#### Other HRSW varieties

recently released by the North Dakota Agricultural Experiment Station:

Prosper – (2011). Very high grain yield, medium early maturity. Average protein and test weight. Good milling and baking properties. Good leaf disease package and medium resistant to scab.

Barlow – (2009). High yield potential. Very good protein with overall milling and baking quality. Very high water absorption and test weight. Excellent protection against leaf and stem rust.

Faller – (2007). Very high yields. Good milling and baking characteristics. Moderately resistant to scab. Good protection against stem and leaf rust. Best adapted to eastern and central North Dakota.

Howard – (2006). Very high yield potential. Good leaf disease protection. FHB (scab) tolerance similar to Steele-ND. Best adapted to central and western regions of North Dakota.

Glenn – (2005). Scab resistance, yield, and straw strength superior to 'Alsen'. High protein and very good milling and baking characteristics. Extremely high test weight.

## For information on the availability of Foundation seed, contact:

#### NDSU Research/Extension Centers

Agronomy Seed Farm, Casselton.......(701) 347-4743 Carrington Research Extension Center....(701) 652-2951 Hettinger Research Extension Center.....(701) 567-4323 Langdon Research Extension Center......(701) 256-2582 North Central Research Ext. Center......(701) 857-7679 Williston Research Extension Center......(701) 774-4315

Or

NDSU Foundation Seedstocks Project (701) 231-8140 www.ndfss.com

#### **Plant Quality Certified Seed**

Certified seed is field inspected and lab analyzed to help ensure variety identity, germination, and purity.

Contact you local seed producer or dealer for quality certified seed.

Seed producers or dealers can be found in the North Dakota Field Inspected Seeds Directory. The directory is available from the North Dakota State Seed Department (NDSSD), your local county agent, or under the field seeds program of the NDSSD website.

#### www.ndseed.com



Varieties protected under PVPA with Title V option can only be sold as a certified class of seed. It is the responsibility of the buyer and/or seller to confirm the PVP status of a specific crop variety prior to buying or selling the variety. PVP status information can be obtained from the ND State Seed Department.



# **Velva**Hard Red Spring Wheat





## Velva Hard Red Spring Wheat

**Velva** was developed by the Hard Red Spring Wheat Breeding Program at North Dakota State University and released by the North Dakota Agricultural Experiment Station in the Summer of 2011. Velva has a broad adaptation to the spring wheat region, but it fits better in Central and Western ND environments. It has excelled performance, particularly where Reeder is grown.

Velva has high grain yield, higher than most cultivars adapted to the Central and Western regions including Glenn, the most dominant cultivar in the region. It is a semi-dwarf cultivar with medium late maturity, similar to Reeder and Faller, and medium to strong straw strength comparable to Reeder. Overall protein of Velva is good, similar to Reeder, with average milling properties. Velva has good baking properties slightly better than Reeder. Test weight is also average, similar to Faller. Velva has an excellent leaf disease package better than Reeder.

Velva is resistant or medium resistant to leaf and stem rusts; resistant to septorias; resistant to races 2 and 3 of tan spot, and medium susceptible to scab compared to susceptible checks. However, Velva is susceptible to bacterial leaf streak, and medium susceptible to the new leaf rust race (Lr21).

Velva was developed by using several breeding methodologies including the modified pedigree breeding method. Winter nurseries in Arizona and New Zealand were used to speed up the process of Velva development and seed production. Velva was observed for more than 5 crop cycles from 2006 to 2010 and was stable and uniform within commercially acceptable limits for all traits.

#### Foliar and head disease reaction of Velva.

	Velva	Reeder	Faller	Glenn
Leaf Rust Reaction <sup>1</sup>	MR/MS*	S	R	R
Stem Rust <sup>1</sup>	R	R	R	R
FHB Reaction <sup>1</sup>	MS	S	MR	MR/R

<sup>&</sup>lt;sup>1</sup>R=resistant; MR=moderately resistant; MS=moderately susceptible; S=suscepible.

## **Velva**General Characteristics

- Adapted to most ND environments, but performs very well in the Western and Central regions.
- High grain yield.
- Semi-dwarf height.
- Medium late maturity similar to Faller.
- Overall acceptable milling and baking quality.
- Good leaf disease resistance package.
- Medium susceptibility to scab.

## Agronomic performance of Velva across the western region of North Dakota, 2010-2012.

	Velva	Reeder	Faller	Glenn	Locs.1
Yield (bu/acre)	58.3	56.4	56.6	56.3	13
Days to Heading	67	65	67	64	13
Height (inches)	32.3	34.0	33.0	35.4	13
Lodging Score <sup>2</sup>	0.0	0.1	0.3	0.3	4
Test wt. (lbs/bu)	57.0	58.8	57.2	61.2	13
Protein (%)	14.8	15.1	14.7	15.7	13

<sup>&</sup>lt;sup>1</sup>Number of locations reported.

### Agronomic performance of Velva across North Dakota, 2010-2012.

	Velva	Reeder	Faller	Glenn	Locs.1
Yield (bu/acre)	55.9	53.9	58.8	54.1	22
Days to Heading	63	61	63	60	22
Height (inches)	31.8	32.8	32.7	34.6	22
Lodging Score <sup>2</sup>	0.0	0.2	0.4	0.2	5
Test wt. (lbs/bu)	57.2	58.6	58.1	61.5	22
Protein (%)	14.9	15.1	14.5	15.4	21

<sup>&</sup>lt;sup>1</sup>Number of locations reported.

<sup>&</sup>lt;sup>2</sup>Scale of 0 to 9, with 0 being resistant and 9 susceptible.



## For more information

about Velva or other hard red spring wheat varieties refer to the most recent Spring Wheat Variety Selection Guide (www.ag.ndsu. edu/crops/guides.html) or contact the HRSW breeder Dr. Mohamed Mergoum at (701) 231-8478 or Extension agronomist Dr. Joel Ransom at (701) 231-7971.

<sup>\*</sup>Medium susceptible to the new leaf rust race (Lr21)

<sup>&</sup>lt;sup>2</sup>Scale 0 to 9, with 0 being resistant and 9 susceptible.