

2019 Hard Red Spring Wheat Variety Trial at Mohall

Cooperators: Dean Schoenberg and the Renville/Bottineau Ag Improvement Association

Variety	Plant Height	Lodging	Test Weight	Protein	Grain Yield				
								-- Average --	
					2017	2018	2019	2 yr	3 yr
	inches	0-9*	lbs/bu	%	-----bu/A-----				
SY Valda	25	0	63.1	14.5	84.4	67.0	50.6	58.8	67.3
Elgin ND	30	0	62.6	15.1	79.1	67.2	54.3	60.8	66.9
SY Ingmar	26	0	63.7	15.1	80.3	57.4	49.1	53.3	62.3
ND VitPro	29	0	64.8	14.7	75.8	58.0	50.6	54.3	61.5
Glenn	29	0	64.9	15.6	73.8	60.1	50.5	55.3	61.5
Linkert	25	0	62.8	15.7	83.4	52.0	48.2	50.1	61.2
SY Soren	23	0	63.1	15.9	75.6	52.8	46.4	49.6	58.3
Bolles	27	0	62.2	16.9	68.7	54.3	49.1	51.7	57.4
TCG Spitfire	28	0	61.1	14.1		75.9	59.7	67.8	
DG Ambush	27	0	63.7	15.1		60.4	52.1	56.3	
LCS Rebel	27	0	64.3	15.0			56.0		
CP3888	26	0	61.9	15.2			53.0		
Lanning	25	0	61.4	16.1			52.1		
MS Barracuda	25	0	63.1	15.0			51.5		
SY McCloud	27	0	63.4	15.5			51.2		
LCS Cannon	25	0	63.2	14.7			50.0		
MN Washburn	25	0	61.0	14.4			49.3		
Mott	30	0	62.8	15.3		65.0	53.0	59.0	
Duclair	27	0	60.2	14.3			55.0		
TCG Stalwart	27	0	60.4	15.5			54.3		
SY Longmire	27	0	62.3	15.0			51.9		
Trial Mean	27	0	62.7	15.2	75.3	62.7	52.2	--	--
C.V.%	6.8	0	1.5	2.7	6.5	6.7	8.4	--	--
LSD 5%	3	NS	1.3	0.6	6.9	5.9	6.2	--	--
LSD 10%	2	NS	1.1	0.5	5.7	4.9	5.2	--	--

*Lodging: 0 = none, 9 = lying flat on the ground.

NS = no statistical difference between varieties.

Bold = solid stem sawfly tolerant varieties.

Planted on April 25 with a seeding rate of 1.25 million PLS/A and harvested on August 22.

Previous Crop: 2016 & 2017 = durum, 2018 = canola.

Tillage: minimum till

Soil Type: Barnes loam

2019 Durum Variety Trial at Mohall

Cooperators: Dean Schoenberg and the Renville/Bottineau Ag Improvement Association

Variety	Plant Height	Lodging	Test Weight	Protein	Grain Yield								
					2017			2018		2019		-- Average --	
					bu/A			bu/A		bu/A		2 yr	3 yr
inches	0-9*	lbs/bu	%										
Grenora	25	0	60.2	14.0	72.4	54.2	47.5	50.8	58.0				
Joppa	26	0	62.3	14.0	74.0	50.5	48.0	49.2	57.5				
Carpio	25	0	62.0	13.2	67.0	55.1	48.0	51.5	56.7				
Alkabo	25	0	61.4	13.6	63.8	56.5	45.6	51.0	55.3				
Mountrail	26	0	60.8	13.7	68.1	47.0	48.6	47.8	54.6				
ND Riveland	29	0	61.9	14.0	69.0	48.6	45.8	47.2	54.5				
ND Grano	26	0	61.9	14.0	61.3	48.8	46.2	47.5	52.1				
Divide	25	0	60.9	14.9	56.5	43.3	44.0	43.6	47.9				
Tioga	28	0	61.0	15.2		52.2	42.8	47.5					
Lebsock	24	0	61.2	14.5		49.0	43.5	46.3					
Trial Mean	26	0	61.4	14.1	67.5	50.8	46.0	--	--				
C.V.%	5.1	0	1.0	3.3	7.8	11.5	10.3	--	--				
LSD 5%	2	NS	0.8	0.7	7.7	8.4	NS	--	--				
LSD 10%	2	NS	0.7	0.6	6.4	7.0	NS	--	--				

*Lodging: 0 = none, 9 = lying flat on the ground.

NS = no statistical difference between varieties.

Planted on April 25 with a seeding rate of 1.5 million PLS/A and harvested on August 22.

Previous Crop: 2016 & 2017 = durum, 2018 = canola.

Tillage: minimum till

Soil Type: Barnes loam

2019 Soybean Variety Trial at Mohall

North Central Research Extension Center

Cooperators: Dean Schoenberg and the Renville/Bottineau Ag Improvement Assoc.

Company/Brand	Variety	Herbicide System	Maturity Group	IDC Rating	Plant Height	Protein %	Oil %	Test Weight lbs/bu	Yield -----					
									2017	2018	2019	2 yr	3 yr	
									bushels/acre -----					
				1-5 ^a	inches	%	%	lbs/bu						
REA Hybrids	RX00749	XT	00.7	1.8	23	32.4	15.1	57.6		22.9	39.5	31.2		
REA Hybrids	RX00810	XT	00.8	2.4	21	32.9	15.6	56.8			52.3			
REA Hybrids	RX0330	XT	0.3	1.9	26	34.2	15.6	51.5			38.6			
LG Seeds	LGS00663RX	XT	00.6	2.1	20	32.3	15.1	58.9		26.3	36.8	31.6		
LG Seeds	LGS00899RX	XT	00.8	2.3	25	32.7	15.8	57.0			45.3			
LG Seeds	LGS0111RX	XT	0.1	2.6	26	32.4	15.7	55.5		31.4	56.7	44.1		
Integra	50060N	XT	00.6	--	27	32.6	14.9	56.7			47.4			
Integra	40089 E3	EN	00.8	1.9	25	31.7	14.3	57.0			39.1			
Integra	20097 R2Y	RR	00.9	2.7	25	33.2	14.7	57.1	39.8	28.7	43.7	36.2	37.4	
Integra	40129 E3	EN	0.1	1.4	23	31.0	15.2	54.0			35.7			
Integra	50001 R2X	XT	00.1	2.5	24	32.4	15.8	54.5			40.9			
Integra	40209 E3	EN	0.2	2.3	25	33.2	13.2	55.8			37.3			
Proseed	XT 60-09	XT	00.9	2.2	27	31.9	15.7	57.7			44.1			
Proseed	EL 80-093	EN	00.9	2.2	25	31.7	14.7	56.4			45.7			
Proseed	50-10	RR	0.1	2.9	26	32.8	15.0	58.0			42.1			
Proseed	XT 80-20	XT	0.2	1.6	23	31.4	15.1	57.1			37.7			
Peterson Farms	18X008	XT	00.8	2.3	25	32.5	15.8	57.6			40.9			
Peterson Farms	19EN008	EN	00.8	1.6	25	32.7	14.3	55.7			38.8			
Peterson Farms	20X01	XT	0.1	3.2	23	32.1	15.7	56.1			38.9			
Peterson Farms	20EN02 NS	EN	0.2	--	25	33.2	13.7	55.3			38.7			
NorthStar	60065NXR2	XT	00.6	2.2	24	32.0	15.3	57.7			35.9			
NorthStar	NS 90084NE3	EN	00.7	1.8	23	32.1	14.4	56.2			36.7			
NorthStar	NS 90094E3 LS-00639N	EN	00.9	1.4	22	32.1	14.5	54.8			41.5			
Legacy Seeds	RR2X	XT	00.6	2.3	24	32.5	15.3	57.9			41.6			
Legacy Seeds	LS-00930 RR2X	XT	00.9	2.6	22	32.4	15.7	57.1			41.6			
Legacy Seeds	LS-0239N RR2X	XT	0.2	1.7	25	32.1	14.9	56.6			42.5			
Dyna-Gro	S005XT38	XT	00.5	2.1	25	31.5	15.5	58.0	39.8	29.3	39.8	34.6	36.3	
Dyna-Gro	S007XT27	XT	00.7	2.2	23	32.5	14.9	58.9			29.7	39.5	34.6	
Dyna-Gro	S009XT68	XT	00.9	2.3	25	32.2	14.9	58.0			32.4			
Thunder Seed	SB89006N	XT	00.6	--	23	31.9	15.1	56.9			29.3	33.0	31.1	
Thunder Seed	SB88007N	XT	00.7	2.2	25	32.3	16.0	57.8	42.4	28.6	41.4	35.0	37.5	
Thunder Seed	ASTRO R2Y	RR	00.8	1.8	25	33.7	13.8	57.9	39.7	35.9	37.3	36.6	37.6	
Hefty	H006x0	XT	00.6	--	22	32.5	14.9	57.7			37.8			
Hefty	H007x7	XT	00.7	--	21	32.7	15.1	59.0			37.5			
Hefty	H008x8	XT	00.8	--	25	32.1	15.9	56.4			23.2	36.4	29.8	
Hefty	H009x7	XT	00.9	--	28	32.7	14.8	56.8			42.0			
Hefty	H01x0	XT	0.1	2.8	25	33.5	15.7	56.3			48.1			
Hefty	H01E9	EN	0.1	2.2	23	33.6	13.3	55.9			35.7			
Hefty	H02x7	XT	0.2	--	29	30.6	16.2	55.3			28.3	40.1	34.2	
Hefty	H02E0	EN	0.2	1.9	24	32.1	13.1	54.9			42.6			
Hefty	H03x7	XT	0.3	--	25	32.1	15.4	55.7	54.1	33.1	40.5	36.8	42.6	
NDSU	ND18008GT	GT	00.7	2.8	24	32.8	15.5	58.0	29.3	25.3	31.8	28.6	28.8	
NDSU	ND17009GT	GT	00.9	3.1	25	34.7	15.2	58.7	39.2	25.8	33.7	29.7	32.9	
Trial Mean				2.4	24	32.5	15.0	56.8		38.9	27.5	40.1	--	--
C.V.%				22.6	5.3	2.8	3.3	1.4		8.5	11.4	14.0	--	--
LSD 5%				0.3	2	1.3	0.7	1.1		4.6	4.4	7.9	--	--
LSD 10%				0.4	2	1.1	0.6	0.9		3.8	3.7	6.6	--	--

^a IDC rating = Iron deficiency chlorosis rating: 1 - green, 3 - yellow, 5 - dead

Planting Date: May 23

Harvest Date: October 18

Planting Rate: 150,000 PLS/A

Row Spacing: Solid Seeded (7" rows)

Soil Type: Barnes loam

Tillage: Minimum Till

Previous Crop: 2016 & 2017 = durum, 2018 = canola

Note: Protein, oil, test weight and yield are adjusted to 13% moisture.