

THE UNIFORM REGIONAL HARD RED SPRING WHEAT NURSERY

The 22 entries in the 1969 uniform regional hard red spring wheat nursery are listed below:

Entry No.	Cross or variety	C.I. or Sel. No.	Year entered	Source
1	Marquis	3461	1929	Canada
2	Thatcher	10003	1929	USDA-Minn.
3	Selkirk	13100	1953	Canada
4	Justin	13462	1959	N. Dak.
5	Chris	13751	1960	USDA-Minn.
6	Polk	13773	1963	"
7	Waldron	13958	1964	N. Dak.
8	Neepawa	RL4200	1967	Canada
9	Pb*2/Magnif Entererriana	RL4220	1968	"
10	Fta/61-107	S6579	1968	USDA-N.Dak.
11	FTA/62-85	S6694	1969	"
12	Polk/ND363	ND492	1969	N. Dak.
13	ND259/Cly/2/Cly/ND122	ND493**	1969	"
14	ND259/Cly/2/Cly/ND122/3/Jtn/ND142	ND494**	1969	"
15	Jtn*2/3/ND259/Cly/2/Cly/ND122	ND495**	1969	"
16	Pj60/3/Hry*7/P54//K184/7*Wis250/4/ K184/4*Wis250	Wis271**	1967	USDA-Wis.
17	"	678-1-6-9**	1969	"
18	II-55-10/4/Pb/II-52-329/3/II-53-38/ III-58-4//II-53-546	II-62-2**	1968	USDA-Minn.
19	"	II-62-61**	1968	"
20	Nrn10/Bvr14//6*Cnt	MT677**	1969	USDA-Mont.
21	"	MT6723**	1969	"
22	Red River 68	14193**	1968	World Seeds, Inc.

** Semidwarf selections

The list above indicates the year a variety or selection was first entered in the uniform test. Ten of the 22 entries were semidwarf. Data from 21 stations are summarized in Tables 3-1 to 3-21. For one reason or another, data from New Mexico and Wisconsin are not included in summary Table 4.

Average bushel weights and yields for reporting stations in 1969 are summarized in Table 4. Included in Table 4 are average yields for entries grown for 2 years. The 19-station average yield data in Table 4 shows that Polk, RR68 and Neepawa ranked above the check variety Chris. Minnesota II-62-61, a semidwarf, ranked first among 22 entries (43.1 Bu/A) compared with Chris at 35.5 bushels per acre. Other semidwarfs that ranked above Chris include 678-1-6-9, Wis271 and II-62-2. Two sawfly resistant selections, S6694 and S6579, and RL4220 also ranked above Chris in yield.

Bushel weight data are presented in Table 4. Polk continued to exhibit good test weight properties with a value of 62.0 lbs/Bu followed in order by II-62-61, S6694 and RR68.

Miscellaneous agronomic and disease data are presented in Table 5. For the character days to head, RR68 proved to be early, 4 days ahead of Chris, while II-62-2 headed 5 days later than Chris. Wisconsin 678-1-6-9, Selkirk and Thatcher were first to mature while ND493, II-62-2 and ND494 were late. The semidwarfs averaged about 6" shorter than standard check varieties. S6694, Neepawa, Polk, Chris and Marquis had moderately weak straw. Waldron and most other semidwarfs have moderately stiff straw.

Stem rust was relatively scarce in the spring wheat region. Marquis showed greatest susceptibility but numerous other varieties and experimentals apparently carry adequate resistance. Leaf rust was more prevalent but not in epidemic proportions. Most entries in the nursery carry good resistance except for Justin, MT677, MT6723, Selkirk, Marquis and Thatcher. Grain losses from shattering appeared in RL4220, ND492 and Polk.

Seedling reactions to stem rust of entries in the uniform nursery are presented in Tables 6-1 and 6-2. Cultures 32B and 151 were moderately virulent to virulent on many of the lines.

Table 3. Agronomic data for entries in the 1969 uniform regional hard red spring wheat nurseries.

Table 3-1. Fargo, North Dakota

Variety or Sel. No.	Date headed	Height Inches	Lodg- ing score	Rust		Shat- tering %	Bushel weight Lb.	Avg. acre yield Bu.
				Leaf %	Stem %			
Wisc. 271	7-1	33	1	TrMR	0	0	60.0	51.8
678-1-6-9	6-30	33	2	TrR	0	0	60.5	51.6
S6694	7-2	41	7	5MR	0	Tr	61.0	48.1
ND495	6-29	33	1	TrR	0	0	58.0	47.7
ND493	6-30	34	2	TrR	0	1	58.5	46.9
II-62-2	7-6	34	2	TrR	0	0	59.5	46.2
II-62-61	7-6	34	2	TrR	0	0	59.0	46.2
Waldron	6-29	39	2	TrR	0	5	59.5	45.7
RL4220	7-4	41	5	20MR-MS	0	20	59.0	45.6
S6579	7-2	37	4	30MR-MS	TrR	Tr	59.0	44.9
ND492	7-3	39	5	5MR	0	40	60.0	44.7
Red River 68	6-27	35	2	TrR	0	0	61.0	44.3
Neepawa	7-3	40	2	30MR-MS	0	Tr	60.5	41.3
Polk	7-4	39	6	TrMR	0	20	61.0	40.9
Chris	7-3	38	7	TrMR	0	Tr	59.0	40.7
ND494	7-1	37	2	TrR	0	0	59.5	39.0
Justin	7-4	39	4	30S	TrR	5	57.0	33.8
MT677	7-4	36	2	100S	5MS	0	55.0	32.8
MT6723	7-5	34	2	100S	TrMR	0	55.0	30.6
Selkirk	7-2	38	6	50S	TrS	1	56.0	29.8
Marquis	7-5	40	7	80S	20S	Tr	58.5	28.7
Thatcher	7-3	38	7	100S	5S	Tr	56.0	26.9

L.S.D. (.05) 6.8

Table 3-2.

Langdon, North Dakota

Variety or Sel. No.	Date headed	Height Inches	Rust		Bushel weight Lb.	Avg. acre yield Bu.
			Lead %	Stem %		
II-62-61	7-14	36	0	0	62.0	69.8
S6694	7-11	46	TrMR	0	63.0	66.3
S6579	7-9	42	10MR	0	62.0	63.6
678-1-6-9	7-8	34	0	0	60.0	63.4
Red River 68	7-8	35	0	0	62.0	58.1
RL4220	7-12	46	5MR	0	61.5	57.9
Neepawa	7-10	44	10MS	0	61.5	57.1
ND492	7-11	42	TrR	0	61.0	56.3
Wis. 271	7-10	34	0	0	60.0	56.2
Waldron	7-9	42	0	0	60.0	55.8
II-62-2	7-14	35	0	0	60.0	54.1
Justin	7-11	45	10S	0	61.5	52.7
ND493	7-9	37	0	0	59.0	52.5
Chris	7-11	45	0	0	61.5	52.3
ND495	7-9	35	0	0	59.0	51.3
Polk	7-12	44	0	0	63.0	48.1
MT6723	7-12	37	20S	0	58.0	45.4
ND494	7-9	39	0	0	59.0	44.7
Thatcher	7-9	43	40S	0	61.5	44.5
Selkirk	7-10	43	10S	0	61.0	44.2
MT677	7-12	36	20S	0	57.0	42.1
Marquis	7-14	48	30S	TrS	62.0	39.7

L.S.D. (.05) 10.5

Table 3-3.

Watertown, South Dakota

Variety or Sel. No.	Leaf rust	Stem rust	Bushel weight	Avg. acre yield
			Lb.	Bu.
678-1-6-9	R	15M	58.4	40.2
Wis. 271	R	R	59.3	39.5
Chris	R	10S	59.7	33.6
S6694	R	65S	59.6	32.2
RL4220	R	R	60.1	31.7
ND493	R	1R	57.0	31.0
ND494	R	R	57.9	31.0
Neepawa	R	25S	59.8	30.8
ND492	R	5MS	58.7	30.8
II-62-61	R	R	58.1	30.2
RR68	R	5MS	59.9	29.8
II-62-2	R	R	56.2	28.7
Polk	R	TrS	60.1	28.6
S6579	R	R	56.2	25.7
ND495	R	5MS	55.4	24.2
Justin	MR	5MS	57.8	23.4
Waldron	R	10MR	56.8	22.8
Thatcher	M	15S	57.3	22.7
MT677	100S	1S	52.1	19.5
Marquis	100S	65S	58.3	19.1
Selkirk	M	R	55.7	18.0
MT6723	100S	R	52.0	16.3

Table 3-4.

Highmore, South Dakota

Variety or Sel. N.	Stem rust	Height	Bushel weight	Avg. acre yield
			Lb.	Bu.
Wis. 271	1R	28	58.9	40.7
II-62-61	R	28	58.3	38.4
Neepawa	1MR	32	57.7	36.2
RL4220	R	35	58.9	36.0
II-62-2	R	28	58.5	35.9
Chris	5S	32	59.6	35.8
678-1-6-9	R	26	58.0	35.4
S6694	5S	34	59.6	34.4
ND494	R	32	59.2	34.3
ND492	R	30	57.7	34.1
S6579	R	31	57.9	33.9
Waldron	TrS	31	37.9	33.6
Polk	TrS	31	60.3	32.4
RR68	20MR	26	59.0	31.1
ND493	R	29	59.1	31.5
Justin	Mix	34	57.7	30.4
MT677	100S	31	54.5	29.6
Selkirk	R	35	55.5	27.9
ND495	R	29	59.1	27.7
MT6723	R	30	55.1	27.2
Thatcher	100S	32	56.0	24.0
Marquis	65S	35	55.7	22.4

Table 3-5.

Crookston, Minnesota

Variety or Sel. No.	Date head. July	Height Inches	Bushel weight	Avg. acre yield
			Lb.	Bu.
II-62-61	12	31	63.5	53.3
678-1-6-9	9	34	63.5	51.2
S6694	10	42	65.0	47.9
Neepawa	10	42	64.5	46.1
RR68	9	33	65.0	43.9
ND492	10	40	64.0	43.7
ND495	9	32	61.5	43.7
ND493	9	35	64.0	42.7
Wis. 271	10	32	64.0	42.1
MT6723	11	34	60.0	42.0
II-62-2	13	32	63.5	41.0
ND494	10	35	62.5	40.8
Waldron	10	41	62.5	39.5
Polk	11	43	64.5	39.3
S6579	9	39	63.5	39.1
Thatcher	9	42	62.0	38.2
MT677	11	33	61.0	38.1
RL4220	11	43	62.5	37.2
Chris	10	43	63.0	36.9
Selkirk	10	42	62.0	35.8
Justin	11	43	61.5	28.7
Marquis	13	44	61.0	24.8
			Mean yield	40.7
			L.S.D. (.05)	9.9

Table 3-6.

Morris, Minnesota

Variety or Sel. No.	Date headed June	Height	Bushel weight	Avg. acre yield
		Inches	Lb.	Bu.
678-1-6-9	26	33	64.0	47.4
RL4220	29	43	64.0	45.7
S6694	29	40	64.0	43.0
Waldron	27	40	63.0	41.0
II-62-61	7/1	33	65.0	40.9
ND492	30	38	64.0	40.9
Wis. 271	30	33	63.0	40.8
ND494	30	38	63.0	40.6
ND493	30	37	62.0	40.6
Red River 68	25	33	65.0	39.9
Chris	30	42	64.0	38.2
Selkirk	30	40	61.5	37.2
Neepawa	29	40	64.0	36.8
ND495	26	34	61.5	36.3
S6579	27	37	63.0	34.7
Justin	30	42	62.0	33.3
II-62-2	7/2	36	64.0	31.8
Polk	7/1	42	64.0	31.6
MT677	30	35	60.5	31.1
Thatcher	30	42	62.5	28.7
MT6723	7/1	34	60.5	28.6
Marquis	7/2	46	62.0	24.6
Mean yield				37.0
L.S.D. (.05)				4.7

Table 3-8.

Winnipeg, Manitoba

Variety or Sel. No.	Height	Rust		Maturity	Lodging	Avg. acre yield
		Leaf	Stem			
	Inches	%	%	Days	1-9	Bu.
Polk	39.7	t R	t R	100.3	5.3	58.2
RL4220	41.0	t R	l M	99.0	4.0	56.3
Neepawa	39.7	5 M	t R	98.7	3.3	51.5
S6579	36.0	4 M	t R	98.7	4.7	49.1
ND492	37.7	t R	t R	100.7	5.0	47.6
Chris	40.0	t MS	0	100.0	6.0	46.8
Wis. 271	31.7	5 M	t R	100.7	2.7	46.2
Waldron	37.7	0	0	98.3	2.7	45.2
S6694	40.3	t MS	t R	98.3	6.7	44.6
Selkirk	38.3	t R/30MS	l R-MR	94.3	3.0	43.6
Red River 68	35.7	t R	t R	96.7	4.7	42.9
678-1-6-9	31.0	t R	l S	97.3	2.7	42.4
Justin	40.0	t R/20M	t R	99.3	3.3	37.5
II-62-2	31.7	t R	t R	102.7	5.0	36.6
II-62-61	32.7	t R	t R	102.0	5.0	36.3
ND495	32.7	t R	t R	102.0	4.3	36.2
Thatcher	40.3	80 S	20 M	96.0	3.7	34.5
ND493	33.7	t R	t R	103.7	4.3	32.0
ND494	36.0	0	t R	102.7	5.7	30.3
MT677	36.0	70 S	20 MR	98.0	4.0	27.3
Marquis	40.7	60 MS	80 S	98.0	5.7	24.4
MT6723	34.7	70 S	10 R	98.7	3.7	23.0

L.S.D. (.05) 7.9

Table 3-9.

Saskatchewan, Canada

Variety or Sel. No.	Days to Head	Days to Ripe	Height	Res. to lodging	Bushel ¹ / weight	1000 K. wt.	Yield C wt./Acre
			Inches.		Lb.		
II-62-61	64.2	103.6	26.5	1.0	66.8	36.5	38.8
MT6723	63.6	104.6	27.8	1.0	65.4	32.0	37.4
MT677	62.8	103.2	28.5	1.0	65.5	31.5	37.3
RL4220	62.7	102.7	35.9	2.0	65.0	33.0	36.3
S6694	61.7	101.9	31.3	1.7	65.2	35.5	35.0
Polk	63.0	104.5	34.0	2.0	65.5	40.0	35.0
ND494	62.2	105.5	30.9	1.8	66.0	43.0	34.9
Thatcher	61.4	102.5	32.6	1.0	65.0	31.5	34.9
S6579	60.8	102.1	29.5	1.3	64.8	39.5	33.8
Neepawa	61.4	102.5	31.5	1.0	65.0	32.5	33.7
Selkirk	62.1	101.5	31.8	1.0	64.5	36.0	33.5
Chris	62.8	103.4	32.6	1.5	65.5	30.5	32.8
Wis. 271	60.4	100.5	27.0	1.0	65.2	34.5	32.7
Red River 68	58.9	100.6	27.5	2.0	66.6	39.0	32.6
678-1-6-9	58.8	100.1	27.5	1.0	65.5	37.0	32.6
II-62-2	64.9	104.9	26.7	1.0	66.0	37.0	31.7
Marquis	64.1	104.1	35.0	1.2	65.8	32.5	31.3
ND492	61.3	102.5	30.7	1.0	64.8	37.5	31.0
ND493	61.7	105.0	29.2	1.2	65.6	40.5	31.0
Justin	63.6	103.5	33.6	1.0	64.8	35.5	30.8
ND495	60.4	103.4	27.1	1.0	65.2	42.0	28.9
Waldron	59.7	102.9	30.1	1.0	64.8	40.0	28.4
L.S.D. (.05)		1.0	1.0				1.8

¹/ Imperial bushel.

Table 3-10.

Minot, North Dakota

Variety or Sel. No.	Date headed	Height Inches	Lodging	Leaf rust %	Bushel weight Lb.	Avg. acre yield Bu.
II-62-61	7-9	29	1.3	TrR	62.5	51.5
LR4220	7-8	39	2.3	TrMR	62.0	49.4
S6694	7-6	37	2.7	TrR	61.5	49.0
Wis. 271	7-6	28	1.0	TrR	62.0	45.3
678-1-6-9	7-2	28	1.0	TrR	61.5	43.7
ND492	7-7	33	2.3	5MR	61.0	43.7
Neepawa	7-6	36	2.3	10MR	62.0	43.7
Marquis	7-8	41	3.0	30S	62.0	43.3
II-62-2	7-10	30	1.3	TrR	61.0	41.3
Polk	7-7	36	2.7	TrR	63.0	41.1
ND494	7-7	33	2.3	TrR	60.0	40.2
Waldron	7-7	35	1.0	TrR	60.5	40.1
S6579	7-6	34	2.0	5MR	61.0	40.1
MT677	7-8	32	1.0	70S	57.0	37.5
Justin	7-8	35	1.3	10S	60.5	37.5
MT6723	7-9	31	1.0	60S	58.0	35.1
Selkirk	7-6	35	1.7	20S	58.5	34.3
Red River 68	7-1	27	1.3	TrR	61.0	34.2
ND493	7-6	28	1.7	TrR	58.0	33.6
Chris	7-7	35	3.0	0	61.0	33.4
ND495	7-4	28	1.0	TrR	59.0	31.6
Thatcher	7-7	36	2.3	50S	59.0	30.6
L.S.D. (.05)						12.0

Table 3-11.

Williston, North Dakota

Variety or Sel. No.	Date headed	Height Inches	Black chaff	Ergot	Bushel weight Lb.	Avg. acre yield
						Bu.
Neepawa	7-1	31	2	T	61.7	36.1
II-62-61	7-5	26	1		61.9	35.7
MT677	7-4	26	1		60.8	35.6
MT6723	7-4	27	1		60.5	35.1
II-62-2	7-6	27	1		60.8	34.4
Selkirk	7-4	32	3		59.7	32.8
Marquis	7-4	35	1	T	60.6	32.2
Wis. 271	7-1	25	3		61.5	31.7
S6579	7-2	28	1		61.1	31.5
RL4220	7-3	30	5		61.3	31.2
Justin	7-5	32	1		61.2	31.0
Chris	7-3	31	2		62.5	30.9
Thatcher	7-2	30	1	1	61.4	30.7
S6694	7-2	31	2		61.3	30.6
Polk	7-3	30	1	T	62.4	30.4
678-1-6-9	6-28	24	3		61.2	29.7
ND492	6-30	26	1		61.3	28.8
ND494	6-30	27	2		60.4	28.2
Red River 68	6-29	25	1		62.1	28.0
ND495	6-28	24	2		60.3	25.1
ND493	6-29	27	1		60.3	23.5
Waldron	7-1	28	1	Heavy	59.6	19.1
L.S.D. (.05)						3.7

Table 3-12.

Dickinson, North Dakota

Variety or Sel. No.	Date headed	Height	Bushel weight	Avg. acre yield
		Inches	Lb.	Bu.
II-62-61	7-2	27	61.0	37.0
II-62-2	7-7	29	60.0	36.3
S6579	6-30	30	60.0	35.9
Wis. 271	6-30	29	61.5	33.9
678-1-6-9	6-26	28	62.0	33.6
ND494	6-30	31	59.5	32.2
Chris	6-30	31	61.0	32.0
Polk	6-30	31	62.0	31.2
Neepawa	6-30	32	60.0	31.2
ND492	6-30	31	59.5	30.8
S6694	6-30	31	59.0	30.7
RL4220	7-1	34	60.5	30.3
MT677	7-2	30	59.0	29.1
Selkirk	7-4	30	59.5	28.7
Red River	6-26	29	61.0	28.5
MT6723	7-3	30	56.5	28.1
ND493	6-30	29	59.0	27.7
Marquis	7-3	31	58.0	27.6
Thatcher	6-30	31	54.0	26.1
Justin	7-4	32	59.5	24.1
ND495	6-30	28	60.0	23.6
Waldron	6-29	30	59.5	23.5
			Average	30.1
			L.S.D. (.05)	6.4

Table 3-13.

Carrington, North Dakota - Irrigated

Variety of Sel. No.	Date headed	Date ripe	Height	Bushel weight	Avg. Acre yield
			Inches	Lb.	Bu.
II-62-61	7-9	8-21	37	60.5	65.4
RL4220	7-8	8-22	47	59.2	58.2
II-62-2	7-10	8-24	37	60.5	57.8
678-1-6-9	7-2	8-14	36	59.0	57.7
Wis. 271	7-2	8-18	37	59.0	57.3
S6579	7-4	8-17	42	59.1	56.9
ND494	7-1	8-19	40	58.7	56.1
S6694	7-5	8-19	47	59.8	55.5
Neepawa	7-4	8-17	44	59.8	55.3
ND493	7-1	8-21	40	58.5	53.4
Polk	7-9	8-21	43	60.9	51.6
ND495	7-2	8-19	38	57.9	49.6
ND492	7-5	8-19	41	57.7	48.2
Waldron	7-5	8-17	42	57.7	47.7
Selkirk	7-6	8-16	44	57.8	47.4
Red River 68	6-30	8-17	36	60.5	47.2
Justin	7-7	8-18	44	57.8	44.3
Chris	7-7	8-22	42	59.0	44.0
MT677	7-6	8-17	37	53.6	39.4
MT6723	7-10	8-19	37	54.9	38.6
Thatcher	7-7	8-15	44	56.9	34.0
Marquis	-	8-15	46	56.7	33.0

L.S.D. (.05) 7.1

Table 3-14.

Sidney, Montana - Dryland

Variety or Sel. No.	Heading date <u>1</u> /	Maturity date <u>1</u> /	Plant height Inches	Lodging sev.	Shat- tering %	Bushel weight Lb.	Avg. acre yield Bu.
II-62-61	179	224	30	0.0	1.3	60.0	47.0
II-62-2	181	225	30	0.0	0.0	60.0	43.1
RL4220	177	222	37	1.0	6.3	58.5	41.5
Thatcher	177	219	35	0.0	0.7	58.5	39.8
Neepawa	177	219	34	0.0	2.0	58.0	39.1
Chris	177	220	36	1.3	1.3	59.5	38.5
MT677	177	221	30	0.0	0.7	55.5	38.2
MT6723	178	222	30	0.0	0.0	55.5	37.8
S6579	176	222	32	1.3	2.0	55.5	36.1
S6694	176	222	34	1.3	3.3	56.0	36.1
Marquis	180	220	38	0.3	1.7	59.0	36.0
RR 68	171	224	28	0.3	0.7	58.0	35.8
Polk	177	223	34	0.7	3.7	60.0	34.5
ND492	176	223	31	0.3	4.7	58.0	34.0
Wis. 271	174	223	27	0.7	1.7	53.0	29.7
Waldron	175	225	33	0.0	4.0	57.5	29.0
ND473	174	223	29	0.7	2.3	52.5	27.6
Selkirk	178	220	34	0.0	3.3	52.0	26.5
678-1-6-9	171	219	27	0.0	4.0	49.0	25.5
Justin	178	222	33	0.3	2.0	52.5	23.3
ND494	175	223	32	2.0	0.0	49.0	19.5
ND495	173	220	28	0.0	2.0	48.5	18.7
Average							33.5
L.S.D. (.05)							3.5

1/ Days after January 1.

Table 3-15.

Havre, Montana - Dryland

Variety or Sel. No.	Heading date	Bushel weight	Avg. acre yield
		Lb.	Bu.
S6694	171	62.0	27.5
MT677	175	60.2	25.0
S6579	170	62.1	24.2
Neepawa	172	61.3	23.8
Waldron	170	60.6	23.5
Chris	173	61.2	22.5
II-62-61	175	61.0	22.3
II-62-2	178	60.9	21.3
Thatcher	172	60.6	21.1
MT6723	177	60.0	21.0
Marquis	176	61.3	20.4
Red River 68	168	62.3	19.0
Polk	173	61.0	18.8
Selkirk	173	60.4	18.3
Wis. 271	170	60.4	18.2
RL4220	173	61.0	17.1
ND494	174	62.2	16.4
ND494	169	61.5	15.9
ND492	170	61.3	15.5
678-1-6-9	168	60.7	15.3
ND495	170	61.7	14.8
Justin	176	60.9	14.5
		Average	19.9
		L.S.D. (.05)	6.7

Table 3-16.

Bozeman, Montana

Variety or Sel. No.	Heading date	Plant height	Lodging %	Bushel weight	Avg. acre yield
		cms.		Lb.	Bu.
II-62-61	199	81	33.3	61.2	83.9
MT677	196	89	15.0	61.2	81.0
Wis. 271	193	80	8.3	62.2	79.9
ND6694	193	109	53.3	63.0	78.9
MT6723	198	90	15.0	60.6	77.9
ND495	192	81	23.3	60.9	74.2
RR 68	191	80	16.7	63.1	73.8
ND493	192	85	18.3	60.2	72.4
678-1-6-9	191	79	16.7	62.2	72.3
ND494	194	92	15.0	60.6	70.9
ND6579	194	96	25.0	62.3	67.3
Chris	195	108	60.0	62.0	67.2
ND492	194	100	36.7	62.4	65.7
II-62-2	200	83	15.0	58.6	64.6
RL4220	195	113	26.7	61.8	64.3
Justin	196	109	40.0	61.8	64.3
Neepawa	195	105	20.0	61.7	63.2
Thatcher	195	105	40.0	62.1	62.4
Waldron	194	102	25.0	61.3	61.4
Polk	195	106	70.0	63.5	57.4
Selkirk	195	107	33.3	60.8	51.3
Marquis	198	114	53.3	62.2	49.5
Average					68.3
L.S.D. (.05)					6.9

Table 3-17.

Sheridan, Wyoming

Variety or Sel. No.	Heading date	Plant height	Bushel weight	Avg. acre yield
		Inches	Lb.	Bu.
II-62-61	179.5	28.0	62.2	42.3
MT6723	177.5	31.0	60.8	35.0
MT677	175.5	30.0	61.3	33.7
Thatcher	172.3	34.0	61.2	33.0
Red River 68	170.0	29.0	63.0	32.0
S6579	173.0	32.5	61.6	31.8
ND495	169.0	30.5	60.5	31.7
RL4220	174.0	36.0	60.1	31.2
ND493	170.5	30.5	60.2	30.8
Marquis	176.5	38.5	61.9	30.7
II-62-2	180.0	28.5	61.2	30.3
678-1-6-9	169.5	28.0	61.9	29.5
S6694	173.5	33.5	61.1	29.5
Wis. 271	172.5	27.5	61.8	28.9
Chris	173.5	34.5	60.8	26.9
Polk	174.5	34.5	61.8	26.6
Neepawa	173.0	33.5	60.8	25.8
ND492	173.5	31.0	60.4	25.6
Waldron	172.5	34.0	59.6	25.3
Justin	175.0	34.0	59.2	24.8
Selkirk	175.5	35.5	59.2	23.8
ND494	172.5	32.5	60.0	23.1
			Mean	29.6
			L.S.D. (.05)	6.1

Table 3-18.

Tetonia, Idaho

Variety or Sel. No.	Date headed	Plant height	Bushel weight	Avg. acre yield
	July	Inches	Lb.	Bu.
Red River 68	15	30	59.5	34.6
II-62-61	21	28	55.4	32.7
S6579	15	35	56.8	32.7
ND493	17	31	57.0	31.8
ND492	17	32	58.3	31.7
MT677	23	30	55.1	31.4
S6694	17	37	59.2	30.7
MT6723	23	29	54.3	29.9
Waldron	14	34	55.8	29.3
678-1-6-9	15	25	55.8	27.3
ND495	15	26	53.8	27.2
Neepawa	17	35	57.0	26.1
Wis. 271	15	26	53.8	25.8
Polk	24	34	58.1	25.5
ND494	17	33	54.2	25.3
II-62-2	19	26	56.3	25.2
RL4220	19	36	56.1	22.9
Thatcher	17	38	53.3	22.7
Selkirk	16	34	54.6	22.3
Justin	19	37	52.9	21.6
Chris	17	36	54.1	20.6
Marquis	19	36	52.8	19.7

Table 3-19.

Lind, Washington

Variety or Sel. No.	Date headed	Plant height	Bushel weight	Avg. acre yield
		Inches	Lb.	Bu.
ND494	6/10	22	61.5	22.6
Neepawa	6/10	21	60.3	20.0
RL4220	6/11	22	61.5	19.1
Justin	6/12	23	60.5	19.1
ND493	6/9	21	61.8	18.9
MT6723	6/13	20	60.8	18.9
II-62-61	6/13	18	62.2	18.6
S6579	6/9	23	60.7	18.5
ND492	6/10	19	61.7	18.3
S6694	6/9	24	60.8	18.2
MT677	6/12	19	60.8	17.8
Waldron	6/10	21	60.3	17.8
Chris	6/10	22	60.9	17.7
Polk	6/11	22	62.4	17.3
II-62-2	6/14	18	61.7	17.1
Thatcher	6/11	21	60.5	17.1
Selkirk	6/10	22	59.0	16.7
Marquis	6/13	22	60.9	16.4
Wis. 271	6/10	19	60.7	16.1
ND495	6/6	19	61.6	15.3
Red River 68	6/6	20	62.2	14.8
678-1-6-9	6/6	19	61.6	14.5

Table 3-20.

Clovis, New Mexico

Variety or Sel. No.	Heading date	Date ripe July	Plant height Inches	Bushel weight Lb.	Avg. acre yield Bu.
Red River 68	5/29	4	25.5	54	14.8
S6579	6/8	10	25.0	55	14.0
Justin	6/11	14	25.9	51	12.9
RL-4220	6/8	8	29.1	51	12.6
S659	6/8	12	28.2	58	12.0
Ciano 67	5/27	3	22.9	58	11.8
ND476	6/12	15	20.1	51	11.7
K48-44	6/8	10	27.9	53	11.4
MT6661	6/9	14	26.8	52	11.2
11-62-61	6/10	14	22.2	56	11.0
ND481	6/10	13	24.9	54	11.0
Marquis	6/15	14	23.4	51	10.8
Thatcher	6/10	14	28.1	52	10.8
Manitou	6/11	13	26.8	56	10.8
Waldron	6/9	14	27.5	54	10.6
Neepawa	6/9	10	25.5	51	10.6
MT6610	6/10	15	26.2	57	10.4
M4-1	6/10	14	24.1	54	10.0
11-62-68	6/17	14	23.0	51	9.9
Wis. 271	6/8	11	22.0	52	9.9
M4-7	6/10	15	25.5	55	9.9
Polk	6/14	15	25.0	56	9.4
Chris	6/6	10	25.1	57	9.3
11-62-2	6/14	14	22.8	53	8.8
ND482	6/10	14	26.4	52	8.4
				Average	10.9
				L.S.D. (.05)	N.S.

Table 3-21.

Madison, Wisconsin

Variety or Sel. No.	Date headed July	Height Inches	Lodging 0-100	Bushel weight Lbs.	Yield Bu./A.
S6579	2	35.7	6.0	57.0	37.1
RL4220	2	41.3	8.0	57.6	35.5
S6694	1	40.0	15.3	58.8	34.1
ND492	1	36.0	12.3	58.8	33.5
Neepawa	1	39.3	8.3	58.5	33.1
H678-1-6-9	1	29.3	3.0	53.6	32.7
11-62-61	3	33.3	9.3	56.2	32.2
Wis 271	1	30.3	3.7	54.0	31.3
Chris	1	40.0	16.3	60.3	30.8
Red River 68	6/30	29.7	5.7	57.4	30.3
Waldron	1	37.7	2.0	56.6	29.0
Polk	3	39.0	11.3	60.5	28.7
Selkirk	1	36.3	7.0	55.6	28.7
ND495	1	31.3	1.3	54.0	27.3
Thatcher	6/30	38.0	16.3	56.8	26.8
Marquis	3	44.0	16.3	56.8	25.5
Justin	2	38.0	7.3	57.0	25.4
ND493	2	32.3	1.7	53.3	24.0
MT6723	2	34.0	4.7	51.9	22.8
MT677	2	34.7	7.0	51.7	22.2
ND494	2	32.7	9.7	54.1	20.6
L.S.D. (.05)					6.1

Table 4. Average bushel weights and yields of entries in 1969 uniform regional hard red spring wheat nursery and average yields of entries grown for two year periods.

Variety or Sel. No.	Bushel Weight (Lb)	Average Yield 1969		Average Yield Bu/A
		Bu/A	% Chris	1968 and 1969
Number of Stations	16	19		38
II-62-61	61.5	43.1	121.4	44.8
S6694	61.4	40.4	113.8	--
678-1-6-9	60.5	39.7	111.8	--
RL4220	60.8	39.5	111.3	40.0
Wisc. 271	60.5	39.5	111.3	41.0
S6579	60.5	38.7	109.0	42.1
Neepawa	61.0	38.5	108.5	39.8
ND492	60.6	37.1	104.5	--
II-62-2	60.5	36.6	103.1	38.6
RR68	61.1	36.3	102.3	40.3
Polk	62.0	35.9	101.0	36.4
ND493	59.9	35.5	100.0	--
Chris	61.0	35.5	100.0	36.7
ND494	60.0	35.3	99.4	--
Waldron	59.9	34.5	97.2	38.4
ND495	58.9	33.7	94.9	--
MT677	57.4	33.6	94.6	--
MT6723	56.6	32.6	91.8	--
Selkirk	58.8	32.1	90.4	--
Justin	59.7	32.0	90.1	33.0
Thatcher	59.3	31.1	87.6	32.2
Marquis	60.0	28.9	81.4	29.2

Table 5. Average of miscellaneous agronomic and disease reaction data for entries in the 1969 uniform regional hard red spring wheat nursery.

Variety or Sel. No.	Days to head ^{1/} (5) ^{2/}	Days to maturity ^{1/} (3)	Height inches (17)	Lodging score ^{2/} (8)	Rust Reaction		Shattering % (2)	1000-kernel weight, g. (1)
					Leaf (6)	Stem (6)		
Wis. 271	178	221	29	1.1	R	R	0.9	34.5
678-1-6-9	176	219	29	1.2	R	MR	2.0	37.0
S6694	179	221	37	3.9	R	MS-S	1.9	35.5
ND495	177	222	30	1.3	R	R-MR	1.0	42.0
ND493	177	224	31	1.7	R	R	1.7	40.5
II-62-2	185	224	30	1.6	R	R	0.0	37.0
II-62-61	183	223	30	1.9	R	R	0.7	36.5
Waldron	178	222	35	1.3	R	R	4.5	40.0
RL4220	180	221	38	2.4	R-MR	R	13.2	33.0
S6579	179	221	34	2.5	R-MR	R	1.3	39.5
ND492	179	221	34	2.9	R-MR	R	22.4	37.5
RR 68	176	220	30	1.8	R	R-MR	0.4	39.0
Neepawa	180	220	36	3.5	MR-MS	R	1.3	32.5
Polk	181	223	36	3.5	R	R	11.9	40.0
Chris	180	221	36	3.7	R	R-MR	0.9	30.5
ND494	180	224	34	2.4	R	R	0.0	43.0
Justin	182	222	37	2.0	MS-S	R	3.5	35.5
MT677	181	221	32	1.5	S	MS-S	0.4	31.5
MT6723	183	222	31	1.5	S	R	0.0	32.0
Selkirk	181	219	36	2.3	S	R-MR	2.2	36.0
Marquis	183	221	40	3.4	S	MS-S	1.1	32.5
Thatcher	180	219	36	2.8	S	MS-S	1.1	31.5

^{1/} After January 1.

^{2/} 1 erect; 9 lodged.

^{3/} Number of stations included.

Table 6-1. 1969 Uniform Regional Hard Red Spring Wheat Nursery.--
Infection types produced by races of Puccinia graminis
tritici on seedlings. (Minn. ARS Cooperative Rust
Laboratory)

Variety or Sel. No.	Infection types produced by race				
	32B	151	15B-2	56	11
Marquis	4	4,2	4	3	3
Thatcher	34	3	3	13	3
Selkirk	3+	1	0;13	0;1	3+
Justin	3	3+	0;1	0;1-	0;1-
Chris	0;1	31	0;	0;	0;
Polk	0;1	310;	0;	0;	0;
Waldron	21	2	11+3	2-	1-
Neepawa	0;1	0;1,3	0;1	0;	1
RL4220	3	34	0;1,3	0;	1,4
S6579	34	4	0;	1-	1
ND492	34,1-	33+	0;	1	0;
ND493	32	3-3	0;	0;	0;
ND494	3	33+	0;1	0;	0;
ND495	4	33+	0;11+	0;	----
Wis. 271	3+	3	0	1-	0;1-
678-1-6-9	3+	4	0;	1-	1-
II-62-2	3-1	3-30;	0;	0;	0
II-62-61	31	33-1	0;	0;	0
Red River 68	3-3	33+	0;1	1-	1-
MT677	4	4	34	3+	3
MT6723	4	4	311+	4	3+
S6694	3+	4	0;	0;1	X

Table 6-2. 1969 Uniform Regional Hard Red Spring Wheat Nursery.
Seedling reaction to stem rust. (North Dakota-ARS)

Variety or Sel. No.	Race of stem rust ^{1/}					
	15	15B	29	32	38	151
Marquis	S	S	S	S	MS	S,MR
Thatcher	S	S	I	MS	S	MS,MR
Selkirk	10pMS ^{2/}	5pR,MS	7pR,MS	S	R,MS	12pMS
	2pR	6pR	1pR			2pMR,MS
Justin	10pR	13pR	MRR	22pMR	MS	15pMR
	1pS	1pS		2pMS		3pMS
Chris	R	R	12pI	S	10pMS	S
			1pMS		1pS	
Polk	R	R	13pMS	S,MR	MS	MS,MR
			1pS			
Waldron	R	R	MR	MR	MR	20pMR
						1pMS
Neepawa	R	7pI	I	S	S	S
		4pMR				
RL4220	MR	10pR	R,MR	S	MS,R	S
		1pMR				
S6579	22pMR	R	MR	S	S	S
	1pMS					
S6694	14pR	R	I	S	S	S
	1pMS					
ND492	R	10pR	10pMS	MRMS	5pMS	S,MR
		2pMR	2pS		3pMR	
					1pS	
ND493	R	R	R	MR	MS	MR
ND494	R	R	R	MR	MS	MR
ND495	R	12pR	R	MRS	MS	MR
		2pR,MS				
Wis. 271	R	R	I	MR	MS	MR
678-1-6-9	R	R	I	S	S	S
II-62-2	R	R	R	MS	MR	MR,MS
II-62-61	R	R	MS	6pMR	MS	MR,MS
				5pMS		
MT677	S	6pS	S	S	S	MSS
		2pR				
		3pI				
MT6723	S	13pS	S	S	S	MSS
		2pI				
		1pR				
Red River 68	MR	7pR	MS	MS	MS	MRMS
		6pI				

^{1/} Race 151 resembled race 38 on the standard differential wheat varieties and possibly some add-mixture of race 32.

^{2/} p = plant.