

Minnesota

VARIETAL TRIALS RESULTS

To help growers select varieties best adapted to a specific area, the Minnesota Agricultural Experiment Station (MAES) compares varieties in research plots at St. Paul, Becker, Crookston, Grand Rapids, Lamberton, Morris and Waseca, and in farmers' fields. Crop varieties are grown in replicated plots at each location, and factors affecting their yield and characteristics are as nearly the same as possible for all varieties at each location.

Not all crop varieties included in previous editions of Minnesota Varietal Trials are included in this 2012 edition. If you have a question about such a crop, contact the author(s) of the related crop section at 612-625-2740 or go to the MAES web site at www.maes.umn.edu. Click on Commodity/Crop Lines, then on Varietal Trials, which will display a crop listing.

Certified Seed

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

Variety vs. Brand

Please read the variety vs. brand information on pages 6 and 7.

Interpreting the Tables

The 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 varieties or to other causes, such as environmental variability.

If the yield difference between two varieties equals or exceeds the LSD value for the yield column, the higher-yielding variety probably was superior in yield. If the difference is less than the LSD the yield difference probably was due to environmental factors. An "NS" notation in a column indicates no significant difference for that characteristic. The relative maturities of varieties are variously indicated in the tables as date of maturity; date of heading or blooming; days to maturity, heading or blooming; or moisture percentage at harvest.

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

Abbreviations

To save space in variety descriptions and some other listings, "agricultural experiment station" often is abbreviated as AES, and e.g. is sometimes used as "for example."

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**Minnesota Agricultural
Experiment Station**

UNIVERSITY OF MINNESOTA



A mist-irrigation system provides the environmental conditions to promote disease development following inoculation of these barley plots on the St Paul campus. The aim of the research is to test the response of barley lines to *Fusarium*, a fungus that causes Fusarium head blight, also known as scab, with the aim of developing varieties with improved resistance.