

2006 Annual Potato Field Day

Texas Potato Variety Development Program



Wednesday June 28, 2006

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

Cooperator: Springlake Potato Sales, Inc.

2006 Field Day Handbook

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Creighton Miller, Jeff Koym, and Douglas Scheuring

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

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Hosted by Springlake Potato Sales, Inc.
Frank Barrett
Bruce Barrett

Funds Received to Support
 The Texas Potato Variety Development Program
 July 1, 2005- June 30, 2006

USDA/CSREES(Special Research Grants Program, Potato Research)	\$45,505
Royalty returned to program	\$27,123
	\$72,628

Expected but not received:

USDA/CSREES (Special Research Grants Program, Potato Research)	\$44,350
Royalty (Estimated)	\$30,000
	\$74,350

In-kind support:

CSS Farms (Milt Carter, John Wallace, Dennis Janke, Grant Monie, Randy Spevak, Lucila Caprio, and Kees Schillhorn van Veen)	\$10,000
Springlake Potato Sales (Frank and Bruce Barrett, Cliff Black, and Tim Gonzales)	\$12,000
	\$22,000

The Texas Potato Variety Development Program Team:

- Creighton Miller – Project Leader
- Jeff Koym – Research Associate
- Douglas Scheuring – Senior Research Associate
- Safia Naqi – Research Associate (Tissue Culture/virus eradication)
- Tyann, Blessington, Ndambe Nzaramba, Lavanya Redavarri – Graduate Students
- Brian Grubbs, Shara Adcock, Kristen Sikorski – Student Workers

Texas Potato Variety Development Program 2006 Trials

Location	Trial	Planted
Springlake	Southwestern Regional Reds	3-29-06
	Texas Advanced Reds	3-29-06
	Field Day Trial Reds/Specialty	3-29-06
	Western Regional Reds	3-29-06
	Field Day Trial Russets	3-30-06
	Parent Nursery	3-30-06
	Southwestern Regional Russets	3-30-06
	Western Regional Russets	3-30-06
	Southwestern Regional Specialty	3-30-06
	Texas Advanced Specialty	3-30-06
	Texas Advanced Russets	3-30-06
	First Year Seedlings (35,939)	3-31-06
	Dalhart	CSS Varsity Trial
Western Regional Chipping		4-5-06
Texas Advanced Chipping		4-5-06
Texas Advanced Specialty		4-5-06
Texas Advanced Reds		4-5-06
Texas Advanced Russets		4-5-06
05 Selection Nurseries		4-5-06
First Year Seedlings (41,303)		4-5-06
7 Texas Advanced Selections (minitubers)		5-4-06

Seedlings for Selection in Texas - 2006

Seedlings planted at Springlake

Source	Families	Total Planted
North Dakota	137	20,155
Oregon	201	15,784
Total	338	35,939

Seedlings planted at Dalhart

Source	Families	Total Planted
Texas	53	11,439
Colorado	75	20,147
USDA/ARS Idaho	102	9,717
Total	230	41,303

Grand Total – 77,272 seedlings from 568 families (crosses) were planted in 2006.

2006 Field Day Trial in Entry Order

Red Skin Selections/Varieties

Dark Red Norland - Oblong Red. Parentage (Redkote x ND626). Cross 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.

Red LaSoda - Oblong Red. Parentage (Triumph x Katahdin). Cross 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.

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

Uses: Fresh.

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

Weaknesses: Can have buff skin, heat sprouts, Rhizoctonia.

Rio Rojo (Protected – PVP)- Round-oval Red. Parentage (ND1562-4R x NDTX9-1098-11R). Evaluated as NDTX4304-1R. Cross 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.

NDTX731-1R - Round Red. Parentage (ND169-10R x ND9476-5). Cross made in North Dakota and selected in Texas. Early maturity. Medium-large vine size.

Uses: Fresh.

Strengths: Uniform round tubers, early, does not oversize, BOT+.

Weaknesses: Susceptible to Rhizoctonia, rough, susceptible to hollow heart, eyes somewhat deep ugly nose, silver scurf, road map, poor internals.

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

Uses: Fresh.

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

Weaknesses: Vascular discoloration, feathering.

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

Uses: Fresh

Strengths: nice flesh, nice shape.

Weaknesses: large tubers are rough, poor internals.

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

Uses: Fresh

Strengths: nice shape and skin.

Weaknesses: Vascular discoloration, feathering silver scurf.

ATX98453-6R - Round Red. Parentage (A93490-1R x A91846-5R). Cross made in Aberdeen, tuberling produced in Texas and selected in Texas. Late maturity. Medium-large vine size.

Uses: Fresh.

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

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

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

Uses: Specialty.

Strengths: Nice shape and size, BOT.

Weaknesses: Eye brows, heat sprouts, market?, feathering+, silver scurf+, drop?

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

Uses: Specialty.

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

Weaknesses: Road map ++, shriveled, drop?

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

Uses: Fresh.

Strengths: Very nice smooth skin.

Weaknesses: Poor internals.

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

Uses: Fresh.

Strengths: Nice color, nice shape, good skin set, keep, nice internals, BOT.

Weaknesses:

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

Uses: Fresh.

Strengths: Very nice, nice interior, nice shape, keep, early, smooth, BOT++.

Weaknesses: Road map Rhizoctonia, feathering, poor internals.

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

Uses: Fresh.

Strengths: Nice shape and color.

Weaknesses:

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

Uses: Fresh.

Strengths: Nice skin and shape

Weaknesses: Short dormancy, Rhizoctonia, road map, drop for poor internals.

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

Uses: Fresh.

Strengths: Keep, nice shape and flesh.

Weaknesses: Road map.

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

Uses: Fresh.

Strengths: Nice shape, skin and flesh, keep.

Weaknesses: Silver scurf+, deep nose+, shriveled, drop+++?

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

Uses: Fresh.

Strengths: Nice skin, flesh, and shape.

Weaknesses:

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

Uses: Fresh.

Strengths: Very nice.

Weaknesses: Shriveled, road map.

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

Uses: Fresh.

Strengths: Nice.

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

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

Uses: Fresh.

Strengths:

Weaknesses: Feathering, shriveled.

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

Uses:

Strengths:

Weaknesses: Feathering, shriveled

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

Uses: Fresh.

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

Weaknesses:

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

Uses: Fresh.

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

Weaknesses:

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

Uses: Fresh.

Strengths: Very nice.

Weaknesses: Some shriveled and hollow heart.

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

Uses: Fresh.

Strengths:

Weaknesses: Small and shriveled.

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

Uses: Fresh.

Strengths: BOT+.

Weaknesses:

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

Uses: Fresh.

Strengths: BOT+.

Weaknesses:

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

Uses: Fresh.

Strengths: Nice appearance, nice internals, smooth, keep, nice shape, small tubers.

Weaknesses: Many small tubers, "Joe Allen" type, lenticels, small, road map, skin color faded, drop?

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

Uses: Fresh.

Strengths: Nice.

Weaknesses:

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

Uses: Fresh.

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

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

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

Uses: Fresh.

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

Weaknesses: Flat, growth cracks, vascular discoloration, lenticels, second growth, poor external, feathering, small green sprouts, silver scurf+, growth cracks, Rhizoctonia, drop?

Specialty Selections/Varieties

Red Skin/ Yellow Flesh

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

Uses: Specialty.

Strengths: Nice shape, dark yellow flesh.

Weaknesses: Flat, poor shape, pointed to stem end, buff skin on stem end, rough, feathering, drop ++.

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

Uses: Specialty.

Strengths: Nice shape and flesh.

Weaknesses: Pale red skin.

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

Uses: Specialty.

Strengths: Nice shape.

Weaknesses: Pale red skin.

ATX961014-1AR/Y - Oblong Red/Yellow. Parentage (A90601-2RDY X MAZAMA). Cross made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Specialty.

Strengths: Nice shape.

Weaknesses: Road map, yellow flesh with some purple vascular color.

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

Uses: Specialty.

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

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

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

Uses: Specialty.

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

Weaknesses: Small, pointed to stem end, silver scurf, road map.

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

Uses: Specialty.

Strengths: Keep, large tubers, nice size and shape.

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

ATTX98468-3R/Y - Round Red. Parentage (ATD252-5R X A93457-4R). Cross made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Specialty.

Strengths: Very nice flesh, keep, BOT-.

Weaknesses: Cull white fleshed tubers, road map+, silver scurf+.

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

Uses: Specialty.

Strengths: nice flesh, keep+.

Weaknesses: rough+, feathering++, heat sprouts, rough.

ATTX98471-4R/Y - Round Red. Parentage (ATD252-5R X BO811-13RY). Cross made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Specialty.

Strengths: Nice flesh, skin, and shape.

Weaknesses: Heat sprouts, deep eyes.

ATTX98491-4YRsplash/Y - Oblong Red/Splash. Parentage (P94A2-3Y X A92657-1R). Cross made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Specialty

Strengths: Spec/High Anti-Ox keep, red splash, nice interior.

Weaknesses: Road map, deep nose.

ATTX98500-2P/Y - Oblong-Purple/Yellow. Parentage (P94A2-4Y X Granola). Cross made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Specialty.

Strengths: Very nice skin, flesh, and shape

Weaknesses:

ATTX98510-1R/Y - Oblong-Red/Yellow. Parentage (T48YF X A93456-6R). Cross made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Specialty.

Strengths: Nice shape, keep, BOT.

Weaknesses: Small tubers road map, silver scurf+.

ATTX98514-1R/Y - Oblong Red/Yellow. Parentage (T51YF x A93456-6R). Cross made in Aberdeen, tuberling produced in Texas, and selected in Texas. Medium maturity. Large vine size.

Uses: Specialty.

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

Weaknesses: Rough, small tubers, poor flesh, feathering, heat sprouts, silver scurf, drop?

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

Uses: Specialty.

Strengths: Nice shape, keep+.

Weaknesses: Road map

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

Uses: Specialty.

Strengths: Nice color.

Weaknesses: Road map, poor shape, poor flesh color, feathering, pointed to stem end, flat

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

Uses: Specialty.

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

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

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

Uses: Specialty.

Strengths: Nice yellow flesh, nice internal.

Weaknesses: Hollow heart, growth crack, too large, feathering, poor shape, pointed, severe road map, green sprout, drop.

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

Uses: Specialty.

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

Weaknesses: Road map, silver scurf, pale red skin.

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

Uses: Specialty.

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

Weaknesses: Zippered, small tubers, poor flesh, road map, oversize, silver scurf.

PA99P11-2 - Round White Red Splash. Parentage (Granola x 91E22). Cross made in Prosser, Washington, tuberling grown in Aberdeen and selected in Texas. Medium maturity. Medium vine size. Lavender-purple flower color.

Uses: Fresh.

Strengths:

Weaknesses: Rough, Deep eyes.

PORTX03PG19-1Pu/YR - Round Purple/Yellow. Parentage (A93456-6R X A92657-1R). Cross made in Prosser, Washington, tuberling grown in Corvallis, Oregon and selected in Texas.

Uses: Fresh.

Strengths: Yellow flesh with some red at eyes.

Weaknesses: Road map.

Specialty Colored Flesh

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

Uses: Specialty.

Strengths:

Weaknesses: Eye brows, rough.

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

Uses: Specialty.

Strengths: Nice internal, nice shape.

Weaknesses:

POR01PG20-12 - Oblong Red/Red. Parentage (PA97B35-2 x PA97B29-3). Cross made in Prosser, Washington, tuberling produced in Oregon, and selected in Oregon. Medium maturity. Medium vine size. Red Purple flower color.

Uses: Dual.

Strengths:

Weaknesses: Too long for a red, poor flesh.

POR01PG22-1 - Long Red Fingerling. Parentage (PA97B23-2 x Red bulk). Cross made in Prosser, Washington, tuberling produced in Oregon, and selected in Oregon. Medium maturity. Medium vine size. Red Purple flower

Uses: Specialty.

Strengths:

Weaknesses: Drop, poor flesh color, and shape.

PORTX03PG25-2R/P - Long Red Fingerling. Parentage (PA97B35-1 x PA99P7-2). Cross made in Prosser, Washington, tuberling produced in Oregon, and selected in Texas.

Uses:

Strengths: Nice red flesh, keep, BOT+++.

Weaknesses: Skinny tubers.

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

Uses: Specialty.

Strengths:

Weaknesses: Flesh color variable from all purple to purple with white.

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

Uses:Specialty.

Strengths:

Weaknesses: Rough shape, small tubers, road map, stem attachments, center pith and cortex is white, purple flesh color more intense at eyes, drop.

ATTX98493-2P/P - Oblong-Long Purple Parentage (P94A2-3Y X BO811-13RY). Cross made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Specialty.

Strengths: Nice dark flesh, BOT.

Weaknesses: Rough, eye brows.

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

Uses: Specialty.

Strengths: Nice shape and flesh.

Weaknesses: Road map.

POR01PG16-1 - Long Purple Fingerling. Parentage (NDOP5847-1 x Red bulk). Cross made in Prosser, Washington, tuberling produced in Oregon, and selected in Oregon. Medium maturity. Medium vine size. Blue flower color.

Uses: Specialty.

Strengths: Flesh darker than All Blue.

Weaknesses: Scab.

PORTX03PG34-4R/P - Long Red Fingerling. Parentage (PA99P20-2 x POROOPG2-16). Cross made in Prosser, Washington, tuberling grown in Corvallis, Oregon and selected in Texas.

Uses: Specialty.

Strengths: Keep.

Weaknesses: Not attractive exterior, small tubers, flesh not as red as others.

White Skin Yellow Flesh

Yukon Gold - Oblong White/Yellow. Parentage (W5279-4 x Norgleam). Cross 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.

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

Uses: Dual.

Strengths: Large tubers.

Weaknesses: Rough, feathering, flesh not very yellow

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

Uses: Specialty.

Strengths: Nice shape and flesh.

Weaknesses: Poor skin.

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

Uses: Fresh/Specialty.

Strengths: Smooth, nice++, nice flesh, keep.

Weaknesses: Poor skin.

ATTX98500-3Wpuspl - Oblong-Pinto/Yellow. Parentage (P94A2-4Y X Granola). Cross made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Specialty.

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

Weaknesses: Flat, second growth, late, heat sprouts, pointed, road map, flat, some pointed to stem end.

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

Uses: Specialty.

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

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

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

Uses: Specialty.

Strengths: Nice, Flesh color-3.0, good yield, nice skin, keep BOT-++.

Weaknesses: Feathering, rough.

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

Uses: Specialty.

Strengths: Nice shape, flesh, and skin.

Weaknesses: Flat.

TX1523-1Ru/Y (Sierra Gold™) (Protected – PVP) - Round-oblong Russet/Yellow. Parentage (Krantz x Delta Gold). Cross made and selected in Texas. Early maturity. Medium vine size.

Uses: Specialty.

Strengths: Flesh color-3.3, nice yield+, nice, BOT++++.

Weaknesses: Can oversize.

TX1674-1W/Y - Oblong-long White/Yellow. Parentage (Russet Nugget x Delta Gold). Cross made in Texas and selected in Texas. Early maturity. Medium vine size. Light lavender flower color.

Uses: Specialty.

Strengths: Red eyes, flesh color-3.0, nice, nice interior, yield+, BOT+.

Weaknesses: Drop, flat, nipple knobs, poor shape, feathering, close set, slight vascular discoloration, some greening in flesh.

UNTX383-3WRE/Y - Round White Red Eye/Yellow . Cross made in Minnesota and selected in Texas.

Uses: Specialty.

Strengths: Keep, BOT-.

Weaknesses: Road map.

VC1009-1W/Y - Oblong Red. Parentage (Agria x MIN12823). Cross made in Lethbridge, Alberta and selected in Colorado. Medium maturity. Large vine size. White flower color.

Uses: Fresh/Specialty.

Strengths: Good yellow color, flesh color-3.1, nice, very nice yellow flesh, smooth, nice small tubers.

Weaknesses: Drop, flat, poor shape, not that great, feathering, susceptible to heat, pear shape, stolon attachments, Rhizoctonia, poor yield.

VC1123-2W/Y - Oblong White . Parentage (Agria x FV9307-3). Cross made in Lethbridge, Alberta and selected in Colorado. Medium-late maturity. Large vine size. White flower color.

Uses: Fresh/Specialty.

Strengths: Nice.

Weaknesses: Flesh color-3.1, alligator hide, heat sprouts, flat, poor internals, road map (scale-like), second growth, heat sprouts, flat, sunburn, late, ugly skin, drop.

Parents

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

Uses: Dual.

Strengths: Not bad nice shape, small, BOT.

Weaknesses: Rhizoctonia, fat tubers, sugar ends, pointed to bud end, growth cracks, blocky.

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

Uses: Dual.

Strengths: Nice, BOT.

Weaknesses: Raised eyes on large tubers, nice, sugar ends, parent, pressure cracks, light net color, feathering.

A93005-10 - Russet. Cross made and selected in Aberdeen.

Uses:

Strengths:

Weaknesses:

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

Uses: Dual purpose.

Strengths:

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

A8893-1 - Long Russet. Cross made and selected in Aberdeen.

Uses:

Strengths:

Weaknesses:

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

Uses: Specialty.

Strengths: White with pink eyes, nice shape.

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

A99433-5Y - Oblong White/Yellow. Cross made and selected in Aberdeen.

Uses: Specialty.

Strengths:

Weaknesses:

A95357-3Y - Oblong White/Yellow. Cross made and selected in Aberdeen.

Uses: Specialty.

Strengths:

Weaknesses:

A96510-4Y - Oblong White/Yellow. Cross made and selected in Aberdeen.

Uses: Specialty.

Strengths:

Weaknesses:

A98445-2RY - Oblong Red/Yellow. Cross made and selected in Aberdeen.

Uses: Specialty.

Strengths:

Weaknesses:

A99331-2RY - Oblong Red/Yellow. Cross made and selected in Aberdeen.

Uses: Specialty.

Strengths:

Weaknesses:

A83350-9R - Oblong Red. Cross made and selected in Aberdeen.

Uses: Fresh.

Strengths:

Weaknesses:

A00645-1 - Oblong Russet. Cross made and selected in Aberdeen.

Uses: Dual.

Strengths:

Weaknesses:

A00646-4 - Oblong Russet. Cross made and selected in Aberdeen.

Uses: Dual.

Strengths:

Weaknesses:

A00681-4 - Oblong Russet. Cross made and selected in Aberdeen.

Uses: Dual.

Strengths:

Weaknesses:

A93570-13 - Oblong Russet. Cross made and selected in Aberdeen.

Uses: Dual.

Strengths:

Weaknesses:

A95109-1 - Russet. Cross made and selected in Aberdeen.

Uses: Dual.

Strengths:

Weaknesses:

A8893-1 - Russet. Cross made and selected in Aberdeen.

Uses: Dual.

Strengths:

Weaknesses:

Western Russet – (Protected – PVP) - Russet. Cross made and selected in Aberdeen.

Uses: Dual.

Strengths: Good fresh and processing qualities, field resistance to common scab and PVY^o.

Weaknesses:

A9304-3 - Russet. Cross made and selected in Aberdeen.

Uses: Dual.

Strengths:

Weaknesses:

A9304-3 - Russet. Cross made and selected in Aberdeen.

Uses: Dual.

Strengths:

Weaknesses:

A9305 - Russet. Cross made and selected in Aberdeen.

Uses: Dual.

Strengths:

Weaknesses:

A83350-9R - Red. Cross made and selected in Aberdeen.

Uses: Fresh.

Strengths:

Weaknesses:

A96471-1R - Red. Cross made and selected in Aberdeen.

Uses: Fresh.

Strengths:

Weaknesses:

A94377-6RY - Red/Yellow. Cross made and selected in Aberdeen.

Uses: Specialty.

Strengths:

Weaknesses:

A961002-1RY - Red/Yellow. Cross made and selected in Aberdeen.

Uses: Specialty.

Strengths:

Weaknesses:

A97521-2RY - Red/Yellow. Cross made and selected in Aberdeen.

Uses: Specialty.

Strengths:

Weaknesses:

TXA1655-1DY - White/Yellow. Cross made in Texas and selected in Aberdeen.

Uses: Specialty.

Strengths:

Weaknesses:

NDA7683C-1C - White. Cross made in North Dakota and selected in Aberdeen.

Uses: Chip.
Strengths:
Weaknesses:

A91790-13 - Russet. Cross made and selected in Aberdeen.

Uses: Dual.
Strengths:
Weaknesses:

COA96741-2C - White. Cross made in Colorado and selected in Aberdeen.

Uses: Chip.
Strengths:
Weaknesses:

COA96142-3C - White. Cross made in Colorado and selected in Aberdeen.

Uses: Chip.
Strengths:
Weaknesses:

Russet Selections/Varieties

Russet Norkotah- Oblong-long Russet. Parentage (ND9526-4Ru x ND9687-5Ru). Cross 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.

TXNS223 - (Protected – PVP) - Oblong-long Russet. Parentage (ND9526-4Ru x ND9687-5Ru). Cross made and selected in North Dakota. TXNS 223 is a mutant strain selection made in 1989 by Texas from the variety Russet Norkotah. Early maturity. Medium vine size. White flower color.

Uses: Fresh.

Strengths: Nice shape, yield, net, and internal, good yield, heavier tuber set with uniform tuber shape, excellent appearance, resistance to hollow heart, some increased resistance to early dying and environmental stresses, lower N requirement, more vigorous and higher yielding than Russet Norkotah BOT.

Weaknesses: Can produce a higher percentage of misshapen tubers than Russet Norkotah.

TXNS278 - (Protected – PVP) Oblong-Long Russet. Parentage (ND9526-4Ru x ND9687-5Ru). Cross 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.

TXNS296 - (Protected – PVP) - Oblong-long Russet. Parentage (ND95264Ru x ND9687-5Ru). Cross 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.

Russet Norkotah-S3 - (Protected – PVP) - Oblong-long Russet. Parentage (ND95264Ru x ND9687-5Ru). Cross made and selected in North Dakota. S3 is a mutant strain selection made in Colorado. Large vine size. White flower color.

Uses: Fresh.

Strengths: Potential for high yield.

Weaknesses: Ten to 14 days later than Russet Norkotah.

Ranger Russet - Long Russet. Parentage (Butte x A6595-3). Cross made and selected in Aberdeen. Released in 1991 by USDA-ARS, and the Colorado, Aberdeen, Oregon and Washington Agricultural Experiment Stations. Medium-late maturity. Large vine size. White flower color.

Uses: Dual purpose.

Strengths: Dual purpose, medium to high specific gravity, good fry color from 45° storage, resistance to internal defects including hollow heart, brown center, net necrosis and sugar ends, high yield of large tubers, resistance to early dying.

Weaknesses: Susceptibility to scab, tendency for deep eyes, susceptibility to stress induced malformities, mediocre performance in Texas, feathering.

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.

Shepody - Long White. Parentage (Bake King x F58050), Selected in New Brunswick, Canada and released by Agriculture Canada, - New Brunswick in 1980. Medium-late maturity. Medium vine size. Light violet flower color with white tips.

Uses: Early harvested processing.

Strengths: Good early yields, high percentage of large tubers, resistance to blackspot bruise, tolerant to heat stress.

Weaknesses: Specific gravity is variable and erratic, sugars accumulate during storage, fries dark from 45° storage, very susceptible to common scab, PVX, PVY, early and late blight, Verticillium wilt and pinkeye.

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

Uses: Dual.

Strengths: Yield, nice yellow flesh color.

Weaknesses: Variable size, feathering, enlarged lenticels rough, not that nice, rough, need to size, feathering, small tubers, drop.

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

Uses: Dual.

Strengths: Nice white flesh, BOT.

Weaknesses:

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

Uses: Dual.

Strengths: Large tubers.

Weaknesses: Powdery scab, feathering, rough drop.

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

Uses: Dual.

Strengths: Nice

Weaknesses: Powdery scab, late, small, poor shape, Rhizoctonia, drop.

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

Uses: Dual.

Strengths: Nice, nice shape, BOT.

Weaknesses: Small, heat necrosis, drop, late.

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

Uses: Dual.

Strengths:

Weaknesses: Small, skinny, drop.

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

Uses: Dual.

Strengths: Nice interior, not bad.

Weaknesses: Late, rough, heat sprouts, OK but drop.

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

Uses: Dual

Strengths:

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

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

Uses: Dual.

Strengths: Nice, nice white flesh.

Weaknesses: Small, heat sprouts, late, drop.

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

Uses: Dual.

Strengths: Nice white flesh, BOT.

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

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

Uses: Fresh.

Strengths: Nice.

Weaknesses:

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

Uses: Fresh.

Strengths: Nice.

Weaknesses: Hollow heart.

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

Uses:

Strengths: Nice.

Weaknesses: Blocky.

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

Uses: Fresh.

Strengths:

Weaknesses: Blocky.

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

Uses: Fresh.

Strengths: Nice shape.

Weaknesses:

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

Uses: Fresh.

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

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

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

Uses: Dual.

Strengths: OK, nice heavy net, BOT.

Weaknesses: Deeper eyes, pointed to apical end, pointed to stem end, some curved, feathering, blocky, rough, heat necrosis, flat.

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

Uses: Fresh.

Strengths: Yield.

Weaknesses:

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

Uses: Fresh.

Strengths: Very nice, good internal, some large tubers, BOT.

Weaknesses: Rhizoctonia, rough, blocky, heat sprouts, small tubers, variable size tubers, sprouts, some shriveling, ugly net on stem end, hollow heart, pointed, curved.

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

Uses: Fresh.

Strengths: Nice, good internal, hollow heart resistant, longest clone, flesh whiter than Norkotah, BOT.

Weaknesses: Rhizoctonia, nipple knobs, some crooked, bruising, some greening, a little rough, skinny, pointed feathering.

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

Uses: Fresh.

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

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

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

Uses: Fresh.

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

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

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

Uses: Fresh.

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

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

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

Uses: Fresh.

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

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

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

Uses: Fresh.

Strengths: OK, nice shape and internal, keep, BOT.

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

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

Uses: Fresh.

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

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

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

Uses: Fresh.

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

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

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

Uses: Fresh.

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

Weaknesses: Heat sprouts, rot, Rhizoctonia, some rot, rough, poor shape, late, curved, drop.

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

Uses: Fresh.

Strengths: Very nice smooth keep, nice shape BOT.

Weaknesses: Rot, rough, poor shape, knobs, clunker, late, rough, some pointed to apical end, curved.

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

Uses: Fresh.

Strengths: Yield, nice shape and internal, very long, keep, nice BOT.

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

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

Uses: Fresh.

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

Weaknesses: Smaller, rot, blocky, heat necrosis, shrinkage, different, small, short, some pointed to stem end, pointed, rough drop?

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

Uses: Fresh

Strengths:

Weaknesses: Rough, knobs, hollow heart.

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

Uses: Fresh.

Strengths:

Weaknesses: Flat, skinny, pointed, hollow heart.

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

Uses: Fresh.

Strengths:

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

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

Uses: Fresh.

Strengths:

Weaknesses: Growth cracks, knobs, hollow heart.

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

Uses: Fresh.

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

Weaknesses: Rough, rot, poor shape, smaller, pointed, curved, apical nipples, heat necrosis, blocky, hollow heart, drop.

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

Uses: Dual.

Strengths: Nice.

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

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

Uses: Fresh.

Strengths: Nice shape.

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

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

Uses: Fresh.

Strengths: Nice.

Weaknesses: Flat.

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

Uses: Fresh.

Strengths: Nice shape.

Weaknesses: Small.

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

Uses: Fresh.

Strengths:

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

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

Uses: Fresh.

Strengths: Very nice, BOT of all Colorado entries.

Weaknesses:

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

Uses: Fresh.

Strengths: Nice.

Weaknesses: Flesh not very white.

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

Uses: Fresh.

Strengths:

Weaknesses: Skinny.

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

Uses: Fresh.

Strengths: Nice.

Weaknesses:

Century - Long Russet; Parentage (A6789-7 x A6680-5), cross made and selected in Aberdeen, Idaho. Released in

1995 by USDA-ARS, California, Colorado, Oregon, and Texas Agricultural Experiment Stations. Medium-late maturity. Large vine size. White flower color.

Uses: Fresh

Strengths: High yield, resistance to early dying

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

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

Uses: Fresh.

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

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

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

Uses: Fresh.

Strengths: Yield, nice internal.

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

TXA549-1Ru - Oval Russet. Parentage (ND9687-3Ru x ND9852-1Ru). Cross made in Texas, selected in Aberdeen and tested extensively in Alberta, Canada. Medium-late maturity. Medium-large vine size. Purple flower color with white tips.

Uses: Dual.

Strengths: Nice, parent, nice net and internal, smooth tubers with good skin set, high yielding, and dark attractive russet skin, appears to be resistant to early blight, BOT for internal.

Weaknesses: Blocky, Rhizoctonia, too short, may not size well, tubers could be longer, pointed stem ends, susceptible to Rhizoctonia, keep, fat tubers, nice feathering uniform, drop.

TXNS410 - Oblong-long Russet. Parentage (ND95264Ru x ND9687-5Ru). Cross made and selected in North Dakota. TXNS410 is a mutant strain selection made in 1989 by Texas from the variety Russet Norkotah. White flower color. Late maturity. Large vine size. White flower color.

Uses: Fresh.

Strengths: Keep, nice+.

Weaknesses:

TXNS551 - Oblong-long Russet. Parentage (ND95264Ru x ND9687-5Ru). Cross made and selected in North Dakota. TXNS551 is a mutant strain selection made in 1989 by Texas from the variety Russet Norkotah. White flower color. Late maturity. Large vine size. White flower color.

Uses: Fresh.

Strengths: Keep, nice BOT.

Weaknesses: Small tubers, feathering, drop.

Fill

Chip Selections/Varieties

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

Uses: Chip.

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

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

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

Uses: Chip and French fries.

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

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.

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

Uses: Chip.

Strengths: Nice, BOT.

Weaknesses: Greenhead, stem end discoloration, powdery scab, poor shape.

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

Uses: Chip.

Strengths: Nice interior, good, nice.

Weaknesses:

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

Uses: Chip.

Strengths: Yield, nice internal, candidate.

Weaknesses: Heat sprouts.

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

Uses: Chip.

Strengths: Nice shape, nice interior, candidate.

Weaknesses: Rough, heat sprouts, variable size, heat necrosis, small.

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

Uses: Chip.

Strengths: Nice shape, nice interior.

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

ATX8823-2W - Round White. Parentage (ND2051-1Ru x A7961-1). Cross made in Aberdeen, tuberling produced in Texas, and selected in Texas. Medium maturity. Large vine size.

Uses: Chip.

Strengths: Nice, candidate, BOT++.

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

ATX95490-2W - Oblong White. Parentage (Red LaSoda x A89655-5DY). Cross made in Aberdeen, tuberling produced in Texas and selected in Texas.

Uses: Chip.

Strengths:

Weaknesses:

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

Uses: Chip.

Strengths: High yield, good appearance, tubers of uniform size, low sugar accumulation in storage, some scab resistance, excellent color, low glycoalkaloids, can be chipped directly out of storage, smooth skin, nice internal.

Weaknesses: Can develop some hollow heart and is somewhat susceptible to shatter bruise, slight russet

patching, susceptible to Rhizoctonia, short tuber dormancy, oversize, heat necrosis.

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

Uses: Chip.

Strengths: Nice, yield, nice interior.

Weaknesses: Rhizoctonia, rough, internal browning.

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

Uses: Chip.

Strengths: Nice, nice shape.

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

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

Uses: Chip.

Strengths: Nice medium size, BOT.

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

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

Uses: Chip.

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

Weaknesses: Deep nose.

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

Uses: Chip.

Strengths:

Weaknesses: Flat, feathering, some internal greening.

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

Uses: Chip.

Strengths: Nice shape and flesh

Weaknesses:

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

Uses: Chip.

Strengths:

Weaknesses: Rough, flesh more yellow, some internal defects.

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

Uses: Chip.

Strengths: Russet skin.

Weaknesses:

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

Uses: Chip.

Strengths:

Weaknesses: Vascular discoloration.

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

Uses: Chip.

Strengths: Nice skin, flesh, and shape.

Weaknesses:

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

Uses: Chip.

Strengths: Nice flesh.

Weaknesses: Rough, knobs.

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

Uses: Chip.

Strengths: Nice shape, very nice flesh.

Weaknesses:

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

Uses: Chip.

Strengths: Nice shape, good yield, chips very white, early maturity and bulking, large tubers, nice internals, yield+, BOT+++.

Weaknesses: Very buff, flat, hollow heart on large tubers, rough, oversize+, gravity could be higher.

NDTX6773-1W - Oblong White. Parentage (ND5175-4 x S440). Cross made in North Dakota and selected in Texas. Medium maturity. Large vine size.

Uses: Chip.

Strengths: Large tubers, very nice.

Weaknesses: Deep eyes, small, rough, drop?.

NDTX7571-3AW - Round White. Parentage (ND5084-3R x Picasso). Cross made in North Dakota and selected in Texas. Late maturity. Large vine size.

Uses: Chip.

Strengths: Nice shape and interior, Atlantic-like.

Weaknesses: Hollow heart, some zebra defect.

TX02080-1P/W-P - Round Purple/White-purple. Parentage (Atlantic x All Blue). Cross made and selected in Texas.

Uses: Chip.

Strengths: White flesh with purple streaks.

Weaknesses:

NDTX7571-5AW - Round White. Parentage (ND5084-3R x Picasso). Cross made in North Dakota and selected in Texas.

Uses: Chip.

Strengths: Nice flesh, Atlantic-like.

Weaknesses:

TX02098-2W - Round White. Parentage (COTX90046-5W x MWTX2609-4Ru). Cross made and selected in Texas.

Uses: Chip.

Strengths:

Weaknesses: Poor internals, Mahogany browning.

TX1475-3W - Round White. Parentage (TX1229-6W x AC80545-1). Cross made and selected in Texas.

Uses: Chip.

Strengths: Large tubers

Weaknesses: Hollow heart.

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

Uses: Chip.

Strengths: Purple skin chipper.

Weaknesses:

NDTX7571-4AW - Round White. Parentage (ND5084-3R x Picasso). Cross made in North Dakota and selected in

Texas. Late maturity. Large vine size.

Uses: Chip.

Strengths: Atlantic-like.

Weaknesses: Hollow heart, mix?, Zebra defect, drop.

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

Uses: Chip.

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

Weaknesses: Rough, vascular ring, road map.

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

Uses:

Strengths: Yellow flesh with purple streaks.

Weaknesses:

NDTX8555-2R/P - Oblong Red/Yellow-Purple. Parentage (7188-4R x 5256-7R). Cross made in North Dakota and selected in Texas.

Uses: Chip.

Strengths: Yellow flesh with purple streaks, keep.

Weaknesses: Road map, heat sprouts.

PATX99P10-1Pu/R - Oblong Red/Red. Parentage (All Red X PA96RR02-120). Cross made in Prosser, Washington, tuberling grown in Aberdeen and selected in Texas.

Uses: Chip.

Strengths: Nice, red color in flesh from eyes, smooth, keep.

Weaknesses: Hollow heart, road map+, silver scurf.

ATTX98466-5R/W-R - Round White. Parentage (ND2051-1Ru x A7961-1). Cross made in Aberdeen, tuberling produced in Texas, and selected in Texas.

Uses: Chip.

Strengths: Red streak in vascular, keep, smooth.

Weaknesses: Lenticels.

TX02080-2P/P - Oblong Purple/Purple. Parentage (Atlantic x All Blue). Cross made and selected in Texas.

Uses: Chip.

Strengths: Very purple flesh.

Weaknesses:

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

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

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

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

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

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

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

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

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

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

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

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

CO = cross made and selected in Colorado

COO = cross made in Colorado and selected in Oregon

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

COTX = cross made in Colorado and selected in Texas

DT = cross made in North Dakota and selected in Texas

FL = cross made and selected by Frito-Lay

LA = cross made and selected in Louisiana

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

MN = cross made and selected in Minnesota

MNTX = cross made in Minnesota and selected in Texas

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

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

ND = cross made and selected in North Dakota

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

NDC = cross made in North Dakota and selected in Colorado

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

NDO = cross made in North Dakota and selected in Oregon

NDTX = cross made in North Dakota and selected in Texas

NY = cross made and selected in New York

PA = cross made in Prosser, Washington and selected in Aberdeen, Idaho.

TC = cross made in Texas and selected in Colorado

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

TXND = cross made in Texas and selected in North Dakota

WC = cross made in Washington and selected in Colorado

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

WN = cross made in Washington and selected in North Dakota

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

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

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

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