



**Minnesota  
Agricultural  
Experiment  
Station**

UNIVERSITY OF MINNESOTA

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#### Grain Yield and Quality Comparisons:

Alsen has a medium yield potential combined with high test weight, high grain protein percentage, and excellent milling and baking quality. Of the current varieties, Alsen offers some of the best resistance to FHB and as such is an excellent hedge against this disease. For additional yield comparisons, consult the *Minnesota Varietal Trials Results* bulletin.

**Table 5:** Grain yield of Alsen relative to comparable HRSW varieties (2004-2005 data).

Variety	Relative Maturity (days)	North (%)	South (%)	State (%)
Glenn	-3	102	100	101
Alsen	0	97	93	95
Freyr	0	101	105	104
Hanna	+1	98	87	92

**Table 6:** Grain quality of Alsen relative to comparable HRSW varieties (2004 - 2005 data).

Variety	Test Weight (lbs/bu)	Grain Protein (%)	Baking Quality
Glenn	62.0	15.5	high
Alsen	60.1	15.1	high
Freyr	58.8	14.7	
Hanna	59.5	14.7	high

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*Alsen*

*Hard Red Spring Wheat*

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February 2006

# Alsen

'Alsen' is a hard red spring wheat developed and released by the North Dakota Agricultural Experiment Station (NDAES) in 2000. Alsen is derived from a cross of three elite lines of which one has Sumai 3, the Chinese source of resistance to Fusarium Head Blight, as a parent.

Before release, Alsen was tested as ND 716 in North Dakota's state wide yield trials in 1998 through 1999 and in the Uniform Regional Hard Red Spring Wheat Nursery in 1999. Since 2000, Alsen been tested in the Minnesota State Yield Trials.

Alsen is named after the town with the same name in northeastern North Dakota, one of areas hit hardest by FHB. Alsen is protected under the Title V provision of the US Plant Variety Protection Act (PVP certificate 2001000666). Breeder seed of Alsen is maintained by NDAES. In Minnesota foundation seed is produced and maintained by the Minnesota Crop Improvement Association, 1900 Hendon Avenue, Saint Paul, MN 55108 ([www.mncia.org](http://www.mncia.org)).

## Characteristics:

Alsen is an awned, medium tall semi-dwarf hard red spring wheat. The small, elliptical kernels are red and very uniform. Alsen has a intermediate maturity. Plant height averages 32 inches and straw strength is good. Although Alsen has the scab-resistant Chinese wheat Sumai 3, known for shattering, in it's pedigree, the variety has no severe problems with shattering.

## Planting:

Alsen is well adapted to northwest Minnesota, but can be grown throughout the state as a hedge against FHB.

**Table 1:** Seed characteristics of Alsen.

<b>Coleoptile</b>	1.9 inches
<b>Seed Count</b>	14,500 kernels/lbs

**Table 2:** Seeding rate information for Alsen.

	Early	Late
<b>Optimum Stand (plants/ft<sup>2</sup>)</b>	30	32
<b>Seeding Rate (lbs/acre)</b>	112	119

## Herbicides:

Avenge has no label for Alsen. Alsen has no restriction for any other herbicides labeled on hard red spring wheat in Minnesota. Crop tolerance data to most common grass herbicides are presented in Table 3.

**Table 3:** Crop tolerance of Alsen to postemergence grass herbicides.

Herbicide	Poor	Fair	Good
<b>Assert</b>			x
<b>Axial</b>			x
<b>Discover</b>			x
<b>Everest</b>		x	x
<b>Puma</b>			x
<b>Rimfire</b>		x	x
<b>Silverado</b>			x

## Fungicides and Seed Treatments:

Alsen has no restrictions for any of the fungicides or seed treatments labeled on hard red spring wheat in Minnesota. Alsen is a hedge against FHB. When planting Alsen in wheat stubble, scout for an early onset of tan spot and use a fungicide to control this disease. Disease responses of Alsen to common pathogens are listed in Table 4.

**Table 4:** Disease responses of Alsen to common pathogens.

Disease	S	MS	MR	R
<b>Common Root Rot</b>		x	x	
<b>Leaf Rust</b>			x	
<b>Stem Rust</b>				x
<b>Stripe Rust</b>				x
<b>Tan spot/ Septoria complex</b>		x	x	
<b>FHB (disease severity)</b>			x	
<b>FHB (grain soundness)</b>			x	
<b>Black Point</b>		No data		