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Grain Yield and Quality Comparisons:

Steele-ND has a medium high yield potential combined with high test weight. Steele-ND is resistant to preharvest sprouting and the Hagberg falling number averages > 400 seconds. For additional yield comparisons, consult the *Minnesota Varietal Trials Results* bulletin.

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

Variety	Relative Maturity (days)	North (%)	South (%)	State (%)
Ulen	-2	99	110	105
Briggs	-1	101	102	102
Granger	-1	100	107	104
Steele-ND	0	100	109	105
Knudson	+1	106	110	109

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

Variety	Test Weight (lbs/bu)	Grain Protein (%)	Baking Quality
Ulen	59.3	15.0	medium
Briggs	60.1	14.8	medium
Granger	59.6	14.7	
Steele-ND	60.6	15.3	high
Knudson	59.5	14.3	medium - high

Steele-ND

Hard Red Spring Wheat

February 2006

Steele-ND

'Steele-ND' is a hard red spring wheat developed and released by the North Dakota Agricultural Experiment Station (NDAES) in 2004. Steele-ND is selected from the cross Parshall/5/Grandin/3/IAS20*4/H567.71//Amidon/4/Grandin*2/Glupro.

Before release, Steele-ND was tested as ND 741 in North Dakota's state wide yield trials in 2001 through 2003 and in the Uniform Regional Hard Red Spring Wheat Nursery in 2001 and 2003. Since 2004, Steele-ND been tested in the Minnesota State Yield Trials.

Steele-ND is named after the town of Steele in south central North Dakota.

Steele-ND is protected under the Title V provision of the US Plant Variety Protection Act (PVP # 200400188). Breeder seed of Steele-ND 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).

Characteristics:

Steele-ND is an awned, medium tall semi-dwarf hard red spring wheat. The small, oval kernels are red and very uniform. Steele-ND has an medium maturity, similar to Oxen and Reeder. Plant height averages 32.0 inches with medium straw strength. Steele-ND has moderate resistance to grain shattering, comparable to Alsen.

Planting:

Steele-ND is well adapted to west central and southern Minnesota.

Table 1: Seed characteristics of Steele-ND.

Coleoptile	2.0 inches
Seed Count	?? kernels/lb

Table 2: Seeding rate information for Steele-ND.

	Early	Late
Optimum Stand (plants/ft²)	30	32
Seeding Rate (lbs/acre)	??	??

Herbicides:

Steele-ND has no restriction for any 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 Steele-ND to postemergence grass herbicides.

Herbicide	Poor	Fair	Good
Assert			x
Axial			x
Discover			x
Everest		x	x
Puma			x
Silverado		x	x
Rimfire			x
Stampede EDF			x

Fungicides and Seed Treatments:

Steele-ND has no restrictions for any of the fungicides or seed treatments labeled on hard red spring wheat in Minnesota. When planting Steele-ND in wheat stubble, consider a seed treatment to reduce the impact of common root rot. Disease responses of Steele-ND to common pathogens are listed in Table 4.

Table 4: Disease responses of Steele-ND to common pathogens.

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