Barley varieties are compared in replicated trials in Crookston, Morris, St. Paul, Stephen and Roseau. Data collected from these trials should be used to make comparisons only among those varieties included in the trials. Descriptions of barley varieties are listed by year of release.

Variety Selection Criteria

Most barley producers in the region grow barley for malt and select varieties approved by the American Malting Barley Association (AMBA). The most important industry specifications for making malting grade are grain protein, kernel plumpness and deoxynivalenol (DON), the toxin produced by the Fusarium Head Blight (FHB) pathogen. Please consult the AMBA recommended varieties for the most current information about industry acceptance of malting barley varieties at www.ambainc.org. For most producers, the disease FHB and the presence of DON in harvested grain are the two most important factors limiting production of malting barley in the region. The only variety with partial resistance to FHB is MNBrite; however, MNBrite is not approved by AMBA as a malting variety. There are no significant differences among the current malting varieties for resistance to FHB.

General-Purpose Varieties

Stellar-ND – Medium yielding and medium maturity. Good lodging resistance and kernel plumpness. Six-rowed, semi-smooth awns, long rachilla hairs and colorless aleurone. Classified as a malting variety by AMBA. Resistant to spot blotch and slightly better net blotch resistance compared to Robust. Released by N.D. AES in 2005. PVP (94)

Tradition – High yielding and medium maturity. Medium lodging resistance and kernel plumpness. Six-rowed, semi-smooth awns, long rachilla hairs and colorless aleurone. Classified as a malting variety by AMBA. Resistant to spot blotch, slightly better net blotch resistance compared to Robust. Developed by Busch-Agricultural Resources Inc. (BARI). Released 2003. PVP (94)

Drummond – Medium yield and medium maturity. Very good lodging resistance and good kernel plumpness. Six-rowed, semi-smooth awns, long rachilla hairs, colorless aleurone. Classified as a malting

### Grain yield as a percent of the mean of varieties in trials from 2004-2006 and 2006 alone.

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<thead>
<tr>
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* 2004 and 2006.
variety by AMBA. Resistant to spot blotch, slightly better net blotch resistance compared to Robust. Developed from crosses involving Azure, Bumper, Hazen and Stander. Released by N.D. AES in 2000. PVP (94)

**Legacy** – High yielding and medium-late maturity. Medium lodging resistance and kernel plumpness. Six-rowed, semi-smooth awns, long rachilla hairs and colorless aleurone. Classified as a malting variety by AMBA. Resistant to spot blotch; slightly better net blotch resistance compared to Robust. Developed by Busch Agricultural Resources Inc. (BARI) from a complex cross involving the parental varieties Bumper, Karl, Manker and Excel. Released 2000. PVP (94)

**Lacey** – High yield and medium maturity. Good lodging resistance and kernel plumpness. Six-rowed, semi-smooth awns, short rachilla hairs, colorless aleurone. Classified as a malting variety by AMBA. Resistant to spot blotch. Developed from crosses involving Robust, Excel and Stander. Released by Minn. AES in 1993. PVP (94)

**Robust** – Low yield and medium maturity. Medium lodging resistance and good kernel plumpness. Six-rowed, semi-smooth awn, short rachilla hairs, colorless aleurone. Classified as a malting variety by AMBA. Resistant to spot blotch. Developed from crosses involving Moorex and Manker. Released by Minn. AES 1983. PVP

**Special-Purpose Varieties**

**MNBr** – Medium yield and early maturity. Medium lodging resistance and kernel plumpness. Six-rowed, semi-smooth awns, colorless aleurone. Not classified as a malting variety. Resistant to kernel discoloration; has some resistance to FHB. Resistant to spot blotch; has slightly better net blotch resistance compared to Robust. Released by Minn. AES 1998.

**Royal** – Intended for use as a forage-companion crop and feed-grain variety. Not a malting variety. Six-rowed, semi-smooth awn, blue aleurone, semidwarf stature. Superior in forage quality (RFV) compared to taller varieties, based on digestibility and intake potential; low in fiber and lignin. Similar to Robust in forage protein and forage yield at the soft dough stage. Compared to taller barley and oat varieties, it competes less with underseeded forage legumes because of its short stature and superior lodging resistance. Resistant to spot blotch. Developed from crosses involving Robust, Azure and semidwarf Minn. M32. Released by Minn. AES 1994. PVP (94)

**Stander** – Medium yield, late maturity. Very good lodging resistance and good kernel plumpness. Six-rowed, semi-smooth awn, short rachilla hairs, colorless aleurone, short stature. Not classified as a malting variety. Resistant to spot blotch. Developed by Minnesota Agricultural Experiment Station from crosses involving Excel, Robust and Bumper. Released 1993. PVP

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**Characteristics of barley varieties, 2000–2006.**

<table>
<thead>
<tr>
<th>Variety</th>
<th>Type</th>
<th>Use</th>
<th>Heading (DAP)</th>
<th>Height (inches)</th>
<th>Lodging (%)</th>
<th>Plump (%)</th>
<th>Protein (%)</th>
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<td>35</td>
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<td>57</td>
<td>32</td>
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<td>35</td>
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No. of Trials: 23 23 12 20 17

DAP = days after planting

1 Only three years of plump and protein data, 2000-2001 and 2006.
2 Only three years of plump and protein data, 2003-2005.

**Disease reactions1 of barley varieties; 2001-2006.**

<table>
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<th>Variety</th>
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<th>Net Blotch</th>
<th>Septoria Speckled Leaf Blotch</th>
<th>Spot Blotch</th>
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1 Most Resistant = 1, Most Susceptible = 9.