

UNIFORM REGIONAL NURSERY, 1963

The thirty-second Uniform Regional Nursery was seeded in 1963 at 23 stations in nine states - Wisconsin, Minnesota, North Dakota, South Dakota, Nebraska, Colorado, Wyoming, Montana and Idaho and in Manitoba and Saskatchewan. The trials at Concord, Nebr. and Akron, Colo. were not harvested.

The list of spring wheats included in the Uniform Regional Nursery in 1963 is as follows:

Variety or Cross	New or Included Old by	Station develop- ing	State or Sel.No.	C.I.No.
Marquis	Old			3641
Thatcher	"			10003
Selkirk	"			13100
Lee	"			12488
Pembina	" Canada	Winnipeg	CT 229	13332
KT-Tc ³ x II-44-29-Tc ²	" Minn.	St.Paul	II-53-404	13465 <i>Cum</i>
Justin	" N.Dak.	Fargo	ND 102	13462
(Ftn x II-44-29, Sel. II-50-17) x Pilot	" Mont.	Bozeman	B61-95	13586
Kenya 338 x Lee	New "	"	B61-88	13772
Kenya 184 x Wisc.250 ⁴	Old Wisc.	Madison	6-16-2	13588
Ftn x Tc ⁴	" Minn.	St.Paul	II-52-238	13572
II-50-17 x Rmr	" "	"	II-54-29	13654
"	" "	"	II-54-30	13655
Ftn-Tc ³ x II-44-29-Tc ²	" "	"	II-53-525-1	13751
"	" "	"	II-53-521	13657
M2824 ² x II-50-72	New "	"	II-55-11	13773
"	" "	"	II-55-12	13774
RL 4125 x Tc ⁶ -P.I.170925	" Manitoba	Winnipeg	RL 4159	13775
RL 2520 x Tc ⁶ - KF	" "	"	RL 4133	13776
"	" "	"	RL 4137	13777
ND 81 sib x Conley	Old N.Dak.	Fargo	ND 256	13608
ND 140 x ND 138	" "	"	ND 247	13568
ND 138 x Lee x FPI 186035	" "	"	ND 264	13569
Conley x ND 142	" "	"	ND 271	13571
ND 140 x ND 138	" "	"	ND 229-1	13589
ND 137 x ND 138	" "	"	ND 287	13590
ND 40-2-1-76 x Conley	" "	"	ND 345	13653
ND 140 x ND 138	New "	"	ND 404	13778
Cly x (Lee x FPI 186035)	" "	"	ND 405	13779
Conley x ND 122	" "	"	ND 406	13780

Yields, Bushel Weights, and Disease Resistance

Data on 1963 yields at each of the stations are given in table 5. Average yields and ranks for the states are given in table 6. The average yields and ranks for the group or area of the tests - Eastern - Western (irrigated and dry land) and all stations for 1963, for 1962-3 and for 1961-3 are given in table 7. In table 8, test weights are given for the individual stations, the Eastern, and Western averages, with the overall averages. The averages for the Eastern and Western sections and the average for all stations for date of heading, height, lodging, heat damage and weight per 1,000 kernels are given in table 9. These latter averages are from stations where data were available. A summary of the data on leaf and stem rust reaction is given in table 10, and other disease notes in table 11.

Yields were good at many of the stations. The highest average yield was obtained at Bozeman, Montana. Yields at Brookings and Watertown, S. Dak., and Havre, Mont. were low.

The highest average yielding varieties in both the Eastern and the Western sections were C. I. 13654, 13655, 13572 and 13586. For the varieties grown for more than 1 year, C. I. 13654, and 13655, were the two highest yielding varieties. The three wheats, C. I. 13780, 13654, and 13655, had the heaviest test weights.

There was a heavy leaf rust infection at the stations in the Eastern section and in the eastern part of the Western section. There were about 8 varieties that were highly resistant. Stem rust did not develop to any extent in the spring wheat region. Stem rust was present in some areas since Marquis had up to 80 percent infection.

The disease notes are given in table 11. These show some of the varieties to be resistant to leaf rust and stem rust, even under artificially induced epidemic conditions. Five varieties had 5 percent or less of stripe rust. Other varieties were moderately resistant.

Table 5 Station and average yield per acre (bushels) of 30 spring wheats grown in the Uniform Regional Nursery in 1963, ranked in order of their average yield at all stations

C.I. No.	Madison Wis.	St. Paul Minn.	Morris Minn.	Crookston Minn.	Brookings S.Dak.	Watertown S.Dak.	Winnipeg Man.	Fargo N.Dak.	Langdon N. Dak.	Casselton N. Dak.	10 Eastern Stations
13654	26.7	26.2	44.4	50.2	17.9	19.8	25.6	43.7	28.3	31.8	31.5
13655	30.9	18.8	42.8	45.7	20.7	20.0	24.8	48.0	31.7	34.9	29.9
13572	29.6	16.7	39.3	45.5	13.8	11.6	18.1	42.9	20.7	33.5	27.2
13586	33.6	22.0	29.8	47.1	8.9	7.9	16.8	35.5	24.1	22.7	24.8
13772	23.5	16.0	28.4	34.2	11.7	9.8	19.2	41.3	32.8	35.6	25.4
13751	25.7	18.1	37.7	40.4	18.1	17.8	17.7	42.8	32.6	25.1	27.6
13777	26.8	21.1	32.1	51.7	13.5	17.4	16.6	37.4	31.9	28.2	27.7
13571	27.0	12.2	30.1	40.9	10.8	8.6	20.2	37.8	27.1	27.9	24.3
13773	24.9	18.6	37.5	41.2	15.7	16.7	25.9	39.6	27.3	27.9	27.5
13775	25.4	24.0	32.8	42.8	16.0	16.7	13.9	36.2	25.7	26.5	26.0
13776	25.0	21.6	34.0	48.0	12.8	13.7	17.4	32.4	30.8	33.4	26.9
13774	25.7	20.7	35.9	40.9	14.7	13.5	24.5	39.5	26.4	25.1	26.7
13779	28.6	22.0	36.6	42.0	16.0	17.5	17.6	41.8	30.2	25.3	27.8
13588	26.2	20.3	37.3	45.0	17.6	15.1	18.3	34.2	26.3	32.5	27.3
13778	27.0	21.3	29.4	38.3	11.3	8.4	17.6	34.2	25.2	24.8	23.8
13465	29.7	18.4	28.9	44.4	9.4	9.6	21.0	32.2	23.3	26.8	24.4
13589	21.0	18.5	20.8	35.7	7.9	6.8	15.2	33.1	31.4	24.5	21.5
13780	30.3	18.8	32.7	37.3	15.8	16.0	17.4	32.2	21.8	21.1	24.3
12488	26.5	18.6	23.9	40.5	7.6	8.8	19.9	33.0	21.5	27.7	22.8
13657	24.4	19.4	32.9	34.5	14.5	12.7	12.2	35.6	22.3	28.0	23.6
13100	31.1	18.5	26.3	38.7	9.2	11.7	12.6	24.6	18.2	24.0	21.5
13653	23.3	15.6	24.4	44.5	12.7	6.9	26.9	36.0	20.4	30.9	24.2
13462	25.7	18.2	25.3	43.9	8.1	9.3	15.3	32.3	23.1	25.7	22.7
13332	28.6	18.5	27.5	39.6	12.0	15.6	13.9	34.2	20.4	23.6	23.4
13568	28.0	19.9	23.5	34.2	7.5	7.1	14.8	29.5	19.8	22.7	20.7
10003	26.5	19.0	18.1	34.9	7.7	9.8	12.0	23.3	15.7	15.3	18.2
13590	25.5	14.6	25.6	33.2	6.8	5.8	12.4	27.6	15.9	19.4	18.7
13608	23.8	16.8	23.0	40.2	10.4	7.7	18.7	27.8	12.3	21.0	20.2
3641	23.5	19.5	25.2	36.5	9.9**	9.8**	8.8	17.6	15.5	17.5	18.4
Mean	26.6	19.1	30.7	41.4	12.6	12.4	18.0	34.8	24.6	26.7	24.7
L.S.D.(5%)	5.5	4.5	3.8	10.9	2.9	2.0	4.7	8.7	7.6	8.0	2.0

Table 5 - cont'd.

C.I. No.	Minot Dickinson		Williston Ft. Collins*		Bozeman*		Havre Sidney		Laramie*		Sheridan Tetonia		Saskatoon Western		Station
	N.Dak.	N.Dak.	N.Dak.	Colo.	Mont.	Mont.	Mont.	Mont.	Wyo.	Wyo.	Ida.	Sask.	Sask.	stations	Average
13654	36.4	24.8	32.2	45.3	53.2	10.8	37.7	34.0	36.5	29.7	52.2	35.7	33.7		
13655	34.6	23.3	29.9	46.9	51.6	8.6	34.8	30.8	35.6	29.3	54.9	34.6	33.3		
13656	34.0	23.6	28.4	42.8	59.8	10.2	34.8	31.1	27.3	29.9	58.5	34.6	32.0		
13586	40.3	22.7	29.6	46.3	61.1	8.2	33.4	31.0	31.6	25.8	59.7	35.4	31.5		
13772	35.7	20.0	29.8	57.7	61.4	9.3	31.5	38.1	41.5	27.0	55.1	37.0	31.2		
13569	37.1	15.6	30.5	56.6	61.1	8.4	33.6	38.4	33.5	29.8	55.7	36.4	31.1		
13751	29.6	25.8	28.8	40.7	57.7	10.4	30.4	38.6	33.4	26.4	54.8	34.2	31.1		
13777	32.5	23.4	30.4	41.1	59.2	6.5	38.0	27.7	32.8	30.2	53.6	34.1	31.1		
13571	41.2	22.3	27.3	55.6	60.9	8.8	33.2	35.7	26.1	30.2	60.1	36.5	30.7		
13773	31.7	25.8	31.6	35.9	53.4	7.5	33.3	36.0	32.1	28.4	49.3	32.3	30.0		
13775	33.7	16.4	25.3	47.7	56.1	5.7	30.3	36.0	36.4	28.4	49.4	33.2	29.7		
13776	31.2	18.9	26.2	43.0	51.2	6.8	34.0	28.2	34.0	28.4	52.2	32.2	29.4		
13774	29.2	27.3	30.2	32.5	52.5	8.7	33.6	25.5	33.9	27.9	48.6	31.8	29.3		
13779	30.9	23.0	31.3	41.3	57.1	6.0	31.1	24.9	25.7	25.8	41.4	30.8	29.3		
13588	34.2	19.4	21.9	51.3	45.1	7.8	31.9	28.8	28.2	24.3	44.4	30.7	29.1		
13778	34.0	19.7	26.2	42.3	61.6	7.4	35.4	29.8	38.0	27.6	48.2	33.7	28.9		
13465	35.5	15.0	28.0	54.5	54.3	9.6	33.5	30.4	26.4	26.9	48.8	33.0	28.9		
13589	25.7	19.1	31.4	52.6	56.3	8.3	31.2	40.7	34.3	27.9	57.2	35.0	28.5		
13780	30.9	22.3	25.5	41.8	54.0	6.7	32.6	27.4	32.1	29.6	51.4	32.2	28.0		
12488	28.8	17.0	25.9	59.5	53.7	8.1	32.5	29.4	36.7	27.1	39.9	32.7	27.9		
13657	28.2	20.6	28.9	39.0	59.9	10.4	28.3	32.3	19.2	26.9	55.4	31.7	27.4		
13100	30.8	12.3	25.2	45.0	59.7	6.8	30.5	37.0	36.1	30.2	46.1	32.7	27.2		
13653	28.1	21.5	27.9	43.5	39.8	7.3	30.5	27.4	30.1	26.2	48.3	30.1	27.2		
13462	29.7	15.1	25.2	42.0	58.7	7.1	29.6	26.4	35.2	24.9	51.1	31.4	27.2		
13332	26.1	19.0	23.4	48.5	56.7	5.9	30.3	28.4	27.6	24.5	46.3	30.6	26.8		
13568	30.2	16.5	29.6	51.7	51.7	7.0	30.1	27.9	34.7	26.9	49.3	32.3	26.4		
10003	31.8	13.7	25.6	43.8	58.7	9.0	31.0	34.3	27.5	28.9	47.7	32.0	25.4		
13590	24.1	16.3	27.8	39.6	53.0	9.6	27.5	38.1	33.0	27.0	50.4	31.5	25.4		
13608	27.8	16.7	24.4	40.2	48.0	6.5	27.9	22.5	23.4	24.0	42.9	27.7	24.1		
3641	24.2	9.4	25.7	49.6	49.3	9.6	25.5	23.5	16.9	26.9	35.1	26.9	22.8		
Mean	31.6	20.2	27.8	45.9	55.2	8.1	31.9	31.0	31.3	27.6	50.4	32.8	29.0		
L.S.D. (5%)	5.0	5.3	2.9	7.6	4.5	N.S.	2.9	8.3	7.9	N.S.	3.2	1.6	1.3		

* = Irrigated Stations.
 ** = Calculated Values.

Table 6 Average yield and rank by states for each of the 30 spring wheats grown in the Uniform Regional Nursery in 1963.

C.I.No.	Wisconsin			Minnesota			S.Dakota			Manitoba			N.Dakota			Colorado			Montana			Wyoming			Idaho			Saskatchewan			Station Average
	1 Station	Yield Rank	3 Stations	Yield Rank	2 Stations	Yield Rank	1 Station	Yield Rank	2 Stations	Yield Rank	3 Stations	Yield Rank	1 Station	Yield Rank	2 Stations	Yield Rank	1 Station	Yield Rank	2 Stations	Yield Rank	3 Stations	Yield Rank	1 Station	Yield Rank	2 Stations	Yield Rank	1 Station	Yield Rank	2 Stations	Yield Rank	
13654	26.7	13	40.3	1	18.8	2	25.6	3	32.9	2	45.3	14	33.9	8	35.2	8	29.7	6	52.2	12	33.7	12	52.2	12	33.7	12	52.2	12	33.7	12	33.7
13655	30.0	4	35.8	2	20.4	1	24.8	4	34.1	1	46.9	12	31.7	16	33.2	10	29.3	8	54.9	8	33.3	8	54.9	8	33.3	8	54.9	8	33.3	8	33.3
13572	24.5	24	33.8	7	15.6	9	24.2	6	32.8	3	42.8	19	34.9	1	29.2	22	29.9	4	58.5	3	32.0	3	58.5	3	32.0	3	58.5	3	32.0	3	32.0
13586	29.6	6	33.8	6	12.7	15	18.1	13	31.6	5	46.3	13	34.2	6	31.3	13	25.8	26	59.7	2	31.5	2	59.7	2	31.5	2	59.7	2	31.5	2	31.5
13772	33.6	1	33.0	10	8.4	25	16.8	19	28.0	14	57.7	2	34.1	7	39.8	1	27.0	17	55.1	7	31.2	7	55.1	7	31.2	7	55.1	7	31.2	7	31.2
13569	23.5	28	26.5	26	10.8	16	19.2	10	32.2	4	56.6	3	34.4	4	36.0	6	29.8	5	55.7	5	31.1	5	55.7	5	31.1	5	55.7	5	31.1	5	31.1
13751	25.7	17	32.1	13	18.0	3	17.7	4	30.8	6	40.7	25	32.8	11	36.0	5	26.4	23	54.8	9	31.1	9	54.8	9	31.1	9	54.8	9	31.1	9	31.1
13777	26.8	12	35.0	13	15.4	10	16.6	20	30.6	8	41.1	24	34.6	3	30.2	2	30.2	2	53.6	10	31.1	10	53.6	10	31.1	10	53.6	10	31.1	10	31.1
13571	27.0	10	27.7	22	9.7	20	20.2	8	30.6	9	55.6	4	34.3	5	30.9	15	30.2	1	60.1	1	30.7	1	60.1	1	30.7	1	60.1	1	30.7	1	30.7
13773	24.9	23	32.4	12	16.2	7	25.9	2	27.3	18	47.7	11	31.4	20	29.2	21	28.4	12	49.3	17	29.9	17	49.3	17	29.9	17	49.3	17	29.9	17	29.9
13775	25.4	21	33.2	9	16.4	6	13.9	25	27.3	18	47.7	11	30.7	23	36.2	4	28.4	11	49.4	16	29.9	16	49.4	16	29.9	16	49.4	16	29.9	16	29.9
13776	25.0	22	34.5	4	13.2	14	17.4	17	28.8	12	43.0	18	30.7	24	31.1	14	28.4	10	52.2	11	29.7	11	52.2	11	29.7	11	52.2	11	29.7	11	29.7
13774	25.7	18	32.5	11	14.1	11	24.5	5	29.6	11	32.5	30	31.6	17	29.7	20	27.9	13	48.6	20	29.4	20	48.6	20	29.4	20	48.6	20	29.4	20	29.4
13779	28.6	8	33.5	8	16.8	4	17.6	16	30.4	10	41.3	23	31.4	19	25.3	28	25.8	25	41.4	28	29.3	28	41.4	28	29.3	28	41.4	28	29.3	28	29.3
13588	26.2	16	34.2	5	16.4	5	18.3	12	28.1	13	51.3	8	28.3	27	28.5	24	24.3	29	44.4	26	29.1	26	44.4	26	29.1	26	44.4	26	29.1	26	29.1
13778	27.0	11	29.7	15	9.8	18	17.6	15	27.4	17	42.3	20	34.8	2	33.9	9	27.6	15	48.2	22	28.9	22	48.2	22	28.9	22	48.2	22	28.9	22	28.9
13465	29.7	5	30.6	14	9.5	21	21.0	7	26.8	20	54.4	5	32.5	12	33.9	9	27.6	15	48.2	22	28.9	22	48.2	22	28.9	22	48.2	22	28.9	22	28.9
13589	21.0	30	25.0	28	7.4	27	15.2	22	27.5	15	52.4	6	31.9	14	37.5	2	27.9	14	57.2	4	28.5	4	57.2	4	28.5	4	57.2	4	28.5	4	28.5
13780	30.3	3	29.6	16	15.9	8	17.4	18	25.6	22	41.8	22	31.1	21	29.8	19	29.6	7	51.4	13	28.5	13	51.4	13	28.5	13	51.4	13	28.5	13	28.5
12488	26.5	15	27.7	23	8.2	26	19.9	9	25.8	21	59.5	1	31.4	18	33.0	11	27.1	16	39.9	29	29.3	29	39.9	29	29.3	29	39.9	29	29.3	29	29.3
13657	24.4	25	28.9	18	13.6	13	12.2	28	27.3	19	39.0	28	32.9	10	25.8	27	26.9	22	55.4	6	27.9	6	55.4	6	27.9	6	55.4	6	27.9	6	27.9
13100	31.1	2	27.8	21	10.4	17	12.6	26	22.5	26	45.0	15	32.3	13	36.6	3	30.2	3	46.1	25	27.4	25	46.1	25	27.4	25	46.1	25	27.4	25	27.4
13653	23.3	29	28.2	20	9.8	19	26.9	1	27.5	16	43.5	17	25.9	30	28.8	23	26.2	24	48.3	21	27.2	21	48.3	21	27.2	21	48.3	21	27.2	21	27.2
13462	25.7	18	29.1	17	8.7	24	15.3	21	25.2	23	42.0	21	31.8	15	30.8	17	24.9	27	51.1	14	27.2	14	51.1	14	27.2	14	51.1	14	27.2	14	27.2
13332	28.6	7	28.5	19	13.8	12	13.9	24	24.4	25	48.5	10	31.0	22	28.0	26	24.5	28	46.3	24	27.2	24	46.3	24	27.2	24	46.3	24	27.2	24	27.2
13568	28.0	9	25.9	27	7.3	28	14.8	23	24.7	24	51.7	7	29.6	26	31.3	12	26.9	20	49.3	18	26.8	18	49.3	18	26.8	18	49.3	18	26.8	18	26.8
10003	26.5	14	24.0	30	8.3	23	12.0	29	20.9	29	43.8	16	32.9	9	30.9	16	28.9	9	47.7	23	25.4	23	47.7	23	25.4	23	47.7	23	25.4	23	25.4
13590	25.5	20	24.5	29	6.3	29	12.4	27	21.8	27	39.6	27	30.0	25	35.6	7	27.0	18	50.4	15	25.4	15	50.4	15	25.4	15	50.4	15	25.4	15	25.4
13608	23.8	26	26.7	25	9.0	22	16.7	11	21.7	28	40.2	26	27.5	29	23.0	29	24.0	30	42.9	27	24.1	27	42.9	27	24.1	27	42.9	27	24.1	27	24.1
3641	23.5	27	27.1	24	9.8		8.8	30	18.3	30	49.6	9	26.1	28	20.2	30	26.9	19	35.1	30	22.8	30	35.1	30	22.8	30	35.1	30	22.8	30	22.8
Mean	26.6		30.4		12.5		18.0		27.5		45.9		31.7		31.2		27.6		50.4		29.0		50.4		29.0		50.4		29.0		29.0
L.S.D. (5%)	5.5		4.1		1.6		4.7		2.7		7.6		2.2		5.7		N.S.		3.2		1.3		3.2		1.3		3.2		1.3		1.3

* Calculated value.

Table 7 Average yield in bushels per acre of the Uniform Regional Nursery wheats at Eastern, Western, Western Irrigated, and Western Dryland Stations in 1963, with 2 and 3 year averages for the Eastern and Western Sections and for the Region

C.I. No.	Rank	Eastern Section				Western Section				West - Irrigated				West - Dryland				Region			
		No. of Stations		No. of Stations		No. of Stations		No. of Stations		Rank		Rank		Rank		Rank		No. of Stations		No. of Stations	
		1963	1962-3	1961-3	29	1963	1962-3	1961-3	30	1963	1962-3	1961-3	30	1963	1962-3	1961-3	30	1963	1962-3	1961-3	30
13654	2	31.5	34.4			4	35.7	37.7		15	44.2			1	32.5			33.7	36.2		
13655	1	32.0	33.4			8	34.6	36.8		19	43.1			3	31.4			33.3	35.2		
13572	3	29.2	31.3		30.4	7	34.6	37.0	31.4	13	44.6			7	30.8			32.0	34.3		30.9
13586	9	27.2	28.3			5	35.4	37.1		9	46.1			2	31.4			31.5	33.0		
13772	14	24.8				1	37.0			1	52.4			4	31.2			31.2			
13569	13	25.4	26.4		27.1	3	36.4	38.3	32.6	2	52.0			8	30.5			31.1	32.7		29.9
13751	6	27.6	29.7			9	34.2	36.7		10	45.7			10	30.0			31.1	33.4		
13777	5	27.7				10	34.1			20	42.7			6	30.9			31.1			
13571	17	24.3	25.6		26.9	2	36.5	37.9	31.8	3	50.7			5	31.2			30.7	32.1		29.4
13773	7	27.5				17	32.3			27	38.6			9	30.0			30.0			
13775	12	26.0				12	33.2			7	46.6			16	28.2			29.8			
13776	10	26.9				19	32.2			25	40.8			14	29.0			29.7			
13774	11	26.7				21	31.8			30	36.8			11	29.9			29.4			
13779	4	27.8				25	30.8			23	41.1			25	26.9			29.3			
13588	8	27.3	29.6			26	30.7	34.0		22	41.7			27	26.5			29.1	31.9		
13778	19	23.8				11	33.7			12	44.6			12	29.6			28.9			
13465	15	24.4	24.9		26.8	13	33.0	34.8	30.0	8	46.4			18	28.0			30.1			28.5
13589	24	21.5	21.7			6	35.0	36.9		4	49.8			13	29.4			28.5	29.7		
13780	16	24.3				18	32.2			24	41.1			15	28.9			28.5			
12488	22	22.8	24.4		25.4	15	32.7	34.7	29.9	5	47.3			23	27.1			28.0	29.8		27.7
13657	20	23.6	25.6			22	31.7	35.0		17	43.7			22	27.2			27.9	30.5		
13100	25	21.5	23.8		24.6	14	32.7	34.8	29.5	6	47.2			20	27.2			27.4	29.6		27.2
13653	18	24.2	25.3			28	30.1	31.2		29	36.9			19	27.5			27.2	28.4		
13462	23	22.7	22.6		24.2	24	31.4	33.3	29.1	21	42.4			21	27.2			27.2	28.2		26.7
13332	21	23.4	24.7		25.6	27	30.6	32.2	27.4	14	44.5			28	25.4			27.2	28.7		26.5
13568	26	20.7	21.0		23.3	16	32.3	35.2	30.3	16	43.8			17	26.0			26.8	28.5		26.9
10003	30	18.2	19.4		21.1	20	32.0	34.3	29.3	11	45.6			26	26.9			25.4	27.3		25.2
13590	28	19.7	20.1			23	31.5	34.5		18	43.6			24	27.0			25.4	27.6		24.5
13608	27	20.2	21.3		23.0	29	27.7	29.9	25.9	28	36.9			29	24.2			24.1	25.8		20.8
3641	29	18.4	17.6		17.9	30	26.9	30.1	25.0	26	40.8			30	21.7			22.8	23.1		
Mean		24.7	25.3		24.7		32.8	34.9	29.4		44.0				28.6			29.0	30.3		27.0
L.S.D. (5%)		2.0	1.5		1.2		1.6	1.4	1.0		4.0				1.7			1.3	1.0		0.8

Table 8 Average weight per bushel for each of the wheats in the Uniform Regional Nursery, with averages for the Eastern and Western areas and an overall average

C. I. No.	TEST WEIGHT (POUNDS)									9 Eastern Stations Ave. Rank	
	Madison	St. Paul	Morris	Crookston	Brookings	Watertown	Fargo	Langdon	Casselton		
13780	61.2	62.0	60.0	62.0	59.5	57.0	60.0	60.0	61.5	60.4	1
13654	60.5	59.7	60.7	63.2	58.0	56.0	61.0	60.0	60.5	60.0	2
13655	60.8	59.0	60.5	63.5	58.3	55.3	61.5	60.0	60.5	59.9	3
13773	60.4	59.5	58.8	63.2	57.0	55.5	62.0	59.0	61.0	59.6	4
13774	60.4	60.2	57.5	63.0	57.8	54.8	61.5	59.5	61.0	59.5	5
13653	60.3	58.0	56.9	62.3	55.5	41.5	60.0	59.0	60.0	57.1	13
13657	60.2	57.0	57.5	61.2	55.0	52.3	59.5	58.5	58.5	57.7	8
13572	59.4	57.5	58.0	62.0	56.0	53.5	60.0	59.0	60.0	58.4	6
13588	59.0	56.5	57.7	61.5	55.0	53.6	59.0	58.0	59.0	57.7	10
13777	60.7	58.5	56.5	61.8	54.3	52.3	58.0	58.5	59.0	57.7	9
13776	60.6	59.8	56.3	62.0	55.0	49.5	59.0	58.0	59.0	57.7	11
13586	60.2	56.8	58.0	62.0	55.0	48.7	60.0	56.5	60.0	57.5	12
13778	60.8	57.3	57.0	61.8	53.7	47.7	58.0	56.5	58.5	56.8	14
13751	58.5	56.2	58.0	61.8	56.8	53.3	59.0	56.5	60.0	57.8	7
13569	60.8	55.5	56.3	62.8	54.0	46.7	59.5	56.5	59.0	56.7	15
13568	60.8	58.0	54.8	62.0	52.6	47.0	56.5	55.0	57.0	56.0	19
13571	60.0	55.2	56.2	61.2	52.5	44.0	59.0	55.5	58.5	55.8	21
13775	59.2	58.0	55.8	60.7	54.3	49.3	57.5	56.0	56.0	56.3	16
13465	58.4	58.0	56.7	61.5	53.3	46.5	58.0	54.0	58.0	56.0	17
13772	61.2	55.3	55.8	62.3	51.0	43.0	57.0	53.0	55.0	54.8	25
13462	58.8	58.5	55.8	61.0	50.8	47.8	57.0	55.0	58.5	55.9	20
13608	59.7	56.5	55.0	61.5	52.8	44.5	57.5	54.0	58.5	55.6	22
12488	58.0	57.2	55.0	62.0	50.0	45.0	57.0	56.0	56.5	55.2	23
13779	57.4	55.8	56.2	60.7	53.5	50.3	58.0	56.0	57.5	56.2	17
13590	59.0	54.5	54.0	58.7	49.7	40.3	56.0	54.0	56.0	53.6	29
3641	58.6	54.0	53.0	58.8	52.2 ^a	40.3	56.0	59.0	56.0	55.0	24
13589	59.2	56.2	54.3	58.3	49.5	39.5	55.0	56.5	55.0	53.7	28
10003	58.4	57.5	55.3	61.0	51.0	46.7	55.0	49.5	54.0	54.3	26
13332	56.8	55.8	54.3	59.0	52.5	48.5	54.5	53.0	52.5	54.1	27
13100	56.3	53.5	53.2	58.8	50.8	47.0	51.0	52.0	52.5	52.8	30
Mean	59.5	57.2	56.5	61.4	53.9	48.8	58.1	56.5	58.0	56.7	

^a = Calculated values.

Table 8 - cont'd.

C.I. No.	Dickinson	Minto	Williston	TEST WEIGHT (POUNDS)										Western 20 Regional Stations		
				Ft. Collins		Bozeman		Laramie		Teton		Saskatoon		Ave.	Rank	Average
				Irrigated	Sidney	Irrigated	Hayre	Sheridan	Irrigated	Tetonia	ton	ton	ton			
13780	61.5	60.5	61.8	62.7	60.5	62.9	59.0	58.0	59.8	61.1	65.5	61.2	61.2	1	1	60.8
13654	60.0	59.0	62.2	62.7	59.0	63.7	60.0	58.0	59.9	58.8	64.5	60.7	60.7	4	4	60.4
13655	60.5	59.5	62.3	62.7	59.5	63.4	61.0	55.0	60.0	59.5	65.0	60.7	60.7	2	2	60.4
13773	60.5	60.0	63.0	61.6	59.5	63.0	59.0	58.0	59.2	59.2	64.5	60.7	60.7	5	5	60.2
13774	60.5	60.0	63.0	61.6	58.5	62.8	60.0	58.0	59.2	59.3	65.0	60.7	60.7	2	2	60.2
13653	60.0	59.0	61.5	61.9	59.0	61.8	59.0	55.0	60.6	60.8	64.5	60.3	60.3	6	6	58.8
13657	58.0	57.5	60.7	60.7	57.5	62.3	61.0	56.0	58.4	58.8	64.0	59.5	59.5	8	8	58.7
13572	59.0	58.0	61.3	61.0	58.5	61.9	59.0	53.0	54.3	58.1	63.5	58.9	58.9	16	16	58.6
13588	59.0	58.0	60.8	61.5	58.0	61.4	58.0	57.0	58.0	57.6	63.5	59.3	59.3	10	10	58.6
13776	58.0	57.5	60.5	60.7	58.5	61.5	59.0	54.0	59.4	58.8	64.5	59.3	59.3	12	12	58.5
13777	58.0	57.5	60.2	60.4	58.0	61.4	59.0	57.0	58.8	58.2	64.0	59.3	59.3	11	11	58.6
13586	59.0	56.5	61.5	61.5	57.0	61.4	59.0	55.0	60.1	58.4	64.0	59.4	59.4	9	9	58.5
13778	58.0	58.0	60.0	61.8	59.0	62.4	59.0	56.0	60.4	59.8	64.0	59.9	59.9	7	7	58.5
13751	56.5	57.0	60.2	61.2	57.5	61.8	60.0	53.0	58.3	57.3	64.0	58.8	58.8	17	17	58.3
13569	57.5	58.5	60.5	61.8	57.5	62.1	59.0	53.0	58.9	60.1	63.5	59.2	59.2	13	13	58.1
13568	57.0	58.0	60.8	61.1	58.5	61.4	57.0	54.0	58.9	58.9	63.0	59.1	59.1	15	15	57.7
13571	60.0	56.0	60.5	61.4	56.0	61.7	59.0	53.0	56.8	58.9	63.0	58.8	58.8			57.4
13775	57.0	55.5	59.0	60.2	56.5	61.1	59.0	56.0	58.1	55.8	62.5	58.2	58.2			57.4
13465	58.0	56.0	60.2	61.2	56.0	61.7	59.0	55.0	53.7	57.5	63.5	58.3	58.3			57.3
13772	57.5	57.0	59.7	60.8	57.5	61.8	58.0	56.0	59.6	58.5	64.0	59.1	59.1	14	14	57.2
13462	58.5	55.5	59.3	60.2	57.0	60.8	58.0	54.0	55.6	57.8	63.0	58.2	58.2	25	25	57.1
13608	58.0	57.0	60.3	60.0	57.5	60.4	59.0	56.0	50.0	59.4	63.0	58.2	58.2	24	24	57.0
12488	57.0	56.0	59.5	61.2	57.0	61.1	59.0	54.0	58.1	57.2	62.0	58.4	58.4	20	20	56.9
13779	57.5	55.5	58.7	59.5	56.0	59.6	58.0	55.0	56.2	55.0	61.5	57.5	57.5	27	27	56.9
13590	60.0	57.0	58.8	60.0	56.5	61.0	59.0	56.0	57.1	58.0	62.5	58.7	58.7	19	19	56.4
3641	55.0	52.0	58.2	61.9	59.0	62.4	60.0	52.0	54.6	59.8	57.5	57.5	57.5	28	28	56.4
13589	55.0	55.0	60.5	60.7	56.5	60.6	58.0	56.0	58.0	57.9	63.0	58.3	58.3	22	22	56.2
10003	57.0	52.0	59.8	60.9	56.0	61.1	58.0	52.0	57.9	57.2	62.5	57.7	57.7	26	26	56.1
13332	56.5	53.0	58.2	59.7	55.5	60.9	59.0	53.0	55.3	55.1	62.5	57.2	57.2	29	29	55.8
13100	55.0	50.0	57.5	59.7	54.0	60.2	55.0	54.0	56.2	54.5	61.5	56.1	56.1	30	30	54.6
Mean	58.2	56.7	60.4	61.1	57.6	61.7	58.2	55.1	57.7	58.3	63.3	58.9	58.9			57.9

Table 9 Averages of agronomic characters recorded on spring wheat varieties in the 1963 Uniform Regional Nursery

C. I. No.	Date of heading (June)			Height (inches)			Lodging class (1-9)			Heat Damage* 1	1000K. Weight 1
	11 19			10 16			3 9				
	Eastern Stations	Western Stations	Regional Stations	Eastern Stations	Western Stations	Regional Stations	Eastern Stations	Western Stations	Regional Stations		
3641	25	7/2	29	34	35	35	4.6	1.7	3.6	T ₁	21.5
10003	23	29	27	33	34	33	3.5	2.0	3.0	T ₁	28.5
13100	23	30	27	32	34	34	3.0	2.0	2.7	T ₁	32.5
12488	21	27	25	33	33	33	4.1	2.0	3.4	T ₁	34.0
13332	22	29	26	32	32	32	3.9	2.7	3.5	T ₁	33.5
13465	22	29	26	34	35	35	4.6	2.0	3.7	T ₂	34.5
13462	24	7/2	29	34	35	35	2.3	1.3	2.0		34.0
13586	24	7/1	28	37	37	37	4.6	2.8	4.0	T ₁	36.0
13772	20	28	24	35	35	35	2.8	1.7	2.4	T ₁	37.0
13588	24	29	27	34	35	35	2.6	1.7	2.3	T ₁	36.5
13572	25	7/2	29	36	37	36	2.8	1.7	2.4	T ₁	30.5
13654	23	30	27	36	36	36	3.6	1.7	3.0	T ₁	35.5
13655	23	30	27	35	35	35	4.5	1.7	3.6		34.5
13751	23	30	27	35	34	34	3.3	1.7	2.8		31.5
13657	26	7/1	30	34	34	34	3.2	2.0	2.8		31.0
13773	24	31	28	33	35	34	3.9	1.7	3.2		38.0
13774	25	31	29	33	34	34	3.3	2.0	2.9		39.5
13775	24	30	27	33	33	33	3.4	2.0	2.9		28.5
13776	24	7/1	29	35	35	35	1.7	2.0	1.8	T ₁	31.5
13777	25	7/1	29	33	34	33	1.7	1.3	1.6		32.8
13608	24	7/2	29	35	36	36	3.7	1.7	3.0	T ₁	38.5
13568	23	31	28	33	34	33	2.2	1.3	1.9	T ₂	34.5
13569	23	30	27	36	37	37	3.4	1.7	2.8	T ₃	40.6
13571	26	7/2	29	35	37	36	4.8	2.2	3.9	T ₁	40.0
13589	23	7/1	28	33	34	34	1.7	1.7	1.7	T ₁	34.0
13590	24	30	27	33	33	33	2.0	1.3	1.8	T ₂	34.0
13653	25	7/2	29	37	36	37	3.7	1.3	2.9	T ₁	34.5
13778	22	28	26	34	34	34	2.6	1.7	2.3	T ₁	35.0
13779	23	7/1	28	35	35	35	4.8	2.0	3.9	T ₂	39.0
13780	22	29	26	35	34	35	2.8	2.8	2.8	T ₁	37.0

* T₁ = 1-2 spikelets empty.
 T₁ = 3-4 " " "
 T₂ = 5-6 " " "

Table 10 Leaf and stem rust notes recorded on spring wheat varieties in the 1963 Uniform Regional Nursery
(T or trace - was computed at 0.2 percent)

C.I. No.	LEAF RUST												Station Average	Rank
	Madison	Morris	Crookston	Brookings	Watertown	Winnipeg	Fargo	Langdon	Casselton	Minot	Williston	Dickinson		
3641	50	70	60	M	50	50	50	80	50	60	30	80	65	29
10003	65	80	70	100	80	80	80	95	60	100	40	80	79	30
13100	50	50	70	65	40	30	30	60	30	50	20	60	49	24
12488	40	50	60	65	50	50	50	50	70	40	30	40	51	27
13332	40	50	70	65	30	30	50	65	30	50	20	50	48	22
13465	30	50	60	65	40	40	40	65	20	50	20	50	49	25
13462	10	30	30	65	30	30	30	45	15	30	30	40	33	17
13586	0	5	T	1	T	T	5	T	0	5	10	20	4	8
13772	15	30	60	65	20	1	50	15	40	40	20	40	34	18
13588	0	3	10	40	1	1	10	40	10	1	1	T	9	10
13572	T	T	0	0	T	T	T	T	0	1	5	20	3	6
13654	T	T	0	0	T	T	T	T	T	T	1	T	0.2	1
13655	0	T	10	0	T	T	T	T	0	T	1	T	1	3
13751	0	T	T	0	T	T	5	T	0	5	5	20	3	5
13657	T	T	0	0	T	T	5	T	0	8	10	10	3	4
13773	0	T	10	0	1	T	5	T	0	10	5	10	3	7
13774	0	T	0	0	T	T	5	T	0	T	5	T	0.9	2
13775	8	10	40	0	5	5	25	10	20	25	20	10	14	15
13776	1	15	15	10	20	20	10	30	20	10	1	10	12	13
13777	1	10	10	10	30	30	15	15	10	10	1	20	11	12
13608	20	70	60	100	30	30	40	75	30	40	30	40	50	26
13568	20	70	60	100	30	30	50	40	40	40	30	60	48	23
13569	T	15	T	10	5	5	10	10	15	10	5	20	8	9
13571	12	50	60	10	5	5	25	T	40	10	30	10	13	14
13589	10	70	70	5	30	30	60	60	60	50	30	80	47	21
13590	8	50	40	100	5	5	50	50	60	40	20	40	44	20
13653	8	60	50	100	40	40	50	50	25	40	30	60	51	28
13778	20	60	60	100	40	40	50	40	30	30	10	60	42	19
13779	T	10	15	100	40	40	20	5	30	5	5	T	20	16
13780	T	5	10	65	30	30	T	T	T	5	5	T	10	11

STEM RUST

Table 10-1

C. I. No.	Madison	Morris	Crookston	Brookings	Watertown	Winnipeg	Fargo	Langdon	Casselton	Minot	Station Average	Rank
3641	4	10	T	2	25	80	50	0	50	70	33	30
10003	T	10	O	1	0	50	5	0	0	20	11	27
13100	O	0	O	25	25	5	0	0	0	0	0.6	18
12488	T	0	T	0	0	60	20	60	0	60	25	29
13332	O	0	O	0	0	10	0	0	0	0	1	19
13465	O	0	O	0	0	T	0	0	0	0	0.1	2
13462	O	0	O	0	0	T	0	0	0	T	0.1	14
13586	O	0	O	0	0	T	0	0	0	0	0.1	2
13772	O	0	O	0	0	10	0	0	0	10	0.1	23
13588	O	0	O	0	0	T	0	0	0	T	0.1	14
13572	O	0	O	0	0	1	0	0	0	10	1	22
13654	O	0	O	0	0	T	0	0	0	0	0.1	2
13655	O	0	O	0	0	T	0	0	0	0	0.1	2
13751	O	0	O	0	0	T	0	0	0	0	0.1	2
13657	O	0	O	0	0	T	0	0	0	0	0.1	2
13773	O	0	O	0	0	T	0	0	0	0	0.1	2
13774	O	0	O	0	0	T	0	0	0	0	0.1	2
13775	O	0	O	0	0	T	0	0	0	0	0.1	2
13776	O	0	O	0	0	T	0	0	0	0	0.1	2
13777	O	0	O	0	0	T	0	0	0	0	0	1
13608	O	0	O	0	0	60	0	0	0	0	0.1	2
13568	O	0	O	0	0	10	0	0	0	15	8	26
13569	O	0	O	0	0	T	0	0	0	15	2	25
13571	O	0	O	0	0	T	0	0	0	0	0.1	2
13589	O	0	O	0	0	T	0	0	0	0	0.1	2
13590	O	0	O	0	0	3	0	0	0	1	0.4	16
13653	O	0	O	0	0	5	0	0	0	T	0.5	17
13778	T	0	O	0	0	10	0	0	0	10	2	23
13779	O	0	O	0	0	20	0	40	0	60	12	28
13780	O	0	O	0	0	10	0	0	0	0	1	19

