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#### Yield & Quality Comparisons:

Lacey has consistently been in the top bracket of the State Yield Trials since release. Lacey received favorable reviews for malting and brewing characteristics including high malt extract, low soluble protein, and high alpha-amylase activity. For additional yield comparisons, consult the Minnesota Variety Trials bulletin.

**Table 5:** Grain yield of Lacey relative to comparablesix-row malting barley varieties.

Variety	Relative Maturity (days)	Grain Yield (%)
Foster	-2	103
Robust	-2	95
Drummond	-1	98
Lacey	0	106

**Table 6:** Grain quality of Lacey relative to comparable

 six-row malting barley varieties.

Variety	Test Weight (lbs/bu)	Grain Protein (%)	Plump (%)
Foster	43.5	12.9	80
Robust	45.6	13.9	77
Drummond	44.5	13.5	74
Lacey	45.6	13.6	79



## UNIVERSITY OF MINNESOTA

# Lacey

### Six-row Malting Barley

January 2002

## Lacey

'Lacey' is a six-row malting barley developed and released by the Minnesota Agricultural Experiment Station (MAES) in 2000. Lacey was selected from a cross of two elite Minnesota lines made in 1993. The parents to the two elite lines include Morex, Robust, and Excel.

Before release, Lacey was tested as M98 in Minnesota state-wide yield trials from 1996 through 1999 and from 1997 to 1999 in the Mississippi Valley Nursery. AMBA approved Lacey for malting in 2001.

Lacey is named after the late Gerald Lacey to recognize his sizeable contribution to the barley industry in Minnesota and the US. Lacey is protected under the Title V provision of the US Plant Variety Protection Act (PVP pending). Breeder seed of Lacey is maintained by the Minnesota Agricultural Experiment Station. Foundation seed is produced and maintained by the Minnesota Crop Improvement Association, 1900 Hendon Avenue, Saint Paul MN 55108 (www.mncia.org).

#### Characteristics:

Lacey is a six-row malting barley with semi-smooth awns and short rachilla hairs. The variety has medium sized kernels and the kernels have a colorless aleurone. Lacey has an intermediate maturity. Plant height averages 33 inches with good resistance to lodging and the variety shows little straw breakage at maturity. Lacey has a high yield potential with a intermediate grain protein and high percentage plump.

#### Planting:

Lacey has a large area of adaptation and can be planted throughout the state.

Table 1: Seed characteristics of Lacey.

Coleoptile	2.2 inches
Seed Count	11,500 seeds/lbs

 Table 2: Seeding rate information for Lacey.

	Early	Late
Optimum Stand (plants/ft <sup>2</sup> )	28	30
Seeding Rate (lbs/acre)	130	140

#### Herbicides:

Lacey has no restrictions for any herbicides are labeled for use on barley in Minnesota. Lacey's tolerance to herbicides containing dicamba is fair to poor. Crop tolerance data to the most common grass herbicides is presented in Table 3. 
 Table 3: Crop tolerance of Lacey to postemergence grass herbicides.

Herbicide	Poor	Fair	Good
Achieve		Х	
Assert			х
Avenge			х
Hoelon			х
Puma			х
Stampede EDF		х	
Tiller		Х	

#### Fungicides & Seed Treatments:

Lacey has no restrictions for any of the fungicides or seed treatments labeled on barley in Minnesota. No data is available on the variety's response to the use of a fungicide relative to other varieties at the present time. Disease responses of Lacey to common pathogens are listed in Table 4.

# **Table 4:** Disease responses of Lacey to commonpathogens.

Disease	S	MS	MR	R
Common Root Rot		Х		
Stem Rust	х			
Leaf Rust				х
Net Blotch	Х	х		
Spot Blotch			х	х
Loose Smut	Х			
FHB	х			
Kernel Discoloration		Х		