

2011 UNL Eastern Organic Winter Wheat State Variety Trial

Group

Cultivar and Description

- 1 1) *Hatcher*—COLORADO release in 2004; pedigree includes Yuma, Tam 200 and Vista; high yield in western Nebraska; short coleoptile; poor canopy cover; good bread quality; marginal milling quality.
- 1 2) *Camelot*—NEBRASKA release in 2008; pedigree includes Nebraska and Kansas experimental lines; top choice statewide for reliably high yield and good bread quality; moderately long coleoptile; high yield in eastern Nebraska; susceptible to scab (*Fusarium* head blight).
- 1 3) *NE03490*—increased for potential release in Nebraska; at least 25% Arapahoe parentage; high yield statewide; has genetically low testweight which does not impair bread quality.
- 3 4) *Wahoo*—NEBRASKA release in 2000; Arapahoe and Abilene parents; high yield and good canopy cover statewide; finishes well in drought years under organic management, but not under conventional management; has genetically low testweight which does not impair bread quality.
- 4 5) *Goodstreak*—NEBRASKA release in 2002; parents include a SD spring wheat, Colt, a Russian variety, and a Kansas line; tall (lodges in eastern Nebraska); long coleoptile; good cover in eastern Nebraska; consistently high yield statewide; variable baking quality.
- 2 6) *Pronghorn*—NEBRASKA release in 1996; Dawn, Colt and Centura parents; tall (lodges in eastern Nebraska); long coleoptile; high yield; good cover in eastern Nebraska; NOT highly susceptible to scab; usually high bread quality.
- 2 7) *Buckskin*—NEBRASKA release in 1973; parents were developed from 1930 to 1965 (Scout, Tenmarq, Marquillo, Oro); tall (lodges in eastern Nebraska); moderately long coleoptile; consistently good bread quality and good cover; good milling qualities; adapted especially to eastern Wyoming and nearby Nebraska; susceptible to stem rust and leaf rust.
- 4 8) *Clark's Cream*—EARL CLARK release in 1972; bulk selection from Kanking crossed with Golden 50 or Golden Chief; noted as an early source of sprouting tolerance for hard white wheat; tall (lodges in eastern Nebraska); good cover in western Nebraska; difficult to thresh; very poor yield statewide; bread quality is variable.
- 4 9) *Danby*—KANSAS release in 2006; parents are Trego and Jagger; sprouting resistant hard white wheat; high test weight; high yield; marginal bread quality.

Groups:

- 1 Consistently High Yield and Bread Quality
- 2 Good Bread Quality but Poorer Yield
- 3 Marginal Milling Quality or Variable Bake Quality
- 4 Expected Poor Bread Quality

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- 2 10) *Alice*—SOUTH DAKOTA release in 2006; parents are Abilene and Karl; often top bread quality; good cover in the east; lower than the average yield for entries in the organic variety trials.
- 2 11) *Karl 92*—KANSAS release in 1992; pedigree is diverse (Plainsman V, Kaw, Atlas 50, Parker, Agent); re-selection from Karl for leaf rust resistance, which has since broken down; high protein content usually translates into top bread quality; lower than the average yield for entries in the organic variety trials.
- 2 12) *Darrell*— SOUTH DAKOTA release in 2006; from a Nebraska cross with Karl 92; usually very good bread quality; mediocre yields; susceptible to leaf rust and bacterial spot.
- 3 13) *NE99495*—NEBRASKA license to Kansas Organic Producers in 2007; cross between Alliance and Karl 92; better quality than most conventional releases; often with good bread quality by organic standards.
- 2 14) *Wesley*—NEBRASKA release in 2000; Colt and Cody parentage; stable high yield; high yield potential in both irrigated and rainfed environments; not protected by plant variety protection laws; usually very good bread quality; highly susceptible to scab.
- 4 15) *Alliance*—NEBRASKA release in 1993; offspring of Colt, Arkan and Chisholm; stable high yield; consistently low protein content, which is reflected in poor bread quality when the protein content is very low; poor milling.
- 1 16) *Millennium*— NEBRASKA release in 1999; cross between Arapahoe, Abilene and a Nebraska experimental line; replacement for Arapahoe for consistent high yield and winter-hardiness; good bread quality, good cover in western Nebraska.
- 4 17) *Overland*— NEBRASKA release in 2007; pedigree includes Arapahoe, Abilene, and a North Dakota cross between Seward and Archer; top yield in all environments; resistant to several leaf diseases so that green leaf endures late in the season; susceptible to Wheat Soil Borne Mosaic virus, which until recently was restricted to Kansas and south; bread quality is marginal.
- 1 18) *Expedition*—SOUTH DAKOTA release in 2002; parents are Tomahawk and Bennett; second year of testing; moderately high yield; good bread quality; long mixing time and good mixing tolerance for whole wheat bread; scab resistant; susceptible to tan spot.
- 3 19) *McGill (NE01481)*—NEBRASKA release in 2010; pedigree includes Redland, Ike and an Oklahoma line; high yield; very good bread quality; Nebraska's first release that is resistant to wheat soilborne mosaic virus; poor milling quality; poor canopy cover.

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- 1 20) *NW03666*—increased for release; parents are Nebraska experimental lines; hard white wheat; good yield and quality.
- 1 21) *NW07505*—parents are Trego and Thunderbolt; hard white wheat; second year of testing; top yield, testweight and quality; moderately long coleoptile; good green leaf duration.
- 1 22) *NW03681*—was increased for release; no longer in pipeline for conventional release; retained for organic release; cross between World Seeds and Nebraska lines; hard white wheat; high protein and good bread quality.
- 1 23) *NE04424*—was increased for release; no longer in pipeline for conventional release; retained for organic release; pedigree includes Thunderbird, Cougar, Abilene, Norkan and Rawhide;
- 1 24) *NE05496*—pedigree includes Rio Blanco and Niobrara; second year of testing; top yield and testweight; good green leaf duration; moderately long coleoptile.
- 3 25) *NE05548*—good milling yield; low vomitoxin (DON from scab) during 2008 epidemic.
- NA 26) *NE08457*—new entry;
- NA 27) *NI08708*—new entry;
- 2 28) *NE02558*—second year of testing for eastern sites only; cross between Jagger and Alliance; slipped through the cracks in conventional testing; very good baking quality; good green-leaf duration; scab resistant.
- 4 29) *NE06545*—second year of testing for eastern sites only; pedigree includes Jagger, Alliance, Abilene and Karl 92; moderately long coleoptile; good cover.
- 1 30) *NE07444*—third year of testing for eastern sites only; pedigree includes Wahoo and Rio Blanco; moderately long coleoptile.
- 2 31) *NE05425*—third year of testing for eastern sites only; pedigree includes Thunderbird and Akron; strong gluten strength for whole wheat bread; high testweight; good bread quality;
- 4 32) *NE05430*—second year of testing for eastern sites only; cross between Indiana and Nebraska lines; good milling and baking quality; susceptible to scab.
- 2 33) *SD07165*—second year of testing for eastern sites only; cross between two South Dakota lines and Avalanche (Colorado white line); high yield; green leaf duration similar to that of Overland; excellent gluten quality.
- NA 34) *Hallam*—new entry to organic trials in eastern Nebraska only; NEBRASKA release in 2004 noted for yield.
- NA 35) *Lyman*—new entry to organic trials in eastern Nebraska only; SOUTH DAKOTA release in 2009 noted for yield and moderately tall with lodging weakness.
- NA 36) *NX05M4180-6*—new entry for eastern Nebraska only; bred for waxy trait.