

Texas Potato Breeding Report 2008



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Cover: Examples of chips with Zebra Chip symptoms.

A major emphasis of the Texas Potato Breeding and Development Program was to screen all of the varieties/selections in the program this year for Zebra Chip (ZC) symptoms. One hundred eight-eight samples representing 162 varieties/selections from Springlake were fresh cut and chip evaluated for ZC this past year. From Dalhart, 182 samples representing 179 varieties/selections were evaluated. Eleven varieties/selections were identified as ZC free by both fresh cut and chip evaluations from both Springlake and Dalhart. This spring, the pathogen *Candidatus Liberibacter solanacearum* was identified as the causative organism which is vectored by potato psyllid. Symptoms of the disease were first noticed in Mexico in the mid-90's and by 2000 it was observed in South Texas. This disease has been costly to the chip industry (some \$10 million last year). It is not fully understood if the psyllid populations are over-wintering or if they are migrating with the winds. Psyllids were found as far north as Wyoming this past year. See Zebra Summary Report page.

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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, Idaho

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

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

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

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

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 Maine (Beltsville, Maryland program)

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

OR = cross made and selected in Oregon

PA = cross made and selected in Prosser, Washington

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

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

TXCR “numbers” = Texas selections (strains) out of Century Russet made by Texas program

TXND = cross made in Texas and selected in North Dakota

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

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

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

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

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

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

Mission Statement

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

Impact Statement

Since the inception of the Texas Potato Breeding and Variety Development Program in 1973, 1,866,096 seedlings have been grown for selection in Texas, from which 8,373 original selections have been made. Twelve improved varieties have been developed/co-developed and/or released from this program. Most of the russet potatoes grown in Texas in 2008 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 2006, the average summer crop yield in Texas was reported to be 440 Cwt/A, the highest in the nation among 11 states with summer crop production. In addition, the farm gate value of the crop has grown from less than \$20 million to more than \$117 million, with an annual economic impact to the state in 2008 estimated to exceed \$300 million. Of the new varieties developed/released in the US in the last 10 years, those developed by the Texas program collectively ranked fourth in total seed acreage entered into certification in 2007.

ZC Research Summary

The overall objective has been to evaluate a wide range of germplasm for possible resistance /tolerance to the ZC complex (and good chip quality), in order to identify and/or develop varieties for the industry which can be more successfully grown when/where conditions for expression of ZC are present. The studies are an integral part of the Texas Potato Breeding and Variety Development Program, and in 2008 were conducted at College Station, with field planting at Springlake (31 March; vine kill 18 July and 15 August), Dalhart (13 May; vine kill 8 and 26 September), and Halfway (22May; harvested 23 October). Insecticides were applied in Springlake and Dalhart, but not at Halfway. A verification planting is planned for Weslaco in December. These tissue culture transplants from our clone bank will include entries from the individual plant selection program as well as several selections which have not exhibited ZC in the past 1-4 years.

Some 188 varieties/advanced selections, including 41 chip entries, were evaluated for ZC expression at Springlake, both as fresh cut tubers and as chips. At Dalhart, nearly 400 varieties/advanced selections were grown, including 112 chip selections from the Southwestern (6) and Western (5) Regional Chip Trials, the Snack Food Trial (15), and the Texas breeding program (86). A total of 203 samples, representing 197 varieties/advanced selections, were chipped and evaluated for ZC and other chip quality characteristics. Funds were provided to Dr. Greta Schuster to monitor psyllid egg and nymph levels during the growing season at both trial locations. The Halfway trial included 19 varieties/advanced selections, which included a pesticide experiment conducted in cooperation with Dr. Ron French. A total of 77 samples from this trial were chipped.

A total of 385 samples were fried, representing more than 13,000 individual tubers from the three locations. A similar number of tubers were fresh-cut and evaluated for ZC. When the fresh cut evaluations and the ZC fry evaluations were integrated, the following ZC-free entries from Springlake and Dalhart 2008 trials were judged to merit further evaluation: ATTX98500-3PW/Y, BTX1544-2W/Y, BTX1749-1W/Y, CO00197-3W, COTX00328-1P/YP, COTX9418-1R, NDTX039190-1R, NDTX049265-2WRSP/Y, NDTX059828-2W, NY138, and TX04212-1R/Y. When further integrating chip quality characteristics, the following entries were judged to be superior: BTX1749-1W/Y, CO00197-3W, COTX00328-1P/YP, NDTX059828-2W, and NY138.

Collaborators in 2008 included Dr. Ron French, Dr. Greta Schuster, Dr. Herman Scholthof, Dr. T.X. Liu, Dr. Christian Nansen, and Dr. Greg Cobb.

Introduction

Program Summary

The Texas Potato Breeding and Variety Development Program used three locations in the 2008 growing season (Table 1). The first planting was near Springlake on 31 May to 2 April and harvested on 22, 24, and 30 July, and 19 August. This location included sixteen replicated trials and first generation seedlings for selection. The second planting was near Dalhart on 14 and 20 April and harvested on 15 and 29 September. Nine replicated trials, a seed increase nursery, and first year seedlings for selection were planted at this site. The third planting was at the Texas AgriLife Halfway Station on 22 May and harvested 23 October. Two replicated Zebra Chip trials were planted at this site. The Texas program entered 24 selections (ATTX98500-3PW/Y, ATTX00289-6Y/Y, TX1673-1Y/Y, TXYG055, TXYG057, TXYG079, TXYG098, TXYG105, TXYG107, AOTX96216-2Ru, AOTX96265-2Ru, AOTX98152-3Ru, ATX9202-3Ru, ATX97147-4Ru, ATX99013-1Ru, AOTX91861-4R, AOTX93483-1R, ATTX98453-6R, BTX2332-1R, COTX94216-1R, COTX94218-1R, NDTX4784-7R, NDTX4828-2R, and NDTX5003-2R) in the Southwestern Regional Trials conducted in Texas, Colorado, and two sites in California. The Texas Program also had three entries in the Western Regional Russet Trial (AOTX95265-2ARu, AOTX95265-3Ru, and AOTX95265-4Ru), and two in the Western Regional Red/ Specialty Trial (ATTX961014-1R/Y and ATTX98500-2P/Y). These trials were conducted at multiple locations in six western states. Plant Variety Protection (PVP) was granted for TX1523-1Ru/Y (Sierra Gold™), and is pending for Stampede Russet, and Rio Rojo.

The major program expansion and focus in 2008 was on Zebra Chip Research, with emphasis on varietal resistance/susceptibility. The program also continued to stress virus testing, clean-up, and minituber multiplication of a large backlog of selected clones. A field day was held on 17 July at Springlake, and was well attended by growers and Zebra Chip collaborators.

Seedling program

In 2008, 70,811 first year seedlings, resulting from 638 different parental combination or families (crosses), were grown for selection on the Barrett Farm (33,921) near Springlake and on the CSS Farm (36,890) near Dalhart. Two hundred ninety four original selections were made from this material (Figure 1).

The 2008 first year seedling tubers from Texas (14,584) were grown during the fall of 2007 at College Station, from true seed crosses made in Lubbock, Texas and Aberdeen, Idaho. The remaining seedling tubers were provided by Rich Novy, Idaho (8,061), Isabel Vales, Oregon (7,833), David Holm, Colorado (20,106), and Susie Thompson, North Dakota (18,027). Dave Holm, (Colorado) also provided mini tubers (2,200) from advanced Texas selections for seed increase.

Texas also sent second and third-size seedling tubers to Colorado (8,393) and to North Dakota (4,384) for first year selections.

Table 1. Trial locations, name of trial, number of entries, and number of plots evaluated in 2008.

Springlake		
Trial	# of Entries	# of Plots
Field day Russets (not reported)	105	210
Field day Red/Specialty(not reported)	100	200
Western Regional Cooperative Russet	20	160
Western Regional Cooperative Red/Specialty	23	184
Southwestern Regional Cooperative Russet	11	88
Southwestern Regional Cooperative Red	14	112
Southwestern Regional Cooperative Specialty	14	112
Southwestern Regional Cooperative Fingerling	2	16
Texas Advanced Russet Selections	28	224
Texas Advanced Red Selections	9	72
Texas Advanced Red Skin/Yellow Flesh Selection	8	64
Texas Advanced White Skin/Yellow Flesh Selection	11	88
Texas Advanced Fingerling Selection	3	24
Texas Advanced Purple Skin/Purple Flesh Selection	3	24
Chip	41	246
Yukon Gold Strain Selections	8	64
Plant Variety Protection Nursery (not reported)	13	240
Total	413	2128

Halfway		
Trial	# of Entries	# of Plots
Zebra Chip Insecticide Trial	8	32
Untreated Zebra Chip Trial	15	45
Total	23	77

Dalhart		
Trial	# of Entries	# of Plots
Western Regional Chip	5	40
Southwestern Regional Chip	6	48
SFA Chip	15	120
Texas Advanced Chip Selection	30	240
2007 Chip Selections	56	56
Texas Advanced Russet Selection	40	320
2007 Russet Selections	70	70
Texas Advanced Red Selection	22	176
2007 Red Selections	36	36
Texas Advanced Red Skin/Yellow Flesh Selection	20	160
Texas Advanced White Skin/Yellow Flesh Selection	17	136
Yukon Gold Strain Selections	15	120
Texas Advanced Fingerling Selections	5	40
2007 Specialty Selection	64	64
Wisconsin (USDA/ARS) Colored Flesh Evaluation (not reported)	15	120
Disease Evaluation Trial (not reported)	6	48
Total	422	1794
Total Entries and Plots	858	3999

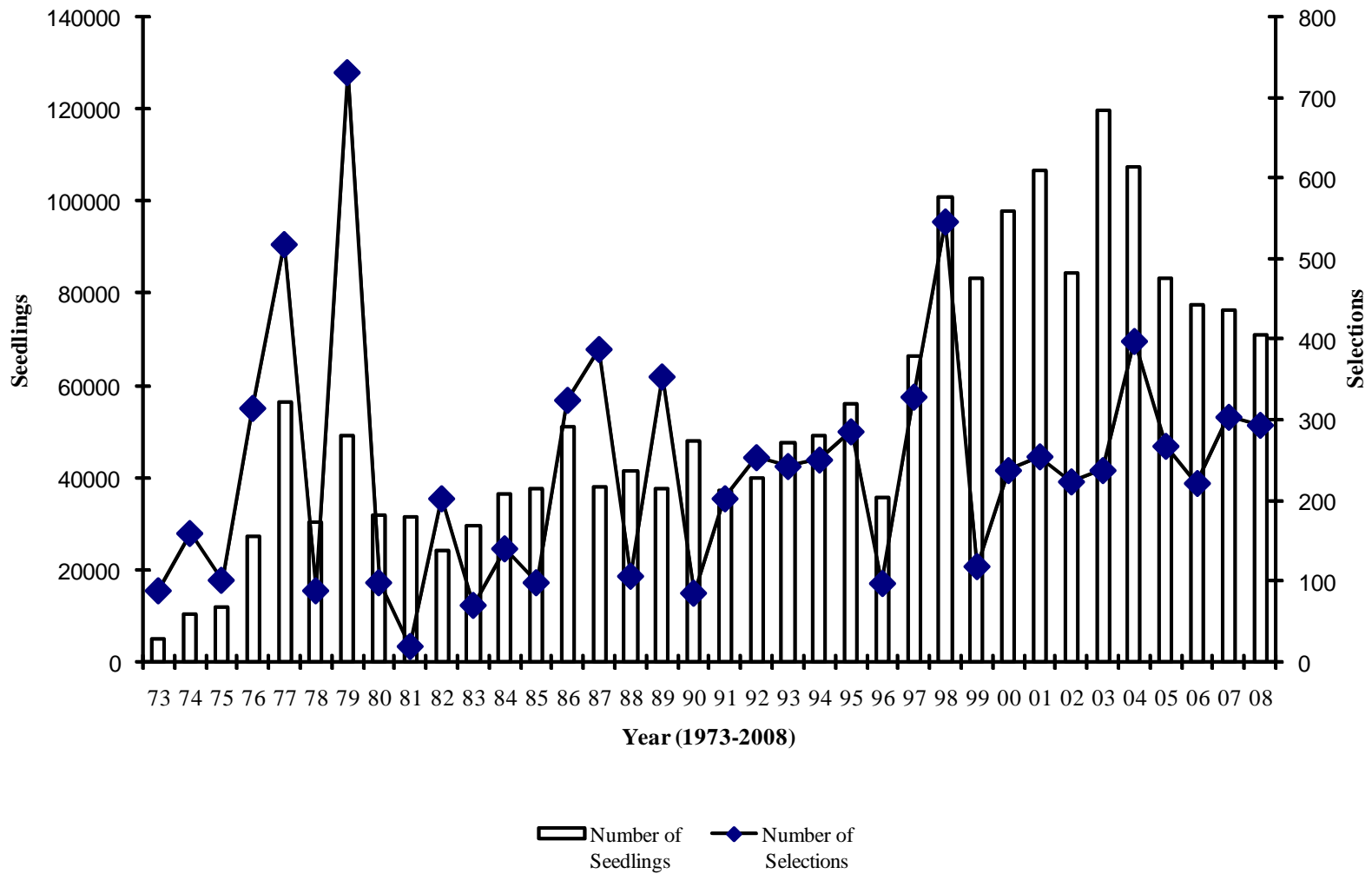


Figure. 1. Number of first year seedling tubers grown for original selection and number of selections made since the inception of the Texas Potato Variety Development Program.

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 425 advanced selections/varieties were tested in replicated and non-replicated trials near Springlake, 493 entries were evaluated near Dalhart, and 19 advanced selections/varieties were tested in replicated trials at Halfway (Table 1). A total of 4,007 plots were planted and harvested in the three locations. A seed increase nursery was grown at the San Luis Valley Research Center, Center, Colorado, by Dr. David Holm.

Since 1973, 25,675 entries have been evaluated (Figure 2). Findings from the Texas Potato Variety Development Program trials have resulted in the release of several improved varieties which have contributed significantly to the competitiveness, sustainability, and profitability of the Texas potato industry.

Results from the various trials are presented in chronological sequence in which they were planted/harvested, Springlake to Dalhart to Halfway. 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.

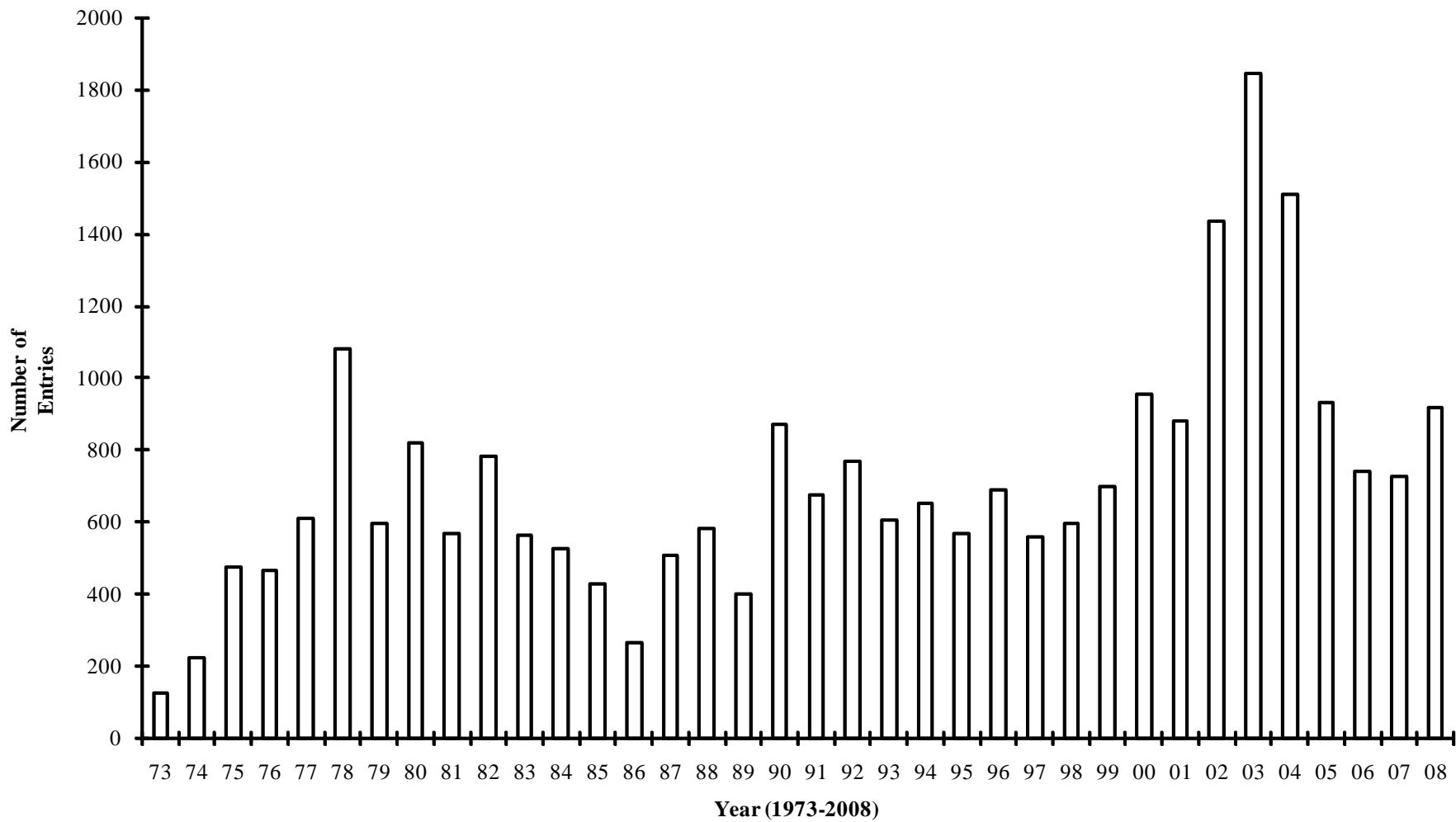


Figure 2. Number of varieties and advanced selections tested for their adaptability to Texas environmental conditions since the inception of the Texas Potato Variety Development Program in 1973.

Springlake Trials, 2008

Summary of growing conditions:

The trials were planted near Springlake, Texas on 31 March to 2 April and harvested on 30 July, and 19. These trials were subjected to higher than normal precipitation in the first week of May, the fourth week of June, the third week of July, and the third week of August. Temperatures were higher than normal for the last week in May and the first and second weeks of June. In addition, these high temperatures were accompanied by high winds. These difficult environmental conditions had an adverse effect on tuber shape.

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
- Southwestern Regional Cooperative Fingerling
- Texas Advanced Russet Selections
- Texas Advanced Red Selections
- Texas Advanced Red Skin/Yellow Flesh Selection
- Texas Advanced White Skin/Yellow Flesh Selection
- Texas Advanced Fingerling Selections
- Texas Advanced Purple Skin/Purple Flesh Selection
- Chip
- Yukon Gold Strain Selection
- Plant Variety Protection Nursery (not reported)

WESTERN REGIONAL COOPERATIVE RUSSET TRIAL

The Western Regional Trials were grown at 12 sites throughout the western United States as part of the WERA-27 project, with cooperators in California, Oregon, Washington, Idaho, Colorado, and Texas. The 2008 russet trial consisted of 20 entries, including the four check varieties Ranger Russet, Russet Norkotah, and Russet Burbank. Four advanced Texas selections were added to the Springlake location.

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

- The outstanding entries for this trial, based on general rating and best of trial designations, were ATX91137-1Ru and TXA549-1Ru (Tables 1a and 1e).
- ATX91137-1Ru and A0008-1TE had the highest total and marketable yields (Table 1a)
- AOTX95265-3Ru and AOTX95265-2ARu had the highest yield of over 18 oz. tubers. PA99N2-1 and CO98067-7RU had the highest yield of less than 4 oz. tubers. Russet Burbank and Ranger Russet had the highest yield of culls/No.2 tubers (Table 1a).
- ATX91137-1Ru and TXA549-1Ru had the highest and second highest percent of marketable yield respectively (Table 1b).
- AOTX95265-3Ru and AOTX95265-2ARu had the highest and second highest percentage yield of over 18 oz. tubers. PA99N2-1 and A97066-42LB had the highest and second highest percentage yield of less than 4 oz. tubers. Russet Burbank and Ranger Russet had the highest and the second highest percentage yield of cull/No. 2 tubers (Table 1a and Table 1b).
- The highest specific gravity was recorded for A97066-42LB (Table 1b).
- TXA549-1Ru and TXCR-2Ru were the latest maturing clones, while Russet Norkotah and A0008-1TE were the earliest maturing (Table 1c).
- NDTX8773-4Ru had 15% hollow heart. TXA549-1Ru had 13% internal brownspot. A0008-1TE exhibited growth cracks and deep eyes (Table 1d).
- All of the entries exhibited Zebra Chip after chipping. PA99N82-4 and PA99N2-1 had highest (43 and 32%) percent Chip (Table 1f).
- TXA549-1Ru received a best of trial designation for chip appearance.

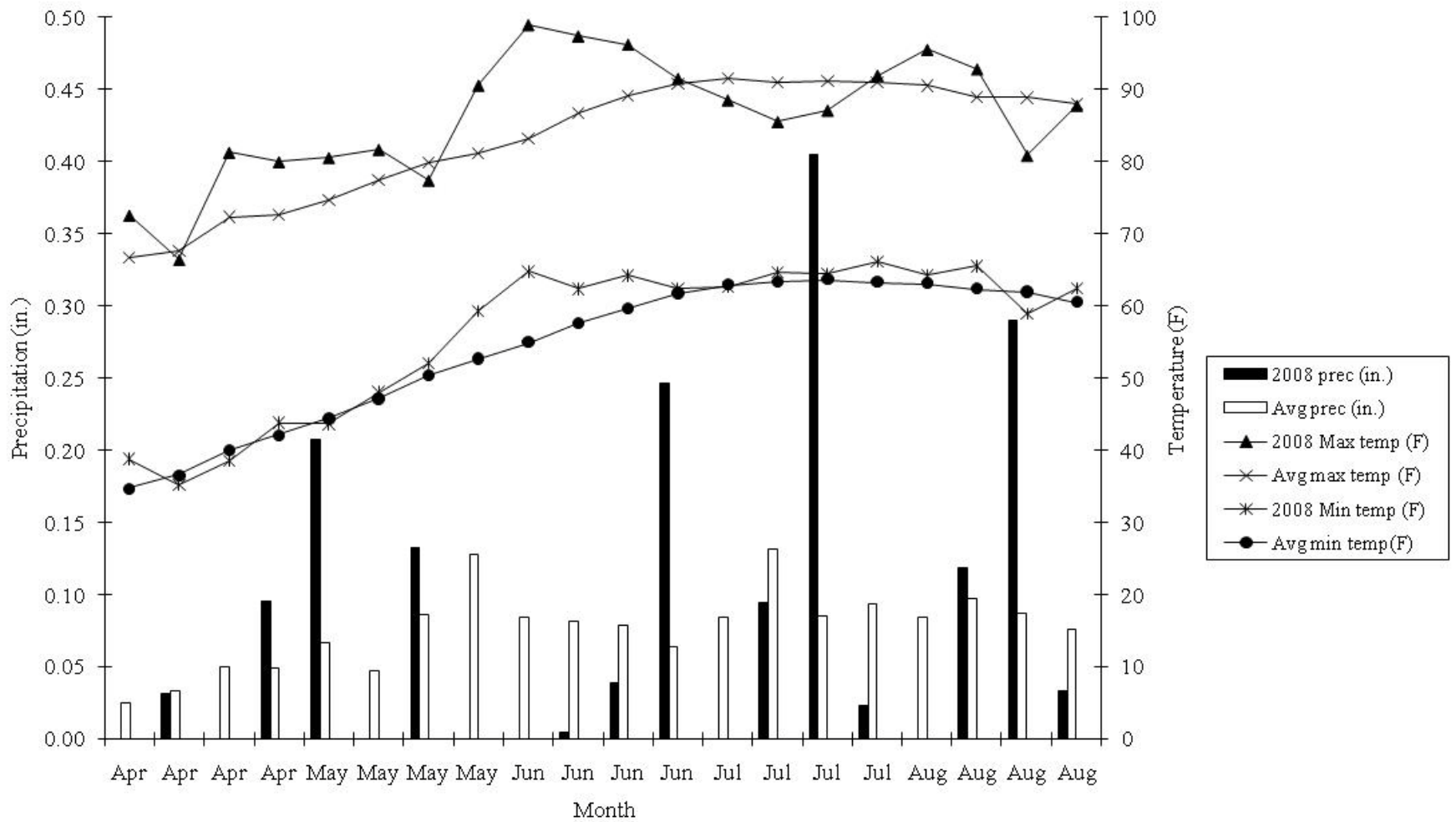


Figure 3. Weekly minimum/maximum temperatures and precipitation for the 2008 growing season near Springlake, Texas compared to the average minimum/maximum temperatures and precipitation (1949-2008).

Comments on entries:

- A0008-1TE Oblong Russet Growth cracks++
- A97066-42LB Long Russet Drop, light russet skin, small
- AC96052-1RU Long Russet Smooth, small, low yield, drop
- AO96141-3 Long Russet Drop, rough
- AOTX95265-1Ru Long Russet
- AOTX95265-2ARu Long Russet Oversize, BOT
- AOTX95265-3Ru Long Russet
- AOTX95265-4Ru Long Russet
- ATX91137-1Ru Long Russet Raised eyes on large tubers, BOT
- CO97087-2RU Long Russet Drop, rough
- CO98067-7RU Oblong Russet Nice internals, nice white flesh
- CO98368-2RU Oblong Russet Small, poor shape, drop
- NDTX8773-4Ru Oblong Russet
- PA99N2-1 Round Russet Round, small
- PA99N82-4 Oblong Russet Drop, growth cracks, blocky
- Ranger Russet Long Russet Skinny
- Russet Burbank Long Russet Rough, very white flesh
- Russet Norkotah Long Russet
- TXA549-1Ru Oblong Russet Blocky, BOT-, BOT
- TXCR-2Ru Long Russet Skinny

Summary:

Overall, the outstanding entries based on general rating and marketable yield were ATX91137-1Ru and TX549-1Ru. TXA549-1Ru had the lowest percentage (7%) of Zebra Chip.

WESTERN REGIONAL COOPERATIVE RED/SPECIALTY TRIAL

This trial consisted of 23 entries, including the check varieties Red LaSoda, Dark Red Norland, Purple Majesty, and Yukon Gold.

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

- Dark Red Norland and CO98012-5R had the highest general ratings (Table 2a).
- Red LaSoda and Dark Red Norland produced the highest total yield and marketable yield (Table 2a).
- CO98012-5R had the highest yield of less than 4 oz. tubers. Red LaSoda had the highest yield of culls/No.2 tubers (Table 2a).
- NDA7985-1R had the highest percentage of marketable yield while CO98012-5R had the highest percentage of less than 4 oz. tubers. Red LaSoda had the highest percentage of culls/No.2 tubers (Table 2b).
- CO98012-5R had the highest specific gravity (Table 2b).
- CO98012-5R had the best skin set (Table 2d).
- All of the entries had low levels of internal defects (Table 2d).
- Red LaSoda had 43% Zebra Chip, while NDA7985-1R and CO98012-5R did not have any Zebra Chip (Table 2f).

Summary:

Dark Red Norland was the outstanding entry.

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

- ATTX961014-1R/Y received the highest general rating (Table 2a).
- ATTX961014-1R/Y produced the highest total and marketable yield (Table 2a).
- ATTX961014-1R/Y had the highest yield of less than 4 oz. tubers. POR01PG45-5 had the highest yield of culls/No.2 tubers (Table 2a).
- ATTX961014-1R/Y and AC99329-7PW/Y had the highest percentage of marketable yield. A99331-2R/Y had the highest percentage of less than 4 oz. tubers. POR01PG45-5 had the highest percentage of culls/No.2 tubers (Table 2b).
- POR01PG45-5 had the highest specific gravity (Table 2b).
- ATTX98500-2P/Y and POR01PG45-5 were latest in maturity (Table 2c).
- ATTX961014-1R/Y and A99331-2RY had the darkest yellow flesh color (Table 2d).

- ATTX98500-2P/Y showed the most feathering (Table 2d).
- All of the entries had low levels of internal defects (Table 2d).
- ATTX961014-1R/Y and AC99329-7PW/Y showed no Zebra Chip (Table 2f).

Summary:

Overall, the outstanding entry based on general rating and marketable yield was ATTX961014-1R/Y.

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

- PA96RR1-193 had the highest general rating (Table 2a).
- CO97222-1R/R produced the highest total and marketable yield (Table 2a).
- PA96RR1-193 had the highest yield of less than 4 oz. CO97222-1R/R had the highest yield of culls/No. 2 tubers (Table 2a).
- CO97222-1R/R had the highest percent marketable yield, while PA96RR1-193 had the highest percentage of less than 4 oz. tubers (Table 2b).
- PA96RR1-193 had the highest specific gravity (Table 2b).
- All of the clones were late in maturity (Table 2c).
- CO97222-1R/R and POR03PG23-1 had the darkest flesh color (Table 2d).
- All of the entries had less than 3% Zebra Chip.

Summary:

None of the red skin red flesh clones appear to merit further evaluation.

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

- CO97215-2P/P had the highest general rating (Table 2a).
- Purple Majesty had the highest total and marketable yield (Table 2a).
- OR00068-1 had highest yield of less than 4 oz. tubers. Purple Majesty had the highest yield of culls/No. 2 tubers (Table 2b).
- CO97215-2P/P had the highest percentage of marketable yield, while CO97227-2P/PW had the highest percentage of less than 4 oz. tubers (Table 2b).
- Purple Majesty had the highest specific gravity (Table 2b).
- All of the clones were late maturing (Table 2c).

- CO97227-2P/PW and CO97215-2P/P had darkest flesh color (Table 2d).

Summary:

CO97227-2P/PW and CO97215-2P/P deserves further testing due to the darkness of their flesh.

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

- The outstanding entry based on general rating was Yukon Gold (Table 2a).
- Yukon Gold had the highest total and marketable yield (Table 2a).
- POR02PG37-2 had the highest yield of less than 4 oz. tubers. POR02PG26-5 had the highest yield of culls/No. 2 tubers (Table 2a).
- Yukon Gold had the highest percentage of marketable yield (Table 2b).
- POR02PG37-2 had the highest percentage of less than 4 oz. tubers. CO99045-1W/Y and POR02PG26-5 had the highest percentage of culls/No.2 tubers (Table 2b).
- POR02PG37-2 and Yukon Gold had the highest specific gravity (Table 2b).
- CO99045-1W/Y and A00286-3Y were the latest maturing entries while earliest maturing clones were Yukon Gold and POR02PG37-2 (Table 2c).
- CO99045-1W/Y had the longest tubers (Table 2d).
- Yukon Gold had 10% hollow heart (Table 2d).
- POR02PG37-2 and A00286-3Y had the deepest yellow flesh color (Table 2d).

Summary:

None of these entries performed better than Yukon Gold.

Comments on entries:

Red/White Flesh

- | | | |
|--------------------|------------|--|
| • CO98012-5R | Round Red | Small, good for B's, nice skin, very small |
| • Dark Red Norland | Oblong Red | Over mature, heat sprouts, very early, buff, rough, |
| • NDA7985-1R | Oblong Red | Good yield, sticky stolon rough, Drop |
| • Red LaSoda | Oblong Red | Oversize, early, rough, chain tubers, knobs, deep eyes, Drop |

Red-Purple/Yellow Flesh

- A99331-2RY Round Red B size, heat sprouts, small, pinto
- AC99329-7PW/Y Round Purple-White pointed, heat sprouts, sticky solons
- AC99330-1P/Y Round Purple very small, nice flesh, rough, Drop+
- ATTX961014-1R/Y Oblong Red variable shape, very nice internals, small, heavy set, dumbbell culls, heat sprouts, lenticels
- ATTX98500-2P/Y Oblong Purple rough, heat sprouts, dumbbell culls, sticky stolon
- POR01PG45-5 Oblong Purple rough, very poor shape, Drop

Red/Red Flesh

- CO97222-1R/R Oblong Red buff, rough, stolon attachment, ugly skin
- POR03PG23-1 Oblong Red red flesh
- PA96RR1-193 Round Red lots of B's, Buff

Purple/Purple Flesh

- CO97215-2P/P Round Purple very dark solid flesh
- CO97227-2P/PW Oblong Purple very dark solid flesh, small, very late, rough
- OR00068-11 Round Purple very late, feathering, All Blue like, small, purple/white flesh, smooth, late, not as many, culls, Drop
- Purple Majesty Oblong Purple small, some rough

Yellow Flesh

- A00286-3Y Round White sow yield, Drop
- CO99045-1W/Y Long White Burbank like, long, fingerling oversize (more #4 to culls), Drop
- POR02PG26-5 Oblong White late, Drop
- POR02PG37-2 Round White small boiler, Drop??
- Yukon Gold Round White smaller, growth cracks on larger tubers

SOUTHWESTERN REGIONAL COOPERATIVE TRIALS

This is the ninth year for the Southwestern Regional Cooperative Trials, which in 2008 included Russet, Red, Chipping (conducted at Dalhart), and Specialty Trials. The Southwestern Regional Potato Research Program includes California, Colorado, and Texas. The objective is to evaluate promising advanced selections

from the Texas and Colorado breeding programs. Entries that are successful in these trials are then graduated to the various Western Regional Trials.

SOUTHWESTERN REGIONAL COOPERATIVE RUSSET TRIAL

This trial consisted of 11 entries, including the check variety Russet Norkotah.

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

- The outstanding entry based on general rating and best of trial designation was AOTX96216-2Ru. CO99100-1RU also had a high general rating. (Table 3a and Table 3e).
- CO99100-1RU and AOTX98152-3Ru had the highest total and marketable yield (Table 3a).
- AOTX98152-3Ru had the highest yield of over 18 oz. tubers. CO99053-4RU and AC99375-1RU had the highest yield of under 4 oz. tubers. CO99053-4RU and AC99375-1RU had the highest yield of cull/No. 2 tubers (Table 3a).
- AOTX96265-2Ru and CO99100-1Ru had the highest percent marketable yield (Table 3b).
- CO99053-4RU and AC99375-1RU had the highest percentage of less than 4 oz. tubers. Russet Norkotah and CO99053-4RU had the highest percentage of culls/No.2 tubers (Table 3b).
- CO99100-1Ru and AC99375-1RU had the highest specific gravity (Table 3b).
- ATX97147-4Ru was the latest maturing entry, while CO99100-1RU and AOTX98152-3Ru were the earliest (Table 3c).
- ATX97147-4Ru and CO99053-4RU showed no Zebra Chip, while ATX9202-3Ru showed 40% Zebra Chip (Table 3f).

Comments on entries:

- AC99375-1RU Oblong Russet small, did not size
- AOTX96216-2RU Long Russet raised eyes on large tubers, BOT
- AOTX96265-2Ru Long Russet feathering
- AOTX98152-3Ru Long Russet
- ATX9202-3Ru Long Russet very white flesh,
- ATX97147-4Ru Long Russet small, nice flesh,
- ATX99013-1Ru Long Russet Drop

- CO99053-3RU Long Russet skinny, long, Drop++
- CO99053-4RU Long Russet heavy set, small, poor shape skinny, Drop
- CO99100-1RU Oblong Russet nice, skin??
- Russet Norkotah Long Russet late Norkotah?

Summary:

CO99100-1RU and AOTX96216-2Ru were the outstanding entries. AOTX98152-3Ru merits further evaluation.

SOUTHWESTERN REGIONAL COOPERATIVE RED TRIAL

The Southwestern Regional Cooperative Red Trial consisted of 14 entries, including the check varieties Red LaSoda and Dark Red Norland.

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

- The outstanding entries based on general rating and best of trial designation were ATTX98453-6R, AOTX91861-4R, and NDTX5003-2R, while BTX2332-1R, NDTX7590-3R, NDTX4784-7R, and Dark Red Norland also received high general ratings (Tables 4a and 4e).
- BTX2332-1R and Red LaSoda had the highest total yield, while BTX2332-1R and ATTX98483-6R had the highest marketable yield. CO00277-2R had the highest yield of less than 4 oz. tubers. Red LaSoda and CO00277-2R had the highest yield of culls/No.2 tubers (Table 4a).
- ATTX98453-6R and NDTX4828-2R had the highest percentage of marketable yield, while CO00277-2R and CO00291-5R had the highest percentage of less than 4 oz. tubers. Red LaSoda had the highest percentage of culls/No. 2 tubers (Table 4b).
- ATTX98453-6R had the highest specific gravity (Table 4b).
- AOTX93483-1R, COTX94218-1R, and CO00291-5R were late in maturity, while NDTX7590-3R was the earliest in maturity (Table 4c).
- AOTX93483-1R had the most feathering (Table 4d).
- All of the entries had good internal qualities (Table 4d).

- COTX94218-1R and CO00291-5R showed no Zebra Chip, while NDTX7590-3R showed 22% Zebra Chip (Table 4f).

Comments on entries:

- AOTX91861-4R Round Red BOT, nice flesh, stem attachment, light set, smooth, low yield, Drop
- AOTX93483-1R Oblong Red very late drop, keep, early bulking, Feathering, light set, rough, pear shape, Stem attachment
- ATTX98453-6R Round Red variable shape, early, smooth, BOT-keep, good color, fast bulking, nice, light set, early buff, BOT-nice skin, can oversize
- BTX2332-1R Oblong Red yield +, buff, Internal?, 10% internal discoloration
- CO00277-2R Oblong Red poor shape, late ?, lots of culls, very white flesh, lots of B's, dumbbell tubers, Drop
- CO00291-5R Round Red late, drop, good for B size, small, did not size, good color
- COTX94216-1R Oblong Red buff, variable size, a little rough, ugly, very white flesh, Drop?
- COTX94218-1R Round Red smooth, nice shape, very white flesh, keep, Drop?
- Dark Red Norland Oblong Red over mature, heat sprouts, very early, buff, rough
- NDTX4784-7R Round Red smooth, stolon, very dark skin, very white flesh
- NDTX4828-2R Oblong Red little rough, Rhizoctonia?, low yield, buff, Drop
- NDTX5003-2R Round Red BOT-, nice, indented, stolon attachment
- NDTX7590-3R Oblong Red Keep, smooth, fast bulking, early, light set, can oversize, feathering
- Red LaSoda Oblong Red Oversize, early, rough, large, chain tubers, knobs, deep eyes, Drop

Summary:

ATTX98453-6R, AOTX91861-4R, and NDTX5003-2R were the outstanding entries.

SOUTHWESTERN REGIONAL COOPERATIVE SPECIALTY TRIAL

The Southwestern Regional Cooperative Specialty Trial consisted of 14 entries, including the check variety Yukon Gold.

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

- ATTX00289-6Y/Y, TX1673-1W/Y, TXYG079, TXTG107, TXYG055, YG ZSC, Yukon Gold, TXYG057, TXYG105, and CO00379-2R/Y were the outstanding entries based on general rating (Table 5a).
- ATTX00289-6Y/Y and TXYG079 had the highest total yield. ATTX00289-6Y/Y and TX1673-1W/Y had the highest marketable yield. ATC00293-1W/Y had the highest yield of less than 4 oz. tubers. TXYG055 and TXYG057 had the highest yield of culls/No. 2 tubers (Table 5a).
- TX1673-1W/Y, ATTX00289-6Y/Y and Yukon Gold had the highest percentage of marketable yield. CO00412-5W/Y had the highest percentage of less than 4 oz. tubers and culls/No.2 tubers (Table 5b).
- CO00412-5W/Y, TXYG105, and TXYG107 and had the highest specific gravity (Table 5b).
- ATTX98500-3PW/Y, ATC00293-1W/Y, and CO00412-5W/Y were the latest in maturity, while Yukon Gold, TXYG057, and ATTX00289-6Y/Y were the earliest in maturity (Table 5c).
- CO00379-2R/Y had the darkest yellow flesh color (Table 5d).
- ATTX00289-6Y/Y, YG ZSC, TXYG057, and TXYG098 had high percentages of hollow heart (Table 5d).
- All of the clones had less than 11% Zebra Chip (Table 5f)

Comments on entries:

- ATC00293 -1W/Y Round White late, shape, Drop
- ATTX00289-6Y/Y Round White raised eyes, internals, hollow heart ++, Drop
- ATTX98500-3PW/Y Oblong White flat, light skin, Drop,
- CO00379-2R/Y Long Red smooth pointed, buff+
- CO00405-1R Long Red buff, curved, fingerling, poor shape, drop, good skin set, nice flesh, skinny

- CO00412-5W/Y Round White late, small boiler, buff, Drop+++
- CO00415-1R Long Red buff, road map, good flesh color
- TX1673-1W/Y Oblong White oversize Rough, Drop
- TXYG055 Round White dumbbells, culls
- TXYG057 Round White shape
- TXYG079 Round White dumbbells
- TXYG098 Round White misshape, low yield
- TXYG105 Round White misshape
- TXYG107 Round White smaller
- YG ZSC Round White misshape, Dumbbells
- Yukon Gold Round White smaller, growth cracks, large tubers

Summary:

ATTX00289-6Y/Y and TX1673-1W/Y were the outstanding entries based on yield and general rating. However, ATTX00289-6Y/Y had 40% hollow heart and raised eyes, which could eliminate it as a potential variety. All of the Yukon Gold strains compared favorably to the standard Yukon Gold.

SOUTHWESTERN REGIONAL COOPERATIVE FINGERLING TRIAL

The Southwestern Regional Cooperative Fingerling Trial consisted of two entries.

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

- Both entries had similar general ratings which were not outstanding (Table 6a).
- CO00415-1R had the highest total yield and yield of 1-6 inch tubers (Table 6a).
- CO00405-1R had the highest specific gravity (Table 6b).
- Both entries were similar in maturity (Table 6c).
- CO00415-1R showed more feathering (Table 6d).
- Both of the clones had less than 3% Zebra Chip (Table 6f)

Comments on entries:

- CO00405-1R Long Red Buff, curved, fingerling, poor shape, drop, good skin set, nice flesh, skinny
- CO00415-1R Long Red Buff, road map, good flesh color

Summary:

Neither of the entries appears to merit further consideration.

OUTSTANDING TEXAS ADVANCED RUSSET SELECTIONS, 2008

Overall Summary - Springlake and Dalhart: The Texas Advanced Russet Selection Trial at Springlake included 28 entries, with 40 entries planted at Dalhart. Russet Norkotah, Russet Norkotah278, and Russet Norkotah296 were the check varieties for both locations. Based on both trials, AOTX02060-1Ru, AOTX95265-1Ru, AOTX95265-2ARuWR08, AOTX98096-1Ru, AOTX99194-1RuBOT, ATX84378-6Ru, ATX91137-1Ru, ATX9202-3Ru, TXA549-1Ru, TXNS410, and TXNS551 will be re-evaluated in the 2009 season.

TEXAS ADVANCED RUSSET SELECTION TRIAL

This russet trial consisted of 28 entries, including the check varieties Russet Norkotah, Russet Norkotah278, and Russet Norkotah296.

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

- AOTX99194-1Ru, ATX03068-1Ru, ATX99194-3Ru, and ATX84378-6Ru were the outstanding entries based on general rating and best of trial designations (Tables 7a and 7e).
- Russet Norkotah278 and ATX91137-1Ru had the highest total yield, while ATX91137-1Ru and AOTX99194-1Ru had the highest yield of marketable tubers. (Table 7a).
- ATX84378-6Ru had the highest yield of over 18 oz. tubers, while ATX03424-1Ru and AOTX96084-1Ru had the highest yield of less than 4 oz. tubers (Table a).

- Russet Norkotah296 and Russet Norkotah278 had the highest yield of culls/No. 2 tubers, and were obviously severely affected by the adverse growing conditions (Table 7a).
- ATX99194-3Ru had the highest percentage of marketable yield (Table 7b).
- ATX84378-6Ru had the highest percentage of over 18 oz. tubers, while ATX03424-1Ru and AOTX99008-1Ru had the highest percentage of less than 4 oz. tubers. Russet Norkotah278 and TXCR-4Ru had the highest percentage of culls/No.2 tubers (Table 7b).
- ATX9332-12Ru had the highest specific gravity (Table 7b).
- TXCR-4Ru, ATX03003-7Ru, Russet Norkotah296, ATX03077-2Ru, Russet Norkotah278, ATX03068-1Ru, and ATX9332-12Ru were the latest in maturity, while AOTX98137-1Ru, AOTX02136-1Ru, and Russet Norkotah were the earliest in maturity (Table 7c).
- ATX03068-1Ru had 15% vascular discoloration. ATX99194-3Ru had 20% internal brownspot (Table 7d).
- ATX03068-1Ru, ATX99194-3Ru, AOTX02136-1Ru, and ATX03424-1Ru showed no Zebra Chip, while Russet Norkotah296, ATX84378-6Ru, and ATX91137-1Ru had the highest percentage of Zebra Chip (Table 7f).

Comments on entries:

- AOTX02060-1Ru Long Russet Bruce likes, large
- AOTX02066-1Ru Oblong Russet blocky
- AOTX02136-1Ru Long Russet blocky, poor internals
- AOTX95265-1Ru Long Russet small, nice internals
- AOTX95269-1Ru Long Russet low yield, Drop,
- AOTX95295-1Ru Long Russet poor shape, drop
- AOTX95295-3Ru Long Russet poor internals, low yield
- AOTX96084-1Ru Long Russet low yield
- AOTX96208-1Ru Long Russet
- AOTX98096-1Ru Long Russet
- AOTX98137-1Ru Long Russet
- AOTX99008-1Ru Long Russet skinny, nice internals, Drop++
- AOTX99194-1Ru Long Russet BOT+, smooth
- ATX03003-1Ru Oblong Russet large, heat sprouts
- ATX03003-7Ru Long Russet poor internals+, low yield, blocky

- ATX03068-1Ru Oblong Russet Bruce likes, blocky, smooth, BOT, rot
- ATX03077-2Ru Long Russet some pointed, large, nice internal
- ATX03424-1Ru Long Russet smooth, low yield
- ATX84378-6Ru Oblong Russet nice internals, BOT, smooth, large
- ATX91137-1Ru Long Russet raised eyes, Drop
- ATX9332-12Ru Long Russet smooth
- ATX99194-3Ru Oblong Russet blocky, BOT for shape, poor internals, low yield
- Russet Norkotah Long Russet pointed
- Russet Norkotah278 Long Russet
- Russet Norkotah296 Oblong Russet rough curved
- TXCR-4Ru Long Russet long skinny, feathering
- TXNS410 Long Russet nice internals
- TXNS551 Long Russet

Summary:

ATX91137-1Ru and AOTX99194-1Ru were the outstanding entries in this trial.

OUTSTANDING TEXAS ADVANCED RED SELECTIONS, 2008

Overall Summary - Springlake and Dalhart: The Texas Advanced Red Selection Trials had nine entries at Springlake and 22 at Dalhart. Red LaSoda was the check variety for both locations. Based on both trials, AOTX01178-1R, ATTX98453-6R, BTX2332-1R, COTX94218-1R, NDTX4271-5R, NDTX4784-7R, NDTX731-1R, Rio Rojo, NDTX059827-1R and NDTX5438-11R will be re-evaluated in the 2009 season.

TEXAS ADVANCED RED SELECTION TRIAL

This trial consisted of nine entries, including the check variety Red LaSoda. With the exception of Red LaSoda, NDTX4271-1R, NDTX731-1R, and Rio Rojo all seed came from Dalhart.

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

- The outstanding entries based on general rating and best of trial designations were Rio Rojo, NDTX4271-5R, and NDTX731-1R. Red LaSoda also received best of trial designation for yield (Tables 8a and 8e).
- Rio Rojo and NDTX731-1R had the highest total yield and marketable yield (Table 8a).
- COTX04340-1R had the highest yield of less than 4 oz tubers. Red LaSoda had the highest yield of culls/No.2 tubers (Table 8a).
- Red LaSoda, Rio Rojo, and NDTX731-1R had the highest percentage of marketable yield (Table 8b).
- NDTX059878-1R and COTX04340-1R had the highest percentage of less than 4 oz. tubers (Table 8b).
- NDTX09845-1R had the highest specific gravity (Table 8b).
- NDTX039190-1R, COTX04340-1R, and Red LaSoda were the latest maturing, while Rio Rojo, NDTX059878-1R, NDTX059845-1R, and NDTX4847-7R were the earliest maturing (Table 8c).
- Red LaSoda and COTX04340-1R showed the most feathering (Table 8d).
- NDTX731-1R, NDTX059845-1R, NDTX059878-1R, and NDTX039190-1R showed no Zebra Chip, while COTX04340-1R (100%) and Red LaSoda (43%) had the highest percentage of Zebra Chip. NDTX059878-1R received a best of trial designation for chip appearance (Table 8f).

Comments on entries:

- COTX04340-1R Oblong Red late, chain stolon, good color, very white flesh, feathering, drop+++
- NDTX039190-1R Round Red low yield, growth cracks, very white flesh, Drop++++
- NDTX059845-1R Round Red some slight misshape, very white flesh, low yield, feathering, Drop
- NDTX059878-1R Round Red some buff, rough, small, Drop
- NDTX4271-5R Round Red small BOT, some buff, yield, mix size, 30% internal problems-Z?, nice flesh, not as nice flesh as Rio Rojo
- NDTX4847-7R Round Red low yield, nice internal, sticky stolon, buff
- NDTX731-1R Round Red BOT+++ , buff, large tubers not as rough Red LaSoda
- Red LaSoda Oblong Red BOT (for yield) deep eyes, very white flesh, very rough, poor shape, dumbbell

- Rio Rojo Round Red BOT++ can oversize

Summary:

Outstanding entries included Rio Rojo, NDTX731-1R, and NDTX4271-5R.

OUTSTANDING TEXAS ADVANCED SPECIALTY SELECTIONS, 2008

Overall Summary - Springlake and Dalhart The Texas Advanced Specialty Selection Trials included 45 entries at Springlake and 62 at Dalhart. Yukon Gold was the check varieties for both locations. Based on both trials, the following entries will be tested again in 2009: ATTX00289-6Y/Y, ATTX961014-1R/Y, ATTX98444-16R/Y, ATTX98500-2P/Y, ATTX99325-1P, ATX02263-1R/Y, COTX03187-1W, COTX04050-1P/P, COTX04178-1Y/Y, COTX04188-3R/Y, COTX04193-2R/Y, COTX04267-1R/Y, NDTX049265-2WRSP/Y, NDTX059759-3Pinto/Y, NDTX059759-3Pinto/Y-P, NDTX059886-1Y/Y, PTTX05PG07-1W, TX04237-6Y/Y, TX1523-1Ru/Y, TXYG055, TXYG055(G2), TXYG057, TXYG057(G2), TXYG079, TXYG079(G2), TXYG098, TXYG098(G2), TXYG105, TXYG105(G2), TXYG107, and TXYG107(G2).

TEXAS ADVANCED RED SKIN/ YELLOW FLESH SELECTION TRIAL

This specialty trial consisted of eight entries.

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

- The entry receiving the highest general ratings and best of trial designations were ATX02263-1R/Y. ATTX99325-1P also received a high general rating (Tables 9a and 9e).
- ATTX98468-5R/Y and COTX04303-2R/Y had the highest total yield, while ATTX98468-5R/Y and ATTX99325-1P had the highest marketable yield (Table 9a)
- COTX04303-2R/Y and ATTX98444-16R/Y had the highest yield of less than 4 oz. tubers. ATTX98468-5R/Y had the highest yield of culls/No.2 tubers (Table 9a).

- ATTX99325-1P had the highest percentage of marketable yield. ATTX98444-16R/Y had the highest percentage of less than 4 oz. tubers and will be advanced as a salad type. ATTX98468-5R/Y had the highest percentage of culls/No.2 tubers (Table 9b).
- TX04212-1R/Y, COTX04303-2R/Y, COTX03039-1R/Y, and ATTX98468-5R/Y were the latest maturing entries, while ATTX99325-1P was the earliest (Table 9c).
- COTX03039-1R/Y and COTX04303-2R/Y had the darkest yellow flesh (Table 9d).
- ATTX98468-5R/Y, ATTX99325-1P, and COTX04303-2R/Y had the worst ratings for feathering (Table 9d).
- COTX04303-2R/Y and TX04212-1R/Y showed no Zebra Chip (Table 9f).

Comments on entries:

- ATTX98444-16R/Y Oblong Red salad, smooth, small
- ATTX98468-5R/Y Oblong Red nice shape, light flesh, lot of culls, Drop
- ATTX99325-1P Oblong Purple very white flesh, yield??
- ATX02263-1R/Y Round Red small, B size, smooth, BOT for salad, buff
- COTX03039-1R/Y Oblong Red silver scurf, buff, poor internals, Drop?
- COTX04303-2R/Y Round Red
- NDTX4756-1R/Y Oblong Red low yield, silver scurf, small
- TX04212-1R/Y Oblong Red sticky stolon, immature, late, low yield, light set, Drop++

Summary:

ATTX99325-1P and ATX02263-1R/Y were the outstanding entries for this trial. ATTX98444-16R/Y and ATX02263-1R/Y will be advanced as salad-type potatoes.

TEXAS ADVANCED WHITE SKIN/YELLOW FLESH SELECTION TRIAL

This specialty trial consisted of 11 entries, including the check varieties TX1523-1Ru/Y and Yukon Gold

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

- The entry receiving the highest general ratings and best of trial designations was TX1523-1Ru/Y. Yukon Gold also received a high general rating (Tables 10a and 10e).
- Yukon Gold and COTX03079-1W/Y had the highest total yield, while TX1523-1Ru/Y and Yukon gold had the highest marketable yield (Table 10a)
- COTX04178-1Y/Y, NDTX059775-1W/Y, and COTX03079-1W/Y had the highest yield of less than 4 oz. tubers. Yukon Gold and BTX1544-2W/Y had the highest yield of culls/No.2 tubers (Table 10a).
- TX1523-1Ru/Y had the highest percentage of marketable yield. COTX04178-1Y/Y had the highest percentage of less than 4 oz. tubers. BTX1544-1W/Y and Yukon Gold had the highest percentage of culls/No.2 tubers (Table 10b).
- TX1523-1Ru/Y had the highest specific gravity (Table 10b).
- COTX04015-3W/Y, NDTX059759-3Pinto/Y, and COTX04178-1Y/Y were the latest maturing entries, while BTX1544-2W/Y and NDTX049265-2WRSP/Y were the earliest maturing (Table 10c).
- COTX03079-1W/Y and COTX04015-3W/Y had the darkest yellow flesh (Table 10d).
- NDTX049265-2WRSP/Y and COTX04015-3W/Y had the worst ratings for feathering. Yukon Gold had 15% hollow heart (Table 10d).
- NDTX059775-1W/Y had 63% Zebra Chip. All other entries had less than 8% Zebra Chip. BTX1749-1W/Y received best of trial designation for chip appearance (Table 10f).

Comments on entries:

- | | | |
|-----------------------|---------------|---|
| • BTX1544-2W/Y | Oblong White | Argentina, Drop++ |
| • BTX1749-1W/Y | Oblong White | rough, ugly, buff, Argentina, Drop+++ |
| • COTX03079-1W/Y | Oblong White | shape-, good yield, drop++ |
| • COTX04015-3W/Y | Oblong White | red eyes, Drop+++ |
| • COTX04178-1Y/Y | Oblong Yellow | small tubers, boiler, Amadeus like, drop++ |
| • NDTX049265-2WRSP/Y | Oblong White | red splash, yield |
| • NDTX059759-3Pinto/Y | Long White | red pinto, purple streak in flesh, TC??, Drop |
| • NDTX059775-1W/Y | Round White | shape-, Drop+++ |
| • TX1523-1Ru/Y | Oblong Russet | BOT++ |
| • TX1674-1W/Y | Long White | pointed to stem, russet, Argentina, Drop+++ |
| • Yukon Gold | Oblong White | |

Summary:

TX1523-1Ru/Y and Yukon Gold were the outstanding entries for this trial. Based on chipping results, TX1674-1W/Y should be evaluated as a possible chip variety.

TEXAS ADVANCED FINGERLING SELECTION TRIAL

This specialty trial consisted of three entries.

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

- The entry receiving the highest general rating and best of trial designation was PTTX05PG07-1W. COTX04056-4P/PSalad and COTX03187-1W also received high general ratings (Tables 11a and 11e).
- COTX04056-4P/PSalad had the highest total and marketable yield (Table 11a)
- COTX04056-4P/PSalad had the highest yield of less than 1 inch long tubers (Table 11a).
- PTTX05PG07-1W and COTX03187-1W had the highest percentage of marketable yield. COTX04056-4P/PSalad had the highest percentage of less than 1 inch long tubers. COTX03187-1W had the highest percentage of culls/No.2 tubers (Table 11b).
- COTX03187-1W had the highest specific gravity (Table 11b).
- COTX04056-4P/PSalad and COTX03187-1W were the latest maturing entries, while PTTX05PG07-1W was the earliest (Table 11c).
- COTX04056-4P/PSalad had the worst ratings for feathering (Table 11d).
- All the clones had less than 5% Zebra Chip (Table 11f).

Comments on entries:

- | | | | |
|-----------------------|--------|--------|--|
| • COTX03187-1W | Long | White | Can be rough, keep+, fingerling, can oversize |
| • COTX04056-4P/PSalad | Oblong | Purple | salad, heavy set+, feathering, rough, light purple flesh,
Drop? |
| • PTTX05PG07-1W | Long | White | Low yield, BOT-, nice shape, keep+, curved, pointed |

Summary:

PTTX05PG07-1W was the outstanding entry for this trial although all will be continued.

TEXAS ADVANCED PURPLE FLESH SELECTION TRIAL

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

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

- All the entries had similar general ratings (Table 12a).
- Purple Majesty had the highest total and marketable yield (Table 12a)
- All of the entries had over 116 CWT/A yield of less than 4 oz. tubers (Table 12a).
- All of the entries had over 59% of less than 4 oz. tubers. (Table 12b).
- COTX04050-1P/P had the highest specific gravity. (Table12b).
- All the entries were late in maturity (Table 12c).
- COTX04050-1P/P had the darkest purple flesh (Table 12d).
- COTX04050-1P/P showed 17% Zebra Chip (Table 12f).

Comments on entries:

- COTX03025-2P/P Oblong Purple Small, road map, buff, white pith
- COTX04050-1P/P Round Purple Small, rough, very dark flesh
- Purple Majesty Oblong Purple Feathering, culls +, rough

Summary:

Based on its dark purple flesh color, COTX04050-1P/P will be advanced.

CHIP TRIAL

The objectives of this trial were twofold. First, to identify potential new varieties which combine high yield and chip quality. Second, to identify varieties which exhibit potential resistance to Zebra Chip.

This chip trial consisted of 41 entries, including the check varieties Atlantic, Chipeta, and Ivory Crisp. Represented in this trial were entries from the Southwestern Regional Chip Trial, the Western Regional Chip Trial, the National Snack Food Trial, as well as advanced selections from the Texas Breeding Program.

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

- The entry receiving the highest general ratings and best of trial designations for chipping was NY138. Beacon Chipper, ATTX00289-4W, CO96141-4W, CO00188-4W, AOTX95295-1W, COTX00328-1Pu/Ypu, and CO97043-14W also received high general ratings. COTX00328-1Pu/Ypu, COTX02377-1W, NDTX059905-1Y/Y, and COTX03270-1W also received best of trial designations for chipping (Tables 13a and 13f).
- ATX00289-4W and CO96141-4W had the highest total yield, while Beacon Chipper and ATTX00289-4W had the highest marketable yield (Table 13a)
- NDTX059897-1Y/Y had the highest yield of under 1 inch tubers. AF2219-10 and W2310-3 had the highest yield of culls/No.2 tubers (Table 13a).
- NY138 and Beacon Chipper had the highest percentage of marketable yield. ATTX98466-5R/W-R, COTX03270-1W, AC00170-2W, and MSJ147-1 had the highest percentage of under 1 inch tubers. W2310-63 and AF2219-10 had the highest percentage of culls/No.2 tubers (Table 13b).
- NDTX7571-3AW, CO95051-7W, W2310-3, W2717-5, and Atlantic had the highest specific gravity (Table 13b).
- MSJ036-A, Chipeta, AF2219-10, MSJ147-1, NDTX059608-1Ru, ATX85404-8W, and AC99123-8W were the latest maturing entries, while NDTX059828-2W, NDTX059905-1Y/Y, PATX99P10-1R/R, COTX02377-1W, and TX03196-1W were the earliest maturing (Table 13c).
- W2717-5 had 20% hollow heart. NDTX059608-1Ru had 23% vascular discoloration. CO00189-2W had 17% internal brownspot (Table 13d).

- Beacon Chipper, ATTX00289-4W, NY138, AOTX95295-1W, COTX00328-1P/Yp, COTX02377-1W, NDTX059632-1W, NDTX059608-1Ru, COTX03270-1W, and NDTX059828-2W showed no Zebra Chip. MSJ036-A, Chipeta, and CO97065-7W had the highest percentage of Zebra Chip (Table 13f).

Comments on entries:

- AC00170-2W Round White immature, green stem, very late, heat sprouts stolon, Drop++
- AC99213-8W Round White better yield, very late, poor internals, sticky stolon
- AF2219-10 Round White very late, rough, very white flesh, sticky stolon, heat sprouts, drop++
- AOTX95295-1W Round White nice
- AOTX95309-1W Round White
- AOTX95309-3W Round White nice interior, small
- Atlantic Round White low yield, buff
- ATTX00289-4W Round White shape-, buff, nice internal
- ATTX98466-5R/W-R Round White yellow red, Internal
- ATX85404-8W Round White late, very white flesh, nice internal
- Beacon Chipper Round White over size, buff
- Chipeta Round White low yield, late, low yield, sticky stolon, knob
- CO00188-4W Round White yield+, late
- CO00189-2W Round White
- CO00197-3W Round White late, drop, poor yield
- CO00270-7W Round White very white flesh
- CO95051-7W Round White Drop
- CO96141-4W Round White nice, smooth, hollow heart, BOT, nice interior
- CO97043-14W Round White late
- CO97065-7W Round White nice
- COTX00328-1Pu/Ypu Oblong Purple purple streak, smooth
- COTX02377-1W Round White
- COTX03270-1W Round White nice set, shape-, Drop
- COTX03270-3W Round White growth cracks, rough
- Ivory Crisp Round White rough, fast bulking, early, can oversize, Drop,

- MSJ036-A Round White late, buff
- MSJ147-1 Round White
- ND7519-1 Round White poor internals, buff, Drop
- NDTX059608-1Ru Round Russet light set, early bulking, low yield
- NDTX059632-1W Round White small, heavy set
- NDTX059828-2W Round White pink eyes, fresh pack, Jon G liked, nice flesh, buff, lenticels
- NDTX059897-1Y/Y Round White late, 2.7 yellow flesh, sticky stolon, indented stem attachment
- NDTX059905-1Y/Y Round White pith color, indented stolon attachment
- NDTX7571-3AW Round White
- NY138 Round White fast bulk, BOT, nice internal, too large, smooth
- NY139 Round White very late
- PATX99P10-1R/R Round White silver scurf
- TX03196-1W Round White nice
- W2310-3 Round White very late, buff, nice internal, drop, nipple knobs
- W2324-1 Round White very late, some rough
- W2717-5 Round White late, shape-

Summary:

NY138, COTX00328-1Pu/Ypu, and COTX02377-W were the outstanding entries for this trial based on yield, chip quality, and Zebra expression.

YUKON GOLD STRAIN SELECTION TRIAL

The Yukon Gold strain selection trial consisted of eight entries, including the check variety Yukon Gold. With the exception of the Yukon Gold check, all of the entries were produced from G2 seed including a G2 Yukon Gold check.

Results from the trial were as follows: (Springlake Tables 14a, 14b, 14c, 14d, 14e, and 14f)

- TXYG079, TXYG107, and TXYG055 were the outstanding entries based on general rating (Table 5a).
- TXYG079 had the highest total yield and highest marketable yield. TXYG055 had the highest yield of less than 4 oz. tubers. TXYG055 and TXYG057 had the highest yield of culls/No. 2 tubers (Table 5a).
- Yukon Gold had the highest percentage of marketable yield. TXYG057, TXYG105, and TXYG098 had the highest percentage of less than 4 oz. tubers and culls/No.2 tubers (Table 5b).
- TXYG105 and TXYG107 had the highest specific gravity (Table 5b).
- The selections appeared to have a higher tuber number per plant and smaller tubers than did the Yukon Gold check.
- In general, the selections tended to be slightly more vigorous and later in maturity than the check (Table 5c).
- All of the strains had similar flesh color ratings to Yukon Gold (Table 5d).
- YG ZSC, TXYG057, TXYG098, and TXYG107 had high percentages of hollow heart (Table 5d).
- All of the clones had less than 10% Zebra Chip (Table 5f)

Comments on entries:

- | | |
|-----------|---------------------------------|
| • TXYG055 | Round White dumbbells, culls |
| • TXYG057 | Round White shape |
| • TXYG079 | Round White dumbbells |
| • TXYG098 | Round White misshape, low yield |
| • TXYG105 | Round White misshape |
| • TXYG107 | Round White smaller |
| • YG ZSC | Round White misshape, dumbbells |

- Yukon Gold Round White smaller, growth cracks, large tubers

Summary:

All of the Yukon Gold Strains compared favorably to the standard Yukon Gold.

Springlake
Table 1a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 20 entries in the Western Regional Russet Trial grown near Springlake, Texas-2008.

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(TX)	538.6	404.3	86.4	117.8	200.1	13.8	47.0	73.5	3.6	4.3
A0008-1TE	534.0	337.6	92.9	63.2	181.6	51.2	28.8	116.3	3.0	2.9
TXA549-1Ru(TX)	407.1	322.0	90.3	63.4	168.2	30.7	49.1	5.4	4.0	4.3
Russet Norkotah	480.9	292.2	99.8	80.0	112.5	51.2	35.0	102.5	3.5	3.7
AOTX95265-1Ru(TX)	489.1	284.4	62.9	69.6	151.9	33.9	51.9	119.0	3.0	2.5
CO97087-2RU	469.3	275.0	89.2	98.0	87.8	25.4	59.7	109.2	3.0	3.2
CO98067-7RU	445.2	273.3	99.3	80.0	94.0	20.7	84.6	66.6	3.4	2.9
TXCR-2Ru(TX)	517.7	270.2	60.6	68.7	140.8	26.5	26.7	194.3	2.1	2.3
CO98368-2RU	336.4	255.0	121.0	88.3	45.6	0.0	69.5	11.9	3.0	2.5
AOTX95265-3Ru	421.3	240.6	47.2	65.0	128.4	62.9	29.6	88.2	3.2	3.1
AOTX95265-2ARu	417.5	232.3	46.7	76.6	109.1	69.1	30.4	85.6	3.5	3.7
PA99N82-4	387.0	223.1	76.3	73.5	73.3	13.3	56.0	94.6	3.4	3.2
Ranger Russet	424.7	208.5	69.5	64.0	75.0	5.9	43.9	166.5	2.4	2.0
AO96141-3	391.2	205.1	77.9	61.8	65.5	1.7	60.6	123.8	2.4	2.5
NDTX8773-4Ru(TX)	391.7	203.6	74.3	41.0	88.3	32.3	67.9	87.8	3.1	2.8
A97066-42LB	320.0	192.0	95.2	40.1	56.7	0.0	91.4	36.5	3.2	3.0
AOTX95265-4Ru	322.1	186.2	47.0	40.1	99.1	14.2	30.4	91.3	2.9	2.9
PA99N2-1	319.1	163.9	108.2	34.2	21.4	0.0	128.3	27.0	2.9	2.1
AC96052-1RU	198.1	134.5	61.4	32.5	40.6	2.6	47.2	13.8	2.7	2.4
Russet Burbank	317.0	80.4	40.3	39.1	1.0	0.0	37.0	199.7	2.0	1.0
Average	406.4	239.2	77.3	64.8	97.1	22.8	53.8	90.7	3.0	2.9
L.S.D. (.05)	83.2	38.1	26.1	27.4	35.2	33.6	24.6	50.1	0.7	0.5

¹ 1=very poor to 5= excellent

Springlake
Table 1b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 20 entries in the Western Regional Russet Trial grown near Springlake, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
ATX91137-1Ru(TX)	75.0	16.1	21.8	37.1	2.6	8.6	13.8	1.061	13.4	Long	Russet
A0008-1TE	63.1	17.4	11.9	33.9	9.9	5.4	21.5	1.063	13.7	Oblong	Russet
TXA549-1Ru(TX)	79.6	22.4	15.7	41.5	7.2	11.9	1.3	1.068	14.6	Oblong	Russet
Russet Norkotah	61.5	21.0	17.0	23.5	10.7	7.3	20.6	1.062	13.7	Long	Russet
AOTX95265-1Ru(TX)	58.2	12.9	14.2	31.1	6.9	10.6	24.4	1.059	13.1	Long	Russet
CO97087-2RU	59.2	18.9	21.4	19.0	5.0	12.9	22.9	1.070	15.0	Long	Russet
CO98067-7RU	61.1	21.9	17.7	21.4	4.5	19.0	15.4	1.060	13.3	Oblong	Russet
TXCR-2Ru(TX)	51.9	11.7	13.3	26.9	5.3	5.2	37.6	1.060	13.1	Long	Russet
CO98368-2RU	75.9	36.1	27.3	12.4	0.0	21.0	3.1	1.062	13.5	Oblong	Russet
AOTX95265-3Ru	58.8	11.2	15.8	31.9	13.0	6.9	21.3	1.062	13.5	Long	Russet
AOTX95265-2ARu	55.8	11.1	18.5	26.2	16.5	7.0	20.7	1.061	13.5	Long	Russet
PA99N82-4	58.6	20.0	19.1	19.5	3.1	14.2	24.1	1.066	14.3	Oblong	Russet
Ranger Russet	49.7	16.3	15.2	18.2	1.4	10.4	38.6	1.066	14.3	Long	Russet
AO96141-3	52.7	19.8	16.0	17.0	0.4	15.6	31.3	1.071	15.1	Long	Russet
NDTX8773-4Ru(TX)	52.6	19.2	10.5	23.0	7.9	17.4	22.1	1.062	13.5	Oblong	Russet
A97066-42LB	60.6	29.0	12.7	18.9	0.0	28.4	11.0	1.082	17.1	Long	Russet
AOTX95265-4Ru	58.5	15.5	13.0	30.0	3.3	9.4	28.8	1.064	14.0	Long	Russet
PA99N2-1	51.3	34.0	10.7	6.6	0.0	40.6	8.1	1.063	13.8	Round	Russet
AC96052-1RU	69.0	29.5	16.1	23.3	1.0	23.3	6.7	1.066	14.2	Long	Russet
Russet Burbank	24.2	13.8	9.9	0.5	0.0	12.1	63.7	1.063	13.8	Long	Russet
Average	58.9	19.9	15.9	23.1	4.9	14.4	21.8	1.065	14.0		
L.S.D. (.05)	10.3	6.7	7.0	9.8	6.4	5.9	8.8	0.006	1.0		

Springlake
Table 1c. Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 20 entries in the Western Regional Russet Trial grown near Springlake, Texas-2008.

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(TX)	5.2	8.6	1.3	66	93	1.8	3.9	3.7	4.1	19
A0008-1TE	4.5	9.4	1.7	60	89	2.1	3.4	2.7	3.1	45
TXA549-1Ru(TX)	4.9	7.4	2.4	86	95	2.4	3.9	4.6	4.7	1
Russet Norkotah	4.2	8.7	1.8	88	100	1.6	3.6	3.1	3.6	40
AOTX95265-1Ru(TX)	4.0	8.4	1.7	86	100	1.5	4.2	4.3	4.4	4
CO97087-2RU	4.9	7.2	2.0	90	95	1.8	4.1	3.7	4.0	21
CO98067-7RU	5.4	6.1	2.0	99	100	1.4	3.9	3.5	3.9	20
TXCR-2Ru(TX)	3.4	9.1	1.7	91	100	1.9	3.6	4.7	4.7	3
CO98368-2RU	5.7	5.4	2.1	71	88	2.7	3.6	3.5	3.8	19
AOTX95265-3Ru	3.2	10.1	1.5	79	99	1.3	4.1	4.0	4.4	16
AOTX95265-2ARu	3.5	9.4	1.6	79	99	1.4	3.9	3.9	4.1	10
PA99N82-4	3.9	7.3	1.9	88	97	1.5	4.1	3.5	4.1	33
Ranger Russet	3.6	7.1	1.6	96	99	2.0	3.7	4.3	4.4	3
AO96141-3	4.2	5.7	1.9	73	99	1.2	4.0	3.7	3.9	14
NDTX8773-4Ru(TX)	4.4	6.8	2.3	84	98	1.9	3.9	4.1	4.5	3
A97066-42LB	4.9	5.2	1.4	60	96	1.8	4.0	3.8	4.1	66
AOTX95265-4Ru	2.6	9.1	1.6	83	100	1.5	3.9	4.0	4.4	10
PA99N2-1	5.1	5.1	1.8	83	96	2.1	3.9	4.4	4.3	0
AC96052-1RU	2.8	6.2	1.8	76	96	1.6	3.8	4.4	4.5	1
Russet Burbank	2.4	5.4	1.6	93	100	2.1	3.9	4.1	4.3	3
Average	4.1	7.4	1.8	81	97	1.8	3.9	3.9	4.2	16
L.S.D. (.05)	1.1	1.3	0.3	14	5	0.4	0.2	0.4	0.3	36

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

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

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

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

Springlake
Table 1d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 20 entries in the Western Regional Russet Trial grown near Springlake, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
ATX91137-1Ru(TX)	1.0	4.4	4.9	4.2	4.2	5.0	5.0	5.0	5.0	4.8	0	0	0	0
A0008-1TE	1.0	3.9	4.5	3.8	4.0	2.8	5.0	5.0	5.0	4.8	8	0	3	0
TXA549-1Ru(TX)	1.0	3.7	5.0	4.5	4.1	5.0	5.0	5.0	5.0	4.5	8	0	0	13
Russet Norkotah	1.0	4.5	5.0	4.0	4.5	5.0	5.0	5.0	5.0	5.0	5	0	0	0
AOTX95265-1Ru(TX)	1.0	4.5	5.0	4.5	4.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO97087-2RU	1.0	4.5	5.0	4.0	4.5	4.8	5.0	5.0	5.0	5.0	0	0	0	0
CO98067-7RU	1.0	3.8	5.0	4.0	4.3	5.0	5.0	5.0	5.0	5.0	0	0	3	0
TXCR-2Ru(TX)	1.0	4.6	3.5	4.0	3.5	5.0	5.0	5.0	5.0	4.1	0	0	0	0
CO98368-2RU	1.0	3.7	4.6	4.5	4.2	5.0	5.0	5.0	5.0	5.0	0	0	0	3
AOTX95265-3Ru	1.0	4.5	5.0	4.2	4.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX95265-2ARu	1.0	4.5	5.0	4.5	4.5	5.0	5.0	5.0	5.0	5.0	3	0	0	0
PA99N82-4	1.0	3.5	4.3	4.5	4.0	3.6	5.0	5.0	5.0	5.0	8	0	0	0
Ranger Russet	1.0	4.9	4.5	4.0	3.9	5.0	5.0	5.0	5.0	5.0	0	0	5	0
AO96141-3	1.0	4.8	5.0	3.9	4.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX8773-4Ru(TX)	1.0	3.8	5.0	4.5	4.1	5.0	5.0	5.0	5.0	5.0	15	0	0	0
A97066-42LB	1.0	3.9	4.5	4.5	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX95265-4Ru	1.0	4.5	5.0	4.5	4.5	5.0	5.0	5.0	5.0	5.0	3	0	3	0
PA99N2-1	1.0	2.0	4.1	4.6	3.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AC96052-1RU	1.0	4.5	5.0	4.7	4.3	5.0	5.0	5.0	5.0	5.0	5	0	0	0
Russet Burbank	1.0	4.6	4.5	4.4	4.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
Average	1.0	4.1	4.7	4.3	4.2	4.8	5.0	5.0	5.0	4.9	3	0	1	1
L.S.D. (.05)	ns	0.1	0.5	0.1	0.2	0.3	ns	ns	ns	0.5	ns	ns	ns	ns

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

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Table 1e. Notes and general rating for all reps of 20 entries in the Western Regional Russet Trial grown near Springlake, Texas-2008.

Variety or Selection	Notes Grading	General Rating Field	General Rating Grading
ATX91137-1Ru(TX)	raised eyes on large tubers, BOT	3.9, 3, 3.8, 3.7	4.5, 4.5, 4, 4.2
A0008-1TE	growth cracks++	2.5, 4, 3, 2.5	4.5, 2.2, 2, 2.8
TXA549-1Ru(TX)	blocky, BOT-, BOT	4, 4, 4, 3.8	4.5, 4, 4.3, 4.3
Russet Norkotah		3.5, 3.5, 3.8, 3	4, 3.5, 3.8, 3.6
AOTX95265-1Ru(TX)		3, 3.5, 3, 2.5	2.5, 2.5, 2.6, 2.5
CO97087-2RU	drop, rough, resistant to Z???	3.5, 3, 2.5, 3	3.7, 2.6, 3.2, 3.3
CO98067-7RU	nice internals, nice white flesh	3.5, 3.8, 3.9, 2.2	3, 3, 3, 2.7
TXCR-2Ru(TX)	skinny	2.5, 2, 2, 2	2.2, 2.2, 2.5, 2.4
CO98368-2RU	small, poor shape, drop	2.5, 2, 3.6, 3.7	2.6, 2.5, 2.5, 2.5
AOTX95265-3Ru		3.3, 3.5, 3.5, 2.5	3.2, 3.2, 3, 3
AOTX95265-2ARu	oversize, BOT	3.5, 3.6, 3, 3.7	3.5, 3.7, 3.7, 3.8
PA99N82-4	drop, growth cracks, blocky	3.8, 3.5, 3.8, 2.5	3.3, 3.3, 3, 3.3
Ranger Russet	skinny	2, 2.5, 2.5, 2.5	2, 2, 2, 2
AO96141-3	drop, rough,	2, 2.8, 2, 2.8	2.5, 3, 2, 2.5
NDTX8773-4Ru(TX)		3, 3.5, 3, 2.8	2.8, 2.8, 2.6, 3
A97066-42LB	drop, light russ skin, small	3.8, 3.5, 2, 3.5	2, 3.3, 3.3, 3.5
AOTX95265-4Ru		2.8, 3.6, 2.5, 2.8	3.2, 3.3, 2.5, 2.7
PA99N2-1	round, small	3, 3, 3.5, 2	2, 2.2, 2, 2
AC96052-1RU	smooth, small, low yield, drop	3.6, 2.5, 2, 2.5	2.5, 2.5, 2.5, 2
Russet Burbank	rough, very white flesh	2, 2, 2, 1.8	1, 1, 1, 1

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Table 1f.

Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Chipt at chipping, and percentage Zebra Defect at grading of 20 entries in the Western Regional Russet Trial grown near Springlake, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Chip	Percent Zebra at Grading
ATX91137-1Ru(TX)	Oregon	1.061	13.4	4.3	1+	20/19	25	18	23%Z , 19% Vas	23%	23%
A0008-1TE	Colorado	1.063	13.7	2.9	1+	29/14	20	19	13%Z , 36% Vas	13%	5%
TXA549-1Ru(TX)	Oregon	1.068	14.6	4.3	1	34/6	38	3	7% Z, BOT	7%	18%
Russet Norkotah	Colorado	1.062	13.7	3.7	2	18/22	18	22	20%Z , 35% Vas	20%	25%
AOTX95265-1Ru(TX)	Oregon	1.059	13.1	2.5	2	19/18	19	18	11%Z , 38% Vas	11%	23%
CO97087-2RU	Colorado	1.070	15.0	3.2	2	27/13	24	14	24%Z , 13% Vas	24%	0%
CO98067-7RU	Colorado	1.060	13.3	2.9	1	13/17	25	14	15%Z , 15% Vas, 5% Bru	15%	5%
TXCR-2Ru(TX)	Colorado	1.060	13.1	2.3	2+	17/22	5	30	20Z , 66% Vas	20%	8%
CO98368-2RU	Colorado	1.062	13.5	2.5	1+	25/18	17	24	12%Z , 32% Vas, 15% Bru	12%	25%
AOTX95265-3Ru	Colorado	1.062	13.5	3.1	2	24/14	13	17	10%Z , 47% Vas	10%	15%
AOTX95265-2ARu	Oregon	1.061	13.5	3.7	1	25/14	27	13	8%Z , 25% Vas	8%	25%
PA99N82-4	Oregon	1.066	14.3	3.2	1	17/24	21	19	43%Z , 5% Vas	43%	10%
Ranger Russet	Oregon	1.066	14.3	2.0	2	7/32	14	23	19%Z , 43% Vas	19%	15%
AO96141-3	Oregon	1.071	15.1	2.5	2	18/19	18	22	30%Z , 25% Vas	30%	20%
NDTX8773-4Ru(TX)	Oregon	1.062	13.5	2.8	2	21/19	7	32	23%Z , 5%Dk, 5%HH	23%	20%
A97066-42LB	Colorado	1.082	17.1	3.0	1	14/23	29	14	12%Z , 12%Dk	12%	18%
AOTX95265-4Ru	Oregon	1.064	14.0	2.9	1+	7/33	17	22	26%Z , 31% Vas	26%	10%
PA99N2-1	Oregon	1.063	13.8	2.1	1	18/22	18	19	32%Z , 19% Vas	32%	18%
AC96052-1RU	Oregon	1.066	14.2	2.4	1+	38/3	34	6	15%Z	15%	10%
Russet Burbank	Oregon	1.063	13.8	1.0	1+	5/30	7	33	13%Z , 50% Vas, 5% Bru, 15%Dk	13%	3%
Average										19%	15%
L.S.D. (.05)											ns

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

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

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

		DAP
Planted	March 31, 2008	
Vines Killed (Red, Chip)	July 28, 2008	118
Vines Killed (Russet)	August 15, 2008	135
Harvested (Red, Chip)	July 30, 2008	120
Harvested (Russet)	August 19, 2008	139

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:

(Red) 101-11-6 # per acre

(Russet, Chip) 175-11-6 # per acre

Irrigation:

Center Pivot

Insecticide:

Agri-Mek, Endigo, Avaunt, Oberon, Rimon, Dimthoate 4e,

Seed Treatment Applied:

Tops MZ Gaucho

Fungicides Applied:

Super tin 80, Kocide, Penncozeb, Quadris

Herbicides Applied:

Treflan, Dual, Sencor, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the first week of May, the fourth week of June, the third week of July, and the third week of August. Temperatures were higher than normal for the last week in May and the first and second weeks in June. These high temperatures had an adverse effect on the tuber shape.

Springlake Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 22 entries in the Western Regional Red/Specialty Trial grown near Springlake, Texas-2008.

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	418.3	242.5	110.6	59.5	72.4	0.0	93.3	82.5	3.6	3.0
Dark Red Norland	374.5	232.1	86.2	127.7	18.2	0.0	100.7	41.7	3.9	3.7
NDA7985-1R	321.6	211.7	79.7	82.5	49.4	0.0	103.9	6.1	3.6	2.8
CO98012-5R	240.6	34.2	23.5	10.7	0.0	0.0	206.4	0.0	3.1	3.4
Average	338.8	180.1	75.0	70.1	35.0	0.0	126.1	32.5	3.5	3.2
L.S.D. (.05)	64.8	36.9	27.0	36.2	27.5		52.3	29.3	0.3	ns
Red-Purple/Yellow Flesh										
ATTX961014-1R/Y	336.2	124.8	92.7	32.2	0.0	0.0	200.9	10.5		3.5
AC99329-7PW/Y	218.7	89.9	57.8	32.0	0.0	0.0	128.8	0.0		2.9
ATTX98500-2P/Y	236.5	54.8	50.8	4.0	0.0	0.0	151.4	30.3		3.2
POR01PG45-5	214.2	50.0	50.0	0.0	0.0	0.0	106.1	58.1		1.8
A99331-2RY	203.2	40.3	40.3	0.0	0.0	0.0	160.0	2.9		2.6
AC99330-1P/Y	222.1	30.4	30.4	0.0	0.0	0.0	158.0	33.7		2.0
Average	238.5	65.0	53.7	11.4	0.0	0.0	150.9	22.6		2.7
L.S.D. (.05)	ns	21.0	14.9	18.1			ns	38.4		0.3
Red/Red Flesh										
CO97222-1R/R	347.9	190.1	112.9	64.1	13.1	0.0	134.6	23.2		2.9
POR03PG23-1	270.9	112.7	98.0	14.8	0.0	0.0	156.5	1.7		3.4
PA96RR1-193	311.9	109.4	89.2	19.4	0.9	0.0	193.1	9.3		3.6
Average	310.2	137.4	100.0	32.7	4.7	0.0	161.4	11.4		3.3
L.S.D. (.05)	ns	28.9	ns	7.3	9.4		40.0	ns		ns
Purple/Purple Flesh										
Purple Majesty	252.9	79.0	71.2	5.9	1.9	0.0	142.1	31.8		2.9
OR00068-11	243.0	76.1	63.6	12.4	0.0	0.0	167.0	0.0		2.6
CO97215-2P/P	160.2	67.9	44.6	21.1	2.2	0.0	74.2	18.2		3.4
CO97227-2P/PW	190.7	28.5	27.0	1.6	0.0	0.0	139.7	22.5		2.5
Average	211.7	62.9	51.6	10.2	1.0	0.0	130.7	18.1		2.8
L.S.D. (.05)	55.9	20.3	17.7	7.4	ns		4.2	12.5		0.3
Yellow Flesh										
Yukon Gold	327.9	206.2	94.6	93.9	17.8	0.0	75.5	46.2	3.6	3.9
POR02PG26-5	353.1	130.3	84.0	41.8	4.5	0.0	129.6	93.2	2.9	2.6
CO99045-1W/Y	267.4	114.3	77.8	29.6	6.9	0.0	80.4	72.8	2.2	2.6
POR02PG37-2	267.6	88.0	66.2	21.8	0.0	0.0	176.0	3.6	3.2	2.7
A00286-3Y	148.7	62.2	42.4	19.8	0.0	0.0	58.1	28.3	2.4	2.0
Average	272.9	120.2	73.0	41.4	5.8	0.0	103.9	48.8	2.9	2.8
L.S.D. (.05)	61.9	27.3	ns	40.2	ns		40.5	30.6	0.4	0.2

¹ 1=very poor to 5= excellent

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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 22 entries in the Western Regional Red/Specialty Trial grown near Springlake, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
Red/White Flesh											
Red LaSoda	57.8	26.5	14.2	17.0	0.0	22.5	19.7	1.058	12.9	Oblong	Red
Dark Red Norland	62.6	23.8	34.2	4.6	0.0	26.8	10.6	1.064	13.8	Oblong	Red
NDA7985-1R	66.1	24.9	26.0	15.3	0.0	32.1	1.8	1.054	12.2	Oblong	Red
CO98012-5R	14.8	10.3	4.5	0.0	0.0	85.2	0.0	1.068	14.6	Round	Red
Average	50.3	21.4	19.7	9.2	0.0	41.6	8.0	1.061	13.4		
L.S.D. (.05)	10.9	10.7	8.9	6.4		11.4	7.2	0.005	1.0		
Red-Purple/Yellow Flesh											
ATTX961014-1R/Y	37.0	28.0	9.0	0.0	0.0	59.8	3.2	1.066	14.3	Oblong	Red
AC99329-7PW/Y	40.2	26.4	13.9	0.0	0.0	59.8	0.0	1.067	14.5	Round	Purple-White
ATTX98500-2P/Y	24.4	22.5	1.9	0.0	0.0	62.6	12.9	1.057	12.8	Oblong	Purple
POR01PG45-5	25.9	25.9	0.0	0.0	0.0	49.1	25.0	1.072	15.4	Oblong	Purple
A99331-2RY	19.8	19.8	0.0	0.0	0.0	78.9	1.3	1.063	13.7	Round	Red
AC99330-1P/Y	13.8	13.8	0.0	0.0	0.0	71.6	14.7	1.064	14.0	Round	Purple
Average	26.9	22.7	4.1	0.0	0.0	63.6	9.5	1.065	14.1		
L.S.D. (.05)	10.7	9.6	6.9			10.7	15.8	0.003	0.6		
Red/Red Flesh											
CO97222-1R/R	54.7	32.5	18.4	3.7	0.0	38.7	6.6	1.069	14.8	Oblong	Red
POR03PG23-1	40.7	35.9	4.8	0.0	0.0	58.3	1.0	1.068	14.7	Oblong	Red
PA96RR1-193	35.3	29.0	6.1	0.3	0.0	61.7	2.9	1.075	15.8	Round	Red
Average	43.6	32.5	9.8	1.3	0.0	52.9	3.5	1.071	15.1		
L.S.D. (.05)	4.0	ns	2.2	2.7		5.9	ns	ns	ns		
Purple/Purple Flesh											
Purple Majesty	31.3	28.5	2.1	0.6	0.0	56.2	12.5	1.066	14.3	Oblong	Purple
OR00068-11	31.2	26.3	4.9	0.0	0.0	68.8	0.0	1.080	16.7	Round	Purple
CO97215-2P/P	41.3	27.3	12.7	1.2	0.0	47.4	11.3	1.073	15.6	Round	Purple
CO97227-2P/PW	15.1	14.2	0.9	0.0	0.0	73.0	11.9	1.068	14.7	Oblong	Purple
Average	29.7	24.1	5.2	0.5	0.0	61.4	8.9	1.072	15.3		
L.S.D. (.05)	6.7	6.6	3.1	ns		6.6	5.0	0.006	1.1		
Yellow Flesh											
Yukon Gold	62.7	29.0	28.3	5.5	0.0	23.0	14.3	1.076	16.1	Round	White
POR02PG26-5	37.4	24.2	11.9	1.3	0.0	36.4	26.2	1.068	14.7	Oblong	White
CO99045-1W/Y	43.4	29.2	11.2	3.0	0.0	30.1	26.5	1.072	15.3	Long	White
POR02PG37-2	32.9	24.1	8.8	0.0	0.0	66.0	1.1	1.076	16.1	Round	White
A00286-3Y	40.9	27.6	13.3	0.0	0.0	40.6	18.5	1.068	14.7	Round	White
Average	43.5	26.8	14.7	1.9	0.0	39.2	17.3	1.072	15.4		
L.S.D. (.05)	12.1	ns	ns	ns		10.0	8.0	ns	ns		

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Table 2c. Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 22 entries in the Western Regional Red/Specialty Trial grown near Springlake, Texas-2008.

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	6.1	5.2	1.8	80	100	1.9	4.0	3.6	3.8	4
Dark Red Norland	6.3	4.6	2.6	93	100	1.5	3.7	3.6	4.0	3
NDA7985-1R	6.4	4.3	2.1	79	98	1.6	3.8	3.7	3.9	0
CO98012-5R	8.8	2.3	2.1	93	100	1.4	3.8	3.4	3.9	0
Average	6.9	4.1	2.1	86	100	1.6	3.8	3.6	3.9	2
L.S.D. (.05)	1.0	1.3	ns	ns	ns	ns	ns	ns	ns	3
Red-Purple/Yellow Flesh										
ATTX961014-1R/Y	9.0	3.0	7.1	91	100	2.0	3.6	3.5	2.6	0
AC99329-7PW/Y	6.1	3.0	2.5	82	100	1.3	3.3	3.4	9.5	0
ATTX98500-2P/Y	6.5	2.8	2.5	79	98	1.5	3.9	4.7	3.7	0
POR01PG45-5	5.2	2.8	2.4	76	96	1.6	3.8	4.6	3.2	0
A99331-2RY	8.0	2.1	2.1	79	100	1.8	3.8	3.9	3.2	3
AC99330-1P/Y	7.9	2.1	2.3	86	100	2.4	3.3	3.6	1.6	0
Average	7.1	2.6	3.1	82	99	1.8	3.6	3.9	4.0	0
L.S.D. (.05)	ns	0.2	ns	ns	ns	0.2	0.3	0.6	ns	ns
Red/Red Flesh										
CO97222-1R/R	9.7	2.8	2.3	84	100	2.3	3.8	4.1	4.1	1
POR03PG23-1	9.9	2.3	2.5	73	96	2.0	3.6	4.5	4.4	0
PA96RR1-193	12.6	2.1	2.2	91	98	1.6	3.3	4.2	4.1	0
Average	10.8	2.4	2.4	83	98	2.0	3.6	4.3	4.2	0
L.S.D. (.05)	2.3	0.3	ns	12	ns	0.5	ns	ns	ns	ns
Purple/Purple Flesh										
Purple Majesty	8.5	2.2	2.6	98	100	2.0	3.9	4.1	4.2	0
OR00068-11	10.9	1.8	2.4	94	99	1.4	4.3	4.4	4.6	0
CO97215-2P/P	6.1	2.4	2.0	68	81	1.4	4.0	4.7	4.7	0
CO97227-2P/PW	8.8	1.7	3.6	99	100	1.8	4.1	4.6	4.6	0
Average	8.6	2.0	2.7	90	95	1.6	4.1	4.4	4.5	0
L.S.D. (.05)	2.9	0.2	0.4	8	8	0.2	0.2	0.3	0.2	
Yellow Flesh										
Yukon Gold	4.9	6.2	1.6	75	92	1.9	3.5	3.0	3.4	0
POR02PG26-5	7.1	3.7	2.2	74	94	2.4	3.7	3.8	3.7	0
CO99045-1W/Y	5.6	3.4	2.6	100	100	1.8	4.4	4.1	4.3	0
POR02PG37-2	8.7	2.6	3.6	95	98	2.7	3.1	3.5	3.2	0
A00286-3Y	3.6	3.2	1.6	83	92	2.2	3.6	4.1	4.0	0
Average	6.0	3.8	2.3	85	95	2.2	3.6	3.7	3.7	0
L.S.D. (.05)	2.6	1.8	0.4	16	ns	ns	0.5	0.4	0.3	

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

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

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

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

Springlake
Table 2d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 22 entries in the Western Regional Red/Specialty Trial grown near Springlake, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
Red/White Flesh														
Red LaSoda	1.2	3.7	1.0	2.0	3.4	5.0	5.0	5.0	4.8	4.0	0	0	0	0
Dark Red Norland	1.2	2.8	1.8	4.0	3.5	4.3	5.0	5.0	5.0	4.8	0	0	3	0
NDA7985-1R	1.2	3.0	1.5	4.3	4.0	5.0	5.0	5.0	5.0	3.8	0	0	0	0
CO98012-5R	1.0	1.2	1.0	4.5	4.7	5.0	5.0	5.0	5.0	4.5	0	0	0	0
Average	1.1	2.7	1.3	3.7	3.9	4.8	5.0	5.0	4.9	4.3	0	0	1	0
L.S.D. (.05)	0.1	0.3	0.2	0.3	0.1	0.3	ns		ns	0.4			ns	
Red-Purple/Yellow Flesh														
ATTX961014-1R/Y	3.2	3.7	1.0	4.4	3.5	5.0	5.0	5.0	5.0	4.5	0	0	0	0
AC99329-7PW/Y	3.0	1.5	1.0	3.5	4.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
ATTX98500-2P/Y	2.9	3.5	1.0	4.0	5.0	5.0	5.0	5.0	5.0	3.5	0	0	0	0
POR01PG45-5	2.6	3.2	1.0	4.5	4.8	5.0	5.0	5.0	5.0	4.5	0	0	0	0
A99331-2RY	3.2	1.5	1.0	4.0	2.8	5.0	5.0	5.0	5.0	4.0	0	0	0	0
AC99330-1P/Y	3.0	1.2	1.0	4.0	4.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average	3.0	2.4	1.0	4.1	4.1	5.0	5.0	5.0	5.0	4.3	0	0	0	0
L.S.D. (.05)	0.2	0.2		ns	0.1					0.4				
Red/Red Flesh														
CO97222-1R/R	4.0	3.1	2.4	4.5	4.6	5.0	5.0	5.0	5.0	4.4	0	0	0	0
POR03PG23-1	3.9	3.6	1.0	4.5	4.5	5.0	5.0	5.0	5.0	4.2	0	0	0	0
PA96RR1-193	2.0	1.2	2.0	4.5	4.5	5.0	5.0	5.0	5.0	4.5	0	0	0	0
Average	3.3	2.6	1.8	4.5	4.5	5.0	5.0	5.0	5.0	4.4	0	0	0	0
L.S.D. (.05)	0.2	0.2	0.2		ns					ns				
Purple/Purple Flesh														
Purple Majesty	4.1	2.9	1.0	4.5	5.0	5.0	5.0	5.0	5.0	3.6	0	0	0	0
OR00068-11	4.0	2.8	1.0	4.1	5.0	5.0	5.0	5.0	5.0	2.4	0	0	0	0
CO97215-2P/P	4.8	2.8	1.0	4.5	5.0	5.0	5.0	5.0	5.0	3.9	0	0	0	0
CO97227-2P/PW	5.0	3.6	1.0	4.5	5.0	5.0	5.0	5.0	5.0	3.7	0	0	0	0
Average	4.5	3.0	1.0	4.4	5.0	5.0	5.0	5.0	5.0	3.4	0	0	0	0
L.S.D. (.05)	0.1	0.2		ns						0.4				
Yellow Flesh														
Yukon Gold	3.0	2.3	1.0	4.5	1.0	4.8	5.0	5.0	5.0	5.0	10	0	0	3
POR02PG26-5	2.4	3.8	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	3	0	3	0
CO99045-1W/Y	3.1	4.8	2.8	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	3	0
POR02PG37-2	3.4	2.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
A00286-3Y	3.5	3.7	1.0	4.5	1.0	5.0	5.0	5.0	5.0	5.0	0	0	3	0
Average	3.1	3.4	1.4	4.2	1.0	5.0	5.0	5.0	5.0	5.0	4	0	2	1
L.S.D. (.05)	0.2	0.3	0.2	0.1		ns					ns		ns	ns

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake
Table 2e.

Notes and general rating for all reps of 22 entries in the Western Regional Red/Specialty Trial grown near Springlake, Texas-2008.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Red/White Flesh				
Red LaSoda		oversize, Drop, early, Rough, large, oversize, chain tubers, knobs, de	3.6, 3.7, 3.4, 3.5	3.4, 3, 3, 2.5
Dark Red Norland		over mature, heat spots, Very early, Buff, Rough, ,	3.8, 4, 3.7, 4	4.5, 3.1, 3.1, 4
NDA7985-1R	drop	good yield, Drop, sticky stem, rough, Drop, rough, stolen attachment	3.7, 3.8, 3.6, 3.2	3.2, 2.3, 3.2, 2.3
CO98012-5R	small	good for B's, nice skin, very small, good for B's	2.8, 3.3, 3.4, 3	3.6, 2.5, 3.7, 3.8
Red-Purple/Yellow Flesh				
ATTX961014-1R/Y		variable shape, very nice internals, small, heavy set, dumbbell culls, bad rep, bad rep, heat sprouts, lenticels		4, 3.8, 3, 3
AC9329-7PW/Y		pointed, heat sprouts, sticky stolon, bad rep		3, 2.5, 3, 3
ATTX98500-2P/Y		rough, heat sprouts, dumbbell culls, sticky stolon		3.4, 3.5, 3, 3
POR01PG45-5		drop, rough, very poor shape,		1.8, 1.8, 1.8, 1.8
A99331-2RY		B size, heat spouts, small, pinto, bad rep		2.5, 2.5, 2.7, 2.5
AC99330-1P/Y		drop+, very small, nice flesh, bad rep, rough		2, 2, 2, 2
Red/Red Flesh				
CO97222-1R/R		Buff, rough, stolen attachment, ugly skin, rough,		3, 3.2, 2.78, 2.8
POR03PG23-1		Red Flesh		3.3, 3.5, 2.8, 4
PA96RR1-193		lots of B's, Buff		3.5, 3.5, 3.8, 3.5
Purple/Purple Flesh				
Purple Majesty		small, some rough		3, 3, 2.7, 2.7
OR00068-11		very late, feathering, Drop, All Blue like, small, purple/white flesh, smooth, late, not as many, culls,		2.3, 2.8, 2.8, 2.5
CO97215-2P/P		very dark solid flesh		3.3, 3.3, 3.4, 3.4
CO97227-2P/PW		very dark solid flesh, small, very late, rough, small		2.6, 2.3, 2.6, 2.3
Yellow Flesh				
Yukon Gold	Smaller	growth cracks, large tubers	3.6, 3.8, 3.5, 3.6	3.7, 4, 3.8, 3.9
POR02PG26-5	Late, Drop	Drop?, Drop	3.3, 3, 2.8, 2.5	2.7, 2.5, 2.8, 2.5
CO99045-1W/Y	Drop, Burbank like, Drop, Long, Long, Drop, Drop	Fing oversize (more #4 to culls)	2, 2.3, 2.5, 2	2.5, 3, 2.5, 2.5
POR02PG37-2	Small,	small boiler, Drop??	3.1, 3.3, 3.3, 3	2.7, 2.7, 2.5, 2.7
A00286-3Y	low yield, Drop, Drop, Drop	bad rep, Drop	2.8, 2, 2.3, 2.3	2, 2, 2, 2

Springlake
Table 2f.

Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 22 entries in the Western Regional Red/Specialty Trial grown near Springlake, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good Chip	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
Red/White Flesh											
Red LaSoda	Colorado	1.058	12.9	3.0	2+	18/24	18	24	43%Z, 14% Vas	43%	5%
Dark Red Norland	Colorado	1.064	13.8	3.7	0	0/0	0	0			0%
NDA7985-1R	Oregon	1.054	12.2	2.8	1+	1/30	1	30	68% Vas, 3% IBS, 23% Dk	0%	0%
CO98012-5R	Colorado	1.068	14.6	3.4	1+	22/18	22	18	18% Vas, 3% IBS, 18% Bru, 8% Dk,	0%	3%
Red-Purple/Yellow Flesh											
ATTX961014-1R/Y	Oregon	1.066	14.3	3.5	2	22/18	22	18	10% Vas, 30% Bru, 3% BC	0%	0%
AC99329-7PW/Y	Colorado	1.067	14.5	2.9	3	0/40	0	40	90% Vas, 10% Bru	0%	0%
ATTX98500-2P/Y	Colorado	1.057	12.8	3.2	1+	8/34	8	34	7%Z, 67% Vas, 7% Bru	7%	0%
POR01PG45-5	Oregon	1.072	15.4	1.8	2	19/23	19	23	2%Z, 29% Vas, 10% Bru,	2%	0%
A99331-2RY	Idaho	1.063	13.7	2.6	3	9/21	9	21	7%Z, 33% Vas, 30% Bru	7%	0%
AC99330-1P/Y	Colorado	1.064	14.0	2.0	2+	15/16	15	16	3%Z, 6% Vas, 42% Bru	3%	0%
Red/Red Flesh											
CO97222-1R/R	Colorado	1.069	14.8	2.9	3+	38/3	38	3	7% Bru	0%	0%
POR03PG23-1	Oregon	1.068	14.7	3.4	3	38/2	38	2	5% Bru, BOT	0%	0%
PA96RR1-193	Oregon	1.075	15.8	3.6	3	35/4	35	4	3%Z, 8% Bru, nice	3%	0%
Purple/Purple Flesh											
Purple Majesty	Colorado	1.066	14.3	2.9	3+	28/11	28	11	3%Z, 26% Bru	3%	0%
OR00068-11	Oregon	1.080	16.7	2.6	3+	26/15	26	15	7%Z, 29% Bru	7%	0%
CO97215-2P/P	Colorado	1.073	15.6	3.4	3++	37/2	37	2	5% Vas	0%	0%
CO97227-2P/PW	Colorado	1.068	14.7	2.5	3+++	34/6	34	6	15%Z	15%	0%
Yellow Flesh											
Yukon Gold	Colorado	1.076	16.1	3.9	3++	0/40	0	40	3%Z, 100% Dk	3%	5%
POR02PG26-5	Oregon	1.068	14.7	2.6	3++	0/38	0	38	11%Z, 100% Dk	11%	8%
CO99045-1W/Y	Colorado	1.072	15.3	2.6	3++	0/40	0	40	5%Z, 100% Dk	5%	0%
POR02PG37-2	Oregon	1.076	16.1	2.7	3+	0/39	0	39	90% Vas, 90% BC, 10% Dk	0%	0%
A00286-3Y	Idaho	1.068	14.7	2.0	3++	0/29	0	29	10%Z, 100% Dk	10%	0%
Average										6%	1%
L.S.D. (.05)											ns

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

¹BOT=Best Of Trial²1=poor, 5=excellent³1=light, 3+=very dark⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

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

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

		DAP
Planted	March 31, 2008	
Vines Killed (Red, Chip)	July 28, 2008	118
Vines Killed (Russet)	August 15, 2008	135
Harvested (Red, Chip)	July 30, 2008	120
Harvested (Russet)	August 19, 2008	139

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:

(Red) 101-11-6 # per acre
(Russet, Chip) 175-11-6 # per acre

Irrigation:

Center Pivot

Insecticide:

Agri-Mek, Endigo, Avaunt, Oberon, Rimon, Dimthoate 4e,

Seed Treatment Applied:

Tops MZ Gaucho

Fungicides Applied:

Super tin 80, Kocide, Penncozeb, Quadris

Herbicides Applied:

Treflan, Dual, Sencor, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the first week of May, the fourth week of June, the third week of July, and the third week of August. Temperatures were higher than normal for the last week in May and the first and second weeks in June. These high temperatures had an adverse effect on the tuber shape.

Springlake
Table 3a.

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 Southwest Regional Russet Trial grown near Springlake, Texas-2008.

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					
CO99100-1RU	352.5	285.8	85.0	131.8	68.9	0.0	54.9	11.8	4.1	3.9
AOTX98152-3RU	322.0	213.1	57.6	55.7	99.9	18.0	27.0	64.0	3.4	3.3
AOTX96216-2RU	253.9	194.5	57.6	61.2	75.7	14.7	28.3	16.4	3.2	4.0
ATX99013-1RU	305.3	189.5	59.0	56.7	73.8	3.8	39.6	72.4	3.4	2.8
AOTX96265-2RU	209.5	175.8	27.0	57.4	91.4	12.8	16.4	4.5	3.6	3.5
CO99053-3RU	247.0	171.7	47.5	67.1	57.2	0.0	37.6	37.7	3.1	2.4
ATX9202-3RU	213.0	165.4	49.1	55.5	60.8	3.8	31.5	12.3	3.3	2.8
ATX97147-4RU	188.8	122.6	51.0	36.3	35.3	0.0	33.5	32.7	2.9	2.9
Russet Norkotah	199.0	106.8	35.6	37.9	33.4	0.0	37.0	55.1	3.0	2.7
CO99053-4RU	276.6	97.8	47.2	34.1	16.6	0.0	100.3	78.5	3.2	2.1
AC99375-1RU	196.9	86.8	61.2	19.2	6.4	0.0	89.9	20.2	3.0	2.8
Average	251.3	164.5	52.5	55.7	56.3	4.8	45.1	36.9	3.3	3.0
L.S.D. (.05)	71.3	49.6	ns	27.1	26.0	11.0	33.1	31.5	0.4	0.3

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 11 entries in the Southwest Regional Russet Trial grown near Springlake, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
CO99100-1RU	81.4	23.8	37.9	19.7	0.0	15.3	3.4	1.064	13.9	Oblong	Russet
AOTX98152-3RU	66.4	17.8	17.3	31.2	5.2	7.9	20.6	1.059	13.1	Long	Russet
AOTX96216-2RU	76.3	22.1	24.4	29.8	5.6	11.6	6.5	1.062	13.5	Long	Russet
ATX99013-1RU	61.6	18.1	19.2	24.2	1.2	12.5	24.7	1.061	13.4	Long	Russet
AOTX96265-2RU	84.4	12.5	27.8	44.1	5.9	7.7	2.1	1.061	13.3	Long	Russet
CO99053-3RU	71.8	20.7	26.7	24.4	0.0	14.7	13.4	1.055	12.4	Long	Russet
ATX9202-3RU	79.0	25.3	25.0	28.7	1.3	13.9	5.8	1.059	13.0	Long	Russet
ATX97147-4RU	66.4	27.6	19.8	19.0	0.0	16.5	17.1	1.063	13.7	Long	Russet
Russet Norkotah	55.4	19.0	19.6	16.7	0.0	18.7	26.0	1.054	12.2	Long	Russet
CO99053-4RU	35.3	16.4	12.4	6.4	0.0	35.1	29.6	1.057	12.7	Long	Russet
AC99375-1RU	43.4	30.5	10.0	3.0	0.0	46.5	10.1	1.064	13.9	Oblong	Russet
Average	65.6	21.3	21.8	22.5	1.7	18.2	14.5	1.060	13.2		
L.S.D. (.05)	13.7	9.4	10.4	9.0	4.0	11.0	11.6	0.004	0.8		

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 11 entries in the Southwest Regional Russet Trial grown near Springlake, Texas-2008.

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	
CO99100-1RU	4.8	6.2	1.8	90	98	2.7	3.5	3.0	3.1	91
AOTX98152-3RU	3.3	7.2	1.8	79	99	1.8	3.6	3.2	3.6	41
AOTX96216-2RU	3.2	6.7	1.5	79	96	1.3	3.9	3.6	4.2	11
ATX99013-1RU	3.8	5.6	1.8	93	100	2.0	3.8	4.0	3.9	1
AOTX96265-2RU	2.4	7.4	1.8	93	99	2.0	3.7	3.9	3.8	1
CO99053-3RU	3.3	5.6	2.0	87	99	1.8	3.9	4.1	4.1	0
ATX9202-3RU	2.9	5.8	1.4	84	99	2.2	3.9	4.1	3.9	1
ATX97147-4RU	2.7	5.5	1.7	66	96	2.1	3.8	4.4	3.8	6
Russet Norkotah	2.9	4.7	1.9	95	98	1.8	4.0	3.6	4.0	1
CO99053-4RU	4.7	4.2	2.2	88	99	2.1	3.5	3.4	3.8	23
AC99375-1RU	4.7	3.4	2.0	80	93	2.3	3.6	4.1	4.1	8
Average	3.5	5.7	1.8	85	98	2.0	3.7	3.8	3.8	17
L.S.D. (.05)	1.4	1.1	0.3	ns	ns	0.4	0.3	0.2	0.3	13

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

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

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

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

Springlake
Table 3d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 11 entries in the Southwest Regional Russet Trial grown near Springlake, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
CO99100-1RU	1.0	3.9	5.0	4.5	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX98152-3RU	1.0	4.6	5.0	4.5	4.7	5.0	5.0	5.0	5.0	4.5	0	0	0	0
AOTX96216-2RU	1.0	4.0	5.0	4.1	4.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX99013-1RU	1.0	4.6	5.0	4.4	4.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX96265-2RU	1.0	4.0	4.3	3.9	4.2	5.0	5.0	5.0	5.0	4.8	3	0	0	0
CO99053-3RU	1.0	4.2	5.0	4.5	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX9202-3RU	1.0	4.0	5.0	3.8	4.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX97147-4RU	1.0	4.5	5.0	4.3	4.6	4.8	5.0	5.0	5.0	5.0	5	0	0	0
Russet Norkotah	1.2	4.4	5.0	4.0	4.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
CO99053-4RU	1.0	4.0	5.0	4.3	3.9	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AC99375-1RU	1.0	3.8	4.6	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average	1.0	4.2	4.9	4.2	4.3	5.0	5.0	5.0	5.0	4.9	1	0	0	0
L.S.D. (.05)	ns	0.2	ns	0.3	0.2	ns				ns	ns			

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake

Table 3e. Notes and general rating for all reps of 11 entries in the Southwest Regional Russet Trial grown near Springlake, Texas-2008.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
CO99100-1RU	nice	Nice, Skin??	3.9, 4.5, 4, 3.9	4, 4, 3.7, 3.8
AOTX98152-3RU			3.4, 3.3, 3.3, 3.5	3.2, 3.5, 3.2, 3.2
AOTX96216-2RU		bad rep, raised eyes on large tubers, BOT	3, 3, 2.8, 3.8	3.5, 4, 4.3, 4.3
ATX99013-1RU		Drop	3.7, 3.5, 3.5, 3	3, 2.5, 2.8, 2.8
AOTX96265-2RU		feathering	3.5, 4, 3, 3.8	3.3, 3.7, 3.5, 3.5
CO99053-3RU		Skinny, long, Drop, Drop++	3.1, 3.3, 3, 3	2.5, 2.5, 2.2, 2.5
ATX9202-3RU		very white flesh	3.3, 3.5, 3.3, 3	3.1, 3.2, 2.5, 2.5
ATX97147-4RU		small, nice flesh	3, 3.4, 2.5, 2.8	2.7, 3.3, 2.7, 2.7
Russet Norkotah	late Nork?		3.3, 2.8, 2.8, 3.2	2.5, 2.5, 2.7, 2.9
CO99053-4RU	heavy set	Drop, Small, Poor shape, Small, Skinny	3.5, 3.3, 3, 2.8	2.3, 2.1, 2.1, 2
AC99375-1RU	small	small, did not size	2.8, 3.5, 2.8, 3	2.5, 2.8, 2.8, 3

Springlake
Table 3f.

Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 11 entries in the Southwest Regional Russet Trial grown near Springlake, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good Chip	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
CO99100-1RU	Colorado	1.064	13.9	3.9	1	27/13	27	13	10%Z , 20% Vas, 3%TM	10%	10%
AOTX98152-3RU	Colorado	1.059	13.1	3.275	2	29/10	29	10	15%Z , 3%IBS, 8%Dk	15%	28%
AOTX96216-2RU	Colorado	1.062	13.5	4.0	1+	26/14	26	14	20%Z , 15%BC	20%	5%
ATX99013-1RU	Colorado	1.061	13.4	2.8	1+	9/30	9	30	21%Z , 56% Vas	21%	10%
AOTX96265-2RU	Colorado	1.061	13.3	3.5	1+	8/31	8	31	21%Z , 54% Vas, 3%GH	21%	20%
CO99053-3RU	Colorado	1.055	12.4	2.4	2	21/21	21	21	7%Z , 43% Vas	7%	10%
ATX9202-3RU	Colorado	1.059	13.0	2.8	1	16/24	16	24	40%Z , 20% Vas	40%	18%
ATX97147-4RU	Colorado	1.063	13.7	2.9	2	17/23	17	23	5% Vas, 40%BC, 13%Dk	0%	3%
Russet Norkotah	Colorado	1.054	12.2	2.7	2	5/34	5	34	21%Z , 62% Vas, 5%IBS	21%	25%
CO99053-4RU	Colorado	1.057	12.7	2.1	2+	4/38	4	38	2%TM	0%	15%
AC99375-1RU	Colorado	1.064	13.9	2.8	1+	16/22	16	22	34%Z , 21% Vas, 3%Dk	34%	25%
Average										17%	15%
L.S.D. (.05)											ns

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

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

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

		DAP
Planted	March 31, 2008	
Vines Killed (Red, Chip)	July 28, 2008	118
Vines Killed (Russet)	August 15, 2008	135
Harvested (Red, Chip)	July 30, 2008	120
Harvested (Russet)	August 19, 2008	139

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:

(Red) 101-11-6 # per acre

(Russet, Chip) 175-11-6 # per acre

Irrigation:

Center Pivot

Insecticide:

Agri-Mek, Endigo, Avaunt, Oberon, Rimon, Dimthoate 4e,

Seed Treatment Applied:

Tops MZ Gaucho

Fungicides Applied:

Super tin 80, Kocide, Penncozeb, Quadris

Herbicides Applied:

Treflan, Dual, Sencor, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the first week of May, the fourth week of June, the third week of July, and the third week of August. Temperatures were higher than normal for the last week in May and the first and second weeks in June. These high temperatures had an adverse effect on the tuber shape.

Springlake
Table 4a.

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 Southwest Regional Red Trial grown near Springlake, Texas-2008.

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					
BTX2332-1R	437.2	337.6	142.7	134.1	60.8	0.0	97.5	2.1	3.8	3.8
ATTX98453-6R	342.0	305.1	69.6	83.9	151.7	2.1	33.6	1.2	3.6	3.9
NDTX7590-3R	323.1	287.2	86.0	96.6	104.6	0.0	36.0	0.0	3.8	3.6
AOTX91861-4R	390.5	278.0	152.1	74.0	51.9	0.0	111.0	1.6	3.8	3.1
NDTX5003-2R	360.5	266.7	124.2	111.6	30.9	1.0	87.1	5.7	3.4	3.5
NDTX4784-7R	312.5	261.4	111.3	97.8	52.2	0.0	51.2	0.0	3.5	3.6
Red LaSoda	418.3	242.5	110.6	59.5	72.4	0.0	93.3	82.5	3.6	3.0
NDTX4828-2R	269.8	241.7	82.6	115.8	43.2	0.0	24.2	4.0	3.5	3.3
Dark Red Norland	374.5	232.1	86.2	127.7	18.2	0.0	100.7	41.7	3.9	3.7
AOTX93483-1R	236.1	200.7	67.1	60.2	73.5	0.0	33.6	1.7	3.5	2.8
COTX94216-1R	294.3	199.6	105.8	61.5	32.3	0.0	94.7	0.0	3.2	3.0
COTX94218-1R	248.4	178.4	86.9	73.5	18.0	0.0	61.5	8.5	3.4	3.3
CO00291-5R	279.6	150.9	129.3	16.6	5.0	0.0	127.5	1.2	3.1	3.1
CO00277-2R	334.4	130.3	95.6	32.3	2.4	0.0	156.5	47.5	3.5	2.2
Average	330.1	236.6	103.6	81.8	51.2	0.2	79.2	14.1	3.5	3.3
L.S.D. (.05)	43.2	28.8	28.0	35.4	26.5	ns	30.1	22.3	0.3	0.4

¹ 1=very poor to 5= excellent

Springlake
Table 4b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 14 entries in the Southwest Regional Red Trial grown near Springlake, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
BTX2332-1R	77.2	32.7	30.3	14.1	0.0	22.4	0.4	1.062	13.6	Oblong	Red
ATTX98453-6R	89.2	19.9	24.6	44.7	0.6	9.8	0.4	1.070	15.0	Round	Red
NDTX7590-3R	89.0	26.6	29.6	32.7	0.0	11.0	0.0	1.063	13.7	Oblong	Red
AOTX91861-4R	71.2	39.0	18.9	13.3	0.0	28.4	0.4	1.057	12.6	Round	Red
NDTX5003-2R	74.2	34.3	31.3	8.5	0.3	24.0	1.5	1.069	14.8	Round	Red
NDTX4784-7R	83.6	35.7	31.2	16.7	0.0	16.4	0.0	1.063	13.8	Round	Red
Red LaSoda	57.8	26.5	14.2	17.0	0.0	22.5	19.7	1.058	12.9	Oblong	Red
NDTX4828-2R	89.6	30.7	42.9	16.1	0.0	9.0	1.4	1.066	14.2	Oblong	Red
Dark Red Norland	62.6	23.8	34.2	4.6	0.0	26.8	10.6	1.064	13.8	Oblong	Red
AOTX93483-1R	85.7	28.4	24.7	32.5	0.0	13.6	0.7	1.060	13.2	Oblong	Red
COTX94216-1R	67.6	35.9	20.8	10.9	0.0	32.4	0.0	1.069	14.8	Oblong	Red
COTX94218-1R	71.7	35.5	28.9	7.3	0.0	25.1	3.2	1.059	13.0	Round	Red
CO00291-5R	54.4	46.0	6.1	2.3	0.0	45.1	0.5	1.059	13.1	Round	Red
CO00277-2R	39.1	28.7	9.7	0.8	0.0	46.9	14.0	1.063	13.8	Oblong	Red
Average	72.3	31.7	24.8	15.8	0.1	23.8	3.8	1.063	13.7		
L.S.D. (.05)	6.4	8.5	9.6	9.2	ns	8.0	6.0	0.005	0.9		

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 14 entries in the Southwest Regional Red Trial grown near Springlake, Texas-2008.

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	
BTX2332-1R	7.0	5.4	2.2	83	96	2.0	3.9	3.8	3.9	0
ATTX98453-6R	4.4	7.1	1.4	48	91	2.3	3.8	3.6	3.8	8
NDTX7590-3R	5.2	6.7	1.5	34	78	1.8	2.5	3.1	3.0	6
AOTX91861-4R	7.2	4.5	2.3	95	100	2.4	3.6	3.8	3.9	1
NDTX5003-2R	7.2	4.5	2.2	68	94	2.2	3.8	3.4	3.8	5
NDTX4784-7R	6.6	5.0	1.4	33	79	1.5	3.7	3.5	3.7	0
Red LaSoda	6.1	5.2	1.8	80	100	1.9	4.0	3.6	3.8	4
NDTX4828-2R	4.3	5.9	1.4	34	88	1.6	3.4	3.7	3.8	0
Dark Red Norland	6.3	4.6	2.6	93	100	1.5	3.7	3.6	4.0	3
AOTX93483-1R	3.5	6.0	1.7	73	94	2.0	4.0	4.5	4.3	0
COTX94216-1R	5.5	5.4	2.0	70	92	2.2	3.8	3.5	3.6	3
COTX94218-1R	5.0	4.2	2.0	62	95	1.4	3.7	4.5	4.3	0
CO00291-5R	6.5	3.7	2.3	59	97	1.4	3.9	4.4	4.4	0
CO00277-2R	8.3	3.2	2.7	64	95	2.0	3.6	3.5	3.4	0
Average	5.9	5.1	2.0	64	93	1.9	3.7	3.7	3.8	2
L.S.D. (.05)	1.3	1.1	0.4	17	9	0.4	0.2	0.4	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 4d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 14 entries in the Southwest Regional Red Trial grown near Springlake, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
BTX2332-1R	1.1	3.0	1.4	4.1	4.0	5.0	5.0	5.0	5.0	4.1	0	0	0	0
ATTX98453-6R	1.2	2.5	1.0	4.3	4.0	5.0	5.0	5.0	5.0	4.2	0	0	0	0
NDTX7590-3R	1.2	3.5	1.0	3.9	4.1	4.8	5.0	5.0	5.0	4.2	0	0	3	0
AOTX91861-4R	1.4	1.6	1.0	3.7	3.8	5.0	5.0	5.0	5.0	4.0	0	0	0	0
NDTX5003-2R	1.3	1.5	1.0	4.0	4.1	5.0	5.0	5.0	5.0	4.1	0	0	0	0
NDTX4784-7R	1.0	1.6	1.0	4.1	4.5	5.0	5.0	5.0	5.0	4.0	0	0	0	0
Red LaSoda	1.2	3.7	1.0	2.0	3.4	5.0	5.0	5.0	4.8	4.0	0	0	0	0
NDTX4828-2R	1.0	3.0	1.0	4.5	3.9	5.0	5.0	5.0	5.0	4.3	0	0	0	0
Dark Red Norland	1.2	2.8	1.8	4.0	3.5	4.3	5.0	5.0	5.0	4.8	0	0	3	0
AOTX93483-1R	1.3	3.3	1.0	4.1	4.1	5.0	5.0	5.0	5.0	3.8	3	0	0	0
COTX94216-1R	1.0	2.5	1.3	4.3	4.2	5.0	5.0	5.0	5.0	4.5	0	0	3	0
COTX94218-1R	1.0	1.6	1.0	4.5	4.2	5.0	5.0	5.0	5.0	4.1	0	0	0	0
CO00291-5R	1.1	1.6	1.0	4.3	4.7	5.0	5.0	5.0	5.0	4.1	0	0	0	0
CO00277-2R	1.3	3.6	1.3	4.3	4.5	5.0	5.0	5.0	5.0	4.3	0	0	0	0
Average	1.2	2.5	1.1	4.0	4.1	4.9	5.0	5.0	5.0	4.2	0	0	1	0
L.S.D. (.05)	0.4	0.5	0.3	0.3	0.2	0.3	ns	ns	ns	0.5	ns	ns	ns	ns

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake
Table 4e.

Notes and general rating for all reps of 14 entries in the Southwest Regional Red Trial grown near Springlake, Texas-2008.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
BTX2332-1R		Yield +, buff, Internal ?, some buff, 10% internal discoloration	3.8, 3.9, 3.7, 3.8	3.9, 4, 3.2, 4.2
ATTX98453-6R	variable shape	Early, smooth, BOT-keep, good color, fast bilking, nice, light set, early buff, smooth, boot-nice skin, can keep, smooth, fast bulking, early, smooth, light set, can	3.5, 3.8, 3.4, 3.5	3.8, 4.2, 3.7, 4
NDTX7590-3R		oversize, feathering	3.9, 3.8, 3.7, 3.7	3.8, 3.5, 3.5, 3.5
AOTX91861-4R	BOT	Drop, nice flesh, Stem attachment, Drop ?, light set, smooth, low yield	3.9, 3.8, 3.7, 3.7	3, 3.2, 2.8, 3.2
NDTX5003-2R	BOT-, , ,	nice, indented, stolon attachment	3.9, 3.3, 3.4, 3	4, 3.5, 3.5, 3
NDTX4784-7R		smooth, stolon, very dark skin, very white flesh, oversize, Drop, early, Rough, large, oversize, chain tubers, knobs, deep eyes	3.6, 3.8, 3.4, 3.2	3.8, 3.4, 3.5, 3.5
Red LaSoda			3.6, 3.7, 3.4, 3.5	3.4, 3, 3, 2.5
NDTX4828-2R	drop	Drop, little rough, Rhizoctonia? , low yield, Buff	3.5, 3.8, 3.2, 3.3	3.2, 3.6, 3, 3.2
Dark Red Norland		over mature, heat spots, Very early, Buff, Rough	3.8, 4, 3.7, 4	4.5, 3.1, 3.1, 4
AOTX93483-1R	very late, drop	Keep, early bulking, Feathering, light set, rough, pear shape, sticky stem, Drop, oversize, Stem attachment, Buff, variable size, a little rough, ugly, Very white	3.8, 3.5, 3.2, 3.6	3.5, 3.2, 2.3, 2.3
COTX94216-1R	drop?	flesh	3.7, 3.2, 3.3, 2.5	3.2, 3.2, 2.8, 2.7
COTX94218-1R		smooth, nice shape, nice shape, Drop? Very white flesh, smooth, nice, very white flesh, keep	3.5, 3.7, 3, 3.3	3.3, 3.4, 3, 3.4
CO00291-5R	late, late , drop, late drop, late	good for B size, small, small, did not size, good color, late	3.2, 3.2, 2.8, 3.3	3.5, 3.2, 3.2, 2.5
CO00277-2R	drop	poor shape, Drop, late ?, nice flesh, Drop, lots of culls, very white flesh, lots of B's, Drop, poor shape,	3.8, 3.6, 3.3, 3.4	2.2, 2.2, 2.2, 2.2

Springlake
Table 4f. Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 14 entries in the Southwest Regional Red Trial grown near Springlake, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good Chip	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
BTX2332-1R	Colorado	1.062	13.6	3.8	1+	18/22	18	22	3%Z , 30% Vas, 5% IBS, 15% Bru	3%	0%
ATTX98453-6R	Colorado	1.070	15.0	3.9	3.0	6/32	6	32	11%Z , 66%Dk, 13%Fus	11%	3%
NDTX7590-3R	Colorado	1.063	13.7	3.6	2.0	5/13	5	13	22%Z , 50% Vas, 11% IBS	22%	3%
AOTX91861-4R	Colorado	1.057	12.6	3.1	3.0	12/30	12	30	2%Z , 24% Vas, 31%Bru, 14%Dk	2%	0%
NDTX5003-2R	Colorado	1.069	14.8	3.5	2.0	18/24	18	24	12%Z , 43% IBS	12%	3%
NDTX4784-7R	Colorado	1.063	13.8	3.6	4.0	23/19	23	19	7%Z , 19% Vas, 5% IBS, 12%Bru, 2% Fus	7%	0%
Red LaSoda	Colorado	1.058	12.9	3.0	2+	18/22	18	22	5%Z , 13% Vas, 35%Bru	5%	3%
NDTX4828-2R	Colorado	1.066	14.2	3.3	1.0	18/26	18	26	11%Z , 2% Vas, 36% IBS, 9%Bru,	11%	3%
Dark Red Norland	Colorado	1.064	13.8	3.7	1+						13%
AOTX93483-1R	Colorado	1.060	13.2	2.8	3.0	1/39	1	39	10%Z , 48% Vas, 38%Dk	10%	0%
COTX94216-1R	Colorado	1.069	14.8	3.0	2.0	15/24	15	24	5%Z , 44% Vas, 15% IBS, 10%Bru, 13%Dk	5%	0%
COTX94218-1R	Colorado	1.059	13.0	3.3	2.0	18/16	18	16	21% Vas, 15%Bru, 15%Dk	0%	0%
CO00291-5R	Colorado	1.059	13.1	3.1	2.0	0/38	0	38	61% Vas, 13%Bru, 21%Dk	0%	0%
CO00277-2R	Colorado	1.063	13.8	2.2	2+	12/38	12	38	4%Z , 70% Vas	4%	8%
Average										7%	2%
L.S.D. (.05)											ns

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

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

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

		DAP
Planted	March 31, 2008	
Vines Killed (Red, Chip)	July 28, 2008	118
Vines Killed (Russet)	August 15, 2008	135
Harvested (Red, Chip)	July 30, 2008	120
Harvested (Russet)	August 19, 2008	139

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:

(Red) 101-11-6 # per acre

(Russet, Chip) 175-11-6 # per acre

Irrigation:

Center Pivot

Insecticide:

Agri-Mek, Endigo, Avaunt, Oberon, Rimon, Dimthoate 4e,

Seed Treatment Applied:

Tops MZ Gaucho

Fungicides Applied:

Super tin 80, Kocide, Penncozeb, Quadris

Herbicides Applied:

Treflan, Dual, Sencor, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the first week of May, the fourth week of June, the third week of July, and the third week of August. Temperatures were higher than normal for the last week in May and the first and second weeks in June. These high temperatures had an adverse effect on the tuber shape.

Springlake
Table 5a. 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 Southwest Regional Specialty Trial grown near Springlake, Texas-2008.

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					
ATTX00289-6W/Y	383.5	254.4	83.2	131.4	39.9	0.0	99.3	29.7	3.5	3.9
TX1673-1W/Y	348.7	250.3	66.9	104.6	78.8	0.0	74.0	24.4	3.4	4.0
TXYG079	396.7	234.2	115.6	83.5	35.1	0.0	111.1	51.3	4.3	4.0
TXYG107	373.7	224.9	85.0	99.7	40.1	0.0	103.5	45.3	3.9	4.0
TXYG055	391.3	215.9	90.6	83.3	42.0	0.0	114.6	60.8	4.3	4.0
YG ZSC	355.4	212.3	102.7	77.6	32.0	0.0	101.5	41.7	4.0	3.9
Yukon Gold	327.9	206.2	94.6	93.9	17.8	0.0	75.5	46.2	3.6	3.9
TXYG057	333.4	196.0	99.0	78.3	18.7	0.0	80.7	56.7	3.7	3.8
TXYG105	346.6	184.4	108.4	66.6	9.5	0.0	106.7	55.5	3.9	3.8
TXYG098	303.5	165.4	95.6	54.1	15.7	0.0	88.3	49.8	3.6	3.3
ATC00293 -1W/Y	330.2	161.6	84.7	69.5	7.4	0.0	152.5	16.1	3.2	2.5
CO00379-2R/Y	249.3	148.7	111.5	37.2	0.0	0.0	85.6	15.0	0.0	3.7
ATTX98500-3PW/Y	188.2	94.2	73.6	20.6	0.0	0.0	75.4	18.7	3.1	2.8
CO00412-5W/Y	158.5	6.6	6.6	0.0	0.0	0.0	119.1	32.8	2.2	1.0
Average	320.5	182.5	87.0	71.4	24.1	0.0	99.1	38.9	3.3	3.5
L.S.D. (.05)	62.5	26.7	32.0	37.1	18.5		40.2	ns	0.5	0.3

¹ 1=very poor to 5= excellent

Springlake
Table 5b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 14 entries in the Southwest Regional Specialty Trial grown near Springlake, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
ATTX00289-6W/Y	66.4	21.6	34.3	10.4	0.0	26.0	7.6	1.067	14.4	Round	White
TX1673-1W/Y	72.3	18.6	30.0	23.7	0.0	20.4	7.3	1.065	14.1	Oblong	White
TXYG079	58.8	29.1	20.8	8.9	0.0	28.0	13.2	1.076	16.0	Round	White
TXYG107	61.1	22.3	27.9	11.0	0.0	27.8	11.0	1.079	16.7	Round	White
TXYG055	56.5	22.5	23.0	10.9	0.0	29.4	14.1	1.068	14.7	Round	White
YG ZSC	60.1	29.2	21.5	9.3	0.0	28.8	11.2	1.074	15.6	Round	White
Yukon Gold	62.7	29.0	28.3	5.5	0.0	23.0	14.3	1.076	16.1	Round	White
TXYG057	58.5	29.9	23.0	5.6	0.0	24.6	16.9	1.073	15.6	Round	White
TXYG105	53.4	31.5	19.3	2.6	0.0	30.5	16.1	1.077	16.2	Round	White
TXYG098	54.8	31.3	18.4	5.0	0.0	28.9	16.4	1.071	15.2	Round	White
ATC00293 -1W/Y	48.6	26.1	19.8	2.7	0.0	46.5	5.0	1.062	13.7	Round	White
CO00379-2R/Y	59.4	45.0	14.4	0.0	0.0	34.4	6.1	1.062	13.6	Long	Red
ATTX98500-3PW/Y	50.8	38.8	11.9	0.0	0.0	38.6	10.6	1.062	13.5	Oblong	White
CO00412-5W/Y	4.7	4.7	0.0	0.0	0.0	75.2	20.1	1.079	16.6	Round	White
Average	54.9	27.1	20.9	6.8	0.0	33.0	12.1	1.071	15.1		
L.S.D. (.05)	9.7	10.0	12.0	6.0		8.5	8.7	0.006	1.0		

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 14 entries in the Southwest Regional Specialty Trial grown near Springlake, Texas-2008.

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	
ATTX00289-6W/Y	7.3	4.9	1.7	65	86	2.2	3.5	3.1	3.7	0
TX1673-1W/Y	5.8	5.1	1.8	90	97	1.7	3.7	3.4	3.6	0
TXYG079	6.9	4.8	1.4	73	94	1.2	3.8	3.3	3.7	0
TXYG107	6.4	4.6	1.3	78	96	1.3	3.9	3.4	3.7	0
TXYG055	6.7	4.7	1.2	81	95	1.3	3.6	3.2	3.8	0
YG ZSC	6.7	4.3	1.3	82	96	1.4	3.8	3.4	3.8	0
Yukon Gold	4.9	6.2	1.6	75	92	1.9	3.5	3.0	3.4	0
TXYG057	5.5	4.7	1.3	75	96	1.2	3.9	3.1	3.4	0
TXYG105	6.5	4.1	1.6	79	98	1.3	3.8	3.5	3.7	0
TXYG098	5.4	4.4	1.3	85	96	1.3	3.7	3.3	3.7	0
ATC00293 -1W/Y	8.0	4.0	1.8	56	92	1.9	4.1	4.3	4.1	0
CO00379-2R/Y	5.8	3.6	2.3	71	95	1.8	3.0	3.2	3.5	0
ATTX98500-3PW/Y	4.9	4.3	2.5	55	81	2.2	3.9	4.5	4.3	0
CO00412-5W/Y	6.6	1.8	3.1	84	96	1.9	4.2	4.2	4.0	0
Average	6.2	4.4	1.7	75	94	1.6	3.7	3.5	3.7	0
L.S.D. (.05)	ns	1.6	0.4	17	7	0.7	0.5	0.3	0.4	ns

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

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

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

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

Springlake
Table 5d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 14 entries in the Southwest Regional Specialty Trial grown near Springlake, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
ATTX00289-6W/Y	3.1	2.4	1.0	3.9	1.0	5.0	5.0	5.0	5.0	5.0	40	0	3	0
TX1673-1W/Y	1.0	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	3	0
TXYG079	3.0	1.9	1.0	4.5	1.0	5.0	5.0	5.0	5.0	4.0	8	0	0	5
TXYG107	3.0	1.3	1.0	4.5	1.0	5.0	5.0	5.0	5.0	5.0	15	0	0	0
TXYG055	2.7	1.9	1.0	4.5	1.0	5.0	5.0	5.0	5.0	4.0	5	0	0	0
YG ZSC	3.0	2.0	1.0	4.5	1.0	5.0	5.0	5.0	5.0	5.0	18	0	0	3
Yukon Gold	3.0	2.3	1.0	4.5	1.0	4.8	5.0	5.0	5.0	5.0	10	0	0	3
TXYG057	3.0	2.0	1.0	4.5	1.0	4.8	5.0	5.0	5.0	5.0	28	0	0	0
TXYG105	3.0	1.8	1.0	4.1	1.0	5.0	5.0	5.0	5.0	5.0	3	0	8	3
TXYG098	3.0	1.9	1.0	4.5	1.0	5.0	5.0	5.0	5.0	5.0	18	0	3	0
ATC00293 -1W/Y	2.3	2.0	1.0	4.5	1.0	5.0	5.0	5.0	5.0	5.0	3	0	0	0
CO00379-2R/Y	3.5	4.0	3.0	4.5	3.9	5.0	5.0	5.0	5.0	4.5	0	0	0	0
ATTX98500-3PW/Y	3.1	3.0	1.0	4.1	1.5	5.0	5.0	5.0	5.0	5.0	3	0	0	0
CO00412-5W/Y	3.1	1.3	2.5	4.0	3.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average	2.8	2.2	1.3	4.3	1.4	5.0	5.0	5.0	5.0	4.8	11	0	1	1
L.S.D. (.05)	0.3	0.7	0.3	ns	0.8	ns				ns	19		ns	ns

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake

Table 5e. Notes and general rating for all reps of 14 entries in the Southwest Regional Specialty Trial grown near Springlake, Texas-2008.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
ATTX00289-6W/Y	, Drop, Raised eyes,	, 30 Drop, Internals, Drop, Hollow, Heat ++,	4, 2.8, 4, 3	4, 3.8, 3.8, 3.8
TX1673-1W/Y	, , Drop, Oversize,	, Rough, ,	3.7, 3.8, 2.7, 3.3	4.5, 3.8, 3.8, 4
TXYG079	, , ,	, , , Dumbbells	4.5, 4.4, 4.5, 3.7	4.5, 3.8, 3.8, 3.8
TXYG107	, , Smaller,	, , ,	4.5, 3.7, 4, 3.2	3.7, 4, 4.3, 3.9
TXYG055	, , ,	, , , dumbbells, culls	4.4, 4.4, 4.4, 3.8	4, 4, 4, 4
YG ZSC	, , , misshape	, Dumbbells, ,	4.5, 3.5, 4.5, 3.4	3.9, 4, 4, 3.8
Yukon Gold	, Smaller, ,	, , growth cracks, large tubers,	3.6, 3.8, 3.5, 3.6	3.7, 4, 3.8, 3.9
TXYG057	Shape, , ,	, , ,	3.3, 4, 3.8, 3.8	4, 3.7, 3.8, 3.7
TXYG105	, misshape, ,	, , ,	3.4, 4.2, 4.2, 3.7	4, 3.9, 3.4, 3.8
TXYG098	, , misshape,	, , , low yield	3.8, 4, 3.5, 3.1	3.6, 3.7, 3, 3
ATC00293 -1W/Y	?, late, Drop, Shape,	, , ,	3.8, 3.2, 2.6, 3.3	3, 2.5, 2.5, 2
CO00379-2R/Y	, , ,	buff, pointed, , Smooth pointed, buff+	0, 0, 0, 0	3.8, 3.8, 4, 3.2
ATTX98500-3PW/Y	, , Drop,	, , Drop, Flat, light skin,	3.3, 3.2, 2.5, 3.2	3, 2.5, 2.5, 3
CO00412-5W/Y	Late, Drop, Drop, Drop, Drop	small boiler, , Drop + Buff,	2.3, 2.3, 2, 2.2	1, 1, 1, 1

Springlake
Table 5f. Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 14 entries in the Southwest Regional Specialty Trial grown near Springlake, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good Chip	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
ATTX00289-6W/Y	Colorado	1.067	14.4	3.9	2	8/12	8	12	35% Vas, 30% Bru	0%	3%
TX1673-1W/Y	Colorado	1.065	14.1	4.0	3++	0/38	0	38	11%Z , 100%Dk, 3%HH	11%	5%
TXYG079	Colorado	1.076	16.0	4.0	3++	0/40	0	40	100%Dk	0%	0%
TXYG107	Colorado	1.079	16.7	4.0	3++	0/38	0	38	3%Z , 100%Dk	3%	0%
TXYG055	Colorado	1.068	14.7	4.0	3++	0/30	0	30	7%Z , 100%Dk	7%	5%
YG ZSC	Colorado	1.074	15.6	3.9	3++	0/30	0	30	3%Z , 100%Dk	3%	3%
Yukon Gold	Colorado	1.076	16.1	3.9	3++	0/40	0	40	3%Z , 100%Dk	3%	5%
TXYG057	Colorado	1.073	15.6	3.8	3++	0/39	0	39	10%Z , 100%Dk	10%	5%
TXYG105	Colorado	1.077	16.2	3.8	3++	0/40	0	40	5%Z , 100%Dk	5%	10%
TXYG098	Colorado	1.071	15.2	3.3	3++	0/40	0	40	3%Z , 100%Dk	3%	0%
ATC00293 -1W/Y	Colorado	1.062	13.7	2.5	3++	0/39	0	39	3%Z , 100%Dk, 3%HH	3%	3%
CO00379-2R/Y	Colorado	1.062	13.6	3.7	2	27/11	27	11	8%Z , 3% Vas, 16% Bru, 5% Dk	8%	0%
ATTX98500-3PW/Y	Colorado	1.062	13.5	2.8	3++	0/39	0	39	100%Dk	0%	0%
CO00412-5W/Y	Colorado	1.079	16.6	1.0	3++	0/39	0	39	100%Dk	0%	0%
Average										4%	3%
L.S.D. (.05)											ns

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

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

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

		DAP
Planted	March 31, 2008	
Vines Killed (Red, Chip)	July 28, 2008	118
Vines Killed (Russet)	August 15, 2008	135
Harvested (Red, Chip)	July 30, 2008	120
Harvested (Russet)	August 19, 2008	139

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:

(Red) 101-11-6 # per acre

(Russet, Chip) 175-11-6 # per acre

Irrigation:

Center Pivot

Insecticide:

Agri-Mek, Endigo, Avaunt, Oberon, Rimon, Dimthoate 4e,

Seed Treatment Applied:

Tops MZ Gaucho

Fungicides Applied:

Super tin 80, Kocide, Penncozeb, Quadris

Herbicides Applied:

Treflan, Dual, Sencor, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the first week of May, the fourth week of June, the third week of July, and the third week of August. Temperatures were higher than normal for the last week in May and the first and second weeks in June. These high temperatures had an adverse effect on the tuber shape.

Springlake
Table 6a. Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 2 entries in the Southwest Regional Fingerling Trial grown near Springlake, Texas-2008.

Variety or Selection	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 6 inch	Under 1 inch	Culls/ No.2	General Rating ¹ Grading
		Total Yield	1-2 inch	2-4 inch	4-6 inch				
CO00415-1R(SW)	220.9	219.5	33.5	115.3	70.7	0.0	0.0	1.4	3.2
CO00405-1R(SW)	151.0	150.5	39.0	89.7	21.9	0.0	0.0	0.5	3.0
Average	186.0	185.0	36.2	102.5	46.3	0.0	0.0	1.0	3.1
L.S.D. (.05)	43.3	40.2	ns	ns	ns			ns	ns

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 2 entries in the Southwest Regional Fingerling Trial grown near Springlake, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	1-2 inch	2-4 inch	4-6 inch	Over 6 inch	Under 1 inch	Culls/ No. 2				
CO00415-1R(SW)	99.4	15.0	50.5	33.9	0.0	0.0	0.6	1.063	13.8	Long	Red
CO00405-1R(SW)	99.7	25.3	59.5	14.8	0.0	0.0	0.3	1.072	15.4	Long	Red
Average	99.5	20.1	55.0	24.4	0.0	0.0	0.5	1.068	14.6		
L.S.D. (.05)	ns	4.2	ns	ns			ns	0.005	1.0		

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 2 entries in the Southwest Regional Fingerling Trial grown near Springlake, Texas-2008.

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	
CO00415-1R(SW)	8.3	2.2	3.1	98	100	2.2	4.0	3.6	4.0	4
CO00405-1R(SW)	6.6	2.0	3.6	94	100	2.5	3.6	3.5	3.7	3
Average	7.4	2.1	3.3	96	100	2.4	3.8	3.5	3.8	3
L.S.D. (.05)	ns	ns	ns	ns		ns	ns	ns	ns	ns

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

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

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

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

Springlake
Table 6d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 2 entries in the Southwest Regional Fingerling Trial grown near Springlake, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
CO00415-1R(SW)	1.0	4.5	1.6	4.5	4.2	5.0	5.0	5.0	5.0	3.8	0	0	0	0
CO00405-1R(SW)	1.0	4.4	1.6	4.3	4.0	5.0	5.0	5.0	5.0	4.4	0	0	0	0
Average	1.0	4.5	1.6	4.4	4.1	5.0	5.0	5.0	5.0	4.1	0	0	0	0
L.S.D. (.05)	ns	ns	ns	ns	ns					0.5				

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake

Table 6e.

Notes and general rating for all reps of 2 entries in the Southwest Regional Fingerling Trial grown near Springlake, Texas-2008.

Variety or Selection	Notes Grading	General Rating Grading
CO00415-1R(SW)	buff, road map, good flesh color	3.2, 3.2, 3.2, 3.2
CO00405-1R(SW)	buff, curved, , fingerling, poor shape, drop, good skin set, nice flesh, skinny, buff	3.2, 3, 3, 2.8

Springlake
Table 6f.

Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 2 entries in the Southwest Regional Fingerling Trial grown near Springlake, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good Chip	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
CO00415-1R(SW)	Colorado	1.063	13.8	3.2	3	0/40	0	40	3%Z, 95% Vas, 8%Dk	3%	0%
CO00405-1R(SW)	Colorado	1.072	15.4	3.0	3	0/11	0	11	91% Vas, 9% Bru	0%	0%
Average										2%	0%
L.S.D. (.05)											ns

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

Addendum to Tables Springlake 6a, 6b, 6c, 6d, 6e, and 6f
Southwest Regional Fingerling Trial

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

		DAP
Planted	March 31, 2008	
Vines Killed (Red, Chip)	July 28, 2008	118
Vines Killed (Russet)	August 15, 2008	135
Harvested (Red, Chip)	July 30, 2008	120
Harvested (Russet)	August 19, 2008	139

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:

(Red) 101-11-6 # per acre
(Russet, Chip) 175-11-6 # per acre

Irrigation:

Center Pivot

Insecticide:

Agri-Mek, Endigo, Avaunt, Oberon, Rimon, Dimthoate 4e,

Seed Treatment Applied:

Tops MZ Gaucho

Fungicides Applied:

Super tin 80, Kocide, Penncozeb, Quadris

Herbicides Applied:

Treflan, Dual, Sencor, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the first week of May, the fourth week of June, the third week of July, and the third week of August. Temperatures were higher than normal for the last week in May and the first and second weeks in June. These high temperatures had an adverse effect on the tuber shape.

Springlake
Table 7a. Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 28 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2008.

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	417.0	285.3	60.2	100.0	125.0	11.0	37.6	83.1	3.5	3.3
AOTX99194-1Ru	341.0	259.5	78.4	64.9	116.2	8.1	42.1	31.3	3.7	3.7
AOTX98096-1Ru	358.7	245.2	76.9	82.5	85.8	8.3	51.4	53.8	2.7	3.3
AOTX95295-1Ru	406.8	244.8	53.6	108.9	82.3	43.6	34.7	83.7	2.8	2.9
AOTX02060-1Ru	377.3	230.9	75.0	74.6	81.3	32.9	35.5	78.0	3.7	3.5
AOTX95269-1Ru	301.9	228.3	49.2	106.9	72.2	10.9	32.5	30.3	2.5	2.6
AOTX98137-1RU	303.9	225.9	53.5	85.8	86.6	7.9	29.0	41.1	2.6	3.3
TXNS551	323.3	224.9	49.9	60.6	114.4	17.3	34.0	47.0	2.7	3.5
ATX9332-12Ru	293.4	220.2	46.4	90.8	83.1	0.0	44.8	28.4	2.3	3.6
TXNS410	286.4	214.3	64.5	74.2	75.6	15.7	44.6	11.7	2.3	3.4
ATX03068-1Ru	288.6	212.2	61.7	72.2	78.2	2.4	51.2	22.8	2.8	3.6
Russet Norkotah278	411.0	211.3	85.1	48.4	77.8	8.3	32.3	159.1	3.3	2.7
ATX99194-3Ru	253.3	209.5	55.7	79.3	74.5	15.5	25.3	3.0	2.9	3.9
AOTX96084-1Ru	282.9	205.9	68.8	68.0	69.2	2.4	51.8	22.8	2.8	3.5
ATX84378-6RU	334.8	202.2	47.6	50.3	104.3	58.5	33.3	40.7	3.7	3.8
ATX03077-2Ru	298.3	198.2	38.5	46.6	113.1	33.9	18.2	48.0	2.8	3.5
AOTX96208-1Ru	306.5	188.4	63.5	43.2	81.7	2.0	45.4	70.8	2.7	3.1
AOTX95295-3Ru	294.7	187.7	48.7	61.6	77.4	5.6	48.9	52.4	2.4	2.9
AOTX95265-1Ru	287.0	186.9	65.1	70.6	51.2	9.5	58.5	32.1	2.1	3.0
AOTX02136-1Ru	258.5	184.1	55.7	71.0	57.5	0.0	35.5	38.9	3.0	3.1
ATX03003-1Ru	256.8	181.8	62.4	50.0	69.4	17.7	39.5	17.7	2.5	2.5
Russet Norkotah296	414.6	180.2	24.2	49.5	106.5	24.8	40.9	168.8	3.4	2.7
AOTX02066-1Ru	251.5	172.0	48.2	46.4	77.4	4.4	28.6	46.4	3.1	3.0
Russet Norkotah	266.2	170.0	64.7	56.1	49.2	15.1	33.1	48.0	3.0	3.2
ATX03003-7Ru	215.1	165.1	66.1	67.0	32.0	0.0	44.4	5.6	2.1	3.2
ATX03424-1Ru	259.5	163.5	46.0	67.0	50.6	0.0	68.0	28.0	2.8	3.5
TXCR-4RU	306.7	137.7	49.0	33.7	55.1	17.9	40.9	110.1	1.6	2.5
AOTX99008-1Ru	172.4	79.3	36.8	26.9	15.6	0.0	34.1	58.9	1.8	2.0
Average	306.0	200.5	57.0	66.3	77.3	13.4	39.9	52.2	2.8	3.2
L.S.D. (.05)	68.2	29.9	26.0	29.6	29.5	28.9	19.4	55.3	0.8	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 28 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
ATX91137-1RU	69.0	14.2	24.1	30.7	2.6	8.9	19.6	1.063	13.8	Long	Russet
AOTX99194-1Ru	76.1	23.0	19.0	34.1	2.1	12.5	9.3	1.071	15.1	Long	Russet
AOTX98096-1Ru	68.8	21.6	22.8	24.4	2.8	14.3	14.1	1.065	14.1	Long	Russet
AOTX95295-1Ru	60.4	13.2	26.9	20.3	10.8	8.6	20.3	1.066	14.3	Long	Russet
AOTX02060-1Ru	61.0	20.4	19.7	21.0	9.1	9.6	20.3	1.064	14.0	Long	Russet
AOTX95269-1Ru	75.8	16.3	35.3	24.2	3.3	10.7	10.2	1.065	14.2	Long	Russet
AOTX98137-1RU	75.9	18.1	29.9	27.9	2.1	10.0	12.1	1.063	13.8	Long	Russet
TXNS551	70.0	15.8	18.6	35.6	5.3	10.7	14.1	1.064	14.0	Long	Russet
ATX9332-12Ru	76.3	15.8	31.3	29.3	0.0	15.4	8.3	1.077	16.3	Long	Russet
TXNS410	74.9	22.7	25.8	26.4	5.4	15.7	4.0	1.064	14.0	Long	Russet
ATX03068-1Ru	74.1	22.2	25.5	26.3	0.7	17.1	8.2	1.062	13.6	Oblong	Russet
Russet Norkotah278	51.3	19.8	12.3	19.3	1.5	8.2	39.0	1.060	13.3	Long	Russet
ATX99194-3Ru	82.4	20.9	31.3	30.2	5.6	10.7	1.3	1.068	14.7	Oblong	Russet
AOTX96084-1Ru	72.7	24.0	23.9	24.9	1.0	17.9	8.3	1.063	13.8	Long	Russet
ATX84378-6RU	61.5	14.5	15.0	32.0	15.5	10.1	12.9	1.059	13.0	Oblong	Russet
ATX03077-2Ru	66.9	13.2	15.6	38.1	10.8	6.4	15.9	1.063	13.7	Long	Russet
AOTX96208-1Ru	61.9	20.6	14.4	26.9	0.7	15.0	22.4	1.062	13.6	Long	Russet
AOTX95295-3Ru	66.6	17.0	21.4	28.2	2.1	17.1	14.3	1.063	13.8	Long	Russet
AOTX95265-1Ru	65.7	22.7	24.7	18.4	3.9	20.4	9.9	1.066	14.3	Long	Russet
AOTX02136-1Ru	72.4	22.0	27.5	22.9	0.0	14.3	13.3	1.065	14.1	Long	Russet
ATX03003-1Ru	71.1	23.7	19.5	27.9	6.2	15.3	7.4	1.066	14.2	Oblong	Russet
Russet Norkotah296	43.1	6.0	11.6	25.6	5.7	9.8	41.4	1.064	13.9	Oblong	Russet
AOTX02066-1Ru	69.5	19.8	19.1	30.6	1.9	11.5	17.2	1.072	15.3	Oblong	Russet
Russet Norkotah	64.4	23.8	21.8	18.8	5.0	12.1	18.5	1.065	14.1	Long	Russet
ATX03003-7Ru	76.7	30.8	31.9	14.0	0.0	20.8	2.5	1.056	12.5	Long	Russet
ATX03424-1Ru	63.0	17.8	25.6	19.6	0.0	25.9	11.1	1.065	14.1	Long	Russet
TXCR-4RU	46.5	17.2	10.7	18.6	5.3	13.6	34.5	1.063	13.7	Long	Russet
AOTX99008-1Ru	49.5	22.9	18.8	7.7	0.0	21.0	29.6	1.070	15.1	Long	Russet
Average	66.7	19.3	22.3	25.1	3.9	13.7	15.7	1.065	14.1		
L.S.D. (.05)	12.7	7.6	10.5	10.8	8.1	6.5	15.0	0.006	1.0		

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 28 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2008.

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	4.9	7.6	1.4	56	82	1.9	3.6	3.9	4.2	15
AOTX99194-1Ru	4.4	6.6	1.4	64	90	1.6	3.6	3.8	4.2	15
AOTX98096-1Ru	3.9	6.9	2.3	90	98	1.6	3.6	3.8	4.1	20
AOTX95295-1Ru	4.1	7.2	2.5	92	99	1.9	3.6	3.9	4.3	13
AOTX02060-1Ru	3.9	7.1	1.8	76	100	2.0	3.7	3.4	3.9	30
AOTX95269-1Ru	3.3	7.1	1.8	86	99	1.7	3.4	3.7	4.0	21
AOTX98137-1RU	3.7	6.2	2.4	85	97	1.9	3.1	3.0	3.5	58
TXNS551	3.7	6.9	2.4	80	94	1.6	3.3	3.5	3.6	28
ATX9332-12Ru	3.4	6.6	2.0	90	96	1.3	3.5	4.0	4.3	11
TXNS410	3.6	6.5	1.7	84	99	1.3	3.2	3.7	3.8	21
ATX03068-1Ru	5.4	5.7	2.0	65	75	1.7	3.8	4.2	4.3	5
Russet Norkotah278	2.9	8.8	1.8	94	99	1.2	4.5	4.4	4.7	6
ATX99194-3Ru	4.0	6.7	1.5	63	79	1.5	3.0	3.4	3.7	30
AOTX96084-1Ru	4.0	5.7	2.5	96	99	1.6	3.4	3.5	3.9	41
ATX84378-6RU	3.8	8.3	1.7	81	90	1.2	3.8	3.5	4.0	13
ATX03077-2Ru	3.3	8.8	1.8	56	82	2.4	3.6	4.1	4.2	11
AOTX96208-1Ru	3.7	5.7	2.3	90	98	2.0	3.4	3.7	4.2	20
AOTX95295-3Ru	4.3	5.2	2.5	91	96	1.9	3.3	3.5	3.9	39
AOTX95265-1Ru	4.2	5.3	3.1	85	98	1.8	3.4	3.5	3.7	41
AOTX02136-1Ru	3.9	6.3	1.1	44	75	2.0	3.0	3.1	3.4	44
ATX03003-1Ru	4.3	6.1	2.2	67	80	1.7	3.5	3.7	4.1	11
Russet Norkotah296	3.1	7.7	1.8	96	100	1.4	4.5	4.4	4.6	3
AOTX02066-1Ru	3.6	6.3	1.2	58	82	1.7	3.3	3.2	3.8	49
Russet Norkotah	3.3	6.3	2.3	89	97	2.0	3.5	3.1	3.5	50
ATX03003-7Ru	3.9	5.3	1.5	61	85	2.2	3.2	4.6	4.5	1
ATX03424-1Ru	4.4	5.5	1.6	66	82	1.9	3.1	3.5	3.9	20
TXCR-4RU	3.3	6.4	2.0	89	98	1.9	3.0	4.4	4.1	6
AOTX99008-1Ru	2.3	4.9	2.1	84	93	1.9	3.6	3.4	3.9	33
Average	3.8	6.6	1.9	78	91	1.7	3.5	3.7	4.0	23
L.S.D. (.05)	0.9	1.4	0.3	16	11	0.4	0.3	0.4	0.4	17

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

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

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

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

Springlake
Table 7d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 28 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
ATX91137-1RU	1.2	4.3	5.0	4.5	4.7	4.8	5.0	5.0	5.0	4.5	0	0	0	0
AOTX99194-1Ru	1.0	4.1	5.0	4.5	4.6	5.0	5.0	5.0	5.0	5.0	0	0	0	10
AOTX98096-1Ru	1.2	4.5	4.9	4.1	4.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX95295-1Ru	1.2	4.7	4.9	4.5	4.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX02060-1Ru	1.2	4.2	4.8	4.5	4.7	4.9	5.0	5.0	5.0	5.0	0	0	0	0
AOTX95269-1Ru	1.2	4.4	4.8	4.3	4.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX98137-1RU	1.3	4.5	5.0	4.5	4.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TXNS551	1.2	4.5	5.0	4.0	4.7	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX9332-12Ru	1.2	4.1	4.9	4.5	4.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TXNS410	1.5	4.7	17.8	4.5	4.5	5.0	5.0	5.0	5.0	5.0	3	0	0	0
ATX03068-1Ru	1.0	3.4	4.5	4.5	4.0	5.0	5.0	5.0	5.0	5.0	5	0	15	0
Russet Norkotah278	1.5	4.7	5.0	4.0	4.7	5.0	5.0	5.0	5.0	5.0	0	0	5	0
ATX99194-3Ru	1.0	3.6	4.5	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	20
AOTX96084-1Ru	1.2	4.7	5.0	4.5	4.6	5.0	5.0	5.0	5.0	5.0	0	3	0	0
ATX84378-6RU	1.1	3.9	5.0	4.0	4.7	5.0	5.0	5.0	5.0	5.0	3	0	0	0
ATX03077-2Ru	1.2	4.3	5.0	4.1	4.7	5.0	5.0	5.0	5.0	5.0	5	0	0	0
AOTX96208-1Ru	1.2	4.6	4.8	4.0	4.7	5.0	5.0	5.0	5.0	5.0	3	0	0	0
AOTX95295-3Ru	1.2	4.5	5.0	4.1	4.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX95265-1Ru	1.2	4.6	4.9	4.1	4.5	5.0	5.0	5.0	5.0	5.0	3	0	0	0
AOTX02136-1Ru	1.2	4.0	4.5	4.0	4.0	4.5	5.0	5.0	5.0	5.0	0	3	0	5
ATX03003-1Ru	1.0	3.9	5.0	4.5	4.5	5.0	5.0	5.0	5.0	5.0	8	0	0	0
Russet Norkotah296	1.4	4.3	5.0	4.0	4.5	5.0	5.0	5.0	5.0	5.0	0	0	5	0
AOTX02066-1Ru	1.2	3.8	4.8	4.0	4.4	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Russet Norkotah	1.5	4.4	4.8	4.0	4.6	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX03003-7Ru	1.0	3.5	4.8	4.0	4.0	4.9	5.0	5.0	5.0	5.0	0	0	0	0
ATX03424-1Ru	1.2	4.3	4.8	4.4	4.6	5.0	5.0	5.0	5.0	5.0	3	0	0	0
TXCR-4RU	1.0	5.0	3.5	4.0	3.7	4.8	5.0	5.0	5.0	3.2	0	0	0	0
AOTX99008-1Ru	1.0	4.2	4.9	4.0	4.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average	1.2	4.3	5.3	4.2	4.5	5.0	5.0	5.0	5.0	4.9	1	0	1	1
L.S.D. (.05)	0.1	0.2	ns	0.1	0.1	ns				0.2		ns	ns	7

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake

Table 7c. Notes and general rating for all reps of 28 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
ATX91137-1Ru		raised eyes, drop	3.5, 3, 3.8, 3.8	3.7, 3.8, 2.5, 3.3
AOTX99194-1Ru		bad rep, BOT+, smooth	3.3, 3.6, 3.9, 3.8	4, 4.5, 3.8, 2.5
AOTX98096-1Ru			3.5, 1.8, 2.5, 3	3.2, 3.2, 3.5, 3.4
AOTX95295-1Ru		poor shape, drop	3.7, 3, 1.5, 2.8	3.3, 2.8, 2.8, 2.8
AOTX02060-1Ru	Bruce likes	large	4, 3.8, 3.5, 3.3	4, 3.3, 3.3, 3.3
AOTX95269-1Ru		drop, low yield	2.8, 3.5, 2, 1.8	3, 2.5, 2.5, 2.5
AOTX98137-1Ru			3.9, 2, 2.5, 2	3.3, 3.2, 3.2, 3.3
TXNS551			2.8, 2.5, 2.8, 2.5	3.5, 3.5, 3.5, 3.5
ATX9332-12Ru		smooth	2, 3, 2, 2	3.5, 3.7, 3.5, 3.6
TXNS410		nice internals	2.8, 2, 2.5, 1.8	3.7, 3.4, 3.3, 3.3
ATX03068-1Ru	Bruce likes	blocky, smooth, BOT, rot	3.8, 2, 2, 3.5	4, 4.2, 3.3, 3
Russet Norkotah278			3, 3.5, 3.5, 3	2.7, 2.7, 2.7, 2.7
ATX99194-3Ru		blocky, BOT for shape, poor internals, low yield	3.5, 3.6, 3, 1.5	4.5, 3.8, 3.8, 3.5
AOTX96084-1Ru		low yield	2.8, 3.2, 2, 3	3.2, 3.6, 3.5, 3.5
ATX84378-6Ru		nice internals, BOT, smooth, large	3.5, 3.5, 4, 3.8	3.5, 3.6, 3.7, 4.5
ATX03077-2Ru		some pointed, large, nice internal	2, 3.5, 3.8, 2	3.5, 3.5, 3.5, 3.5
AOTX96208-1Ru			3, 2.5, 2.6, 2.5	3.3, 3, 3, 3
AOTX95295-3Ru		poor internals, low yield	2.5, 2, 3.5, 1.5	3.4, 3, 3, 2
AOTX95265-1Ru		small, nice internals	2.5, 2, 2, 2	2.7, 3, 3, 3.4
AOTX02136-1Ru		blocky, poor internals	3.5, 3.5, 3, 2	3, 3.2, 2.6, 3.5
ATX03003-1Ru		large, heat sprouts	3.2, 3.9, 2, 1	2.5, 2.8, 2.5, 2
Russet Norkotah296		rough, curved	3.6, 3, 3.8, 3.2	3, 2.8, 2.5, 2.5
AOTX02066-1Ru		blocky	2.5, 3.5, 3.8, 2.5	2.8, 3, 3, 3.2
Russet Norkotah		pointed	3.5, 3, 2.5, 3	3.3, 3.3, 3, 3
ATX03003-7Ru		poor internals+, low yield, blocky	1.5, 3, 2, 1.8	3.3, 3.3, 3.3, 2.7
ATX03424-1Ru		, smooth, low yield	2, 3, 3, 3	3.8, 3.7, 3.3, 3
TXCR-4Ru		long skinny, feathering	1.8, 1.5, 1.5, 1.5	2.7, 2.5, 2.5, 2.2
AOTX99008-1Ru		drop++, skinny, nice internals	1.8, 2, 1.5, 2	2, 2, 2, 2

Springlake
Table 7f.

Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 28 entries in the Texas Advanced Russet Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
ATX91137-1Ru	Dalhart	1.063	13.8	3.3	2	13/26	13	26	21%Z , 46% Vas	21%	3%
AOTX99194-1Ru	Dalhart	1.071	15.1	3.7	2	21/19	21	19	5%Z , 35% Vas, 3% Bru	5%	8%
AOTX98096-1Ru	Dalhart	1.065	14.1	3.3	1+	16/25	16	25	7%Z , 51% Vas, 2% Bru	7%	8%
AOTX95295-1Ru	Dalhart	1.066	14.3	2.9	1+	15/26	15	26	2%Z , 61% Vas	2%	8%
AOTX02060-1Ru	Dalhart	1.064	14.0	3.5	1+	32/8	32	8	3%Z , 10% Vas, 8% Bru	3%	10%
AOTX95269-1Ru	Dalhart	1.065	14.2	2.6	1+	23/17	23	17	8%Z , 28% Vas, 8% Bru	8%	10%
AOTX98137-1RU	Dalhart	1.063	13.8	3.3	2	25/13	25	13	3%Z , 32% Vas	3%	8%
TXNS551	Dalhart	1.064	14.0	3.5	1+	23/18	23	18	12%Z , 32% Vas	12%	5%
ATX9332-12Ru	Dalhart	1.077	16.3	3.6	2+	14/25	14	25	5%Z , 59% Vas	5%	5%
TXNS410	Dalhart	1.064	14.0	3.4	2	22/17	22	17	3%Z , 41% Vas	3%	8%
ATX03068-1Ru	Dalhart	1.062	13.6	3.6	3	10/29	10	29	54% Vas, 21% Dk	0%	8%
Russet Norkotah278	Colorado	1.060	13.3	2.7	2	9/28	9	28	11%Z , 62% Vas, 3% Bru	11%	10%
ATX99194-3Ru	Dalhart	1.068	14.7	3.9	1+	26/11	26	11	24% Vas, 5% Bru, BOT-	0%	3%
AOTX96084-1Ru	Dalhart	1.063	13.8	3.5	1+	14/26	14	26	5%Z , 60% Vas	5%	10%
ATX84378-6RU	Dalhart	1.059	13.0	3.8	2	26/14	26	14	23%Z , 3% Bru, 10% Dk	23%	13%
ATX03077-2Ru	Dalhart	1.063	13.7	3.5	2+	6/35	6	35	7%Z , 78% Vas	7%	5%
AOTX96208-1Ru	Dalhart	1.062	13.6	3.1	1+	28/12	28	12	8%Z , 20% Vas	8%	0%
AOTX95295-3Ru	Dalhart	1.063	13.8	2.9	2+	34/6	34	6	10%Z , 5% Bru	10%	15%
AOTX95265-1Ru	Springlake	1.066	14.3	3.0	2	36/5	36	5	7%Z , 5% Bru	7%	0%
AOTX02136-1Ru	Dalhart	1.065	14.1	3.1	1	24/14	24	14	32% Vas, 5% Bru, BOT-	0%	0%
ATX03003-1Ru	Dalhart	1.066	14.2	2.5	1+	39/9	39	9	19%Z	19%	5%
Russet Norkotah296	Colorado	1.064	13.9	2.7	1+	18/24	18	24	33%Z , 24% Vas	33%	23%
AOTX02066-1Ru	Dalhart	1.072	15.3	3.0	1	30/8	30	8	21%Z , BOT	21%	3%
Russet Norkotah	Dalhart	1.065	14.1	3.2	2	19/20	19	20	5%Z , 46% Vas	5%	15%
ATX03003-7Ru	Dalhart	1.056	12.5	3.2	2	28/1	28	1	3%Z	3%	0%
ATX03424-1Ru	Dalhart	1.065	14.1	3.5	1+	31/9	31	9	23% Dk, BOT	0%	3%
TXCR-4RU	Dalhart	1.063	13.7	2.5	1+	10/26	10	26	6%Z , 64% Vas, 3% Bru	6%	0%
AOTX99008-1Ru	Dalhart	1.070	15.1	2.0	1+	22/19	22	19	15%Z , 29% Vas, 2% Bru	15%	0%
Average										9%	6%
L.S.D. (.05)											ns

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

Addendum to Tables Springlake 7a, 7b, 7c, 7d, 7e, and 7f
Texas Advanced Russet Selection Trial

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

		DAP
Planted	March 31, 2008	
Vines Killed (Red, Chip)	July 28, 2008	118
Vines Killed (Russet)	August 15, 2008	135
Harvested (Red, Chip)	July 30, 2008	120
Harvested (Russet)	August 19, 2008	139

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:

(Red) 101-11-6 # per acre
(Russet, Chip) 175-11-6 # per acre

Irrigation:

Center Pivot

Insecticide:

Agri-Mek, Endigo, Avaunt, Oberon, Rimon, Dimthoate 4e,

Seed Treatment Applied:

Tops MZ Gaucho

Fungicides Applied:

Super tin 80, Kocide, Penncozeb, Quadris

Herbicides Applied:

Treflan, Dual, Sencor, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the first week of May, the fourth week of June, the third week of July, and the third week of August. Temperatures were higher than normal for the last week in May and the first and second weeks in June. These high temperatures had an adverse effect on the tuber shape.

Springlake
Table 8a. Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 9 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2008.

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					
NDTX731-1R	470.1	415.5	109.0	142.9	163.6	0.0	53.7	0.9	3.8	4.5
Rio Rojo	414.4	371.5	83.9	163.6	124.0	0.0	40.8	2.1	3.7	5.0
Red LaSoda	387.2	311.8	97.8	82.1	131.9	0.0	63.4	11.9	3.4	3.0
NDTX4271-5R	313.6	216.9	112.0	60.2	44.8	0.0	96.6	0.0	3.4	4.5
NDTX059845-1R	214.9	148.3	63.4	77.4	7.4	0.0	66.6	0.0	2.7	3.5
NDTX059878-1R	220.9	124.5	88.5	36.0	0.0	0.0	96.5	0.0	2.9	3.7
COTX04340-1R	266.9	121.9	79.2	38.9	3.8	0.0	142.4	2.6	2.8	2.9
NDTX4847-7R	162.1	116.9	56.5	47.9	12.4	0.0	45.3	0.0	3.0	3.6
NDTX039190-1R	57.2	35.1	24.2	10.9	0.0	0.0	22.1	0.0	2.2	2.1
Average	278.6	206.9	79.4	73.3	54.2	0.0	69.7	1.9	3.1	3.6
L.S.D. (.05)	40.6	24.4	37.5	31.7	34.7		42.0	ns	0.4	0.2

¹ 1=very poor to 5= excellent

Springlake
Table 8b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 9 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
NDTX731-1R	88.4	22.7	31.0	34.7	0.0	11.4	0.2	1.058	12.9	Round	Red
Rio Rojo	89.5	20.3	39.7	29.5	0.0	10.1	0.4	1.052	11.8	Round	Red
Red LaSoda	80.5	25.0	21.2	34.2	0.0	16.2	3.4	1.061	13.4	Oblong	Red
NDTX4271-5R	69.3	35.3	19.2	14.9	0.0	30.7	0.0	1.056	12.6	Round	Red
NDTX059845-1R	68.8	29.4	36.6	2.8	0.0	31.2	0.0	1.068	14.6	Round	Red
NDTX059878-1R	56.3	40.6	15.8	0.0	0.0	43.7	0.0	1.063	13.7	Round	Red
COTX04340-1R	46.5	30.2	15.0	1.3	0.0	52.2	1.3	1.060	13.2	Oblong	Red
NDTX4847-7R	73.0	35.3	29.6	8.2	0.0	27.0	0.0	1.062	13.6	Round	Red
NDTX039190-1R	60.5	42.7	17.8	0.0	0.0	39.5	0.0	1.052	11.7	Round	Red
Average	70.3	31.3	25.1	13.9	0.0	29.1	0.6	1.059	13.0		
L.S.D. (.05)	11.6	13.6	13.0	10.7		12.2	ns	0.007	1.2		

Springlake
Table 8c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 9 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2008.

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
NDTX731-1R	6.2	6.3	1.5	94	100	1.4	3.7	3.7	3.6	3
Rio Rojo	5.4	6.6	1.7	82	97	1.4	3.7	3.2	3.4	6
Red LaSoda	5.7	5.8	1.8	88	100	1.7	4.0	3.9	4.2	0
NDTX4271-5R	6.8	3.9	1.8	70	98	1.4	3.9	3.4	3.8	8
NDTX059845-1R	6.9	3.9	1.2	45	66	2.1	2.5	3.2	3.1	0
NDTX059878-1R	5.9	3.2	1.3	71	96	2.4	3.0	3.1	2.9	14
COTX04340-1R	7.7	3.0	2.2	83	97	2.2	3.7	4.0	4.1	0
NDTX4847-7R	5.5	4.1	1.2	36	63	1.8	2.9	3.0	2.9	3
NDTX039190-1R	3.5	3.0	1.2	30	47	1.2	1.3	4.3	2.1	0
Average	5.9	4.4	1.6	66	85	1.7	3.2	3.5	3.3	4
L.S.D. (.05)	ns	0.8	0.4	13	12	0.3	0.4	0.6	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 8d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 9 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
NDTX731-1R	1.8	2.0	2.0	3.2	4.5	5.0	5.0	5.0	5.0	4.5	0	0	0	0
Rio Rojo	1.0	2.5	1.0	4.4	3.9	5.0	5.0	5.0	5.0	4.5	0	0	0	0
Red LaSoda	1.0	3.7	1.0	1.9	3.3	5.0	5.0	5.0	5.0	3.4	0	0	0	0
NDTX4271-5R	1.0	2.8	1.0	4.0	4.2	5.0	5.0	5.0	5.0	4.0	0	0	0	0
NDTX059845-1R	1.0	2.0	1.0	4.4	4.5	5.0	5.0	5.0	5.0	3.6	0	0	0	0
NDTX059878-1R	1.0	2.2	1.0	4.5	4.2	5.0	5.0	5.0	5.0	3.9	0	0	0	0
COTX04340-1R	1.0	2.9	1.0	4.8	4.8	5.0	5.0	5.0	5.0	3.1	0	0	0	0
NDTX4847-7R	1.0	2.0	1.7	4.5	4.8	5.0	5.0	5.0	5.0	4.1	0	0	0	3
NDTX039190-1R	1.0	2.1	1.0	4.5	4.4	3.0	5.0	5.0	5.0	5.0	0	0	0	0
Average	1.1	2.5	1.2	4.0	4.3	4.8	5.0	5.0	5.0	4.0	0	0	0	0
L.S.D. (.05)	ns	0.1	0.1	0.2	0.1	ns				0.2				ns

¹ 1=light to 5=dark

⁶ 1 to 5=none

² 1=round to 5=long

⁷ 1 to 5=none

³ 1=none to 5=heavy

⁸ 1 to 5=none

⁴ 1=deep to 5=shallow

⁹ 1 to 5=none

⁵ 1=light to 5=dark

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake

Table 8e. Notes and general rating for all reps of 9 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Notes Field	Notes Grading	General Rating Grading	General Rating Grading
NDTX731-1R	BOT-, BOT+, , BOT	, BOT buff, , Rough like RLS, oversize, large tubers not as rough	3.8, 4.5, 3.2, 3.8	4.5, 4.5, 4.5, 4.5
Rio Rojo	, , , BOT	, BOT, can oversize, , deep eyes, very white flesh, , very	3.4, 4, 3.3, 3.9	5, 5, 5, 5
Red LaSoda	, BOT, , BOT-	rough, poor shape, dumbbell, , some buff, yield, mix size, 30%	3.4, 3, 3.2, 3.8	3, 3, 3, 3
NDTX4271-5R	, , , small BOT	internal problems-Z?, nice flesh, not some slight misshape, very white	3.2, 3.4, 3, 4	4.4, 4.5, 4.4, 4.5
NDTX059845-1R	drop, , ,	flesh, Drop ?, low yield, feathering,	2.5, 2.5, 2.8, 3	3.5, 3.5, 3.5, 3.5
NDTX059878-1R	, drop, ,	some buff, rough, small, Drop, Chain stolen, good color, very	2.8, 2.8, 3.2, 2.6	3.7, 3.7, 3.7, 3.6
COTX04340-1R	drop, drop?, late drop,	white flesh, Feathering, late, Drop, low yield, nice internal, sticky	2.8, 2.5, 2.8, 3	3.4, 2.5, 3.2, 2.5
NDTX4847-7R	, , ,	stolen, , buff growth cracks, low yield, growth	2.8, 3, 3.4, 2.7	3.5, 3.5, 3.8, 3.5
NDTX039190-1R	drop, drop, drop, drop	cracks, , Drop, very white flesh	2.2, 2.2, 2.3, 2.2	2, 2.3, 2, 2

Springlake
Table 8f. Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 9 entries in the Texas Advanced Red Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good Chip	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
NDTX731-1R	CSS	1.058	12.9	4.5	2	23/18	23	18	29% Vas, 15%Dk	0%	0%
Rio Rojo	CSS	1.052	11.8	5.0							5%
Red LaSoda	Barrett	1.061	13.4	3.0	2+	18/24	18	24	43%Z , 14% Vas	43%	0%
NDTX4271-5R	CSS	1.056	12.6	4.5	2	17/22	17	22	15%Z , 15% Vas, 26%Bru	15%	0%
NDTX059845-1R	Dalhart	1.068	14.6	3.5	1+	16/23	16	23	56% Vas	0%	0%
NDTX059878-1R	Dalhart	1.063	13.7	3.7	1+	34/3	34	3	BOT-	0%	0%
COTX04340-1R	Dalhart	1.060	13.2	2.9	3	0/36	0	36	100%Z	100%	0%
NDTX4847-7R	Dalhart	1.062	13.6	3.6	2	13/27	13	27	18% Fus	8%	0%
NDTX039190-1R	Dalhart	1.052	11.8	2.1	1+	5/33	5	33	79% IBS	0%	3%
Average										21%	1%
L.S.D. (.05)											ns

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

Addendum to Tables Springlake 8a, 8b, 8c, 8d, 8e, and 8f
Texas Advanced Selection Red Trial

Location:
Springlake, Texas

Soil Type
Tivoli Fine Sand

Seed Source
Colorado, Oregon, Texas and Idaho

Date:		DAP
Planted	March 31, 2008	
Vines Killed (Red, Chip)	July 28, 2008	118
Vines Killed (Russet)	August 15, 2008	135
Harvested (Red, Chip)	July 30, 2008	120
Harvested (Russet)	August 19, 2008	139

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:
(Red) 101-11-6 # per acre
(Russet, Chip) 175-11-6 # per acre

Irrigation:
Center Pivot

Insecticide:
Agri-Mek, Endigo, Avaunt, Oberon, Rimon, Dimthoate 4e,

Seed Treatment Applied:
Tops MZ Gaucho

Fungicides Applied:
Super tin 80, Kocide, Penncozeb, Quadris

Herbicides Applied:
Treflan, Dual, Sencor, Roundup

Environmental Factors:
These trials were subjected to higher than normal precipitation in the first week of May, the fourth week of June, the third week of July, and the third week of August. Temperatures were higher than normal for the last week in May and the first and second weeks in June. These high temperatures had an adverse effect on the tuber shape.

Springlake
Table 9a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 8 entries in the Texas Advanced Red Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2008.

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 Grading
		Total Yield	4-6 oz	6-10 oz	10-18 oz				
ATTX98468-5R/Y	255.5	164.2	95.2	61.3	7.7	2.8	60.5	28.0	2.4
ATTX99325-1P	141.2	121.3	42.2	63.7	15.3	0.0	19.9	0.0	3.6
COTX03039-1R/Y	133.7	96.2	54.9	32.9	8.5	0.0	29.8	7.7	3.1
COTX04303-2R/Y	240.6	85.9	48.6	37.3	0.0	0.0	145.6	9.1	2.6
ATX02263-1R/Y	181.7	83.7	75.2	8.5	0.0	0.0	98.0	0.0	3.9
NDTX4756-1R/Y	110.5	58.1	43.8	14.3	0.0	0.0	52.4	0.0	3.1
TX04212-1R/Y	94.7	55.7	24.7	24.5	6.5	0.0	36.8	2.2	2.5
ATTX98444-16R/Y	130.5	21.6	17.1	4.4	0.0	0.0	106.1	2.8	2.8
Average	161.0	85.8	50.2	30.9	4.7	0.4	68.7	6.2	3.0
L.S.D. (.05)	107.8	21.8	25.5	24.9	ns	ns	ns	12.1	0.5

¹ 1=very poor to 5= excellent

Springlake
Table 9b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 8 entries in the Texas Advanced Red Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
ATTX98468-5R/Y	64.5	38.9	23.0	2.6	0.9	24.1	10.5	1.064	14.0	Oblong	Red
ATTX99325-1P	86.2	31.0	46.0	9.1	0.0	13.8	0.0	1.063	13.7	Oblong	Purple
COTX03039-1R/Y	71.7	40.4	25.1	6.2	0.0	21.7	6.6	1.067	14.5	Oblong	Red
COTX04303-2R/Y	48.9	27.2	21.6	0.0	0.0	45.2	6.0	1.068	14.7	Round	Red
ATX02263-1R/Y	46.2	41.6	4.6	0.0	0.0	53.8	0.0	1.063	13.8	Round	Red
NDTX4756-1R/Y	48.9	36.8	12.0	0.0	0.0	51.1	0.0	1.064	13.9	Oblong	Red
TX04212-1R/Y	58.6	27.1	26.4	5.1	0.0	39.9	1.6	1.049	11.2	Oblong	Red
ATTX98444-16R/Y	15.8	12.5	3.3	0.0	0.0	82.2	2.0	1.073	15.5	Oblong	Red
Average	55.1	31.9	20.3	2.9	0.1	41.5	3.3	1.064	13.9		
L.S.D. (.05)	18.2	ns	17.2	ns	ns	20.3	ns	0.004	0.8		

Springlake
Table 9c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 8 entries in the Texas Advanced Red Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2008.

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	
ATTX98468-5R/Y	6.2	3.3	2.5	85	98	1.9	4.1	4.1	4.4	0
ATTX99325-1P	4.7	4.1	2.0	28	60	2.1	2.1	3.2	2.0	3
COTX03039-1R/Y	5.2	3.5	1.4	40	60	1.7	2.5	4.3	3.6	0
COTX04303-2R/Y	4.9	5.0	1.9	61	78	1.7	3.6	4.1	4.4	0
ATX02263-1R/Y	8.3	2.1	1.8	73	88	1.7	3.5	3.4	3.4	0
NDTX4756-1R/Y	4.9	2.3	1.9	59	81	2.4	3.1	3.3	3.5	4
TX04212-1R/Y	3.2	2.6	1.9	47	94	1.7	4.4	4.9	4.9	0
ATTX98444-16R/Y	6.7	1.7	1.6	68	97	2.1	3.2	3.6	3.4	0
Average	5.5	3.1	1.9	58	82	1.9	3.3	3.9	3.7	1
L.S.D. (.05)	1.6	ns	ns	16	17	0.3	0.6	0.5	0.7	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 9d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 8 entries in the Texas Advanced Red Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
ATTX98468-5R/Y	2.6	2.8	1.3	4.1	3.4	5.0	5.0	5.0	5.0	3.0	0	0	0	3
ATTX99325-1P	1.0	3.5	1.0	4.7	4.8	5.0	5.0	5.0	5.0	3.1	0	0	0	0
COTX03039-1R/Y	3.4	3.3	2.5	4.5	4.1	5.0	5.0	5.0	5.0	3.7	0	0	0	0
COTX04303-2R/Y	3.5	1.8	1.0	4.0	4.4	5.0	5.0	5.0	5.0	3.1	0	0	0	0
ATX02263-1R/Y	2.5	2.0	1.0	4.5	4.5	5.0	5.0	5.0	5.0	4.5	0	0	0	0
NDTX4756-1R/Y	3.1	2.8	1.0	4.5	3.7	5.0	5.0	5.0	5.0	3.8	0	0	0	0
TX04212-1R/Y	3.1	3.5	1.0	4.5	4.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
ATTX98444-16R/Y	2.9	2.1	1.0	4.5	4.0	5.0	5.0	5.0	5.0	4.1	0	0	0	0
Average	2.8	2.7	1.2	4.4	4.1	5.0	5.0	5.0	5.0	3.7	0	0	0	0
L.S.D. (.05)	0.2	0.6	0.1	0.1	0.3					0.3				ns

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake
Table 9e. Notes and general rating for all reps of 8 entries in the Texas Advanced Red Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Notes Grading	General Rating Grading
ATTX98468-5R/Y	nice shape, light flesh, light flesh, lot of culls, drop	3.4, 2, 2, 2
ATTX99325-1P	very white flesh, yield??	3.5, 3.8, 3.5, 3.5
COTX03039-1R/Y	silver scurf, drop?, buff, poor internals	3, 3, 3, 3.2
COTX04303-2R/Y		3, 2.8, 2.3, 2.3
ATX02263-1R/Y	small, B size, smooth, BOT for salad, buff	3.6, 3.6, 4.5, 4
NDTX4756-1R/Y	low yield, silver scurf, small	3.2, 3.3, 3, 3
TX04212-1R/Y	sticky stolon, immature, late, low yield, light set, drop++	2.5, 2.5, 2.5, 2.5
ATTX98444-16R/Y	salad??, small, smooth, small, drop	2.8, 2.7, 3, 2.8

Springlake
Table 9f. Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 8 entries in the Texas Advanced Red Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good Chip	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
ATTX98468-5R/Y	Dalhart	1.064	14.0	2.4	1+	21/19	21	19	13%Z , 18% Vas, 18% Bru	13%	0%
ATTX99325-1P	Dalhart	1.063	13.7	3.6	1+	9/30	9	30	8%Z , 33% Vas, 36% Bru	8%	0%
COTX03039-1R/Y	Dalhart	1.067	14.5	3.1	2	23/15	23	15	5%Z , 3% Vas, 32% Bru	5%	8%
COTX04303-2R/Y	Dalhart	1.068	14.7	2.6	2+	14/23	14	23	3%Z, 5% Vas, 11% IBS, 8%Z	0%	0%
ATX02263-1R/Y	Dalhart	1.063	13.8	3.9	2	36/3	36	3	8%Z	8%	0%
NDTX4756-1R/Y	Dalhart	1.064	13.9	3.1	3	9/30	9	30	3%Z , 33% Bru, 41% Dk	3%	0%
TX04212-1R/Y	Dalhart	1.049	11.2	2.5	2	12/17	12	17	48% Vas, 10% Bru	0%	0%
ATTX98444-16R/Y	Dalhart	1.073	15.5	2.8	3	23/16	23	16	5%Z , 5% Vas, 18% Bru,	5%	0%
Average										5%	1%
L.S.D. (.05)											ns

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

Addendum to Tables Springlake 9a, 9b, 9c, 9d, 9e, and 9f
Texas Advanced Red Skin Yellow Flesh Selection Trial

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

		DAP
Planted	March 31, 2008	
Vines Killed (Red, Chip)	July 28, 2008	118
Vines Killed (Russet)	August 15, 2008	135
Harvested (Red, Chip)	July 30, 2008	120
Harvested (Russet)	August 19, 2008	139

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:

(Red) 101-11-6 # per acre
(Russet, Chip) 175-11-6 # per acre

Irrigation:

Center Pivot

Insecticide:

Agri-Mek, Endigo, Avaunt, Oberon, Rimon, Dimthoate 4e,

Seed Treatment Applied:

Tops MZ Gaucho

Fungicides Applied:

Super tin 80, Kocide, Penncozeb, Quadris

Herbicides Applied:

Treflan, Dual, Sencor, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the first week of May, the fourth week of June, the third week of July, and the third week of August. Temperatures were higher than normal for the last week in May and the first and second weeks in June. These high temperatures had an adverse effect on the tuber shape.

Springlake
Table 10a.

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 Texas Advanced White Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2008.

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 Grading	General Rating ¹ Field
		Total Yield	4-6 oz	6-10 oz	10-18 oz					
TX1523-1Ru/Y	312.2	261.6	138.5	86.7	36.3	0.0	43.2	7.5	3.9	4.2
Yukon Gold	412.8	249.9	158.1	84.7	7.1	0.0	98.4	64.5	3.8	3.9
COTX03079-1W/Y	372.3	210.3	133.7	63.3	13.3	0.0	113.5	48.4	3.2	2.9
NDTX049265-2WRSP/Y	283.8	177.7	132.0	37.6	8.1	0.0	104.1	2.0	3.7	3.3
BTX1749-1W/Y	284.1	172.6	129.1	31.9	11.7	0.0	95.0	16.5	3.1	2.8
TX1674-1W/Y	236.8	122.2	105.5	16.7	0.0	0.0	82.5	32.1	2.9	2.6
COTX04015-3W/Y	270.2	118.8	109.1	9.7	0.0	0.0	113.5	37.9	3.0	2.5
BTX1544-2W/Y	278.3	115.0	88.7	26.2	0.0	0.0	111.7	51.6	3.1	2.9
NDTX059775-1W/Y	246.0	98.0	83.5	14.5	0.0	0.0	114.5	33.5	2.2	2.7
NDTX059759-3Pinto/Y	154.1	92.2	70.8	21.4	0.0	0.0	54.9	7.1	3.7	3.0
COTX04178-1Y/Y	156.3	29.2	28.6	0.6	0.0	0.0	117.4	9.7	2.8	2.9
Average	273.4	149.8	107.1	35.8	6.9	0.0	95.3	28.3	3.2	3.1
L.S.D. (.05)	44.6	36.0	34.7	28.1	ns		27.8	21.2	0.5	0.4

¹ 1=very poor to 5= excellent

Springlake
Table 10b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 11 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
TX1523-1Ru/Y	83.6	44.3	27.5	11.8	0.0	14.1	2.4	1.077	16.3	Oblong	Russet
Yukon Gold	60.5	38.7	20.2	1.6	0.0	23.7	15.8	1.073	15.6	Oblong	White
COTX03079-1W/Y	56.7	35.4	17.6	3.8	0.0	30.5	12.8	1.067	14.5	Oblong	White
NDTX049265-2WRSP/Y	62.7	46.7	13.4	2.6	0.0	36.7	0.7	1.062	13.6	Oblong	White Red Splash
BTX1749-1W/Y	60.7	45.4	11.2	4.0	0.0	33.4	5.8	1.076	16.1	Oblong	White
TX1674-1W/Y	51.5	44.4	7.2	0.0	0.0	35.0	13.4	1.073	15.6	Long	White
COTX04015-3W/Y	43.9	40.4	3.6	0.0	0.0	42.2	13.8	1.071	15.1	Oblong	White
BTX1544-2W/Y	41.1	31.8	9.4	0.0	0.0	40.7	18.2	1.072	15.4	Oblong	White
NDTX059775-1W/Y	39.7	33.8	5.9	0.0	0.0	46.2	14.1	1.060	13.3	Round	White
NDTX059759-3Pinto/Y	60.1	45.8	14.3	0.0	0.0	35.2	4.6	1.057	12.7	Long	White Red Pinto
COTX04178-1Y/Y	18.8	18.4	0.4	0.0	0.0	74.7	6.5	1.063	13.7	Oblong	Yellow
Average	52.7	38.6	11.9	2.2	0.0	37.5	9.8	1.068	14.7		
L.S.D. (.05)	9.0	9.1	9.6	ns		10.4	7.7				

Springlake
Table 10c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 11 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2008.

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	
TX1523-1Ru/Y	5.2	5.8	1.7	79	86	1.8	3.7	3.7	3.9	0
Yukon Gold	7.0	4.6	1.3	85	97	1.2	4.0	3.4	3.9	0
COTX03079-1W/Y	8.1	3.7	2.6	88	93	2.3	3.7	3.6	3.7	0
NDTX049265-2WRSP/Y	7.7	3.5	2.3	76	86	2.4	3.3	3.3	3.4	0
BTX1749-1W/Y	5.4	4.5	1.6	80	95	2.4	3.3	3.5	3.4	0
TX1674-1W/Y	6.8	3.1	2.2	68	86	2.0	3.2	3.7	3.7	0
COTX04015-3W/Y	7.7	3.1	1.9	80	83	2.1	4.0	4.0	4.0	0
BTX1544-2W/Y	5.8	3.6	1.7	82	99	2.2	3.1	3.2	3.4	0
NDTX059775-1W/Y	6.8	2.9	1.8	89	94	2.3	3.5	3.5	3.6	0
NDTX059759-3Pinto/Y	4.2	3.4	1.5	82	94	2.2	3.9	4.1	4.1	0
COTX04178-1Y/Y	7.2	2.0	2.3	79	84	1.7	3.4	4.0	4.0	0
Average	6.5	3.7	1.9	81	91	2.1	3.5	3.6	3.7	0
L.S.D. (.05)	1.6	1.0	0.5	ns	9	0.3	0.3	0.4	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 10d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 11 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
TX1523-1Ru/Y	2.9	4.1	2.6	4.3	3.5	5.0	5.0	5.0	5.0	4.5	0	0	0	0
Yukon Gold	3.0	3.0	1.0	4.5	1.0	5.0	5.0	5.0	5.0	3.8	15	0	0	0
COTX03079-1W/Y	3.1	3.5	1.0	4.5	1.0	5.0	5.0	5.0	5.0	3.6	0	0	0	0
NDTX049265-2WRSP/Y	2.8	3.9	1.0	4.5	1.0	5.0	5.0	5.0	5.0	3.0	0	0	0	3
BTX1749-1W/Y	2.0	3.5	1.3	4.0	2.5	5.0	5.0	5.0	5.0	3.8	0	0	3	0
TX1674-1W/Y	2.6	4.0	2.0	4.0	3.3	5.0	5.0	5.0	5.0	4.0	0	0	0	0
COTX04015-3W/Y	3.1	3.2	1.0	4.5	1.0	5.0	5.0	5.0	5.0	3.1	0	0	0	0
BTX1544-2W/Y	3.0	3.7	2.1	4.0	3.3	5.0	5.0	5.0	5.0	3.5	0	0	0	0
NDTX059775-1W/Y	2.0	2.2	1.0	4.5	1.0	5.0	5.0	5.0	5.0	3.9	0	0	0	0
NDTX059759-3Pinto/Y	2.8	4.0	1.0	4.5	4.0	5.0	5.0	5.0	5.0	3.5	0	0	0	0
COTX04178-1Y/Y	2.3	2.6	1.0	4.5	1.0	5.0	5.0	5.0	5.0	4.1	0	0	0	0
Average	2.7	3.4	1.4	4.3	2.0	5.0	5.0	5.0	5.0	3.7	1	0	0	0
L.S.D. (.05)	0.3	0.5	0.1	0.1	0.2					0.5	8		ns	ns

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake

Table 10e. Notes and general rating for all reps of 11 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Springlake, Texas-20

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
TX1523-1Ru/Y	BOT, BOT		4.5, 4, 4.5, 3.8	4.5, 3.4, 4, 3.8
Yukon Gold			4, 4, 4, 3.5	3.8, 3.5, 4, 4
COTX03079-1W/Y	shape-, drop	Good Yield, Drop ?	2.8, 2.9, 3.2, 2.8	3.3, 3.3, 3.3, 3
NDTX049265-2WRSP/Y		Yield	3.2, 3.5, 3.4, 3.2	3.8, 3.8, 3.5, 3.7
BTX1749-1W/Y	drop, drop	Rough, Drop, Ugly, Buff, Argentina, Drop	3.2, 2.5, 2.5, 3	3.3, 3.3, 3, 2.8
TX1674-1W/Y	drop, drop, drop	Pointed to stem, Russet, Argentina, ,	2.8, 2.7, 2.8, 2.2	2.8, 2.8, 3, 3
COTX04015-3W/Y	drop, drop, drop,	Red Eyes	2, 2.7, 2.3, 2.8	3, 3, 3, 2.8
BTX1544-2W/Y	drop, drop	Argentina	3.2, 2.8, 2.4, 3	3.1, 3, 3, 3.4
NDTX059775-1W/Y	drop, drop, drop, shape-	Drop	2.7, 2.7, 2.8, 2.5	2.2, 2.2, 2.2, 2
NDTX059759-3Pinto/Y	drop	Purple Streak in Flesh, TC ??, 10 ZC	2.3, 3.3, 3.3, 3.2	4, 3.5, 3.7, 3.7
COTX04178-1Y/Y	drop, small tubers, drop, small tubers	Boiler, Amadeus, Like	2.7, 3.2, 2.2, 3.4	3.8, 2.5, 2.5, 2.5

Springlake
Table 10f.

Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 11 entries in the Texas Advanced White Skin Yellow Flesh Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good Chip	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
TX1523-1Ru/Y	Dalhart	1.077	16.3	3.9	2.0	17/24	17	24	2%Z , 5%Fus, 51%Dark to one side	2%	0%
Yukon Gold	Colorado	1.073	15.6	3.8	2.0	8/21	8	21	52% Vas, 24%Dk	0%	0%
COTX03079-1W/Y	Dalhart	1.067	14.5	3.2	3-	8/21	8	21	3%Z , 17% Vas, 45%IBS, 7%Bru	3%	0%
2WRSP/Y	Dalhart	1.062	13.6	3.7	2.0	21/10	21	10	23% Vas, 6%Fus	0%	0%
BTX1749-1W/Y	Dalhart	1.076	16.1	3.1	1+	28/0	28	0	BOT	0%	0%
TX1674-1W/Y	Dalhart	1.073	15.6	2.9	2+	33/6	33	6	8%Z , 100% Vas, 10%Fus	8%	0%
COTX04015-3W/Y	Dalhart	1.071	15.1	3.0	2+	15/15	15	15	20% Vas, 20%Fus, 7%Dk, 3%TM	0%	0%
BTX1544-2W/Y	Dalhart	1.072	15.4	3.1	2+	19/10	19	10	28% Vas, 7%Fus	0%	0%
NDTX059775-1W/Y	Dalhart	1.060	13.3	2.2	2.0	11/19	11	19	63%Z	63%	0%
NDTX059759-3Pinto/Y	Dalhart	1.057	12.7	3.7	3-	31/6	31	6	5%Z , 5%Bru5%Fus	5%	3%
COTX04178-1Y/Y	Dalhart	1.063	13.7	2.8	2+	16/22	16	22	5%Z , 37% Vas, 5%Fus	5%	0%
Average										8%	0%
L.S.D. (.05)											ns

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

Addendum to Tables Springlake 10a, 10b, 10c, 10d, 10e, and 10f
Texas Advanced White Skin Yellow Flesh Selection Trial

Location:
Springlake, Texas

Soil Type
Tivoli Fine Sand

Seed Source
Colorado, Oregon, Texas and Idaho

Date:		DAP
Planted	March 31, 2008	
Vines Killed (Red, Chip)	July 28, 2008	118
Vines Killed (Russet)	August 15, 2008	135
Harvested (Red, Chip)	July 30, 2008	120
Harvested (Russet)	August 19, 2008	139

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:
(Red) 101-11-6 # per acre
(Russet, Chip) 175-11-6 # per acre

Irrigation:
Center Pivot

Insecticide:
Agri-Mek, Endigo, Avaunt, Oberon, Rimon, Dimthoate 4e,

Seed Treatment Applied:
Tops MZ Gaucho

Fungicides Applied:
Super tin 80, Kocide, Penncozeb, Quadris

Herbicides Applied:
Treflan, Dual, Sencor, Roundup

Environmental Factors:
These trials were subjected to higher than normal precipitation in the first week of May, the fourth week of June, the third week of July, and the third week of August. Temperatures were higher than normal for the last week in May and the first and second weeks in June. These high temperatures had an adverse effect on the tuber shape.

Springlake Table 11a. Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 3 entries in the Texas Advanced Fingerling Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 6 inch	Under 1 inch	Culls/ No.2	General Rating ¹ Grading
		Total Yield	1-2 inch	2-4 inch	4-6 inch				
COTX04056-4P/P Salad	300.6	204.9	103.5	101.4	0.0	0.0	95.2	0.5	3.7
COTX03187-1W	170.1	145.9	30.3	68.3	47.4	2.2	4.0	18.0	3.8
PTTX05PG07-1W	104.1	90.2	19.0	42.4	28.9	5.9	0.0	8.0	3.9
Average	191.6	147.0	50.9	70.7	25.4	2.7	33.1	8.8	3.8
L.S.D. (.05)	42.6	27.3	ns	ns	ns	ns	12.8	12.6	ns

¹ 1=very poor to 5= excellent

Springlake
Table 11b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 3 entries in the Texas Advanced Fingerling Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	1-2 inch	2-4 inch	4-6 inch	Over 6 inch	Under 1 inch	Culls/ No. 2				
COTX04056-4P/P Salad	68.2	34.4	33.8	0.0	0.0	31.7	0.2	1.072	15.4	Oblong	Purple
COTX03187-1W	85.7	20.4	39.9	25.4	1.2	3.0	10.1	1.083	17.3	Long	White
PTTX05PG07-1W	88.0	18.5	42.7	26.8	4.8	0.0	7.2	1.070	14.9	Long	White
Average	80.6	24.4	38.8	17.4	2.0	11.6	5.8	1.075	15.9		
L.S.D. (.05)	10.8			18.5		6.3	7.0	0.005	0.8		

Springlake
Table 11c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 3 entries in the Texas Advanced Fingerling Selection Trial grown near Springlake, Texas-2008.

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	
COTX04056-4P/P Salad	11.4	2.3	1.8	81	97	1.7	4.0	4.7	4.7	0
COTX03187-1W	5.8	2.8	2.4	62	80	1.9	3.8	4.4	4.4	0
PTTX05PG07-1W	7.1	1.6	1.5	54	71	2.2	3.3	3.3	3.8	0
Average	8.1	2.2	1.9	65	83	1.9	3.7	4.1	4.3	0
L.S.D. (.05)	1.5	0.2	0.4	17	10	0.3	0.3	0.3	0.3	

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

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

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

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

Springlake
Table 11d. Flesh color, tuber shape, degree of russetting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 3 entries in the Texas Advanced Fingerling Selection Trial grown near Springlake, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
COTX04056-4P/P Salad	3.6	3.5	1.0	4.4	4.7	5.0	5.0	5.0	5.0	2.8	0	0	0	0
COTX03187-1W	1.0	4.0	3.0	4.5	1.0	5.0	5.0	5.0	5.0	3.7	0	0	0	0
PTTX05PG07-1W	1.0	4.4	2.5	4.5	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
Average	1.9	4.0	2.2	4.5	2.2	5.0	5.0	5.0	5.0	3.5	0	0	0	0
L.S.D. (.05)	0.1	0.3	ns	ns	0.1					0.3				

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake

Table 11e.

Notes and general rating for all reps of 3 entries in the Texas Advanced Fingerling Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Notes Grading	General Rating Grading
COTX04056-4P/P Salad	drop?, salad, heavy set+, feathering, rough, light purple flesh	3.8, 3.6, 3.6, 3.6
COTX03187-1W	can be rough, , keep+, fingerling, can oversize	3.8, 3.6, 3.8, 3.8
PTTX05PG07-1W	low yield, , BOT-, nice shape, keep+, curved, pointed, good shape, curved	3.8, 3.8, 4, 3.8

Springlake
Table 11f.

Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 3 entries in the Texas Advanced Fingerling Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good Chip	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
COTX04056-4P/P Salad	Dalhart	1.072	15.4	3.7	4	32/6	32	6	5%Z , 11% Vas	5%	0%
COTX03187-1W	Dalhart	1.083	17.3	3.8	0	0/0	0	0		0%	0%
PTTX05PG07-1W	Dalhart	1.070	14.9	3.9	3	30/10	30	10	25% Bru	0%	0%
Average L.S.D. (.05)										2%	0% ns

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

Addendum to Tables Springlake 11a, 11b, 11c, 11d, 11e, and 11f
Texas Advanced Fingerling Selection Trial

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

		DAP
Planted	March 31, 2008	
Vines Killed (Red, Chip)	July 28, 2008	118
Vines Killed (Russet)	August 15, 2008	135
Harvested (Red, Chip)	July 30, 2008	120
Harvested (Russet)	August 19, 2008	139

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:

(Red) 101-11-6 # per acre
(Russet, Chip) 175-11-6 # per acre

Irrigation:

Center Pivot

Insecticide:

Agri-Mek, Endigo, Avaunt, Oberon, Rimon, Dimthoate 4e,

Seed Treatment Applied:

Tops MZ Gaucho

Fungicides Applied:

Super tin 80, Kocide, Penncozeb, Quadris

Herbicides Applied:

Treflan, Dual, Sencor, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the first week of May, the fourth week of June, the third week of July, and the third week of August. Temperatures were higher than normal for the last week in May and the first and second weeks in June. These high temperatures had an adverse effect on the tuber shape.

Springlake Table 12a. Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 3 entries in the Texas Advanced Purple Flesh Selection Trial grown near Springlake, Texas-2008.

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 Grading
		Total Yield	4-6 oz	6-10 oz	10-18 oz				
Purple Majesty	301.7	95.4	75.6	17.5	2.2	0.0	179.3	27.0	3.0
COTX03025-2P/P	235.1	56.5	52.4	4.0	0.0	0.0	157.7	21.0	2.6
COTX04050-1P/P	190.0	47.2	36.7	8.5	2.0	0.0	116.8	26.0	3.0
Average	242.3	66.3	54.9	10.0	1.4	0.0	151.3	24.7	2.8
L.S.D. (.05)	53.6	25.8	16.6	10.3	ns		ns	ns	ns

¹ 1=very poor to 5= excellent

Springlake
Table 12b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of Texas Advanced Purple Flesh Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
Purple Majesty	31.2	25.1	5.5	0.6	0.0	59.9	8.9	1.066	14.4	Oblong	Purple
COTX03025-2P/P	24.3	22.6	1.7	0.0	0.0	66.8	8.9	1.068	14.7	Oblong	Purple
COTX04050-1P/P	23.6	18.6	4.1	0.9	0.0	62.1	14.2	1.071	15.2	Round	Purple
Average	26.4	22.1	3.7	0.5	0.0	63.0	10.7	1.069	14.8		
L.S.D. (.05)	ns	ns	ns	ns		ns	ns	ns	ns		

Springlake
Table 12c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of Texas Advanced Purple Flesh Selection Trial grown near Springlake, Texas-2008.

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	
Purple Majesty	10.6	2.2	2.3	91	99	1.5	4.0	4.0	4.5	0
COTX03025-2P/P	9.3	2.0	2.6	96	99	2.4	3.8	4.2	4.3	0
COTX04050-1P/P	6.9	2.1	1.9	95	98	2.3	3.7	4.6	4.4	0
Average	9.0	2.1	2.3	94	99	2.1	3.8	4.3	4.4	0
L.S.D. (.05)	ns	ns	0.3	ns	ns	0.6	0.1	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 12d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of Texas Advanced Purple Flesh Selection Trial grown near Springlake, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
Purple Majesty	4.1	3.5	1.0	4.5	4.6	5.0	5.0	5.0	5.0	3.7	0	0	0	0
COTX03025-2P/P	3.9	3.5	1.0	4.8	5.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
COTX04050-1P/P	4.6	2.5	1.0	4.0	5.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
Average	4.2	3.2	1.0	4.4	4.9	5.0	5.0	5.0	5.0	3.9	0	0	0	0
L.S.D. (.05)	0.2	ns		ns	ns					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 1 to 5=none
¹¹ Stem end vascular discoloration severely evaluated

Springlake

Table 12e.

Notes and general rating for all reps of Texas Advanced Purple Flesh Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Notes Grading	General Rating Grading
Purple Majesty	feathering, culls +, rough,	3, 2.7, 3, 3.2
COTX03025-2P/P	small, road map, buff, white pith, small, road map,	3, 2.5, 2.4, 2.4
COTX04050-1P/P	small, rough, very dark flesh	3.2, 3.2, 3, 2.5

Springlake
Table 12f.

Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of Texas Advanced Purple Flesh Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good Chip	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
Purple Majesty	Colorado	1.066	14.4	3.0	3+	28/11	28	11	3%Z , 26% Bru	3%	0%
COTX03025-2P/P	Dalhart	1.068	14.7	2.6	4	33/5	33	5	3%Z , 8% Bru, 3% HH	3%	0%
COTX04050-1P/P	Dalhart	1.071	15.2	3.0	4++	32/9	32	9	17%Z , 2% Bru	17%	0%
Average										8%	0%
L.S.D. (.05)											ns

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

Addendum to Tables Springlake 12a, 12b, 12c, 12d, 12e, and 12f
Texas Advanced Purple Flesh Selection Trial

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

		DAP
Planted	March 31, 2008	
Vines Killed (Red, Chip)	July 28, 2008	118
Vines Killed (Russet)	August 15, 2008	135
Harvested (Red, Chip)	July 30, 2008	120
Harvested (Russet)	August 19, 2008	139

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:

(Red) 101-11-6 # per acre

(Russet, Chip) 175-11-6 # per acre

Irrigation:

Center Pivot

Insecticide:

Agri-Mek, Endigo, Avaunt, Oberon, Rimon, Dimthoate 4e,

Seed Treatment Applied:

Tops MZ Gaucho

Fungicides Applied:

Super tin 80, Kocide, Penncozeb, Quadris

Herbicides Applied:

Treflan, Dual, Sencor, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the first week of May, the fourth week of June, the third week of July, and the third week of August. Temperatures were higher than normal for the last week in May and the first and second weeks in June. These high temperatures had an adverse effect on the tuber shape.

Springlake Total yield, total yield of U.S. No.1, less than 1 inch and culls/No.2 potatoes and general rating of 41 entries in the Chip Trial Table 13a. grown near Springlake, Texas-2008.

Variety or Selection	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Under 1 in.	Culls/ No.2	General Rating ¹ Field	General Rating ¹ Grading
		Total Yield	1-2 in.	2-3 in.	Over 3 in.				
Beacon Chipper	395.3	361.1	94.1	176.9	90.1	28.5	5.6	3.9	4.5
ATTX00289-4W	406.0	345.1	90.3	197.4	57.3	38.3	22.6	3.8	3.7
CO96141-4W	422.4	344.7	109.4	204.9	30.4	62.1	15.6	4.0	4.4
NY138	364.9	335.6	72.6	135.5	127.5	29.3	0.0	3.8	4.2
CO00188-4W(SW)	400.5	320.3	199.9	115.4	5.1	78.9	1.3	3.2	4.0
CO00189-2W	384.4	305.7	135.1	146.8	23.8	67.4	11.3	3.7	3.3
Ivory Crisp	314.7	283.9	54.5	160.5	69.0	22.2	8.6	3.6	3.0
CO97065-7W	321.1	238.2	70.2	160.3	7.8	70.4	12.4	3.4	3.4
W2324-1	313.5	237.4	92.0	130.7	14.8	56.5	19.6	2.8	3.8
Atlantic	272.9	227.8	107.8	101.2	18.8	25.5	19.7	3.0	3.3
AOTX95309-1W	277.4	207.6	94.0	110.1	3.5	63.3	6.5	2.8	3.2
ND7519-1	339.6	218.7	153.7	58.9	6.2	100.4	20.4	3.3	2.4
AOTX95295-1W	265.1	208.1	98.8	109.3	0.0	50.6	6.5	3.1	3.8
TX03196-1W	257.2	206.1	71.8	111.7	22.6	46.0	5.1	3.2	3.4
COTX00328-1Pu/Ypu	247.4	192.8	109.4	64.5	18.8	40.3	14.3	3.0	3.8
CO97043-14W	244.7	192.4	93.2	95.2	4.0	48.8	3.5	2.9	3.8
AC99213-8W	242.9	188.6	71.4	102.4	14.8	41.9	12.4	2.9	3.1
ATX85404-8W	254.0	191.5	70.1	117.3	4.1	55.4	7.0	3.7	3.6
NDTX059897-1Y/Y	313.8	176.7	86.6	82.0	8.1	121.5	15.6	2.9	3.7
COTX02377-1W	213.2	175.0	74.8	88.5	11.8	38.2	0.0	3.1	3.4
NY139	236.0	170.9	69.8	88.7	12.4	54.9	10.2	2.8	3.3
CO00197-3W(SW)	318.4	170.0	66.8	103.3	0.0	94.4	54.0	2.7	2.3
PATX99P10-1R/R	205.0	167.0	85.9	71.0	10.1	37.5	0.5	3.2	3.5
W2717-5	291.7	165.6	60.2	93.3	12.1	44.9	81.2	3.3	2.0
COTX03270-3W	231.0	165.4	73.4	87.1	4.8	33.1	32.5	2.8	2.9
NDTX059905-1Y/Y	193.3	164.6	40.6	93.6	30.4	23.4	5.4	3.2	3.2
NDTX059632-1W	268.4	157.2	113.5	41.5	2.2	84.3	26.9	2.9	2.9
CO00270-7W(SW)	226.8	152.1	88.5	61.7	1.9	62.7	12.1	3.5	3.0
AOTX95309-3W	226.1	142.9	72.6	67.4	3.0	77.8	5.4	3.1	2.9
NDTX059608-1Ru	163.2	141.6	24.6	110.5	6.5	17.3	4.3	2.8	2.5
MSJ147-1	254.8	139.2	79.5	59.7	0.0	111.3	4.3	2.8	2.7
AF2219-10	352.5	136.3	73.9	62.4	0.0	85.5	130.7	3.2	1.8
W2310-3	288.8	133.9	58.3	75.6	0.0	33.1	121.8	3.2	2.5
CO95051-7W	204.7	127.9	89.8	34.3	3.8	68.6	8.2	3.0	2.4
AC00170-2W(SW)	268.0	123.4	94.0	29.4	0.0	113.9	30.7	2.2	2.3
COTX03270-1W	241.5	120.5	73.7	43.0	3.8	107.0	14.0	2.8	2.9
NDTX059828-2W	169.4	116.4	68.8	47.6	0.0	51.1	1.9	2.7	3.0
NDTX7571-3AW	146.0	93.8	48.1	40.9	4.8	46.8	5.4	2.8	2.9
ATTX98466-5R/W-R	154.9	89.5	42.8	46.8	0.0	63.7	1.6	2.8	3.2
Chipeta	115.6	88.0	27.0	49.6	11.4	27.6	0.0	2.8	2.5
MSJ036-A	200.3	81.5	46.0	35.5	0.0	110.5	8.3	2.5	3.0
Average	301.3	231.9	92.2	116.5	23.1	54.0	15.5	3.2	3.4
L.S.D. (.05)	28.4	16.1	24.5	24.6	16.2	20.1	18.0	0.5	0.4

¹ 1=very poor to 5= excellent

Springlake Percent by weight of U.S. No. 1, less than 1 inch and culls/No.2 potatoes, specific gravity, tuber type and skin type of 41 entries in the Chip
 Table 13b. Trial grown near Springlake, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Under 1 in.	Culls/ No. 2	Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	1-2 in.	2-3 in.	Over 3 in.						
Beacon Chipper	91.3	24.1	44.4	22.9	7.2	1.4	1.067	14.4	Round	White
ATTX00289-4W	85.2	22.4	48.6	14.1	9.5	5.4	1.063	13.7	Round	White
CO96141-4W	81.8	25.9	48.7	7.1	14.6	3.6	1.066	14.3	Round	White
NY138	91.8	19.5	37.0	35.3	8.2	0.0	1.070	15.0	Round	White
CO00188-4W(SW)	79.8	49.7	28.9	1.2	19.9	0.4	1.069	14.8	Round	White
CO00189-2W	79.5	35.2	38.1	6.2	17.6	2.8	1.050	11.4	Round	White
Ivory Crisp	90.2	17.2	51.1	21.9	7.1	2.7	1.073	15.5	Round	White
CO97065-7W	74.2	21.9	49.8	2.4	21.9	3.9	1.070	15.0	Round	White
W2324-1	75.5	29.7	41.2	4.6	18.1	6.4	1.070	15.0	Round	White
Atlantic	83.5	40.0	37.4	6.1	9.5	7.0	1.076	16.1	Round	White
AOTX95309-1W	74.7	33.9	39.6	1.2	22.9	2.4	1.069	14.8	Round	White
ND7519-1	64.5	45.3	17.3	1.8	29.6	5.9	1.067	14.4	Round	White
AOTX95295-1W	78.8	37.5	41.3	0.0	18.9	2.3	1.068	14.6	Round	White
TX03196-1W	80.3	28.0	44.2	8.1	17.7	2.0	1.070	15.1	Round	White
COTX00328-1Pu/Ypu	78.2	43.3	27.5	7.4	16.3	5.5	1.060	13.3	Oblong	Purple
CO97043-14W	78.5	37.7	39.0	1.8	20.0	1.4	1.060	13.3	Round	White
AC99213-8W	77.5	29.6	42.2	5.7	17.6	5.0	1.064	13.9	Round	White
ATX85404-8W	75.7	26.6	47.2	1.9	21.7	2.6	1.068	14.7	Round	White
NDTX059897-1Y/Y	56.4	27.6	26.2	2.6	38.7	5.0	1.062	13.6	Round	White
COTX02377-1W	82.1	34.9	41.9	5.2	17.9	0.0	1.076	16.1	Round	White
NY139	72.4	29.5	37.6	5.2	23.3	4.3	1.068	14.7	Round	White
CO00197-3W(SW)	53.7	21.1	32.7	0.0	29.8	16.5	1.065	14.0	Round	White
PATX99P10-1R/R	81.5	42.3	34.2	4.9	18.3	0.3	1.070	15.0	Round	White
W2717-5	57.5	21.0	32.2	4.3	15.3	27.2	1.076	16.1	Round	White
COTX03270-3W	71.6	31.6	37.9	2.1	14.7	13.8	1.070	15.0	Round	White
NDTX059905-1Y/Y	85.2	22.2	47.9	15.1	12.1	2.7	1.069	14.8	Round	White
NDTX059632-1W	58.7	42.3	15.5	0.8	31.5	9.9	1.069	14.9	Round	White
CO00270-7W(SW)	66.5	38.5	27.2	0.8	28.4	5.1	1.041	9.9	Round	White
AOTX95309-3W	63.0	31.9	30.0	1.2	34.7	2.3	1.070	14.9	Round	White
NDTX059608-1Ru	86.8	14.1	68.9	3.8	10.8	2.4	1.067	14.5	Round	Russet
MSJ147-1	55.6	32.0	23.7	0.0	42.8	1.6	1.066	14.4	Round	White
AF2219-10	38.5	20.8	17.7	0.0	24.8	36.7	1.063	13.8	Round	White
W2310-3	46.4	20.1	26.2	0.0	11.5	42.1	1.078	16.3	Round	White
CO95051-7W	62.5	43.9	16.8	1.8	33.6	3.9	1.075	15.8	Round	White
AC00170-2W(SW)	46.0	35.0	11.0	0.0	42.6	11.4	1.066	14.4	Round	White
COTX03270-1W	50.5	31.1	17.5	1.9	43.2	6.3	1.070	15.1	Round	White
NDTX059828-2W	69.4	40.6	28.7	0.0	29.7	0.9	1.068	14.6	Round	White
NDTX7571-3AW	64.8	33.2	28.2	3.4	30.7	4.4	1.080	16.8	Round	White
ATTX98466-5R/W-R	57.8	27.6	30.2	0.0	41.2	1.1	1.071	15.2	Round	White
Chipeta	74.7	22.0	44.7	8.0	25.3	0.0	1.050	11.4	Round	White
MSJ036-A	40.7	23.0	17.7	0.0	55.2	4.1	1.065	14.0	Round	White
Average	76.6	31.0	38.6	7.0	18.2	5.1	1.067	14.5		
L.S.D. (.05)	6.9	9.6	9.7	6.0	6.6	5.7	0.007	1.3		

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Table 13c. 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 41 entries in the Chip Trial grown near Springlake, Texas-2008.

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	
Beacon Chipper	5.3	6.3	2.0	100	100	2.0	3.7	4.2	4.1	0
ATTX00289-4W	7.5	4.4	2.2	78	97	1.7	3.9	3.8	4.2	0
CO96141-4W	8.1	4.2	1.8	89	100	2.5	3.6	4.1	4.1	0
NY138	7.3	6.1	1.4	58	69	1.4	3.8	3.9	4.2	0
CO00188-4W(SW)	9.2	3.6	2.6	94	100	2.0	3.4	4.2	4.6	0
CO00189-2W	9.0	3.4	2.0	83	100	2.6	3.4	3.8	4.0	0
Ivory Crisp	4.6	5.5	7.3	82	100	2.0	3.9	4.5	4.7	0
CO97065-7W	7.1	3.7	2.1	92	100	1.7	3.6	4.1	4.3	0
W2324-1	7.0	3.6	2.1	90	100	1.8	4.6	4.6	4.7	0
Atlantic	4.8	4.4	2.1	97	100	1.7	4.1	4.3	4.5	0
AOTX95309-1W	8.7	3.1	10.0	79	85	1.7	3.5	4.3	4.5	0
ND7519-1	9.8	2.8	2.1	75	100	1.5	4.1	4.4	4.5	0
AOTX95295-1W	6.3	3.6	2.6	90	96	1.5	4.2	4.6	4.5	0
TX03196-1W	6.4	3.9	1.9	69	83	2.6	3.0	3.3	3.2	0
COTX00328-1Pu/Ypu	5.4	3.7	2.3	90	97	2.0	3.5	3.8	4.1	0
CO97043-14W	6.5	3.1	2.1	96	100	2.2	4.1	4.5	4.5	0
AC99213-8W	5.2	3.6	2.4	96	100	1.8	4.3	4.7	4.7	0
ATX85404-8W	4.9	4.3	2.9	97	102	1.6	3.8	4.6	4.7	0
NDTX059897-1Y/Y	10.3	2.8	2.6	75	88	1.7	4.4	4.3	4.4	0
COTX02377-1W	4.8	3.9	1.6	69	94	2.6	3.1	3.2	3.1	0
NY139	5.4	3.5	1.8	83	100	1.6	4.0	4.4	4.6	0
CO00197-3W(SW)	8.9	2.7	2.1	78	99	1.9	4.4	4.7	4.7	0
PATX99P10-1R/R	5.9	3.3	2.0	71	88	2.6	2.8	3.2	3.0	0
W2717-5	4.5	4.5	1.9	69	97	2.2	3.9	4.2	4.5	0
COTX03270-3W	6.6	3.5	1.5	51	74	1.8	3.7	4.3	4.4	0
NDTX059905-1Y/Y	4.8	4.5	1.6	64	74	2.0	2.9	3.5	3.3	3
NDTX059632-1W	7.9	2.7	2.1	81	96	1.9	3.6	3.7	3.9	0
CO00270-7W(SW)	5.3	3.4	1.8	85	100	1.7	3.8	4.2	4.6	0
AOTX95309-3W	6.2	3.1	2.6	85	97	1.6	3.7	4.0	4.4	0
NDTX059608-1Ru	4.3	5.1	2.1	43	63	1.6	3.3	4.6	4.6	0
MSJ147-1	8.7	2.4	2.4	61	100	1.9	3.9	4.6	4.6	0
AF2219-10	6.0	3.6	1.6	61	100	1.5	4.5	4.7	4.7	0
W2310-3	4.3	4.0	2.1	79	97	1.9	3.9	4.1	4.0	0
CO95051-7W	5.8	2.8	2.1	89	100	1.9	3.9	4.6	4.7	0
AC00170-2W(SW)	9.6	2.1	2.3	90	100	2.4	3.9	4.5	4.5	0
COTX03270-1W	8.2	2.5	2.3	67	92	2.6	3.0	4.1	4.3	0
NDTX059828-2W	4.3	3.6	2.2	83	94	2.2	2.8	3.1	3.4	3
NDTX7571-3AW	4.5	3.1	1.9	79	85	2.1	2.9	3.9	3.9	0
ATTX98466-5R/W-R	6.8	2.8	2.0	57	67	2.7	2.7	3.1	3.3	0
Chipeta	3.0	3.2	2.4	100	100	1.5	4.5	4.8	4.9	0
MSJ036-A	7.1	2.3	1.9	79	100	1.7	3.8	4.7	4.6	0
Average	6.8	3.9	2.6	82	95	1.9	3.8	4.2	4.3	0
L.S.D. (.05)	1.1	0.6	2.7	11	7	0.2	0.3	0.4	0.4	2

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

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

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

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

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Table 13d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 41 entries in the Chip Trial grown near Springlake, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹¹	Percent Internal Brownspot
Beacon Chipper	1.0	1.8	3.5	4.5	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX00289-4W	1.0	3.0	3.9	4.5	1.0	5.0	5.0	5.0	5.0	4.1	0	0	3	0
CO96141-4W	1.0	1.6	3.6	4.5	1.0	5.0	5.0	5.0	5.0	4.3	13	0	0	0
NY138	1.0	2.0	3.8	4.5	1.0	5.0	5.0	5.0	5.0	4.8	0	0	0	0
CO00188-4W(SW)	1.0	1.6	4.3	4.5	1.0	5.0	5.0	5.0	5.0	4.5	3	0	0	0
CO00189-2W	1.0	1.2	4.3	4.5	1.0	5.0	5.0	5.0	5.0	4.2	3	0	0	17
Ivory Crisp	1.0	2.0	4.5	4.5	1.0	5.0	5.0	5.0	5.0	3.9	0	0	13	0
CO97065-7W	1.0	1.2	3.5	4.5	1.0	5.0	5.0	5.0	5.0	3.8	3	0	0	0
W2324-1	1.0	1.5	3.5	3.8	1.0	5.0	5.0	5.0	5.0	3.9	0	0	7	0
Atlantic	1.0	1.2	3.0	4.0	1.0	5.0	5.0	5.0	5.0	4.5	10	0	0	3
AOTX95309-1W	1.0	1.8	4.0	4.5	1.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
ND7519-1	1.0	1.2	4.2	4.5	1.0	5.0	5.0	5.0	5.0	3.7	3	0	13	0
AOTX95295-1W	1.0	1.5	4.5	4.5	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TX03196-1W	1.0	2.0	4.5	4.5	1.0	5.0	5.0	5.0	5.0	3.9	0	0	0	3
COTX00328-1Pu/Ypu	2.2	3.9	4.5	4.5	4.8	5.0	5.0	5.0	5.0	3.6	3	0	0	0
CO97043-14W	1.0	1.2	4.0	4.0	1.0	5.0	5.0	5.0	5.0	4.6	0	0	8	0
AC99213-8W	1.0	1.6	4.0	4.2	1.0	5.0	5.0	5.0	5.0	3.9	0	0	17	10
ATX85404-8W	1.0	1.5	4.0	4.5	1.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
NDTX059897-1Y/Y	2.2	1.5	3.8	4.0	1.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
COTX02377-1W	1.0	2.8	2.0	4.0	1.0	5.0	5.0	5.0	5.0	4.5	3	0	0	0
NY139	1.0	1.6	4.0	4.0	1.0	5.0	5.0	5.0	5.0	4.3	0	0	0	0
CO00197-3W(SW)	1.0	3.0	4.0	4.5	1.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
PATX99P10-1R/R	3.5	3.8	5.0	4.3	4.0	5.0	5.0	5.0	5.0	3.5	0	0	0	3
W2717-5	1.0	1.5	3.5	3.8	1.0	5.0	5.0	5.0	5.0	3.9	20	0	0	0
COTX03270-3W	1.0	1.6	3.8	4.5	1.0	3.0	5.0	5.0	5.0	4.7	0	0	3	0
NDTX059905-1Y/Y	1.5	1.5	4.0	3.8	1.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
NDTX059632-1W	1.0	2.2	4.0	3.8	1.0	5.0	5.0	5.0	5.0	4.8	7	0	10	0
CO00270-7W(SW)	1.0	1.2	4.0	4.5	1.0	5.0	5.0	5.0	5.0	4.5	0	0	10	0
AOTX95309-3W	1.0	1.2	4.3	4.5	1.0	5.0	5.0	5.0	5.0	4.9	0	0	0	0
NDTX059608-1Ru	1.0	2.8	2.8	4.0	1.0	5.0	5.0	5.0	5.0	3.6	7	0	23	3
MSJ147-1	1.0	1.5	4.0	4.5	1.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
AF2219-10	1.0	1.2	4.0	4.0	1.0	5.0	5.0	5.0	5.0	4.5	0	0	0	0
W2310-3	1.0	1.2	4.0	4.5	1.0	4.3	5.0	5.0	5.0	4.5	0	0	3	0
CO95051-7W	1.0	1.5	4.0	4.5	1.0	5.0	5.0	5.0	4.7	4.5	3	0	3	0
AC00170-2W(SW)	1.0	1.0	4.5	4.5	1.0	5.0	5.0	5.0	5.0	4.5	0	0	13	0
COTX03270-1W	1.0	2.0	4.0	4.5	1.0	5.0	5.0	5.0	5.0	4.6	0	0	0	3
NDTX059828-2W	1.0	1.5	4.0	3.8	1.0	5.0	5.0	5.0	5.0	4.7	0	0	7	0
NDTX7571-3AW	1.0	1.5	3.5	4.4	1.0	5.0	5.0	5.0	5.0	4.0	13	0	0	13
ATTX98466-5R/W-R	2.5	3.9	4.5	4.5	4.5	5.0	5.0	5.0	5.0	3.9	0	0	0	0
Chipeta	1.0	1.8	4.2	4.2	1.0	5.0	5.0	5.0	5.0	4.0	0	0	0	0
MSJ036-A	1.0	1.0	3.5	4.5	1.0	5.0	5.0	5.0	5.0	3.5	0	0	3	0
Average	1.1	1.8	3.9	4.3	1.2	4.9	5.0	5.0	5.0	4.3	2	0	4	1
L.S.D. (.05)	0.1	0.2	0.1	0.1		0.1		0.1	0.2	9		10		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 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

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Table 13e. Notes and general rating for all reps of 41 entries in the Chip Trial grown near Springlake, Texas-2008.

Variety or Selection	Notes field	Notes Grading	General Rating Field	General Rating Grading
Beacon Chipper		over size, Buff	3.8, 3.8, 4, 3.9	4.5, 4.5, 4.5, 4.5
ATTX00289-4W	shape-	buff, nice internal	4, 3.8, 3.5, 3.8	4.4, 3.6, 3.2, 3.7
CO96141-4W		Nice, smooth, hollow heart, BOT, Nice, nice interior	4, 4, 4, 4	4.4, 4.5, 4.2, 4.4
NY138		fast bulk, BOT, Nice internal, too large, smooth	3.8, 3.5, 4, 3.8	4.3, 4.2, 4.2, 4.2
CO00188-4W(SW)	yield+, late,		4, 3.5, 2.2, 3.2	3.8, 4.5, 3.8, 4
CO00189-2W			3.8, 3.8, 3.6, 3.7	3, 3.4, 3.4, 3.3
Ivory Crisp		Rough, Drop, fast bulking, early, can oversize	3.7, 3.3, 3.7, 3.6	2.3, 3.2, 3.4, 3
CO97065-7W	nice	30 Z	3.3, 3, 3.9, 3.4	3.4, 3.4, 3.5, 3.4
W2324-1	very late	some rough	3.7, 2, 2.8, 2.8	4, 3.3, 4, 3.8
Atlantic	low yield	low yield, buff	3, 3.4, 2.7, 3	3, 4, 3, 3.3
AOTX95309-1W			2.6, 2.5, 3.2, 2.8	2.7, 3.5, 3.5, 3.2
ND7519-1		Drop, poor internals, buff	3.3, 3.4, 3.3, 3.3	2, 2.6, 2.6, 2.4
AOTX95295-1W		nice	2.7, 3.5, 3.2, 3.1	4, 4, 3.5, 3.8
TX03196-1W		nice	3.7, 2.8, 3, 3.2	3.7, 3.5, 3, 3.4
COTX00328-1Pu/Ypu		Purple streak, smooth	3.5, 2.5, 3, 3	3.8, 3.8, 3.8, 3.8
CO97043-14W	late		3.1, 2.8, 2.8, 2.9	3.8, 3.8, 3.8, 3.8
AC99213-8W	better yield, late, very late,	Poor internals, sticky stolon, Sticky stolens, 30 Z	3.8, 2.2, 2.6, 2.9	3, 3.2, 3.2, 3.1
ATX85404-8W	late	Very white Flesh, nice internal, , ,	3.8, 3.8, 3.4, 3.7	3.6, 3.6, 3.6, 3.6
NDTX059897-1Y/Y	late	20 Z, 2.7 yellow flesh, sticky stolon, indented stem attachment	3.5, 2.8, 2.4, 2.9	4, 3.5, 3.5, 3.7
COTX02377-1W		, , ,	3.6, 3, 2.7, 3.1	3.3, 3.2, 3.7, 3.4
NY139	very late	20 Z	2.8, 3.3, 2.3, 2.8	3.2, 3.3, 3.3, 3.3
CO00197-3W(SW)	late	Drop, poor yield, Drop	2, 2.2, 4, 2.7	2, 2.5, 2.5, 2.3
PATX99P10-1R/R		silver scurf, silver scurf	3.3, 3.3, 3, 3.2	3.5, 3.5, 3.5, 3.5
W2717-5	late, shape-		3.3, 3.7, 2.8, 3.3	2, 2, 2, 2
COTX03270-3W		growth cracks, rough	2.6, 2.8, 3.1, 2.8	3, 2.7, 3.1, 2.9
NDTX059905-1Y/Y		Pith color, indented stolen attachment	3.7, 2.7, 3.2, 3.2	3.6, 3, 3, 3.2
NDTX059632-1W	small, heavy set	Small	3.4, 2.4, 2.8, 2.9	3.6, 2.6, 2.6, 2.9
CO00270-7W(SW)	, , ,	Very white flesh	3.1, 3.7, 3.8, 3.5	2.4, 2.4, 4.3, 3
AOTX95309-3W	, , ,	nice interior, small	3, 3.2, 3, 3.1	3.6, 2.2, 3, 2.9
NDTX059608-1Ru	light set, early bulking, , ,	low yield	2.5, 2.8, 3.2, 2.8	2.2, 2.6, 2.6, 2.5
MSJ147-1			2.5, 3.5, 2.4, 2.8	2.2, 3, 3, 2.7
AF2219-10	very late, drop	Drop, Rough, Very white flesh, sticky stolon, heat sprouts	3.1, 3.6, 2.8, 3.2	2, 2, 1.5, 1.8
W2310-3	very late	buff, nice internal, drop, nipple knobs	3.3, 3.5, 2.7, 3.2	2.7, 2.8, 2, 2.5
CO95051-7W		Drop	2.7, 3.4, 2.8, 3	2.3, 2.5, 2.5, 2.4
AC00170-2W(SW)	immature, green stem, very late	Drop, drop, Heat sprouts stolon	2.5, 2, 2.2, 2.2	2, 2.2, 2.8, 2.3
COTX03270-1W	nice set, shape-	Drop	3.1, 2.9, 2.3, 2.8	2.2, 3.3, 3.3, 2.9
NDTX059828-2W	pink eyes, fresh pack, Jon G liked	nice flesh, buff, lenticels	2.7, 2.3, 3, 2.7	3, 3, 3, 3
NDTX7571-3AW			2.7, 2.8, 2.8, 2.8	3.2, 2.8, 2.8, 2.9
ATTX98466-5R/W-R		yellow red , Bad Rep, Internal	2.8, 2.7, 3,	3.3, 3.3, 3,
Chipeta	low yield, late	low yield, 80 Z, Sticky Stolon, Knob	2.8, 3.2, 2.3, 2.8	2.2, 3.3, 2, 2.5
MSJ036-A	late	Buff	2.7, 2.2, 2.5, 2.5	3, 3, 3, 3

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Table 13f. Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip weight, chip defects and notes, and percentage of Zebra Defect of 41 entries in the Chip Trial grown near Springlake, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber		Good/Bad Ratio	Number of Good	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
				General Rating ²	Chip Color ³						
Beacon Chipper	Michigan	1.067	14.4	4.5	2.0	20/10	20	10	33% Vas	0%	3%
ATTX00289-4W	Dalhart	1.063	13.7	3.7	2.0	8/12	8	12	35% Vas, 30% Bru	0%	0%
CO96141-4W	Colorado	1.066	14.3	4.4	1+	24/6	24	6	20%Z	20%	0%
NY138	New York	1.070	15.0	4.2	1.0	31/0	31	0	BOT ¹	0%	0%
CO00188-4W(SW)	Colorado	1.069	14.8	4.0	1+	22/7	22	7	17%Z, 7% Bru	17%	5%
CO00189-2W	Colorado	1.050	11.4	3.3	1.0	24/6	24	6	3%Z, 13% Vas	3%	0%
Ivory Crisp	Idaho	1.073	15.6	3.0	2.0	10/18	10	18	18%Z	18%	3%
CO97065-7W	Colorado	1.070	15.0	3.4	1.0	17/13	17	13	30%Z, 13% Dk	30%	10%
W2324-1	Wisconsin	1.070	15.0	3.8	2.0	14/15	14	15	24%Z, 28% Vas	24%	3%
Atlantic	Oregon	1.076	16.1	3.3	1+	12/19	12	19	23%Z, 19% Bru	23%	0%
AOTX95309-1W	Dalhart	1.069	14.8	3.2	1.0	22/17	22	17	3%Z, 28% Vas, 10% Bru, 3% HH	3%	0%
ND7519-1	North Dakota	1.067	14.4	2.4	1.0	22/8	22	8	10%Z, 10% Vas, 3% Bru	10%	0%
AOTX95295-1W	Colorado	1.068	14.6	3.8	1+	15/15	15	15	37% Vas, 13% Bru	0%	0%
TX03196-1W	Dalhart	1.070	15.1	3.4	1.0	21/11	21	11	3%Z, 16% Vas, 19% Bru	3%	0%
COTX00328-1Pu/Ypu	Dalhart	1.061	13.3	3.8	2.0	29/0	29	0	BOT	0%	0%
CO97043-14W	Colorado	1.060	13.3	3.8	1.0	23/6	23	6	3%Z, 17% Vas	3%	0%
AC99213-8W	Colorado	1.064	13.9	3.1	1.0	19/12	19	12	6%Z, 16% Vas, 16% Bru	6%	10%
ATX85404-8W	Dalhart	1.068	14.7	3.6	1.0	16/13	16	13	3%Z, 28% Vas, 14% Bru	3%	0%
NDTX059897-1Y/Y	Dalhart	1.062	13.6	3.7	3.0	11/18	11	18	21%Z, 10% IBS, 28% Bru	21%	7%
COTX02377-1W	Dalhart	1.076	16.1	3.4	1.0	28/0	28	0	BOT	0%	0%
NY139	New York	1.068	14.7	3.3	1+	14/16	14	16	23%Z, 27% Vas, 3% Bru	23%	7%
CO00197-3W(SW)	Colorado	1.064	14.0	2.3	2.0	14/17	14	17	39% Vas, 6% IBS, 10% Bru	0%	0%
PATX99P10-1R/R	Dalhart	1.070	15.0	3.5	1+	20/10	20	10	3%Z, 33% Bru	3%	0%
W2717-5	Wisconsin	1.076	16.1	2.0	1.0	18/7	18	7	24%Z, 4% HH	24%	0%
COTX03270-3W	Dalhart	1.070	15.0	2.9	1+	14/15	14	15	10%Z, 21% Vas, 21% Bru	10%	0%
NDTX059905-1Y/Y	Dalhart	1.069	14.8	3.2	1+	22/9	22	9	3%Z, 13% Vas, 16% Bru, BOT-	3%	0%
NDTX059632-1W	Dalhart	1.069	14.9	2.9	1.0	22/8	22	8	27% Vas	0%	0%
CO00270-7W(SW)	Colorado	1.041	9.8	3.0	2.0	18/12	18	12	20% Vas, 7% Bru, 10% Dk	4%	0%
AOTX95309-3W	Dalhart	1.070	14.9	2.9	1+	18/10	18	10	4%Z, 32% Vas	4%	0%
NDTX059608-1Ru	Dalhart	1.068	14.6	2.5	3.0	7/22	7	22	3%Z, 38% Vas, 3% Bru, 14% Dk, 21% HH	0%	0%
MSJ147-1	Michigan	1.066	14.4	2.7	1+	19/11	19	11	3%Z, 33% Bru	3%	0%
AF2219-10	Main	1.063	13.8	1.8	2.0	10/18	10	18	4%Z, 25% Vas, 29% Bru, 7% Dk	4%	0%
W2310-3	Wisconsin	1.078	16.3	2.5	1.0	20/9	20	9	3%Z, 28% Bru	3%	7%
CO95051-7W	Colorado	1.075	15.8	2.4	1.0	26/4	26	4	3%Z, 10% Bru	3%	0%
AC00170-2W(SW)	Colorado	1.066	14.4	2.3	1.0	19/10	19	10	10%Z, 21% Vas, 7% Bru	10%	0%
COTX03270-1W	Dalhart	1.070	15.1	2.9	1.0	27/1	27	1	4% Vas, BOT-	0%	0%
NDTX059828-2W	Dalhart	1.068	14.6	3.0	1+	20/10	20	10	20% Vas, 10% Bru	0%	0%
NDTX7571-3AW	Dalhart	1.080	16.8	2.9	2.0	13/16	13	16	21%Z, 31% Vas, 3% Bru	21%	0%
ATTX98466-5R/W-R	Dalhart	1.071	15.2	3.2	2.0	24/5	24	5	3%Z, 14% Bru	3%	0%
Chipeta	Oregon	1.050	11.4	2.5	2.0	3/25	3	25	39%Z, 43% Vas	39%	33%
MSJ036-A	Michigan	1.065	14.0	3.0	2+	5/25	5	25	83%Z	83%	0%
Average										10%	2%
L.S.D. (.05)											9.5

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

Addendum to Tables Springlake 13a, 13b, 13c, 13d, 13e, and 13f
Chip Trial

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

		DAP
Planted	March 31, 2008	
Vines Killed (Red, Chip)	July 28, 2008	118
Vines Killed (Russet)	August 15, 2008	135
Harvested (Red, Chip)	July 30, 2008	120
Harvested (Russet)	August 19, 2008	139

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:

(Red) 101-11-6 # per acre

(Russet, Chip) 175-11-6 # per acre

Irrigation:

Center Pivot

Insecticide:

Agri-Mek, Endigo, Avaunt, Oberon, Rimon, Dimthoate 4e,

Seed Treatment Applied:

Tops MZ Gaucho

Fungicides Applied:

Super tin 80, Kocide, Penncozeb, Quadris

Herbicides Applied:

Treflan, Dual, Sencor, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the first week of May, the fourth week of June, the third week of July, and the third week of August. Temperatures were higher than normal for the last week in May and the first and second weeks in June. These high temperatures had an adverse effect on the tuber shape.

Springlake Table 14a. 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 Yukon Gold Strain Selection Trial grown near Springlake, Texas-2008.

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					
TXYG079	396.7	234.2	115.6	83.5	35.1	0.0	111.1	51.3	4.3	4.0
TXYG107	373.7	224.9	85.0	99.7	40.1	0.0	103.5	45.3	3.9	4.0
TXYG055	391.3	215.9	90.6	83.3	42.0	0.0	114.6	60.8	4.3	4.0
YG ZSC	355.4	212.3	102.7	77.6	32.0	0.0	101.5	41.7	4.0	3.9
Yukon Gold	327.9	206.2	94.6	93.9	17.8	0.0	75.5	46.2	3.6	3.9
TXYG057	333.4	196.0	99.0	78.3	18.7	0.0	80.7	56.7	3.7	3.8
TXYG105	346.6	184.4	108.4	66.6	9.5	0.0	106.7	55.5	3.9	3.8
TXYG098	303.5	165.4	95.6	54.1	15.7	0.0	88.3	49.8	3.6	3.3
Average	353.6	204.9	98.9	79.6	26.4	0.0	97.8	50.9	3.9	3.8
L.S.D. (.05)	ns	25.9	ns	ns	17.9		ns	ns	ns	0.3

¹ 1=very poor to 5= excellent

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Table 14b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 8 entries in the Yukon Gold Strain Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
TXYG079	58.8	29.1	20.8	8.9	0.0	28.0	13.2	1.076	16.0	Round	White
TXYG107	61.1	22.3	27.9	11.0	0.0	27.8	11.0	1.079	16.7	Round	White
TXYG055	56.5	22.5	23.0	10.9	0.0	29.4	14.1	1.068	14.7	Round	White
YG ZSC	60.1	29.2	21.5	9.3	0.0	28.8	11.2	1.074	15.6	Round	White
Yukon Gold	62.7	29.0	28.3	5.5	0.0	23.0	14.3	1.076	16.1	Round	White
TXYG057	58.5	29.9	23.0	5.6	0.0	24.6	16.9	1.073	15.6	Round	White
TXYG105	53.4	31.5	19.3	2.6	0.0	30.5	16.1	1.077	16.2	Round	White
TXYG098	54.8	31.3	18.4	5.0	0.0	28.9	16.4	1.071	15.2	Round	White
Average	58.2	28.1	22.8	7.4	0.0	27.6	14.1	1.074	15.8		
L.S.D. (.05)	ns	ns	ns	ns		ns	ns	0.004	0.8		

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Table 14c.

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 Yukon Gold Strain Selection Trial grown near Springlake, Texas-2008.

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	
TXYG079	6.9	4.8	1.4	73	94	1.2	3.8	3.3	3.7	0
TXYG107	6.4	4.6	1.3	78	96	1.3	3.9	3.4	3.7	0
TXYG055	6.7	4.7	1.2	81	95	1.3	3.6	3.2	3.8	0
YG ZSC	6.7	4.3	1.3	82	96	2.0	3.8	3.4	3.8	0
Yukon Gold	4.9	6.2	1.6	75	92	1.9	3.5	3.0	3.4	0
TXYG057	5.5	4.7	1.3	75	96	1.2	3.9	3.1	3.4	0
TXYG105	6.5	4.1	1.6	79	98	1.3	3.8	3.5	3.7	0
TXYG098	5.4	4.4	1.3	85	96	1.3	3.7	3.3	3.7	0
Average	6.1	4.7	1.4	78	95	1.4	3.7	3.3	3.6	0
L.S.D. (.05)	ns	ns	0.2	ns	ns	ns	ns	ns	ns	

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

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

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

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

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Table 14d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 8 entries in the Yukon Gold Strain Selection Trial grown near Springlake, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
TXYG079	3.0	1.9	5.0	4.5	1.0	5.0	5.0	5.0	5.0	4.0	8	0	0	5
TXYG107	3.0	1.3	5.0	4.5	1.0	5.0	5.0	5.0	5.0	5.0	15	0	0	0
TXYG055	2.7	1.9	5.0	4.5	1.0	5.0	5.0	5.0	5.0	4.0	5	0	0	0
YG ZSC	3.0	2.0	5.0	4.5	1.0	5.0	5.0	5.0	5.0	5.0	18	0	0	3
Yukon Gold	3.0	2.3	5.0	4.5	1.0	4.8	5.0	5.0	5.0	5.0	10	0	0	3
TXYG057	3.0	2.0	5.0	4.5	1.0	4.8	5.0	5.0	5.0	5.0	28	0	0	0
TXYG105	3.0	1.8	5.0	4.1	1.0	5.0	5.0	5.0	5.0	5.0	3	0	8	3
TXYG098	3.0	1.9	5.0	4.5	1.0	5.0	5.0	5.0	5.0	5.0	18	0	3	0
Average	3.0 ns	1.9 ns	5.0	4.5 ns	1.0	4.9 ns	5.0	5.0	5.0	4.8 ns	13 ns	0 ns	1 ns	2 ns

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Springlake

Table 14e. Notes and general rating for all reps of 8 entries in the Yukon Gold Strain Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
TXYG079	, , ,	, , , Dumbbells	4.5, 4.4, 4.5, 3.7	4.5, 3.8, 3.8, 3.8
TXYG107	, , Smaller,	, , ,	4.5, 3.7, 4, 3.2	3.7, 4, 4.3, 3.9
TXYG055	, , ,	, , , dumbbells, culls	4.4, 4.4, 4.4, 3.8	4, 4, 4, 4
YG ZSC	, , , misshape	, Dumbbells, ,	4.5, 3.5, 4.5, 3.4	3.9, 4, 4, 3.8
Yukon Gold	, Smaller, ,	, , growth cracks, large tubers,	3.6, 3.8, 3.5, 3.6	3.7, 4, 3.8, 3.9
TXYG057	Shape, , ,	, , ,	3.3, 4, 3.8, 3.8	4, 3.7, 3.8, 3.7
TXYG105	, misshape, ,	, , ,	3.4, 4.2, 4.2, 3.7	4, 3.9, 3.4, 3.8
TXYG098	, , misshape,	, , , low yield	3.8, 4, 3.5, 3.1	3.6, 3.7, 3, 3

Springlake
Table 14f.

Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 8 entries in the Yukon Gold Strain Selection Trial grown near Springlake, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good Chip	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
TXYG079	Colorado	1.076	16.0	4.0	3++	0/40	0	40	100%Dk	0%	0%
TXYG107	Colorado	1.079	16.7	4.0	3++	0/38	0	38	3%Z , 100%Dk	3%	0%
TXYG055	Colorado	1.068	14.7	4.0	3++	0/30	0	30	7%Z , 100%Dk	7%	5%
YG ZSC	Colorado	1.074	15.6	3.9	3++	0/30	0	30	3%Z , 100%Dk	3%	3%
Yukon Gold	Colorado	1.076	16.1	3.9	3++	0/40	0	40	3%Z , 100%Dk	3%	5%
TXYG057	Colorado	1.073	15.6	3.8	3++	0/39	0	39	10%Z , 100%Dk	10%	5%
TXYG105	Colorado	1.077	16.2	3.8	3++	0/40	0	40	5%Z , 100%Dk	5%	10%
TXYG098	Colorado	1.071	15.2	3.3	3++	0/40	0	40	3%Z , 100%Dk	3%	0%
Average										4%	3%
L.S.D. (.05)											ns

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

Addendum to Tables Springlake 14a, 14b, 14c, 14d, 14e, and 14f
Yukon Gold Strain Selection Trial

Location:

Springlake, Texas

Soil Type

Tivoli Fine Sand

Seed Source

Colorado, Oregon, Texas and Idaho

Date:

		DAP
Planted	March 31, 2008	
Vines Killed (Red, Chip)	July 28, 2008	118
Vines Killed (Russet)	August 15, 2008	135
Harvested (Red, Chip)	July 30, 2008	120
Harvested (Russet)	August 19, 2008	139

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:

(Red) 101-11-6 # per acre

(Russet, Chip) 175-11-6 # per acre

Irrigation:

Center Pivot

Insecticide:

Agri-Mek, Endigo, Avaunt, Oberon, Rimon, Dimthoate 4e,

Seed Treatment Applied:

Tops MZ Gaucho

Fungicides Applied:

Super tin 80, Kocide, Penncozeb, Quadris

Herbicides Applied:

Treflan, Dual, Sencor, Roundup

Environmental Factors:

These trials were subjected to higher than normal precipitation in the first week of May, the fourth week of June, the third week of July, and the third week of August. Temperatures were higher than normal for the last week in May and the first and second weeks in June. These high temperatures had an adverse effect on the tuber shape.

2008 Dalhart Trials

Summary of growing conditions:

These trials were planted 10 miles southwest of Dalhart. Temperature was higher than average for the last week in May and the first and second week in June, which was accompanied by moderate winds. Precipitation was higher than normal during the growing season (Figure 5).

Trials conducted:

- Western Regional Chip
- Southwestern Regional Chip
- SFA Chip
- Texas Advanced Chip Selection
- 2008 Chip Selection
- Texas Advanced Russet Selection
- 2008 Russet Selection
- Texas Advanced Red Selection
- 2008 Red Selection
- Texas Advanced Red Skin/Yellow Flesh Selection
- Texas Advanced White Skin/Yellow Flesh Selection
- Yukon Gold Strain Selection
- Texas Advanced Fingerling Selection
- 2008 Specialty Selection
- Wisconsin (USDA/ARS) Colored Flesh Evaluation (not reported)
- Disease Evaluation (not reported)

WESTERN REGIONAL COOPERATIVE CHIP TRIAL

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

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

- The entry receiving the highest general rating and best of trial designation for chip appearance was CO97065-7W, while Atlantic also had a high general rating (Tables 1a, and 1f).
- Atlantic and CO97065-7W had the highest total yield and marketable yield (Table 1a).
- CO97065-7W and Atlantic had the highest yield of 1-3 inch tubers, while Chipeta had the highest yield of over 3-inch tubers (Table 1a).
- All of the clones had over 98 percent of 1-3-inch tubers (Table 1b).
- Atlantic had the highest specific gravity and percent solids (Table 1b).
- AC97097-14W and Chipeta were the latest maturing entries, while CO97065-7W and Ivory Crisp were the earliest maturing (Table 1c).
- Atlantic had 20% hollow heart (Table 1d).
- All of the entries had 3% or less Zebra Chip (Tables 1f).
- Overall, CO97065-7W produced the highest quality chips (Table 1f).

Comments on entries:

- | | |
|---------------|---|
| • Atlantic | Round White buff, ¹ CR=1 |
| • Chipeta | Oblong White oversize, rough, greening, soft, CR=2 |
| • CO97043-14W | Round White rough, over size, deep nose, sticky stolon, light set, CR=1 |
| • CO97065-7W | Round White nice flesh, CR=1 |
| • Ivory Crisp | Round White green, feathering, oversize, CR=1 |

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

Summary:

The top performing entry based on all factors, including chip evaluations, was CO97065-7W.

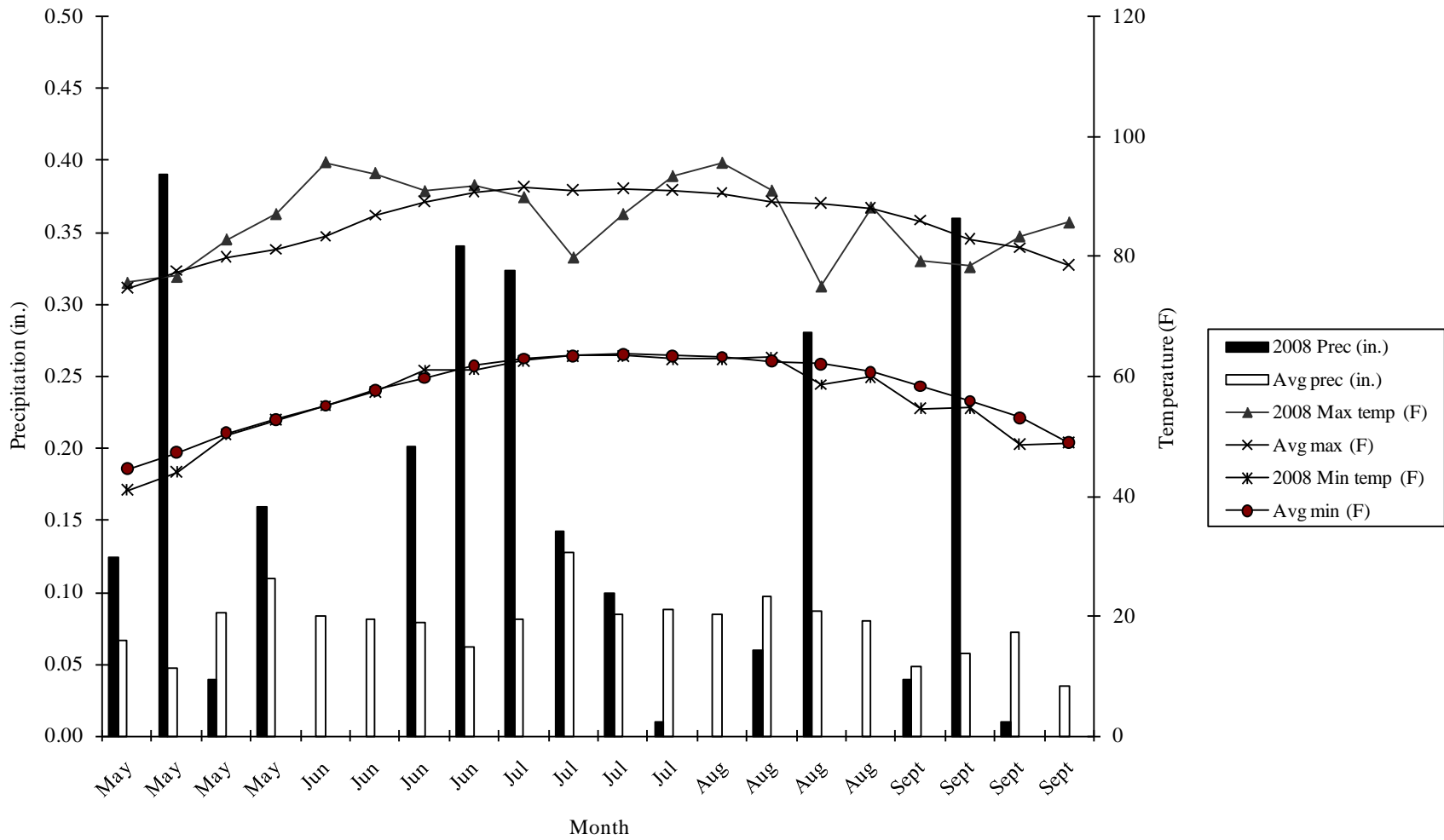


Figure 4. Weekly minimum/maximum temperatures and precipitation for the 2008-growing season near Dalhart, Texas compared to the average minimum/maximum temperatures and precipitation (1949-2008).

SOUTHWESTERN REGIONAL COOPERATIVE CHIP TRIAL

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

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

- Atlantic had the highest general rating. AC00170-2W and CO00188-4W had the highest ratio of good chips to bad chips (Table 2a and 2e).
- Atlantic and CO00197-3W had the highest total and marketable yield. AC00170-2W had the highest yield of 1-3-inch tubers. Chipeta had the highest yield of over 3-inch tubers. CO00197-3W had the highest yield of under 1-inch tubers (Table 2a).
- All of the entries had over 88 percent of over 1-inch tubers (Table 2a).
- Atlantic had the highest specific gravity and percent solids (Table 2b).
- Chipeta and CO00197-3W were the latest maturing, while AC00170-2W was the earliest (Table 2c).
- CO00270-7W and Atlantic had 25 and 20% hollow heart (Table 2d).
- All of the entries exhibited 3% or less Zebra Chip (Tables 2e and 2f).

Comments on entries:

- AC00170-2W Oblong White nice flesh, small, ¹CR=1
- Atlantic Round White buff, CR=1
- Chipeta Oblong White oversize, rough, greening, soft, CR=2
- CO00188-4W Round White rough, small, heavy set, greening, nice flesh, CR=1
- CO00197-3W Round White rough, drop, pointed to stem, over size, feathering, CR=1+
- CO00270-7W Round White ugly, growth cracks, very rough, CR=1+

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

Summary:

AC00170-2W and CO00188-4W were the outstanding entries for this trial based on chip quality.

SFA CHIP TRIAL

The trial consisted of 15 entries, including the check varieties Atlantic, Chipeta, and Ivory Crisp.

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 ND7519-1 and NY138. Beacon Chipper, CO95051-7W, and W2717-5 also received high general ratings. MSJ147-1 and CO96141-4W received best of trial designations for chip appearance (Table 3a).
- Beacon Chipper and AF2219-10 had the highest total and marketable yield. (Table 3a).
- CO95051-7W had the highest yield of 1to3-inch tubers, while Chipeta had the highest yield of over 3-inch tubers (Table 3a).
- All of the entries had over 95% total marketable yield (Table 3b).
- AF2219-10 had the highest specific gravity and percent solids (Table 3b).
- CO95051-7W, MSJ147-1, CO96141-4W, Chipeta, and NY139 were the latest maturing entries, while W2717-5 and Ivory Crisp were the earliest maturing (Table 3c).
- All of the entries exhibited some hollow heart, however, CO95051-7W, Atlantic, and W2717-5 had the highest percent hollow heart (Table 3d).
- AF2219-10 and W2324-1 had 13% and 8% respectively Zebra Chip, while, the remainder had 3% or less (Table 3f).

Comments on entries:

- | | | |
|------------------|--------------|---|
| • AF2219-10 | Round White | some pointed, rough, over size, nice flesh, CR=1 |
| • Atlantic | Round White | buff, CR=1 |
| • Beacon Chipper | Round White | deep nose, very large tuber, parent, very white flesh, CR=1 |
| • Chipeta | Oblong White | oversize, rough, greening, soft, CR=2 |
| • CO95051-7W | Round White | CR=1+ |
| • CO96141-4W | Oblong White | some cracking, flat, too long, CR=1, Drop |
| • Ivory Crisp | Round White | green, feathering, oversize, CR=1 |
| • MSJ036-A | Round White | soft, feathering, Drop, CR=2 |

- MSJ147-1 Round White nice, small nice flesh, CR=1
- ND7519-1 Round White BOT for yield, some purple spot on apical end, CR=1
- NY138 Round White large tubers, smooth, nice flesh, CR=1
- NY139 Oblong White oversize, stem indentation, CR=1
- W2310-3 Round White very rough, flat, CR=1, Drop
- W2324-1 Round White rough, CR=1
- W2717-5 Round White flat, CR=1

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

Summary:

Based on all factors, ND7519-1, MSJ147-1, and NY138 were the outstanding entries.

OUTSTANDING TEXAS ADVANCED CHIP SELECTIONS 2008

The Texas Advanced Chip Selection Trial at Springlake included 17 entries and 27 in Dalhart. Atlantic, Chipeta, and Ivory Crisp were the check varieties at both locations. Based on both trials, the following entries will be reevaluated in 2009: 04-3315-1W/W-P, AOTX95295-1W, AOTX95309-3W, ATX03409-6W/Y, ATX85404-8W, COTX02377-1W, COTX03270-1W, NDTX059828-2W, NDTX059897-1Y/Y, TX03196-1W, and TX1673-1W.

TEXAS ADVANCED SELECTION CHIP TRIAL

The trial consisted of 30 entries, including the check varieties Atlantic, Chipeta, and Ivory Crisp. The seed was from Oregon, and Dalhart

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

- The outstanding entry for this trial based on general ratings, best of trial designations, and chip quality was TX03196-1W. AOTX95309-3W also received a best of trial designation for tuber appearance.

AOTX95295-1W received a high general rating and a best of trial designation for chip appearance. NDTX059897-1Y/Y received a high general rating but scored low for chip color. NDTX059828-2W and COTX02377-1W also received a best of trial designation for chip appearance (Tables 4a, 4e and 4f).

- TX1673-1W and NDTX059897-1Y/Y had the highest total yield. TX1673-1W and AOTX95295-1W had the highest marketable yield, while NDTX059897-1Y/Y had the highest yield of 1 to 3-inch tubers (Table 4a).
- TX16741W had the highest yield of over 3-inch tubers. NDTX059632-1W had the highest yield of under 1-inch tubers (Table 4a).
- All of the entries had over 87% marketable yield. Chipeta, Ivory Crisp, and NDTX059608-1Ru, had greater than 50% of over 3-inch tubers, (Table 3b).
- Atlantic had the highest specific gravity and percent solids (Table 4b).
- AOTX95295-1W, AOTX85404-8W, Chipeta, NDTX059608-1Ru, and ATX03409-6W/Y were the latest maturing entries, while TX03196-1W, AOTX95309-3W, COTX02377-1W, and ATTX98466-5R/W-R were the earliest maturing (Table 4c).
- Atlantic, COTX03270-3W, NDTX059608-1Ru, and NDTX7571-3AW had the highest percentage hollow heart (Table 4d).
- ATX03409-3W/Y had 21% Zebra Chip. COTX03270-3W, AOTX95309-3W, and NDTX059902-1W had the highest ratio of good chips to bad chips. NDTX059897-1Y/Y had the highest percentage of dark chips in the trial (Table 4f).

Comments on entries:

- 04-3311-4W/W-P Round White small, Drop ++, ¹CR=1 **Deleted**,
- 04-3315-1W/W-P Oblong White purple flesh, Drop, CR=3
- AOTX95295-1W Round White smooth, CR=1
- AOTX95309-1W Round White CR=1 **Deleted**
- AOTX95309-3W Round White nice flesh, small, BOT, CR=1
- Atlantic Round White buff, CR=1
- ATTX00289-4W Oblong White some pointed, drop, nice flesh, CR=2 **Deleted**
- ATTX98466-5R/W-R Oblong White CR=3
- ATX03409-1W/Y Round White Green +, small, CR=1 **Deleted**
- ATX03409-2W/Y Round White white flesh, potential salad, low yield, sticky stolon, Drop, CR=1+ **Deleted**

- ATX03409-3W/Y Round White low yield, nice internal, CR=2 **Deleted**
- ATX03409-6W/Y Oblong White small, nice interior, CR=1
- ATX03409-7W/Y Round White white flesh, Buff +, Low yield, Drop +, CR=1 **Deleted**
- ATX85404-8W Round White over size, feathering, nice internals, CR=1
- Chipeta Oblong White oversize, Rough, greening, soft, CR=2
- COTX00328-1Pu/Ypu Round White purple streak, road map, CR=2 **Deleted**
- COTX02377-1W Round White nice interior, small, CR=1
- COTX03270-1W Oblong White Vivaldi like shape, keep flesh?, green, nice interior, fresh market shape, Oblong, CR=1
- COTX03270-3W Round White rough, green heads, Drop +, CR=1 **Deleted**
- Ivory Crisp Round White green, feathering, oversize, CR=1
- NDTX059608-1Ru Oblong White oversize, rot, low yield, Drop, CR=1+ **Deleted**
- NDTX059632-1W Round White low yield, small, pointed, CR=2 **Deleted**
- NDTX059828-2W Round White nice flesh, CR=1 **Deleted**
- NDTX059897-1Y/Y Round White nice, Buff, CR=3
- NDTX059902-1W Round White light set, keep??., low yield, Drop??., CR=1 **Deleted**
- NDTX059905-1Y/Y Oblong White stem end attachment, light yellow flesh, CR=1+ **Deleted**
- NDTX7571-3AW Round White buff, low yield, Drop?, Drop, CR=1+ **Deleted**
- PATX99P10-1R/R Oblong Red smooth, small, CR=3+++
- TX03196-1W Round White BOT, CR=1
- TX1673-1W Oblong White heart shaped, oversize +, nice interior, CR=1

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

Summary:

Based on all factors, AOTX95295-1W and TX03196-1W were the outstanding entries in this trial.

2007 CHIP SELECTIONS TRIAL, DALHART

The trial consisted of 56 entries of which 19 were selected in the field for further chip evaluations. Of those, 17 (NDTX059979-1W, NDTX059997-1W, NDTX059997-2W, NDTX059997-3W, NDTX059997-4W, NDTX059997-6W, NDTX059997-7W, NDTX059997-8W, TX05246-3W, TX05249-10W, TX05249-11W, TX05249-12W, TX05249-14W, TX05249-3W, TX05249-5W, TX05249-8W, and TX05254-2W) will be advanced in 2009 (Table 5).

TEXAS ADVANCED RUSSET SELECTION TRIAL, DALHART

The trial consisted of 40 entries, including the check varieties Russet Norkotah, Russet Norkotah278, Russet Norkotah296, and Stampede Russet.

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

- The outstanding entries for this trial, based on general rating and best of trial designations, were ATX91137-1Ru, Russet Norkotah296, AOTX95265-1Ru, and AOTX02060-1Ru, while Russet Norkotah278 and AOTX96265-2Ru also had a high general rating (Tables 6a and 6e).
- Russet Norkotah296 and ATX91137-1Ru had the highest total and marketable yields (Table 6a).
- Russet Norkotah296 and Russet Norkotah278 had the highest yield of over 18 oz. tubers, while AOTX98096-1Ru and AOTX02136-1Ru had the highest yield of less than 4 oz. tubers (Table 6a).
- ATX97147-4Ru, TXCR-2Ru, and AOTX99008-1Ru had the highest yield of culls/No.2 tubers (Table 6a).
- AOTX98137-1Ru and AOTX03003-1Ru had the highest percentages of marketable yield, while TXA549-1Ru, AOTX95265-4Ru, and Russet Norkotah278 had the highest percentage of over 18 oz. tubers (Table 6b).
- ATX03424-1Ru and ATX03003-7Ru had the highest percentage of less than 4 oz. tubers, while AOTX99008-1Ru and TXCR-2Ru had the highest percentage of culls/No. 2 tubers (Table 6b).
- AOTX99008-1Ru and ATX9332-12Ru had the highest specific gravity (Table 6b).

- Russet Norkotah296, AOTX95265-1Ru, ATX9202-3Ru, ATX97147-4Ru, AOTX96265-2Ru, AOTX9332-12Ru, AOTX95265-4Ru, AOTX98152-3Ru, AOTX99194-1Ru, TXCR-2Ru, ATX03003-7Ru, and TXA549-1Ru were the latest maturing, while ATX03068-1Ru, TXNS410, TXNS551, AOTX95265-3Ru, AOTX02066-1Ru, and AOTX02060-1Ru were the earliest maturing (Table 6c).
- TXCR-2Ru and TXCR-4Ru showed the most feathering. TXA549-1Ru, ATX84378-6Ru, ATX03077-2Ru, NDTX8773-4Ru, AOTX96265-2Ru, and ATX97147-4Ru showed extremely high percentages of hollow heart (Table 6d).
- TXA549-1Ru and AOTX02066-1Ru had high percentages of Zebra Chip. All of the rest of the entries showed less than 13% Zebra Chip (Table 6f).

Comments on entries:

- AOTX02060-1Ru Long Russet some points, growth cracks, drop?, BOT, very nice, keep
- AOTX02066-1Ru Oblong Russet nice shape, raised eyes, keep, light set, smooth, Drop??, **Deleted**
- AOTX02136-1Ru Oblong Russet poor rep, ugly net, low yield, Drop+++, **Deleted**
- AOTX95265-1Ru Long Russet late, BOT
- AOTX95265-2ARu Long Russet rough, Rhizoctonia, high yield
- AOTX95265-3Ru Oblong Russet **Deleted**
- AOTX95265-4Ru Long Russet pointed, nice flesh, some rot, Drop, **Deleted**
- AOTX95269-1Ru Oblong Russet low yield, Drop++ **Deleted**
- AOTX95295-1Ru Long Russet Rhizoctonia, some rough, Drop++, **Deleted**
- AOTX95295-3Ru Long Russet nice skin, small, low yield, Drop, **Deleted**
- AOTX96084-1Ru Long Russet Drop++, **Deleted**
- AOTX96208-1Ru Oblong Russet Drop+++ **Deleted**
- AOTX96216-2Ru Long Russet Rhizoctonia **Deleted**
- AOTX96265-2Ru Long Russet very nice, nice shape, BOT, keep, feathering **Deleted**
- AOTX98096-1Ru Long Russet large tubers, Drop ??, **Deleted**
- AOTX98137-1Ru Oblong Russet rough, Drop++, **Deleted**
- AOTX98152-3Ru Oblong Russet blocky, light russet, Drop ??, **Deleted**
- AOTX99008-1Ru Long Russet small, pointed, drop++++, **Deleted**
- AOTX99194-1Ru Long Russet nice shape, Drop, **Deleted**
- ATX03003-1Ru Oblong Russet small, smooth, small lenticels, heavy set, Drop, **Deleted**

- ATX03003-7Ru Oblong Russet feathering, Drop?+, **Deleted**
- ATX03068-1Ru Long Russet bad Rhizoctonia, low yield, Drop, **Deleted**
- ATX03077-2Ru Long Russet rough large, Drop, **Deleted**
- ATX03424-1Ru Long Russet Drop, **Deleted**
- ATX84378-6Ru Oblong Russet small alligator, Rhizoctonia
- ATX91137-1Ru Oblong Russet BOT++, zebra, blocky
- ATX9202-3Ru Oblong Russet late, blocky, small, bruising, feathering, zebra??
- ATX9332-12Ru Oblong Russet pointed, Rhizoctonia **Deleted**
- ATX97147-4Ru Oblong Russet shape-, rough, drop good yield, oversized, Rhizoctonia, pointed
Deleted
- ATX99194-3Ru Oblong Russet spotty, russetting, nice shape, 10z ? ugly net, poor skin finish,
Drop, **Deleted**
- NDTX8773-4Ru Oblong Russet pointed, block, too round, drop++, **Deleted**
- Russet Norkotah (CO) Long Russet
- Russet Norkotah278 Long Russet
- Russet Norkotah296 Long Russet BOT+++, rough, yield
- Stampede Russet Oblong Russet
- TXA549-1Ru Oblong Russet blocky, low set, BOT-, oversize, Rhizoctonia, hollow heart
- TXCR-2Ru Long Russet feathering, poor shape, Drop++, **Deleted**
- TXCR-4Ru Oblong Russet Drop++ **Deleted**
- TXNS410 Long Russet small, Drop+
- TXNS551 Long Russet Drop?

Summary:

Based on all factors, the outstanding entries in this trial were ATX91137-1Ru, Russet Norkotah296, AOTX95265-1Ru, and AOTX02060-1Ru.

2008 RUSSET SELECTIONS TRIAL, DALHART

The trial consisted of 70 entries of which five (AOTX03657-1Ru, AOTX05096-4Ru, ATX05114-1Ru, ATX05142-2Ru, and COTX05002-2Ru) will be advanced in 2009 (Table 7).

TEXAS ADVANCED RED SELECTION TRIAL, DALHART

This trial consisted of 22 entries and the check varieties Red LaSoda, Rio Rojo and Dark Red Norland

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

- The outstanding entries based on general rating and best of trial designation were NDTX731-1R and NDTX4271-5R. Rio Rojo also had a best of trial designation, while COTX94218-1R also had high general rating (Tables 8a, and 8e).
- NDTX731-1R and Red LaSoda had the highest total yield, marketable yield (Table 8a).
- Red LaSoda and AOTX93483-1R had the highest yield of over 18oz. tubers (Table 8a).
- NDTX059827-1R and COTX94218-1R had the highest yield of less than 4 oz tubers (Table 8a).
- Rio Rojo and NDTX7590-3R had the highest percentage marketable yield (Table 8b).
- AOTX93483-1R had the highest percentage of over 18 oz. tubers. (Table 8b).
- NDTX059878-1R, NDTX5003-2R, NDTX059827-1R, and COTX94218-1R had the highest percentage of less than 4 oz. tubers (Table 8b).
- COTX94218-1R had the highest specific gravities (Table 8b)
- AOTX93483-1R, AOTX01178-1R, AOTX91861-4R, BTX2332-1R, COTX94218-1R, and Red LaSoda were the latest maturing, while NDTX7590-3R, NDTX4847-7R, ATTX98453-6R, and Rio Rojo were the earliest maturing (Table 8c).
- NDTX731-1R and Red LaSoda had the deepest eyes. Rio Rojo had the worst rating for feathering. NDTX731-1R had the highest percentage of hollow heart (Table 8d).
- Dark Red Norland, NDTX4847-7R, AOTX91861-4R, COTX04340-1R, BTX2332-1R, and Red LaSoda had very high percentages of Zebra Chip. All of the other entrants had less than 5% Zebra Chip (Table 8f).

Comments on entries:

- AOTX01178-1R Round Red RLS like, yield+, keep, light set
- AOTX91861-4R Oblong Red light set, RLS like, deep eyes, Drop? **Deleted**
- AOTX93483-1R Oblong Red oversize, light set, sticky stolon, size parent, Drop **Deleted**
- ATTX98453-6R Round Red smooth, light set
- BTX2332-1R Round Red buff
- COTX04340-1R Oblong Red hollow heart, sticky stolon, dark purple skin, Drop **Deleted**
- COTX94216-1R Round Red Very late, buff, rough, Drop, **Deleted**
- COTX94218-1R Round Red B size, pre Zebra?, very white flesh, keep
- Dark Red Norland Round Red rough, Drop
- NDTX039190-1R Round Red **Deleted**
- NDTX059827-1R Round Red small, nice white flesh, keep, b size
- NDTX059845-1R Round Red heavy set, small, light set, Drop, **Deleted**
- NDTX059878-1R Round Red **Deleted**
- NDTX4271-5R Round Red BOT++, very white flesh, smooth, oversize
- NDTX4828-2R Round Red bad skin finish, buff+, lenticels, Drop, **Deleted**
- NDTX4847-7R Round Red zipper defect **Deleted**
- NDTX5003-2R Round Red B size, stem end indentation, rough, Drop, **Deleted**
- NDTX5438-11R Round Red smooth, BOT, keep?, fair
- NDTX731-1R Round Red BOT++, deep eyes, BOT for shape and color, rough, (hollow heart), Drop
- NDTX7590-3R Oblong Red low yield, smooth, nice, rot, low yield, Drop, **Deleted**
- Red LaSoda (CO) Oblong Red early, oversize, rough, ugly, deep eyes,
- Rio Rojo Round Red feathering, growth cracks, ROT

Summary:

Based on all factors, the outstanding entries for this trial were NDTX731-1R, NDTX4271-5R, Rio Rojo, and COTX94218-1R

2008 RED SELECTIONS TRIAL, DALHART

The trial consisted of 36 entries of which 7 (ATX03516-2R, ATX03550-2R, COTX05211-4R, COTX05211-5R, COTX05211-7R, NDTX050070-1R, and NDTX050054-3R) (Table 9) will be advanced in 2009.

TEXAS ADVANCED RED SKIN/YELLOW FLESH SELECTION TRIAL

The Texas advanced red skin/yellow flesh selection trial consisted of 20 entries.

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

- The outstanding entries for this trial based on general rating and best of trial designations were ATTX961014-1R/Y, COTX04267-1R/Y, COTX04193-2R/Y, ATX02263-1R/Y, and ATTX98444-16R/Y (Table 10a, 10e).
- ATTX98500-2P/Y and ATTX961014-1R/Y had the highest total and marketable yields (Table 10a)
- ATTX00289-5R/Y and ATTX98518-5P/Y had the highest yield of over 18 oz. tubers (Table 10a).
- ATX02263-1R/Y and ATTX98444-16R/Y had the highest yield of less than 4 oz. tubers, while COTX04303-3R/Y and COTX04096-1R-W/Y had the highest yield of culls/No. 2 tubers (Table 10a).
- ATTX98500-2P/Y and ATTX961014-1R/Y had the highest percentage of marketable yield (Table 10b).
- ATTX00289-5R/Y and ATTX98518-5P/Y had the highest percentage over 18 oz. tubers (Table 10b).
- ATTX98444-16R/Y and ATX02263-1R/Y had the highest percentage of less than 4 oz. tubers, while COTX04303-3R/Y had the highest percentage of culls/No. 2 tubers (Table 10b).
- TX04239-2R/Y had the highest specific gravity (Table 10b).
- ATTX98500-2P/Y, COTX04096-1R-W/Y, TX04212-1R/Y, COTX04303-2R/Y, COTX04188-3R/Y, and NDTX4756-1R/Y were the latest maturing, while ATTX98444-16R/Y, ATX02263-1R/Y, ATTX99325-1P, COTX04193-2R/Y, and ATTX961014-1R/Y were the earliest maturing (Table 10c).
- COTX04193-2R/Y, COTX04267-1R/Y, COTX04188-3R/Y, and COTX04303-1R/Y had the darkest yellow flesh color of the entries (Table 10d).
- COTX04303-3R/Y, ATTX98468-5R/Y, and ATX03491-1R/Y had the poorest ratings for feathering (Table 10d).

- ATTX98500-2P/Y, ATTX961014-1R/Y, ATTX00289-5R/Y, COTX04096-1R-W/Y, COTX03039-1R/Y, COTX04188-3R/Y, COTX04193-2R/Y, and COTX04303-3R/Y had over 8% Zebra Chip. All of the other entries had less than 5% Zebra Chip (Table 10f).

Comments on entries:

- ATTX00289-5R/Y Oblong Red RLS like, oversize, yellow size parent ¹FC=2.2 Drop, **Deleted**
- ATTX961014-1R/Y Oblong Red nipple on stem, BOT, Rhizoctonia FC=2.6
- ATTX98444-16R/Y Round Red BOT++++, salad FC=3
- ATTX98468-5R/Y Round Red Drop++ FC=3.2, **Deleted**
- ATTX98500-2P/Y Round Purple little rough, yield + FC=2.5
- ATTX98518-5P/Y Long Purple rough skin FC=2.5 Drop, **Deleted**
- ATTX99325-1P Oblong Purple smooth FC=1
- ATX02263-1R/Y Round Red BOT -, salad + FC=2.3
- ATX03491-1R/Y Oblong Red feathering, sticky stolon FC=2.8, **Deleted**
- COTX03039-1R/Y Oblong Red smooth, shape - FC=2.8, **Deleted**
- COTX04096-1R-W/Y Long Red/white pointed, Yield + FC=3.1 Drop, **Deleted**
- COTX04188-3R/Y Round Red FC=3.8
- COTX04193-2R/Y Oblong Red BOT - FC=3.5
- COTX04267-1R/Y Round Red BOT-, salad FC=3.9
- COTX04303-1R/Y Round Red late, rough, FC=3.5 Drop, **Deleted**
- COTX04303-2R/Y Oblong Red nice interior FC=3.2, **Deleted**
- COTX04303-3R/Y Round Red lots of culls FC=2.7 Drop, **Deleted**
- NDTX4756-1R/Y Oblong Red salad ?? FC=2.7, **Deleted**
- TX04212-1R/Y Long Red poor shape, rough FC=3.2 Drop++, **Deleted**
- TX04239-2R/Y Round Red poor stand, poor yield FC=3.2 Drop, **Deleted**

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

Summary:

Based on all factors the outstanding entry for this trial was ATTX961014-1R/Y. COTX04267-1R/Y, COTX04193-2R/Y, ATX02263-1R/Y, and ATTX98444-16R/Y will be evaluated as salad type potatoes

TEXAS ADVANCED WHITE SKIN YELLOW FLESH TRIAL

This trial consisted of 17 entries, with TX1523-1Ru/Y as a check.

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

- The outstanding entries for this trial, based on general rating and best of trial designations, were ATTX00289-6Y/Y, TX1523-1Ru/Y, NDTX059759-3Pinto/Y, and NDTX059759-3R-W/Y-P. NDTX049265-2WRSP/Y and TX04237-6Y/Y also received high general ratings (Tables 11a and 11e).
- ATTX00289-6Y/Y and TX1523-1Ru/Y had the highest total and marketable yield (Table 11a).
- COTX04178-1Y/Y and NDTX059886-1Y/Y had the highest yield of less than 4 oz. tubers, while ATTX98500-3P-W/Y had the highest yield of culls/No. 2 tubers (Table 11a).
- NDTX059759-3Pinto/Y and NDTX059759-3Pinto/Y-P had the highest percentage of marketable yield (Table 11b).
- NDTX059886-1Y/Y, ATX03496-3Y/Y, and COTX04178-1Y/Y had the highest percentage of less than 4 oz. tubers, while NDTX059759-1P-W/Y and ATTX98500-3P-W/Y had the highest percentage of culls/No. 2 tubers (Table 11b).
- COTX04015-3W/Y, NDTX059886-1Y/Y, TX1674-1W/Y, and TX1523-1Ru/Y had the highest specific gravities (Table 11b).
- NDTX059759-3Pinto/Y, ATTX98500-3P-W/Y, NDTX059759-3Pinto/Y-P, and COTX04015-3W/Y were the latest maturing, while ATTX00289-6Y/Y, BTX1544-2W/Y, BTX1749-1W/Y, and ATX03496-3Y/Y were the earliest maturing (Table 11c).
- COTX04015-3W/Y, NDTX059759-3Pinto/Y-P, ATTX98500-3P-W/Y, and NDTX059759-3Pinto/Y had dark yellow flesh (Table 11d).
- TX04237-6R/Y had 28% hollow heart (Table 11d).
- NDTX059775-1W/Y and TX04237-6Y/Y had 28% and 15% Zebra Chip, respectively. All of the other entries had less than 3% Zebra Chip. NDTX049265-2WRSP/Y and ATX03496-3Y/Y received high chip evaluations (Table 11f).

Comments on entries:

- ATTX00289-6Y/Y Oblong Yellow yield ++, BOT for yield, pointed, pink eyes,¹FC 2.7
- ATTX98500-3PW/Y Oblong Purple White pointed, poor shape, Rhizoctonia +, Rough ++, FC=3.7 Drop, **Deleted**
- ATX03496-3Y/Y Oblong Yellow Amadeus like, lenticels, FC=3, **Deleted**
- BTX1544-2W/Y Oblong White pointed stem, fine russet skin, FC=3 Drop ?, **Deleted**
- BTX1749-1W/Y Oblong White early, low yield, FC= 2.7, **Deleted**
- COTX03079-1W/Y Oblong White purple, FC=3 Drop ?, **Deleted**
- COTX04015-3W/Y Oblong White light set, low yield, red eyes, FC=3.7, Drop+, **Deleted**
- COTX04178-1Y/Y Round Yellow pointed stem, small salad? Drop?, FC= 2.5
- NDTX049265-2WRSP/Y Oblong White red splash, nice, some pointed to stem, pair shape, high yield, Nice internals, FC= 3.2, Drop ?
- NDTX059759-1P-W/Y Oblong Purple white light set, Flat, Purple streaks, FC= 3.3, Drop+, **Deleted**
- NDTX059759-3Pinto/Y Oblong Red White BOT red/pinto, shoulder hump, over size, purple streaks, FC=3.8
- NDTX059759-3Pinto/Y-P Oblong White BOT+ red/pinto, purple streak flesh, FC=3.8
- NDTX059775-1W/Y Oblong White nice skin finish, FC=2.1, **Deleted**
- NDTX059886-1Y/Y Round Yellow salad? small, poor skin finish, FC=2.6, Drop,
- TX04237-6Y/Y Oblong Yellow low yield, large tubers, smooth, FC=2.7
- TX1523-1Ru/Y Oblong Russet BOT+, FC=3
- TX1674-1W/Y Oblong White pink eyes, fine light russet skin, Drop ?, FC=3.2, **Deleted**

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

Summary:

Based on all factors, the outstanding entries for this trial were ATTX00289-6Y/Y, TX1523-1Ru/Y, NDTX059759-3Pinto/Y, and NDTX059759-3Pinto/Y-P. COTX04178-1W-Y/Y and NDTX059886-1Y/Y will be evaluated in 2009 as salad type potatoes.

YUKON GOLD STRAIN SELECTION TRIAL

This trial consisted of 15 entries, including the check variety Yukon Gold. One of the objectives of this trial was to compare Texas produced seed to Colorado G2 seed.

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

- The outstanding entries for this trial, based on general rating and best of trial designations, were TXYG055(G2), TXYG057(G2), TXYG098(G2), and Yukon Gold (Tables 12a and 12e).
- TXYG055(G2) and TXYG107(G2) had the highest total yield and marketable yield (Table 12a)
- TXYG055(G2) and Yukon Gold had the highest yield of over 18 oz. tubers (Table 12a).
- TXYG055(G2) and TXYG105(G2) had the highest yield of less than 4 oz. tubers (Table 12a).
- All of the entries had greater than 80% marketable tubers, while Yukon Gold had the highest percentage of over 18 oz. tubers (Table 12b).
- TXYG098 and TXYG055 had the highest percentage of less than 4 oz. tubers (Table 12b).
- Yukon Gold had the highest specific gravity while, TXYG098 had the lowest (Table 12b).
- In general, the Texas produced seed had fewer tubers per plant than those of the G2 seed. Yukon Gold had the highest average number of tubers per plant (Table 12c).
- TXYG105(G2) was the earliest maturing, while TXYG079 was the latest maturing. In general, all the Texas produced seed had lower vigor than the G2 seed (Table 12c).
- All of the entries exhibited some hollow heart. TXYG107(G2), TXYG079(G2), TXYG079, TXYG057, and TXYG055(G2) had greater than 23% hollow heart, while, TXYG105 only had 5% (Table 12d).

Comments on entries:

- TXYG055 Oblong White low yield, small, FC=3
- TXYG055(G2) Oblong White BOT+, oversize, FC=3

- TXYG057 Oblong White low yield, FC= 3
- TXYG057(G2) Oblong White oblong type, BOT, nice, FC=3
- TXYG079 Oblong White light set, large tubers, FC=3
- TXYG079(G2) Oblong White light set, poor rep, FC= 3
- TXYG098 Oblong White low yield, FC= 3
- TXYG098(G2) Oblong White BOT, FC=3
- TXYG105 Oblong White low yield, FC= 3
- TXYG105(G2) Oblong White light set, large tubers, FC=2.95
- TXYG107 Oblong White rough, Zebra++, FC=3
- TXYG107(G2) Oblong White FC=3
- Yukon Gold (CO) Oblong White BOT, FC=3.05
- Yukon Gold (Stad) (G2) Oblong White, FC=3
- YG ZSC(G2) Oblong White Rhizoctonia, FC=3

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

Summary:

TXYG055(G2) and TXYG107(G2) were the outstanding entries for this trial.

TEXAS ADVANCED FINGERLING SELECTION TRIAL

The Texas Advanced Fingerling Selection trial consisted of five entries, including the check varieties Banana and Purple Peruvian.

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

- The outstanding entry for this trial based on general rating and best of trial designations was PTTX05PG07-1W (Tables 13a and 13e).
- COTX04050-1P/P had the highest total yield and marketable yield (Table 13a)

- COTX04050-1P/P had the highest yield of under one-inch tubers, while Banana had the highest yield of culls/No. 2 tubers (Table 13a).
- Banana had the lowest percentage of marketable and the highest percentage of culls/No. 2 tubers (Table 13b).
- COTX03187-1W had the highest specific gravity (Table 13b).
- COTX04050-1P/P had the highest average number of tubers per plant (Table 13c).
- Banana and Purple Peruvian were the latest maturing, while PTTX05PG07-1W was the earliest maturing (Table 13c).

Comments on entries:

- COTX04050-1P/P Round Purple salad?, purple flesh, smooth, more to purples,
- COTX03187-1W Long White over size
- PTTX05PG07-1W Long White white flesh, very smooth, no culls, BOT
- Banana Long White Rhizoctonia, many culls, keep for seed
- Purple Peruvian Long Purple deep eyes,

Summary:

Based on all factors the outstanding entry for this trial was PTTX05PG07-1W.

2008 SPECIALTY SELECTIONS TRIAL, DALHART

The trial consisted of 64 entries of which 15 (ATX03515-1R/Y, ATX03545-1R, ATX03546-W/Y, ATX03546-2R/Y, ATX05175-3R/Y, ATX05178-2P, ATX05202-3W/Y, COTX05037-4Y/Y, COTX05037-5P/Y, COTX05082-2P/P, COTX05249-3W-R/Y, COTX05261-1R/Y, COTX05261-2R/Y, NDTX050025-1W/Y, and NDTX050065-1R/Y) will be advanced in the 2009 season (Table 14).

Dalhart
Table 1a.

Total yield, total yield of U.S. No.1, less than 1 inch and culls/No.2 potatoes and general rating of 5 entries in the Western Regional Chip Trial grown near Dalhaart, Texas-2008.

Variety or Selection	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Under 1 in.	Culls/ No.2	General Rating ¹ Grading
		Total Yield	1-2 in.	2-3 in.	Over 3 in.			
Atlantic	427.8	425.6	18.4	291.2	116.0	2.2	0.0	3.3
Chipeta	346.4	346.4	6.0	136.0	204.4	0.0	0.0	2.9
Ivory Crisp	273.2	269.8	7.2	122.6	140.0	3.4	0.0	3.1
CO97043-14W	222.8	222.0	5.4	113.4	103.2	0.8	0.0	3.0
CO97065-7W	427.8	426.0	11.4	327.4	87.2	1.8	0.0	3.3
Average	339.6	338.0	9.7	198.1	130.2	1.6	0.0	3.1
L.S.D. (.05)	51.7	50.4	8.6	79.6	63.8	ns		0.3

¹ 1=very poor to 5= excellent

Dalhart
Table 1b.

Percent by weight of U.S. No. 1, less than 1 inch and culls/No.2 potatoes, specific gravity, tuber type and skin type of 5 entries in the Western Regional Chip Trial grown near Dalhaart, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Under 1 in.	Culls/ No. 2	Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	1-2 in.	2-3 in.	Over 3 in.						
Atlantic	99.5	4.0	66.5	28.9	0.5	0.0	1.091	18.8	Round	White
Chipeta	100.0	1.8	39.7	58.5	0.0	0.0	1.076	16.1	Oblong	White
Ivory Crisp	98.7	2.6	45.4	50.6	1.3	0.0	1.080	16.7	Round	White
CO97043-14W	99.6	2.4	50.9	46.3	0.4	0.0	1.078	16.3	Round	White
CO97065-7W	99.6	2.7	77.2	19.7	0.4	0.0	1.082	17.2	Round	White
Average	99.5	2.7	56.0	40.8	0.5	0.0	1.081	17.0		
L.S.D. (.05)	ns	ns	16.3	18.5	ns		0.007	1.2		

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 5 entries in the Western Regional Chip Trial grown near Dalhart, Texas-2008.

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	
Atlantic	8.3	6.1	75	91	1.6	4.6	3.8	4.6	6
Chipeta	6.0	7.9	55	80	2.0	4.7	5.0	4.7	0
Ivory Crisp	6.6	7.7	43	58	2.0	3.0	3.4	3.3	30
CO97043-14W	9.0	6.5	33	40	1.9	2.5	4.0	2.5	1
CO97065-7W	8.3	5.7	79	94	1.8	4.6	3.3	4.5	30
Average	7.6	6.8	57	73	1.9	3.9	3.9	3.9	14
L.S.D. (.05)	ns	1.6	17	24	ns	1.4	0.5	1.4	17

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

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

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

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

Dalhart
Table 1d. Flesh color, tuber shape, degree of russetting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 5 entries in the Western Regional Chip Trial grown near Dalhaart, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
Atlantic	1.0	1.0	2.1	4.0	1.4	5.0	5.0	5.0	5.0	5.0	20	0	0	3
Chipeta	1.0	3.3	1.5	4.0	1.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
Ivory Crisp	1.0	1.8	1.0	4.0	1.0	5.0	5.0	5.0	5.0	2.5	10	0	0	0
CO97043-14W	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	10	0	0	5
CO97065-7W	1.0	1.0	1.5	3.9	1.0	5.0	5.0	5.0	5.0	5.0	3	0	0	3
Average	1.0	1.7	1.4	4.0	1.1	5.0	5.0	5.0	5.0	4.5	10	0	0	2
L.S.D. (.05)		0.2	0.2	0.1	0.2					ns	ns			ns

¹ 1=light to 5=dark
² 1=round to 5=long
³ 1=none to 5=heavy
⁴ 1=deep to 5=shallow
⁵ 1=light to 5=dark
⁶ 1 to 5=none
⁷ 1 to 5=none
⁸ 1 to 5=none
⁹ 1 to 5=none
¹⁰ 1 to 5=none
¹¹ Stem end vascular discoloration severely evaluated

Dalhart
Table 1e. Notes and general rating for all reps of 5 entries in the Western Regional Chip Trial grown near Dalhaart, Texas-2008.

Variety or Selection	Notes Grading	General Rating Grading
Atlantic	Buff	3.2, 3.5, 3.2, 3.2
Chipeta	oversize, Rough, greening, soft	3, 3, 3, 2.5
Ivory Crisp	Green, Feathering, oversize	3.4, 3, 3.1, 2.8
CO97043-14W	Rough, over size, deep nose, sticky stolen, Light set,	2.8, 3, 3, 3

Dalhart
Table 1f. Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 5 entries in the Western Regional Chip Trial grown near Dalhaart, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good Chip	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
Atlantic	Oregon	1.091	18.8	3.3	1	18/11	18	11	34% Vas, 3% HH	0%	0%
Chipeta	Oregon	1.076	16.1	2.9	2	7/23	7	23	70% Vas, 7% Dk	0%	0%
Ivory Crisp	Idaho	1.080	16.7	3.1	1	33/6	33	6	3% Z , 10% Vas, 3% Bru	3%	0%
CO97043-14W	Colorado	1.078	16.3	3.0	1	30/6	30	6	17% Vas	0%	0%
CO97065-7W	Colorado	1.082	17.2	3.3	1	39/1	39	1	3% Bru, BOT	3%	0%
Average										1%	0%

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

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

Location:

Dalhart, Texas

Soil Type

Dallum Fine Sand Loam

Seed Source

Colorado

Date:

		DAP
Planted	May 13, 2008	
Vines Killed (Red Chip)	September 8, 2008	115
Vines Killed (Russet)	September 26, 2008	133
Harvested (Red Chip)	September 15, 2008	122
Harvested (Russet)	September 29, 2008	136

Plot Information:

Size of Plots	10'
Spacing Between Hills	12"
Spacing Between Rows	28"
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:
205-221-50 # per acre

Irrigation:

Center Pivot

Seed Treatment

Tops MZ Gaucho

Insecticide:

Platinum, Fulfill, Thimet, LI 700, Spintor, AgriMek, Superb, Reaper, Rimon

Herbicides Applied:

Medal, Sencor, Eptam, Matrix, Liberate, Intensity, Superb, Reglone, Dual

Fungicide Applied:

Quadris, Ultra Flourish, Headline, Echo, Manzate, Endura, Revus Top, Scala, SuperTin

Environmental Factors:

Temperature was higher than average for the last week in May and the first and second week in June. Precipitation was high than normal during the growing season

Dalhart
Table 2a. Total yield, total yield of U.S. No.1, less than 1 inch tubers and culls/No.2 potatoes and general rating of 6 entries in the Southwest Regional Chip Trial grown near Dalhaart, Texas-2008.

Variety or Selection	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre			Under 1 in.	Culls/ No.2	General Rating ¹ Grading	
		Total Yield	1-2 in.	2-3 in.				Over 3 in.
Atlantic	427.8	425.6	18.4	291.2	116.0	2.2	0.0	3.3
CO00197-3W	449.8	396.4	15.8	264.8	115.8	53.4	0.0	3.1
AC00170-2W	394.6	392.0	31.2	324.8	36.0	2.6	0.0	3.0
Chipeta	346.4	346.4	6.0	136.0	204.4	0.0	0.0	2.9
CO00188-4W	351.6	340.6	20.2	284.2	36.2	11.0	0.0	3.2
CO00270-7W	203.2	193.4	6.4	83.0	104.0	1.4	8.4	2.6
Average	362.3	349.1	16.3	230.7	102.1	11.8	1.4	3.0
L.S.D. (.05)	51.2	48.7	10.5	76.4	58.8	19.9	ns	0.3

¹ 1=very poor to 5= excellent

Dalhart
Table 2b.

Percent by weight of U.S. No. 1, less than 1 inch tubers and culls/No.2 potatoes, specific gravity, tuber type and skin type of 6 entries in the Southwest Regional Chip Trial grown near Dalhaart, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Under 1 in.	Culls/ No. 2	Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	1-2 in.	2-3 in.	Over 3 in.						
Atlantic	99.5	4.0	66.5	28.9	0.5	0.0	1.091	18.8	Round	White
CO00197-3W	88.6	3.6	60.2	24.8	11.4	0.0	1.081	16.9	Round	White
AC00170-2W	99.3	8.0	82.5	8.8	0.7	0.0	1.083	17.3	Oblong	White
Chipeta	100.0	1.8	39.7	58.5	0.0	0.0	1.076	16.1	Oblong	White
CO00188-4W	96.8	5.8	81.3	9.7	3.2	0.0	1.079	16.7	Round	White
CO00270-7W	96.4	3.4	42.8	50.2	0.6	3.0	1.066	14.3	Round	White
Average	96.8	4.4	62.2	30.1	2.7	0.5	1.079	16.7		
L.S.D. (.05)	5.1	2.5	16.8	16.0	3.8	ns	0.007	1.2		

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 6 entries in the Southwest Regional Chip Trial grown near Dalhart, Texas-2008.

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	
Atlantic	8.3	6.1	75	91	1.6	4.6	3.8	4.6	6
CO00197-3W	21.0	5.9	36	43	2.0	3.0	4.7	3.9	0
AC00170-2W	13.4	4.0	53	78	1.6	4.0	3.2	4.0	29
Chipeta	6.0	7.9	55	80	2.0	4.7	5.0	4.7	0
CO00188-4W	8.3	4.3	80	100	1.8	4.4	3.6	4.3	27
CO00270-7W	8.2	6.8	30	35	1.8	2.6	4.3	3.3	8
Average	10.8	5.8	55	71	1.8	3.9	4.1	4.1	12
L.S.D. (.05)	7.9	1.0	25	24	ns	0.9	0.5	0.3	15

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

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

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

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

Dalhart
Table 2d. Flesh color, tuber shape, degree of russetting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 6 entries in the Southwest Regional Chip Trial grown near Dalhaart, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
Atlantic	1.0	1.0	2.1	4.0	1.4	5.0	5.0	5.0	5.0	5.0	20	0	0	3
CO00197-3W	1.0	2.6	1.0	4.0	1.0	5.0	5.0	5.0	5.0	3.5	3	0	0	0
AC00170-2W	1.0	3.4	1.0	4.0	1.0	5.0	5.0	5.0	5.0	3.5	5	0	0	0
Chipeta	1.0	3.3	1.5	4.0	1.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
CO00188-4W	1.0	1.6	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.5	8	0	0	0
CO00270-7W	1.0	1.1	1.0	4.0	1.0	4.5	5.0	5.0	5.0	5.0	25	0	0	0
Average	1.0	2.2	1.3	4.0	1.1	4.9	5.0	5.0	5.0	4.4	11	0	0	0
L.S.D. (.05)		0.2	0.1		0.1	ns				1.3	ns			ns

¹ 1=light to 5=dark
² 1=round to 5=long
³ 1=none to 5=heavy
⁴ 1=deep to 5=shallow
⁵ 1=light to 5=dark
⁶ 1 to 5=none
⁷ 1 to 5=none
⁸ 1 to 5=none
⁹ 1 to 5=none
¹⁰ 1 to 5=none
¹¹ Stem end vascular discoloration severely evaluated

Dalhart
Table 2e. Notes and general rating for all reps of 6 entries in the Southwest Regional Chip Trial grown near Dalhaart, Texas-2008.

Variety or Selection	Notes Grading	General Rating Grading
Atlantic	Buff	3.2, 3.5, 3.2, 3.2
CO00197-3W	rough, Drop, Pointed to stem, over size, feathering	2.5, 3.2, 3.2, 3.3
AC00170-2W	Nice flesh, Small	3, 3, 3, 3
Chipeta	oversize, Rough, greening, soft	3, 3, 3, 2.5
CO00188-4W	rough, small, heavy set, Greening, nice flesh,	3.3, 3.3, 3.1, 3.2
CO00270-7W	ugly, growth cracks, very rough	2.5, 2.8, 2.6, 2.5

Dalhart
Table 2f. Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 6 entries in the Southwest Regional Chip Trial grown near Dalhaart, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good	Number of Chip	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
Atlantic	Oregon	1.091	18.8	3.3	1	18/11	18	11		34% Vas, 3% HH	0%	0%
CO00197-3W	Colorado	1.081	16.9	3.1	1+	31/8	31	8		15% Vas, 3% HH, 3% Bru	0%	0%
AC00170-2W	Colorado	1.083	17.3	3.0	1	40/3	40	3		2% PreZ , 2% HH, 2% BC	2%	0%
Chipeta	Oregon	1.076	16.1	2.9	2	7/23	7	23		70% Vas, 7% Dk	0%	0%
CO00188-4W	Colorado	1.079	16.7	3.2	1	29/1	29	1		3% Bru	0%	0%
CO00270-7W	Colorado	1.066	14.3	2.6	1+	18/11	18	11		3% Z , 34% Vas	3%	0%
Average											1%	0%

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

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

Location:

Dalhart, Texas

Soil Type

Dallum Fine Sand Loam

Seed Source

Colorado

Date:

		DAP
Planted	May 13, 2008	
Vines Killed (Red Chip)	September 8, 2008	115
Vines Killed (Russet)	September 26, 2008	133
Harvested (Red Chip)	September 15, 2008	122
Harvested (Russet)	September 29, 2008	136

Plot Information:

Size of Plots	10'
Spacing Between Hills	12"
Spacing Between Rows	28"
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:
205-221-50 # per acre

Irrigation:

Center Pivot

Seed Treatment

Tops MZ Gaucho

Insecticide:

Platinum, Fulfill, Thimet, LI 700, Spintor, AgriMek, Superb, Reaper, Rimon

Herbicides Applied:

Medal, Sencor, Eptam, Matrix, Liberate, Intensity, Superb, Reglone, Dual

Fungicide Applied:

Quadris, Ultra Flourish, Headline, Echo, Manzate, Endura, Revus Top, Scala, SuperTin

Environmental Factors:

Temperature was higher than average for the last week in May and the first and second week in June. Precipitation was high than normal during the growing season

Dalhart
Table 3a.

Total yield, total yield of U.S. No.1, less than 1 inch tubers and culls/No.2 potatoes and general rating of 15 entries in the Snack food Trial grown near Dalhart, Texas-2008.

Variety or Selection	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Under 1 in.	Culls/ No.2	General Rating ¹ Grading
		Total Yield	1-2 in.	2-3 in.	Over 3 in.			
Beacon Chipper	504.9	504.3	5.0	262.2	237.0	0.6	0.0	3.4
AF2219-10	479.0	475.8	18.4	292.0	165.4	3.2	0.0	3.1
CO95051-7W	474.8	468.6	43.4	410.6	14.6	6.2	0.0	3.7
ND7519-1	453.6	444.0	17.6	322.2	104.2	9.6	0.0	3.7
Atlantic	427.8	425.6	18.4	291.2	116.0	2.2	0.0	3.3
W2717-5	397.2	391.8	17.8	297.8	76.2	5.4	0.0	3.5
MSJ147-1	380.8	377.8	32.2	331.4	14.2	3.0	0.0	3.3
W2324-1	370.8	369.0	10.8	210.6	147.6	1.8	0.0	3.4
CO96141-4W	380.0	362.0	3.8	192.6	165.6	0.0	18.0	2.9
NY138	352.2	351.8	5.8	192.8	153.2	0.4	0.0	3.4
Chipeta	346.4	346.4	6.0	136.0	204.4	0.0	0.0	2.9
W2310-3	342.4	331.8	12.6	177.0	142.2	5.6	5.0	2.9
NY139	332.8	331.4	7.2	232.0	92.2	1.4	0.0	3.1
MSJ036-A	314.6	310.6	35.0	249.0	26.6	4.0	0.0	3.2
Ivory Crisp	273.2	269.8	7.2	122.6	140.0	3.4	0.0	3.1
Average	388.7	384.1	16.1	248.0	120.0	3.1	1.5	3.2
L.S.D. (.05)	47.1	47.7	17.1	67.1	50.3	ns	ns	0.2

¹ 1=very poor to 5= excellent

Dalhart
Table 3b.

Percent by weight of U.S. No. 1, less than 1 inch tubers and culls/No.2 potatoes, specific gravity, tuber type and skin type of 15 entries in the Snack food Trial grown near Dalhart, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Under 1 in.	Culls/ No. 2	Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	1-2 in.	2-3 in.	Over 3 in.						
Beacon Chipper	99.9	1.0	51.8	47.1	0.1	0.0	1.081	17.0	Round	White
AF2219-10	99.4	3.8	59.9	35.6	0.6	0.0	1.101	20.6	Round	White
CO95051-7W	98.8	8.8	86.7	3.2	1.2	0.0	1.084	17.5	Round	White
ND7519-1	98.0	3.9	72.1	22.0	2.0	0.0	1.087	18.0	Round	White
Atlantic	99.5	4.0	66.5	28.9	0.5	0.0	1.091	18.8	Round	White
W2717-5	98.8	4.4	74.7	19.7	1.2	0.0	1.089	18.4	Round	White
MSJ147-1	99.2	8.3	87.1	3.8	0.8	0.0	1.091	18.7	Round	White
W2324-1	99.5	2.8	56.9	39.8	0.5	0.0	1.088	18.2	Round	White
CO96141-4W	95.6	1.0	50.6	43.9	0.0	4.4	1.075	15.8	Oblong	White
NY138	99.9	1.6	55.2	43.0	0.1	0.0	1.074	15.7	Round	White
Chipeta	100.0	1.8	39.7	58.5	0.0	0.0	1.076	16.1	Oblong	White
W2310-3	96.9	3.7	52.0	41.2	1.7	1.5	1.085	17.7	Round	White
NY139	99.6	2.1	70.7	26.7	0.4	0.0	1.087	18.0	Oblong	White
MSJ036-A	98.7	11.2	80.0	7.5	1.3	0.0	1.083	17.3	Round	White
Ivory Crisp	98.7	2.6	45.4	50.6	1.3	0.0	1.080	16.7	Round	White
Average	98.8	4.1	63.3	31.4	0.8	0.4	1.085	17.6		
L.S.D. (.05)	ns	4.2	13.5	15.0	ns	ns	0.010	2.5		

Dalhart
Table 3c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 15 entries in the Snack food Trial grown near Dalhart, Texas-2008.

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	
Beacon Chipper	6.6	7.9	96	100	1.8	4.1	3.7	4.3	10
AF2219-10	7.6	6.4	90	100	1.9	4.5	3.8	4.7	9
CO95051-7W	12.1	3.9	100	100	2.0	4.4	5.0	4.4	0
ND7519-1	8.8	5.4	81	95	1.8	4.5	3.9	4.6	10
Atlantic	8.3	6.1	75	91	1.6	4.6	3.8	4.6	6
W2717-5	8.2	5.0	99	99	2.0	4.6	3.4	4.6	23
MSJ147-1	10.1	3.9	85	98	1.8	4.0	4.2	4.2	3
W2324-1	6.6	6.6	70	88	2.0	4.3	4.0	4.2	13
CO96141-4W	14.5	7.1	30	39	2.3	3.5	4.5	3.5	5
NY138	6.9	7.3	54	73	1.9	3.8	3.9	3.7	11
Chipeta	6.0	7.9	55	80	2.0	4.7	5.0	4.7	0
W2310-3	9.8	5.5	53	65	1.5	3.7	3.9	3.8	8
NY139	5.8	6.3	68	93	1.9	4.3	4.3	4.3	8
MSJ036-A	10.7	3.8	54	83	1.5	4.3	4.0	4.3	10
Ivory Crisp	6.6	7.7	43	58	2.0	3.0	3.4	3.3	30
Average	8.6	6.1	70	84	1.9	4.1	4.0	4.2	10
L.S.D. (.05)	3.3	1.0	19	19	0.3	0.5	0.5	0.5	12

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

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

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

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

Dalhart
Table 3d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 15 entries in the Snack food Trial grown near Dalhart, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
Beacon Chipper	1.0	1.6	1.1	3.6	1.0	5.0	5.0	5.0	5.0	5.0	10	0	0	0
AF2219-10	1.0	1.4	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.0	5	0	0	0
CO95051-7W	1.0	1.6	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	25	0	0	0
ND7519-1	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	10	0	0	0
Atlantic	1.0	1.0	2.1	4.0	1.4	5.0	5.0	5.0	5.0	5.0	20	0	0	3
W2717-5	1.0	2.4	1.0	3.9	1.0	5.0	5.0	5.0	5.0	5.0	18	0	3	0
MSJ147-1	1.0	1.1	1.0	4.5	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
W2324-1	1.0	1.3	1.0	3.6	1.0	5.0	5.0	5.0	5.0	5.0	13	0	0	0
CO96141-4W	1.0	3.3	1.0	4.0	1.0	4.5	5.0	5.0	5.0	5.0	13	0	0	0
NY138	1.0	2.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
Chipeta	1.0	3.3	1.5	4.0	1.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
W2310-3	1.0	2.0	1.8	4.0	1.0	5.0	5.0	5.0	5.0	5.0	3	0	0	0
NY139	1.0	3.0	1.0	3.7	1.0	5.0	5.0	5.0	5.0	5.0	3	0	0	0
MSJ036-A	1.0	1.6	1.0	4.0	1.0	5.0	5.0	5.0	5.0	2.8	3	0	0	0
Ivory Crisp	1.0	1.8	1.0	4.0	1.0	5.0	5.0	5.0	5.0	2.5	10	0	0	0
Average	1.0	1.9	1.2	3.9	1.0	5.0	5.0	5.0	5.0	4.6	9	0	0	0
L.S.D. (.05)		0.4	0.2	0.2	0.1					0.3	ns		ns	ns

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Dalhart
Table 3e.

Notes and general rating for all reps of 15 entries in the Snack food Trial grown near Dalhart, Texas-2008.

Variety or Selection	Notes Grading	General Rating Grading
Beacon Chipper	deep nose, very large tuber, parent, very white flesh, oversize	3.4, 3.5, 3.4, 3.4
AF2219-10	, some pointed, rough, over size, nice flesh	3, 3.2, 3, 3
CO95051-7W	, , ,	3.4, 4, 3.7, 3.6
ND7519-1	BOT for yield, , , some purple spot on apical end	3.9, 3.4, 3.8, 3.5
Atlantic	, , Buff,	3.2, 3.5, 3.2, 3.2
W2717-5	Flat, Oblong, , ,	3.6, 3.5, 3.5, 3.5
MSJ147-1	nice, , , Small nice flesh	3.8, 3.3, 3, 3.2
W2324-1	, , Rough,	3.4, 3.3, 3.3, 3.4
CO96141-4W	, , some cracking, Flat, Drop, too long	2.8, 3, 3, 2.8
NY138	large tubers, oversize, smooth, nice flesh	3.4, 3.3, 3.3, 3.4
Chipeta	oversize, , Rough, greening, soft	3, 3, 3, 2.5
W2310-3	, very rough, Drop, Flat, ,	3, 2.8, 3, 2.9
NY139	oversize, stem indentation, ,	3, 3.2, 3.3, 3
MSJ036-A	, , Soft, Feathering, Drop	3.3, 3.3, 3, 3.2
Ivory Crisp	, , Green, Feathering, oversize	3.4, 3, 3.1, 2.8

Dalhart
Table 3f. Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 15 entries in the Snack food Trial grown near Dalhart, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good	Number of Chip	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
Beacon Chipper	Michigan	1.081	17.0	3.4	1	35/7	35	7		2% PreZ , 14% Vas	2%	0%
AF2219-10	Main	1.101	20.6	3.1	1	28/12	28	12		13% Z , 10% Vas, 8% GH	13%	8%
CO95051-7W	Colorado	1.084	17.5	3.7	1+	32/5	32	5		3% PreZ , 8% HH, 3% Bru	3%	0%
ND7519-1	North Dakota	1.087	18.0	3.7	1	38/2	38	2		3% Vas, 3% HH, BOT	0%	0%
Atlantic	Oregon	1.091	18.8	3.3	1	18/11	18	11		34% Vas, 3% HH	0%	0%
W2717-5	Wisconsin	1.089	18.4	3.5	1	33/5	33	5		8% Vas, 5% Bru	0%	15%
MSJ147-1	Michigan	1.091	18.7	3.3	1	38/2	38	2		5% Bru, BOT	0%	0%
W2324-1	Wisconsin	1.088	18.2	3.4	1	30/6	30	6		8% Z , 6% Vas, 3% HH	8%	0%
CO96141-4W	Colorado	1.075	15.8	2.9	1	36/0	36	0		BOT	0%	0%
NY138	New York	1.074	15.7	3.4	1	30/5	30	5		9% Vas, 6% Bru, BOT	0%	0%
Chipeta	Oregon	1.076	16.1	2.9	2	7/23	7	23		70% Vas, 7% Dk	0%	0%
W2310-3	Wisconsin	1.085	17.7	2.9	1	30/10	30	10		3% Z , 10% Bru, 13% GH	3%	0%
NY139	New York	1.087	18.0	3.1	1	39/1	39	1		3% Vas	0%	0%
MSJ036-A	Michigan	1.083	17.3	3.2	2	27/13	27	13		15% Vas, 13% Bru, 5% BC	0%	0%
Ivory Crisp	Idaho	1.080	16.7	3.1	1	33/6	33	6		3% Z , 10% Vas, 3% Bru	3%	0%

Average 2% 2%

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

Addendum to Tables Dalhart 3a, 3b, 3c, 3d, 3e, and 3f
Snack food Trial

Location:

Dalhart, Texas

Soil Type

Dallum Fine Sand Loam

Seed Source

Colorado

Date:

		DAP
Planted	May 13, 2008	
Vines Killed (Red Chip)	September 8, 2008	115
Vines Killed (Russet)	September 26, 2008	133
Harvested (Red Chip)	September 15, 2008	122
Harvested (Russet)	September 29, 2008	136

Plot Information:

Size of Plots	10'
Spacing Between Hills	12"
Spacing Between Rows	28"
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:
205-221-50 # per acre

Irrigation:

Center Pivot

Seed Treatment

Tops MZ Gaucho

Insecticide:

Platinum, Fulfill, Thimet, LI 700, Spintor, AgriMek, Superb, Reaper, Rimon

Herbicides Applied:

Medal, Sencor, Eptam, Matrix, Liberate, Intensity, Superb, Reglone, Dual

Fungicide Applied:

Quadris, Ultra Flourish, Headline, Echo, Manzate, Endura, Revus Top, Scala, SuperTin

Environmental Factors:

Temperature was higher than average for the last week in May and the first and second week in June. Precipitation was high than normal during the growing season

Dalhart Total yield, total yield of U.S. No.1, less than 1 inch tubers and culls/No.2 potatoes and general rating of 30 entries
 Table 4a. in the Texas Advanced Chip Selection Trial grown near Dalhart, Texas-2008.

Variety or Selection	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Under 1 in.	Culls/ No.2	General Rating ¹ Grading
		Total Yield	1-2 in.	2-3 in.	Over 3 in.			
TX1673-1W	472.8	471.0	52.8	194.6	223.6	1.8	0.0	3.2
AOTX95295-1(W)	441.8	439.0	14.2	301.4	123.4	2.8	0.0	3.5
NDTX059897-1Y/Y	442.8	432.8	30.8	321.8	80.2	10.0	0.0	3.7
Atlantic	427.8	425.6	18.4	291.2	116.0	2.2	0.0	3.3
ATX85404-8W	424.8	414.6	20.6	258.2	135.8	10.2	0.0	3.5
Chipeta	346.4	346.4	6.0	136.0	204.4	0.0	0.0	2.9
NDTX059828-2W	324.0	307.4	45.6	261.8	0.0	16.6	0.0	3.3
COTX03270-3W	318.2	307.4	11.8	179.4	116.2	3.0	7.8	2.8
COTX03270-1W	306.8	300.6	15.2	268.4	17.0	4.2	2.0	3.6
TX03196-1W	291.8	287.8	31.2	236.0	20.6	4.0	0.0	3.5
AOTX95309-3W	290.2	278.4	85.0	193.4	0.0	11.8	0.0	3.6
Ivory Crisp	273.2	269.8	7.2	122.6	140.0	3.4	0.0	3.1
ATX03409-1W/Y	266.4	260.0	18.4	190.4	51.2	6.4	0.0	3.0
AOTX95309-1W	250.6	249.6	13.4	212.8	23.4	1.0	0.0	3.4
ATX00289-4W	219.2	217.6	8.8	143.8	65.0	1.6	0.0	2.9
COTX02377-1W	217.4	211.0	18.4	163.2	29.4	6.4	0.0	3.2
NDTX059608-1Ru	210.4	209.6	4.2	84.8	120.6	0.8	0.0	2.3
ATX03409-7W/Y	209.8	201.2	12.6	134.2	54.4	5.6	3.0	2.8
ATX03409-2W/Y	193.6	189.0	22.2	132.6	34.2	4.0	0.6	2.7
ATX03409-3W/Y	181.0	178.6	11.0	127.0	40.6	2.4	0.0	2.9
NDTX059902-1W	157.0	157.0	3.0	88.2	65.8	0.0	0.0	3.0
NDTX7571-3AW	158.2	155.6	10.6	99.6	45.4	2.6	0.0	3.0
NDTX059632-1W	176.0	152.8	11.2	141.6	0.0	21.6	1.6	3.4
PATX99P10-1R/R	152.4	151.0	8.4	136.0	6.6	1.4	0.0	3.2
NDTX059905-1Y/Y	152.6	149.0	10.2	112.0	26.8	3.6	0.0	3.0
ATX03409-6W/Y	159.2	146.0	19.2	126.8	0.0	13.2	0.0	2.9
04-3315-1W/W-P	127.8	108.6	12.8	86.0	9.8	4.0	15.2	1.6
ATX98466-5R/W-R	72.0	68.0	12.6	55.4	0.0	4.0	0.0	3.0
COTX00328-1Pu/Ypu	64.4	64.4	6.2	58.2	0.0	0.0	0.0	2.9
04-3311-4W/W-P	27.8	27.0	7.8	19.2	0.0	0.8	0.0	1.0
Average	276.2	270.5	19.7	181.3	69.6	5.1	0.6	3.1
L.S.D. (.05)	42.0	40.0	ns	63.0	39.0	7.5	ns	0.3

¹ 1=very poor to 5= excellent

Dalhart
Table 4b. Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 30 entries in the Texas Advanced Chip Selection Trial grown near Dalhart, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Under 1 in.	Culls/ No. 2	Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	1-2 in.	2-3 in.	Over 3 in.						
TX1673-1W	99.6	12.2	40.7	46.7	0.4	0.0	1.071	15.1	Oblong	White
AOTX95295-1(W)	99.4	3.1	68.4	27.9	0.6	0.0	1.083	17.3	Round	White
NDTX059897-1Y/Y	97.9	6.9	72.9	18.1	2.1	0.0	1.076	16.1	Round	White
Atlantic	99.5	4.0	66.5	28.9	0.5	0.0	1.091	18.8	Round	White
ATX85404-8W	97.5	4.8	60.4	32.3	2.5	0.0	1.076	16.1	Round	White
Chipeta	100.0	1.8	39.7	58.5	0.0	0.0	1.076	16.1	Oblong	White
NDTX059828-2W	95.0	15.2	79.8	0.0	5.0	0.0	1.066	14.3	Round	White
COTX03270-3W	95.9	3.8	56.1	36.0	1.0	3.0	1.074	15.7	Round	White
COTX03270-1W	98.0	5.0	88.0	5.0	1.4	0.6	1.082	17.2	Oblong	White
TX03196-1W	98.6	11.6	80.5	6.5	1.4	0.0	1.067	14.4	Round	White
AOTX95309-3W	96.3	26.3	70.0	0.0	3.7	0.0	1.077	16.2	Round	White
Ivory Crisp	98.7	2.6	45.4	50.6	1.3	0.0	1.080	16.7	Round	White
ATX03409-1W/Y	97.6	6.9	71.5	19.2	2.4	0.0	1.083	17.4	Round	White
AOTX95309-1W	99.6	5.5	84.4	9.7	0.4	0.0	1.079	16.5	Round	White
ATTX00289-4W	99.3	3.8	65.1	30.4	0.7	0.0	1.075	15.8	Oblong	White
COTX02377-1W	96.8	8.7	75.9	12.2	3.2	0.0	1.073	15.6	Round	White
NDTX059608-1Ru	99.6	2.1	41.2	56.3	0.4	0.0	1.071	15.2	Oblong	White
ATX03409-7W/Y	96.5	5.2	65.5	25.7	2.2	1.4	1.081	17.0	Round	White
ATX03409-2W/Y	97.5	12.3	72.2	13.0	2.2	0.3	1.075	15.8	Round	White
ATX03409-3W/Y	98.7	6.1	70.5	22.0	1.3	0.0	1.076	16.0	Round	White
NDTX059902-1W	100.0	1.8	59.5	38.8	0.0	0.0	1.077	16.2	Round	White
NDTX7571-3AW	98.3	7.3	62.5	28.5	1.7	0.0	1.079	16.6	Round	White
NDTX059632-1W	86.8	6.4	80.5	0.0	12.3	0.9	1.087	18.0	Round	White
PATX99P10-1R/R	99.1	5.0	90.4	3.7	0.9	0.0	1.063	13.8	Oblong	Red
NDTX059905-1Y/Y	98.1	8.3	74.3	15.5	1.9	0.0	1.072	15.3	Oblong	White
ATX03409-6W/Y	91.9	12.0	79.9	0.0	8.1	0.0	1.084	17.5	Oblong	White
04-3315-1W/W-P	87.4	10.0	69.1	8.3	3.1	9.5	1.074	15.7	Oblong	White
ATTX98466-5R/W-R	95.5	19.0	76.6	0.0	4.5	0.0	1.070	15.0	Oblong	White
COTX00328-1Pu/Ypu	100.0	9.2	90.8	0.0	0.0	0.0	1.049	11.2	Round	White
04-3311-4W/W-P	96.3	32.9	63.4	0.0	3.7	0.0	1.063	13.8	Round	White
Average	97.8	7.1	67.3	23.4	2.0	0.2	1.076	16.1		
L.S.D. (.05)	6.3	13.6	20.7	13.4	3.2	ns	0.006	1.0		

Dalhart
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 30 entries in the Texas Advanced Chip Selection Trial grown near Dalhart, Texas-

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	
TX1673-1W	6.3	7.9	95	95	2.0	4.7	3.3	4.7	35
AOTX95295-1(W)	9.4	5.6	65	88	2.0	4.6	4.1	4.6	3
NDTX059897-1Y/Y	12.1	4.7	74	78	1.5	4.3	3.6	4.2	18
Atlantic	8.3	6.1	75	91	1.6	4.6	3.8	4.6	6
ATX85404-8W	13.3	5.5	58	60	1.5	3.5	4.3	3.8	0
Chipeta	6.0	7.9	55	80	2.0	4.7	5.0	4.7	0
NDTX059828-2W	16.1	3.1	68	73	1.8	3.0	3.4	3.1	20
COTX03270-3W	12.2	5.6	40	48	2.0	3.3	4.0	3.2	0
COTX03270-1W	11.2	4.5	56	64	2.0	3.8	3.4	3.5	20
TX03196-1W	10.3	4.2	61	71	2.0	2.3	2.5	2.3	53
AOTX95309-3W	9.8	3.2	90	93	2.0	4.1	2.7	4.2	45
Ivory Crisp	6.6	7.7	43	58	2.0	3.0	3.4	3.3	30
ATX03409-1W/Y	7.6	4.7	76	76	3.0	2.0	3.0	2.0	30
AOTX95309-1W	10.0	4.2	59	71	2.0	2.6	3.7	2.9	10
ATTX00289-4W	8.7	5.8	38	46	1.5	2.8	3.8	3.4	10
COTX02377-1W	9.8	4.0	53	56	1.5	1.5	2.7	2.0	29
NDTX059608-1Ru	7.1	8.1	38	38	1.5	1.5	4.9	2.0	0
ATX03409-7W/Y	14.0	5.2	29	30	2.0	1.5	4.0	2.0	8
ATX03409-2W/Y	10.0	3.6	50	55	2.0	2.0	2.8	3.0	53
ATX03409-3W/Y	8.4	5.1	43	43	2.0	3.0	3.7	3.0	20
NDTX059902-1W	7.5	6.4	31	36	1.5	3.0	3.7	3.0	5
NDTX7571-3AW	7.0	4.9	43	48	2.0	2.0	3.9	2.0	8
NDTX059632-1W	11.5	3.8	40	40	2.0	3.0	2.8	3.0	50
PATX99P10-1R/R	6.3	3.4	70	76	1.5	2.0	1.5	2.0	100
NDTX059905-1Y/Y	12.9	4.5	26	26	1.5	2.0	2.8	2.0	50
ATX03409-6W/Y	11.5	2.7	55	58	2.0	2.0	4.0	0.0	0
04-3315-1W/W-P	16.3	3.7	18	21	1.5	2.0	3.0	2.5	38
ATX98466-5R/W-R	9.9	2.7	33	33	1.5	1.3	1.5	1.3	88
COTX00328-1Pu/Ypu	5.8	4.2	26	26	2.0	3.0	3.5	3.0	10
04-3311-4W/W-P	4.8	3.3	38	38	2.0	4.7	3.8	4.7	11
Average	9.7	5.2	55	62	1.9	3.0	3.5	3.1	24
L.S.D. (.05)	4.1	1.0	20	23	1.0	0.5	0.7	0.4	23

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

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

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

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

Dalhart
Table 4d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 30 entries in the Texas Advanced Chip Selection Trial grown near Dalhart, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
TX1673-1W	1.0	3.7	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX95295-1(W)	1.0	1.6	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
NDTX059897-1Y/Y	3.0	1.5	2.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	5	0	0	3
Atlantic	1.0	1.0	2.1	4.0	1.4	5.0	5.0	5.0	5.0	5.0	20	0	0	3
ATX85404-8W	1.0	1.6	1.0	4.0	1.0	5.0	5.0	5.0	5.0	4.1	5	0	0	0
Chipeta	1.0	3.3	1.5	4.0	1.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
NDTX059828-2W	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX03270-3W	1.0	2.0	1.0	4.0	1.0	4.0	5.0	5.0	5.0	5.0	43	0	0	0
COTX03270-1W	1.0	3.6	1.5	4.0	1.0	5.0	5.0	5.0	5.0	5.0	8	0	0	0
TX03196-1W	1.0	1.6	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	8
AOTX95309-3W	1.0	1.8	1.0	3.9	1.0	5.0	5.0	5.0	5.0	5.0	3	0	0	0
Ivory Crisp	1.0	1.8	1.0	4.0	1.0	5.0	5.0	5.0	5.0	2.5	10	0	0	0
ATX03409-1W/Y	1.0	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
AOTX95309-1W	1.0	1.7	1.0	4.2	1.0	5.0	5.0	5.0	5.0	5.0	15	0	0	0
ATTX00289-4W	1.0	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	3	0	3	0
COTX02377-1W	1.0	2.0	1.5	4.0	1.0	5.0	5.0	5.0	5.0	5.0	3	0	0	0
NDTX059608-1Ru	1.0	3.6	2.5	4.0	1.8	5.0	5.0	5.0	5.0	5.0	30	0	0	0
ATX03409-7W/Y	1.0	1.5	2.2	4.0	1.3	5.0	5.0	5.0	5.0	5.0	23	0	0	0
ATX03409-2W/Y	1.0	1.1	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	10	0	0	0
ATX03409-3W/Y	1.0	1.0	2.1	4.0	1.7	5.0	5.0	5.0	5.0	5.0	3	0	0	0
NDTX059902-1W	1.0	1.5	1.5	4.1	1.0	5.0	5.0	5.0	5.0	5.0	13	0	0	3
NDTX7571-3AW	1.0	3.7	1.4	4.0	1.0	5.0	5.0	5.0	5.0	5.0	43	0	0	0
NDTX059632-1W	1.0	1.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	8	0	0	0
PATX99P10-1R/R	3.0	3.7	1.0	4.0	4.2	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX059905-1Y/Y	2.1	1.9	1.4	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX03409-6W/Y	1.0	1.0	2.4	4.4	1.4	5.0	5.0	5.0	5.0	5.0	0	0	0	0
04-3315-1W/W-P	3.5	3.1	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX98466-5R/W-R	2.4	3.6	1.0	4.5	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX00328-1Pu/Ypu	1.5	3.8	1.0	4.0	4.5	5.0	5.0	5.0	5.0	5.0	3	0	0	0
04-3311-4W/W-P	1.4	1.0	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average	1.3	2.2	1.3	4.0	1.4	5.0	5.0	5.0	5.0	4.9	8	0	0	1
L.S.D. (.05)	0.1	0.2	0.2	0.1	0.1	0.2				0.2	17		ns	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 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Dalhart
Table 4e. Notes and general rating for all reps of 30 entries in the Texas Advanced Chip Selection Trial grown near Dalhart, Texas-2008.

Variety or Selection	Notes Grading	General Rating Grading
TX1673-1W	heart shaped, Oversize +, nice interior	3.2, 3.2, 3.2, 3.2
AOTX95295-1(W)	smooth	3.8, 3.6, 3.5, 3.2
NDTX059897-1Y/Y	nice, Buff	4, 3.6, 3.5, 3.6
Atlantic	Buff	3.2, 3.5, 3.2, 3.2
ATX85404-8W	over size, feathering, nice internal	3.8, 3.3, 3.8, 3.2
Chipeta	oversize, Rough, greening, soft	3, 3, 3, 2.5
NDTX059828-2W	nice flesh	3.3, 3.4, 3.3, 3.2
COTX03270-3W	rough, green heads, Drop +	2.8, 3.2, 2.5, 2.5
COTX03270-1W	Vivaldi like shape, keep flesh?, green, nice interior, fresh market shape, Oblong,	3.5, 3.7, 3.5, 3.5
TX03196-1W	BOT	3.6, 4, 3.3, 3.2
AOTX95309-3W	nice flesh, BOT, small	3.6, 4, 3.3, 3.5
Ivory Crisp	Green, Feathering, oversize	3.4, 3, 3.1, 2.8
ATX03409-1W/Y	green +, small	3, 3, 3, 3
AOTX95309-1W		3.8, 3.6, 3, 3.3
ATX00289-4W	some pointed, drop, nice flesh	2.8, 3, 2.8, 3
COTX02377-1W	nice interior, small	3.2, 3.5, 3, 3
NDTX059608-1Ru	oversize, Rot, Drop, low yield	2.5, 2.6, 2, 2
ATX03409-7W/Y	Drop +, white flesh, Buff +, Low yield	3, 3, 2.7, 2.6
ATX03409-2W/Y	white flesh, potential salad, Drop, Low yield, sticky stolen	3, 3, 2.5, 2.3
ATX03409-3W/Y	Low yield, nice internal	3, 2.8, 3, 2.8
NDTX059902-1W	light set, Drop ??, keep ??, low yield	3, 2.8, 3, 3
NDTX7571-3AW	Buff, low yield, Drop?, Drop	3, 2.8, 3.5, 2.5
NDTX059632-1W	Low yield, small, pointed	3.4, 3.4, 3.4, 3.4
PATX99P10-1R/R	smooth, small	3.1, 3.2, 3.1, 3.2
NDTX059905-1Y/Y	stem end attachment, light yellow flesh	3.2, 3, 2.8, 3
ATX03409-6W/Y	small, nice interior, small	3, 2.8, 3, 2.8
04-3315-1W/W-P	purple flesh, Drop	1.5, 1.5, 2, 1.5
ATX98466-5R/W-R		3, 3, 3, 3
COTX00328-1Pu/Ypu	purple streak, road map	2.7, 2.7, 3, 3
04-3311-4W/W-P	Small, Drop ++	1, 1, 1, 1

Dalhart Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra
Table 4f. Defect at chipping, and percentage 30 entries in the Texas Advanced Chip Selection Trial grown near Dalhart, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good Chip	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
TX1673-1W	Colorado	1.071	15.1	3.2	1	25/14	25	14	15% Vas, 21% BC	0%	0%
AOTX95295-1(W)	Colorado	1.083	17.3	3.5	1	33/7	33	7	10% Vas, 8% Bru,BOT	0%	0%
NDTX059897-1Y/Y	Dalhart	1.076	16.1	3.7	3	12/22	12	22	65% Dk	0%	0%
Atlantic	Oregon	1.091	18.8	3.3	1	18/11	18	11	34% Vas, 3% HH	0%	0%
ATX85404-8W	Dalhart	1.076	16.1	3.5	1	24/5	24	5	3% Z, 10% PreZ, 3% Vas	3%	0%
Chipeta	Oregon	1.076	16.1	2.9	2	7/23	7	23	70% Vas, 7% Dk	0%	0%
NDTX059828-2W	Dalhart	1.066	14.3	3.3	1	38/1	38	1	3% Vas, BOT	0%	0%
COTX03270-3W	Dalhart	1.074	15.7	2.8	1	31/7	31	7	8% Vas, 5% HH, 5% Bru	0%	0%
COTX03270-1W	Dalhart	1.082	17.2	3.6	1	38/2	38	2	3% Z, 3% Dk	3%	0%
TX03196-1W	Dalhart	1.067	14.4	3.5	1	34/2	34	2	6% Bru, BOT	0%	0%
AOTX95309-3W	Dalhart	1.077	16.2	3.6	1	32/8	32	8	20% Vas	0%	0%
Ivory Crisp	Idaho	1.080	16.7	3.1	1	33/6	33	6	3% Z, 10% Vas, 3% Bru	3%	0%
ATX03409-1W/Y	Dalhart	1.083	17.4	3.0	1	19/1	19	1	5% Bru	0%	0%
AOTX95309-1W	Dalhart	1.079	16.5	3.4	1	38/9	38	9	9% Vas, 6% Bru, 2% Dk	0%	0%
ATTX00289-4W	Dalhart	1.075	15.8	2.9	2	20/20	20	20	5% Z, 30% Vas, 15% BC	5%	0%
COTX02377-1W	Dalhart	1.073	15.6	3.2	1	37/3	37	3	5% PreZ, 3% HH, BOT	5%	0%
NDTX059608-1Ru	Dalhart	1.071	15.2	2.3	1+	16/14	16	14	7% Z, 23% Vas, 7% HH, 10%	7%	0%
ATX03409-7W/Y	Dalhart	1.081	17.0	2.8	1	32/8	32	8	13% Vas, 3% HH, 5% BC, drop	0%	0%
ATX03409-2W/Y	Dalhart	1.075	15.8	2.7	1+	32/9	32	9	20% Vas, 2% Bru	0%	0%
ATX03409-3W/Y	Dalhart	1.076	16.0	2.9	2	15/5	15	5	25% Vas,drop	0%	0%
NDTX059902-1W	Dalhart	1.077	16.2	3.0	1	28/12	28	12	10% Z, 20% Vas, drop	10%	0%
NDTX7571-3AW	Dalhart	1.079	16.6	3.0	1+	26/9	26	9	9% Z, 11% Vas, 9% HH	9%	0%
NDTX059632-1W	Dalhart	1.087	18.0	3.4	2	10/0	10	0	DROP	0%	0%
PATX99P10-1R/R	Dalhart	1.063	13.8	3.2	3+++	34/6	34	6	3% Bru, 13% Dk	0%	0%
NDTX059905-1Y/Y	Dalhart	1.072	15.3	3.0	1+	23/15	23	15	21% PreZ, 13% Vas, 5% Bru	21%	0%
ATX03409-6W/Y	Dalhart	1.084	17.5	2.9	1	15/1	15	1	6% Vas	0%	0%
04-3315-1W/W-P	Springlake	1.074	15.7	1.6	3	38/3	38	3	7% Dk	0%	0%
ATTX98466-5R/W-R	Dalhart	1.070	15.0	3.0	3	29/4	29	4	12% Bru,nice	0%	0%
COTX00328-1Pu/Ypu	Dalhart	1.049	11.2	2.9	2	25/3	25	3	11% Bru, nice	0%	0%
04-3311-4W/W-P	Springlake	NA	NA	1.0	1	29/2	29	2	6% Vas,nice	0%	0%

Average 2% 0%

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

Addendum to Tables Dalhart 4a, 4b, 4c, 4d, 4e, and 4f
Texas Advanced Chip Selection Trial

Location:

Dalhart, Texas

Soil Type

Dallum Fine Sand Loam

Seed Source

Colorado

Date:

		DAP
Planted	May 13, 2008	
Vines Killed (Red Chip)	September 8, 2008	115
Vines Killed (Russet)	September 26, 2008	133
Harvested (Red Chip)	September 15, 2008	122
Harvested (Russet)	September 29, 2008	136

Plot Information:

Size of Plots	10'
Spacing Between Hills	12"
Spacing Between Rows	28"
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:
205-221-50 # per acre

Irrigation:

Center Pivot

Seed Treatment

Tops MZ Gaucho

Insecticide:

Platinum, Fulfill, Thimet, LI 700, Spintor, AgriMek, Superb, Reaper, Rimon

Herbicides Applied:

Medal, Sencor, Eptam, Matrix, Liberate, Intensity, Superb, Reglone, Dual

Fungicide Applied:

Quadris, Ultra Flourish, Headline, Echo, Manzate, Endura, Revus Top, Scala, SuperTin

Environmental Factors:

Temperature was higher than average for the last week in May and the first and second week in June. Precipitation was high than normal during the growing season

Dalhart
Table 5

Tuber type, skin color, inventory weight, chip color, of 17 entries to be Advanced from the
2007 Chip Selection Trial grown near Dalhart, Texas-2008.

Variety or Selection	Tuber Type	Skin Color	Inventory Weight	Chip Color ¹
NDTX059979-1W	Round	White	5.9	1
NDTX059997-1W	Oblong	White	10.0	1
NDTX059997-2W	Round	White	8.6	1
NDTX059997-3W	Round	White	8.0	1
NDTX059997-4W	Round	White	5.5	1+
NDTX059997-6W	Round	White	5.8	1
NDTX059997-7W	Round	White	4.7	1
NDTX059997-8W	Round	White	6.2	1
TX05246-3W	Round	White	10.6	1+
TX05249-10W	Round	White	15.0	1
TX05249-11W	Round	White	11.6	1+
TX05249-12W	Round	White	12.5	1+
TX05249-14W	Round	White	9.6	1+
TX05249-3W	Round	White	8.0	1+
TX05249-5W	Round	White	9.9	2
TX05249-8W	Round	White	15.0	2
TX05254-2W	Round	White	18.5	2+

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

¹1=light, 3+=very dark

Springlake Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 40 entries in the Texas Advanced Selection Table 6a. Russet Trial grown near Dalhart, Texas-2008.

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	683.9	605.3	57.2	173.6	374.4	50.2	26.8	1.6	3.9	4.4
Russet Norkotah296	723.1	506.1	50.8	123.2	332.0	180.8	23.2	13.0	4.3	4.6
AOTX95265-1RU	549.9	452.4	45.6	134.4	272.4	73.1	20.4	4.0	2.9	4.1
ATX9202-3RU	507.5	443.6	96.4	243.6	103.6	28.6	32.0	3.2	3.6	3.5
AOTX95265-2ARU	538.6	404.8	42.0	121.6	241.2	121.7	12.0	0.0	2.9	3.8
AOTX02060-1Ru	448.8	401.1	48.3	160.5	192.3	27.0	15.5	5.2	3.4	4.1
Russet Norkotah278	592.0	395.0	51.5	108.3	235.2	164.6	29.1	3.4	3.9	4.1
ATX97147-4RU	559.7	351.0	32.6	101.2	217.2	131.2	17.8	59.6	3.5	3.4
Russet Norkotah (CO)	431.0	331.0	50.1	126.1	154.7	65.1	28.5	6.4	3.9	3.9
AOTX96265-2RU	393.6	315.0	26.6	98.0	190.4	67.4	11.2	0.0	3.6	4.1
ATX9332-12RU	344.9	305.4	26.7	111.7	167.0	12.4	10.9	16.2	3.4	3.5
AOTX95265-4RU	465.9	299.2	74.9	86.7	137.6	137.6	29.1	0.0	3.6	3.5
AOTX98152-3RU	365.2	288.0	80.8	148.4	58.8	46.0	28.0	3.2	3.5	3.4
NDTX8773-4RU	323.8	251.0	38.1	99.7	113.1	20.2	28.3	24.4	3.1	2.4
AOTX99194-1Ru	269.4	244.0	38.4	112.8	92.8	0.0	25.3	0.0	3.2	3.4
TXCR-2RU	423.2	241.9	37.3	65.6	138.9	111.0	12.5	57.8	3.6	2.8
AOTX98096-1Ru	287.2	234.2	53.3	82.7	98.1	14.0	35.2	3.8	3.5	3.0
ATX03077-2Ru	317.6	222.2	32.2	76.2	113.8	70.6	15.2	9.6	3.2	3.4
AOTX96084-1Ru	248.0	212.4	124.0	61.6	26.8	0.0	34.0	1.6	2.8	2.6
ATX03424-1Ru	268.0	210.8	74.4	101.2	35.2	0.0	54.8	2.4	2.7	3.3
ATX84378-6RU	275.2	205.1	47.5	47.7	109.9	60.3	9.9	0.0	3.7	3.5
AOTX02066-1Ru	250.8	202.0	42.8	75.0	84.2	29.4	19.4	0.0	3.0	3.0
AOTX95265-3Ru	237.1	200.0	45.6	91.7	62.7	25.3	11.7	0.0	3.2	3.2
Stampede Russet	290.8	199.6	41.2	90.8	67.6	68.8	22.4	0.0	3.5	3.9
ATX03003-1Ru	221.6	196.8	53.9	85.1	57.9	2.4	22.4	0.0	2.8	2.8
AOTX02136-1Ru	223.2	191.6	76.8	62.4	52.4	0.0	31.6	0.0	2.7	2.5
ATX03003-7Ru	232.3	188.0	62.9	90.1	34.9	2.8	40.3	1.2	2.9	2.5
TXA549-1Ru	314.2	183.8	21.9	24.6	137.3	108.5	9.1	12.8	3.6	3.5
AOTX96216-2Ru	210.7	181.6	41.9	77.3	62.4	11.2	13.9	4.0	3.1	3.0
AOTX95295-1Ru	232.8	176.0	39.6	75.4	61.0	23.0	29.6	4.2	3.0	3.0
AOTX99008-1Ru	264.9	168.6	73.3	56.0	39.2	10.8	28.5	57.0	2.8	2.3
AOTX95295-3Ru	191.6	157.0	54.8	56.8	45.4	9.6	25.0	0.0	3.0	3.0
AOTX95269-1Ru	170.2	152.8	54.9	47.7	50.1	0.0	17.3	0.0	2.2	2.8
TXCR-4RU	222.2	149.0	36.2	61.2	51.6	44.6	28.6	0.0	3.2	2.8
AOTX96208-1Ru	180.4	148.6	60.4	48.6	39.6	2.4	29.4	0.0	2.8	2.8
ATX99194-3Ru	166.2	147.7	29.9	55.2	62.7	5.4	13.1	0.0	2.6	3.0
AOTX98137-1RU	156.0	141.6	52.8	55.2	33.6	0.0	14.4	0.0	3.1	2.6
TXNS551	151.7	128.0	53.1	43.7	31.2	0.0	23.7	0.0	2.9	2.9
TXNS410	141.8	119.6	41.6	52.4	25.6	2.4	19.8	0.0	3.1	2.8
ATX03068-1Ru	75.4	70.0	4.8	23.6	41.6	2.6	2.8	0.0	2.7	2.9
Average	323.8	250.6	50.4	89.0	111.2	43.3	22.6	7.4	3.2	3.2
L.S.D. (.05)	57.4	39.3	22.2	35.7	41.5	41.0	12.1	26.0	0.8	0.4

¹ 1=very poor to 5=excellent

Springlake
Table 6b.Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 40 entries in the Texas Advanced
Selection Russet Trial grown near Dalhart, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
ATX91137-1RU	88.7	8.4	25.5	54.9	7.1	3.9	0.2	1.072	15.4	Oblong	Russet
Russet Norkotah296	69.9	7.1	17.1	45.7	25.1	3.2	1.8	1.077	16.3	Long	Russet
AOTX95265-1RU	82.7	8.3	24.7	49.7	12.9	3.7	0.7	1.083	17.3	Long	Russet
ATX9202-3RU	88.2	19.8	48.7	19.7	4.8	6.3	0.6	1.083	17.2	Oblong	Russet
AOTX95265-2ARU	75.0	7.8	22.6	44.7	22.7	2.2	0.0	1.072	15.4	Long	Russet
AOTX02060-1Ru	88.9	10.4	35.1	43.5	6.3	3.4	1.4	1.081	16.9	Long	Russet
Russet Norkotah278	67.6	8.6	18.6	40.4	27.0	4.9	0.5	1.077	16.2	Long	Russet
ATX97147-4RU	62.8	5.9	18.6	38.3	23.6	3.2	10.4	1.078	16.5	Oblong	Russet
Russet Norkotah (CO)	77.1	11.9	30.0	35.3	14.7	6.6	1.7	1.079	16.6	Long	Russet
AOTX96265-2RU	79.9	6.7	24.2	48.9	17.4	2.8	0.0	1.084	17.5	Long	Russet
ATX9332-12RU	88.8	7.7	32.1	49.0	3.4	3.2	4.5	1.099	20.2	Oblong	Russet
AOTX95265-4RU	64.4	16.2	18.9	29.3	29.4	6.2	0.0	1.077	16.2	Long	Russet
AOTX98152-3RU	79.0	22.1	39.5	17.3	12.2	7.7	1.1	1.096	19.7	Oblong	Russet
NDTX8773-4RU	78.5	11.6	32.2	34.7	5.5	8.9	7.1	1.059	13.1	Oblong	Russet
AOTX99194-1Ru	90.0	13.8	42.5	33.7	0.0	10.0	0.0	1.082	17.1	Long	Russet
TXCR-2RU	57.3	8.9	15.0	33.4	24.5	2.8	15.5	1.077	16.3	Long	Russet
AOTX98096-1Ru	82.5	20.0	29.2	33.3	3.6	12.9	1.0	1.067	14.4	Long	Russet
ATX03077-2Ru	69.9	9.9	23.8	36.3	22.0	4.6	3.5	1.080	16.7	Long	Russet
AOTX96084-1Ru	86.3	52.1	24.5	9.6	0.0	13.2	0.5	1.064	14.0	Long	Russet
ATX03424-1Ru	78.8	28.4	37.5	13.0	0.0	20.5	0.7	1.070	15.1	Long	Russet
ATX84378-6RU	74.7	17.0	17.1	40.5	21.8	3.5	0.0	1.067	14.5	Oblong	Russet
AOTX02066-1Ru	81.2	17.1	30.7	33.5	10.9	7.9	0.0	1.083	17.3	Oblong	Russet
AOTX95265-3Ru	83.9	19.8	38.9	25.1	11.2	4.9	0.0	1.067	14.4	Oblong	Russet
Stampede Russet	69.2	14.7	31.5	22.9	23.0	7.9	0.0	1.065	14.2	Oblong	Russet
ATX03003-1Ru	89.1	25.1	37.9	26.1	1.1	9.8	0.0	1.069	14.9	Oblong	Russet
AOTX02136-1Ru	85.8	33.3	29.1	23.4	0.0	14.2	0.0	1.070	14.9	Oblong	Russet
ATX03003-7Ru	80.9	26.8	39.2	15.0	1.1	17.4	0.6	1.084	17.5	Oblong	Russet
TXA549-1Ru	59.9	6.6	7.9	45.3	33.6	2.8	3.7	1.078	16.4	Oblong	Russet
AOTX96216-2Ru	86.9	20.3	36.4	30.2	4.7	6.5	1.9	1.069	14.8	Long	Russet
AOTX95295-1Ru	76.3	17.8	32.6	25.8	9.3	12.2	2.2	1.070	15.0	Long	Russet
AOTX99008-1Ru	66.3	29.1	22.1	15.1	4.9	11.3	17.5	1.090	18.5	Long	Russet
AOTX95295-3Ru	82.0	28.8	30.4	22.8	4.9	13.1	0.0	1.063	13.8	Long	Russet
AOTX95269-1Ru	89.8	31.9	28.3	29.6	0.0	10.2	0.0	1.069	14.8	Oblong	Russet
TXCR-4RU	68.1	16.9	27.9	23.3	18.9	13.0	0.0	1.079	16.5	Oblong	Russet
AOTX96208-1Ru	81.9	32.8	27.0	22.0	1.4	16.7	0.0	1.062	13.6	Oblong	Russet
ATX99194-3Ru	88.6	18.4	33.2	37.0	3.2	8.2	0.0	1.073	15.5	Oblong	Russet
AOTX98137-1RU	90.8	33.8	35.4	21.5	0.0	9.2	0.0	1.062	13.5	Oblong	Russet
TXNS551	84.2	35.3	28.5	20.5	0.0	15.8	0.0	1.060	13.1	Long	Russet
TXNS410	84.5	28.9	37.2	18.4	1.5	14.0	0.0	1.060	13.3	Long	Russet
ATX03068-1Ru	93.0	6.2	31.0	55.8	3.4	3.7	0.0	1.078	16.4	Long	Russet
Average	79.3	18.7	29.1	31.6	10.4	8.3	1.9	1.074	15.8		
L.S.D. (.05)	10.0	9.0	11.6	12.1	10.0	4.5	7.2	0.010	1.8		

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 40 entries in the Texas Advanced Selection Russet Trial grown near Dalhart, Texas-2008.

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	
ATX91137-1RU	8.0	9.2	96	98	2.0	4.6	3.3	4.7	30
Russet Norkotah296	8.4	9.7	99	100	2.0	4.6	4.1	4.7	18
AOTX95265-1RU	7.2	8.4	84	98	1.5	4.6	4.3	4.7	8
ATX9202-3RU	8.6	6.4	90	95	1.8	4.6	4.1	4.7	13
AOTX95265-2ARU	6.7	9.8	94	95	2.0	4.6	3.8	4.6	23
AOTX02060-1Ru	7.0	8.9	61	79	2.0	4.0	2.3	4.4	69
Russet Norkotah278	7.9	9.5	90	93	1.8	4.6	3.9	4.6	15
ATX97147-4RU	6.1	10.3	86	98	1.8	4.6	4.5	4.7	0
Russet Norkotah (CO)	6.0	7.6	98	100	2.1	4.6	3.8	4.5	23
AOTX96265-2RU	4.5	10.1	88	99	1.8	4.6	4.5	4.7	0
ATX9332-12RU	5.7	8.5	56	74	1.8	4.3	4.5	4.1	0
AOTX95265-4RU	6.7	8.0	89	100	2.0	4.2	4.2	4.2	5
AOTX98152-3RU	9.1	6.3	70	79	1.8	3.0	4.3	3.7	5
NDTX8773-4RU	7.1	7.4	54	69	1.8	3.6	3.5	4.0	33
AOTX99194-1Ru	7.9	6.1	46	63	2.0	2.3	4.2	2.9	10
TXCR-2RU	8.0	9.5	45	63	1.5	3.5	4.5	3.5	0
AOTX98096-1Ru	4.6	6.3	99	100	2.0	2.0	2.5	2.5	68
ATX03077-2Ru	5.6	8.9	66	76	2.0	3.8	3.6	4.0	18
AOTX96084-1Ru	5.2	4.9	95	96	2.0	2.0	2.4	2.1	59
ATX03424-1Ru	6.5	4.8	76	88	2.0	3.9	3.7	4.0	15
ATX84378-6RU	4.2	8.9	78	84	1.5	3.9	2.7	3.8	50
AOTX02066-1Ru	5.3	6.7	61	80	1.5	4.0	2.3	4.2	60
AOTX95265-3Ru	4.6	6.9	75	78	2.0	2.5	2.3	3.0	60
Stampede Russet	5.5	7.3	75	84	1.5	3.5	3.4	3.2	30
ATX03003-1Ru	5.5	5.6	71	80	1.5	2.5	3.1	3.0	23
AOTX02136-1Ru	7.4	5.6	49	55	1.5	2.5	3.5	2.8	43
ATX03003-7Ru	5.9	5.1	68	80	1.8	2.0	4.4	2.3	0
TXA549-1Ru	11.2	11.7	28	33	1.8	1.8	4.6	2.3	0
AOTX96216-2Ru	3.7	6.7	79	89	2.0	2.0	3.5	2.3	35
AOTX95295-1Ru	5.3	6.1	68	78	2.0	2.0	2.6	2.4	58
AOTX99008-1Ru	4.5	5.3	85	93	1.8	4.0	3.0	4.2	45
AOTX95295-3Ru	4.2	5.3	86	88	2.0	2.0	2.0	2.4	73
AOTX95269-1Ru	2.9	6.0	94	99	2.0	2.9	3.3	3.1	25
TXCR-4RU	4.5	6.3	78	88	2.0	2.3	3.8	2.6	13
AOTX96208-1Ru	4.1	4.9	84	93	2.0	2.0	2.5	2.4	60
ATX99194-3Ru	4.7	6.0	49	60	2.0	2.8	3.3	2.6	38
AOTX98137-1RU	5.2	5.8	48	58	2.0	1.7	3.0	2.0	60
TXNS551	3.8	4.7	86	90	2.0	2.0	2.3	2.3	75
TXNS410	3.2	4.7	93	95	2.0	2.5	2.3	2.6	90
ATX03068-1Ru	14.4	8.8	8	8	2.0	1.0	2.0	1.0	80
Average	6.2	7.2	74	82	1.9	3.2	3.4	3.4	33
L.S.D. (.05)	2.8	1.4	18	20	0.2	0.4	0.6	0.5	25

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

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

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

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

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Table 6d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 40 entries in the Texas Advanced Selection Russet Trial grown near Dalhart, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹¹	Percent Internal Brownspot
ATX91137-1RU	1.0	3.7	4.3	4.0	3.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Russet Norkotah296	1.0	4.4	4.8	3.9	4.5	5.0	5.0	5.0	5.0	5.0	18	0	0	0
AOTX95265-1RU	1.0	4.2	4.5	3.9	4.0	5.0	5.0	5.0	5.0	5.0	25	0	0	0
ATX9202-3RU	1.0	3.7	4.0	4.0	4.0	5.0	5.0	5.0	5.0	4.6	3	0	0	0
AOTX95265-2ARU	1.0	4.2	4.5	4.0	4.2	5.0	5.0	5.0	5.0	5.0	18	0	0	0
AOTX02060-1Ru	1.0	4.0	4.4	4.0	3.9	4.5	5.0	5.0	5.0	5.0	5	0	0	0
Russet Norkotah278	1.1	4.4	4.6	3.7	4.5	5.0	5.0	5.0	5.0	5.0	28	0	0	0
ATX97147-4RU	1.0	3.8	4.0	4.0	4.1	5.0	5.0	5.0	5.0	5.0	73	0	0	0
Russet Norkotah (CO)	1.4	4.0	4.2	3.7	4.1	5.0	5.0	5.0	5.0	5.0	8	0	0	0
AOTX96265-2RU	1.0	4.0	3.9	4.0	3.9	5.0	5.0	5.0	5.0	4.1	75	0	0	0
ATX9332-12RU	1.0	3.9	3.6	4.1	3.7	5.0	5.0	5.0	5.0	5.0	43	0	0	0
AOTX95265-4RU	1.0	4.5	4.5	4.0	4.6	5.0	5.0	5.0	5.0	5.0	53	0	0	0
AOTX98152-3RU	1.0	3.3	3.6	4.1	3.0	5.0	5.0	5.0	5.0	5.0	40	0	0	0
NDTX8773-4RU	1.0	3.3	3.8	3.6	3.8	5.0	5.0	5.0	5.0	5.0	70	0	0	0
AOTX99194-1Ru	1.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	25	3	0	0
TXCR-2RU	1.0	4.4	3.0	3.3	3.1	5.0	5.0	5.0	5.0	2.5	8	0	0	0
AOTX98096-1Ru	1.0	4.0	4.0	4.4	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX03077-2Ru	1.0	4.5	4.6	4.0	4.1	5.0	5.0	5.0	5.0	5.0	60	0	0	0
AOTX96084-1Ru	1.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX03424-1Ru	1.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	3	0	0	0
ATX84378-6RU	1.0	3.8	4.4	4.0	4.3	5.0	5.0	5.0	5.0	5.0	50	0	0	0
AOTX02066-1Ru	1.0	3.4	3.6	4.0	3.6	5.0	5.0	5.0	5.0	5.0	5	5	0	0
AOTX95265-3Ru	1.0	4.3	4.1	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
Stampede Russet	1.0	3.8	4.3	4.0	4.1	5.0	5.0	5.0	5.0	5.0	15	0	0	0
ATX03003-1Ru	1.0	3.7	4.4	4.0	4.1	4.8	5.0	5.0	5.0	5.0	5	0	0	0
AOTX02136-1Ru	1.0	3.3	4.0	4.0	3.7	4.5	5.0	5.0	5.0	5.0	0	0	0	0
ATX03003-7Ru	1.0	3.5	4.1	4.0	4.1	5.0	5.0	5.0	5.0	4.8	23	0	0	0
TXA549-1Ru	1.0	3.5	3.7	4.0	3.6	5.0	5.0	5.0	5.0	5.0	55	0	0	0
AOTX96216-2Ru	1.0	4.0	4.0	3.8	3.9	5.0	5.0	5.0	5.0	5.0	3	3	0	3
AOTX95295-1Ru	1.0	4.0	4.5	3.9	4.3	5.0	5.0	5.0	5.0	5.0	8	0	0	0
AOTX99008-1Ru	1.0	3.5	3.7	4.0	3.9	5.0	5.0	5.0	5.0	5.0	15	0	0	0
AOTX95295-3Ru	1.0	3.9	4.5	4.0	4.0	5.0	5.0	5.0	5.0	5.0	3	3	0	0
AOTX95269-1Ru	1.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TXCR-4RU	1.0	4.0	3.0	4.0	2.5	5.0	5.0	5.0	5.0	3.8	3	0	0	0
AOTX96208-1Ru	1.0	4.0	4.2	4.0	4.4	5.0	5.0	5.0	5.0	5.0	8	0	0	0
ATX99194-3Ru	1.0	3.4	3.0	4.0	3.7	4.5	5.0	5.0	5.0	5.0	3	0	0	8
AOTX98137-1RU	1.0	3.8	4.4	4.0	4.1	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TXNS551	1.0	4.0	4.4	4.0	4.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TXNS410	1.0	4.0	4.3	4.0	4.5	5.0	5.0	5.0	5.0	5.0	3	0	0	0
ATX03068-1Ru	1.0	4.0	4.4	4.0	4.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average	1.0	3.9	4.1	4.0	4.0	5.0	5.0	5.0	5.0	4.9	19	0	0	0
L.S.D. (.05)	0.1	0.1	0.1	0.1	0.2					0.4	20	ns		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 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

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Table 6e. Notes and general rating for all reps of 40 entries in the Texas Advanced Selection Russet Trial grown near Dalhart, Texas-2008.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
ATX91137-1RU	BOT, BOT	BOT +, zebra, blocky	4, 3.9, 3.8, 3.8	4.5, 4.5, 4, 4.4
Russet Norkotah296	BOT, BOT, rough, BOT yield	10z?, BOT, rough	4.5, 4.3, 4.2, 4.3	4.5, 4.5, 4.8, 4.5
AOTX95265-1RU	late	BOT, 1OZ	3.9, 4, 3.6, 0	4, 4, 4.4, 4
ATX9202-3RU	late, blocky, small	bruising, feathering, zebra??	3.5, 3.8, 3.3, 3.8	3.5, 3.4, 3.5, 3.5
AOTX95265-2ARU	rough	Rhizoctonia, high yield, rough	3.8, 4, 3.6, 0	3.5, 4, 4, 3.5
AOTX02060-1Ru	some points, growth cracks, drop?	BOT, very nice, keep	3.6, 3.3, 3.7, 3.1	4.5, 4, 4, 4
Russet Norkotah278			3.9, 3.7, 4, 3.8	4, 4, 4.4, 3.8
ATX97147-4RU	shape-, rough, drop good yield, rough, shape, oversized	Rhizoctonia, poor shape, over size, pointed, drop, yield +, shape -	3.7, 3, 3.3, 3.8	3.5, 3, 3.4, 3.6
Russet Norkotah (CO)			4.5, 3.8, 3.6, 3.8	4.3, 3.4, 4.5, 3.4
AOTX96265-2RU	very nice	nice shape, boot, keep, feathering	3, 3.9, 3.6, 3.9	4, 4, 4.5, 3.8
ATX9332-12RU	pointed	Rhizoctonia, pointed	3.3, 3.8, 3.3, 3	3.6, 3.6, 3.5, 3.3
AOTX95265-4RU		pointed, nice flesh, drop, 30z?, some rot	3.2, 3.6, 3.9, 3.8	3.7, 2.8, 3.7, 3.7
AOTX98152-3RU	blocky	, drop ?? blocky, light russet	4, 3.3, 3.3, 3.3	3.5, 3.2, 3.5, 3.4
NDTX8773-4RU	pointed, block, drop, blocky, drop, blocky	too round, block, drop +	3.2, 3.3, 2.8, 3	2.5, 2.5, 2.5, 2
AOTX99194-1Ru	drop	nice shape	3.3, 3.5, 2.8, 3	3.2, 3.7, 3.1, 3.5
TXCR-2RU	drop, drop	feathering, drop +, poor shape	4, 3.9, 3.5, 2.8	2.5, 3, 2.5, 3
AOTX98096-1Ru	large tubers	drop ??	3.5, 4, 3.2, 3.2	2.8, 3.3, 3, 2.8
ATX03077-2Ru	rough large	rough, drop	3.2, 3.2, 3.3, 3	2.7, 3.5, 3.4, 3.8
AOTX96084-1Ru	drop, bad dig	drop +	2.8, 2.8, 2.3, 3.2	2.8, 2.6, 2.6, 2.4
ATX03424-1Ru	drop		3.2, 2.5, 2.5, 2.5	4, 3, 3, 3
ATX84378-6RU		small alligator, Rhizoctonia	3.8, 3.5, 3.8, 3.5	3, 3.6, 3.6, 3.6
AOTX02066-1Ru		drop ??, nice shape, raised eyes, keep, light set, smooth	3.3, 3, 3, 2.8	2.5, 2.8, 3.4, 3.1
AOTX95265-3Ru			3.2, 3, 3.1, 3.6	3.7, 3.3, 3, 2.8
Stampede Russet			3.8, 3.2, 3.5, 3.5	4, 3.8, 3.8, 3.8
ATX03003-1Ru	small	smooth, small lenticels, drop, lenticels, heavy set	2.8, 3, 2.6, 2.8	3.2, 2.5, 2.7, 2.7
AOTX02136-1Ru	bad dig, drop, poor rep drop	ugly net, low yield, drop ++	2.8, 2.8, 2.5, 2.8	2.8, 2.8, 2.5, 2
ATX03003-7Ru	drop?	drop, feathering	3.2, 3, 2.7, 2.7	2, 2.5, 2.8, 2.5
TXA549-1Ru	blocky, low set, BOT-, oversize, light set	Rhizoctonia, hollow heart	3.9, 3.7, 3.4, 3.4	3.5, 3.5, 3, 4
AOTX96216-2Ru		Rhizoctonia	3.3, 3.2, 3, 2.8	3, 2.8, 3, 3.3
AOTX95295-1Ru	drop	Rhizoctonia, some rough, drop	3, 3.2, 2.8, 2.8	3.2, 3, 3, 2.8
AOTX99008-1Ru	small, pointed, drop, drop	drop +, small	2.8, 2.8, 2.8, 2.8	2.5, 2.5, 2, 2
AOTX95295-3Ru	drop	nice skin, small, low yield	3, 3.2, 2.8, 3	3, 3.2, 3, 2.6
AOTX95269-1Ru	bad dig	low yield, drop, drop	2.1, 3.2, 3.3, 0	2.7, 2.8, 2.7, 2.8
TXCR-4RU	drop, drop	drop	3.7, 3.2, 3.2, 2.8	2.5, 3, 2.5, 3.3
AOTX96208-1Ru	drop, drop	drop +	2.5, 2.8, 3.3, 2.5	2.8, 3, 2.8, 2.6
ATX99194-3Ru	drop, drop	spotty, russetting, nice shape, 10z ? ugly net, drop, poor skin finish	2.8, 2.5, 2.5, 2.5	3.1, 3.2, 2.6, 3.2
AOTX98137-1RU	drop	drop, rough	4, 2.2, 4, 2.2	2.8, 2.5, 2.5, 2.5
TXNS551	drop?		3, 3, 2.8, 2.8	2.8, 2.8, 2.8, 3
TXNS410	drop, drop	small	3.2, 2.8, 2.8, 3.7	2.8, 2.5, 3, 2.8
ATX03068-1Ru	drop, bad Rhizoctonia, drop	low yield, low yield	2.8, 2.8, 2.8, 2.2	2.8, 3, 3, 2.8

Springlake Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at
Table 6f. chipping, and percentage Zebra Defect at grading of 40 entries in the Texas Advanced Selection Russet Trial grown near Dalhart, Texas-2008.Springlake, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good	Number of Chip	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
ATX91137-1RU	Colorado	1.072	15.4	4.4	1+	27/13	27	13		8% PreZ , 25% Vas, French Fry	8%	3%
Russet Norkotah296	Barret	1.077	16.3	4.6	2+	4/25	4	25		83% Vas, 3% Bru	0%	3%
AOTX95265-1RU	Colorado	1.083	17.3	4.1	3	5/26	5	26		84% Dk	0%	3%
ATX9202-3RU	Colorado	1.083	17.2	3.5	1+	23/16	23	16		26% Vas, 15% Bru	0%	0%
AOTX95265-2ARU	Colorado	1.072	15.4	3.8	3	7/22	7	22		76% Vas	0%	0%
AOTX02060-1RU	Dalhart	1.081	16.9	4.1	2	17/23	17	23		45% Vas, 3% HH, 10% Bru,	0%	0%
Russet Norkotah278	Barret	1.077	16.2	4.1	3	20/20	20	20		33% Vas, 18% Bru	0%	0%
ATX97147-4RU	Colorado	1.078	16.5	3.4	3	15/25	15	25		8% Z , 3% HH, 3% Bru, 33% Dk,	8%	0%
Russet Norkotah (CO)	Colorado	1.079	16.6	3.9	3+	12/18	12	18		53% Vas, 3% Bru, 3% Dk	0%	0%
AOTX96265-2RU	Colorado	1.084	17.5	4.1	2+	9/34	9	34		67% Vas, 12% Bru	0%	0%
ATX9332-12RU	Colorado	1.099	20.2	3.5	3	22/15	22	15		11% PreZ , 14% Vas, 3% HH,	11%	0%
AOTX95265-4RU	Colorado	1.077	16.2	3.5	2	3/36	3	36		92% Vas, 3% Bru, 14% Dk	0%	18%
AOTX98152-3RU	Colorado	1.096	19.7	3.4	2	3/30	3	30		3% PreZ , 79% Vas, 3% HH, 6%	3%	3%
NDTX8773-4RU	Colorado	1.059	13.1	2.4	3	3/36	3	36		10% Z , 36% Vas, 18% HH, 31%	10%	0%
AOTX99194-1Ru	Dalhart	1.082	17.1	3.4	2+	18/22	18	22		55% Dk	0%	0%
TXCR-2RU	Colorado	1.077	16.3	2.8	2+	0/42	0	42		5% Z , 81% Vas, 14% BC	5%	0%
AOTX98096-1Ru	Dalhart	1.067	14.4	3.0	3	8/22	8	22		73% Dk	0%	0%
ATX03077-2RU	Dalhart	1.080	16.7	3.4	3	14/28	14	28		2% PreZ , 45% Vas, 14% Dk	2%	0%
AOTX96084-1Ru	Dalhart	1.064	14.0	2.6	3+	10/32	10	32		12% Bru, 64% Dk	0%	0%
ATX03424-1Ru	Dalhart	1.070	15.1	3.3	2	8/8	8	8		50% Vas	0%	0%
ATX84378-6RU	Dalhart	1.067	14.5	3.5	2+	19/11	19	11		7% PreZ , 13% Vas, 17% BC	7%	0%
AOTX02066-1Ru	Dalhart	1.083	17.3	3.0	2	20/20	20	20		25% PreZ , 18% Vas, 8% Bru,	25%	0%
AOTX95265-3Ru	Dalhart	1.067	14.4	3.2	3	0/39	0	39		100% Dk	0%	0%
Stampede Russet	Colorado	1.065	14.2	3.9	3	14/6	14	6		30% Vas	0%	0%
ATX03003-1Ru	Dalhart	1.069	14.9	2.8	2+	22/20	22	20		48% Vas	0%	0%
AOTX02136-1Ru	Dalhart	1.070	14.9	2.5	2+	10/29	10	29		46% PreZ , 23% Vas, 5% Dk	46%	0%
ATX03003-7Ru	Dalhart	1.084	17.5	2.5	1+	20/12	20	12		22% Vas, 16% Bru, French Fry	0%	0%
TXA549-1Ru	Colorado	1.078	16.4	3.5	2	7/31	7	31		34% PreZ , 45% Vas, 8% HH	34%	0%
AOTX96216-2Ru	Dalhart	1.069	14.8	3.0	3+	10/30	10	30		35% Vas, 5% Bru, 33% Dk, 3%	0%	0%
AOTX95295-1Ru	Dalhart	1.070	15.0	3.0	3	5/35	5	35		88% Dk	0%	0%
AOTX99008-1Ru	Dalhart	1.090	18.5	2.3	1+	32/9	32	9		22% Dk, French Fry Type, BOT	0%	8%
AOTX95295-3Ru	Dalhart	1.063	13.8	3.0	3	17/22	17	22		3% Z , 54% Vas	3%	0%
AOTX95269-1Ru	Dalhart	1.069	14.8	2.8	3+	0/30	0	30		3% Bru, 97% Dk	0%	0%
TXCR-4RU	Dalhart	1.079	16.5	2.8	2	18/20	18	20		13% Z , 34% Vas, 5% Dk, 3% GH	13%	0%
AOTX96208-1Ru	Dalhart	1.062	13.6	2.8	3+	19/20	19	20		18% Vas, 3% Bru, 31% Dk	0%	0%
ATX99194-3Ru	Dalhart	1.073	15.5	3.0	2	14/17	14	17		48% Vas, 6% Bru	0%	3%
AOTX98137-1RU	Dalhart	1.062	13.5	2.6	2+	14/6	14	6		25% Vas, 5% Bru	0%	0%
TXNS551	Dalhart	1.060	13.1	2.9	3	9/22	9	22		71% Vas	0%	0%
TXNS410	Dalhart	1.060	13.3	2.8	2+	11/34	11	34		22% Vas, 4% HH, 49% Dk	0%	0%
ATX03068-1Ru	Dalhart	1.078	16.4	2.9	3	0/15	0	15		47% Vas, 7% HH, 40% Bru, 7%	0%	0%

Average
L.S.D. (.05)

4%
6.2

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

Addendum to Tables Dalhart 6a, 6b, 6c, 6d, 6e, and 6f
Texas Advanced Selection Russet Trial

Location:

Dalhart, Texas

Soil Type

Dallum Fine Sand Loam

Seed Source

Colorado

Date:

		DAP
Planted	May 13, 2008	
Vines Killed (Red Chip)	September 8, 2008	115
Vines Killed (Russet)	September 26, 2008	133
Harvested (Red Chip)	September 15, 2008	122
Harvested (Russet)	September 29, 2008	136

Plot Information:

Size of Plots	10'
Spacing Between Hills	12"
Spacing Between Rows	28"
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:
205-221-50 # per acre

Irrigation:

Center Pivot

Seed Treatment

Tops MZ Gaucho

Insecticide:

Platinum, Fulfill, Thimet, LI 700, Spintor, AgriMek, Superb, Reaper, Rimon

Herbicides Applied:

Medal, Sencor, Eptam, Matrix, Liberate, Intensity, Superb, Reglone, Dual

Fungicide Applied:

Quadris, Ultra Flourish, Headline, Echo, Manzate, Endura, Revus Top, Scala, SuperTin

Environmental Factors:

Temperature was higher than average for the last week in May and the first and second week in June. Precipitation was high than normal during the growing season

Dalhart
Table 7.

Tuber type, skin color, and remnant weight for entries to be advanced from the 07 russet selections grown near Dalhart, Texas-2008.

Variety or Selection	Tuber Type	Skin Color	Inventory Weight
AOTX03657-1Ru	Oblong	Russet	7.0
AOTX05096-4Ru	Oblong	Russet	11.3
ATX05114-1Ru	Oblong	Light Russet	15.2
ATX05142-2Ru	Oblong	Russet	22.7
COTX05002-2Ru	Long	Russet	47.0

Dalhart Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 22 entries in the Texas Advanced Selection
 Table 8a. Red Trial grown near Dalhart, Texas-2008.

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 (CO)	480.0	408.0	36.8	148.4	222.8	44.8	27.2	0.0	4.1	3.5
NDTX731-1R	458.0	392.4	149.6	122.0	120.8	5.2	60.4	0.0	4.4	4.2
NDTX4271-5R	452.4	383.5	91.7	140.3	151.5	24.6	44.3	0.0	3.8	4.3
Rio Rojo	358.2	328.0	60.6	169.9	97.5	0.0	29.0	1.2	3.5	3.5
COTX04340-1R	383.0	290.0	129.0	129.4	31.6	2.4	87.4	3.2	3.2	3.2
COTX94218-1R	361.2	262.8	134.6	96.2	32.0	0.0	98.4	0.0	3.8	3.7
ATTX98453-6R	303.6	254.8	55.2	75.2	124.4	0.0	48.8	0.0	2.8	3.0
NDTX5438-11R	311.6	242.8	102.4	99.6	40.8	6.6	62.2	0.0	3.3	3.3
BTX2332-1R	287.5	239.2	66.1	90.4	82.7	0.0	48.3	0.0	3.2	3.5
AOTX91861-4R	228.5	197.6	41.3	63.7	92.5	12.2	18.7	0.0	3.6	2.9
AOTX01178-1R	218.4	195.2	32.4	57.2	105.6	0.0	23.2	0.0	3.4	3.4
AOTX93483-1R	260.4	194.8	22.4	40.0	132.4	45.4	17.6	2.6	2.7	2.6
NDTX4828-2R	220.0	192.6	76.3	84.0	32.3	0.0	27.5	0.0	3.2	2.8
COTX94216-1R	217.1	170.2	60.3	75.7	34.1	0.0	46.9	0.0	2.8	2.7
NDTX059827-1R	260.4	164.0	99.4	44.6	20.0	0.0	96.4	0.0	3.4	3.5
NDTX4847-7R	184.8	160.8	68.8	66.4	25.6	0.0	24.0	0.0	3.2	3.2
NDTX5003-2R	220.8	159.0	88.6	45.0	25.4	0.0	61.8	0.0	3.0	2.8
NDTX7590-3R	169.6	153.6	49.6	87.2	16.8	3.2	12.8	0.0	2.9	3.0
Dark Red Norland	169.6	144.8	28.8	62.0	54.0	15.2	9.6	0.0	3.2	2.9
NDTX059845-1R	145.3	117.6	51.7	52.0	13.9	5.0	22.7	0.0	2.9	3.0
NDTX039190-1R	127.2	106.4	30.4	65.6	10.4	0.0	20.8	0.0	2.5	2.7
NDTX059878-1R	117.8	85.8	36.6	33.4	15.8	0.0	32.0	0.0	2.9	3.0
Average	269.8	220.2	68.8	84.0	67.4	7.5	41.8	0.3	3.3	3.2
L.S.D. (.05)	54.4	39.1	34.8	34.9	35.4	27.9	28.2	ns	0.5	0.3

¹ 1=very poor to 5= excellent

Dalhart
Table 8b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 22 entries in the Texas Advanced Selection Red Trial grown near Dalhart, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
Red LaSoda (CO)	85.8	7.9	31.0	46.9	8.5	5.7	0.0	1.069	14.8	Oblong	Red
NDTX731-1R	86.0	32.0	27.1	26.9	1.4	12.6	0.0	1.057	12.8	Round	Red
NDTX4271-5R	85.0	20.3	31.1	33.6	5.2	9.8	0.0	1.059	13.0	Round	Red
Rio Rojo	91.7	16.8	46.3	28.6	0.0	7.9	0.3	1.053	11.9	Round	Red
COTX04340-1R	76.0	33.7	34.0	8.2	0.7	22.6	0.8	1.065	14.1	Oblong	Red
COTX94218-1R	73.1	37.5	27.4	8.2	0.0	26.9	0.0	1.071	15.2	Round	Red
ATTX98453-6R	84.1	18.4	25.1	40.6	0.0	15.9	0.0	1.067	14.5	Round	Red
NDTX5438-11R	79.6	31.9	33.4	14.3	2.4	18.0	0.0	1.064	13.9	Round	Red
BTX2332-1R	83.1	23.5	30.3	29.3	0.0	16.9	0.0	1.064	14.0	Round	Red
AOTX91861-4R	86.9	18.6	28.6	39.7	4.6	8.5	0.0	1.063	13.7	Oblong	Red
AOTX01178-1R	89.1	15.3	26.0	47.8	0.0	10.9	0.0	1.065	14.0	Round	Red
AOTX93483-1R	75.7	8.7	15.5	51.4	16.6	6.8	0.9	1.058	12.8	Oblong	Red
NDTX4828-2R	86.8	35.4	38.0	13.4	0.0	13.2	0.0	1.062	13.6	Round	Red
COTX94216-1R	78.1	27.6	36.1	14.4	0.0	21.9	0.0	1.073	15.6	Round	Red
NDTX059827-1R	62.9	37.8	17.9	7.2	0.0	37.1	0.0	1.060	13.2	Round	Red
NDTX4847-7R	87.0	37.2	35.9	13.9	0.0	13.0	0.0	1.059	13.1	Round	Red
NDTX5003-2R	72.0	38.5	21.0	12.5	0.0	28.0	0.0	1.070	15.0	Round	Red
NDTX7590-3R	90.7	29.7	52.2	8.9	1.6	7.7	0.0	1.056	12.5	Oblong	Red
Dark Red Norland	86.9	17.6	36.7	32.7	7.1	6.0	0.0	1.060	13.2	Round	Red
NDTX059845-1R	81.6	34.7	37.2	9.7	3.2	15.2	0.0	1.063	13.8	Round	Red
NDTX039190-1R	83.6	23.9	51.6	8.2	0.0	16.4	0.0	1.050	11.5	Round	Red
NDTX059878-1R	73.5	28.5	28.7	16.2	0.0	26.5	0.0	1.059	13.1	Round	Red
Average	81.8	26.2	32.3	23.3	2.3	15.8	0.1	1.062	13.6		
L.S.D. (.05)	11.0	10.1	11.9	14.3	ns	7.9	ns	0.005	0.9		

Dalhart
Table 8c.

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 22 entries in the Texas Advanced Selection Red Trial grown near Dalhart, Texas-2008.

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	
Red LaSoda (CO)	6.5	7.7	94	100	2.1	4.5	4.3	4.6	4
NDTX731-1R	8.2	6.1	85	96	1.5	3.9	2.9	4.0	63
NDTX4271-5R	15.9	6.8	36	50	2.0	2.6	3.2	3.1	48
Rio Rojo	9.2	6.2	40	54	2.2	3.9	2.1	3.9	71
COTX04340-1R	11.6	4.6	65	76	1.8	3.6	3.6	3.3	16
COTX94218-1R	10.7	4.2	75	83	1.9	3.3	4.2	3.5	8
ATTX98453-6R	7.1	6.7	55	65	2.0	2.6	2.7	2.3	40
NDTX5438-11R	11.1	5.6	48	55	1.8	2.3	3.8	2.6	16
BTX2332-1R	7.9	5.4	61	69	1.8	3.6	4.1	3.5	8
AOTX91861-4R	13.7	6.5	24	34	2.0	3.0	4.1	3.1	8
AOTX01178-1R	7.7	6.2	44	50	2.0	2.6	4.3	2.7	0
AOTX93483-1R	25.7	8.7	15	19	2.0	3.0	4.1	3.1	4
NDTX4828-2R	9.2	5.6	36	45	1.8	2.6	3.6	2.6	14
COTX94216-1R	16.2	4.4	24	33	2.0	2.7	4.0	2.7	11
NDTX059827-1R	9.1	3.5	71	83	2.3	3.2	3.1	3.1	31
NDTX4847-7R	11.7	5.3	25	30	2.0	1.8	2.8	2.8	30
NDTX5003-2R	10.1	4.1	49	55	2.0	1.9	3.1	1.8	33
NDTX7590-3R	27.2	6.5	14	14	2.0	2.3	1.5	1.9	71
Dark Red Norland	6.8	7.3	31	38	1.9	2.5	2.9	2.7	30
NDTX059845-1R	9.4	4.8	26	33	1.9	1.6	2.9	1.9	25
NDTX039190-1R	6.9	5.1	36	36	2.0	1.1	2.9	1.1	8
NDTX059878-1R	8.7	4.4	30	35	2.0	1.5	3.2	1.5	14
Average	11.4	5.7	45	52	1.9	2.7	3.3	2.8	25
L.S.D. (.05)	10.1	0.9	18	18	0.3	0.8	0.8	0.7	23

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

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

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

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

Dalhart
Table 8d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 22 entries in the Texas Advanced Selection Red Trial grown near Dalhart, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
Red LaSoda (CO)	1.0	3.7	1.0	1.8	3.7	5.0	5.0	5.0	5.0	3.5	3	0	0	0
NDTX731-1R	1.0	2.3	1.0	2.1	4.5	5.0	5.0	5.0	5.0	3.5	30	0	0	0
NDTX4271-5R	1.0	2.3	1.0	3.9	4.5	5.0	5.0	5.0	5.0	4.1	8	0	0	0
Rio Rojo	1.0	2.1	1.0	4.0	4.0	3.5	5.0	5.0	5.0	2.9	0	0	3	0
COTX04340-1R	1.0	3.0	1.0	3.8	4.8	5.0	5.0	5.0	5.0	3.9	10	0	0	3
COTX94218-1R	1.0	2.3	1.0	3.7	3.9	5.0	5.0	5.0	5.0	3.3	5	0	0	0
ATTX98453-6R	1.0	2.0	1.0	4.2	4.1	5.0	5.0	5.0	5.0	4.1	3	0	0	0
NDTX5438-11R	1.0	2.7	1.0	4.5	4.3	5.0	5.0	5.0	5.0	4.4	8	0	0	0
BTX2332-1R	1.0	2.3	1.0	4.0	3.8	5.0	5.0	5.0	5.0	4.0	5	0	3	3
AOTX91861-4R	1.0	3.7	1.0	3.4	4.0	5.0	5.0	5.0	5.0	3.5	0	0	5	0
AOTX01178-1R	1.0	2.2	1.0	2.0	3.6	5.0	5.0	5.0	5.0	3.3	8	0	0	0
AOTX93483-1R	1.0	3.6	1.0	3.7	4.1	5.0	5.0	5.0	5.0	3.6	0	0	0	0
NDTX4828-2R	1.0	2.3	3.0	4.0	3.8	5.0	5.0	5.0	5.0	4.0	0	0	0	0
COTX94216-1R	1.0	1.8	2.0	3.5	4.8	5.0	5.0	5.0	5.0	3.9	0	0	0	0
NDTX059827-1R	1.0	1.7	1.0	3.6	4.0	5.0	5.0	5.0	5.0	3.7	3	0	0	0
NDTX4847-7R	1.0	1.5	1.0	4.0	3.7	5.0	5.0	5.0	5.0	4.0	0	0	0	0
NDTX5003-2R	1.0	1.5	1.0	2.8	4.1	5.0	5.0	5.0	5.0	3.6	8	0	0	0
NDTX7590-3R	1.0	3.9	1.0	4.0	4.0	5.0	5.0	5.0	5.0	4.0	3	0	0	3
Dark Red Norland	1.0	2.8	1.0	4.0	4.0	5.0	5.0	5.0	5.0	3.6	5	0	0	0
NDTX059845-1R	1.0	1.5	1.0	3.8	4.5	5.0	5.0	5.0	5.0	4.0	0	0	0	0
NDTX039190-1R	1.0	1.5	1.0	4.0	3.9	5.0	5.0	5.0	5.0	3.5	0	0	0	0
NDTX059878-1R	1.0	1.5	1.0	4.2	3.8	5.0	5.0	5.0	5.0	3.6	0	0	0	0
Average	1.0	2.4	1.1	3.6	4.1	4.9	5.0	5.0	5.0	3.7	4	0	0	0
L.S.D. (.05)		0.3	0.1	0.3	0.2	0.3				0.7	12		ns	ns

¹ 1=light to 5=dark
² 1=round to 5=long
³ 1=none to 5=heavy
⁴ 1=deep to 5=shallow
⁵ 1=light to 5=dark
⁶ 1 to 5=none
⁷ 1 to 5=none
⁸ 1 to 5=none
⁹ 1 to 5=none
¹⁰ 1 to 5=none
¹¹ Stem end vascular discoloration severely evaluated

Dalhart

Table 8e.

Notes and general rating for all reps of 22 entries in the Texas Advanced Selection Red Trial grown near Dalhart, Texas-2008.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
Red LaSoda (CO)		eary, oversize, rough, ugly, deep eyes	4.5, 4, 4, 4	3.5, 3.5, 3.5, 3.5
NDTX731-1R	BOT, BOT	deep eyes, BOT for shape and color, rough, drop(hollow heart),	4.3, 4.3, 4.5, 4.5	4, 4, 4.5, 4.2
NDTX4271-5R	BOT, BOT	very white flesh, BOT+, smooth, oversize	4, 3.3, 4, 4	4.5, 4.5, 4.5, 3.5
Rio Rojo		feathering, Growth cracks, ROT	3.5, 3.5, 3.5, 3.5	3.5, 3.5, 3.5, 3.5
COTX04340-1R		hollow heart, sticky stolon, dark purple skin, drop	2.8, 3.3, 3, 3.5	3.2, 3.3, 3.2, 3.2
COTX94218-1R		B size, pre Zebra?, very hhte fresh, keep	3.5, 4.5, 3.8, 3.3	3.7, 3.7, 3.7, 3.6
ATTX98453-6R		smooth, light set	3.3, 3.5, 2.5, 2	3, 2.8, 3.4, 2.8
NDTX5438-11R		smoooth, BOT, keep?, fair	2.8, 3.5, 3.5, 3.2	3.3, 3.5, 3.2, 3.2
BTX2332-1R		buff	3.8, 2.8, 2.8, 3.2	3.5, 3.8, 3.52, 3.2
AOTX91861-4R		light set, RLS like, deep eyes, drop?	3.7, 3.7, 3.5, 3.5	2.8, 2.8, 3, 3
AOTX01178-1R		RLS like, Yield+, keep, light set	3.3, 3.5, 3.3, 3.5	4, 3.2, 3.2, 3.2
AOTX93483-1R		oversize, light set, sticky stolon, size parent, drop	2.8, 2.8, 2.8, 2.5	3, 2, 3, 2.5
NDTX4828-2R		bad skin finish, buff+, lenticels, drop	3.3, 3.8, 3, 2.8	3.2, 2.6, 2.6, 2.6
COTX94216-1R	very late	buff, drop, rough	2.8, 2.8, 2.5, 3	2.8, 2.8, 2.5, 2.5
NDTX059827-1R	small	nice white flesh, keep, b size	4, 3.5, 2.8, 3.3	4, 3.5, 3, 3.5
NDTX4847-7R		zipper defect	3.2, 3.2, 3.2, 3.2	3.2, 3.2, 3.2, 3.2
NDTX5003-2R	B size	stem end indentaion, rough, drop,	3.5, 2.8, 3, 2.5	3, 2.7, 3.2, 2.3
NDTX7590-3R		drop, low yield, smooth, nice, rot, low yield	2, 3.4, 3.5, 2.5	3, 3, 3, 3
Dark Red Norland		drop, rough	3.5, 3.3, 3, 3	3.2, 2.6, 2.6, 3
NDTX059845-1R	heavy set	drop, small, light set	3.2, 3.2, 2.5, 2.5	3, 3, 2.8, 3
NDTX039190-1R			2.5, 2.5, 2.5, 2.5	2.7, 2.7, 2.7, 2.7
NDTX059878-1R			3.2, 2.8, 3, 2.5	3, 3, 3, 3

Dalhart Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 22 entries in the Texas Advanced Selection Red Trial grown near Dalhart, Texas-2008. Dalhart, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
Red LaSoda (CO)	Colorado	1.069	14.8	3.5	2	0/32	0	32	63% Z , 38% Vas	63%	5%
NDTX731-1R	Colorado	1.057	12.8	4.2	1+	15/23	15	23	3% PreZ , 37% Vas, 21% BC	3%	0%
NDTX4271-5R	Colorado	1.059	13.0	4.3	2	7/32	7	32	5% Z , 18% PreZ, 56% Vas, 3%	5%	8%
Rio Rojo	CSS	1.053	11.9	3.5	3	0/13	0	13	92% Vas	0%	0%
COTX04340-1R	Dalhart	1.065	14.1	3.2	2+	0/42	0	42	52% PreZ , 48% Vas	52%	0%
COTX94218-1R	Dalhart	1.071	15.2	3.7	2	28/12	28	12	23% Vas, 8% Bru	0%	3%
ATTX98453-6R	Dalhart	1.067	14.5	3.0	1+	2/37	2	37	13 % Vas, 79% Dk	0%	0%
NDTX5438-11R	Colorado	1.064	13.9	3.3	3	0/42	0	42	100% Dk	0%	0%
BTX2332-1R	Dalhart	1.064	14.0	3.5	2+	8/23	8	23	19% Z , 52% Vas, 3% BC	19%	0%
AOTX91861-4R	Colorado	1.063	13.7	2.9	3	7/31	7	31	29% Z , 26% Vas, 8% Bru, 3%	29%	0%
AOTX01178-1R	Colorado	1.065	14.0	3.4	2	3/16	3	16	79% Vas, 5% GH	0%	0%
AOTX93483-1R	Colorado	1.058	12.8	2.6	2+	1/34	1	34	26% Vas, 3% Bru, 23% Dk, 6%	0%	0%
NDTX4828-2R	Colorado	1.062	13.6	2.8	3	4/36	4	36	8% Vas, 58% Dk, 25% BC	0%	0%
COTX94216-1R	Colorado	1.073	15.6	2.7	1+	25/16	25	16	17% Vas, 7% Bru, 15% Dk	0%	0%
NDTX059827-1R	Dalhart	1.060	13.2	3.5	2	17/21	17	21	5% Z , 32% Vas, 18% BC	5%	0%
NDTX4847-7R	Dalhart	1.059	13.1	3.2	2	0/10	0	10	50% PreZ , 50% Vas	50%	0%
NDTX5003-2R	Dalhart	1.070	15.0	2.8	1+	18/22	18	22	3% Z , 13% Vas, 15% Bru, 3%	3%	3%
NDTX7590-3R	Colorado	1.056	12.5	3.0	3	0/19	0	19	5% Vas, 95% BC	0%	0%
Dark Red Norland	Colorado	1.060	13.2	2.9	2+	4/28	4	28	28% PreZ , 53% Vas	28%	0%
NDTX059845-1R	Dalhart	1.063	13.8	3.0	2	20/21	20	21	46% Vas, 5% Bru	0%	0%
NDTX039190-1R	Dalhart	1.050	11.5	2.7	2	1/23	1	23	50% Vas, 46% BC	0%	0%
NDTX059878-1R	Dalhart	1.059	13.1	3.0	1+	21/20	21	20	2% Z , 15% Vas, 17% Bru, 2%	2%	0%
Average										12%	1%

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

Addendum to Tables Dalhart 8a, 8b, 8c, 8d, 8e, and 8f
Texas Advanced Selection Red Trial

Location:

Dalhart, Texas

Soil Type

Dallum Fine Sand Loam

Seed Source

Colorado

Date:

		DAP
Planted	May 13, 2008	
Vines Killed (Red Chip)	September 8, 2008	115
Vines Killed (Russet)	September 26, 2008	133
Harvested (Red Chip)	September 15, 2008	122
Harvested (Russet)	September 29, 2008	136

Plot Information:

Size of Plots	10'
Spacing Between Hills	12"
Spacing Between Rows	28"
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:
205-221-50 # per acre

Irrigation:

Center Pivot

Seed Treatment

Tops MZ Gaucho

Insecticide:

Platinum, Fulfill, Thimet, LI 700, Spintor, AgriMek, Superb, Reaper, Rimon

Herbicides Applied:

Medal, Sencor, Eptam, Matrix, Liberate, Intensity, Superb, Reglone, Dual

Fungicide Applied:

Quadris, Ultra Flourish, Headline, Echo, Manzate, Endura, Revus Top, Scala, SuperTin

Environmental Factors:

Temperature was higher than average for the last week in May and the first and second week in June. Precipitation was high than normal during the growing season

Dalhart
Table 9.

Tuber type, skin color, and remnant weight for 7 entries to be advanced from the 07 red selections grown near Dalhart, Texas-2008.

Variety or Selection	Tuber Type	Skin Color	Inventory Weight
ATX03516-2R	Oblong	Red	19.5
ATX03550-2R	Oblong	Red	25.0
COTX05211-4R	Oblong	Red	20.4
COTX05211-5R	Oblong	Red	38.0
COTX05211-7R	Oblong	Red	21.6
NDTX050070-1R	Oblong	Red	5.9
NDTX050054-3R	Round	Red	4.9

Springlake
Table 10a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 20 entries in the Texas Advanced Selection Red Skin Yellow Flesh Trial grown near Dalhart, Texas-2008.

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					
ATTX98500-2P/Y	470.8	385.6	183.0	160.5	42.1	2.4	70.4	12.4	3.3	3.0
ATTX961014-1R/Y	448.7	372.2	125.5	150.0	96.7	0.0	72.3	4.2	4.0	4.3
ATTX00289-5R/Y	432.8	317.6	82.4	86.8	148.4	84.0	27.2	4.0	2.3	2.9
ATX03491-1R/Y	316.5	238.5	81.7	89.7	67.0	0.0	68.0	10.0	2.9	3.0
COTX04096-1R-W/Y	358.5	234.2	129.1	74.9	30.1	0.0	97.3	27.0	3.1	2.7
TX04212-1R/Y	282.5	223.0	67.2	118.4	37.3	0.0	48.5	11.0	2.8	2.3
COTX04303-2R/Y	310.4	219.5	103.2	86.7	29.6	0.0	86.7	4.2	2.9	2.9
ATTX98518-5P/Y	294.0	212.6	37.3	62.1	113.1	49.0	17.1	15.4	2.8	3.1
COTX03039-1R/Y	285.0	206.4	72.6	103.4	30.4	0.0	66.4	12.2	3.1	3.4
ATTX98468-5R/Y	289.7	195.5	113.6	61.1	20.8	0.0	88.0	6.2	3.0	2.9
COTX04303-1R/Y	260.4	182.4	80.3	59.2	42.9	0.0	66.1	11.8	2.6	2.9
COTX04188-3R/Y	272.5	168.0	104.3	61.1	2.6	0.0	104.5	0.0	2.7	3.3
TX04239-2R/Y	254.4	164.0	95.2	68.8	0.0	0.0	82.4	8.0	2.5	2.4
COTX04267-1R/Y	278.0	161.2	116.0	42.4	2.8	0.0	116.8	0.0	2.7	3.7
COTX04193-2R/Y	271.2	157.0	69.3	77.9	9.8	0.0	114.1	0.0	3.2	3.8
COTX04303-3R/Y	198.7	125.3	60.5	64.8	0.0	0.0	50.1	23.2	3.0	2.9
ATTX99325-1P	162.7	118.1	56.0	41.1	21.1	0.0	44.5	0.0	3.1	3.2
ATX02263-1R/Y	293.4	96.0	75.6	20.4	0.0	0.0	194.2	3.2	3.4	3.7
NDTX4756-1R/Y	202.7	84.3	53.6	30.7	0.0	0.0	118.4	0.0	2.9	3.4
ATTX98444-16R/Y	175.2	11.4	11.4	0.0	0.0	0.0	163.8	0.0	3.6	4.5
Average	292.9	193.6	85.9	73.0	34.7	6.8	84.9	7.6	3.0	3.2
L.S.D. (.05)	58.9	40.9	35.4	23.4	41.6	18.4	42.0	ns	0.6	0.3

¹ 1=very poor to 5= excellent

Springlake
Table 10b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 20 entries in the Texas Advanced Selection Red Skin Yellow Flesh Trial grown near Dalhart, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
ATTX98500-2P/Y	82.1	38.9	34.3	8.9	0.5	14.9	2.5	1.063	13.7	Round	Purple
ATTX961014-1R/Y	82.7	28.5	33.3	20.9	0.0	16.3	1.0	1.069	14.8	Oblong	Red
ATTX00289-5R/Y	72.4	19.3	19.8	33.2	20.0	6.4	1.2	1.060	13.2	Oblong	Red
ATX03491-1R/Y	75.2	25.6	28.3	21.4	0.0	22.2	2.6	1.069	14.8	Oblong	Red
COTX04096-1R-W/Y	65.5	36.2	20.7	8.7	0.0	27.2	7.3	1.074	15.7	Long	Red-White
TX04212-1R/Y	80.3	22.9	42.8	14.5	0.0	16.2	3.5	1.057	12.8	Long	Red
COTX04303-2R/Y	70.9	33.2	27.7	10.0	0.0	27.8	1.3	1.075	15.9	Oblong	Red
ATTX98518-5P/Y	74.6	13.2	21.4	40.0	14.0	6.1	5.3	1.063	13.8	Long	Purple
COTX03039-1R/Y	73.2	26.7	37.7	8.8	0.0	23.4	3.4	1.074	15.6	Oblong	Red
ATTX98468-5R/Y	67.9	39.0	21.3	7.6	0.0	29.7	2.4	1.068	14.7	Round	Red
COTX04303-1R/Y	69.2	32.7	21.6	15.0	0.0	27.3	3.4	1.067	14.5	Round	Red
COTX04188-3R/Y	63.1	39.1	22.8	1.2	0.0	36.9	0.0	1.079	16.7	Round	Red
TX04239-2R/Y	64.5	37.4	27.0	0.0	0.0	32.4	3.1	1.081	17.0	Round	Red
COTX04267-1R/Y	58.3	41.9	15.3	1.1	0.0	41.7	0.0	1.066	14.2	Round	Red
COTX04193-2R/Y	59.8	26.1	29.6	4.1	0.0	40.2	0.0	1.061	13.4	Oblong	Red
COTX04303-3R/Y	63.7	30.9	32.8	0.0	0.0	25.1	11.2	1.068	14.7	Round	Red
ATTX99325-1P	72.6	33.6	25.6	13.4	0.0	27.4	0.0	1.063	13.7	Oblong	Purple
ATX02263-1R/Y	33.1	26.0	7.1	0.0	0.0	65.9	1.0	1.071	15.3	Round	Red
NDTX4756-1R/Y	41.5	26.4	15.1	0.0	0.0	58.5	0.0	1.062	13.6	Oblong	Red
ATTX98444-16R/Y	5.7	5.7	0.0	0.0	0.0	94.3	0.0	1.071	15.2	Round	Red
Average	63.8	29.2	24.2	10.4	1.7	32.0	2.5	1.068	14.7		
L.S.D. (.05)	12.3	10.4	7.3	11.9	5.5	11.5	ns	0.006	1.0		

Springlake
Table 10c.

Average number of tubers per plant, average tuber weight, average number of stems per plant, percent stand 40 days after planting, percent stand 60 days after planting, plant characteristics and percent dead vines at vine kill of 20 entries in the Texas Advanced Selection Red Skin Yellow Flesh 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	
ATTX98500-2P/Y	9.5	5.0	93	99	1.9	4.5	4.7	4.7	4
ATTX961014-1R/Y	9.9	4.6	99	99	1.5	4.3	1.9	4.2	81
ATTX00289-5R/Y	23.3	7.9	41	43	1.6	3.3	3.7	3.8	9
ATX03491-1R/Y	8.3	4.8	78	83	1.9	3.2	2.7	3.3	46
COTX04096-1R-W/Y	10.1	4.1	79	83	1.5	3.6	4.6	3.8	4
TX04212-1R/Y	6.0	5.3	90	93	2.4	4.1	5.0	4.2	3
COTX04303-2R/Y	10.7	4.2	61	70	2.0	3.0	4.1	1.9	5
ATTX98518-5P/Y	13.4	8.0	28	31	1.6	2.8	3.6	3.0	23
COTX03039-1R/Y	8.4	4.6	68	73	1.8	3.8	3.8	3.8	14
ATTX98468-5R/Y	17.3	3.9	56	59	1.9	2.5	3.6	2.6	11
COTX04303-1R/Y	7.3	4.5	81	83	1.6	2.9	3.6	2.7	15
COTX04188-3R/Y	9.6	3.5	75	85	2.5	3.8	5.0	3.7	0
TX04239-2R/Y	20.7	3.5	38	49	2.0	2.3	3.4	2.8	23
COTX04267-1R/Y	10.7	3.3	81	81	2.5	3.0	3.8	3.3	16
COTX04193-2R/Y	12.3	3.4	64	66	2.4	3.3	2.2	3.2	71
COTX04303-3R/Y	5.1	4.1	85	88	1.5	2.5	3.8	2.5	5
ATTX99325-1P	5.7	4.0	69	73	1.9	2.3	1.3	2.6	100
ATX02263-1R/Y	11.2	2.7	95	96	1.9	3.9	2.1	3.7	73
NDTX4756-1R/Y	9.0	4.1	65	69	1.5	2.0	4.2	2.8	11
ATTX98444-16R/Y	9.8	1.8	95	100	1.9	3.5	1.8	3.6	81
Average	10.9	4.4	72	76	1.9	3.2	3.4	3.3	30
L.S.D. (.05)	ns	1.2	21	23	0.3	0.6	0.8	0.7	26

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

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

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

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

Springlake
Table 10d. Flesh color, tuber shape, degree of russetting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 20 entries in the Texas Advanced Selection Red Skin Yellow Flesh Trial grown near Dalhart, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
ATTX98500-2P/Y	2.6	2.8	1.0	2.6	4.9	5.0	5.0	5.0	5.0	3.5	3	0	0	0
ATTX961014-1R/Y	2.7	3.8	1.0	3.6	3.6	5.0	5.0	5.0	5.0	4.5	0	0	0	0
ATTX00289-5R/Y	2.3	3.9	1.0	2.5	2.5	5.0	5.0	5.0	5.0	3.8	0	0	0	0
ATX03491-1R/Y	2.9	3.4	1.0	4.1	4.1	5.0	5.0	5.0	5.0	3.2	3	0	0	0
COTX04096-1R-W/Y	3.1	3.9	1.0	4.5	1.5	5.0	5.0	5.0	5.0	4.5	0	0	0	0
TX04212-1R/Y	3.3	4.0	1.0	2.5	4.0	5.0	5.0	5.0	5.0	3.6	0	0	0	0
COTX04303-2R/Y	3.3	3.5	1.0	4.5	4.0	4.5	5.0	5.0	5.0	3.9	3	0	0	0
ATTX98518-5P/Y	2.6	4.2	1.0	4.3	4.8	5.0	5.0	5.0	5.0	3.5	0	0	0	0
COTX03039-1R/Y	2.9	3.7	1.0	4.0	3.9	5.0	5.0	5.0	5.0	3.7	0	0	0	0
ATTX98468-5R/Y	3.3	1.9	1.0	4.0	3.5	5.0	5.0	5.0	5.0	3.3	0	0	0	0
COTX04303-1R/Y	3.5	2.6	1.0	4.0	4.3	5.0	5.0	5.0	5.0	4.0	0	0	0	0
COTX04188-3R/Y	3.9	2.2	1.0	4.0	3.7	5.0	5.0	5.0	5.0	4.2	0	0	0	0
TX04239-2R/Y	3.3	2.9	1.0	4.1	4.2	5.0	5.0	5.0	5.0	4.0	0	0	0	0
COTX04267-1R/Y	4.0	2.6	1.0	3.9	4.1	5.0	5.0	5.0	5.0	4.0	0	0	0	0
COTX04193-2R/Y	3.5	3.5	1.0	4.0	4.3	4.8	5.0	5.0	5.0	4.1	0	0	0	0
COTX04303-3R/Y	2.8	1.8	1.0	4.0	4.5	3.0	5.0	5.0	5.0	3.3	0	0	0	0
ATTX99325-1P	1.0	3.8	1.0	4.1	4.8	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX02263-1R/Y	2.4	2.0	1.0	4.0	3.9	5.0	5.0	5.0	5.0	4.0	0	0	0	0
NDTX4756-1R/Y	2.8	3.3	1.0	4.0	3.8	5.0	5.0	5.0	5.0	4.2	0	0	0	3
ATTX98444-16R/Y	3.0	1.0	1.0	4.5	4.0	5.0	5.0	5.0	5.0	4.1	0	0	0	0
Average	2.9	3.0	1.0	3.9	3.9	4.9	5.0	5.0	5.0	3.9	0	0	0	0
L.S.D. (.05)	0.5	0.4		0.3	0.3	0.3				0.4	ns			ns

¹ 1=light to 5=dark
² 1=round to 5=long
³ 1=none to 5=heavy
⁴ 1=deep to 5=shallow
⁵ 1=light to 5=dark
⁶ 1 to 5=none
⁷ 1 to 5=none
⁸ 1 to 5=none
⁹ 1 to 5=none
¹⁰ 1 to 5=none
¹¹ Stem end vascular discoloration severely evaluated

Springlake

Table 10e. Notes and general rating for all reps of 20 entries in the Texas Advanced Selection Red Skin Yellow Flesh Trial grown near Dalhart, Texas-2008.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
ATTX98500-2P/Y		a little rough, yield +	3.4, 3.2, 3.7, 3	3, 3, 3, 3
ATTX961014-1R/Y		nippel on stem, BOT, Rhiz,	4, 4, 4, 3.8	3.8, 4.5, 4.5, 4.2
ATTX00289-5R/Y		Drop, RLS Like, Oversize, Yellow size parent	2, 2, 3, 2	3, 2.8, 3, 2.8
ATX03491-1R/Y		feathering, stick stolen	3.2, 3, 3, 2.3	3, 3, 3, 3
COTX04096-1R-W/Y		Pointed, Drop, Yield +	3, 3, 3.2, 3.2	2.8, 2.5, 2.5, 3
TX04212-1R/Y	poor shape	Drop, Rough, Drop	3, 2.5, 3, 2.5	2, 2, 3, 2
COTX04303-2R/Y		Nice interior	3.2, 3.2, 2.8, 2.2	3.3, 3, 2.8, 2.5
ATTX98518-5P/Y	drop	rough skin	3.3, 2.2, 3.3, 2.5	3, 3, 3.3, 3.2
COTX03039-1R/Y		smooth, shape -	3.3, 2.8, 3.5, 2.6	3.5, 3, 3.5, 3.5
ATTX98468-5R/Y	drop	Drop	3.2, 3, 3.2, 2.5	3, 3.3, 2.7, 2.5
COTX04303-1R/Y	late, rough, drop	Bad rep	3, 2.8, 2, 2.5	2.8, 3.2, 2.8, 2.8
COTX04188-3R/Y			2.8, 2.8, 2.8, 2.5	3.3, 3.3, 3.4, 3.2
TX04239-2R/Y	drop, poor stand	Poor yield	2, 3.9, 2, 2	2.5, 2, 2.5, 2.5
COTX04267-1R/Y		BOT-, Salad	2, 2.8, 2.8, 3.2	3.8, 3.6, 3.5, 3.7
COTX04193-2R/Y		BOT -	3, 3.3, 3, 3.4	3.8, 4, 3.5, 3.8
COTX04303-3R/Y		Drop, lots of culls	3, 3, 3, 3	2.83, 2.8, 3, 2.83
ATTX99325-1P		Smooth	3.2, 3, 3, 3	3.2, 3.3, 3, 3.3
ATX02263-1R/Y		BOT -, Salad +	3.5, 3.6, 2.8, 3.5	3.5, 3.7, 3.7, 3.8
NDTX4756-1R/Y		Salad ??	2.8, 2.8, 2.8, 3	3.5, 3.5, 3.3, 3.2
ATTX98444-16R/Y	BOT, BOT, BOT, salad	BOT, salad	4, 2.5, 3.5, 4.5	4.5, 4.5, 4.5, 4.5

Springlake
Table 10f.

Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 20 entries in the Texas Advanced Selection Red Skin Yellow Flesh Trial grown near Dalhart, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Ratio	Number of Good Chip	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
ATTX98500-2P/Y	Colorado	1.063	13.7	3.0	1+	19/21	19	21	10% Z , 43% Vas	10%	0%
ATTX961014-1R/Y	Colorado	1.069	14.8	4.3	1+	29/3	29	3	9% Z	9%	0%
ATTX00289-5R/Y	Colorado	1.060	13.2	2.9	3+	1/29	1	29	20% PreZ , 70% Vas, 7% Bru	20%	0%
ATX03491-1R/Y	Dalhart	1.069	14.8	3.0	1+	20/10	20	10	30% Vas, 3% Bru	0%	0%
COTX04096-1R-W/Y	Dalhart	1.074	15.7	2.7	2	12/28	12	28	8% Z , 55% Vas, 8% BC	8%	0%
TX04212-1R/Y	Dalhart	1.057	12.8	2.3	2+	20/21	20	21	46% Vas, 5% Bru	0%	0%
COTX04303-2R/Y	Dalhart	1.075	15.9	2.9	2	26/11	26	11	5% Z , 24% BC	5%	0%
ATTX98518-5P/Y	Colorado	1.063	13.8	3.1	2+	16/24	16	24	60% Vas	0%	0%
COTX03039-1R/Y	Dalhart	1.074	15.6	3.4	2	18/12	18	12	17% Z , 20% Vas, 3% BC	17%	8%
ATTX98468-5R/Y	Dalhart	1.068	14.7	2.9	2	35/3	35	3	3% PreZ , 5% Vas, 5% Bru	3%	0%
COTX04303-1R/Y	Dalhart	1.067	14.5	2.9	2	22/18	22	18	28% Vas, 10% Bru, 8% BC	0%	0%
COTX04188-3R/Y	Dalhart	1.079	16.7	3.3	3	24/12	24	12	22% Z , 3% HH, 8% Bru	22%	0%
TX04239-2R/Y	Dalhart	1.081	17.0	2.4	2	9/10	9	10	42% Vas, 11% Bru	0%	0%
COTX04267-1R/Y	Dalhart	1.066	14.2	3.7	2	32/8	32	8	5% Z , 13% Vas, 3% Bru	5%	0%
COTX04193-2R/Y	Dalhart	1.061	13.4	3.8	2	30/9	30	9	10% Z , 10% Vas, 3% Bru	10%	0%
COTX04303-3R/Y	Dalhart	1.068	14.7	2.9	3	3/18	3	18	14% PreZ , 43% Vas, 19% Bru,	14%	0%
ATTX99325-1P	Dalhart	1.063	13.7	3.2	1+	22/11	22	11	5% Z , 18% Vas, 9% Bru	5%	0%
ATX02263-1R/Y	Dalhart	1.071	15.3	3.7	2	31/9	31	9	5% Z , 18% Vas	5%	0%
NDTX4756-1R/Y	Dalhart	1.062	13.6	3.4	3	36/0	36	0		0%	0%
ATTX98444-16R/Y	Dalhart	1.071	15.2	4.5	2	26/7	26	7	18% Vas, 3% GH	0%	0%
Average										7%	0%

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

Addendum to Tables Dalhart 10a, 10b, 10c, 10d, 10e, and 10f
Texas Advanced Selection Red Skin Yellow Flesh Trial

Location:

Dalhart, Texas

Soil Type

Dallum Fine Sand Loam

Seed Source

Colorado

Date:

		DAP
Planted	May 13, 2008	
Vines Killed (Red Chip)	September 8, 2008	115
Vines Killed (Russet)	September 26, 2008	133
Harvested (Red Chip)	September 15, 2008	122
Harvested (Russet)	September 29, 2008	136

Plot Information:

Size of Plots	10'
Spacing Between Hills	12"
Spacing Between Rows	28"
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:
205-221-50 # per acre

Irrigation:

Center Pivot

Seed Treatment

Tops MZ Gaucho

Insecticide:

Platinum, Fulfill, Thimet, LI 700, Spintor, AgriMek, Superb, Reaper, Rimon

Herbicides Applied:

Medal, Sencor, Eptam, Matrix, Liberate, Intensity, Superb, Reglone, Dual

Fungicide Applied:

Quadris, Ultra Flourish, Headline, Echo, Manzate, Endura, Revus Top, Scala, SuperTin

Environmental Factors:

Temperature was higher than average for the last week in May and the first and second week in June. Precipitation was high than normal during the growing season

Dalhart 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 White Skin
 Table 11a. Yellow Flesh Trial grown near Dalhart, Texas-2008.

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					
ATTX00289-6Y/Y	566.5	509.1	116.2	207.2	185.6	0.0	57.4	0.0	3.8	3.6
TX1523-1Ru/Y	403.2	358.2	84.1	154.3	119.8	0.0	44.9	0.0	4.0	4.5
NDTX059759-3R-W/Y	368.9	336.8	76.3	124.2	136.3	0.0	32.1	0.0	4.0	3.3
ATTX98500-3PW/Y	388.0	303.4	110.4	146.8	46.2	0.0	63.4	21.2	3.3	2.9
BTX1544-2W/Y	346.4	302.0	96.0	160.4	45.6	0.0	44.4	0.0	3.8	3.3
NDTX059759-3R-W/Y-1	318.4	290.7	38.9	149.6	102.1	0.0	25.1	2.6	3.5	4.3
NDTX059775-1W/Y	346.0	260.6	122.4	110.6	27.6	0.0	85.4	0.0	3.3	3.4
COTX03079-1W/Y	282.4	230.4	65.9	98.4	66.1	0.0	52.0	0.0	3.2	2.8
BTX1749-1W/Y	253.6	205.2	61.6	96.0	47.6	0.0	45.2	3.2	3.1	3.3
NDTX049265-2WRSP/Y	234.0	187.6	50.0	95.6	42.0	0.0	46.4	0.0	3.3	3.7
TX04237-6Y/Y	213.2	187.2	42.8	82.8	61.6	0.0	26.0	0.0	3.4	3.7
COTX04178-1Y/Y	307.0	167.0	83.7	83.2	0.0	0.0	133.1	7.0	3.3	3.3
NDTX059759-1P-W/Y	194.3	163.8	50.7	86.9	26.1	0.0	22.9	7.6	3.2	3.3
ATX03496-3Y/Y	252.9	147.7	80.1	62.3	5.2	0.0	105.2	0.0	3.4	2.9
TX1674-1W/Y	142.8	122.6	34.8	68.6	19.2	0.0	20.2	0.0	2.9	2.9
NDTX059886-1Y/Y	224.4	89.2	36.8	52.4	0.0	0.0	135.2	0.0	2.5	3.6
COTX04015-3W/Y	59.3	51.6	13.1	27.9	10.6	0.0	7.6	0.0	2.3	2.3
Average	288.3	230.2	68.5	106.3	55.4	0.0	55.7	2.4	3.3	3.3
L.S.D. (.05)	53.2	36.0	39.0	38.7	34.0		36.8	ns	0.5	0.2

¹ 1=very poor to 5= excellent

Dalhart
Table 11b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 17 entries in the Texas Advanced White Skin Yellow Flesh Trial grown near Dalhart, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
ATTX00289-6Y/Y	89.7	20.5	36.9	32.3	0.0	10.3	0.0	1.063	13.8	Oblong	Yellow
TX1523-1Ru/Y	88.8	20.4	38.3	30.1	0.0	11.2	0.0	1.080	16.8	Oblong	Russet
NDTX059759-3R-W/Y	91.3	20.4	33.8	37.1	0.0	8.7	0.0	1.075	15.9	Oblong	Red White
ATTX98500-3PW/Y	79.5	27.9	39.6	11.9	0.0	16.0	4.6	1.073	15.6	Oblong	Purple White
BTX1544-2W/Y	87.2	27.6	46.3	13.3	0.0	12.8	0.0	1.078	16.4	Oblong	White
NDTX059759-3R-W/Y-P	91.3	12.1	47.0	32.2	0.0	7.9	0.8	1.072	15.4	Oblong	White
NDTX059775-1W/Y	76.5	35.1	33.3	8.1	0.0	23.5	0.0	1.067	14.5	Oblong	White
COTX03079-1W/Y	81.3	23.3	35.5	22.5	0.0	18.7	0.0	1.074	15.7	Oblong	White
BTX1749-1W/Y	81.1	24.8	36.9	19.4	0.0	17.9	1.0	1.078	16.4	Oblong	White
NDTX049265-2WRSP/Y	80.2	21.7	40.4	18.1	0.0	19.8	0.0	1.071	15.3	Oblong	White Red Splas
TX04237-6Y/Y	87.6	20.3	38.1	29.1	0.0	12.4	0.0	1.069	14.8	Oblong	Yellow
COTX04178-1Y/Y	55.3	27.9	27.4	0.0	0.0	42.9	1.8	1.058	12.9	Round	Yellow
NDTX059759-1P-W/Y	84.1	24.5	44.7	14.9	0.0	10.9	4.9	1.076	16.0	Oblong	Purple White
ATX03496-3Y/Y	60.9	32.9	26.6	1.4	0.0	39.1	0.0	1.064	13.9	Oblong	Yellow
TX1674-1W/Y	85.9	23.9	50.9	11.1	0.0	14.1	0.0	1.082	17.2	Oblong	White
NDTX059886-1Y/Y	39.7	16.4	23.3	0.0	0.0	60.3	0.0	1.082	17.2	Round	Yellow
COTX04015-3W/Y	86.1	21.7	46.3	18.0	0.0	13.9	0.0	1.086	17.9	Oblong	White
Average	79.2	23.6	38.0	17.6	0.0	20.0	0.8	1.074	15.6		
L.S.D. (.05)	9.6	11.4	15.7	13.0		8.2	ns	0.005	0.8		

Dalhart
Table 11c.

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 17 entries in the Texas Advanced White Skin Yellow Flesh Trial grown near Dalhart, Texas-2008.

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	
ATTX00289-6Y/Y	10.0	6.0	93	95	1.9	4.4	2.1	4.6	78
TX1523-1Ru/Y	9.5	6.5	56	70	1.6	4.0	3.5	4.4	23
NDTX059759-3R-W/Y	6.8	6.4	73	88	1.9	4.0	4.4	3.2	1
ATTX98500-3PW/Y	11.0	4.7	54	73	1.9	4.5	4.1	4.7	5
BTX1544-2W/Y	7.1	5.0	91	99	1.4	3.1	2.3	4.5	70
NDTX059759-3R-W/Y-P	9.6	5.3	64	73	1.9	3.9	4.7	3.8	0
NDTX059775-1W/Y	10.1	3.7	86	95	1.6	3.4	3.5	3.8	23
COTX03079-1W/Y	11.9	4.4	49	59	1.9	3.3	3.1	3.8	41
BTX1749-1W/Y	6.2	4.8	75	86	1.9	3.5	2.6	3.6	44
NDTX049265-2WRSP/Y	12.3	4.9	34	43	1.8	3.3	3.2	3.5	24
TX04237-6Y/Y	9.6	5.5	36	44	1.9	2.6	3.9	2.8	0
COTX04178-1Y/Y	12.4	3.1	66	80	1.9	3.1	3.5	3.3	33
NDTX059759-1P-W/Y	9.0	5.2	35	45	1.8	2.1	3.9	2.1	10
ATX03496-3Y/Y	8.2	3.2	55	96	1.8	3.1	2.5	3.3	75
TX1674-1W/Y	6.0	4.8	48	54	1.6	2.1	3.8	2.4	6
NDTX059886-1Y/Y	11.3	2.7	66	80	1.9	2.5	3.3	2.9	24
COTX04015-3W/Y	9.0	5.6	13	14	2.0	1.0	4.0	1.9	5
Average	9.4	4.8	58	70	1.8	3.2	3.4	3.4	27
L.S.D. (.05)	4.0	0.8	25	22	ns	0.9	0.7	0.9	18

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

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

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

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

Dalhart
Table 11d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 17 entries in the Texas Advanced White Skin Yellow Flesh Trial grown near Dalhart, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
ATTX00289-6Y/Y	2.8	3.3	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	3	0	0	0
TX1523-1Ru/Y	3.0	3.5	3.7	4.0	3.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
NDTX059759-3R-W/Y	3.9	3.5	1.0	4.4	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATTX98500-3PW/Y	3.8	3.2	1.4	4.4	1.0	5.0	5.0	5.0	5.0	5.0	3	0	0	0
BTX1544-2W/Y	3.0	3.5	2.7	4.0	1.3	5.0	5.0	5.0	5.0	5.0	8	0	0	0
NDTX059759-3R-W/Y-P	3.9	3.5	1.0	4.4	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX059775-1W/Y	2.1	3.5	1.0	4.2	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX03079-1W/Y	3.0	3.3	2.0	3.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
BTX1749-1W/Y	2.7	2.9	1.9	4.0	1.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX049265-2WRSP/Y	3.3	3.0	1.0	3.9	1.3	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TX04237-6Y/Y	2.8	3.4	1.0	4.2	1.0	5.0	5.0	5.0	5.0	5.0	28	0	0	5
COTX04178-1Y/Y	2.5	2.3	1.3	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX059759-1P-W/Y	3.4	3.3	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
ATX03496-3Y/Y	3.0	3.7	1.4	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
TX1674-1W/Y	3.3	3.9	1.5	4.3	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
NDTX059886-1Y/Y	2.6	1.2	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
COTX04015-3W/Y	3.8	3.3	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average	3.1	3.2	1.5	4.0	1.2	5.0	5.0	5.0	5.0	5.0	3	0	0	0
L.S.D. (.05)	0.4	0.1	0.2	0.1	0.1						10			ns

¹ 1=light to 5=dark
² 1=round to 5=long
³ 1=none to 5=heavy
⁴ 1=deep to 5=shallow
⁵ 1=light to 5=dark
⁶ 1 to 5=none
⁷ 1 to 5=none
⁸ 1 to 5=none
⁹ 1 to 5=none
¹⁰ 1 to 5=none
¹¹ Stem end vascular discoloration severely evaluated

Dalhart

Table 11e. Notes and general rating for all reps of 17 entries in the Texas Advanced White Skin Yellow Flesh Trial grown near Dalhart, Texas-2008.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
ATTX00289-6Y/Y		yield ++, BOT for yield, Pointed, Pink eyes	4, 3.8, 3.7, 3.7	3.7, 3.6, 3.5, 3.5
TX1523-1Ru/Y	BOT	BOT	4.5, 3.8, 4, 3.8	4.5, 4.5, 4.5, 4.5
NDTX059759-3R-W/Y	bad rep, BOT red/pinto,	Shoulder hump, over size, purple streaks	4, 3.5, 4.8, 3.8	3, 3.8, 3, 3.5
ATTX98500-3PW/Y	pointed	Poor shape, Drop, Pointed, rhiz +, Rough, Drop +	3.3, 3.5, 3.2, 3.2	3, 3, 2.5, 3
BTX1544-2W/Y		Pointed stem, Drop ?, Fine russ skin	3.2, 4.5, 3.8, 3.7	3.3, 3.3, 3.3, 3.3
NDTX059759-3R-W/Y-P	BOT red/pinto	BOT, purple streak flesh	3.4, 3.5, 3.5, 3.6	4.2, 4.2, 4.5, 4.2
NDTX059775-1W/Y	bad rep	Nice skin finish	3.5, 3.2, 3.4, 3	3.3, 3.4, 3.5, 3.5
COTX03079-1W/Y		Purple , Drop ?	3, 4, 2.7, 3	2.8, 2.8, 2.8, 2.8
BTX1749-1W/Y	early	Low yield	3.2, 3, 3.3, 3	3.2, 3.3, 3.3, 3.2
NDTX049265-2WRSP/Y	nice	some pointed to stem, pair shape, Drop ?, High yield, Nice internals	3.5, 3.4, 3.3, 3	3.7, 3.7, 3.7, 3.7
TX04237-6Y/Y	low yield	Large tubers, smooth	3.4, 3, 3.6, 3.4	3.8, 3.8, 3.5, 3.5
COTX04178-1Y/Y		Pointed Stem, Drop?, small salad?	2.8, 3.4, 3.2, 3.8	3.3, 3.2, 3.2, 3.3
NDTX059759-1P-W/Y	light set, light set	Drop, Flat, Purple streaks, Drop, Flat, Purple streaks	3, 3, 3.3, 3.3	3.3, 3.3, 3.3, 3.3
ATX03496-3Y/Y	Amedeus like	Lenticels	4, 3.3, 3.4, 3	3, 2.8, 3, 2.8
TX1674-1W/Y		Pink eyes, Fine russ skin, Drop ?, Light Russ	3.3, 3.3, 2.5, 2.6	3.3, 2.8, 2.7, 2.7
NDTX059886-1Y/Y	drop	Salad ? Small, Poor skin finish	3, 2.3, 2.5, 2.3	3.5, 3.5, 3.7, 3.6
COTX04015-3W/Y	drop, drop	Light set, Low tiel, Red eyes	2.8, 2.5, 2, 2	2.8, 2, 2, 2.5

Dalhart
Table 11f. Specific gravity, percent solids, tuber general rating, chip color rating, good chip bad chip ratio, good chip bad chip number, chip defects and notes, and percentage of Zebra Defect at chipping, and percentage Zebra Defect at grading of 17 entries in the Texas Advanced White Skin Yellow Flesh Trial grown near Dalhart, Texas-2008.

Variety or Selection	Source	Gravity	% Solids	Tuber General Rating ²	Chip Color ³	Good/Bad Chip Ratio	Number of Good Chip	Number of Bad Chip	Chip Defects and Notes ⁴	Percent Zebra Defect	Percent Zebra Defect at Grading
ATTX00289-6Y/Y	Colorado	1.063	13.8	3.6	2	26/12	26	12	26% Vas, 5% BC	0%	3%
TX1523-1Ru/Y	Dalhart	1.080	16.8	4.5	2	10/1	10	1	9% Bru	0%	0%
NDTX059759-3R-W/Y	Dalhart	1.075	15.9	3.3	2+	21/19	21	19	3% PreZ , 5% Vas, 40% Bru	3%	0%
ATTX98500-3PW/Y	Colorado	1.073	15.6	2.9	2+	10/20	10	20	67% Vas	0%	0%
BTX1544-2W/Y	Dalhart	1.078	16.4	3.3	3	25/15	25	15	18% Vas, 13% Bru, 10% BC	0%	0%
NDTX059759-3R-W/Y-P	Dalhart	1.072	15.4	4.3	3	6/4	6	4	30% Vas, 10% Dk	0%	0%
NDTX059775-1W/Y	Dalhart	1.067	14.5	3.4	2+	0/39	0	39	28% PreZ , 72% Vas	28%	0%
COTX03079-1W/Y	Dalhart	1.074	15.7	2.8	2+	7/27	7	27	29% Vas, 3% Bru, 41% Dk, 3%	0%	0%
BTX1749-1W/Y	Dalhart	1.078	16.4	3.3	2+	29/11	29	11	20% Vas, 8% Bru	0%	0%
NDTX049265-2WRSP/Y	Dalhart	1.071	15.3	3.7	2	20/10	20	10	33% BC, BOT-	0%	0%
TX04237-6Y/Y	Dalhart	1.069	14.8	3.7	3	10/29	10	29	15% Z , 15% Vas, 44% Bru	15%	0%
COTX04178-1Y/Y	Dalhart	1.058	12.9	3.3	3+	19/21	19	21	8% Bru, 38% Dk, 8% BC	0%	0%
NDTX059759-1P-W/Y	Dalhart	1.076	16.0	3.3	3	33/7	33	7	15% Bru, 3% Dk	0%	0%
ATX03496-3Y/Y	Dalhart	1.064	13.9	2.9	1+	20/10	20	10	33% Vas, Nice skin, BOT	0%	0%
TX1674-1W/Y	Dalhart	1.082	17.2	2.9	3	24/16	24	16	25% Vas, 15% Bru	0%	0%
NDTX059886-1Y/Y	Dalhart	1.082	17.2	3.6	2	29/10	29	10	3% PreZ , 5% Vas, 18% Bru	3%	0%
COTX04015-3W/Y	Dalhart	1.086	17.9	2.3	3	8/21	8	21	3% PreZ , 53% Vas, 17% Dk	3%	0%
Average										3%	0%

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

¹BOT=Best Of Trial

²1=poor, 5=excellent

³1=light, 3+=very dark

⁴Vas=vascular heat necrosis, Dark=high sugars, BSB=blackspot bruise, HH=hollow heart, IBS=internal brownspot, SE=sugar ends, PB= pressure bruise, GH=greenheads, Z=zebra

Addendum to Tables Dalhart 11a,11b, 11c, 11d, 11e, and 11f
Texas Advanced White Skin Yellow Flesh Trial

Location:

Dalhart, Texas

Soil Type

Dallum Fine Sand Loam

Seed Source

Colorado

Date:

		DAP
Planted	May 13, 2008	
Vines Killed (Red Chip)	September 8, 2008	115
Vines Killed (Russet)	September 26, 2008	133
Harvested (Red Chip)	September 15, 2008	122
Harvested (Russet)	September 29, 2008	136

Plot Information:

Size of Plots	10'
Spacing Between Hills	12"
Spacing Between Rows	28"
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:
205-221-50 # per acre

Irrigation:

Center Pivot

Seed Treatment

Tops MZ Gaucho

Insecticide:

Platinum, Fulfill, Thimet, LI 700, Spintor, AgriMek, Superb, Reaper, Rimon

Herbicides Applied:

Medal, Sencor, Eptam, Matrix, Liberate, Intensity, Superb, Reglone, Dual

Fungicide Applied:

Quadris, Ultra Flourish, Headline, Echo, Manzate, Endura, Revus Top, Scala, SuperTin

Environmental Factors:

Temperature was higher than average for the last week in May and the first and second week in June. Precipitation was high than normal during the growing season

Dalhart
Table 12a.

Total yield, total yield of U.S. No.1, under 4 ounce and culls/No.2 potatoes and general rating of 15 entries in the Yukon Gold Strain Trial grown near Dalhart, Texas-2008.

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					
TXYG055(TX)	231.4	189.2	80.0	70.2	39.0	0.0	42.2	0.0	3.0	3.5
TXYG055(G2)	480.4	407.6	100.0	176.4	131.2	16.0	56.8	0.0	3.8	4.1
TXYG057(TX)	165.4	137.0	38.0	53.8	45.2	0.0	28.4	0.0	3.0	3.4
TXYG057(G2)	467.5	389.3	125.9	176.8	86.6	0.0	78.2	0.0	3.6	4.1
TXYG079(TX)	156.0	138.2	32.4	46.2	59.6	3.8	14.0	0.0	3.2	3.5
TXYG079(G2)	432.6	393.4	129.0	149.4	115.0	0.0	39.2	0.0	3.6	3.8
TXYG098(TX)	151.2	124.6	50.0	44.4	30.2	0.0	26.6	0.0	3.1	3.2
TXYG098(G2)	449.8	386.6	136.2	153.4	97.0	0.0	63.2	0.0	3.6	4.1
TXYG105(TX)	181.2	151.2	67.4	56.6	27.2	0.0	30.0	0.0	3.1	3.5
TXYG105(G2)	437.8	368.6	124.7	142.1	101.8	0.0	69.2	0.0	3.6	4.0
TXYG107(TX)	330.7	265.7	78.6	117.0	70.1	11.4	53.6	0.0	3.4	3.8
TXYG107(G2)	479.4	417.2	150.2	156.8	110.2	0.0	62.2	0.0	3.7	4.0
Yukon Gold (CO)	439.9	354.8	102.6	175.6	76.6	20.2	64.9	0.0	3.6	4.2
Yukon Gold (Stad) (G2)	398.2	343.8	83.6	165.2	95.0	11.6	42.8	0.0	3.5	3.8
ZSC(G2)	451.2	374.6	121.6	181.8	71.2	11.4	65.2	0.0	3.5	3.9
Average	350.2	296.1	94.7	124.4	77.1	5.0	49.1	0.0	3.4	3.8
L.S.D. (.05)	57.3	58.0	45.5	49.7	44.8	ns	18.7		0.2	0.3

¹ 1=very poor to 5= excellent

Dalhart
Table 12b.

Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 15 entries in the Yukon Gold Strain Trial grown near Dalhart, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	4-6 oz	6-10 oz	10-18 oz	Over 18 oz.	Under 4 oz.	Culls/ No. 2				
TXYG055(TX)	81.6	33.5	30.5	17.6	0.0	18.4	0.0	1.077	16.2	Oblong	White
TXYG055(G2)	85.6	21.5	36.0	28.1	2.8	11.6	0.0	1.076	16.1	Oblong	White
TXYG057(TX)	82.6	24.9	32.9	24.9	0.0	17.4	0.0	1.072	15.3	Oblong	White
TXYG057(G2)	83.3	26.9	37.8	18.6	0.0	16.7	0.0	1.075	15.9	Oblong	White
TXYG079(TX)	88.6	19.6	28.6	40.3	2.0	9.5	0.0	1.077	16.2	Oblong	White
TXYG079(G2)	90.7	29.4	34.8	26.5	0.0	9.3	0.0	1.076	16.1	Oblong	White
TXYG098(TX)	80.5	34.5	30.5	15.4	0.0	19.5	0.0	1.069	14.8	Oblong	White
TXYG098(G2)	85.9	30.4	33.8	21.7	0.0	14.1	0.0	1.077	16.2	Oblong	White
TXYG105(TX)	84.1	38.4	30.2	15.6	0.0	15.9	0.0	1.072	15.4	Oblong	White
TXYG105(G2)	84.2	28.3	32.5	23.5	0.0	15.8	0.0	1.073	15.6	Oblong	White
TXYG107(TX)	80.5	23.7	35.7	21.2	3.3	16.1	0.0	1.076	16.1	Oblong	White
TXYG107(G2)	86.9	30.8	33.2	22.9	0.0	13.1	0.0	1.074	15.8	Oblong	White
Yukon Gold (CO)	81.0	24.0	39.9	17.0	4.3	14.7	0.0	1.080	16.8	Oblong	White
Yukon Gold (Stad) (G2)	86.3	20.9	41.5	23.9	2.9	10.8	0.0	1.075	15.9	Oblong	White
ZSC(G2)	82.6	26.5	40.5	15.5	2.9	14.5	0.0	1.075	15.9	Oblong	White
Average	84.3	27.6	34.6	22.2	1.2	14.5	0.0	1.075	15.9		
L.S.D. (.05)	ns	ns	ns	ns	ns	ns		ns	ns		

Dalhart
Table 12c.

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 15 entries in the Yukon Gold Strain Trial grown near Dalhart, Texas-2008.

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	
TXYG055(TX)	6.0	5.6	74	74	1.5	4.0	1.8	4.0	93
TXYG055(G2)	6.7	7.5	86	98	1.5	4.5	2.0	4.7	79
TXYG057(TX)	4.8	6.1	55	60	1.5	3.6	1.8	3.4	83
TXYG057(G2)	7.8	6.5	94	94	1.5	4.7	2.0	4.7	74
TXYG079(TX)	4.8	7.7	39	45	1.5	2.9	2.8	3.2	50
TXYG079(G2)	7.6	7.5	68	81	1.5	4.5	2.3	4.5	69
TXYG098(TX)	5.1	5.8	45	50	1.5	3.0	2.3	3.5	68
TXYG098(G2)	8.1	6.0	90	94	1.5	4.3	1.7	4.6	89
TXYG105(TX)	4.6	5.6	66	73	1.5	3.2	1.7	3.7	83
TXYG105(G2)	7.0	6.3	100	100	1.5	4.7	1.3	4.7	98
TXYG107(TX)	5.2	6.4	91	100	1.5	4.0	2.1	4.1	71
TXYG107(G2)	7.3	6.6	99	99	1.5	4.5	2.1	4.7	74
Yukon Gold (CO)	8.8	7.2	68	76	1.5	4.5	1.9	4.7	84
Yukon Gold (Stad) (G2)	7.3	7.5	69	76	1.5	4.5	2.7	4.7	60
ZSC(G2)	7.0	6.6	96	100	1.5	4.7	1.5	4.7	88
Average	6.5	6.6	76	81	1.5	4.1	2.0	4.3	77
L.S.D. (.05)	1.7	0.1	15.9	16.8		0.2 ns		0.1 ns	

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

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

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

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

Dalhart
Table 12d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 15 entries in the Yukon Gold Strain Trial grown near Dalhart, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
TXYG055(TX)	3.0	3.3	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	15	0	0	0
TXYG055(G2)	3.0	3.6	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	23	0	0	0
TXYG057(TX)	3.0	3.2	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	25	0	0	0
TXYG057(G2)	3.0	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	18	0	0	5
TXYG079(TX)	3.0	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	25	0	0	0
TXYG079(G2)	3.0	3.4	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	25	0	0	0
TXYG098(TX)	3.0	3.4	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	10	0	0	0
TXYG098(G2)	3.0	3.2	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	15	0	0	3
TXYG105(TX)	3.0	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	5	0	0	0
TXYG105(G2)	3.0	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	15	0	0	0
TXYG107(TX)	3.0	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	18	0	0	0
TXYG107(G2)	3.0	3.3	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	30	0	0	0
Yukon Gold (CO)	3.1	3.6	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	10	0	0	0
Yukon Gold (Stad) (G2)	3.0	3.5	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	10	0	0	0
ZSC(G2)	3.0	3.6	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	15	0	0	0
Average	3.0	3.4	1.0	4.0	1.0	5.0	5.0	5.0	5.0	5.0	17	0	0	1
L.S.D. (.05)		ns									ns			ns

¹ 1=light to 5=dark

⁶ 1 to 5=none

² 1=round to 5=long

⁷ 1 to 5=none

³ 1=none to 5=heavy

⁸ 1 to 5=none

⁴ 1=deep to 5=shallow

⁹ 1 to 5=none

⁵ 1=light to 5=dark

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Dalhart

Table 12e.

Notes and general rating for all reps of 15 entries in the Yukon Gold Strain Trial grown near Dalhart, Texas-2008.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
TXYG055(TX)		low yield, small	2.8, 3.2, 3, 3	3.5, 3.5, 3.3, 3.7
TXYG055(G2)	BOT	BOT, oversize	3.7, 3.96, 3.8, 3.7	4, 4.2, 4.2, 3.8
TXYG057(TX)		low yield	3.2, 3.1, 2.6, 3.2	3, 3.5, 3, 4
TXYG057(G2)	oblong type	BOT, nice	3.6, 3.7, 3.5, 3.7	4.2, 4.2, 4, 3.8
TXYG079(TX)		light set, large tubers	3.2, 3.2, 3, 3.2	3.3, 3.5, 3.7, 3.5
TXYG079(G2)		light set, poor rep	3.6, 3.4, 3.5, 3.7	4.2, 3.3, 3.8, 3.9
TXYG098(TX)		low yield	3.2, 3, 3.2, 3	3, 3, 3.4, 3.2
TXYG098(G2)		BOT	3.5, 3.8, 3.5, 3.7	4.1, 4.2, 4, 4
TXYG105(TX)		low yield	3, 3, 3.2, 3.3	3.3, 3.3, 3.4, 3.8
TXYG105(G2)		light set, large tubers	3.7, 3.3, 3.6, 3.6	4.2, 3.6, 4, 4
TXYG107(TX)		rough, zebra++	3.3, 3.2, 3.4, 3.5	3.8, 3.5, 3.8, 4
TXYG107(G2)			3.7, 3.6, 3.7, 3.6	4.1, 4, 4, 4
Yukon Gold (CO)		BOT	3.8, 3.7, 3.6, 3.2	4.2, 3.8, 4.3, 4.5
Yukon Gold (Stad) (G2)			3.5, 3.5, 3.6, 3.5	4, 3.7, 3.8, 3.8
ZSC(G2)		rhizoctonia	3.4, 3.5, 3.5, 3.7	4, 3.8, 4, 3.9

Addendum to Tables Dalhart 12a,12b, 12c, 12d, 12e, and 12f
Yukon Gold Strain Trial

Location:

Dalhart, Texas

Soil Type

Dallum Fine Sand Loam

Seed Source

Colorado

Date:

		DAP
Planted	May 13, 2008	
Vines Killed (Red Chip)	September 8, 2008	115
Vines Killed (Russet)	September 26, 2008	133
Harvested (Red Chip)	September 15, 2008	122
Harvested (Russet)	September 29, 2008	136

Plot Information:

Size of Plots	10'
Spacing Between Hills	12"
Spacing Between Rows	28"
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:
205-221-50 # per acre

Irrigation:

Center Pivot

Seed Treatment

Tops MZ Gaucho

Insecticide:

Platinum, Fulfill, Thimet, LI 700, Spintor, AgriMek, Superb, Reaper, Rimon

Herbicides Applied:

Medal, Sencor, Eptam, Matrix, Liberate, Intensity, Superb, Reglone, Dual

Fungicide Applied:

Quadris, Ultra Flourish, Headline, Echo, Manzate, Endura, Revus Top, Scala, SuperTin

Environmental Factors:

Temperature was higher than average for the last week in May and the first and second week in June. Precipitation was high than normal during the growing season

Dalhart Total yield, total yield of U.S. No.1, under 1 inch tubers, culls/No.2 potatoes and general rating of 5 entries in the Texas Advanced Fingerling Selection Trial grown near Dalhart, Texas-2008.

Variety or Selection	Total Yield Cwt/A	U.S. No. 1 Cwt. Per Acre				Over 6 inch	Under 1 inch	Culls/ No.2	General Rating ¹ Field	General Rating ¹ Grading
		Total Yield	1-2 inch	2-4 inch	4-6 inch					
COTX04050-1P/P	355.5	307.2	222.4	84.8	0.0	0.0	48.3	0.0	3.6	3.4
COTX03187-1W	203.0	193.9	125.3	68.5	0.0	0.0	8.5	0.6	3.6	3.4
PTTX05PG07-1W	142.9	140.0	135.2	4.8	0.0	0.0	2.9	0.0	3.8	4.5
Banana	150.8	101.4	92.0	9.4	0.0	0.0	6.6	42.8	3.6	3.5
Purple Peruvian	77.3	70.1	62.1	8.0	0.0	0.0	7.2	0.0	3.5	3.5
Average	185.9	162.5	127.4	35.1	0.0	0.0	14.7	8.7	3.6	3.7
L.S.D. (.05)	55.9	46.0	50.2	17.1			9.7	13.7	ns	0.1

¹ 1=very poor to 5= excellent

Dalhart
Table 13b. Percent by weight of U.S. No. 1, under 4 ounce and culls/No.2 potatoes, specific gravity, tuber type and skin type of 5 entries in the Texas Advanced Fingerling Selection Trial grown near Dalhart, Texas-2008.

Variety or Selection	Percent By Weight of U.S. No. 1				Percent By Weight			Specific Gravity	% Solids	Tuber Type	Skin Type
	Total Yield	1-2 inch	2-4 inch	4-6 inch	Over 6 inch	Under 1 inch	Culls/ No. 2				
COTX04050-1P/P	86.4	62.5	23.9	0.0	0.0	13.6	0.0	1.073	15.5	Round	Purple
COTX03187-1W	95.5	61.8	33.7	0.0	0.0	4.1	0.4	1.095	19.4	Long	White
PTTX05PG07-1W	98.0	94.2	3.8	0.0	0.0	2.0	0.0	1.065	14.1	Long	White
Banana	67.5	60.0	7.5	0.0	0.0	4.9	27.6	1.079	16.6	Long	White
Purple Peruvian	90.2	77.6	12.6	0.0	0.0	9.8	0.0	1.081	16.9	Long	Purple
Average	87.5	71.2	16.3	0.0	0.0	6.9	5.6	1.079	16.5		
L.S.D. (.05)	6.3	12.3	11.0			3.9	4.5	0.003	0.5		

Dalhart
Table 13c.

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 5 entries in the Texas Advanced Fingerling Selection Trial grown near Dalhart, Texas-2008.

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	
COTX04050-1P/P	15.4	2.4	91	95	2.0	3.9	3.1	4.1	30
COTX03187-1W	8.1	3.2	73	80	2.0	4.1	3.8	4.3	4
PTTX05PG07-1W	10.2	1.9	66	75	2.0	3.6	1.8	3.3	76
Banana	7.0	1.7	100	100	2.0	4.5	4.2	4.4	3
Purple Peruvian	6.4	1.2	100	100	1.9	4.5	5.0	4.7	0
Average	9.4	2.1	86	90	2.0	4.1	3.6	4.1	23
L.S.D. (.05)	2.5	0.3	12	18	ns	0.4	0.3	0.4	7

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

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

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

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

Dalhart
Table 13d. Flesh color, tuber shape, degree of russeting, eye depth, skin color, growth cracks, shatter bruise, scab, knobiness, feathering, percent hollow heart, percent blackspot, percent vascular discoloration, percent internal brownspot of 5 entries in the Texas Advanced Fingerling Selection Trial grown near Dalhart, Texas-2008.

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 ¹⁰	Percent Hollow Heart	Percent Blackspot	Percent Vascular Discoloration ¹⁰	Percent Internal Brownspot
COTX04050-1P/P	4.0	2.0	1.0	4.0	4.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
COTX03187-1W	1.0	4.0	1.0	4.5	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
PTTX05PG07-1W	1.0	4.0	1.0	4.5	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Banana	2.0	4.0	1.0	3.8	1.0	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Purple Peruvian	4.3	5.0	1.0	2.6	4.5	5.0	5.0	5.0	5.0	5.0	0	0	0	0
Average	2.5	3.8	1.0	3.9	2.4	5.0	5.0	5.0	5.0	5.0	0	0	0	0
L.S.D. (.05)	0.2	ns		0.4	ns									

¹ 1=light to 5=dark

² 1=round to 5=long

³ 1=none to 5=heavy

⁴ 1=deep to 5=shallow

⁵ 1=light to 5=dark

⁶ 1 to 5=none

⁷ 1 to 5=none

⁸ 1 to 5=none

⁹ 1 to 5=none

¹⁰ 1 to 5=none

¹¹ Stem end vascular discoloration severely evaluated

Dalhart

Table 13e.

Notes and general rating for all reps of 5 entries in the Texas Advanced Fingerling Selection Trial grown near Dalhart, Texas-2008.

Variety or Selection	Notes Field	Notes Grading	General Rating Field	General Rating Grading
COTX04050-1P/P	salad?	Purple flesh, smooth, more to purples	3.4, 3.7, 3.7, 3.7	3.4, 3.4, 3.4, 3.4
COTX03187-1W		over size	3.6, 3.6, 3.5, 3.5	3.5, 3.5, 3.3, 3.3
PTTX05PG07-1W	White flesh	very smooth, no culls, BOT	4, 3.6, 3.7, 3.7	4.5, 4.5, 4.5, 4.5
Banana		Rhizoctonia, many culls, keep for seed	3.5, 3.5, 3.7, 3.7	3.5, 3.5, 3.5, 3.5
Purple Peruvian		deep eyes	3.5, 3.5, 3.5, 3.5	3.5, 3.5, 3.5, 3.5

Addendum to Tables Dalhart 13a,13b, 13c, 13d, 13e, and 13f
Texas Advanced Fingerling Selection Trial

Location:

Dalhart, Texas

Soil Type

Dallum Fine Sand Loam

Seed Source

Colorado

Date:

		DAP
Planted	May 13, 2008	
Vines Killed (Red Chip)	September 8, 2008	115
Vines Killed (Russet)	September 26, 2008	133
Harvested (Red Chip)	September 15, 2008	122
Harvested (Russet)	September 29, 2008	136

Plot Information:

Size of Plots	10'
Spacing Between Hills	12"
Spacing Between Rows	28"
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:
205-221-50 # per acre

Irrigation:

Center Pivot

Seed Treatment

Tops MZ Gaucho

Insecticide:

Platinum, Fulfill, Thimet, LI 700, Spintor, AgriMek, Superb, Reaper, Rimon

Herbicides Applied:

Medal, Sencor, Eptam, Matrix, Liberate, Intensity, Superb, Reglone, Dual

Fungicide Applied:

Quadris, Ultra Flourish, Headline, Echo, Manzate, Endura, Revus Top, Scala, SuperTin

Environmental Factors:

Temperature was higher than average for the last week in May and the first and second week in June. Precipitation was high than normal during the growing season

Dalhart
Table 14.

General rating, tuber type, skin color, notes, and remnant weight for 15 entries to be advanced from the 07 specialty selections grown near Dalhart, Texas-2008.

Variety or Selection	General Rating Field	Tuber Type	Skin Color	Notes	Inventory Weight
ATX03515-1R/Y	3.2	Oblong	Red	white flesh	25.3
ATX03545-1R	3.4	Round	Red	yellow flesh 2	5.4
ATX03546-1W/Y	3.4	Round	White	yellow flesh 3	10.3
ATX03546-2R/Y	3.0	Oblong	Red	yellow flesh4	6.7
ATX05175-3R/Y	3.4	Round	Red	yellow flesh4	14.5
ATX05178-2P	3.3	Oblong	Purple	white flesh	21.6
ATX05202-3W/Y	3.8	Round	White	yellow flesh 3	6.1
COTX05037-4Y/Y	4.0	Round	White	yellow flesh	43.6
COTX05037-5P/Y	3.3	Oblong	Purple	yellow flesh	19.1
COTX05082-2P/P	3.0	Oblong	Purple	P 4.8	22.6
COTX05249-3W-R/Y	3.3	Round	White	yellow flesh 2	16.3
COTX05261-1R/Y	4.0	Oblong	White	yellow flesh3.5	23.2
COTX05261-2R/Y	3.4	Round	Red	yellow flesh 2.5	5.9
NDTX050025-1W/Y	3.1	Oblong	White	yellow flesh 2.5	4.8
NDTX050065-1R/Y	3.1	Round	Red	white flesh	3.0

Appendix A. General notes on potato varieties or selections – 2008.

04-3311-4W/W-P Round White. Cross was made and selected by USDA/ARS in Madison, WI

Uses: Chip.

Strengths:

Weaknesses: Small, Drop ++, **Deleted**

Cutting Notes: blocky, small

04-3315-1W/W-P Oblong White. Cross was made and selected by USDA/ARS in Madison, WI

Uses: Chip.

Strengths: Purple flesh, **Keep**

Weaknesses: Drop

Cutting Notes: blocky, small

A0008-1TE- Oblong Russet. Parentage (Blazer Russet x A95109-1). Cross was made and selected in Aberdeen. Medium-early maturity. Small vine size. White flower color.

Uses: Dual.

Strengths:

Weaknesses: Growth cracks++

Cutting Notes: blocky, small

A00286-3Y- Oblong White. Parentage (NDA5507-3Y x A89655-5DY). Cross was made and selected in Aberdeen. Medium-late maturity. Medium large vine size. Medium red-purple flower color.

Uses: Specialty.

Strengths:

Weaknesses: Low yield. Drop,

Cutting Notes: Rough Nice dark yellow flesh

A97066-42LB- Oblong Light Russet. Parentage (AWN86514-2 x A86102-6). Cross was made and selected in Aberdeen. Medium maturity. Medium large vine size. White flower color

Uses: Dual.

Strengths: Drop, light russet skin, small

Weaknesses:

Cutting Notes: light skin, silver scurf

A99331-2RY- Oblong Red. Parentage (Inca Gold x COA94019-5R). Cross was made and selected in Aberdeen. Medium maturity. Medium vine size. Dark red-purple flower color.

Uses: Specialty.

Strengths: B size

Weaknesses: heat sprouts, small, pinto

Cutting Notes: rough, poor shape, white eyes

AC00170-2W- Round White. Parentage (A90467-14 x A91790-13). Cross was made in Aberdeen and selected in Colorado. Early maturity. Medium vine size. Purple flower color.

Uses: Chip.

Strengths: Nice flesh

Weaknesses: Small, immature, green stem, very late, drop++, Heat sprouts stolon.

Cutting Notes: Nice, shape and flesh

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: Smooth

Weaknesses: small, low yield, drop.

Cutting Notes: Small,

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:

Weaknesses: Poor shape, pointed to stem end.

Cutting Notes: light flesh

AC99213-8W- Round White. Parentage (A900467-14 x NDA5698-8). Cross was made in Aberdeen, and selected in Colorado. Medium maturity. Large vine. White flower color.

Uses: Chip.

Strengths: Better yield

Weaknesses: Very late, poor internals, sticky stolon

Cutting Notes: Nice

AC99329-7RW/Y- Round Purple-White. Parentage (Inca Gold x A91846-5R). Cross was made in Aberdeen, and selected in Colorado. Medium maturity. Large-very large vine. Purple flower color.

Uses: Specialty

Strengths:

Weaknesses: Pointed, heat sprouts, sticky solons

Cutting Notes: Pinto, nice shape

AC99330-1P/Y-Round Purple. Parentage (Inca Gold x A89655-5DY). Cross was made in Aberdeen, and selected in Colorado. Early maturity. Large vine. Blue flower color.

Uses: Specialty.

Strengths: nice flesh

Weaknesses: Drop+, rough very small

Cutting Notes: nice flesh

AC99375-1RU-. Oblong Russet Parentage (AWN86514-2 x A89384-10). Cross was made in Aberdeen, and selected in Colorado. Medium maturity. Large vine. White flower color.

Uses: Duel.

Strengths:

Weaknesses: Small, did not size

Cutting Notes: blocky, purple streaks in flesh

AF2219-10-Oblong White Parentage (SA8211-6 x EB8109-1). Cross was made and selected in Main at the Aroostook Farm. Medium-late maturity.

Uses: Chip Strength: high specific gravity, moderate to good yields, large tuber size, generally good appearance good chip color. Very white flesh

Weaknesses: susceptibility to blackspot bruise is similar to Snowden Very late, drop++, Rough sticky stolon, heat sprouts over size some pointed.

Cutting Notes: nice white flesh

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: Drop, rough.

Cutting Notes: pointed, skinny

AOTX01178-1R-Round Red. Parentage (A97201-4 x A93157-6LS). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths: RLS like, Yield+, **Keep**,

Weaknesses: light set

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: Bruce likes, large very nice, keep BOT, **Keep**

Weaknesses: Some points, growth cracks, drop?

Cutting Notes: small, rough

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: nice shape, smooth?

Weaknesses: drop+ Drop??, blocky raised eyes, keep, light set **Deleted**

Cutting Notes: small, rough

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

Uses: Fresh.

Strengths: Blocky, nice shape.

Weaknesses: poor internals drop+++, ugly net, low yield, **Deleted**.

Cutting Notes: skinny

AOTX03657-1Ru - Oblong Russet. Parentage (A97039-23 x COA96054-3). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses: Small.

AOTX05096-4RU- Long Russet. Parentage (A00082-6 x A97214-4). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses: Flat

AOTX91861-4R-Oblong Red. Parentage (Red LaSoda X ND2224-5R). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths: BOT, nice flesh, smooth,

Weaknesses: RLS like, deep eyes, drop? Drop, Stem attachment, light set low yield, **Deleted**

Cutting Notes nice shape and skin:

AOTX93483-1R-Oblong Red. Parentage (NDO2686-6R X AD82705-1R). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths: size parent Keep, early bulking

Weaknesses: Oversize, light set, sticky stolon Very late drop, Feathering, light set, rough, pear shape, Stem attachment, **Deleted**

Cutting Notes: eye brows, too large

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 internals, **Keep**

Weaknesses: Small,

Cutting Notes: purple streaks in flesh, rough, skinny, Colorado seed

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: BOT

Weaknesses: Late

Cutting Notes: very nice, Springlake seed

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: BOT high yield, **Keep**

Weaknesses: Oversize Rough, Rhizoctonia, rough

Cutting Notes: blocky, nice

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:

Weaknesses: **Deleted**

Cutting Notes: blocky, flat, pointed

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 flesh

Weaknesses: Pointed, drop, some rot, **Deleted**

Cutting Notes: rough, blocky

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:

Weaknesses: Drop, low yield low yield, drop++, **Deleted**

Cutting Notes: small, blocky

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:

Weaknesses: Poor shape, drop Drop++, Rhizoctonia, some rough **Deleted as Russet**

Cutting Notes: blocky, shriveled, small

AOTX95295-1W- Round White. Parentage (A89804-7 x Ranger Russet). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Chip.

Strengths: Smooth, Nice, Keep as Chip

Weaknesses:

Cutting Notes: BOT for chipping, very nice, CO seed

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: nice skin

Weaknesses: Drop small, low yield Poor internals, **Deleted**

Cutting Notes: very small, shriveled

AOTX95309-1W- Round 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:

Weaknesses: **Deleted**

Cutting Notes: nice shape, sprouts+++

AOTX95309-3W- Round 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 flesh, nice interior BOT **Keep**

Weaknesses: small,

Cutting Notes: nice shape, small, sprouts++

AOTX96084-1Ru- Oblong Russet. Parentage (A8792-1 X A86102-6). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas

Uses: Fresh.

Strengths:

Weaknesses: Drop++, Low yield, **Deleted**

Cutting Notes: small, nice shape

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:

Weaknesses: Drop+++, **Deleted**

Cutting Notes: shriveled, small, 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: BOT

Weaknesses: Rhizoctonia, raised eyes on large tubers **Deleted**

Cutting Notes: dark russet, very small, growth cracks, purple steaks in flesh

AOTX96265-2Ru- Oblong Russet. Parentage (A90621-4 X A84180-8). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths: Very nice, nice shape, BOT, keep

Weaknesses: Feathering, **Deleted**

Cutting Notes: blocky

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: Large tubers

Weaknesses: drop??, **Deleted**

Cutting Notes: rough, small

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:

Weaknesses: Drop++, rough, **Deleted**

Cutting Notes: small, shriveled

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

Uses: Fresh.

Strengths:

Weaknesses: Blocky, drop??, light russet, **Deleted**

Cutting Notes: blocky

AOTX98202-1Ru- Oblong Russet. Parentage (A9201-6 X A9014-2). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses:

AOTX99008-1Ru- Oblong Russet. Parentage (A8670-7 x A9308-2). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses: Drop++, skinny Small, pointed, drop++++, **Deleted**

Cutting Notes: blackspot bruise, poor internal, hollow heart, drop

AOTX99194-1Ru- Oblong Russet. Parentage (A94137-1 x GemStar Russet). Cross was made in Aberdeen, tuberling produced in Oregon, and selected in Texas.

Uses: Fresh.

Strengths: BOT+, smooth nice shape

Weaknesses: Drop, **Deleted**

Cutting Notes: purple sprouts, skinny

ATC00293-1W/Y- Oblong White. Parentage (Agria x TXA1655-1DY). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Colorado. Medium maturity. Large vine size. Purple flower color.

Uses: Fresh.

Strengths:

Weaknesses: Late, Drop, Shape

Cutting Notes: scab

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 50o, uniform tuber size and shape, tolerant to scab and Verticillium wilt, resistant to pink eye and highly resistant to race A of golden nematode, PVX and tuber net necrosis.

Weaknesses: Very 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 % % ZC.

Cutting Notes: uniform

ATTX00289-4W- Oblong Russet. Parentage (NDA5507-3 X TXA1655-1DY). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Fresh.

Strengths: nice flesh nice internal

Weaknesses: Some pointed, drop, Shape-, buff, **Deleted**

Cutting Notes: nice shape

ATTX00289-5R/Y- Round Yellow. Parentage (NDA5507-3 X TXA1655-1DY). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Fresh.

Strengths: Yellow size parent

Weaknesses: Drop, RLS Like, Oversize, **Deleted**

ATTX00289-6Y/Y- Round Yellow. Parentage (NDA5507-3 X TXA1655-1DY). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Fresh.

Strengths: Yield ++, BOT for yield

Weaknesses: Drop, Raised eyes, Internals, hollow heart ++, Pointed, Pink eyes, **Deleted**
Cutting Notes: red eyes

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

Uses: Fresh.

Strengths: **Keep**

Weaknesses:

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

Uses: Specialty.

Strengths: very nice internals heavy set, BOT, **Keep**

Weaknesses: Nipple on stem Rhizoctonia Variable shape small, dumbbell culls, heat sprouts, lenticels

Cutting Notes: some red vascular discoloration

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: Salad, smooth, small BOT++++, salad, **Keep**

Weaknesses:

Cutting Notes: nice flesh, shriveled, road map

ATTX98453-11BR - Round Red. Parentage (A93490-1R X A91846-5R). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses:

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: Smooth nice nice skin smooth, BOT-keep, good color, fast bulking, **Keep**

Weaknesses: light set Variable shape early, can oversize,

Cutting Notes: light red skin, nice flesh

ATTX98466-5R/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, **Keep**.

Weaknesses: shriveled

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

Uses: Specialty.

Strengths: Nice shape

Weaknesses: light flesh, lot of culls, drop Drop++, **Deleted**

Cutting Notes: very small, shriveled.

ATX98493-1AR - Round Red. Parentage (94A2-3Y X BO811-13RY). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses:

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

Uses: Specialty.

Strengths: yield +, **Keep**

Weaknesses: Rough, heat sprouts, dumbbell culls, sticky stolon A little rough,

Cutting Notes: nice shape and flesh

ATX98500-3PW/Y- Oblong-Pinto/Yellow. Parentage (P94A2-4Y X Granola). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas. Late maturity. Large vine size. Purple flower color

Uses: Specialty.

Strengths:

Weaknesses: Pointed, Poor shape, Rhizoctonia +, Rough, Drop ++, Drop, Flat, light skin, **Deleted**

Cutting Notes: poor shape, pointed, flat

ATX98518-5P/Y - Round Yellow. Parentage (Agraria X A83350-9R). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses: Drop, rough skin, **Deleted**

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

Uses: Specialty.

Strengths: Smooth Very white flesh, **Keep**

Weaknesses: yield??

Cutting Notes: rough, feathering, shriveled

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

Uses: Fresh.

Strengths: BOT -, Salad Small, B size, smooth, BOT for salad, buff, **Keep**

Weaknesses:

Cutting Notes: small, road map

ATX03003-1Ru- Oblong Russet. Parentage (Western Russet x A98079-1). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths: Large, smooth, heavy set

Weaknesses: heat sprouts Small, small lenticels, drop, **Deleted**

Cutting Notes: BOT, very nice, blocky

ATX03003-7Ru- Oblong Russet. Parentage (Western Russet x A98079-1). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses: Poor internals+, low yield, blocky Drop?+, feathering, **Deleted**

Cutting Notes: BOT, rough

ATX03068-1Ru- Oblong Russet. Parentage (A95109-1 x Silverton Russet). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths: Bruce likes, blocky, smooth, BOT,

Weaknesses: Drop, bad Rhizoctonia, low yield rot, **Deleted**

Cutting Notes: rough, nice

ATX03077-2Ru- Oblong Russet. Parentage (A96095-3 x A92030-5). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths: large, nice internal

Weaknesses: Rough large, drop some pointed, **Deleted**

ATX03407-2Ru- Round Russet. Parentage (Stampede Russet x Alturas Cross was made in Colorado and selected in Texas.

Uses: Specialty.

Strengths: Uniform size.

Weaknesses: **Deleted**

Cutting Notes: nice shape

ATX03409-1W/Y- Oblong White-Buff. Parentage (Summit Russet x A96013-2). Cross was made in Aberdeen and selected in Texas.

Uses: Chip.

Strengths:

Weaknesses: Green +, small, **Deleted**

Cutting Notes: flesh not very white, shriveled

ATX03409-2W/Y- Oblong White-Buff. Parentage (Summit Russet x A96013-2). Cross was made in Aberdeen and selected in Texas.

Uses: Chip.

Strengths: White flesh potential salad

Weaknesses: Drop, Low yield, sticky stolon, **Deleted**

Cutting Notes: rough, poor shape

ATX03409-3W/Y- Oblong White-Buff. Parentage (Summit Russet x A96013-2). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths: nice internal

Weaknesses: Low yield **Deleted**

Cutting Notes: large tubers nice

ATX03409-6W/Y- Oblong White-Buff. Parentage (Summit Russet x A96013-2). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths: nice interior, **Keep**

Weaknesses: Small

Cutting Notes: small, nice white flesh

ATX03409-7W/Y- Oblong White-Buff. Parentage (Summit Russet x A96013-2). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths: white flesh

Weaknesses: Buff skin. Low yield Drop +, **Deleted**

Cutting Notes: small

ATX03424-1Ru- Oblong Russet. Parentage (Wallowa Russet x A98292-2). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths: Smooth

Weaknesses: Drop low yield, **Deleted**

Cutting Notes: small, shriveled

ATX03491-1R/Y - Oblong Red. Parentage (A97521-3R x AO93487-2R). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses: Feathering, sticky stolon, **Deleted**

ATX03496-3Y/Y - Oblong Yellow. Parentage (NDTX4271-5R x AO93487-2R). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses: Amadeus like, Lenticels, **Deleted**

ATX03515-1R/Y - Oblong Red Parentage (A961014-12RY x NDC5281-2). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses:

ATX03516-2R - Oblong Red. Parentage (A961014-12RY x NDTX4271-5R). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses:

ATX03545-1R/Y - Oblong Red. Parentage (A97521-3R x AO96747-2R/Y). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses:

ATX03546-1W/Y - Oblong White. Parentage (ATA98472-2Y x A97523-1RY). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses:

ATX03546-2R/Y - Oblong Red. Parentage (ATA98472-2Y x A97523-1RY). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses:

ATX03550-2R - Oblong Russet. Parentage (NDTX4271-5R x AO96747-2R/Y). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses:

ATX05114-1Ru - Oblong Russet. Parentage (TC1675-1RU x A97229-1). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses:

ATX05142-2Ru - Oblong Russet. Parentage (Rio Grande R. x A97214-4). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses:

ATX05175-3R/Y - Oblong Red. Parentage (A99331-2RY x VC1075-1R). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses:

ATX05178-2P - Oblong Purple. Parentage (A99331-2RY x Durango Red). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses:

ATX05202-3W/Y - Oblong White. Parentage (A00286-3Y x A99433-5Y). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh. **Keep**

Strengths:

Weaknesses:

ATX84378-6Ru- Oblong-long Russet. Parentage (A79141-9 x ND329-1). Cross was made in Aberdeen, and selected in Texas.

Uses: Fresh.

Strengths: Nice internals, BOT, smooth, large, **Keep**

Weaknesses: Small alligator, Rhizoctonia

Cutting Notes: shriveled, rough, growth cracks

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: Very white Flesh, nice internal, **Keep**

Weaknesses: Late Over size, feathering

Cutting Notes: very long sprouts++, nice shape

ATX91137-1Ru- Oblong Russet. Parentage (A81473-2 x A8343-12) Cross was made in Aberdeen, and selected in Texas.

Uses: Fresh.

Strengths: BOT++, **Keep**

Weaknesses: Raised eyes on large tubers drop zebra, blocky

Cutting Notes: nice shape, small

ATX9202-3Ru- Oblong Russet. Parentage (A8343-12 x A8495-1) Cross was made in Aberdeen, and selected in Texas.

Uses: Fresh.

Strengths: Very white flesh, **Keep**

Weaknesses: Late, blocky, small, bruising, feathering, zebra??

Cutting Notes: small, purple steaks in flesh

ATX9332-12Ru- Oblong Russet. Parentage (A8850-1 x A88288-1). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh

Strengths: Smooth

Weaknesses: Pointed, Rhizoctonia, **Deleted**

Cutting Notes: small, shriveled, rough, hollow heart

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

Uses: Fresh.

Strengths: nice flesh good yield,

Weaknesses: Small, Shape-, rough, drop oversized, Rhizoctonia, pointed, **Deleted**

Cutting Notes: rough, lenticels

ATX98448-6R/Y - Round Red Parentage (A92657-1R X A89655-5DY). Cross was made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses:

ATX99013-1Ru- Long Russet. Parentage (A8893-1 X A91186-2). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses: Drop

Cutting Notes: small, pointed

ATX99194-3Ru- Oblong Russet. Parentage (A94137-1 x GemStar Russet). Cross was made in Aberdeen and selected in Texas.

Uses: Fresh.

Strengths: Blocky BOT for shape nice shape

Weaknesses: poor internals, low yield Drop, spotty, russeting10z?, ugly net, **Deleted**

Cutting Notes: blocky, very nice, large tubers

Banana- Long White. Parentage (Grown in British Columbia for over 90 years. Research indicates that the variety might have been introduced to early settlers and natives by Russian fur traders. The exact origin, parental lines or breeding techniques used in its development are not known.)

Uses: Specialty.

Strengths: keep for seed

Weaknesses: Rhizoctonia, many culls,

Beacon Chipper- Round White. (The origin and pedigree of Beacon Chipper is currently unknown). Identified at Michigan State University. Medium maturity. Medium vine size. White flower color.

Uses: Chip.

Strengths: parent very white flesh

Weaknesses: deep nose, very large tuber, over size, Buff

Cutting Notes: scab, nice shape

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: Argentina

Weaknesses: Drop++, Pointed stem, Drop ?, Fine russet skin, **Deleted**

Cutting Notes: nice flesh, poor skin, BOT- for flesh and shape

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: Argentina

Weaknesses: Drop+++, Rough, Ugly, Buff, Early, Low yield, **Deleted**

Cutting Notes: small, shriveled

BTX2103-1R/Y - Oblong Red. Parentage (BO811-13 x ARS-W82-21285-1). Cross was made in Beltsville, Maryland and selected in Texas.

Uses: Specialty.

Strengths: **Keep**

Weaknesses:

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: Yield +, **Keep**

Weaknesses: Buff Internal?, 10% internal discoloration

Cutting Notes: some red discoloration in flesh

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

Uses: Chip and French fries.

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

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

Cutting Notes: very nice

CO00188-4W- Oblong White. Parentage (A90490-1W x BC0894-2W). Cross was made and selected in Colorado. Early maturity. Medium vine size. White flower color.

Uses: Chip.

Strengths: heavy set nice flesh Yield+

Weaknesses: Rough, small Greening, late

Cutting Notes: nice

CO00189-2W- Round White. Parentage (??). Cross was made and selected in Colorado.

Uses: Chip.

Strengths:

Weaknesses:

Cutting Notes: uniform

CO00197-3W- Oblong White. Parentage (A91790-13W x NDTX4930-5W). Cross was made and selected in Colorado. Early maturity. Medium vine size. White flower color.

Uses: Chip.

Strengths:

Weaknesses: Late, Drop, poor yield Rough, Drop, Pointed to stem, over size, feathering

Cutting Notes: nice shape

CO00270-7W- Oblong White. Parentage (BC0894-2W x A91790-13W). Cross was made and selected in Colorado. Early-medium maturity. Medium vine size. Purple flower color.

Uses: Fresh.

Strengths: Very white flesh

Weaknesses: Ugly, growth cracks, very rough

Cutting Notes: nice shape, size, and flesh

CO00277-2R- Round Red. Parentage (CO89097-2R x CO94065-2R). Cross was made and selected in Colorado. Very early maturity. Medium vine size. Red-purple flower color.

Uses: Fresh.

Strengths: very white flesh

Weaknesses: Drop, poor shape, late?, lots of culls lots of B's, dumbbell tubers

Cutting Notes: some feathering

CO00291-5R- Round Red. Parentage (CO94019-1R x NDC5281-2R). Cross was made and selected in Colorado. Medium maturity. Large vine size. Red-purple flower color.

Uses: Fresh.

Strengths: good for B size, small good color

Weaknesses: Late, drop did not size

Cutting Notes: nice skin and flesh

CO00379-2R/Y- Oblong Red. Parentage (VC0967-2R/Y x NDC6174-1R). Cross was made and selected in Colorado. Early-medium maturity. Small-medium vine size. Purple flower color.

Uses: Specialty.

Strengths: Smooth

Weaknesses: pointed, buff

Cutting Notes: nice flesh

CO00405-1R- Oblong Russet. Parentage (Banana x NDC6174-1R). Cross was made and selected in Colorado. Very early maturity. Small vine size. Purple flower color.

Uses: Specialty.

Strengths: fingerling good skin set, nice flesh

Weaknesses: Buff curved, poor shape, drop

Cutting Notes: Fingerling, curved, pointed.

CO00412-5W/Y- Oblong White. Parentage (German Butterball x TX1523-1RU/Y). Cross was made and selected in Colorado. Medium maturity. Large vine size. Purple flower color.

Uses: Specialty.

Strengths:

Weaknesses: Late, Drop+++ small boiler, Buff

Cutting Notes: small

CO00415-1R- Long Red. Parentage (Kipfel x NDC5281-2R). Cross was made and selected in Colorado. Very early maturity. Medium vine size. Purple flower color.

Uses: Specialty.

Strengths: good flesh color

Weaknesses: Buff, road map

Cutting Notes: Fingerling, rough.

CO111F2-1P/P - Oblong Purple. Parentage (??). Cross was made and selected in Colorado.

Uses: Specialty.

Strengths: Very dark flesh

Weaknesses:

CO95051-7W- Round White. Parentage (??). Cross was made and selected in Colorado.

Uses: Chip.

Strengths:

Weaknesses: Drop

Cutting Notes: nice

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, smooth BOT, Nice, nice interior

Weaknesses: hollow heart, some cracking, Flat, Drop, too long

Cutting Notes: nice, uniform.

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:

Weaknesses: Late Rough, over size, deep nose, sticky stolon, light set

Cutting Notes: very white flesh, uniform.

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: Nice flesh

Weaknesses:

Cutting Notes: uniform.

CO97087-2RU- Oblong Russet. Parentage (CO87009-4 x W1005). Cross was made and selected in Colorado. Medium maturity. Medium vine size. White flower color.

Uses: Fresh.

Strengths:

Weaknesses: Drop, rough

Cutting Notes: blocky, very white flesh.

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

Uses: Specialty.

Strengths: Very dark solid flesh

Weaknesses:

Cutting Notes: smooth, dark flesh.

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

Uses: Specialty.

Strengths:

Weaknesses: Buff, rough, stolon attachment, ugly skin

Cutting Notes: nice flesh.

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 flesh

Weaknesses: lots of B's, Buff, rough, Drop

Cutting Notes: nice flesh.

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

Uses: Specialty.

Strengths: Very dark solid flesh,

Weaknesses: small, very late, rough

Cutting Notes: very dark flesh.

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:

Weaknesses: Smooth, low yield.

Cutting Notes: poor skin and shape.

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

Weaknesses: Very poor internals, silver scurf, drop, buff skin.

Cutting Notes: poor skin.

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:

Weaknesses: Buff, drop.

Cutting Notes: smooth skin, nice flesh.

CO98012-5R-Oblong Light Russet. Parentage (PA92A17-6 x A91194-4). Cross was made and selected in Aberdeen. Medium maturity. Medium-large vine size.

Uses: Fresh.

Strengths: good for B's, nice skin

Weaknesses: Small, very small

Cutting Notes: nice shape and flesh.

CO98067-7RU- Long Russet. Parentage (Silverton Russet x TC1675-1). Cross was made and selected in Colorado. Early-medium maturity. Medium vine size. White flower color

Uses: Dual.

Strengths: Nice internals, nice white flesh

Weaknesses:

Cutting Notes: small

CO98368-2RU- Long Russet. Parentage (Russet Nugget x Bannock Russet). Cross was made and selected in Colorado. Medium-early maturity. Medium vine size. Purple flower color.

Uses: Dual.

Strengths:

Weaknesses: Small, poor shape, drop

Cutting Notes: curved, small.

CO99045-1W/Y-Long White/Yellow. Parentage (Rio Grande Russet x German Butterball). Cross was made and selected in Colorado. Medium maturity. Large vine size. White flower color.

Uses: Specialty.

Strengths:

Weaknesses: Drop, Burbank like, Long, Fingerling oversize (more #4 to culls)

Cutting Notes: light russet, light flesh, poor internals, internal brownspot.

CO99053-3RU- Long Russet. Parentage (AC91014-2 x Silverton Russet). Cross was made and selected in Colorado. Late maturity. Large vine size. White flower color

Uses: Dual.

Strengths:

Weaknesses: Skinny, long, Drop++

Cutting Notes: curved, rough

CO99053-4RU- Long Russet. Parentage (AC91014-2 x Silverton Russet). Cross was made and selected in Colorado. Early maturity. Medium vine size. White flower color.

Uses: Fresh.

Strengths: Heavy set

Weaknesses: Drop, Small, Poor shape Skinny

Cutting Notes: flat

CO99076-6R- Round Red. Parentage (). Cross was made and selected in Aberdeen. Medium maturity. Medium-large vine size.

Uses: Fresh.

Strengths: BOT++

Weaknesses:

Cutting Notes: nice shape and flesh

CO99100-1RU- Oblong Russet. Parentage (AC93047-1 x Silverton Russet). Cross was made and selected in Colorado. Early maturity. Small-medium vine size. White flower color.

Uses: Dual.

Strengths: Nice,

Weaknesses: Skin??

Cutting Notes: blocky.

CO99256-2R-Oblong Light Russet. Parentage (PA92A17-6 x A91194-4). Cross was made and selected in Aberdeen. Medium maturity. Medium-large vine size.

Uses: Fresh.

Strengths: Lots of B's.

Weaknesses: Low yield, small, drop.

Cutting Notes: some internal problems.

CO99338-3RU/Y- Round Russet/Yellow. Parentage (Russet Nugget x Crispin). Cross was made and selected in Colorado. Early maturity. Medium vine size. White flower color.

Uses: Specialty.

Strengths:

Weaknesses: Small, light skin russet, poor internals.

Cutting Notes: hollow heart.

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

Uses: Chip.

Strengths: Purple streak, smooth

Weaknesses: road map, **Deleted**

Cutting Notes: larger than

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

Uses: Chip.

Strengths: Nice interior , **Keep**

Weaknesses: small

Cutting Notes: nice

COTX03025-2P/P- Oblong Purple/Purple. Parentage (CO94165-3P/P x PA97B36-3). Cross was made in Colorado and selected in Texas.

Uses: Specialty.

Strengths:

Weaknesses: Small, road map, buff, white pith, **Deleted**

Cutting Notes: nice flesh and shape

COTX03039-1R/Y- Oblong Red/Yellow. Parentage (CO97233-3R/Y x VC0967-2R/Y). Cross was made in Colorado and selected in Texas.

Uses: Specialty.

Strengths: Smooth

Weaknesses: Silver scurf, drop?, buff, poor internals shape - **Deleted**

Cutting Notes: road map, nice shape

COTX03079-1W/Y- Oblong White/Yellow. Parentage (VC1015-7R/Y x CO97232-2R/Y). Cross was made in Colorado and selected in Texas.

Uses: Specialty.

Strengths: Good Yield

Weaknesses: drop Shape-, drop++, **Deleted**

Cutting Notes: shriveled

COTX03137-2R/R - Oblong Red/Red. Parentage (VC1015-7R/Y x CO97232-2R/Y). Cross was made in Colorado and selected in Texas.

Uses: Specialty.

Strengths:

Weaknesses:

COTX03187-1W- Fingerling White. Parentage (AC89536-5RU x A9304-3). Cross was made in Colorado and selected in Texas.

Uses: Specialty.

Strengths: keep+, fingerling, **Keep**

Weaknesses: Can be rough, can oversize

Cutting Notes: long white or fingerling??

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

Uses: Chip.

Strengths: Vivaldi like shape, keep nice interior, fresh market shape nice set, **Keep**

Weaknesses: flesh?, green shape-, Drop

Cutting Notes: small, nice shape

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

Uses: Chip.

Strengths:

Weaknesses: Growth cracks, rough, **Deleted**

Cutting Notes: mixed, planted white skin

COTX04015-3W/Y- Oblong White/Yellow. Parentage (ATC98495-1W/Y x TX1674-1W/Y). Cross was made in Colorado and selected in Texas.

Uses: Specialty.

Strengths:

Weaknesses: Drop+, Light set, Low yield, Red eyes, **Deleted**

Cutting Notes: rough, nice flesh

COTX04050-1P/P- Oblong Purple/Purple. Parentage (CO97215-2P/P x CO97306-2P/P). Cross was made in Colorado and selected in Texas

Uses: Specialty.

Strengths: Salad?, Purple flesh, smooth, more to purples very dark flesh, **Keep**

Weaknesses: Small, rough,

Cutting Notes: small, nice flesh

COTX04056-4P/PSalad- Round Purple/Purple. Parentage (CO97216-1P/P x CO97227-2P/PW). Cross was made in Colorado and selected in Texas

Uses: Specialty.

Strengths: salad, heavy set, **Keep**

Weaknesses: Drop? +, feathering, rough, light purple flesh

Cutting Notes: small, B size, nice flesh

COTX04096-1R-W/Y – Round Red-White/Yellow. Parentage (US147-96R/Y x CO97232-2R/Y). Cross was made in Colorado and selected in Texas

Uses: Specialty.

Strengths: Yield +

Weaknesses: Pointed, Drop, **Deleted**

COTX04178-1Y/Y- Oblong Red Parentage (ATC98444-1R/Y x CO99076-1R). Cross was made in Colorado and selected in Texas

Uses: Specialty.

Strengths: Boiler, Amadeus Like salad? **Keep**

Weaknesses: Small tubers, drop++ Pointed Stem, Drop?, small

Cutting Notes: small, nice flesh

COTX04188-3R/Y - Oblong White/Yellow. Parentage (ATC98515-1R/Y x ATC98444-1R/Y). Cross was made in Colorado and selected in Texas.

Uses: Specialty.

Strengths: **Keep**

Weaknesses:

COTX04193-2R/Y- Oblong White/Yellow. Parentage (ATC98515-1R/Y x ND3574-5R). Cross was made in Colorado and selected in Texas.

Uses: Specialty.

Strengths: BOT -, **Keep**

Weaknesses:

COTX04267-1R/Y - Oblong White/Yellow. Parentage (CO98012-5R x CO97232-2R/Y). Cross was made in Colorado and selected in Texas.

Uses: Specialty.

Strengths: BOT-, Salad, **Keep**

Weaknesses:

COTX04303-1R/Y - Round Red/Yellow. Parentage (CO99083-2R/Y x ATC98444-1R/Y) Cross was made in Colorado and selected in Texas

Uses: Specialty.

Strengths:

Weaknesses: Late, rough, drop, **Deleted**

COTX04303-2R/Y- Round Red/Yellow. Parentage (CO99083-2R/Y x ATC98444-1R/Y) Cross was made in Colorado and selected in Texas

Uses: Specialty.

Strengths: Nice interior

Weaknesses: **Deleted**

Cutting Notes: small, nice flesh, road map

COTX04303-3R/Y - Round Red/Yellow. Parentage (CO99083-2R/Y x ATC98444-1R/Y) Cross was made in Colorado and selected in Texas

Uses: Specialty.

Strengths:

Weaknesses: Drop, lots of culls, **Deleted**

COTX04337-1Ru - Oblong Russet. Parentage (Bannock Russet x AT9-772598-8RU). Cross was made in Colorado and selected in Texas.

Uses: Specialty.

Strengths:

Weaknesses: **Deleted**

COTX04337-2W- Oblong White. Parentage (Bannock Russet x AT9-772598-8RU). Cross was made in Colorado and selected in Texas.

Uses: Specialty.

Strengths:

Weaknesses: **Deleted**

COTX04340-1R- Round Red. Parentage (ND3574-5R x CO98012-5R) Cross was made in Colorado and selected in Texas

Uses: Specialty.

Strengths: good color, very white flesh.

Weaknesses: Late drop+++ , Chain stolon Feathering Hollow heart, dark purple skin, **Deleted**

Cutting Notes: small

COTX05002-2Ru - Oblong Russet. Parentage (A95409-1 x CO96109-7RU). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses:

COTX05037-4Y/Y- Oblong Yellow/Yellow. Parentage (AC99330-1P/Y x CO97227-2P/PW). Cross was made in Colorado and selected in Texas.

Uses: Specialty.

Strengths: **Keep**

Weaknesses:

COTX05037-5P/Y - Oblong Purple/Yellow. Parentage (AC99330-1P/Y x CO97227-2P/PW). Cross was made in Colorado and selected in Texas.

Uses: Specialty.

Strengths: **Keep**

Weaknesses:

COTX05082-2P/P - Oblong Purple/Purple. Parentage (CO97227-2P/P x WMSG147-3). Cross was made in Colorado and selected in Texas.

Uses: Specialty.

Strengths: **Keep**

Weaknesses:

COTX05211-4R - Oblong Red. Parentage (CO98012-5R x CO00278-4R). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses:

COTX05211-5R - Oblong Red. Parentage (CO98012-5R x CO00278-4R). Cross was made in Colorado and selected in Texas.

Uses: Specialty.

Strengths: **Keep**

Weaknesses:

COTX05211-7R - Oblong Red. Parentage (CO98012-5R x CO00278-4R). Cross was made in Colorado and selected in Texas.

Uses: Fresh.

Strengths: **Keep**

Weaknesses:

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

Uses: Specialty.
Strengths: **Keep**
Weaknesses:

COTX05261-1R/Y - Oblong Red/Yellow. Parentage (CO00379-2R/Y x CO00278-4R). Cross was made in Colorado and selected in Texas.

Uses: Specialty.
Strengths: **Keep**
Weaknesses:

COTX05261-2R/Y - Oblong Red/Yellow. Parentage (CO00379-2R/Y x CO00278-4R). Cross was made in Colorado and selected in Texas.

Uses: Specialty.
Strengths: **Keep**
Weaknesses:

COTX94216-1R- Round Red. Parentage (Purple Peruvian x Chipeta). Cross was made in Colorado and selected in Texas.

Uses: Fresh.
Strengths: Very white flesh
Weaknesses: Drop?, Buff, variable size, a little rough, ugly, Very late, buff, drop, rough, **Deleted**
Cutting Notes: eye brows, nice flesh

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: very white flesh, keep Smooth, nice shape, **Keep**
Weaknesses: B size, pre Zebra Drop?
Cutting Notes: poor internals

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.
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.
Cutting Notes: poor shape

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:
Weaknesses: Rough, Drop, fast bulking, early, can oversize Green, Feathering, oversize,
Cutting Notes: rough

King Harry- Round White Parentage () Cross was made and selected at Cornell University.

Uses: Fresh.

Strengths:

Weaknesses:

Klondyke Rose-Long Red. Cross made in Netherlands.

Uses: Specialty

Strengths:

Weaknesses:

Cutting Notes: dormant

MSJ036-A- Round White. Parentage (B1254-1 X S440). Clone was developed by Michigan State University and the Michigan Agricultural Experiment Station. Later maturity. Large vine size.

Uses: Chip.

Strengths: high yielding, shallow eyes

Weaknesses: Sugar levels have to be watched at harvest during cold temperatures Late, Buff. Soft,

Feathering, Drop

Cutting Notes: variable size

MSJ147-1- Round White. Parentage (NorValley X S440). Clone was developed by Michigan State University and the Michigan Agricultural Experiment Station. Small vine size.

Uses: Chip.

Strengths: nice, small nice flesh

Weaknesses: Slow to emerge.

Cutting Notes: very small

ND7519-1- Oblong White Parentage (??). Cross was made and selected in North Dakota.

Uses: Chip.

Strengths: BOT for yield

Weaknesses: Drop, poor internals, buff some purple spot on apical end,

Cutting Notes: feathering, some internal brown spot

NDA7985-1R- Oval Red. Parentage (Minn 17922 x ND2225-1R). Cross was made in North Dakota and selected in Aberdeen. Early maturity. Medium-small vine size.

Uses: Fresh.

Strengths: Good yield

Weaknesses: Drop, sticky stolon rough

Cutting Notes: nice shape

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: very white flesh

Weaknesses: Drop++++, low yield, growth cracks, **Deleted**

Cutting Notes: shriveled, small

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

Uses: Chip.
Strengths: nice, high yield, nice internals, **Keep**
Weaknesses: some pointed to stem, pair shape, Drop
Cutting Notes: rough, shriveled

NDTX050025-1W/Y - Oblong White/Yellow. Parentage (ND 8083b-1pY x ATND 98459-1RY). Cross was made in North Dakota and selected in Texas.

Uses: Specialty.
Strengths: **Keep**
Weaknesses:

NDTX050054-3R - Oblong Red. Parentage (ND 8314-1R x ND 028601-1R). Cross was made in North Dakota and selected in Texas.

Uses: Fresh.
Strengths: **Keep**
Weaknesses:

NDTX050065-1R/Y - Oblong Red/Yellow. Parentage (ND 8375b-6R x ND 4756-1R). Cross was made in North Dakota and selected in Texas.

Uses: Specialty.
Strengths: **Keep**
Weaknesses:

NDTX050070-1R - Oblong Red. Parentage (ND 8375b-6R x ND 8347CB-12R). Cross was made in North Dakota and selected in Texas.

Uses: Fresh.
Strengths: **Keep**
Weaknesses:

NDTX059608-1Ru- Long White. Parentage (Atlantic x ND 8229-3). Cross was made in North Dakota and selected in Texas.

Uses: Chip.
Strengths:
Weaknesses: Oversize, Rot, Drop, low yield Light set, early bulking, low yield **Deleted**
Cutting Notes: poor shape, poor internal, ZC??

NDTX059620-1W- Oblong White. Parentage (Dakota Crisp x Dakota Pearl). Cross was made in North Dakota and selected in Texas.

Uses: Chip.
Strengths:
Weaknesses: **Deleted**
Cutting Notes: flesh not very white, yellow flesh? large tubers very nice

NDTX059632-1W- Oblong White. Parentage (Dakota Pearl x ND 7377Cb-1). Cross was made in North Dakota and selected in Texas.

Uses: Chip
Strengths: heavy set
Weaknesses: Low yield, small, pointed, **Deleted**
Cutting Notes: brown center, rough

NDTX059759-1P-W/Y- Oblong Purple-White/Yellow. Parentage (ATND 99331-2 Pinto x ND 7834-2P). Cross was made in North Dakota and selected in Texas.

Uses: Specialty.

Strengths:

Weaknesses: Light set, Drop+, Flat, Purple streaks, **Deleted**

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

Uses: Fresh.

Strengths: Purple Streak in Flesh BOT red/pinto, **Keep**

Weaknesses: Drop Shoulder hump, over size

Cutting Notes: nice shape, flesh, and skin, red pinto, purple steaks in flesh

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

Uses: Fresh.

Strengths: Purple Streak in Flesh BOT red/pinto, **Keep**

Weaknesses: Oblong White BOT+ red/pinto, purple streak flesh, FC=3.8

NDTX059775-1W/Y- Oblong Yellow. Parentage (89063-84 x Bison). Cross was made in North Dakota and selected in Texas.

Uses: Fresh.

Strengths: Nice skin finish.

Weaknesses: Drop+++ , shape, **Deleted**

Cutting Notes: BOT

NDTX059827-1R – Round Red. Parentage (ND 4659-5R x ND 8512C-17R). Cross was made in North Dakota and selected in Texas.

Uses: Fresh.

Strengths: Small, nice white flesh, keep, b size **Keep**

Weaknesses:

NDTX059828-2W- Round White. Parentage (ND 4659-5R x ND 8524B-1R). Cross was made in North Dakota and selected in Texas.

Uses: Chip.

Strengths: Nice flesh Pink eyes, fresh pack, Jon G liked, nice flesh, buff, **Keep**

Weaknesses: lenticels

Cutting Notes: sprouts++, shriveled, small

NDTX059845-1R- Round Red. Parentage (ND 5124c-1R x ND 028685-4RY). Cross was made in North Dakota and selected in Texas.

Uses: Fresh.

Strengths: Very white flesh Heavy set

Weaknesses: Drop, some slight misshape low yield, feathering, drop, small, light set, **Deleted**

Cutting Notes: long sprouts, nice shape

NDTX059878-1R-Oblong Red. Parentage (ND 7172V-5 x ND 028577-6RY). Cross was made in North Dakota and selected in Texas.

Uses: Fresh.
Strengths:
Weaknesses: Drop, some buff, rough, small, **Deleted**
Cutting Notes: shriveled and feathering.

NDTX059886-1Y/Y - Oblong Yellow/Yellow. Parentage (ND 7192-1 x ND 8178-1Y). Cross was made in North Dakota and selected in Texas.

Uses: Specialty.
Strengths: Salad? Small **Keep**
Weaknesses: Drop, Poor skin finish

NDTX059897-1Y/Y- Round White-Buff. Parentage (ND 7291b-2Y x Stirling). Cross was made in North Dakota and selected in Texas.

Uses: Chip.
Strengths: yellow flesh Nice, Buff, **Keep**
Weaknesses: Late sticky stolon, indented stem attachment
Cutting Notes: nice shape, nice yellow flesh

NDTX059902-1W- Oblong White-Buff. Parentage (ND 7291b-2Y x ND 7519-1). Cross was made in North Dakota and selected in Texas.

Uses: Chip.
Strengths: keep?
Weaknesses: Light set, Drop??, low yield, **Deleted**
Cutting Notes: nice shape and size

NDTX059905-1Y/Y- Round White-Buff. Parentage (ND 7291b-2Y x ND 028615AB-3). Cross was made in North Dakota and selected in Texas.

Uses: Chip.
Strengths:
Weaknesses: Stem end attachment, light yellow flesh Pith color, indented stolon attachment, **Deleted**
Cutting Notes: small, yellow flesh

NDTX059979-1W - Oblong White. Parentage (ND 7519-1 x Dakota Diamond). Cross was made in North Dakota and selected in Texas.

Uses: Chip.
Strengths: **Keep**
Weaknesses:

NDTX059997-1W - Oblong White. Parentage (ND 7799c-1 x ND 860-2). Cross was made in North Dakota and selected in Texas.

Uses: Chip.
Strengths: **Keep**
Weaknesses:

NDTX059997-2W Oblong White. Parentage (ND 7799c-1 x ND 860-2). Cross was made in North Dakota and selected in Texas.

Uses: Chip.
Strengths: **Keep**
Weaknesses:

NDTX059997-3W - Oblong White. Parentage (ND 7799c-1 x ND 860-2). Cross was made in North Dakota and selected in Texas.

Uses: Chip.

Strengths: **Keep**

Weaknesses:

NDTX059997-4W - Oblong White. Parentage (ND 7799c-1 x ND 860-2). Cross was made in North Dakota and selected in Texas.

Uses: Chip.

Strengths: **Keep**

Weaknesses:

NDTX059997-6W - Oblong White. Parentage (ND 7799c-1 x ND 860-2). Cross was made in North Dakota and selected in Texas.

Uses: Chip.

Strengths: **Keep**

Weaknesses:

NDTX059997-7W - Oblong White. Parentage (ND 7799c-1 x ND 860-2). Cross was made in North Dakota and selected in Texas.

Uses: Chip.

Strengths: **Keep**

Weaknesses:

NDTX059997-8W- Oblong White. Parentage (ND 7799c-1 x ND 860-2). Cross was made in North Dakota and selected in Texas.

Uses: Chip.

Strengths: **Keep**

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: BOT+++ , very white flesh, smooth, yield nice flesh

Weaknesses: Small, some buff, mix size, 30% internal problems-Z? not as nice flesh as Rio Rojo

Cutting Notes: BOT, very white flesh oversize

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: Salad??

Weaknesses: Low yield, silver scurf, small, **Deleted**

Cutting Notes: small, nice flesh, shriveled, pale skin

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

Uses: Fresh.

Strengths: Smooth very dark skin, very white flesh, **Keep**

Weaknesses: stolon,
Cutting Notes: nice shape and flesh

NDTX4828-2R- Round Red. Parentage (ND3877-2R x ND1871-3R). Cross was made in North Dakota and selected in Texas.

Uses: Fresh.

Strengths:

Weaknesses: Drop, little rough, Rhizoctonia? , low yield, Buff Bad skin finish, buff+, lenticels, drop,

Deleted

Cutting Notes: nice skin

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

Weaknesses: Zipper defect Low yield sticky stolon, buff, **Deleted**

Cutting Notes: small, shriveled, drop?

NDTX5003-2R- Round Red. Parentage (ND3504-3R x ND2050-1R). Cross was made in North Dakota and selected in Texas.

Uses: Fresh.

Strengths: B size, BOT-, nice,

Weaknesses: stem end indentation, rough, drop indented, stolon attachment, **Deleted**

Cutting Notes: nice skin

NDTX5438-11R – Round Red. Parentage (ND4339-10R x ND4269-9R). Cross was made in North Dakota and selected in Texas.

Uses: Fresh.

Strengths: Smooth, BOT, keep?, fair **Keep**

Weaknesses:

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: BOT+++ , large tubers not as rough Red LaSoda BOT for shape and color, **Keep**

Weaknesses: buff, deep eyes, rough, drop (hollow heart)

Cutting Notes: good skin set, nice

NDTX7571-3AW- Round White-Buff. Parentage (ND5084-3R x Picasso). Cross was made in North Dakota and selected in Texas. Late maturity. Large vine size.

Uses: Chip.

Strengths:

Weaknesses: low yield, Drop?, Drop, **Deleted**

Cutting Notes: small, nice shape

NDTX7590-3R- Round-Oblong Red. Parentage (ND5151-5R X ND5002-3R). Cross was made in North Dakota and selected in Texas.

Uses: Fresh.

Strengths: smooth, nice **Keep**, smooth, fast bulking, early

Weaknesses: Drop, low yield light set, can oversize, feathering, **Deleted**
Cutting Notes: nice skin

NDTX8773-4Ru- Oblong Russet. Parentage (?). Cross was made in North Dakota and selected in Texas.
Uses: Fresh.
Strengths:
Weaknesses: Pointed, block, drop++, too round, **Deleted**
Cutting Notes: small, hollow heart

NY138-Oblong White. Parentage (?). Cross made and selected at Cornell University.
Uses: Chip.
Strengths: large tubers, smooth, nice flesh Fast bulk, BOT, Nice internal
Weaknesses: too large
Cutting Notes: nice, large tubers

NY139- Round White Parentage (?). Cross made and selected at Cornell University. Medium-late maturity
Use: Chip
Strengths: appearance is good, moderate to large tubers, moderate to high yields, moderate to high specific gravity, very good chip color, resistant to shatter and blackspot bruise
Weaknesses: Very late oversize, stem indentation,
Cutting Notes: nice, flesh not as white

OR00068-11- Round Purple. Parentage (All Blue x PA97B29-4). Cross was made and selected in Oregon. Medium-early maturity. Medium-large vine size. Red-purple flower color
Uses: Specialty.
Strengths:
Weaknesses: Very late, feathering, Drop, All Blue like, small, purple/white flesh, smooth, late, not as many, culls,
Cutting Notes: flesh not as dark as Purple Majesty

PA96RR1-193- Round Red. Parentage (Fontenot x 3261-5R). Cross was made and selected in Prosser, Washington.
Uses: Specialty.
Strengths:
Weaknesses: Lots of B's, Buff
Cutting Notes: nice shape, light red flesh

PA99N2-1- Oblong Russet. Parentage (AO84275-3 G6582-3). Cross was made and selected in Prosser, Washington. Medium maturity. Medium vine size. White flower color.
Uses: Dual.
Strengths:
Weaknesses: Round, small
Cutting Notes: blocky, light skin

PA99N82-4-Oblong Russet. Parentage (PA95B4-149 x Rus bulk). Cross was made and selected in Prosser, Washington.
Uses: Specialty.
Strengths:
Weaknesses: Drop, growth cracks, blocky

Cutting Notes: blocky, fat, hollow heart

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: Smooth, small

Weaknesses: Silver scurf

Cutting Notes: small, light red flesh

POR01PG45-5- Oblong Red. Parentage (Serrana x Red flesh bulk pollen). Cross was made in Prosser, Washington, tuberling produced in Oregon, and selected in Oregon. Medium-late maturity. Medium-large vine size. Blue flower

Uses: Specialty.

Strengths:

Weaknesses: Drop, rough, very poor shape

Cutting Notes: very light flesh

POR02PG26-5- Oval Yellow-Red Eyes/Yellow. Parentage (PA99P11-2 x Pig420). Cross was made in Prosser, Washington, tuberling produced in Oregon, and selected in Oregon. Medium maturity. Medium vine size. Purple flower color.

Uses: Specialty

Strengths:

Weaknesses: Late, Drop

Cutting Notes: large tubers, red eyes

POR02PG37-2- Oval Yellow-Red Eyes/Yellow. Parentage (PA99P35-1 x Rose Gold). Cross was made in Prosser, Washington, tuberling produced in Oregon, and selected in Oregon. Medium early maturity. Medium small vine size. Red purple flower color.

Uses: Specialty

Strengths:

Weaknesses: Small boiler, Drop?

Cutting Notes: red eyes

POR03PG23-1- Oblong Red. Parentage (PA97B35-1 x PA99P11-2). Cross was made in Prosser, Washington, tuberling produced in Oregon, and selected in Oregon. Medium maturity. Medium vine size. Red purple flower color.

Uses: Specialty

Strengths: Red Flesh

Weaknesses:

Cutting Notes: silver scurf, flesh red with yellow streaks

PORTX03PG25-2R/R- Round Red/Red. Parentage (PA97B35-1 x PA99P7-2). Cross was made in Prosser, Washington, tuberling grown in Oregon and selected in Texas.

Uses: Chip.

Strengths: **Keep**

Weaknesses

PTTX05PG07-1W – Long White. Parentage (POR01PG22-1 x OR00067-7). Cross was made in Prosser, Washington, tuberling produced in Texas and selected in Texas.

Uses: Specialty.

Strengths: BOT-, nice shape, keep+, very smooth, no culls, BOT, **Keep**

Weaknesses Low yield curved, pointed

Purple Majesty- Oblong Purple. Parentage (ND2008-2 x All Blue). Cross made and selected in Colorado. Late maturity. Large vine size. Blue flower color

Uses: Specialty.

Strengths:

Weaknesses: Feathering, culls +, rough Small, some rough

Cutting Notes: smooth nice shape

Purple Peruvian- Long Purple/Purple. Parentage (??).

Uses: Specialty

Strengths:

Weaknesses: Deep eyes

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 45o 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.

Cutting Notes: rough, curved, pointed

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.

Cutting Notes: deep eyes

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.

Cutting Notes: BOT, some feathering

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.

Cutting Notes: blocky, flat, pointed

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.

Cutting Notes: rough, large tubers, skinny.

Russet Norkotah278 (Protected – PVP) -. Oblong-Long Russet. Parentage (ND9526-4Ru x ND9687-5Ru). Cross was made and selected in North Dakota. TXNS 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

Cutting Notes: BOT, Barrett Seed

Russet Norkotah296 (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.

Cutting Notes: BOT, Barrett Seed

Stampede Russet - Oblong-Long Russet. Parentage (BR7091-1 x Lemhi Russet), cross made in Texas, selected in Idaho and tested extensively in Alberta, Canada. Released in 1999 by Agriculture and Agri-Food Canada and the Texas Agricultural Experiment Station. Early maturity. Medium vine size. Lavender flower color.

Uses: Fresh.

Strengths: Smooth tubers with good skin set, high yielding, dark attractive russet skin.

Weaknesses: Tubers can be short.

TX03185-1R/R - Oblong Red/Red. Parentage (BTX1749-1W/Y x NDTX4271-1R). Cross was made and selected in Texas.

Uses: Specialty.

Strengths: **Keep**

Weaknesses:

TX03196-1W – Round White. Parentage (NDTX4748-7R x Adora). Cross was made and selected in Texas.

Uses: Chip.

Strengths: BOT, Nice, **Keep**.

Weaknesses:

Cutting Notes: BOT

TX04212-1R/Y- Oblong Red. Parentage (ATTX98500-2PU/Y x ATTX01178-1R). Cross was made and selected in Texas.

Uses: Specialty.

Strengths:

Weaknesses: Poor shape, Drop++, Rough Sticky stolon, immature, late, low yield, light set, Deleted

Cutting Notes: BOT

TX04237-6Y/Y – Oblong Yellow/. Parentage (Russet Nugget x A92030-5). Cross was made and selected in Texas.

Uses: Specialty.

Strengths: Large tubers, smooth **Keep**.

Weaknesses: Drop, poor stand, Poor yield

TX04239-2R/Y – Round Red/Yellow. Parentage (TXA1655-DY x A9014-2). Cross was made and selected in Texas.

Uses: Specialty.

Strengths:

Weaknesses: **Deleted**

TX05246-3W – Round White. Parentage (A9305-10 x A91790-13). Cross was made and selected in Texas.

Uses: Chip.

Strengths: **Keep**.

Weaknesses:

TX05249-10W – Round White. Parentage (Gem Russet x A91790-13). Cross was made and selected in Texas.

Uses: Chip.

Strengths: **Keep**.

Weaknesses:

TX05249-11W – Round White. Parentage (Gem Russet x A91790-13). Cross was made and selected in Texas.

Uses: Chip.

Strengths: **Keep**.

Weaknesses:

TX05249-12W – Round White. Parentage (Gem Russet x A91790-13). Cross was made and selected in Texas.

Uses: Chip.

Strengths: **Keep**.

Weaknesses:

TX05249-14W – Round White. Parentage (Gem Russet x A91790-13). Cross was made and selected in Texas.

Uses: Chip.
Strengths: **Keep**.
Weaknesses:

TX05249-3W – Round White. Parentage (Gem Russet x A91790-13). Cross was made and selected in Texas.
Uses: Chip.
Strengths: **Keep**.
Weaknesses:

TX05249-5W – Round White. Parentage (Gem Russet x A91790-13). Cross was made and selected in Texas.
Uses: Chip.
Strengths: **Keep**.
Weaknesses:

TX05249-8W – Round White. Parentage (Gem Russet x A91790-13). Cross was made and selected in Texas.
Uses: Chip.
Strengths: **Keep**.
Weaknesses:

TX05254-2W – Round White. Parentage (COA96741-2C x A91790-13). Cross was made and selected in Texas.
Uses: Chip.
Strengths: **Keep**.
Weaknesses:

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.
Cutting Notes: BOT

TX1673-1W- Oblong White. Parentage (Russet Nugget x CS 7802L-2). Cross was made in Texas and selected in Texas.
Uses: Chip.
Strengths: nice interior **Keep**
Weaknesses: Heart shaped, Oversize Drop, Oversize, Rough
Cutting Notes: flat, white flesh

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:
Weaknesses: Drop+++ , Pointed to stem, Russet, Argentina Pink eyes, Fine light russet skin, **Deleted**
Cutting Notes: flat, variable size

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: Blocky BOT-++, **Keep**

Weaknesses: low set, oversize, light set, Rhizoctonia, hollow heart

Cutting Notes: nice white flesh, blocky

TXCR-2Ru- Long Light Russet. Parentage (A6789-7 x A6680-5). Cross made and selected by USDA/ARS Aberdeen, ID. TXCR-2Ru is a mutant strain selection made in 1995 by Texas from the variety Century Russet. Late maturity. Large vine size. White flower color.

Uses: Fresh.

Strengths:

Weaknesses: Drop++, feathering, Skinny poor shape, **Deleted**

Cutting Notes: rough, poor shape

TXCR-4Ru- Long Light Russet. Parentage (A6789-7 x A6680-5). Cross was made and selected by USDA/ARS Aberdeen ID. TXCR-4Ru is a mutant strain selection made in 1995 by Texas from the variety Century Russet. Late maturity. Large vine size. White flower color.

Uses: Fresh.

Strengths:

Weaknesses: Drop++ Long skinny, feathering, **Deleted**

Cutting Notes: skinny, rough, drop

TXNS410-. Oblong-Long Russet. Parentage (ND9526-4Ru x ND9687-5Ru). Cross was made and selected in North Dakota. TXNS410 is a mutant strain selection made in 1989 by Texas from the variety Russet Norkotah. Early maturity. Medium-large vine size. White flower color.

Use: Fresh

Strengths: Nice internals

Weaknesses: Drop+, small

Cutting Notes: small, rough, drop

TXNS551-. Oblong-Long Russet. Parentage (ND9526-4Ru 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. Early maturity. Medium-large vine size. White flower color.

Use: Fresh

Strengths:

Weaknesses: Drop

Cutting Notes: small, did not size, drop?

TXYG055 Oblong-White. 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. TXYG055 is a mutant strain selection made in 1997 by Texas from the variety Yukon Gold

Use: Specialty

Strengths:

Weaknesses:

TXYG057 Oblong-White. 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. TXYG057 is a mutant strain selection made in 1997 by Texas from the variety Yukon Gold

Use: Specialty

Strengths:
Weaknesses

TXYG079 Oblong-White. 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. TXYG079 is a mutant strain selection made in 1997 by Texas from the variety Yukon Gold

Use: Specialty
Strengths:
Weaknesses

TXYG098 Oblong-White. 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. TXYG098 is a mutant strain selection made in 1997 by Texas from the variety Yukon Gold

Use: Specialty
Strengths:
Weaknesses

TXYG105 Oblong-White. 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. TXYG105 is a mutant strain selection made in 1997 by Texas from the variety Yukon Gold

Use: Specialty
Strengths:
Weaknesses

TXYG107 Oblong-White. 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. TXYG107 is a mutant strain selection made in 1997 by Texas from the variety Yukon Gold

W2310-3- Oblong White. Parentage (?). Cross was made and selected in Wisconsin.

Uses: Chip
Strengths: best chip color coming from storage at 47°F (8.3°C) and 42°F (5.5°C) of all lines tested nice internal.
Weaknesses: low yield Very late, buff drop, nipple knobs very rough, Drop, Flat
Cutting Notes: nice

W2324-1- Oblong White. Parentage (?). Cross was made and selected in Wisconsin.

Uses: Chip
Strengths: very high marketable yield potential and specific gravity the chip color from the December fry was statistically similar to Snowden and NorValley. Significantly lower early dying and early blight than the average of the round white lines.
Weaknesses: Scab severity is the limiting factor to the promotion of this line as a variety for wide adaptation. Very late, some rough Rough
Cutting Notes: deep eyes, hollow heart

W2717-5-Oblong White. Parentage (?). Cross was made and selected in Wisconsin.

Uses: Chip

Strengths:

Weaknesses: Late, shape Flat,

Cutting Notes: pressure cracks, nice flesh, hollow heart

Yukon Gold - Oblong White/Yellow. Parentage (W5279-4 x Norgleam). Cross was made and selected in Ontario, Canada. Released in 1980 by Agriculture Canada, The University of Guelph, and The Ontario Ministry of Agriculture & Food, Guelph, Ontario. Medium-early maturity. Medium-large vine size. Violet flower color.

Uses: Specialty.

Strengths: Attractive yellow flesh tubers with red eyes, good yield, resistant to mild mosaic, moderately resistant to PLRV.

Weaknesses: Can exhibit some feathering, Susceptible to PVY and common scab, hollow heart and internal heat necrosis can be a problem, Plant establishment is irregular, particularly from basal end seed pieces.

Cutting Notes: smooth, nice shape

Appendix B. Parentage of potato varieties or selections-2008.

Variety or Selection	Parentage
Ackersegen	Hindenburg x Allerfruheste
Adora	Pimura x Alcmaria
Agria	Quarta x Semlo
All Blue	Unknown
Alpha	Paul Kruger x Preferent
Ambra	Duke of York x Reneta Lub B 53
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

Variety or Selection**Parentage**

Green Mountain

Dunmore x Excelsior

Hertha

Dijkhuis61-133 x Konst62-374

Ilong

Innovator

Shepody x RZ 84-2580

Irish Crispin

Amigo x DH70-699 3a

Ivory Crisp

ND292-1 x A77268-4

Keuka Gold

Steuben x Norwis

KLONDYKE ROSE

Krasaua

Visnovske Rohlic x B53

La Rouge

LaSoda x Progress

Latona

Jaerla x Nicola

Magic Molly

Open pollinated seed ball from Red Beauty

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

Rio Rojo

ND1562-4R x NDTX9-1098-11R

Rose Gold

Abnaki x G6521-4RY

Russet Burbank

Mutant from Burbank

Russet Legend

Century Russet x WNC672-2

Russet Norkotah

ND9526-4RU x ND9687-5Ru

Russet Norkotah 278

ND9526-4RU x ND9687-5Ru

Russet Norkotah 296

ND9526-4RU x ND9687-5Ru

Russet Norkotah-S3

ND9526-4RU x ND9687-5Ru

Rutt

Laila x Alcmaria

Saginaw Gold

MS321-38 x Michibonne

Sangre

Viking x A6356-9

Variety or Selection

Sangre-10
 Sante
 Satina
 Shepody
 Stampede Russet
 Strobrawa
 Super Red
 TX1523-1Ru/Y (Sierra Gold™)
 Ukama
 Urgenta
 Valisa
 Viking
 Vivaldi
 Vokal
 Winema
 Yellow Finn
 Yukon Gold

Numbered Clones

04-3311-4W/W-P
 04-3315-1W/W-P
 A0008-1TE
 A00286-3Y
 A97066-42LB
 A99331-2RY
 AC00170-2W
 AC96052-1RU
 AC97521-1R/Y
 AC99213-8W
 AC99329-7RW/Y
 AC99330-1P/Y
 AC99375-1RU
 AF2219-10
 AO96141-3
 AOTX01178-1R
 AOTX02060-1Ru
 AOTX02066-1Ru
 AOTX02136-1Ru
 AOTX03657-1Ru
 AOTX05096-4RU
 AOTX91861-4R
 AOTX93483-1R
 AOTX95265-1Ru

Parentage

Viking x A6356-9
 SVPY66-13-636 x AM66-42
 Puntila x 99 73
 Bakeking x F58050
 BR7091-1 x Lemhi Russet
 MPI55 957/54 x Mira
 Krantz x Delta Gold
 Marijke x Sirtema
 Furore x Katahdin
 Redskin x Nordak
 TZ 77-148 x Monalisa
 Primura x Rheinhort
 Redsen x ND1196-2R
 W5279-4 x NorGleam
 (Blazer Russet x A95109-1).
 (NDA5507-3Y x A89655-5DY)
 (AWN86514-2 x A86102-6).
 (Inca Gold x COA94019-5R).
 (A90467-14 x A91790-13)
 (A81386-1 x A9014-2).
 (SJP/T48YF x A91846-5R).
 (A900467-14 x NDA5698-8).
 (Inca Gold x A91846-5R).
 (Inca Gold x A89655-5DY).
 (AWN86514-2 x A89384-10).
 (SA8211-6 x EB8109-1)
 (A89222-3 x COA90064-6)
 (A97201-4 x A93157-6LS)
 (A97201-4 x A93157-6LS).
 (A97218-1 x A97201-4).
 (A96563-8 x A92030-5).
 (A97039-23 x COA96054-3).
 (A00082-6 x A97214-4).
 (Red LaSoda x ND2224-5R).
 (NDO2686-6R x AD82705-1R).
 (A89216-9 x A86102-6).

Variety or Selection	Parentage
AOTX95265-1Ru	(A89216-9 x A86102-6).
AOTX95265-2ARu	(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).
AOTX95295-1W	(A89804-7 x Ranger Russet).
AOTX95295-3Ru	(A89804-7 x Ranger Russet).
AOTX95309-1W	(A9055-8LS x A89163-3LS).
AOTX95309-3W	(A9055-8LS x A89163-3LS).
AOTX96084-1Ru	(A8792-1 x A86102-6).
AOTX96208-1Ru	(A9057-7 x A91194-3)
AOTX96216-2Ru	(A89216-9 x A86102-6)
AOTX96265-2Ru	(A90621-4 x A84180-8).
AOTX98096-1Ru	(Shepody x A92158-3).
AOTX98137-1Ru	(A8670-7 x A9310-1).
AOTX98152-3Ru	(A88338-1 x A9201-6).
AOTX98202-1Ru	(A9201-6 x A9014-2).
AOTX99008-1Ru	(A8670-7 x A9308-2).
AOTX99194-1Ru	(A94137-1 x Gem Star Russet).
ATC00293-1W/Y	(Agris x T x A1655-1DY).
ATTX00289-4W	(NDA5507-3 x T x A1655-1DY).
ATTX00289-5R/Y	(NDA5507-3 x T x A1655-1DY).
ATTX00289-6Y/Y	(NDA5507-3 x T x A1655-1DY).
ATTX01180-1R/Y	(ND5084-3R x A92657-1R).
ATTX961014-1R/Y	(A90601-2RDY x MAZAMA).
ATTX98444-16R/Y	(A83360-9R x T48YF).
ATTX98453-11BR	(A93490-1R x A91846-5R).
ATTX98453-6R	(A93490-1R x A91846-5R).
ATTX98466-5R/W-R	(ND2051-1Ru x A7961-1).
ATTX98468-5R/Y	(ATD252-5R x A93457-4R).
ATTX98493-1AR	(94A2-3Y x BO811-13RY).
ATTX98500-2P/Y	(P94A2-4Y x Granola).
ATTX98500-3PW/Y	(P94A2-4Y x Granola).
ATTX98518-5P/Y	(Agris x A83350-9R).
ATTX99325-1P	(AGRIA x W1100R).
ATX02263-1R/Y	(Inca Gold x A92653-6R).
ATX03003-1Ru	(Western Russet x A98079-1).
ATX03003-7Ru	(Western Russet x A98079-1).
ATX03068-1Ru	(A95109-1 x Silverton Russet).
ATX03077-2Ru	(A96095-3 x A92030-5)
ATX03407-2Ru-	(Stampede Russet x Alturas)

Variety or Selection**Parentage**

ATX03409-1W/Y	(Summit Russet x A96013-2).
ATX03409-2W/Y	(Summit Russet x A96013-2).
ATX03409-3W/Y	(Summit Russet x A96013-2).
ATX03409-6W/Y	(Summit Russet x A96013-2).
ATX03409-7W/Y	(Summit Russet x A96013-2).
ATX03424-1Ru	(Wallowa Russet x A98292-2).
ATX03491-1R/Y	(A97521-3R x AO93487-2R).
ATX03496-3Y/Y	(NDT x 4271-5R x AO93487-2R).
ATX03515-1R/Y	(A961014-12RY x NDC5281-2).
ATX03516-2R	(A961014-12RY x NDT x 4271-5R).
ATX03545-1R/Y	(A97521-3R x AO96747-2R/Y).
ATX03546-1W/Y	(ATA98472-2Y x A97523-1RY).
ATX03546-2R/Y	(ATA98472-2Y x A97523-1RY).
ATX03550-2R	(NDT x 4271-5R x AO96747-2R/Y).
ATX05114-1Ru	(TC1675-1RU x A97229-1).
ATX05142-2Ru	(Rio Grande Russet. x A97214-4).
ATX05175-3R/Y	(A99331-2RY x VC1075-1R).
ATX05178-2P	(A99331-2RY x Durango Red).
ATX05202-3W/Y	(A00286-3Y x A99433-5Y).
ATX84378-6Ru	(A79141-9 x ND329-1).
ATX85404-8W	(Gemchip x ND860-2).
ATX91137-1Ru	(A81473-2 x A8343-12)
ATX9202-3Ru	(A8343-12 x A8495-1)
ATX9332-12Ru	(A8850-1 x A88288-1).
ATX97147-4Ru	(A79180-10 x A88236-6)
ATX98448-6R/Y	(A92657-1R x A89655-5DY).
ATX99013-1Ru	(A8893-1 x A91186-2)
ATX99194-3Ru	(A94137-1 x Gem Star Russet).
BTX1544-2W/Y	(BO811-13 x Yukon Gold).
BTX1749-1W/Y	(K7-6 x BO925-4).
BTX2103-1R/Y	(BO811-13 x ARS-W82-21285-1).
BTX2332-1R	(B1523-4 x Super Red Norland)
CO00188-4W	(A90490-1W x BC0894-2W).
CO00189-2W	
CO00197-3W	(A91790-13W x NDT x 4930-5W).
CO00270-7W	(BC0894-2W x A91790-13W).
CO00277-2R	(CO89097-2R x CO94065-2R).
CO00291-5R	(CO94019-1R x NDC5281-2R).
CO00379-2R/Y	(VC0967-2R/Y x NDC6174-1R).
CO00405-1R	(Banana x NDC6174-1R).
CO00412-5W/Y	(German Butterball x TX523-1RU/Y).
CO00415-1R	(Kipfel x NDC5281-2R).

Variety or Selection	Parentage
CO111F2-1P/P	
CO95051-7W	
CO96141-4W	(BC0894-2 x AC87340-2).
CO97043-14W	(AC91817-5 x AC87340-2).
CO97065-7W	(AC92513-3 x Chipeta).
CO97087-2RU	(CO87009-4 x W1005).
CO97215-2P/P	(CO94163-1 x CO94183-1).
CO97222-1R/R	(CO94170-1 x CO94183-1).
CO97226-2R/R	(CO94183-1 x CO94214-1).
CO97227-2P/PW	(CO94183-1 x CO94215-1).
CO97232-1R/Y	(CO94218-1 x VC0967-2).
CO97232-2R/Y	(CO94218-1 x VC0967-2).
CO97233-3R/Y	(CO94218-1 x VC0967-5).
CO98012-5R	(PA92A17-6 x A91194-4).
CO98067-7RU	(Silverton Russet x TC1675-1).
CO98368-2RU	(Russet Nugget x Bannock Russet).
CO99045-1W/Y	(Rio Grande Russet x German Butterball).
CO99053-3RU	(AC91014-2 x Silverton Russet).
CO99053-4RU	(AC91014-2 x Silverton Russet).
CO99076-6R	
CO99100-1RU	(AC93047-1 x Silverton Russet).
CO99256-2R	(PA92A17-6 x A91194-4).
CO99338-3RU/Y	(Russet Nugget x Crispin).
COTX00328-1Pu/Ypu	(ATD252-5R x BO811-13RY).
COTX02377-1W	(Dakota Pearl x Chipeta).
COTX03025-2P/P	(CO94165-3P/P x PA97B36-3).
COTX03039-1R/Y	(CO97233-3R/Y x VC0967-2R/Y).
COTX03079-1W/Y	(VC1015-7R/Y x CO97232-2R/Y).
COTX03137-2R/R	(VC1015-7R/Y x CO97232-2R/Y).
COTX03187-1W	(AC89536-5RU x A9304-3).
COTX03270-1W	(CO95007-1RU x AC96052-1RU).
COTX03270-3W	(CO95007-1RU x AC96052-1RU).
COTX04015-3W/Y	(ATC98495-1W/Y x T x 1674-1W/Y).
COTX04050-1P/P	(CO97215-2P/P x CO97306-2P/P)
COTX04056-4P/PSalad	(CO97216-1P/P x CO97227-2P/PW)
COTX04096-1R-W/Y	(US147-96R/Y x CO97232-2R/Y)
COTX04178-1Y/Y	(ATC98444-1R/Y x CO99076-1R)
COTX04188-3R/Y	(ATC98515-1R/Y x ATC98444-1R/Y).
COTX04193-2R/Y	(ATC98515-1R/Y x ND3574-5R).
COTX04267-1R/Y	(CO98012-5R x CO97232-2R/Y).
COTX04303-1R/Y	(CO99083-2R/Y x ATC98444-1R/Y)
COTX04303-2R/Y	(CO99083-2R/Y x ATC98444-1R/Y)

Variety or Selection	Parentage
COTX04303-3R/Y	(CO99083-2R/Y x ATC98444-1R/Y)
COTX04337-1Ru	(Bannock Russet x AT9-772598-8RU).
COTX04337-2W	(Bannock Russet x AT9-772598-8RU).
COTX04340-1R	(ND3574-5R x CO98012-5R)
COTX05002-2Ru	(A95409-1 x CO96109-7RU).
COTX05037-4Y/Y	(AC99330-1P/Y x CO97227-2P/PW).
COTX05037-5P/Y	(AC99330-1P/Y x CO97227-2P/PW).
COTX05082-2P/P	(CO97227-2P/P x WMSG147-3).
COTX05211-4R	(CO98012-5R x CO00278-4R).
COTX05211-5R	(CO98012-5R x CO00278-4R).
COTX05211-7R	(CO98012-5R x CO00278-4R).
COTX05249-3W-R/Y	(CO00320-1R x ATC98509-1R/Y).
COTX05261-1R/Y	(CO00379-2R/Y x CO00278-4R).
COTX05261-2R/Y	(CO00379-2R/Y x CO00278-4R).
COTX94216-1R	(Purple Peruvian x Chipeta).
COTX94218-1R	(Red Ruby x Red Gold).
MSJ036-A	(B1254-1 x S440).
MSJ147-1	(NorValley x S440).
ND7519-1	
NDA7985-1R	(Minn17922 x ND2225-1R).
NDTX039190-1R	(ND8089-2R x ND4659-5R).
NDTX049265-2WRSP/Y	(ATND99331-2Pinto x Dakota Rose).
NDTX050025-1W/Y	(ND8083b-1pY x ATND98459-1RY).
NDTX050054-3R	(ND8314-1R x ND028601-1R).
NDTX050065-1R/Y	(ND8375b-6R x ND4756-1R).
NDTX050070-1R	(ND8375b-6R x ND8347CB-12R).
NDTX059608-1Ru	(Atlantic x ND8229-3).
NDTX059620-1W	(Dakota Crisp x Dakota Pearl).
NDTX059632-1W	(Dakota Pearl x ND7377Cb-1).
NDTX059759-1P-W/Y	(ATND99331-2Pinto x ND7834-2P).
NDTX059759-3Pinto/Y	(ATND99331-2Pinto x ND7834-2P).
NDTX059759-3Pinto/Y-P	(ATND99331-2Pinto x ND7834-2P).
NDTX059775-1W/Y	(89063-84 x Bison).
NDTX059827-1R	(ND4659-5R x ND8512C-17R).
NDTX059828-2W	(ND4659-5R x ND8524B-1R).
NDTX059845-1R	(ND5124c-1R x ND028685-4RY).
NDTX059878-1R-Oblong	(ND7172V-5 x ND028577-6RY).
NDTX059886-1Y/Y	(ND7192-1 x ND8178-1Y).
NDTX059897-1Y/Y	(ND7291b-2Y x Stirling).
NDTX059902-1W	(ND7291b-2Y x ND7519-1).
NDTX059905-1Y/Y	(ND7291b-2Y x ND028615AB-3).
NDTX059979-1W	(ND7519-1 x Dakota Diamond).

Variety or Selection	Parentage
NDTX059997-1W	(ND7799c-1 x ND860-2).
NDTX059997-2W	(ND7799c-1 x ND860-2).
NDTX059997-3W	(ND7799c-1 x ND860-2).
NDTX059997-4W	(ND7799c-1 x ND860-2).
NDTX059997-6W	(ND7799c-1 x ND860-2).
NDTX059997-7W	(ND7799c-1 x ND860-2).
NDTX059997-8W	(ND7799c-1 x ND860-2).
NDTX4271-5R	(NDT x 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 ND1871-3R).
NDTX4847-7R	(ND3900IR-3R x Fontenot).
NDTX5003-2R	(ND3504-3R x ND2050-1R).
NDTX5438-11R	(ND4339-10R x ND4269-9R).
NDTX731-1R	(ND169-10R x ND9476-5).
NDTX7571-3AW	(ND5084-3R x Picasso).
NDTX7590-3R	(ND5151-5R x ND5002-3R).
NDTX8773-4Ru	
NY138	
NY139	
OR00068-11	(All Blue x PA97B29-4).
PA96RR1-193	(Fontenot x 3261-5R).
PA99N2-1	(AO84275-3 x G6582-3)
PA99N82-4	(PA95B4-149 x Rusbulk).
PATX99P10-1R/R	(All Red x PA96RR02-120).
POR01PG45-5	(Serrana x Red flesh bulk pollen).
POR02PG26-5	(PA99P11-2 x Pig420).
POR02PG37-2	(PA99P35-1 x Rose Gold).
POR03PG23-1	(PA97B35-1 x PA99P11-2).
PORTX03PG25-2R/R	(PA97B35-1 x PA99P7-2).
PTTX05PG07-1W	(POR01PG22-1 x OR00067-7).
TX03185-1R/R	(BT x 1749-1W/Y x NDT x 4271-1R).
TX03196-1W	(NDT x 4748-7R x Adora).
TX04212-1R/Y	(ATTX98500-2PU/Y x ATTX01178-1R).
TX04237-6Y/Y	(Russet Nugget x A92030-5).
TX04239-2R/Y	(T x A1655-DY x A9014-2)
TX05246-3W	(A9305-10 x A91790-13).
TX05249-10W	(Gem Russet x A91790-13).
TX05249-11W	(Gem Russet x A91790-13).
TX05249-12W	(Gem Russet x A91790-13).
TX05249-14W	(Gem Russet x A91790-13).
TX05249-3W	(Gem Russet x A91790-13).

Variety or Selection	Parentage
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TX05249-8W	(Gem Russet x A91790-13).
TX05254-2W	(COA96741-2C x A91790-13).
TX1673-1W	(Russet Nugget x CS7802L-2).
TX1674-1W/Y	(Russet Nugget x Delta Gold).
TXA549-1Ru	(ND9687-3Ru x ND9852-1Ru).
TXCR-2Ru	(A6789-7 x A6680-5).
TXCR-4Ru	(A6789-7 x A6680-5).
TXNS410	(ND9526-4Ru x ND9687-5Ru).
TXNS551	(ND9526-4Ru x ND9687-5Ru).
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TXYG057	(W5279-4 x Norgleam).
TXYG079	(W5279-4 x Norgleam).
TXYG098	(W5279-4 x Norgleam).
TXYG105	(W5279-4 x Norgleam).
TXYG107	(W5279-4 x Norgleam).
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W2324-1	
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