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Grain Yield and Quality Comparisons:

Granite has a medium to high yield potential combined with very high test weight and very high grain protein. Granite is resistant to preharvest sprouting but the variety is genetically prone to lower Hagberg falling numbers (HFN). The risk of HFN < 300 seconds is \pm 20% and increases when conditions during grainfill and harvest are cool. For additional yield comparisons, consult the *Minnesota Varietal Trials Results* bulletin.

Table 5: Grain yield of Granite relative to comparable HRSW varieties (2003-2005 data).

Variety	Relative Maturity (days)	North (%)	South (%)	State (%)
Banton	-4	99	101	100
Trooper	-4	98	95	96
Knudson	-3	106	111	109
Granite	0	105	101	102
Saturn	+3	102	107	105

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

Variety	Test Weight (lbs/bu)	Grain Protein (%)	Baking Quality
Banton	60.9	14.6	
Trooper	59.9	14.1	
Knudson	59.5	14.3	medium - high
Granite	61.1	15.4	medium - low
Saturn	56.2	15.2	

Granite

Hard Red Spring Wheat

February 2006

Granite

'Granite' is a hard red spring wheat developed in Germany by Pflanzenzucht Oberlimpurg. WestBred LLC represents the variety in the USA since 2002. Granite is selected from a complex cross that includes both German and Mexican germplasm.

Before release, Granite was tested as SLW 97606 in WestBred's own yield trials in 2000 and 2001. Since 2002, Granite has been tested in the Minnesota State Yield Trials.

Granite is protected under the Title V provision of the US Plant Variety Protection Act (PVP # 200100197). Breeder seed of Granite is maintained by WestBred LLC, Bozeman, Montana. In Minnesota, certified seed can be purchased from a WestBred Associate (www.westbred.com).

Characteristics:

Granite is an awned, medium height semi-dwarf hard red spring wheat. Plant height averages 29.5 inches and Granite has very strong straw. Granite has a medium sized, ovate kernel. Granite has a medium late maturity, similar to NorPro.

Planting:

Granite is well adapted to west central and northwest Minnesota. Granite responds well to a high input production system and is therefore well suited for the heart of the Red River Valley.

Table 1: Seed characteristics of Granite.

Coleoptile	2.6 inches
Seed Count	15,000 kernels/lb

Table 2: Seeding rate information for Granite.

	Early	Late
Optimum Stand (plants/ft²)*	50	50
Seeding Rate (lbs/acre)*	150	150

* This recommendation is made by WestBred LLC and is considerably higher than the standard University of Minnesota recommendation of 30 to 32 plants/ft²

Herbicides:

Granite 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 Granite to postemergence grass herbicides.

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

Fungicides and Seed Treatments:

Granite has no restrictions for any of the fungicides or seed treatments labeled on hard red spring wheat in Minnesota. Granite is susceptible to bacterial stripe caused by *Xanthomonas translucens* and moderately susceptible to leaf rust. Actively scout for leaf rust and consider a fungicide to control this disease. Disease responses of Granite to common pathogens are listed in Table 4.

Table 4: Disease responses of Granite to common pathogens.

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