

LANG - MN

'Lang-MN,' tested as MN10261-1, is a hard red spring wheat that combines yield, quality, and disease resistance.

A medium maturity variety, it has yielded very well in state and regional testing.

Lang-MN has a good combination of overall disease resistance, including very good ratings for Fusarium head blight and Bacterial leaf streak, and excellent ratings for leaf rust and stripe rust.



Heading 1 day earlier than Prosper, it is similar in height with slightly better straw strength.

Lang-MN has high protein, very good test weight, and is resistant to pre-harvest sprouting, all contributing to good overall end-use quality characteristics.

The variety is named after Ben Lang, retired MCIA President/CEO and long-time field supervisor.

Key characteristics of Lang-MN include:

- Scab resistance
- Good protein and yield
- High test weight

CERTIFIED SEED

What is Seed Certification?

Seed certification is an internationally recognized system to preserve the genetic identity and purity of crop varieties.

How is Seed Certified?

Seed certification requires planting eligible seedstocks, field inspection of the growing crop, proper conditioning, representative sampling, thorough laboratory analysis, and proper labeling.

Who Produces Certified Seed?

Certified seed is produced by careful, conscientious growers, according to specific seed certification standards.

Why buy Certified Seed?

Seed certification procedures provide the best possible third party assurance of good quality seed of known identity, germination and purity.

Plant Variety Protection

Minnesota wheat varieties are PVP 94 Title V protected and can only be sold as certified seed.

For a list of Certified Seed producers visit the Minnesota Crop Improvement Association at www.mncia.org or call 1-800-510-6242.

Ask for Certified Seed

FOR MORE INFORMATION

about HRSW varieties and the University of Minnesota wheat breeding program contact Jim Anderson, University of Minnesota wheat breeder at 612-625-9763 or Jochum Wiersma, University of Minnesota Extension Agronomist at 218-281-8629.

For copies of the annual Minnesota Field Crop Trials visit maes.umn.edu.

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WHEAT

*Hard Red Spring Wheat
Varieties with Proven Results*



*Lang-MN
Shelly
Bolles
Linkert*



*Improving your process
Enhancing your products
Increasing your profits*

www.mncia.org



HARD RED SPRING WHEAT

BOLLES

‘Bolles’ is a hard red spring wheat that combines very high grain protein content with excellent pre-harvest sprout resistance to provide outstanding milling and baking quality.



Well suited to Minnesota and North Dakota it is a medium maturity variety, with good straw strength and competitive grain yields. Bolles has excellent leaf rust resistance, moderate resistance to Fusarium head blight and bacterial leaf streak. Key characteristics of Bolles include:

- Superior protein
- High baking quality
- Leaf rust resistance

Agronomic characteristics of hard red spring wheat varieties in Minnesota

Variety	State Yield			Days to Heading	Straw Strength 1-9*
	2017	2-Yr	3-Yr		
	bu/A				
Shelly	98	94	93	62.3	5
Prosper	99	91	91	62.8	6
Faller	98	89	90	62.3	5
Lang-MN	90	86	88	61.3	5
Forefront	90	84	85	58.7	7
Bolles	87	84	84	63.9	4
Linkert	89	84	84	60.8	2
MB-Mayville	91	86	86	60.2	3
Mean (bu/A)	92	87	88		
LSD (0.10)	4.1	3.2	2.6		
No. Env.	14	26	40		

*1-9 scale in which 1 is the strongest straw and 9 is the weakest.

SHELLY

‘Shelly’ is a high yielding variety well adapted to the hard red spring wheat growing regions of Minnesota, and North and South Dakota. Grain yields are comparable to the highest yielding varieties but at a



higher protein level. It possesses a good disease resistance package with an excellent rating for resistance to stripe and stem rust with moderate resistance to scab, leaf rust and bacterial leaf streak. A medium maturity variety, Shelly has good test weight and pre-harvest sprouting resistance.

Key characteristics of Shelly include:

- High yields
- Good test weight
- Stripe rust resistance

Grain quality of hard red spring wheat varieties in Minnesota

Variety	Quality		
	Test Wt lbs/bu	Protein %	Preharvest Sprouting
	2-Yr	2-Yr	1-9*
Shelly	60.4	13.5	1
Prosper	59.9	13.3	2
Faller	59.6	13.2	1
Lang-MN	60.9	14.7	1
Forefront	60.4	14.6	3
Bolles	59.3	15.6	1
Linkert	60.2	15.1	2
MB-Mayville	60.1	14.7	3

*1-9 scale in which 1 is best and 9 is worst. Values of 1-3 should be considered as resistant.

LINKERT

‘Linkert’ is a hard red spring wheat with excellent straw strength and has performed well across Minnesota and the Dakotas. A medium-early maturity variety, Linkert has high



protein and good test weight. It is moderately susceptible to Fusarium head blight and moderately resistant to leaf rust. Linkert is resistant to pre-harvest sprouting and has very good end-use quality. Key characteristics of Linkert include:

- Very strong straw
- High protein
- Good yields

Disease reactions* of hard red spring wheat varieties in Minnesota

Variety	Disease			
	Leaf Rust	Stripe Rust	BLS**	Scab***
	1-9*	1-9*	1-9*	1-9*
Shelly	3	1	5	4
Prosper	5	5	5	5
Faller	5	5	4	4
Lang-MN	1	1	3	3
Forefront	2	2	4	3
Bolles	1	1	5	4
Linkert	3	1	4	5
MB-Mayville	3	3	6	7

*1-9 scale where 1=most resistant, 9=most susceptible

**BLS - Bacterial Leaf Streak

***Scab - Fusarium Head Blight