**Introduction**

The University of Minnesota provides objective information to help farmers select crop brands and varieties best adapted to their locations. In 2013 the University’s Agricultural Experiment Station compared entries in research plots in St. Paul, at Research and Outreach Centers at Crookston, Grand Rapids, Lamberton, Morris, Rosemount and Waseca, the Sand Plain Experimental Research Farm at Becker, and in farmers fields. Entries are grown in replicated plots at each location so that factors affecting their yield and characteristics are as nearly the same as possible for all entries at each location.

If you have a question about any crop contact an author of that crop section at 612-625-2740, or go to www.maes.umn.edu, the Experiment Station’s website.

**Certified Seed**

While use of certified seed is suggested, certification in itself does not imply a recommendation. Registered and certified seed of many crop varieties among the entries in this report can be purchased from grower-members of Minnesota Crop Improvement Association (MCIA) or from seed dealers. You can find sources of registered and certified seed at the MCIA website, www.mcia.org

**Interpreting the Tables**

These trials are not designed for crop, or species, comparisons; crops are grown on different fields and with different management. The data should be used only to compare varieties and brands within a table.

The relative maturities of entries are variously shown in tables as date of maturity, date of heading or blooming, days to maturity, heading or blooming, or moisture percent at harvest.

LSD (least significant difference) numbers beneath yield columns in tables are statistical measures of variability within trials. The LSD is used to determine whether the difference between two yields is due to a genetic difference in the entries or to other factors, such as environmental variability. If the difference in a trait such as yield between two entries equals or exceeds the LSD value for the column the higher-yielding entry probably was superior in yield. If the difference is less than the LSD value the yield difference probably was due to environmental factors. An “NS” notation in a column indicates no significant difference for that characteristic.

**Abbreviations**

To save space, “AES” is sometimes used as “agricultural experiment station”, and “eg” is sometimes used as “for example.” Lists headed “Authors/Researchers” ending the text for each crop show locations with abbreviations:

NCROC: North Central Research and Outreach Center, Grand Rapids
NWROC: Northwest Research and Outreach Center, Crookston
RROC: Rosemount Research and Outreach Center, Rosemount
SPC: University of Minnesota St. Paul campus
SPRF: Sand Plain Research Farm, Becker
SROC: Southern Research and Outreach Center, Waseca
SWROC: Southwest Research and Outreach Center, Lamberton

**Project Leaders**

Alfalfa: Craig Sheaffer, Josh Larson
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Oat: Roger Caspers
Soybean: Jim Orf, Seth Naeve, Gerald Decker
Wheat, Hard Red Spring: Jim Anderson, Jochum Wiersma, Roger Caspers, Susan Reynolds
Wheat, Winter: Jim Anderson, Jochum Wiersma, Roger Caspers, Susan Reynolds

All but Dave Grafstrom are members of the Department of Agronomy and Plant Genetics in the College of Food, Agricultural and Natural Resource Sciences, University of Minnesota. Grafstrom is with Northland Community and Technical College, Roseau.

**Cover Photo**

Jim Anderson, University of Minnesota wheat breeder, describing spring wheat trials at the summer crops field day, Northwest Research and Outreach Center, Crookston.

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