

UNIFORM REGIONAL SPRING WHEAT NURSERY

Twenty-two varieties or selections were entered in the 1966 uniform regional hard red spring wheat nursery. Data are reported from 18 stations. Hail destroyed the nurseries at Dickinson, Casselton, and Langdon, North Dakota and frost damaged the Tetonia, Idaho nursery.

The 22 entries are listed below:

Entry No.	Cross or variety	New or old	Developing station	Sel. No.	C.I. No.
1	Marquis	Old	Canada		3641
2	Thatcher	"	Minnesota		10003
3	Selkirk	"	Canada		13100
4	Justin	"	N. Dakota		13462
5	Chris	"	Minnesota		13751
6	Manitou	"	Canada		13775
7	Kenya 338 x Lee	"	Montana	B61-89	13946
8	M2854 ² x II-50-72	"	Minnesota	II-55-11	13773
9	"	New	"	II-55-16	-
10	Tc x Ftn-Hry	"	"	II-56-40	-
11	Crim x II-53-521	"	"	II-59-91	-
12	Unknown	Old	S. Dakota	SD625	13948
13	Unknown	"	" "	SD626	13949
14	(II-50-17 x 51-2688)ND4-Rsc	"	N. Dakota	61-107	13937
15	ND4-Rsc(II-50-17 x 51-3349)	New	" "	62-85	-
16	[Penjamo 62x(Hry ⁷ xP54)x(K184xWis250 ⁷)] x(K184xWis250 ⁴)	"	Wisconsin	Wisc.261	-
17	"	"	"	Wisc.262	-
18	Justin x ND81	Old	N. Dakota	ND363	13828
19	MEET x Cly ² - ND81	"	" "	ND407	13953
20	Justin x ND152	"	" "	ND456	13956
21	Justin x ND228	"	" "	ND457	13957
22	ND152 x Justin	New	" "	ND477	-

Yield data from the 1966 uniform nursery are summarized in tables 5, 6, and 7. Growing conditions varied from excellent to poor. The highest average yields were harvested at Bozeman, Montana (irrigated) and Saskatoon, Canada, with yields of 51.8 and 51.2 bushels per acre, respectively. Experiment means at Sheridan, Wyoming, and Highmore, South Dakota, were 13.2 and 14.5 bushels per acre, respectively. Wisconsin selections 261 and 262, semidwarf types, ranked first and second in yield when the 18-station averages are considered. Of the named varieties, Manitou and Chris were about equal at 32.6 and 32.0 bushels, respectively, over the 18 stations.

Average yields over 2- or 3- year periods (Table 7) show Manitou and Chris have outyielded Selkirk and Justin by approximately 4 bushels per acre. ND363 and Minn. II-55-11 also have yielded satisfactorily. Two-year averages show that several newer selections are about equal to Chris in ability to yield.

Bushel weight data are summarized in tables 8 and 9. Minnesota selections II-55-16 and II-55-11 were outstanding in test weight. At stations such as Sheridan and Sidney, where Chris and Manitou had relatively low weights (51.0 to 56.0 pounds per bushel), these Minnesota entries weighed 58.0 pounds per bushel or more at all stations, except Madison.

Miscellaneous agronomic data are presented in table 10. The Wisconsin selections averaged 5 to 8 inches shorter than other entries.

Stem rust and leaf rust readings are summarized in tables 11 and 12. Stem rust was not widespread in 1966, and it caused little, if any, damage to varieties recommended for areas where stem rust can be a hazard to production. Leaf rust occurred more generally at the eastern stations of the region. No leaf rust was observed on Chris. Manitou was infected at most eastern stations, but its reaction type was resistant. Nearly all of the newer selections have at least moderate resistance to leaf rust.

Miscellaneous disease data for entries in the uniform regional nursery are summarized in table 13. Loose smut scores are shown only for entries which were in the 1965 nursery. Marquis, B61-89, SD626, and ND456 had substantial infections of loose smut. Septoria readings were high at Carrington. Although average yields and bushel weights were good at Carrington, leaf damage caused by Septoria undoubtedly did affect wheat production adversely at that station.

The data from 1966 trials support the conclusion made in 1965 that Chris and Manitou will be valuable new varieties for the spring wheat region.

Table 5. Average acre yields (bushels) of entries in the 1966 uniform regional hard red spring wheat nursery.

Variety or Sel. No.	C.I. No.	Madison Wisc.	Minnesota				South Dakota		North Dakota		Average 10 eastern stations	
			St. Paul	Morris	Grookston	Waseca	Highmore	Watertown	Fargo	Carrington		Winnipeg
Wisc 261		32.3	35.8	32.2	25.1	32.4	12.5	26.5	42.2	43.6	38.0	32.1
Wisc 262		36.0	32.5	28.1	31.2	31.8	15.3	24.7	45.2	46.4	39.2	33.0
ND 363	13828	35.6	32.5	32.2	28.7	32.0	17.6	26.9	47.0	37.8	28.7	31.9
II-55-16		30.0	25.8	32.7	29.1	23.0	10.6	29.8	38.4	38.2	44.0	30.2
61-107	13937	38.0	30.2	33.5	32.2	28.7	17.7	27.1	45.7	49.8	29.7	33.3
ND 456	13956	34.2	28.5	27.0	30.8	26.1	15.4	27.8	40.4	36.2	35.1	30.2
ND 477		33.2	28.9	23.9	29.8	26.7	15.6	27.4	41.5	40.7	37.7	30.5
SD 626	13949	35.9	30.7	31.1	26.1	30.3	14.4	28.4	44.4	46.2	37.1	32.5
Manitou	13775	31.0	26.9	29.2	30.0	30.3	16.8	30.7	43.5	41.3	32.6	31.2
ND 457	13957	32.3	28.4	25.6	27.7	25.1	15.1	25.4	42.4	33.2	39.7	29.5
II-56-40		30.3	25.9	29.8	28.1	30.7	17.2	21.2	39.7	35.0	39.0	29.7
62-85		29.9	25.0	31.1	30.0	25.2	13.1	25.7	37.6	43.5	28.7	29.0
Chris	13751	25.9	26.9	30.2	31.8	26.3	15.6	26.5	37.9	38.6	37.0	29.7
B61-89	13946	33.3	25.1	25.2	27.0	26.2	15.6	26.3	43.7	38.1	24.2	28.5
ND 407	13953	30.7	22.7	24.0	30.0	21.0	13.0	23.3	38.6	39.8	43.2	28.6
II-55-11		31.4	25.0	32.2	28.7	28.5	14.2	29.7	40.0	36.7	23.3	29.0
II-59-91		29.9	26.7	25.9	24.2	30.1	13.1	21.6	35.2	31.1	31.7	27.0
Selkirk	13100	28.6	27.2	24.4	27.4	23.0	12.9	21.4	38.6	37.7	29.9	27.1
Thatcher	10003	25.3	27.4	22.5	24.6	19.9	10.1	24.8	34.9	40.4	27.4	25.7
SD 625	13948	35.5	17.7	26.9	30.0	23.5	16.7	28.1	38.3	35.2	23.9	27.6
Justin	13462	26.6	22.6	15.9	22.4	21.8	14.7	26.0	34.2	26.5	20.1	23.1
Marquis	3641	21.9	24.0	15.9	23.1	22.5	11.9	21.3	29.8	27.1	14.2	21.2
Average		31.7	27.6	27.2	28.0	26.6	14.5	25.9	40.0	38.3	32.0	29.1
L.S.D. (5%)		4.0	4.6	7.0	N.S.	6.2	2.3	2.8	4.6	4.0	10.1	

Table 5. (continued)

Variety or Sel. No.	C.I. No.	North Dakota		Wyoming		Montana		Saskatoon	Average 8 western stations	18-station average
		Williston	Minot	Laramie	Sheridan	Bozeman	Havre	Sidney		
Wisc 261		26.8	37.0	59.3	13.2	56.6	18.8	29.4	59.4	37.5
Wisc 262		23.8	32.8	54.6	11.8	57.0	18.3	32.2	57.2	36.0
ND 363	13828	24.3	39.9	51.1	12.8	54.8	23.6	30.6	57.4	36.8
II-55-16		28.0	47.2	52.1	11.5	52.9	24.6	31.0	56.2	37.9
61-107	13937	26.5	37.0	41.8	14.9	51.5	20.5	27.3	49.8	33.7
ND 456	13956	25.2	30.9	51.3	14.6	60.4	26.8	30.5	58.0	33.3
ND 477		24.0	30.6	53.7	13.5	57.4	22.7	27.3	61.7	33.1
SD 626	13949	23.2	30.7	42.9	14.0	56.6	24.1	28.7	43.2	32.9
Manitou	13775	24.8	36.6	44.8	12.4	49.7	21.7	28.7	55.0	34.2
ND 457	13957	23.7	34.4	48.5	13.0	55.9	24.3	27.3	58.3	35.7
II-56-40		26.6	34.9	51.2	14.9	50.7	21.1	29.0	53.4	35.2
62-85		23.6	41.8	47.1	14.3	50.3	25.3	28.0	56.9	35.9
Chris	13751	26.7	39.2	46.9	13.7	48.9	22.3	25.6	54.4	34.7
B61-89	13946	26.9	33.8	47.9	13.3	55.8	17.8	29.8	57.6	35.4
ND 407	13953	22.2	35.7	41.8	13.1	52.2	22.3	27.3	63.6	34.8
II-55-11	13773	24.7	36.6	33.4	13.8	49.5	23.9	29.3	53.0	33.0
II-59-91		23.4	35.2	49.1	15.1	50.9	22.3	26.8	53.6	34.6
Selkirk	13100	25.4	31.3	40.8	11.1	43.3	20.8	26.8	44.1	30.5
Thatcher	10003	26.1	29.4	49.3	11.0	47.6	21.3	27.1	38.2	31.3
SD 625	13948	20.7	28.6	32.1	15.3	46.7	21.9	27.0	33.4	28.2
Justin	13462	24.1	31.9	43.3	13.0	51.6	22.6	28.3	49.0	33.0
Marquis	3641	23.7	34.0	43.2	10.8	39.9	23.2	24.7	32.7	29.0
Average		24.8	35.0	46.7	13.2	51.8	22.3	28.3	51.2	34.3
L.S.D. (5%)		3.2	5.6	7.6	N.S.	8.2	5.0	2.4	3.3	

Table 6. Average yields (bushels per acre) and rank by states for entries in the 1966 uniform regional hard red spring wheat nursery.

Variety or Sel. No.	C.I. No.	Wisconsin		Minnesota		South Dakota		North Dakota		Wyoming		Montana		Canada		18-station average
		1 station	Yield Rank	4 stations	Yield Rank	2 stations	Yield Rank	4 stations	Yield Rank	2 stations	Yield Rank	3 stations	Yield Rank	2 stations	Yield Rank	
Wisc. 261		32.3	10	31.4	1	19.5	15	37.4	3	36.2	1	34.9	8	48.7	5	34.6
Wisc. 262		36.0	2	30.9	4	20.0	14	37.0	5	33.2	3	35.8	5	48.2	6	34.3
ND 363	13828	35.6	4	31.4	2	22.3	4	37.3	4	32.0	7	36.3	3	43.1	11	34.1
II-55-16		30.0	15	27.7	12	20.2	13	38.0	2	31.8	8	36.2	4	50.1	2	33.7
61-107	13937	38.0	1	31.2	3	22.4	2	39.8	1	28.4	16	33.1	17	39.8	16	33.5
ND 456	13956	34.2	6	28.1	10	21.6	6	33.2	17	33.0	5	39.2	1	46.6	7	33.3
ND 477		33.2	8	27.3	13	21.5	7	34.2	12	33.6	2	35.8	6	49.7	3	33.1
SD 626	13949	35.9	3	29.6	5	21.4	8	36.1	8	28.5	15	36.5	2	40.2	15	32.7
Manitou	13775	31.0	12	29.1	6	23.8	1	36.6	6	28.6	14	33.4	15	43.8	10	32.6
ND 457	13957	32.3	9	26.7	14	20.3	12	33.4	15	30.8	9	35.8	7	49.0	4	32.3
II-56-40		30.3	14	28.6	8	19.2	17	34.1	13	33.1	4	33.6	14	46.2	8	32.2
62-85		29.9	17	27.8	11	19.4	16	36.6	7	30.7	10	34.5	9	42.8	12	32.1
Chris	13751	25.9	20	28.8	7	21.1	9	35.6	9	30.3	12	32.3	18	45.7	9	32.0
B61-89	13946	33.3	7	25.9	16	21.0	10	35.6	10	30.6	11	34.5	10	40.9	14	31.6
ND 407	13953	30.7	13	24.4	19	18.2	18	34.1	14	27.5	18	33.9	13	53.4	1	31.4
II-55-11	13773	31.4	11	28.6	9	22.0	5	34.5	11	23.6	22	34.2	11	38.1	17	30.8
II-59-91		29.9	16	26.7	15	17.4	20	31.2	19	32.1	6	33.3	16	42.2	13	30.4
Seikirk	13100	28.6	18	25.5	17	17.2	21	33.3	16	26.0	20	30.3	21	37.0	18	28.6
Thatcher	10003	25.3	21	23.6	20	17.5	19	32.7	18	30.2	13	32.0	19	32.8	20	28.1
SD 625	13948	35.5	5	24.5	18	22.4	3	30.7	20	23.7	21	31.9	20	28.7	21	27.9
Justin	13462	26.6	19	20.7	22	20.4	11	29.2	21	28.2	17	34.2	12	34.6	19	27.5
Marquis	3641	21.9	22	21.4	21	16.6	22	28.7	22	27.0	19	29.3	22	23.4	22	24.7
Average		31.7		27.3		20.2		34.5		30.0		34.1		42.0		

Table 7. Average yields (bushels per acre) for entries in the uniform regional hard red spring wheat nursery for 2 or 3 years.

Variety or Sel. No.	C.I. No.	Eastern stations			Western stations			All stations			Grand average	
		(10) ^{1/}			(8)			(18)			No. tests	Yield
		1964	1965	1966	1964	1965	1966	1964	1965	1966		
ND 363	13828	32.0	39.2	31.9	30.7	38.9	36.8	31.4	39.0	34.1	56	35.0
Manitou	13775	31.6	37.4	31.2	31.6	37.9	34.2	31.6	37.7	32.6	56	34.1
Chris	13751	31.8	39.5	29.7	29.3	37.4	34.7	30.7	38.5	32.0	56	33.9
II-55-11	13773	30.8	38.5	29.0	31.2	36.9	33.0	31.0	37.7	30.8	56	33.3
Selkirk	13100	25.9	30.1	27.1	27.9	35.9	30.5	26.8	33.0	28.6	56	29.6
Justin	13462	26.5	31.2	23.1	27.3	33.4	33.0	26.9	32.3	27.5	56	29.0
Thatcher	10003	22.4	24.4	25.7	28.5	33.2	31.3	25.0	28.8	28.1	56	27.4
Marquis	3641	11.9	18.9	21.2	26.2	27.9	29.0	18.3	23.4	24.7	56	22.2
61-107	13937	38.3	33.3	35.3	41.3	33.9	38.0	39.8	33.5	33.5	38	36.8
ND 407	13953	39.5	28.6	34.1	41.1	34.8	38.3	40.3	31.4	31.4	38	36.1
SD 626	13949	41.2	32.5	36.9	37.2	32.9	35.3	39.2	32.7	32.7	38	36.1
ND 456	13956	36.8	30.2	33.5	38.6	37.2	38.0	37.7	33.3	33.3	38	35.6
Chris (ck)	13751	39.5	29.7	34.6	37.4	34.7	36.2	38.5	32.0	32.0	38	35.4
ND 457	13957	36.0	29.5	32.8	37.3	35.7	36.6	36.6	32.3	32.3	38	34.6
B61-89	13946	31.8	28.5	30.2	38.3	35.4	37.0	35.0	31.6	31.6	38	33.4
SD 625	13948	37.7	27.6	32.7	36.7	28.2	32.9	37.2	27.9	27.9	38	32.8

^{1/} Number in parentheses refers to number of tests included in averages.

Table 8. Average bushel weights (pounds) for entries in the 1966 uniform regional hard red spring wheat nursery.

Variety or Sel. No.	C.I. No.	Madison Wisc.	Minnesota			South Dakota		North Dakota		Average 10 eastern stations	
			St. Paul	Morris	Crookston	Waseca	Highmore	Watertown	Fargo		Carrington
II-55-16		57.0	60.5	62.5	63.0	60.5	59.0	60.7	59.7	63.5	60.9
II-55-11	13773	56.8	60.5	62.0	62.5	61.0	61.0	59.6	60.0	63.0	60.8
62-85		58.4	60.0	62.5	63.0	61.0	58.0	60.2	60.2	62.5	60.8
ND 407	13953	59.9	59.5	61.0	63.0	59.5	59.0	58.8	59.5	64.4	60.7
ND 477		58.8	59.0	61.0	62.0	59.5	60.0	57.0	58.8	63.0	60.0
ND 456	13956	58.6	59.0	61.5	62.0	60.5	59.0	57.9	59.0	63.0	60.0
ND 457	13957	57.9	59.0	61.0	61.5	59.0	57.0	56.8	58.0	63.0	59.4
SD 625	13948	55.4	59.0	60.5	61.0	59.0	60.0	57.1	59.5	62.0	59.5
Chris	13751	56.4	59.5	61.0	61.0	59.0	57.0	57.4	58.8	62.0	59.2
B61-89	13946	56.6	58.0	60.0	60.0	58.0	57.0	57.0	56.7	61.0	58.4
II-56-40		54.0	58.5	60.5	61.5	58.5	57.0	56.4	57.7	62.5	58.8
Wisc 261		55.6	58.0	59.5	61.5	58.5	56.0	55.5	58.2	62.5	58.5
61-107	13937	56.2	58.0	60.0	61.0	58.5	58.0	56.4	59.2	61.0	58.9
Wisc 262		54.6	57.0	57.0	60.5	56.0	59.0	54.8	57.8	61.5	57.8
ND 363	13828	56.0	56.5	61.0	61.0	57.5	58.0	55.2	57.2	58.1	58.1
Justin	13462	57.6	58.0	58.0	59.0	57.5	58.0	57.1	57.2	59.1	58.2
II-59-91		55.0	57.5	60.5	61.5	58.5	54.0	54.4	57.3	62.0	58.1
SD 626	13949	54.4	58.0	59.0	60.0	57.5	56.0	55.4	58.0	61.0	58.0
Marquis	3641	55.0	59.5	58.0	59.0	58.0	53.0	57.8	53.0	56.7	56.8
Manitou	13775	55.0	58.0	59.0	61.0	58.0	55.0	56.3	57.7	60.1	58.0
Thatcher	10003	54.8	58.5	57.5	60.0	56.0	57.0	54.9	56.5	59.1	57.3
Selkirk	13100	53.6	57.0	56.0	58.5	54.5	52.0	51.6	56.2	58.1	55.5
Average		56.3	58.6	60.0	61.1	58.5	57.3	56.7	58.0	61.3	58.8

Table 8. (continued)

Variety or Sel. No.	C.I. No.	North Dakota		Wyoming		Montana		Saskatoon	Average	
		Williston	Minot	Laramie	Sheridan	Bozeman	Havre		8 western stations	18-station average
II-55-16		60.2	62.5	60.2	58.0	61.6	62.8	64.4	61.3	61.1
II-55-11	13773	60.0	61.0	59.0	58.0	60.8	62.2	64.1	60.6	60.8
62-85		59.0	60.5	60.3	56.0	61.5	62.5	63.9	60.4	60.7
ND 407	13953	57.5	62.0	58.8	56.0	58.6	61.9	62.0	59.4	60.2
ND 477		59.3	62.0	60.2	55.0	59.3	62.2	63.5	59.9	60.0
ND 456	13956	59.0	61.5	59.9	57.0	59.6	60.1	63.4	59.8	59.9
ND 457	13957	58.5	61.5	59.7	55.0	60.1	61.3	63.6	59.8	59.6
SD 625	13948	58.0	58.0	59.2	57.0	58.6	62.1	62.5	59.2	59.4
Chris	13751	58.3	61.0	59.0	54.0	58.7	61.1	62.9	58.9	59.1
B61-89	13946	58.6	59.0	59.2	56.0	60.2	62.1	62.5	59.5	58.9
II-56-40		57.8	59.0	60.1	55.0	59.2	61.5	62.6	58.9	58.9
Wisc 261		58.6	60.0	60.6	55.0	57.7	62.9	63.2	59.3	58.9
61-107	13937	57.8	57.5	59.3	55.0	58.9	60.6	62.0	58.6	58.8
Wisc 262		58.8	59.5	60.0	55.0	58.7	63.2	62.8	59.3	58.5
ND 363	13828	57.0	59.5	60.2	54.0	59.4	60.5	64.4	59.0	58.5
Justin	13462	57.8	59.0	60.0	54.0	57.3	59.9	62.0	58.5	58.4
II-59-91		57.0	59.5	59.6	55.0	58.2	61.1	62.8	58.7	58.4
SD 626	13949	56.8	58.0	59.3	54.0	58.4	60.1	62.2	58.1	58.1
Marquis	3641	56.5	61.0	59.5	56.0	60.1	60.9	61.5	59.1	57.9
Manitou	13775	56.0	59.0	58.6	51.0	58.6	61.3	62.0	57.6	57.9
Thatcher	10003	57.5	59.0	59.5	54.0	58.3	61.7	60.6	58.3	57.8
Selkirk	13100	54.7	58.0	58.6	53.0	56.7	60.1	60.3	56.7	56.1
Average		57.9	59.9	59.6	55.1	59.1	61.5	62.7	59.1	

Table 9. Average test weights (pounds per bushel) by states for entries in the 1966 uniform regional hard red spring wheat nursery.

Variety or Sel. No.	C.I. No.	Wisconsin 1 station	Minnesota 4 stations	North Dakota 4 stations	South Dakota 2 stations	Montana 3 stations	Wyoming 2 stations	Canada 2 stations	18-station average
II-55-16		57.0	61.6	61.2	59.9	61.7	59.1	64.0	61.1
II-55-11	13773	56.8	61.5	60.8	60.3	61.0	58.5	63.6	60.8
62-85		58.4	61.6	60.4	59.1	61.3	58.2	63.2	60.7
ND 407	13953	59.9	60.8	60.3	58.9	59.6	57.4	63.2	60.2
ND 477		58.8	60.4	60.5	58.5	59.8	57.6	63.3	60.0
ND 456	13956	58.6	60.8	59.8	58.5	59.0	58.5	63.2	59.9
ND 457	13957	57.9	60.1	59.8	56.9	59.9	57.4	63.3	59.6
SD 625	13948	55.4	59.9	59.1	58.6	59.7	58.1	62.3	59.4
Chris	13751	56.4	60.1	59.5	57.2	58.5	56.5	62.5	59.1
B61-89	13946	56.6	59.0	58.6	57.0	60.0	57.6	61.8	58.9
II-56-40		54.0	59.8	59.0	56.7	58.8	57.6	62.6	58.9
Wisc. 261		55.6	59.4	59.2	55.8	59.0	57.8	62.9	58.9
61-107	13937	56.2	59.4	58.9	57.2	58.9	57.2	61.5	58.8
Wisc. 262		54.6	57.6	59.0	56.9	59.4	57.5	62.2	58.5
ND 363	13828	56.0	59.0	58.4	56.6	58.9	57.1	61.3	58.5
Justin	13462	57.6	58.1	58.5	57.6	58.3	57.0	60.6	58.4
II-59-91		55.0	59.5	58.5	54.2	58.4	57.3	62.4	58.4
SD 626	13949	54.4	59.1	58.3	55.7	58.1	56.7	61.6	58.1
Marquis	3641	55.0	58.6	57.1	55.4	59.4	57.8	59.1	57.9
Manitou	13775	55.0	59.0	58.2	55.7	58.1	54.8	61.1	57.9
Thatcher	10003	54.8	58.0	58.0	56.0	58.4	56.8	59.9	57.8
Selkirk	13100	53.6	56.5	56.6	51.8	56.4	55.8	59.2	56.1
Average		56.3	59.5	59.1	57.0	59.2	57.4	62.0	

Table 10. Summary of miscellaneous agronomic data for entries in the 1966 uniform regional hard red spring wheat nursery.

Variety or Sel. No.	C.I. or Sel. No.	Heading date (days after June 1)			Days to		Height (inches)			Lodging score 2/ (7)	1000 Kernel weight (3)
		(7) 1/ East	(7) 1/ West	(14) Region	(1) Head	(2) Mature	(7) East	(7) West	(14) Region		
Marquis	3641	31	32	31.5	56	98	38	34	36	3.0	24.1
Thatcher	10003	29	30	29.5	55	96	37	31	34	2.6	23.6
Selkirk	13100	29	30	29.5	54	95	35	31	33	2.9	29.7
Justin	13462	30	32	31.0	56	102	36	32	34	2.5	31.1
Chris	13751	30	31	30.5	55	102	37	32	35	4.6	29.2
Manitou	13775	29	30	29.5	53	98	37	32	35	3.8	25.8
B61-89	13946	28	27	27.5	55	99	37	31	34	3.6	34.1
II-55-11	13773	30	31	30.5	53	101	37	32	35	3.5	36.1
II-55-16		30	32	31.0	56	102	37	33	35	3.6	38.4
II-56-40		28	29	28.5	56	99	39	33	36	3.9	33.4
II-59-91		29	30	29.5	55	103	38	32	35	4.3	31.0
SD 625	13948	27	29	28.0	56	95	35	32	34	3.4	30.8
SD 626	13949	27	28	27.5	56	97	38	32	35	3.1	33.7
61-107	13937	28	29	28.5	55	97	37	31	34	4.5	36.0
62-85		29	28	28.5	56	100	38	32	35	4.2	34.2
Wisc. 261		29	29	29.0	53	98	29	26	28	2.0	30.7
Wisc. 262		27	27	27.0	57	96	29	26	28	2.0	32.1
ND 363	13828	28	28	28.0	56	96	35	30	33	2.0	31.9
ND 407	13953	30	30	30.0	54	103	38	31	35	3.1	39.6
ND 456	13956	29	30	29.5	56	101	37	32	35	3.1	34.7
ND 457	13957	30	31	30.5	53	102	37	30	34	3.0	32.9
ND 477		28	30	29.0	59	98	36	32	34	2.9	30.7

1/ Numbers in parentheses refer to numbers of tests in averages.

2/ 1 is erect; 9 is completely lodged.

Table 11. Stem rust notes recorded (%) for entries in the 1966 uniform regional hard red spring wheat nursery. (Trace computed at 0.2%).

Variety or Sel. No.	C.I. No.	North Dakota			Minnesota		Winnipeg	Madison	Average
		Fargo	Minot	Carrington	St. Paul	Waseca			
Marquis	3641	40	30	40S	80	30S	80S	25	46.4
Thatcher	10003	T	0	TS	80	TS	40M	0	17.2
Selkirk	13100	0	0	0	0	0	1M	0	.1
Justin	13462	0	0	0	T-5S	0	TR	0	.2
Chris	13751	0	0	0	5S,0	0	0	0	.2
Manitou	13775	0	0	0	TS-0	0	TMR	0	.2
B61-89	13946	0	0	0	40MS-S	0	TR	0	5.7
II-55-11	13773	0	0	0	0,T-5S	0	0	0	.1
II-55-16		0	0	0	0,T-5S	0	0	0	.1
II-56-40		0	0	0	0,TS	0	TR	0	.1
II-59-91		0	0	0	0,5S	0	1M	0	.2
SD 625	13948	0	0	0	0,5S	0	60MS	0	8.6
SD 626	13949	0	0	0	0,TS	0	5M	0	0.7
61-107	13937	0	0	0	0,TR	0	5R	0	0.7
62-85		0	0	0	10R-MR	0	TR	0	1.0
Wisc. 261		0	0	0	0	0	TR	0	.1
Wisc. 262		0	0	0	0	20MS-S	10S	0	4.3
ND 363	13828	0	0	0	20MS	0	1R	0	3.0
ND 407	13953	0	0	0	20MS	0	TR	T	2.9
ND 456	13956	0	0	0	20S	0	TR	0	2.8
ND 457	13957	0	0	0	5-20MS-S	0	1R	0	1.6
ND 477		0	0	0	20-40MS-S	0	TR	1	4.5

Table 12. Leaf rust notes recorded (%) for entries in the 1966 uniform regional hard red spring wheat nursery. (Trace computed at 0.2%).

Variety or Sel. No.	C.I. No.	North Dakota			Minnesota			Winnipeg	Madison	Average
		Fargo	Minot	Carrington	St. Paul	Morris	Waseca			
Marquis	3641	60	50	10	40S	30S	30	70MS	90	47.5
Thatcher	10003	40	50	50	40S	40S	30	80S	90	52.5
Selkirk	13100	7	30	30	40S	20S	5	50MR	60	30.3
Justin	13462	10	15	5	20S	20S	5	30M	30	16.9
Chris	13751	0	0	0	0	0	0	0	0	0
Manitou	13775	5	10MR	T	5MR	5MR	T	10R	1	4.6
B61-89	13946	5	15	T	5S	5S	0	15M	5	6.3
II-55-11	13773	T	0	0	TR	0	0	0	0	.1
II-55-16		T	0	0	0	0	0	0	0	.1
II-56-40		T	0	0	TR	0	0	0	T	2.2
II-59-91		T-5	5R	10	SR-MR	0	0	1R-30M	T	4.7
SD 625	13948	T	10	20	5R	0	T	TR	T	4.5
SD 626	13949	T	T	10	TR	0	T	TR	10	2.6
61-107	13937	T	T	T	TR	5S	0	50MR	T	7.0
62-85		0	0	0	TR	0	0	0	T	.1
Wisc. 261		T	0	10	TR	5S	0	TR	T	2.0
Wisc. 262		T	0	25	TR	0	0	TR	T	3.2
ND 363	13828	0	0	30	5MR	0	0	0	0	4.4
ND 407	13953	7	T-5	10	5MS-S	5S	0	0	3	4.0
ND 456	13956	10	10	5	20S	10S	0	TR	3	7.3
ND 457	13957	5	5	25	20S	5S	0	20M	10	11.3
ND 477		10	10	35	20S	5S	0	10M	10	12.5

Table 13. Miscellaneous disease data from entries in the 1966 uniform regional hard red spring wheat nursery.

Variety or Sel. No.	C.I. No.	Carrington		St. Paul		Stripe rust**
		Septoria	Black chaff	Root rot	Loose smut*	Bozeman
		%	%	Score	%	Score
Marquis	3641	85	T	6	41	0
Thatcher	10003	90	T	1	0	0
Selkirk	13100	85	10	2	0	0
Justin	13462	90	0	1	0	0
Chris	13751	70	5	0	0	0
Manitou	13775	80	0	2	0	0
B61-89	13946	75	0	1	12	3
II-55-11	13773	65	T	1	0	3
II-55-16		70	15	3	-	3
II-56-40		85	20	0	-	0
II-59-91		90	0	1	-	0
SD 625	13948	100	5	5	0	0
SD 626	13949	90	T	1	23	3
61-107	13937	85	T	0	0	3
62-85		85	0	1	-	3
Wisc. 261		90	0	4	-	3
Wisc. 262		90	0	1	-	3
ND 363	13828	90	0	0	1	0
ND 407	13953	60	0	3	0	3
ND 456	13956	95	0	0	16	0
ND 457	13957	80	0	0	4	3
ND 477		95	T	2	-	3

* Smut readings are from the 1965 regional nursery entries.

** 0 is resistant, 3 is susceptible.