Description
• Barley is an annual cereal grain used primarily for malting and as livestock forage.
• Approx. 14,300 seeds per pound, 48 pounds per bushel
• Barley can yield 45 – 100 bushels per acre in Minnesota.

Management considerations
• Avoid planting barley on fields with lots of corn trash. Corn trash carries the Fusarium fungus, which can cause FHB in barley.
• Avoid fields with a large population of weeds, especially wild oats and Canada thistle.
• Avoid fields with residual herbicides that kill grasses.
• Well-drained, fertile soils are essential for producing good quality barley. Barley grows best in the northwestern and north central regions of Iowa.

Optimum Planting Dates
• The recommended planting date for barley in Minnesota is early April to early May.

Seeding Recommendations
• Plant about 96 lbs. (about 2 bushels) of seed per acre.
• Good seed-soil contact and adequate moisture is essential when the grain is seeded. Prepare a firm seedbed for good germination and seedling development. Dry, loose soil makes for an unsatisfactory seedbed.
• Drill about 1 to 1½ inches deep, depending on soil moisture and soil texture. A grain drill with press wheels is the best because it places the seed at a uniform depth and gives good soil-seed contact. Seed placed deeper than two inches may result in reduced emergence and reduced yields.
• Can be seeded with an end-gate seeder (or fertilizer spreader) and dragged but establishment may be uneven.
**Fertilization** *(Consider a soil test and please contact your fertilizer professional for your specific needs):*

- **Nitrogen**: Application of fertilizer with the drill should be a standard management practice. Do not apply more than 5 lb. N/acre as urea in contact with the seed (in the row). If the soil is dry at planting time, do not apply more than 40 lb. N plus K$_2$O per acre with the drill. Higher rates can be used if the soil is wet at planting time.

- **Phosphate**: Phosphate in fertilizers has no negative effect on seed germination and seedling growth. Therefore, ample amounts of phosphate can be placed in contact with the seed.

- **Potassium**: No broadcast potash will be needed when the soil test K is 121 PPM or higher. No potash (either banded or broadcast) is suggested when the soil test for K is 161 PPM or higher. Phosphate and/or potash that is broadcast should be incorporated before seeding. These nutrients do not move in most soils and will have very little effect on production if they are topdressed to an established stand.

- **Sulfur**: Sulfur (S) can increase barley yields when the crop is grown on sandy soils. Research trials have shown that there is no need to add S to a fertilizer program when barley is grown on fine-textured soils in Minnesota.

**Weed and Disease Control** *(This is not intended as a recommendation or endorsement of any specific product but as a list of possible controls. Please contact your chemical professional for your specific needs and always read and follow label directions):*

- **Seeding as early as possible** in the growing season enables the cool season small grain crop to compete effectively with weeds, especially with warm season annual grasses. Research has shown that herbicides generally are not needed for green and yellow foxtail control in small grains if the small grain is well established before the foxtail emerges.

- **Grass Control** (foxtail): Puma from emergence to the five-leaf stage of growth.

- **Broadleaf Control**: Bromite Plus works well, 2,4-D or MCPA can also be used.

- **It may be possible to spot treat areas in the field rather than the entire field.**

- **Fusarium Head Blight** (FHB) and its associated toxin, deoxynivalenol (DON), can be a problem in barley (especially in fields previously in corn).

- **Fungicides**: Consider applying 6 - 9oz. of Headline (or another approved fungicide). Check with your chemical advisor for rates and timing. A second application may be needed in wet years.