

2002 DESCRIPTIONS OF POTATO VARIETIES AND CLONES

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FRESH MARKET OR PROCESSING VARIETIES

Named Varieties

Alturas (A82360-7) – A late maturing, very high yielding selection with oblong, lightly russeted tubers. It resulted from a cross of A77182-1 and A75188-3. It was released in 2002. It was selected for dehydration purposes but may also be useful for french fry processing and possibly fresh market. Alturas has high specific gravity and excellent fry color from 45°F storage, and will often fry acceptably following 40°F storage. Strengths: exceptionally high yield, high specific gravity, low sugar accumulation in storage, resistance to most external and internal defects. Weaknesses: short tuber type, high tuber set, occasional growth cracks.

Bannock Russet (A81473-2) – A late maturing, medium to high yielding variety with heavy russet skin and oblong tuber type. It resulted from a cross of A75175-1 and A75188-3. It was released in 1999. It will be useful for fresh market and processing, especially in areas with a long, warm growing season. Bannock Russet has medium to high specific gravity and excellent fry color from 45°F storage. Strengths: excellent appearance, acceptable and consistent specific gravity, excellent fry color, resistance to early dying, early blight, external defects and blackspot bruise. Weaknesses: short tuber shape, susceptibility to shatter bruise and skinning, occasional hollow heart, extremely late tuber maturity if fertilized late.

CalWhite – An early to medium to late maturing, high yielding variety with oblong, white tubers. It resulted from a cross of Pioneer and BC8370-4 and was released in 1995 by the University of California. It is used primarily for tablestock. The tubers have medium to high solids and produce good fry color. Strengths: high yield, good specific gravity, resistant to Fusarium tuber rot. Weaknesses: short tuber dormancy, susceptible to powdery scab.

Gem Russet (A8495-1) – A medium to late maturing, medium to high yielding variety with long tuber type and medium russet skin. It resulted from a cross of A77182-1 and Russet Norkotah. It was released in 2000. Gem Russet will be useful in both the fresh and processing markets. It has high specific gravity, excellent fry color from 45°F storage, and will often fry acceptably following 40°F storage. Strengths: excellent tuber shape and appearance, high proportion of U.S. No. 1 tubers, long dormancy, high specific gravity, good fry color. Weaknesses: mediocre yields in some environments, susceptibility to PVY (can be symptom less) and blackspot bruise.

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Ranger Russet – A medium to late maturing, medium to high yielding variety with medium russet skin, and long tuber type that is very similar in appearance to Russet Burbank. It resulted from a cross of Butte and A6595-3. It is useful both for processing and some fresh market and is the third most widely grown variety in the U.S. Ranger has medium to high specific gravity and good fry color from 45°F storage. Strengths: resistance to internal defects including hollow heart, brown center, net necrosis and sugar ends, high yield of large tubers, resistance to early dying, PVX and PVY. Weaknesses: susceptibility to scab, tendency for deep eyes, susceptibility to stress induced malformities, blackspot bruise, and late blight tuber rot.

Russet Burbank – This well-known variety serves as a standard for all russet-type variety trials. Russet Burbank is late maturing, medium to high yielding with medium russet skin and long tuber type. It is useful for fresh market and processing. Russet Burbank has medium specific gravity and usually fries well from 45°F storage. Strengths: storability, medium to high yields, culinary quality. Weaknesses: susceptibility to stress-induced malformations, hollow heart, brown center, and sugar ends, susceptibility to net necrosis, early dying, and abundance of undersize tubers.

Russet Norkotah – A very early maturing, low to medium yielding variety with medium russet skin and long tuber type. It resulted from a cross of ND9526-4Russ and ND9687-5Russ. It is useful for fresh market. Russet Norkotah has low specific gravity and fries poorly from 45°F storage. Strengths: early maturity, attractive appearance, uniform shape. Weaknesses: low specific gravity, sugar accumulation during storage, common occurrence of very low yields due to high susceptibility to early dying, occasional disagreeable flavor.

Shepody – A medium maturing, medium yielding variety with white skin and long tuber type. It resulted from a cross of Bake-King and F58050. It is useful for early-harvest processing. Shepody has medium to low specific gravity and fries poorly from 45°F storage. Strengths: good early yields, high percentage of large tubers, resistance to blackspot bruise. Weaknesses: specific gravity is variable and often low, poor fry color from storage, susceptibility to scab, PVY, and dry rot, extreme susceptibility to metribuzin injury.

Stampede Russet – An early to medium maturing selection release by Agriculture Canada – Alberta. It resulted from a cross of BRT091-1 and Lemhi Russet and is medium to low yielding. Stampede Russet produces a high proportion of U.S. No. 1 long smooth russeted tubers. It has poor processing characteristics, but is an attractive tuber appealing to the fresh market. Strengths: high proportion of U.S. No. 1 tubers. Weaknesses: low yield, low specific gravity and poor fry color.

Wallowa Russet (AO87277-6) – A high yielding, medium maturing selection from Oregon with medium russet skin and long tuber type. It resulted from a cross of A82758-3 and Ranger Russet. Released in 2002 by Oregon. It may have potential for both fresh market and processing use. It has high specific gravity and very good fry color from 45°F storage. Strengths: high yield, good tuber appearance, high specific gravity, and

excellent fry color. Weaknesses: susceptibility to shatter bruise, tendency for pointed ends, very short dormancy.

Fresh Market or Processing: Experimental Selections

The following selections are being evaluated for quality, yield, and disease resistance under Idaho growing conditions. Selections having superior characteristics will be evaluated further.

A84118-3 (Summit Russet) – A late maturing, medium yielding selection with medium russet skin and oblong to long tuber type. It resulted from a cross of A77236-6 and TND329-1Russ. It is useful both for fresh market and processing and is scheduled for release in 2003. A84118-3 has high specific gravity and excellent fry color from 45°F storage. Strengths: less susceptible to late blight than most commonly grown varieties, resistance to early blight, Verticillium wilt, external defects, and blackspot bruise, low sugar accumulation in storage, very high proportion of U.S. No. 1 tubers. Weaknesses: occasional hollow heart, mediocre yields in short season areas.

A8893-1 – A high yielding, early maturing selection with russet skin and oblong tuber type. It resulted from a cross of A7816-14 and NorKing Russet. It was selected at the Parma research station for its ability to produce good early yields and maintain adequate processing quality under stress conditions. It may be useful for fresh market and early harvest processing. It has medium specific gravity and good fry color. Strengths: good early yield, high proportion of U.S. No. 1 tubers, resistance to sugar ends, scab, and most internal and external defects. Weaknesses: short tuber type, hollow heart, tendency for pointed stem-end tubers.

A9014-2 – A medium to late maturing, high yielding selection with heavy russet skin and oblong tuber type. It resulted from a cross of Gem Russet and A8341-5. It has excellent appearance and may be useful for both processing and fresh market. A9014-2 has high specific gravity and good fry color from 40°F storage. Strengths: high yield, outstanding appearance, exceptionally high percentage of U.S. No. 1 tubers, resistance to external defects, blackspot bruise and corky ringspot, and excellent fry color from cold storage. Weaknesses: Susceptible to hollow heart and PVY.

A9045-7 – A medium to late maturing, high yielding selection with long tuber type and light russet skin. It resulted from a cross of Ranger Russet and Russet Legend. It was selected at Parma for early yield and good processing quality under stress conditions. It may be useful for processing and possibly fresh market. A9045-7 has high specific gravity. Strengths: high yield, excellent appearance, resistance to internal defects including sugar ends, high specific gravity, and resistance to early dying and shatter bruise. Weaknesses: light skin color, inconsistent fry color, susceptibility to scab, blackspot bruising and growth cracks.

A90586-11 – A late maturing, medium to high yielding selection with white oblong tuber type. It resulted from a cross of KSA195-90 and Ranger Russet. It was selected for resistance to late blight. A90586-11 has high specific gravity. Strengths: foliar and tuber

late blight resistance, resistance to shatter bruise and corky ringspot, high yield potential, high specific gravity. Weaknesses: susceptibility to blackspot bruise and a high tendency for tuber greening.

A91186-2 – A medium to early maturing medium yielding selection with long tubers and good russet skin. It resulted from a cross of A83043-12 and A85041-5. A91186-2 has moderate specific gravity, produces attractive tubers and fries well out of 40 and 45°F storage. Strengths: good fry color out of storage. Weaknesses: low yield, tendency for curved tubers, slightly susceptible to tuber early blight.

A91814-5 – A medium maturing high yielding selection with short white tubers. It resulted from a cross of NDA2031-2 and NDO1496-1. A91814-5 has high specific gravity and fries exceptionally well out of 40 and 45°F storage. A91814-5 was selected primarily to serve the processing-dehydration industry, but may serve the frozen processing industry as well. Strengths: exceptionally high yield, high proportion of U.S. No. 1 tubers, excellent fry color out of storage, high specific gravity. Weaknesses: short tuber type, appearance inappropriate for fresh market, susceptibility to tuber late blight rot.

A92030-5 – A medium maturing, medium to high yielding selection with long heavily russeted tubers. It resulted from a cross of A86003-20 and A83043-12. A92030-5 has moderate specific gravity and acceptable fry color from storage. Selected at Parma for its good tuber type characteristics under stressful conditions. Strengths: high yielding, large blocky tubers at some locations. Weaknesses: susceptibility to hollow heart, blackspot bruise and early dying, tendency for pointy tubers.

A92294-6 – A medium to late maturing very high yielding selection with long, white tubers. It resulted from a cross of A86332-7 and A84118-3 and has high specific gravity and acceptable fry color from storage. A92294-6 may serve primarily the processing industry. Strengths: very high yield, acceptable fry color from storage. Weaknesses: susceptible to growth cracks, tendency for curved tubers, potential for sugar end development.

A93004-3 – A medium to early maturing high yielding selection with very long, heavily russeted tubers. It resulted from a cross of A83043-12 and A7961-1. A93004-3 produces a high proportion of oversized tubers, has moderate specific gravity and good fry color from storage. It has potential for processing and fresh markets. Strengths: high percentage of U.S. No. 1 tubers, good fry color from storage. Weaknesses: moderate susceptibility to blackspot bruise, susceptible to skin checking, lumpy tuber appearance.

A93005-10 – A medium to late maturing high yielding selection with oblong, lightly russeted tubers. It resulted from a cross of A83043-12 and A85103-3. A93005-10 has moderate specific gravity and good fry color out of storage. It has potential for processing and fresh markets. Strengths: excellent fry color from storage, very high yield. Weaknesses: some tendency for secondary tuber growth.

A93116-3 – A medium to late maturing medium yielding selection with long russetted tubers. It resulted from a cross of A84069-5 and A86102-6. A 93116-3 has low specific gravity and poor fry color from storage. Strengths: resistance to blackspot bruise. Weaknesses: low specific gravity, mediocre yield and fry color, bumpy tuber appearance.

A93157-6LS – A medium to late maturing medium to high yielding selection with long russetted tubers. It resulted from a cross of A87149-4 and A88108-7. A93157-6LS has high specific gravity excellent fry color from storage and was originally selected for its resistance to sugar development. Strengths: very high proportion of U.S. No. 1 tubers, good tuber appearance, excellent fry color, high yield. Weaknesses: highly susceptible to blackspot bruise, tendency for hollow heart.

A94053-5 – A medium to late maturing low yielding selection with oblong, heavily russetted tubers. It resulted from a cross of A86332-7 and A84430-5. A94053-5 has very high specific gravity and good fry color from storage. Strengths: high proportion of U.S. No. 1 tubers, good fry color from storage, high specific gravity. Weaknesses: low yield, tendency for translucent end development.

AC89536-5 – A medium maturing, high yielding selection from Colorado with russetted skin and long tuber type. It resulted from a cross of Butte and A8469-5. AC89536-5 has a moderate specific gravity, high percentage of U.S. No. 1 tubers and should fit processing and fresh markets. Strengths: high percentage of U.S. No. 1 tubers and good fry color. Weaknesses: tendency for hollow heart and skin checking.

AC92009-4 – A medium to late maturing selection from Colorado with oblong, heavily russetted tubers. It resulted from a cross of A83043-12 and A8784-3. AC92009-4 has a high proportion of smooth U.S. No. 1 tubers, but is very low yielding. It has high specific gravity and acceptable fry color from storage. Strengths: attractive skin and tuber shape, high specific gravity. Weaknesses: low yield, susceptible to skin checking.

AO94110-203 – A medium to late maturing selection from Oregon with oblong, heavily russetted tubers. It resulted from a cross of A87149-4 and COA8926-4. AO94110-203 has a high proportion of U.S. No. 1 tubers, but was very low yielding in Aberdeen and produced poor fry color from storage. Strengths: attractive tubers, high proportion of U.S. No. 1 tubers. Weaknesses: low yield, low specific gravity, poor fry color.

ATX9202-1 – A medium maturing selection from Texas with oblong, russetted tubers. It resulted from a cross of A83043-12 and Gem Russet. ATX9202-1 has moderate yield and specific gravity and produces good fry color from storage. Strengths: good fry color from storage. Weaknesses: moderate to low yield, susceptible to growth cracks.

ATX92230-1 – A medium maturing selection from Texas with oblong tubers. It resulted from a cross of A86003-13 and Gem Russet. ATX92230-1 has good yields with a very high proportion of U.S. No. 1 tubers. It has mediocre specific gravity and produces good fry color from storage. Strengths: very high proportion of U.S. No. 1 tubers, good fry color from storage. Weaknesses: susceptible to hollow heart and shatter bruise.

CO92077-5 - A medium to late maturing selection from Colorado with oblong tubers with buff, scaly skin. It resulted from cross of Russet Legend and Silverton. CO92077-5 has a fair proportion of U.S. No. 1 tubers. Strengths: higher proportion of U.S. No. 1 tubers than Russet Burbank. Weaknesses: low yield, low specific gravity, poor fry color, susceptible to scab.

NDC5372-1 – A medium maturing selection from Colorado with short, lightly russeted tubers. It resulted from a cross of ND4093-4 and AO84275-3. NDC5372-1 has mediocre yields with a high proportion of U.S. No. 1 tubers. It has average specific gravity and fry color from storage. Strengths: high proportion of U.S. No. 1 tubers. Weaknesses: mediocre yield, specific gravity and fry color.

TC1675-1 - A medium maturing selection from Colorado with short russeted tubers. It resulted from a cross of Russet Nugget and Lemhi Russet. TC1675-1 has mediocre yield with a high proportion of U.S. No. 1 tubers. It has average specific gravity and acceptable fry color from storage. Strengths: high proportion of U.S. No. 1 tubers, attractive tuber type and smooth skin. Weaknesses: short tuber type, mediocre processing qualities.

CHIPPING VARIETIES

Named Varieties

Atlantic – A medium maturing, high yielding variety with buff skin and round tuber type. It resulted from a cross of Wauseon and B5141-6. It is used widely as a field delivery chipping variety in the eastern U.S. and elsewhere. Atlantic has high specific gravity and chips well from 50°F storage. Strengths: high yields, high specific gravity, low sugar buildup in storage. Weaknesses: susceptibility to hollow heart, heat necrosis, shatter bruise and storage rots.

Chipeta – A late maturing, high yielding variety with buff skin and round tuber type. Chipeta can have very large tubers. It resulted from a cross of WNC612-13 and Wischip. It has high specific gravity and low sugar accumulation in storage. It will occasionally chip out of 45°F storage. Strengths: high yield, low sugar buildup in storage, low incidence of internal problems, resistance to most field diseases. Weaknesses: irregular shape, large size.

Ivory Crisp (NDO1496-1) – A medium maturing, medium to high yielding selection from Oregon with white skin and round tuber type. It resulted from a cross of ND292-1 and A77268-4. It is a potential early chipping selection due to good early yields and high specific gravity. Ivory Crisp has good cold chipping potential. Strengths: ability to chip from 40°F storage, appearance, low incidence of internal problems, high specific gravity, good reconditioning capability following cold storage. Weaknesses: susceptibility to shatter bruise and common scab.

Chipping: Experimental Selections

A91790-13 – A medium to late maturing, medium to high yielding selection with round white tubers. It resulted from a cross of Chipeta and Ivory Crisp. A91790-13 has excellent chip color out of 40 or 50°F storage. Strengths: high specific gravity, good chip color out of storage, few internal problems. Weakness: adhering stolons, susceptibility to tuber late blight rot.

B0564-8 – An early maturing selection from the USDA-ARS in Maryland with round, white tubers. It resulted from a cross of B0155-24 and B9935-8. B0564-8 has moderate yields and specific gravity similar to Chipeta. It has mediocre chip color from storage. Strengths: uniform skin color. Weaknesses: mediocre yield, specific gravity and chip color, susceptible to verticillium wilt and blackspot bruising, deep bud ends.

B0766-3 – An early maturing, medium to low yielding selection from the USDA-ARS in Maryland with white, netted, oval tubers. It resulted from a cross of B0243-18 and Coastal Chip. B0766-3 has moderate specific gravity and produces good chip color from storage. Strengths: high percentage of U.S. No. 1 tubers, good chip color. Weaknesses: deep bud ends, susceptibility to early blight and blackspot bruising.

NDTX4930-5W – A medium maturing, medium to high yielding selection from North Dakota and selected in Texas. It resulted from a cross of ND860-2 and A7961-1. It has white, oblong tubers with moderate specific gravity and good chip color out of storage. Strengths: good tuber size and chip color. Weaknesses: mediocre specific gravity, tendency for flat tubers, susceptibility to early blight and late blight tuber rot.

NY112 – A late maturing high yielding selection from New York. It resulted from a cross of Atlantic and Q155-3. NY112 has round to oval, white tubers with light netting. It has high specific gravity and produces good chip color out of storage and reconditions well. Strengths: high yield, uniform size profile, and good chip color from storage. Weaknesses: higher glycoalkaloid content

SPECIALTY VARIETIES

Named Varieties

Dark Red Norland – A very early maturing, medium yielding variety with round to oblong shape and dark red skin. It resulted from a cross of Redkote and ND626. It has good eating quality and low specific gravity. Strengths: good combination of early maturity and yield, good eating quality, wide adaptation. Weaknesses: prone to uneven skin color (pinto) and russetting, susceptible to early dying, scab, growth cracks, short tuber dormancy.

IdaRose (A82705-1R) - A medium to late maturing variety with bright red skin and round tuber type. It resulted from a cross of Sangre and TXA218-7. IdaRose is high yielding, has excellent eye appeal, and good culinary quality. It has long dormancy and can be used directly from the field or after storage. Strengths: high yield, good

appearance, lack of internal defects. Weaknesses: skin russetting in light soils, tendency to skin when immature.

Yukon Gold – A medium to high yielding, early to medium maturing variety with oval, white tuber type with yellow flesh. It resulted from a cross of W5279-4 and Norgleam. It is intended primarily for the fresh market and has short dormancy. Strengths: good appearance and good yield, resistant to PVA. Weaknesses: short dormancy, mediocre yields.

Specialty: Experimental Selections

A92584-3BB – A medium maturing, high yielding selection with round white tubers. It resulted from a cross of A86463-4 and NDA2031-2. It has moderate specific gravity and has good chip color. There is local interest in A92584-3BB for the fresh and canning markets. Strengths: uniform size distribution, good appearance, and good yield of B-sized creamer tubers. Weaknesses: susceptibility to common scab.

AO93487-2R – An early maturing round red selection from Oregon. It resulted from a cross of NDO3503-5 and Mazama. AO93487-2R has average yield and good dark red color. It has specific gravity similar to Red Lasoda and good tuber appearance. Strengths: nice tuber appearance, dark red color. Weaknesses: mediocre yield.

AO96747-2R/Y – A medium maturing selection from Oregon with round, red tubers with bright yellow flesh. It resulted from a cross of A90601-2RD and A83350-9R. AO96747-2R/Y has low yields, nice tuber appearance and higher specific gravity than Red Lasoda. Strengths: nice tuber appearance, bright yellow flesh. Weaknesses: low yield.

CO93037-6R – A late maturing selection from Oregon with round, dark red tubers. It resulted from a cross of CO82177-9 and NDO4030-12. CO93037-6R has low yields and a nice dark red tuber appearance. It has average specific gravity. Strengths: dark red color. Weaknesses: susceptibility to growth cracks, late maturity lends to skinning potential, low yield.

NDA5507-3Y – Originating as a seedling in ND and selected in the field at Aberdeen, this round, pink-eyed, yellow-fleshed selection holds promise as a specialty variety. It resulted from a cross of Brodick and Yukon Gold. NDA5507-3Y has early to medium maturity and also has the chipping characteristics and PVY resistance of its Scottish parent, Brodick. Tuber uniformity and type also are very good.

NDC5281-2 – An early to medium maturing selection from Colorado with oval, red tubers. It resulted from a cross of ND3196-1R and ND2224-5R. NDC5281-2 has average yield and good specific gravity. It has good dark red color. Strengths: good red color, good specific gravity. Weaknesses: skinning potential, slightly susceptible to scab.

NDO4323-2R – An early maturing selection from Oregon with round, dark red tubers. It resulted from a cross of 1871-3 and LA 12-59. NDO4323-2 has mediocre yield and

average specific gravity. Strengths: dark red color. Weaknesses: very susceptible to growth cracks, mediocre yield.

NDTX4271-5R – An early maturing selection from Texas with round, dark red tubers. It resulted from a cross of NDTX1068-1 and ND2050-1R. NDTX4271-5R has acceptable yield and specific gravity similar to Red Lasoda. Strengths: dark red color, nice uniform shape. Weaknesses: susceptible to growth cracks and shatter bruise.

TX1523-1RU/Y – An early maturing selection from Texas with oval, russeted tubers with yellow flesh. It resulted from a cross of Krantz and Delta Gold. TX1523-1RU/Y is comparable to Yukon Gold in yield. It has very nice tuber appearance and good specific gravity. Strengths: nice tuber appearance, resistant to secondary growth and growth cracks. Weaknesses: susceptible to scab.

TX1674-1W/Y – A medium maturing selection from Texas with oblong, russeted tubers with yellow flesh and pink eyes. It resulted from a cross of Russet Nugget and Delta Gold. TX1674-1W/Y is lower yielding than Yukon Gold and has high specific gravity. Strengths: nice tuber appearance, resistant to secondary growth and growth cracks, high specific gravity. Weaknesses: low yield.