

Texas Potato Breeding Report 2006



The Texas Agricultural Experiment Station
Department of Horticultural Sciences
Texas A&M University

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College Station and Lubbock

Full Report

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Prefix source key for numbered advanced selections:

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

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

AD = cross made in Aberdeen, Idaho and selected in California (Davis)

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 Aberdeen, Idaho

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

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

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

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

CS = Campbell Institute for Agricultural Research, Camden, New Jersey

AWN = cross made in Aberdeen, Idaho and selected in Washington

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

COO = cross made in Colorado and selected in Oregon

CORN = Colorado selections (strains) out of Russet Norkotah made by the Colorado program

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

LA = cross made and selected in Louisiana

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

MN = cross made and selected in Minnesota

MNTX = cross made in Minnesota and selected in Texas

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

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

ND = cross made and selected in North Dakota

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

NDC = cross made in North Dakota and selected in Colorado

NDD = cross made in North Dakota and selected in California (Davis)

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

PA = cross made and selected in Prosser

POR = cross made in Prosser and selected in Oregon

RZ = cross made and selected at the Potato Research Institute, Czech Republic.

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

WC = cross made in Washington and selected in Colorado

WD = cross made in Washington and selected in California (Davis)

WN = cross made in Washington and selected in North Dakota

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

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

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

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

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

Mission Statement

The mission of the Texas Potato Breeding and Variety Development Program of the Texas Agricultural Experiment Station 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 Variety Development Program in 1973, 1,789,826 seedlings have been grown for selection in Texas, from which 8,063 original selections have been made. Twelve improved varieties have been developed/co-developed and/or released from this program. Virtually all of the russet potatoes grown in Texas in 2006 were to the improved Texas Russet Norkotah strains. When this program was initiated in 1973, the average yield of the summer crop in Texas was about 200 Cwt/A. In 2005 the average summer crop yield in Texas was reported to be 440 Cwt/A, the highest in the nation among 12 states with summer crop production. In addition, the farm gate value of the crop has grown from less than \$20 million to about \$70 million with an annual economic impact to the state in 2005 estimated to exceed \$150 million. Of the new varieties developed/released in the US in the last 10 years, those released by the Texas program collectively ranked second in total seed acreage entered into certification in 2006.

Introduction

Program Summary

The Texas Potato Breeding and Variety Development Program used two locations in the 2006 growing season (Table 1). The first planting was near Springlake, Texas on 29 to 31 March 2006 and harvested on 13, 16 July, and 8, 10 August. This location included eight replicated trials and first generation seedlings for selection. The second planting was near Dalhart, Texas on 4 and 5 April and harvested on 28 August, 11, 12, and 18 September. Five replicated trials, a seed increase nursery, and first year seedlings for selection were planted at this site. The Texas program entered sixteen selections (ATTX961014-1R/Y, ATTX98500-2P/Y, AOTX95265-1Ru, AOTX95265-3Ru, AOTX95295-3Ru, AOTX98137-1Ru, ATX9117-1Ru, ATX9130-1Ru, ATX9202-3Ru, ATX97147-4Ru, ATTX98453-6R, COTX00104-7R, NDTX4784-7R, NDTX4828-2R, and TX1475-3W) in the Southwestern Regional Trials conducted in Texas, Colorado, and 2 sites in California. The Texas Program also had five entries in the Western Regional Russet Trial (AOTX95265-2ARu, AOTX95265-4Ru, MWTX2609-2Ru, MWTX2609-4Ru, and TXA549-1Ru,) and one in the Western Regional Chipping Trial (ATTX95490-2W). These trials were conducted at multiple locations in 6 western states. Plant Variety Protection (PVP) is pending for TX1523-1Ru/Y (Sierra Gold™), Stampede Russet, and Rio Rojo. The major program expansion and emphasis in 2006 continued to involve virus testing, clean-up, and minituber multiplication of a large backlog of selected clones. A field day was held on 26 June at Springlake and was well attended.

Seedling program

In 2006 77,534 first year seedlings, resulting from 575 different parental combination or families (crosses), were grown for selection on the Barrett Farm (35,939) near Springlake and on the CSS Farm (41,595) near Dalhart. Two hundred twenty two original selections were made from this material (Figure 1).

The 2006 first year seedling tubers from Texas (13,409) were grown during the fall of 2005 at College Station, primarily from true seed crosses made in Lubbock, Texas. The remaining seedling tubers were provided by Rich Novy, Idaho (9,717), Isabel Vales, Oregon (15,784), David Holm, Colorado (20,147), and Susie Thompson, North Dakota (20,155). Dave Holm, Colorado also provided 292 mini tubers from advanced Texas selection for seed increase. The Texas program provided 2,688 second – fourth size seedling tubers to Colorado, while 970, 311, and 3,077 were sent to North Dakota, Minnesota, and Washington respectively.

Table 1. Trial locations, name of trial, number of entries, and number of plots evaluated in 2006.

Springlake			Dalhart		
Trial	# of Entries	# of Plots	Trial	# of Entries	# of Plots
Field Day Red	95	190	Western Regional Chipping	13	104
Western Regional Red/Specialty	16	128	Texas Advanced Chipping Selections	24	180
Southwest Regional Red	8	64	05 Chip Selection	29	29
Texas Advanced Selections Red	21	168	Texas Advanced Specialty Selections	34	256
Field Day Russets	99	198	05 Specialty Selection	62	62
Western Regional Russets	24	192	05 Fingerling Selection	41	41
Southwest Regional Russets	15	120	Texas Advanced Red Selections	34	160
Texas Advanced Selection Russets	18	144	05 Red Selection	50	50
Southwest Regional Specialty	11	88	Texas Advanced Russet Selections	37	176
Texas Advanced Selection Specialty	25	200	05 Russet Selection	87	87
Total	332	1492	Total	411	1145
			Total Entries and Plots	743	2637

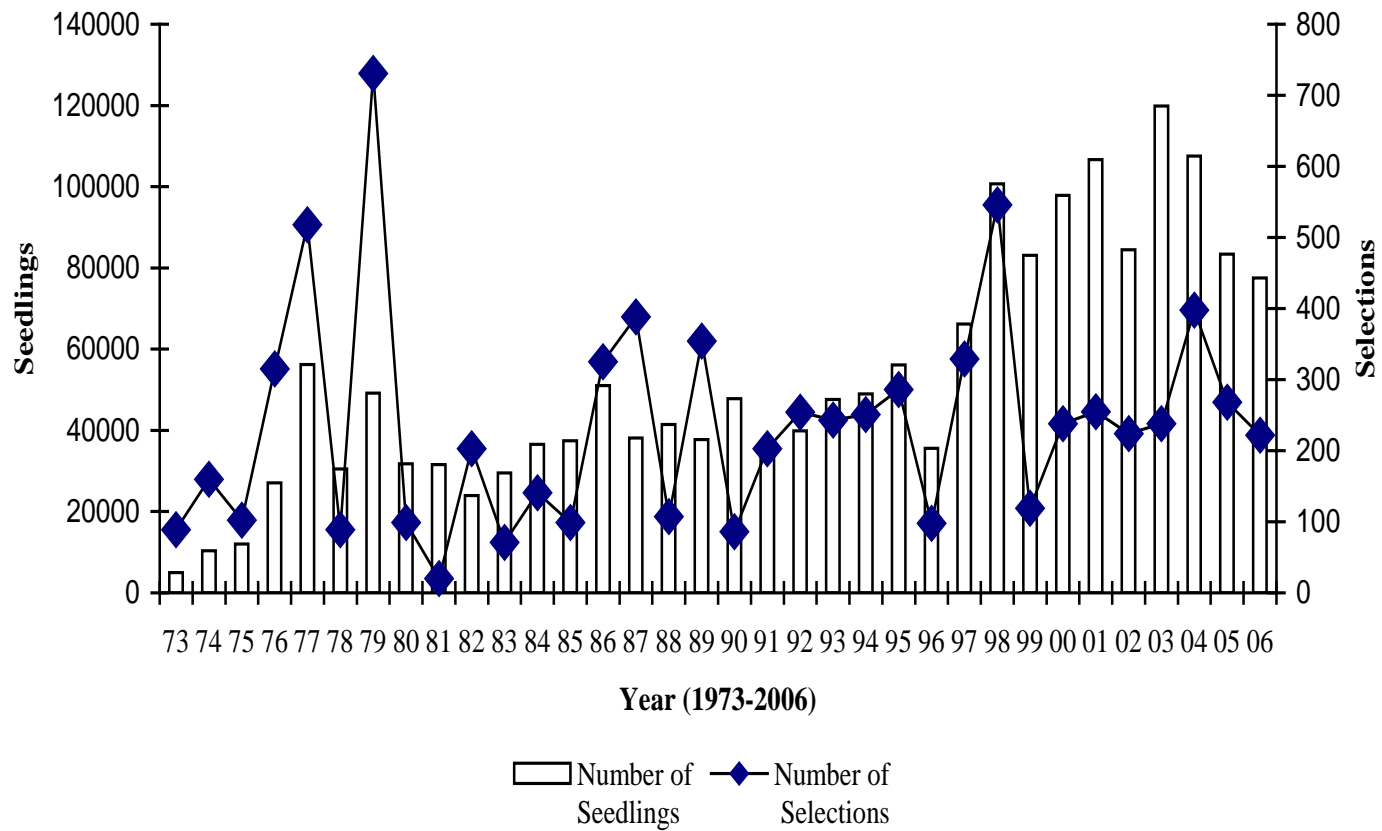


Figure. 1. Number of first year seedling tubers grown for original selection and number of selections made since the inception of the Texas Potato Variety Development Program.

Adaptation trials

The objectives of the adaptation trials were: (1) to test advanced selections and named varieties to determine their potential as replacement varieties for those presently grown in Texas, and (2) to identify potential parents for use in the Texas breeding program. Some 332 advanced selections and varieties were tested in replicated and nonreplicated trials near Springlake, while 411 entries were evaluated near Dalhart (Table 1). A seed increase nursery was grown at the San Luis Valley Research Center, Center, Colorado, by Dr. David Holm.

Since 1973, 24,029 entries have been evaluated (Figure 2). Findings from the Texas Potato Breeding and Variety Development Program trials have resulted in the release of several improved varieties which have contributed significantly to the competitiveness, sustainability, and profitability of the Texas potato industry.

Results from the various trials are presented in the chronological sequence in which they were planted/harvested, Springlake to Dalhart. 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. An Addendum is presented for each trial which describes cultural information. 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.

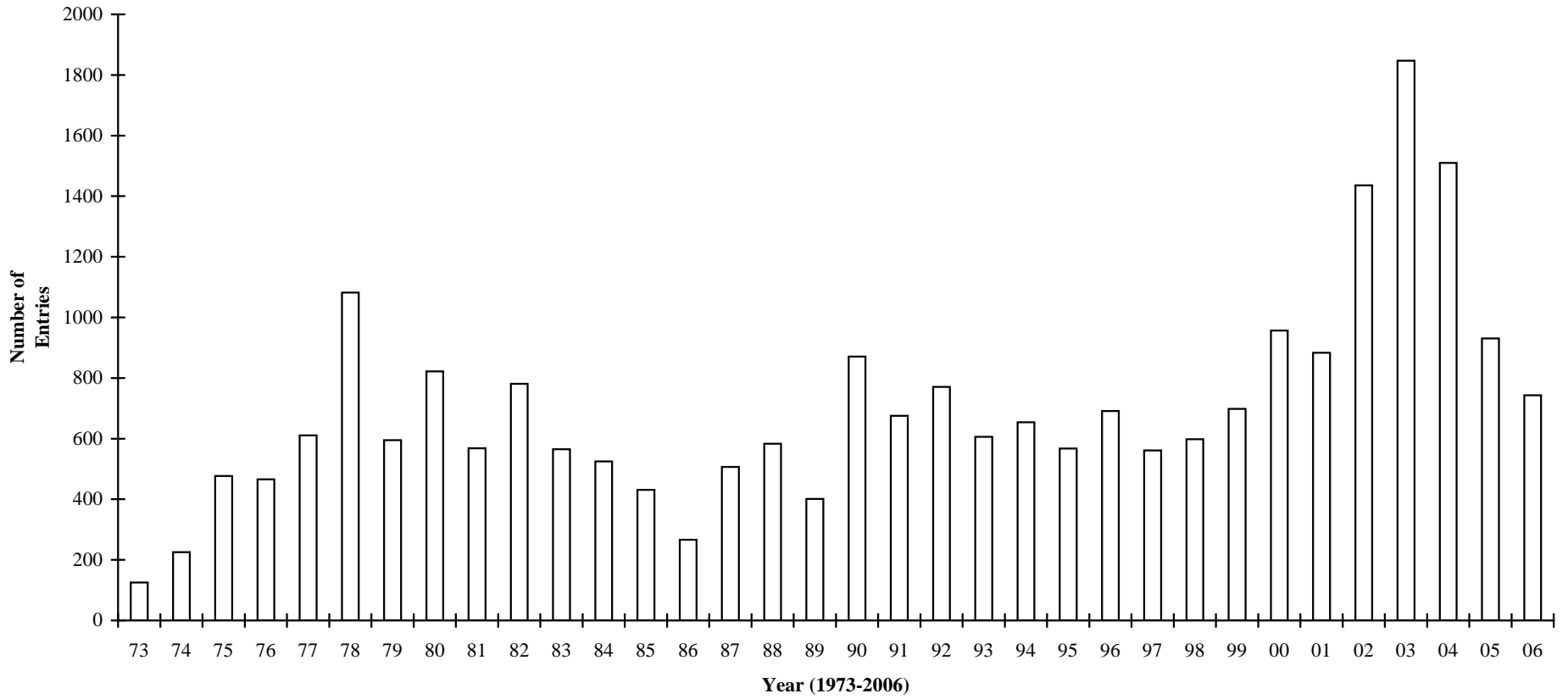


Figure 2. Number of varieties and advanced selections tested for their adaptability to Texas environmental conditions each since the inception of the Texas Potato Variety Development Program in 1973.

Springlake Trials, 2006

Summary of growing conditions:

The trials were planted near Springlake from 29 to 31 March 2006 and harvested on 13, 16 July, and 8, 10 August. These trials were subjected to higher than normal precipitation in the third week of April, fourth week of May, the second week in July, and the third week of August. Temperatures were higher than normal for May and the first three weeks of July.

Trials conducted:

- Field day (not reported)
- Western regional cooperative russet
- Western regional cooperative red/specialty
- Southwestern regional cooperative russet
- Southwestern regional cooperative red
- Southwestern regional cooperative specialty
- Texas advanced russet selection
- Texas advanced red selection
- Texas advanced specialty selection

WESTERN REGIONAL COOPERATIVE RUSSET TRIAL

The three 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 2006 russet trial consisted of 24 entries, including the 4 check varieties Ranger Russet, Russet Norkotah, Russet Burbank, and Shepody.

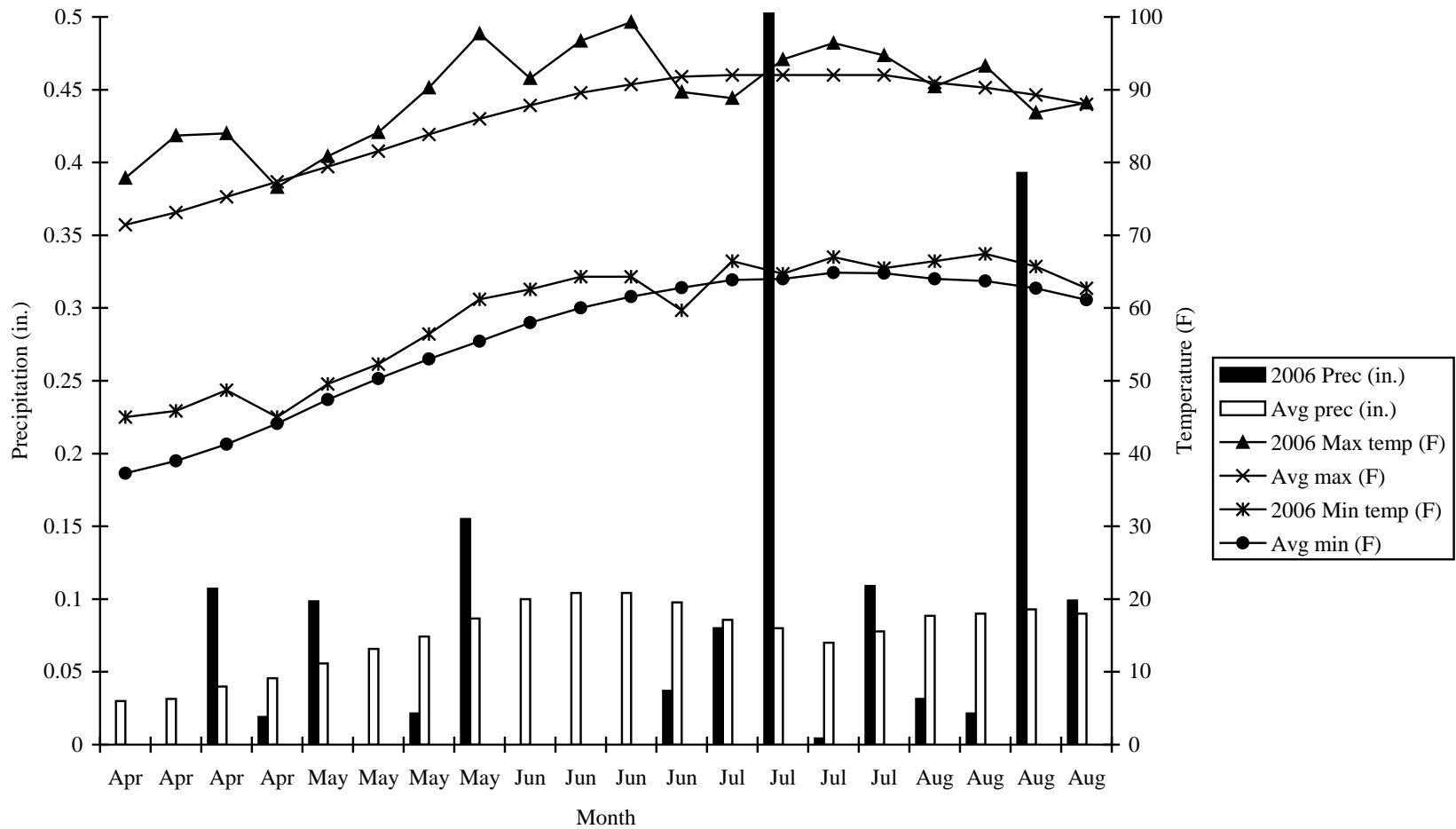


Figure 4. Weekly minimum/maximum temperatures and precipitation for the 2006-growing season near Sringlelake, Texas compared to the average minimum/maximum temperatures and precipitation (1971-2000).

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

- The outstanding entries for this trial based on general rating and best of trial designations were ATX91137-1Ru, TXA549-1Ru, and A95109-1 (Table 1e). CO97137-1W also received a best of trial designation. (Table 1e).
- MWTX2609-4Ru and A95109-1 had the highest total yields (Table 1a)
- ATX91137-1Ru and TXA549-1Ru had the highest total marketable yield (Table 1a).
- The clones with the highest yield of 4-6 oz. tubers were CO95172-3Ru and AO96160-3, while, CO95172-3Ru and TXA549-1Ru had the highest yield of 6-10 oz. tubers. ATX91137-1Ru and MWTX2609-4Ru had the highest yield of 10-18 oz. tubers, while AO96160-3 and AC96052-1Ru had the highest yield of less than 4 oz. tubers. Russet Burbank and AO96141-2 had the highest yield of culls/No.2 tubers (Table 1a).
- ATX91137-1Ru and CO95172-3Ru had the highest and second highest percent of marketable yield (Table 1b).
- AC96052-1Ru and AO96160-3 had the highest and second highest percentage yield of less than 4 oz. tubers. Russet Burbank and Shepody had the highest and second highest yield of cull/No. 2 tubers (Table 1a and Table 1b).
- The highest specific gravity was recorded for AO96160-3, AOA95154-1, and CO97137-1W (Table 1b).
- AO96141-3 and A96104-2 had the highest average number of tubers per plant, while A95409-1 and A95074-6 had the lowest average number. The highest average tuber weight was recorded for A95409-1 and MWTX2609-2Ru (Table 1c).
- A95074-6 and MWTX2609-4Ru were the latest maturing clones, while CO97137-1W was the earliest maturing. CO97137-1W and Russet Norkotah had the highest percentage of dead vines at harvest (Table 1c).
- CO97137-1W and Shepody had the lightest russet skin (Table 1d).
- MWTX2609-4Ru, Ranger Russet, Russet Norkotah, AOTX95265-4Ru, and Russet Burbank had over 25 percent of heat necrosis (Table 1d).

Comments on entries:

- A95074-6 Oblong Russet, heat sprouts, light skin, small, blocky, raised eyes, yellow flesh (3), nice shape, drop.
- A95109-1 Long Russet, knobs, growth cracks, nice skin and shape, light skin, blocky, full tubers, BOT.
- A95409-1 Long Russet, light russet, pointed, rough, yield+, skinny.

- A96104-2 Oblong Russet, small, poor skin, light skin, smooth, blocky, heat sprouts.
- AC96052-1RU Oblong Russet, small, heavy set, smooth, pear shaped, heat sprouts, nice, nice shape.
- AO96141-3 Long Russet, heat sprouts, small, rough, pointed to apical end, knobs, drop.
- AO96160-3 Oblong Russet, small, blocky, heat sprouts, heavy set, nice shape.
- AO96164-1 Long Russet, rough++, pointed, small, skinny, poor shape, curved, drop.
- AOA95154-1 Oblong Russet, heat sprouts++, blocky, small, nice shape, B size.
- AOA95155-7 Oblong Russet, heat sprouts+, small, feathering, blocky, pointed, nice internals.
- AOTX95265-2ARu Long Russet, poor shape, crooked, rough, curved, pointed, dumb bell, bud cracks, small, drop.
- AOTX95265-4Ru Oblong Russet, rough, small, curved, bud cracks.
- ATX91137-1Ru Oblong Russet, smooth, small, nice interior, nice shape, heavy set, blocky, BOT.
- Century Long Russet, rough, skinny, pointed, knobs.
- CO94035-15RU Oblong Russet, blocky, small, heavy set, tubers did not size, skinny.
- CO95172-3RU Oblong Russet, heat sprouts, small, heavy set, nice interior, light skin, pointed, skinny, drop.
- CO97137-1W Long White, smooth, small, nice shape, pointed, skinny, BOT.
- MWTX2609-2Ru Long Russet, light russet, long, skinny, rough, pointed, feathering, yield+.
- MWTX2609-4Ru Long Russet, light russet, heat sprouts, rough, pointed, yield+, feathering.
- Ranger Russet Long Russet, heat sprouts, rough, curved, pointed, nice interior, drop.
- Russet Burbank Long Russet, small, curved, poor shape, dumb bell, blocky, rough.
- Russet Norkotah Oblong Russet, small, rough, poor shape, nice interior.
- Shepody Oblong White, small, curved, poor shape, dumb bell, blocky, rough.
- TXA549-1Ru Oblong Russet, blocky, nice shape, Rhizoctonia, smooth skin, BOT.

Summary:

Overall, the outstanding entries based on general rating and marketable yield were ATX91137-1Ru, TXA549-1Ru, and A95109-1.

WESTERN REGIONAL COOPERATIVE RED/SPECIALTY TRIAL

This trial consisted of 16 entries, including the check varieties Red LaSoda, Dark Red Norland, All Blue, and Yukon Gold. There was no red skinned white flesh clones entered in to this trial.

Results for the **red skinned yellow flesh** clones were as follows: (Springlake Tables 2a, 2b, 2c, 2d, and 2e)

- CO97232-1R/Y and CO97232-2R/Y had the highest general rating (Table 2a).
- CO97232-1R/Y and CO97233-3R/Y produced the highest total yield, while CO97232-1R/Y and CO97232-2R/Y had the highest yield of marketable, 4-6 oz., and 6-10 oz. tubers (Table 2a).
- CO97233-3R/Y and PA99P11-2 had the highest yield of less than 4 oz. tubers (Table 2a).
- CO97232-1R/Y and CO97232-2R/Y had the highest percentage of marketable and 6-10 oz. tubers, while CO97232-2R/Y and AC97521-1R/Y had the highest percentage of 4-6 oz. tubers. PA99P11-2 and CO97233-3R/Y had the higher percentage of less than 4 oz. tubers (Table 2b).
- All of the entries had similar values for specific gravity (Table 2b).
- PA99P11-2 and CO97233-3R/Y had the higher average number of tubers per plant (Table 2c).
- AC97521-1R/Y, PA99P11-2, and CO97233-3R/Y were later in maturity than CO97232-1R/Y and CO97232-2R/Y (Table 2c).
- CO97232-2R/Y and AC97521-1R/Y had the darkest yellow flesh color (Table 2d).
- CO97232-2R/Y had the best skin set of all the entries (Table 2d).
- All of the entries had low levels of internal defects (Table 2d).

Summary:

Overall, the outstanding entries based on general rating and marketable yield were CO97232-1R/Y and CO97232-2R/Y.

Results for the **red skinned red flesh clones** were as follows: (Springlake Tables 2a, 2b, 2c, 2d, and 2e)

- POR01PG22-1 had the highest general rating and received a best of trial notation (Table 2a).

- POR01PG20-12 produced the highest total and marketable yield in all classes (Table 2a).
- CO97226-2R/R had the highest yield of less than 4 oz. (Table 2a).
- POR01PG20-12 had the highest percent marketable yield, while CO97226-2R/R and POR01PG22-1 had the lowest percentage of marketable yield and highest percentage of less than 4 oz. tubers (Table 2b).
- CO97226-2R/R had the highest specific gravity (Table 2b).
- CO97226-2R/R had the highest average number of tubers per plant and POR01PG20-12 had the highest average tuber weight (Table 2c).
- All of the entries were late in maturity and had no dead vines at harvest (Table 2c).
- All of the entries had similar values for flesh color (Table 2d).
- POR01PG20-12 showed the most feathering (Table 2d).

Summary:

Of the red skinned red flesh clones, POR01PG22-1 shows promise as a fingerling.

Results for the **purple skinned purple flesh clones** were as follows: (Springlake Tables 2a, 2b, 2c, 2d, and 2e)

- All Blue had a slightly higher general rating than POR01PG16-1 (Table 2a).
- All Blue produced higher yields, in all categories, than POR01PG16-1 (Table 2a).
- POR01PG16-1 had higher percentage of less than 4 oz. tubers (Table 2b).
- All Blue had higher specific gravity than POR01PG16-1 (Table 2b).
- Both entries had similar values for average number of tubers per plant and average tuber weight (Table 2c).
- POR01PG16-1 was earlier maturing than All Blue (Table 2c).
- POR01PG16-1 did not feather as much as All Blue (Table 2d).
- POR01PG16-1 had darker flesh color than All Blue (Table 2d).

Summary:

POR01PG16-1 deserves further testing.

Results for the **white skinned yellow flesh clones** were as follows: (Springlake Tables 2a, 2b, 2c, 2d, and 2e)

- The outstanding entry based on general rating and best of trial notations was Yukon Gold (Table 2a).
- Yukon Gold produced the highest total yield and marketable yield in all classes (Table 2a).
- VC1002-3W/Y had the highest yield of less than 4 oz. tubers, while A96510-4Y and Yukon Gold had the highest yield of greater than 10 oz. tubers (Table 2a).
- Yukon Gold and A96510-4Y had the highest percentage of marketable yield. VC1009-1W/Y and VC1123-2W/Y had the highest percentage of 4-6 oz. tubers. Yukon Gold and VC1123-2W/Y had the highest percentage of greater than 6-10 oz tubers (Table 2b).
- Yukon Gold and A96510-4Y had the highest percentage of over 10 oz. tubers, while VC1009-1W/Y and VC1123-2W/Y had the highest percentage of less than 4 oz. tubers (Table 2b).
- Yukon Gold and A95510-4Y had the highest specific gravity (Table 2b).
- VC1123-2W/Y and Yukon Gold had the highest average number of tubers per plant, A96510-4Y and Yukon Gold had the highest average tuber weight (Table 2c).
- The earliest maturing clone was Yukon Gold , while A96510-4Y, VC1009-1W/Y and VC1123-2W/Y were late in maturity (Table 2c).
- A96510-4Y had the longest tubers and the most russet skin (Table 2d).
- VC1123-2W/Y showed the least amount of feathering (Table 2d).
- None of the entries had significant levels of internal defects (Table 2d).
- VC1009-1W/Y and VC1123-2W/Y had the deepest yellow flesh color (Table 2d).

Summary:

None of these entries performed better than Yukon Gold.

Comments on entries:

Red/White Flesh

- Red LaSoda Oblong Red, growth cracks, trace hollow heart, rough, poor shape, deep eyes.
- Dark Red Norland Oblong Red, nice, BOT+.

Red/Yellow Flesh

- AC97521-1R/Y Oblong Red, heat sprouts, pointed to stem end, nice flesh, chain tubers, road map drop, F=3.5.
- CO97232-1R/Y Oblong Red, not dark skin or flesh, pointed to stem end, very nice flesh, nice smooth skin, poor skin set, F=3.3 .

- CO97232-2R/Y Oblong Red, road map, poor skin otherwise nice, nice interior, buff, nice shape drop, F=3.7.
- CO97233-3R/Y Oblong Red many tubers, Klondike-type, road map, close set, pear shaped, pointed to stem end, drop+, F=3.1.
- PA99P11-2 Round White Red Splash, poor shape, rough, heat sprouts, white flesh with red color, many small tubers, very poor shape, ok interior, drop++, F=3.3.

Red/Red Flesh

- CO97226-2R/R Oblong Red, late, nice interior, road map, buff, many small tubers, drop, F=3.0.
- POR01PG20-12 Oblong Red, very late, nice internal, poor shape, did not fill out, chip??. F=2.5.
- POR01PG22-1 Fingerling Red, heat sprouts, rough, alligator, buff, russeting, BOT, F=2.9.

Purple/Purple Flesh

- All Blue Long Purple, poor shaped, rough, road map, buff, F=3.5.
- POR01PG16-1 Long Purple, rough, very dark flesh, road map, dumb bell, poor shape, drop++, F=4.5.

White/Yellow Flesh

- Yukon Gold Oblong White, poor yield, BOT, F=2.5.
- A96510-4Y Oblong White, rough, pear shaped, pointed to stem end, flesh not very yellow, drop+++, F=1.5.
- VC1009-1W/Y Oblong White, poor shape, flat, rough, ugly, drop, F=2.8.
- VC1123-2W/Y Oblong White, rough, poor shape, heat sprouts, buff, ugly skin, chain tubers, F=2.8.

¹F=-Flesh color intensity, 1=very light to 5=very dark purple or dark yellow

SOUTHWESTERN REGIONAL COOPERATIVE TRIALS

This is the eighth year for the Southwestern Regional Cooperative Trials, which in 2006 included Russet, Red, Chipping (conducted at Dalhart), and Specialty Trials. The Southwestern Regional Potato Research Consortium 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.

SOUTHWESTERN REGIONAL COOPERATIVE RUSSET TRIAL

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

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

- The outstanding entry based on general rating and best of trial designation was Russet Norkotah 278, while CO97138-3RU and AOTX95295-3Ru also had high general ratings. AOTX98137-1Ru and AOTX95265-3Ru also had best of trial notations (Table 3a, 3e).
- Russet Norkotah 278 and ATX9130-1Ru had the highest total yield, while ATX9130-1Ru, Russet Norkotah, and CO97138-3RU had the highest marketable yield.
- CO97090-4RU and CO97087-2RU had the highest yield of 4-6 oz. tubers, while AOTX95265-3Ru and CO97087-2RU had the highest yield of 6-10 oz. tubers. ATX9130-1Ru and CO97138-3RU had the highest yield of 10-18 oz. tubers, while CO97138-3RU and Russet Norkotah 278 had the highest yield of over 18 oz. tubers. CO97090-4RU and AOTX95265-3RU had the highest yield of less than 4 oz., while Russet Norkotah 278 and Russet Norkotah S3 had the highest yield of cull/No. 2 tubers (Table 3a).
- CO97090-4Ru, CO97138-3Ru, ATX9130-1Ru and Russet Norkotah had the highest percentage of marketable yield, while CO97138-3Ru and Russet Norkotah S3 had the highest percentage of over 10 oz tubers. Russet Norkotah 278 and ATX9117-1Ru had the highest percentage of cull/No. 2 tubers (Table 3b).
- CO97087-2RU and ATX9117-1Ru had the highest specific gravity (Table 3b).
- AOTX95265-3Ru and CO97090-4RU had the highest average number of tubers per plant, while ATX9117-1Ru had the lowest. CO97138-3RU and AOTX95265-1Ru had the highest average tuber weight, while CO97090-4RU had the lowest (Table 3c).
- Russet Norkotah S3, Russet Norkotah 278, ATX9202-3Ru, and ATX97147-4Ru were the latest maturing entries, while Russet Norkotah and ATX9130-1Ru were the earliest (Table 3c).
- ATX9117-1Ru had the highest percentage of hollow heart (Table 3d).
- ATX95265-3Ru and ATX9202-3Ru had the highest percentage of heat necrosis (Table 3d).

Comments on entries:

- Russet Norkotah Oblong Russet, nice, curved, nice shape, small.
- Russet Norkotah 278 Oblong Russet, rough, curved, poor shape, deep eyes, oversized, green head, yield+, nice, BOT++.
- Russet NorkotahHS3 Long Russet, late, rough, poor shape, small, pointed skinny, nice shape

- AOTX95265-1Ru Long Russet, rough, curved, pointed, nice yield+, nice shape, yield-.
- AOTX95265-3Ru Oblong Russet, points, small, rough, curved, skinny, BOT-.
- AOTX95295-3Ru Oblong Russet, nice, nice shape, small, rough, curved, skinny.
- AOTX98137-1Ru Oblong Russet, poor shape, curved, blocky, rough, nice interior, nice shape, smooth, small, BOT.
- ATX9117-1Ru Oblong Russet, poor shape, poor skin, lenticels, growth cracks, small, blocky, bud cracks, hollow heart+, drop++.
- ATX9130-1Ru Oblong Russet, flat, poor skin, rough, blocky, knobs, poor skin, small, flat, light skin, drop+++.
- ATX9202-3Ru Oblong Russet, poor shape, rough, blocky, small, poor skin, pointed, drop.
- ATX97147-4Ru Oblong Russet, pointed, rough, small, poor shape, light russet, poor internal, poor skin drop++.
- CO97087-2RU Oblong Russet, flat, rough, road map, close set, small, nice internals, pointed, drop++.
- CO97090-4RU Oblong Russet, poor skin, feathering, close set, blocky, pointed, nice internals, nice, small, drop+++.
- CO97138-3RU Oblong Russet, yield, flat, poor and variable shape, nice, yield+, blocky, nice interior, nice shape and skin, some road map.
- CO97138-7RU Oblong Russet, heat sprouts, poor shape, curved, poor skin, rough, pointed, nice internals.

Summary:

Clearly the outstanding entries were Russet Norkotah and CO97138-3Ru. Others deserving mention are AOTX95265-1Ru, AOTX95265-3Ru, AOTX95295-3Ru, and AOTX98137-1Ru.

SOUTHWESTERN REGIONAL COOPERATIVE RED TRIAL

The Southwestern Regional Cooperative Red Trial consisted of 8 entries, including the check varieties Red LaSoda and Dark Red Norland .

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

- The outstanding entries based on general rating and Best of Trial designation were NDTX4784-7R and ATTX98453-6R, while Dark Red Norland and Red LaSoda also received the high general ratings (Tables 4a, 4e).
- CO98012-5R and Red LaSoda had the highest total yield, while Red LaSoda and Dark Red Norland had the highest marketable yield, 6-10 oz., and 10-18 oz. tubers. CO98012-5R and COTX00104-7R had the highest yield of than 4-6 oz. tubers, while CO98012-5R and NDTX4828-2R had the highest yield of less than 4 oz. tubers (Table 4a).
- CO98012-5R and Red LaSoda had the highest percentage of marketable, 6-10 oz., and 10-18 oz. tubers, while CO98012-5R and NDTX4828-2R had the highest percentage of less than 4 oz. tubers (Table 4b).
- CO98012-5R and ATTX98453-6R had the highest specific gravity (Table 4b).
- COTX00104-7R and CO98012-5R had the highest average number of tubers per plant, while Red LaSoda and Dark Red Norland had the highest tuber weight. All entries were late in maturity, except Dark Red Norland and NDTX4784-7R which were medium in maturity (Table 4c).
- Dark Red Norland, NDTX4784-7R, CO98012-5R, and NDTX4828-2R had good skin set (Table 4d).
- All of the entries had good internal qualities (Table 4d).

Comments on entries:

- Dark Red Norland Round-Oblong Red, silver scurf, slight russet, buff.
- Red LaSoda Oblong Red, rough, deep eyes.
- ATTX98453-6R Round Red, buff, to WR, BOT++.
- CO98012-5R Round Red, long stolons, indentation at stem end, road map, buff, smooth.
- COTX00104-7R Round Red, late, growth cracks, shape-, alligator skin, small, rough, nipples at stem end, smooth, drop++.
- COTX94218-1R Round Red, small, good color, slight russet, rough.
- NDTX4784-7R Round Red, buff, to WR, BOT++.
- NDTX4828-2R Round Red, small 'c' size, road map, poor skin, drop.

Summary:

Both ATTX98453-6R and NDTX4784-7R performed well and deserve further evaluation.

SOUTHWESTERN REGIONAL COOPERATIVE SPECIALTY TRIAL

The Southwestern Regional Cooperative Specialty Trial consisted of 11 entries, including the check varieties Yukon Gold and All Blue .

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

- Yukon Gold and ATTX961014-1R/Y were the outstanding entries based on best of trial notations and general rating (Table 5a).
- ATC98495-1W/Y and Yukon Gold had the highest total yield, while Yukon Gold and ATTX961014-1R/Y had the highest yield of marketable tubers, 6-10 oz., and 10-18 oz. tubers. CO97222-1R/R and ATC98509-1R/Y had a highest yield of 4-6 oz. tubers, while ATC98444-1R/Y and All Blue had the highest yield of less than 4 oz. tubers (Table 5a).
- Yukon Gold and ATTX961014-1R/Y had the highest percentage of marketable tubers, 6-10 oz., and 10-18 oz. tubers, while ATC98444-1R/Y and All Blue had the highest percentage of less than 4 oz. tubers (Table 5b).
- Yukon Gold, ATC98444-1R/Y, and CO97215-2P/P had the highest specific gravity (Table 5b).
- All Blue and ATC98444-1R/Y had the highest average number of tubers per plant, while Yukon Gold and ATTX961014-1R/Y had the highest average tuber weight (Table 5c).
- All of the entries were medium to late in maturity (Table 5c).
- ATTX961014-1R/Y ATC98495-1W/Y, CO97274-2W/Y, ATC98509-1R/Y, and ATC98444-1R/Y had similar flesh color rating to Yukon Gold (Table 5d).
- CO97227-2P/PW and CO97215-2P/P had darker flesh color ratings than All Blue (Table 5d).
- ATTX961014-1R/Y, ATC98509-1R/Y, CO97274-2W/Y, and Yukon Gold had the best ratings for feathering (Table 5d).

Comments on entries:

- All Blue Oblong Purple, very late, heat sprouts, second growth, chain tubers, rough, white pith, pointed, dog, drop.
- Yukon Gold Oblong White, poor internals, BOT.
- ATC98444-1R/Y Round Red, small, very late, slight road map, close set, drop.

- ATC98495-1W/Y Oblong White, late, chain tubers, knobs, small, heat sprouts, poor shape, rough, second growth, red splash eyes, eye tubers, drop++.
- ATC98509-1R/Y Oblong Red, many small tuber, late, flat, poor shape.
- ATTX961014-1R/Y Oblong Red, nice, slight road map, to WR, BOT+++.
- ATTX98500-2P/Y Round Purple, long stolons, rough, keep, drop.
- CO97215-2P/P Round Purple, heat sprouts, late, rough, eye tubers, drop.
- CO97222-1R/R Oblong Red, very buff skin, ugly bud end, ugly nose, drop++.
- CO97227-2P/PW Oblong Purple, smooth, long stolons, late, very dark flesh, small, solid flesh color, rough, keep for extraction, dog, drop.
- CO97274-2W/Y Oblong White, nice, internal color same as Yukon, rough, flat, poor shape, ugly nose, drop.

Summary:

Clearly ATTX961014-1R/Y out performed the check variety Yukon Gold and will be advanced to the Western Regional Trial.

OUTSTANDING TEXAS ADVANCED RUSSET SELECTIONS, 2006

Overall Summary - Springlake and Dalhart: The Texas Advanced Russet Selection Trial at Springlake included 18 entries, with 30 entries planted at Dalhart. Russet Norkotah was the check variety for both locations. Based on both trials the following entries (AOTX95269-1Ru, AOTX95295-1Ru, AOTX96075-1Ru, AOTX96084-1Ru, AOTX96208-1Ru, AOTX96216-2Ru, AOTX98096-1Ru, AOTX02136-1Ru, and ATX91137-1Ru) will be re-evaluated in the 2007 season..

TEXAS ADVANCED RUSSET SELECTION TRIAL

This russet trial consisted of 18 entries including the check variety Russet Norkotah. Results were as follows: (Springlake Tables 6a, 6b, 6c, 6d, and 6e)

- AOTX95269-1Ru, AOTX95295-1Ru, and AOTX96084-1Ru were the outstanding entries based on general rating and best of trial designations. AOTX96216-3Ru, AOTX96216-1Ru, and AOTX96075-1Ru also received best of trial designations (Tables 6a and 6e).
- AOTX95269-1Ru and AOTX96208-1Ru had the highest total yield, while AOTX95269-1Ru and AOTX96208-1Ru had the highest yield of marketable tubers. AOTX96208-1Ru and AOTX96216-1Ru had the highest yield of 4-6 oz. tubers, while AOTX96208-1Ru and AOTX96084-1Ru had the highest yield of 6-10 oz. tubers. AOTX95269-1Ru and AOTX95295-1Ru had the highest yield of 10-18 oz. tubers (Table 6a).
- AOTX96075-1Ru and TXNS551 had the highest yield of over 18 oz. tubers, while AOTX96208-1Ru and COTX02056-1Ru had the highest yield of less than 4 oz. tubers (Table 6a).
- AOTX02064-2Ru had the highest yield of culls/No. 2 tubers (Table 6a).
- AOTX96084-1Ru and AOTX95295-1Ru had the highest percentage of marketable yield (Table 6b).
- COTX02203-3Ru and COTX02056-1Ru had the highest percentage of 4-6 oz. tubers, while AOTX96084-1Ru and AOTX96208-1Ru had the highest percentage of 6-10 oz. tubers. TXNS410 and TXNS551 had the highest percentage of 10-18 oz. tubers (Table 6b).
- TXNS551 and AOTX96075-1Ru had the highest percentage of over 18 oz. tubers, while COTX02203-3Ru and COTX02056-1Ru had the highest percentage of less than 4 oz. tubers. AOTX02064-2Ru and AOTX02136-1Ru had the highest percentage of culls/No.2 tubers (Table 6b).
- AOTX02064-2Ru and AOTX96084-1Ru had the highest specific gravity (Table 6b).
- AOTX96208-1Ru and COTX02056-1Ru had the highest average number of tubers per plant, while COTX02203-3Ru had the lowest. TXNS551 and TXNS410 had the highest average tuber weight, while COTX02203-3Ru had the lowest (Table 6c).
- AOTX95269-1Ru, AOTX96216-2Ru, AOTX02136-1Ru, and AOTX02064-2Ru were the latest in maturity, while Russet Norkotah and TXNS551 were the earliest (Table 6c).
- AOTX02064-2Ru had 20% hollow heart, while COTX02056-1Ru had 80 % internal brownspot (Table 6d).

Comments on entries:

- Russet Norkotah Long Russet, blocky, small, skinny, curved, very nice, small, poor shape, rough.
- AOTX02064-2Ru Long Light Russet, light skin, growth cracks, bud cracks, blocky, drop+++.
- AOTX02136-1Ru Long Light Russet, light skin, small, poor yield, mix, rough, pointed to stem end, keep.
- AOTX95265-1Ru Long Russet, rough, curved, pointed, nice, yield+, nice shape, yield-.

- AOTX95269-1Ru Long Russet, small, rough, curved, poor internals, yield+, blocky, nice, pointed, drop, BOT.
- AOTX95295-1Ru Long Russet, rough, Rhizoctonia, curved, nice, bud cracks, BOT.
- AOTX96075-1Ru Long Russet, rough, large tubers, yield+, nice, pointed to bud end, fat tubers, blocky, curved, nice internals, bud cracks, poor shape, deep eyes, BOT.
- AOTX96084-1Ru Long Russet, yield+, nice +, blocky, nice shape, keep, nice internals BOT+++.
- AOTX96208-1Ru Long Russet, nice, blocky, rough, deep eyes, yield+, curved, close set, yield-, drop.
- AOTX96216-1Ru Long Russet, rough, curved, poor skin, culls++, heat sprouts, poor shape, pointed, drop+++, BOT.
- AOTX96216-2Ru Long Russet, rough, curved, heat sprouts, pointed, large tubers, skinny, yield+, Rhizoctonia.
- AOTX96216-3Ru Long Russet, rough, small, nice shape and size, blocky, pointed, BOT.
- AOTX98096-1Ru Long Russet, pointed, blocky, nice, skinny, poor shape, yield+ drop?.
- ATX97195-1Ru Long Russet, green head, rough, curved, road map, small, yield-, nice shape, drop.
- COTX02056-1Ru Long Russet, small, pointed, dumb bell, light skin, poor internals, feathering, drop++++.
- COTX02203-3RU Long Russet, yield-, small, poor skin, drop+++.
- TXNS410 Long Russet, yield-, poor shape, yield-, rough, growth cracks, bud cracks.
- TXNS551 Long Russet, blocky, some pointed, nice, yield-, rough, curved, drop, keep, BOT

Summary:

Clearly the outstanding entry was AOTX96084-1Ru and will be advanced from tissue culture.

OUTSTANDING TEXAS ADVANCED RED SELECTIONS, 2006

Overall Summary - Springlake and Dalhart: The Texas Advanced Red Selection Trials had 21 entries at Springlake and 16 at Dalhart. Red LaSoda was the check variety for both locations. Based on both trials, the

following entries (COTX02172-1R, NDTX731-1R, COTX00411-4R, ATX00270-2R, COTX02172-1R, NDTX4304-1R, NDTX4271-5R, ATTX98453-6R) will be re-evaluated in the 2007 season.

TEXAS ADVANCED RED SELECTION TRIAL

This trial consisted of 21 entries. With the exception of Red LaSoda, NDTX4271-1R, and Rio Rojo all seed came from Dalhart.

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

- The outstanding entries based on general rating and best of trial designations were Rio Rojo, NDTX4271-5R, BTX2332-1R, COTX00411-4R, and ATX00270-2R. Red LaSoda and COTX02293-4R also received high general ratings (Tables 7a and 7e).
- Rio Rojo and Red LaSoda had the highest total and marketable yield (Table 7a).
- COTX02293-4R and COTX00411-4R had the highest yield of 4-6 oz. tubers, while Red LaSoda and NDTX4271-5R had the highest yield of 6-10 oz. tubers. Rio Rojo and Red LaSoda had the highest yield of 10-18 oz. tubers (Table 7a).
- ATX00270-2R and COTX00411-4R had the highest yield of less than 4 oz tubers (Table 7a).
- ATX01188-1R and BTX2332-1R had the highest percentage of marketable yield, while COTX02266-1R and COTX02380-3AR had the highest percentage of 4-6 oz. tubers (Table 7b).
- NDTX4271-5R and Red LaSoda had the highest percentage of 6-10 oz. tubers, while ATX01188-1R and Rio Rojo had the highest percentage of 10-18 oz. tubers (Table 7b).
- ATX00270-2R and COTX02041-1R had the highest percentage of less than 4 oz. tubers (Table 7b).
- COTX02041-1R had the highest specific gravity (Table 7b).
- COTX02172-1R and ATTX01175-1R had the highest average number of tubers per plant, while NDTX4847-7R had the lowest. Rio Rojo and Red LaSoda had the highest average tuber weight, while COTX02041-1R had the lowest (Table 7c).
- Red LaSoda, NDTX4271-5R, ATX01188-1R, ATTX01180-4R, COTX02294-4R, ATTX01175-1R, and COTX02041-1R were the latest maturing, while NDTX731-1R and NDTX4847-7R were the earliest maturing (Table 7c).
- COTX00411-4R and COTX00290-3R had the least amount of feathering, while COTX02294-4R, ATX01180-1R, and ATX01188-1R had the most feathering (Table 7d).

Comments on entries:

- Red LaSoda Oblong Red, deep eyes, rough.
- ATTX01175-1R Oblong Red, stolons, poor shape, drop++++.
- ATTX01180-1R Round-Oblong Red, nice appearance, rough, poor internals, drop.
- ATTX01180-4R Round Red, rough, close set, drop.
- ATX00270-2R Round Red, heavy set, nice skin set, boiler, poor rep, poor internals, drop?, BOT+++.
- ATX01180-1R Oblong Red, large tuber, poor shape, heat sprouts.
- ATX01188-1R Oblong Red, poor shape, road map, alligator, drop.
- BTX2332-1R Oblong Red, heavy set, light skin color, buff, nice, to SWR or WR, BOT.
- COTX00290-3R Oblong Red, road map, russeting, poor skin, small, alligator, drop++++.
- COTX00411-4R Round Red, small tubers, heavy set, 'b' and 'c' size, buff, keep, TC, BOT.
- COTX02041-1R Oblong Red, small tubers, drop+++.
- COTX02172-1R Oblong Red, smooth skin, slight purple in vascular.
- COTX02266-1R Round Red, nipple at stem, very white flesh, keep+, drop.
- COTX02266-2R Oblong Red, 'b' and 'c' size, poor skin, road map, poor shape, drop++.
- COTX02293-4R Round Red, nice color, keep, buff, nice.
- COTX02294-4R Oblong Red, alligator, drop+++++.
- COTX02380-3AR Oblong Red, pointed to apical end, flat, poor internals, smooth, drop?.
- NDTX4271-5R Oblong Red, light buff skin, very white flesh, BOT-++.
- Rio Rojo Oblong Red, BOT+++.
- NDTX4847-7R Round Red, growth cracks, poor skin, russeting, scab, buff, poor internals drop+.
- NDTX731-1R Oblong Red, deep nose, rough, buff+.

Summary:

Outstanding entries included Rio Rojo, NDTX4271-5R, and BTX2332-1R.

OUTSTANDING TEXAS ADVANCED SPECIALTY SELECTIONS, 2006

The Texas Advanced Specialty Selection Trials at Springlake included 25 entries and 25 at Dalhart. Based on both trials, the following entries (ATTX99325-1P, BTX1749-1W/Y, NDTX4756-1R/Y, TX1674-1W/Y, UNTX383-3WRE/Y, ATTX98462-3R/Y, ATTX98500-2P/Y, ATTX98468-5R/Y, ATTX961014-1AR/Y, ATTX98444-16R/Y, ATTX98491-4YRsplash/Y, ATTX98500-3Wpuspl, BTX1544-2W/Y, COTX02305-3R, PORTX03PG25-2R/P, TX1523-1Ru/Y) will be re-evaluated in the 2007 season.

TEXAS ADVANCED SPECIALTY SELECTION TRIAL

This trial consisted of 25 entries and the check variety Yukon Gold. With the exception of Yukon Gold, TX1523-1Ru/Y, and BTX1544-2W/Y all seed came from Dalhart.

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

- The entries receiving the highest general ratings and best of trial designations were TX1523-1Ru/Y, BTX1544-2W/Y, Yukon Gold, ATTX98468-5R/Y, ATTX98462-3R/Y, and ATTX961014-1AR/Y, while UNTX383-3WRE/Y and COTX01403-4R/Y received only best of trial designations (Tables 8a and 8e).
- TX1523-1Ru/Y, Yukon Gold, and BTX1544-2W/Y had the highest total, marketable, 6-10 oz., and 10-18 oz. tuber yield (Table 8a)
- ATTX98468-5R/Y and ATTX98471-4R/Y had the highest yield of 4-6 oz. tubers (Table 8a).
- ATTX98468-3R/Y and ATTX98444-16R/Y had the highest yield of less than 4 oz. tubers (Table 8a).
- Yukon Gold, TX1523-1Ru/Y, and ATTX961014-1AR/Y had the highest percentage of marketable yield, while ATTX98500-3Wpuspl and UNTX383-3WRE/Y had the highest percentage of 4-6 oz. tubers (Table 8b).
- TX1674-1W/Y and BTX1544-2W/Y had the highest percentage of 6-10 oz. tubers, while Yukon Gold and TX1523-1Ru/Y had the highest percentage of 10-18 oz. tubers (Table 8b).
- PORTX03PG34-4R/P and ATTX98444-16R/Y had the highest percentage of less than 4 oz. tubers (Table 8b).
- The highest specific gravities were recorded for PORTX03PG19-1Pu/YR, ATTX98444-16R/Y, TX1674-1W/Y, BTX1749-1W/Y, and ATTX98468-3R/Y (Table 8b).

- PORTX03PG25-2R/P and ATTX98468-3R/Y had the highest average tubers per plant, while COTX01403-4R/Y had the lowest. Yukon Gold and TX1523-1Ru/Y had the highest average tuber weight, while PORTX03PG25-2R/P had the lowest (Table 8c).
- ATX99331-1Pu/Y, ATTX98500-3Wpuspl, PORTX03PG25-2R/P, and ATTX98510-1R/Y were the latest maturing clones, while COTX01403-4R/Y and ATTX99325-1P were the earliest (Table 8c).
- ATTX98491-4YRspl/Y and UNTX383-3WRE/Y had the darkest yellow flesh color, while ATTX98493-2P/P had the darkest purple flesh color (Table 8d).
- TX1523-1Ru/Y, BTX1544-2W/Y, ATTX98500-3Wpuspl, ATTX98462-3R/Y, ATTX961014-1AR/Y, and PORTX03PG19-1Pu/YR had the best ratings for feathering, while ATTX98468-5R/Y, ATTX98471-4R/Y, and ATTX98514-1R/Y had the worst ratings for feathering (Table 8d).

Comments on entries:

- Yukon Gold Oblong White, nice, internal??, BOT, FC=2.6.
- ATTX88654-3W/RE/Y Oblong White, smooth, very yellow , late, purple eyes, light russet at apical end, drop++, BOT, FC=3.1.
- ATTX961014-1AR/Y Oblong Red, slight road map, smooth, lenticels, heat sprouts at apical end, BOT, FC=3.0.
- ATTX98444-16R/Y Round Red, boiler, buff, keep, FC=3.5.
- ATTX98462-3R/Y Oblong Red, smooth, yield+, slight road map, heat sprouts at apical end, keep, TC, BOT, FC=3.1.
- ATTX98468-3R/Y Round Red, boiler, creamer, nice, indentation at stem end, smooth skin drop?, keep, TC, FC=3.4.
- ATTX98468-5R/Y Oblong Red, To SWR or WR, will oversize, drop?, BOT, TC, FC=3.3.
- ATTX98471-4R/Y Round Red, deep stem, indentation at stem end, ugly nose, deep eyes drop++++, FC=2.3.
- ATTX98491-4YRspl/Y Round Red, rough, red splash eyes, raised eyes++, drop?, TC, FC=3.8.
- ATTX98493-2P/P Oblong Purple, rough, knobs, second growth, some white flesh centers, use for extraction, apical buds, drop, FC=4.5.
- ATTX98500-3Wpuspl Oblong White, can be pointed, heat sprouts, pinto, flat, eye tubers, some very nice, poor shape, drop, FC=3.4.
- ATTX98510-1R/Y Oblong Red, poor shape, drop?, mix, nice interior, silver scurf, drop, FC=3.1.
- ATTX98514-1R/Y Round Red, stem attachment, bull nose, stem end indentations, silver scurf, rough, deep nose, drop+++ , keep, FC=2.9.

- ATTX99325-1P Oblong Purple, road map, smooth, drop?, FC=1.5.
- ATX99331-1Pu/Y Oblong Purple, alligator, road map, eye tubers, keep, drop++, FC=2.5.
- BTX1544-2W/Y Oblong White, buff, poor shape, nice, BOT-, FC=3.0.
- BTX1749-1W/Y Oblong White, buff, TC, BOT, FC=2.8.
- COTX01403-4R/Y Oblong Red, low yield, nice shape, nice, keep, BOT-, TC, FC=3.0.
- NDTX4756-1R/Y Oblong Red, mix, silver scurf, drop++, FC=2.9.
- PORTX03PG19-1Pu/YR Oblong Purple, select smooth skin tubers, road map, buff, light red flesh, nice interior, keep, drop++, FC=3.6.
- PORTX03PG25-2R/P Long Red, rough, alligator, buff, fingerling, pointed to stem end, drop, FC=3.3.
- PORTX03PG34-4R/P Oblong Red, road map, ugly, drop++++, FC=2.0.
- TX1523-1Ru/Y Round Russet, BOT+++, FC=2.9.
- TX1674-1W/Y Oblong White, flat, pink eyes, slight russet, to WR or SWR, parent, pointed to stem end, nice interior, nice skin, poor shape, TC, drop, FC=2.9.
- UNTX383-3WRE/Y Round White, boiler only, yellow pale red eyes, smooth skin, keep, TC, BOT-, FC=3.8.

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

Summary:

Based on all factors the outstanding entries for this trial were TX1523-1Ru/Y, BTX1544-2W/Y, Yukon Gold, and ATTX98468-5R/Y.

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Table 1a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 24 entries in the Western Regional Russet Trial grown near Springlake, Texas-2006.

Variety or Selection	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					
ATX91137-1Ru	649.3	543.0	116.2	174.7	252.1	18.0	25.1	63.3	3.7	3.7
TXA549-1Ru	620.8	465.9	97.5	189.0	179.3	62.8	45.1	47.0	3.7	4.3
A95109-1	680.6	462.2	82.0	152.3	227.9	97.7	38.4	82.3	3.5	3.9
CO95172-3RU	550.2	448.0	150.8	193.8	103.4	3.1	65.7	33.4	2.6	2.3
A95409-1	607.7	432.0	74.7	122.3	235.0	99.1	22.7	54.0	2.6	3.0
MWTX2609-4Ru	685.0	432.0	59.0	122.9	250.0	85.1	22.1	145.8	2.8	2.5
MWTX2609-2Ru	644.3	408.8	64.8	147.2	196.8	84.2	25.9	125.4	3.0	2.6
Century	619.4	392.7	80.8	131.3	180.7	41.8	36.8	148.0	2.7	2.7
A96104-2	525.3	392.0	129.7	161.5	100.8	4.7	90.6	38.0	2.5	3.0
Ranger Russet	485.2	345.2	79.9	130.2	135.1	17.6	33.2	89.2	2.5	2.5
Russet Norkotah	482.5	344.8	81.8	124.0	139.0	20.8	47.6	69.3	3.4	3.2
AOTX95265-2ARu	552.5	344.5	90.8	147.7	106.0	13.8	49.5	144.7	2.9	3.2
AO96160-3	479.5	341.4	143.5	148.9	48.9	1.9	117.9	18.3	2.7	2.6
AOTX95265-4Ru	558.4	338.6	94.4	128.3	115.9	17.3	41.5	161.0	2.9	3.4
AO96141-3	668.7	329.1	108.1	133.8	87.2	22.3	73.8	243.5	2.1	2.3
CO97137-1W	436.5	319.7	120.0	133.3	66.4	0.0	51.9	64.8	2.4	2.2
AO96164-1	533.3	308.8	75.0	111.2	122.6	19.9	23.0	181.6	2.5	2.4
AC96052-1RU	416.1	291.0	131.3	115.9	43.9	4.5	107.4	13.1	2.3	3.0
AOA95155-7	435.9	281.7	107.4	109.6	64.7	0.0	87.2	67.1	2.5	3.1
CO94035-15RU	397.6	280.0	115.5	100.5	64.0	0.0	79.0	38.6	2.3	2.6
A95074-6	354.2	264.7	69.2	116.0	79.5	2.1	58.8	28.5	1.8	2.1
AOA95154-1	373.9	244.3	122.8	87.5	34.1	2.2	87.0	40.3	2.1	2.8
Shepody	448.9	214.6	60.7	88.4	65.5	6.1	35.6	192.6	2.5	2.4
Russet Burbank	479.2	114.5	28.5	59.7	26.3	2.2	41.0	321.5	1.7	1.6
Average	528.5	347.5	95.2	130.4	121.9	26.1	54.4	100.5	2.6	2.8
L.S.D. (.05)	159.3	126.1	40.1	55.0	75.3	34.2	24.4	60.2	0.5	0.5

¹ 1=very poor to 5= excellent

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Table 1b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 24 entries in the Western Regional Russet Trial grown near Springlake, Texas-2006.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2			
ATX91137-1Ru	83.3	18.0	26.8	38.4	2.6	4.3	9.8	1.069	Oblong	Russet
TXA549-1Ru	75.0	15.6	30.8	28.5	10.0	7.2	7.8	1.074	Oblong	Russet
A95109-1	68.0	12.1	22.6	33.2	14.1	5.7	12.3	1.069	Long	Russet
CO95172-3RU	81.3	27.3	35.1	18.9	0.6	12.0	6.1	1.069	Oblong	Russet
A95409-1	71.2	12.5	20.3	38.4	16.3	3.7	8.7	1.073	Long	Russet
MWTX2609-4Ru	63.8	9.0	18.8	36.0	11.6	3.5	21.2	1.070	Long	Russet
MWTX2609-2Ru	63.7	10.1	21.7	31.9	12.9	3.8	19.7	1.067	Long	Russet
Century	63.7	13.3	21.4	29.0	6.5	6.0	23.7	1.064	Long	Russet
A96104-2	72.9	26.5	30.4	16.0	0.7	19.3	7.0	1.060	Oblong	Russet
Ranger Russet	70.6	17.1	26.1	27.4	3.3	6.9	19.2	1.071	Long	Russet
Russet Norkotah	71.7	16.3	25.8	29.6	4.3	9.8	14.3	1.063	Oblong	Russet
AOTX95265-2ARu	61.8	16.4	26.9	18.5	2.6	9.2	26.4	1.070	Long	Russet
AO96160-3	71.1	29.9	31.1	10.1	0.4	24.7	3.9	1.080	Oblong	Russet
AOTX95265-4Ru	60.3	17.4	22.8	20.1	3.3	7.1	29.3	1.072	Oblong	Russet
AO96141-3	48.2	16.8	20.2	11.2	2.0	11.7	38.0	1.074	Long	Russet
CO97137-1W	73.3	27.3	31.5	14.6	0.0	11.8	14.9	1.076	Long	White
AO96164-1	58.0	14.4	21.1	22.5	3.4	4.4	34.1	1.071	Long	Russet
AC96052-1RU	69.9	31.4	27.9	10.5	1.1	26.1	3.0	1.066	Oblong	Russet
AOA95155-7	65.2	24.9	25.4	14.9	0.0	19.9	14.9	1.070	Oblong	Russet
CO94035-15RU	69.9	30.0	25.5	14.4	0.0	20.9	9.3	1.061	Oblong	Russet
A95074-6	70.1	23.6	28.7	17.8	0.4	23.2	6.3	1.068	Oblong	Russet
AOA95154-1	65.0	32.7	23.1	9.1	0.5	23.3	11.2	1.076	Oblong	Russet
Shepody	47.4	13.7	19.4	14.2	1.3	8.2	43.1	1.069	Oblong	White
Russet Burbank	24.3	5.7	13.0	5.5	0.4	8.2	67.2	1.070	Long	Russet
Average	65.4	19.3	24.9	21.3	4.1	11.7	18.8	1.070		
L.S.D. (.05)	11.8	7.8	8.5	10.3	4.6	7.8	10.1	0.007		

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Table 1c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 24 entries in the Western Regional Russet Trial grown near Springlake, Texas-2006.

Variety or Selection	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Average Number Stems/ Plant	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
						Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
ATX91137-1Ru	6.2	9.0	1.7	97	98	2.0	4.6	4.1	4.5	13
TXA549-1Ru	6.4	8.0	2.2	100	100	2.1	4.9	4.5	4.9	5
A95109-1	6.7	9.0	1.7	87	94	2.0	4.8	4.2	4.7	4
CO95172-3RU	7.4	6.1	1.7	100	100	1.8	4.7	4.4	4.7	0
A95409-1	5.0	10.2	1.6	94	98	2.0	4.5	4.5	4.6	6
MWTX2609-4Ru	5.8	9.6	1.6	91	100	2.0	4.5	4.7	4.5	0
MWTX2609-2Ru	5.6	9.8	1.6	94	98	1.8	4.6	4.6	4.6	0
Century	6.2	8.3	1.5	92	100	1.6	4.5	4.6	4.4	0
A96104-2	7.8	5.6	1.5	95	98	1.6	4.0	3.9	4.1	11
Ranger Russet	5.6	7.4	1.5	97	98	1.8	4.6	4.3	4.5	6
Russet Norkotah	5.8	7.2	1.5	95	96	1.8	4.4	3.8	4.4	55
AOTX95265-2ARu	6.6	7.0	1.8	95	97	1.8	4.7	4.2	4.7	14
AO96160-3	7.3	5.4	1.8	97	100	2.0	4.8	4.1	4.8	8
AOTX95265-4Ru	6.1	7.7	1.9	100	100	1.8	4.7	3.9	4.6	18
AO96141-3	9.0	6.1	1.8	93	99	1.5	4.4	4.6	4.3	0
CO97137-1W	6.5	5.6	2.4	100	100	2.0	3.8	3.1	3.8	56
AO96164-1	5.6	8.0	4.5	98	98	1.6	4.5	4.3	4.4	8
AC96052-1RU	7.0	5.0	1.7	90	99	1.6	4.6	4.6	4.5	5
AOA95155-7	6.9	5.4	1.3	89	97	1.5	4.3	4.1	4.2	0
CO94035-15RU	6.6	5.2	1.7	92	96	1.4	4.9	4.6	4.7	0
A95074-6	5.5	5.5	1.7	81	95	1.9	4.9	4.9	4.9	0
AOA95154-1	6.5	4.9	1.4	88	99	1.6	4.5	4.6	4.6	0
Shepody	5.5	6.9	1.6	93	98	2.0	4.9	3.9	4.9	13
Russet Burbank	6.5	6.4	1.7	91	96	1.8	4.6	4.6	4.7	5
Average	6.4	7.1	1.8	94	98	1.8	4.6	4.3	4.5	9
L.S.D. (.05)	1.6	1.3	ns	ns	ns	0.3	0.2	0.6	0.3	12

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

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

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

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

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Table 1d. Flesh color, tuber shape, degree of russetting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 24 entries in the Western Regional Russet Trial grown near Springlake, Texas-2006.

Variety or Selection	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	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot	Percent Heat Necrosis
ATX91137-1Ru	1.4	4.3	4.1	3.8	4.2	5.0	5.0	5.0	5.0	5.0	0	1	1	0	0
TXA549-1Ru	1.2	3.6	3.5	4.2	3.7	5.0	5.0	5.0	5.0	5.0	0	3	0	0	0
A95109-1	1.5	4.6	4.2	4.1	4.0	4.8	5.0	5.0	5.0	5.0	3	0	0	0	10
CO95172-3RU	1.4	4.1	3.6	3.4	3.8	5.0	5.0	5.0	5.0	5.0	0	1	1	3	5
A95409-1	1.4	4.7	3.7	3.1	3.5	5.0	5.0	5.0	5.0	5.0	0	3	0	0	15
MWTX2609-4Ru	1.0	4.7	3.4	3.6	3.2	5.0	5.0	5.0	5.0	5.0	0	5	0	0	25
MWTX2609-2Ru	1.0	4.7	3.4	3.6	2.4	5.0	5.0	5.0	5.0	5.0	0	0	3	0	0
Century	1.0	4.9	3.5	3.7	3.4	5.0	5.0	5.0	5.0	5.0	0	0	0	0	30
A96104-2	1.2	3.8	4.0	3.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0	3
Ranger Russet	1.2	4.7	3.5	3.0	3.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0	33
Russet Norkotah	1.5	4.7	4.7	3.3	4.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0	25
AOTX95265-2ARu	1.3	4.7	4.7	3.4	4.7	5.0	5.0	5.0	5.0	5.0	0	0	5	0	10
AO96160-3	1.2	3.6	4.7	4.0	4.7	5.0	5.0	5.0	5.0	5.0	0	0	5	0	5
AOTX95265-4Ru	1.4	4.5	4.7	3.5	4.7	5.0	5.0	5.0	5.0	5.0	0	0	3	0	30
AO96141-3	1.2	4.7	3.7	3.6	3.4	5.0	5.0	5.0	5.0	5.0	0	0	3	0	8
CO97137-1W	1.3	4.7	1.0	4.9	1.4	5.0	5.0	5.0	5.0	5.0	0	3	0	3	0
AO96164-1	1.1	4.7	3.9	4.3	4.1	5.0	5.0	5.0	5.0	5.0	0	0	0	0	10
AC96052-1RU	1.5	4.5	4.7	3.9	4.4	5.0	5.0	5.0	5.0	5.0	0	3	0	10	5
AOA95155-7	1.2	4.0	3.6	4.3	3.7	5.0	5.0	5.0	5.0	5.0	0	5	0	0	10
CO94035-15RU	1.2	4.6	4.1	3.9	4.3	5.0	5.0	5.0	5.0	5.0	0	0	0	0	8
A95074-6	3.0	4.2	3.5	4.0	3.6	5.0	5.0	5.0	5.0	5.0	8	0	0	0	18
AOA95154-1	1.2	4.0	4.3	4.5	4.4	5.0	5.0	5.0	5.0	5.0	0	0	0	0	15
Shepody	1.3	3.5	1.0	4.1	1.1	5.0	5.0	5.0	5.0	5.0	0	0	0	0	15
Russet Burbank	1.2	4.5	4.4	3.7	4.1	5.0	5.0	5.0	5.0	5.0	0	10	0	0	35
Average	1.3	4.4	3.7	3.8	3.7	5.0	5.0	5.0	5.0	5.0	0	1	1	1	13

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 Stem end vascular discoloration severely evaluated

Variety or Selection	Notes Field		Notes Grading	General Rating Field	General Rating Grading
ATX91137-1Ru	, , , BOT	+/-, -, +/(-), +/-	nice shape, heavy set, smooth, nice shape, blocky	3.7, 3.2, 4, 4	4, 3.5, 3.5, 3.7
TXA549-1Ru	blocky, , blocky,	+, ++, ++, +	blocky, nice snape and skin, mizoc, BOT, , smooth skin, blocky, nice shape and skin, , BOT, growth crack, blocky, nice skin and shape, BOT, light skin, blocky, full tubers	3.7, 4, 3.2, 3.7	4.5, 4.2, 4.2, 4.2
A95109-1	, , , knobs, growth cracks	-, -, -, +/-	small, heavy set, small, nice interior, light, pointed, light, small, pointed to stem, pointed, rough, yield+, rough, pointed, skinny, yield+, light skin, rough, pointed	3.2, 4, 3.7, 3	4, 4.2, 4, 3.5
CO95172-3RU	, , heat sprouts, heat sprouts	+/-, (+)/-, (+)/-, +/-	small, heavy set, small, nice interior, light, pointed, light, small, pointed to stem, pointed, rough, yield+, rough, pointed, skinny, yield+, light skin, rough, pointed	2.7, 2, 3, 2.7	2.2, 2.2, 2.2, 2.5
A95409-1	light russet, , , light russet, heat sprouts,	+/(-), +/-, +/(-), +/-	rough, pointed, rough, yield+, pointed, feathering, rough, yield+, pointed, long, skinny, rough, light skin, long, rough, pointed, feathering, yield+	3, 2.2, 2.2, 3	2.7, 2.5, 2.7, 4
MWTX2609-4Ru	heat sprouts,	+, ++, ++, ++	rough, pointed, feathering, yield+	3, 2.7, 2.2, 3.2	2.5, 2.2, 2.7, 2.7
MWTX2609-2Ru	light russet, , ,	-, +/(-), +/-, +/(-)	rough, pointed, feathering, yield+	3, 3, 3, 3	2.5, 2.5, 2.7, 2.7
Century	, , ,	+/(-), +/(-), +/-, +	rough, skinny, , skinny, pointed, rough, pointed, knobs	3, 3, 2.7, 2.2	2.5, 2.5, 2.7, 3.2
A96104-2	, , ,	+/-, +/(-), +/(-), +	small, poor skin, small, light skin, smooth, blocky, small, blocky, heat sprouts	2.7, 2.7, 2.7, 2	2.5, 3.2, 3.7, 2.7
Ranger Russet	, , heat sprouts,	+/(-), +/(-), +/-, (+)/-	rough, drop, rough, curved, pointed, heat sprouts, nice interior	2.7, 2.2, 2.2, 2.7	2.2, 2.2, 2.7, 3
Russet Norkotah	, , ,	-, -, -, +/(-)	small, rough, poor shape, nice interior, rough, curved, drop, rough, pointed, bomb	4, 3, 3.7, 3	3, 3.2, 3.5, 3
AOTX95265-2ARu	poor shape, , crooked, crooked	+/(-), -, -, -	bell, curved, bud cracks, small, rough	2.7, 2.7, 3.2, 3	2.7, 3, 3.5, 3.5
AO96160-3	small, , blocky, heat sprouts	-, +/(-), +/(-), +/(-)	small, small, heavy set, blocky, small, nice shape, small	3.2, 2.7, 2.7, 2	2.2, 3, 2.7, 2.5
AOTX95265-4Ru	, , ,	-, -, -, +/-	rough, small, rough, curved, bud cracks, small, curved, pointed	3, 3, 2.7, 3	3.5, 3.2, 3.2, 3.5
AO96141-3	heat sprouts, heat sprouts, , heat sprout, drop	+/(-), +/-, +/-, +/-	small, heat sprouts, heat sprouts, pointed, rough, rough, small, pointed to apical, drop, smooth, small, BOT, small, nice snape, pointed, small, skinny	2.2, 2, 2, 2	2, 2.2, 2.5, 2.5
CO97137-1W	, , ,	+, +/-, -, +/-	pointed, small, skinny, poor shape, pointed, curved, skinny, skinny, drop, rough, skinny	3, 2.2, 2, 2.2	2, 2.2, 2.2, 2.5
AO96164-1	, rough++, ,	-, -, -, -	small, heavy set, smooth, small, pear shaped, heat sprouts, nice, nice, shape, small, small, feathering, small, blocky,	3.2, 2, 2.7, 2	2, 2.2, 2.5, 2.7
AC96052-1RU	, , ,	-, +/(-), -, -	small, heavy set, smooth, small, pear shaped, heat sprouts, nice, nice, shape, small, small, feathering, small, blocky,	2.7, 2, 2.2, 2.2	3.2, 2.7, 3.5, 2.7
AOA95155-7	neat sprouts+, small	-, +/(-), -, +/-	feathering, heat sprouts, small, pointed, nice , small, heavy set, small, tubers did not size, small, skinny	2.7, 2.2, 3, 2.2	3.5, 3, 2.7, 3
CO94035-15RU	blocky, blocky, ,	(+)/-, (+)/-, +/(-), +/(-)	small, skinny	2.7, 2.2, 2.2, 2.2	3.2, 2.5, 2.5, 2
A95074-6	drop, heat sprouts, ,	+/(-), +/(-), +/-, +/-	light skin, small, blocky, raised eyes, yellow flesh(3), heat sprouts, small, heat heat sprouts, small, neat sprouts, small, nice shape, , small, B size, tubers did not size	1, 2, 2.2, 2	1.5, 2.2, 2.5, 2
AOA95154-1	heat sprouts++, blocky, ,	+/(-), -, -, -	small, curved, poor shape, curved, dumb bell, blocky, rough, small,	2.7, 2.2, 2.2, 1.2	2.2, 3, 3.2, 2.7
Shepody	, , ,	+/-, +/(-), +/-, +/(-)	small, curved, poor shape, curved, dumb bell, blocky, rough, small,	2.2, 2, 2.7, 2.2	2.5, 2, 2.2, 3
Russet Burbank	, , ,	-, -, -, -	small, curved, poor shape, curved, dumb bell, blocky, rough, small,	2.7, 2.7, 2, 2.7	2, 2.2, 2.5, 2.7

Addendum to Tables Springlake 1a, 1b, 1c, and 1d
Western Regional Russet Trial

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

Planted	March 29, 2006	DAP
Vines Killed	July 28, 2006	119
Harvested	August 10, 2006	131

Plot Information:

Size of Plots	10' 5"
Spacing Between Hills	9"
Spacing Between Rows	36"
Hills Per Plot	14
Number of Plot Per Rep	2
Number of Reps	4

Method of Harvest:

Two-row drag digger, with hand pick up

Fertilizer:

Application:
263-28-28-20# per acre

Irrigation:

Center Pivot

Insecticide:

Dimethoate, Avaunt, Rimon, Oberon 2SC

Seed Treatment

Tops MZ Gaucho

Fungicides Applied:

Penncozeb, Super Tin 80, Tenn-Cop 5E

Herbicides Applied:

Dual, Sencor, Matrix, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the third week of April, fourth week of May, the second week in July, and the third week of August. Temperatures were higher than normal for May and the first three weeks of July.

Springlake Total yield, total yield of U.S. No.2, under 4 ounce and culls/No.2 potatoes and general rating of 26 entries in the Western Regional
 Table 2a. Red/Specialty Trial grown near Springlake, Texas-2006.

Variety or Selection	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Field	General Rating ¹ Grading
		Total Yield	4-6 oz	6-10 oz	10-18 oz					
Red/White Flesh										
Red LaSoda	600.8	485.6	133.0	196.6	156.0	14.0	101.2	0.0	3.9	3.1
Dark Red Norland	503.6	438.1	134.8	171.7	131.6	0.0	65.5	0.0	3.8	4.3
Average	552.2	461.9	133.9	184.2	143.8	7.0	83.3	0.0	3.8	3.7
Red/Yellow Flesh										
CO97232-1R/Y	419.4	301.1	130.3	118.2	52.5	0.0	118.2	0.0	3.1	3.5
CO97232-2R/Y	414.0	292.0	188.8	103.2	0.0	0.0	122.0	0.0	3.4	3.2
CO97233-3R/Y	465.5	183.1	117.5	64.3	1.2	0.0	282.4	0.0	3.2	2.9
AC97521-1R/Y	350.9	173.4	116.5	56.9	0.0	0.0	177.5	0.0	3.1	3.0
PA99P11-2	346.6	74.7	74.7	0.0	0.0	0.0	271.9	0.0	2.1	2.0
Average	399.3	204.8	125.6	68.5	10.8	0.0	194.4	0.0	3.0	2.9
L.S.D. (.05)	58.6	57.7	41.0	44.0	6.4		42.9		0.4	0.3
Red/Red Flesh										
POR01PG20-12	380.6	258.6	130.7	103.9	24.0	0.0	122.0	0.0	3.0	3.0
CO97226-2R/R	296.8	43.9	43.9	0.0	0.0	0.0	252.9	0.0	3.1	2.5
POR01PG22-1	142.1	5.2	5.2	0.0	0.0	0.0	136.9	0.0	3.4	2.8
Average	273.2	102.6	59.9	34.6	8.0	0.0	170.6	0.0	3.2	2.8
L.S.D. (.05)	106.4	46.0	26.2	23.2	ns		73.6		ns	0.3
Purple/Purple Flesh										
All Blue	334.1	132.8	105.8	27.0	0.0	0.0	201.4	0.0	2.1	2.5
POR01PG16-1	254.8	66.4	47.9	18.5	0.0	0.0	188.4	0.0	2.3	2.1
Average	294.5	99.6	76.8	22.7	0.0	0.0	194.9	0.0	2.2	2.3
L.S.D. (.05)	39.4	35.7	ns	ns			ns		ns	ns
White/Yellow Flesh										
Yukon Gold	522.9	429.4	118.9	186.2	124.2	17.9	75.6	0.0	3.7	3.9
VC1123-2W/Y	437.9	269.7	113.2	119.2	37.3	0.0	168.2	0.0	2.9	2.5
A96510-4Y	314.1	232.3	52.1	81.8	98.4	26.4	55.3	0.0	2.4	2.3
VC1009-1W/Y	223.7	130.7	81.6	32.3	16.8	0.0	93.0	0.0	2.9	2.8
Average	374.6	265.5	91.4	104.9	69.2	11.1	98.0	0.0	3.0	2.8
L.S.D. (.05)	72.1	50.4	19.4	31.7	49.1	ns	43.9		0.6	0.3
Average	375.5	219.8	99.7	80.0	40.1	3.6	152.0	0.0	3.0	2.9
L.S.D. (.05)	62.4	51.6	34.0	40.2	24.3	ns	44.3	ns	0.4	0.4

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 16 entries in the Western Regional Red/Specialty Trial grown near Springlake, Texas-2006.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	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/White Flesh										
Red LaSoda	81.1	22.4	32.7	26.0	2.2	16.7	0.0	1.070	Oblong	Red
Dark Red Norland	87.0	26.7	34.0	26.3	0.0	13.0	0.0	1.061	Oblong	Red
Average	84.1	24.6	33.4	26.2	1.1	14.8	0.0	1.066		
Red/Yellow Flesh										
CO97232-1R/Y	71.8	30.8	28.5	12.5	0.0	28.2	0.0	1.070	Oblong	Red
CO97232-2R/Y	70.1	45.8	24.3	0.0	0.0	29.9	0.0	1.067	Oblong	Red
CO97233-3R/Y	38.8	25.2	13.3	0.3	0.0	61.2	0.0	1.067	Oblong	Red
AC97521-1R/Y	49.0	32.9	16.1	0.0	0.0	51.0	0.0	1.073	Oblong	Red
PA99P11-2	21.8	21.8	0.0	0.0	0.0	78.2	0.0	1.072	Round	White Red Splash
Average	50.3	31.3	16.5	2.5	0.0	49.7	0.0	1.070		
L.S.D. (.05)	9.5	8.7	9.9	1.1		9.5		ns		
Red/Red Flesh										
POR01PG20-12	67.7	34.4	27.2	6.2	0.0	32.3	0.0	1.072	Oblong	Red
CO97226-2R/R	14.9	14.9	0.0	0.0	0.0	85.1	0.0	1.075	Oblong	Red
POR01PG22-1	4.8	4.8	0.0	0.0	0.0	95.2	0.0	1.064	Fingerling	Red
Average	29.1	18.0	9.1	2.1	0.0	70.9	0.0	1.070		
L.S.D. (.05)	10.0	9.9	4.1	ns		10.0		0.006		
Purple/Purple Flesh										
All Blue	39.1	31.5	7.6	0.0	0.0	60.9	0.0	1.074	Long	Purple
POR01PG16-1	24.8	18.6	6.2	0.0	0.0	75.2	0.0	1.067	Long	Purple
Average	32.0	25.0	6.9	0.0	0.0	68.0	0.0	1.071		
L.S.D. (.05)	12.6	ns	ns			12.6		ns		
White/Yellow Flesh										
Yukon Gold	82.1	22.8	35.7	23.6	3.4	14.4	0.0	1.078	Oblong	White
VC1123-2W/Y	61.6	26.4	26.8	8.5	0.0	38.4	0.0	1.071	Oblong	White
A96510-4Y	74.9	17.0	26.6	31.3	7.3	17.8	0.0	1.076	Oblong	White
VC1009-1W/Y	60.0	36.9	15.0	8.1	0.0	40.0	0.0	1.070	Oblong	White
Average	69.7	25.8	26.0	17.9	2.7	27.7	0.0	1.074		
L.S.D. (.05)	12.0	8.4	6.4	11.9	ns	8.7		ns		
Overall Average										
Average	53.1	25.8	18.4	8.9	0.8	46.1	0.0	1.071		
L.S.D. (.05)	10.8	8.5	8.7	5.8	ns	9.8	ns	0.005		

Springlake
Table 2c. Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 16 entries in the Western Regional Red/Specialty Trial grown near Springlake, Texas-2006.

Variety or Selection	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Average Number Stems/ Plant	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
						Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
Red/White Flesh										
Red LaSoda	6.5	7.7	2.0	96	100	1.5	5.0	5.0	5.0	0
Dark Red Norland	6.9	6.2	2.2	96	98	2.6	2.5	3.1	2.8	21
Average										
Red/Yellow Flesh										
CO97232-1R/Y	8.2	4.4	2.3	93	96	1.6	2.7	3.2	3.1	11
CO97232-2R/Y	7.8	4.6	2.2	94	96	3.0	3.2	3.1	3.3	16
CO97233-3R/Y	12.1	3.5	2.6	89	92	2.3	3.8	4.4	4.0	0
AC97521-1R/Y	9.9	3.0	2.8	98	100	1.6	4.9	5.0	4.8	0
PA99P11-2	14.6	2.0	2.1	83	100	1.5	4.5	4.8	4.3	0
Average	10.5	3.5	2.4	91	97	2.0	3.8	4.1	3.9	6
L.S.D. (.05)	1.9	0.6	0.4	ns	5	0.5	0.6	0.6	0.5	11
Red/Red Flesh										
POR01PG20-12	8.5	3.8	2.1	91	98	1.5	4.5	4.4	4.5	0
CO97226-2R/R	12.4	2.0	2.7	93	98	1.9	4.4	4.6	4.3	0
POR01PG22-1	10.6	1.5	2.2	78	89	1.5	4.6	5.0	4.4	0
Average	10.5	2.4	2.3	87	95	1.6	4.5	4.7	4.4	0
L.S.D. (.05)	ns	0.7	0.1	ns	ns	0.2	ns	ns	ns	
Purple/Purple Flesh										
All Blue	10.0	2.9	2.0	91	96	1.6	4.9	4.8	4.8	0
POR01PG16-1	10.3	2.7	2.3	71	81	2.6	3.6	3.8	3.4	0
Average	10.1	2.8	2.2	81	89	2.1	4.2	4.3	4.1	0
L.S.D. (.05)	ns	ns	ns	ns	ns	ns	0.2	ns	0.2	
White/Yellow Flesh										
Yukon Gold	7.5	6.6	1.7	83	91	1.0	4.6	3.4	4.2	18
VC1123-2W/Y	8.1	4.7	2.1	91	96	1.5	4.9	5.0	4.6	0
A96510-4Y	4.4	6.8	1.7	79	88	1.8	4.9	5.0	4.6	0
VC1009-1W/Y	5.1	3.7	2.1	95	100	1.8	5.0	5.0	5.0	0
Average	6.3	5.4	1.9	87	94	1.5	4.8	4.6	4.6	4
L.S.D. (.05)	1.8	0.7	ns	ns	ns	0.4	ns	0.2	0.4	5
Average	8.9	4.1	2.2	89	95	1.8	4.2	4.3	4.2	4
L.S.D. (.05)	3.2	0.7	0.4	ns	ns	0.4	0.4	0.4	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

Springlake
Table 2d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 16 entries in the Western Regional Red/Specialty Trial grown near Springlake, Texas-2006.

Variety or Selection	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	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
Red/White Flesh														
Red LaSoda	1.4	3.1	1.0	2.3	3.5	5.0	5.0	5.0	5.0	1.5	13	0	0	0
Dark Red Norland	1.5	3.1	1.0	3.6	3.9	5.0	5.0	5.0	5.0	4.1	0	0	0	0
Average	1.4	3.1	1.0	2.9	3.7	5.0	5.0	5.0	5.0	2.8	6	0	0	0
Red/Yellow Flesh														
CO97232-1R/Y	3.3	3.6	1.4	4.0	2.8	5.0	5.0	5.0	5.0	2.3	0	0	0	0
CO97232-2R/Y	3.7	2.6	1.8	3.5	2.5	5.0	5.0	5.0	5.0	4.1	0	0	0	8
CO97233-3R/Y	3.1	3.4	2.3	4.0	4.0	5.0	5.0	5.0	5.0	2.9	0	0	0	0
AC97521-1R/Y	3.5	3.5	1.1	3.6	3.3	5.0	5.0	5.0	5.0	2.9	3	0	0	0
PA99P11-2	3.3	1.5	1.0	2.3	1.5	5.0	5.0	5.0	5.0	1.9	0	0	0	0
Average	3.4	2.9	1.5	3.5	2.8	5.0	5.0	5.0	5.0	2.8	1	0	0	2
Red/Red Flesh														
POR01PG20-12	2.5	4.1	1.0	3.3	4.0	5.0	5.0	5.0	5.0	1.8	0	0	0	0
CO97226-2R/R	3.0	2.0	1.8	3.0	4.5	5.0	5.0	5.0	5.0	3.3	0	0	0	0
POR01PG22-1	2.9	4.4	1.3	3.9	4.5	5.0	5.0	5.0	5.0	2.3	0	0	0	0
Average	2.8	3.5	1.4	3.4	4.3	5.0	5.0	5.0	5.0	2.4	0	0	0	0
Purple/Purple Flesh														
All Blue	3.5	4.0	1.1	3.0	5.0	5.0	5.0	5.0	5.0	2.6	0	0	0	0
POR01PG16-1	4.5	4.0	1.5	4.0	4.5	5.0	5.0	5.0	5.0	4.0	0	0	0	0
Average	4.0	4.0	1.3	3.5	4.8	5.0	5.0	5.0	5.0	3.3	0	0	0	0
White/Yellow Flesh														
Yukon Gold	2.5	3.2	1.5	3.6	1.0	5.0	5.0	5.0	5.0	2.6	3	0	3	0
VC1123-2W/Y	2.8	3.0	1.4	3.4	1.5	5.0	5.0	5.0	5.0	3.7	3	0	0	0
A96510-4Y	1.5	4.5	4.0	3.4	3.8	5.0	5.0	5.0	5.0	2.0	0	0	0	0
VC1009-1W/Y	2.8	3.1	1.1	3.4	1.0	4.6	5.0	5.0	5.0	1.3	0	0	5	0
Average	2.4	3.5	2.0	3.4	1.8	4.9	5.0	5.0	5.0	2.4	1	0	2	0
Average	2.8	3.3	1.5	3.4	3.2	5.0	5.0	5.0	5.0	2.7	1	0	0	0

¹ 1=light to 5=dark

⁶ 1 to 5=none

² 1=round to 5=long

⁷ 1 to 5=none

³ 1=none to 5=heavy

⁸ 1 to 5=none

⁴ 1=deep to 5=shallow

⁹ 1 to 5=none

⁵ 1=light to 5=dark

¹⁰ Stem end vascular discoloration severely evaluated

Springlake

Table 2e. Notes and general rating for all reps of 16 entries in the Western Regional Red/Specialty Trial grown near Springlake, Texas-2006.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Red/White Flesh				
Red LaSoda	, , growth cracks,	, trace hollow heart, rough, poor shape, deep eyes	3.7, 3.7, 4, 4	3, 3.2, 3, 3
Dark Red Norland	, , ,	nice, BOT, BOT,	3.7, 4, 3.7, 3.7	4.5, 4, 4.5, 4
Red/Yellow Flesh				
CO97232-1R/Y	, , , not dark skin or flesh	pointed to stem end, very nice flesh, nice smooth skin, poor skin set,	3, 3.2, 3.2, 3	3.5, 3.5, 3.5, 3.5
CO97232-2R/Y	, , ,	road map, drop, poor skin otherwise nice, nice interior, road map, drop,	3.2, 3.7, 3, 3.7	3, 3.2, 3, 3.5
CO97233-3R/Y	, , many tubers, Klondike type	road map, drop, close set, pear shaped, pointed to stem end, road	3.2, 3, 3.7, 3	3, 3, 3, 2.5
AC97521-1R/Y	, heat sprouts, heat sprouts, pointed to stem end,	pointed to stem end , nice flesh, drop, heat sprouts, chain tubers, road map	3.2, 3, 3, 3.2	2.7, 3.5, 2.7, 3
PA99P11-2	, drop, , poor shape	rough, drop, heat sprouts, rough, white flesh with red color, many small	2.2, 2, 2, 2.2	2, 2, 2, 2
Red/Red Flesh				
POR01PG20-12	, very late, nice internal, poor shape, nice interior, poor shape	poor shape, did not fill out, chip??. poor shape	3, 3, 3, 3	3, 3, 3, 3
CO97226-2R/R	, late, small tubers, nice interior	road map, buff, , many small tubers, buff, drop	3.2, 3, 3, 3.2	2.5, 2.5, 2.5, 2.5
POR01PG22-1	, BOT, , fingerling	heat sprouts, rough, fingerling, alligator, buff, heat sprouts, russetting	3.5, 3.7, 3.2, 3.2	2.5, 3, 3, 2.5
Purple/Purple Flesh				
All Blue	, , ,	poor shaped, , rough, road map, buff	2.2, 2, 2.2, 2	2.5, 2.5, 2.5, 2.5
POR01PG16-1	, drop, drop,	rough, drop, very dark flesh, road map, dumb bell, poor shape	2.2, 2, 2, 3	3, 1.7, 1.5, 2
White/Yellow Flesh				
Yukon Gold	, , , poor yield	BOT, , ,	3.5, 4, 4, 3.2	4, 4, 4, 3.5
VC1123-2W/Y	, , ,	rough poor shape, heat sprouts, buff, ugly skin, chain tubers, heat sprouts	2.2, 3, 3.2, 3.2	2.5, 2.5, 2.5, 2.5
A96510-4Y	, , rough, drop, drop	pear shaped, poor shaped, pointed to stem end, drop, flesh not very yellow	2.2, 2.2, 2, 3.2	2.5, 2.5, 2, 2
VC1009-1W/Y	, , ,	, , poor shape, flat, rough, ugly, drop	2.7, 3, 2.7, 3	3, 3, 2.5, 2.5

Addendum to Tables Springlake 2a, 2b, 2c, 2d, and 2e
Western Regional Cooperative Red/ Specialty Trial

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

Planted	March 29, 2006	DAP
Vines Killed	July 11, 2006	102
Harvested	July 13, 2006	104

Plot Information:

Size of Plots	10' 5"
Spacing Between Hills	9"
Spacing Between Rows	36"
Hills Per Plot	14
Number of Plot Per Rep	2
Number of Reps	4

Method of Harvest:

Two-row drag digger, with hand pick up

Fertilizer:

Application:
158-28-28-20# per acre

Irrigation:

Center Pivot

Insecticide:

Dimethoate, Avaunt, Rimon, Oberon 2SC

Seed Treatment

Tops MZ Gaucho

Fungicides Applied:

Penncozeb, Super Tin 80, Tenn-Cop 5E

Herbicides Applied:

Dual, Sencor, Matrix, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the third week of April, fourth week of May, the second week in July, and the third week of August. Temperatures were higher than normal for May and the first three weeks of July.

Springlake
Table 3a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 14 entries in the Southwestern Regional Russet Trial grown near Springlake, Texas-2006.

Variety or Selection	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					
ATX9130-1RU	542.5	429.5	95.0	112.3	222.3	18.2	24.2	70.6	3.5	2.2
Russet Norkotah	541.9	426.8	75.4	155.3	196.1	11.6	44.6	59.0	3.3	3.4
CO97138-3RU	534.6	423.7	63.8	141.6	218.3	32.9	36.9	41.0	3.5	3.7
CO97087-2RU	505.6	387.5	126.7	170.2	90.6	0.0	73.6	44.4	2.7	2.2
AOTX98137-1RU	505.0	386.7	95.2	143.9	147.6	13.2	39.2	65.9	3.3	3.5
AOTX95265-3RU	533.9	384.8	85.8	171.5	127.5	13.5	77.7	57.9	3.2	3.1
CO97090-4RU	482.1	384.4	188.6	127.7	68.0	2.2	83.5	12.0	2.9	3.0
CO97138-7RU	503.2	383.4	77.9	169.2	136.3	13.2	47.5	59.0	3.1	2.9
Russet Norkotah 278	564.1	360.0	79.5	146.3	134.2	24.9	46.7	132.5	3.4	3.9
ATX9202-3RU	460.0	347.7	91.3	139.3	117.1	0.0	65.0	47.3	2.9	2.1
ATX97147-4RU	426.3	296.4	101.9	111.5	83.0	0.0	47.6	82.3	2.9	2.2
Russet Norkotah-S3	452.1	288.7	51.0	108.8	128.9	24.6	45.0	93.8	3.0	3.1
AOTX95295-3RU	389.9	284.3	80.7	95.9	107.7	4.2	47.7	53.7	3.1	3.6
AOTX95265-1Ru	303.2	209.8	41.6	83.9	84.3	17.6	26.2	49.6	3.1	3.2
ATX9117-1RU	313.7	197.5	56.2	52.6	88.7	5.0	29.1	82.1	2.9	2.2
Average	481.7	356.7	89.6	134.1	133.0	12.6	50.4	62.1	3.1	3.0
L.S.D. (.05)	49.1	27.4	23.8	30.3	33.7	19.1	19.6	37.4	0.4	0.4

¹ 1=very poor to 5= excellent

Springlake
Table 3b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 14 entries in the Southwestern Regional Russet Trial grown near Springlake, Texas-2006.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2			
ATX9130-1RU	79.4	17.4	21.0	41.0	3.3	4.5	12.8	1.067	Oblong	Russet
Russet Norkotah	79.3	14.0	29.0	36.4	1.8	8.4	10.4	1.067	Oblong	Russet
CO97138-3RU	79.4	11.9	26.5	41.0	6.0	6.9	7.7	1.062	Oblong	Russet
CO97087-2RU	76.7	25.1	33.7	17.9	0.0	14.6	8.8	1.080	Oblong	Russet
AOTX98137-1RU	77.3	19.3	29.0	29.0	2.5	7.7	12.4	1.075	Oblong	Russet
AOTX95265-3RU	72.3	15.9	32.3	24.0	2.6	14.4	10.8	1.072	Oblong	Russet
CO97090-4RU	80.0	39.3	26.4	14.3	0.5	17.1	2.4	1.069	Oblong	Russet
CO97138-7RU	76.4	15.5	33.6	27.4	2.5	9.2	11.8	1.073	Oblong	Russet
Russet Norkotah 278	64.0	14.1	25.9	23.9	4.4	8.4	23.2	1.064	Oblong	Russet
ATX9202-3RU	75.6	19.8	30.4	25.4	0.0	14.2	10.2	1.065	Oblong	Russet
ATX97147-4RU	69.7	23.6	26.2	19.9	0.0	11.2	19.1	1.069	Oblong	Russet
Russet Norkotah-S3	64.2	11.3	23.9	28.9	5.4	10.0	20.4	1.068	Long	Russet
AOTX95295-3RU	72.8	20.7	24.6	27.5	1.1	12.3	13.8	1.067	Oblong	Russet
AOTX95265-1Ru	69.2	13.7	27.7	27.8	5.8	8.7	16.3	1.071	Long	Russet
ATX9117-1RU	64.3	17.9	16.9	29.4	1.3	9.5	24.9	1.080	Oblong	Russet
Average	74.0	18.7	27.9	27.5	2.6	10.5	12.9	1.069		
L.S.D. (.05)	7.8	4.9	6.6	7.5	3.6	4.0	6.8	0.008		

Springlake
Table 3c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 14 entries in the Southwestern Regional Russet Trial grown near Springlake, Texas-2006.

Variety or Selection	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	
ATX9130-1RU	6.5	7.6	1.7	82	91	2.1	4.2	3.0	4.4	50
Russet Norkotah	6.4	7.0	2.1	100	100	1.8	3.6	2.9	3.5	66
CO97138-3RU	6.2	8.2	1.7	80	89	1.9	3.6	3.4	3.5	28
CO97087-2RU	7.0	6.0	1.9	92	100	1.5	4.3	3.8	4.2	19
AOTX98137-1RU	6.3	7.1	2.0	94	95	2.1	3.9	3.3	3.8	41
AOTX95265-3RU	7.6	6.2	1.9	86	95	1.6	4.5	3.6	4.4	34
CO97090-4RU	7.2	5.5	2.2	96	100	2.6	3.7	3.2	3.7	36
CO97138-7RU	5.4	7.9	1.6	89	98	1.6	4.4	3.5	4.4	21
Russet Norkotah 278	6.5	7.2	2.0	100	100	1.8	4.9	4.1	4.9	16
ATX9202-3RU	6.7	5.8	1.5	73	98	1.6	4.6	4.0	4.4	11
ATX97147-4RU	6.0	6.1	1.9	88	98	1.5	4.8	4.0	4.7	19
Russet Norkotah-S3	5.5	6.8	1.8	100	100	1.8	4.9	4.2	4.8	16
AOTX95295-3RU	6.2	6.2	1.5	68	86	1.8	3.2	3.3	3.2	43
AOTX95265-1Ru	3.2	8.2	1.6	85	96	1.8	3.8	3.7	3.9	23
ATX9117-1RU	4.0	6.9	1.7	87	96	1.6	4.6	3.8	4.5	13
Average	6.2	6.8	1.8	88	96	1.8	4.2	3.5	4.1	30
L.S.D. (.05)	0.9	0.7	0.3	16	9	0.4	0.4	0.5	0.4	18

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

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

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

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

Springlake
Table 3d. Flesh color, tuber shape, degree of russetting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 14 entries in the Southwestern Regional Russet Trial grown near Springlake, Texas-2006.

Variety or Selection	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	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot	Percent Heat Necrosis
ATX9130-1RU	1.5	4.2	3.7	4.4	3.5	5.0	5.0	5.0	4.9	5.0	8	0	0	0	3
Russet Norkotah	1.5	4.5	4.7	3.6	4.7	5.0	5.0	5.0	5.0	5.0	3	0	10	0	0
CO97138-3RU	1.4	4.1	4.4	4.2	4.4	5.0	5.0	5.0	5.0	5.0	0	0	0	0	3
CO97087-2RU	1.2	3.6	4.1	3.8	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0	0
AOTX98137-1RU	1.4	4.4	4.4	3.7	4.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0	0
AOTX95265-3RU	1.4	4.5	4.7	3.2	4.7	5.0	5.0	5.0	5.0	5.0	0	0	5	0	20
CO97090-4RU	1.4	4.0	4.1	4.1	4.3	5.0	5.0	5.0	5.0	5.0	3	0	0	0	0
CO97138-7RU	1.4	3.6	4.4	3.8	4.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0	0
Russet Norkotah 278	1.4	4.6	4.6	3.5	4.7	5.0	5.0	5.0	5.0	5.0	0	0	5	3	5
ATX9202-3RU	1.4	3.8	4.6	3.5	4.5	5.0	5.0	5.0	5.0	5.0	3	0	0	0	23
ATX97147-4RU	1.5	4.0	3.5	4.3	3.8	5.0	5.0	5.0	5.0	5.0	0	0	5	8	5
Russet Norkotah-S3	1.4	4.7	4.7	3.7	4.7	5.0	5.0	5.0	5.0	5.0	0	0	3	0	8
AOTX95295-3RU	1.4	4.1	4.6	3.6	4.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0	10
AOTX95265-1Ru	1.2	4.7	4.7	3.6	4.6	5.0	5.0	5.0	5.0	5.0	0	0	3	0	0
ATX9117-1RU	1.4	3.6	4.0	4.0	4.0	3.9	5.0	5.0	5.0	5.0	30	0	0	0	3
Average	1.4	4.2	4.4	3.8	4.4	5.0	5.0	5.0	5.0	5.0		0	2	1	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 Stem end vascular discoloration severely evaluated

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
ATX9130-1RU	, , flat, flat	poor skin, rough, blocky, drop, poor skin, rough, blocky, drop, knobs, poor skin, rough, blocky, drop, rough, small, nice, curved, nice shape, small, nice shape, small, nice shape	3.7, 3.7, 3.2, 3.2	2.2, 2, 2.5, 2.2
Russet Norkotah	, , , yield, , yield, flat, poor and variable shape,	nice, yield+, blocky, blocky, rough, nice interior, blocky, nice shape and skin, some road map, nice shape, road map rough, flat, road map, drop, close set, flat, rough, small, nice internals, flat, small, rough, blocky, rough, pointed, curved, blocky, blocky, rough, nice interior, nice shape, smooth, small, nice shape	3.7, 3.2, 3.2, 3	3.2, 3.7, 3.2, 3.5
CO97138-3RU		rough, flat, road map, drop, close set, flat, rough, small, nice internals, flat, small, rough, blocky, rough, pointed, curved, blocky, blocky, rough, nice interior, nice shape, smooth, small, nice shape	4, 3.7, 3.2, 3	4, 3.5, 3.7, 3.7
CO97087-2RU	flat, drop, drop, , flat	rough, flat, road map, drop, close set, flat, rough, small, nice internals, flat, small, rough, blocky, rough, pointed, curved, blocky, blocky, rough, nice interior, nice shape, smooth, small, nice shape	3, 2.7, 2.2, 2.7	2, 2, 2.5, 2.2
AOTX98137-1RU	poor shape, BOT, ,	small, curved, rough, curved, skinny, curved, rough, skinny, curved, rough	3.2, 3.7, 3.2, 3	3.2, 3.7, 3.7, 3.5
AOTX95265-3RU	, points, BOT-,	feathering, close set, blocky, drop, feathering, pointed, small, drop, feathering, nice internals, nice, small, blocky curved, blocky, poor skin, rough, blocky, poor skin, pointed, rough, blocky, nice, nice internals	3.2, 3.2, 3.7, 2.7	2.5, 3.2, 3.5, 3.2
CO97090-4RU	drop, poor skin, drop, drop, , heat sprouts, , heat sprouts, poor shape	rough, curved, rough, poor shape, deep eyes, oversized, green head, yield+, BOT, nice, BOT	3, 2.7, 2.7, 3	2.2, 2.7, 3.7, 3.5
CO97138-7RU		rough, curved, rough, poor shape, deep eyes, oversized, green head, yield+, BOT, nice, BOT	3.7, 2.7, 3.2, 2.7	2.5, 2.7, 2.7, 3.7
Russet Norkotah 278	, , BOT-,	rough blocky, small, blocky, poor skin, rough, blocky, small, small, blocky, pointed	2.7, 3.7, 4, 3	3.2, 4, 4.2, 4
ATX9202-3RU	drop, , , poor shape	pointed, rough, small, rough, small, pointed, drop, rough, pointed, poor shape, light russet, poor internal, drop, pointed, rough, small, rough, small, rough, pointed, skinny, nice shape	2.7, 3, 3.2, 2.7	2, 2, 2.2, 2.2
ATX97147-4RU	, , pointed,	pointed, rough, small, rough, small, pointed, drop, rough, pointed, poor shape, light russet, poor internal, drop, pointed, rough, small, rough, small, rough, pointed, skinny, nice shape	3, 3.2, 2.7, 2.7	2, 2, 2.5, 2.2
Russet Norkotah-S3	late, , rough, poor shape	pointed, rough, small, rough, small, rough, pointed, skinny, nice shape	3, 2.7, 3.2, 3	3, 3, 3, 3.2
AOTX95295-3RU	, , ,	nice, nice shape, small, nice shape, rough, curved, skinny rough, curved, pointed, some pointed, nice yield+, nice shape, yield-, curved	3, 3.2, 3, 3	3.7, 3.7, 3.7, 3.2
AOTX95265-1Ru	, , ,	poor skin, lenticels, growth cracks, lenticels, small, rough, growth cracks, rough, blocky, lenticels, bud cracks, drop,	3, 3.2, 3.2, 3	2.7, 3.7, 3.5, 3
ATX9117-1RU	, , , poor shape	poor skin, lenticels, growth cracks, lenticels, small, rough, growth cracks, rough, blocky, lenticels, bud cracks, drop,	3, 3.2, 2.7, 2.7	3.7, 3.5, 3, 2

Addendum to Tables Springlake 3a, 3b, 3c, 3d, and 3e
Southwestern Regional Russet Trial

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

Planted	March 29, 2006	DAP
Vines Killed	July 28, 2006	119
Harvested	August 10, 2006	131

Plot Information:

Size of Plots	10' 5"
Spacing Between Hills	9"
Spacing Between Rows	36"
Hills Per Plot	14
Number of Plot Per Rep	2
Number of Reps	4

Method of Harvest:

Two-row drag digger, with hand pick up

Fertilizer:

Application:
263-28-28-20# per acre

Irrigation:

Center Pivot

Insecticide:

Dimethoate, Avaunt, Rimon, Oberon 2SC

Seed Treatment

Tops MZ Gaucho

Fungicides Applied:

Penncozeb, Super Tin 80, Tenn-Cop 5E

Herbicides Applied:

Dual, Sencor, Matrix, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the third week of April, fourth week of May, the second week in July, and the third week of August. Temperatures were higher than normal for May and the first three weeks of July.

Springlake
Table 4a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 8 entries in the Southwestern Regional Red Trial grown near Springlake, Texas-2006.

Variety or Selection	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Field	General Rating ¹ Grading
		Total Yield	4-6 oz	6-10 oz	10-18 oz					
Red LaSoda	459.1	386.4	41.2	120.6	224.6	8.0	64.7	0.0	3.9	3.5
Dark Red Norland	414.1	348.6	105.4	108.6	134.7	0.0	65.5	0.0	3.8	3.7
NDTX4784-7R	320.9	221.1	86.2	68.5	66.4	0.0	99.8	0.0	3.9	4.0
ATTX98453-6R	311.5	191.8	97.3	65.5	29.1	0.0	119.7	0.0	3.5	3.5
COTX00104-7R	365.9	185.7	112.7	55.0	18.0	0.0	180.2	0.0	3.3	2.8
COTX94218-1R	343.4	143.5	103.1	40.5	0.0	0.0	199.9	0.0	3.0	3.1
CO98012-5R	462.1	132.3	117.1	15.2	0.0	0.0	329.7	0.0	3.5	3.2
NDTX4828-2R	326.7	125.5	105.3	20.2	0.0	0.0	201.1	0.0	3.7	3.1
Average	375.5	216.9	96.0	61.8	59.1	1.0	157.6	0.0	3.6	3.4
L.S.D. (.05)	81.4	66.4	44.5	33.8	30.1	ns	48.7	ns	0.5	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 8 entries in the Southwestern Regional Red Trial grown near Springlake, Texas-2006.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	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	84.2	8.9	26.4	48.9	1.6	14.2	0.0	1.061	Oblong	Red
Dark Red Norland	84.3	27.3	25.6	31.5	0.0	15.7	0.0	1.064	Round-Oblong	Red
NDTX4784-7R	68.8	26.6	21.6	20.6	0.0	31.2	0.0	1.063	Round	Red
ATX98453-6R	61.4	31.1	21.0	9.4	0.0	38.6	0.0	1.074	Round	Red
COTX00104-7R	50.8	30.8	15.0	4.9	0.0	49.2	0.0	1.072	Round	Red
COTX94218-1R	40.5	28.6	11.9	0.0	0.0	59.5	0.0	1.068	Round	Red
CO98012-5R	28.6	25.3	3.3	0.0	0.0	71.4	0.0	1.076	Round	Red
NDTX4828-2R	37.7	31.8	5.9	0.0	0.0	62.3	0.0	1.065	Round	Red
Average	57.0	26.3	16.3	14.4	0.2	42.8	0.0	1.068		
L.S.D. (.05)	10.7	10.8	8.2	4.4	ns	10.6	ns	0.004		

Springlake
Table 4c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 8 entries in the Southwestern Regional Red Trial grown near Springlake, Texas-2006.

46 or Selection	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Average Number Stems/ Plant	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
						Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
Red LaSoda	6.5	6.8	1.8	84	88	1.5	5.0	4.9	5.0	0
Dark Red Norland	5.9	7.1	2.4	87	83	1.9	3.3	3.6	3.3	16
NDTX4784-7R	7.1	4.0	1.7	89	93	1.5	3.8	3.5	3.7	17
ATTX98453-6R	11.5	3.8	1.4	43	67	2.1	3.2	4.4	3.1	0
COTX00104-7R	18.1	3.5	2.0	61	65	1.4	3.4	4.6	3.2	0
COTX94218-1R	10.2	2.8	3.5	92	96	1.4	5.0	5.0	5.0	0
CO98012-5R	13.9	2.9	2.1	93	98	1.5	5.0	4.5	5.0	0
NDTX4828-2R	9.0	3.2	2.1	93	95	1.5	4.7	4.7	4.6	0
Average	10.3	4.3	2.1	80	86	1.6	4.2	4.4	4.1	4
L.S.D. (.05)	ns	0.8	0.5	20	21	0.3	0.5	0.5	0.4	8

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, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot, and percent heat necrosis of 8 entries in the Southwestern Regional Red Trial grown near Springlake, Texas-2006.

Variety or Selection	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	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot	Percent Heat Necrosis
Red LaSoda	1.5	3.0	1.0	2.0	3.0	5.0	5.0	5.0	5.0	1.5	3	0	3	0	3
Dark Red Norland	1.5	3.0	1.1	3.4	4.0	5.0	5.0	5.0	5.0	4.2	0	0	0	0	0
NDTX4784-7R	1.0	2.2	1.6	3.5	4.2	5.0	5.0	5.0	5.0	4.1	0	0	0	0	0
ATTX98453-6R	1.0	2.4	1.5	3.6	3.9	5.0	5.0	5.0	5.0	3.1	0	0	0	0	0
COTX00104-7R	1.0	2.9	1.6	3.5	4.3	4.8	5.0	5.0	5.0	3.4	0	0	0	0	5
COTX94218-1R	1.3	2.1	1.0	3.9	3.8	5.0	5.0	5.0	5.0	2.6	0	0	0	0	5
CO98012-5R	1.4	2.1	1.2	3.4	4.5	5.0	5.0	5.0	5.0	4.0	0	0	0	0	5
NDTX4828-2R	1.0	2.5	2.3	3.3	4.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0	0
Average	1.2	2.5	1.4	3.3	4.0	5.0	5.0	5.0	5.0	3.4	0	0	0	0	2

¹ 1=light to 5=dark

⁶ 1 to 5=none

² 1=round to 5=long

⁷ 1 to 5=none

³ 1=none to 5=heavy

⁸ 1 to 5=none

⁴ 1=deep to 5=shallow

⁹ 1 to 5=none

⁵ 1=light to 5=dark

¹⁰ Stem end vascular discoloration severely evaluated

Springlake

Table 4e. Notes and general rating for all reps of 8 entries in the Southwestern Regional Red Trial grown near Springlake, Texas-2006.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Red LaSoda	, , ,	rough, deep eyes, ,	3.7, 4, 4, 4	3.5, 3.5, 3.5, 3.5
Dark Red Norland	, , ,	silver scurf, slight russet, , , silver scurf, duff	3.7, 4, 4.2, 3.2	3.7, 3.5, 4, 3.5
NDTX4784-7R	, , ,	buff, BOT-, buff, BOT, to WR BOT-,	4, 4, 3.7, 3.9	4, 4.5, 3.5, 4
ATTX98453-6R	, , ,	, buff, BOT-, BOT, To WR	3.2, 3.7, 4, 3	3.2, 3.7, 3.7, 3.5
COTX00104-7R	late, growth cracks, shape-,	alligator skin, drop, small, rough, nipples at stem end, drop?, smooth,	3, 3, 4.2, 3	2.5, 2.7, 3, 3
COTX94218-1R	small, small, , good color	slight russet, small, rough, ,	2.7, 3.2, 3, 3.2	3, 3, 3, 3.5
CO98012-5R	, long stolons, long stolons,	indentation at stem end, road map, buff, , smooth, buff	4, 3.7, 3.2, 3.2	3, 3.2, 3, 3.5
NDTX4828-2R	, , small 'c' size,	road map++, drop, , poor skin,	3.7, 3.7, 3.7, 3.7	3, 3.2, 3.2, 3.1

Addendum to Tables Springlake 4a, 4b, 4c, 4d, and 4e
Southwestern Regional Red Trial

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

Planted	March 29, 2006	DAP
Vines Killed	July 11, 2006	102
Harvested	July 13, 2006	104

Plot Information:

Size of Plots	10' 5"
Spacing Between Hills	9"
Spacing Between Rows	36"
Hills Per Plot	14
Number of Plot Per Rep	2
Number of Reps	4

Method of Harvest:

Two-row drag digger, with hand pick up

Fertilizer:

Application:
158-28-28-20# per acre

Irrigation:

Center Pivot

Insecticide:

Dimethoate, Avaunt, Rimon, Oberon 2SC

Seed Treatment

Tops MZ Gaucho

Fungicides Applied:

Penncozeb, Super Tin 80, Tenn-Cop 5E

Herbicides Applied:

Dual, Sencor, Matrix, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the third week of April, fourth week of May, the second week in July, and the third week of August. Temperatures were higher than normal for May and the first three weeks of July.

Springlake
Table 5a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 11 entries in the Southwestern Regional Specialty Trial grown near Springlake, Texas-2006.

Variety or Selection	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Field	General Rating ¹ Grading
		Total Yield	4-6 oz	6-10 oz	10-18 oz					
Yukon Gold	495.9	449.1	68.5	254.1	126.5	7.8	39.1	0.0	3.9	4.0
ATTX961014-1R/Y	484.0	420.0	97.5	217.5	105.1	0.0	64.0	0.0	4.1	4.5
ATC98495-1W/Y	498.7	338.3	133.2	169.5	35.6	0.0	160.4	0.0	2.8	2.5
CO97274-2W/Y	410.2	329.6	88.2	159.9	81.6	2.1	78.5	0.0	3.3	3.1
CO97222-1R/R	428.9	292.6	147.9	88.7	56.0	0.0	136.4	0.0	3.2	2.8
ATC98509-1R/Y	410.9	280.3	140.6	115.8	23.9	0.0	130.6	0.0	3.1	3.1
CO97227-2P/PW	326.6	165.0	119.8	32.0	13.1	0.0	161.6	0.0	2.8	2.7
CO97215-2P/P	284.9	153.0	92.0	61.1	0.0	0.0	131.8	0.0	2.6	2.7
All Blue	331.9	129.5	104.6	24.9	0.0	0.0	202.4	0.0	1.9	2.0
ATTX98500-2P/Y	208.4	125.7	74.7	46.3	4.7	0.0	82.7	0.0	2.5	2.9
ATC98444-1R/Y	327.0	94.0	88.8	5.2	0.0	0.0	233.0	0.0	2.8	2.9
Average	382.5	252.5	105.1	106.8	40.6	0.9	129.1	0.0	3.0	3.0
L.S.D. (.05)	45.7	33.3	22.9	27.6	19.6	ns	47.0	ns	0.5	0.4

¹ 1=very poor to 5= excellent

Springlake
Table 5b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 8 entries in the Southwestern Regional Red Trial grown near Springlake, Texas-2006.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2			
Yukon Gold	90.7	13.8	51.2	25.6	1.5	7.8	0.0	1.077	Oblong	White
ATTX961014-1R/Y	86.8	20.1	44.8	21.8	0.0	13.2	0.0	1.071	Oblong	Red
ATC98495-1W/Y	68.6	27.3	34.3	7.1	0.0	31.4	0.0	1.071	Oblong	White
CO97274-2W/Y	80.4	21.7	39.1	19.6	0.5	19.1	0.0	1.069	Oblong	White
CO97222-1R/R	68.3	34.6	20.7	13.1	0.0	31.7	0.0	1.062	Oblong	Red
ATC98509-1R/Y	68.6	34.1	28.6	5.9	0.0	31.4	0.0	1.066	Oblong	Red
CO97227-2P/PW	50.9	37.2	9.7	4.0	0.0	49.1	0.0	1.071	Oblong	Purple
CO97215-2P/P	53.5	32.8	20.7	0.0	0.0	46.5	0.0	1.075	Round	Purple
All Blue	38.9	31.4	7.4	0.0	0.0	61.1	0.0	1.072	Oblong	Purple
ATTX98500-2P/Y	60.3	35.8	22.1	2.3	0.0	39.7	0.0	1.053	Round	Purple
ATC98444-1R/Y	29.1	27.4	1.7	0.0	0.0	70.9	0.0	1.076	Round	Red
Average	63.3	28.7	25.5	9.0	0.2	36.5	0.0	1.069		
L.S.D. (.05)	9.0	7.0	6.8	4.9	ns	8.8	ns	0.005		

Springlake
Table 5c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 8 entries in the Southwestern Regional Red Trial grown near Springlake, Texas-2006.

Variety or Selection	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Average Number Stems/ Plant	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
						Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
Yukon Gold	6.0	6.8	1.4	99	100	1.1	4.7	3.8	4.6	0
ATTX961014-1R/Y	7.5	5.3	1.7	97	100	2.3	4.3	3.9	4.4	4
ATC98495-1W/Y	9.6	4.4	2.1	96	96	1.9	4.8	5.0	4.8	0
CO97274-2W/Y	6.4	5.3	1.8	100	100	1.8	3.9	3.8	4.1	5
CO97222-1R/R	9.3	3.8	2.1	99	100	2.3	4.3	3.9	4.3	4
ATC98509-1R/Y	9.3	3.6	1.8	100	100	1.8	4.8	5.0	4.7	0
CO97227-2P/PW	11.1	2.6	2.3	96	96	2.0	5.0	5.0	5.0	0
CO97215-2P/P	8.4	2.8	2.1	93	100	1.9	4.9	5.0	4.9	0
All Blue	12.6	2.2	2.2	100	100	2.0	5.0	5.0	5.0	0
ATTX98500-2P/Y	7.0	2.8	1.7	78	88	1.9	5.0	5.0	5.0	0
ATC98444-1R/Y	11.2	2.4	2.0	98	100	2.0	4.9	5.0	4.9	0
Average	9.0	3.8	1.9	96	98	1.9	4.7	4.6	4.7	1
L.S.D. (.05)	1.7	0.3	0.3	8	6	0.4	0.3	0.2	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

Springlake
Table 5d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 8 entries in the Southwestern Regional Red Trial grown near Springlake, Texas-2006.

Variety or Selection	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	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
Yukon Gold	3.0	3.0	1.2	3.5	1.9	5.0	5.0	5.0	5.0	3.9	0	0	0	0
ATTX961014-1R/Y	3.3	3.0	1.0	3.5	3.7	5.0	5.0	5.0	5.0	4.5	3	0	0	0
ATC98495-1W/Y	3.1	2.5	1.7	3.0	1.9	5.0	5.0	5.0	5.0	2.6	0	0	0	0
CO97274-2W/Y	3.3	3.5	1.7	3.7	1.7	5.0	5.0	5.0	5.0	4.0	0	0	0	0
CO97222-1R/R	3.0	3.5	3.0	2.6	5.0	4.5	5.0	5.0	5.0	3.2	0	0	0	0
ATC98509-1R/Y	2.8	3.3	1.4	3.1	2.4	5.0	5.0	5.0	5.0	4.1	0	0	0	0
CO97227-2P/PW	4.0	3.8	1.0	3.1	5.0	5.0	5.0	5.0	5.0	2.6	0	0	0	0
CO97215-2P/P	4.0	2.0	1.0	3.9	4.9	5.0	5.0	5.0	5.0	1.9	0	0	0	0
All Blue	3.0	4.5	1.5	2.4	4.9	5.0	5.0	5.0	5.0	3.3	0	0	0	0
ATTX98500-2P/Y	3.0	2.4	1.0	3.1	5.0	5.0	5.0	5.0	5.0	1.8	0	0	0	0
ATC98444-1R/Y	3.3	2.3	1.2	3.5	2.9	5.0	5.0	5.0	5.0	1.9	0	0	0	0
Average	3.2	3.1	1.4	3.2	3.6	5.0	5.0	5.0	5.0	3.1	0	0	0	0

¹ 1=light to 5=dark

⁶ 1 to 5=none

² 1=round to 5=long

⁷ 1 to 5=none

³ 1=none to 5=heavy

⁸ 1 to 5=none

⁴ 1=deep to 5=shallow

⁹ 1 to 5=none

⁵ 1=light to 5=dark

¹⁰ Stem end vascular discoloration severely evaluated

Springlake

Table 5e. Notes and general rating for all reps of 11 entries in the Southwestern Regional Specialty Trial grown near Springlake, Texas-2006.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Yukon Gold	, BOT, ,	poor internals , , ,	4, 4, 4.2, 3.2	4, 4, 4, 4
ATTX961014-1R/Y	nice, BOT, BOT, BOT, nice	slight road map, BOT, To WR, ,	4, 4, 4.2, 4.2	4.5, 4.5, 4.5, 4.5
ATC98495-1W/Y	late, , chain tubers, knobs	small, heat sprouts, poor shape, drop, rough,, second growth, drop, red splash eyes, eye	2, 3.2, 3, 3	2, 2, 3, 3
CO97274-2W/Y	nice, internal color same as Yukon, ,	rough, flat, poor shape, ugly nose, drop	3.7, 3, 3.2, 3.2	3.2, 3.2, 3, 3
CO97222-1R/R	, , ,	, very buff skin, ugly bud end, drop, ugly nose, drop	3.2, 3.2, 3.2, 3.2	3, 2.5, 3, 2.7
ATC98509-1R/Y	many small tuber, late, , ,	flat, poor shape, , ,	3, 3, 3.2, 3.2	3, 3, 3, 3.5
CO97227-2P/PW	smooth, long stolons, late, very dark flesh, , very late, long stolons	small, solid flesh color, rough, drop, keep for extraction, dog	3, 2.7, 3.2, 2.2	3, 2.7, 2.5, 2.5
CO97215-2P/P	heat sprouts, late, late, , drop	rough, eye tubers, drop, , heat sprouts, second growth, chain tubers, rough, white pith, pointed, dog	2.7, 3, 2.7, 2	2.7, 2.7, 2.7, 2.7
All Blue	late, drop, late, very late long stolons, long stolons, drop?, drop?, drop	rough, keep, , drop,	2, 1.5, 2, 2	2, 2, 2, 2
ATTX98500-2P/Y			3.2, 2.2, 2.7, 2	2.7, 3.5, 2.7, 2.7
ATC98444-1R/Y	late, small, late, small, , very late	slight road map, drop, , close set, drop,	2.7, 3, 2.7, 2.7	2, 3.5, 3, 3

Addendum to Tables Springlake 5a, 5b, 5c, 5d, and 5e
Southwestern Regional Specialty Trial

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

Planted	March 30, 2006	DAP
Vines Killed	July 11, 2006	101
Harvested	July 16, 2006	106

Plot Information:

Size of Plots	10' 5"
Spacing Between Hills	9"
Spacing Between Rows	36"
Hills Per Plot	14
Number of Plot Per Rep	2
Number of Reps	4

Method of Harvest:

Two-row drag digger, with hand pick up

Fertilizer:

Application:
263-28-28-20# per acre

Irrigation:

Center Pivot

Insecticide:

Dimethoate, Avaunt, Rimon, Oberon 2SC

Seed Treatment

Tops MZ Gaucho

Fungicides Applied:

Penncozeb, Super Tin 80, Tenn-Cop 5E

Herbicides Applied:

Dual, Sencor, Matrix, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the third week of April, fourth week of May, the second week in July, and the third week of August. Temperatures were higher than normal for May and the first three weeks of July.

Springlake
Table 6a.

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 Ruesset Selection Trial grown near Springlake, Texas-2006.

Variety or Selection	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					
AOTX95269-1Ru	525.1	415.1	67.0	161.4	186.7	28.5	46.3	35.2	3.6	3.6
AOTX96208-1Ru	498.6	374.4	85.8	170.3	118.4	13.6	56.5	54.1	3.5	3.5
AOTX95295-1Ru	468.7	374.4	68.6 ##	138.8	167.0	5.2	39.3	49.6	3.5	4.4
AOTX96216-2Ru	486.4	372.2	52.7	160.6	159.0	31.7	33.1	49.4	3.5	3.1
AOTX96084-1Ru	415.7	341.9	52.2	161.7	128.0	10.9	25.6	37.4	3.7	4.4
AOTX98096-1Ru	440.8	333.9	51.4	139.8	142.6	25.6	35.5	45.8	3.3	3.4
AOTX96216-3Ru	411.0	326.8	67.4	133.2	126.3	22.4	38.7	23.0	3.3	3.3
ATX97195-1Ru	426.2	317.7	50.0	127.8	139.9	22.4	25.6	60.5	2.9	3.3
AOTX96216-1Ru	433.6	305.3	74.8	134.2	96.3	12.1	37.9	78.3	3.3	2.7
Russet Norkotah	403.1	303.2	61.3	134.8	107.1	10.5	35.7	53.7	3.0	3.2
AOTX96075-1Ru	438.4	287.7	43.6	113.6	130.5	43.2	35.9	71.6	3.4	3.5
TXNS551	364.6	287.3	36.3	114.9	136.1	35.1	21.3	21.0	3.2	3.5
TXNS410	356.4	267.4	28.2	104.6	134.5	5.6	12.1	71.3	3.0	2.7
AOTX95265-1Ru	303.2	209.8	41.6	83.9	84.3	17.6	26.2	49.6	3.1	3.2
AOTX02136-1Ru	277.0	194.5	45.4	80.3	68.8	0.0	14.7	67.8	3.1	3.0
COTX02056-1Ru	253.9	168.3	62.7	79.6	26.0	0.0	54.6	30.9	2.1	1.7
AOTX02064-2Ru	326.6	166.0	59.5	75.7	30.9	0.0	44.8	115.8	2.8	2.0
COTX02203-3RU	89.8	46.4	39.1	7.3	0.0	0.0	32.9	10.5	2.1	1.7
Average L.S.D. (.05)	384.4	282.9	54.9	117.9	110.1	15.8	34.3	51.4	3.1	3.1

¹ 1=very poor to 5= excellent

Springlake
Table 6b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 18 entries in the Texas Advanced Ruesset Selection Trial grown near Springlake, Texas-2006.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2			
AOTX95269-1Ru	79.0	12.8	30.6	35.6	5.2	8.9	6.8	1.072	Long	Russet
AOTX96208-1Ru	74.9	17.1	34.1	23.7	2.9	11.5	10.7	1.067	Long	Russet
AOTX95295-1Ru	79.6	14.7	29.2	93.8	1.2	8.5	10.7	1.076	Long	Russet
AOTX96216-2Ru	76.7	10.8	33.0	32.8	6.4	6.8	10.1	1.071	Long	Russet
AOTX96084-1Ru	82.4	12.4	38.7	31.3	2.4	6.1	9.1	1.082	Long	Russet
AOTX98096-1Ru	75.9	11.7	31.4	32.8	5.7	8.0	10.3	1.069	Long	Russet
AOTX96216-3Ru	79.6	16.5	32.4	30.7	5.3	9.5	5.6	1.066	Long	Russet
ATX97195-1Ru	74.1	11.8	29.7	32.6	5.5	5.8	14.5	1.068	Long	Russet
AOTX96216-1Ru	70.2	17.4	30.8	22.1	2.7	8.8	18.3	1.073	Long	Russet
Russet Norkotah	75.1	15.3	33.1	26.7	2.7	8.9	13.2	1.067	Long	Russet
AOTX96075-1Ru	65.4	9.8	25.9	29.7	9.9	8.1	16.7	1.069	Long	Russet
TXNS551	78.4	10.0	31.3	37.1	9.9	5.9	5.8	1.066	Long	Russet
TXNS410	75.0	7.9	29.1	38.1	1.5	3.5	20.0	1.068	Long	Russet
AOTX95265-1Ru	69.2	13.7	27.7	27.8	5.8	8.7	16.3	1.071	Long	Russet
AOTX02136-1Ru	71.1	16.7	29.2	25.3	0.0	5.2	23.7	1.073	Long	Light Russet
COTX02056-1Ru	66.6	24.8	31.9	9.9	0.0	21.0	12.4	1.065	Long	Russet
AOTX02064-2Ru	51.4	18.7	22.9	9.7	0.0	13.8	34.9	1.083	Long	Light Russet
COTX02203-3RU	49.8	43.1	6.7	0.0	0.0	38.4	11.8	N/A	Long	Russet
Average L.S.D. (.05)	71.9	15.8	29.3	26.7	3.7	10.4	13.9	1.071		

Springlake
Table 6c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 18 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2006.

Variety or Selection	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	
AOTX95269-1Ru	5.2	8.4	1.9	96	100	1.5	4.5	4.2	4.6	8
AOTX96208-1Ru	5.9	7.1	1.5	90	98	1.8	3.8	3.6	3.7	15
AOTX95295-1Ru	5.0	8.0	1.8	94	98	1.8	3.9	3.8	3.8	18
AOTX96216-2Ru	4.6	8.7	1.7	93	100	1.8	4.3	4.2	4.2	13
AOTX96084-1Ru	4.6	8.3	1.5	81	91	1.6	3.9	3.7	4.0	23
AOTX98096-1Ru	4.3	8.5	1.6	94	99	1.6	4.1	3.5	4.0	25
AOTX96216-3Ru	4.1	8.2	1.7	88	100	1.5	4.1	4.1	4.0	19
ATX97195-1Ru	4.1	8.6	1.8	100	100	1.6	4.1	4.0	4.1	18
AOTX96216-1Ru	4.9	7.5	1.7	88	97	1.5	3.9	3.9	3.9	10
Russet Norkotah	4.3	7.7	1.7	99	100	1.8	4.1	3.2	4.1	43
AOTX96075-1Ru	4.3	8.7	1.6	85	98	1.5	4.3	3.6	4.3	21
TXNS551	3.6	9.1	1.6	75	93	1.5	3.8	3.4	4.0	36
TXNS410	3.4	9.6	1.6	69	90	1.5	3.8	3.7	3.8	23
AOTX95265-1Ru	3.2	8.2	1.6	85	96	1.8	3.8	3.7	3.9	23
AOTX02136-1Ru	3.8	7.8	1.2	56	79	1.5	3.2	4.1	3.2	10
COTX02056-1Ru	5.8	5.2	1.2	60	72	1.5	2.6	3.7	2.5	18
AOTX02064-2Ru	5.3	6.5	1.4	43	79	1.8	3.9	4.1	3.7	10
COTX02203-3RU	3.1	4.0	1.5	42	59	1.9	2.0	4.0	2.3	9
Average	4.4	7.8	1.6	80	92	1.6	3.8	3.8	3.8	19
L.S.D. (.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 Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of Table 6d. 18 entries in the Texas Advanced Ruesset Selection Trial grown near Springlake, Texas-2006.

Variety or Selection	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	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot	Percent Heat Necrosis
AOTX95269-1Ru	1.2	4.2	4.5	3.6	4.7	5.0	5.0	5.0	5.0	5.0	0	0	13	0	3
AOTX96208-1Ru	1.3	4.3	4.6	3.5	4.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0	5
AOTX95295-1Ru	1.5	4.3	4.7	3.7	4.7	5.0	93.8	5.0	5.0	5.0	0	3	0	0	0
AOTX96216-2Ru	1.8	4.5	4.7	3.5	4.7	5.0	5.0	5.0	5.0	5.0	0	0	5	0	8
AOTX96084-1Ru	1.5	4.0	4.7	3.5	4.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0	0
AOTX98096-1Ru	1.5	4.1	4.7	3.6	4.7	5.0	5.0	5.0	5.0	5.0	0	0	5	3	0
AOTX96216-3Ru	1.4	4.2	4.7	3.8	4.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0	3
ATX97195-1Ru	1.4	4.4	4.7	3.7	4.7	5.0	5.0	5.0	5.0	5.0	0	5	0	0	0
AOTX96216-1Ru	1.5	4.4	4.7	3.7	4.7	5.0	5.0	5.0	5.0	5.0	0	5	0	0	0
Russet Norkotah	1.5	4.7	4.7	3.6	4.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0	13
AOTX96075-1Ru	1.5	4.3	4.7	3.7	4.7	5.0	5.0	5.0	5.0	5.0	0	0	5	0	0
TXNS551	1.5	4.5	4.7	3.7	4.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0	0
TXNS410	1.6	4.4	4.6	3.6	4.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0	0
AOTX95265-1Ru	1.2	4.7	4.7	3.6	4.6	5.0	5.0	5.0	5.0	5.0	0	0	3	0	0
AOTX02136-1Ru	1.5	4.0	4.0	4.1	3.8	5.0	5.0	5.0	5.0	5.0	0	3	0	0	0
COTX02056-1Ru	1.4	4.3	3.5	3.8	3.2	5.0	5.0	5.0	5.0	5.0	0	0	0	80	0
AOTX02064-2Ru	1.4	3.7	3.7	3.9	3.6	4.5	5.0	5.0	5.0	5.0	20	0	3	0	0
COTX02203-3RU	1.5	3.7	4.3	4.1	4.2	5.0	5.0	5.0	5.0	5.0	3	0	0	3	0
Average	1.5	4.2	4.5	3.7	4.5	5.0	5.0	5.0	5.0	5.0		1	2	5	2

¹ 1=light to 5=dark

⁶ 1 to 5=none

² 1=round to 5=long

⁷ 1 to 5=none

³ 1=none to 5=heavy

⁸ 1 to 5=none

⁴ 1=deep to 5=shallow

⁹ 1 to 5=none

⁵ 1=light to 5=dark

¹⁰ Stem end vascular discoloration severely evaluated

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
AOTX95269-1Ru	, , BOT	-, +/(-), +/-, +	3.2, 3, 4, 4	3.5, 3.7, 3.5, 3.7
AOTX96208-1Ru	, , nice,	+/(-), +/(-), +/-, +	3.7, 3.2, 4, 3.2	3.5, 3.2, 4, 3.2
AOTX95295-1Ru	, BOT, , rough	(+)/-, +/-, +/(-), +/(-)	3.2, 4, 3.7, 3	4.5, 4.2, 4.2, 4.5
AOTX96216-2Ru	, , pointed,	+/(-), +/(-), +/(-), (+)/-	3.7, 3.2, 3.2, 3.7	3, 3, 3.2, 3.2
AOTX96084-1Ru	, , yield+, nice BOT	+, +, +, (+)/-	3.2, 3.7, 4, 4	4.7, 4.5, 4.2, 4.2
AOTX98096-1Ru	, , pointed,	+, (+)/-, +/(-), +	3.7, 3.2, 3.2, 3.2	3.7, 3.2, 3.5, 3.2
AOTX96216-3Ru	, , rough, small, BOT	+, +/(-), (+)/-, +/-	3.7, 2.7, 3, 3.7	4.2, 2.7, 2.7, 3.7
ATX97195-1Ru	, , drop,	+/(-), (+)/-, (+)/-, (+)/-	3, 3.2, 2, 3.2	3.5, 3.5, 2.5, 3.5
AOTX96216-1Ru	, BOT, ,	+/(-), +/-, +/(-), +/-	2.7, 4, 3.7, 2.7	2.2, 2.2, 3.2, 3
Russet Norkotah	, , ,	(+)/-, +/-, (+)/-, +/(-)	3, 3.2, 2.7, 3.2	3.2, 3.5, 2.7, 3.2
AOTX96075-1Ru	, , , BOT	+/-, +/(-), +/(-), +/(-)	3.2, 3.7, 3, 3.7	3.7, 3.5, 3.2, 3.5
TXNS551	, , , drop	+, +, +/-, +	3.2, 3.7, 3, 2.7	4, 3.5, 3, 3.5
TXNS410	, yield-, , poor shape	+, +, +, (+)/-	3.2, 2.7, 3.2, 2.7	2.7, 2.7, 2.7, 2.5
AOTX95265-1Ru	, , ,	+/-, (+)/-, (+)/-, (+)/-	3, 3.2, 3.2, 3	2.7, 3.7, 3.5, 3
AOTX02136-1Ru	, , , pointed	+, (+)/-, +/-, +/(-)	3, 3, 3, 3.2	3, 3.5, 3, 2.5
COTX02056-1Ru	drop, small, drop, drop, drop	-, -, -, -	2.2, 2, 2, 2.2	1.7, 1.7, 1.7, 1.7
AOTX02064-2Ru	, drop, ,	-, +/(-), +/(-), +/-	3.2, 2.7, 2.7, 2.7	2, 1.7, 1.7, 2.5
COTX02203-3RU	drop, drop, drop?, drop	-, -, -, -	2.2, 2, 2, 2	1.7, 1.7, 1.7, 1.7

Addendum to Tables Springlake 6a, 6b, 6c, and 6d
Western Regional Cooperative Red/ Specialty Trial

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

Planted	March 22, 2005	DAP
Vines Killed	July 9, 2005	107
Harvested	July 12, 2005	110

Plot Information:

Size of Plots	10' 5"
Spacing Between Hills	9"
Spacing Between Rows	36"
Hills Per Plot	14
Number of Plot Per Rep	2
Number of Reps	4

Method of Harvest:

Two-row drag digger, with hand pick up

Fertilizer:

Application:
158-28-28-20# per acre

Irrigation:

Center Pivot

Insecticide:

Dimethoate, Avaunt, Rimon, Oberon 2SC

Seed Treatment

Tops MZ Gaucho

Fungicides Applied:

Penncozeb, Super Tin 80, Tenn-Cop 5E

Herbicides Applied:

Dual, Sencor, Matrix, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the third week of April, fourth week of May, the second week in July, and the third week of August. Temperatures were higher than normal for May and the first three weeks of July.

Springlake
Table 7a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 21 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2006.

Variety or Selection	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					
Rio Rojo	551.4	445.3	120.7	188.5	136.1	11.7	94.4	0.0	4.0	4.4
Red LaSoda	549.1	414.6	93.6	201.9	119.1	42.2	92.2	0.0	3.5	3.8
NDTX4271-5R	537.8	387.2	138.5	199.2	49.5	14.5	136.1	0.0	3.8	3.9
BTX2332-1R	355.7	293.8	140.8	117.8	35.3	0.0	61.9	0.0	3.8	3.9
COTX02293-4R	400.5	280.3	154.9	117.0	8.5	0.0	120.2	0.0	3.3	3.7
ATX01188-1R	298.9	249.3	85.8	84.4	79.1	2.8	46.8	0.0	3.3	2.7
ATTX01180-4R	345.3	248.9	105.7	113.7	29.4	0.0	96.4	0.0	3.0	3.2
ATX01180-1R	303.0	243.3	93.8	94.4	55.1	7.3	52.4	0.0	3.3	3.1
COTX02172-1R	363.4	236.2	116.4	88.1	31.7	0.0	127.3	0.0	3.5	3.6
COTX02380-3AR	323.9	212.0	132.7	64.3	14.9	0.0	111.9	0.0	3.2	3.4
NDTX731-1R	280.1	209.3	78.9	95.2	35.3	0.0	70.8	0.0	3.2	3.0
COTX00411-4R	354.2	170.3	143.0	25.8	1.4	0.0	183.9	0.0	3.7	4.0
NDTX4847-7R	192.8	140.4	64.9	65.7	9.7	0.0	52.4	0.0	3.1	3.1
ATTX01180-1R	185.7	139.2	72.6	53.8	12.7	0.0	46.6	0.0	2.8	3.4
COTX02266-1R	212.4	138.3	105.5	29.6	3.2	0.0	74.0	0.0	3.0	3.5
COTX02266-2R	297.7	116.0	87.7	28.2	0.0	0.0	181.7	0.0	3.4	3.2
COTX00290-3R	263.8	96.8	54.0	19.4	23.4	0.0	167.0	0.0	2.4	1.8
COTX02294-4R	189.6	75.2	57.3	17.9	0.0	0.0	114.3	0.0	2.7	2.1
ATTX01175-1R	137.1	75.0	18.6	28.2	28.2	0.0	62.1	0.0	2.9	2.3
ATX00270-2R	255.1	51.4	49.6	1.8	0.0	0.0	203.7	0.0	3.2	3.8
COTX02041-1R	179.5	45.8	41.5	4.2	0.0	0.0	133.7	0.0	2.7	3.4
Average	313.2	203.3	93.2	78.1	32.0	3.7	106.2	0.0	3.2	3.3
L.S.D. (.05)	55.7	53.3	39.7	35.2	31.0	11.3	32.0	ns	0.4	0.4

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 21 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2006.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2			
Rio Rojo	81.1	22.1	34.7	24.3	1.9	17.1	0.0	1.062	Oblong	Red
Red LaSoda	75.5	17.2	36.8	21.5	7.8	16.8	0.0	1.065	Oblong	Red
NDTX4271-5R	72.1	25.7	37.1	9.3	2.7	25.2	0.0	1.067	Oblong	Red
BTX2332-1R	82.4	39.9	32.9	9.7	0.0	17.6	0.0	1.064	Oblong	Red
COTX02293-4R	69.3	38.5	28.5	2.2	0.0	30.7	0.0	1.065	Round	Red
ATX01188-1R	82.9	29.4	27.9	25.7	1.0	16.0	0.0	1.054	Oblong	Red
ATX01180-4R	71.9	30.6	32.8	8.5	0.0	28.1	0.0	1.063	Round	Red
ATX01180-1R	80.2	30.3	31.6	18.3	2.2	17.6	0.0	1.057	Oblong	Red
COTX02172-1R	65.6	32.9	24.1	8.7	0.0	34.4	0.0	1.062	Oblong	Red
COTX02380-3AR	65.6	40.9	19.7	4.9	0.0	34.4	0.0	1.072	Oblong	Red
NDTX731-1R	75.0	27.3	34.5	13.2	0.0	25.0	0.0	1.060	Oblong	Red
COTX00411-4R	47.8	40.2	7.2	0.4	0.0	52.2	0.0	1.070	Round	Red
NDTX4847-7R	72.2	34.7	33.2	4.2	0.0	27.8	0.0	1.059	Round	Red
ATX01180-1R	73.8	38.7	28.4	6.8	0.0	26.2	0.0	1.056	Round-Oblong	Red
COTX02266-1R	65.6	49.7	14.6	1.3	0.0	34.4	0.0	1.069	Round	Red
COTX02266-2R	36.1	28.2	7.9	0.0	0.0	63.9	0.0	1.060	Oblong	Red
COTX00290-3R	36.7	20.5	7.3	8.9	0.0	63.3	0.0	1.058	Oblong	Red
COTX02294-4R	39.0	30.4	8.6	0.0	0.0	61.0	0.0	1.065	Oblong	Red
ATX01175-1R	54.7	13.5	20.6	20.6	0.0	45.3	0.0	1.048	Oblong	Red
ATX00270-2R	20.2	19.5	0.7	0.0	0.0	79.8	0.0	1.072	Round	Red
COTX02041-1R	24.3	21.9	2.4	0.0	0.0	75.7	0.0	1.082	Oblong	Red
Average	61.5	30.1	22.5	9.0	0.7	37.7	0.0	1.063		
L.S.D. (.05)	12.0	11.3	9.7	7.2	2.2	11.6	ns	0.003		

Springlake
Table 7c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 21 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2006.

Variety or Selection	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	
Rio Rojo	7.5	6.2	2.4	93	98	2.0	3.7	3.8	3.7	0
Red LaSoda	8.1	5.6	2.1	100	100	1.5	5.0	4.6	5.0	1
NDTX4271-5R	9.9	4.9	2.0	72	93	1.5	4.5	4.1	4.5	0
BTX2332-1R	6.5	5.1	2.1	80	89	1.8	3.8	3.7	3.7	8
COTX02293-4R	9.1	4.6	3.0	71	81	2.0	3.4	3.7	3.4	6
ATX01188-1R	5.6	5.1	1.5	79	90	1.4	4.4	4.3	4.2	3
ATTX01180-4R	11.1	4.4	1.5	47	65	1.5	3.5	4.3	3.5	0
ATX01180-1R	7.9	5.4	1.5	41	61	2.0	3.6	3.9	3.6	6
COTX02172-1R	17.9	3.5	2.2	53	67	2.4	3.6	3.5	3.7	19
COTX02380-3AR	9.1	3.5	1.4	73	88	1.6	3.2	3.5	3.2	6
NDTX731-1R	5.6	4.7	1.8	82	89	1.3	2.5	3.0	2.5	16
COTX00411-4R	9.2	3.2	2.5	97	99	1.6	3.8	3.3	3.9	8
NDTX4847-7R	4.3	4.5	1.5	51	80	1.5	2.9	3.2	8.0	13
ATTX01180-1R	5.1	4.2	1.5	58	72	1.8	2.3	3.4	2.4	0
COTX02266-1R	4.4	4.2	2.5	92	95	2.0	2.3	3.3	2.2	8
COTX02266-2R	9.4	2.7	4.3	94	97	2.4	3.8	3.7	3.8	4
COTX00290-3R	7.1	3.2	2.2	94	96	1.0	2.8	3.9	2.9	0
COTX02294-4R	6.1	2.9	1.4	74	89	1.6	4.1	4.3	4.2	0
ATTX01175-1R	15.2	2.7	1.4	25	31	1.5	2.5	4.5	2.5	0
ATX00270-2R	9.4	2.6	1.9	73	85	1.5	4.1	3.2	3.8	10
COTX02041-1R	8.1	2.6	1.9	50	71	1.6	3.9	4.0	3.6	0
Average	8.4	4.1	2.0	71	83	1.7	3.5	3.7	3.7	5
L.S.D. (.05)	5.2	0.9	0.2	16	14	0.3	0.5	0.7	ns	11

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

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

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

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

Springlake
Table 7d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot, and percent heat necrosis of 21 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2006.

Variety or Selection	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	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot	Percent Heat Necrosis
Rio Rojo	1.1	2.8	1.0	4.0	3.7	5.0	5.0	5.0	5.0	3.0	0	0	0	0	0
Red LaSoda	1.8	3.5	1.0	2.0	3.4	5.0	5.0	5.0	5.0	2.0	8	0	3	0	0
NDTX4271-5R	1.4	2.3	1.0	3.8	4.3	5.0	5.0	5.0	5.0	3.4	0	0	3	0	0
BTX2332-1R	2.0	2.0	1.8	4.0	3.5	5.0	5.0	5.0	5.0	3.0	0	0	3	0	0
COTX02293-4R	1.6	2.5	1.1	3.6	4.0	5.0	5.0	5.0	5.0	3.0	0	0	3	0	0
ATX01188-1R	1.4	3.2	1.0	3.8	4.1	4.5	5.0	4.4	5.0	1.5	0	0	0	0	0
ATTX01180-4R	2.0	2.1	1.0	3.4	3.5	5.0	5.0	5.0	5.0	1.8	0	0	0	0	3
ATX01180-1R	2.0	3.5	1.0	3.9	3.6	5.0	5.0	5.0	5.0	1.5	0	0	10	0	0
COTX02172-1R	1.4	2.8	1.0	3.9	3.5	5.0	5.0	5.0	5.0	2.5	0	0	0	0	0
COTX02380-3AR	1.7	3.7	1.0	4.5	3.8	5.0	5.0	5.0	5.0	3.3	0	0	0	0	0
NDTX731-1R	1.8	2.6	1.4	2.9	3.8	5.0	5.0	5.0	5.0	3.0	0	0	0	0	0
COTX00411-4R	1.4	2.0	1.1	4.0	4.3	5.0	5.0	5.0	5.0	4.2	0	0	3	0	0
NDTX4847-7R	1.0	2.4	1.5	3.9	4.5	4.5	5.0	4.3	5.0	2.5	0	0	0	0	15
ATTX01180-1R	2.5	2.1	1.1	3.5	3.0	5.0	5.0	5.0	5.0	2.8	0	0	5	3	5
COTX02266-1R	1.1	2.9	1.1	3.6	3.3	5.0	5.0	5.0	5.0	3.0	0	0	0	0	0
COTX02266-2R	1.1	2.9	1.5	4.0	3.9	5.0	5.0	5.0	5.0	2.3	0	0	5	0	0
COTX00290-3R	1.5	2.0	3.3	3.9	4.0	4.6	5.0	5.0	5.0	4.1	0	0	3	0	0
COTX02294-4R	1.0	3.7	1.0	4.0	4.4	5.0	5.0	4.5	5.0	1.1	0	0	3	0	0
ATTX01175-1R	1.5	2.8	1.0	3.8	4.5	5.0	5.0	5.0	5.0	1.8	0	0	0	5	0
ATX00270-2R	2.0	1.6	1.0	4.0	4.0	5.0	5.0	5.0	5.0	3.8	0	0	5	0	0
COTX02041-1R	2.0	2.5	1.0	4.0	4.0	5.0	5.0	5.0	5.0	2.6	0	0	0	0	0
Average	1.6	2.7	1.2	3.7	3.8	4.9	5.0	4.9	5.0	2.7		0	2	0	1

¹ 1=light to 5=dark

⁶ 1 to 5=none

² 1=round to 5=long

⁷ 1 to 5=none

³ 1=none to 5=heavy

⁸ 1 to 5=none

⁴ 1=deep to 5=shallow

⁹ 1 to 5=none

⁵ 1=light to 5=dark

¹⁰ Stem end vascular discoloration severely evaluated

Springlake

Table 7e. Notes and general rating for all reps of 21 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2006.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Rio Rojo	BOT++, BOT, ,	BOT++, , ,	4.2, 4.2, 3.7, 3.7	4.5, 4.5, 4.5, 4
Red LaSoda	, , ,	, , deep eyes, rough	3.2, 3.7, 3.7, 3.2	4, 4, 3.5, 3.5
NDTX4271-5R	, BOT-, ,	light buff skin, BOT-, very white flesh, BOT-, , buff	3.7, 4, 3.7, 3.7	4, 4, 4, 3.7
BTX2332-1R	BOT, , BOT-,	heavy set, light skin color, buff, nice, light skin color, buff, TO SWR or WR,	4, 3.7, 3.7, 3.7	4, 3.7, 4, 4
COTX02293-4R	, nice color, ,	, keep, buff, nice,	3.2, 3.7, 3.2, 3	3.7, 3.7, 3.7, 3.5
ATX01188-1R	, , ,	poor shape, drop, poor shape, drop, road map, alligator,	3, 3.2, 3.2, 3.7	2, 2.7, 3, 3
ATTX01180-4R	, rough, drop?, ,	drop, close set, ,	3, 3, 3, 3	3, 3.7, 3, 3.2
ATX01180-1R	, large tuber, ,	, poor shape, heat sprouts,	3.2, 3.2, 3.2, 3.7	3, 3, 3, 3.5
COTX02172-1R	, , ,	, smooth skin, slight purple in vascular,	3.7, 3.2, 3.2, 3.7	3.7, 3.5, 3.5, 3.5
COTX02380-3AR	, , , pointed to apical end	flat, drop?, poor internals, smooth,	3.2, 3.2, 3.2, 3.2	3, 3.7, 3.5, 3.5
NDTX731-1R	, , ,	deep nose, buff, , rough, buff+,	3.2, 3.2, 3, 3.2	3, 3, 3, 3
COTX00411-4R	small tubers, heavy set, heavy set, 'b' and 'c' size, b' and 'c' size	heavy set, BOT, buff, keep, TC, small tubers, many small tubers	4, 3.7, 3.2, 3.7	4, 4, 4, 4
NDTX4847-7R	, , , drop?	growth cracks, poor skin, russeting, drop, scab, buff, drop, poor internals	3, 3.7, 3, 2.7	3, 3.5, 3, 2.7
ATTX01180-1R	, , , drop	nice appearance, rough, drop, poor internals, rough	3, 3.2, 3, 2	4, 3.5, 3, 3
COTX02266-1R	, , ,	, keep+, nipple at stem, drop, very white flesh	3.2, 3, 3, 2.7	3.7, 3.7, 3, 3.5
COTX02266-2R	c' size, b' and 'c' size, , drop?	, poor skin, road map, poor shape, drop, road map, russeting, drop, poor skin,	3.7, 3.7, 3, 3	3.7, 3, 3, 3
COTX00290-3R	, drop, drop, drop	small, alligator, drop++,	3, 2.7, 2, 2	2, 1.5, 2, 1.5
COTX02294-4R	, drop, drop?, drop?	drop+, , drop, alligator	3, 2.7, 3, 2.2	2.5, 2, 2, 2
ATTX01175-1R	, stolons, drop, , stolons, drop	poor shape, drop, poor shape, drop heavy set, nice skin set, BOT, boiler,	3, 2.7, 3, 2.7	2.5, 2, 2.5, 2
ATX00270-2R	, , heavy set,	BOT++, poor rep, poor internals, drop?,	3.2, 3, 3.2, 3.2	4, 4, 3.7, 3.5
COTX02041-1R	, drop?, drop?, drop	, small tubers, ,	3, 2.7, 3, 2.2	3.5, 3.7, 3.5, 3

Addendum to Tables Springlake 7a, 7b, 7c, 7d, and 7e
Texas Advanced Red Selection

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado and Texas

Date:

Planted	March 29, 2006	DAP
Vines Killed	July 11, 2006	102
Harvested	July 13, 2006	104

Plot Information:

Size of Plots	9	Feet
Spacing Between Hills	9	Inches
Spacing Between Rows	36	Inches
Hills Per Plot	12	
Number of Plot Per Rep	2	
Number of Reps	4	

Method of Harvest:

Two-row drag digger, with hand pick up

Fertilizer:

Application:
158-28-28-20# per acre

Irrigation:

Center Pivot

Insecticide:

Dimethoate, Avaunt, Rimon, Oberon 2SC

Seed Treatment

Tops MZ Gaucho

Fungicides Applied:

Penncozeb, Super Tin 80, Tenn-Cop 5E

Herbicides Applied:

Dual, Sencor, Matrix, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the third week of April, fourth week of May, the second week in July, and the third week of August. Temperatures were higher than normal for May and the first three weeks of July.

Springlake
Table 8a. Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 25 entries in the Texas Advanced Specialty Selection Trial grown near Springlake, Texas-2006.

Variety or Selection	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Field	General Rating ¹ Grading
		Total Yield	4-6 oz	6-10 oz	10-18 oz					
Yukon Gold	424.1	371.3	95.8	148.6	126.8	0.0	52.8	0.0	3.6	3.9
TX1523-1Ru/Y	401.5	341.2	80.4	143.3	117.5	0.0	60.2	0.0	4.1	4.5
BTX1544-2W/Y	385.0	320.0	101.0	147.8	71.2	0.0	64.9	0.0	4.0	3.7
ATTX98468-5R/Y	368.5	267.3	131.5	100.8	35.0	0.0	101.2	0.0	3.5	4.2
ATTX88654-3W/RE/Y	370.5	254.9	120.7	87.4	46.8	0.0	115.6	0.0	3.6	2.7
ATTX98493-2P/P	379.1	252.9	104.5	98.8	49.6	0.0	126.2	0.0	3.6	2.3
ATTX98471-4R/Y	345.9	245.0	124.4	68.4	52.2	0.0	100.8	0.0	2.6	2.5
ATTX98500-3Wpuspl	302.5	233.7	116.4	79.3	37.9	0.0	68.8	0.0	3.6	2.9
ATTX98514-1R/Y	353.9	225.6	115.1	86.6	23.9	0.0	128.3	0.0	3.1	3.0
TX1674-1W/Y	297.9	225.6	83.1	115.9	26.6	0.0	72.3	0.0	3.6	2.6
ATX99331-1Pu/Y	347.7	216.8	92.6	78.2	46.0	0.0	130.9	0.0	3.1	3.0
ATTX98510-1R/Y	294.8	196.2	96.4	77.4	22.4	0.0	98.6	0.0	3.0	3.4
ATTX99325-1P	239.0	194.7	62.7	67.0	65.1	2.6	41.7	0.0	3.9	3.4
BTX1749-1W/Y	271.6	190.4	90.8	74.2	25.4	0.0	81.3	0.0	3.2	3.7
ATTX98462-3R/Y	257.1	189.6	82.3	65.5	41.7	0.0	67.6	0.0	3.5	4.3
ATTX961014-1AR/Y	226.1	188.5	61.0	81.2	46.2	0.0	37.6	0.0	3.9	4.4
PORTX03PG19-1Pu/YR	298.2	152.4	90.1	59.1	3.2	0.0	145.8	0.0	3.1	2.9
UNTX383-3WRE/Y	264.4	146.2	101.0	39.7	5.4	0.0	118.2	0.0	3.4	3.9
NDTX4756-1R/Y	241.0	141.4	68.2	49.8	23.4	0.0	99.6	0.0	3.0	3.1
ATTX98468-3R/Y	348.0	113.5	97.6	15.9	0.0	0.0	234.5	0.0	3.2	3.6
PORTX03PG25-2R/R	256.9	91.2	67.8	23.4	0.0	0.0	165.8	0.0	3.0	2.0
ATTX98491-4YRsplash/∧	151.5	79.9	45.6	27.4	6.9	0.0	71.6	0.0	3.2	3.4
COTX01403-4R/Y	128.9	78.0	39.1	30.5	8.5	0.0	50.8	0.0	3.2	3.6
ATTX98444-16R/Y	268.6	62.4	55.1	7.3	0.0	0.0	206.2	0.0	3.4	3.4
PORTX03PG34-4R/P	143.3	32.0	32.0	0.0	0.0	0.0	111.3	0.0	2.0	1.4
Average	294.6	192.4	86.2	70.9	35.3	0.1	102.1	0.0	3.3	3.3
L.S.D. (.05)	39.0	35.6	32.8	29.1	23.1	ns	28.4	ns	0.5	0.5

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 25 entries in the Texas Advanced Specialty Selection Trial grown near Springlake, Texas-2006.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2			
Yukon Gold	87.5	22.7	35.0	29.9	0.0	12.5	0.0	1.078	Oblong	White
TX1523-1Ru/Y	85.1	19.9	35.8	29.4	0.0	14.9	0.0	1.078	Round	Russet
BTX1544-2W/Y	83.0	26.0	38.5	18.4	0.0	17.0	0.0	1.072	Oblong	White
ATTX98468-5R/Y	72.5	35.0	28.3	9.2	0.0	27.5	0.0	1.072	Oblong	Red
ATTX88654-3W/RE/Y	68.8	32.6	23.6	12.6	0.0	31.2	0.0	1.065	Oblong	White
ATTX98493-2P/P	66.6	27.6	26.0	13.1	0.0	33.4	0.0	1.075	Oblong	Purple
ATTX98471-4R/Y	70.9	36.3	19.8	14.7	0.0	29.1	0.0	1.080	Round	Red
ATTX98500-3Wpuspl	77.3	38.3	26.5	12.5	0.0	22.7	0.0	1.063	Oblong	White
ATTX98514-1R/Y	63.7	32.4	24.5	6.8	0.0	36.3	0.0	1.074	Round	Red
TX1674-1W/Y	75.8	27.8	39.1	8.9	0.0	24.2	0.0	1.082	Oblong	White
ATX99331-1Pu/Y	62.4	26.6	22.6	13.2	0.0	37.6	0.0	1.063	Oblong	Purple
ATTX98510-1R/Y	66.2	32.3	26.5	7.4	0.0	33.8	0.0	1.069	Oblong	Red
ATTX99325-1P	82.0	27.1	28.0	26.9	1.0	17.0	0.0	1.067	Oblong	Purple
BTX1749-1W/Y	70.6	34.7	27.4	8.5	0.0	29.4	0.0	1.082	Oblong	White
ATTX98462-3R/Y	73.5	32.1	25.5	15.8	0.0	26.5	0.0	1.072	Oblong	Red
ATTX961014-1AR/Y	83.4	27.3	35.9	20.2	0.0	16.6	0.0	1.069	Oblong	Red
PORTX03PG19-1Pu/YR	51.3	29.8	20.6	0.9	0.0	48.7	0.0	1.087	Oblong	Purple
UNTX383-3WRE/Y	55.8	37.6	16.0	2.2	0.0	44.2	0.0	1.079	Round	White
NDTX4756-1R/Y	58.6	28.1	20.2	10.3	0.0	41.4	0.0	1.069	Oblong	Red
ATTX98468-3R/Y	32.4	28.0	4.3	0.0	0.0	67.6	0.0	1.080	Round	Red
PORTX03PG25-2R/R	35.4	26.3	9.1	0.0	0.0	64.6	0.0	1.072	Long	Red
ATTX98491-4YRsplash/Y	53.0	31.3	17.9	3.7	0.0	47.0	0.0	1.077	Round	Red
COTX01403-4R/Y	59.8	30.3	23.7	5.8	0.0	40.2	0.0	1.057	Oblong	Red
ATTX98444-16R/Y	23.2	20.5	2.7	0.0	0.0	76.8	0.0	1.083	Round	Red
PORTX03PG34-4R/P	22.1	22.1	0.0	0.0	0.0	77.9	0.0	1.078	Oblong	Red
Average	63.2	29.3	23.1	10.8	0.0	36.7	0.0	1.074		
L.S.D. (.05)	10.0	10.3	9.7	7.3	ns	10.0	ns	0.004		

Springlake
Table 8c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 25 entries in the Texas Advanced Specialty Selection Trial grown near Springlake, Texas-2006.

Variety or Selection	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
						Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
Yukon Gold	5.6	6.2	1.5	97	100	1.1	4.3	3.4	4.1	16
TX1523-1Ru/Y	5.9	6.0	2.1	95	96	1.9	3.7	3.6	3.7	5
BTX1544-2W/Y	6.0	5.5	1.7	95	98	1.5	3.9	3.4	3.8	10
ATTX98468-5R/Y	6.6	4.7	2.4	98	100	1.9	3.9	3.7	4.0	6
ATTX88654-3W/RE/Y	8.4	4.1	1.7	73	92	1.5	3.9	4.1	3.8	4
ATTX98493-2P/P	8.3	3.9	2.0	96	97	2.3	3.5	3.8	3.6	5
ATTX98471-4R/Y	7.9	3.9	1.6	79	94	2.0	3.8	4.1	3.7	0
ATTX98500-3Wpuspl	8.5	4.0	1.4	69	78	1.5	4.2	4.9	4.0	0
ATTX98514-1R/Y	7.9	3.8	2.3	89	98	1.9	4.0	4.0	3.9	3
TX1674-1W/Y	6.0	4.9	1.5	71	83	1.4	3.4	4.1	3.4	3
ATX99331-1Pu/Y	7.6	4.1	1.6	92	100	1.6	4.7	4.9	4.7	0
ATTX98510-1R/Y	6.4	3.9	1.9	85	97	2.0	3.7	4.1	3.8	3
ATTX99325-1P	5.4	5.2	1.8	51	73	7.0	2.9	2.9	2.7	14
BTX1749-1W/Y	5.1	4.5	2.1	92	98	2.3	2.9	3.1	3.1	10
ATTX98462-3R/Y	5.3	4.3	1.9	85	94	1.8	2.7	3.2	2.9	5
ATTX961014-1AR/Y	5.4	5.2	1.6	58	70	1.6	2.4	3.5	2.7	0
PORTX03PG19-1Pu/YR	7.8	3.3	1.8	91	98	2.0	2.9	3.5	3.1	8
UNTX383-3WRE/Y	7.1	3.6	2.0	83	90	2.3	3.1	3.4	3.2	4
NDTX4756-1R/Y	6.1	3.5	1.7	76	92	2.0	3.5	3.4	3.6	10
ATTX98468-3R/Y	11.0	2.6	2.0	100	100	1.6	4.2	3.6	4.0	0
PORTX03PG25-2R/R	12.6	1.7	2.7	92	99	1.9	3.7	4.2	3.6	0
ATTX98491-4YRsplash/Y	4.5	3.3	1.6	68	84	2.3	2.6	3.4	3.2	5
COTX01403-4R/Y	3.1	3.6	2.0	91	94	1.5	1.6	2.4	1.6	50
ATTX98444-16R/Y	8.0	2.8	2.1	100	100	1.6	4.1	3.4	4.0	3
PORTX03PG34-4R/P	6.7	1.9	3.3	91	94	2.5	2.8	3.8	2.7	0
Average	6.9	4.0	1.9	85	93	2.0	3.4	3.7	3.5	6
L.S.D. (.05)	1.7	0.6	0.4	14	10	ns	0.5	0.4	0.5	8

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, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 25 entries in the Texas Advanced Specialty Selection Trial grown near Springlake, Texas-2006.

Variety or Selection	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	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
Yukon Gold	2.6	3.3	1.5	3.5	1.9	5.0	5.0	5.0	5.0	3.6	13	0	0	0
TX1523-1Ru/Y	2.9	2.5	2.9	4.1	3.5	5.0	5.0	5.0	5.0	4.0	0	0	0	0
BTX1544-2W/Y	3.0	2.6	3.0	3.6	2.8	5.0	5.0	5.0	5.0	4.2	0	0	0	0
ATTX98468-5R/Y	3.3	2.6	1.0	4.0	3.0	5.0	5.0	5.0	5.0	1.9	0	0	0	0
ATTX88654-3W/RE/Y	3.1	3.0	2.0	3.5	2.1	5.0	5.0	5.0	5.0	2.5	0	0	0	0
ATTX98493-2P/P	4.5	3.8	1.1	3.8	5.0	4.8	5.0	5.0	5.0	2.8	0	0	0	0
ATTX98471-4R/Y	2.3	2.3	1.5	2.3	4.5	5.0	5.0	5.0	5.0	1.7	0	0	0	0
ATTX98500-3Wpuspl	3.4	3.4	1.6	3.9	5.0	5.0	5.0	5.0	5.0	4.4	0	0	0	0
ATTX98514-1R/Y	2.9	2.1	1.5	3.3	3.3	5.0	5.0	5.0	5.0	1.6	0	0	0	0
TX1674-1W/Y	2.9	4.0	2.5	4.4	3.0	5.0	5.0	5.0	5.0	3.1	0	0	0	0
ATX99331-1Pu/Y	2.5	2.6	1.4	3.6	5.0	4.6	5.0	5.0	5.0	2.8	0	0	0	0
ATTX98510-1R/Y	3.1	2.5	1.0	3.6	3.4	5.0	5.0	5.0	5.0	2.7	0	0	0	0
ATTX99325-1P	1.5	3.9	1.0	4.3	5.0	4.9	5.0	5.0	5.0	2.7	3	0	0	0
BTX1749-1W/Y	2.8	2.8	2.3	4.0	3.0	5.0	5.0	5.0	5.0	3.8	0	0	0	0
ATTX98462-3R/Y	3.1	3.8	1.1	4.3	3.8	5.0	5.0	5.0	5.0	4.3	0	0	0	0
ATTX961014-1AR/Y	3.0	4.0	1.1	3.6	3.9	5.0	5.0	5.0	5.0	4.1	0	0	0	0
PORTX03PG19-1Pu/YR	3.6	2.6	2.1	4.0	3.8	5.0	5.0	5.0	5.0	4.0	0	0	0	0
UNTX383-3WRE/Y	3.8	2.1	1.4	3.8	2.0	5.0	5.0	5.0	5.0	3.7	0	0	0	0
NDTX4756-1R/Y	2.9	2.4	1.3	3.6	3.3	4.9	5.0	5.0	5.0	3.9	3	0	0	3
ATTX98468-3R/Y	3.4	2.0	3.8	3.5	3.6	5.0	5.0	5.0	5.0	3.8	0	0	0	0
PORTX03PG25-2R/R	3.3	4.0	1.5	4.0	5.0	5.0	5.0	5.0	5.0	1.9	0	0	0	0
ATTX98491-4YRsplash/γ	3.8	1.9	1.0	3.9	2.4	5.0	5.0	5.0	5.0	4.0	0	0	0	0
COTX01403-4R/Y	3.0	3.1	1.3	4.1	3.0	5.0	5.0	5.0	5.0	4.0	0	0	0	8
ATTX98444-16R/Y	3.5	2.0	1.5	3.5	4.0	5.0	5.0	5.0	5.0	2.9	0	0	0	0
PORTX03PG34-4R/P	2.0	3.6	3.5	4.0	5.0	4.6	5.0	5.0	5.0	3.5	0	0	0	0
Average	3.0	2.9	1.7	3.8	3.6	5.0	5.0	5.0	5.0	3.3	1	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 Stem end vascular discoloration severely evaluated

Springlake

Table 8e. Notes and general rating for all reps of 25 entries in the Texas Advanced Specialty Selection Trial grown near Springlake, Texas-2006.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Yukon Gold	, , ,	nice, internal??. BOT,	3.2, 4, 3.2, 4	4, 3.7, 4, 4
TX1523-1Ru/Y	\BOT, , ,	BOT++, , ,	4.2, 4, 4.2, 4	4.5, 4.5, 4.5, 4.5
BTX1544-2W/Y	, , ,	BOT-, buff, poor shape, nice,	4, 4, 4, 4	3.7, 3.7, 3.5, 4
ATTX98468-5R/Y	, drop?, ,	To SWR or WR, BOT, TC, will oversize,	4, 3, 4, 3	4.5, 4, 4, 4.2
ATTX88654-3WRE/Y	smooth, very yellow, BOT-, late, ,	purple eyes, drop, , light russet at apical end, drop	3.2, 4, 3.2, 4	2.7, 2.5, 2.7, 2.7
ATTX98493-2P/P	, , ,	rough, knobs, second growth, some white flesh centers, use for extraction, drop, apical	3.2, 4, 3.2, 4	2, 3, 2, 2
ATTX98471-4R/Y	drop, drop, deep stem, drop?,	drop+?, indentation at stem end, ugly nose, , deep eyes	2.2, 3, 2.2, 3	2, 2.7, 2.7, 2.7
ATTX98500-3Wpuspl	can be pointed, heat sprouts, ,	pinto, drop, flat, eye tubers, pointed at both ends, some very nice, poor shape	3.2, 4, 3.2, 4	2, 3.5, 3, 3
ATTX98514-1R/Y	stem attachment, drop, bull nose, drop?, ,	stem end indentations, drop, sliver scurf, rough, keep, deep nose, drop	3, 3.2, 3, 3.2	2.7, 3, 3.5, 2.7
TX1674-1W/Y	, flat, ,	flat., pink eyes, slight russet, to Wr or Swr, TC, parent., pointed to stem end, nice	3.2, 4, 3.2, 4	1, 3, 3.5, 3
ATX99331-1Pu/Y	drop?, , ,	alligator, road map, eye tubers, drop?, , keep	3, 3.2, 3, 3.2	3, 3, 3, 3
ATTX98510-1R/Y	poor shape, drop?, drop, ,	mix, nice interior, drop?, , , silver scurf	3, 3, 3, 3	3.2, 3.5, 3.5, 3.2
ATTX99325-1P	, , ,	, road map, drop?, smooth,	3.7, 4, 3.7, 4	3.2, 3, 3.5, 4
BTX1749-1W/Y	, , ,	TC, BOT, buff, ,	3.2, 3.2, 3.2, 3.2	4.2, 3.7, 3.5, 3.5
ATTX98462-3R/Y	smooth, BOT-, keep, yield+, ,	smooth, TC, BOT, slight road map, smooth, heat sprouts at apical end,	4, 3, 4, 3	4.5, 4, 4.5, 4.2
ATTX961014-1AR/Y	, , ,	slight road map, BOT, smooth, TC, BOT, lenticels, heat sprouts at apical end	4, 3.7, 4, 3.7	4.5, 4.5, 4.5, 4.2
PORTX03PG19-1Pu/YR	select smooth skin tubers, drop?, ,	road map, drop, buff, light red flesh, nice interior, keep, drop	3, 3.2, 3, 3.2	2.7, 3.5, 2.7, 2.7
UNTX383-3WRE/Y	keep, , boiler only,	yellow pale red eyes, TC, BOT-, smooth skin,	3.7, 3, 4, 3	4, 3.7, 4, 3.7
NDTX4756-1R/Y	drop?, drop, ,	drop, mix, silver scurf, boiler, nice, keep, indentation at stem end,	3, 3, 3, 3	2.7, 3, 3, 3.5
ATTX98468-3R/Y	boiler, drop?, creamer, ,	smooth skin, TC, rough, drop, alligator, buff, fingerling, pointed to stem end	3.2, 3.2, 3.2, 3.2	3.5, 3.5, 4, 3.5
PORTX03PG25-2R/R	, drop, ,	rough, drop, red splash eyes, raised eyes+., TC, drop?	3.2, 2.7, 3.2, 2.7	2, 2, 2, 2
ATTX98491-4YR splash/Y	, , ,	nice, low yield, keep, nice shape, nice, BOT- , TC	2.7, 3.7, 2.7, 3.7	3, 3, 3.7, 3.7
COTX01403-4R/Y	, , ,		3.2, 2.7, 2.7, 3.7	2, 2, 3, 3
ATTX98444-16R/Y	boiler, , ,	buff, boiler, keep, , ,	3.7, 3, 3.7, 3	3.2, 3.2, 3.5, 3.5
PORTX03PG34-4R/P	drop, drop, drop,	road map, drop+., , , ugly	2, 2, 2, 2	1, 1.5, 1.5, 1.5

Addendum to Tables Springlake 8a, 8b, 8c, 8d, and 8e
Texas Advanced Specialty Selection

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

Planted	March 30, 2006	DAP
Vines Killed	July 11, 2006	101
Harvested	July 16, 2006	106

Plot Information:

Size of Plots	10' 5"
Spacing Between Hills	9"
Spacing Between Rows	36"
Hills Per Plot	14
Number of Plot Per Rep	2
Number of Reps	4

Method of Harvest:

Two-row drag digger, with hand pick up

Fertilizer:

Application:
263-28-28-20# per acre

Irrigation:

Center Pivot

Insecticide:

Dimethoate, Avaunt, Rimon, Oberon 2SC

Seed Treatment

Tops MZ Gaucho

Fungicides Applied:

Penncozeb, Super Tin 80, Tenn-Cop 5E

Herbicides Applied:

Dual, Sencor, Matrix, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the third week of April, fourth week of May, the second week in July, and the third week of August. Temperatures were higher than normal for May and the first three weeks of July.

2006 Dalhart Trials

Summary of growing conditions:

These trials were planted 30 miles south of Dalhart. This trial was subjected to higher than normal temperature during May and June. Lower than normal precipitation was recorded during the first 3 weeks of April, the last two weeks of May, and the first three weeks of June. Higher than normal precipitation was recorded during the last week of June, the first week of July, and the first and last weeks of August (Figure 5).

Trials conducted:

- Western Regional Chipping
- Southwestern Regional Chipping
- Texas Advanced Chipping Selection
- Texas Advanced Russet Selection
- Texas Advanced Red Selection
- Texas Advanced Specialty Selection
- 2005 Chipping Selection
- 2005 Russet Selection
- 2005 Red Selection
- 2005 Specialty Selection
- 2005 Fingerling Selection
- CSS Variety Chip (data not reported)

WESTERN REGIONAL COOPERATIVE CHIPPING TRIAL

This trial consisted of 10 entries, including Atlantic, Ivory Crisp, and Chipeta as check varieties.

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

- The entries receiving the highest general ratings and best of trial designations for appearance and chipping quality were B0766-3T and Ivory Crisp, while Chipeta and CO97043-14W also received a high general rating and best of trial designation for appearance (Table 1a, 1e, 1f).
- ATTX95490-2W had the highest total yield and the lowest marketable yield. B0766-3T and CO97065-7W had the highest marketable yield (Table 1a)

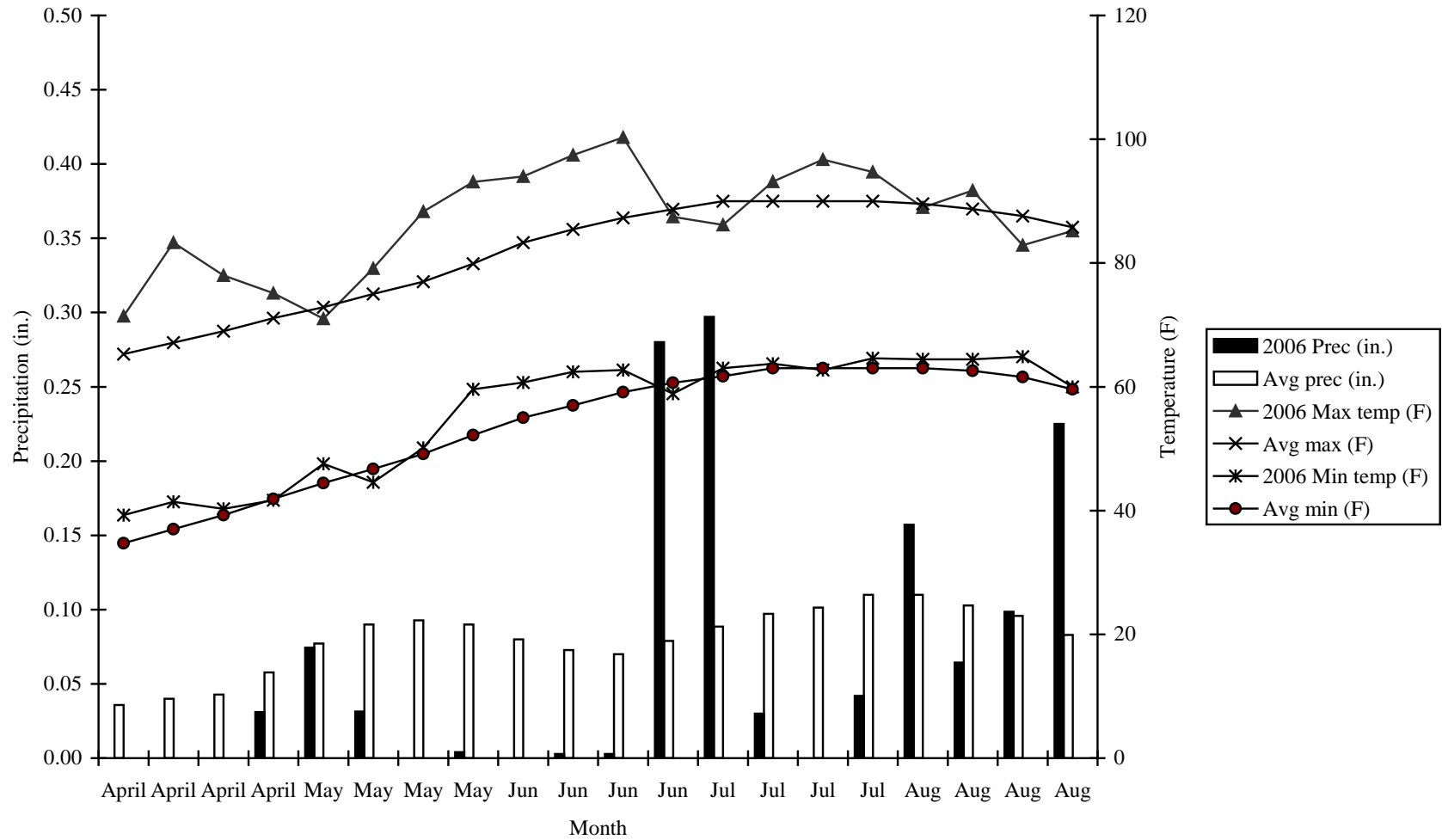


Figure 5. Weekly minimum/maximum temperatures and precipitation for the 2006-growing season near Dalhart, Texas compared to the average minimum/maximum temperatures and precipitation (1971-2000).

- CO95051-7W and Atlantic had the highest yield of 4-6 oz. tubers, while B0766-3T and CO97065-7W had the highest yield of 6-10 oz. tubers. Chipeta and CO97043-14W had the highest yield of 10-18 oz. tubers. CO95051-7W had the highest yield of less than 4 oz. tubers, while ATTX95490-2W had the highest yield of culls/No. 2 tubers (Table 1a).
- CO97043-14W and CO97065-7W had the highest percentage of marketable yield, while CO95051-7W and AC97097-14W had the highest percentage of 4-6 oz. tubers (Table 1b).
- CO97065-7W and Atlantic had the highest percentage of 6-10 oz. tubers, while Chipeta and CO97043-14W had the highest percentage of 10-18 oz. tubers. CO95051-7W had the highest percentage of less than 4 oz. tubers, while ATTX95490-2W had the highest percentage of culls/No. 2 tubers (Table 1b).
- CO95051-7W had the highest specific gravity and percent solids (Table 1b).
- CO95051-7W and ATTX95490-2W had the highest average tubers per plant, while Chipeta had the lowest. Chipeta and ATTX95490-2W had the highest average tuber weight, while CO95051-7W had the lowest (Table 1c).
- Chipeta, B0766-3T, and Ivory Crisp were the latest maturing entries, while CO96141-4W was the earliest (Table 1c).
- A high percentage of hollow heart was noted for AC97097-14W, while Atlantic had a high percentage of internal brownspot (Table 1d).
- All of the entries appeared to exhibit zebra chips except for CO97043-14W while those appearing to exhibit the most extreme zebra expression were ATTX95490-2W, CO95051-7W, and Chipeta (Tables 1e and 1f).
- Overall, B0766-3T produced the highest quality chip (Table 1f).

Comments on entries:

- Atlantic Round Buff, heat sprouts, yield-, nice, bad rep, nice shape and skin, poor internals, 10 % Zebra, CR¹=2.
- Ivory Crisp Round White, nice, uniform, nice shape, skin, and internals++, bud cracks+, buff, 10 % Zebra, BOT+, CR=1.
- Chipeta Round White, rough, oversize, heat sprouts, yield-, growth cracks, poor rep, 20% Zebra, nice, yield+, BOT++, CR=2+.
- AC97097-14W Round White, uniform, small, variable shape, road map, yield-, buff, nice shape, hollow heart++, poor internals, 20% Zebra, CR=1.
- ATTX95490-2W Oblong White, oversize, rough, yield+, poor shape, 32% Zebra, heat sprouts, stem attachments, drop++++, CR=3.

- B0766-3T Round White, nice, uniform, buff, yield+, bud cracks, nice shape and skin, nice internals, BOT++, CR=1+.
- CO95051-7W Round White, small, heavy set, yield-, nice internals, 40% Zebra, CR=1+.
- CO96141-4W Round White, uniform, nice shape, yield+, yield-, nice internals++, CR=2-.
- CO97043-14W Round White, uniform, yield, flat chain tubers, rough, poor rep, nice, stem attachment, nice shape, skin and internals, BOT-, CR=1.
- CO97065-7W Round White, buff, growth cracks, oversized, buff, uniform, nice, bud cracks, 10 % zebra, nice shape, and skin, excellent internals, BOT+++, CR=1.

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

Summary:

The top performing entries based on all factors including the chipping results was B0766-3T.

SOUTHWESTERN REGIONAL COOPERATIVE CHIPPING TRIAL

This trial consisted of five entries, including Atlantic and Chipeta as check varieties.

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

- Chipeta had the highest general rating and best of trial designations for appearance, while TX1475-3W received a best of trial designation for chip quality (Table 2a, 2e, 2f).
- TX1475-3W and ATDC9801-3P had the highest total yield, while ATDC9801-3P and Atlantic had the highest marketable yield. CO98277-4W and Atlantic had the highest yield of 4-6 oz. tubers, while ATDC9801-3P and Atlantic had the highest yield of 6-10 oz. tubers.
- TX1475-3W and ATDC9801-3P had the highest yield of 10-18 oz. tubers, while TX1475-3W had the highest yield of over 18 oz. tubers. ATDC9801-3P and CO98277-4W had the highest yield of less than 4 oz. tubers. (Table 2a).
- All of the entries had acceptable percentages of total marketable tubers, while CO98277-4W and Atlantic had the highest percentage of 4-6 oz. tubers. ATDC9801-3P had the highest percentage of 6-10 oz. tubers, while Chipeta and TX1475-3W had the highest percentage of 10-18 oz. tubers.
- TX1475-3W had the highest percentage of over 18 oz. tubers, while CO98277-4W and ATDC9801-3P had the highest percentage of less than 4oz. tubers (Table 2b).

- ATDC9801-3P had the highest specific gravity and percent solids (Table 2b).
- ATDC9801-3P and CO98277-4W had the highest average tubers per plant and the lowest average tuber weight, while TX1475-3W had the higher average tuber weights (Table 2c).
- Chipeta was the latest maturing, while TX1475-3W and CO98277-4W was the earliest (Table 2c).
- TX1475-3W had the highest percentage of hollow heart, while Atlantic had the highest percent of internal brownspot (Table 2d).
- ATDC9801-3P did not exhibit zebra in the tubers nor in the chips however, it did chip medium dark (Tables 2e and 2f).

Comments on entries:

- Atlantic Round Buff, heat sprouts, yield-, nice, bad rep, nice shape and skin, poor internals, 10 % Zebra, CR=2.
- Chipeta Round White, rough, oversize, heat sprouts, yield-, growth cracks, poor rep, 20% Zebra, nice, yield+, BOT-++, CR=2+.
- ATDC9801-3P Round Red, growth cracks, light red skin, buff, rough, skin color faded, road map, nice internals, heavy set, small, CR=1.
- CO98277-4W Oblong White, heat sprouts, growth cracks, uniform, nice, small++, flat, yield-, nice internals, CR=2+.
- TX1475-3W Oblong White, growth cracks, yield-, light set, rough, yield+, hollow heart on > 18 oz tubers, yield+, CR=1.

Summary:

TX1475-3W was overall the best chipper of the group.

TEXAS ADVANCED SELECTION CHIPPING TRIAL

The trial consisted of 43 entries, including the check variety Atlantic. All of the seed was from Dalhart.

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

- The outstanding entries for this trial based on general ratings, best of trial designations, and chip quality were ATX85404-8W, NDTX4930-5W, and PATX99P10-1R/R.

- AOTX95309-1W and AOTX95309-3W received high general ratings and best of trial designations for appearance. COTX02377-1W, COTX01339-4W, COTX00328-1Pu/Ypu, TX02098-2W, and ATTX98466-5R/W-R received best of trial designations for chip quality (Table 3a, 3e, 3f).
- ATX85404-8W and NDTX4930-5W had the highest total yield and total marketable yield. AOTX95309-3W and TX02098-2W had the highest yield of 4-6 oz. tubers, while ATX85404-8W and NDTX4930-5W had the highest yield of 6-10 oz. tubers (Table 3a).
- NDTX4930-5W and COTX02377-1W had the highest yield of 10-18 oz. tubers, while NDTX4930-5W had the highest yield of over 18 oz. tubers. TX02098-2W and TX02080-1P/W-P had the highest yield of less than 4 oz. tubers (Table 3a).
- TX02098-2W and TX02080-1P/W-P had the highest yield of culls/No.2 tubers (Table 3a).
- COTX02377-2W and COTX02377-1W had the highest percentage of total marketable yield. ATTX98466-5R/W-R and COTX99238-2W had the highest percentage of 4-6 oz. tubers, while COTX00238-1Pu/Ypu and COTX01339-4W had the highest percentage of 6-10 oz. (Table 3b).
- COTX02377-1W and COTX02377-2W had the highest percentage of 10-18 oz. tubers, while NDTX4930-5W had the highest percentage of over 18 oz. tubers. COTX99238-2W and TX02098-2W had the highest percentage of less than 4 oz. tubers (Table 3b).
- NDTX6773-1W and TX02098-2W had the highest percentage of culls/No.2 tubers (Table 3b).
- TX02080-1P/W-P and TX02098-2W had the highest specific gravity and percent solids (Table 3b).
- TX02098-2W and TX02080-1P/W-P had the highest average tubers per plant, while NDTX7571-5AW had the lowest. NDTX4930-5W and COTX02377-2W had the highest average tuber weight, while ATTX98466-5R/W-R had the lowest (Table 3c).
- ATX85404-8W, COTX02377-2W, TX02098-2W, and COTX00328-1Pu/Ypu were the latest maturing entries, while ATTX98466-5R/W-R and COTX01339-4W were the earliest maturing (Table 3c).
- COTX02377-1W and NDTX6773-1W had high percentages of hollow heart. TX02098-2W, NDTX7571-3AW, and NDTX7571-2AW had high percentages of internal brownspot (Table 3d).

Comments on entries:

- AOTX95309-1W Round White, very uniform, to SWR, excellent internals, BOT+++, CR=1.
- AOTX95309-3W Round White, yield+, uniform, to SWR, lenticels, excellent internals, BOT+++, CR=1+.
- ATTX98466-5R/W-R Oblong Red, yield+, nice red skin, nice shape, white/red flesh, flat, lenticels, nice internals, CR=2+.
- ATX85404-8W Round White, very nice, uniform, scab on lenticels, buff, nice shape and internals, BOT+++, CR=1.

- COTX00328-1Pu/Ypu Oblong Purple, nice, shape and skin, nice internals, yellow/purple flesh, flat, road map, buff, knobs, CR=2+.
- COTX01339-4W Oblong White, pointed to stem end, pear shaped, yield+, excellent internals, nice shape and skin, flat, hollow heart, poor shape, knobs, CR=1+.
- COTX02377-1W Round White, rough, bud cracks, hollow heart, drop++, CR=1.
- COTX02377-2W Round White, very nice, uniform, large, nice shape and skin, excellent internals++, buff, CR=2.
- COTX99238-2W Round White, small, uniform, heavy set, nice shape, yield-, excellent internals, CR=2.
- NDTX4930-5W Oblong White, nice shape, yield+, mix, excellent internals, poor internals, BOT+, CR=1.
- NDTX6773-1W Oblong White, small, pointed, hollow heart++, drop, CR=1+.
- NDTX7571-3AW Oblong White, buff, yield, hollow heart, nice shape, poor internals+, flat, drop, CR=2.
- NDTX7571-5AW Oblong White, yield-, nice internals, small, flat, nice shape, mix, buff and smooth skin, poor internals, rough, keep smooth skin tubers, CR=1+.
- NDTX8555-2R/P Oblong Red, nice skin, heat sprouts, some pointed, small, pear shaped, white/red flesh, pointed, road map, sliver scurf, CR=3.
- PATX99P10-1R/R Oblong Red, nice skin and shape, nice shape and color, BOT for flesh color, CR=3.
- TX02080-1P/W-P Oblong Purple, road map, buff, small, poor skin, yield+, heavy set, nice shape and color, buff, CR=3.
- TX02098-2W Round White, uniform, yield+, heavy set, poor internals+, nice shape and skin, many small tubers, CR=3.

Summary:

Based on all factors ATX85404-8W, NDTX4930-5W, and AOTX95309-1W were the outstanding entries. Entries that will be retested in 2007 are: AOTX95309-3W, COTX02377-1W, COTX02377-2W, COTX01339-4W, COTX00328-1Pu/Ypu, PATX99P10-1R/R, and ATTX98466-5R/W-R.

TRIAL OF THE 2005 CHIPPING SELECTIONS, DALHART

The trial consisted of 29 entries of which 16 were selected in the field for further chip evaluations. Of these, seven (COTX03194-2W, COTX03194-3W, COTX03270-3W, COTX03270-4W, MWTX395-1W, NDTX049265-2W, and TX03196-1W) (Table 4) will be advanced in 2007.

TEXAS ADVANCED RUSSET SELECTION TRIAL, DALHART

The trial consisted of 30 entries, including the check varieties Russet Norkotah and Century.

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

- The outstanding entries for this trial based on general rating and best of trial designations were AOTX96208-1Ru and AOTX02136-1Ru while, AOTX95295-1Ru, and TXA549-1Ru, also had high general ratings in the field and at grading (Tables 5a, 5f).
- AOTX95295-1Ru and MWTX2609-2Ru had the highest total yield. AOTX95295-1Ru and ATX9202-3Ru had the highest marketable yield, while AOTX95295-1Ru and AOTX9621-3Ru the highest yield of 4-6 oz. tubers (Table 5a).
- AOTX95295-1Ru and AOTX02019-1Ru had the highest yield of 6-10 oz., while TXA549-1Ru and AOTX95295-1Ru had the highest yield of 10-18 oz. tubers (Table 5a).
- Russet Norkotah 278 and Russet Norkotah 223 had the highest yield of over 18 oz. tubers, while Russet Norkotah 223 and AOTX95295-3Ru had the highest yield of less than 4 oz. tubers (Table 5a).
- ATX91137-1Ru and Century had the highest yield of culls/No.2 tubers (Table 5a).
- AOTX02019-1Ru and ATX9202-3Ru had the highest percentages of marketable yield, while AOTX02019-1Ru and AOTX96216-3Ru had the highest percentage of 4-6 oz. AOTX02019-1Ru and ATX9130-1Ru had the highest percentage of 6-10 oz. tubers (Table 5b).
- TXNS551 and TXA549-1Ru had the highest percentage of 10-18 oz. tubers, while AOTX02136-1Ru and Russet Norkotah 278 had the highest percentage of over 18 oz. tubers. AOTX02019-1Ru and AOTX95295-3Ru had the highest percentage of less than 4 oz. tubers, while ATX91137-1Ru and Century had the highest percentage of culls/No. 2 tubers (Table 5b).
- TXA549-1Ru and AOTX02136-1Ru had the highest specific gravity (Table 5b).
- AOTX95295-1Ru and Russet Norkotah 223 had the highest average number of tubers per plant, while AOTX96075-1Ru had the lowest. AOTX02136-1Ru and AOTX96216-2Ru had the highest average tuber weight, while AOTX02019-1Ru had the lowest (Table 5c).
- TXA549-1Ru, MWTX2609-2Ru, MWTX2609-4Ru, and Century were the latest maturing, while Russet Norkotah and AOTX95295-3Ru were the earliest maturing (Table 5c).
- TXA549-1Ru, Russet Norkotah 223, ATX9130-1Ru, AOTX96208-1Ru, AOTX96216-2Ru, and AOTX96216-3Ru had over 15 percent hollow heart (Table 5d).

Comments on entries:

- Russet Norkotah Long Russet, rough, large, yield-, smooth, nice internals, pointed, long.
- Century Long White, rough, long, curved, bruised ends, low gravity, skinny, pointed.
- AOTX02019-1Ru Long Russet, small, heavy set, blocky, sprouts, poor internals, 60 % internal discoloration, drop?+.
- AOTX02136-1Ru Long Russet, uniform, yield+, fat tubers, nice shape, smooth, keep, BOT.
- AOTX95265-1Ru Long Russet, nice shape, nice internals, nice, keep.
- AOTX95265-2ARu Long Russet, small, curved, apical green head, nice shape, keep.
- AOTX95265-3Ru Long Russet, nice shape, yield+, poor shape+, greening++, nice internals, too long, drop+, BOT.
- AOTX95265-4Ru Long Russet, large curved, nice internals, greening, drop+.
- AOTX95269-1Ru Long Russet, nice.
- AOTX95295-1Ru Long Russet, very nice, uniform, 15% heat necrosis.
- AOTX95295-3Ru Long Russet, yield-, small, uniform, shapes ok, greening, keep.
- AOTX96075-1Ru Long Russet, nice shape, smooth, nice internals, keep.
- AOTX96084-1Ru Long Russet, better than Norkotah, fat, nice shape, yield-, very nice.
- AOTX96208-1Ru Long Russet, nice, nice shape, smooth, yield+, BOT.
- AOTX96216-1Ru Long Russet, curved, rough, nice internals keep.
- AOTX96216-2Ru Long Russet, nice, 10% heat necrosis, fat, nice shape, keep, BOT.
- AOTX96216-3Ru Long Russet, rough, small, yield-, drop?, keep.
- AOTX98096-1Ru Long Russet, very nice, nice shape and internals, fat tubers.
- ATX91137-1Ru Long Russet, nice, rough, raised eyes, lots of culls, knobs, nice internals.
- ATX9130-1Ru Long Russet, nice, uniform, nice shape, poor skin, flat, drop, smooth, light russet, hollow heart.

- ATX9202-3Ru Long Russet, nice shape, uniform, deep eyes, nice internals+, drop, BOT-.
- ATX97195-1Ru Long Russet, curved, poor shape, rough, internal??. fat, BOT.
- MWTX2609-2Ru Long Light Russet, rough, curved, yield+, skinny, nice internals.
- MWTX2609-4Ru Long Light Russet, rough, curved, low gravity, pointed, nice internals, bruised.
- TXA549-1Ru Oblong Russet, blocky, very nice, nice shape, keep, BOT.
- Russet Norkotah 223 Long Russet, small, curved, rough, greening, poor shape, nice internals.
- Russet Norkotah 278 Long Russet, rough, curved, greening, 20% heat necrosis.
- Russet Norkotah 223 Long Russet, not as rough as other strains, greening, yield+, pointed.
- TXNS410 Long Russet, nice, small, curved, poor shape, rough, nice internals, oversize.
- TXNS551 Long Russet, uniform, nice internals, curved, rough, yield-, small, pointed, drop?.

Summary:

Based on all factors, the outstanding entries in this trial were AOTX95295-1Ru, ATX9202-3Ru, TXA549-1Ru..

TRIAL OF THE 2005 RUSSET SELECTIONS, DALHART

The trial consisted of 87 entries of which seven (AOTX02060-1Ru, AOTX02066-1Ru, AOTX03096-1Ru, AOTX03134-1Ru, ATX02014-1Ru, COTX03261-1Ru, and COTX03285-4Ru) will be advanced in 2007 (Table 6).

TEXAS ADVANCED RED SELECTION TRIAL, DALHART

This trial consisted of 16 entries and the check varieties Red LaSoda and Dark Red Norland

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

- The outstanding entries based on general rating and best of trial designation was Rio Rojo, NDTX4271-5R, COTX94218-1R, NDTX4784-7R, and ATTX98453-6R, while NDTX4847-7R also had high general rating (Table 7a, 7e).
- Rio Rojo and NDTX4271-5R had the highest total and marketable yield (Table 7a).

- COTX02294-4R and COTX02266-2R had the highest yield of 4-6 oz. tubers, while COTX94218-1R and NDTX4271-5R had the highest yield of 6-10 oz. tubers (Table 7a).
- COTX02266-2R and COTX94218-1R had the highest yield of less than 4 oz tubers, while Red LaSoda and COTX00104-7R had the highest yield of culls/No. 2 tubers (Table 7a).
- COTX02266-1R and Rio Rojo had the highest percentage marketable yield, while COTX02294-4R and COTX00411-4R had the highest percentage of 4-6 oz. tubers (Table 7b).
- ATX00270-2R and ATTX98453-6R had the highest percentage of 6-10 oz. tubers, while Rio Rojo and NDTX731-1R had the highest percentage of 10-18 oz. tubers. (Table 7b).
- COTX00411-4R and COTX02266-2R had the highest percentage of less than 4 oz. tubers, while Red LaSoda had the highest percentage of culls/No. 2 tubers (Table 7b).
- ATX00270-2R and COTX00411-4R had the highest specific gravities (Table 7b)
- COTX02266-2R and COTX94218-1R had the highest average number of tuber per plant, while NDTX731-1R had the lowest. Red LaSoda and NDTX731-1R had the highest average tuber weight, while COTX02266-2R had the lowest (Table 7c).
- Red LaSoda, COTX00104-7R, COTX02294-4R, and COTX94218-1R were the latest maturing, while COTX02266-1R was the earliest maturing (Table 7c).
- NDTX731-1R and Red LaSoda had the deepest eyes. ATX00270-2R had a high percentage of hollow heart, while ATTX98453-6R has a high percentage of internal brownspot. (Table 7d).

Comments on entries:

- Red LaSoda Oblong Red 3.7, rough, oversized, deep eyes, silver scurf.
- Dark Red Norland Oblong Red 3.5, nice, rough, deep eyes, faded red skin, russetting.
- ATTX98453-6R Oblong Red 4, nice shape and skin, poor internals for 1 rep, nice internals for 3 reps, BOT.
- ATX00270-2R Oblong Red 3.7, heavy set, very nice.
- COTX00104-7R Oblong Red 4.3, yield+, very nice, rough, poor shape, poor internals, silver scurf, drop.
- COTX00411-4R Oblong Red 4, heavy set, poor shape, drop+.
- COTX02172-1R Oblong Red 3.7, yield+, very nice, nice internals, keep.
- COTX02266-1R Oblong Red 3, light red skin, poor shape, silver scurf, drop?.
- COTX02266-2R Oblong Red 4, small, heavy set, poor shape, silver scurf, drop++.

- COTX02294-4R Oblong Red 4.5, poor shape, nice color, feathering, small, drop++ .
- COTX94218-1R Oblong Red 4.5, heavy set, small, nice internals, feathering, rough, drop?, BOT-.
- NDTX4271-5R Oblong Red 4.5, road map, buff, yield+, oversized, heat sprouts, BOT+++.
- Rio Rojo Oblong Red 4.5¹, yield+, some rot, silver scurf, heat sprouts, buff, feathering, heat sprouts, BOT+++.
- NDTX4784-7R Round Red 4.5, very nice, silver scurf, TC, BOT++.
- NDTX4847-7R Oblong Red 4.5, nice.
- NDTX731-1R Oblong Red 4.3, buff, nice shape, oversize, deep eyes and nose, silver scurf, rough.

¹Red – Skin color 5=dark, 1=light

Summary:

Based on all factors, the outstanding entries for this trial were Rio Rojo, NDTX4271-5R, and NDTX4847-7R.

TRIAL OF THE 2005 RED SELECTIONS, DALHART

The trial consisted of 50 entries of which 10 (COTX03254-2R, NDTX039096-1R, NDTX039190-1R, NDTX039191C-1R, NDTX039191C-2R, NDTX049263-1R, NDTX049349-10R, NDTX049368-2R, TX03198-6R, and TX03199-2R/Y) (Table 8) will be advanced in 2007.

TEXAS ADVANCED SPECIALTY SELECTION

The Texas advanced specialty selection trial consisted of 25 entries, including the check variety Yukon Gold.

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

- The outstanding entries for this trial based on general rating and best of trial designations were Yukon Gold, ATTX961014-1R/Y, ATTX961014-1AR/Y, and TX1523-1Ru/Y, while ATTX99325-1P also received a high general rating (Table 9a, 9e).
- ATTX98462-3R/Y and ATTX98468-5R/Y had the highest total yield, ATTX98462-3R/Y and Yukon Gold had the highest marketable yield (Table 9a)

- ATTX98468-3R/Y and PORTX03PG25-2R/P had the highest yield of 4-6 oz. tubers, while BTX1544-2W/Y and ATX99331-1Pu/Y had the highest yield of 6-10 oz. tubers (Table 9a).
- ATTX98462-3R/Y and Yukon Gold had the highest yield of 10-18 oz. tubers (Table 9a).
- ATTX98468-3R/Y and ATTX98444-16R/Y had the highest yield of less than 4 oz. tubers, while ATTX98468-5R/Y and ATTX98500-3Wpuspl had the highest yield of culls/No. 2 tubers (Table 9a).
- TX1523-1Ru/Y and Yukon Gold had the highest percentage of marketable yield, while PORTX03PG25-2R/P and ATTX98462-9R/Y had the highest percentage of 4-6 oz. tubers (Table 9b).
- ATTX98510-1R/Y and ATTX99325-1P had the highest percentage of 6-10 oz. tubers, while TX1523-1Ru/Y and ATTX961014-1AR/Y had the highest percentage of 10-18 oz. tubers (Table 9b).
- ATTX98444-16R/Y and COTX02305-3R had the highest percentage of less than 4 oz. tubers, while ATTX98468-5R/Y and ATTX98500-3Wpuspl had the highest percentage of culls/No. 2 tubers (Table 9b).
- ATTX98468-3R/Y and ATTX98444-16R/Y had the highest specific gravities (Table 9b).
- COTX02305-3R and ATTX98468-3R/Y had the highest average number of tubers per plant, while COTX01403-4R/Y had the lowest. Yukon Gold and TX1523-1Ru/Y had the highest average tuber weight, while COTX02305-3R had the lowest (Table 9c).
- ATTX99331-1Pu/Y, TX1674-1W/Y, ATTX98500-3Wpuspl, and ATTX98500-2P/Y were the latest maturing clones, while COTX01403-4R/Y was the earliest maturing (Table 9c).
- UNTX383-3WRE/Y, ATTX98500-2P/Y, and ATTX98491-4YRspl/Y had the deepest flesh color (Table 9d).
- Yukon Gold and BTX1749-1W/Y had the highest percentage of hollow heart, while Yukon Gold, COTX01403-4R/Y, and ATTX98462-9R/Y had high percentages of internal brownspot (Table 9d).

Comments on entries:

- Yukon Gold Oblong White, very nice, very poor internals, nice shape, lenticels, eye brows, BOT, FC=3.0.
- ATTX88654-3W/RE/Y Oblong White/RE, heat sprouts, nice shape, smooth skin, rough shape, drop?, FC¹=2.8.
- ATTX961014-1AR/Y Oblong Red, heat sprouts, road map, nice shape, skin and flesh, silver scurf, pointed, keep, BOT, FC=2.5.
- ATTX961014-1R/Y Oblong Red, heat sprouts, road map, nice shape, silver scurf, nice, large eye brows, BOT, FC=2.9.

- ATTX98444-16R/Y Round Red, boiler, nice shape, skin and flesh, heavy set, poor internals++, scale, heat sprouts, road map, silver scurf, drop?, drop, FC=2.5.
- ATTX98462-3R/Y Oblong Red, nice shape, skin and flesh, some road map, smooth, keep, FC=2.6.
- ATTX98462-9R/Y Round Red, nice shape and skin, boiler nice flesh, poor internals++, scale, heat sprouts, road map, silver scurf, drop++, FC=3.1.
- ATTX98468-3R/Y Round Red, nice shape, skin and flesh, boiler heavy set, silver scurf, road map, small, drop?, keep+, FC=3.0.
- ATTX98468-5R/Y Oblong Red, rough, oversize, poor shape, heat sprouts, flat, light red skin, powdery scab, ugly skin, close set, rough, feathering, nice internals, drop+, FC=2.4.
- ATTX98491-4YRspl/Y Oblong Red, red splash, nice shape and flesh, FC=3.5.
- ATTX98500-2P/Y Oblong Purple rough, yield+, nice flesh, poor shape, deep eyes, lenticels, FC=3.5
- ATTX98500-3Wpuspl Oblong White, flat pointed, pinto, smooth, FC=3.4.
- ATTX98510-1R/Y Oblong Red, nice shape and flesh, skin not very red, mix, poor shape, rough, growth cracks, FC=2.5.
- ATTX98514-1R/Y Oblong Red, uniform, small, nice shape, skin and flesh, hard, rough, deep eyes and nose, drop, FC=3.0.
- ATTX99325-1P Oblong Purple, nice shape and skin, heat sprouts, rough, smooth skin, feathering, keep, FC=1.0.
- ATX99331-1Pu/Y Oblong Purple, nice shape, skin and flesh, poor skin, road map, deep eyes, FC=2.5.
- BTX1544-2W/Y Oblong White, nice shape and skin, nice yellow flesh, rough, oversize, buff, greening, FC=2.6.
- BTX1749-1W/Y Oblong White, nice shape, skin and flesh, rough, greening, buff, to SW or WR, FC=2.9.
- COTX01403-4R/Y Oblong Red, heat sprouts, yield-, light red skin, nice shape and flesh, smooth, pale skin, buff, road map, poor internals++, drop, FC=3.0.
- COTX02305-3R Oblong Red, white flesh fingerling, heat sprouts, nice internals, FC=1.0.
- NDTX4756-1R/Y Oblong Red, yield-, light red skin, nice shape and flesh, heat sprouts, FC=2.5.

- PORTX03PG25-2R/P Long Red, nice shape for a fingerling, curved, skinny, rough, FC=3.0.
- TX1523-1Ru/Y Oblong Russet, yield++, excellent internals, BOT+++, FC=2.9.
- TX1674-1W/Y Oblong White, yield-, small, did not size, flat, pink eyes, pear shaped, nice internal, buff, FC=2.0.
- UNTX383-3WRE/Y Oblong White/RE, nice shape, skin, and flesh, excellent flesh, FC=4.0.

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

Summary:

Based on all factors the outstanding entries for this trial were ATTX98462-3R/Y, Yukon Gold, BTX1544-2W/Y, and ATTX961014-1R/Y.

TRIAL OF THE 2005 SPECIALTY SELECTIONS, DALHART

The trial consisted of 51 entries of which the following 30 clones will be saved for further evaluation. ATX01170-1R/Y, ATX02263-1R/Y, COTX03025-1P/P, COTX03025-2P/P, COTX03039-1R/Y, COTX03079-1W/Y, COTX04015-3AW/Y, COTX04015-3W/Y, COTX04050-1P/P, COTX04061-1R/R, COTX04096-1R/Y, COTX04117-1W/Y, PTX05PG18-1R/R, TX03185-1R/R, TX03198-2Y-R/Y, AOTX03337-1W, COTX03047-1P/P, COTX03094-1R/Y-R, COTX03119-1R/R, COTX03137-1P/P, COTX03137-2R/R, COTX03185-1W, COTX03254-1W, COTX03276-1Ru, PTTX05PG06-1R/R, PTTX05PG06-2R/R, PTTX05PG07-1W, PTTX05PG07-2P/R, PTTX05PG07-3R/R, PTTX05PG11-2R/Y, PTTX05PG07-3R/R, and PTTX05PG11-2R/Y

2006 NURSERY, DALHART

The Dalhart nursery was used primarily to evaluate and increase the 2005 russet, red, specialty, and chip selections from Springlake and Dalhart and to produce seed from disease-free mini tubers of 20 promising advanced selections.

Dalhart
Table 1a. Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 10 entries in the Western Regional Chip Trial grown near Dalhart, Texas-2006.

Variety or Selection	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 18 oz	Under 4 oz.	Culls/ No.2	General Rating ¹ Field	General Rating ¹ Grading
		Total Yield	4-6 oz	6-10 oz	10-18 oz					
Atlantic	563.2	488.7	230.0	224.3	34.4	0.0	74.5	0.0	3.5	3.4
Chipeta	455.0	375.1	73.6	144.4	157.0	25.9	40.7	13.3	3.0	4.2
Ivory Crisp	596.6	494.8	217.4	197.3	80.2	16.3	85.4	0.0	3.8	4.4
AC97097-14W	429.4	351.8	218.0	102.2	31.6	0.0	77.5	0.0	3.4	2.5
ATTX95490-2W	1157.5	312.5	134.5	128.4	49.7	0.0	53.1	791.9	2.9	1.0
B0766-3T	659.7	571.7	229.1	240.0	102.6	3.0	78.4	6.5	3.7	4.4
CO95051-7W	538.4	372.4	330.2	42.3	0.0	0.0	166.0	0.0	3.1	2.9
CO96141-4W	549.6	466.6	218.1	207.6	40.8	0.0	83.1	0.0	3.7	3.4
CO97043-14W	536.0	486.1	156.4	201.7	128.1	0.0	45.7	4.1	3.0	3.9
CO97065-7W	595.7	525.1	181.9	289.7	53.6	0.0	70.6	0.0	3.5	4.2
Average	608.1	444.5	198.9	177.8	67.8	4.5	77.5	81.6	3.4	3.4
L.S.D. (.05)	127.8	98.9	54.7	53.0	64.7	15.2	30.8	41.3	0.4	0.9

¹ 1=very poor to 5= excellent

Dalhart
Table 1b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 10 entries in the Western Regional Chip Trial grown near Dalhart, Texas-2006.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	Percent Solids	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
Atlantic	86.8	40.8	39.8	6.1	0.0	13.2	0.0	1.067	14.4	Round	Buff
Chipeta	82.7	19.3	30.8	32.7	4.8	10.2	2.2	1.053	12.0	Round	White
Ivory Crisp	83.0	36.4	33.1	13.5	2.8	14.2	0.0	1.065	14.1	Round	White
AC97097-14W	82.3	50.8	24.2	7.4	0.0	17.7	0.0	1.067	14.6	Round	White
ATTX95490-2W	27.0	11.5	11.1	4.4	0.0	4.6	68.4	1.036	8.9	Oblong	White
B0766-3T	86.8	34.5	37.4	14.9	0.6	11.8	0.8	1.060	13.3	Round	White
CO95051-7W	69.1	61.2	7.8	0.0	0.0	30.9	0.0	1.068	14.6	Round	White
CO96141-4W	84.9	39.7	37.7	7.5	0.0	15.1	0.0	1.063	13.8	Round	White
CO97043-14W	90.7	29.2	37.6	23.9	0.0	8.5	0.8	1.064	13.9	Round	White
CO97065-7W	88.2	31.7	48.6	7.9	0.0	11.8	0.0	1.067	14.5	Round	White
Average	78.1	35.5	30.8	11.8	0.8	13.8	7.2	1.061	13.4		
L.S.D. (.05)	5.5	9.3	8.7	8.4	2.6	5.6	2.6	0.004			

Dalhart
Table 1c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 10 entries in the Western Regional Chip Trial grown near Dalhart, Texas-2006.

Variety or Selection	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Average Number Stems/ Plant	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
						Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
Atlantic	10.4	5.0	2.4	99	100	1.9	4.5	4.4	4.4	8
Chipeta	5.9	7.0	3.0	100	100	1.6	4.9	5.0	4.9	0
Ivory Crisp	10.1	5.4	2.5	100	100	1.8	4.5	5.0	4.5	0
AC97097-14W	9.1	4.5	1.8	84	98	1.4	4.2	4.3	4.2	1
ATTX95490-2W	16.1	6.6	2.6	95	100	1.8	4.4	4.2	4.5	4
B0766-3T	10.8	5.6	2.4	100	100	1.5	4.7	4.9	4.8	0
CO95051-7W	14.2	3.5	2.2	98	100	1.5	4.5	4.7	4.4	0
CO96141-4W	10.4	4.9	2.3	100	100	2.3	3.8	3.2	4.0	26
CO97043-14W	10.8	5.9	2.2	68	84	1.6	4.2	3.6	4.3	9
CO97065-7W	9.7	5.6	2.3	100	100	1.6	4.4	3.7	4.4	16
Average	10.7	5.4	2.4	94	98	1.7	4.4	4.3	4.4	6
L.S.D. (.05)	2.4	0.7	0.4	9	ns	0.3	0.3	0.4	0.4	5

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

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

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

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

Dalhart
Table 1d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 10 entries in the Western Regional Chip Trial grown near Dalhart, Texas-2006.

Variety or Selection	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	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
Atlantic	1.3	1.7	2.1	4.2	1.7	5.0	5.0	5.0	5.0	0	0	0	35
Chipeta	1.1	3.4	1.4	3.7	1.2	5.0	5.0	5.0	5.0	0	0	0	0
Ivory Crisp	1.1	2.0	1.4	4.0	1.2	5.0	5.0	5.0	5.0	0	0	0	3
AC97097-14W	1.3	2.3	1.7	4.2	1.5	5.0	5.0	5.0	5.0	40	0	0	0
ATTX95490-2W	1.3	3.7	1.2	3.6	1.2	5.0	5.0	5.0	5.0	3	0	0	3
B0766-3T	1.0	2.2	1.8	4.2	1.7	5.0	5.0	5.0	5.0	0	0	0	0
CO95051-7W	1.0	1.3	1.4	4.5	1.2	5.0	5.0	5.0	5.0	0	0	0	3
CO96141-4W	1.1	1.6	1.4	4.4	1.2	5.0	5.0	5.0	5.0	3	0	0	0
CO97043-14W	1.2	1.6	1.2	4.3	1.2	5.0	5.0	4.8	5.0	0	0	0	0
CO97065-7W	1.0	1.5	1.7	4.2	1.5	5.0	5.0	5.0	5.0	0	0	0	0
Average	1.1	2.1	1.5	4.1	1.4	5.0	5.0	5.0	5.0	5	0	0	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 Stem end vascular discoloration severely evaluated

Dalhart

Table 1e. Notes and general rating for all reps of 10 entries in the Western Regional Chip Trial grown near Dalhart, Texas-2006.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Atlantic	heat sprouts, buff, buff, yield-, buff, nice	bad rep, buff, nice shape and skin, buff, poor internals, 10 % Zebra	3.7, 3.7, 3, 3.5	3.5, 4, 3.5, 2.7
Chipeta	rough, oversize, heat sprouts, oversize, yield-, growth cracks,	20% Zebra, nice, BOT, BOT-, yield+, BOT-	3, 2.7, 3.2, 3	4, 4.2, 4.5, 4.2
Ivory Crisp	nice, BOT, uniform, uniform	BOT, nice shape, skin, and internals++, bud cracks+, BOT-, buff, 10 % Zebra	4, 4.2, 3.2, 3.7	4.5, 4.2, 4.5, 4.2
AC97097-14W	uniform, small, variable shape, variable shape	road map, small, yield-, road map, buff, nice shape, hollow heart++, poor	3.7, 3.2, 3.5, 3.2	2.7, 2.2, 2.7, 2.2
ATTX95490-2W	oversize, rough, rough, yield+, rough, oversized, yield+, oversized	internals, 30% Zebra, drop++, heat	3, 3, 2.7, 3	1, 1, 1, 1
B0766-3T	nice, uniform, buff, yield+, buff, nice	buff, BOT, bud cracks, buff, nice shape and skin, BOT, nice internals, BOT	4, 3.7, 3.5, 3.5	4.2, 4.5, 4.2, 4.5
CO95051-7W	small, heavy set, small, small, small	yield-, nice internals, small, yield-, 40% Zebra, small, yield-	3.5, 3, 3, 3	3, 3, 3, 2.7
CO96141-4W	uniform, nice shape, uniform, uniform, yield+	, nice shape, small, yield-, small, nice internals++, yield+	4, 3.5, 3.7, 3.5	3.7, 3.2, 3, 3.7
CO97043-14W	uniform, yield, flat chain tubers, rough, flat, poor rep, flat	nice, stem attachment, flat, nice shape, skin and internals, BOT-,	3.5, 2.5, 3.2, 2.7	3.5, 4, 4.2,
CO97065-7W	buff, growth cracks, growth cracks, oversized, buff, uniform, nice	bud cracks, 10 % zebra, nice shape, and skin, buff, excellent internals, BOT, buff,	3.7, 3, 3.7, 3.7	4, 4.2, 4.5, 4.2

Dalhart Specific gravity, percent solids, chip color rating, chip defects, tuber defects, and notes of 10 entries in the Western
 Table 1f. Regional Chip Trial grown near Dalhart, Texas-2006.

Variety or Selection	Location	Gravity	% Solids	Chip Color	Chip Defects	Tuber Defects
Atlantic	Dalhart	1.076	16	2	7% S, 7% IBS, 17% Vas	3% S
Atlantic	Springlake Early	1.092	19	2	33% IHN	
Atlantic	Springlake Late	1.076	16	2	27% Z, 30% vas, 27% scab	OK
Chipeta	Dalhart	1.076	16	2+	3% BC, 7% BSB, 33% Vas, 33% Z	
Chipeta	Springlake Early	1.071	15	3	100% Vas, 20% IHN, 13% PB	
Chipeta	Springlake Late	1.061	13	2	17% Z, 17% fus, 3% HH, 10% SE	Knobs
Ivory Crisp	Dalhart	1.056	12	1	3% S, 3% IBS, 10% Vas	13% S
Ivory Crisp	Springlake Early	1.078	16	2+	100% Vas, 37% Z	
Ivory Crisp	Springlake Late	1.069	15	1	17% vas, BOT	Big
AC97097-14W	Dalhart	1.066	14	1	37% BSB, 7% Vas	3% S, 10% IHN
AC97097-14W	Springlake Early	1.087	18	2	17% Vas	
AC97097-14W	Springlake Late	1.074	16	1+	40% vas	HS, Shape-
ATTX95490-2W	Dalhart	1.078	17			
ATTX95490-2W	Springlake Early	1.053	12	3++	100% Vas	
ATTX95490-2W	Springlake Late	1.049	11	3+	30% Z, 40% vas, 33% dark	Oversize are rough
B0766-3T	Dalhart	1.068	15	1+	13% IBS, 27% Vas, 10% Z	
B0766-3T	Springlake Early	1.081	17	1	BOT++	
B0766-3T	Springlake Late	1.068	15	2	63% Z, 37% vas	HS-,
CO95051-7W	Springlake Late	1.064	14	1+	90% vas	Small
CO95051-7W	Dalhart	1.070	15	1+	7% S, 30% IBS, 17% Vas	
CO95051-7W	Springlake Early	1.087	18	2	13% PB, nice	
CO96141-4W	Dalhart	1.073	16	2-	10% S, 3% BSB, 7% Vas, 20% Z	Nice tuber
CO96141-4W	Springlake Early	1.081	17	1	10% GH, 10% Fus	
CO96141-4W	Springlake Late	1.064	14	1+	23% Z, 17% vas	Nice shape
CO97043-14W	Dalhart	1.064	14	1	13% S, 3% IBS, 7% GH	80% S
CO97043-14W	Springlake Early	1.080	17	2+	67% Vas, 17% Fus	
CO97043-14W	Springlake Late	1.067	14	1+	13% Z, 23% vas, 3% HH and BSB	OK shape
CO97065-7W	Dalhart	1.070	15	1	10% S, 7% Vas, 13% Z	13% S
CO97065-7W	Springlake Early	1.084	17	2	27% Vas	
CO97065-7W	Springlake Late	1.070	15	1+	23% Z and vas	Nice size mix

Addendum to Tables Dalhart 1a, 1b, 1c, 1d, 1e, and 1f
Western Regional Chip Trial

Location:

Dalhart, Texas

Soil Type

Dallum Fine Sandy Loam

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

Planted	April 5, 2006	DAP
Vines Killed	July 26, 2006	111
Harvested	August 28, 2006	143

Plot Information:

Size of Plots	10'
Spacing Between Hills	12"
Spacing Between Rows	30
Hills Per Plot	10
Number of Plot Per Rep	2
Number of Reps	4

Method of Harvest:

Four-row drag digger, with hand pick up.

Fertilizer:

Application:
178-0-0 # per acre

Irrigation:

Center Pivot

Insecticide:

Dimethoate, Aphoil, Oberon, Spintor, Oberon.

Fungicides Applied:

Tops MZ Gaucho, Dithane, H Dithane Headline Echo Endura Scala

Herbicides Applied:

Brawl, Pendant, Sencor, Spartan, Intensity, Superb COC, Arrow.

Environmental Factors:

This trial was subjected to higher than normal temperature during May and June. Lower than normal precipitation was recorded during the first 3 weeks of April, the last two weeks of May, and the first three weeks of June. Higher than normal precipitation was recorded during the last week of June, the first week of July, and the first and last weeks of August

Dalhart Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 5 entries in the Southwestern Regional Chip
 Table 2a. Trial grown near Dalhart, Texas-2006.

Variety or Selection	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					
ATDC9801-3P	684.3	571.9	222.6	294.9	54.5	0.0	112.4	0.0	3.1	3.3
Atlantic	563.2	488.7	230.0	224.3	34.4	0.0	74.5	0.0	3.5	3.4
TX1475-3W	685.9	488.0	72.9	161.6	253.6	174.1	12.0	11.8	2.9	2.5
CO98277-4W	619.5	479.5	261.4	177.1	40.9	0.0	106.3	33.8	3.2	2.9
Chipeta	551.9	472.6	61.4	177.7	233.5	25.9	40.1	13.3	3.0	4.2
Average	621.0	500.2	169.7	207.1	123.4	40.0	69.0	11.8	3.1	3.3
L.S.D. (.05)	53.1	33.0	28.0	43.1	23.4	29.4	14.8	ns	ns	0.5

¹ 1=very poor to 5= excellent

Dalhart
Table 2b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 5 entries in the Southwestern Regional Chip Trial grown near Dalhart, Texas-2006.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	Percent 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				
ATDC9801-3P	83.6	32.5	43.1	8.0	0.0	16.4	0.0	1.069	14.9	Round	Red
Atlantic	86.8	40.8	39.8	6.1	0.0	13.2	0.0	1.067	14.4	Round	Buff
TX1475-3W	71.3	10.7	23.6	37.0	25.2	1.7	1.8	1.069	14.7	Oblong	White
CO98277-4W	77.5	42.2	28.6	6.6	0.0	17.2	5.3	1.050	11.4	Oblong	White
Chipeta	85.9	11.2	32.1	42.5	4.6	7.3	2.2	1.053	12.0	Round	White
Average	81.0	27.5	33.5	20.0	6.0	11.2	1.9	1.061	13.5		
L.S.D. (.05)	6.7	4.4	6.7	4.1	4.1	2.5	ns	0.005			

Dalhart
Table 2c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 5 entries in the Southwe

Variety or Selection	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	
ATDC9801-3P	13.3	4.7	2.5	100	100	1.5	4.7	4.4	4.7	4
Atlantic	10.4	5.0	2.4	99	100	1.9	4.5	4.4	4.4	8
TX1475-3W	6.2	10.1	2.3	100	100	2.1	4.4	3.7	4.4	10
CO98277-4W	12.9	4.4	2.6	94	100	2.3	3.8	3.7	3.8	15
Chipeta	6.5	7.8	3.0	100	100	1.6	4.9	5.0	4.9	0
Average	9.9	6.4	2.5	99	100	1.9	4.4	4.2	4.4	7
L.S.D. (.05)	0.8	0.4	ns	ns	ns	0.3	0.3	0.5	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 2d. Flesh color, tuber shape, degree of russetting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 5 entries in the Southwestern Reg

Variety or Selection	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	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
ATDC9801-3P	1.0	1.7	2.2	3.3	3.3	5.0	5.0	5.0	5.0	3	0	3	3
Atlantic	1.3	1.7	2.1	4.2	1.7	5.0	5.0	5.0	5.0	0	0	0	35
TX1475-3W	1.2	2.7	1.7	4.0	1.5	5.0	5.0	5.0	5.0	55	0	0	0
CO98277-4W	1.1	2.7	1.2	4.5	1.2	4.2	5.0	4.5	5.0	3	0	0	0
Chipeta	1.1	3.4	1.4	3.7	1.2	5.0	5.0	5.0	5.0	0	0	0	0
Average	1.1	2.4	1.7	3.9	1.8	4.8	5.0	4.9	5.0	12	0	1	8

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ Stem end vascular discoloration severely evaluated

Dalhart

Table 2e.

Notes and general rating for all reps of 5 entries in the Southwestern Regional Chip Trial grown near Dalhart, Texas-2006.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
ATDC9801-3P	growth cracks, light red skin, buff, growth cracks, rough, buff, light red heat sprouts, buff, buff, yield-, buff,	rough+, , skin color faded, road map, nice internals, heavy set, small bad rep, buff, nice shape and skin,	3, 3.2, 3.2, 3	3, 3.2, 3.5, 3.5
Atlantic	nice	buff, poor internals, 10 % Zebra	3.7, 3.7, 3, 3.5	3.5, 4, 3.5, 2.7
TX1475-3W	growth cracks, yield-, oversized, yield-, light set, rough, rough heat sprouts, heat sprouts, growth	rough, rough, yield+, hollow heart on > 18 oz tubers, rough, yield+,	2.7, 3, 3, 3	2.2, 2.7, 2.7, 2.5
CO98277-4W	cracks, small, heat sprouts, growth rough, oversize, heat sprouts,	small++, , flat, yield-, nice internals 20% Zebra, nice, BOT, BOT-,	3, 2.7, 3.7, 3.5	2.7, 2.5, 3.2, 3
Chipeta	oversize, yield-, growth cracks,	yield+, BOT-	3, 2.7, 3.2, 3	4, 4.2, 4.5, 4.2

Dalhart Specific gravity, percent solids, chip color rating, chip defects, tuber defects, and notes of 5 entries in the Southwestern Regional Chip Trial
 Table 2f. grown near Dalhart, Texas-2006.

Variety or Selection	Location	Gravity	% Solids	Chip Color	Chip Defects	Tuber Defects	Notes
ATDC9801-3P	Dalhart	1.067	14	1	3% BSB, 50% Vas	3% HH	-/-
	Springlake Early	1.078	16	2	100% Vas, 77% Z		Drop
	Springlake Late	1.064	14	2	57% Z, 13% vas	Rough, rizoc, smalls are ugly	
Atlantic	Dalhart	1.076	16	2	7% S, 7% IBS, 17% Vas	3% S	+
	Springlake Early	1.092	19	2	33% IHN		Drop-
	Springlake Late	1.076	16	2	27% Z, 30% vas, 27% scab	OK	
TX1475-3W	Dalhart	1.079	17	1	30% S, 10% Vas, GH	30% S	+ SW06 TC
	Springlake Early	1.076	16	1+	20% Vas, 17% IHN		SW06 ✓
	Springlake Late	1.067	15	1+	27% vas, BOT	Large tubers rough	
CO98277-4W	Dalhart	1.072	15	2+	7% BSB, 10% S, 7% Z	3% S, 7% GC, 7% GC	-
	Springlake Early	1.068	15	2+	46% Vas, 7% Fus, 7% PB		
	Springlake Late	1.059	13	3	37% Z, 27% vas, 3% BSB	Nice size mix	
Chipeta	Dalhart	1.076	16	2+	3% BC, 7% BSB, 33% Vas, 33% Z		- +
	Springlake Early	1.071	15	3	100% Vas, 20% IHN, 13% PB		Drop
	Springlake Late	1.061	13	2	17% Z, 17% fus, 3% HH, 10% SE	Knobs	

Addendum to Tables Dalhart 2a, 2b, 2c, 2d, 2e, and 2f
Southwestern Regional Chip Trial

Location:

Dalhart, Texas

Soil Type

Dallum Fine Sandy Loam

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

Planted	April 5, 2006	DAP
Vines Killed	July 26, 2006	111
Harvested	August 28, 2006	143

Plot Information:

Size of Plots	10'
Spacing Between Hills	12"
Spacing Between Rows	30
Hills Per Plot	10
Number of Plot Per Rep	2
Number of Reps	4

Method of Harvest:

Four-row digger, with hand pick up.

Fertilizer:

Application:
178-0-0 # per acre

Irrigation:

Center Pivot

Insecticide:

Dimethoate, Aphoil, Oberon, Spintor, Oberon.

Fungicides Applied:

Tops MZ Gaucho, Dithane, H Dithane Headline Echo Endura Scala

Herbicides Applied:

Brawl, Pendant, Sencor, Spartan, Intensity, Superb COC, Arrow.

Environmental Factors:

This trial was subjected to higher than normal temperature during May and June. Lower than normal precipitation was recorded during the first 3 weeks of April, the last two weeks of May, and the first three weeks of June. Higher than normal precipitation

Dalhart
Table 1a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 17 entries in the Texas Advanced Selection
Chip Trial grown near Dalhart, Texas-2006.

Variety or Selection	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					
ATX85404-8W	685.1	610.7	164.7	307.5	138.5	0.0	74.3	0.0	4.5	4.5
NDTX4930-5W	722.8	605.6	124.4	325.6	155.7	34.4	44.4	38.3	4.0	4.4
AOTX95309-1W	636.2	516.0	216.1	235.0	64.9	5.0	111.5	3.7	4.2	4.5
COTX02377-1W	522.3	486.6	133.3	208.7	144.6	0.0	35.7	0.0	3.2	3.0
COTX01339-4W	529.5	460.0	153.1	253.1	53.8	0.0	53.1	16.3	3.5	4.1
AOTX95309-3W	559.9	456.2	226.5	189.1	40.7	0.0	98.4	5.2	4.2	4.4
COTX00328-1Pu/Ypu	487.9	451.7	138.5	236.5	76.7	0.0	36.2	0.0	3.7	4.2
COTX02377-2W	467.5	443.4	107.7	221.3	114.4	0.0	24.1	0.0	4.0	4.2
TX02080-1P/W-P	581.7	407.7	209.5	145.1	53.1	0.0	161.2	12.9	3.0	4.1
PATX99P10-1R/R	487.9	399.3	85.1	220.7	93.5	0.0	58.4	30.3	3.7	4.3
TX02098-2W	616.6	383.5	224.8	149.6	9.1	0.0	172.1	61.0	3.5	3.1
NDTX8555-2R/P	421.0	354.6	117.0	175.8	61.9	0.0	40.5	25.9	3.5	3.9
NDTX7571-3AW	427.8	311.0	89.2	150.4	71.4	2.6	77.0	37.2	3.2	2.6
ATX98466-5 R/W-R	367.4	268.3	195.8	70.8	1.7	0.0	96.3	2.8	4.0	4.2
NDTX6773-1W	355.7	252.9	78.0	139.0	35.9	0.0	56.0	46.8	3.2	2.9
NDTX7571-5AW	319.3	252.9	84.1	124.4	44.4	0.0	51.0	15.5	3.2	3.6
COTX99238-2W	332.6	211.5	140.0	49.2	22.2	0.0	121.1	0.0	3.2	3.9
Average	501.2	404.2	146.3	188.3	69.6	2.5	77.1	17.4	3.6	3.9
L.S.D. (.05)	79.4	72.7	46.3	59.8	36.7	10.9	26.3	28.5	0.2	0.3

¹ 1=very poor to 5= excellent

Dalhart
Table 1b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 17 entries in the Texas Advanced Selection Chip Trial grown near Dalhart, Texas-2006.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	Precent 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				
ATX85404-8W	89.2	24.1	44.9	20.2	0.0	10.8	0.0	1.066	14.2	Round	White
NDTX4930-5W	84.1	17.2	45.3	21.6	4.6	6.2	5.1	1.065	14.1	Oblong	White
AOTX95309-1W	80.7	34.9	36.2	9.6	0.6	18.0	0.7	1.067	14.4	Round	White
COTX02377-1W	92.9	25.9	39.6	27.4	0.0	7.1	0.0	1.065	14.1	Round	White
COTX01339-4W	87.0	28.9	48.3	9.8	0.0	10.2	2.8	1.053	12.0	Oblong	White
AOTX95309-3W	81.0	40.7	33.2	7.1	0.0	18.1	0.9	1.063	13.8	Round	White
COTX00328-1Pu/Ypu	92.8	28.5	49.3	14.9	0.0	7.2	0.0	1.056	12.5	Oblong	Purple
COTX02377-2W	94.8	23.0	47.1	24.7	0.0	5.2	0.0	1.066	14.3	Round	White
TX02080-1P/W-P	70.2	35.9	25.0	9.3	0.0	27.6	2.2	1.070	15.0	Oblong	Purple
PATX99P10-1R/R	81.9	17.5	45.1	19.3	0.0	12.0	6.1	1.062	13.5	Oblong	Red
TX02098-2W	62.2	36.2	24.6	1.4	0.0	27.9	10.0	1.070	15.0	Round	White
NDTX8555-2R/P	84.1	27.5	42.2	14.4	0.0	9.7	6.1	1.059	13.0	Oblong	Red
NDTX7571-3AW	72.7	20.9	35.1	16.7	0.6	18.0	8.7	1.068	14.7	Oblong	White
ATTX98466-5 R/W-R	73.1	53.2	19.4	0.5	0.0	26.1	0.7	1.065	14.1	Oblong	Red
NDTX6773-1W	72.1	23.2	37.5	11.5	0.0	15.8	12.0	1.066	14.2	Oblong	White
NDTX7571-5AW	79.5	26.7	38.9	13.8	0.0	16.1	4.5	1.069	14.8	Oblong	White
COTX99238-2W	63.3	43.0	14.4	6.0	0.0	36.7	0.0	1.066	14.3	Round	White
Average	80.1	29.8	36.8	13.4	0.3	16.0	3.5	1.064	14.0		
L.S.D. (.05)	8.4	9.8	10.8	6.7	1.4	5.0	5.7	0.003			

Dalhart
Table 1c. Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 17 entries in the Texas

Variety or Selection	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	
ATX85404-8W	11.8	5.3	2.2	100	100	1.5	4.7	5.0	4.7	0
NDTX4930-5W	9.3	7.2	2.0	99	100	1.5	4.7	3.7	4.7	20
AOTX95309-1W	12.6	4.6	2.3	98	100	1.5	4.5	4.0	4.5	10
COTX02377-1W	7.9	6.1	1.9	90	100	2.0	4.0	3.5	4.2	25
COTX01339-4W	9.5	5.1	1.6	93	100	2.5	3.5	1.5	3.2	90
AOTX95309-3W	13.2	4.1	2.5	95	95	1.5	4.7	3.5	4.7	20
COTX00328-1Pu/Ypu	8.7	5.6	1.8	83	94	2.0	3.7	4.0	3.5	5
COTX02377-2W	6.5	6.6	1.7	83	100	1.5	5.0	5.0	5.0	0
TX02080-1P/W-P	14.8	3.6	2.1	100	100	2.5	4.0	3.2	4.2	40
PATX99P10-1R/R	8.8	5.2	1.6	90	99	2.5	3.7	2.7	3.7	45
TX02098-2W	17.1	3.3	2.1	93	100	1.5	4.7	4.2	4.5	5
NDTX8555-2R/P	9.0	4.3	2.0	93	100	2.0	3.7	2.7	3.5	60
NDTX7571-3AW	7.4	5.3	1.6	96	100	2.0	3.2	3.2	3.2	35
ATX98466-5 R/W-R	10.8	3.2	2.1	100	100	2.5	3.5	1.5	3.2	90
NDTX6773-1W	7.7	5.3	2.4	79	81	1.5	4.0	3.5	3.7	20
NDTX7571-5AW	6.0	5.1	1.5	95	96	2.5	2.5	3.0	2.2	40
COTX99238-2W	9.4	3.3	1.6	94	100	2.5	3.5	3.2	3.2	40
Average	10.0	4.9	1.9	93	98	2.0	4.0	3.4	3.9	32
L.S.D. (.05)	1.9	0.5	0.4	11	8	0.2	0.2	0.2	0.2	10

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

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

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

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

Dalhart
Table 1d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 17 entries in the Texas Advanced

Variety or Selection	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	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
ATX85404-8W	1.0	2.4	1.4	4.0	1.2	5.0	5.0	5.0	5.0	0	0	0	0
NDTX4930-5W	1.0	3.4	1.0	3.7	1.0	5.0	5.0	5.0	5.0	5	0	0	0
AOTX95309-1W	1.0	1.6	1.4	3.9	1.2	5.0	5.0	5.0	5.0	0	0	0	0
COTX02377-1W	1.2	3.2	1.5	3.7	1.2	5.0	5.0	5.0	5.0	70	0	0	0
COTX01339-4W	1.2	1.8	1.5	4.5	1.2	5.0	5.0	5.0	5.0	10	0	0	0
AOTX95309-3W	1.0	1.8	1.5	3.6	1.2	5.0	5.0	5.0	5.0	3	0	0	0
COTX00328-1Pu/Ypu	2.5	4.0	1.6	4.5	4.7	5.0	5.0	5.0	5.0	0	0	0	0
COTX02377-2W	1.1	1.9	1.5	4.5	1.2	5.0	5.0	5.0	5.0	0	0	0	0
TX02080-1P/W-P	3.5	3.1	1.7	4.5	4.5	5.0	5.0	5.0	5.0	3	0	0	13
PATX99P10-1R/R	3.5	3.1	1.0	4.5	4.5	5.0	5.0	5.0	5.0	0	0	0	0
TX02098-2W	1.2	1.4	1.2	4.4	1.1	5.0	5.0	5.0	5.0	3	0	0	33
NDTX8555-2R/P	3.1	4.0	1.3	4.5	4.5	5.0	5.0	5.0	5.0	0	0	0	8
NDTX7571-3AW	1.4	2.5	2.3	3.9	2.4	5.0	5.0	5.0	5.0	13	0	0	30
ATTX98466-5 R/W-R	2.5	2.1	1.2	4.1	3.9	5.0	5.0	5.0	5.0	0	0	0	0
NDTX6773-1W	1.0	2.6	1.0	3.8	3.5	5.0	5.0	5.0	5.0	28	0	0	0
NDTX7571-5AW	1.2	3.3	2.1	4.0	2.2	5.0	5.0	5.0	5.0	5	0	0	25
COTX99238-2W	1.0	1.2	1.0	3.7	1.2	5.0	5.0	5.0	5.0	0	0	0	0
Average	1.7	2.5	1.4	4.1	2.4	5.0	5.0	5.0	5.0	8	0	0	6

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ Stem end vascular discoloration severely evaluated

Dalhart
Table 1e.

Notes and general rating for all reps of 17 entries in the Texas Advanced Selection Chip Trial grown near Dalhart, Texas-2006.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
ATX85404-8W	very nice, uniform, BOT, , ,	scab on lenticels, buff, nice shape and internals, BOT++, ,	4.5, 4.5, 4.5, 4.5	4.5, 4.5, 4.5, 4.5
NDTX4930-5W	nice shape, yield+, mix, , ,	excellent internals, BOT+, yield+, nice, nice shape, poor internals	4, 4, 4, 4	4.5, 4.5, 4.5, 4.2
AOTX95309-1W	very uniform, to SWR, BOT, , ,	nice internals, BOT+, excellent internals, BOT+, bud cracks, hollow heart, drop, , bud cracks, hollow heart, drop,	4.2, 4.2, 4.2, 4.2	4.5, 4.5, 4.5, 4.5
COTX02377-1W	rough, , rough,	excellent internals, nice shape and skin, flat, pear shape, hollow heart, poor shape, pear shape, knobs	3.2, 3.2, 3.2, 3.2	3, 3, 3, 3
COTX01339-4W	pointed to stem end, pear shaped, yield+, , ,	lenticels, nice internals, BOT++, excellent internals, flat, road map, white/ purple flesh, buff, nice internals, knobs,	3.5, 3.5, 3.5, 3.5	4.2, 4, 4.2, 4
AOTX95309-3W	yield+, uniform, to SWR, BOT, , ,	nice shape and skin, excellent internals++, buff, ,	4.2, 4.2, 4.2, 4.2	4.2, 4.5, 4.5, 4.5
COTX00328- 1Pu/Ypu	nice, shape and skin, nice internals, yellow/purple flesh, , ,	nice shape and color, road map, buff, , buff	3.7, 3.7, 3.7, 3.7	4.2, 4.2, 4.2, 4.2
COTX02377-2W	very nice, uniform, large, , ,	nice shape and color, BOT for flesh color, , poor internals, small, nice shape and skin, many small tubers, poor internals, heavy set	4, 4, 4, 4	4.2, 4.2, 4.2, 4.2
TX02080-1P/W-P	road map, buff, small, poor skin, yield+, heavy set, , ,	small, pear shaped, white/red flesh, pointed, road map, sliver scurf, road map	3, 3, 3, 3	4, 4.2, 4, 4
PATX99P10-1R/R	nice skin and shape, , ,	poor internals, hollow heart, buff, nice shape, poor internals, poor internals, drop, flat, buff	3.7, 3.7, 3.7, 3.7	4.2, 4.2, 4.2, 4.5
TX02098-2W	uniform, yield+, heavy set, small, , ,	flat, nice shape and skin, white and slight purple flesh, lenticels, nice internals,	3.5, 3.5, 3.5, 3.5	3, 3.2, 3.5, 2.7
NDTX8555-2R/P	nice skin, heat sprouts, some pointed, , ,	hollow heart++, drop, , , nice internals, small, flat, nice shape, mix, buff and smooth skin, buff, poor internals, flat rough, keep small, nice shape, yield-, yield-, small, excellent internals,	3.5, 3.5, 3.5, 3.5	4, 3.7, 4, 4
NDTX7571-3AW	buff, yield-, , ,		3.2, 3.2, 3.2, 3.2	2.7, 2.5, 2.5, 2.7
ATTX98466-5 R/W- R	yield+, nice red skin, nice shape, white/red flesh, , ,		4, 4, 4, 4	4.2, 4, 4.2, 4.5
NDTX6773-1W	small, pointed, , ,		3.2, 3.2, 3.2, 3.2	3, 3, 2.7, 3
NDTX7571-5AW	buff, yield-, , ,		3.2, 3.2, 3.2, 3.2	4.2, 2.5, 4, 3.7
COTX99238-2W	small, uniform, heavy set, , ,		3.2, 3.2, 3.2, 3.2	4, 3.7, 4, 4

Dalhart Specific gravity, percent solids, chip color rating, chip defects, tuber defects, and notes of 17 entries in the Texas Advanced Selection Chip Trial grown near Dalhart, Texas-2006.

Variety or Selection	Location	Gravity	% Solids	Chip Color	Chip Defects	Tuber Defects	Notes
ATX85404-8W	Dalhart	1.040	10	1	7% S, 63% Vas	7% S	+
	Springlake Early	1.082	17	2	27% Vas		To TX
	Springlake Late	1.071	15	1	53% vas, 7% BSB, BOT+	HS-, oversize are rough	
NDTX4930-5W	Dalhart	1.074	16	1	7% Vas, 3% BSB		BOT ++
	Springlake Early	1.066	14	1+	100% Vas, 3% Fus, 3% SE		To TX
	Springlake Late	1.063	14	1	50% vas, 3% fus, BOT	Nice	
AOTX95309-1W	Dalhart	1.071	15	1	13% BSB, 40% Vas		+ TC, To SWR
	Springlake Early	1.081	17	1+	30% Vas		
	Springlake Late	1.070	15	2	17% Z, 47% vas	Mostly small - large ones rough	
COTX02377-1W	Dalhart	1.064	14				TC, To SW
	Springlake Early	1.085	18	1+	BOT		*
	Springlake Late	1.068	15	1	7% Z, 3% vas, 13% BSB, BOT	OK shape	
COTX01339-4W	Dalhart	1.061	13	1+	3% S, 7% BSB, 10% Vas, 3% Z	13% Bruise	+ TC, To SWR
	Springlake Early	1.077	16	1+	13% Vas, 10% Fus		
	Springlake Late	1.064	14	1	23% vas, 7% fus, BOT	Rough, pear shape	
AOTX95309-3W	Dalhart	1.071	15	1+	10% BSB, 60% Vas		+ TC, To SWR
	Springlake Early	1.080	17	1+	17% Vas, 7% Z		
	Springlake Late	1.066	14	1+	43% vas	Small	
COTX00328-1Pu/Ypu	Dalhart	1.072	15	2+			BOT + TC
	Springlake Early	1.071	15	2+	100% Vas, 10% Fus, blue ring		Drop-
	Springlake Late	1.060	13	1	BOT, nice color	Nice shape	To SW
COTX02377-2W	Dalhart	1.071	15				To TX
	Springlake Early	1.077	16	2	23% Vas, 7% Fus		√
	Springlake Late	1.066	14	2	50% Z, 23% vas, 3% BSB and Scab	Small, some rough	
TX02080-1P/W-P	Dalhart	1.076	16	3	3% S, 17% Vas		Drop
	Springlake Early	1.087	18	3++	30% SE		
	Springlake Late	1.074	16	3	7% SE, nice	Small	
PATX99P10-1Pu/R	Dalhart	1.063	14	3	Nicw Chip	3% GC	+
	Springlake Early	1.076	16	3	10% PB, nice color		√
	Springlake Late	1.063	14	2	BOT, Very nice	Nice skin - waxy	To SW
TX02098-2W	Dalhart	1.075	16	3	27% Vas, 43% BSB	50% Bruise	-
	Springlake Early	1.079	17	2+	17% Vas, 7% SE, nice chip color		√
	Springlake Late	1.069	15	1+	BOT	Small, HS-	To TX
NDTX8555-2R/P	Dalhart	1.059	13	3	20% IBS		Drop
	Springlake Early	1.068	15	3	Nice		
	Springlake Late	1.062	14	2	13% fus, nice	Nice	
NDTX7571-3AW	Dalhart	1.071	15	2	13% S, 20% IBS	10% IBS, 3% GH, 37% BC	+/-
	Springlake Early	1.090	19	2	13% PB		√
	Springlake Late	1.075	16	2	43% Z, 20% vas, 23% BSB	Nice, uniform	To TX
ATTX98466-5R/W-R	Dalhart	1.066	14	2+		17% S	BOT ++ TC
	Springlake Early	1.083	17	2+	10% PB, very nice color		√
	Springlake Late	1.069	15	1+	13% dark	Nice	To SW
NDTX6773-1W	Dalhart	1.073	15	1+	27% Vas, 7% BSB, Z	3% GC, 7% Bruise	+
	Springlake Early	1.075	16	1+	40% Vas, 7% Fus		√
	Springlake Late	1.064	14	1+	10% Z, 40% vas, 3% Scab	Small, uniform	To TX
NDTX7571-5AW	Dalhart	1.073	16	1+	3% HH, 37% IBS	13% HH, 30% IBS	Drop
	Springlake Early	1.082	17	1+	30% Vas, BOT+		*√
	Springlake Late	1.062	14	1+	10% Z, 60% vas, 13% Scab	Rough	To TX
COTX99238-2W	Dalhart	1.073	16	2	40% Vas, 17% Z		+/-
	Springlake Early	1.079	17	2	53% Vas, 27% Fus		Drop
	Springlake Late	1.063	14	1+	57% vas	Close set, HS-	

Addendum to Tables Dalhart 3a, 3b, 3c, 3d, 3e, and 3f
Texas Advanced Selection Chip Trial

Location:

Dalhart, Texas

Soil Type

Dallum Fine Sandy Loam

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

		DAP
Planted	April 5, 2006	
Vines Killed	July 26, 2006	111
Harvested	August 28, 2006	143

Plot Information:

Size of Plots	10'
Spacing Between Hills	12"
Spacing Between Rows	30
Hills Per Plot	10
Number of Plot Per Rep	2
Number of Reps	4

Method of Harvest:

Four-row digger, with hand pick up.

Fertilizer:

Application:
178-0-0 # per acre

Irrigation:

Center Pivot

Insecticide:

Dimethoate, Aphoil, Oberon, Spintor, Oberon.

Fungicides Applied:

Tops MZ Gaucho, Dithane, H Dithane Headline Echo Endura Scala

Herbicides Applied:

Brawl, Pendant, Sencor, Spartan, Intensity, Superb COC, Arrow.

Environmental Factors:

This trial was subjected to higher than normal temperature during May and June. Lower than normal precipitation was recorded during the first 3 weeks of April, the last two weeks of May, and the first three weeks of June. Higher than normal precipitation

Dalhart
Table 4

Specific gravity, percent solids, chip color, Defects, Notes, Remnant Weight, 7 Entries to be Advanced from the 2005 Chip Selection Trial grown near Dalhart, Texas-2006.

Variety or Selection	Specific Gravity	% Solids	Chip Color	Defects/Diseases	Notes	Total Wt
COTX03194-2W	1.079	17	1+	40% Vas, 10% GH, 35% Z	OK?	
COTX03194-3W	1.067	15	1	30% Vas, 10% BSB	BOT-	
COTX03270-3W	1.060	13	1+	35% GH, 30% Z	BOT	
COTX03270-4W	1.066	14	2+	20% Dark, 10% GH, 10% BSB	Keep	
MWTX395-1W	1.080	17	2+	15% BSB, 25% Z	Keep	
NDTX049265-2W	1.066	14	2+	30% Dark, 10% Z	Keep	
TX03196-1W	1.067	14	1+	35% Vas, 10% BSB, 10% Z	BOT	

Dalhart Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 30 entries in the Texas Advanced Selection
 Table 5a. Russet Trial grown near Dalhart, Texas-2006.

Variety or Selection	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					
AOTX95295-1Ru	891.7	649.0	122.0	225.6	301.4	145.5	42.3	54.9	4.0	3.8
ATX9202-3Ru	699.8	521.4	98.0	133.9	289.5	90.6	76.2	11.5	4.0	3.4
TXA549-1Ru	737.5	497.5	72.3	108.9	316.2	130.7	65.8	43.6	4.5	4.0
Russet Norkotah 296	867.3	491.8	83.6	108.5	299.7	239.6	40.1	95.8	3.7	3.5
ATX97195-1Ru	726.1	488.7	79.3	118.5	291.0	136.8	51.0	49.7	4.2	3.0
AOTX98096-1Ru	714.4	473.1	48.8	144.6	279.7	147.2	58.8	35.3	4.0	3.5
Russet Norkotah 223	875.6	470.9	76.2	193.4	201.2	191.7	84.1	128.9	3.5	3.5
MWTX2609-2Ru	887.8	464.3	68.4	153.8	242.2	210.8	51.0	161.6	3.2	2.6
AOTX95295-3Ru	618.8	449.0	84.3	121.3	243.4	59.2	76.7	34.0	3.7	3.3
TXNS551	612.0	437.8	46.2	122.4	269.2	96.3	50.5	27.4	3.5	3.1
ATX9130-1Ru	636.8	405.4	90.6	169.3	145.5	93.8	59.0	78.7	2.7	2.5
AOTX95265-3Ru	731.7	402.5	47.3	104.0	251.2	210.2	33.7	85.3	4.0	2.9
AOTX96208-1Ru	658.6	400.8	62.3	89.3	249.2	189.9	44.4	23.5	3.5	3.8
AOTX96216-2Ru	699.6	398.1	46.6	99.8	251.8	177.7	30.5	93.2	3.7	3.8
AOTX96216-3Ru	594.2	397.7	107.6	123.7	166.4	118.5	59.2	18.7	4.0	2.8
AOTX95265-2ARu	626.0	397.7	83.6	138.5	175.5	58.4	47.0	122.8	2.7	3.0
AOTX95269-1Ru	681.7	387.2	70.6	99.8	216.9	156.8	52.3	85.4	3.7	3.8
AOTX96084-1Ru	560.2	373.3	62.3	135.9	175.1	84.9	40.1	61.9	4.0	3.5
AOTX02136-1Ru	600.0	369.6	80.4	100.6	188.6	189.1	17.9	23.5	4.2	4.0
MWTX2609-4Ru	675.2	360.7	47.9	75.4	237.4	110.6	37.0	166.8	3.0	2.5
Russet Norkotah	568.0	348.9	95.0	98.4	155.5	106.7	37.0	75.4	3.5	2.9
Russet Norkotah 278	808.5	347.6	43.6	115.9	188.2	252.6	52.3	155.9	3.5	3.5
AOTX02019-1Ru	399.4	334.5	79.3	213.9	41.4	0.0	64.9	0.0	3.5	3.3
AOTX95265-4Ru	741.8	330.6	90.6	94.1	145.9	160.3	71.4	179.5	3.0	3.0
Century	793.7	311.5	93.2	44.0	174.2	221.7	42.3	218.2	2.5	2.8
ATX91137-1Ru	700.0	302.7	48.8	74.1	179.9	113.7	52.7	230.9	3.7	3.3
AOTX95265-1Ru	530.6	302.6	56.0	128.4	118.2	152.2	34.0	41.8	3.7	3.6
AOTX96216-1Ru	532.3	263.1	31.8	131.1	100.2	164.7	31.4	73.2	3.7	3.6
TXNS410	448.7	261.8	17.0	116.7	128.1	130.7	39.6	16.6	3.5	3.0
AOTX96075-1Ru	410.3	258.3	48.8	66.2	143.3	101.5	27.9	22.7	4.0	3.5
Average	696.3	420.4	75.2	125.3	219.9	143.2	51.4	81.3	3.6	3.3
L.S.D. (.05)	64.6	38.9	32.6	24.7	34.7	47.0	18.9	30.2	0.2	0.2

¹ 1=very poor to 5= excellent

Dalhart Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 30 entries in the Texas
 Table 5b. Advanced Selection Russet Trial grown near Dalhart, Texas-2006.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2			
AOTX95295-1Ru	73.0	13.7	25.4	33.9	16.4	4.6	6.0	1.055	Long	Russet
ATX9202-3Ru	74.8	14.3	19.3	41.3	12.6	10.8	1.7	1.059	Long	Russet
TXA549-1Ru	67.4	9.7	14.8	42.9	17.8	8.9	6.0	1.067	Oblong	Russet
Russet Norkotah 296	56.8	9.5	12.6	34.7	27.4	4.6	11.2	1.054	Long	Russet
ATX97195-1Ru	67.4	10.9	16.3	40.1	18.9	7.0	6.8	1.054	Long	Russet
AOTX98096-1Ru	66.2	6.8	20.3	39.2	20.7	8.2	4.9	1.058	Long	Russet
Russet Norkotah 223	53.8	8.7	22.1	23.0	21.9	9.6	14.7	1.051	Long	Russet
MWTX2609-2Ru	52.3	7.6	17.4	27.3	23.8	5.8	18.1	1.051	Long	Light Russet
AOTX95295-3Ru	72.7	13.9	19.5	39.3	9.6	12.3	5.4	1.060	Long	Russet
TXNS551	71.8	7.8	19.8	44.1	15.0	8.4	4.8	1.055	Long	Russet
ATX9130-1Ru	63.8	14.2	26.5	23.1	14.5	9.3	12.4	1.056	Long	Russet
AOTX95265-3Ru	55.3	6.4	14.0	34.9	28.6	4.5	11.5	1.056	Long	Russet
AOTX96208-1Ru	60.8	9.5	13.5	37.8	28.8	6.7	3.6	1.058	Long	Russet
AOTX96216-2Ru	56.9	6.6	14.3	36.0	25.4	4.4	13.3	1.057	Long	Russet
AOTX96216-3Ru	66.9	18.0	20.7	28.1	20.0	10.0	3.2	1.058	Long	Russet
AOTX95265-2ARu	63.7	13.5	22.9	27.3	8.9	7.8	19.7	1.056	Long	Russet
AOTX95269-1Ru	56.8	10.3	14.6	31.9	23.0	7.7	12.6	1.055	Long	Russet
AOTX96084-1Ru	66.8	11.2	24.3	31.3	15.0	7.1	11.1	1.058	Long	Russet
AOTX02136-1Ru	61.7	11.9	17.6	32.2	31.4	3.0	3.9	1.062	Long	Russet
MWTX2609-4Ru	53.6	7.1	11.0	35.5	16.6	5.4	24.5	1.051	Long	Light Russet
Russet Norkotah	61.3	16.7	17.3	27.3	18.8	6.5	13.3	1.057	Long	Russet
Russet Norkotah 278	43.0	5.4	14.3	23.3	31.1	6.4	19.5	1.055	Long	Russet
AOTX02019-1Ru	83.9	19.6	53.7	10.6	0.0	16.1	0.0	1.060	Long	Russet
AOTX95265-4Ru	44.6	12.2	12.7	19.7	21.6	9.6	24.1	1.050	Long	Russet
Century	39.2	11.8	5.6	21.9	27.9	5.3	27.6	1.052	Long	White
ATX91137-1Ru	43.3	7.0	10.6	25.7	16.2	7.5	33.0	1.055	Long	Russet
AOTX95265-1Ru	57.4	10.6	24.3	22.6	28.3	6.4	7.9	1.057	Long	Russet
AOTX96216-1Ru	49.8	6.0	24.8	19.0	30.7	5.8	13.7	1.059	Long	Russet
TXNS410	58.4	3.7	26.3	28.4	29.0	8.9	3.7	1.059	Long	Russet
AOTX96075-1Ru	63.0	11.9	16.1	35.0	24.7	6.9	5.5	1.057	Long	Russet
Average	61.4	11.1	18.8	31.5	19.8	7.6	11.2	1.056		
L.S.D. (.05)	5.4	4.5	4.6	5.7	6.0	3.7	4.2	0.004		

Dalhart
Table 5c. Average number of tubers per plant, average tuber weight, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 30 entries in the Texas Advanced Selection Russet Trial gro

Variety or Selection	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
AOTX95295-1Ru	10.0	8.3	80	100	1.5	4.2	3.2	4.5	40
ATX9202-3Ru	7.5	8.6	85	100	1.5	4.7	4.0	5.0	5
TXA549-1Ru	6.7	10.2	83	100	1.5	5.0	5.0	5.0	0
Russet Norkotah 296	8.3	9.7	95	100	2.0	5.0	4.0	5.0	20
ATX97195-1Ru	6.3	10.6	93	100	1.5	4.7	3.5	4.7	25
AOTX98096-1Ru	6.3	10.5	95	100	2.0	4.5	3.5	4.5	25
Russet Norkotah 223	8.9	9.1	100	100	2.0	5.0	3.7	5.0	25
MWTeX2609-2Ru	8.5	9.6	98	100	1.5	4.7	5.0	4.7	0
AOTX95295-3Ru	6.8	8.4	84	100	1.5	4.2	2.7	4.0	60
TXNS551	5.3	10.6	93	100	2.0	4.0	3.2	4.2	40
ATX9130-1Ru	6.9	8.6	88	100	2.5	4.0	3.5	4.2	35
AOTX95265-3Ru	6.4	10.5	94	100	2.0	5.0	4.2	5.0	10
AOTX96208-1Ru	6.6	9.2	98	100	2.0	4.5	3.2	4.2	35
AOTX96216-2Ru	5.7	11.3	95	100	1.5	4.7	3.5	5.0	25
AOTX96216-3Ru	6.2	8.8	100	100	2.0	4.5	3.2	4.5	30
AOTX95265-2ARu	6.6	8.7	100	100	1.5	5.0	4.5	5.0	5
AOTX95269-1Ru	6.2	10.1	90	100	1.5	4.5	3.5	4.5	25
AOTX96084-1Ru	5.9	8.8	88	100	1.5	4.0	3.5	4.2	20
AOTX02136-1Ru	6.2	12.2	55	75	1.5	3.7	3.5	3.5	15
MWTeX2609-4Ru	6.4	9.8	80	100	1.5	4.5	5.0	4.5	0
Russet Norkotah	5.8	9.0	100	100	2.0	4.5	2.7	4.5	60
Russet Norkotah 278	7.2	10.4	100	100	2.0	5.0	3.7	5.0	20
AOTX02019-1Ru	6.0	6.2	80	100	2.0	3.7	3.2	4.0	35
AOTX95265-4Ru	7.4	9.3	98	100	1.5	5.0	4.0	5.0	20
Century	6.7	11.0	73	100	1.5	4.5	5.0	4.7	0
ATX91137-1Ru	6.3	10.3	75	100	1.5	4.7	4.0	4.7	25
AOTX95265-1Ru	5.4	9.1	79	100	2.0	3.7	3.2	3.5	40
AOTX96216-1Ru	4.5	10.8	100	100	1.5	3.5	3.7	3.7	10
TXNS410	4.0	10.3	83	100	1.5	3.5	3.7	3.2	20
AOTX96075-1Ru	3.9	9.7	73	100	1.5	3.7	3.0	4.0	40
Average	6.8	9.6	90	99	1.7	4.5	3.8	4.6	23
L.S.D. (.05)	0.9	1.0	8	4	0.2	0.2	0.2	0.2	5

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

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

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

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

Dalhart
Table 5d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 30 entries in the Texas Advanced

Variety or Selection	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	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
AOTX95295-1Ru	1.2	4.7	4.7	3.7	4.7	5.0	5.0	5.0	5.0	5	0	0	10
ATX9202-3Ru	1.2	4.6	4.5	3.0	4.5	5.0	5.0	5.0	5.0	8	0	0	0
TXA549-1Ru	1.0	3.7	4.7	3.8	4.4	5.0	5.0	5.0	5.0	20	0	0	0
Russet Norkotah 296	1.2	4.7	4.5	3.6	4.7	5.0	5.0	5.0	5.0	15	0	0	0
ATX97195-1Ru	1.2	4.7	4.7	3.7	4.7	5.0	5.0	5.0	5.0	5	0	0	5
AOTX98096-1Ru	1.2	4.7	4.7	3.7	4.7	5.0	5.0	5.0	5.0	5	0	0	0
Russet Norkotah 223	1.2	4.5	4.7	3.7	4.5	5.0	5.0	5.0	5.0	0	0	0	0
MWTX2609-2Ru	1.1	5.0	1.6	4.0	2.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX95295-3Ru	1.2	4.4	4.5	3.5	4.5	5.0	5.0	5.0	5.0	10	0	0	8
TXNS551	1.2	4.7	4.7	3.6	4.7	5.0	5.0	5.0	5.0	0	0	0	0
ATX9130-1Ru	1.0	4.0	3.7	4.2	3.7	4.5	5.0	5.0	5.0	30	0	0	5
AOTX95265-3Ru	1.4	4.7	4.5	3.3	4.5	5.0	5.0	5.0	5.0	10	0	0	3
AOTX96208-1Ru	1.2	4.7	4.5	3.7	4.7	5.0	5.0	5.0	5.0	15	0	0	5
AOTX96216-2Ru	1.0	4.6	4.7	3.5	4.7	5.0	5.0	5.0	5.0	15	0	0	0
AOTX96216-3Ru	1.4	4.6	4.7	3.6	4.7	5.0	5.0	5.0	5.0	15	0	0	0
AOTX95265-2ARu	1.2	4.7	4.7	3.5	4.7	5.0	5.0	5.0	5.0	10	0	0	0
AOTX95269-1Ru	1.2	5.0	4.7	3.5	4.7	5.0	5.0	5.0	5.0	5	0	0	0
AOTX96084-1Ru	1.0	4.7	4.7	3.5	4.7	5.0	5.0	5.0	5.0	15	0	0	5
AOTX02136-1Ru	1.0	4.7	4.7	4.0	4.6	5.0	5.0	5.0	5.0	10	0	0	0
MWTX2609-4Ru	1.0	5.0	1.7	4.0	2.0	5.0	5.0	5.0	5.0	0	0	0	0
Russet Norkotah	1.0	4.7	4.7	3.5	4.7	5.0	5.0	5.0	5.0	5	0	0	10
Russet Norkotah 278	1.2	4.5	4.5	3.5	4.6	5.0	5.0	5.0	5.0	5	0	0	0
AOTX02019-1Ru	1.5	4.5	4.5	4.0	4.6	5.0	5.0	5.0	5.0	20	0	0	0
AOTX95265-4Ru	1.2	4.7	4.7	3.5	4.7	5.0	5.0	5.0	5.0	0	0	0	0
Century	1.1	5.0	1.5	4.0	2.0	5.0	5.0	5.0	5.0	5	0	0	0
ATX91137-1Ru	1.2	4.0	4.7	4.7	4.5	5.0	5.0	5.0	5.0	0	0	0	0
AOTX95265-1Ru	1.2	4.7	4.7	3.6	4.7	5.0	5.0	5.0	5.0	5	0	0	0
AOTX96216-1Ru	1.2	4.7	4.5	3.5	4.7	5.0	5.0	5.0	5.0	10	0	5	0
TXNS410	1.2	4.7	4.7	3.5	4.7	5.0	5.0	5.0	5.0	5	0	0	0
AOTX96075-1Ru	1.0	4.7	4.7	3.7	4.7	5.0	5.0	5.0	5.0	0	0	0	0
Average	1.2	4.6	4.2	3.7	4.3	5.0	5.0	5.0	5.0	9	0	0	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 Stem end vascular discoloration severely evaluated

Dalhart
 Table 5e. Notes and general rating for all reps of 30 entries in the Texas Advanced Selection Russet Trial grown near Dalhart, Texas-2006.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
AOTX95295-1Ru	very nice, uniform, , ,	20% heat necrosis, small, 10% heat necrosis, ,	4, 4, 4, 4	4, 3.5, 4, 3.5
ATX9202-3Ru	nice shape, uniform, , ,	deep eyes, drop, nice internals+, ,	4, 4, 4, 4	4, 2.5, 3.5, 3.54
TXA549-1Ru	blocky, very nice, BOT, , ,	blocky, very nice, nice shape, keep, ,	4.5, 4.5, 4.5, 4.5	4, 4, 4, 4
Russet Norkotah 296	not as rough as other strains, , ,	greening, yield+, rough, pointed, ,	3.7, 3.7, 3.7, 3.7	3.5, 3.5, 3.5, 3.5
ATX97195-1Ru	BOT, , ,	curved, poor shape, rough, internal??, fat, ,	4.2, 4.2, 4.2, 4.2	3, 3, 3, 3
AOTX98096-1Ru	very nice, , ,	nice shape and internals, fat tubers, ,	4, 4, 4, 4	3.5, 3.5, 3.5, 3.5
Russet Norkotah 223	small, curved, , ,	rough, curved, greening, poor shape,, nice internals, .	3.5, 3.5, 3.5, 3.5	3.5, 3.5, 3.5, 3.5
MWTX2609-2Ru	rough, curved, yield+, , ,	skinny, rough, curved, nice internals, ,	3.2, 3.2, 3.2, 3.2	2.7, 2.5, 2.7, 2.5
AOTX95295-3Ru	yield-, small, uniform, , ,	shape ok, yield-, greening, keep, nice internals, curved, rough, yield-, small, pointed, drop?, ,	3.7, 3.7, 3.7, 3.7	3, 3, 3.5, 3.5
TXNS551	uniform, , ,	, , poor skin, flat, poor shape, drop, smooth, light russet, hollow heart	3.5, 3.5, 3.5, 3.5	3.2, 3, 3.2, 3
ATX9130-1Ru	nice, uniform, nice shape, BOT-, , ,	poor shape+, greening++, drop?, nice internals, too long, drop,	2.7, 2.7, 2.7, 2.7	2.5, 2.5, 2.5, 2.5
AOTX95265-3Ru	nice shape, yield+, BOT, , ,		4, 4, 4, 4	3, 3, 2.5, 3.2
AOTX96208-1Ru	nice, , ,	nice shape, smooth, yield+, BOT, , ,	3.5, 3.5, 3.5, 3.5	4, 3.5, 4, 3.5
AOTX96216-2Ru	nice, , ,	10% heat necrosis, fat, nice shape, keep, BOT, ,	3.7, 3.7, 3.7, 3.7	3.5, 4, 3.5, 4
AOTX96216-3Ru	rough, , ,	small, yield-, drop?, keep/, ,	4, 4, 4, 4	2.5, 3, 2.5, 3
AOTX95265-2ARu	small, curved, , ,	apical green head, nice shape, keep, ,	2.7, 2.7, 2.7, 2.7	2.5, 3.5, 2.5, 3.5
AOTX95269-1Ru	nice, , ,	, , ,	3.7, 3.7, 3.7, 3.7	4, 3.5, 4, 3.5
AOTX96084-1Ru	nice, BTN, , ,	fat, nice shape, yield-, very nice, ,	4, 4, 4, 4	3.5, 3.5, 3.5, 3.5
AOTX02136-1Ru	uniform, yield+, , ,	fat tubers, BOT, nice shape, smooth, keep, , low gravity, pointed, long, light russet, nice internals, bruised, ,	4.2, 4.2, 4.2, 4.2	4, 4, 4, 4
MWTX2609-4Ru	rough, curved, , ,	yield-, smooth, nice internals, pointed, long, rough, .	3, 3, 3, 3	2.5, 2.5, 2.5, 2.5
Russet Norkotah	rough, large, , ,		3.5, 3.5, 3.5, 3.5	3, 2.7, 3, 2.7
Russet Norkotah 278	rough, curved, , ,	rough, greening, 20% heat necrosis, curved, , , small, drop, sprouts, poor internals, 60 % internal discoloration, drop?, ,	3.5, 3.5, 3.5, 3.5	3.5, 3.5, 3.5, 3.5
AOTX02019-1Ru	small, heavy set, blocky, , ,		3.5, 3.5, 3.5, 3.5	3, 3.5, 3, 3.5
AOTX95265-4Ru	large curved, , ,	nice internals, drop, greening, drop, ,	3, 3, 3, 3	3, 3, 3, 3
Century	rough, long, curved, , ,	bruised ends, low gravity, skinny, pointed, rough, ,	2.5, 2.5, 2.5, 2.5	2.5, 3, 2.5, 3
ATX91137-1Ru	nice, rough, , ,	raised eyes, lot s of culls, knobs, nice internals, , , nice shape, nice internals, keep, , nice, nice internals	3.7, 3.7, 3.7, 3.7	3, 3.5, 3, 3.5
AOTX95265-1Ru	nice shape, , ,		3.7, 3.7, 3.7, 3.7	3.5, 3.5, 3.7, 3.7
AOTX96216-1Ru	curved, rough, , ,	keep, rough, curved, nice internals, , small, curved, poor shape, rough, nice internals, oversize, ,	3.7, 3.7, 3.7, 3.7	3.7, 3.5, 3.7, 3.5
TXNS410	nice, , ,		3.5, 3.5, 3.5, 3.5	3, 3, 3, 3
AOTX96075-1Ru	, , ,	nice shape, keep, smooth, nice internals, ,	4, 4, 4, 4	3.5, 3.5, 3.5, 3.5

Addendum to Tables Springlake 5a, 5b, 5c, 5d, and 5e
Texas Advanced Selection Russet Trial

Location:

Dalhart, Texas

Soil Type

Dallum Fine Sandy Loam

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

Planted	April 5, 2006	DAP
Vines Killed	August 7, 2006	122
Harvested	September 11, 2006	156

Plot Information:

Size of Plots	10'
Spacing Between Hills	12"
Spacing Between Rows	30
Hills Per Plot	10
Number of Plot Per Rep	2
Number of Reps	4

Method of Harvest:

Four-row digger, with hand pick up.

Fertilizer:

Application:
178-0-0 # per acre

Irrigation:

Center Pivot

Insecticide:

Dimethoate, Aphoil, Oberon, Spintor, Oberon.

Fungicides Applied:

Tops MZ Gaucho, Dithane, HDithaneHeadlineEchoEnduraScala

Herbicides Applied:

Brawl, Pendant, Sencor, Spartan, Intensity, Superb COC, Arrow.

Environmental Factors:

This trial was subjected to higher than normal temperature during May and June. Lower than normal precipitation was recorded during the first 3 weeks of April, the last two weeks of May, and the first three weeks of June. Higher than normal precipitation

Dalhart
Table 6. General rating, tuber type, skin color, notes, and remnant weight for 7 entries to be advanced from the 05 russet selections grown near Dalhart, Texas-2006.

Variety or Selection	General Rating Field	Tuber Type	Skin Color	Notes	Rem. Wt.
AOTX02060-1Ru	3.7		Russet	large tubers, keep	25
AOTX02066-1Ru	3.5		Russet	nice, keep	22
AOTX03096-1Ru	3.7		Russet	large, raised eyes, keep	31
AOTX03134-1Ru	3.2		Russet	yield+, keep	23
ATX02014-1Ru	3.2		Russet	yield-, keep	14
COTX03261-1Ru	3.2	Oblong	Russet	yield+, keep	34
COTX03285-4Ru	3.5	Oblong	Russet	large tubers, oversize, keep	31

Dalhart
Table 7a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 16 entries in the Texas Advanced Selection Red Trial grown near Dalhart, Texas-2006.

Variety or Selection	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					
Rio Rojo	724.4	659.1	130.0	132.0	397.0	0.0	65.3	0.0	4.2	4.1
NDTX4271-5R	776.3	658.9	192.2	160.0	306.7	0.0	108.9	8.5	4.2	4.2
COTX02172-1R	585.9	497.9	133.3	138.5	226.1	0.0	77.1	10.9	3.5	3.4
NDTX4847-7R	572.6	474.8	72.0	117.6	285.2	0.0	70.6	27.2	4.0	4.0
COTX02266-2R	613.8	452.2	206.9	143.7	101.5	0.0	159.0	2.6	3.5	2.5
Red LaSoda	591.1	451.3	73.2	107.6	270.5	0.0	44.0	95.8	3.5	3.0
COTX94218-1R	574.2	450.4	193.1	164.7	92.6	0.0	117.9	5.9	4.2	3.1
COTX02266-1R	470.4	440.0	147.7	99.8	192.5	0.0	30.5	0.0	3.0	2.8
Dark Red Norland	507.9	429.1	140.3	138.5	150.3	0.0	59.2	19.6	3.7	2.7
NDTX4784-7R	487.0	421.7	125.5	122.0	174.2	0.0	46.2	19.2	4.2	4.2
COTX00104-7R	510.7	394.9	162.9	111.2	120.8	0.0	76.1	39.6	4.2	3.0
COTX02294-4R	464.2	381.4	246.8	134.6	0.0	0.0	82.8	0.0	3.0	2.0
NDTX731-1R	422.5	368.1	67.1	80.8	220.2	0.0	34.6	19.8	4.0	3.3
ATX00270-2R	460.4	365.9	150.3	145.9	69.7	0.0	91.9	2.6	4.0	3.2
ATTX98453-6R	424.7	355.4	114.3	121.3	119.8	0.0	62.7	6.5	4.5	3.4
COTX00411-4R	316.7	219.5	152.0	54.9	12.6	0.0	91.5	5.7	3.5	3.0
Average	531.4	438.8	144.2	123.3	171.2	0.0	76.1	16.5	3.8	3.2
L.S.D. (.05)	101.3	83.7	39.2	45.5	60.2		37.3	18.2	0.2	0.2

¹ 1=very poor to 5= excellent

Dalhart
Table 7b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 16 entries in the Texas Advanced Selection Red Trial grown near Dalhart, Texas-2006.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2			
Rio Rojo	91.0	18.3	18.1	54.5	0.0	9.0	0.0	1.046	Oblong	Red
NDTX4271-5R	84.7	24.9	20.6	39.2	0.0	14.1	1.1	1.052	Oblong	Red
COTX02172-1R	84.6	22.8	24.0	37.7	0.0	13.3	2.1	1.053	Oblong	Red
NDTX4847-7R	82.5	12.9	20.2	49.5	0.0	12.6	4.9	1.054	Oblong	Red
COTX02266-2R	74.6	33.9	23.5	17.2	0.0	24.8	0.6	1.053	Oblong	Red
Red LaSoda	76.4	12.4	18.2	45.8	0.0	7.4	16.2	1.056	Oblong	Red
COTX94218-1R	78.9	34.2	28.6	16.0	0.0	20.0	1.1	1.058	Oblong	Red
COTX02266-1R	93.5	31.4	21.1	41.0	0.0	6.5	0.0	1.059	Oblong	Red
Dark Red Norland	84.4	28.0	27.0	29.4	0.0	11.5	4.1	1.050	Oblong	Red
NDTX4784-7R	86.5	25.7	25.0	35.8	0.0	9.4	4.1	1.052	Round	Red
COTX00104-7R	77.4	31.8	21.9	23.7	0.0	15.0	7.6	1.043	Oblong	Red
COTX02294-4R	82.5	54.5	28.0	0.0	0.0	17.5	0.0	1.052	Oblong	Red
NDTX731-1R	87.2	16.1	19.0	52.1	0.0	8.3	4.5	1.051	Oblong	Red
ATX00270-2R	79.5	32.6	31.7	15.2	0.0	20.0	0.6	1.062	Oblong	Red
ATX98453-6R	83.8	27.2	28.9	27.7	0.0	14.7	1.4	1.057	Oblong	Red
COTX00411-4R	69.3	48.0	17.3	4.0	0.0	28.9	1.8	1.060	Oblong	Red
Average	82.3	28.4	23.3	30.6	0.0	14.6	3.1	1.054		
L.S.D. (.05)	5.5	8.2	7.3	7.0		4.3	3.5	0.005		

Dalhart
Table 7c.

Average number of tubers per plant, average tuber weight, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 16 entries in the Texas Advanced Selection Red Trial grown

Variety or Selection	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
Rio Rojo	9.6	6.9	91	100	2.0	4.7	3.2	4.7	60
NDTX4271-5R	11.8	6.1	88	100	2.0	4.7	3.5	4.7	35
COTX02172-1R	11.2	5.9	65	83	2.0	4.7	4.0	4.7	15
NDTX4847-7R	9.2	6.7	78	88	1.5	3.7	3.2	4.0	45
COTX02266-2R	14.2	4.0	90	100	2.0	4.5	2.7	4.2	75
Red LaSoda	7.1	7.7	98	100	2.0	4.7	5.0	4.7	0
COTX94218-1R	11.9	4.4	98	100	2.0	4.7	4.7	4.7	5
COTX02266-1R	10.4	5.3	78	88	2.0	3.2	2.2	3.5	80
Dark Red Norland	8.0	5.8	100	100	2.0	4.2	3.5	4.2	40
NDTX4784-7R	7.1	6.3	75	100	2.0	4.7	3.5	4.7	45
COTX00104-7R	11.2	4.9	71	88	1.5	4.0	5.0	4.2	0
COTX02294-4R	8.7	5.0	80	100	1.5	4.2	5.0	4.0	0
NDTX731-1R	5.2	7.5	89	100	1.5	3.0	3.0	3.2	50
ATX00270-2R	8.8	4.9	75	98	1.5	4.7	3.2	4.5	35
ATTX98453-6R	8.8	5.5	46	88	2.0	3.7	3.7	3.5	15
COTX00411-4R	10.4	4.2	63	68	1.5	3.2	4.0	3.5	10
Average	9.6	5.7	80	94	1.8	4.2	3.7	4.2	32
L.S.D. (.05)	3.8	0.8	15	13	ns	0.2	0.2	0.2	5

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

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

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

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

Dalhart
Table 7d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 16 entries in the Texas Advanced

Variety or Selection	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	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
Rio Rojo	1.0	1.8	1.2	4.0	4.5	5.0	5.0	5.0	5.0	3	0	0	3
NDTX4271-5R	1.0	2.0	1.2	4.0	4.5	5.0	5.0	5.0	5.0	3	0	5	0
COTX02172-1R	1.0	3.7	1.6	4.0	3.7	5.0	5.0	5.0	5.0	5	0	5	0
NDTX4847-7R	1.2	2.0	1.2	4.5	4.5	5.0	5.0	5.0	5.0	5	0	3	0
COTX02266-2R	1.3	2.9	1.2	3.5	4.0	5.0	5.0	5.0	5.0	0	0	0	0
Red LaSoda	1.0	3.5	1.5	1.5	3.7	5.0	5.0	5.0	5.0	0	0	0	5
COTX94218-1R	1.0	1.9	1.5	3.9	4.5	5.0	5.0	5.0	5.0	3	0	0	0
COTX02266-1R	1.0	2.9	1.2	3.4	3.0	5.0	5.0	5.0	5.0	0	0	0	0
Dark Red Norland	1.0	3.5	2.0	2.0	3.5	5.0	5.0	5.0	5.0	0	0	0	0
NDTX4784-7R	1.0	1.7	1.2	3.5	4.5	5.0	5.0	5.0	5.0	0	0	0	0
COTX00104-7R	1.0	2.9	1.5	3.6	4.4	5.0	5.0	5.0	5.0	0	0	0	0
COTX02294-4R	1.0	3.7	1.0	4.1	4.5	5.0	5.0	5.0	5.0	0	0	0	0
NDTX731-1R	1.0	2.1	1.4	1.8	4.3	5.0	5.0	5.0	5.0	0	0	3	0
ATX00270-2R	2.0	2.0	2.0	3.5	3.7	5.0	5.0	5.0	5.0	15	0	0	0
ATTX98453-6R	1.0	2.2	1.5	3.4	4.0	5.0	5.0	5.0	5.0	3	0	0	15
COTX00411-4R	1.0	3.3	1.7	4.0	4.0	5.0	5.0	5.0	5.0	0	0	5	0
Average	1.1	2.6	1.4	3.4	4.1	5.0	5.0	5.0	5.0	2	0	1	1

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ Stem end vascular discoloration severely evaluated

Dalhart

Table 7e.

Notes and general rating for all reps of 16 entries in the Texas Advanced Selection Red Trial grown near Dalhart, Texas-2006.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Rio Rojo	yield+,BOT, , ,	some rot, silver scurf, heat sprouts, BOT+, buff, feathering, heat sprouts, BOT, ,	4.2, 4.2, 4.2, 4.2	4.5, 4, 4, 4
NDTX4271-5R	road map, buff, yield+,BOT-, , ,	oversized, heat sprouts, yield+,BOT, , , very nice , nice internals, keep, , very nice ,	4.2, 4.2, 4.2, 4.2	4.2, 4.2, 4, 4.2
COTX02172-1R	yield+, , yield+,	nice internals, keep,	3.5, 3.5, 3.5, 3.5	3.7, 3, 3.7, 3
NDTX4847-7R	nice, , ,	, , ,	4, 4, 4, 4	4, 4, 4, 4
COTX02266-2R	small, heavy set, , small, heavy set,	poor shape, silver scurf, drop, , poor shape, silver scurf, drop,	3.5, 3.5, 3.5, 3.5	2.5, 2.5, 2.5, 2.5
Red LaSoda	rough, , rough,	oversized, rough, deep eyes, silver scurf, , oversized, rough, deep eyes, silver scurf,	3.5, 3.5, 3.5, 3.5	3, 3, 3, 3
COTX94218-1R	heavy set, small,BOT-, , ,	nice internals, feathering, rough, drop?, , , poor shape, silver scurf, drop?, , poor shape, silver scurf, drop?,	4.2, 4.2, 4.2, 4.2	3, 3, 3.2, 3
COTX02266-1R	light red skin, , light red skin,	rough, deep eyes, faded red skin, russetting, , rough, deep eyes, faded red skin, russetting,	3, 3, 3, 3	2.5, 3, 2.5, 3
Dark Red Norland	nice, , nice,	very nice, silver scurf, TC,BOT, , very nice, silver scurf, TC,BOT,	3.7, 3.7, 3.7, 3.7	2.7, 2.7, 2.7, 2.7
NDTX4784-7R	very nice, BOT, , very nice, BOT,	rough, poor shape, poor internals, silver scurf, drop, , ,	4.2, 4.2, 4.2, 4.2	4.2, 4.2, 4.2, 4.2
COTX00104-7R	yield+, very nice, , , poor shape, nice color, , poor shape,	poor shape, feathering, small, drop, , poor shape, feathering, small, drop,	4.2, 4.2, 4.2, 4.2	3, 3, 3, 3
COTX02294-4R	nice color,	oversize, deep eyes and nose, silver scurf, rough, , ,	3, 3, 3, 3	2, 2, 2, 2
NDTX731-1R	buff, nice shape, , , heavy set, very nice, , heavy set, very nice,	, , ,	4, 4, 4, 4	3.2, 3.2, 3.2, 3.5
ATX00270-2R	nice,	nice shape, poor internals for 1 rep, nice internals for 3 reps, , ,	4, 4, 4, 4	3.2, 3.2, 3.2, 3.2
ATX98453-6R	nice shape and skin,BOT, , ,	poor shape, drop?,drop, , poor shape, drop?,drop,	4.5, 4.5, 4.5, 4.5	3, 3.5, 3.5, 3.7
COTX00411-4R	heavy set, , heavy set,		3.5, 3.5, 3.5, 3.5	3, 3, 3, 3

Addendum to Tables Dalhart 7a, 7b, 7c, and 7d
Texas Advanced Selection Red Trial

Location:

Dalhart, Texas

Soil Type

Dallum Fine Sandy Loam

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

Planted	April 5, 2006	DAP
Vines Killed	July 26, 2006	111
Harvested	September 11, 2006	156

Plot Information:

Size of Plots	10'
Spacing Between Hills	12"
Spacing Between Rows	30
Hills Per Plot	10
Number of Plot Per Rep	2
Number of Reps	4

Method of Harvest:

Four-row digger, with hand pick up.

Fertilizer:

Application:
178-0-0 # per acre

Irrigation:

Center Pivot

Insecticide:

Dimethoate, Aphoil, Oberon, Spintor, Oberon.

Fungicides Applied:

Tops MZ Gaucho, Dithane, HDithaneHeadlineEchoEnduraScala

Herbicides Applied:

Brawl, Pendant, Sencor, Spartan, Intensity, Superb COC, Arrow.

Environmental Factors:

This trial was subjected to higher than normal temperature during May and June. Lower than normal precipitation was recorded during the first 3 weeks of April, the last two weeks of May, and the first three weeks of June. Higher than normal precipitation

Dalhart
Table 8.

General rating, tuber type, skin color, notes, and remnant weight for 10 entries to be advanced from the 05 red selections grown near Dalhart, Texas-2006.

Variety or Selection	General Rating Field	Tuber Type	Skin Color	Notes	Rem. Wt.
COTX03254-2R	3.2			Keep	
NDTX039096-1R	3.2			Keep	
NDTX039190-1R	3.5			Keep	
NDTX039191C-1R	3.2			Keep	
NDTX039191C-2R	3.5			Keep	
NDTX049263-1R	3.2			Keep	
NDTX049349-10R	3.5			Keep	
NDTX049368-2R	3.5			Keep	
TX03198-6R	3.5			Keep	
TX03199-2R/Y	3.5			Keep	

Dalhart Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 25 entries in the Texas Advanced Selection Specialty Trial grown near Dalhart, Texas-2006.

Variety or Selection	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					
ATTX98462-3R/Y	799.3	659.9	164.7	122.0	373.3	0.0	139.4	0.0	4.2	4.0
Yukon Gold	652.3	566.9	94.7	140.7	331.5	3.7	55.8	25.9	4.5	4.5
BTX1544-2W/Y	642.9	541.2	114.8	167.5	259.0	5.4	93.2	3.0	3.7	3.2
ATTX961014-1R/Y	634.4	531.8	164.1	102.7	265.0	0.0	96.9	5.7	4.2	4.5
ATTX961014-1AR/Y	593.3	485.3	101.1	73.2	311.0	0.0	103.7	4.4	4.2	3.7
ATTX99325-1P	521.3	446.9	70.3	155.7	221.0	0.0	65.9	8.5	3.2	4.0
TX1523-1Ru/Y	494.8	446.5	70.1	81.5	294.9	0.0	48.4	0.0	4.2	4.5
ATTX98468-5R/Y	678.6	420.5	127.2	135.9	157.4	0.0	110.6	147.5	2.0	2.0
ATX99331-1Pu/Y	569.8	413.2	91.3	163.6	158.3	8.1	148.5	0.0	4.0	2.7
BTX1749-1W/Y	517.5	392.3	118.0	79.5	194.7	0.0	108.5	16.8	4.0	3.5
TX1674-1W/Y	483.5	390.7	105.2	74.7	210.8	0.0	92.8	0.0	3.5	3.0
ATTX98500-3Wpuspl	533.0	355.4	113.3	140.7	101.5	0.0	96.7	80.8	3.2	3.5
ATTX88654-3W/RE/Y	554.7	333.2	111.2	111.3	110.6	0.0	183.8	37.7	3.2	2.0
UNTX383-3WRE/Y	469.9	320.0	150.7	83.6	85.7	0.0	149.8	0.0	3.7	3.7
ATTX98500-2P/Y	467.0	319.7	141.4	96.7	81.6	0.0	128.4	18.9	3.5	3.1
ATTX98510-1R/Y	522.9	318.9	117.4	156.8	44.6	0.0	176.0	28.1	3.0	3.0
ATTX98514-1R/Y	578.5	310.1	126.8	131.8	51.6	2.8	265.5	0.0	3.2	3.0
ATTX98491-4YRsplash	382.5	270.1	104.5	98.9	66.6	0.0	87.6	24.8	3.0	3.6
PORTX03PG25-2R/P	323.4	260.1	168.6	14.4	77.1	0.0	63.4	0.0	3.0	3.5
COTX01403-4R/Y	307.5	238.1	90.2	86.5	61.4	0.0	69.5	0.0	3.5	2.8
NDTX4756-1R/Y	356.3	213.2	108.0	45.3	59.9	0.0	143.1	0.0	3.5	3.7
ATTX98468-3R/Y	559.9	202.7	170.5	20.9	11.3	0.0	357.2	0.0	4.0	3.0
ATTX98462-9R/Y	319.9	114.6	114.6	0.0	0.0	0.0	203.4	2.0	4.0	2.7
ATTX98444-16R/Y	388.6	64.5	64.5	0.0	0.0	0.0	324.1	0.0	3.7	3.0
COTX02305-3R	84.9	23.5	23.5	0.0	0.0	0.0	61.4	0.0	2.0	2.7
Average	497.5	345.6	113.1	91.3	141.2	0.8	134.9	16.2	3.5	3.3
L.S.D. (.05)	93.5	83.8	44.9	42.6	69.8	ns	57.7	41.5	0.2	0.7

¹ 1=very poor to 5= excellent

Dalhart
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 25 entries in the Texas
Advanced Selection Specialty Trial grown near Dalhart, Texas-2006.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2			
ATTX98462-3R/Y	82.3	21.0	15.4	45.9	0.0	17.7	0.0	1.055	Oblong	Red
Yukon Gold	86.9	14.7	21.7	50.4	0.5	8.5	4.0	1.062	Oblong	White
BTX1544-2W/Y	84.3	17.9	26.1	40.4	0.8	14.4	0.5	1.063	Oblong	White
ATTX961014-1R/Y	83.6	25.0	17.4	41.1	0.0	15.4	1.0	1.057	Oblong	Red
ATTX961014-1AR/Y	81.8	17.0	12.3	52.4	0.0	17.5	0.7	1.051	Oblong	Red
ATTX99325-1P	85.5	13.9	29.1	42.5	0.0	12.8	1.7	1.050	Oblong	Purple
TX1523-1Ru/Y	90.4	14.0	16.8	59.5	0.0	9.6	0.0	1.062	Oblong	Russet
ATTX98468-5R/Y	62.6	18.9	20.3	23.3	0.0	16.5	20.9	1.048	Oblong	Red
ATX99331-1Pu/Y	72.6	15.9	29.1	27.5	1.3	26.2	0.0	1.052	Oblong	Purple
BTX1749-1W/Y	75.6	23.3	15.5	36.8	0.0	20.9	3.5	1.065	Oblong	White
TX1674-1W/Y	80.4	21.5	15.6	43.3	0.0	19.6	0.0	1.063	Oblong	White
ATTX98500-3Wpuspl	67.1	21.4	26.6	19.2	0.0	18.3	14.6	1.056	Oblong	White
ATTX88654-3W/RE/Y	60.0	20.3	20.0	19.7	0.0	33.5	6.6	1.051	Oblong	White/RE
UNTX383-3WRE/Y	68.2	32.1	17.8	18.3	0.0	31.8	0.0	1.063	Oblong	White/RE
ATTX98500-2P/Y	68.5	30.5	20.8	17.1	0.0	27.7	3.8	1.045	Oblong	Purple
ATTX98510-1R/Y	60.7	23.0	30.0	7.7	0.0	34.4	4.9	1.055	Oblong	Red
ATTX98514-1R/Y	53.4	21.6	22.8	9.0	0.5	46.1	0.0	1.057	Oblong	Red
ATTX98491-4YRsplash/Y	70.7	27.2	25.7	17.8	0.0	22.8	6.5	1.060	Oblong	Red
PORTX03PG25-2R/P	80.6	52.8	5.2	22.6	0.0	19.4	0.0	1.053	Long	Red
COTX01403-4R/Y	77.3	29.3	28.2	19.8	0.0	22.7	0.0	1.036	Oblong	Red
NDTX4756-1R/Y	59.9	30.3	12.8	16.8	0.0	40.1	0.0	1.060	Oblong	Red
ATTX98468-3R/Y	38.1	32.5	3.8	1.8	0.0	61.9	0.0	1.066	Round	Red
ATTX98462-9R/Y	35.0	35.0	0.0	0.0	0.0	64.4	0.6	1.056	Round	Red
ATTX98444-16R/Y	16.7	16.7	0.0	0.0	0.0	83.3	0.0	1.066	Round	Red
COTX02305-3R	27.8	27.8	0.0	0.0	0.0	72.2	0.0	1.065	Oblong	Red
Average	66.8	24.1	17.3	25.3	0.1	30.3	2.8	1.057		
L.S.D. (.05)	10.6	9.9	7.9	10.5	ns	9.6	6.1	0.006		

Dalhart
Table 9c. Average number of tubers per plant, average tuber weight, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 25 entries in the Texas Advanced Selection Specialty Trial

Variety or Selection	Average Number Tubers/ Plant	Average Tuber Weight In oz.	Percent Stand 40 DAP	Percent Stand 60 DAP	Plant Characteristics				Percent Dead Vines
					Plant Type ¹	Vigor ²	Maturity ³	Vine Size ⁴	
ATTX98462-3R/Y	11.4	6.4	89	100	2.0	4.0	2.7	4.2	65
Yukon Gold	7.7	7.8	91	100	1.5	4.7	3.2	4.7	25
BTX1544-2W/Y	9.0	6.7	86	100	1.5	4.7	3.2	4.7	50
ATTX961014-1R/Y	9.1	6.5	80	98	2.0	4.5	3.0	4.2	45
ATTX961014-1AR/Y	8.4	6.5	91	100	2.0	4.5	3.0	4.2	60
ATTX99325-1P	10.7	6.4	36	74	2.5	3.0	2.5	3.2	75
TX1523-1Ru/Y	6.2	7.4	96	100	2.0	4.7	3.2	4.7	60
ATTX98468-5R/Y	11.1	5.6	100	100	2.0	4.7	3.5	4.7	25
ATX99331-1Pu/Y	10.3	5.1	86	100	1.5	4.7	4.5	4.7	0
BTX1749-1W/Y	8.5	5.6	90	100	2.0	4.0	3.5	3.7	50
TX1674-1W/Y	8.7	5.5	80	94	1.5	4.5	4.2	4.2	10
ATTX98500-3Wpuspl	14.3	5.2	60	68	1.5	4.5	4.0	4.7	0
ATTX88654-3W/RE/Y	11.6	4.4	85	100	2.0	4.2	3.7	4.5	2
UNTX383-3WRE/Y	10.9	4.3	75	93	2.5	3.5	3.7	3.7	25
ATTX98500-2P/Y	10.8	4.0	81	100	2.0	4.7	4.0	4.7	0
ATTX98510-1R/Y	10.7	4.5	90	100	2.0	4.0	3.5	4.2	35
ATTX98514-1R/Y	13.7	3.9	98	100	2.0	4.5	3.5	4.2	40
ATTX98491-4YRsplash/Y	7.3	4.8	80	100	2.0	2.0	3.5	2.5	20
PORTX03PG25-2R/P	11.5	2.6	93	100	2.0	4.0	3.7	4.0	0
COTX01403-4R/Y	5.4	5.3	95	100	2.0	3.2	1.0	3.0	100
NDTX4756-1R/Y	7.9	4.2	85	100	2.0	3.5	3.7	3.2	25
ATTX98468-3R/Y	17.5	3.0	91	100	1.5	4.7	3.7	4.7	15
ATTX98462-9R/Y	8.9	3.3	98	100	2.0	2.7	3.0	3.0	45
ATTX98444-16R/Y	12.8	2.8	99	100	2.0	4.7	3.5	4.7	35
COTX02305-3R	18.0	1.2	25	38	1.5	1.5	4.0	1.5	0
Average	10.5	4.9	83	95	1.9	4.0	3.4	4.0	32
L.S.D. (.05)	2.3	0.6	13	7					

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

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

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

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

Dalhart
Table 9d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 25 entries in the Texas Advanced

Variety or Selection	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	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
ATTX98462-3R/Y	2.6	3.7	1.5	4.5	4.0	5.0	5.0	5.0	5.0	0	0	0	0
Yukon Gold	3.0	2.5	1.5	4.0	1.2	5.0	5.0	5.0	5.0	40	0	0	28
BTX1544-2W/Y	2.6	3.7	3.0	3.8	3.3	5.0	5.0	5.0	5.0	15	0	0	8
ATTX961014-1R/Y	2.9	3.2	1.5	4.0	3.3	5.0	5.0	5.0	5.0	0	0	0	0
ATTX961014-1AR/Y	2.5	4.0	1.5	4.5	4.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX99325-1P	1.0	4.0	1.0	4.5	4.7	5.0	5.0	5.0	5.0	0	0	0	0
TX1523-1Ru/Y	2.9	3.7	4.0	4.5	4.2	5.0	5.0	5.0	5.0	0	0	0	0
ATTX98468-5R/Y	2.4	3.4	1.5	4.0	3.5	5.0	5.0	5.0	5.0	0	0	0	0
ATX99331-1Pu/Y	2.5	2.0	3.5	2.5	5.0	5.0	5.0	5.0	5.0	5	0	0	0
BTX1749-1W/Y	2.9	3.3	2.6	3.9	2.8	5.0	5.0	5.0	5.0	28	0	0	5
TX1674-1W/Y	2.0	3.7	7.0	4.5	2.5	5.0	5.0	5.0	5.0	3	0	0	0
ATTX98500-3Wpuspl	3.4	3.6	1.5	4.2	2.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX88654-3W/RE/Y	2.8	3.7	2.0	4.0	1.7	5.0	5.0	5.0	5.0	3	0	0	0
UNTX383-3WRE/Y	4.0	2.0	1.2	4.5	2.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX98500-2P/Y	3.5	2.8	1.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX98510-1R/Y	2.5	2.3	1.4	3.6	3.3	5.0	5.0	5.0	5.0	15	0	0	0
ATTX98514-1R/Y	3.0	2.2	1.1	2.1	3.7	5.0	5.0	5.0	5.0	3	0	0	0
ATTX98491-4YRsplash/λ	3.5	2.4	1.5	4.0	2.0	5.0	5.0	5.0	5.0	0	0	0	0
PORTX03PG25-2R/P	3.0	4.5	1.4	4.0	4.5	5.0	5.0	5.0	5.0	0	0	0	0
COTX01403-4R/Y	3.0	3.7	2.2	3.6	3.0	5.0	5.0	5.0	5.0	0	0	0	55
NDTX4756-1R/Y	2.5	3.4	1.3	3.9	3.2	5.0	5.0	5.0	5.0	0	0	0	0
ATTX98468-3R/Y	3.0	3.4	1.9	4.5	3.1	5.0	5.0	5.0	5.0	0	0	0	0
ATTX98462-9R/Y	3.1	2.9	1.6	4.5	3.7	5.0	5.0	5.0	5.0	0	0	0	53
ATTX98444-16R/Y	2.5	2.7	1.0	4.5	4.0	5.0	5.0	5.0	5.0	0	0	0	15
COTX02305-3R	1.0	4.0	1.0	4.5	4.7	5.0	5.0	5.0	5.0	0	0	0	0
Average	2.7	3.2	1.9	4.0	3.4	5.0	5.0	5.0	5.0	4	0	0	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 Stem end vascular discoloration severely evaluated

Dalhart

Table 9e. Notes and general rating for all reps of 25 entries in the Texas Advanced Selection Specialty Trial grown near Dalhart, Texas-2006.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
ATTX98462-3R/Y	nice shape, skin and flesh, some road map, , ,	some road map, nice shape, smooth, keep, , ,	4.2, 4.2, 4.2, 4.2	4, 4, 4, 4
Yukon Gold	very nice, BOT, , ,	very poor internals, nice shape, lenticels, eye brows, , ,	4.5, 4.5, 4.5, 4.5	4.5, 4.5, 4.5, 4.5
BTX1544-2W/Y	nice shape and skin, nice yellow flesh, , ,	rough, oversize, buff, greening, , ,	3.7, 3.7, 3.7, 3.7	3, 3.5, 3, 3.2
ATTX961014-1R/Y	heat sprouts, road map, nice shape, , ,	road map, silver scurf, nice, large eye brows, BOT, , ,	4.2, 4.2, 4.2, 4.2	4.5, 4.5, 4.5, 4.5
ATTX961014-1AR/Y	heat sprouts, road map, nice shape, skin and flesh, , ,	silver scurf, pointed, keep, BOT, , ,	4.2, 4.2, 4.2, 4.2	3.5, 3.7, 3.7, 3.7
ATTX99325-1P	nice shape and skin, heat sprouts, , ,	rough, smooth skin, feathering, keep, , ,	3.2, 3.2, 3.2, 3.2	4, 4, 4, 4
TX1523-1Ru/Y	BOT, , ,	yield++, excellent internals, BOT++, , ,	4.2, 4.2, 4.2, 4.2	4.5, 4.5, 4.5, 4.5
ATTX98468-5R/Y	rough, oversize, poor shape, heat sprouts, flat, light red skin, drop, ,	powdery scab, ugly skin, close set, rough, heat sprouts, feathering, nice	2, 2, 2, 2	2, 2, 2, 2
ATX99331-1Pu/Y	nice shape, skin and flesh, , ,	poor skin, road map, deep eyes, , ,	4, 4, 4, 4	2.7, 2.7, 2.7, 2.7
BTX1749-1W/Y	nice shape, skin and flesh, , ,	rough, greening, buff, to sw or wr, , ,	4, 4, 4, 4	3.5, 3.5, 3.5, 3.5
TX1674-1W/Y	yield-, small, did not size, , ,	flat, pink eyes, pear shaped, nice internal, buff, , ,	3.5, 3.5, 3.5, 3.5	3, 3, 3, 3
ATTX98500-3Wpuspl ATTX88654- 3WRE/Y	flat pointed, , , heat sprouts, nice shape, , ,	pinto, smooth, flat, pointed, , , smooth skin, rough shape, drop?, , ,	3.2, 3.2, 3.2, 3.2	3.5, 3.5, 3.5, 3.5 2.7, 2.7, 2.7,
UNTX383-3WRE/Y	nice shape, skin, and flesh, , ,	excellent flesh, nice shape, skin??, , , poor shape, deep eyes, lenticels, rough, , ,	3.7, 3.7, 3.7, 3.7	3.7, 3.7, 3.7, 3.7
ATTX98500-2P/Y	rough, yield+, nice flesh, , ,	mix, poor shape, rough, growth cracks, , ,	3.5, 3.5, 3.5, 3.5	3, 3, 3.2, 3.2
ATTX98510-1R/Y	nice shape and flesh, skin not very red, , ,	hard, rough, deep eyes and nose, drop, , ,	3, 3, 3, 3	3, 3, 3, 3
ATTX98514-1R/Y	uniform, small, nice shape, skin and flesh, , ,	nice shape and internals, , nice shape and internals,	3.2, 3.2, 3.2, 3.2	3, 3, 3, 3
ATTX98491- 4YRsplash/Y	red splash, nice shape and flesh, , red splash, nice shape and flesh, nice shape for a fingerling, curved, , ,	nice shape and internals, , nice shape and internals,	3, 3, 3, 3	3.5, 3.7, 3.5, 3.7
PORTX03PG25-2R/P	heat sprouts, yield-, light red skin, nice shape and flesh, , ,	fingerling, skinny, curved, rough, , , smooth, pale skin, buff, road map, poor internals++, drop, , ,	3, 3, 3, 3	3.5, 3.5, 3.5, 3.5
COTX01403-4R/Y	yield-, light red skin, nice shape and flesh, , ,	nice internals, nice shape, pale skin, heat sprouts, , ,	3.5, 3.5, 3.5, 3.5	2.7, 3, 2.7, 2.7
NDTX4756-1R/Y	nice shape, skin and flesh, boiler heavy set, , ,	silver scurf, road map, small, drop?, keep+, , ,	3.5, 3.5, 3.5, 3.5	3.7, 3.7, 3.7, 3.7
ATTX98468-3R/Y	nice shape and skin, boiler nice flesh, , ,	poor internals++, scale, heat sprouts, road map, silver scurf, drop?, drop, , ,	4, 4, 4, 4	3.2, 3, 2.7, 3
ATTX98462-9R/Y	boiler, nice shape, skin and flesh, heavy set, , ,	poor internals++, scale, heat sprouts, road map, silver scurf, drop?, drop, , ,	3.5, 3.5, 4, 4	3.7, 3.7, 3.2, 3
ATTX98444-16R/Y	white flesh fingerling, heat sprouts, , white flesh fingerling,	whit flesh fingerling, nice internals, whit flesh fingerling, nice internals,	4, 4, 4, 4	2.7, 2.7, 2.7, 2.7
COTX02305-3R			2, 2, 2, 2	2.7, 2.7, 2.7, 2.7

Addendum to Tables Dalhart 9a, 9b, 9c, 9d, and 9e
Texas Advanced Selection Specialty

Location:

Dalhart, Texas

Soil Type

Dallum Fine Sand Loam

Seed Source

Colorado and Texas

Date:

Planted	April 5, 2006	DAP
Vines Killed	July 31, 2006	116
Harvested	September 13, 2006	158

Plot Information:

Size of Plots	10'
Spacing Between Hills	12"
Spacing Between Rows	30
Hills Per Plot	10
Number of Plot Per Rep	2
Number of Reps	4

Method of Harvest:

Four-row digger, with hand pick up.

Fertilizer:

Application:
178-0-0 # per acre

Irrigation:

Center Pivot

Insecticide:

Dimethoate, Aphoil, Oberon, Spintor, Oberon.

Fungicides Applied:

Tops MZ Gaucho, Dithane, H Dithane Headline Echo Endura Scala

Herbicides Applied:

Brawl, Pendant, Sencor, Spartan, Intensity, Superb COC, Arrow.

Environmental Factors:

This trial was subjected to higher than normal temperature during May and June. Lower than normal precipitation was recorded during the first 3 weeks of April, the last two weeks of May, and the first three weeks of June. Higher than normal precipitation

Dalhart General rating, tuber shape, skin color, lenticels, flesh color, eye depth, sprout rating, scurf rating, a and remnant weight for 30 entries to be advanced from the 05 specialty selections grown near Dalhart, Texas-2006.

Variety or Selection	Gen Rating Grading	Tuber Shape 1=round to 5=long	Skin Color 1=light 5=dark	Lenticels 1=none 3=pronounced	Flesh Color 1=light 5=dark	Eye Depth 1=deep to 5=shallow	Sprout 1=none 5=lots	Scurf 1=none 5 lots
ATX01170-1R/Y	3.7	3	R 4	3	Y 3.5	4.0	3.0	Scurf 3
ATX02263-1R/Y	3.5	3.5	R 4	3	Y 3	3.5	1.5	Scurf 4
COTX03025-1P/P	3.5	3.5	P 4	1	P 3.5 W cent	3.0	1.0	Scurf 4.5, roadmap
COTX03025-2P/P	3.7	2	P 4	3	P 3.5	3.0	1.5	Scurf 4
COTX03039-1R/Y	3.5	4	R 4	3	Y 3	3.0	2.0	Scurf 4.5
COTX03079-1W/Y	3.0	3.5	W	3	Y 3	3.5	2.0	Scurf 3
COTX04015-3AW/Y	4.5	3.5	W/Reye	1	Y 3.5	4.5	2.0	Scurf 2, BOT, TC to Scotland
COTX04015-3W/Y	3.0	4	W	2	Y 3.5	4.0	3.0	Scurf 4
COTX04050-1P/P	3.5	3	P 4.5	3	P 4.5	3.5	1.5	Scurf 4
COTX04061-1R/R	3.0	5 L	P 3	2	R ctr W ring	2.0	1.0	Scurf 4
COTX04096-1R/Y	3.0	3	Reyes	2.5	Y 3.5	4.0	1.0	Scurf 3
COTX04117-1W/Y	3.5	3	Y/Reye	2	Y 3	4.0	1.0	Small tubers, somewhat flat, scurf 3
PTX05PG18-1R/R	3.5	3.5	R 4.5	1	R 3	5.0	2.0	Scurf 3.5
TX03185-1R/R	3.0	3.5	R 4	2	R 3	4.0	2.0	Scurf 5, chip
TX03198-2Y-R/Y	3.5	2	h eyes	3	Y 3	3.5	2.0	Scurf 3
AOTX03337-1W		Fingerling	White	Keep				
COTX03047-1P/P		Fingerling	White	Keep				
COTX03094-1R/Y-R		Fingerling	Red	Keep				
COTX03119-1R/R		Fingerling	Red	Keep				
COTX03137-1P/P		Fingerling	Purple	Keep				
COTX03137-2R/R		Fingerling	Red	Keep				
COTX03185-1W		Fingerling	White	Keep				
COTX03254-1W		Fingerling	White	Keep				
COTX03276-1Ru		Fingerling	Russet	Keep				
PTTX05PG06-1R/R		Fingerling	Red	Keep				
PTTX05PG06-2R/R		Fingerling	Red	Keep				
PTTX05PG07-1W		Fingerling	White	Keep				
PTTX05PG07-2P/R		Fingerling	Purple	Keep				
PTTX05PG07-3R/R		Fingerling	Red	Keep				
PTTX05PG11-2R/Y		Fingerling	Red	Keep				
PTTX05PG07-3R/R		Fingerling	Red	Keep				
PTTX05PG11-2R/Y		Fingerling	Red	Keep				

Appendix A. General notes on potato varieties or selections – 2006.

A00645-1 - Oblong Russet. Parentage (A93570-13 x A92158-3). Cross was made and selected in Aberdeen.
Uses: Dual.
Strengths: PVY resistant, high yielding.
Weaknesses: Lower specific gravity; early blight susceptible.

A00646-4 - Oblong Russet. Parentage (A93570-13 x A95154-1). Cross was made and selected in Aberdeen.
Uses: Dual.
Strengths: Nice type, earlier maturing; PVY resistant.
Weaknesses: Lower yielding.

A00681-4 - Oblong Russet. Parentage (PA92A08-17 x Western Russet). Cross was made and selected in Aberdeen.
Uses: Dual.
Strengths: Good type, medium russet with light yellow flesh, cold-sweetening resistant.
Weaknesses: Smaller tuber size with some hollow heart.

A83350-9R - Oblong Red. Cross was made and selected in Aberdeen. (Dropped from program).
Uses: Fresh.
Strengths: Nice type and red skin color.
Weaknesses: Very susceptible to PVY.

A8893-1 (Blazer Russet). - Long Russet. Parentage (A7816-14 x NorKing Russet). Cross was made and selected in Aberdeen. Lavender flower color.
Uses: Dual.
Strengths: Good early processor, possible replacement for Shepody.
Weaknesses: Short tuber dormancy.

A91790-13 – Oblong Russet. Parentage (Chipeta x Ivory Crisp). Cross was made and selected in Aberdeen.
Uses: Chip.
Strengths: Good cold-sweetening resistance.
Weaknesses: Asymptomatic for PVY infection.

A93005-10 – Long Russet. Parentage (A8343-12 x A85103-3). Cross was made and selected in Aberdeen.
Uses: Dual.
Strengths: Long tuber dormancy with storage duration similar to Burbank, good processor.
Weaknesses: Mild symptom expression for PVY.

A9304-3 – Long Russet. Parentage (A8343-12 x Western Russet). Cross was made and selected in Aberdeen.
Uses: Dual.
Strengths: High yielding.
Weaknesses: Some irregular shaped tubers, occasional hollow heart.

A93157-6LS (Premier Russet). - Oblong Russet. Parentage (A87149-4 x A88108-7). Cross was made and selected in Aberdeen. Medium-late maturity. Medium vine size. White flower color.

Uses: Dual.

Strengths: Not bad nice shape, small, resistance to PVY and cold-sweetening resistant, consistently high gravity, reduced water need relative to Burbank, BOT.

Weaknesses: Rhizoctonia, fat tubers, sugar ends, pointed to bud end, growth cracks, blocky, blackspot and dry rot susceptible.

A93570-13 - Oblong Russet. Parentage (A85536-1 x A86102-6). Cross was made and selected in Aberdeen.

Uses: Dual.

Strengths: High resistance to PVY and PLRV.

Weaknesses: Smaller tuber size.

A94377-6RY – Oblong Red/Yellow. Parentage (A88479-3R x COA8925-4R). Cross was made and selected in Aberdeen. (Dropped From Program).

Uses: Specialty.

Strengths:

Weaknesses:

A95074-6 - Long White. Parentage (Agria x Summit Russet). Cross was made and selected in Aberdeen. Medium-late maturity. Large vine size. White flower color.

Uses: Dual.

Strengths: Yield, nice yellow flesh color, nice shape.

Weaknesses: Variable size, feathering, enlarged lenticels rough, not that nice, rough, need to size, feathering, small tubers, heat sprouts, light skin, small, blocky, raised eyes, yellow flesh (3),drop.

A95109-1 - Long Russet. Parentage (A8893-1 x Summit Russet). Cross was made and selected in Aberdeen. Medium-early maturity. Medium-small vine size. White flower color.

Uses: Dual.

Strengths: Nice, nice white flesh, early maturing for fresh-pack or early to mid processing, nice skin and shape full tubers, BOT.

Weaknesses: Raised eyes on large tubers, nice, sugar ends, parent, pressure cracks, light net color, feathering, and lower gravities may limit its use for processing in certain environment knobs, growth cracks.

A95357-3Y - Oblong White with pink eye/Yellow. Parentage (NZA8903-3 x A86102-6). Cross was made and selected in Aberdeen.

Uses: Specialty.

Strengths: Good type, high yielding, blackspot resistant.

Weaknesses:

A95409-1 - Long Russet. Parentage (A89146-8 x Ranger Russet). Cross was made and selected in Aberdeen. Medium-late maturity. Large vine size. Red-purple flower color.

Uses: Dual.

Strengths: Large tubers.

Weaknesses: Powdery scab, feathering, rough, light russet, pointed, yield+, skinny, drop.

A961002-1RY - Red/Yellow. Parentage (ATD9304-1RY x A83350-1R). Cross was made and selected in Aberdeen. (Dropped From Program).

Uses: Specialty.

Strengths:
Weaknesses:

A96510-4Y - Oblong White/Yellow. Parentage (PA92A17-6 x A91194-4). Cross was made and selected in Aberdeen.

Uses: Specialty.
Strengths: PVY Resistant, high yielding.
Weaknesses: Some 2nd growth.

A96104-2 - Long Russet. Parentage (A88236-4 x A89512-3). Cross was made and selected in Aberdeen. Medium-late maturity. Medium vine size. Red-purple flower color.

Uses: Dual.
Strengths: Nice.
Weaknesses: Powdery scab, late, small, poor shape, Rhizoctonia, poor skin light skin, smooth, blocky, heat sprouts, drop.

A96741-1R - Red. Parentage (IdaRose x NDO2686-6R). Cross was made and selected in Aberdeen. (Dropped From Program).

Uses: Fresh.
Strengths:
Weaknesses:

A96510-4Y - Oblong Light Russet. Parentage (PA92A17-6 x A91194-4). Cross was made and selected in Aberdeen. Medium maturity. Medium-large vine size.

Uses: Dual.
Strengths: Large tubers.
Weaknesses: Rough, feathering, flesh not very yellow, rough, pear shaped, poor shaped, pointed to stem end, drop+++.

A97521-2RY - Red/Yellow. Parentage (SJP/T48YF x A91846-5R). Cross was made and selected in Aberdeen. (Dropped From Program).

Uses: Specialty.
Strengths:
Weaknesses:

A98445-2RY - Oblong Red/Yellow. Cross was made and selected in Aberdeen. (Dropped from program).

Uses: Specialty.
Strengths: Good red skin following storage.
Weaknesses: Can have indent on bud end of tuber.

A99331-2RY - Oblong Red/Yellow. Parentage (Inca Gold x COA94019-5R). Cross was made and selected in Aberdeen.

Uses: Specialty.
Strengths: Mottled or splashed red & yellow skin, deep yellow flesh.
Weaknesses: Possibly too small of tuber size.

A99433-5Y - Oblong White/Yellow. Parentage (Chipeta x MSG274-3). Cross was made and selected in Aberdeen.

Uses: Specialty.

Strengths: Nice type-light yellow flesh, high yield and gravity.
Weaknesses: scab susceptible; poor processor.

AC96052-1RU - Oblong Russet. Parentage (A81386-1 x A9014-2). Cross was made in Aberdeen and selected in Colorado. Medium maturity. Large vines. Purple flower color.

Uses: Dual.

Strengths: Nice, nice shape, heavy set, smooth, BOT.

Weaknesses: Small, heat necrosis, late, pear shaped, heat sprouts, drop.

AC97097-14W - Oblong White. Parentage (Brodick x A91746-8). Cross was made in Aberdeen and selected in Colorado. Medium maturity. Medium size vines. Purple flower color.

Uses: Chip.

Strengths: Nice interior, good, nice, uniform nice shape.

Weaknesses: Variable shape, road map, yield-, hollow heart++, buff, poor internals, 20% Zebra.

AC97521-1R/Y - Oblong Red/Yellow. Parentage (SJP/T48YF x A91846-5R). Cross was made in Aberdeen, and selected in Colorado. Medium maturity. Large vine. Red-purple flower color.

Uses: Specialty.

Strengths: Nice shape, dark yellow flesh, nice flesh.

Weaknesses: Flat, poor shape, pointed to stem end, buff skin on stem end, rough, feathering, heat sprouts, chain tubers, road map drop++.

All Blue - Oblong Purple. Parentage (Unknown). Medium-late maturity. Medium- large vine size. Blue flower color.

Uses: Specialty.

Strengths:

Weaknesses: Rough shape, small tubers, road map, stem attachments, center pith and cortex is white, purple flesh color more intense at eyes, poor shaped, road map, buff very late, heat sprouts, second growth, chain tubers, rough, pointed, dog, drop.

AO96141-3 - Long Russet. Parentage (A89222-3 x COA90064-6). Cross was made and selected in Aberdeen. Medium maturity. Medium-large vines. White flower color.

Uses: Dual.

Strengths:

Weaknesses: Small, skinny, heat sprouts, pointed to apical, knobs drop.

AO96160-3 - Oblong Russet. Parentage (A89384-10 x A89512-3). Cross was made in Aberdeen and selected in Corvallis, Oregon. Medium-late maturity. Medium-large vine size. Red-purple flower color.

Uses: Dual.

Strengths: Nice interior, not bad, blocky, heavy set, nice shape.

Weaknesses: Late, rough, heats sprouts, small, heat sprouts, drop.

AO96164-1 - Long Russet. Parentage (A89384-10 x A91194-4). Cross was made in Aberdeen and selected in Oregon. Medium maturity. Medium vine size. White flower color.

Uses: Dual.

Strengths:

Weaknesses: Growth cracks, pointed to stem end, pointed to bud end, poor shape, skinny, flat, rough, poor shape, curved, drop.

AOA95154-1 - Long Russet. Parentage (Bannock x A89152-4). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Aberdeen. Medium-early maturity. Medium-large vine size. Medium-purple flower color.

Uses: Dual.

Strengths: Nice, nice white flesh, blocky.

Weaknesses: Small, heat sprouts, late, B size tubers did not size drop.

AOA95155-7 - Long Russet. Parentage (Bannock x A89163-3LS). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Aberdeen. Medium-late maturity. Small vine size. Red-purple flower color.

Uses: Dual.

Strengths: Nice white flesh, good processor, resistant to blackspot bruise, BOT.

Weaknesses: Pointed to apical end, growth cracks, heat sprouts, very late, feathering, poor shape, small, drop.

AOTX02019-1Ru - Oblong Russet. Parentage (A92030-4 x A97201-4). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths: Nice, heavy set, blocky.

Weaknesses: Small, sprouts, poor internals, 60 % internal discoloration, drop? +.

AOTX02060-1Ru - Oblong Russet. Parentage (A97201-4 x A93157-6LS). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses:

AOTX02064-2Ru - Oblong Russet. Parentage (A97218-1 x A93187-3). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths: Nice, blocky.

Weaknesses: Hollow heart, light skin, growth cracks, bud cracks drop+++.

AOTX02066-1Ru Oblong Russet. Parentage (A97218-1 x A97201-4). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses:

AOTX02136-1Ru - Oblong Russet. Parentage (A96563-8 x A92030-5). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses:

Strengths: Nice, uniform, yield+, fat tubers, nice shape, smooth, keep, BOT.

Weaknesses: Blocky pointed, light skin, small, poor yield, some pointed, mix, rough, pointed to stem end.

AOTX02197-1Ru - Oblong Russet. Parentage (AOA95154-1 x A9014-2). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses: Blocky.

AOTX02206-5Ru - Oblong Russet. Parentage (AOA95155-7 x AOA95154-1). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths: Nice shape.

Weaknesses:

AOTX03096-1Ru Oblong Russet. Parentage (A97198-15 x A92030-5). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses

AOTX03134-1Ru Oblong Russet. Parentage (A98082-17 x AC93026-9RU). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses

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

Uses: Fresh.

Strengths: Nice net, very nice appearance, nice interior, uniform, longer than Norkotah, nice yield+, BOT++.

Weaknesses: Blocky, rough, tuber moth, Rhizoctonia, some curved and pointed, some shriveling, small tubers.

AOTX95265-2ARu - Long Russet. Parentage (A89216-9 X A86102-6). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths: OK, nice heavy net, nice shape, keep, BOT.

Weaknesses: Deeper eyes, pointed to apical end, pointed to stem end, some curved, feathering, blocky, rough, heat necrosis, flat, poor shape, crooked dumb bell, bud cracks apical green head.

AOTX95265-2Ru - Long Russet. Parentage (A89216-9 X A86102-6). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths: Yield.

Weaknesses:

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

Uses: Fresh.

Strengths: Very nice, good internal, some large tubers, yield+, nice shape, nice internals BOT.

Weaknesses: Rhizoctonia, rough, blocky, heat sprouts, small tubers, variable size tubers, sprouts, some shriveling, ugly net on stem end, hollow heart, pointed, curved, poor shape+, greening++, too long, points, small, rough, curved, skinny, drop+.

AOTX95265-4Ru - Long Russet. Parentage (A89216-9 x A86102-6). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Medium-late maturity. Medium-large vine size. White flower color.

Uses: Fresh.

Strengths: Nice, good internal, hollow heart resistant, longest clone, flesh whiter than Norkotah, BOT.
Weaknesses: Rhizoctonia, nipple knobs, some crooked, bruising, some greening, a little rough, skinny, pointed feathering, greening, bud cracks, drop+.

AOTX95269-1Ru - Long Russet. Parentage (A89296-3 x A89804-7). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Medium-maturity. Large vine size.

Uses: Fresh.

Strengths: Yield, will store, nice, large tubers, yield+, BOT.

Weaknesses: Rough, blocky, pointed, ugly, some shape problems, stem end bruise, some shriveling, curved tubers, pointed, rough, small, drop?.

AOTX95295-1Ru - Long Russet. Parentage (A89804-7 x Ranger Russet). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Medium-early maturity. Large vine size.

Uses: Fresh.

Strengths: Very nice, good internal, uniform, BOT++.

Weaknesses: Heat sprouts, Rhizoctonia, skinny tubers, some shrinking, sugar end, pointed, curved, pointed to apical end rot, rough, uneven net, pointed to bud end, hollow heart, bud cracks, 15% heat necrosis, drop?.

AOTX95295-3Ru - Long Russet. Parentage (A89804-7 x Ranger Russet). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Early maturity. Medium vine size.

Uses: Fresh.

Strengths: Good shape and internal, some very large tubers, longer than Norkotah, uniform, keep, BOT+++.

Weaknesses: Some rot, blocky, Rhizoctonia, not as nice as other selections, hollow heart, smaller, poor net too long, pointed, curved, rough, yield-, greening, curved, skinny, drop?.

AOTX95309-1W - Oblong White. Parentage (A9055-8LS x A89163-3LS). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Medium maturity. Large vine size.

Uses: Chip.

Strengths: Yield, nice internal, candidate, very uniform, to SWR, excellent internals, BOT+++.

Weaknesses: Heat sprouts.

AOTX95309-2W - Long White. Parentage (A9055-8LS x A89163-3LS). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Late maturity. Large vine size.

Uses: Chip.

Strengths: Nice shape, nice interior, candidate.

Weaknesses: Rough, heat sprouts, variable size, heat necrosis, small (dropped).

AOTX95309-3W - Oblong White. Parentage (A9055-8LS x A89163-3LS). Cross was made in Aberdeen, produced in Oregon, and selected in Texas. Late maturity. Large vine size.

Uses: Chip.

Strengths: Nice shape, nice interior, yield+, uniform, to SWR excellent internals, BOT+++.

Weaknesses: Rhizoctonia, sprouts, heat sprouts, rough, green head, feathering, lenticels, drop.

AOTX96075-1Ru - Long Russet. Parentage (A84118-3 x A89384-10). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Medium-early maturity. Large vine size.

Uses: Fresh.

Strengths: Nice shape and internals, good yield, nice++, longer than Norkotah, yield+, fat tubers large tubers keep BOT+*.

Weaknesses: Variable size, little rough, some dry rot, shape not as nice curved, heat sprouts, small, blackspot bruise??, some pointed to apical end, Rhizoctonia, heat necrosis, bud cracks, poor shape, deep eyes, pointed to bud end, drop+.

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

Uses: Fresh.

Strengths: OK, nice shape and internal, yield+, nice +, better than Norkotah, fat, nice shape keep, BOT.

Weaknesses: Little short, rough, rot, blocky, lenticels, Rhizoctonia, small, heat sprouts, blackspot bruise, heat necrosis drop?.

AOTX96208-1Ru - Long Russet. Parentage (A9057-7 x A91194-3). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Early maturity. Large vine size.

Uses: Fresh.

Strengths: Nice, good internal, large tubers, nice shape, smooth yield+, BOT.

Weaknesses: Heat sprouts, pointed, poor shape, crooked, rough, blocky, variable size, knobs, very long, some curved and pointed, Rhizoctonia, blocky, close set deep eyes, drop?+++.

AOTX96216-1Ru - Long Russet. Parentage (A9082-2 x A86102-6). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Medium-early maturity. Large vine size.

Uses: Fresh.

Strengths: Nice shape and internal, nice, keep, large tubers, BOT.

Weaknesses: Heat sprouts, little rough, small secondary tubers at eye, heat necrosis, curved, so so, pointed, feathering ugly, poor shape, Rhizoctonia, skinny, curved, rough poor skin, culls++, drop+++.

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

Uses: Fresh.

Strengths: Nice, nice internal, nice shape, fat, nice shape, large tubers, yield+ keep, BOT.

Weaknesses: Heat sprouts, rot, Rhizoctonia, some rot, rough, poor shape, late, 10% heat necrosis, curved, pointed, skinny, drop.

AOTX96216-3Ru - Oblong Russet. Parentage (A89216-9 x A86102-6). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Medium maturity. Medium-large vine size.

Uses: Fresh.

Strengths: Very nice smooth, nice shape and size, keep, BOT.

Weaknesses: Rot, rough, poor shape, knobs, clunker, late, some pointed to apical end, curved, small, blocky, yield-, drop?.

AOTX98096-1Ru - Oblong Russet. Parentage (Shepody x A92158-3). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Medium-early maturity. Large vine size.

Uses: Fresh.

Strengths: Yield, nice shape and internal, very long, fat tubers, yield+, nice, keep, BOT.

Weaknesses: Some rot, blocky, poor shape, small tubers, rough, pointed, skinny, drop++?.

AOTX98137-1Ru - Oblong Russet. Parentage (A8670-7 x A9310-1). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas. Early maturity. Medium-large vine size.

Uses: Fresh.

Strengths: Very nice, nice shape and internal, BOT for shape, uniform, smooth, keep, BOT+.

Weaknesses: Smaller, rot, blocky, heat necrosis, shrinkage, different, small, short, some pointed to stem end, pointed, rough poor shape, curved drop.

ATC98444-1R/Y- Oblong Red/Yellow. Parentage (A83350-9R x T48YF). Cross was made in Aberdeen, tuberling produced in Texas, Texas and selected in Colorado.

Uses: Specialty.

Strengths: Nice shape and flesh.

Weaknesses: Pale red skin, very late, slight road map, close set, drop.

ATC98495-1W/Y - Oblong White/Yellow. Parentage (P94A2-4Y x A89655-5DY). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Colorado.

Uses: Specialty.

Strengths: Nice shape and flesh.

Weaknesses: Poor skin, late, chain tubers, knobs, small, heat sprouts, poor shape, rough, second growth, red splash eyes, eye tubers, drop++.

ATC98509-1R/Y - Oblong Red/Yellow. Parentage (T48YF x A92657-1R). Cross was made in Aberdeen, tuberling produced in Texas, Texas and selected in Colorado.

Uses: Specialty.

Strengths: Nice shape, many small tubers.

Weaknesses: Pale red skin, late, flat, poor shape.

ATDC9801-3P - Round Purple. Parentage (Ivory Crisp x A86SXD6-7). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Colorado.

Uses: Chip.

Strengths: Purple skin chipper, nice internals, heavy set.

Weaknesses: Growth cracks, light red skin, buff, rough, skin color faded, road map.

Atlantic - Round White. Parentage (Wauseon x B5141-6). Cross was-made in Beltsville, Maryland, and selected in Maine. Released in 1976 by USDA-ARS, Florida, Virginia, New Jersey and Maine Agricultural Experiment Stations. Medium maturity. Medium vine size. Pale lavender flower color.

Uses: Chip.

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

Weaknesses: Very susceptible to internal heat necrosis, particularly in sandy soils in warm, dry seasons, susceptible to hollow heart, shatter bruise, Rhizoctonia and storage rots, buff skin 10 % Zebra.

ATTX01175-1R - Oblong Red. Parentage (MN17922 x Mazama). Cross was made in Aberdeen, tuberling produced in Texas and selected in Texas.

Uses: Fresh.

Strengths: Nice color, good shape, small tubers, smooth skin, BOT-.

Weaknesses: Vascular discoloration, feathering, stolons, poor shape, drop++++.

ATTX01180-1R - Round Red. Parentage (ND5084-3R x A92657-1R). Cross was made in Aberdeen, tuberling produced in Texas and selected in Texas.

Uses: Fresh

Strengths: Nice flesh, nice shape, nice appearance.

Weaknesses: Large tubers are rough, poor internals, drop.

ATTX01180-4R - Round Red. Parentage (ND5084-3R x A92657-1R). Cross was made in Aberdeen, tuberling produced in Texas and selected in Texas

Uses: Fresh

Strengths: Nice shape and skin.

Weaknesses: Vascular discoloration, feathering silver scurf, rough, close set, drop.

ATTX8823-2W - Round White. Parentage (ND2051-1Ru x A7961-1). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas. Medium maturity. Large vine size.

Uses: Chip.

Strengths: Nice, candidate, BOT++.

Weaknesses: Oversize, poor shape, a little rough, stem attachment.

ATTX88654-3W/RE/Y - Oblong Red. Parentage (PI343201 x Gurney's Purple 1). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas. Early maturity. Medium vine size.

Uses: Fresh/Specialty.

Strengths: Smooth, nice++, nice flesh, very yellow, purple eyes, keep, BOT.

Weaknesses: Poor skin, light russet at apical end, rough shape heat sprouts drop++.

ATTX95490-2W - Oblong White. Parentage (Red LaSoda x A89655-5DY). Cross was made in Aberdeen, tuberling produced in Texas and selected in Texas.

Uses: Chip.

Strengths: Yield+.

Weaknesses: Oversize, rough, poor shape, 32% Zebra, heat sprouts, stem attachments, drop++++.

ATTX961014-1AR/Y - Oblong Red/Yellow. Parentage (A90601-2RDY X MAZAMA). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Specialty.

Strengths: Nice shape, skin and flesh keep, BOT.

Weaknesses: Road map, yellow flesh with some purple vascular color, heat sprouts, road map pointed slight road map heat sprouts at apical end.

ATTX961014-1R/Y - Oblong Red/Yellow. Parentage (A90601-2RDY X MAZAMA). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Specialty.

Strengths: Nice internal, Spec/High AntiOx, To WR, keep++, BOT.

Weaknesses: Lenticels, road map+, silver scurf+, heat sprouts, large eye brows, drop.

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

Uses: Specialty.

Strengths: Nice skin and flesh, heavy set boiler, keep, BOT-.

Weaknesses: Small, pointed to stem end, silver scurf, road map, poor internals++, scale, heat sprouts, drop.

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

Uses: Fresh.

Strengths: Nice white interior, smooth skin, nice shape To WR, BOT.

Weaknesses: Flat, stem end rot, will shrivel, skinning, some buff skin deep eyes, some russetting, mix.

ATX98462-3R/Y - Oblong Red. Parentage (ATD251-5RY X BO811-13RY). Cross was made in Aberdeen, tuberling produced in Texas and selected in Texas.

Uses: Specialty.

Strengths: Keep, large tubers, nice size and shape. Yield+, smooth, keep, BOT,

Weaknesses: Heat sprouts+, road map+, flesh not as yellow, some vascular discoloration.

ATX98462-9R/Y – Round Red, Parentage (ATD251-5RY X BO811-13RY). Cross was made in Aberdeen, tuberling produced in Texas and selected in Texas.

Uses: Specialty.

Strengths: shape and skin, boiler nice flesh

Weaknesses: poor internals++, scale, heat sprouts, road map, silver scurf, drop++.

ATX98466-5R/W-R - Round White. Parentage (ND2051-1Ru x A7961-1). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Chip.

Strengths: Red streak in vascular, nice red skin, nice shape, white/red flesh yield+, keep, smooth.

Weaknesses: Lenticels, flat.

ATX98468-3R/Y - Round Red. Parentage (ATD252-5R X A93457-4R). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Specialty.

Strengths: Very nice flesh, boiler, creamer, heavy set nice, keep, BOT-.

Weaknesses: Cull white fleshed tubers, road map+, silver scurf+, indentation at stem end drop?,

ATX98468-5R/Y - Oblong Red. Parentage (ATD252-5R X A93457-4R). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Specialty.

Strengths: nice flesh, To SWR or WR keep+. BOT

Weaknesses: rough+, feathering++, heat sprouts, rough, oversize, poor shape flat, light red skin, powdery scab, ugly skin, close set, rough, drop+

ATX98471-4R/Y - Round Red. Parentage (ATD252-5R X BO811-13RY). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Specialty.

Strengths: Nice flesh, skin, and shape.

Weaknesses: Heat sprouts, deep eyes, deep stem, indentation at stem end, ugly nose, raised eyes++, deep eyes drop++++.

ATX98491-4YRspl/Y - Oblong Red/Splash. Parentage (P94A2-3Y X A92657-1R). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Specialty

Strengths: Spec/High Anti-Ox keep, red splash, nice interior, nice shape and flesh

Weaknesses: Road map, deep nose.

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

Uses: Specialty.

Strengths: Nice dark flesh, BOT.

Weaknesses: Rough, eye brows, knobs, second growth, some white flesh centers,
Use for extraction, apical buds, drop.

ATX98500-2P/Y - Oblong-Purple/Yellow. Parentage (P94A2-4Y X Granola). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Specialty.

Strengths: Very nice skin, flesh, and shape keep.

Weaknesses: Long stolons, rough, poor shape, deep eyes, lenticels, drop.

ATX98500-3Wpuspl - Oblong-Pinto/Yellow. Parentage (P94A2-4Y X Granola). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Specialty.

Strengths: Smooth, unique appearance, keep, nice flesh, stores well.

Weaknesses: Flat, second growth, late, heat sprouts, pointed, road map, flat, some pointed to stem end, eye tubers, poor shape, drop.

ATX98510-1R/Y - Oblong-Red/Yellow. Parentage (T48YF X A93456-6R). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Specialty.

Strengths: Nice shape, keep, BOT.

Weaknesses: Small tubers road map, silver scurf+, skin not very red, mix, poor shape, rough, growth cracks.

ATX98514-1R/Y - Oblong Red/Yellow. Parentage (T51YF x A93456-6R). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas. Medium maturity. Large vine size.

Uses: Specialty.

Strengths: Flesh color-3.8, nice interior color, hard uniform nice keep, BOT.

Weaknesses: Rough, small tubers, poor flesh, feathering, heat sprouts, silver scurf, deep eyes, stem attachment, bull nose, stem end indentations deep nose, drop+++.

ATX99325-1P – Oblong Purple. Parentage (AGRIA X W1100R). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Specialty.

Strengths: Nice shape and size, BOT.

Weaknesses: Eye brows, heat sprouts, market, feathering+, rough silver scurf+, road map drop.

ATX00144-2R - Round Red. Parentage (Century Russet x A91048-3). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Fresh.

Strengths: Buff skin, nice shape, small tubers, keep.

Weaknesses: Road map ++, shriveled, drop.

ATX00270-2R - Red Round Red. Parentage (CO89097-2 x ND5256-7R). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Fresh.

Strengths: Heavy set, very nice skin set, boiler BOT+++.

Weaknesses: Poor internals, drop.

ATX01180-1R - Oblong Red. Parentage (ND5084-3R x A92657-1R). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.
Strengths: Very nice smooth skin.
Weaknesses: Poor internals, poor shape, heat sprouts.

ATX01188-1R - Oblong Red. Parentage (Amadeus x Winema). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Fresh.
Strengths: Nice color, nice shape, good skin set, nice internals, keep, BOT.
Weaknesses: Poor shape, road map, alligator, drop.

ATX02014-1Ru - Round Red. Parentage (Cruza 148 x Ranger Russ). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Fresh.
Strengths:
Weaknesses

ATX85404-8W - Round White. Parentage (Gemchip x ND860-2). Cross was made in Aberdeen and selected in Texas. Medium-late maturity. Medium-large vine size. White flower color.

Uses: Chip.
Strengths: High yield, good appearance, tubers of uniform size, low sugar accumulation in storage, some scab resistance, excellent color, low glycoalkaloids, can be chipped directly out of storage, smooth skin, nice internal. BOT+++.
Weaknesses: Can develop some hollow heart and is somewhat susceptible to shatter bruise, slight russet patching, susceptible to Rhizoctonia, short tuber dormancy, oversize, heat necrosis.

ATX91137-1Ru - Long Russet, Parentage (A81473-2 x A83343-12). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Flesh.
Strengths: Nice, nice internals, smooth, nice shape, heavy set, blocky, BOT.
Weaknesses: Rough, raised eyes, lots of culls, knobs.

ATX9117-1Ru -Long Russet. Parentage (A8519-4 x A84727-62). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh
Strengths:
Weaknesses: Rough, knobs, hollow heart, poor shape, poor skin, lenticels, growth cracks, small, blocky, bud cracks, drop++.

ATX9130-1Ru - Long Russet. Parentage (A8611-10 x A85103-3). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.
Strengths: Nice, uniform, nice shape.
Weaknesses: Flat, skinny, pointed, hollow heart, poor skin, poor shape, light russet, blocky, knobs, drop+++.

ATX9202-1Ru - Long Russet. Parentage (A8343-12 x A8495-1). Cross was made in Aberdeen and selected in Texas. Medium maturity. Large vine size.

Uses: Fresh.
Strengths: Nice shape, uniform nice internals+, BOT-.

Weaknesses: Misshapen, growth cracks, knobs, blocky, rough, some rot, poor shape, poor internal, knobs++, so so, deep eyes poor skin, pointed, drop.

ATX97147-4Ru - Long Russet. Parentage (A79180-10 x A88236-6). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses: Growth cracks, knobs, hollow heart, pointed, rough, small, poor shape, light russet, poor internal, poor skin drop++.

ATX97195-1Ru - Oblong Russet. Parentage (A89149-7 x A88236-6). Cross was made in Aberdeen and selected in Texas. Medium-early maturity. Large vine size.

Uses: Fresh.

Strengths: Very nice, nice internal, yield+, BOT.

Weaknesses: Rough, rot, poor shape, smaller, pointed, curved, apical nipples, heat necrosis, blocky, hollow heart, road map, green head yield-, internal??. drop.

ATX99331-1Pu/Y - Round-Oblong Purple/Yellow. Parentage (INCA GOLD X COA94019-5R). Cross was made in Aberdeen and selected in Texas.

Uses: Specialty.

Strengths: Nice shape and flesh keep+.

Weaknesses: Road map, alligator, eye tubers, deep eyes, drop++.

B0766-3T - Round White. Parentage (B0243-18 x Costal Chip). Cross was made and selected in Beltsville, Maryland. Medium-early maturity. Medium vine size. White flower color.

Uses: Chip.

Strengths: Nice, yield, nice interior, uniform, buff, yield+, nice internals, BOT++.

Weaknesses: Rhizoctonia, rough, internal browning, bud cracks.

BTX1544-2W/Y - Oblong White/Yellow. Parentage (BO811-13 x Yukon Gold). Cross was made in Beltsville, Maryland and selected in Texas. Medium maturity. Medium vine size.

Uses: Specialty.

Strengths: Nice, good color, nice interior, nice yellow flesh, BOT+++.

Weaknesses: Greenhead, pear shape, Rhizoctonia, rough, pointed to stem end, enlarged lenticels, growth cracks, rot, pointed to apical end, rough++, variable shape, oversize, buff, greening.

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

Uses: Specialty.

Strengths: Nice, Flesh color-3.0, good yield, nice shape nice skin, To SW or WR keep BOT++.

Weaknesses: Feathering, rough, greening.

BTX2332-1R - Round Red. Parentage (B1523-4 x Super Red Norland). Cross was made in Beltsville, Maryland and selected in Texas. Medium maturity. Large vine size.

Uses: Fresh.

Strengths: Very nice, nice interior, nice shape, early, heavy set smooth, TO SW or WR, keep, BOT++.

Weaknesses: Road map Rhizoctonia, feathering, poor internals, light skin color, buff.

Century - Long Russet. Parentage (A6789-7 x A6680-5). Cross was made and selected in Aberdeen, Idaho. Released in 1995 by USDA-ARS, California, Colorado, Oregon, and Texas Agricultural Experiment Stations. Medium-late maturity. Large vine size. White flower color.

Uses: Fresh

Strengths: High yield, resistance to early dying

Weaknesses: Medium to low specific gravity, dark fry color from 45° storage, susceptibility to shatter bruise, pointed at stem end, light russet, sometimes difficult to set skin, susceptible to tuber infection by early blight, highly susceptible to Fusarium dry rot, green heads, fine net, susceptible to Rhizoctonia, rough, skinny, pointed, knobs bruised ends, low gravity.

Chipeta - Oblong White. Parentage (WNC612-13 x Wischip). Cross was made in Aberdeen and selected in Colorado. Released by USDA-ARS, Aberdeen, and Colorado Agricultural Experiment Stations. Late maturity. Large vine size. Red-Reddish purple corollas and large yellow anthers.

Uses: Chip and French fries.

Strengths: High yield potential, high specific gravity and low sugar accumulation in storage, will occasionally chip out of 40° storage, resistant to most internal and external defects including second growth, growth cracks, hollow heart, heat necrosis and blackspot bruises. Also resistant to leaf roll- induced net necrosis, Verticillium wilt, and both foliar and tuber phases of early blight BOT-++.

Weaknesses: Irregular shape, may oversize, buff skin, variable tuber size, skin feathering, some russet patches, green heads, susceptible to Rhizoctonia, common scab, and Fusarium dry rot, late maturity, deep eyes, 20% Zebra.

CO94035-15RU - Long Russet. Parentage (AO80432-1 x Silverton Russ). Cross was made and selected in Colorado. Medium maturity. Medium vine size. White flower color.

Uses: Dual.

Strengths: Nice, heavy set.

Weaknesses: Rot, curved tuber, flat, poor shape, Rhizoctonia, pronounced lenticels, ugly net, late, pointed, ugly net, heat spouts, crooked, blocky, skinny, drop.

CO95051-7W - Round White. Parentage (AC88456-6 x BC0894-2). Cross was made and selected in Colorado. Medium maturity. Medium vine size. Purple flower color.

Uses: Chip.

Strengths: Nice, nice shape, heavy set nice internals.

Weaknesses: Long stolons, poor internals, heat necrosis, stem end discoloration, some internal greening, 40% Zebra.

CO95172-3RU - Oblong Russet. Parentage (Russet Nugget x AC88165-3). Cross was made and selected in Colorado. Medium maturity. Large vine size. Red-purple flower color.

Uses: Fresh.

Strengths: Nice shape, heavy set, nice interior, light skin.

Weaknesses: Pointed to stem end, poor shape, small, late, Rhizoctonia, pointed, small, feathering, heat sprouts skinny drop.

CO96141-4W - Round White. Parentage (BC0894-2 x AC87340-2). Cross was made and selected in Colorado. Medium-early maturity. Medium-small vine size. White flower color

Uses: Chip.

Strengths: Nice medium size, uniform, nice shape, yield+, BOT.

Weaknesses: Stem end rot, nice, some internal greening.

CO97043-14W - Round White. Parentage (AC91817-5 x AC87340-2). Cross was made in and selected in Colorado. Medium maturity. Medium vine size. White flower color.

Uses: Chip.

Strengths: Very good, nice flesh and shape, uniform, yield, BOT.

Weaknesses: Deep nose, flat chain tubers, rough stem attachment.

CO97065-7W - Round White. Parentage (AC92513-3 x Chipeta). Cross was made in and selected in Colorado. Medium maturity. Medium vine size. Red-purple flower color.

Uses: Chip.

Strengths: Buff uniform, nice excellent internals, BOT+++.

Weaknesses: Flat, feathering, some internal greening, growth cracks, oversized, 10 % zebra.

CO97087-2RU - Oblong Russet. Parentage (CO87009-4 x W1005). Cross was made and selected in Colorado.

Uses: Fresh.

Strengths: Nice, nice internals.

Weaknesses: Flat, rough, road map, close set, small, pointed, drop++.

CO97090-4RU - Oblong Russet. Parentage (CO89036-10 x AC91579-4). Cross was made and selected in Colorado.

Uses: Fresh.

Strengths: Nice shape, nice internals.

Weaknesses: Small, poor skin, feathering, close set, blocky, pointed drop+++.

CO97137-1W - Oblong White. Parentage (NDO2904-7 x AC89047-1). Cross was made and selected in Colorado. Early maturity. Medium-small vine size. White flower color.

Uses: Fresh.

Strengths: Smooth, nice shape, BOT.

Weaknesses: Pointed to apical end, skinny, slight stem end discoloration, pointed to stem end, small, flat, skinny, drop.

CO97138-3RU - Oblong Russet. Parentage (NDO2904-7 x CO90052-1). Cross was made and selected in Colorado.

Uses: Fresh.

Strengths: Very nice, nice interior, yield, BOT of all Colorado entries.

Weaknesses: Poor and variable shape, some road map.

CO97138-7RU - Oblong Russet. Parentage (NDO2904-7 x CO90052-1). Cross was made and selected in Colorado.

Uses: Fresh.

Strengths: Nice, nice internals.

Weaknesses: Flesh not very white, heat sprouts, poor shape, curved, poor skin, rough, pointed.

CO97215-2P/P - Oblong Purple/Purple. Parentage (CO94163-1 x CO94183-1). Cross was made in Colorado and selected in Colorado.

Uses: Specialty.

Strengths: Nice shape and flesh.

Weaknesses: Road map, heat sprouts, late, rough, eye tubers, drop.

CO97222-1R/R - Oblong Red/Red. Parentage (CO94170-1 x CO94183-1). Cross was made in and selected in Colorado.

Uses: Specialty.

Strengths:

Weaknesses: Eye brows, rough, very buff skin, ugly bud end, ugly nose, drop++.

CO97226-2R/R - Round Red/Red. Parentage (CO94183-1 x CO94214-1). Cross was made in and selected in Colorado. Early maturity. Medium-large vine size. White flower color.

Uses: Specialty.

Strengths: Nice internal, nice shape.

Weaknesses: Late, road map, buff, many small tubers, drop.

CO97227-2P/PW - Oblong Purple/Purple. Parentage (CO94183-1 x CO94215-1). Cross was made in Colorado and selected in Colorado.

Uses: Specialty.

Strengths: Smooth very dark flesh solid flesh color keep for extraction.

Weaknesses: Flesh color variable from all purple to purple with white, long stolons, late rough, dog, drop.

CO97232-1R/Y - Oblong-Red/Yellow. Parentage (CO94218-1 x VC0967-2). Cross was made and selected in Colorado. Medium- early maturity. Medium vine size. Purple flower color.

Uses: Specialty.

Strengths: Nice color, very nice flesh, nice smooth skin.

Weaknesses: Road map, poor shape, poor flesh color, feathering, pointed to stem end, flat, not dark skin or flesh poor skin set.

CO97232-2R/Y - Round-Red/Yellow. Parentage (CO94218-1 x VC0967-2). Cross was made and selected in Colorado. Medium maturity. Medium vine size. Red-purple flower color.

Uses: Specialty.

Strengths: Nice shape, buff, nice internal, BOT.

Weaknesses: Ugly net, road map, poor shape, pointed to stem end, poor skin, drop.

CO97233-3R/Y - Oblong-Red/Yellow. Parentage (CO94218-1 x VC0967-5). Cross was made and selected in Colorado. Medium-late maturity. Medium vine size. Red-purple flower color.

Uses: Specialty.

Strengths: Nice yellow flesh, nice internal, many tubers.

Weaknesses: Hollow heart, growth crack, too large, feathering, poor shape, pointed, severe road map, green sprout, Klondike type, road map, close set, pear shaped, pointed to stem end, drop+.

CO97274-2W/Y - Oblong White/Yellow. Parentage (Agria x CO94161-2). Cross was made in and selected in Colorado.

Uses: Specialty.

Strengths: Nice shape, flesh, and skin, nice, internal color same as Yukon.

Weaknesses: Flat, rough poor shape, ugly nose, drop.

CO98012-5R - Oblong Red. Parentage (A79543-4R x AC91844-2). Cross was made in and selected in Colorado.

Uses: Fresh.

Strengths: Nice shape and color, smooth.

Weaknesses: Long stolons, indentation at stem end, road map, buff.

CO98277-4W - Oblong White. Parentage (CO92060-1 x NDA2031-2). Cross was made in and selected in Colorado.

Uses: Chip.

Strengths: Nice shape and flesh uniform, nice, nice internals.

Weaknesses: Heat sprouts, growth cracks, small flat, yield-.

COA96142-3C - White. Parentage (BC0894-2 x Ivory Crisp). Cross was made in Colorado and selected in Aberdeen. (Dropped from Program).

Uses: Chip.

Strengths:

Weaknesses:

COA96741-2C - White. Parentage (BC0894-2 x AC87340-2). Cross was made in Colorado and selected in Aberdeen. (Dropped from Program).

Uses: Chip.

Strengths:

Weaknesses:

COTX00104-6R – Oblong Red. Parentage (ND3574-5R x C086218-2). Cross was made in Colorado and selected in Texas. Medium-early maturity. Medium vine size.

Uses: Fresh.

Strengths: Nice skin and shape yield+, smooth.

Weaknesses: Short dormancy, Rhizoctonia, road map, drop for poor internals, late, growth cracks, shape-, alligator skin, small, rough, nipples at stem end silver scurf, drop++.

COTX00290-3R - Round Red. Parentage (CO94019-1R XCO89097-2R). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths: Keep, nice shape and flesh.

Weaknesses: Road map, russetting, poor skin, small, alligator, drop++++.

COTX00328-1Pu/Ypu - Oblong Purple. Parentage (ATD252-5R X BO811-13RY). Cross was made in Colorado and selected in Texas.

Uses: Chip.

Strengths: Nice shape and skin, yellow with purple flesh, keep.

Weaknesses: Rough, vascular ring, road map, buff, knobs.

COTX00411-4R - Oblong Red. Parentage (German Butterball X NDC5281-2R). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths: Nice shape, skin and flesh, heavy set, 'b' and 'c' size keep, TC, BOT.

Weaknesses: Silver scurf+, deep nose+, poor shape shriveled, drop+++?.

COTX01339-4W - Round White. Parentage (ND6961B-1R x A85530-10W). Cross was made in Colorado and selected in Texas.

Uses: Chip.

Strengths: Yield+, excellent internals, nice shape and skin.

Weaknesses: Rough, flesh more yellow, some internal defects, pointed to stem end, pear shaped flat, hollow heart, poor shape, pear shape, knobs.

COTX01403-4R/Y - Oblong Red/Yellow. Parentage (VC1015-7R/Y x Winema). Cross was made in Colorado and selected in Texas.

Uses: Specialty.

Strengths: Nice shape and flesh, smooth internals++, keep TC BOT+.

Weaknesses: Road map, silver scurf, pale red skin, heat sprouts, yield-, light red skin, low yield.

COTX02038-1R - Round Red. Parentage (A92653-6R x CO94019-1R). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths: Nice skin, flesh, and shape.

Weaknesses:

COTX02041-1R - Oblong Red. Parentage (A92653-6R x NDC5281-2R). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths: Very nice.

Weaknesses: Shriveled, road map, small tubers, drop+++.

COTX02056-1Ru - Long Russet. Parentage (A93004-3RU x CO94084-12RU). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses: Skinny small, pointed, dumb bell, light skin, poor internals, feathering, drop++++.

COTX02172-1R - Oblong Red. Parentage (CO94065-2R x ND3574-5R). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths: Nice, yield+, very nice, nice internals, smooth skin, keep.

Weaknesses: Shriveled, road map, some red streaks in the flesh slight purple in vascular.

COTX02175-6AR - Oblong Red. Parentage (CO94065-2R x NDTX4304-1R). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses: Feathering, shriveled.

COTX02175-6BR - Oblong Red. Parentage (CO94065-2R x NDTX4304-1R). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses: Feathering, shriveled

COTX02203-3Ru - Oblong Russet. Parentage (CO95007-1RU x CO96109-7RU). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths: Nice.

Weaknesses: Yield-, small, poor skin, drop+++.

COTX02203-5Ru - Oblong Russet. Parentage (CO95007-1RU x CO96109-7RU). Cross was made in Colorado and selected in Texas.

Uses: Chip.

Strengths: Russet skin.

Weaknesses:

COTX02266-1R - Oblong Red. Parentage (ND3574-5R x NDTX4304-1R). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths: Very nice skin, shape, and flesh, very white flesh, keep+, BOT.

Weaknesses: Light red skin, poor shape, silver scurf, nipple at stem, drop?.

COTX02266-2R - Oblong Red. Parentage (ND3574-5R x NDTX4304-1R). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths: Very nice skin, shape, and flesh, c' size, BOT.

Weaknesses: Small, heavy set, poor shape, silver scurf, poor skin, road map drop++.

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

Uses: Fresh.

Strengths: Very nice, nice color, buff, keep.

Weaknesses: Some shriveled and hollow heart.

COTX02294-4R - Oblong Red. Parentage (NDC5281-2R x NDO4323-2R). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths: nice color

Weaknesses: Small and shriveled, poor shape, feathering, alligator, small, drop++.

COTX02305-3R - Oblong Red, Parentage (NDC6184-3R x CO94065-2R). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths: Nice color white flesh fingerling, nice internals.

Weaknesses: Heat sprouts, FC=1.0.

COTX02332-1W - Round White. Parentage (S438 x NDC5372-1RU). Cross was made in Colorado and selected in Texas.

Uses: Chip.

Strengths:

Weaknesses: Vascular discoloration.

COTX02377-1W - Round White. Parentage (Dakota Pearl x Chipeta). Cross was made in Colorado and selected in Texas.

Uses: Chip.

Strengths: Nice skin, flesh, and shape.

Weaknesses: Rough, bud cracks, hollow heart, drop++.

COTX02377-2W - Oblong White. Parentage (Dakota Pearl x Chipeta). Cross was made in Colorado and selected in Texas.

Uses: Chip.

Strengths: Nice flesh, very nice, uniform, large, nice shape and skin, excellent internals++

Weaknesses: Rough, knobs, buff.

COTX02380-3AR - Oblong Red. Parentage (Durango Red x NDC6184-3R). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths: Smooth, BOT+.

Weaknesses: Pointed to apical end, flat, poor internals, drop?.

COTX02380-3BR - Oblong Red. Parentage (Durango Red x NDC6184-3R). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths: BOT+.

Weaknesses:

COTX03194-2W - Oblong Red. Parentage (AC94296-5W x A91790-13). Cross was made in Colorado and selected in Texas.

Uses: Chip

Strengths:

Weaknesses

COTX03194-3W - Oblong Red. Parentage (AC94296-5W x A91790-13). Cross was made in Colorado and selected in Texas.

Uses: Chip

Strengths:

Weaknesses

COTX03254-2R - Oblong Red. Parentage (CO94019-1R x CO97078-5R). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses:

COTX03261-1Ru - Oblong Red. Parentage (CO94084-12RU x A88093-1). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths: BOT+.

Weaknesses

COTX03270-3W - Oblong Red. Parentage (CO95007-1RU x AC96052-1RU). Cross was made in Colorado and selected in Texas.

Uses: Chip.

Strengths:

Weaknesses

COTX03270-4W - Oblong Red. Parentage (CO95007-1RU x AC96052-1RU). Cross was made in Colorado and selected in Texas.

Uses: Chip.

Strengths:

Weaknesses

COTX03285-4Ru - Oblong Red. Parentage (CO96043-5RU x A93157-6LS). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses:

COTX94218-1R - Round Red. Parentage (Red Ruby x Red Gold). Cross was made in Colorado and selected in Texas. Medium maturity. Large vine size.

Uses: Fresh.

Strengths: Nice appearance, nice internals, smooth, keep, nice shape, small tubers, good color heavy set, BOT-.

Weaknesses: Many small tubers, "Joe Allen" type, lenticels, small, road map, skin color faded, slight russet, rough feathering, drop?.

COTX99238-2W - Round-Oblong White. Parentage (ND2676-10 x AC87340-2). Cross was made in Colorado and selected in Texas. Late maturity. Large vine size.

Uses: Chip.

Strengths: Nice shape, very nice flesh, uniform, heavy set, nice shape excellent internals

Weaknesses: yield-, small.

Dark Red Norland - Oblong Red. Parentage (Redkote x ND626). Cross was made and selected in North Dakota. Dark Red Norland is a clonal selection made by Stan Barrett of Texas and propagated by Gene Shaver, Nebraska. Early maturity. Medium vine size. Purple flower color.

Uses: Fresh.

Strengths: Early maturity, dark red tubers, high resistance to PVA and moderate resistance to common scab, PVY and PLRV, nice BOT+.

Weaknesses: Tuber color will fade if allowed to fully mature, tubers exhibit variable tuber color and size, enlarged lenticels, will heat sprout and hollow heart, susceptible to PVS and early and late blights, rough, deep eyes, faded red skin, russetting.

Ivory Crisp - Round White. Parentage (ND292-1 x A77268-4). Cross was made in North Dakota and selected in Corvallis, Oregon. Medium maturity. Medium vine size. White flower color.

Uses: Chip.

Strengths: Nice, BOT. uniform, nice shape, skin, and internals++, BOT+.

Weaknesses: Greenhead, stem end discoloration, powdery scab, poor shape, bud cracks+, 10 % Zebra.

MWTX2609-2Ru - Long Light Russet. Parentage (Russet Burbank x (Ontario x 4 x hybrid). Cross was made by USDA/ARS Madison, Wisconsin and selected in Texas. Late maturity. Large vine size. White flower color.

Uses: Fresh.

Strengths: Nice, high yield, long, light net, BOT- for interior, yield+, nice internals.

Weaknesses: Pointed, rough, feathering, cone shaped, poor shape, knobs, eye knobs, century like, pointed to stem end, skinny rough, curved feathering drop+++.

MWTX2609-4Ru - Long Light Russet. Parentage (Russet Burbank x (Ontario x 4 x hybrid). Cross was made by USDA/ARS Madison, Wisconsin and selected in Texas. Late maturity. Large vine size. White flower color.

Uses: Fresh.

Strengths: Yield, nice internal, yield+.

Weaknesses: Rot, eye bulge, light russet, rough, pointed, poor shape and net, eyes a little deep, heat sprouts, pointed to stem end, stem nipples, not as long as -4, poor shape, feathering, heat sprouts, bad sprouting, feathering, rough, curved, low gravity, pointed drop++++.

MWTX395-1W - Long Light Russet. Parentage (Snowden x 03-349-11). Cross was made by USDA/ARS Madison, Wisconsin and selected in Texas

Uses: Chip.

Strengths:

Weaknesses:

NDA5507-3YF (Yukon Gem) - Oblong White with pink eye. Parentage (Brodick x Yukon Gold). Cross was made in North Dakota and selected in Alberta. Medium-early maturity. Medium vine size. Red-purple flower color

Uses: Specialty.

Strengths: White with pink eyes, nice shape. Late blight resistant in foliage and tuber; PVY resistant; better scab resistance than Yukon Gold

Weaknesses: Red eyes, poor shape, enlarged lenticels, flat, stem attachment heat sprouts, flesh color-1.6, many small tubers, not that yellow flesh, nipple knobs at stem end, Rhizoctonia, large lenticels, feathering, pointed to stem end, buff, drop.

NDA7683C-1C - White. Parentage (ND5822C-7 x Picasso). Cross was made in North Dakota and selected in Aberdeen.

Uses: Specialty-Fresh pack

Strengths: High yield; good type and tuber uniformity

Weaknesses: Does not process

NDTX028742-1P/P - Oblong Purple/Yellow-Purple. Parentage (MSI201-2PY x Dakota Rose). Cross was made in North Dakota and selected in Texas.

Uses: Specialty.

Strengths: Yellow flesh with purple streaks.

Weaknesses:

NDTX039096-1R, - Oblong Red. Parentage (ND 4944-3R x ND 8089-2R). Cross was made in North Dakota and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses:

NDTX039190-1R - Oblong Red. Parentage (ND 8089-2R x ND 4659-5R). Cross was made in North Dakota and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses:

NDTX039191C-1R - Oblong Red. Parentage (ND 8089-2R x ND 7525C-2R). Cross was made in North Dakota and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses:

NDTX039191C-2R - Oblong Red. Parentage (ND 8089-2R x ND 7525C-2R). Cross was made in North Dakota and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses:

NDTX049263-1R - Oblong Red. Parentage (ATND 98450-1R x ND 8383-.1R). Cross was made in North Dakota and selected in Texas.

Uses:.

Strengths:.

Weaknesses:

NDTX049265-2W - Oblong White. Parentage (ATND 99331-2 Pinto x Dakota Rose). Cross was made in North Dakota and selected in Texas.

Uses: Chip.

Strengths:

Weaknesses:

NDTX049349-10R - Oblong Red. Parentage (ND 4659-3R x Dakota Jewel). Cross was made in North Dakota and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses:

NDTX049368-2R - Oblong Red. Parentage (ND 5002-3R x ND 7987-1R). Cross was made in North Dakota and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses:

NDTX4271-5R - Round Red. Parentage (NDTX9-1068-1R x ND2050-1R). Cross was made in North Dakota and selected in Texas. Early to medium maturity. Medium vine size.

Uses: Fresh.

Strengths: Good color and shape, lots of small round tubers yield+, color+, very nice, nice interior, BOT. very white flesh

Weaknesses: Can have buff skin, heat sprouts, Rhizoctonia, road map, buff oversized, heat sprouts.

NDTX4756-1R/Y - Oblong-Red/Yellow. Parentage (3451-14R X 1618-13R). Cross was made in North Dakota and selected in Texas.

Uses: Specialty.

Strengths: Nice shape and flesh, yield+, keep, BOT+++.

Weaknesses: Zippered, small tubers, poor flesh, road map, oversize, silver scurf, mix yield-, light redskin, heat sprouts skin drop++.

NDTX4784-7R - Round Red. Parentage (ND3574-5R x ND2050-1R). Cross was made in North Dakota and selected in Texas.

Uses: Fresh.

Strengths: Nice, very nice TC, to WR, BOT++.

Weaknesses: Silver scurf.

NDTX4828-2R - Oblong Red. Parentage (ND3877-2R x NorDonna). Cross was made in North Dakota and selected in Texas. Medium-early maturity. Large vine size.

Uses: Fresh.

Strengths: Nice shape, very little skinning with nice color, stores very well, nice interior, yield+, small 'c' size.

Weaknesses: Deep eyes, rough, lenticels, silver scurf, some netting at stem end, early, rough, silver scurf, road map, poor skin, drop.

NDTX4847-7R - Oblong Red. Parentage (ND3900IR-3R x Fontenot). Cross was made in North Dakota and selected in Texas. Medium-early maturity. Medium-large vine size.

Uses: Fresh.

Strengths: Nice internal smooth nice shape, nice, TC?, BOT*.

Weaknesses: Flat, growth cracks, vascular discoloration, lenticels, second growth, poor external, feathering, small green sprouts, silver scurf+, growth cracks, Rhizoctonia, poor skin, russetting, scab, buff, poor internals drop+.

NDTX4930-5W - Round White. Parentage (ND860-2 x A7961-1). Cross was made in North Dakota and selected in Texas. Early-medium maturity. Medium-large vine size. White flower color.

Uses: Chip.

Strengths: Nice shape, good yield, chips very white, early maturity and bulking, large tubers, nice internals, yield+, nice shape, excellent internals BOT+++.

Weaknesses: Very buff, flat, hollow heart on large tubers, rough, oversize+, gravity could be higher.

NDTX6773-1W - Oblong White. Parentage (ND5175-4 x S440). Cross was made in North Dakota and selected in Texas. Medium maturity. Large vine size.

Uses: Chip.

Strengths: Large tubers, very nice.

Weaknesses: Deep eyes, small, rough, pointed, hollow heart++, drop?.

NDTX731-1R - Round Red. Parentage (ND169-10R x ND9476-5). Cross was made in North Dakota and selected in Texas. Early maturity. Medium-large vine size.

Uses: Fresh.

Strengths: Uniform round tubers, early, does not oversize, BOT+.

Weaknesses: Susceptible to Rhizoctonia, rough, susceptible to hollow heart, eyes somewhat deep ugly nose, silver scurf, road map, poor internals, oversize, deep eyes and nose, silver scurf.

NDTX7571-3AW - Round White. Parentage (ND5084-3R x Picasso). Cross was made in North Dakota and selected in Texas. Late maturity. Large vine size.

Uses: Chip.

Strengths: Nice shape and interior, Atlantic-like, buff.

Weaknesses: Hollow heart, some zebra defect, yield-, poor internals, hollow heart flat,

NDTX7571-4AW - Round White. Parentage (ND5084-3R x Picasso). Cross was made in North Dakota and selected in Texas. Late maturity. Large vine size.

Uses: Chip.

Strengths: Atlantic-like.

Weaknesses: Hollow heart, mix?, Zebra defect, drop.

NDTX7571-5AW - Round White. Parentage (ND5084-3R x Picasso). Cross was made in North Dakota and selected in Texas.

Uses: Chip.

Strengths: Nice flesh, Atlantic-like, nice internals nice shape buff and smooth skin.

Weaknesses: small, flat, mix, poor internals, rough yield-.

NDTX8555-2R/P - Oblong Red/Yellow-Purple. Parentage (7188-4R x 5256-7R). Cross was made in North Dakota and selected in Texas.

Uses: Chip.

Strengths: Yellow flesh with purple streaks, nice skin, keep.

Weaknesses: Road map, heat sprouts, some pointed, small, pear shaped, sliver scurf.

PA99P11-2 - Round White Red Splash. Parentage (Granola x 91E22). Cross was made in Prosser, Washington, tuberling grown in Aberdeen and selected in Texas. Medium maturity. Medium vine size. White flower color.

Uses: Fresh.

Strengths:

Weaknesses: Rough, Deep eyes, poor shape heat sprout many small tubers, drop++.

PATX99P10-1R/R - Oblong Red/Red. Parentage (All Red X PA96RR02-120). Cross was made in Prosser, Washington, tuberling grown in Aberdeen and selected in Texas.

Uses: Chip.

Strengths: Nice, red color in flesh from eyes, smooth, nice skin and shape, keep. BOT for flesh color

Weaknesses: Hollow heart, road map+, silver scurf.

POR01PG16-1 - Long Purple Fingerling. Parentage (NDOP5847-1 x Red bulk). Cross was made in Prosser, Washington, tuberling produced in Oregon, and selected in Oregon. Medium maturity. Medium vine size. Blue flower color.

Uses: Specialty.

Strengths: Flesh darker than All Blue, very dark flesh.

Weaknesses: Scab, rough road map, dumb bell, poor shape, drop++.

POR01PG20-12 - Oblong Red/Red. Parentage (PA97B35-2 x PA97B29-3). Cross was made in Prosser, Washington, tuberling produced in Oregon, and selected in Oregon. Medium maturity. Medium vine size. Red Purple flower color.

Uses: Dual.

Strengths: Nice internal.

Weaknesses: Too long for a red, poor flesh, very late did not fill out, chip??.

POR01PG22-1 - Long Red Fingerling. Parentage (PA97B23-2 x Red bulk). Cross was made in Prosser, Washington, tuberling produced in Oregon, and selected in Oregon. Medium maturity. Medium vine size. Red Purple flower

Uses: Specialty.

Strengths: Fingerling, BOT.

Weaknesses: Poor flesh color, and shape, heat sprouts, rough, alligator, buff, russeting, drop.

PORTX03PG19-1Pu/YR - Round Purple/Yellow. Parentage (A93456-6R X A92657-1R). Cross was made in Prosser, Washington, tuberling grown in Corvallis, Oregon and selected in Texas.

Uses: Fresh.

Strengths: Yellow flesh with some red at eyes, select smooth skin tubers nice interior, keep

Weaknesses: Road map, buff, light red flesh drop++.

PORTX03PG25-2R/P - Long Red Fingerling. Parentage (PA97B35-1 x PA99P7-2). Cross was made in Prosser, Washington, tuberling produced in Oregon, and selected in Texas.

Uses: Specialty.

Strengths: Nice red flesh, keep, nice shape for a fingerling BOT+++.

Weaknesses: Skinny tubers, curved, skinny, rough, alligator pointed to stem end.

PORTX03PG34-4R/P - Long Red Fingerling. Parentage (PA99P20-2 x POROOPG2-16). Cross was made in Prosser, Washington, tuberling grown in Corvallis, Oregon and selected in Texas.

Uses: Specialty.

Strengths: Keep.

Weaknesses: Not attractive exterior, small tubers, flesh not as red as others, road map, ugly, drop++++.

Ranger Russet - Long Russet. Parentage (Butte x A6595-3). Cross was made and selected in Aberdeen. Released in 1991 by USDA-ARS, and the Colorado, Aberdeen, Oregon and Washington Agricultural Experiment Stations. Medium-late maturity. Large vine size. White flower color.

Uses: Dual purpose.

Strengths: Dual purpose, medium to high specific gravity, good fry color from 45° storage, resistance to internal defects including hollow heart, brown center, net necrosis and sugar ends, high yield of large tubers, resistance to early dying.

Weaknesses: Susceptibility to scab, tendency for deep eyes, susceptibility to stress induced malformities, mediocre performance in Texas, feathering.

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. Medium maturity. Medium-large vine size. Purple flower color.

Uses: Fresh.

Strengths: High yields, wide adaptability.

Weaknesses: Deep eyes, light color, occasional hollow heart, occasional growth cracks, Susceptible to PVX, PVY, PVS, PVM, PLRV, early and late blights, scab, corky ring spot, bacterial wilt, and Rhizoctonia, tubers can over-size and have poor skin set.

Rio Rojo (Protected – PVP).- Round-oval Red. Parentage (ND1562-4R x NDTX9-1098-11R). Evaluated as NDTX4304-1R. Cross was made in North Dakota and selected in Texas. Early to medium maturity. Medium vine size. Dormancy is similar to Red LaSoda but longer than Dark Red Norland.

Uses: Fresh.

Strengths: Yield+, nice exterior, hollow heart resistant, good color, very nice interior, attractive bright red color, can store well, BOT.

Weaknesses: Can oversize, seems to set high in bed, feathering, can skin and exhibit variability in tuber color, feathering, deep nose, heat sprouts, and growth cracks, some rot, silver scurf.

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: Dual.

Strengths: Tolerant to scab, good long term storage.

Weaknesses: Susceptible to Fusarium and Verticillium wilts, PLRV, PVY and net necrosis, Jelly-end and sugar-end develop in tubers when plants are subjected to stress, stress results in knobs, pointed ends, and dumbbells.

Russet Norkotah- Oblong-long Russet. Parentage (ND9526-4Ru x ND9687-5Ru). Cross was made and selected in North Dakota. Released in 1987 by the North Dakota Agricultural Experiment Station. Early-medium maturity. Medium vine size. Corolla is white and anthers are yellow-orange.

Uses: Fresh.

Strengths: Uniform tuber shape, excellent appearance, and resistance to hollow heart, shallow eyes, high percentage of #1 tubers, tolerance to common scab and silver scurf.

Weaknesses: Weak vine, susceptibility to early dying, most viruses especially PVY, and late blight, and very susceptible to Verticillium wilt and early blight.

Russet Norkotah S3 - (Protected – PVP). - Oblong-long Russet. Parentage (ND95264Ru x ND9687-5Ru). Cross was made and selected in North Dakota. S3 is a mutant strain selection made in Colorado. Large vine size. White flower color.

Uses: Fresh.

Strengths: Potential for high yield, nice shape.

Weaknesses: Ten to 14 days later than Russet Norkotah, late, rough, poor shape, pointed, small, pointed skinny.

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: Early harvested processing.

Strengths: Good early yields, high percentage of large tubers, resistance to blackspot bruise, tolerant to heat stress.

Weaknesses: Specific gravity is variable and erratic, sugars accumulate during storage, fries dark from 45° storage, very susceptible to common scab, PVX, PVY, early and late blight, Verticillium wilt and pinkeye, small, curved, poor shape, dumb bell, blocky, rough.

TX02080-1P/W-P - Round Purple/White-purple. Parentage (Atlantic x All Blue). Cross was made and selected in Texas.

Uses: Chip.

Strengths: White flesh with purple streaks, yield+, heavy set, nice shape and color, buff

Weaknesses: Road map, buff, small, poor skin

TX02080-2P/P - Oblong Purple/Purple. Parentage (Atlantic x All Blue). Cross was made and selected in Texas.

Uses: Chip.

Strengths: Very purple flesh.

Weaknesses:

TX02098-2W - Round White. Parentage (COTX90046-5W x MWTX2609-4Ru). Cross was made and selected in Texas.

Uses: Chip.
Strengths: Uniform, yield+, heavy set, nice shape and skin.
Weaknesses: Poor internals, Mahogany browning, many small tubers.

TX03196-1W - Round White. Parentage (NDTX4748-7R x Adora). Cross was made and selected in Texas.

Uses: Chip.
Strengths:
Weaknesses:

TX03198-6R - Round Red. Parentage (ATTX98498-1R/Y x NDTX4271-1R). Cross was made and selected in Texas.

Uses: Fresh.
Strengths:
Weaknesses:

TX03199-2R/Y - Round White. Parentage (NDC4069-1R/R x Russian Blue). Cross was made and selected in Texas.

Uses: Specialty.
Strengths:
Weaknesses:

TX1475-3W - Round White. Parentage (TX1229-6W x AC80545-1). Cross was made and selected in Texas.

Uses: Chip.
Strengths: Large tubers yield+
Weaknesses: Hollow heart, yield-, light set, rough.

TX1523-1Ru/Y (Sierra Gold™). (Protected – PVP). - Round-oblong Russet/Yellow. Parentage (Krantz x Delta Gold). Cross was made and selected in Texas. Early maturity. Medium vine size.

Uses: Specialty.
Strengths: Flesh color-3.3, nice yield+, nice, excellent internals BOT++++.
Weaknesses: Can oversize.

TXA1655-1DY - White/Yellow. Parentage (Delta Gold x Delta Gold). Cross was made in Texas and selected in Aberdeen.

Uses: Specialty.
Strengths: Nice deep-yellow flesh, used as a parent in program.
Weaknesses: HH and scab susceptibility

TX1674-1W/Y - Oblong-long White/Yellow. Parentage (Russet Nugget x Delta Gold). Cross was made in Texas and selected in Texas. Early maturity. Medium vine size. Light lavender flower color.

Uses: Specialty.
Strengths: Red eyes, flesh color-3.0, nice, nice interior, yield+, to WR or SWR, parent, BOT+.
Weaknesses: Drop, flat, nipple knobs, poor shape, feathering, close set, slight vascular discoloration, some greening in flesh, flat, pink eyes, slight russet pointed to stem end.

TXA549-1Ru - Oval Russet. Parentage (ND9687-3Ru x ND9852-1Ru). Cross was made in Texas, selected in Aberdeen and tested extensively in Alberta, Canada. Medium-late maturity. Medium-large vine size. Purple flower color with white tips.

Uses: Dual.

Strengths: Nice, parent, nice net and internal, smooth tubers with good skin set, high yielding, and dark attractive russet skin, appears to be resistant to early blight, BOT for internal.

Weaknesses: Blocky, Rhizoctonia, too short, may not size well, tubers could be longer, pointed stem ends, susceptible to Rhizoctonia, keep, fat tubers, nice feathering uniform, drop.

Russet Norkotah 223 - (Protected – PVP). - Oblong-long Russet. Parentage (ND9526-4Ru x ND9687-5Ru). Cross was made and selected in North Dakota. TXNS 223 is a mutant strain selection made in 1989 by Texas from the variety Russet Norkotah. Early maturity. Medium vine size. White flower color.

Uses: Fresh.

Strengths: Nice shape, yield, net, and internal, good yield, heavier tuber set with uniform tuber shape, excellent appearance, resistance to hollow heart, some increased resistance to early dying and environmental stresses, lower N requirement, more vigorous and higher yielding than Russet Norkotah, BOT.

Weaknesses: Can produce a higher percentage of misshapen tubers than Russet Norkotah.

Russet Norkotah 278 - (Protected – PVP). Oblong-Long Russet. Parentage (ND9526-4Ru x ND9687-5Ru). 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-large vine size. White flower color.

Uses: Fresh.

Strengths: Good yield, uniform tuber shape, excellent appearance, resistance to hollow heart, some increased resistance to early dying, and environmental stresses, lower N requirement, more vigorous, and higher yielding than Russet Norkotah, heavy net, BOT.

Weaknesses: Five to ten days later than Russet Norkotah. Can produce a higher percentage of misshapen tubers than Russet Norkotah.

Russet Norkotah 223 - (Protected – PVP). - Oblong-long Russet. Parentage (ND95264Ru x ND9687-5Ru). Cross was made and selected in North Dakota. TXNS 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.

Strengths: Nice, BOT.

Weaknesses: Five to ten days later than Russet Norkotah. Can produce a higher percentage of misshapen tubers than Russet Norkotah.

TXNS410 - Oblong-long Russet. Parentage (ND95264Ru x ND9687-5Ru). Cross was made and selected in North Dakota. TXNS410 is a mutant strain selection made in 1989 by Texas from the variety Russet Norkotah. White flower color. Late maturity. Large vine size. White flower color.

Uses: Fresh.

Strengths: Keep, nice+, nice internals.

Weaknesses: curved, poor shape, rough, yield- rough, growth cracks, bud cracks.

TXNS551 - Oblong-long Russet. Parentage (ND95264Ru x ND9687-5Ru). Cross was made and selected in North Dakota. TXNS551 is a mutant strain selection made in 1989 by Texas from the variety Russet Norkotah. White flower color. Late maturity. Large vine size. White flower color.

Uses: Fresh.

Strengths: Keep, nice keep nice internals BOT.

Weaknesses: Small tubers, feathering, blocky, some pointed, rough, curved, drop.

UNTX383-3WRE/Y - Round White Red Eye/Yellow . Cross was made in Minnesota and selected in Texas.

Uses: Specialty.

Strengths: Keep, nice shape, skin, and flesh, excellent flesh smooth skin, keep, TC BOT-.

Weaknesses: Road map, boiler only, yellow pale red eyes, skin??.

VC1009-1W/Y - Oblong Red. Parentage (Agria x MIN12823). Cross was made in Lethbridge, Alberta and selected in Colorado. Medium maturity. Large vine size. White flower color.

Uses: Fresh/Specialty.

Strengths: Good yellow color, flesh color-3.1, nice, very nice yellow flesh, smooth, nice small tubers.

Weaknesses: Drop, flat, poor shape, not that great, feathering, susceptible to heat, pear shape, stolon attachments, Rhizoctonia, poor yield.

VC1123-2W/Y - Oblong White. Parentage (Agria x FV9307-3). Cross was made in Lethbridge, Alberta and selected in Colorado. Medium-late maturity. Large vine size. White flower color.

Uses: Fresh/Specialty.

Strengths: Nice.

Weaknesses: Flesh color-3.1, alligator hide, heat sprouts, flat, poor internals, road map (scale-like), second growth, heat sprouts, flat, sunburn, late, ugly skin, drop.

Western Russet – (Protected – PVP). - Russet. Parentage (A68113-4 x BelRus). Cross was made and selected in Aberdeen.

Uses: Dual.

Strengths: Good fresh and processing qualities, field resistance to common scab and PVYo.

Weaknesses: Susceptible to tuber early blight and blackspot bruise.

Yukon Gold - Oblong White/Yellow. Parentage (W5279-4 x Norgleam). Cross was made and selected in Ontario, Canada. Released in 1980 by Agriculture Canada, The University of Guelph, and The Ontario Ministry of Agriculture & Food, Guelph, Ontario. Medium-early maturity. Medium-large vine size. Violet flower color.

Uses: Specialty.

Strengths: Attractive yellow flesh tubers with red eyes, good yield, resistant to mild mosaic, moderately resistant to PLRV.

Weaknesses: Can exhibit some feathering, Susceptible to PVY and common scab, hollow heart and internal heat necrosis can be a problem, Plant establishment is irregular, particularly from basal end seed pieces.

Appendix B. Parentage of potato varieties or selections-2006.

Variety or Selection	Parentage
Ackersegen	Hindenburg x Allerfruheste
Adora	Pimura x Alcmaria
Agria	Quarta x Semlo
All Blue	
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
Binje	Munstersen x Fransen
Caesar	Monalisa x Rop B 1176
Carola	
Carrera	
Century	A6789-7 x A6680-5
Chipeta	WNC612-13 x Wischip
Climax	Bintje x Record
Courage	
Dakota Jewel	ND2223-8R x ND649-4R
Dark Red Norland	Redkote x ND626
Day-9	
Delikat	
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
Estima	
Fabula	
Florissant	Premiere x VK 69-491
Fortuna	
Foxton	Irene x Maris Piper
German Butter Ball	
Golden Sunburst	
Granola	3333/60 x 267 04
Hertha	Dijkhuis61-133 x Konst62-374
Ilong	
Innovator	Shepody x RZ 84-2580
Irish Crispin	Amigo x DH70-699 3a

Variety or Selection	Parentage
Ivory Crisp	ND292-1 x A77268-4
KLONDYKE ROSE	
Krasaua	Visnovske Rohlic x B53
La Rouge	LaSoda x Progress
Latona	Jaerla x Nicola
Maris Piper	
Mazama	ND1196-2R x Redsen
Molli	
Mondial	Spunta x Ve 66-295
Morning Gold	Olinda x Y 68-4-103
NorDonna	ND206-1R x ND821-6R
Norgold-M	ND2475-8 x A119-1
NorValley	NorChip x ND860-2
Oscar	Desiree x VK 64 491
Ottar	Dore x DsxAS-737
Penta	Bellona x Estima
Pimpernel	
Platina	
Premiere	
Primica Inta	
Ranger Russet	Butte x A6595-3
Red Gold	G68211 x G6521-4RY
Red LaSoda	Triumph x Katahdin
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
Rutt	Laila x Alemaria
Saginaw Gold	MS321-38 x Michibonne
Sangre	Viking x A6356-9
Sangre-10	Viking x A6356-9
Sante	SVPY66-13-636 x AM66-42
Satina	Puntila x 99 73
Shepody	Bakeking x F58050
Stampede Russet	BR7091-1 x Lemhi Russet
Strobrawa	MPI55 957/54 x Mira
Super Red	
Ukama	Marijke x Sirtema
Urgenta	Furore x Katahdin
Valisa	
Viking	Redskin x Nordak
Vivaldi	TZ 77-148 x Monalisa
Vokal	Primura x Rheinhort

Variety or Selection	Parentage
Winema	Redsen x ND1196-2R
Yellow Finn	
Yukon Gold	W5279-4 x NorGleam
Numbered Clones	
A00645-1	A93570-13 x A92158-3
A00646-4	A93570-13 x A95154-1
A00681-4	PA92A08-17 x Western Russet
A83350-9R	
A8893-1 (Blazer Russet)	A7816-14 x NorKing Russet
A91790-13	Chipeta x Ivory Crisp
A93005-10	A8343-12 x A85103-3
A9304-3	A8343-12 x Western Russet
A93157-6LS(Premier Russet)	A87149-4 x A88108-7
A93570-13	A85536-1 x A86102-6
A94377-6RY	A88479-3R x COA8925-4R
A95074-6	Agria x Summit Russet
A95109-1	A8893-1 x Summit Russet
A95357-3Y	NZA8903-3 x A86102-6
A95409-1	A89146-8 x Ranger Russet
A961002-1RY	ATD9304-1RY x A83350-1R
A96510-4Y	PA92A17-6 x A91194-4
A96104-2	A88236-4 x A89512-3
A96741-1R	IdaRose x NDO2686-6R
A96510-4Y	PA92A17-6 x A91194-4
A97521-2RY	SJP/T48YF x A91846-5R
A98445-2RY	
A99331-2RY	Inca Gold x COA94019-5R
A99433-5Y	Chipeta x MSG274-3
AC96052-1RU	A81386-1 x A9014-2
AC97097-14W	Brodick x A91746-8
AC97521-1R/Y	SJP/T48YF x A91846-5R
AO96141-3	A89222-3 x COA90064-6
AO96160-3	A89384-10 x A89512-3
AO96164-1	A89384-10 x A91194-4
AOA95154-1	Bannock x A89152-4
AOA95155-7	Bannock x A89163-3LS
AOTX02019-1Ru	A92030-4 x A97201-4
AOTX02060-1Ru	A97201-4 x A93157-6LS
AOTX02064-2Ru	A97218-1 x A93187-3
AOTX02066-1Ru	A97218-1 x A97201-4
AOTX02136-1Ru	A96563-8 x A92030-5
AOTX02197-1Ru	AOA95154-1 x A9014-2

Variety or Selection**Parentage**

AOTX02206-5Ru	AOA95155-7 x AOA95154-1
AOTX03096-1Ru	A97198-15 x A92030-5
AOTX03134-1Ru	A98082-17 x AC93026-9RU
AOTX95265-1Ru	A89216-9 x A86102-6
AOTX95265-2ARu	A89216-9 x A86102-6
AOTX95265-2Ru	A89216-9 x A86102-6
AOTX95265-3Ru	A89216-9 x A86102-6
AOTX95265-4Ru	A89216-9 x A86102-6
AOTX95269-1Ru	A89296-3 x A89804-7
AOTX95295-1Ru	A89804-7 x Ranger Russet
AOTX95295-3Ru	A89804-7 x Ranger Russet
AOTX95309-1W-	A9055-8LS x A89163-3LS
AOTX95309-2W	A9055-8LS x A89163-3LS
AOTX95309-3W	A9055-8LS x A89163-3LS
AOTX96075-1Ru	A84118-3 x A89384-10
AOTX96084-1Ru	A8792-1 x A86102-6
AOTX96208-1Ru	A9057-7 x A91194-3
AOTX96216-1Ru	A9082-2 x A86102-6
AOTX96216-2Ru	A89216-9 x A86102-6
AOTX96216-3Ru	A89216-9 x A86102-6
AOTX98096-1Ru	Shepody x A92158-3
AOTX98137-1Ru	A8670-7 x A9310-1
ATC98444-1R/Y-	A83350-9R x T48YF
ATC98495-1W/Y	P94A2-4Y x A89655-5DY
ATC98509-1R/Y	T48YF x A92657-1R
ATDC9801-3P	Ivory Crisp x A86S x D6-7
ATTX01175-1R	MN17922 x Mazama
ATTX01180-1R	ND5084-3R x A92657-1R
ATTX01180-4R	ND5084-3R x A92657-1R
ATTX8823-2W	ND2051-1Ru x A7961-1
ATTX88654-3W/RE/Y	PI343201 x Gurney's Purple
ATTX95490-2W	Red LaSoda x A89655-5DY
ATTX961014-1AR/Y	A90601-2RDY x MAZAMA
ATTX961014-1R/Y-	A90601-2RDY x MAZAMA
ATTX98444-16R/Y	A83360-9R x T48YF
ATTX98453-6R	A93490-1R x A91846-5R
ATTX98462-3R/Y	ATD251-5RY x BO811-13RY
ATTX98462-9R/Y	ATD251-5RY x BO811-13RY
ATTX98466-5R/W-R	ND2051-1Ru x A7961-1
ATTX98468-3R/Y	ATD252-5R x A93457-4R
ATTX98468-5R/Y	ATD252-5R x A93457-4R
ATTX98471-4R/Y	ATD252-5R x BO811-13RY

Variety or Selection

ATX98491-4YRspl/Y
ATX98493-2P/P
ATX98500-2P/Y
ATX98500-3Wpuspl
ATX98510-1R/Y
ATX98514-1R/Y
ATX99325-1P
ATX00144-2R
ATX00270-2R
ATX01180-1R
ATX01188-1R
ATX02014-1Ru
ATX85404-8W
ATX91137-1Ru
ATX9117-1Ru
ATX9130-1Ru
ATX9202-1Ru
ATX97147-4Ru
ATX97195-1Ru
ATX99331-1Pu/Y
B0766-3T
BTX1544-2W/Y
BTX1749-1W/Y
BTX2332-1R
CO94035-15RU
CO95051-7W
CO95172-3RU
CO96141-4W
CO97043-14W
CO97065-7W
CO97087-2RU
CO97090-4RU
CO97137-1W
CO97138-3RU
CO97138-7RU
CO97215-2P/P
CO97222-1R/R
CO97226-2R/R
CO97227-2P/PW
CO97232-1R/Y
CO97232-2R/Y
CO97233-3R/Y

Parentage

P94A2-3Y x A92657-1R
P94A2-3Y x BO811-13RY
P94A2-4Y x Granola
P94A2-4Y x Granola
T48YF x A93456-6R
T51YF x A93456-6R
AGRIA x W1100R
Century Russet x A91048-3
CO89097-2 x ND5256-7R
ND5084-3R x A92657-1R
Amadeus x Winema
Cruza148 x Ranger Russet
Gemchip x ND860-2
A81473-2 x A83343-12
A8519-4 x A84727-62
A8611-10 x A85103-3
A8343-12 x A8495-1
A79180-10 x A88236-6
A89149-7 x A88236-6
INCA GOLD x COA94019-5R
B0243-18 x Costal Chip
BO811-13 x Yukon Gold
K7-6 x BO925-4
B1523-4 x Super Red Norland
AO80432-1 x Silverton Russet
AC88456-6 x BC0894-2
Russet Nugget x AC88165-3
BC0894-2 x AC87340-2
AC91817-5 x AC87340-2
AC92513-3 x Chipeta
CO87009-4 x W1005
CO89036-10 x AC91579-4
NDO2904-7 x AC89047-1
NDO2904-7 x CO90052-1
NDO2904-7 x CO90052-1
CO94163-1 x CO94183-1
CO94170-1 x CO94183-1
CO94183-1 x CO94214-1
CO94183-1 x CO94215-1
CO94218-1 x VC0967-2
CO94218-1 x VC0967-2
CO94218-1 x VC0967-5

Variety or Selection**Parentage**

CO97274-2W/Y	Agria x CO94161-2
CO98012-5R	A79543-4R x AC91844-2
CO98277-4W	CO92060-1 x NDA2031-2
COA96142-3C	BC0894-2 x Ivory Crisp
COA96741-2C	BC0894-2 x AC87340-2
COTX00104-6R	ND3574-5R x C086218-2
COTX00290-3R	CO94019-1R x CO89097-2R
COTX00328-1Pu/Ypu	ATD252-5R x BO811-13RY
COTX00411-4R	GermanButterball x NDC5281-2R
COTX01339-4W	ND6961B-1R x A85530-10W
COTX01403-4R/Y	VC1015-7R/Y x Winema
COTX02038-1R	A92653-6R x CO94019-1R
COTX02041-1R	A92653-6R x NDC5281-2R
COTX02056-1Ru	A93004-3RU x CO94084-12RU
COTX02172-1R	CO94065-2R x ND3574-5R
COTX02175-6AR	CO94065-2R x NDT x 4304-1R
COTX02175-6BR	CO94065-2R x NDT x 4304-1R
COTX02203-3Ru	CO95007-1RU x CO96109-7RU
COTX02203-5Ru	CO95007-1RU x CO96109-7RU
COTX02266-1R	ND3574-5R x NDT x 4304-1R
COTX02266-2R	ND3574-5R x NDT x 4304-1R
COTX02293-4R	NDC5281-2R x ND3574-5R
COTX02294-4R	NDC5281-2R x NDO4323-2R
COTX02305-3R	NDC6184-3R x CO94065-2R
COTX02332-1W	S438 x NDC5372-1RU
COTX02377-1W	Dakota Pearl x Chipeta
COTX02377-2W	Dakota Pearl x Chipeta
COTX02380-3AR	Durango Red x NDC6184-3R
COTX02380-3BR	Durango Red x NDC6184-3R
COTX03194-2W	AC94296-5W x A91790-13
COTX03194-3W	AC94296-5W x A91790-13
COTX03254-2R	CO94019-1R x CO97078-5R
COTX03261-1Ru	CO94084-12RU x A88093-1
COTX03270-3W	CO95007-1RU x AC96052-1RU
COTX03270-4W	CO95007-1RU x AC96052-1RU
COTX03285-4Ru	CO96043-5RU x A93157-6LS
COTX94218-1R	Red Ruby x Red Gold
COTX99238-2W-	ND2676-10 x AC87340-2
MWTX2609-2Ru	Russet Burbank x Ontario x 4 x hybrid
MWTX2609-4Ru	Russet Burbank x Ontario x 4 x hybrid
MWTX395-1W	Snowden x 03-349-11
NDA5507-3YF(Yukon Gem)	Brodick x Yukon Gold

Variety or Selection**Parentage**

NDA7683C-1C	ND5822C-7 x Picasso
NDTX028742-1P/P	MSI201-2PY x Dakota Rose
NDTX039096-1R,	ND4944-3R x ND8089-2R
NDTX039190-1R	ND8089-2R x ND4659-5R
NDTX039191C-1R	ND8089-2R x ND7525C-2R
NDTX039191C-2R	ND8089-2R x ND7525C-2R
NDTX049263-1R	ATND98450-1R x ND8383-1R
NDTX049265-2W	ATND99331-2Pinto x Dakota Rose
NDTX049349-10R	ND4659-3R x Dakota Jewel
NDTX049368-2R	ND5002-3R x ND7987-1R
NDTX4271-5R	NDTX 9-1068-1R x ND2050-1R
NDTX4756-1R/Y	3451-14R x 1618-13R
NDTX4784-7R	ND3574-5R x ND2050-1R
NDTX4828-2R	ND3877-2R x NorDonna
NDTX4847-7R	ND3900IR-3R x Fontenot
NDTX4930-5W -	ND860-2 x A7961-1
NDTX6773-1W	ND5175-4 x S440
NDTX731-1R	ND169-10R x ND9476-5
NDTX7571-3AW.	ND5084-3R x Picasso
NDTX7571-4AW	ND5084-3R x Picasso
NDTX7571-5AW	ND5084-3R x Picasso
NDTX8555-2R/P	7188-4R x 5256-7R
PA99P11-2	Granola x 9.1E+23
PATX99P10-1R/R	All Red x PA96RR02-120
POR01PG16-1	NDOP5847-1 x Red bulk
POR01PG20-12	PA97B35-2 x PA97B29-3
POR01PG22-1	PA97B23-2 x Red bulk
PORTX03PG19-1Pu/YR -	A93456-6R x A92657-1R
PORTX03PG25-2R/P	PA97B35-1 x PA99P7-2
PORTX03PG34-4R/P	PA99P20-2 x POROOPG2-16
TX02080-1P/W-P -	Atlantic x All Blue
TX02080-2P/P -	Atlantic x All Blue
TX02098-2W -	COTX90046-5W x MWTX2609-4Ru
TX03196-1W	NDTX4748-7R x Adora
TX03198-6R	ATTX98498-1R/Y x NDTX4271-1R
TX03199-2R/Y	NDC4069-1R/R x Russian Blue
TX1475-3W	TX1229-6W x AC80545-1
TXA1655-1DY	Delta Gold x Delta Gold
TX1674-1W/Y	Russet Nugget x Delta Gold
TXA549-1Ru.	ND9687-3Ru x ND9852-1Ru.
TXNS410	ND95264Ru x ND9687-5Ru.
TXNS551.	ND95264Ru x ND9687-5Ru.

Variety or Selection

UNTX383-3WRE/Y

VC1009-1W/Y

VC1123-2W/Y

Parentage

Agria x MIN12823.

Agria x FV9307-3.

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