Hard Red Spring Wheat and Durum Wheat Production Guide (continued)

A-1050, May 1998

Variety Selection

Use of adapted varieties is a positive management decision. Hard red spring and durum wheat varieties currently grown in North Dakota are described in the following tables. Characteristics to evaluate in selecting a variety are: yield potential in your area; protein content when grown with proper fertility; milling, processing and baking quality; straw strength and plant height; reaction to important diseases; and days to maturity. When selecting a top yielding variety it is best to use data that summarizes several years and locations. The notion that the single data set nearest your farm will indicate which variety will perform the best for you is wrong. Choose the variety that on average performs the best at several locations near you over several years.

NDSU Hard Red Spring Wheat Variety Description

Variety	Agent or Origin[1]	Year Released	Beard	Height	Strength of Straw	Maturity
Coteau	ND	1978	yes	med.	m.strg.	med.
Len	ND	1979	yes	s.dwf.	v.strg.	m.early
Stoa	ND	1984	yes	med.	m.strg.	m.early
Butte 86	ND	1986	yes	med.	m.strg.	early
Nordic	AgriPro	1986	yes	s.dwf.	strg.	m.late
Amidon	ND	1988	yes	med.	med.	med.
Prospect	SD	1988	yes	s.dwf.	v.strg.	m.early
Grandin	ND	1989	yes	s.dwf.	strg.	early
Gus	ND	1989	yes	s.dwf.	strg.	m.early
2370	NDSURF	1990	yes	s.dwf.	v.strg.	m.early

2375	NDSURF	1990	yes	s.dwf.	med.	m.early
Bergen	AgriPro	1990	yes	s.dwf.	v.strg.	m.early
Sharp	SD	1990	yes	med.	med.	early
2371	NDSURF	1991	yes	s.dwf.	v.strg.	m.early
CDC Teal	CDC	1991	no	med.	med.	m.early
Norm	MN	1992	yes	s.dwf.	v.strg.	med.
Sonja	AgriPro	1992	yes	s.dwf.	v.strg.	m.early
AC Domain	Can	1993	no	med.	med.	early
AC Barrie	Can	1994	no	med.	med.	med.
Kulm	ND	1994	yes	med.	strg.	early
2398	NDSURF	1995	yes	s.dwf.	strg.	m.late
Ernest	ND	1995	yes	med.	med.	med.
Glupro	ND	1995	yes	tall	med.	m.late
Gunner	AgriPro	1995	yes	med.	m.strg.	med.
Hamer	AgriPro	1995	yes	s.dwf.	v.strg.	med.
Lars	AgriPro	1995	yes	s.dwf.	v.strg.	med.
McNeal	MT	1995	yes	med.	strg.	m.early
Russ	SD	1995	yes	med.	med.	m.early
Trenton	ND	1995	yes	med.	med.	med.
Verde	MN	1995	yes	s.dwf.	strg.	med.
AC Cora	Can	1996	no	med.	med.	med.
Keene	ND	1996	yes	med.	med.	med.
Oxen	SD	1996	yes	s.dwf.	strg.	m.early

NDSU Hard Red Spring Wheat Variety Description (continued)

	Reaction to Disease[2]					Quality Factors		
Variety	**Stem rust**	**Leaf rust**	**Foliar Disease**	**Root Rot**	**Head Blight (Scab)**	**Test wt.**	**Wheat Protein**	**Quality Rating[3]**
Coteau	R	R	M	MS	S	avg.	high	4.0
Len	R	R	S	S	MS	high	avg.	4.0

Stoa	R	R	MS	M	MS	high	avg.	3.0
Butte 86	R[5]	R	MS	MS	MS	high	avg.	3.0
Nordic	R	MR	MR	MR	MS	high	low	2.0
Amidon	R	R	M	MR	S	high	avg.	4.0
Prospect	R[6]	MR	MS	MR	MS	high	avg.	2.0
Grandin	R	R	MS	M	S	high	avg.	4.0
Gus	R	R	M	M	VS	high	high	4.0
2370	R[6]	R	MS	S	MS*	high	avg.	2.5
2375	R	R	MS	M	MS*	high	avg.	2.5
Bergen	R[6]	R	MR	MS	S	high	avg.	2.0
Sharp	R	R	MS	S	MS*	V.H.	avg.	2.0
2371	R[5]	R	M	S	MS	high	avg.	3.0
CDC Teal	R	MR	MR	MS	VS	high	avg.	N/A
Norm	R	R	MR	MR	VS	high	low	2.0
Sonja	R	MR	MR	M	VS	high	avg.	N/A
AC Domain	R	R	S	M	MS	high	high	N/A
AC Barrie	R[7]	R	M	N/A	M	high	N/A	N/A
Kulm	R	R	MS	MS	S	high	high	3.0
2398	R	R	MR	MS	VS	avg.	low	2.0
Ernest	R	R	MS	M	S	high	high	2.5
Glupro	R	MS	N/A	N/A	VS	avg.	high	4.0
Gunner	R[5]	R	MR	N/A	M	high	N/A	N/A
Hamer	R	R	M	N/A	S	avg.	avg.	2.0
Lars	R	R	MR	N/A	S*	avg.	avg.	2.0
McNeal	MS	S	M	M	VS	avg.	avg.	N/A
Russ	R	R	S	S	S*	avg.	avg.	N/A
Trenton	R	R	MS	S	S*	high	high	3.0
Verde	R	R	MR	M	MS*	high	low	N/A
AC Cora	R[6]	R	MS	N/A	M	high	N/A	N/A
Keene	R	R	MR	M	S	high	avg.	3.0
Oxen	R[7]	R	N/A	N/A	S	high	high	N/A

[1] Refers to agent or developer: NDSURF = North Dakota State University Research Foundation;

CDC = Crop Development Center, University of Saskatchewan; Can = Agriculture Canada.

[2] R = resistant; MR = moderately resistant; M = intermediate; MS = moderately susceptible; S = susceptible; VS = very susceptible; [4] = occasionally mixed with some susceptible plant; [5] = MR, [6] = M, [7]= S or MS in artificially induced epidemics; N/A =data not available; Head blight =scab; Foliar disease=reaction to tan spot and septoria leaf spot complex. Letter ratings for head blight (scab) based on visual head symptoms. * Indicates yield and/or quality have often been higher than would be expected based on visual head blight symptoms alone.

[3] 1.0 = Very poor quality; 2.0 = Poor quality; 2.5 = Poor to average quality; 3.0 = Average quality; 3.5 = Average to good quality; 4.0 = Good quality; N/A = Quality data not available. Bread making quality assessed by the Department of Cereal Science, NDSU.

Fusarium head blight (scab) reactions of Spring Wheat in North Dakota.

Very Susceptible	Susceptible	Moderately Susceptible	Intermediate
AC Elsa	AC Cadillac	AC Domain	AC Barrie
CDC Teal	AC Cora*	Bacup	Gunner
Glupro	Amidon	Butte 86	
Gus	Bergen	Forge	
Majestic*	Coteau*	Len	
McNeal	Ernest	Marshall	
Norm	Grandin	Nordic	
Roblin	Hamer*	Prospect	
Sonja	Keene	Russ*	
Splendor*	Kulm	Sharp*	
Wheaton	Lars*	Sharpshooter	
Vance	Nora	Verde*	
2398	Norlander	2370*	
	Oxen	2371	
	Trenton*	2375*	

* Yield/quality tolerance to scab. Some varieties show less yield loss or less scabby kernels than would be expected based on the field symptoms. Varieties which have consistently exhibited yield tolerance or grain tolerance are indicated

by an asterisk .*

Fungal leaf spot reactions of Spring Wheat in North Dakota.

Susceptible	Moderately Susceptible	Intermediate	Moderately Resistant
AC Domain	Bacup	AC Barrie	Gunner
Butte 86	Ernest	AC Cora	Keene
Cutless	Norlander	Amidon	Lars
Grandin	OxenCDC Teal	Gus	Verde
Kulm	Sharp	Hamer	2398
Len (VS)	Sharpshooter	McNeal	
Russ	Stoa	Nordic	
2370	Trenton		
2375			

Note: Above reactions are to tan spot and/or Septoria leaf spots.
Leaf rust reactions of varieties may be different!

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