength: intense skin color, nice skin color nice+, very uniform size and shape, it went to WR in the past, seed was refreshed two years ago, BOT, strong, uniformly round

Weakness: very few tubers

Cutting Notes: intense skin color

NY 152-Round White. Parentage (B38-14 x Marcy). Cross was made and selected by Cornell University.

Uses: chip

Strength: uniform size and shape+, lots of tubers, high tuber number+, medium size

Weakness: not uniform skin appearance, not uniform size, tubers from the first few plants are larger

Chip Notes: CR=1.5, 79% Good chip, Nice

Cutting Notes: nice shape

ORTX13SP218-1W-P/Y-White Purple eye/Yellow. Parentage (PI604214FS x PALLIDA CPC) Cross was made in Oregon and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes: Dropped at Dalhart cutting purple eye shadows

POR11PG62-3-Long Yellow/Pink Splash. Parentage (Diverse x High Car). Cross was made and selected in Prosser, WA. Medium early maturity. Medium small vine size. Purple flower color

Uses: fresh.

Strength: nice

Weakness: knobs++, wild looking, ducks, it does not look like a fingerling+, splashed skin pattern, late, pink splashes, small pink unique pattern+, small, bulging eye, FC=3.0, FC=3.0

Cutting Notes: splashed red yellow skin, bulging eyes

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: nice+, unique shape, skin and flesh, uniform size and shape, dark skin, uniform size and shape, produce minitubers, high tuber set

Weakness: a little large, grow for less time, many eyes in large tubers, not fingerling, small+, rain drops, some wrinkled FC=4.0, FC=3.5

Cutting Notes: nice flesh, nice shape

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.

Strength: uniform size high yield+, nice shape very dark skin, oval to oblong, nice flesh pattern, BOT

Weakness: flesh has white marbling+, silver scurf+, white center, pointy, rough skin, small, marble pattern FC=3.5, FC=4.0

Cutting Notes: intense purple flesh

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: high tuber number+++ , Parent for high tuber number nice, medium

Weakness: knobs, small+, noticeable eyes, not uniform size SE

Cutting Notes: ugly, very long, skinny

Red LaSoda(Dalhart seed source)-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: robust

Weakness: very large++, lenticels light skin, deep eyes, knobs, attached stolon, high yield, smaller than other Red LaSoda++, flat

Cutting Notes: deep eyes

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: high tuber number

Weakness: large variation in shape large tubers are 3-, some large tubers, very large light skin, very deep eyes, heat sprouts, sticky stolons+, chain tubers

Cutting Notes: deep eyes

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: nice skin, nice shape, uniform size nice russet skin, BOT+, beautiful shape, high tuber no, skin blemishes, skinning+

Weakness: knobs+++++, green heads enlarged lenticels, 40% SE some skin color variation, bacterial rot 10% bulging eyes, soft rot 10%

Cutting Notes:

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: medium russet skin

Weakness: knobs+++ , pointy++ , skinny , growth cracks , deformed tubers , skinny , curved
Cutting Notes: pointy , not uniform russetting

Russet Norkotah(Dalhart seed source)-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: heavy russet, high set, BOT, high yield, wider than standard Oregon source Russet Norkotah

Weakness: skinny curved, thin+, pointy+, skinning

Cutting Notes: nice shape

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: nice size, nice shape+, nice skin, nice russet skin, BOT, high tuber number

Weakness: some moon shapes several with damaged skin, enlarged lenticels

Cutting Notes: nice shape

RussetNorkotah278(Nebraska seed source)-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: high yield, nice, darker skin

Weakness: deeper eyes, skin blemishes, pointy, soft end +, skinny

Cutting Notes: nice shape

RussetNorkotah278-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 skin and shape nice

Weakness: lower yield than Nebraska seed source, low tuber set, pointy, curved, skinny, pointy++, more eyes than regular Russet Norkotah, long+, not uniform russet skin

Cutting Notes: nice shape,

RussetNorkotah296-Oblong-Long Russet. Parentage (ND95264Ru x ND9687-5Ru). Russet Norkotah cross 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:, nicer shape than regular Norkotah nice size and shape, good russet skin

Weakness: knobs, SE enlarged lenticels+, DROP, wider, curved tubers, pointy+ long+, pointy, thin soft rot

Cutting Notes: nice shape

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: light skin++, large, smooth skin++

Weakness: knobs, not uniform shaped

Cutting Notes: smooth skin, curvy

Sierra Gold-Round-Oblong Russet /Yellow. Parentage (Krantz x Delta Gold). Cross was made and selected in Texas. Early maturity. Medium vine size.

Uses: fresh

Strength: nice, high yield, medium uniform tubers, uniform size, russet, nice++, golden+, attractive

Weakness: FC=3.0, FC=2.6

Cutting Notes: russet skin, intense yellow flesh

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: nice+, uniform, nice pattern, good color combination, skin color radiation, heavy, nice flesh, beautiful skin pattern, hard to cut

Weakness: refresh seed, silver scurf+, few tubers, flat+ angular pink streaks (40%), FC=3.3, FC=3.0

Cutting Notes: silver scurf

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: nice, medium size tubers, Large, buff skin+, russet skin, medium-large tubers+, high yield

Weakness: some attached stolons+, rough looks

Chip Notes: CR=1.6, 50% Good chip

Cutting Notes: buff skin

Soraya-White. Parentage (Marabel x 1.307 120-93). Cross was made and selected in Germany.

Uses: fresh

Strength: smooth skin, oblong to long+, beautiful flesh+ nice,

Weakness: variation for color flesh, knobs++, bulging eyes, skin blemishes+, DROP+++, very few tubers+, pointy, FC=4.0, FC=4.0

Cutting Notes:

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: nice white flesh

Weakness: curved, pointy+, very few tubers, a little pointy, few tubers, not uniform size refresh seed, skin blemishes, ugly, not uniform russet skin+

Cutting Notes: nice shape

TX05249-10W-Oblong White. Parentage (Gem Russet x A91790-13). Cross was made and selected in Texas.

Uses: chip

Strength:

Weakness: some large tubers++, green heads, shape deformities, not uniform size, DROP+, rotten,

Chip Notes: CR=3.4, 30% Good chip, 1 GH

Cutting Notes: uniform size and shape, medium size

TX08352-5Ru(Vanguard)-Long Russet. Parentage (TXA549-1Ru x AOTX98137-1RU). Cross was made and selected in Texas.

Uses: fresh

Strength: large+, uniform size++, nice skin, bulky, BOT+++, blocky++ nice shape, Parent, cross with PVY res

Weakness: knobs* boarder under skin brown spots?,

Cutting Notes: bulky, nice

TX09396-1W-Oblong White Parentage (Atlantic x NY139) Cross was made and selected in Texas.

Uses: chip

Strength:

Weakness: knobs, few tubers+, not uniform size, large, DROP++, netted scales

Chip Notes: CR=2.2, 43% Good chip, Shape-,

Cutting Notes: not uniform size

TX09406S-1P/P-Round Purple/Purple. Parentage (A99331-2RY x CO00405-1R) Cross was made and selected in Texas.

Uses: fresh

Strength: high tuber set++, very intense skin color+, BOT+, small, uniform size and shape, nice,

Make potato chips,

Weakness: rotten, grey skin+, marble pattern+, some white center++, FC=3.9, FC=3.9

Cutting Notes: uniform size and shape

TX12483-6W-Round White. Parentage (TX08402 x Snowden). Cross was made and selected in Texas.

Uses: chip

Strength: golden russet, small

Weakness: russet+++, few tubers+, not uniform size++, dirty look, rotten, DROP+, angular

Chip Notes: CR=1.9, 58% Good chip, Shape-

Cutting Notes: uniform size and shape

TX12484-1WZC-Oblong White. Parentage (TX08402 x NDTX059828-2W). Cross was made and selected in Texas.

Uses: chip

Strength: smooth skin+, nice white flesh+,

Weakness: not uniform size and shape, large mixed skin type?

Chip Notes: CR=2.8, 41% Good chip

Cutting Notes: nice skin

TX12484-2WZC-Oblong White. Parentage (TX08402 x NDTX059828-2W). Cross was made and selected in Texas.

Uses: chip

Strength: smooth skin, very hard to cut+, use as parent, unique skin,

Weakness: pinkish skin+++, some large tubers large

Chip Notes: CR=2.4, 52% Good chip

Cutting Notes: uniform size

TX12484-3WZC-Oblong White. Parentage (TX08402 x NDTX059828-2W). Cross was made and selected in Texas.

Uses: chip

Strength: nice shape, uniform size and shape+, advance, keep all seed, keep, ZC tolerant, high tuber number, smooth skin, nice, advance, fingerprint, small tubers are round, large are oblong, nice flesh, nice, nice white flesh

Weakness: Large

Chip Notes: CR=2.0, 71% Good chip, Color-, 1 GH

Cutting Notes: greenheads, uniform size

TX13580-1W-Oval White. Parentage (Waneta x 00-3315-11). Cross was made and selected in Texas.

Uses: chip

Strength: snaps when cut,

Weakness: late? attached tubers, DROP, not uniform size++, angular tubers mixed flesh?, buff skin

Chip Notes: CR=2.5, 51% Good chip, 1 GH

Cutting Notes: small, very shriveled

TX13590-9Ru-Oblong Russet. Parentage (ND9687-3Ru x ND9852-1Ru). Cross was made and selected in Texas.

Uses: fresh

Strength: high yield+, short oval to oblong, round to oblong, move to SW or WR++, blocky nice shape nice, bulky, medium nice shape, roundish+,

Weakness: not uniform shape and size, small angular, not uniform skin russet

Cutting Notes: small

TX14602-2W/Y-White/Yellow. Parentage (COTX05095-2Ru/Y x Atlantic). Cross was made and selected in Texas.

Uses: fresh

Strength: nice russet pattern, snap cut, large tubers, TC, advance to yellow trial, uniform size and shape, medium size, Yukon class but medium size, very round, buff skin+,

Weakness: lacks shine+, DROP for fresh market+, FC=3.4, FC=3.3

Cutting Notes: uniform size, small

TX14612-1R-Oval Red. Parentage (BTX2332-1R x NDTX4784-7R). Cross was made and selected in Texas.

Uses: fresh

Strength: very intense color++, nice skin

Weakness: ugly, DROP+, angular tubers+, very large+, oblong few tubers++

Cutting Notes: shriveled, dry rot

TX14615-3R-Oval Red. Parentage (COTX02172-1R x NDTX4784-7R). Cross was made and selected in Texas.

Uses: fresh

Strength: shiny skin+, nice, bright skin, smooth

Weakness: angular tubers, few tubers, DROP, silver scurf

Cutting Notes: shriveled, silver scurf

TX14615-4R-Oval Red. Parentage (COTX02172-1R x NDTX4784-7R). Cross was made and selected in Texas.

Uses: fresh

Strength: intense skin color, shiny, nice skin color, nice+

Weakness: pear shaped

Cutting Notes: silver scurf, intense skin color,

TX14619-2R-Oval Red. Parentage (NDTX4784-7R x BTX2332-1R). Cross was made and selected in Texas.

Uses: fresh

Strength: intense red skin

Weakness: skin map, netted scab

Cutting Notes: nice flesh

TX14621-2R-Oval Red. Parentage (NDTX4784-7R x NDTX081648CB-4W). Cross was made and selected in Texas.

Uses: fresh

Strength:

Weakness: very few tubers++, road map

Cutting Notes: rot, shriveled

TX14629-1P/P-Oval Purple/Purple. Parentage (COTX04050-1P/P x NDTX4764-7R). Cross was made and selected in Texas.

Uses: fresh

Strength: shiny

Weakness: dislike shape, wrinkled+, lighter flesh++, white center+++, rotting+, internal problems, large tubers, ugly, Drop, FC=2.3

Cutting Notes: large tubers

TX14632-2R-Round Red. Parentage (ATTX05186-3W/Y x NDTX059759-3Pinto/Y). Cross was made and selected in Texas.

Uses: fresh

Strength: nice, small-medium, very uniform medium size, smooth skin, shiny

Weakness: pointy

Cutting Notes: large tubers, internes skin color, creamy flesh

TX14646-1W-R/YPinto-Oval White Red/Yellow Pinto. Parentage (NDTX059759-3Pinto x BTX2332-1R). Cross was made and selected in Texas.

Uses: fresh

Strength: unique pattern, use as parent less flat than Harlequin, large beautiful skin pattern, shiny, smooth skin, similar to Harlequin, not flat, very nice+

Weakness: few tubers, bloody flesh, yellow/pink flesh all over, FC=3.5, FC=3.0

Cutting Notes: large tubers, yellow pink flesh

TX14668-3WZC-Oval White. Parentage (Waneta x ATTX07042-3W). Cross was made and selected in

Texas.

Uses: chip

Strength:

Weakness: very few tubers++, buff skin, some large+, large tubers+++, DROP+++, mixed?, attached stolons,

Chip Notes: CR=3.3, 43% Good chip, DROP, Shape-

Cutting Notes: large tubers

TX14670-2W/Y-Oval White/Yellow. Parentage (MSN190-2 x ATTX07042-3W). Cross was made and selected in Texas.

Uses: fresh

Strength: uniform shape,

Weakness: relaxed russet+, washed out yellow flesh+, not uniform yellow flesh, not good russet pattern, rough skin, large, buff skin+++, not uniform size, a little flat, DROP for fresh market+, FC=2.5, FC=2.5

Cutting Notes: buff skin, uniform size and shape

TX14695-2WZC-Oval White. Parentage (TX09396-1W x AOR07793-1). Cross was made and selected in Texas.

Uses: chip

Strength: oblong+, smooth skin uniform,

Weakness: not uniform size, round to long few tubers, rotten , Some GH, pointy, mixed?

Chip Notes: CR=2.6, 70% Good chip, Shape-, DROP?, Shape-, BOT, Shape-

Cutting Notes: oval

TX14710-4WZC-Oval White. Parentage (TX05249-11W x AOR07793-1). Cross was made and selected in Texas.

Uses: chip

Strength: smooth skin, nice white flesh

Weakness: buff skin, not uniform size, small, large, dirty skin, culls

Chip Notes: CR=2.5, 49% Good chip, DROP, Nice

Cutting Notes: uniform size

TX14710-7WZC- Oval White. Parentage (TX05249-11W x AOR07793-1). Cross was made and selected in Texas.

Uses: chip

Strength: uniform size, smooth

Weakness: not uniform size and shape+, a little flat+, mixed russet+, knobs, DROP, attached stolons

Chip Notes: CR=3.6, 15% Good chip, IBS, DROP+, 5 IBS

Cutting Notes: very nice skin, cream flesh

TX16714-2R/Y-Red/Yellow. Parentage (ATTX98444S-16R/Y x NDTX4784-7R). Cross was made and selected in Texas.

Uses: fresh

Strength:

Weakness:

Cutting Notes:

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: large+, bulky, some nice shapes Parent for size and shape, very large++, bulky, nice shape, high tuber number, blocky, sister clone of Stampede Russet, better than stampede, graduated but was not released

Weakness: not uniform shape and size, few tubers, skin blemishes, rough DROP

Cutting Notes: golden skin color

Wendy-Oval White Parentage (??). Cross was made and selected in Germany.

Uses: fresh

Strength: large, smooth skin, nice, shiny skin, medium size+, very nice flesh, uniform shape and

size, BOT

Weakness: knobs++, FC=3.2, FC=3.6

Cutting Notes: hollow heart, intense yellow flesh, oblong

Yukon Gold(Dalhart seed source)-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, nice yellow flesh, typical Yukon, large, heavy tubers, smooth skin

Weakness: smaller than another Yukon, a little angular FC=2.9, FC=2.5

Cutting Notes:

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, snaps nice, large tubers+++, heavy, high tuber set snaps

Weakness: bulging eyes lenticels, knobs+, not uniform shape nor size, ugly very large knobs, large ugly, check seed source, FC=3.5, FC=2.8

Cutting Notes: large

Appendix B. Parentage of potato varieties or selections-2018.

Variety or Selection	Parentage
Ackersegen	Hindenburg x Allerfruheste
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	Bintje x Record
Courage	

Variety or Selection	Parentage
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
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

Variety or Selection	Parentage
Lanorma	Bydand x Caesar
LaRatte	??
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
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

Variety or Selection	Parentage
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	?
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

Variety or Selection	Parentage
US Blue	?
Valisa	
Viking	Redskin x Nordak
Vivaldi	TZ 77-148 x Monalisa
Vokal	Primura x Rheinhort
Waneta	??
Winema	Redsen x ND1196-2R
Wendy	??
Yellow Finn	
Yukon Gold	W5279-4 x NorGleam
Numbered Clones	
A06030-23	A99133-6 x Premier Russet
A07061-6	Targhee Russet x Clearwater Russet
A071012-4BF	A85331-7 x A01054-4
A07769-4	PA01N32-1 x Premier Russet
A08433-4VR	A01667-3 x AOND95249-1Russ
A10021-5TE	A03921-2 x Mountain Gem Rus
AC01144-1W	COA96141-2 x Willamette
AC10376-1W/Y	Gala x Granola
AO02183-2	A98082-17 x Premier R
AO06191-1	A99134-1 x AC92009-4RU
AOR06576-1	AO0487-22LB x A93575-4
AOR07781-5	PA92A08-17 x PALB03035-6
AOR07821-1	WHA4052-1 x Clearwater Russet
AOR09034-3	Boulder x A03449-2C
AORTX09032-3W	A03449-2C x Ivory Crisp
AORTX09033-11W	CO96141-4W x Ivory Crisp
AORTX09033-4W	CO96141-4W x Ivory Crisp
AORTX09037-1W/Y	Fasan x Ivory Crisp
AORTX09037-4W/Y	Fasan x Ivory Crisp
AORTX09037-5W/Y	Fasan x Ivory Crisp
AORTX09144-2W	A02516-102LB x PALB03016-3

Variety or Selection	Parentage
AORTX11913-3Wre/Y	A03576-5Y x NDA050237B-1R
AORTX11913-4P	A03576-5Y x NDA050237B-1R
AOTX05043-1Ru	A99032-2TE x Summit Russet
ATTX05175s-1R/Y	A99331-2RY X COA99261-IRY
ATTX10007-1Ru	A02060-3TE x A05013-5TE
ATTX10008-1Ru	A02060-3TE x Stampede Russet
ATTX10067-1Ru	A01010-1 x Stampede Russet
ATTX10265-4R/Y	A02267-2PY X US 147-96RIY
ATTX10270-2P/Y	A02267-5PY x NorDonna
ATTX10286-1R/Y	US 147-96R/Y x NorDonna
ATTX10301-1Pyspl/Y	A03576-5Y x NorDonna
ATTX10327-2Y/Y	A03576-5Y x CO00412-5W/Y
ATTX10327-3Y/Y	A03576-5Y x CO00412-5W/Y
ATTX10333-1W	AFA3976TPS-1 x NY139
ATTX10378-3Ru/Y	Granola x CO00412-5W/Y
ATTX10389-1W	Marike x NY139
ATTX11591-1W/Y	A05175-7RY x A05201-1Y
ATTX11591-3W/Y	A05175-7RY x A05201-1Y
ATTX11617-2R	US147-96R/Y x ND8555-8R
ATTX11633-1RYPinto/Y	Pinto x ND8555-8R
ATTX11633-2R/Y	Pinto x ND8555-8R
ATTX11633-3R/Y	Pinto x ND8555-8R
ATTX11633-4R/Y	Pinto x ND8555-8R
ATTX11676-1Y/Y	POR02PG26-5 x Mila
ATTX98444S-16R/Y	A83360-9R X T48YF
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
ATX11379-1Ru	AO00057-2 x Clearwater Russet

Variety or Selection	Parentage
ATX11382-2Ru	AO01114-4 x A01325-1
ATX11482-3W	A05158-2C x M5
ATX11533-1W/Y	V15-71 x A03449-2C
ATX11548-1R	NDA050237B-1R x NDA050204-1R
ATX11549-1P/Y	Huckleberry Gold x ND8555-8R
ATX11556-1P/Y	A99331-2RY x NDA050237B-1R
ATX11567-1W/Y	A02267-1Y x A05201-1Y
ATX11586-1R/Y	A05173-2RY x Mila
ATX11586-2R/Y	A05173-2RY x Mila
ATX11593-1R/Y	A05175-7RY x POR02PG26-5
ATX12058-1Ru	A01010-1 x A07030-12TE
ATX13018-1Ru	A06015-13TE x A06084-1TE
ATX13018-2Ru	A06015-13TE x A06084-1TE
ATX13046-1Ru	Blazer Russet x AO02183-2
ATX13065-3Ru	NDA070929B-1 x Premier Russet
ATX13108-2Ru	Dakota Trailblazer x A061071-3CSR
ATX13126-3W	MSR061-1 x CO95051-7W
ATX13126-5Ru	MSR061-1 x CO95051-7W
ATX13127-1Ru	W2717-5 x CO02321-4W
ATX13134-3W/Y	NDA081451CB-1CY x CO02321-4W
ATX14003-1Ru	A07001-7TE x CO99100-1Ru
BTX1749-1W/Y	K7-6 x BO925-4
BTX2103-1R/Y	BO811-13 x ARS-W82-21285-1
CO06215-2R	??
CO08037-2P/P	CO03031-2R/Rx CO97215-2P/P
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
CO09128-3W/Y	A00293-2Y x CO03060-2W/Y
CO09128-5W/Y	A00293-2Y x CO03060-2W/Y

Variety or Selection	Parentage
CO09205-2RU	AOA95154-1 x CO95086-8RU
CO09218-4W/Y	ATC00293-1W/Y x CO00412-5W/Y
CO10064-1W/Y	CO00412-5W/Y x CO04099-4W/Y
CO10073-7W	CO02321-4W x CO02024-9W
CO10076-4W	CO03243-3W x CO02024-9W
CO10087-4RU	CO03367-1RU x Mercury Russet
CO10091-1RU	CO03371-4RU
CO10097-2W/Y	CO04067-10W/Y x CO00412-5W/Y
CO10098-4W/Y	CO04099-3W/Y x CO04099-4W/Y
CO10098-5W/Y	CO04099-3W/Y x CO04099-4W/Y
CO98012-6R	A79543-4R x AC91844-2
CO99076-5R	AC91848-1 x Rio Colorado
COTX00104-6R	ND3574-5R X C086218-2
COTX02293-4R	NDC5281-2R x ND3574-5R
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
COTX07054-2R	ATDC9801-3P x CO99076-6R
COTX08322-10Ru	Blazer Russet x AC96052-1RU
COTX09022-3RuRE/Y	A00286-3Y x CO99100-1RU
COTX10073s-1W	A97066-42LB x Alpine Russet
COTX10080-2Ru	CO03364-5RU x CO98067-7RU
COTX10097-2W/Y	CO04067-10W/Y x CO00412-5W/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
COTX13029-2Ru/Y	AC06358-2W/Y x CO07039-3RU/Y
COTX13215-1Ru	A02507-2LB x CO05110-6RU
COTX13215-2Ru	A02507-2LB x CO05110-6RU
COTX13230-1W	AC06358-2W/Y x CO07044-3RU/Y

Variety or Selection	Parentage
COTX13231-1W	AC98016-6W x Wischip
COTX13231-4W	AC98016-6W x Wischip
COTX13231-5W	AC98016-6W x Wischip
COTX13244-1W	AC07116-2W x CO02321-4W
COTX13244-3W	AC07116-2W x CO02321-4W
COTX13263-2W	CO02024-9W x Wischip
COTX14016-1Ru	Payette Russet x Pomerelle Russet
COTX14035-1R	CO99076-6R x NDC081655-1R
COTX14035-2R	CO99076-6R x NDC081655-1R
COTX14087-1R	CO06024-7RU x CO08071-6RU
COTX14107-3R	CO07322-3R x NDC081655-1R
COTX14107-4R	CO07322-3R x NDC081655-1R
COTX14128-1R	NDTX5438-11R x CO05211-4R
COTX14132-1Ru	POR06V12-3 x AC05039-2RU
COTX14220-2W/Y	AC07281-1W/Y x Yukon Nugget
COTX14250-1Ru	AF3362-1 x A06021-1T
COTX14263-1Ru	AO03123-2 x POR06V12-3
COTX14284-2W/Y	CO97237-4RU/Y x AC06358-1W/Y
COTX15023-1Ru	A03921-2 x CO08065-2RU
COTX15144-1Ru	CO08065-2RU x CO09337-1RU
COTX15271-1Ru	A03921-2 x Mercury Russet
COTX15338-1Y/Y	CO99045-1W/Y x Saikai 35
COTX15345-1Y/Y	CO05037-3W/Y x CO00412-5W/Y
COTX15425-1Y/Y	CO10003-3W/Y x CO10018-3W/Y
COTX15425-2Y/Y	CO10003-3W/Y x CO10018-3W/Y
COTX15500-1Yre/Y	CO10097-2W/Y x CO10018-3W/Y
COTX15500-2Ryspl/Y	CO10097-2W/Y x CO10018-3W/Y
Dal17001RuRua	??
Dal17001RuRub	??
FOB136-181	??
MSV030-4	Beacon Chipper x MSG227- 2
MSV313-2	??

Variety or Selection	Parentage
MSV358-3	MSP239-1 x OP
MSW044-1	??
MSW343-2R	??
MSW485-2	MSQ070-1 x MSR156-7
MSX540-4	R061-1 x Lamoka
MSX569-1R	??
NCB2607-3	??
NDA081453CAB-2C	Dakota Diamond x ND 039173CAB-22
NDTX059759-3RY/YPinto	ATND 99331-2 Pinto x ND 7834-2P
NDTX059828-2WZC	ND 4659-5R x ND 8524B-1R
NDTX071258Bs-1R	ND 039035B-9R x ND 4659-5R
NDTX081451CBs-1Y/Y	Dakota Diamond x Gala
NDTX081648CB-13W	ND 8456-1 x ND7377CB-1
NDTX113030C-3W	Dakota Diamond x ND7192-1
NDTX12135-1W	ND8559-20 x M3
NDTX12203AB-1W	ND028598c-1 x M2
NDTX12248Y-1R	95043.11 x Dakota Ruby
NDTX1244-3W/Y	AND07358-1Y x ND7192-1
NDTX1246-3W	AND07358-1Y x ND8304-2
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
NDTX13315CB-1W	ND092181CB-16 x ND7519-1
NDTX14134Y-3W	Waneta x ND860-2
NDTX1432Y-2Y/Y	93057.1 x ND7799c-1
NDTX14362AB-1W	ND102809AB-2 x ND028984B-1
NDTX1443-2W	Dakota Crisp x ND860-2
NDTX1444-3W	Dakota Crisp x ND7799c-1
NDTX1444-4W	Dakota Crisp x ND7799c-1

Variety or Selection	Parentage
NDTX1444-5W	Dakota Crisp x ND7799c-1
NDTX14475-1W/Y	ND113317-5 x ND113057-1
NDTX1452CB-3W	Dakota Diamond x ND102857CB-1
NDTX1467C-1R	Dakota Ruby x ND113300C-3RSY
NDTX1482YB-1W	Eva x Missaukee
NDTX1488-1Y	Gala x ND860-2
NDTX4784-7R	ND3574-5R x ND2050-1R
NY 152	B38-14 x Marcy
ORTX13SP218-1W-P/Y	PI604214FS x PALLIDA CPC
POR11PG62-3	Diverse x High Car
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
TX12483-6W	TX08402 x Snowden
TX12484-1WZC	TX08402 x NDTX059828-2W
TX12484-2WZC	TX08402 x NDTX059828-2W
TX12484-3WZC	TX08402 x NDTX059828-2W
TX13580-1W	Waneta x 00-3315-11
TX13590-9Ru	ND9687-3Ru x ND9852-1Ru
TX14602-2W/Y	COTX05095-2Ru/Y x Atlantic
TX14612-1R	BTX2332-1R x NDTX4784-7R
TX14615-3R	COTX02172-1R x NDTX4784-7R
TX14615-4R	COTX02172-1R x NDTX4784-7R
TX14619-2R	NDTX4784-7R x BTX2332-1R
TX14621-2R	NDTX4784-7R x NDTX081648CB-4W
TX14629-1P/P	COTX04050-1P/P x NDTX4764-7R
TX14632-2R	ATTX05186-3W/Y x NDTX059759-3Pinto/Y
TX14646-1W-R/Ypinto	NDTX059759-3Pinto x BTX2332-1R
TX14668-3WZC	Waneta x ATTX07042-3W
TX14670-2W/Y	MSN190-2 x ATTX07042-3W

Variety or Selection	Parentage
TX14695-2WZC	TX09396-1W x AOR07793-1
TX14710-4WZC	TX05249-11W x AOR07793-1
TX14710-7WZC	TX05249-11W x AOR07793-1
TX16714-2R/Y	ATTX98444S-16R/Y x NDTX4784-7R
TXA549-1Ru	ND9687-3Ru x ND9852-1Ru

Appendix C. Disposition of Clones

Clone	Class	Disposition
NDTX14362AB-1W	Chip	NCPT19 Tier 1
NDTX12135-1W	Chip	NCPT19 Tier 1
NDTX1246-5W/Y	Chip	NCPT19 Tier 2
AORTX09033-11W	Chip	EGSS19
ATX13134-3W/Y	Chip	EGSS19
NDTX13280CB-3W	Chip	EGSS19
AORTX09037-5W/Y	Chip	Keep
TX12484-2WZC	Chip	Keep
TX12484-3WZC	Chip	Keep
AORTX09037-1W/Y	Chip	Keep
AORTX09037-4W/Y	Chip	Keep
COTX12235-2W	Chip	Keep
COTX12428-1W	Chip	Keep
NDTX059828-2WZC	Chip	Keep
NDTX113030C-3W	Chip	Keep
NDTX12203AB-1W	Chip	Keep
NDTX1244-3W/Y	Chip	Keep
TX14668-3WZC	Chip	Keep
ATX10333-1W	Chip	Keep
ATX10389-1W	Chip	Keep
COTX13230-1W	Chip	Keep
COTX13231-1W	Chip	Keep
COTX13231-4W	Chip	Keep
COTX13231-5W	Chip	Keep
COTX13244-1W	Chip	Keep
COTX13244-3W	Chip	Keep
COTX13263-2W	Chip	Keep
COTX15345-1Y/Y	Chip	Keep

2018 Clone Disposition

Clone	Texas Trial Level	Class	Disposition for 2019 trials
NDTX081648CB-13W	Hig	Chip	Keep
NDTX12135-1W	EGSS18	Chip	NCPT19 Tier 1
NDTX14362AB-1W	EGSS18	Chip	NCPT19 Tier 1
NDTX1246-5W/Y	NCPT18 Tier 1	Chip	NCPT19 Tier 2
AORTX09033-11W	TXCH	Chip	EGSS19
ATX13134-3W/Y	TXCH	Chip	EGSS19
NDTX13280CB-3W	TXCH	Chip	EGSS19
AORTX09037-1W/Y	TXCH	Chip	Keep
AORTX09037-4W/Y	TXCH	Chip	Keep
AORTX09037-5W/Y	NCPT18 Tier 2	Chip	Keep
Atlantic	Mini Tuber 18	Chip	Keep
Atlantic	WRCH	Chip	Keep
ATTX10333-1W	4hillChip	Chip	Keep
ATTX10389-1W	4hillChip	Chip	Keep
COTX12235-2W	NCPT18 Tier 2	Chip	Keep
COTX12428-1W	NCPT18 Tier 2	Chip	Keep
COTX13230-1W	4hillChip	Chip	Keep
COTX13231-1W	4hillChip	Chip	Keep
COTX13231-4W	4hillChip	Chip	Keep
COTX13231-5W	4hillChip	Chip	Keep
COTX13244-1W	4hillChip	Chip	Keep
COTX13244-3W	4hillChip	Chip	Keep
COTX13263-2W	4hillChip	Chip	Keep
COTX15345-1Y/Y	4hillChip	Chip	Keep
COTX15425-1Y/Y	4hillChip	Chip	Keep
COTX15500-1Yre/Y	4hillChip	Chip	Keep
COTX15500-2Ryspl/Y	4hillChip	Chip	Keep
NDTX059828-2WZC	TXCH	Chip	Keep
NDTX113030C-3W	TXCH	Chip	Keep
NDTX12203AB-1W	NCPT18 Tier 2	Chip	Keep
NDTX1244-3W/Y	NCPT18 Tier 2	Chip	Keep
NDTX13315CB-1W	4hillChip	Chip	Keep
NDTX14134Y-3W	4hillChip	Chip	Keep
NDTX1432Y-2Y/Y	4hillChip	Chip	Keep
NDTX1443-2W	4hillChip	Chip	Keep
NDTX1444-3W	4hillChip	Chip	Keep

2018 Clone Disposition

Clone	Texas Trial Level	Class	Disposition for 2019 trials
NDTX1444-4W	4hillChip	Chip	Keep
NDTX1444-5W	4hillChip	Chip	Keep
NDTX1452CB-3W	4hillChip	Chip	Keep
NDTX1482YB-1W	4hillChip	Chip	Keep
NDTX1488-1Y	4hillChip	Chip	Keep
TX12484-2WZC	EGSS18	Chip	Keep
TX12484-3WZC	EGSS18	Chip	Keep
TX14668-3WZC	ZC Susceptible Check	Chip	Keep
AORTX09032-3W	TXCH	Chip	DROP
AORTX09033-4W	TXCH	Chip	DROP
AORTX09144-2W	NCPT18 Tier 2	Chip	DROP
Atlantic dal	TXCH	Chip	DROP
ATX11482-3W	TXCH	Chip	DROP
ATX13126-3W	TXCH	Chip	DROP
ATX13126-5Ru	TXCH	Chip	DROP
ATX13127-1Ru	TXCH	Chip	DROP
NDTX1246-3W	NCPT18 Tier 2	Chip	DROP
NDTX13224CAB-1W	TXCH	Chip	DROP
NDTX14475-1W/Y	EGSS18	Chip	DROP
TX05249-10W	TXCH	Chip	DROP
TX09396-1W	TXCH	Chip	DROP
TX12483-6W	NCPT18 Tier 1	Chip	DROP
TX12484-1WZC	EGSS18	Chip	DROP
TX13580-1W	NCPT18 Tier 1	Chip	DROP
TX14695-2WZC	NCPT18 Tier 1	Chip	DROP
TX14710-4WZC	EGSS18	Chip	DROP
TX14710-7WZC	TXCH	Chip	DROP
ATX11586-2R/Y	4Hill18FNG	Fing	Keep
Banana	TXFing	Fing	Keep
PORTX03PG25-2R/R	TXFing	Fing	Keep
ATX08121-3P/Y	TXP/P	P/P	Keep
ATX11549-1P/Y	TXP/P	P/P	Keep
ATX11556-1P/Y	TXP/P	P/P	Keep
COTX10138-19P/Y	TXP/P	P/P	DROP
ATTX05175s-1R/Y	WRRY	RD/Y	WR19

2018 Clone Disposition

Clone	Texas Trial Level	Class	Disposition for 2019 trials
ATX02263-1R/Y	SW	RD/Y	WR19
COTX04193s-2R/Y	WRRY	RD/Y	WR19
ATTX10265-4R/Y	TXRD/Y	RD/Y	Keep
ATTX10270-2P/Y	4Hill18RD/Y	RD/Y	Keep
ATTX10286-1R/Y	4Hill18RD/Y	RD/Y	Keep
ATX11586-1R/Y	4Hill18RD/Y	RD/Y	Keep
ATX11593-1R/Y	4Hill18RD/Y	RD/Y	Keep
NDTX059759-3RY/Y Pinto	TXRD/Y	RD/Y	Keep
NDTX059759-3RY/Y Pinto	Mini Tuber 18	RD/Y	Keep
Sierra Rose	TXRD/Y	RD/Y	Keep
Sierra Rose	Mini Tuber 18	RD/Y	Keep
TX14646-1W-R/YPinto	TXRD/Y	RD/Y	Keep
TX16714-2R/Y	4Hill18RD/Y	RD/Y	Keep
BTX2103-1R/Y	Mini Tuber 18	RD/Y	DROP
NDTX071258Bs-1R	WRRD	Red	SW19
ATTX11617-2R	4Hill18Red	Red	Keep
ATX08121-5R	TXRD	Red	Keep
COTX14107-4R	TXRD	Red	Keep
NDTX12248Y-1R	TXRD	Red	Keep
NDTX4784-7R	TXRD	Red	Keep
Red LaSoda	WRRD	Red	Keep
COTX00104-6R	TXRD	Red	DROP
COTX02293-4R	TXRD	Red	DROP
COTX07054-2R	TXRD	Red	DROP
COTX14035-1R	TXRD	Red	DROP
COTX14107-3R	TXRD	Red	DROP
NDTX13105-1R	TXRD	Red	DROP
TX14612-1R	TXRD	Red	DROP
TX14615-3R	TXRD	Red	DROP
TX14615-4R	TXRD	Red	DROP
TX14619-2R	TXRD	Red	DROP
TX14632-2R	TXRD	Red	DROP
COTX08322-10Ru	TXRU	Russ	SW19
COTX05095-2Ru/Y	WRRU	Russ	WR19
AOTX03187-1Ru	Mini Tuber 18	Russ	Keep

2018 Clone Disposition

Clone	Texas Trial Level	Class	Disposition for 2019 trials
ATX10007-1Ru	4Hill18Ru	Russ	Keep
ATX10008-1Ru	4Hill18Ru	Russ	Keep
ATX10067-1Ru	4Hill18Ru	Russ	Keep
ATX10378-3Ru/Y	4Hill18Ru	Russ	Keep
ATX11382-2Ru	4Hill18Ru	Russ	Keep
ATX12058-1Ru	TXRU	Russ	Keep
ATX13018-1Ru	4Hill18Ru	Russ	Keep
ATX13018-2Ru	4Hill18Ru	Russ	Keep
ATX13046-1Ru	4Hill18Ru	Russ	Keep
ATX13065-3Ru	4Hill18Ru	Russ	Keep
ATX14003-1Ru	4Hill18Ru	Russ	Keep
COTX08063-2RU	Mini Tuber 18	Russ	Keep
COTX09022-3RuRE/Y	TXRU	Russ	Keep
COTX09022-3RuRE/Y	Mini Tuber 18	Russ	Keep
COTX10080-2Ru	TXRU	Russ	Keep
COTX13029-2Ru/Y	4Hill18Ru	Russ	Keep
COTX14016-1Ru	4Hill18Ru	Russ	Keep
COTX14132-1Ru	TXRU	Russ	Keep
COTX14250-1Ru	TXRU	Russ	Keep
COTX14263-1Ru	4Hill18Ru	Russ	Keep
COTX15023-1Ru	4Hill18Ru	Russ	Keep
COTX15144-1Ru	4Hill18Ru	Russ	Keep
COTX15271-1Ru	4Hill18Ru	Russ	Keep
Dal17001RuRua	4Hill18Ru	Russ	Keep
Dal17001RuRub	4Hill18Ru	Russ	Keep
Reveille Russet	Mini Tuber 18	Russ	Keep
Reveille Russet Neb	TXRU	Russ	Keep
Russet Burbank	Mini Tuber 18	Russ	Keep
Russet Norkotah	WRRU	Russ	Keep
Russet Norkotah	Mini Tuber 18	Russ	Keep
Russet Norkotah223	Mini Tuber 18	Russ	Keep
Russet Norkotah278	Mini Tuber 18	Russ	Keep
Russet Norkotah296	Mini Tuber 18	Russ	Keep
Sierra Gold	Mini Tuber 18	Russ	Keep
TX08352-5Ru	Mini Tuber 18	Russ	Keep

2018 Clone Disposition

Clone	Texas Trial Level	Class	Disposition for 2019 trials
TX08352-5Ru Neb	TXRU	Russ	Keep
TX13590-9Ru	TXRU	Russ	Keep
AOTX05043-1Ru	WRRU	Russ	DROP
ATX11379-1Ru	TXRU	Russ	DROP
ATX13108-2Ru	TXRU	Russ	DROP
COTX13215-1Ru	TXRU	Russ	DROP
COTX13215-2Ru	TXRU	Russ	DROP
RussetNorkotah278	TXRU	Russ	DROP
RussetNorkotah278 Neb	TXRU	Russ	DROP
RussetNorkotah296	TXRU	Russ	DROP
Stampede Russet	TXRU	Russ	DROP
TXA549-1RU	TXRU	Russ	DROP
ATX05202S-3W/Y	TXSM	Small	Keep
ATX06264S-4R/Y	TXSM	Small	Keep
COTX04050S-1P/P	TXSM	Small	Keep
NDTX081451CBS-1Y/Y	TXSM	Small	Keep
NDTX1467C-1R	4Hill18SM	Small	Keep
AORTX11913-4P	TXSM	Small	DROP
ATTX98444S-16R/Y	TXSM	Small	DROP
ATX05186-1R	TXSM	Small	DROP
ATX11548-1R	TXSM	Small	DROP
COTX10073S-1W	TXSM	Small	DROP
COTX10138S-7W/Y	TXSM	Small	DROP
NDTX1287B-1W	TXSM	Small	DROP
TX09406S-1P/P	TXSM	Small	DROP
AORTX11913-3Wre/Y	TXW/Y	WH/Y	Keep
ATTX10301-1Pyspl/Y	4Hill18WH/Y	WH/Y	Keep
ATTX10327-2Y/Y	4Hill18WH/Y	WH/Y	Keep
ATTX10327-3Y/Y	4Hill18WH/Y	WH/Y	Keep
ATTX11591-3W/Y	TXW/Y	WH/Y	Keep
ATTX11633-1RYPinto/Y	4Hill18WH/Y	WH/Y	Keep
ATTX11633-2R/Y	4Hill18WH/Y	WH/Y	Keep
ATTX11633-3R/Y	4Hill18WH/Y	WH/Y	Keep
ATTX11633-4R/Y	4Hill18WH/Y	WH/Y	Keep
ATTX11676-1Y/Y	4Hill18WH/Y	WH/Y	Keep

2018 Clone Disposition

Clone	Texas Trial Level	Class	Disposition for 2019 trials
ATX11567-1W/Y	TXW/Y	WH/Y	Keep
COTX14220-2W/Y	TXW/Y	WH/Y	Keep
COTX14284-2W/Y	TXCH	WH/Y	Keep
COTX15338-1Y/Y	4Hill18WH/Y	WH/Y	Keep
COTX15425-2Y/Y	4Hill18WH/Y	WH/Y	Keep
Sierra Gold	TXW/Y	WH/Y	Keep
TX14602-2W/Y	TXW/Y	WH/Y	Keep
Yukon Gold	WRWY	WH/Y	Keep
ATTX11591-1W/Y	TXW/Y	WH/Y	DROP
BTX1749-1W/Y	TXW/Y	WH/Y	DROP
COTX10097-2W/Y	TXW/Y	WH/Y	DROP
TX14670-2W/Y	TXW/Y	WH/Y	DROP
Yukon Gold dal	TXW/Y	WH/Y	DROP
TACNA	Mini Tuber 18		DROP
UNICA	Mini Tuber 18		DROP

2018 Clone Disposition

Clone	Texas Trial Level	Class	Disposition for 2019 trials
Colorado Seed Disposition			
NDTX059759-3RY/Y Pinto		WH/Y	Maintain
ATTX07042-3W		Chip	SW2019
TX09403-15W		Chip	SW2019
TX09403-21W		Chip	SW2019
COTX08322-10RU		Russ	SW2019
NDTX071258BS-1R		Small	SW2019
ATTX05175s-1R/Y		RD/Y	WR2019
ATX02263-1R/Y		RD/Y	WR2019
ATX06264s-4R/Y		RD/Y	WR2019
COTX04193s-2R/Y		RD/Y	WR2019
COTX05095-2RU/Y		Russ	WR2019
AOTX05043-1RU		Russ	DROP
ATTX98444-16R/Y		Small	DROP
COTX08063-2RU		Russ	Increase

Index of Varieties and Clones

A06030-23	101, 102, 105, 208, 273
A07061-6	101, 102, 105, 208, 273
A071012-4BF	101, 102, 105, 208, 273
A07769-4	101, 103, 105, 209, 273
A08433-4VR.....	101, 102, 105, 209, 273
A10021-5TE	101, 103, 105, 209, 273
AC01144-1W	92, 94, 209, 273
AC10376-1W/Y	26, 27, 124, 126, 210, 273
Ackersegen.....	269
Actrice.....	269
Adora	269
Agria	269
Alegria	26, 27, 124, 125, 126, 210, 269
All Blue.....	256, 269, 271
Alpha.....	269
Ambra	269
AO02183-2	101, 102, 105, 210, 224, 273, 275
AO06191-1	101, 103, 105, 210, 273
AOR06576-1.....	101, 104, 105, 211, 273
AOR07781-5.....	103, 105, 211, 273
AOR07821-1.....	101, 102, 105, 211, 273
AOR09034-3.....	91, 92, 94, 211, 273
AORTX09032-3W.....	144, 146, 150, 212, 273
AORTX09033-11W.....	144, 148, 150, 212, 273
AORTX09033-4W.....	144, 148, 150, 212, 273
AORTX09037-1W/Y.....	144, 145, 150, 212, 273
AORTX09037-4W/Y.....	144, 145, 146, 150, 213, 273
AORTX09037-5W/Y.....	3, 144, 146, 150, 213, 273
AORTX09144-2W.....	3, 144, 145, 146, 150, 213, 273
AORTX11913-3Wre/Y.....	67, 68, 69, 188, 189, 190, 214, 274
AORTX11913-4P	74, 75, 76, 197, 199, 214, 274
AOTX05043-1Ru	3, 101, 103, 105, 214, 274

Asterix.....	269
Atlantic.....	91, 93, 94, 144, 145, 146, 150, 214, 261, 263, 269, 271, 279
ATX05175s-1R/Y	19, 20, 117, 119, 215, 274
ATX10007-1Ru.....	168, 169, 215, 274
ATX10008-1Ru.....	168, 169, 215, 274
ATX10067-1Ru.....	168, 169, 215, 274
ATX10265-4R/Y.....	60, 61, 62, 179, 181, 215, 274
ATX10270-2P/Y	186, 187, 216, 274
ATX10286-1R/Y.....	186, 187, 216, 274
ATX10301-1Pyspl/Y.....	195, 196, 216, 274
ATX10327-2Y/Y.....	195, 196, 216, 274
ATX10327-3Y/Y.....	195, 196, 216, 274
ATX10333-1W.....	158, 159, 217, 274
ATX10378-3Ru/Y.....	168, 169, 217, 274
ATX10389-1W.....	158, 159, 217, 274
ATX11591-1W/Y.....	188, 189, 190, 217, 274
ATX11591-3W/Y.....	67, 69, 188, 189, 190, 217, 274
ATX11617-2R.....	177, 178, 218, 274
ATX11633-1RYPinto/Y.....	195, 196, 218, 274
ATX11633-2R/Y.....	195, 196, 218, 274
ATX11633-3R/Y.....	195, 196, 218, 274
ATX11633-4R/Y.....	195, 196, 219, 274
ATX11676-1Y/Y.....	195, 196, 219, 274
ATX98444S-16R/Y.....	74, 75, 76, 197, 198, 199, 219, 267, 274, 280
ATX02263-1R/Y	3, 19, 20, 117, 119, 219, 274
ATX05186s-1R.....	74, 75, 76, 198, 199, 219, 274
ATX05202s-3W/Y.....	74, 75, 76, 197, 198, 199, 220, 274
ATX06264s-4R/Y.....	75, 76, 197, 199, 220, 274
ATX08121-3P/Y.....	131, 132, 133, 220, 274
ATX08121-5R	53, 54, 55, 170, 171, 172, 220, 274
ATX11379-1Ru	45, 46, 48, 162, 163, 221, 274
ATX11382-2Ru	168, 169, 221, 275
ATX11482-3W	144, 147, 150, 221, 275
ATX11533-1W/Y	221, 275

ATX11548-1R	197, 199, 222, 275
ATX11549-1P/Y	131, 132, 133, 222, 275
ATX11556-1P/Y	131, 133, 222, 275
ATX11567-1W/Y	67, 68, 69, 188, 189, 190, 222, 275
ATX11586-1R/Y	186, 187, 223, 275
ATX11586-2R/Y	206, 207, 223, 275
ATX11593-1R/Y	186, 187, 223, 275
ATX12058-1Ru	45, 46, 48, 160, 161, 162, 163, 223, 275
ATX13018-1Ru	168, 169, 223, 275
ATX13018-2Ru	168, 169, 224, 275
ATX13046-1Ru	168, 169, 224, 275
ATX13065-3Ru	168, 169, 224, 275
ATX13108-2Ru	45, 46, 48, 160, 161, 163, 224, 275
ATX13126-3W	145, 148, 150, 224, 275
ATX13126-5Ru	145, 148, 150, 225, 275
ATX13127-1Ru	144, 149, 150, 225, 275
ATX13134-3W/Y	144, 145, 147, 150, 225, 275
ATX14003-1Ru	168, 169, 225, 275
Avalanche	269
Aziza	269
Baltic Cream	269
Banana	81, 82, 138, 139, 226, 269
Beacon Chipper	245, 269, 277
Bettina	269
Binje	269
Boulder	211, 269, 273
BTX1749-1W/Y	67, 68, 69, 188, 189, 190, 226, 275
BTX2103-1R/Y	60, 61, 62, 179, 181, 226, 275
Caesar	269, 271
Carola	269
Carrera	269
Century	269, 271, 272
Chieftain	12, 13, 14, 110, 112, 226, 269
Chipeta	269

Climax.....	269
CO06215-2R.....	110, 111, 112, 227, 275
CO08037-2P/P.....	32, 34, 131, 132, 133, 227, 275
CO08155-2RU/Y.....	103, 105, 227, 275
CO08231-1RU.....	101, 103, 105, 227, 275
CO09036-2RU.....	101, 104, 105, 228, 275
CO09076-3RU.....	104, 105, 228, 275
CO09079-5PW/Y.....	19, 20, 117, 119, 228, 275
CO09128-3W/Y.....	25, 26, 27, 124, 125, 126, 228, 275
CO09128-5W/Y.....	25, 27, 124, 126, 229, 275
CO09205-2RU.....	101, 102, 105, 229, 276
CO09218-4W/Y.....	26, 27, 124, 125, 126, 229, 276
CO10064-1W/Y.....	25, 27, 124, 125, 126, 229, 276
CO10073-7W.....	91, 92, 93, 94, 230, 276
CO10076-4W.....	91, 92, 94, 230, 276
CO10087-4RU.....	103, 105, 230, 276
CO10091-1RU.....	101, 103, 105, 230, 276
CO10097-2W/Y.....	25, 27, 124, 125, 126, 231, 243, 276, 277
CO10098-4W/Y.....	25, 27, 124, 125, 126, 231, 276
CO10098-5W/Y.....	25, 26, 27, 124, 125, 126, 231, 276
CO98012-6R.....	12, 13, 14, 110, 112, 231, 276
CO99076-5R.....	12, 13, 14, 110, 112, 232, 276
COTX00104-6R.....	53, 54, 55, 170, 171, 172, 232, 276
COTX02293-4R.....	53, 54, 55, 170, 171, 172, 232, 276
COTX03134-1W.....	74, 75, 76, 190, 197, 198, 199, 232, 276
COTX04050s-1P/P.....	74, 75, 76, 197, 198, 199, 233, 276
COTX04193s-2R/Y.....	19, 20, 117, 119, 233, 276
COTX05095-2Ru/Y.....	3, 101, 102, 105, 233, 263, 276, 279
COTX07054-2R.....	53, 55, 170, 171, 172, 234, 276
COTX08322-10Ru.....	47, 48, 160, 161, 163, 234, 276
COTX09022-3RuRE/Y.....	45, 46, 48, 160, 162, 163, 234, 276
COTX10073s-1W.....	74, 75, 76, 198, 199, 234, 276
COTX10080-2Ru.....	45, 46, 47, 48, 160, 161, 163, 235, 276
COTX10097-2W/Y.....	67, 68, 69, 188, 189, 190, 235, 276

COTX10138-19P/Y	32, 34, 131, 133, 235, 276
COTX10138s-7W/Y	74, 75, 76, 81, 197, 198, 199, 235, 276
COTX10138S-7W/Y	74
COTX12235-2W	3, 144, 146, 150, 236, 276
COTX12428-1W	3, 145, 147, 150, 236, 276
COTX13029-2Ru/Y	168, 169, 236, 276
COTX13215-1Ru	45, 47, 48, 160, 161, 163, 236, 276
COTX13215-2Ru	47, 48, 160, 161, 163, 237, 276
COTX13230-1W	158, 159, 237, 276
COTX13231-1W	158, 159, 237, 277
COTX13231-4W	158, 159, 237, 277
COTX13231-5W	158, 159, 238, 277
COTX13244-1W	158, 159, 238, 277
COTX13244-3W	158, 159, 238, 277
COTX13263-2W	158, 159, 238, 277
COTX14016-1Ru	168, 169, 239, 277
COTX14035-1R	53, 54, 55, 170, 172, 239, 277
COTX14035-2R	239, 277
COTX14087-1R	239, 277
COTX14107-3R	53, 54, 55, 171, 172, 240, 277
COTX14107-4R	53, 54, 55, 170, 171, 172, 240, 277
COTX14128-1R	53, 54, 55, 240, 277
COTX14132-1Ru	45, 46, 48, 160, 161, 162, 163, 240, 277
COTX14220-2W/Y	188, 189, 190, 241, 277
COTX14250-1Ru	45, 46, 48, 160, 161, 163, 241, 277
COTX14263-1Ru	168, 169, 241, 277
COTX14284-2W/Y	144, 145, 150, 241, 277
COTX15023-1Ru	168, 169, 242, 277
COTX15144-1Ru	168, 169, 242, 277
COTX15271-1Ru	168, 169, 242, 277
COTX15338-1Y/Y	195, 196, 242, 277
COTX15345-1Y/Y	158, 159, 242, 277
COTX15425-1Y/Y	158, 159, 243, 277
COTX15425-2Y/Y	195, 196, 243, 277

COTX15500-1Yre/Y	158, 159, 243, 277
COTX15500-2Ryspl/Y	158, 159, 243, 277
Courage	269
Dakota Jewel	270
Dal17001RuRua	168, 169, 244, 277
Dal17001RuRub	168, 169, 244, 277
Dark Red Norland	270
Day-9	270
Delikat	270
Desiree	270, 271
Diamante	270
Dore	270, 271
Eerstelling	270
Eigenheimer	270
Electra	270
Emma	270
Estima	270, 271
Fabula	270
Florissant	270
FOB136-181	124, 126, 244, 277
Fortress Russet	227, 270, 275
Fortuna	270
Foxton	270
Gasora	270
German Butter Ball	270
Golden Sunburst	270
Granola	210, 217, 270, 273, 274
Green Mountain	270
Hertha	270
Innovator	227, 270, 275
Irish Crispin	270
Ivory Crisp	212, 213, 270, 273
Kalkaska	270
Keuka Gold	270

King Harry	270
Krasaua	270
La Rouge	270
Lamoka	91, 93, 94, 244, 246, 270, 278
Lanorma	271
LaRatte	39, 40, 138, 139, 244, 271
Latona	271
Magic Molly.....	271
Maris Piper.....	269, 270, 271
Mazama.....	260, 271
MegaChip.....	271
Merlin.....	271
Modoc	271
Molli.....	271
Mondial.....	271, 272
Morning Gold.....	271
MSV030-4	91, 92, 94, 245, 277
MSV313-2	91, 93, 94, 245, 277
MSV358-3	92, 94, 245, 278
MSW044-1.....	91, 93, 94, 245, 278
MSW343-2R.....	12, 14, 110, 111, 112, 246, 278
MSW485-2.....	91, 92, 94, 246, 278
MSX540-4	91, 92, 94, 246, 278
MSX569-1R.....	12, 13, 14, 110, 112, 246, 278
NCB2607-3.....	117, 118, 119, 247, 278
NDA081453CAB-2C.....	91, 92, 94, 247, 278
NDTX059759-3RY/YPinto	60, 61, 62, 179, 180, 181, 247
NDTX059828-2WZC	144, 148, 150, 247, 278
NDTX071258Bs-1R	12, 13, 14, 110, 111, 112, 248, 278
NDTX081451CBs-1Y/Y	74, 75, 76, 197, 199, 248, 278
NDTX081648CB-13W	93, 94, 248, 278
NDTX113030C-3W.....	144, 145, 146, 150, 248, 278
NDTX12135-1W	3, 144, 147, 150, 249, 278
NDTX12203AB-1W.....	3, 144, 147, 150, 249, 278

NDTX12248Y-1R.....	53, 54, 55, 170, 171, 172, 249, 278
NDTX1244-3W/Y	3, 144, 145, 150, 249, 278
NDTX1246-3W	3, 144, 145, 146, 150, 250, 278
NDTX1246-5W/Y	3, 144, 146, 150, 250, 278
NDTX1287B-1W.....	74, 75, 76, 198, 199, 250, 278
NDTX13105-1R	53, 54, 55, 170, 172, 251, 278
NDTX13224CAB-1W	145, 148, 150, 251, 278
NDTX13264B-1R/Y.....	60, 61, 62, 251, 278
NDTX13280CB-3W	148, 150, 251, 278
NDTX13315CB-1W	158, 159, 252, 278
NDTX14134Y-3W	158, 159, 252, 278
NDTX1432Y-2Y/Y	158, 159, 252, 278
NDTX14362AB-1W.....	3, 144, 146, 150, 252, 278
NDTX1443-2W	158, 159, 252, 278
NDTX1444-3W	158, 159, 253, 278
NDTX1444-4W	158, 159, 253, 278
NDTX1444-5W	158, 159, 253, 279
NDTX14475-1W/Y	144, 145, 150, 253, 279
NDTX1452CB-3W	158, 159, 254, 279
NDTX1467C-1R.....	204, 205, 254, 279
NDTX1482YB-1W.....	158, 159, 254, 279
NDTX1488-1Y	158, 159, 254, 279
NDTX4784-7R	54, 55, 170, 171, 172, 255, 264, 265, 267, 279, 280
Nectar.....	271
NorDonna.....	216, 271, 274
Norgold-M	271
NorValley.....	271
NY 152.....	91, 93, 94, 255, 279
Olympus.....	271
ORTX13SP218-1W-P/Y.....	255, 279
Oscar	271
Ottar	271
Pacific Russet.....	271
Penta.....	271

Pimpernel	271
Platina	271
POR11PG62-3	39, 40, 138, 139, 255, 279
PORTX03PG25-2R/R.....	81, 82, 138, 139, 256, 279
Premiere	270, 271
Primica Inta.....	271
Prince Hairy	271
Purple Majesty	32, 33, 34, 87, 131, 133, 256, 271
Purple Peruvian.....	271
Ranger Russet	101, 102, 105, 256, 271
Red Gold	271
Red LaSoda.....	12, 13, 14, 53, 54, 55, 110, 112, 170, 172, 246, 256, 257, 271
Reveille Russet.....	45, 46, 47, 48, 101, 103, 105, 257, 272
Rio Rojo	272
Rodeo	272
Rosara	272
Rose Gold	272
Russet Burbank	1, 101, 103, 105, 257, 272
Russet Legend.....	272
Russet Norkotah.....	viii, 1, 45, 46, 47, 48, 101, 102, 104, 105, 160, 162, 163, 258, 259, 272
Russet Norkotah dal.....	45, 46, 47, 48, 160, 162, 163
Russet Norkotah112.....	272
Russet Norkotah223.....	272
Russet Norkotah278.....	45, 46, 48, 272
Russet Norkotah296.....	45, 46, 48, 272
RussetNorkotah278.....	160, 161, 162, 163, 258
RussetNorkotah296.....	160, 162, 163, 259
Rutt.....	272
Saginaw Gold.....	272
Sangre	272
Sangre10	272
Sante.....	272
Satina	272
Shepody	101, 103, 105, 259, 270, 272

Sierra Gold.....	68, 69, 188, 189, 190, 259, 272
Sierra Rose.....	60, 62, 179, 181, 260, 272
Smiley.....	272
Snowden.....	91, 92, 94, 260, 262, 272, 279
Soraya.....	25, 26, 27, 124, 125, 126, 260, 272
Sprint.....	272
Stampede Russet.....	45, 47, 48, 160, 161, 163, 215, 260, 267, 272, 274
Strobrawa.....	272
Super Red.....	272
Taisiya.....	272
Tebina.....	272
TX05249-10W.....	144, 147, 150, 261, 279
TX08352-5Ru.....	45, 46, 47, 48, 101, 102, 104, 105, 261, 279
TX09396-1W.....	144, 145, 148, 150, 261, 266, 279, 280
TX09406S-1P/P.....	74, 75, 76, 198, 199, 262, 279
TX12483-6W.....	3, 148, 150, 262, 279
TX12484-1WZC.....	148, 150, 262, 279
TX12484-2WZC.....	144, 147, 150, 262, 279
TX12484-3WZC.....	147, 150, 263, 279
TX13580-1W.....	3, 147, 150, 263, 279
TX13590-9Ru.....	46, 48, 160, 162, 163, 263, 279
TX14602-2W/Y.....	67, 68, 69, 188, 189, 190, 263, 279
TX14612-1R.....	54, 55, 170, 172, 264, 279
TX14615-3R.....	53, 54, 55, 170, 171, 172, 264, 279
TX14615-4R.....	53, 54, 55, 171, 172, 264, 279
TX14619-2R.....	53, 54, 55, 170, 172, 264, 279
TX14621-2R.....	54, 55, 265, 279
TX14629-1P/P.....	32, 34, 265, 279
TX14632-2R.....	53, 54, 55, 170, 171, 172, 265, 279
TX14646-1W-R/YPinto.....	60, 61, 62, 179, 181, 265
TX14668-3WZC.....	144, 148, 150, 265, 279
TX14670-2W/Y.....	68, 69, 188, 189, 190, 266, 279
TX14695-2WZC.....	148, 150, 266, 280
TX14710-4WZC.....	147, 150, 266, 280

TX14710-7WZC	148, 150, 267, 280
TX16714-2R/Y	186, 187, 267, 280
TXA549-1Ru	45, 47, 48, 160, 161, 162, 163, 261, 267, 279, 280
Ukama	272
Urgenta	270, 272
US Blue	273
Valisa	273
Viking	272, 273
Vivaldi	273
Vokal	273
Waneta	91, 252, 263, 265, 273, 278, 279
Wendy	25, 26, 27, 124, 126, 267, 273
Winema	273
Yellow Finn	273
Yukon Gold	viii, 25, 27, 67, 68, 69, 124, 125, 126, 188, 189, 190, 268, 273

