

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
in cooperation with
STATE AGRICULTURAL EXPERIMENT STATIONS

COMPARISON OF
WINTER WHEAT VARIETIES GROWN IN COOPERATIVE
NURSERY EXPERIMENTS IN THE
HARD RED WINTER WHEAT REGION
IN 1985

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This is a joint progress report of cooperative investigations under way in the State Agricultural Experiment Stations and the Agricultural Research Service of the U. S. Department of Agriculture containing preliminary data which have not been sufficiently confirmed to justify general release. Interpretations may be modified with additional experimentation. Confirmed results will be published through established channels. The report is primarily a tool for use of cooperators and their official staffs and for those persons having direct and special interest in the development of agricultural research programs.

The report includes data furnished by the State Agricultural Experiment Stations as well as by the Agricultural Research Service and was compiled in the Central States Area, U. S. Department of Agriculture. The report is not intended for publication and should not be referred to in literature citations nor quoted in publicity or advertising. Use of the data may be granted for certain purposes upon written request to the agency or agencies involved.

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CENTRAL STATES AREA

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By

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REGIONAL NOTES

The 1985 Hard Red Winter Wheat Breeders field day was held in Colorado on June 13. Field stops included the CSU nurseries at Ft. Collins. Stops also were made at Cargill, NAPB, and Rohm and Haas facilities and nurseries in the area.

Dr. Art Dubbs retired as superintendent of the Mocassin, Montana research station in December, 1984. He has been replaced by Dr. Grant Jackson as Superintendent and Agronomist at the station.

Dr. D. S. Marshall, Texas A & M small grains breeder and pathologist, has replaced Dr. J. H. Gardenhire at Dallas, Texas. Dr. Gardenhire retired in 1984.

Dr. J. W. Schmidt, wheat and small grains breeder at the University of Nebraska, retired on December 31, 1985. A replacement has not yet been named.

NEW VARIETIES AND GERMPLASM

The following is only a partial list of new wheat varieties and germplasms available in the region. Included are those for which we have current information. Several seed companies continue to be active in the development and sale of new hybrids and pure lines.

VARIETIES

Carson - Developed by the Colorado Agricultural Experiment Station has the pedigree Anza/Scout//Centurk. Carson is in a medium-height class with stronger, stiffer straw than Sandy. It also matures earlier and has better seedling emergence. It is being tested in the 1986 SRPN under the experimental No. C0810010

The Nebraska Agricultural Experiment Station has indicated the intent to release two wheats in 1986, NE851182 and NE77465.

NE851182 is composite of 24 lines selected from the Brule cultivar that possess the SR6 gene for stem rust resistance. The line performs essentially equal to Brule but it is slightly later (less than a day) in maturity. It is being tested in the 1986 SRPN.

NE77465, with the pedigree WRR*5/Agent//Centurk 78, is a conventional height, medium maturity line with good winterhardiness and strong quality. The primary advantage of the line stems from its superior performance under heavy Cephalosporium stripe infections at North Platte, NE. The line was tested in the NRPN in 1982 and 1983.

The Kansas Agricultural Experiment Station has indicated the intent to release three wheats in 1986, KS831957, KS82H4, and KS82H144. The lines were tested in the SRPN in 1985 and are currently in the 1986 SRPN.

KS831957, from Plainsman V/Odeskaja 51, features high grain protein content, kernel size, and resistance to Spindle Streak Mosaic Virus. It has been superior to Newton, equal to TAM 105, and slightly inferior to Arkan in yield in Kansas trials.

KS82H4, from Plainsman V/3/2*(KS76H3705) Larned/Eagle//Sage, carries resistance genes Lr24, Lr1, Sr24, and H3, and is resistant to soilborne mosaic virus. It has average yields 4% higher than Arkan in northern Kansas trials, but 8-10% less in southcentral and southeastern Kansas. The line is shorter and matures about a day later than Newton with winterhardiness equal to Scout 66.

KS82H144, from KS73H530 (Newton sib)/KS76HN1978-1 (Arkan sib), is best adapted to the southern two thirds of western Kansas. The line has effective levels of resistance to leaf rust (Lr1), stem rust, Septoria, and Soil Borne Mosaic. It is 2 inches shorter and 1 1/2 days later in maturity than Newton.

Nickerson American Plant Breeders has announced the release of three experimental varieties under the Agripro label:

Victory, tested in the SRPN as NA-HW81-283, is an intermediate height semi-dwarf wheat.

Stallion, tested in the SRPN as NA-HW81-297, is a short semi-dwarf wheat.

Thunderbird, tested in the SRPN and NRPN as NA-HW81-459, is an intermediate height wheat.

Pioneer has announced two new lines for commercial production:

2157, tested in the SRPN as X7442B, a semi-dwarf wheat.

2165, tested in the SRPN as X7452B, also a semi-dwarf type.

GERMPLASM

The Kansas Agricultural Experiment Station approved KS85WGRC01 as a germplasm release. The line is homozygous for resistance for Hessian fly derived from the cross TA1644/Newton//Wichita. The resistance, conditioned by a single dominant gene, is derived from Ae. squarrosa (T. taushii) accession TA1644. The gene is independent of H13 and is effective against known biotypes of the Hessian fly. The line is heterogeneous for characters other than Hessian fly resistance and is cytogenetically stable.

The Nebraska Agricultural Experiment Station will release NE80413 (Lovrin 13/2*Centurk 78) as germplasm in 1986. It was tested in the SRPN in 1983 and 1984, and the NRPN in 1984 and 1985. NE80413 possesses a combination of disease resistances exceeding that of most hard winter wheat varieties. These include resistance to stem rust, leaf rust, and soilborne mosaic. It is susceptible to Hessian fly.

1985
SOUTHERN REGIONAL PERFORMANCE NURSERY

Entry no.	Variety or Pedigree	C.I. or Sel. No.	Source
1	Kharkof	1442	Check
2	Scout 66	13996	"
3	TAM 105	17826	"
4	Payne//TAM W-101/Amigo	OK81306	Oklahoma
5	"	OK81322	"
6*	Aurora/2*TAM W-101	OK83396	"
7*	"	OK83398	"
8	TX71A1039-V1*3/Amigo	TX81V6610	Texas
9	"	TX81V6614	"
10	Amigo/3/2*TX71A937 Sdy sib/ Tcs//Ctk	TX39949-2	"
11*	TX71A1039-V1*3/Amigo	TX81V6180	"
12*	TAM-105/TAM W-101	TX80A4135-6	"
13*	TX71A1039-V1*3/Amigo	TX81V6183	"
14*	TAM W-103//Short Wheat/ Scout (TX69A509-1)	TX83A5930	"
15*	MV69-12/TAM W-103	TX78A3345-V42	"
16*	TAM W-101/Newton	TX80A5172-4	"
17*	Short Wheat/Scout (TX69A509-2)//Fox	TX78V2430-36	"
18*	TX71A1039-V1*3/Amigo	TX81V6187	"
19*	Plainsman V/3/2*Larned/Eagle// Sage	KS82H4	Kansas
20*	KS73H530//Sage/Arthur	KS82H144	"
21	Bulk Selection	NA-HW81-283	NAPB
22	"	NA-HW81-297	"
23	"	NA-HW81-459	"
24*	OK11252A/HW76-1226	NA-HW81-170	"
25*	"	NA-HW81-157	"
26**	Winter Wheat Hybrid	RH830101	R-H
27**	"	RH830201	"
28*	"	RH845202	"
29	TAM W-101/W558 (W8460D)	XW131	Pioneer
30	Mexican Bulk Hybrid Selection	78DW14	Harpool
31	"	Hp114	"
32*	Bulk Population	77DW48	"
33*	"	77DW19	"
34*	Experimental Line	AGC101	AgriGenetics
35*	"	AGC103	"
36*	"	AGC104	"
37*	"	AGC105	"
38*	"	AGC102	"
39*	Plainsman V/Odesskya 51	KS831957	Kansas
40*	Winter Wheat Hybrid	XH183a	HybriTech
41*	"	XH215c	"

* New in 1985.

** New seed provided.

TEST SITE INFORMATION - SRPN

Clovis, NM -- Irrigated nursery was planted on 10/2/84 and harvested 6/25/85. A total of 160 lbs of N and 100 lbs of P_2O_5 were applied and the nursery was irrigated on 10/9/84 and 4/22/85. Moisture content was variable as rain fell before threshing was complete. Leaf rust notes taken on 5/21/85.

Dryland nursery was planted on 10/1/85 and harvested on 6/21/85. A total of 100 lbs of P_2O_5 was applied and 0 N. Leaf rust notes taken on 5/20/85.

A total of 15.61 inches of moisture fell during the growing season. Yields were adjusted to 14% moisture basis.

Farmington, NM -- Wet fall and dry spring. No pest problems and all entries overwintered without any stand loss. Winter temperatures were relatively mild with very little snowfall.

Bushland, TX -- The irrigated nursery was planted on land which had extensive laser leveling. Prior to planting, 350 lbs/acre of P_2O_5 and 150 lbs/acre of N were applied, as recommended, and no adverse effects were noted. Rains delayed planting until November 4. Planting rate was 65 lbs/acre and good stands were established. No winterkilling occurred and the nursery remained in good condition throughout winter and early spring. Precipitation was nearly twice normal amounts in January and March but less than normal in April and May. Glean was applied February 21. Temperatures above normal during winter and spring resulted in earliest heading date recorded in 40 years. Three and 1/2 inch irrigations were applied on 4/19, 5/6, and 5/27. Average temperature from 5/27 to 6/4 of 90 degrees F along with high winds reduced potential yields. Leaf rust was observed primarily after heading and was believed to be insufficient to cause loss. Harvested June 25.

The dryland nursery was planted of fallow land on October 8 with seeding rate of 32 lbs/acre. Good stands were established and remained in good condition until late April. Glean was applied February 19. Nursery exhibited considerable drouth stress during late April and May. Timely rain contributed to test weight and prevented severe yield loss. No winterkill or insect damage occurred. Leaf rust was present but developed too late to cause serious damage. Harvested June 16.

Chillicothe, TX -- No information.

Dallas, TX -- No information.

Stillwater, OK -- Good stands were obtained and good production conditions existed throughout the growing season. Severe early infections of powdery mildew affected yields of some entries. A severe leaf rust infection occurred and tan spot and septoria leaf blotch were present. Excessive rain during grain fill and several days of excessively high temperatures reduced yields and test weights.

Lahoma, OK -- Good uniform stands were obtained and excellent production conditions existed until grain fill. Yields and test weights were reduced by several days of high temperatures and excessive rainfall just prior to harvest. Leaf rust, tan spot, and septoria were present and could have had some influence on yield.

Altus, OK -- Good uniform stands were obtained. Some drought stress was evident in soft dough stage. There was excessive rain late in grain fill and several days of high temperatures in late dough stage. A serious leaf rust infection occurred and was a factor affecting yields. Yields and test weights were reduced by high temperatures.

Goodwell, OK -- Good uniform stands were obtained and no disease or insect problems of consequence. Good production conditions existed until soft dough stage when several days of excessive temperatures reduced yields and test weights.

Hutchinson, KS -- Timely fall rains resulted in very good stand establishment. The nursery was planted in mid-October, slightly later than optimum. Excellent spring conditions resulted in very good development and high yield potential. Anthesis occurred 10 days earlier than average. Two days of hot, dry winds in late May reduced yield potential considerably. Heavy leaf rust and moderately heavy infection of septoria significantly reduced yields on susceptible entries.

Manhattan, KS -- Good fall moisture resulting in excellent fall stand establishment. Warm spring with adequate moisture caused rapid development and heading approximately two weeks earlier than average. High temperature stress occurred twice during grain fill. Three severe thunderstorms at maturity caused heavy lodging and some shattering. Heavy soil borne mosaic infection delayed development of susceptible lines. Heavy leaf rust infection and moderate infection of septoria tritici also were present.

Hays, KS -- Good stands and good fall growth occurred. Very mild winter conditions with excellent snow cover resulted in no winter damage. Leaf rust was the only serious disease and yields of susceptible entries were reduced.

Colby, KS -- Surface soil was extremely dry at planting but stands were good. Excellent moisture was received during fall (over 4" in October) and throughout spring months. Precipitation from planting to harvest totalled 12.64 inches. No winter damage occurred. Spring growth initiated early and heading began in early May, about 10 days earlier than normal. May and June were cool except for a few days just prior to harvest. Conditions at harvest were excellent.

Ft. Collins, CO -- Essentially no diseases, insects, weeds, or winter injury. Yields were 20-30 bu/a lower than normal due to early spring heat and moisture stress.

Walsh, CO -- No diseases, insects, or weeds. Drouth stress followed anthesis with uniform stress over the nursery.

Akron, CO -- Essentially no insects, diseases, weeds, or winterkill. Excellent moisture throughout season. Nursery was planted on no-till fallow with a 5% volunteer of Vona uniformly distributed.

Julesburg, CO -- No significant diseases, insects, or weeds. Excellent stands were obtained. Conditions were drier than normal throughout spring and summer.

Burlington, CO -- No significant diseases or insects. Excellent conditions prevailed throughout the growing season.

Mead, NE -- The nurseries were seeded into dry soil. Emergence was delayed but aided by rainfall about a week after seeding. Stands were considered only fair. Winter damage was minimal. The nursery was slow developing in the early spring, but then developed rapidly and appeared to be considerably ahead of normal. Cool, rainy weather slowed crop development and harvest date was near normal. Leaf rust infections were severe and caused some yield losses. No other diseases developed. Bird damage was severe in some SRPN entries.

Clay Center, NE -- Ample moisture was present at seeding but the crop did not develop well. Tillering was less than normal. Winter was mild with warm temperatures early in the spring forcing early wheats to head very early. Rains and cooler temperatures late in the season favored later maturing entries. Leaf rust was fairly heavy.

Sidney, NE -- The nurseries started out well but tillering was minimal due to lack of moisture. No disease or insect problems occurred. Hail on May 26 damaged the crop. Damage was preferential in that tall cultivars were most severely hurt.

Alliance, NE -- The seedbed was satisfactory but the area was very short of moisture during all of the crop season. A couple showers during and after heading and cool nights enabled the crop to develop and produce a reasonably satisfactory yield. No insect or disease problems and the winter was mild.

South Dakota Stations -- Highmore, Presho, and Brookings were seeded September 7, 10, and 11 and harvested July 15, 9, and 23, respectively. Brookings was overseeded with flax. Fall moisture conditions were good and little winterkill was recorded. An unusually hot and dry spring reduced yield potentials at Presho, and to some extent, Highmore. There was no significant disease development due to little rain and few cool days. At Brookings some leaf rust, septoria, and tan spot infections were noted. Stem rust was evident at harvest on late maturing lines. A hail storm prior to harvest further reduced yields at Presho.

Columbia, MO -- The nursery was planted late and winter survival was a severe problem. The winter was colder than average with little snow cover. Growing conditions in the spring were cool and moist. Both leaf rust and septoria leaf blotch infections were serious problems and powdery mildew was moderately serious.

Ames, IA -- Planted 9/20/84 and emerged 9/28/84. Good growth and plant development occurred during the fall season. Nearly all entries survived the winter well. Good growth and plant development occurred in the spring although plants were a bit shorter than normal. Grain yields were excellent with very good test weights despite leaf rust, tan spot, and septoria on leaves of many entries.

Urbana, IL -- Fall stands and growth were excellent. Winter was moderate with some winterkill on less hardy entries. A warm early spring caused heading and maturity to occur 10 days earlier than normal. A late, moderate to heavy leaf rust infection affected susceptible entries. Soil borne mosaic infections were evident in some susceptible entries.

Lind, WA -- Seeded September 17. Spring weather was cold and dry and heading was about one week later than average. The weather turned hot and dry shortly before heading and harvest was about one week early.

Aberdeen, ID -- The Aberdeen nursery was irrigated four times. Available moisture was allowed to drop to about 40% between irrigations. The Tetonia nursery had an early, heavy snowfall and continued snow cover throughout the winter. Snowmold damage was heavy and no yields were taken.

Table 1. Yield and agronomic data for 41 entries in the Southern Regional Performance Nursery in 1985.

CLOVIS (IRR.) NEW MEXICO THREE REPLICATIONS							
C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:	: LODGING % :	: LEAF RUST: SEVERITY: 0-9
OK83396	6	7908	79.9	87	118	17	3
KS82H4	19	7647	79.9	90	121	3	3
XW131	29	7557	79.2	82	117	0	3
NA-HW81-157	25	7403	79.8	81	120	0	4
NA-HW81-170	24	7370	78.2	90	120	33	2
TX78V2430-36	17	7300	79.9	92	120	30	2
NA-HW81-283	21	7267	78.6	84	118	13	5
RH845202	28	7222	80	98	118	3	7
TX81V6180	11	7211	83	85	115	7	6
TX80A4135-6	12	7174	78.2	87	118	17	6
KS82H144	20	7126	78.5	89	118	0	2
RH830201	27	7113	78.7	97	118	3	7
OK83398	7	7021	80.8	88	117	0	3
TX78A3345-V42	15	6999	81.6	82	122	7	5
AGC105	37	6999	80.6	83	119	0	3
RH830101	26	6971	80.3	97	120	3	6
TX81V6614	9	6878	82.8	77	117	17	2
TX81V6610	8	6867	83.3	81	117	20	2
TX83A5930	14	6842	81.3	83	118	0	5
XH215C	41	6766	77.6	97	121	3	4
CAPITAN	42	6723	79.2	106	124	13	4
OK81322	5	6522	79.2	97	121	0	2
NA-HW81-459	23	6366	82.4	86	119	10	2
NA-HW81-297	22	6365	81	85	117	0	6
TX80A5172-4	16	6272	79.8	91	115	43	3
17826	3	6256	76.5	89	118	0	8
TX81V6187	18	6174	83.2	80	115	10	5
XH183A	40	6100	77.5	90	118	7	6
TX81V6183	13	6021	82.1	86	115	30	6
KS831957	39	5985	80.6	93	118	10	2
AGC104	36	5970	77.2	60	117	0	7
78DW14	30	5950	77.8	89	119	60	2
13996	2	5862	78.8	104	123	80	5
77DW48	32	5826	76.8	87	118	0	4
1442	1	5814	77.8	108	128	7	3
77DW19	33	5569	80	87	117	0	5
HP114	31	5560	78.6	86	117	77	7
OK81306	4	5524	76.2	96	123	13	3
AGC103	35	5325	79.3	90	117	0	5
AGC101	34	5284	79.3	84	116	7	4
AGC102	38	5275	79.2	85	116	0	2
TX39949-2	10	4930	77.8	80	117	10	8

MEAN	6502
LSD(.05)	804
C.V.	7.6

CLOVIS

(DRYL.)

NEW MEXICO

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:	: LODGING %	: LEAF RUST: SEVERITY: 0-9
TX80A4135-6	12	5010	79.6	77	117	3	5
KS82H4	19	4873	79.3	81	120	0	2
TX81V6183	13	4734	81.1	70	114	0	5
XW131	29	4669	79	70	116	0	3
TX78V2430-36	17	4557	79.7	75	116	10	2
TX81V6180	11	4422	79.9	70	113	0	3
TX81V6187	18	4406	81.1	79	114	0	5
TX80A5172-4	16	4342	80.8	80	114	7	2
TX81V6614	9	4304	83.2	73	115	0	2
OK83398	7	4244	79.3	73	117	0	3
NA-HW81-283	21	4244	79.6	78	117	0	4
TX81V6610	8	4227	82	74	116	0	2
RH845202	28	4181	78.7	81	117	0	5
RH830201	27	4173	78.9	82	118	0	7
KS82H144	20	4159	80.9	76	116	0	2
17826	3	4150	79	79	118	0	5
NA-HW81-170	24	4045	77.8	78	119	13	2
TX39949-2	10	4042	78.8	76	116	0	8
XH215C	41	4041	76.9	87	120	0	4
TX78A3345-V42	15	4019	79.1	68	120	0	5
TX83A5930	14	3983	78.2	66	118	0	3
RH830101	26	3978	79.1	80	119	0	4
NA-HW81-297	22	3922	81.3	75	117	0	6
AGC103	35	3919	79.3	76	116	30	5
OK81306	4	3912	77.5	84	122	0	2
CAPITAN	42	3911	77.8	90	123	0	3
NA-HW81-157	25	3882	78.8	72	120	0	3
OK83396	6	3803	78.6	73	117	0	2
NA-HW81-459	23	3725	81.8	78	118	0	2
77DW19	33	3678	79.8	84	117	0	3
XH183A	40	3650	78.2	80	118	0	4
KS831957	39	3576	79.4	79	118	0	2
AGC105	37	3546	78.8	72	119	0	4
AGC101	34	3495	77.2	77	115	0	2
13996	2	3477	78.9	87	121	47	3
HP114	31	3371	77.1	76	117	33	5
78DW14	30	3327	76.3	87	117	33	2
AGC102	38	3326	78.4	75	116	0	2
OK81322	5	3231	78.6	75	119	0	2
77DW48	32	3209	78.8	75	118	0	3
1442	1	3107	77.6	91	127	0	3
AGC104	36	2196	75.7	46	117	0	4

MEAN 3931
LSD(.05) 585
C.V. 9.1

FARMINGTON

NEW MEXICO

FOUR REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:
TX81V6180	11	5928	80.1	76	130
OK81322	5	5555	77.2	86	138
TX81V6614	9	5441	79.3	77	136
TX80A4135-6	12	5362	76.3	81	134
TX81V6187	18	5323	79.8	77	131
TX39949-2	10	5259	75.9	83	136
TX81V6183	13	5207	79.7	73	130
OK81306	4	5129	76.4	90	142
TX81V6610	8	5062	78.7	76	135
TX78A3345-V42	15	4872	74.8	77	138
TX80A5172-4	16	4792	78	85	131
TX78V2430-36	17	4790	76.4	84	139
NA-HW81-283	21	4763	74.8	81	133
NA-HW81-157	25	4682	75.6	72	139
RH830201	27	4622	75.3	88	134
TX83A5930	14	4597	76.1	74	134
RH845202	28	4580	75.5	85	135
78DW14	30	4531	73.5	95	139
KS82H4	19	4526	76.8	83	134
AGC105	37	4452	76.6	81	136
XH183A	40	4439	75.1	87	135
OK83396	6	4423	75.6	78	134
13996	2	4408	76.1	97	136
XH215C	41	4334	73.9	87	138
NA-HW81-297	22	4206	78.4	80	134
NA-HW81-170	24	4161	75.5	80	137
XW131	29	4154	75.8	77	131
HP114	31	4080	76.4	84	135
NA-HW81-459	23	4033	76.3	87	134
OK83398	7	4030	74.7	79	133
RH830101	26	4030	74.8	90	132
1442	1	3764	74.2	100	142
17826	3	3707	74.2	79	135
AGC101	34	3700	75.1	76	133
KS82H144	20	3568	76.9	80	133
KS831957	39	3561	75.3	84	135
77DW19	33	3394	74.7	82	136
AGC102	38	3228	74.8	75	133
AGC103	35	3001	72.2	80	133
AGC104	36	2877	74	50	131
77DW48	32	2650	73.7	77	137

MEAN	4371
LSD(.05)	760
C.V.	12.4

DALLAS
TEXAS
THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:	: LODGING 0-9	: WINTER SURVIVAL 0-5	: LEAF RUST: SEV.:RESP: % : 1-9:	: MILDEW % :	: SEPTORIA: TRITICI % :
TX81V6614	9	4436	76.4	79	102	3	2	0 .	0	62
OK81322	5	4270	73.5	86	103	1	2	0 .	0	55
OK81306	4	4140	72.6	86	103	2	2.5	0 .	0	55
AGC102	38	3865	73.9	86	95	2	2	90 8	15	55
78DW14	30	3766	70.7	93	102	2	3	35 7	0	55
TX81V6610	8	3676	74.4	83	102	2	1.5	0 .	0	46
NA-HW81-459	23	3636	74.6	90	101	0	2	0 .	75	55
KS831957	39	3555	62.3	93	102	3	2	55 7	0	37
HP114	31	3553	73.9	89	101	0	2.5	100 8	45	62
77DW19	33	3495	73.5	89	95	0	2	100 8	50	62
TX81V6180	11	3410	68	81	102	1	2	100 8	0	62
OK83396	6	3405	67.5	86	104	0	2	40 3	0	62
OK83398	7	3389	69.3	86	104	0	2	25 3	0	55
NA-HW81-297	22	3345	72.9	80	98	1	2	100 5	45	55
AGC105	37	3338	71.9	80	102	3	2	100 8	15	55
AGC103	35	3302	73.8	86	95	0	1.5	100 8	45	55
77DW48	32	3250	72.2	84	101	1	2	100 8	55	55
NA-HW81-170	24	3141	74.2	85	103	0	2	5 3	70	55
XW131	29	3132	69.7	81	102	2	2	100 8	50	55
AGC101	34	3082	70.6	83	102	3	2	100 8	20	62
TX81V6187	18	3069	70	88	102	1	2	100 8	0	62
TX81V6183	13	3015	71.6	81	102	2	2	100 8	30	55
XH183A	40	3002	71.3	86	102	0	2	100 8	30	55
TX80A5172-4	16	2932	68.6	94	112	0	2	100 8	20	70
TX78V2430-36	17	2883	70.7	88	113	0	2.5	0 .	40	62
RH830201	27	2813	69.9	86	103	0	2	100 8	0	55
TX78A3345-V42	15	2795	69	77	101	3	2.5	100 8	20	55
KS82H4	19	2730	69.3	90	110	0	2	3 3	40	55
XH215C	41	2710	68.8	90	103	0	2	100 8	20	55
13996	2	2517	72	102	114	0	1.5	85 7	0	55
KS82H144	20	2352	69.4	88	109	0	2.5	30 7	50	55
NA-HW81-157	25	2313	70.6	85	104	0	2	95 8	60	46
TX39949-2	10	2284	69.7	85	102	1	2.5	100 8	0	55
NA-HW81-283	21	2271	66.8	83	105	0	2	25 3	0	55
AGC104	36	2228	61	58	93	0	2.5	100 8	0	55
RH845202	28	2143	67.1	91	103	0	1.5	100 8	0	55
RH830101	26	2130	71.6	97	105	0	2	90 8	0	55
TX80A4135-6	12	2022	64.1	84	113	0	2.5	95 8	20	55
17826	3	1484	64.5	89	111	0	2	100 8	15	55
TX83A5930	14	1244	63.6	74	113	0	2.5	100 8	45	55
1442	1	404	72.9	102	137	0	2	100 8	0	46

MEAN 2940
LSD(.05) 597
C.V. 12.4

CHILLICOTHE
TEXAS
THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:	: TAN SPOT 0-9	: LEAF RUST: SEV.: %	: RESP: 1-9: %	: LEAF RUST: SEV.: %	: RESP: 1-9: %	: LEAF RUST: SEV.: %	: RESP: 1-9: %
78DW14	30	4439	78.5	99	107	0	0	0	1	3	50	2
TX81V6187	18	4273	77.1	86	105	1	1	7	60	8	60	8
TX81V6614	9	4261	78.5	80	105	0	0	0	10	2	10	2
TX81V6183	13	4246	77.6	87	105	0	1	7	60	8	60	8
TX81V6610	8	4214	77.3	79	107	2	0	0	10	2	10	2
OK83396	6	4073	70.8	82	111	3	1	7	10	2	10	7
AGC105	37	4035	79.7	82	109	0	0	0	20	8	50	8
TX78V2430-36	17	3927	72.9	88	112	3	0	0	0	0	0	0
TX81V6180	11	3795	74.6	83	105	0	1	7	40	8	40	8
NA-HW81-170	24	3793	74.7	86	112	0	0	0	0	0	10	2
OK83398	7	3714	77.6	84	111	0	1	3	10	2	10	2
AGC101	34	3658	76.5	94	105	0	1	3	10	8	10	8
OK81322	5	3638	73.1	86	111	5	0	0	20	7	10	2
AGC102	38	3620	77.7	84	107	0	1	7	30	8	60	8
NA-HW81-297	22	3542	79.3	85	107	0	0	0	40	8	80	8
NA-HW81-283	21	3519	71.3	87	112	0	1	3	20	2	40	2
KS82H144	20	3493	74.8	86	108	0	0	0	5	2	10	2
AGC103	35	3493	78.8	82	105	0	1	7	60	8	80	8
TX39949-2	10	3479	74.5	83	107	0	5	7	50	8	60	8
TX78A3345-V42	15	3419	74	76	112	0	1	3	20	7	60	8
OK81306	4	3414	71.3	89	112	8	0	0	0	0	15	2
KS831957	39	3401	79.3	94	108	0	1	3	10	3	20	2
NA-HW81-459	23	3367	78.8	98	110	0	0	0	0	0	5	2
XW131	29	3327	73.9	76	107	0	20	2	5	8	20	8
AGC104	36	3320	72.9	49	107	0	5	7	80	8	100	8
TX80A5172-4	16	3293	73	92	108	0	0	0	5	8	10	8
NA-HW81-157	25	3280	74.2	80	115	0	1	8	30	7	40	8
KS82H4	19	3268	74.5	84	115	0	0	0	1	3	5	3
TX80A4135-6	12	3107	70.2	85	112	0	1	7	10	8	50	8
RH845202	28	2896	72.7	94	112	0	10	7	90	8	90	8
RH830201	27	2885	73.9	91	108	0	10	7	100	8	100	8
XH183A	40	2829	76	94	109	0	10	7	80	8	80	8
HP114	31	2825	73.5	84	108	0	1	7	30	8	70	8
RH830101	26	2791	74.1	95	112	0	15	7	20	8	50	8
77DW48	32	2791	73.1	80	111	0	0	0	1	8	20	8
TX83A5930	14	2728	73.3	76	112	0	1	3	40	8	90	8
77DW19	33	2641	73.4	83	109	0	0	0	60	8	70	8
XH215C	41	2549	72	90	113	.	5	7	60	8	60	8
13996	2	2304	76.8	95	112	.	1	7	10	7	50	8
17826	3	2188	67.2	85	114	.	10	7	50	8	80	8
1442	1	1574	78.4	108	.	.	10	7	60	8	60	8

MEAN 3351
LSD(.05) 264
C.V. 4.8

¹ Three dates: 4/11, 4/24, 5/4.

BUSHLAND

(IRR.)

TEXAS

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:	: LODGING %	: SHATTER %	: LEAF RUST: SEV.:RESP: %	: 1-9:
TX81V6610	8	7077	77.4	79	123	42	2	0	.
TX81V6614	9	7045	78.4	76	122	35	0	0	.
OK83396	6	6695	74.1	80	124	18	0	1	7
OK83398	7	6127	75.9	86	125	12	2	1	7
TX78V2430-36	17	6089	74.8	88	127	43	0	0	.
AGC105	37	5986	75.9	76	123	13	0	1	8
TX81V6180	11	5886	75.9	75	121	15	2	5	8
NA-HW81-459	23	5822	77	87	124	0	3	0	.
OK81306	4	5811	72.6	88	126	30	3	1	2
XW131	29	5739	74.4	75	122	18	0	1	8
TX81V6187	18	5623	75.9	75	121	37	0	5	8
AGC102	38	5538	77	79	120	3	0	1	8
TX78A3345-V42	15	5520	74.4	75	123	12	2	10	8
TX81V6183	13	5463	75.6	76	121	35	2	10	8
KS82H4	19	5461	74.8	85	127	18	2	0	.
AGC101	34	5450	77	79	120	12	0	1	8
TX80A5172-4	16	5428	75.2	92	123	80	0	1	8
NA-HW81-297	22	5401	75.6	76	121	7	0	5	8
AGC103	35	5400	77.4	83	121	18	0	15	8
TX80A4135-6	12	5398	71.7	87	126	30	0	1	8
OK81322	5	5376	73.7	83	123	17	2	1	2
TX83A5930	14	5372	72.6	76	126	3	0	10	7
KS82H144	20	5250	76.6	86	124	8	2	0	.
78DW14	30	5163	75.6	95	124	27	12	0	.
AGC104	36	5154	72.6	48	121	0	0	50	8
HP114	31	5127	75.9	81	121	82	3	20	8
77DW48	32	5064	74.1	74	121	0	0	10	8
NA-HW81-170	24	5051	73.4	85	126	43	3	0	.
KS831957	39	5051	77.7	89	122	25	3	1	7
RH830101	26	5039	75.2	92	125	23	2	5	8
TX39949-2	10	5003	73.7	85	124	27	2	15	8
NA-HW81-283	21	4972	73.7	87	125	8	5	1	3
RH845202	28	4972	73.7	91	125	15	3	25	8
RH830201	27	4954	73.7	92	122	47	3	25	8
XH215C	41	4761	69.7	95	126	20	3	5	8
77DW19	33	4714	74.4	77	121	0	0	1	8
XH183A	40	4691	73	90	122	13	2	15	8
17826	3	4678	71.2	85	126	18	0	15	8
13996	2	4323	76.2	102	127	22	15	5	8
NA-HW81-157	25	4070	68.3	86	127	20	3	10	8
1442	1	2064	75.6	97	140	57	7	60	8

MEAN 5312
LSD(.05) 483
C.V. 5.6

BUSHLAND

(DRYL.)

TEXAS

FOUR REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:
TX81V6610	8	3381	80.2	58	117
TX78V2430-36	17	3379	77	65	120
TX78A3345-V42	15	3246	77	59	121
TX81V6187	18	3162	78.8	57	114
OK83396	6	3132	77	59	120
TX81V6183	13	3112	77.7	56	114
KS82H4	19	3090	78.4	63	121
RH830201	27	3076	76.6	63	119
TX81V6614	9	3021	79.9	53	118
XH215C	41	3012	77.4	62	121
TX83A5930	14	3004	77.7	56	121
XW131	29	2982	75.9	64	117
RH845202	28	2949	78.1	62	119
TX80A4135-6	12	2920	77.4	55	119
OK83398	7	2911	77.7	60	120
AGC105	37	2899	78.8	56	119
HP114	31	2898	78.1	66	116
AGC104	36	2871	73.4	40	115
TX80A5172-4	16	2839	76.6	56	117
TX81V6180	11	2836	75.9	53	114
NA-HW81-297	22	2820	78.4	64	117
KS82H144	20	2802	78.1	56	118
NA-HW81-459	23	2790	78.8	64	120
KS831957	39	2780	76.6	62	118
NA-HW81-283	21	2768	76.2	57	119
XH183A	40	2768	77.7	63	117
AGC101	34	2753	76.2	61	114
NA-HW81-170	24	2741	78.1	61	120
TX39949-2	10	2718	77.4	60	120
13996	2	2686	77.4	71	122
NA-HW81-157	25	2681	78.1	55	122
17826	3	2637	75.9	61	120
RH830101	26	2629	78.4	62	120
78DW14	30	2603	76.2	72	119
AGC103	35	2597	78.1	62	115
AGC102	38	2592	76.2	58	114
OK81306	4	2368	77	59	121
OK81322	5	2351	78.1	57	120
77DW48	32	2273	77	57	118
77DW19	33	2163	78.1	59	117
1442	1	2013	77.4	72	128

MEAN	2811
LSD(.05)	398
C.V.	10.1

STILLWATER
OKLAHOMA
THREE REPLICATIONS

C. I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1	: LEAF RUST: SEV.: %	: RESP: 1-9:
78DW14	30	4667	72.5	100	108	10	7
OK83398	7	4573	71.9	92	116	1	2
TX81V6614	9	4425	74.2	88	111	10	3
OK81322	5	4421	71.9	96	115	15	3
OK83396	6	4416	70.6	90	116	1	2
TX81V6187	18	4259	72.1	89	109	40	8
TX81V6180	11	4170	69.1	86	108	60	8
TX78A3345-V42	15	4116	69.8	86	113	90	8
NA-HW81-297	22	4111	72.8	93	111	60	8
NA-HW81-459	23	3995	74.9	97	115	60	8
AGC101	34	3954	72.4	93	109	.	.
OK81306	4	3909	69.8	92	115	15	3
TX81V6610	8	3887	73.7	86	111	10	3
TX81V6183	13	3842	72	89	110	90	8
XW131	29	3838	70.6	87	110	80	8
AGC102	38	3793	72.4	93	110	70	8
TX39949-2	10	3762	71.2	95	112	25	7
RH830201	27	3699	70.2	99	112	80	8
NA-HW81-283	21	3645	70.2	100	117	40	8
AGC105	37	3542	72.5	88	111	90	8
RH845202	28	3506	69.7	103	117	90	8
XH183A	40	3488	70.3	99	110	70	8
NA-HW81-170	24	3394	69.8	97	115	90	8
AGC103	35	3237	72.9	91	110	70	8
TX80A4135-6	12	2972	66.6	97	117	80	8
TX78V2430-36	17	2941	67.6	94	118	5	2
KS82H144	20	2865	70.4	97	116	30	7
RH830101	26	2842	72	101	117	90	8
KS831957	39	2820	71.5	95	111	.	.
TX80A5172-4	16	2775	70.2	101	112	60	8
NA-HW81-157	25	2645	66.7	94	120	90	8
KS82H4	19	2636	68.5	97	119	30	8
17826	3	2609	66.6	96	118	80	8
AGC104	36	2488	63	54	110	40	8
13996	2	2340	72.6	109	119	70	8
HP114	31	2304	70.7	93	112	80	8
XH215C	41	2255	67.7	94	116	70	8
77DW19	33	2156	68.5	90	112	.	.
77DW48	32	2026	68.4	89	113	70	8
TX83A5930	14	1596	64.2	81	117	90	8
1442	1	1367	72.2	113	126	90	8

MEAN	3324
LSD(.05)	823
C.V.	15.2

ALTUS
OKLAHOMA
THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM
OK81322	5	3636	68.5	87
OK83398	7	3605	69.4	85
OK83396	6	3564	68	81
78DW14	30	3564	69.8	92
AGC101	34	3542	69.4	83
KS831957	39	3479	72.9	91
NA-HW81-459	23	3430	73.7	97
TX81V6614	9	3416	71.2	82
NA-HW81-170	24	3336	69.7	91
TX81V6610	8	3295	69.9	81
OK81306	4	3264	67.5	91
AGC102	38	3170	72.2	81
AGC105	37	3138	72.9	79
XW131	29	3053	66.6	78
TX80A5172-4	16	3040	68.6	97
TX81V6180	11	2932	67.2	84
KS82H4	19	2856	72.4	90
AGC103	35	2842	71.2	80
NA-HW81-283	21	2838	69.4	87
TX78V2430-36	17	2825	69.8	86
TX81V6183	13	2699	68.5	81
NA-HW81-297	22	2677	70.6	80
KS82H144	20	2668	69.9	88
77DW19	33	2515	69	80
XH215C	41	2497	69.8	93
RH830101	26	2493	72.2	99
TX78A3345-V42	15	2484	67.6	75
RH830201	27	2466	67.1	89
77DW48	32	2434	67	79
TX80A4135-6	12	2381	66.7	86
13996	2	2372	74.2	113
TX81V6187	18	2363	68.1	82
RH845202	28	2340	69.4	88
XH183A	40	2287	68.5	90
HP114	31	2206	65.7	80
17826	3	2156	67.3	84
NA-HW81-157	25	2148	69.1	79
TX83A5930	14	1977	67.5	75
TX39949-2	10	1717	68.5	85
AGC104	36	1650	62.6	42
1442	1	776	72.9	95

MEAN	2735
LSD(.05)	375
C.V.	8.4

LAHOMA
OKLAHOMA
THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM
OK81322	5	4932	71.6	102
AGC105	37	4918	74.8	91
XW131	29	4842	72.4	90
TX81V6614	9	4802	75.1	88
AGC102	38	4694	72.5	88
AGC101	34	4685	73.4	91
OK83396	6	4645	69.4	89
OK81306	4	4595	68.4	98
NA-HW81-170	24	4564	72.8	97
OK83398	7	4479	72.2	90
AGC103	35	4470	74.8	93
KS831957	39	4461	73.7	98
TX81V6610	8	4443	75.7	86
78DW14	30	4259	74.6	100
TX81V6180	11	4232	71.9	82
TX81V6183	13	4187	74.2	88
TX78A3345-V42	15	4129	71.9	84
KS82H144	20	4111	71.6	96
NA-HW81-297	22	4111	72.9	87
RH830201	27	4013	72.8	103
77DW48	32	3954	71.3	87
NA-HW81-459	23	3901	75.5	102
NA-HW81-283	21	3856	68.9	88
TX80A5172-4	16	3833	68.6	101
TX81V6187	18	3824	72.8	89
XH183A	40	3811	70.2	98
RH845202	28	3735	72.5	100
RH830101	26	3708	74.3	109
77DW19	33	3654	70	90
KS82H4	19	3649	69.8	97
TX80A4135-6	12	3645	68.8	90
XH215C	41	3640	68.5	99
TX78V2430-36	17	3632	71	97
HP114	31	3600	71.3	89
NA-HW81-157	25	3596	70.2	89
TX83A5930	14	3493	69.1	82
17826	3	3363	66.7	96
13996	2	3336	73	118
TX39949-2	10	3318	72.2	90
AGC104	36	3250	66.3	51
1442	1	2009	73.5	111

MEAN	4009
LSD(.05)	432
C.V.	6.6

GOODWELL

OKLAHOMA

THREE REPLICATIONS

C. I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:
OK83396	6	6043	74.8	83	131
TX81V6610	8	6027	78.7	83	131
OK83398	7	5921	77.5	87	131
TX78V2430-36	17	5917	75.7	98	136
KS82H144	20	5905	77.3	89	131
OK81322	5	5860	76.4	92	132
TX81V6614	9	5721	78	83	131
NA-HW81-459	23	5676	77.8	96	131
NA-HW81-170	24	5664	74.9	95	132
KS82H4	19	5602	76.1	96	134
AGC103	35	5508	78.7	92	125
AGC102	38	5464	78.6	88	124
TX81V6187	18	5439	76.6	85	127
XW131	29	5427	74.2	83	127
OK81306	4	5423	75.9	95	133
TX81V6180	11	5390	76.9	85	126
AGC101	34	5357	78	88	124
AGC105	37	5353	77	84	129
KS831957	39	5349	78.6	102	125
RH830201	27	5345	74	101	128
TX81V6183	13	5304	76.8	84	127
78DW14	30	5263	73.9	94	130
TX80A4135-6	12	5231	72.2	92	133
RH830101	26	5219	75.2	99	130
XH183A	40	5210	74.3	96	127
NA-HW81-283	21	5190	74.3	94	132
NA-HW81-297	22	5092	76.6	87	126
NA-HW81-157	25	5076	72.6	89	133
HP114	31	5023	75.2	92	126
RH845202	28	5010	73.5	97	129
TX78A3345-V42	15	4965	73	80	131
TX80A5172-4	16	4965	75.9	90	129
77DW19	33	4896	76.5	87	127
TX83A5930	14	4892	71.1	81	132
AGC104	36	4867	72.8	58	124
77DW48	32	4835	75.9	84	128
XH215C	41	4708	72.6	103	132
TX39949-2	10	4651	73	92	131
17826	3	4369	73.1	95	132
13996	2	4271	76.8	110	134
1442	1	2609	71.7	119	140

MEAN 5220
LSD(.05) 590
C.V. 6.9

HUTCHINSON

KANSAS

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1	: LEAF RUST SEV.: %	: SEPTORIA: RESP: 1-9:	: 0-9 :
RH830201	27	4350	71.1	97	123	30	8	5
KS831957	39	4341	77.8	96	121	1	2	4
TX81V6187	18	4277	74.8	85	122	25	8	5
TX81V6180	11	4204	73	80	122	25	8	7
OK81322	5	4167	73.1	92	124	5	2	7
OK83398	7	4163	74.9	89	125	5	3	7
NA-HW81-283	21	4126	74.4	94	126	10	3	4
NA-HW81-297	22	4125	73.8	84	121	15	7	5
AGC103	35	4119	77	86	120	15	3	3
NA-HW81-170	24	4113	71.3	92	126	5	2	3
NA-HW81-459	23	4105	76.4	100	123	1	2	5
AGC102	38	4072	76.5	84	120	30	8	3
KS82H4	19	4048	74.6	95	126	5	2	8
TX81V6614	9	4037	75.2	85	125	5	2	4
RH830101	26	4030	73.4	108	125	15	8	4
XH183A	40	4016	70.3	95	123	60	8	5
XH215C	41	3995	73.7	96	125	30	8	4
AGC101	34	3919	75.7	83	120	15	3	4
TX81V6183	13	3911	72.6	82	122	20	7	4
TX81V6610	8	3906	75.3	80	124	5	2	4
XW131	29	3879	72.9	83	123	10	3	7
78DW14	30	3828	75.9	94	125	5	2	4
OK83396	6	3818	73.3	84	124	5	3	7
OK81306	4	3806	73	92	125	5	2	8
TX80A4135-6	12	3777	67.7	90	126	15	3	6
HP114	31	3772	72.4	86	122	15	7	5
TX80A5172-4	16	3722	71.1	96	124	5	7	4
RH845202	28	3709	72.1	96	124	15	8	6
KS82H144	20	3706	72	92	125	5	2	7
AGC105	37	3694	75.7	82	122	20	3	4
77DW48	32	3672	73.1	82	123	5	7	4
TX78A3345-V42	15	3655	73.7	79	125	20	7	8
TX78V2430-36	17	3604	72.8	96	128	5	2	4
NA-HW81-157	25	3600	66.6	84	126	40	8	4
77DW19	33	3461	72.4	85	123	20	8	4
TX83A5930	14	3353	68	79	126	15	7	5
13996	2	3342	74.6	121	127	20	7	6
AGC104	36	3328	67.3	49	119	30	8	9
TX39949-2	10	3166	72.5	90	125	20	8	4
1442	1	3137	71.1	131	127	30	7	4
17826	3	2735	69	90	126	25	7	8

MEAN	3824
LSD(.05)	571
C.V.	9.1

MANHATTAN

KANSAS

TWO REPLICATIONS

C. I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: LODGING %	: DAYS TO HEADING FROM 1/1:	: LEAF RUST: SEV.:RESP: 0-9:
KS82H4	19	2954	75.1	98	0	128	5
AGC102	38	2950	74	89	0	121	7
NA-HW81-170	24	2926	74	89	0	126	3
TX80A5172-4	16	2908	72.8	93	30	123	7
NA-HW81-283	21	2764	72.8	99	5	126	6
KS82H144	20	2716	74.9	97	0	125	5
RH830101	26	2698	74.2	102	10	125	7
XW131	29	2682	72.6	85	40	124	5
AGC103	35	2679	74.9	93	5	121	8
RH845202	28	2621	72.2	100	5	124	8
NA-HW81-459	23	2502	76.1	97	0	123	3
OK81322	5	2499	71.5	80	55	129	6
NA-HW81-297	22	2475	76.4	90	15	123	8
XH183A	40	2468	72.4	96	20	124	9
AGC101	34	2418	73.7	87	50	121	7
XH215C	41	2381	71.3	96	0	126	8
TX81V6610	8	2288	72	70	20	129	3
OK83398	7	2280	71.3	80	5	126	6
OK81306	4	2265	68.5	81	50	128	6
OK83396	6	2252	68.9	77	0	126	6
NA-HW81-157	25	2199	71.1	82	15	128	8
TX80A4135-6	12	2191	69	81	15	127	7
TX81V6614	9	2189	72.9	71	20	127	3
RH830201	27	2164	69.8	94	25	126	9
AGC104	36	2147	68.1	53	70	122	9
KS831957	39	2131	75.1	100	20	123	4
TX78A3345-V42	15	2125	69.1	78	15	127	7
TX78V2430-36	17	2091	71.1	87	20	129	7
13996	2	2080	70.8	97	80	129	8
TX81V6183	13	1968	71.5	72	5	128	7
78DW14	30	1927	69.9	86	30	130	4
TX81V6180	11	1916	69.9	70	5	127	9
17826	3	1870	64.4	79	55	128	9
77DW19	33	1841	69.1	76	0	129	8
TX39949-2	10	1840	68	81	55	128	8
77DW48	32	1837	69	76	10	128	8
AGC105	37	1767	69.7	70	25	127	7
HP114	31	1662	70	79	99	128	8
TX81V6187	18	1601	69	71	50	128	9
TX83A5930	14	1540	63.1	68	5	128	7
1442	1	1323	72.4	95	80	129	8

MEAN 2247
LSD(.05) 489
C.V. 13.3

HAYS

KANSAS

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1	: LEAF RUST: SEV.: % : 1-9:
TX81V6610	8	5178	82.3	85	125	0
TX81V6614	9	5154	82.9	87	125	0
NA-HW81-170	24	5003	80.3	91	128	0
OK83396	6	4985	77.6	83	126	0
KS82H144	20	4761	81.5	88	125	5
TX81V6180	11	4759	81	81	122	50
KS82H4	19	4678	79.7	93	127	0
TX81V6183	13	4665	81.1	83	122	50
NA-HW81-459	23	4660	80.7	93	126	0
XW131	29	4622	79.2	84	126	0
TX83A5930	14	4575	78.2	80	127	20
XH215C	41	4571	74.6	96	128	50
RH830201	27	4553	79.2	95	126	60
AGC101	34	4542	81	88	122	5
TX81V6187	18	4528	81.3	83	122	50
TX78V2430-36	17	4517	80.8	94	126	0
NA-HW81-157	25	4517	78.8	86	128	0
OK83398	7	4510	79.3	87	126	0
TX80A4135-6	12	4504	77.6	89	127	60
TX78A3345-V42	15	4497	80	83	128	50
TX80A5172-4	16	4490	80.2	93	123	5
RH845202	28	4463	78.7	95	127	60
OK81306	4	4443	79.3	91	128	0
OK81322	5	4405	80	90	126	0
NA-HW81-283	21	4376	79.7	90	126	0
AGC105	37	4371	81.3	84	127	5
AGC102	38	4308	80.8	85	122	0
NA-HW81-297	22	4293	81.3	85	124	40
AGC103	35	4205	81.7	88	123	40
XH183A	40	4205	79.5	95	126	50
17826	3	4201	76.1	92	126	60
RH830101	26	4170	78.4	96	127	50
KS831957	39	4156	80.6	93	126	0
TX39949-2	10	4129	80.5	85	124	60
77DW48	32	4127	78.9	90	126	20
HP114	31	4109	81.4	90	125	40
77DW19	33	4089	80.4	88	125	0
78DW14	30	4015	78.1	102	126	0
AGC104	36	3858	77.1	53	124	40
13996	2	3851	79.8	105	128	40
1442	1	2916	73.3	115	134	30

MEAN 4414
LSD(.05) 478
C.V. 6.6

COLBY
KANSAS
THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HL	: PLANT HEIGHT CM	: LODGING %	: DAYS TO HEADING FROM 1/1	: LEAF RUST: SEV.:RESP: 0-5:
XH215C	41	5187	79.2	97	1	133	3
TX81V6614	9	4908	83.3	79	0	130	2
TX81V6610	8	4816	81.1	81	1	131	2
NA-HW81-283	21	4781	78.3	84	3	129	3
OK83396	6	4684	78.8	79	1	129	4
TX81V6187	18	4630	81.3	81	0	128	3
TX78V2430-36	17	4602	81.4	86	1	132	3
OK81322	5	4534	79.7	91	1	134	2
NA-HW81-170	24	4512	80.1	86	1	133	2
OK81306	4	4484	77.9	94	1	135	2
XH183A	40	4465	79.6	89	0	130	4
HP114	31	4457	80.5	86	1	130	4
TX78A3345-V42	15	4402	80	79	0	134	4
RH830201	27	4393	77.9	91	1	131	4
TX80A4135-6	12	4363	77.3	89	1	130	4
AGC105	37	4328	80	84	0	131	3
TX81V6183	13	4323	80.8	79	0	128	3
TX83A5930	14	4304	78.9	71	0	130	3
RH845202	28	4291	79.5	91	0	130	5
TX81V6180	11	4290	80.4	79	0	127	3
KS82H4	19	4286	79.7	86	1	131	2
NA-HW81-157	25	4269	81	81	0	134	2
17826	3	4212	77.5	86	2	130	5
NA-HW81-459	23	4208	81.4	86	1	133	2
OK83398	7	4173	79.9	81	0	130	3
77DW48	32	4136	79.6	86	0	131	2
TX39949-2	10	4133	78.2	84	0	129	4
NA-HW81-297	22	4131	79.6	84	1	130	4
RH830101	26	4130	79.7	89	0	130	3
TX80A5172-4	16	4063	80	84	4	128	3
XW131	29	4054	77.8	81	1	131	4
KS831957	39	3991	80.2	86	0	130	2
13996	2	3966	79.6	97	17	131	3
AGC103	35	3935	79.2	84	0	129	4
77DW19	33	3894	79.6	86	0	131	4
AGC102	38	3753	79.3	81	1	128	3
AGC101	34	3688	79.2	79	0	129	3
KS82H144	20	3588	78.8	84	0	128	3
AGC104	36	3568	77.3	66	0	129	4
78DW14	30	3294	77.3	89	1	134	1
1442	1	2773	78.6	117	17	140	3

MEAN	4219
LSD(.05)	480
C.V.	7.0

FORT

COLLINS

COLORADO

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:
RH830201	27	7606	81.4	97	150
XH215C	41	7575	81.7	91	152
VONA	42	7517	81.1	89	150
NA-HW81-170	24	7187	81.1	79	151
TX78V2430-36	17	7134	81.4	84	151
TX81V6610	8	7116	82.9	74	151
OK83396	6	7112	79.6	79	150
TX81V6614	9	7105	82.7	76	150
TX80A4135-6	12	7077	80.8	84	151
TX78A3345-V42	15	7015	80.5	74	151
NA-HW81-157	25	6833	82.7	76	152
OK81306	4	6802	79.6	89	152
KS82H4	19	6800	81.7	89	150
TX80A5172-4	16	6695	80.1	86	147
RH845202	28	6682	81.7	91	148
TX81V6183	13	6608	81.4	79	148
HP114	31	6579	82.3	79	148
TX81V6180	11	6518	82	74	147
TX81V6187	18	6483	82.7	71	147
OK81322	5	6469	79.2	84	151
17826	3	6400	80.8	76	149
NA-HW81-283	21	6340	81.7	76	150
AGC104	36	6326	77	51	147
XH183A	40	6235	82.3	79	149
XW131	29	6203	75.5	76	150
TX83A5930	14	6188	81.4	64	151
TX39949-2	10	6120	80.8	79	150
RH830101	26	6081	82.3	97	148
AGC105	37	6011	81.7	74	149
13996	2	5981	80.5	99	150
OK83398	7	5893	79.6	74	149
NA-HW81-297	22	5766	82.9	76	148
NA-HW81-459	23	5628	82.3	84	150
AGC101	34	5616	79.6	79	146
KS82H144	20	5548	80.1	71	149
78DW14	30	5515	81.1	89	152
AGC103	35	5487	80.8	79	147
KS831957	39	5373	80.1	97	149
AGC102	38	5346	79.6	74	147
77DW19	33	5137	81.7	79	150
77DW48	32	5126	80.5	76	150
1442	1	4951	79.9	114	160

MEAN	6338
LSD(.05)	597
C.V.	5.8

JULESBURG

COLORADO

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM
NA-HW81-283	21	3217	78.6	71
RH830101	26	3097	78	84
RH845202	28	3075	75.9	76
TX81V6187	18	3055	79.6	71
RH830201	27	3017	76.5	81
TX81V6183	13	3005	78.9	71
KS82H4	19	2966	78	79
OK81322	5	2958	77.4	79
OK81306	4	2948	78	79
KS831957	39	2943	79.2	89
AGC105	37	2924	79.9	74
VONA	42	2922	78	79
XH183A	40	2907	78.3	81
XH215C	41	2905	75.9	81
HP114	31	2865	77.4	79
OK83396	6	2854	76.8	74
NA-HW81-170	24	2846	77	79
TX78A3345-V42	15	2831	78.9	71
TX81V6610	8	2816	79.6	74
NA-HW81-459	23	2811	79.9	86
TX81V6180	11	2784	78.6	69
TX80A4135-6	12	2754	77.7	76
AGC103	35	2728	79.2	76
AGC102	38	2707	79.2	74
TX83A5930	14	2704	78	69
NA-HW81-157	25	2704	77.7	69
XW131	29	2667	76.8	71
NA-HW81-297	22	2665	78.9	79
17826	3	2639	78	74
13996	2	2632	78.9	91
TX80A5172-4	16	2631	78.3	74
OK83398	7	2623	77	71
78DW14	30	2605	76.1	79
AGC101	34	2576	79.6	71
77DW48	32	2571	79.9	74
TX78V2430-36	17	2542	79.6	74
KS82H144	20	2542	80.1	71
77DW19	33	2436	77.7	71
TX81V6614	9	2420	78.9	69
TX39949-2	10	2358	74.9	71
AGC104	36	2218	77.7	51
1442	1	2013	77	109

MEAN 2749
LSD(.05) 320
C.V. 7.1

BURLINGTON
COLORADO
THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM
TX80A4135-6	12	4832	77.4	94
TX81V6614	9	4773	80.1	86
TX81V6180	11	4773	77.7	86
TX81V6183	13	4540	80.5	86
OK83396	6	4481	77.7	89
OK81322	5	4422	77.7	97
TX81V6187	18	4391	79.9	86
KS82H4	19	4290	80.1	94
TX78V2430-36	17	4210	78.6	89
TX81V6610	8	4168	80.5	86
TX80A5172-4	16	4095	78.9	97
RH845202	28	4095	76.5	91
TX39949-2	10	4093	76.1	94
XH183A	40	4077	79.6	89
17826	3	4042	78.3	94
VONA	42	4014	80.1	84
OK81306	4	3919	78.9	97
AGC101	34	3896	77	91
RH830101	26	3890	77	104
HP114	31	3887	75.2	102
NA-HW81-170	24	3886	80.1	84
NA-HW81-283	21	3864	79.2	81
RH830201	27	3855	74.9	97
NA-HW81-157	25	3844	79.2	79
NA-HW81-459	23	3768	79.9	97
NA-HW81-297	22	3738	80.8	84
XW131	29	3708	75.2	84
KS82H144	20	3697	80.8	84
TX78A3345-V42	15	3686	79.2	86
AGC105	37	3674	81.1	86
AGC103	35	3634	78.9	94
77DW48	32	3630	76.5	89
78DW14	30	3521	75.9	97
AGC102	38	3487	78	84
77DW19	33	3478	78	89
OK83398	7	3420	77	89
TX83A5930	14	3332	77	81
13996	2	3282	79.2	112
XH215C	41	3253	77.7	86
AGC104	36	3164	76.1	61
KS831957	39	3132	78.6	99
1442	1	2368	77	132

MEAN	3865
LSD(.05)	837
C.V.	13.3

AKRON

COLORADO

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM
VONA	42	4898	79.9	89
TX81V6183	13	4843	79.9	76
TX78V2430-36	17	4838	78	86
TX81V6180	11	4697	78.6	79
KS82H4	19	4697	79.2	79
TX81V6614	9	4682	79.9	74
TX81V6187	18	4679	80.1	76
XW131	29	4673	78	79
RH830201	27	4608	78.6	91
TX80A4135-6	12	4596	79.2	81
OK81322	5	4558	76.1	79
TX81V6610	8	4535	79.6	74
NA-HW81-170	24	4498	78.3	86
TX78A3345-V42	15	4490	78.3	74
17826	3	4483	79.6	76
RH845202	28	4458	79.2	89
OK83396	6	4447	77.4	69
NA-HW81-283	21	4442	78.6	79
TX80A5172-4	16	4407	80.5	81
NA-HW81-459	23	4387	80.8	91
XH215C	41	4381	77.4	91
XH183A	40	4340	78.3	81
TX83A5930	14	4198	80.1	74
HP114	31	4194	80.1	84
RH830101	26	4173	79.9	97
AGC105	37	4144	80.8	74
77DW19	33	4120	79.2	76
77DW48	32	4102	78.9	81
OK81306	4	4088	76.1	76
KS82H144	20	4078	79.2	69
78DW14	30	4070	77	94
TX39949-2	10	4066	77	81
AGC102	38	4051	78.9	74
NA-HW81-157	25	4036	80.1	81
AGC104	36	3940	77.4	51
AGC101	34	3927	78.9	81
OK83398	7	3920	79.9	71
NA-HW81-297	22	3895	79.9	76
AGC103	35	3843	79.2	81
KS831957	39	3715	79.9	91
13996	2	3285	78.9	114
1442	1	2563	77	122

MEAN	4263
LSD(.05)	571
C.V.	8.2

WALSH
COLORADO
THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HL	: PLANT HEIGHT CM
AGC102	38	2785	78.3	62
NA-HW81-283	21	2604	73	58
TX81V6183	13	2602	76.8	55
XH183A	40	2565	74.9	62
OK81306	4	2547	71.5	74
XH215C	41	2527	71.2	75
NA-HW81-297	22	2518	77.4	55
KS82H4	19	2504	77.7	64
OK83396	6	2475	73	55
NA-HW81-459	23	2450	77	67
KS831957	39	2450	78	65
RH830201	27	2436	74.6	67
78DW14	30	2377	72.8	70
TX81V6187	18	2351	73.7	57
AGC101	34	2334	78	60
VONA	42	2324	75.9	61
XW131	29	2298	74.3	60
AGC105	37	2286	78.3	61
13996	2	2262	75.2	74
TX81V6610	8	2251	77.4	55
TX81V6180	11	2222	77	53
KS82H144	20	2212	76.5	64
NA-HW81-170	24	2196	73.7	64
TX80A5172-4	16	2189	74.9	61
RH830101	26	2171	75.9	67
TX80A4135-6	12	2160	73	65
77DW48	32	2141	75.9	61
NA-HW81-157	25	2130	72.4	64
TX78V2430-36	17	2128	75.2	61
HP114	31	2112	73.7	62
OK81322	5	2094	73	64
TX81V6614	9	2048	78	56
AGC103	35	1967	78	58
TX83A5930	14	1917	74.9	60
OK83398	7	1910	72.4	57
AGC104	36	1907	75.5	46
77DW19	33	1904	77.4	60
17826	3	1893	71.9	64
TX78A3345-V42	15	1874	74.3	55
TX39949-2	10	1863	75.2	65
1442	1	1767	75.5	90
RH845202	28	1599	73.4	64

MEAN	2223
LSD(.05)	556
C.V.	15.3

MEAD

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1	: LEAF RUST SEV. %	: BIRD RESP. 1-9	: DAMAGE %
78DW14	30	4252	76.8	96	144	1	2	0
KS82H4	19	3410	77.4	89	144	5	8	0
XW131	29	3403	74.8	80	142	50	7	0
NA-HW81-283	21	3385	76.6	87	145	1	2	1
NA-HW81-170	24	3369	76.2	85	145	1	2	0
OK81322	5	3354	77.7	91	144	1	2	0
OK83398	7	3349	78.7	85	144	1	2	0
OK83396	6	3250	76.8	81	144	5	8	0
OK81306	4	3224	77.4	93	146	1	2	0
13996	2	3141	78.6	113	144	90	8	1
TX78V2430-36	17	3087	77.4	86	149	1	2	0
NA-HW81-157	25	3067	74.4	84	146	1	2	0
TX80A5172-4	16	3031	77.4	86	142	25	8	0
NA-HW81-297	22	2986	77.9	80	142	60	8	1
KS82H144	20	2977	78.7	85	145	1	2	0
RH830101	26	2930	75.9	97	142	90	8	0
XH215C	41	2883	76.1	93	143	90	8	0
XH183A	40	2881	77.4	91	142	90	8	0
77DW19	33	2748	76.1	83	141	25	7	0
77DW48	32	2656	77.4	80	143	50	7	0
RH845202	28	2609	74.6	94	142	90	8	1
TX81V6610	8	2585	80	77	144	1	2	3
NA-HW81-459	23	2556	78.8	93	144	1	2	0
TX80A4135-6	12	2524	72.2	85	145	50	8	0
TX81V6614	9	2508	80.9	73	145	5	8	1
TX78A3345-V42	15	2452	73.5	75	143	80	7	1
KS831957	39	2340	80	92	139	1	2	13
RH830201	27	2325	74.9	94	142	90	8	6
HP114	31	2266	78	83	143	50	8	0
TX39949-2	10	2221	75.5	83	145	90	8	0
AGC105	37	2201	80	78	142	70	8	0
17826	3	2150	73.3	85	143	90	8	0
TX81V6183	13	2132	77.4	76	144	90	8	1
TX83A5930	14	2015	72.9	73	146	40	8	0
AGC103	35	1957	79.3	83	140	70	8	14
TX81V6187	18	1921	78.7	73	143	90	8	3
TX81V6180	11	1881	76.1	71	143	70	8	4
1442	1	1793	74.8	108	151	80	8	1
AGC102	38	1639	80.6	78	137	50	8	25
AGC101	34	1542	79.3	80	139	50	7	20
AGC104	36	1045	72.2	50	137	50	7	15

MEAN	2635
LSD(.05)	855
C.V.	19.9

CLAY

CENTER

NEBRASKA

THREE REPLICATIONS

C. I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:	: WINTER SURVIVAL 0-9
OK81306	4	4177	80.5	82	144	9
OK81322	5	3966	81	82	144	9
KS82H4	19	3940	81.3	79	143	9
NA-HW81-459	23	3746	81.8	83	142	9
KS831957	39	3727	81	81	140	9
XH215C	41	3584	79.5	89	144	9
TX81V6610	8	3551	82.6	68	142	9
TX81V6614	9	3505	82.7	68	143	9
NA-HW81-283	21	3287	77.3	75	144	9
NA-HW81-157	25	3227	79.5	73	144	9
TX78V2430-36	17	3092	81.1	80	147	8
KS82H144	20	3083	80.4	77	142	9
OK83396	6	3011	76.5	67	143	9
RH830101	26	2891	79.2	82	143	8
RH830201	27	2872	77.4	79	142	9
NA-HW81-297	22	2806	78.9	73	142	9
13996	2	2800	79.9	97	144	9
1442	1	2796	77.9	115	149	9
TX80A4135-6	12	2755	75.6	75	142	8
NA-HW81-170	24	2744	78.6	75	144	9
77DW48	32	2700	78	74	142	9
AGC103	35	2643	78.6	75	139	9
XW131	29	2551	76.2	72	143	8
OK83398	7	2549	78.7	69	143	7
RH845202	28	2549	77.7	81	144	8
77DW19	33	2505	78.7	73	142	9
AGC102	38	2496	78.7	66	139	9
HP114	31	2467	78.8	75	141	9
TX81V6180	11	2416	78	64	140	8
TX81V6187	18	2323	78	67	141	8
XH183A	40	2319	78.2	77	143	8
TX78A3345-V42	15	2307	75.6	65	144	9
AGC101	34	2300	77.1	68	139	8
AGC105	37	2231	78.4	69	142	8
78DW14	30	2196	76.5	80	145	8
TX81V6183	13	2068	77.5	64	142	8
17826	3	1979	76.4	72	143	8
TX80A5172-4	16	1879	76.1	75	142	7
TX39949-2	10	1767	76	74	144	7
TX83A5930	14	1491	73.3	65	145	7
AGC104	36	1426	72.4	44	139	8

MEAN	2749
LSD(.05)	608
C.V.	13.5

SIDNEY

NEBRASKA

THREE REPLICATIONS

C. I. OR SEL. NO.	: : NO. :	: YIELD : : KG/HA :	: VOLUME : : WEIGHT : : KG/HL :	: HAIL : : DAMAGE : : % :
OK81306	4	2437	78.8	10
XH215C	41	2383	79.9	10
OK83396	6	2291	78.8	5
OK81322	5	2230	79.5	5
TX80A4135-6	12	2168	79.6	5
OK83398	7	2127	79.1	5
NA-HW81-459	23	2078	80.5	5
RH830201	27	2050	80.5	5
17826	3	2013	80.4	20
KS82H4	19	1992	79.7	10
NA-HW81-297	22	1974	81.4	5
XW131	29	1957	77.4	5
NA-HW81-283	21	1949	79.9	5
TX78A3345-V42	15	1897	78.7	20
RH845202	28	1880	80.4	5
NA-HW81-170	24	1829	79.1	5
TX81V6610	8	1825	81.8	5
78DW14	30	1809	76.8	10
TX78V2430-36	17	1794	79.3	20
AGC105	37	1773	80	20
TX81V6187	18	1760	80.9	10
XH183A	40	1760	80	10
NA-HW81-157	25	1759	81	5
77DW19	33	1758	79.7	5
TX81V6614	9	1750	81.9	5
77DW48	32	1738	78.9	10
RH830101	26	1722	80.2	10
TX81V6180	11	1714	80.9	5
TX81V6183	13	1667	81	10
13996	2	1666	80.2	20
AGC103	35	1637	79.6	20
1442	1	1636	79.9	20
TX80A5172-4	16	1608	79.9	10
TX39949-2	10	1581	79.7	10
AGC102	38	1565	79.9	20
TX83A5930	14	1514	78.6	10
KS82H144	20	1470	81.3	5
AGC104	36	1467	77.9	5
KS831957	39	1451	79.7	10
AGC101	34	1424	79.1	10
HP114	31	1251	80.9	10

MEAN	1813
LSD(.05)	418
C.V.	14.1

ALLIANCE

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:
TX80A4135-6	12	3749	79.9	63	146
RH830201	27	3699	79.3	67	149
TX81V6187	18	3403	80.9	64	148
XH215C	41	3363	77.8	69	151
TX78A3345-V42	15	3355	78.8	60	151
TX39949-2	10	3351	78.9	69	148
RH845202	28	3281	79.1	65	149
TX81V6183	13	3258	81.4	63	146
TX78V2430-36	17	3248	79.7	64	149
NA-HW81-170	24	3156	78.8	62	152
KS82H4	19	3148	79.9	64	146
TX81V6614	9	3137	81.3	64	149
OK83396	6	3124	77.1	60	150
NA-HW81-297	22	3103	80.6	61	147
77DW19	33	3084	78.7	65	147
NA-HW81-157	25	3070	79.2	59	149
TX81V6610	8	3059	81.8	60	150
OK81306	4	3039	76.2	69	153
XW131	29	3037	77.4	64	150
13996	2	3004	78.9	76	147
OK81322	5	3002	77.7	67	152
TX80A5172-4	16	2999	79.3	66	148
TX81V6180	11	2984	80.4	58	147
NA-HW81-459	23	2963	79.9	66	148
OK83398	7	2913	77	60	146
78DW14	30	2892	74.7	72	152
AGC105	37	2825	77.8	64	150
17826	3	2813	77.5	59	147
KS831957	39	2801	78.7	70	147
TX83A5930	14	2800	79.5	58	148
HP114	31	2795	78.8	66	147
RH830101	26	2794	78.9	68	147
AGC103	35	2791	78	63	146
NA-HW81-283	21	2739	77.5	63	147
AGC101	34	2680	77.7	68	146
1442	1	2675	76.9	83	153
KS82H144	20	2668	80.4	64	147
XH183A	40	2653	77.8	68	147
77DW48	32	2649	77.3	59	148
AGC102	38	2507	77.5	58	147
AGC104	36	2125	76.6	38	147

MEAN	2994
LSD(.05)	570
C.V.	11.7

HIGHMORE

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	YIELD : KG/HA :	VOLUME : WEIGHT : : KG/HL :	PLANT : HEIGHT : : CM :	DAYS TO : WINTER : : HEADING : SURVIVAL : : FROM 1/1: % :
XH215C	41	2331	76.1	50	144 97
TX80A4135-6	12	2130	76.1	46	145 33
17826	3	2062	77.4	45	145 70
1442	1	1995	38.7	60	148 67
NA-HW81-157	25	1905	73.5	40	146 60
NA-HW81-170	24	1771	74.8	41	144 53
RH830201	27	1771	74.8	41	144 57
TX81V6183	13	1726	77.4	37	144 47
RH830101	26	1704	76.1	43	145 73
OK81306	4	1681	74.8	44	146 40
TX78A3345-V42	15	1636	77.4	46	145 57
XH183A	40	1569	73.5	44	144 63
13996	2	1547	77.4	48	145 60
RH845202	28	1547	77.4	42	145 37
NA-HW81-459	23	1524	76.1	43	145 40
TX81V6610	8	1457	77.4	39	146 23
OK81322	5	1412	74.8	44	145 28
77DW19	33	1390	74.8	41	144 67
OK83398	7	1367	73.5	44	145 30
XW131	29	1367	73.5	41	145 12
TX81V6614	9	1345	77.4	46	146 20
NA-HW81-283	21	1323	74.8	37	145 45
OK83396	6	1300	73.5	44	145 35
KS82H4	19	1278	76.1	45	144 73
HP114	31	1233	74.8	41	145 15
77DW48	32	1166	72.2	41	144 13
AGC102	38	1121	73.5	41	144 47
KS831957	39	1098	73.5	41	144 77
TX81V6187	18	1054	76.1	37	144 30
AGC103	35	1054	73.5	40	144 40
NA-HW81-297	22	1031	74.8	39	144 42
TX81V6180	11	986	76.1	39	145 7
AGC101	34	986	73.5	43	144 37
TX39949-2	10	852	71	50	147 3
78DW14	30	852	69.7	54	145 5
AGC105	37	852	74.8	37	145 23
AGC104	36	695	73.5	34	146 28
KS82H144	20	583	74.8	41	146 13
TX80A5172-4	16	471	72.2	37	146 3
TX83A5930	14	359	68.4	50	146 0
TX78V2430-36	17	45	.	37	144 0

MEAN	1308
LSD(.05)	531
C.V.	24.9

BROOKINGS

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:
OK81306	4	7577	77.4	75	127
OK81322	5	7487	74.8	75	126
NA-HW81-170	24	6860	78.7	73	125
NA-HW81-283	21	6747	77.4	70	124
NA-HW81-459	23	6747	78.7	69	124
KS82H4	19	6546	80	74	125
NA-HW81-157	25	6277	76.1	68	126
TX81V6610	8	6232	73.5	61	125
KS82H144	20	6232	80	69	125
RH845202	28	6232	77.4	78	124
KS831957	39	6232	80	79	124
XH215C	41	6142	76.1	77	125
RH830201	27	5985	74.8	75	124
RH830101	26	5918	77.4	78	123
77DW48	32	5918	77.4	69	124
XW131	29	5896	77.4	68	124
AGC103	35	5896	78.7	73	123
NA-HW81-297	22	5873	78.7	67	123
17826	3	5761	74.8	76	123
77DW19	33	5761	78.7	74	124
XH183A	40	5649	76.1	71	123
1442	1	5604	73.5	87	132
TX78V2430-36	17	5604	68.4	71	126
AGC105	37	5402	76.1	64	124
TX80A4135-6	12	5380	73.5	69	124
OK83396	6	5313	76.1	67	124
AGC102	38	5313	77.4	66	123
TX81V6187	18	5268	78.7	60	123
78DW14	30	5268	72.2	75	126
OK83398	7	5246	77.4	68	124
TX81V6183	13	5178	74.8	64	123
TX80A5172-4	16	5156	77.4	73	123
TX81V6614	9	5066	77.4	64	126
13996	2	4932	73.5	88	125
TX78A3345-V42	15	4887	74.8	60	125
HP114	31	4887	77.4	69	124
TX81V6180	11	4775	77.4	62	123
AGC101	34	4708	78.7	63	123
TX39949-2	10	3990	68.4	67	125
AGC104	36	3564	68.4	42	123
TX83A5930	14	3318	71	69	126

MEAN	5630
LSD(.05)	1330
C.V.	14.5

PRESHO

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:	: HAIL DAMAGE %
TX81V6610	8	2780	80	51	146	13
OK81322	5	2757	77.4	52	145	23
OK81306	4	2309	76.1	60	146	17
TX81V6614	9	2242	76.1	49	146	5
TX81V6183	13	2219	77.4	47	145	18
XH215C	41	2219	72.2	52	146	8
TX80A4135-6	12	2130	71	47	145	5
NA-HW81-459	23	2130	74.8	50	145	28
TX81V6180	11	2107	77.4	47	145	33
TX78A3345-V42	15	2062	74.8	47	146	15
TX81V6187	18	2062	78.7	47	145	17
NA-HW81-157	25	1995	74.8	46	147	23
TX39949-2	10	1905	68.4	51	147	10
13996	2	1816	74.8	58	144	28
OK83396	6	1771	73.5	48	144	22
RH845202	28	1771	72.2	50	144	18
17826	3	1749	67.1	49	145	17
RH830101	26	1704	76.1	52	144	17
XH183A	40	1681	71	51	145	5
NA-HW81-283	21	1659	71	49	145	22
KS831957	39	1614	74.8	47	144	43
NA-HW81-297	22	1592	72.2	48	144	40
OK83398	7	1547	69.7	48	144	30
TX78V2430-36	17	1480	64.5	44	147	20
78DW14	30	1480	68.4	49	147	10
RH830201	27	1457	73.5	51	145	28
1442	1	1435	72.2	62	148	5
TX80A5172-4	16	1435	87.7	47	146	12
XW131	29	1435	69.7	47	145	13
77DW48	32	1412	68.4	47	146	5
KS82H144	20	1390	73.5	50	144	17
NA-HW81-170	24	1367	71	49	146	23
HP114	31	1367	73.5	47	144	5
AGC102	38	1367	68.4	47	144	30
AGC101	34	1233	72.2	47	145	35
AGC103	35	1233	71	47	144	32
KS82H4	19	1166	73.5	48	145	22
77DW19	33	1166	67.1	49	146	27
AGC105	37	1031	64.5	47	144	13
TX83A5930	14	897	71	47	145	3
AGC104	36	897	69.7	30	146	10

MEAN	1685
LSD(.05)	.687
C.V.	25.0

COLUMBIA
MISSOURI
FOUR REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HL	: PLANT HEIGHT CM	: LODGING 0-9	: DAYS TO HEADING FROM 1/1:	: WINTER SURVIVAL 0-9	: LEAF RUST: SEV.: %	: SEPTORIA: RESP: 1-9:	: 0-9 :
OK81322	5	4377	75.6	86	8	129	5	20		4.5
TX81V6187	18	4294	74.6	80	5	127	4	8		5.5
77DW19	33	4198	76.5	86	3	126	4	7		6.5
TX80A5172-4	16	3809	72.5	91	9	126	3	44		5.5
KS82H4	19	3704	75.5	91	1	130	3	4		6
NA-HW81-157	25	3696	72.9	80	2	131	4	24		5.5
NA-HW81-459	23	3689	75.3	78	5	127	3	25		5.5
OK81306	4	3649	71.7	90	7	128	3	35		6.5
77DW48	32	3641	74	83	3	126	4	22		6.5
TX78A3345-V42	15	3635	73.8	78	4	127	4	30		5.5
XH183A	40	3614	73	87	6	128	4	70		6
OK83396	6	3612	71.7	84	4	129	3	32		5.5
NA-HW81-283	21	3611	70.8	84	8	130	4	14		5.5
TX80A4135-6	12	3529	69.5	88	8	130	4	6		4.5
13996	2	3495	71.6	90	7	130	4	24		6
TX39949-2	10	3454	65.4	84	5	131	4	21		6.5
AGC105	37	3436	72.2	72	3	127	3	38		7
XH215C	41	3397	66.2	93	3	130	5	17		5
TX81V6610	8	3389	70.7	81	7	130	6	35		4.5
NA-HW81-297	22	3364	69.1	85	8	129	3	18		6
RH830201	27	3345	75.1	95	8	126	4	60		6.5
AGC102	38	3344	74.2	84	4	123	3	57		6.5
RH830101	26	3326	75.1	92	8	131	4	27		5.5
AGC101	34	3313	72.5	78	4	126	5	25		6
OK83398	7	3309	73.3	91	7	130	1	15		5
RH845202	28	3189	69.7	86	7	130	4	65		5
HP114	31	3132	68.8	83	8	126	4	34		6.5
TX81V6183	13	3117	71.1	88	8	126	5	36		7
XW131	29	3097	71.1	76	7	127	3	20		6
TX83A5930	14	3094	66.8	87	7	129	5	9		6
AGC103	35	3066	69.9	82	2	126	3	60		7
17826	3	3060	70	86	4	129	4	48		6
TX81V6614	9	2911	68.4	81	9	128	5	1		6.5
KS831957	39	2903	69.1	84	7	127	4	29		7
78DW14	30	2839	71	90	6	128	4	7		5
AGC104	36	2812	69.8	49	2	125	6	9		8
TX81V6180	11	2722	69.9	75	6	127	4	47		5
TX78V2430-36	17	2695	71.2	92	9	131	6	1		5.5
KS82H144	20	2666	73.5	95	9	134	4	27		5
NA-HW81-170	24	2590	69.9	81	3	128	3	39		6
1442	1	1590	67.6	99	9	132	4	33		6

MEAN	3310
LSD(.05)	1068
C.V.	19.8

AMES

IOWA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: LODGING %	: DAYS TO FROM 1/1:	: DAYS TO FROM 1/1:	: WINTER SURVIVAL %
OK83396	6	6104	79.2	83	1	140	183	95
NA-HW81-170	24	6008	79.9	91	2	142	182	96
OK81322	5	5896	80.2	94	2	142	182	99
KS82H4	19	5853	80	92	4	142	181	97
TX81V6610	8	5705	81.1	84	8	142	182	93
TX80A5172-4	16	5577	79.9	93	42	139	181	91
OK83398	7	5537	78.8	84	5	141	183	90
AGC105	37	5454	79.3	81	5	138	179	96
XW131	29	5295	77.8	83	29	139	181	97
OK81306	4	5243	79.5	91	4	143	183	94
XH215C	41	5154	79.1	99	1	143	184	100
KS831957	39	5136	80.8	97	9	137	180	99
TX81V6614	9	5118	81	80	10	143	183	90
RH845202	28	5113	77	98	8	140	182	95
RH830101	26	5109	78.6	102	17	140	182	96
NA-HW81-297	22	5098	78.9	85	6	138	180	95
AGC102	38	5015	79.7	86	5	136	180	99
RH830201	27	5010	77.1	101	7	140	182	93
NA-HW81-157	25	5008	78.7	82	0	144	185	95
NA-HW81-283	21	4963	78.4	92	7	144	184	92
TX80A4135-6	12	4882	75.5	91	2	143	183	90
NA-HW81-459	23	4766	80.2	92	8	141	182	92
XH183A	40	4757	78.9	96	2	139	182	98
TX78A3345-V42	15	4656	77.7	81	3	141	181	95
13996	2	4598	79.2	108	21	143	182	98
TX81V6180	11	4551	78.8	79	4	139	181	80
77DW48	32	4533	78.6	86	2	139	180	92
AGC101	34	4427	79.5	83	6	136	179	98
77DW19	33	4358	79.7	85	6	138	181	93
TX81V6187	18	4329	79.2	80	7	140	182	82
TX81V6183	13	4118	78.8	83	11	140	182	73
1442	1	4107	77.8	121	53	148	185	99
17826	3	4084	74.4	91	6	140	182	95
HP114	31	4051	79.1	83	7	139	184	59
KS82H144	20	3925	80.1	86	9	144	183	44
TX39949-2	10	3804	76.6	89	7	141	185	82
AGC103	35	3425	79.6	86	8	137	181	70
AGC104	36	2291	72.1	52	6	137	176	82
78DW14	30	2127	74	79	5	145	187	15
TX83A5930	14	1610	73.7	71	3	145	186	24
TX78V2430-36	17	1056	.	81	10	144	189	5

MEAN 4582
LSD(.05) 1102
C.V. 14.5

URBANA
ILLINOIS
THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:	: WINTER SURVIVAL %
TX81V6180	11	5693	77.8	86	127	100
NA-HW81-157	25	5688	80.1	89	131	100
TX81V6187	18	5443	77.5	88	128	100
XW131	29	5408	77.4	83	129	100
RH830201	27	5255	75.9	97	129	100
OK83396	6	5226	75.6	86	130	100
TX81V6183	13	5215	75.2	90	127	100
RH845202	28	5024	76.3	101	130	100
OK81306	4	4930	73.3	94	131	100
NA-HW81-297	22	4903	82	90	127	100
NA-HW81-283	21	4868	75.2	94	132	100
TX81V6610	8	4860	76.3	86	129	95
TX80A4135-6	12	4841	76.9	92	131	100
RH830101	26	4831	79.4	101	129	100
OK83398	7	4801	74.8	90	130	100
KS82H4	19	4772	78.3	98	131	100
OK81322	5	4763	73.8	95	130	100
77DW48	32	4680	76	87	129	97
TX78A3345-V42	15	4661	74.2	87	130	100
TX80A5172-4	16	4624	77.8	93	128	100
XH215C	41	4554	75.9	99	130	100
AGC103	35	4551	78.2	89	127	100
77DW19	33	4519	78.5	89	128	100
NA-HW81-459	23	4476	79.4	101	128	100
NA-HW81-170	24	4444	76.8	92	129	100
TX81V6614	9	4406	78.7	84	128	90
HP114	31	4328	75.3	93	128	100
TX39949-2	10	4299	76.3	91	130	85
AGC105	37	4261	75.2	89	129	100
AGC101	34	4250	76.4	94	127	100
XH183A	40	4194	76	95	128	100
AGC102	38	4146	74.5	89	127	100
78DW14	30	3767	76.3	94	133	40
AGC104	36	3724	69.6	58	129	100
17826	3	3619	78.7	104	132	100
KS82H144	20	3509	75.5	93	131	70
TX83A5930	14	3503	71.7	79	132	97
13996	2	3385	74.5	97	130	100
TX78V2430-36	17	3240	78.2	83	136	47
KS831957	39	3170	75.4	89	128	100
1442	1	2859	76.2	97	142	100

MEAN	4480
LSD(.05)	759
C.V.	10.4

ABERDEEN

IDAHO

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:	: WINTER SURVIVAL %	: WINTER ¹ SURVIVAL %
XH215C	41	8155	79.7	80	164	96	58
OK81306	4	7247	77.8	79	165	92	20
RH830201	27	7129	79.3	76	159	90	63
KS82H4	19	7005	80	70	159	90	65
17826	3	6992	78.4	66	156	89	86
TX80A4135-6	12	6904	78.7	71	160	87	42
TX83A5930	14	6857	78.7	62	158	91	67
XW131	29	6700	76.8	69	158	77	48
NA-HW81-170	24	6691	78	69	162	78	57
XH183A	40	6667	78.7	71	158	93	52
TX78V2430-36	17	6656	78	72	162	87	30
NA-HW81-297	22	6633	79.1	69	158	77	53
OK83396	6	6615	77.8	65	162	88	37
KS831957	39	6409	79.1	80	158	94	48
TX39949-2	10	6387	77.8	66	161	85	33
NA-HW81-157	25	6353	78.7	69	163	75	58
HP114	31	6230	80.4	75	157	93	53
RH845202	28	6203	78.4	74	159	77	47
13996	2	6178	77.8	105	163	93	55
OK83398	7	6158	78.4	67	158	94	52
AGC103	35	6149	78	72	159	95	23
TX81V6180	11	6046	80	64	159	87	57
TX81V6614	9	5945	80.6	64	161	88	20
78DW14	30	5938	78	79	162	78	10
OK81322	5	5914	78.4	67	164	88	23
AGC105	37	5909	79.1	67	160	92	35
NA-HW81-459	23	5857	80	80	160	67	40
TX81V6610	8	5849	80	66	161	78	23
77DW48	32	5837	77.8	72	159	98	22
TX81V6187	18	5808	80	67	157	93	61
TX80A5172-4	16	5734	79.1	72	158	89	67
TX81V6183	13	5730	80.4	66	158	96	76
KS82H144	20	5730	79.1	64	158	93	68
TX78A3345-V42	15	5703	77.4	71	161	85	42
NA-HW81-283	21	5701	77.8	70	157	79	63
77DW19	33	5698	78.4	71	157	95	33
RH830101	26	5517	79.3	76	157	91	53
AGC101	34	5138	76.5	66	157	93	38
1442	1	4721	75.9	104	169	85	58
AGC102	38	4672	76.1	69	156	90	43
AGC104	36	3315	74.8	46	156	92	43

MEAN 6124
LSD(.05) 1147
C.V. 11.5

¹From Tetonia, Idaho Nursery.

LIND
WASHINGTON
THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:
NA-HW81-283	21	2352	80	55	147
13996	2	2188	80.6	68	146
17826	3	2174	80.9	69	146
NA-HW81-170	24	2002	80.4	54	147
XH215C	41	2000	79.7	68	147
NA-HW81-157	25	1928	80.8	52	146
1442	1	1914	79.5	84	151
HP114	31	1885	79.7	58	146
TX81V6610	8	1883	82.4	52	147
XH183A	40	1874	79.7	60	145
TX80A4135-6	12	1825	79.3	55	147
TX81V6183	13	1802	81.1	52	145
OK81306	4	1793	79.7	64	148
NA-HW81-459	23	1740	81.7	64	146
TX78A3345-V42	15	1690	79.9	56	147
OK81322	5	1672	80.8	59	147
77DW48	32	1657	78.9	53	146
TX80A5172-4	16	1652	81.1	59	146
XW131	29	1641	80	54	147
AGC102	38	1638	79.7	53	145
RH830201	27	1625	81.5	63	145
KS82H4	19	1618	81.3	56	146
AGC103	35	1612	80	58	145
RH845202	28	1611	80.4	61	145
TX39949-2	10	1607	79.1	59	147
KS831957	39	1605	80	61	145
OK83396	6	1594	79.9	56	147
77DW19	33	1592	79.3	58	146
AGC105	37	1576	81	58	146
NA-HW81-297	22	1569	81.4	54	145
AGC101	34	1553	80.1	57	145
KS82H144	20	1493	81.5	54	147
TX83A5930	14	1441	81.4	54	146
78DW14	30	1385	76.8	72	149
OK83398	7	1278	80.4	53	147
RH830101	26	1278	80.5	58	145
TX78V2430-36	17	1271	80.9	59	146
TX81V6180	11	1195	81.1	51	145
TX81V6187	18	1170	82.9	52	146
TX81V6614	9	1101	82.6	52	146
AGC104	36	588	78.7	36	145

MEAN	1636
LSD(.05)	575
C.V.	21.4

Table 2. Summary of mean yields (kg/ha) of 41 wheats grown in the 1985 Southern Regional Performance Nursery at 32 locations with state means and ranks.

VARIETY OR PEDIGREE	C.I. OR SEL. NO.	ENTRY: NO.	MEAD* NEBRASKA	CLAY CENTER NEBRASKA	SIDNEY NEBRASKA	ALLIANCE NEBRASKA	NEBRASKA STATE MEAN
AURORA/2*TAM W-101	OK83396	6	3250 8	3011 13	2291 3	3124 13	2809 9
TX71A1039-V1*3/AMIGO	TX81V6610	8	2585 22	3551 7	1825 17	3059 17	2812 8
PAYNE//TAM W-101/AMIGO	OK81322	5	3354 6	3966 2	2230 4	3002 21	3066 3
TX71A1039-V1*3/AMIGO	TX81V6614	9	2508 25	3505 8	1750 25	3137 12	2797 10
PAYNE//TAM W-101/AMIGO	OK81306	4	3224 9	4177 1	2437 1	3039 18	3218 1
PLAINSMAN V/3/2*LARNED/EAGLE//SAGE	KS82H4	19	3410 2	3940 3	1992 10	3148 11	3027 4
OK11252A/HW76-1226	NA-HW81-170	24	3369 5	2744 20	1829 16	3156 10	2576 16
WINTER WHEAT HYBRID	RH830201	27	2325 28	2872 15	2050 8	3699 2	2874 7
TAM W-101/W558 (W8460D)	XW131	29	3403 3	2551 23	1957 12	3037 19	2515 20
TX71A1039-V1*3/AMIGO	TX81V6180	11	1881 37	2416 29	1714 28	2984 23	2371 26
BULK SELECTION	NA-HW81-283	21	3385 4	3287 9	1949 13	2739 34	2658 14
TX71A1039-V1*3/AMIGO	TX81V6187	18	1921 36	2323 30	1760 21	3403 3	2495 21
TAM-105/TAM W-101	TX80A4135-6	12	2524 24	2755 19	2168 5	3749 1	2891 6
BULK SELECTION	NA-HW81-459	23	2556 23	3746 4	2078 7	2963 24	2929 5
AURORA/2*TAM W-101	OK83398	7	3349 7	2549 25	2127 6	2913 25	2530 18
WINTER WHEAT HYBRID	XH215C	41	2883 17	3584 6	2383 2	3363 4	3110 2
TX71A1039-V1*3/AMIGO	TX81V6183	13	2132 33	2068 36	1667 29	3258 8	2331 30
BULK SELECTION	NA-HW81-297	22	2986 14	2806 16	1974 11	3103 14	2628 15
EXPERIMENTAL LINE	AGC105	37	2201 31	2231 34	1773 20	2825 27	2276 32
MV69-12/TAM W-103	TX78A3345-V42	15	2452 26	2307 32	1897 14	3355 5	2520 19
WINTER WHEAT HYBRID	RH845202	28	2609 21	2549 24	1880 15	3281 7	2570 17
OK11252A/HW76-1226	NA-HW81-157	25	3067 12	3227 10	1759 23	3070 16	2686 12
TAM W-101/NEWTON	TX80A5172-4	16	3031 13	1879 38	1608 33	2999 22	2162 38
SHORT WHEAT/SCOUT (TX69A509-2)//FOX	TX78V2430-36	17	3087 11	3092 11	1794 19	3248 9	2711 11
WINTER WHEAT HYBRID	XH183A	40	2881 18	2319 31	1760 21	2653 38	2244 34
PLAINSMAN V/ODESSKAYA 51	KS831957	39	2340 27	3727 5	1451 39	2801 29	2660 13
WINTER WHEAT HYBRID	RH830101	26	2930 16	2891 14	1722 27	2794 32	2469 23
EXPERIMENTAL LINE	AGC102	38	1639 39	2496 27	1565 35	2507 40	2189 36
KS73H530//SAGE/ARTHUR	KS82H144	20	2977 15	3083 12	1470 37	2668 37	2407 25
EXPERIMENTAL LINE	AGC101	34	1542 40	2300 33	1424 40	2680 35	2135 39
EXPERIMENTAL LINE	AGC103	35	1957 35	2643 22	1637 31	2791 33	2357 29
MEXICAN BULK HYBRID SELECTION	78DW14	30	4252 1	2196 35	1809 18	2892 26	2299 31
MEXICAN BULK HYBRID SELECTION	HP114	31	2266 29	2467 28	1251 41	2795 31	2171 37
AMIGO/3/2*TX71A937 SDY SIB/TCS//CTK	TX39949-2	10	2221 30	1767 39	1581 34	3351 6	2233 35
BULK POPULATION	77DW48	32	2656 20	2700 21	1738 26	2649 39	2362 28
BULK POPULATION	77DW19	33	2748 19	2505 26	1758 24	3084 15	2449 24
TAM 105	17826	3	2150 32	1979 37	2013 9	2813 28	2268 33
SCOUT 66	13996	2	3141 10	2800 17	1666 30	3004 20	2490 22
TAM W-103//SHORT WHEAT/SCOUT (TX69A509-1)	TX83A5930	14	2015 34	1491 40	1514 36	2800 30	1935 40
EXPERIMENTAL LINE	AGC104	36	1045 41	1426 41	1467 38	2125 41	1673 41
KHARKOF	1442	1	1793 38	2796 18	1636 32	2675 36	2369 27
MEAN			2635	2749	1813	2994	2519
LSD(.05)			855	608	418	570	620
C.V.			19.9	13.5	14.1	11.7	13.1

Table 2. Continued.

C.I. OR SEL. NO.	: ENTRY: : NO. :	DALLAS : TEXAS :	CHILLI- : COTHE : TEXAS :	BUSHLAND : (IRR.) : TEXAS :	BUSHLAND : (DRYL.) : TEXAS :	TEXAS : STATE MEAN :	COLUMBIA : MISSOURI :
OK83396	6	3405 12	4073 6	6695 3	3132 5	4326 3	3612 12
TX81V6610	8	3676 6	4214 5	7077 1	3381 1	4587 2	3389 19
OK81322	5	4270 2	3638 13	5376 21	2351 38	3909 12	4377 1
TX81V6614	9	4436 1	4261 3	7045 2	3021 9	4691 1	2911 33
OK81306	4	4140 3	3414 21	5811 9	2368 37	3933 11	3649 8
KS82H4	19	2730 28	3268 28	5461 15	3090 7	3637 22	3704 5
NA-HW81-170	24	3141 18	3793 10	5051 28	2741 28	3681 21	2590 40
RH830201	27	2813 26	2885 31	4954 34	3076 8	3432 26	3345 21
XW131	29	3132 19	3327 24	5739 10	2982 12	3795 15	3097 29
TX81V6180	11	3410 11	3795 9	5886 7	2836 20	3982 9	2722 37
NA-HW81-283	21	2271 34	3519 16	4972 32	2768 25	3383 28	3611 13
TX81V6187	18	3069 21	4273 2	5623 11	3162 4	4031 7	4294 2
TX80A4135-6	12	2022 38	3107 29	5398 20	2920 14	3362 30	3529 14
NA-HW81-459	23	3636 7	3367 23	5822 8	2790 23	3904 13	3689 7
OK83398	7	3389 13	3714 11	6127 4	2911 15	4036 6	3309 25
XH215C	41	2710 29	2549 38	4761 35	3012 10	3258 33	3397 18
TX81V6183	13	3015 22	4246 4	5463 14	3112 6	3959 10	3117 28
NA-HW81-297	22	3345 14	3542 15	5401 18	2820 21	3777 16	3364 20
AGC105	37	3338 15	4035 7	5986 6	2899 16	4065 5	3436 17
TX78A3345-V42	15	2795 27	3419 20	5520 13	3246 3	3745 17	3635 10
RH845202	28	2143 36	2896 30	4972 32	2949 13	3240 35	3189 26
NA-HW81-157	25	2313 32	3280 27	4070 40	2681 31	3086 38	3696 6
TX80A5172-4	16	2932 24	3293 26	5428 17	2839 19	3623 23	3809 4
TX78V2430-36	17	2883 25	3927 8	6089 5	3379 2	4070 4	2695 38
XH183A	40	3002 23	2829 32	4691 37	2768 26	3322 32	3614 11
KS831957	39	3555 8	3401 22	5051 28	2780 24	3697 20	2903 34
RH830101	26	2130 37	2791 34	5039 30	2629 33	3147 36	3326 23
AGC102	38	3865 4	3620 14	5538 12	2592 36	3904 14	3344 22
KS82H144	20	2352 31	3493 17	5250 23	2802 22	3474 25	2666 39
AGC101	34	3082 20	3658 12	5450 16	2753 27	3736 18	3313 24
AGC103	35	3302 16	3493 17	5400 19	2597 35	3698 19	3066 31
78DW14	30	3766 5	4439 1	5163 24	2603 34	3993 8	2839 35
HP114	31	3553 9	2825 33	5127 26	2898 17	3600 24	3132 27
TX39949-2	10	2284 33	3479 19	5003 31	2718 29	3371 29	3454 16
77DW48	32	3250 17	2791 34	5064 27	2273 39	3345 31	3641 9
77DW19	33	3495 10	2641 37	4714 36	2163 40	3253 34	4198 3
17826	3	1484 39	2188 40	4678 38	2637 32	2747 40	3060 32
13996	2	2517 30	2304 39	4323 39	2686 30	2958 39	3495 15
TX83A5930	14	1244 40	2728 36	5372 22	3004 11	3087 37	3094 30
AGC104	36	2228 35	3320 25	5154 25	2871 18	3393 27	2812 36
1442	1	404 41	1574 41	2064 41	2013 41	1513 41	1590 41
MEAN		2940	3351	5312	2811	3604	3310
LSD(.05)		597	264	483	398	656	1068
C.V.		12.4	4.8	5.6	10.1	8.1	19.8

Table 2. Continued.

C.I. OR SEL. NO.	ENTRY NO.	STILLWATER OKLAHOMA	ALTUS OKLAHOMA	LAHOMA OKLAHOMA	GOODWELL OKLAHOMA	OKLAHOMA STATE MEAN	URBANA ILLINOIS	AMES IOWA
OK83396	6	4416 5	3564 3	4645 7	6043 1	4667 2	5226 6	6104 1
TX81V6610	8	3887 13	3295 10	4443 13	6027 2	4413 6	4860 12	5705 5
OK81322	5	4421 4	3636 1	4932 1	5860 6	4712 1	4763 17	5896 3
TX81V6614	9	4425 3	3416 8	4802 4	5721 7	4591 4	4406 26	5118 13
OK81306	4	3909 12	3264 11	4595 8	5423 15	4298 8	4930 9	5243 10
KS82H4	19	2636 32	2856 17	3649 30	5602 10	3686 26	4772 16	5853 4
NA-HW81-170	24	3394 23	3336 9	4564 9	5664 9	4239 12	4444 25	6008 2
RH830201	27	3699 18	2466 28	4013 20	5345 20	3881 23	5255 5	5010 18
XW131	29	3838 15	3053 14	4842 3	5427 14	4290 9	5408 4	5295 9
TX81V6180	11	4170 7	2932 16	4232 15	5390 16	4181 14	5693 1	4551 26
NA-HW81-283	21	3645 19	2838 19	3856 23	5190 26	3882 22	4868 11	4963 20
TX81V6187	18	4259 6	2363 32	3824 25	5439 13	3971 19	5443 3	4329 30
TX80A4135-6	12	2972 25	2381 30	3645 31	5231 23	3557 30	4841 13	4882 21
NA-HW81-459	23	3995 10	3430 7	3901 22	5676 8	4250 11	4476 24	4766 22
OK83398	7	4573 2	3605 2	4479 10	5921 3	4644 3	4801 15	5537 7
XH215C	41	2255 37	2497 25	3640 32	4708 37	3275 36	4554 21	5154 11
TX81V6183	13	3842 14	2699 21	4187 16	5304 21	4008 17	5215 7	4118 31
NA-HW81-297	22	4111 9	2677 22	4111 18	5092 27	3998 18	4903 10	5098 16
AGC105	37	3542 20	3138 13	4918 2	5353 18	4238 13	4261 29	5454 8
TX78A3345-V42	15	4116 8	2484 27	4129 17	4965 31	3923 20	4661 19	4656 24
RH845202	28	3506 21	2340 33	3735 27	5010 30	3648 28	5024 8	5113 14
NA-HW81-157	25	2645 31	2148 37	3596 35	5076 28	3366 31	5688 2	5008 19
TX80A5172-4	16	2775 30	3040 15	3833 24	4965 31	3653 27	4624 20	5577 6
TX78V2430-36	17	2941 26	2825 20	3632 33	5917 4	3828 24	3240 39	1056 41
XH183A	40	3488 22	2287 34	3811 26	5210 25	3699 25	4194 31	4757 23
KS831957	39	2820 29	3479 6	4461 12	5349 19	4027 15	3170 40	5136 12
RH830101	26	2842 28	2493 26	3708 28	5219 24	3565 29	4831 14	5109 15
AGC102	38	3793 16	3170 12	4694 5	5464 12	4280 10	4146 32	5015 17
KS82H144	20	2865 27	2668 23	4111 19	5905 5	3887 21	3509 36	3925 35
AGC101	34	3954 11	3542 5	4685 6	5357 17	4385 7	4250 30	4427 28
AGC103	35	3237 24	2842 18	4470 11	5508 11	4014 16	4551 22	3425 37
78DW14	30	4667 1	3564 4	4259 14	5263 22	4438 5	3767 33	2127 39
HP114	31	2304 36	2206 35	3600 34	5023 29	3283 35	4328 27	4051 34
TX39949-2	10	3762 17	1717 39	3318 39	4651 38	3362 32	4299 28	3804 36
77DW48	32	2026 39	2434 29	3954 21	4835 36	3312 33	4680 18	4533 27
77DW19	33	2156 38	2515 24	3654 29	4896 33	3305 34	4519 23	4358 29
17826	3	2609 33	2156 36	3363 37	4369 39	3124 37	3619 35	4084 33
13996	2	2340 35	2372 31	3336 38	4271 40	3080 38	3385 38	4598 25
TX83A5930	14	1596 40	1977 38	3493 36	4892 34	2989 40	3503 37	1610 40
AGC104	36	2488 34	1650 40	3250 40	4867 35	3064 39	3724 34	2291 38
1442	1	1367 41	776 41	2009 41	2609 41	1690 41	2859 41	4107 32
MEAN		3324	2735	4009	5220	3822	4480	4582
LSD(.05)		823	375	432	590	517	759	1102
C.V.		15.2	8.4	6.6	6.9	9.3	10.4	14.5

Table 2. Continued.

C.I. OR SEL. NO.	: ENTRY: NO.	: HUTCHINSON KANSAS	: HAYS KANSAS	: MANHATTAN KANSAS	: COLBY KANSAS	: KANSAS STATE MEAN	: LIND WASHINGTON	: ABERDEEN IDAHO
OK83396	6	3818 23	4985 4	2252 20	4684 5	3935 7	1594 27	6615 13
TX81V6610	8	3906 20	5178 1	2288 17	4816 3	4047 3	1883 9	5849 28
OK81322	5	4167 5	4405 24	2499 12	4534 8	3901 8	1672 16	5914 25
TX81V6614	9	4037 14	5154 2	2189 23	4908 2	4072 2	1101 40	5945 23
OK81306	4	3806 24	4443 23	2265 19	4484 10	3749 21	1793 13	7247 2
KS82H4	19	4048 13	4678 7	2954 1	4286 21	3992 6	1618 22	7005 4
NA-HW81-170	24	4113 10	5003 3	2926 3	4512 9	4138 1	2002 4	6691 9
RH830201	27	4350 1	4553 13	2164 24	4393 14	3865 10	1625 21	7129 3
XW131	29	3879 21	4622 10	2682 8	4054 31	3809 11	1641 19	6700 8
TX81V6180	11	4204 4	4759 6	1916 32	4290 20	3792 13	1195 38	6046 22
NA-HW81-283	21	4126 7	4376 25	2764 5	4781 4	4012 5	2352 1	5701 35
TX81V6187	18	4277 3	4528 15	1601 39	4630 6	3759 18	1170 39	5808 30
TX80A4135-6	12	3777 25	4504 19	2191 22	4363 15	3708 24	1825 11	6904 6
NA-HW81-459	23	4105 11	4660 9	2502 11	4208 24	3869 9	1740 14	5857 27
OK83398	7	4163 6	4510 18	2280 18	4173 25	3782 15	1278 35	6158 20
XH215C	41	3995 17	4571 12	2381 16	5187 1	4033 4	2000 5	8155 1
TX81V6183	13	3911 19	4665 8	1968 30	4323 17	3717 23	1802 12	5730 32
NA-HW81-297	22	4125 8	4293 28	2475 13	4131 28	3756 20	1569 30	6633 12
AGC105	37	3694 30	4371 26	1767 37	4328 16	3540 31	1576 29	5909 26
TX78A3345-V42	15	3655 32	4497 20	2125 27	4402 13	3670 27	1690 15	5703 34
RH845202	28	3709 28	4463 22	2621 10	4291 19	3771 16	1611 24	6203 18
NA-HW81-157	25	3600 34	4517 16	2199 21	4269 22	3646 29	1928 6	6353 16
TX80A5172-4	16	3722 27	4490 21	2908 4	4063 30	3796 12	1652 18	5734 31
TX78V2430-36	17	3604 33	4517 16	2091 28	4602 7	3703 25	1271 37	6656 11
XH183A	40	4016 16	4205 29	2468 14	4465 11	3789 14	1874 10	6667 10
KS831957	39	4341 2	4156 33	2131 26	3991 32	3655 28	1605 26	6409 14
RH830101	26	4030 15	4170 32	2698 7	4130 29	3757 19	1278 35	5517 37
AGC102	38	4072 12	4308 27	2950 2	3753 36	3771 17	1638 20	4672 40
KS82H144	20	3706 29	4761 5	2716 6	3588 38	3693 26	1493 32	5730 32
AGC101	34	3919 18	4542 14	2418 15	3688 37	3642 30	1553 31	5138 38
AGC103	35	4119 9	4205 29	2679 9	3935 34	3735 22	1612 23	6149 21
78DW14	30	3828 22	4015 38	1927 31	3294 40	3266 38	1385 34	5938 24
HP114	31	3772 26	4109 36	1662 38	4457 12	3500 32	1885 8	6230 17
TX39949-2	10	3166 39	4129 34	1840 35	4133 27	3317 36	1607 25	6387 15
77DW48	32	3672 31	4127 35	1837 36	4136 26	3443 34	1657 17	5837 29
77DW19	33	3461 35	4089 37	1841 34	3894 35	3321 35	1592 28	5698 36
17826	3	2735 41	4201 31	1870 33	4212 23	3255 39	2174 3	6992 5
13996	2	3342 37	3851 40	2080 29	3966 33	3310 37	2188 2	6178 19
TX83A5930	14	3353 36	4575 11	1540 40	4304 18	3443 33	1441 33	6857 7
AGC104	36	3328 38	3858 39	2147 25	3568 39	3225 40	588 41	3315 41
1442	1	3137 40	2916 41	1323 41	2773 41	2537 41	1914 7	4721 39
MEAN		3824	4414	2247	4219	3676	1636	6124
LSD(.05)		571	478	489	480	432	575	1147
C.V.		9.1	6.6	13.3	7.0	8.4	21.4	11.5

Table 2. Continued.

C.I. OR SEL. NO.	: ENTRY: NO.	: CLOVIS (IRR.) NEW MEXICO	: CLOVIS (DRYL.) NEW MEXICO	: FARMINGTON NEW MEXICO	: NEW MEXICO STATE MEAN	: BROOKINGS S. DAKOTA	: HIGHMORE* S. DAKOTA	: PRESHO* S. DAKOTA	: SOUTH DAKOTA STATE MEAN
OK83396	6	7908 1	3803 27	4423 22	5378 9	5313 26	1300 23	1771 15	2795 24
TX81V6610	8	6867 18	4227 12	5062 9	5385 8	6232 8	1457 16	2780 1	3490 4
OK81322	5	6522 21	3231 38	5555 2	5103 19	7487 2	1412 17	2757 2	3886 1
TX81V6614	9	6878 17	4304 9	5441 3	5541 5	5066 33	1345 21	2242 4	2884 20
OK81306	4	5524 37	3912 25	5129 8	4855 25	7577 1	1681 10	2309 3	3856 2
KS82H4	19	7647 2	4873 2	4526 19	5682 3	6546 6	1278 24	1166 37	2996 16
NA-HW81-170	24	7370 5	4045 17	4161 26	5192 16	6860 3	1771 6	1367 32	3333 7
RH830201	27	7113 12	4173 14	4622 15	5303 13	5985 13	1771 6	1457 26	3071 13
XW131	29	7557 3	4669 4	4154 27	5460 6	5896 16	1367 19	1435 27	2899 19
TX81V6180	11	7211 9	4422 6	5928 1	5854 1	4775 37	986 32	2107 9	2623 31
NA-HW81-283	21	7267 7	4244 10	4763 13	5425 7	6747 4	1323 22	1659 20	3243 8
TX81V6187	18	6174 26	4406 7	5323 5	5301 14	5268 28	1054 29	2062 10	2795 25
TX80A4135-6	12	7174 10	5010 1	5362 4	5848 2	5380 25	2130 2	2130 7	3213 9
NA-HW81-459	23	6366 22	3725 28	4033 29	4708 29	6747 4	1524 15	2130 7	3467 5
OK83398	7	7021 13	4244 11	4030 30	5098 20	5246 30	1367 19	1547 23	2720 30
XH215C	41	6766 20	4041 19	4334 24	5047 21	6142 12	2331 1	2219 5	3564 3
TX81V6183	13	6021 28	4734 3	5207 7	5321 12	5178 31	1726 8	2219 5	3041 14
NA-HW81-297	22	6365 23	3922 23	4206 25	4831 26	5873 18	1031 31	1592 22	2832 23
AGC105	37	6999 14	3546 32	4452 20	4999 22	5402 24	852 34	1031 39	2428 35
TX78A3345-V42	15	6999 15	4019 20	4872 10	5297 15	4887 35	1636 11	2062 10	2862 21
RH845202	28	7222 8	4181 13	4580 17	5328 10	6232 8	1547 13	1771 15	3183 11
NA-HW81-157	25	7403 4	3882 26	4682 14	5322 11	6277 7	1905 5	1995 12	3392 6
TX80A5172-4	16	6272 24	4342 8	4792 11	5135 18	5156 32	471 39	1435 27	2354 37
TX78V2430-36	17	7300 6	4557 5	4790 12	5549 4	5604 22	45 41	1480 24	2376 36
XH183A	40	6100 27	3650 30	4439 21	4730 28	5649 21	1569 12	1681 19	2966 18
KS831957	39	5985 29	3576 31	3561 36	4374 33	6232 8	1098 28	1614 21	2981 17
RH830101	26	6971 16	3978 22	4030 31	4993 23	5918 14	1704 9	1704 18	3108 12
AGC102	38	5275 40	3326 37	3228 38	3943 39	5313 26	1121 27	1367 32	2600 32
KS82H144	20	7126 11	4159 15	3568 35	4951 24	6232 8	583 38	1390 31	2735 28
AGC101	34	5284 39	3495 33	3700 34	4160 37	4708 38	986 32	1233 35	2309 38
AGC103	35	5325 38	3919 24	3001 39	4082 38	5896 16	1054 29	1233 35	2727 29
78DW14	30	5950 31	3327 36	4531 18	4603 31	5268 28	852 34	1480 24	2533 33
HP114	31	5560 36	3371 35	4080 28	4337 34	4887 35	1233 25	1367 32	2496 34
TX39949-2	10	4930 41	4042 18	5259 6	4743 27	3990 39	852 34	1905 13	2249 39
77DW48	32	5826 33	3209 39	2650 41	3895 40	5918 14	1166 26	1412 30	2832 22
77DW19	33	5569 35	3678 29	3394 37	4214 36	5761 19	1390 18	1166 37	2772 26
17826	3	6256 25	4150 16	3707 33	4704 30	5761 19	2062 3	1749 17	3191 10
13996	2	5862 32	3477 34	4408 23	4583 32	4932 34	1547 13	1816 14	2765 27
TX83A5930	14	6842 19	3983 21	4597 16	5141 17	3318 41	359 40	897 40	1524 41
AGC104	36	5970 30	2196 41	2877 40	3681 41	3564 40	695 37	897 40	1719 40
1442	1	5814 34	3107 40	3764 32	4228 35	5604 22	1995 4	1435 27	3011 15
MEAN		6502	3931	4371	4935	5630	1308	1685	2874
LSD(.05)		804	585	760	850	1330	531	687	843
C.V.		7.6	9.1	12.4	9.9	14.5	24.9	25.0	19.5

Table 2. Concluded.

C.I. OR SEL. NO.	: ENTRY: NO.	: FORT COLLINS COLORADO	: WALSH COLORADO	: BURLINGTON COLORADO	: AKRON COLORADO	: JULESBURG COLORADO	: COLORADO STATE MEAN	: REGIONAL AVERAGE
OK83396	6	7112 6	2475 9	4481 5	4447 16	2854 15	4274 4	4348 1
TX81V6610	8	7116 5	2251 19	4168 10	4535 11	2816 18	4177 9	4330 2
OK81322	5	6469 19	2094 30	4422 6	4558 10	2958 8	4100 13	4317 3
TX81V6614	9	7105 7	2048 31	4773 2	4682 5	2420 38	4206 6	4276 4
OK81306	4	6802 11	2547 5	3919 16	4088 28	2948 9	4061 15	4237 5
KS82H4	19	6800 12	2504 8	4290 8	4697 4	2966 7	4251 5	4212 6
NA-HW81-170	24	7187 3	2196 22	3886 20	4498 12	2846 16	4123 12	4164 7
RH830201	27	7606 1	2436 12	3855 22	4608 8	3017 5	4304 2	4107 8
XW131	29	6203 24	2298 16	3708 26	4673 7	2667 26	3910 21	4106 9
TX81V6180	11	6518 17	2222 20	4773 2	4697 3	2784 20	4199 7	4085 10
NA-HW81-283	21	6340 21	2604 2	3864 21	4442 17	3217 1	4094 14	4071 11
TX81V6187	18	6483 18	2351 14	4391 7	4679 6	3055 4	4192 8	4059 12
TX80A4135-6	12	7077 8	2160 25	4832 1	4596 9	2754 21	4284 3	4052 13
NA-HW81-459	23	5628 32	2450 10	3768 24	4387 19	2811 19	3809 25	4046 14
OK83398	7	5893 30	1910 34	3420 35	3920 36	2623 31	3553 34	4028 15
XH215C	41	7575 2	2527 6	3253 38	4381 20	2905 13	4128 11	4027 16
TX81V6183	13	6608 15	2602 3	4540 4	4843 1	3005 6	4320 1	4016 17
NA-HW81-297	22	5766 31	2518 7	3738 25	3895 37	2665 27	3716 27	3949 18
AGC105	37	6011 28	2286 17	3674 29	4144 25	2924 11	3808 26	3940 19
TX78A3345-V42	15	7015 9	1874 38	3686 28	4490 13	2831 17	3979 19	3929 20
RH845202	28	6682 14	1599 41	4095 11	4458 15	3075 3	3982 18	3918 21
NA-HW81-157	25	6833 10	2130 27	3844 23	4036 33	2704 24	3909 22	3894 22
TX80A5172-4	16	6695 13	2189 23	4095 11	4407 18	2631 30	4003 17	3888 23
TX78V2430-36	17	7134 4	2128 28	4210 9	4838 2	2542 35	4170 10	3881 24
XH183A	40	6235 23	2565 4	4077 14	4340 21	2907 12	4025 16	3829 25
KS831957	39	5373 37	2450 10	3132 40	3715 39	2943 10	3523 36	3782 26
RH830101	26	6081 27	2171 24	3890 18	4173 24	3097 2	3882 24	3781 27
AGC102	38	5346 38	2785 1	3487 33	4051 32	2707 23	3675 29	3749 28
KS82H144	20	5548 34	2212 21	3697 27	4078 29	2542 36	3615 33	3721 29
AGC101	34	5616 33	2334 15	3896 17	3927 35	2576 33	3670 30	3713 30
AGC103	35	5487 36	1967 32	3634 30	3843 38	2728 22	3532 35	3706 31
78DW14	30	5515 35	2377 13	3521 32	4070 30	2605 32	3618 32	3686 32
HP114	31	6579 16	2112 29	3887 19	4194 23	2865 14	3927 20	3628 33
TX39949-2	10	6120 26	1863 39	4093 13	4066 31	2358 39	3700 28	3558 34
77DW48	32	5126 40	2141 26	3630 31	4102 27	2571 34	3514 37	3552 35
77DW19	33	5137 39	1904 36	3478 34	4120 26	2436 37	3415 40	3542 36
17826	3	6400 20	1893 37	4042 15	4483 14	2639 28	3891 23	3537 37
13996	2	5981 29	2262 18	3282 37	3285 40	2632 29	3488 39	3477 38
TX83A5930	14	6188 25	1917 33	3332 36	4198 22	2704 24	3668 31	3361 39
AGC104	36	6326 22	1907 35	3164 39	3940 34	2218 40	3511 38	3057 40
1442	1	4951 41	1767 40	2368 41	2563 41	2013 41	2732 41	2662 41
MEAN		6309	2220	3861	4247	2745	3877	3859
LSD(.05)		593	560	840	571	321	445	265
C.V.		5.8	15.5	13.3	8.2	7.2	9.5	11.0

*Data from Mead, NE was not used in state or regional averages; data from Highmore or Presho, SD were not used in regional averages.

Table 3. Summary of mean yields (kg/ha) and ranks of 41 wheats grown in the 1985 Southern Regional Performance Nursery at 20 locations from the Midwest from which a c.v. of 14.0 or less and a significant F test for entries were obtained.

C.I. OR SEL. NO.	ENTRY: NO.	CLOVIS (DRYL.) NEW MEXICO	CLOVIS (IRR.) NEW MEXICO	FARMINGTON NEW MEXICO	DALLAS TEXAS	CHILLI- COTHE TEXAS	BUSHLAND (IRR.) TEXAS	BUSHLAND (DRYL.) TEXAS
TX81V6614	9	4304 9	6878 17	5441 3	4436 1	4261 3	7045 2	3021 9
TX81V6610	8	4227 12	6867 18	5062 9	3676 6	4214 5	7077 1	3381 1
OK83396	6	3803 27	7908 1	4423 22	3405 12	4073 6	6695 3	3132 5
OK81322	5	3231 38	6522 21	5555 2	4270 2	3638 13	5376 21	2351 38
KS82H4	19	4873 2	7647 2	4526 19	2730 28	3268 28	5461 15	3090 7
TX81V6180	11	4422 6	7211 9	5928 1	3410 11	3795 9	5886 7	2836 20
TX78V2430-36	17	4557 5	7300 6	4790 12	2883 25	3927 8	6089 5	3379 2
NA-HW81-170	24	4045 17	7370 5	4161 26	3141 18	3793 10	5051 28	2741 28
OK81306	4	3912 25	5524 37	5129 8	4140 3	3414 21	5811 9	2368 37
TX81V6183	13	4734 3	6021 28	5207 7	3015 22	4246 4	5463 14	3112 6
TX81V6187	18	4406 7	6174 26	5323 5	3069 21	4273 2	5623 11	3162 4
XW131	29	4669 4	7557 3	4154 27	3132 19	3327 24	5739 10	2982 12
TX80A4135-6	12	5010 1	7174 10	5362 4	2022 38	3107 29	5398 20	2920 14
RH830201	27	4173 14	7113 12	4622 15	2813 26	2885 31	4954 34	3076 8
OK83398	7	4244 11	7021 13	4030 30	3389 13	3714 11	6127 4	2911 15
NA-HW81-283	21	4244 10	7267 7	4763 13	2271 34	3519 16	4972 32	2768 25
NA-HW81-459	23	3725 28	6366 22	4033 29	3636 7	3367 23	5822 8	2790 23
TX78A3345-V42	15	4019 20	6999 15	4872 10	2795 27	3419 20	5520 13	3246 3
AGC105	37	3546 32	6999 14	4452 20	3338 15	4035 7	5986 6	2899 16
XH215C	41	4041 19	6766 20	4334 24	2710 29	2549 38	4761 35	3012 10
TX80A5172-4	16	4342 8	6272 24	4792 11	2932 24	3293 26	5428 17	2839 19
RH845202	28	4181 13	7222 8	4580 17	2143 36	2896 30	4972 32	2949 13
NA-HW81-297	22	3922 23	6365 23	4206 25	3345 14	3542 15	5401 18	2820 21
KS82H144	20	4159 15	7126 11	3568 35	2352 31	3493 17	5250 23	2802 22
KS831957	39	3576 31	5985 29	3561 36	3555 8	3401 22	5051 28	2780 24
NA-HW81-157	25	3882 26	7403 4	4682 14	2313 32	3280 27	4070 40	2681 31
RH830101	26	3978 22	6971 16	4030 31	2130 37	2791 34	5039 30	2629 33
78DW14	30	3327 36	5950 31	4531 18	3766 5	4439 1	5163 24	2603 34
AGC101	34	3495 33	5284 39	3700 34	3082 20	3658 12	5450 16	2753 27
XH183A	40	3650 30	6100 27	4439 21	3002 23	2829 32	4691 37	2768 26
AGC102	38	3326 37	5275 40	3228 38	3865 4	3620 14	5538 12	2592 36
AGC103	35	3919 24	5325 38	3001 39	3302 16	3493 17	5400 19	2597 35
HP114	31	3371 35	5560 36	4080 28	3553 9	2825 33	5127 26	2898 17
TX83A5930	14	3983 21	6842 19	4597 16	1244 40	2728 36	5372 22	3004 11
TX39949-2	10	4042 18	4930 41	5259 6	2284 33	3479 19	5003 31	2718 29
77DW48	32	3209 39	5826 33	2650 41	3250 17	2791 34	5064 27	2273 39
77DW19	33	3678 29	5569 35	3394 37	3495 10	2641 37	4714 36	2163 40
17826	3	4150 16	6256 25	3707 33	1484 39	2188 40	4678 38	2637 32
13996	2	3477 34	5862 32	4408 23	2517 30	2304 39	4323 39	2686 30
AGC104	36	2196 41	5970 30	2877 40	2228 35	3320 25	5154 25	2871 18
1442	1	3107 40	5814 34	3764 32	404 41	1574 41	2064 41	2013 41
MEAN		3931	6502	4371	2940	3351	5312	2811
LSD(.05)		585	804	760	597	264	483	398
C.V.		9.1	7.6	12.4	12.4	4.8	5.6	10.1

Table 3. Continued.

C.I. OR SEL. NO.	ENTRY: NO.	ALTUS OKLAHOMA	LAHOMA OKLAHOMA	GOODWELL OKLAHOMA	HUTCHINSON KANSAS	HAYS KANSAS	MANHATTAN KANSAS	COLBY KANSAS
TX81V6614	9	3416 8	4802 4	5721 7	4037 14	5154 2	2189 23	4908 2
TX81V6610	8	3295 10	4443 13	6027 2	3906 20	5178 1	2288 17	4816 3
OK83396	6	3564 3	4645 7	6043 1	3818 23	4985 4	2252 20	4684 5
OK81322	5	3636 1	4932 1	5860 6	4167 5	4405 24	2499 12	4534 8
KS82H4	19	2856 17	3649 30	5602 10	4048 13	4678 7	2954 1	4286 21
TX81V6180	11	2932 16	4232 15	5390 16	4204 4	4759 6	1916 32	4290 20
TX78V2430-36	17	2825 20	3632 33	5917 4	3604 33	4517 16	2091 28	4602 7
NA-HW81-170	24	3336 9	4564 9	5664 9	4113 10	5003 3	2926 3	4512 9
OK81306	4	3264 11	4595 8	5423 15	3806 24	4443 23	2265 19	4484 10
TX81V6183	13	2699 21	4187 16	5304 21	3911 19	4665 8	1968 30	4323 17
TX81V6187	18	2363 32	3824 25	5439 13	4277 3	4528 15	1601 39	4630 6
XW131	29	3053 14	4842 3	5427 14	3879 21	4622 10	2682 8	4054 31
TX80A4135-6	12	2381 30	3645 31	5231 23	3777 25	4504 19	2191 22	4363 15
RH830201	27	2466 28	4013 20	5345 20	4350 1	4553 13	2164 24	4393 14
OK83398	7	3605 2	4479 10	5921 3	4163 6	4510 18	2280 18	4173 25
NA-HW81-283	21	2838 19	3856 23	5190 26	4126 7	4376 25	2764 5	4781 4
NA-HW81-459	23	3430 7	3901 22	5676 8	4105 11	4660 9	2502 11	4208 24
TX78A3345-V42	15	2484 27	4129 17	4965 31	3655 32	4497 20	2125 27	4402 13
AGC105	37	3138 13	4918 2	5353 18	3694 30	4371 26	1767 37	4328 16
XH215C	41	2497 25	3640 32	4708 37	3995 17	4571 12	2381 16	5187 1
TX80A5172-4	16	3040 15	3833 24	4965 31	3722 27	4490 21	2908 4	4063 30
RH845202	28	2340 33	3735 27	5010 30	3709 28	4463 22	2621 10	4291 19
NA-HW81-297	22	2677 22	4111 18	5092 27	4125 8	4293 28	2475 13	4131 28
KS82H144	20	2668 23	4111 19	5905 5	3706 29	4761 5	2716 6	3588 38
KS831957	39	3479 6	4461 12	5349 19	4341 2	4156 33	2131 26	3991 32
NA-HW81-157	25	2148 37	3596 35	5076 28	3600 34	4517 16	2199 21	4269 22
RH830101	26	2493 26	3708 28	5219 24	4030 15	4170 32	2698 7	4130 29
78DW14	30	3564 4	4259 14	5263 22	3828 22	4015 38	1927 31	3294 40
AGC101	34	3542 5	4685 6	5357 17	3919 18	4542 14	2418 15	3688 37
XH183A	40	2287 34	3811 26	5210 25	4016 16	4205 29	2468 14	4465 11
AGC102	38	3170 12	4694 5	5464 12	4072 12	4308 27	2950 2	3753 36
AGC103	35	2842 18	4470 11	5508 11	4119 9	4205 29	2679 9	3935 34
HP114	31	2206 35	3600 34	5023 29	3772 26	4109 36	1662 38	4457 12
TX83A5930	14	1977 38	3493 36	4892 34	3353 36	4575 11	1540 40	4304 18
TX39949-2	10	1717 39	3318 39	4651 38	3166 39	4129 34	1840 35	4133 27
77DW48	32	2434 29	3954 21	4835 36	3672 31	4127 35	1837 36	4136 26
77DW19	33	2515 24	3654 29	4896 33	3461 35	4089 37	1841 34	3894 35
17826	3	2156 36	3363 37	4369 39	2735 41	4201 31	1870 33	4212 23
13996	2	2372 31	3336 38	4271 40	3342 37	3851 40	2080 29	3966 33
AGC104	36	1650 40	3250 40	4867 35	3328 38	3858 39	2147 25	3568 39
1442	1	776 41	2009 41	2609 41	3137 40	2916 41	1323 41	2773 41
MEAN		2735	4009	5220	3824	4414	2247	4219
LSD(.05)		375	432	590	571	478	489	480
C.V.		8.4	6.6	6.9	9.1	6.6	13.3	7.0

Table 3. Concluded.

C.I. OR SEL. NO.	ENTRY: NO.	FORT COLLINS COLORADO	BURLINGTON COLORADO	AKRON COLORADO	JULESBURG COLORADO	CLAY CENTER NEBRASKA	ALLIANCE NEBRASKA	REGIONAL AVERAGE
TX81V6614	9	7105 7	4773 2	4682 5	2420 38	3505 8	3137 12	4562 1
TX81V6610	8	7116 5	4168 10	4535 11	2816 18	3551 7	3059 17	4485 2
OK83396	6	7112 6	4481 5	4447 16	2854 15	3011 13	3124 13	4423 3
OK81322	5	6469 19	4422 6	4558 10	2958 8	3966 2	3002 21	4318 4
KS82H4	19	6800 12	4290 8	4697 4	2966 7	3940 3	3148 11	4275 5
TX81V6180	11	6518 17	4773 2	4697 3	2784 20	2416 29	2984 23	4269 6
TX78V2430-36	17	7134 4	4210 9	4838 2	2542 35	3092 11	3248 9	4259 7
NA-HW81-170	24	7187 3	3886 20	4498 12	2846 16	2744 20	3156 10	4237 8
OK81306	4	6802 11	3919 16	4088 28	2948 9	4177 1	3039 18	4178 9
TX81V6183	13	6608 15	4540 4	4843 1	3005 6	2068 36	3258 8	4159 10
TX81V6187	18	6483 18	4391 7	4679 6	3055 4	2323 30	3403 3	4151 11
XW131	29	6203 24	3708 26	4673 7	2667 26	2551 23	3037 19	4148 12
TX80A4135-6	12	7077 8	4832 1	4596 9	2754 21	2755 19	3749 1	4142 13
RH830201	27	7606 1	3855 22	4608 8	3017 5	2872 15	3699 2	4129 14
OK83398	7	5893 30	3420 35	3920 36	2623 31	2549 25	2913 25	4094 15
NA-HW81-283	21	6340 21	3864 21	4442 17	3217 1	3287 9	2739 34	4081 16
NA-HW81-459	23	5628 32	3768 24	4387 19	2811 19	3746 4	2963 24	4076 17
TX78A3345-V42	15	7015 9	3686 28	4490 13	2831 17	2307 32	3355 5	4041 18
AGC105	37	6011 28	3674 29	4144 25	2924 11	2231 34	2825 27	4032 19
XH215C	41	7575 2	3253 38	4381 20	2905 13	3584 6	3363 4	4011 20
TX80A5172-4	16	6695 13	4095 11	4407 18	2631 30	1879 38	2999 22	3981 21
RH845202	28	6682 14	4095 11	4458 15	3075 3	2549 24	3281 7	3963 22
NA-HW81-297	22	5766 31	3738 25	3895 37	2665 27	2806 16	3103 14	3924 23
KS82H144	20	5548 34	3697 27	4078 29	2542 36	3083 12	2668 37	3891 24
KS831957	39	5373 37	3132 40	3715 39	2943 10	3727 5	2801 29	3875 25
NA-HW81-157	25	6833 10	3844 23	4036 33	2704 24	3227 10	3070 16	3871 26
RH830101	26	6081 27	3890 18	4173 24	3097 2	2891 14	2794 32	3847 27
78DW14	30	5515 35	3521 32	4070 30	2605 32	2196 35	2892 26	3836 28
AGC101	34	5616 33	3896 17	3927 35	2576 33	2300 33	2680 35	3828 29
XH183A	40	6235 23	4077 14	4340 21	2907 12	2319 31	2653 38	3824 30
AGC102	38	5346 38	3487 33	4051 32	2707 23	2496 27	2507 40	3822 31
AGC103	35	5487 36	3634 30	3843 38	2728 22	2643 22	2791 33	3796 32
HP114	31	6579 16	3887 19	4194 23	2865 14	2467 28	2795 31	3751 33
TX83A5930	14	6188 25	3332 36	4198 22	2704 24	1491 40	2800 30	3631 34
TX39949-2	10	6120 26	4093 13	4066 31	2358 39	1767 39	3351 6	3621 35
77DW48	32	5126 40	3630 31	4102 27	2571 34	2700 21	2649 39	3542 36
77DW19	33	5137 39	3478 34	4120 26	2436 37	2505 26	3084 15	3538 37
17826	3	6400 20	4042 15	4483 14	2639 28	1979 37	2813 28	3518 38
13996	2	5981 29	3282 37	3285 40	2632 29	2800 17	3004 20	3489 39
AGC104	36	6326 22	3164 39	3940 34	2218 40	1426 41	2125 41	3324 40
1442	1	4951 41	2368 41	2563 41	2013 41	2796 18	2675 36	2582 41
MEAN		6309	3861	4247	2745	2749	2994	3940
LSO(.05)		593	840	571	321	608	570	288
C.V.		5.8	13.3	8.2	7.2	13.5	11.7	9.1

Table 4. Summary of mean yields (kg/ha) and ranks for 16 wheats grown in the Southern Regional Performance Nursery at 27 sites in 1984 and 1985 with state means and ranks.

VARIETY OR PEDIGREE	: C.I. OR SEL. NO.	: ENTRY: NO. :	: SIDNEY NEBRASKA	: ALLIANCE NEBRASKA	: NEBRASKA STATE MEAN	: AMES IOWA	: URBANA ILLINOIS	:
PAYNE//TAM W-101/AMIGO	OK81322	5	3022 3	3208 7	3115 3	4483 1	4343 8	
PAYNE//TAM W-101/AMIGO	OK81306	4	2686 11	3400 3	3043 5	3955 2	4498 7	
TX71A1039-V1*3/AMIGO	TX81V6610	8	2937 5	2829 15	2883 11	3266 11	4252 9	
TX71A1039-V1*3/AMIGO	TX81V6614	9	2746 8	3386 4	3066 4	2938 12	3735 13	
WINTER WHEAT HYBRID	RH830201	27	2909 6	3944 1	3427 1	3630 3	4767 3	
BULK SELECTION	NA-HW81-283	21	2704 9	2900 13	2802 13	3430 9	5013 1	
TAM W-101/W558 (W8460D)	XW131	29	3067 2	2930 12	2998 6	3496 6	4884 2	
BULK SELECTION	NA-HW81-459	23	3215 1	3330 5	3272 2	3467 7	4740 4	
BULK SELECTION	NA-HW81-297	22	2703 10	3093 10	2898 9	3545 4	4728 5	
WINTER WHEAT HYBRID	RH830101	26	2454 12	3313 6	2884 10	3531 5	4646 6	
TAM 105	17826	3	3019 4	2881 14	2950 7	2591 14	3783 12	
MEXICAN BULK HYBRID SELECTION	HP114	31	2383 13	3005 11	2694 14	2913 13	3815 11	
MEXICAN BULK HYBRID SELECTION	78DW14	30	2169 15	2742 16	2455 16	2127 15	3153 15	
AMIGO/3/2*TX71A937 SDY SIB/TCS//CTK	TX39949-2	10	2237 14	3442 2	2839 12	2112 16	4123 10	
SCOUT 66	13996	2	2763 7	3132 9	2948 8	3433 8	3234 14	
KHARKOF	1442	1	1998 16	3162 8	2580 15	3299 10	3132 16	
	MEAN		2688	3169	2928	3254	4178	
	LSD(.05)		N.S.	N.S.	N.S.	N.S.	981	
	C.V.		17.3	13.0	15.0	17.8	13.6	

Table 4. Continued.

C.I. OR SEL. NO.	ENTRY: NO.	BROOKINGS S. DAKOTA	HIGHMORE* S. DAKOTA	PRESHO* S. DAKOTA	SOUTH DAKOTA STATE MEAN	DALLAS TEXAS	CHILLI- COTHE TEXAS	BUSHLAND (IRR.) TEXAS	TEXAS STATE MEAN
OK81322	5	5716 2	3318 2	2488 1	3841 1	4122 1	2998 4	5432 8	4184 3
OK81306	4	6030 1	2881 4	2287 3	3732 2	3998 2	2789 7	5588 4	4125 4
TX81V6610	8	4943 4	1580 12	1995 4	2839 10	3440 9	3142 2	6816 1	4466 2
TX81V6614	9	4282 11	1300 14	1760 10	2447 13	3829 3	3122 3	6749 2	4566 1
RH830201	27	4764 7	2735 6	1861 7	3120 5	3057 11	2412 11	5217 12	3562 12
NA-HW81-283	21	5077 3	2343 9	1760 10	3060 6	2935 12	2761 8	5243 10	3646 10
XW131	29	4719 8	1412 13	1726 13	2619 11	3602 5	2594 10	5894 3	4030 5
NA-HW81-459	23	4640 9	2690 7	1771 9	3034 7	3470 8	2632 9	5565 5	3889 8
NA-HW81-297	22	4102 12	1917 10	1536 14	2518 12	3593 6	2885 5	5548 6	4009 7
RH830101	26	4909 5	2556 8	1939 5	3135 4	2663 13	2281 12	5481 7	3475 13
17826	3	4472 10	2825 5	1749 12	3015 8	2283 15	2031 15	5350 9	3221 14
HP114	31	3878 14	1636 11	1446 15	2320 14	3500 7	2255 13	5171 13	3642 11
78DW14	30	4864 6	527 16	1166 16	2186 15	3670 4	3262 1	5135 14	4022 6
TX39949-2	10	3396 16	818 15	1805 8	2006 16	3073 10	2802 6	5239 11	3705 9
13996	2	4080 13	3049 3	1905 6	3011 9	2552 14	2048 14	4832 15	3144 15
1442	1	3766 15	3475 1	2399 2	3213 3	903 16	1378 16	2975 16	1752 16
MEAN		4602	2234	1849	4602	3168	2587	5390	3715
LSD(.05)		N.S.	N.S.	N.S.	N.S.	1251	916	1050	1080
C.V.		15.1	19.9	21.6	18.3	9.9	8.7	6.6	8.2

Table 4. Continued.

C.I. OR SEL. NO.	: ENTRY: : NO. :	: CLOVIS (IRR.) : NEW MEXICO :	: CLOVIS (DRYL.) : NEW MEXICO :	: FARMINGTON : NEW MEXICO :	: NEW MEXICO : STATE MEAN :	: HAYS : KANSAS :	: COLBY : KANSAS :	: KANSAS : STATE MEAN :
OK81322	5	5301 6	2027 16	7000 2	4776 5	3690 7	4555 1	4123 3
OK81306	4	4781 12	2723 12	6501 3	4668 9	3678 8	4329 5	4004 6
TX81V6610	8	5175 7	2676 13	6394 4	4748 8	4139 2	4498 2	4319 1
TX81V6614	9	5074 8	2848 7	7224 1	5049 1	4158 1	4441 3	4300 2
RH830201	27	5842 1	3123 3	5380 12	4782 4	3891 3	4315 6	4103 4
NA-HW81-283	21	5310 5	2807 10	6171 7	4763 7	3749 6	4411 4	4080 5
XW131	29	5689 2	3190 2	5714 10	4865 2	3875 4	3823 12	3849 9
NA-HW81-459	23	4796 11	2364 14	5379 13	4180 15	3659 9	4077 8	3868 8
NA-HW81-297	22	4447 15	2281 15	6283 5	4337 13	3759 5	3814 13	3786 12
RH830101	26	5636 3	3342 1	5341 14	4773 6	3657 10	4089 7	3873 7
17826	3	5529 4	3041 4	5796 9	4789 3	3582 12	4033 10	3808 11
HP114	31	5007 9	2734 11	5903 8	4548 10	3565 13	4052 9	3809 10
78DW14	30	4557 13	2826 8	5610 11	4331 14	3183 14	3429 15	3306 15
TX39949-2	10	4203 16	2813 9	6236 6	4417 12	3650 11	3755 14	3702 13
13996	2	4961 10	3032 5	5304 15	4432 11	3117 15	3951 11	3534 14
1442	1	4519 14	2858 6	4610 16	3996 16	2402 16	2960 16	2681 16
MEAN		5052	2793	5928	4591	3610	4033	3821
LSD(.05)		N.S.	N.S.	1243	N.S.	551	593	476
C.V.		11.8	16.0	17.1	16.4	8.5	4.8	6.7

Table 4. Continued.

C.I. OR SEL. NO.	ENTRY: NO.	FORT COLLINS COLORADO	WALSH COLORADO	BURLINGTON COLORADO	AKRON COLORADO	JULESBURG COLORADO	COLORADO STATE MEAN	COLUMBIA MISSOURI
OK81322	5	6639 5	2229 8	3889 4	4389 1	2675 5	3964 4	4071 1
OK81306	4	7153 2	2343 3	3897 3	3650 13	2608 8	3930 5	3695 2
TX81V6610	8	7045 3	2218 9	3917 2	4375 2	2504 11	4012 3	3307 7
TX81V6614	9	7399 1	2104 13	4179 1	4202 5	2394 13	4056 1	3213 11
RH830201	27	6751 4	2264 5	3828 7	4290 3	2964 1	4019 2	3582 4
NA-HW81-283	21	6217 7	2357 2	3679 9	4125 6	2849 3	3845 7	3523 6
XW131	29	6064 8	2075 14	3267 14	4250 4	2616 7	3655 9	3093 13
NA-HW81-459	23	5357 14	2297 4	3737 8	3848 12	2800 4	3608 11	3615 3
NA-HW81-297	22	5317 15	2411 1	3589 12	3427 15	2516 10	3452 15	3267 8
RH830101	26	6033 9	2144 12	3854 6	4055 8	2902 2	3797 8	3532 5
17826	3	6564 6	2199 10	3863 5	4118 7	2593 9	3867 6	3233 9
HP114	31	5987 10	2154 11	3600 11	3886 11	2464 12	3618 10	2787 15
78DW14	30	5692 13	2233 7	3117 15	4016 9	2302 14	3472 14	3025 14
TX39949-2	10	5921 11	1997 15	3677 10	3916 10	2294 15	3561 12	3161 12
13996	2	5700 12	2235 6	3569 13	3641 14	2623 6	3554 13	3219 10
1442	1	4694 16	1771 16	2667 16	3105 16	2155 16	2878 16	2239 16
MEAN		6158	2189	3645	3956	2579	3706	3280
LSD(.05)		983	N.S.	N.S.	N.S.	N.S.	463	805
C.V.		8.1	12.8	11.0	9.7	10.9	10.2	13.6

Table 4. Concluded.

C.I. OR SEL. NO.	ENTRY: NO.	STILLWATER OKLAHOMA	ALTUS OKLAHOMA	LAHOMA OKLAHOMA	GOODWELL OKLAHOMA	OKLAHOMA STATE MEAN	ABERDEEN IDAHO	LIND WASHINGTON	REGIONAL AVERAGE
OK81322	5	3674 6	2695 1	3446 1	5480 5	3824 3	5067 8	2177 7	4093 1
OK81306	4	3723 5	2491 6	3345 2	4992 12	3638 6	5581 2	2321 4	4030 2
TX81V6610	8	3798 3	2598 5	3251 4	5869 1	3879 1	4329 14	2258 6	3999 3
TX81V6614	9	3802 2	2610 3	3296 3	5726 2	3858 2	4486 12	1863 14	3992 4
RH830201	27	3421 9	2125 10	2789 11	5437 6	3443 10	5075 7	2080 10	3914 5
NA-HW81-283	21	3541 7	2338 8	2973 7	5359 7	3553 8	4989 10	2302 5	3871 6
XW131	29	3345 11	2316 9	3004 6	5514 4	3545 9	4997 9	1963 12	3839 7
NA-HW81-459	23	3521 8	2601 4	2908 8	5541 3	3642 5	5462 4	2438 1	3818 8
NA-HW81-297	22	3759 4	2415 7	3069 5	5338 8	3645 4	5754 1	2155 8	3752 9
RH830101	26	3133 12	2042 11	2681 12	5282 9	3285 11	4668 11	1868 13	3742 10
17826	3	2945 13	1872 14	2670 13	5067 10	3138 12	.	.	3631 11
HP114	31	2711 15	1874 13	2818 9	5055 11	3115 13	5568 3	2106 9	3568 12
78DW14	30	4091 1	2643 2	2796 10	4882 14	3603 7	5141 6	1740 15	3536 13
TX39949-2	10	3362 10	1682 15	2430 15	4963 13	3109 14	5311 5	2040 11	3513 14
13996	2	2738 14	2016 12	2607 14	4802 15	3041 15	4450 13	2374 3	3457 15
1442	1	1852 16	915 16	1816 16	3003 16	1896 16	3853 15	2399 2	2737 16
MEAN		3338	2202	2869	5144	3388	4982	2137	3718
LSD(.05)		N.S.	N.S.	N.S.	974	N.S.	N.S.	N.S.	585
C.V.		11.1	8.5	7.1	9.3	9.8	16.7	13.0	13.1

*Data from Highmore or Presho, SD were not used in regional averages.

Table 5. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for the 41 entries in the 1985 Southern Regional Performance Nursery grown at 29 locations.

C.I. OR SEL. NO.	ENTRY: NO.	MEAN YIELD OVER 29 LOCATIONS KG/HA	REGRESSION COEFFICIENT (b)	CORRELATION COEFFICIENT (r)	COEFFICIENT OF DETERMINATION (r ²)
OK83396	6	4348	1.14	0.96	0.93
TX81V6610	8	4330	1.10	0.97	0.93
OK81322	5	4317	1.01	0.91	0.83
TX81V6614	9	4276	1.09	0.93	0.86
OK81306	4	4237	1.02	0.92	0.85
KS82H4	19	4212	1.13	0.96	0.93
NA-HW81-170	24	4164	1.14	0.96	0.93
RH830201	27	4107	1.14	0.98	0.95
XW131	29	4106	1.10	0.97	0.95
TX81V6180	11	4085	1.10	0.94	0.89
NA-HW81-283	21	4071	0.99	0.96	0.92
TX81V6187	18	4059	1.01	0.94	0.88
TX80A4135-6	12	4052	1.12	0.96	0.92
NA-HW81-459	23	4046	0.92	0.95	0.91
OK83398	7	4028	1.03	0.95	0.90
XH215C	41	4027	1.12	0.92	0.85
TX81V6183	13	4016	0.96	0.95	0.90
NA-HW81-297	22	3949	0.96	0.98	0.96
AGC105	37	3940	1.03	0.96	0.93
TX78A3345-V42	15	3929	1.03	0.97	0.94
RH845202	28	3918	1.11	0.97	0.95
NA-HW81-157	25	3894	1.11	0.95	0.90
TX80A5172-4	16	3888	0.99	0.96	0.92
TX78V2430-36	17	3881	1.11	0.87	0.76
XH183A	40	3829	0.98	0.98	0.95
KS831957	39	3782	0.90	0.91	0.83
RH830101	26	3781	1.03	0.97	0.94
AGC102	38	3749	0.76	0.89	0.80
KS82H144	20	3721	1.02	0.95	0.90
AGC101	34	3713	0.81	0.93	0.87
AGC103	35	3706	0.89	0.94	0.88
78DW14	30	3686	0.83	0.86	0.73
HP114	31	3628	0.97	0.96	0.92
TX39949-2	10	3558	0.91	0.91	0.83
77DW48	32	3552	0.92	0.94	0.88
77DW19	33	3542	0.89	0.94	0.89
17826	3	3537	1.05	0.94	0.87
13996	2	3477	0.86	0.95	0.89
TX83A5930	14	3361	1.06	0.86	0.75
AGC104	36	3057	0.86	0.86	0.74
1442	1	2662	0.81	0.79	0.63

Table 6. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for 16 entries in the 1984 and 1985 Southern Regional Performance Nursery grown at 25 locations.

C.I. OR SEL. NO.	: ENTRY: NO.	: MEAN YIELD OVER 25 LOCATIONS KG/HA	: REGRESSION COEFFICIENT (b)	: CORRELATION COEFFICIENT (r)	: COEFFICIENT OF DETERMINATION (r ²)
OK81322	5	4093	1.08	0.95	0.90
OK81306	4	4030	1.06	0.95	0.90
TX81V6610	8	3999	1.17	0.96	0.92
TX81V6614	9	3992	1.22	0.95	0.90
RH830201	27	3914	1.02	0.96	0.92
NA-HW81-283	21	3871	1.04	0.97	0.95
XW131	29	3839	1.11	0.97	0.94
NA-HW81-459	23	3818	0.94	0.94	0.89
NA-HW81-297	22	3752	1.01	0.95	0.90
RH830101	26	3742	0.98	0.96	0.93
17826	3	3631	1.06	0.95	0.89
HP114	31	3568	0.97	0.95	0.91
78DW14	30	3536	0.86	0.88	0.78
TX39949-2	10	3513	0.96	0.94	0.88
13996	2	3457	0.83	0.94	0.88
1442	1	2737	0.70	0.79	0.63

Table 7. Summary of agronomic and yield data for 41 wheats in the 1985 Southern Regional Performance Nursery.

VARIETY OR PEDIGREE	: C.I. OR SEL. NO.	: ENTRY: NO.:	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:	: DAYS TO RIPENING: FROM 1/1:	: LODGING %
	NO. OF TRIALS		31	25	1	6
AURORA/2*TAM W-101	OK83396	6	75	132	183	6
TX71A1039-V1*3/AMIGO	TX81V6610	8	73	131	182	15
PAYNE//TAM W-101/AMIGO	OK81322	5	81	133	182	12
TX71A1039-V1*3/AMIGO	TX81V6614	9	73	131	183	14
PAYNE//TAM W-101/AMIGO	OK81306	4	83	134	183	16
PLAINS MAN V/3/2*LARNED/EAGLE//SAGE	KS82H4	19	82	133	181	4
OK11252A/HW76-1226	NA-HW81-170	24	80	132	182	15
WINTER WHEAT HYBRID	RH830201	27	85	130	182	14
TAM W-101/W558 (W8460D)	XW131	29	74	130	181	15
TX71A1039-V1*3/AMIGO	TX81V6180	11	72	129	181	5
BULK SELECTION	NA-HW81-283	21	78	132	184	6
TX71A1039-V1*3/AMIGO	TX81V6187	18	74	129	182	17
TAM-105/TAM W-101	TX80A4135-6	12	79	132	183	11
BULK SELECTION	NA-HW81-459	23	84	131	182	3
AURORA/2*TAM W-101	OK83398	7	76	131	183	4
WINTER WHEAT HYBRID	XH215C	41	86	133	184	4
TX71A1039-V1*3/AMIGO	TX81V6183	13	74	129	182	13
BULK SELECTION	NA-HW81-297	22	76	129	180	5
EXPERIMENTAL LINE	AGC105	37	74	131	179	7
MV69-12/TAM W-103	TX78A3345-V42	15	72	132	181	6
WINTER WHEAT HYBRID	RH845202	28	84	131	182	5
OK11252A/HW76-1226	NA-HW81-157	25	75	134	185	6
TAM W-101/NEWTON	TX80A5172-4	16	82	130	181	34
SHORT WHEAT/SCOUT (TX69A509-2)//FOX	TX78V2430-36	17	80	134	189	19
WINTER WHEAT HYBRID	XH183A	40	82	130	182	7
PLAINS MAN V/ODESSKAYA 51	KS831957	39	84	130	180	11
WINTER WHEAT HYBRID	RH830101	26	88	131	182	9
EXPERIMENTAL LINE	AGC102	38	75	128	180	2
KS73H530//SAGE/ARTHUR	KS82H144	20	78	131	183	3
EXPERIMENTAL LINE	AGC101	34	77	128	179	12
EXPERIMENTAL LINE	AGC103	35	78	128	181	10
MEXICAN BULK HYBRID SELECTION	78DW14	30	86	132	187	26
MEXICAN BULK HYBRID SELECTION	HP114	31	79	130	184	50
AMIGO/3/2*TX71A937 SDY SIB/TCS//CTK	TX39949-2	10	78	131	185	16
BULK POPULATION	77DW48	32	75	131	180	2
BULK POPULATION	77DW19	33	77	130	181	1
TAM 105	17826	3	80	132	182	14
SCOUT 66	13996	2	96	133	182	44
TAM W-103//SHORT WHEAT/SCOUT (TX69A509-1)	TX83A5930	14	70	133	186	2
EXPERIMENTAL LINE	AGC104	36	49	128	176	13
KHARKOF	1442	1	102	141	185	36

Table 7. Concluded.

C.I. OR SEL. NO.	: ENTRY: : NO. :	: SHATTER : % :	: WINTER : SURVIVAL : : % :	: LEAF RUST: : SEVERITY : : % :	: MILDEW : % :	: TAN : SPOT : 0-9 :	: SEPTORIA: : TRITICI : : 0-9 :	: VOLUME : WEIGHT : : KG/HL :	: YIELD : KG/HA :
NO. OF TRIALS	1	5	8	1	1	2	32	29	
OK83396	6	0	71	12	0	3	6	75.2	4348
TX81V6610	8	2	63	8	0	2	4	78.4	4330
OK81322	5	2	68	7	0	5	6	76.3	4317
TX81V6614	9	0	62	4	0	0	5	78.7	4276
OK81306	4	3	69	9	0	8	7	75.4	4237
KS82H4	19	2	85	7	40	0	7	77.1	4212
NA-HW81-170	24	3	77	19	70	0	5	76.2	4164
RH830201	27	3	81	68	0	0	6	75.6	4107
XW131	29	0	67	35	50	0	7	75.1	4106
TX81V6180	11	2	66	50	0	0	6	76.7	4086
NA-HW81-283	21	5	76	16	0	0	5	75.5	4071
TX81V6187	18	0	73	47	0	1	5	77.6	4059
TX80A4135-6	12	0	70	45	20	0	5	74.3	4052
NA-HW81-459	23	3	68	12	75	0	5	78.5	4046
OK83398	7	2	73	7	0	0	6	76.2	4028
XH215C	41	3	90	53	20	.	5	74.9	4027
TX81V6183	13	2	78	57	30	0	6	77.3	4016
NA-HW81-297	22	0	73	47	45	0	6	77.7	3949
AGC105	37	0	69	47	15	0	6	77.1	3940
TX78A3345-V42	15	2	76	55	20	0	7	75.7	3929
RH845202	28	3	71	67	0	0	6	75.6	3918
NA-HW81-157	25	3	78	38	60	0	5	75.7	3894
TX80A5172-4	16	0	70	31	20	0	5	76.6	3888
TX78V2430-36	17	0	34	1	40	3	5	75.8	3881
XH183A	40	2	81	67	30	0	6	75.9	3829
KS831957	39	3	84	15	0	0	6	77.2	3782
RH830101	26	2	83	52	0	0	5	77	3781
AGC102	38	0	76	45	15	0	5	76.8	3749
KS82H144	20	2	58	14	50	0	6	77.1	3721
AGC101	34	0	73	29	20	0	5	76.6	3713
AGC103	35	0	66	56	45	0	5	77.2	3706
78DW14	30	12	30	13	0	0	5	74.8	3686
HP114	31	3	64	51	45	0	6	76.1	3628
TX39949-2	10	2	58	49	0	0	5	74.7	3558
77DW48	32	0	64	37	55	0	5	75.5	3552
77DW19	33	0	78	32	50	0	5	76.2	3542
17826	3	0	88	62	15	.	7	74	3537
13996	2	15	81	48	0	.	6	76.8	3477
TX83A5930	14	0	56	47	45	0	6	73.8	3361
AGC104	36	0	69	52	0	0	9	72.5	3057
1442	1	7	82	60	0	.	5	74.3	2662

Table 8

Seedling reaction of entries of the 1985 Uniform Southern Hard Red Winter Wheat Performance Nursery to selected isolates of Puccinia graminis f. sp. tritici (by D.V. McVey, Cereal Rust Laboratory, USDA, ARS, U.of Mn., St. Paul, MN.)

		Reaction Produced by Isolates									
		70-44-68A	72-00-1370C	69-21-399	71-21-584B	72-25-639C	72-00-53A	75-32-1622A	72-01-4A	74-21-1409A	
		HJCS	QFBS	QSHS	RHRS	RKQS	RTQQ	RTQS	TNMI	TNMI	Spec.
No.	Name or Sel. No.	29	151			11-32-113			15B-2		Sr Gene
1.	Kharkof	S	S	S	S	S	S	S	S	S	NONE
2.	Scout 66	S	S	S	S	S	;1n	S	;	S	17
3.	TAM 105	2	2	2-	2	2	2	2	S	S	Tmp
4.	OK81306	2=	2=	2=	2=	2=	2=	1	2=	2=	Amigo
5.	OK81322	2=	2=	2=	2=	;1	;1	;	2=	2=	Amigo
6.	OK83396	0	2=	2=	2=	2=	;1	;1	2=	2=	5, 31
7.	OK83398	0	2=	2=	2=	;1-	;1-	;1-	1	;1-	5, Amigo
8.	TX81V6610	0	2=	2=	2=	;1-	2=	1	2=	2=	5, Amigo
9.	TX81V6614	0	2=	2=	2=	;1-	2=	2=	2=	2=	5, Amigo
10.	TX39949-2	0	2-	2-	2=	2=	;1-	2=	0	2=	
11.	TX81V6180	0;	2=	2=	2=	2=	2=	2=	2=	2=	5, Amigo
12.	TX80A4135-6	2	2-	2-	2	2-	2	2-	S	S	Tmp
13.	TX81V6183	0;	2=,S	2=,S	2-,S	2-	2-	2=,S	S,2=	S,2=	5,Seg Amigo
14.	TX83A5930	2	2=	2=	2-	-	2-	2-	S	S	Tmp
15.	TX78A3345-V42	2-	2-	2-	2-	2-	2-	2-	S	S	Tmp
16.	TX80A5172-4	2	2	2	2	2	23	23	S	S	Tmp
17.	TX78V2430-36	2=	2=	2=	2=	2=	2-	2=	2	2-	24
18.	TX81V6187	;	2,S	2,S	2,S	2,S	S,2-	S,2=	2=	2-	5,Seg Amigo
19.	KS82H4	2=	2=	2=	2=	2=	2=	2=	2-	2-	24
20.	KS82H144	2	2-	2-	2-	2	2	2=	-	-	24?
21.	NA-HW81-283	S	S	S	S	S	S	S	S	S	NONE
22.	NA-HW81-297	0	S	S	S	S	X-	S	0	S	5, 17
23.	NA-HW81-459	0	2=	2=	2=	2=	2=	2=	-	2	5, +
24.	NA-HW81-170	2=	2=	2=	2-	2-	;	2	0	2	17,+
25.	NA-HW81-157	2=,S	2=	2=	2-,S	2=	;;,2	2=	S	S	Seg +
26.	RH830101	0;,2	2	2,S	2-	2	2	2	-	;1	+
27.	RH830201	;	;	2,S	2,S	2-	2	2	0;	;	5, 6, +
28.	RH845202	2,S	2-	2	2	2	2	2	S	S	Tmp
29.	XW131	0,2=	2=	23	2	2	23	2	0	2=	+
30.	78DW14	2	2-c	S	23c	23c	23c	2c	2	2	+
31.	Hp114	0;	S	S	S	S	S	S	S	S	5
32.	77DW48	S	S	S	S	S	S	S	S	S	NONE
33.	77DW19	S	S	S	S	S	S	S	S	S	NONE
34.	AGC101	S	S	S	S	S	S	S	S	S	NONE
35.	AGC103	S	2	S	2	21c,S	2c,S	2-c	S	S	+
36.	AGC104	2	2-	S	S	2-	2c	2=	S	S	+
37.	AGC105	2=	2	S	2	S	S	S	2=	2=	8, 9b
38.	AGC102	S	2	S	S	S	S	S	S	S	+
39.	KS831957	S	S	S	S	S	S	S	S	S	NONE
40.	XH183a	S	;1-n,S	S	;;,S	S	S	S	;	;1-n,S	Seg 6 & +
41.	XH215c	S	;1-n,S	S	S	S	S	S	0;,S	;;,S	Seg 6

NOTE: c = Chlorosis, n = Necrosis

Table 9

Adult plant reaction of the 1985 Uniform Southern Regional Hard Red Winter Wheat Performance Nursery inoculated to stem and leaf rust at St. Paul, MN. (ARS-USDA, Cereal Rust Laboratory. by D.V.McVey.)

Entry No.	Variety or Pedigree	C.I. or Sel. No	Rust	
			Stem	Leaf
1.	Kharkof	1422	90S	60S
2.	Scout 66	13996	40MS	40S
3.	TAM 105	17826	80S	80S
4.	Payne//TANM W101/Amigo	OK81306	60MR	TMR
5.	"	OK81322	40MR	TS
6.	Aurora/2*TAM W-101	OK83396	60MR	TS
7.	"	OK83398	60MR	10MS-S
8.	TX71A1039-V1*3/Amigo	TX81V6610	60MR	TR
9.	"	TX81V6614	40MR	TMR
10.	Amigo/3/2*TX71A937 Sdy sib/ Tcs//Ctk	TX39949-2	40MS	80S
11.	TXC71A1039-V1*3/Amigo	TX81V6180	60MS	40S
12.	TAM-105/TAM W-101	TX80A4135-6	90S	60S
13.	TX71A1039-V1*3/Amigo	TX81V6183	60S	60S
14.	TAM W-103//Short Wheat/ Sut (TX69A509-1)	TX83A5930	90S	60S
15.	MV69-12/TAM W-103	TX80A5172-4	10MR	TS
16.	TAM W-101/Newton	TX80A5172-4	10MR	TS
17.	Short Wheat/Scout (TX69A509-2)//Fox	TX78V2430-36	60S	TMS
18.	TX71A1039-V1*3/Amigo	TX81V6187	60S	60S
19.	Plainsman V/3/2*Larned/ Eagle//Sage	KS82H4	TR	TS
20.	KS73H530//Sage/Arthur	KS82H144	40MR	40S
21.	Bulk Selection (Victory)	NA-HW81-283	40MR	30MS
22.	" (Stallion)	NA-HW81-297	80S	60S
23.	" (Thunderbird)	NA-HW81-459	20MR	TS
24.	OK11252A/HW76-1226	NA-HW81-170	40MR	TR
25.	"	NA-HW81-157	30MS	TS
26.	Winter Wheat Hybrid	RH830101	5MS	60S
27.	"	RH830201	30S	60S
28.	"	RH845202	60S	60S
29.	TAM W-101/W558 (W8460D)	XW131	80S	TS
30.	Mexican Bulk	78DW14	80S	TS
31.	"	Hp114	90S	40S
32.	Bulk Population	77DW48	80S	20MS
33.	"	77DW19	80S	5S
34.	Experimental Line	AGC5630	80S	40S
35.	"	AGC5625	80S	40S
36.	"	AGC6004	80S	60S
37.	"	AGC6114	80S	20S
38.	"	AGC5627	80S	20S
39.	Plainsman V/Odesskya 51	KS831957	80S	40S
40.	Winter Wheat Hybrid	XH183a	80S	80S
41.	"	XH215c	40S	10S

Table 10

Field Infection Data - Soil-Borne Mosaic
 1985 Southern Regional Performance Nursery^{1/}
 Urbana, Illinois
 (Cooperators - H. Jedlinski and C. M. Brown)

ENTRY NO.	C.I. OR SEL. NO.	DISEASE SEVERITY	
		REP 1	REP 2
1	1442	S	MS
2	13996	S	S
3	17826	S	S
4	OK81306	S	S
5	OK81322	S	S
6	OK83396	Ros	Ros
7	OK83398	MS	S
8	TX81V6610	S	S
9	TX81V6614	S	S
10	TX39949-2	S	S
11	TX81V6180	S	S
12	TX80A4135-6	S	S
13	TX81V6183	VS	VS
14	TX83A5930	S	S
15	TX78A3345-V42	MS	S-MS
16	TX80A5172-4	S	S-MS
17	TX78V2430-36	WK	WK
18	TX81V6187	S	S
19	KS82H4	S	MS
20	KS82H144	S	S
21	NA-HW81-283	MS	MS
22	NA-HW81-297	R	R
23	NA-HW81-459	R	R
24	NA-HW81-170	R	R
25	NA-HW81-157	MS	MR
26	RH830101	S	VS
27	RH830201	S	S
28	RH845202	S	S-MS
29	XW131	MS	MS
30	78DW14	WK	WK
31	HP114	S	S
32	77DW48	VS	VS
33	77DW19	VS	VS
34	AGC5630	VR	VR
35	AGC5625	VR	VR
36	AGC6004	VR	VR
37	AGC6114	VS	VS
38	AGC5627	VR	VR
39	KS831957	VR	VR
40	XH183a	R	R
41	XH215c	R-MR	R-MR

^{1/} The nursery was planted on October 2, 1984. The severity data were taken on April 18, 1985. The rating scale is the same as that in previous years; Ros = rosetting; WK = winter killed.

Table 11. Hessian fly reaction, Great Plains biotype,
1985 Southern Regional Performance Nursery.
(Data from J. H. Hatchett, Manhattan, KS.)

ENTRY NO.	REACTION TYPE	NO. OF PLANTS	
		R	S
1	S		
2	S		
3	S		
4	S		
5	S		
6	S		
7	S		
8	S		
9	S		
10	S		
11	S		
12	S		
13	S		
14	S		
15	S		
16	S		
17	S		
18	S		
19	R		
20	S		
21	S		
22	S		
23	S		
24	S		
25	S		
26	S		
27	H	9	10
28	S		
29	H	8	10
30	S		
31	S		
32	H	6	19
33	S		
34	S		
35	S		
36	S		
37	S		
38	S		
39	S		
40	S		
41	S		

1985
NORTHERN REGIONAL PERFORMANCE NURSERY

<u>Entry no.</u>	<u>Variety or Pedigree</u>	<u>C.I. or Sel. No.</u>	<u>Source</u>
1	Kharkof	1442	Check
2	Warrior	13190	"
3	Colt	NE78696	"
4	Lovrin 13/2*Ctk 78	NE80413	Nebraska
5	CI15322//Agent/4*Sut/3/ Ctk/4/SD82163	SD82163	So. Dakota
6	Amigo/2*Ctk 78//Rose	SD82119	" "
7	Sage*2/Hand	SD79391	" "
8*	Amigo/Ctk*2//SD74221	SD82195	" "
9*	NE70545/NE70537//CO672135/ CO662079	SD82102	" "
10*	CI15322//Agate/Scout*4/3/ Ctk 78	SD76598-7	" "
11**	Winter Wheat Hybrid	RH830201	R-H
12**	" " "	RH830301	"
13*	" " "	RH846835	"
14*	Ctk//Froid/7759-19	ND8002	No. Dakota
15*	Wnk*2/II64-27	ND8061	" "
16*	Wnk/Rrr	ND8095	" "
17*	Bulk Selection	NA-HW81-459	NAPB
18**	Winter Wheat Hybrid (new seed)	XNH1150	HybriTech
19*	" " "	XH385	"
20*	" " "	XNH1251	"
21	Norwin	MT7877	Montana
22	Redwin Selection	MT8003	"
23***	TAM 107	TXGH2875	Texas
24***	TAM 108	TX71A562-6-28	"

* New in 1985.

** New seed provided.

*** Entered from the SRPN.

TEST SITE INFORMATION - NRPN

Clovis, NM -- See information for SRPN.

Nebraska Stations -- See information for SRPN.

South Dakota Stations -- See information for SRPN.

Casselton, ND -- Location abandoned, 100% winterkill.

Williston, ND -- The nursery was planted on fallow and fall emergence was excellent. Dry conditions throughout the growing season resulted in low yields. The winter was open with very little snow cover. Low temperatures during the first 10 days of February resulted in soil temperatures at a depth of 2" of -9 degrees F, causing winter injury to all entries. Warm weather in March and early April resulted in early growth and dormancy broke early. Below average rainfall (40 to 50% of normal) in April, May, and June occurred with above average temperatures in April and May and below average temperatures during June. No disease or insect problems occurred.

Hettinger, ND -- The nursery was planted during the second week of September on summer fallowed land. Very dry fall conditions resulted in delayed emergence. Inadequate snowfall contributed to differential winter survival and variable stands.

Rosemount, MN -- Little snow cover was present during December, January, and February. Leaf rust was present but weather was dry from the first week in June to mid-July with no measureable precipitation. Lodging, stem rust and other leaf diseases were not severe. Temperatures were cooler than normal in June, and normal in July. (The nursery is located near St. Paul).

Waseca, MN -- Leaf rust was prevalent but had little influence on yield because of dry weather. Crop stood well. Some gopher damage on a few plots.

Sheridan, WY -- Fall and winter conditions were generally good. The spring was very dry and by harvest the area was 5" below normal in precipitation. Grasshoppers also were bad, but damage to the nursery was small due to spraying.

Archer, WY -- Moisture conditions were good during planting. The winter was a typical mild Wyoming winter with little snow cover. A late winter and very dry spring and summer months reduced yields throughout eastern Wyoming. Diseases were not a problem, however grasshoppers caused some damage.

Moccasin, MT -- The nursery was seeded on fallow into moist soil on September 19 with a deep furrow drill. The nursery received 45 lbs/acre N as urea which was applied preplant incorporated, and 60 lbs/acre diammonium phosphate (6-30-0) was applied with the seed. Excellent stands were obtained and over an inch of precipitation was received after seeding. A severe temperature drop in October prevented gradual winter hardening of the crop and the winter was windy and cold. Significant rainfall did not occur until the Memorial Day weekend. As a result, all entries experienced some winterkill and the pattern of winterkill was very erratic and unpredictable. Yields were below average and CV's were high. Stands were thin and heading and maturity notes were difficult to record.

Sidney, MT -- Abandoned due to winterkill.

Aberdeen, ID -- See information for SRPN.

Lind, WA -- See information for SRPN.

Lethbridge, Alberta -- Abandoned due to winterkill.

Table 12. Yield and agronomic data for entries in the 1985 Northern Regional Performance Nursery.

CLOVIS

(IRR.)

NEW MEXICO

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: LODGING %	: DAYS TO HEADING FROM 1/1:	: LEAF RUST: SEVERITY: 0-9
SD82102	9	7162	79.4	104	10	123	3
CAPITAN	25	6937	78.1	107	17	124	4
XH385	19	6928	76	96	20	123	5
ND8061	15	6765	80	100	3	128	6
TX71A562-6-28	24	6761	76.2	89	17	123	6
TXGH2875	23	6625	78.5	82	13	115	8
SD76598-7	10	6597	80.3	97	3	124	3
RH830201	11	6448	79.6	98	0	119	7
MT8003	22	6359	79.4	98	3	129	5
SD79391	7	6316	79.7	96	33	124	3
RH830301	12	6308	79.2	103	17	121	6
NE80413	4	6295	82.7	104	10	124	2
ND8002	14	6255	78.4	102	0	129	4
XNH1150	18	6189	79	101	7	123	5
XNH1251	20	6164	79.6	108	37	123	3
SD82163	5	6136	81	98	20	123	4
RH846835	13	6128	79.5	90	3	116	8
NA-HW81-459	17	6109	82.7	88	10	119	2
CI13190	2	5933	79.6	105	0	126	4
SD82195	8	5877	80.1	102	0	127	3
SD82119	6	5778	79.5	105	17	123	6
PI476975	3	5510	79.1	90	0	123	6
ND8095	16	5344	79.9	108	0	129	5
MT7877	21	5061	76	74	0	127	7
CI1442	1	4709	79.2	114	13	128	5
MEAN		6188					
LSD(.05)		1126					
C.V.		11.0					

CLOVIS

(DRYL.)

NEW MEXICO

THREE REPLICATIONS

C. I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HL	: PLANT HEIGHT CM	: LODGING %	: DAYS TO HEADING FROM 1/1:	: LEAF RUST: SEVERITY: 0-9
TXGH2875	23	4518	76.7	80	0	115	8
RH846835	13	4378	77.3	80	0	114	7
NA-HW81-459	17	4349	80.8	84	0	118	2
ND8002	14	4346	76.3	91	0	128	2
RH830301	12	4304	77.7	93	3	120	5
NE80413	4	4271	78.8	91	0	123	2
SD76598-7	10	4176	78.3	91	0	124	2
SD82163	5	4112	78.3	92	3	123	4
CAPITAN	25	4096	77.3	93	7	124	4
SD82102	9	4078	76.4	92	0	123	2
SD79391	7	3976	78.1	89	17	124	2
MT8003	22	3972	77.6	93	0	127	5
XH385	19	3949	74	85	0	123	5
PI476975	3	3894	76.6	86	0	122	6
RH830201	11	3853	77.8	88	0	120	5
XNH1251	20	3808	77.5	102	7	123	3
TX71A562-6-28	24	3672	70.6	86	20	122	8
XNH1150	18	3665	77.1	95	0	122	5
CI13190	2	3467	76.4	90	0	124	2
SD82195	8	3443	75.3	92	0	127	4
ND8061	15	3297	78.7	84	0	127	4
SD82119	6	3177	76.3	92	0	122	5
CI1442	1	3162	77.3	99	0	127	4
MT7877	21	3033	73.9	68	0	127	7
ND8095	16	3022	78	94	0	128	5

MEAN	3841
LSD(.05)	662
C.V.	10.5

MEAD

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: PLANT HEIGHT CM	: LODGING 0-9	: DAYS TO HEADING FROM 1/1	: LEAF RUST: SEV.:RESP: % : 1-9:
SD79391	7	3517	107	1	147	1 2
SD76598-7	10	3280	116	1	146	1 2
NA-HW81-459	17	3105	95	0	143	1 2
XNH1251	20	3031	110	0	144	70 7
SD82102	9	2968	115	2	147	1 2
PI476975	3	2966	89	0	145	80 8
TX71A562-6-28	24	2905	98	0	145	70 7
RH830201	11	2804	101	0	143	90 8
SD82195	8	2764	113	0	149	25 8
NE80413	4	2607	107	2	146	1 2
XNH1150	18	2421	103	0	145	90 8
RH830301	12	2408	110	2	144	90 8
ND8061	15	2403	107	1	150	80 8
CI13190	2	2394	115	2	149	90 8
MT8003	22	2381	116	0	151	90 8
XH385	19	2156	99	0	147	70 7
SD82119	6	2143	112	1	144	70 8
ND8002	14	2127	117	3	152	40 8
CI1442	1	2118	118	3	151	60 8
SD82163	5	2056	108	2	146	80 7
TXGH2875	23	1887	84	0	140	90 8
ND8095	16	1726	112	1	152	70 8
RH846835	13	1625	97	1	140	90 8
MT7877	21	1038	82	2	150	90 8

MEAN	2451
LSD(.05)	761
C.V.	18.8

SIDNEY

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: HAIL DAMAGE %	:
SD82195	8	2601	79.9	5	
ND8095	16	2500	79.6	30	
MT8003	22	2464	80	20	
TXGH2875	23	2439	78.9	30	
PI476975	3	2394	79.1	5	
XH385	19	2353	79.7	20	
TX71A562-6-28	24	2185	78.2	10	
RH830201	11	2184	80.4	30	
ND8061	15	2159	80.1	20	
CI13190	2	2146	78.7	10	
ND8002	14	2132	78	20	
SD76598-7	10	2090	80.2	20	
NE80413	4	2082	78.6	30	
RH830301	12	2074	79.9	30	
XNH1251	20	2067	80.1	10	
SD79391	7	2065	80	30	
NA-HW81-459	17	2044	81.3	20	
SD82102	9	2019	79.7	20	
SD82163	5	1998	80.1	50	
SD82119	6	1884	78.8	30	
RH846835	13	1788	78.8	20	
MT7877	21	1779	80.9	30	
CI1442	1	1757	79.2	20	
XNH1150	18	1535	79.2	20	
MEAN		2114			
LSD(.05)		N.S.			
C.V.		17.5			

ALLIANCE

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:
RH830201	11	2486	78.4	64	147
SD82163	5	2465	78.7	71	149
PI476975	3	2438	77.7	58	149
XH385	19	2308	76.1	62	150
RH846835	13	2213	77.5	59	146
CI1442	1	2165	77.1	82	150
TXGH2875	23	2162	77.4	59	146
NE80413	4	2160	77.3	73	150
ND8002	14	2134	75.5	71	154
ND8095	16	2045	78.6	66	152
TX71A562-6-28	24	2041	75.7	62	149
SD82102	9	2014	77	69	150
SD76598-7	10	2011	76.9	69	150
MT8003	22	2008	76.4	72	153
MT7877	21	1988	76.9	50	153
ND8061	15	1973	77.4	66	152
CI13190	2	1968	77.5	74	150
SD82119	6	1897	78	74	150
XNH1251	20	1897	76.2	80	150
RH830301	12	1838	78.9	65	147
SD82195	8	1688	76.2	69	153
NA-HW81-459	17	1686	80	64	147
SD79391	7	1662	78.7	63	151
XNH1150	18	1612	75.9	68	150
MEAN		2036			
LSD(.05)		520			
C.V.		15.5			

BROOKINGS

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:
SD82102	9	5806	80	88	155
XH385	19	5649	78.7	84	156
CI13190	2	5537	81.3	102	155
XNH1251	20	5515	78.7	91	156
SD82163	5	5447	81.3	89	155
ND8002	14	5156	80	96	158
NA-HW81-459	17	5156	81.3	80	154
SD82195	8	5133	80	91	158
TX71A562-6-28	24	5111	74.8	78	155
RH830301	12	5089	78.7	86	154
SD76598-7	10	5044	80	90	155
ND8095	16	4954	81.3	102	160
XNH1150	18	4932	76.1	91	155
RH830201	11	4909	78.7	83	154
PI476975	3	4842	78.7	76	155
MT8003	22	4820	78.7	95	158
RH846835	13	4730	77.4	80	153
ND8061	15	4685	81.3	89	157
SD82119	6	4663	78.7	88	154
TXGH2875	23	4618	77.4	80	153
NE80413	4	4595	78.7	88	156
SD79391	7	4551	80	83	156
CI1442	1	4483	80	106	160
MT7877	21	4326	77.4	78	157

MEAN	4990
LSD(.05)	N.S.
C.V.	11.3

HIGHMORE

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:	: WINTER SURVIVAL %
ND8002	14	2600	76.1	59	179	93
SD82163	5	2466	77.4	51	177	50
SD82195	8	2376	76.1	56	178	80
NE80413	4	2331	77.4	55	177	40
CI1442	1	2309	76.1	69	179	67
MT7877	21	2309	78.7	52	178	93
MT8003	22	2309	74.8	57	179	67
CI13190	2	2287	74.8	58	176	73
XNH1251	20	2264	74.8	52	176	67
ND8095	16	2197	77.4	58	178	100
SD82102	9	2130	76.1	51	175	63
XH385	19	2130	73.5	48	176	67
XNH1150	18	2085	76.1	49	176	63
PI476975	3	2018	76.1	52	178	73
ND8061	15	2018	76.1	57	179	97
RH830301	12	1928	76.1	44	175	63
SD82119	6	1861	77.4	48	176	70
SD76598-7	10	1838	76.1	52	176	63
NA-HW81-459	17	1838	73.5	49	175	63
SD79391	7	1816	77.4	51	176	73
TXGH2875	23	1793	74.8	40	175	60
TX71A562-6-28	24	1749	76.1	44	176	57
RH830201	11	1704	72.2	50	175	60
RH846835	13	1480	72.2	38	175	43
MEAN		2076				
LSD(.05)		476				
C.V.		13.9				

PRESHO

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:	: HAIL DAMAGE %	:
SD82119	6	2825	76.1	56	176	30	
NE80413	4	2443	74.8	53	178	10	
SD82163	5	2421	74.8	53	176	27	
TX71A562-6-28	24	2421	74.8	51	176	10	
XNH1251	20	2309	73.5	58	175	23	
TXGH2875	23	2264	76.1	52	175	40	
ND8002	14	2219	74.8	58	179	20	
MT8003	22	2197	73.5	55	179	10	
RH846835	13	2174	76.1	51	175	20	
SD76598-7	10	2107	73.5	56	177	23	
XNH1150	18	2085	73.5	55	176	7	
XH385	19	2040	76.1	52	177	20	
NA-HW81-459	17	2018	74.8	53	175	27	
SD79391	7	1995	73.5	52	176	18	
CI1442	1	1883	69.7	64	179	18	
SD82102	9	1883	72.2	50	176	13	
RH830301	12	1883	74.8	54	176	32	
PI476975	3	1861	74.8	46	178	13	
CI13190	2	1793	76.1	60	176	33	
SD82195	8	1749	69.7	53	179	7	
ND8095	16	1704	69.7	56	179	7	
RH830201	11	1569	72.2	55	175	37	
MT7877	21	1435	69.7	41	179	7	
ND8061	15	1211	69.7	52	179	5	

MEAN	2020
LSD(.05)	450
C.V.	13.5

WILLISTON

N. DAKOTA

FOUR REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:	: WINTER SURVIVAL %
ROUGH RIDER	27	1299	75.9	68	158	59
ND8095	16	1261	76.9	60	158	66
MT7877	21	1185	75.4	56	160	41
CHEYENNE	34	1171	74.3	66	159	39
CI13190	2	1169	74.7	59	157	34
ND8002	14	1160	74.2	56	158	60
XNH1251	20	1144	74.1	63	156	26
WINOKA	35	1143	76.6	66	159	54
AGASSIZ	26	1138	75.6	59	156	65
REDWIN	28	1124	75	62	160	38
XNH1150	18	1120	75.5	60	158	12
SD82195	8	1119	75.9	57	158	44
RH830201	11	1095	76.2	55	154	40
CI1442	1	1079	75.1	65	159	33
TX71A562-6-28	24	1071	75.1	55	155	16
SD82102	9	1068	74.6	61	157	29
NORSTAR	25	1067	75.2	65	161	81
MT7811	32	1027	73.6	63	162	23
SD76598-7	10	1019	74.5	61	158	23
ND8061	15	1010	72.4	57	159	51
SD82119	6	1006	74.5	60	159	23
RH830301	12	987	76.6	55	152	33
PI476975	3	954	73.8	55	155	34
NE80413	4	943	73.4	56	158	26
NA-HW81-459	17	938	76.1	59	155	24
XH385	19	934	72.4	57	158	16
SD82163	5	899	73.8	57	157	16
WINRIDGE	33	890	72.4	56	161	30
TXGH2875	23	872	74	53	160	24
ROSEBUD	30	850	73	62	160	39
SIOUXLAND	36	845	74.4	57	157	29
CREE	31	844	72.5	61	162	23
MT8003	22	833	73.3	64	162	17
SD79391	7	830	72.4	58	160	35
RH846835	13	636	73	49	153	11
ARCHER	29	533	72.1	58	160	10

MEAN	1007
LSD(.05)	299
C.V.	21.2

HETTINGER

N. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY; NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:	: WINTER SURVIVAL %
CI13190	2	1527	61.5	85	168	78
ND8002	14	1500	64	88	169	83
AGASSIZ	27	1472	68.5	88	168	85
NORSTAR	25	1464	68.1	97	168	85
SD82195	8	1460	67.6	81	167	73
XH385	19	1341	68.6	70	165	45
ROUGH RIDER	26	1305	72.1	87	165	90
ND8095	16	1281	67.3	81	170	85
RH830301	12	1244	72.5	74	161	58
ND8061	15	1225	70.8	81	166	73
PI476975	3	1219	70.2	67	163	50
CI1442	1	1153	68.8	88	169	55
RH830201	11	1149	73.4	73	164	53
MT7877	21	1094	68.8	68	169	72
SD76598-7	10	1024	64.8	77	165	40
SD79391	7	1020	67	69	166	52
SD82119	6	962	69.8	74	165	48
SD82163	5	880	63.1	77	165	38
XNH1251	20	814	67.1	82	166	45
NE80413	4	770	66.6	76	165	20
RH846835	13	743	71	59	161	42
XNH1150	18	742	61.9	73	168	12
SD82102	9	738	62.8	83	167	17
NA-HW81-459	17	644	66.6	66	166	17
MT8003	22	590	56	73	170	15
TX71A562-6-28	24	314	64.2	61	165	5
TXGH2875	23	301	66.2	55	164	30

MEAN	1038
LSD(.05)	493
C.V.	28.9

ROSEMOUNT

MINNESOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HL	: PLANT HEIGHT CM	: LODGING 0-9	: DAYS TO HEADING FROM 1/1:	: WINTER SURVIVAL %	: LEAF RUST: SEV.: %	: RESP: 1-9:
TX71A562-6-28	24	3443	78.7	79	2	150	68	40	8
XNH1251	20	3354	78.7	104	3	150	100	60	8
XNH1150	18	3143	78.7	101	2	150	97	80	8
XH385	19	3127	77.4	83	2	150	97	80	8
ND8002	14	3123	76.8	102	2	156	97	50	8
ND8061	15	3116	79.3	94	2	154	97	30	8
MT7877	21	2975	76.8	69	1	156	75	70	8
SD76598-7	10	2970	79.3	96	3	152	100	5	8
SD82102	9	2968	79.3	98	3	150	90	.	.
RH830301	12	2937	80.6	93	3	147	97	40	8
MT8003	22	2928	77.4	98	1	154	77	90	8
ND8095	16	2856	79.3	96	2	157	100	40	8
SD82163	5	2822	78	85	2	151	63	60	8
SD82195	8	2784	79.3	99	2	155	98	10	8
SD79391	7	2665	79.3	89	3	151	57	10	8
RH830201	11	2621	79.3	89	2	146	100	70	8
NE80413	4	2605	78.7	98	2	153	62	5	3
NA-HW81-459	17	2495	81.3	89	1	147	90	1	2
SD82119	6	2378	78	90	2	149	57	70	8
TXGH2875	23	2336	79.3	77	1	145	53	90	8
CI1442	1	2253	76.8	110	4	156	28	60	8
RH846835	13	2244	79.3	83	1	145	87	90	8
CI13190	2	2141	78.7	97	4	153	35	70	8
PI476975	3	1856	75.5	70	1	152	42	60	8

MEAN	2756
LSD(.05)	800
C.V.	17.6

WASECA
MINNESOTA
THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: LODGING 0-9	: WINTER SURVIVAL %
ND8002	14	5873	81.6	102	1	88
SD82102	9	5864	82	90	2	72
SD76598-7	10	5692	79.6	90	2	50
SD82195	8	5651	82.7	98	1	92
XNH1251	20	5185	81.4	93	1	63
SD79391	7	4887	82.7	86	2	82
ND8095	16	4833	82.1	97	1	91
ND8061	15	4788	82.6	95	2	85
RH830201	11	4734	81.5	81	2	68
NA-HW81-459	17	4516	82	78	1	50
CI13190	2	4425	77.6	102	2	65
CI1442	1	4235	77.4	113	3	52
XH385	19	4182	79.9	80	1	55
RH830301	12	3919	81.3	80	2	55
MT7877	21	3918	77.4	73	1	65
XNH1150	18	3801	80.6	91	1	67
NE80413	4	3696	73	88	2	25
MT8003	22	3593	77.7	95	1	43
TX71A562-6-28	24	3479	78.6	71	2	63
PI476975	3	3439	78.2	75	1	42
SD82119	6	3249	79.1	88	2	46
RH846835	13	2298	78.6	73	2	28
SD82163	5	2226	73.3	83	1	27
TXGH2875	23	.	78.4	69	1	40
MEAN		4281				
LSD(.05)		1136				
C.V.		16.1				

SHERIDAN

WYOMING

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:
XNH1150	18	2910	80.7	87	157
XH385	19	2834	80.7	73	154
XNH1251	20	2753	79.8	83	154
NE80413	4	2740	80.7	78	154
TX71A562-6-28	24	2698	80.7	64	154
MT8003	22	2619	81	82	159
SD82163	5	2563	80.8	76	154
MT7877	21	2498	81.2	73	158
ND8002	14	2483	80.1	83	161
ND8061	15	2483	83	75	158
CI13190	2	2435	80.6	80	154
RH830201	11	2409	81	72	151
RH830301	12	2340	81.5	74	149
TXGH2875	23	2297	79.4	65	150
SD82102	9	2286	80	79	155
NA-HW81-459	17	2279	82.6	68	150
RH846835	13	2275	80.4	67	149
SD76598-7	10	2253	80.1	76	156
ND8095	16	2244	81	78	159
SD79391	7	2188	80.7	78	155
SD82119	6	2121	81.4	74	153
PI476975	3	2119	79.8	61	155
SD82195	8	2071	80.7	78	158
CI1442	1	2060	79.6	85	157
MEAN		2415			
LSD(.05)		532			
C.V.		13.4			

ARCHER
WYOMING
THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL
MT7877	21	1695	71.7
MT8003	22	1690	74.5
ND8002	14	1668	70.9
XNH1150	18	1612	69.4
RH830201	11	1607	74
XH385	19	1606	66.4
TX71A562-6-28	24	1574	69.6
NA-HW81-459	17	1557	73.2
RH830301	12	1554	74.5
ND8095	16	1545	73.9
XNH1251	20	1535	69.9
CI13190	2	1533	72.5
SD82163	5	1511	72.9
ND8061	15	1501	74.8
RH846835	13	1494	69
NE80413	4	1449	74
TXGH2875	23	1446	71
PI476975	3	1443	72.2
SD82102	9	1437	69.9
SD82119	6	1409	70.2
SD79391	7	1374	72.3
SD76598-7	10	1333	71
CI1442	1	1310	73.8
SD82195	8	1304	73.2

MEAN	1508
LSD(.05)	N.S.
C.V.	12.3

MOCCASIN

MONTANA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : KG/HA :	: VOLUME : WEIGHT : KG/HL :	: PLANT : HEIGHT : CM :	: DAYS TO : HEADING : : FROM 1/1:	: WINTER : SURVIVAL : : 1-5 :	: GRAIN : PROTEIN : : % :
MT7877	21	1938	71	56	168	4	14
ND8002	14	1725	65.5	77	169	4	14.3
XH385	19	1637	63.9	68	169	4	15.5
ND8095	16	1625	70.8	75	.	4	15.1
PI476975	3	1608	67.9	57	168	4	16.5
RH830201	11	1555	71.3	70	168	3	15.1
CI13190	2	1554	66.5	71	167	4	14.4
RH830301	12	1547	69.5	68	167	3	15.2
ND8061	15	1526	72.1	64	.	3	15.5
SD82119	6	1505	68	72	167	4	16.2
CI1442	1	1488	67.9	83	169	4	14.7
SD76598-7	10	1479	69.5	75	.	3	15.3
SD82195	8	1394	71.3	71	.	3	16.3
SD82163	5	1362	68.6	70	168	3	16.1
XNH1251	20	1360	68.5	78	170	3	16.1
SD79391	7	1343	70.5	69	167	4	15.9
XNH1150	18	1331	65.8	76	168	3	15.5
MT8003	22	1331	71.8	74	.	3	14.2
SD82102	9	1257	64.9	75	167	3	16.6
NE80413	4	1251	70	70	.	3	15.9
NA-HW81-459	17	1247	70.5	69	168	3	15.3
RH846835	13	1182	67.8	60	167	3	15.7
TXGH2875	23	1054	69.1	57	166	2	15.3
TX71A562-6-28	24	859	68.9	62	.	2	15.2
MEAN		1423					
LSD(.05)		416					
C.V.		17.7					

ABERDEEN

IDAHO

TWO REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:	: WINTER SURVIVAL %	: WINTER ¹ SURVIVAL %
NEELY	25	7835	79.1	84	162	95	50
ND8002	14	7371	79.1	91	161	97	55
XH385	19	7330	78.4	76	159	95	43
NE80413	4	6956	79.1	84	161	89	33
MT8003	22	6597	78.4	88	162	93	45
SD76598-7	10	6548	79.3	80	160	95	67
ND8095	16	6402	80	93	164	92	42
XNH1150	18	6395	79.1	79	158	87	82
SD82163	5	6306	79.1	81	160	93	20
ND8061	15	6299	78.4	90	164	97	53
SD82102	9	6174	78.4	83	159	93	67
SD82195	8	6140	79.7	89	161	95	48
TX71A562-6-28	24	6068	77.8	69	156	98	50
NA-HW81-459	17	6061	80	71	156	93	68
MT7877	21	5920	77.1	67	163	96	37
PI476975	3	5914	78.4	70	155	94	43
SD82119	6	5880	79.3	84	157	88	30
XNH1251	20	5837	78	81	160	90	68
RH830201	11	5781	79.1	74	152	98	53
RH830301	12	5526	78.4	76	155	93	30
CI1442	1	5405	78.4	94	162	95	37
SD79391	7	5373	78.7	79	157	94	53
CI13190	2	5192	77.8	93	163	91	27
RH846835	13	4981	78	71	154	91	60
TXGH2875	23	4959	77.4	66	155	92	53
MEAN		6130					
LSD(.05)		1072					
C.V.		10.6					

¹From Tetonia, Idaho Nursery.

LIND
WASHINGTON
THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HL	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:
CI13190	2	1959	79.2	70	149
SD82119	6	1881	80.8	69	145
TX71A562-6-28	24	1876	80	64	146
SD82102	9	1845	79.7	68	147
RH830301	12	1822	79.6	64	145
NA-HW81-459	17	1811	81.1	64	146
XNH1150	18	1773	79.5	73	147
XH385	19	1735	78.7	63	147
MT8003	22	1686	79.7	71	149
SD79391	7	1683	80.2	63	147
CI1442	1	1668	79.3	78	150
SD76598-7	10	1668	80.2	67	147
RH846835	13	1661	78.6	58	145
PI476975	3	1630	80.9	69	147
XNH1251	20	1630	79.5	75	147
SD82195	8	1627	79.9	69	150
TXGH2875	23	1627	78.2	56	145
ND8002	14	1592	78.3	74	151
RH830201	11	1571	80.2	65	145
MT7877	21	1571	82.2	52	150
NE80413	4	1547	80.5	68	148
ND8061	15	1468	80.9	72	151
SD82163	5	1392	80.5	63	148
ND8095	16	1358	78.8	77	151
MEAN		1670			
LSD(.05)		N.S.			
C.V.		21.0			

Table 13. Summary of mean yields (kg/ha) and ranks of 24 wheats grown in the 1985 Northern Regional Performance Nursery at 17 locations, with state means and ranks.

VARIETY OR PEDIGREE	: C.I. OR SEL. NO.	: ENTRY: NO.	: MEAD NEBRASKA	: SIDNEY* NEBRASKA	: ALLIANCE NEBRASKA	: NEBRASKA STATE MEAN	:
CTK//FROID/7759-19	ND8002	14	2127 18	2132 11	2134 9	2131 17	
WINTER WHEAT HYBRID	XH385	19	2156 16	2353 6	2308 4	2232 11	
NE70545/NE70537//CO672135/CO662079	SD82102	9	2968 5	2019 18	2014 12	2491 5	
CI15322//AGATE/SCOUT*4/3/CTK 78	SD76598-7	10	3280 2	2090 12	2011 13	2645 3	
WINTER WHEAT HYBRID	XNH1251	20	3031 4	2067 15	1897 18	2464 7	
AMIGO/CTK*2//SD74221	SD82195	8	2764 9	2601 1	1688 21	2226 12	
WINTER WHEAT HYBRID	RH830201	11	2804 8	2184 8	2486 1	2645 2	
WNK*2//I164-27	ND8061	15	2403 13	2159 9	1973 16	2188 14	
LOVRIN 13/2*CTK78	NE80413	4	2607 10	2082 13	2160 8	2384 9	
BULK SELECTION	NA-HW81-459	17	3105 3	2044 17	1686 22	2395 8	
WINTER WHEAT HYBRID	RH830301	12	2408 12	2074 14	1838 20	2123 18	
WINTER WHEAT HYBRID	XNH1150	18	2421 11	1535 24	1612 24	2016 21	
REDWIN SELECTION	MT8003	22	2381 15	2464 3	2008 14	2194 13	
TAM 108	TX71A562-6-28	24	2905 7	2185 7	2041 11	2473 6	
WARRIOR	CI13190	2	2394 14	2146 10	1968 17	2181 15	
SAGE*2/HAND	SD79391	7	3517 1	2065 16	1662 23	2590 4	
WNK/RRR	ND8095	16	1726 22	2500 2	2045 10	1885 23	
CI15322//AGENT/4*SUT/3/CTK/4/SD75375	SD82163	5	2056 20	1998 19	2465 2	2260 10	
COLT	PI476975	3	2966 6	2394 5	2438 3	2702 1	
NORWIN	MT7877	21	1038 24	1779 22	1988 15	1513 24	
AMIGO/2*CTK 78//ROSE	SD82119	6	2143 17	1884 20	1897 18	2020 20	
KHARKOF	CI1442	1	2118 19	1757 23	2165 6	2142 16	
TAM 107	TXGH2875	23	1887 21	2439 4	2162 7	2025 19	
WINTER WHEAT HYBRID	RH846835	13	1625 23	1788 21	2213 5	1919 22	
	MEAN		2451	2114	2036	2244	
	LSD(.05)		761	N.S.	520	1001	
	C.V.		18.8	17.5	15.5	17.6	

Table 13. Continued.

C.I. OR SEL. NO.	: ENTRY: : NO.	: BROOKINGS : S. DAKOTA	: HIGHMORE : S. DAKOTA	: PRESHO* : S. DAKOTA	: SOUTH : DAKOTA : STATE MEAN	: WASECA : MINNESOTA	: ROSEMOUNT : MINNESOTA	: MINNESOTA : STATE MEAN
ND8002	14	5156 6	2600 1	2219 7	3878 6	5873 1	3123 5	4498 1
XH385	19	5649 2	2130 11	2040 12	3889 4	4182 13	3127 4	3655 10
SD82102	9	5806 1	2130 11	1883 15	3968 1	5864 2	2968 9	4416 2
SD76598-7	10	5044 11	1838 18	2107 10	3441 14	5692 3	2970 8	4331 3
XNH1251	20	5515 4	2264 9	2309 5	3889 4	5185 5	3354 2	4269 4
SD82195	8	5133 8	2376 3	1749 20	3755 7	5651 4	2784 14	4218 5
RH830201	11	4909 14	1704 23	1569 22	3306 20	4734 9	2621 16	3677 9
ND8061	15	4685 18	2018 14	1211 24	3351 18	4788 8	3116 6	3952 6
NE80413	4	4595 21	2331 4	2443 2	3463 13	3696 17	2605 17	3150 19
NA-HW81-459	17	5156 6	1838 18	2018 13	3497 12	4516 10	2495 18	3505 11
RH830301	12	5089 10	1928 16	1883 15	3508 10	3919 14	2937 10	3428 15
XNH1150	18	4932 13	2085 13	2085 11	3508 10	3801 16	3143 3	3472 12
MT8003	22	4820 16	2309 5	2197 8	3564 9	3593 18	2928 11	3260 17
TX71A562-6-28	24	5111 9	1749 22	2421 3	3430 15	3479 19	3443 1	3461 13
CI13190	2	5537 3	2287 8	1793 19	3912 3	4425 11	2141 23	3283 16
SD79391	7	4551 22	1816 20	1995 14	3183 23	4887 6	2665 15	3776 8
ND8095	16	4954 12	2197 10	1704 21	3575 8	4833 7	2856 12	3844 7
SD82163	5	5447 5	2466 2	2421 3	3957 2	2226 23	2822 13	2524 22
PI476975	3	4842 15	2018 14	1861 18	3430 15	3439 20	1856 24	2647 21
MT7877	21	4326 24	2309 5	1435 23	3318 19	3918 15	2975 7	3446 14
SD82119	6	4663 19	1861 17	2825 1	3262 21	3249 21	2378 19	2814 20
CI1442	1	4483 23	2309 5	1883 15	3396 17	4235 12	2253 21	3244 18
TXGH2875	23	4618 20	1793 21	2264 6	3206 22	.	2336 20	2336 23
RH846835	13	4730 17	1480 24	2174 9	3105 24	2298 22	2244 22	2271 24
MEAN		4990	2076	2020	3533	4281	2756	3519
LSD(.05)		N.S.	476	450	620	1136	800	N.S.
C.V.		11.3	13.9	13.5	12.7	16.1	17.6	16.9

Table 13. Continued.

C.I. OR SEL. NO.	: ENTRY: : NO. :	: MOCCASIN : MONTANA :	: WILLISTON : N. DAKOTA :	: HETTINGER : N. DAKOTA :	: NORTH : DAKOTA : STATE MEAN :	: ARCHER : WYOMING :	: SHERIDAN : WYOMING :	: WYOMING : STATE MEAN :
ND8002	14	1725 2	1160 4	1500 2	1330 2	1668 3	2483 9	2076 8
XH385	19	1637 3	934 19	1341 4	1138 6	1606 6	2834 2	2220 2
SD82102	9	1257 19	1068 11	738 20	903 17	1437 19	2286 15	1862 18
SD76598-7	10	1479 12	1019 12	1024 12	1022 12	1333 22	2253 18	1793 19
XNH1251	20	1360 15	1144 5	814 16	979 14	1535 11	2753 3	2144 4
SD82195	8	1394 13	1119 7	1460 3	1290 3	1304 24	2071 23	1687 23
RH830201	11	1555 6	1095 8	1149 10	1122 7	1607 5	2409 12	2008 10
ND8061	15	1526 9	1010 13	1225 7	1117 8	1501 14	2483 9	1992 11
NE80413	4	1251 20	943 17	770 17	856 19	1449 16	2740 4	2094 7
NA-HW81-459	17	1247 21	938 18	644 21	791 20	1557 8	2279 16	1918 14
NA-HW81-459	12	1547 8	987 15	1244 6	1115 10	1554 9	2340 13	1947 13
XNH1150	18	1331 17	1120 6	742 19	931 15	1612 4	2910 1	2261 1
MT8003	22	1331 17	833 22	590 22	711 21	1690 2	2619 6	2154 3
TX71A562-6-28	24	859 24	1071 10	314 23	692 22	1574 7	2698 5	2136 5
CI13190	2	1554 7	1169 3	1527 1	1348 1	1533 12	2435 11	1984 12
SD79391	7	1343 16	830 23	1020 13	925 16	1374 21	2188 20	1781 20
ND8095	16	1625 4	1261 1	1281 5	1271 4	1545 10	2244 19	1894 15
SD82163	5	1362 14	899 20	880 15	889 18	1511 13	2563 7	2037 9
PI476975	3	1608 5	954 16	1219 8	1087 11	1443 18	2119 22	1781 21
MT7877	21	1938 1	1185 2	1094 11	1140 5	1695 1	2498 8	2097 6
SD82119	6	1505 10	1006 14	962 14	984 13	1409 20	2121 21	1765 22
CI1442	1	1488 11	1079 9	1153 9	1116 9	1310 23	2060 24	1685 24
TXGH2875	23	1054 23	872 21	301 24	586 24	1446 17	2297 14	1871 17
RH846835	13	1182 22	636 24	743 18	690 23	1494 15	2275 17	1885 16
MEAN		1423	1014	989	1001	1508	2415	1961
LSD(.05)		416	294	483	445	N.S.	532	283
C.V.		17.7	20.5	29.8	24.4	12.3	13.4	13.4

Table 13. Concluded.

C.I. OR SEL. NO.	: ENTRY: NO.	: CLOVIS (IRR.) NEW MEXICO	: CLOVIS (DRYL.) NEW MEXICO	: NEW MEXICO STATE MEAN	: ABERDEEN IDAHO	: LIND WASHINGTON	: REGIONAL AVERAGE	:
ND8002	14	6255 12	4346 4	5301 6	7371 1	1592 18	3274	
XH385	19	6928 2	3949 12	5438 3	7330 2	1735 8	3190	
SD82102	9	7162 1	4078 9	5620 1	6174 10	1845 4	3186	
SD76598-7	10	6597 6	4176 7	5387 4	6548 5	1668 11	3129	
XNH1251	20	6164 14	3808 15	4986 16	5837 17	1630 14	3086	
SD82195	8	5877 19	3443 19	4660 20	6140 11	1627 16	2989	
RH830201	11	6448 7	3853 14	5150 12	5781 18	1571 19	2982	
ND8061	15	6765 3	3297 20	5031 15	6299 9	1468 22	2970	
NE80413	4	6295 11	4271 6	5283 7	6956 3	1547 21	2948	
NA-HW81-459	17	6109 17	4349 3	5229 9	6061 13	1811 6	2919	
RH830301	12	6308 10	4304 5	5306 5	5526 19	1822 5	2917	
XNH1150	18	6189 13	3665 17	4927 17	6395 7	1773 7	2915	
MT8003	22	6359 8	3972 11	5165 11	6597 4	1686 9	2914	
TX71A562-6-28	24	6761 4	3672 16	5216 10	6068 12	1876 3	2908	
CI13190	2	5933 18	3467 18	4700 19	5192 22	1959 1	2901	
SD79391	7	6316 9	3976 10	5146 13	5373 21	1683 10	2880	
ND8095	16	5344 22	3022 24	4183 22	6402 6	1358 24	2846	
SD82163	5	6136 15	4112 8	5124 14	6306 8	1392 23	2843	
PI476975	3	5510 21	3894 13	4702 18	5914 15	1630 15	2790	
MT7877	21	5061 23	3033 23	4047 23	5920 14	1571 19	2703	
SD82119	6	5778 20	3177 21	4478 21	5880 16	1881 2	2661	
CI1442	1	4709 24	3162 22	3936 24	5405 20	1668 11	2640	
TXGH2875	23	6625 5	4518 1	5572 2	4959 24	1627 16	2607	
RH846835	13	6128 16	4378 2	5253 8	4981 23	1661 13	2538	
MEAN		6157	3830	4993	6059	1670	2910	
LSD(.05)		1138	615	714	1062	N.S.	303	
C.V.		11.2	9.7	11.1	10.6	21.0	15.1	

*Data from Sidney, NE and Presho, SD were not used in state or regional averages.

Table 14. Summary of mean yields (kg/ha) and ranks of 24 wheats grown in the 1985 Northern Regional Performance Nursery at 8 central and northern locations from which a c.v. of 19 or less and a significant F test for entries were obtained.

C.I. OR SEL. NO.	ENTRY: NO.	MEAD NEBRASKA	ALLIANCE NEBRASKA	HIGHMORE S. DAKOTA	SHERIDAN WYOMING	WASECA MINNESOTA	ROSEMOUNT MINNESOTA	ABERDEEN IDAHO	MOCCASIN MONTANA	REGIONAL AVERAGE
ND8002	14	2127 18	2134 9	2600 1	2483 9	5873 1	3123 5	7371 1	1725 2	3430 1
SD76598-7	10	3280 2	2011 13	1838 18	2253 18	5692 3	2970 8	6548 5	1479 12	3259 2
XH385	19	2156 16	2308 4	2130 11	2834 2	4182 13	3127 4	7330 2	1637 3	3213 3
XNH1251	20	3031 4	1897 18	2264 9	2753 3	5185 5	3354 2	5837 17	1360 15	3210 4
SD82102	9	2968 5	2014 12	2130 11	2286 15	5864 2	2968 9	6174 10	1257 19	3208 5
SD82195	8	2764 9	1688 21	2376 3	2071 23	5651 4	2784 14	6140 11	1394 13	3109 6
ND8061	15	2403 13	1973 16	2018 14	2483 9	4788 8	3116 6	6299 9	1526 9	3076 7
NE80413	4	2607 10	2160 8	2331 4	2740 4	3696 17	2605 17	6956 3	1251 20	3043 8
RH830201	11	2804 8	2486 1	1704 23	2409 12	4734 9	2621 16	5781 18	1555 6	3012 9
ND8095	16	1726 22	2045 10	2197 10	2244 19	4833 7	2856 12	6402 6	1625 4	2991 10
MT8003	22	2381 15	2008 14	2309 5	2619 6	3593 18	2928 11	6597 4	1331 17	2971 11
XNH1150	18	2421 11	1612 24	2085 13	2910 1	3801 16	3143 3	6395 7	1331 17	2962 12
SD79391	7	3517 1	1662 23	1816 20	2188 20	4887 6	2665 15	5373 21	1343 16	2931 13
TX71A562-6-28	24	2905 7	2041 11	1749 22	2698 5	3479 19	3443 1	6068 12	859 24	2905 14
NA-HW81-459	17	3105 3	1686 22	1838 18	2279 16	4516 10	2495 18	6061 13	1247 21	2903 15
MT7877	21	1038 24	1988 15	2309 5	2498 8	3918 15	2975 7	5920 14	1938 1	2823 16
RH830301	12	2408 12	1838 20	1928 16	2340 13	3919 14	2937 10	5526 19	1547 8	2805 17
CI13190	2	2394 14	1968 17	2287 8	2435 11	4425 11	2141 23	5192 22	1554 7	2799 18
PI476975	3	2966 6	2438 3	2018 14	2119 22	3439 20	1856 24	5914 15	1608 5	2795 19
SD82163	5	2056 20	2465 2	2466 2	2563 7	2226 23	2822 13	6306 8	1362 14	2783 20
CI1442	1	2118 19	2165 6	2309 5	2060 24	4235 12	2253 21	5405 20	1488 11	2754 21
SD82119	6	2143 17	1897 18	1861 17	2121 21	3249 21	2378 19	5880 16	1505 10	2629 22
TXGH2875	23	1887 21	2162 7	1793 21	2297 14	.	2336 20	4959 24	1054 23	2355 23
RH846835	13	1625 23	2213 5	1480 24	2275 17	2298 22	2244 22	4981 23	1182 22	2287 24
MEAN		2451	2036	2076	2415	4281	2756	6059	1423	2927
LSD(.05)		761	520	476	532	1136	800	1062	416	475
C.V.		18.8	15.5	13.9	13.4	16.1	17.6	10.6	17.7	15.6

Table 15. Summary of mean yields (kg/ha) and ranks for 12 wheats grown in the Northern Regional Performance Nursery at 15 site in 1984 and 1985 with state means and ranks.

VARIETY OR PEDIGREE	: : C.I. OR : SEL. NO.	: : ENTRY: : NO. :	: : SIDNEY* : NEBRASKA :	: : ALLIANCE : NEBRASKA :	: : NEBRASKA : STATE MEAN :	: : SHERIDAN : WYOMING :	: : MOCCASIN : MONTANA :
LOVRIN 13/2*CTK78	NE80413	4	2763 6	3221 2	2992 5	2389 4	1679 9
WINTER WHEAT HYBRID	RH830201	11	3035 3	3158 4	3096 2	2180 8	1269 11
WINTER WHEAT HYBRID	XNH1150	18	2611 9	2691 11	2651 9	2409 2	2023 4
CI15322//AGENT/4*SUT/3/CTK/4/SD75375	SD82163	5	2955 4	3155 5	3055 3	2420 1	2092 1
REDWIN SELECTION	MT8003	22	2834 5	3252 1	3043 4	2407 3	2031 3
AMIGO/2*CTK 78//ROSE	SD82119	6	2684 7	3101 6	2893 7	2120 10	1845 6
COLT	PI476975	3	3370 1	3203 3	3287 1	2123 9	1813 7
WINTER WHEAT HYBRID	RH830301	12	2647 8	2481 12	2564 11	2191 7	1388 10
WARRIOR	CI13190	2	3059 2	2864 8	2961 6	2245 5	1971 5
SAGE*2/HAND	SD79391	7	2469 10	2816 10	2643 10	2068 11	1229 12
NORWIN	MT7877	21	2267 12	2826 9	2547 12	2232 6	2053 2
KHARKOF	CI1442	1	2463 11	2875 7	2669 8	1817 12	1766 8
	MEAN		2763	2970	2867	2218	1763
	LSD(.05)		N.S.	N.S.	N.S.	N.S.	N.S.
	C.V.		15.0	12.3	13.6	13.2	20.0

Table 15. Continued.

C.I. OR SEL. NO.	ENTRY: NO.	BROOKINGS S. DAKOTA	HIGHMORE S. DAKOTA	PRESHO* S. DAKOTA	SOUTH DAKOTA STATE MEAN	WILLISTON* N. DAKOTA	HETTINGER N. DAKOTA	NORTH DAKOTA STATE MEAN	ABERDEEN IDAHO
NE80413	4	3800 7	2735 7	2567 4	3267 9	645 11	2066 5	1356 6	5198 4
RH830201	11	4293 1	2466 11	1793 11	3379 6	730 5	2150 3	1440 4	4898 7
XNH1150	18	3766 8	2387 12	2018 9	3077 10	651 9	1705 12	1178 11	5518 1
SD82163	5	3912 5	2735 7	2365 5	3323 8	600 12	1750 10	1175 12	5323 2
MT8003	22	3172 11	2612 10	2869 2	2892 12	750 3	1733 11	1241 10	5224 3
SD82119	6	4024 4	3161 4	3004 1	3592 2	678 7	1891 8	1285 8	4932 5
PI476975	3	4091 3	3194 2	2163 8	3643 1	658 8	2351 2	1505 3	4194 10
RH830301	12	4214 2	2735 7	1961 10	3475 4	732 4	2099 4	1416 5	4412 9
CI13190	2	3878 6	3105 5	2343 6	3491 3	1122 1	2488 1	1805 1	3869 12
SD79391	7	3665 9	3194 2	1670 12	3430 5	649 10	1870 9	1260 9	4528 8
MT7877	21	3060 12	2903 6	2298 7	2981 11	1071 2	1994 6	1533 2	4924 6
CI1442	1	3295 10	3374 1	2679 3	3334 7	697 6	1908 7	1303 7	4147 11
MEAN		3764	2883	2311	3324	808	1998	1375	4764
LSD(.05)		N.S.	N.S.	N.S.	N.S.	N.S.	438	N.S.	N.S.
C.V.		16.6	15.6	17.8	16.4	38.3	18.9	25.2	15.0

Table 15. Concluded.

C.I. OR SEL. NO.	: ENTRY: NO.	: CLOVIS (IRR.) NEW MEXICO	: CLOVIS (DRYL.) NEW MEXICO	: NEW MEXICO STATE MEAN	: WASECA MINNESOTA	: ROSEMOUNT MINNESOTA	: MINNESOTA STATE MEAN	: LIND WASHINGTON	: REGIONAL AVERAGE
NE80413	4	5412 3	3107 3	4260 4	5180 1	2885 4	4033 1	2114 7	3315
RH830201	11	5669 1	2992 5	4330 2	4931 3	3098 1	4015 2	2413 1	3293
XNH1150	18	5392 4	3039 4	4216 5	4448 6	2897 3	3673 4	2256 3	3211
SD82163	5	5346 5	2985 6	4165 6	3857 11	2573 8	3215 10	2095 8	3187
MT8003	22	5205 7	3334 2	4269 3	4077 9	2636 6	3357 9	2134 6	3151
SD82119	6	4774 10	2806 8	3790 9	4369 7	2466 9	3417 7	2291 2	3148
PI476975	3	4993 9	2570 10	3781 10	4550 5	2726 5	3638 5	1929 12	3145
RH830301	12	5636 2	3369 1	4502 1	4086 8	2952 2	3519 6	2089 9	3138
CI13190	2	5013 8	2767 9	3890 8	4730 4	2081 12	3406 8	2239 4	3104
SD79391	7	5213 6	2833 7	4023 7	4994 2	2623 7	3808 3	2088 10	3094
MT7877	21	4514 11	2243 12	3378 11	3757 12	2165 10	2961 12	2145 5	2901
CI1442	1	3955 12	2453 11	3204 12	3899 10	2133 11	3016 11	2044 11	2806
MEAN		5093	2875	3984	4407	2603	3505	2151	3124
LSD(.05)		618	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
C.V.		12.0	13.7	12.9	15.1	17.2	16.2	15.4	15.6

*Data from Sidney, NE or Williston, ND were not used in regional averages; data from Prescho, SD was not used in state or regional averages.

Table 16. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for the 24 entries in the 1985 Northern Regional Performance Nursery grown at 15 locations.

C.I. OR SEL. NO.	ENTRY NO.	MEAN YIELD OVER 15 LOCATIONS KG/HA	REGRESSION COEFFICIENT (b)	CORRELATION COEFFICIENT (r)	COEFFICIENT OF DETERMINATION (r ²)
ND8002	14	3274	1.12	0.97	0.95
XH385	19	3190	1.15	0.99	0.98
SD82102	9	3186	1.19	0.98	0.97
SD76598-7	10	3129	1.13	0.98	0.96
XNH1251	20	3086	1.03	0.98	0.97
SD82195	8	2989	1.01	0.97	0.94
RH830201	11	2982	0.99	0.99	0.98
ND8061	15	2970	1.05	0.99	0.98
NE80413	4	2948	1.06	0.98	0.97
NA-HW81-459	17	2919	1.05	0.99	0.98
RH830301	12	2917	0.96	0.99	0.98
XNH1150	18	2915	1.01	0.99	0.98
MT8003	22	2914	1.04	0.99	0.98
TX71A562-6-28	24	2908	1.06	0.97	0.95
CI13190	2	2901	0.90	0.98	0.95
SD79391	7	2880	0.98	0.97	0.94
ND8095	16	2846	0.95	0.97	0.94
SD82163	5	2843	0.98	0.94	0.89
PI476975	3	2790	0.89	0.97	0.95
MT7877	21	2703	0.82	0.95	0.91
SD82119	6	2661	0.91	0.99	0.97
CI1442	1	2640	0.80	0.98	0.96
TXGH2875	23	2607	1.01	0.97	0.94
RH846835	13	2538	0.91	0.94	0.88

Table 17. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for 12 entries in the 1984 and 1985 Northern Regional Performance Nursery grown at 12 locations.

C.I. OR SEL. NO.	: ENTRY: : NO. :	MEAN YIELD OVER 12 LOCATIONS KG/HA	: REGRESSION COEFFICIENT : (b)	: CORRELATION COEFFICIENT : (r)	: COEFFICIENT OF DETERMINATION : (r ²)
NE80413	4	3315	1.17	0.97	0.94
RH830201	11	3293	1.06	0.95	0.90
XNH1150	18	3211	1.05	0.96	0.93
SD82163	5	3187	1.05	0.94	0.89
MT8003	22	3151	1.04	0.95	0.91
SD82119	6	3148	0.98	0.96	0.93
PI476975	3	3145	1.00	0.94	0.87
RH830301	12	3138	0.98	0.95	0.91
CI13190	2	3104	0.94	0.95	0.90
SD79391	7	3094	1.08	0.96	0.93
MT7877	21	2901	0.85	0.93	0.87
CI1442	1	2806	0.80	0.93	0.87

Table 18. Summary of agronomic and yield data for 24 wheats grown in the 1985 Northern Regional Performance Nursery.

C.I. OR SEL. NO.	: ENTRY: NO.	: PLANT HEIGHT CM	: LODGING 0-9	: DAYS TO HEADING FROM 1/1:	: WINTER SURVIVAL %	: LEAF RUST: SEVERITY: %	: GRAIN PROTEIN %	: VOLUME WEIGHT KG/HL	: YIELD KG/HA
NO. OF TRIALS		15	3	13	7	2	1	16	15
ND8002	14	84	2	156	82	45	14.3	75.6	3274
XH385	19	73	1	153	60	75	15.5	75	3190
SD82102	9	80	2	153	61	1	16.6	75.8	3186
SD76598-7	10	79	2	153	63	3	15.3	76.5	3129
XNH1251	20	84	1	152	66	65	16.1	76.1	3086
SD82195	8	81	1	155	76	18	16.3	76.7	2989
RH830201	11	74	1	149	68	80	15.1	77.2	2982
ND8061	15	79	2	156	79	55	15.5	77.3	2970
NE80413	4	79	2	153	42	3	15.9	76.5	2948
NA-HW81-459	17	72	1	150	58	1	15.3	78	2919
RH830301	12	76	2	150	61	65	15.2	77.5	2917
XNH1150	18	80	1	153	60	85	15.5	75.5	2915
MT8003	22	82	1	156	51	90	14.2	75.6	2914
TX71A562-6-28	24	69	1	152	51	55	15.2	75	2908
CI13190	2	84	3	154	58	80	14.4	75.8	2901
SD79391	7	75	2	153	64	6	15.9	77	2880
ND8095	16	83	1	157	82	55	15.1	77.2	2846
SD82163	5	77	2	153	44	70	16.1	76.3	2843
PI476975	3	68	1	152	54	70	16.5	76.2	2790
MT7877	21	64	1	156	68	80	14	75.9	2703
SD82119	6	79	2	152	52	70	16.2	76.6	2661
CI1442	1	91	4	156	52	60	14.7	76	2640
TXGH2875	23	65	1	149	50	90	15.3	75.8	2607
RH846835	13	68	1	148	52	90	15.7	75.9	2538

Table 19

Seedling reaction of entries of the 1985 Uniform Northern Hard Red Winter Wheat Performance Nursery to selected isolates of *Puccinia graminis* f. sp. *tritici* (by D.V. McVey Cereal Rust Laboratory, USDA, ARS, U. of Mn., St. Paul, MN.)

		Reaction Produced by Isolates									
		70- 44- 68A HJCS	72- 00- 1370C QFBS	69- 21 399 QSHS	71- 21- 584B RHRS	72- 25- 639C RKQS	72- 00- 53A RTQQ	75- 32- 1622A RTQS	72- 01- 4A TNMH	74- 21- 1409A TNMK	Spec. Sr Gene
No.	Name or Sel. No.	29	151			11-32-113			15B-2		
1.	Kharkof	S	S	S	S	S	S	S	S	S	NONE
2.	Warrior	S	S	S	S	S	S	S	S	S	NONE
3.	Colt	2=	0;	2=	2=	2=	2=	2=	0;	0;	6, 31
4.	NE 80413	0	0;	2=	;1	2=	2=	1	0;	0;	5, 6, 31
5.	SD 82163	;1-	0;	S	2-	S	S	S	0;	0;	6. +
6.	SD 82119	2=	2-	2-	2-	2=	2-	2-	-	2=	24
7.	SD 79319	0	;2=	2=	2=	2-	2=	2=	0;2-	2-	5, Amigo, Seg. 6
8.	SD 82195	0;	S	S	S	S	S	S	-	-	5
9.	SD 82102	2	S	S	-	S	S	S	S	S	?
10.	SD 76598-7	2-	0	2=	-	1	0	2	0	0	6, 17,+
11.	RH 830201	2	2,1n	23,S	;S	2,S	2,S	23	;1n,S	;1n,S	?
12.	RH 830301	2	2,;	2,S	2	2	2+	23	S	S	?
13.	RH 846835	2-	2=,;	2-	2	2=	2=	2=	2=	2=	?
14.	ND 8002	0	0	0,S	2	S	S	S	0	0	6, 8, 36
15.	ND 8061	S	2-	2=	S	S	S	S	S	S	7b
16.	ND 8095	0	2-	2=	2	23	2-	23	23	S	5, 7b, +
17.	NA HW81-459	0	2-	2=	2=	2=	;	2=	0	2-	5, 17, +
18.	XNH1150	0,S	S	S	S	S	S	S	S	S	Seg 5
19.	XH385	S	;1n	S	;1n,S	S	S	S	;1n,S	S	+
20.	XNH1251	0	S	S	S	S	S	S	S	S	5
21.	Norwin	0	S,;	S	S	S	S	S	S	S	5, Seg +
22.	Redwin Sel.	0	S	S	S	S	S	S	S	S	5
23.	TAM 107	2=	2=	2=	2=	2=	2=	2=	2=	2=	Amigo
24.	TAM 108	2-	0	2=	-	2=	2=	2=	0	0	6, Tmp

NOTE: n = Necrosis, - = No Test

Table 20

Adult plant reaction of the 1985 Uniform Northern Regional Hard Red Winter Wheat Performance Nursery inoculated to stem and leaf rust at St. Paul, MN. (ARS-USDA, Cereal Rust Laboratory. by D.V.McVey.)

Entry No.	Variety or Pedigree	C.I. or Sel. No.	Rust	
			Stem	Leaf
1.	Kharkof	1442	80S	60S
2.	Warrior	13190	80S	80S
3.	Colt	NE78696	TR	40S
4.	Lovrin 13/2*Ctk 78	NE80413	TMR	TR
5.	CI15322//Agent/4*Sut/3/ Ctk/4/SD75375	SD82163	30S	20S
6.	Amigo/2*Ctk 78//Rose	SD82119	30MS	60S
7.	Sage*2/Hand	SD79391	TR	TS
8.	Amigo/Ctk*2//SD74221	SD82195	60S	10S
9.	NE70545/NE70537//C0672135/ C0662079	SD82102	5S	TMS
10.	CI15322//Agate/Sut*4/3/ Ctk78	SD76598-7	TR	TS
11.	Winter Wheat Hybrid	RH830201	40MS	60S
12.	" " "	RH830301	60S	60S
13.	" " "	RH846835	40MS	60S
14.	Ctk//Froid/7759-19	ND8002	40S	40S
15.	Wnk*2/II64-27	ND8061	20MS	80S
16.	Wnk/Rrr	ND8095	TS	80S
17.	Bulk Sel.	NA-HW81-459	30MR	TS
18.	Winter Wheat Hybrid (new seed)	XNH1150	80S	60S
19.	" " "	XH385	60S	40S
20.	" " "	XNH11251	60S	40S
21.	Norwin	MT7877	TS	60S
22.	Redwin Selection	MT8003	80S	60S
23.	TAM 107	TXGH2875	60MS	80S
24.	TAM 108	TX71A562-6-28	TMR	40S

Table 21. Hessian fly reaction, Great Plains biotype,
1985 Northern Regional Performance Nursery.
(Data from J. H. Hatchett, Manhattan, KS.)

ENTRY NO.	REACTION TYPE	NO. OF PLANTS	
		R	S
1	S		
2	H	7	11
3	H	10	10
4	S		
5	S		
6	S		
7	S		
8	S		
9	H	7	12
10	S		
11	S		
12	S		
13	S		
14	S		
15	S		
16	S		
17	H	6	18
18	S		
19	S		
20	S		
21	S		
22	S		
23	S		
24	S		

QUALITY DATA

Composites of 1-lb samples of each SRPN and NRPN entry from each harvested nursery site are evaluated at the Hard Red Winter Wheat Quality Laboratory at Manhattan, Kansas. Results are reported to cooperators by the laboratory and are not included in this report.

UNIFORM WINTERHARDINESS NURSERIES

The nurseries are comprised of Southern and Northern Materials Sections. In 1985 the Southern Section contained 178 entries and the Northern Section 102 entries. Nursery lists and survival data from test sites at which differential winter survival occurred appear in the tabulations that follow.

SOIL-BORNE MOSAIC NURSERY

The nursery contained 110 entries in 1985. Infection data were reported from all test sites, ie: Lincoln, NE, Manhattan, KS, and Urbana, IL. The nursery list and reaction data are included herein.

1985
UNIFORM WINTERHARDINESS NURSERY
Southern Materials Section

<u>Entry no.</u>	<u>Variety or Pedigree</u>	<u>C.I. or Sel. No.</u>	<u>Source</u>
1	Pm 4/3*Cheney/3/Olesen's dwf/ 2*Eagle//Pn/Durum	KS82H238-1	Kansas
2	H15A13333/3/Larned/Eagle//Sage	KS83H134	"
3	"	KS83H141	"
4	Pnn/2*Eagle/3/Larned/Eagle// Sage	KS83H158	"
5	Bsn/Sterling//3*Sut/3/Eagle/4/ Pnn/2*Eagle	KS84H196	"
6	"	KS84H197	"
7	"	KS84H199	"
8	"	KS84H200	"
9	Priboy/Eagle/3/Pnn/2*Eagle// Cheney	KS84H83	"
10	Warrior	13190	Check
11	Priboy/Eagle/3/Pnn/2*Eagle// Cheney	KS84H84	Kansas
12	"	KS84H97	"
13	"	KS84H98	"
14	"	KS84H99	"
15	Short Wheat/Scout (TX69A509-2)// Fox	TX78V2430-6	Texas
16	"	TX78V2430-16	"
17	"	TX78V2430-22	"
18	"	TX78V2430-21	"
19	"	TX78V2430-23	"
20	Scout 66	13996	Check
21	Short Wheat/Scout (TX69A509-2)// Fox	TX78V2430-33	Texas
22	"	TX78V2430-35	"
23	Short Wheat/Scout (TX69A509-2)// BBY2/Fox	TX78V2270-55	"
24	MV69-12/TAM W-103	TX78A3345-V43	"
25	TX73V203*3/Amigo	TX81V6212	"
26	"	TX81V6710	"
27	PV/TAM W-101	KS787-3	Kansas
28	"	KS787-11	"
29	"	KS787-12	"
30	Vona	17441	Check
31	PV/TAM W-101	KS787-22	Kansas
32	PV/TAM 105	KS789-12	"
33	"	KS789-13	"
34	"	KS789-14	"
35	"	KS789-16	"

1985 Uniform Winterhardiness Nursery (Southern Materials Section) continued:

<u>Entry no.</u>	<u>Variety or Pedigree</u>	<u>C.I. or Sel. No.</u>	<u>Source</u>
36	PV/TAM 105	KS789-19	Kansas
37	"	KS789-28	"
38	PV/KS75216	KS7811-3	"
39	"	KS7811-8	"
40	Warrior	13190	Check
41	PV//SD69105/EGL	KS7814-1	Kansas
42	PV//SD69105/Pkr	KS7833-3	"
43	Nwt/NE76696	KS7866-3	"
44	"	KS7866-11	"
45	"	KS7866-15	"
46	"	KS7866-16	"
47	Nwt/David	KS7878-3	"
48	Nwt//SD69105/EGL	KS78107-3	"
49	Nwt/3/Tsn//SD69105/Ctk	KS78110-1	"
50	Scout 66	13996	Check
51	Nwt/3/Nph/A66//Tsn	KS78139-3	Kansas
52	"	KS78139-12	"
53	Nwt/3/Nph/A66//Pronto	KS78140-1	"
54	MS-AZ/Nwt	KS78141-5	"
55	KS75216//Nwt/Php	KS78151-6	"
56	"	KS78151-8	"
57	Nwt "S"/Hsd "S"	KS78152-2	"
58	Nwt "S"/4/KS73148/3/SD69105// K/A	KS78156-1	"
59	Pkr 76/C-S	KS79238-2	"
60	Vona	17441	Check
61	Nwt/Wings	KS79387-1	Kansas
62	"	KS79428-1	"
63	Nwt/Ldn	KS79444-3	"
64	"	KS79446-1	"
65	Pv/Ldn	KS80259-3	"
66	KS73165/3/Sdy//A/K	KS80301-3	"
67	Nwt/TAM W-101	KS7643-5	"
68	"	KS7643-21	"
69	"	KS7643-24	"
70	Warrior	13190	Check
71	Nwt/TAM W-101	KS7643-25	Kansas
72	"	KS7643-32	"
73	Nwt/Wings	KS7645-8	"
74	R3-Arkan	KSTC84139	"
75	Wrr*5/Agent//Ctk 78	NE77465	Nebraska
76	Wrr*5/Agent//Aurora/3/Ctk 78	NE78488	"
77	Lovrin 13/2*Ctk 78	NE80413	"
78	NE73513 Sentinel/Ctk/Agate	NE81531	"
79	Complex Cross	NE82413	"
80	Scout 66	13996	Check
81	Complex Cross	NE82414	Nebraska

1985 Uniform Winterhardiness Nursery (Southern Materials Section) continued:

<u>Entry no.</u>	<u>Variety or Pedigree</u>	<u>C.I. or Sel. No.</u>	<u>Source</u>
82	Complex Cross	NE82419	Nebraska
83	"	NE82438	"
84	CIMMYT/Scout/Agate//Sage Sib	NE82533	"
85	TX62A4793-7/Homestead/ Buckskin Sel.	NE82558	"
86	Complex Cross	NE82565	"
87	Fuzz/Gage/Lcr//Homestead	NE82567	"
88	Ctk/Gage Sel.//NE66454/ NE68457	NE82624	"
89	Brule//Sentinel/Ctk	NE82651	"
90	Vona	17441	Check
91	Brule//Sentinel/Ctk	NE82652	Nebraska
92	Brule/Pkr*4/Agent//Belot 198/ Lcr	NE82655	"
93	"	NE82656	"
94	"	NE82657	"
95	"	NE82658	"
96	Lindon Sib*2/Roughrider	NE82761	"
97	"	NE82765	"
98	Complex Cross	NE83404	"
99	"	NE83406	"
100	Warrior	13190	Check
101	Complex Cross	NE83407	Nebraska
102	"	NE83431	"
103	"	NE83432	"
104	"	NE83434	"
105	"	NE83439	"
106	"	NE83449	"
107	Zg4240/73/2*Ctk 78	NE83478	"
108	Complex Cross	NE83495	"
109	"	NE83498	"
110	Scout 66	13996	Check
111	Complex Cross	NE83499	Nebraska
112	"	NE83501	"
113	NE68719/Arthur//NE69457 NE76434/Ctk 78	NE83509	"
114	"	NE83511	"
115	Bez 1/2*Ctk 78//NE68457/ Homestead	NE83529	"
116	"	NE83532	"
117	Complex Cross	NE83604	"
118	"	NE83606	"
119	"	NE83626	"
120	Vona	17441	Check
121	Bez 1/2*Ctk 78//Wrr*5/Agent// Kavkaz	NE83674	Nebraska
122	"	NE83675	"

1985 Uniform Winterhardiness Nursery (Southern Materials Section) continued:

<u>Entry no.</u>	<u>Variety or Pedigree</u>	<u>C.I. or Sel. No.</u>	<u>Source</u>
123	Bez 1/2*Ctk 78//391-56-D8/Kaw// Sentinel	NE83684	Nebraska
124	Pkr*4/Agent//Belot. 198/Lcr/ Bez 1/Ctk 78	NE83701	"
125	Complex Cross	NE83703	"
126	Buckskin//NE68719/Arthur/2/ Bez 1/2*Ctk 78	NE83704	"
127	"	NE83707	"
128	Ldn Sel./Bennett Sib	NE83718	"
129	Roughrider/Wrr*5/Agent//Kavkaz	NE83725	"
130	Warrior	13190	Check
131	82 McVey	MC83754	Nebraska
132	Kharkof	1442	SRPN
133	Scout 66	13996	"
134	TAM 105	17826	"
135	Payne//TAM W-101/Amigo	OK81306	"
136	"	OK81322	"
137	Aurora/2*TAM W-101	OK83396	"
138	"	OK83398	"
139	TX71A1039-V1*3/Amigo	TX81V6610	"
140	Scout 66	13996	Check
141	TX71A1039-V1*3/Amigo	TX81V6614	SRPN
142	Amigo/3/2*TX71A937, Sdy sib/ Tcs//Ctk	TX39949-2	"
143	TX71A1039-V1*3/Amigo	TX81V6180	"
144	TAM 105/TAM W-101	TX80A4135-6	"
145	TX71A1039-V1*3/Amigo	TX81V6183	"
146	TAM W-103//Short Wheat/Scout (TX69A509-1)	TX83A5930	"
147	MV69-12/TAM W-103	TX78A3345-V42	"
148	TAM W-101/Newton	TX80A5172-4	"
149	Short Wheat/Scout (TX69A509-2)// Fox	TX78V2430-36	"
150	Vona	17441	Check
151	TX71A1039-V1*3/Amigo	TX81V6187	SRPN
152	Plainsman V/3/2*Larned/ Eagle//Sage	KS82H4	"
153	KS73H530//Sage/Arthur	KS82H144	"
154	Bulk Selection	NA-HW81-283	"
155	"	NA-HW81-297	"
156	"	NA8HW81-459	"
157	OK11252A/HW76-1226	NA-HW81-170	"
158	"	NA-HW81-157	"
159	Winter Wheat Hybrid	RH830101	"
160	Warrior	13190	Check

1985 Uniform Winterhardiness Nursery (Southern Materials Section) concluded:

<u>Entry no.</u>	<u>Variety or Pedigree</u>	<u>C.I. or Sel. No.</u>	<u>Source</u>
161	Winter Wheat Hybrid	RH830201	SRPN
162	"	RH845202	"
163	TAM W-101/W558 (W8460D)	XW131	"
164	Mexican Bulk Hybrid Selection	78DW14	"
165	"	Hp114	"
166	Bulk Population	77DW48	"
167	"	77DW19	"
168	Exp. Line	AGC101	"
169	"	AGC103	"
170	Scout 66	13996	Check
171	Exp. Line	AGC104	SRPN
172	"	AGC105	"
173	"	AGC102	"
174	Plainsman V/Odesskaya 51	KS831957	"
175	Winter Wheat Hybrid	XH183a	"
176	"	XH215c	"
177	Vona	17441	Check
178	Warrior	13190	"

1985 UNIFORM WINTERHARDINESS NURSERY

Southern Materials Section*Survival Data (%)

Entry no.	Nebraska**			Minnesota			Montana			South Dakota***	
	Mead			St. Paul			Moccasin			Highmore	Brookings
	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean		
1				75	85	80	5	15	10	100	100
2				95	95	95	7	20	14	100	100
3				95	90	93	20	30	25	100	100
4				95	95	95	90	35	63	100	90
5				75	90	83	80	5	43	100	90
6				70	90	80	90	10	50	100	---
7				75	95	85	85	15	50	100	70
8				75	100	88	90	20	55	80	100
9				40	70	55	75	20	48	100	100
10				90	95	93	90	30	60	90	100
11				80	100	90	85	25	55	90	100
12				80	95	88	50	30	40	100	100
13				60	95	78	65	30	48	90	50
14				50	95	73	60	25	43	80	40
15				1	30	16	60	5	33	60	---
16	100	90	95	0	30	15	50	5	28	80	50
17	100	95	98	0	10	5	50	10	30	40	70
18	100	90	95	0	10	5	45	5	25	0	80
19	100	95	98	0	5	3	60	5	33	20	10
20				80	100	90	70	35	53	50	60
21	100	95	98	0	5	3	40	10	25	50	---
22	100	95	98	0	2	1	10	3	7	5	30
23	100	95	98	0	5	3	15	0	8	10	30
24				40	100	70	70	5	38	100	50
25				10	40	25	65	5	35	100	0
26				40	60	50	55	10	33	80	0
27	100	95	98	10	90	50	25	3	14	80	0
28	100	90	95	40	90	65	50	5	28	100	0
29	100	95	98	30	95	63	15	5	10	80	0
30				50	85	68	80	3	42	30	90
31				70	100	85	90	20	55	60	80
32				50	80	65	90	25	58	40	---

1985 UNIFORM WINTERHARDINESS NURSERY

Southern Materials Section

(Continued)

Entry no.	Nebraska**			Minnesota			Montana			South Dakota***	
	Mead			St. Paul			Moccasin			Highmore	Brookings
	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean		
33				80	95	88	70	5	38	100	100
34	100	95	98	85	90	88	75	10	43	100	100
35				60	100	80	90	10	50	70	100
36				90	100	95	70	5	38	100	100
37				90	90	90	25	15	20	100	100
38				90	100	95	50	15	33	100	100
39				90	100	95	5	5	5	20	90
40				100	100	100	60	15	38	100	90
41				95	100	98	40	20	30	100	100
42				90	100	95	10	15	13	100	90
43				80	100	90	45	10	28	90	100
44				85	100	93	10	15	13	90	100
45				80	100	90	5	10	8	30	100
46				80	100	90	0	15	8	100	100
47				90	95	93	5	5	5	100	---
48				70	90	80	3	5	4	100	100
49				95	100	98	3	5	4	100	100
50				100	100	100	5	10	8	100	100
51				70	80	75	3	5	4	100	100
52				80	90	85	2	10	6	100	100
53				90	95	93	10	0	5	100	100
54				85	90	88	5	5	5	100	100
55				85	90	88	0	3	2	100	100
56				5	75	40	3	3	3	100	100
57	100	95	98	5	10	8	10	5	8	100	100
58				80	95	88	5	10	8	100	---
59				85	85	85	50	20	35	100	70
60				50	75	63	10	5	8	100	80
61				60	75	68	5	10	8	100	80
62				75	80	78	10	10	10	100	90
63				80	95	88	25	10	18	100	100
64				90	100	95	35	10	23	100	100
65				70	90	80	40	10	25	100	100
66				75	90	83	50	5	28	100	100
67				90	100	95	50	5	28	100	---
68				80	85	83	40	5	23	100	40

1985 UNIFORM WINTERHARDINESS NURSERY
Southern Materials Section
(Continued)

Entry no.	Nebraska**			Minnesota			Montana			South Dakota***	
	Mead			St. Paul			Moccasin			Highmore	Brookings
	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean		
69				75	85	80	50	10	30	100	100
70				100	100	100	50	10	30	100	100
71	100	95	98	80	80	80	60	3	32	100	100
72				90	90	90	60	5	33	100	70
73				10	60	35	50	0	25	100	---
74				95	100	98	65	3	34	100	30
75				100	100	100	50	10	30	100	40
76				80	95	88	30	10	20	100	5
77				90	100	95	30	10	20	100	0
78				95	100	98	10	5	8	100	5
79				100	100	100	25	5	15	100	20
80				95	90	93	15	5	10	100	5
81				80	100	90	10	15	13	100	5
82				75	95	85	5	15	10	100	100
83				80	100	90	15	20	18	100	100
84				80	95	88	10	15	13	100	---
85				90	100	95	15	20	18	100	90
86				90	100	95	25	15	20	100	90
87				90	100	95	30	30	30	100	100
88				80	95	88	10	15	13	100	100
89				100	100	100	35	40	38	100	60
90				20	60	40	15	20	18	100	---
91				80	80	80	30	20	25	100	70
92				100	100	100	15	20	18	100	70
93				100	100	100	40	20	30	100	90
94				100	95	98	30	15	23	100	90
95				100	100	100	30	10	20	100	100
96				95	100	98	60	15	38	100	100
97				100	100	100	60	10	35	100	100
98				95	100	98	50	5	28	100	90
99				100	100	100	40	10	25	100	---
100				100	100	100	70	10	40	100	100
101				100	100	100	60	20	40	100	100
102				100	100	100	50	10	30	100	100
103				100	100	100	45	15	30	100	100
104				95	100	98	30	15	23	100	100
105				100	100	100	35	15	25	100	70
106				100	100	100	35	20	28	100	90

1985 UNIFORM WINTERHARDINESS NURSERY
Southern Materials Section
(Continued)

Entry no.	Nebraska**			Minnesota			Montana			South Dakota***	
	Mead			St. Paul			Moccasin			Highmore	Brookings
	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean		
107				100	100	100	30	30	30	100	90
108				90	100	95	40	40	40	100	100
109				90	90	90	25	45	35	100	20
110				100	85	93	15	45	30	100	---
111				90	80	85	20	20	20	100	10
112				80	60	70	25	15	20	100	70
113				80	40	60	20	30	25	100	90
114				95	50	73	40	30	35	100	90
115				100	70	85	40	20	30	100	80
116	100	90	95	100	80	90	30	30	30	100	80
117				100	90	95	40	35	38	100	80
118				90	90	90	20	50	35	100	70
119				100	100	100	50	40	45	100	---
120				80	5	43	30	5	18	100	90
121				95	50	73	5	10	8	100	---
122				95	85	90	10	20	15	100	100
123				100	100	100	30	25	28	100	100
124				100	95	98	30	5	18	100	100
125				100	100	100	30	10	20	100	---
126				100	100	100	35	10	23	100	30
127				100	100	100	40	5	23	100	40
128				100	100	100	30	10	20	100	0
129				95	95	95	25	10	18	100	0
130				100	100	100	50	15	33	100	0
131	100	95	98	95	90	93	15	5	10	100	0
132				95	100	98	50	10	30	100	0
133				100	90	95	0	10	5	100	80
134				85	90	88	20	15	18	100	100
135				60	80	70	20	5	13	100	90
136	100	98	99	80	80	80	30	10	20	100	---
137	100	90	95	50	90	70	40	15	28	100	100
138				60	100	80	30	20	25	100	100
139	100	95	98	40	40	40	3	5	4	100	100
140				90	100	95	5	20	13	100	100
141	95	95	95	80	50	65	3	10	7	100	30
142	90	90	90	15	1	8	3	5	4	100	---
143	100	95	98	60	1	31	5	5	5	100	60

1985 UNIFORM WINTERHARDINESS NURSERY
Southern Materials Section
(Concluded)

Entry no.	Nebraska**			Minnesota			Montana			South Dakota***	
	Mead			St. Paul			Moccasin			Highmore	Brookings
	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean		
144	100	95	98	70	60	65	15	15	15	100	90
145	100	98	99	90	80	85	20	10	15	100	90
146	95	85	90	40	1	21	25	5	15	100	100
147				90	70	80	35	10	23	100	70
148	100	90	95	70	1	36	30	5	18	100	90
149	90	85	88	1	0	1	10	3	7	100	80
150	100	95	98	70	10	40	25	10	18	100	50
151	100	98	99	80	25	53	20	15	18	100	---
152				90	30	60	20	25	23	10	50
153				80	70	75	10	20	15	100	60
154				95	80	88	15	20	18	100	90
155				90	80	85	25	20	23	100	90
156				90	80	85	20	25	23	100	90
157				100	80	90	25	25	25	100	90
158				100	60	80	25	20	23	100	90
159				90	60	75	20	30	25	100	100
160	100	85	93	100	90	95	20	25	23	100	90
161				100	85	93	30	30	30	100	90
162				95	75	85	10	10	10	80	---
163				60	10	35	5	15	10	100	60
164	95	95	95	1	0	1	3	3	3	100	90
165	100	95	98	80	5	43	5	5	5	100	90
166				70	5	38	10	5	8	100	90
167				80	1	41	20	10	15	100	90
168	100	95	98	80	5	43	15	10	13	100	90
169				70	1	36	5	15	10	100	60
170				95	60	78	15	10	13	90	70
171	100	85	93	80	1	41	5	10	8	100	---
172				85	5	45	10	15	13	100	60
173				80	40	60	15	20	18	100	90
174				100	70	85	20	25	23	100	100
175				85	50	68	10	25	18	100	100
176	100	95	98	95	80	88	40	25	33	100	100
177				40	0	20	15	15	15	100	5
178				100	90	95	50	40	45	90	100

* Southern Materials at Casselton, North Dakota were 100% winterkilled.

** Data only given for entries with less than 100% winter survival.

*** One replication only of the Southern Materials Section was grown at Highmore and at Brookings in 1985.

1985
UNIFORM WINTERHARDINESS NURSERY
Northern Materials Section

<u>Entry no.</u>	<u>Variety or Pedigree</u>	<u>C.I. or Sel. No.</u>	<u>Source</u>
1	Norstar	17735	Check
2	Rrr/SD56713-10	ND811729	No. Dakota
3	Wnk//Hume/Sut 66	ND812400	" "
4	Wnk//Hume/NB68465	ND812787	" "
5	Bnz/Odessa 51	ND811781	" "
6	Rrr/Martonvasar 2	ND812708	" "
7	Rrr//Yogo/Trapper	ND8212	" "
8	Rrr//Frd/Lancer	ND8215	" "
9	Frd/Priboy	ND8264	" "
10	Warrior	13190	Check
11	Rrr*2/1809	ND8286	No. Dakota
12	Colt	NE78696	NRPN
13	Lovrin 13/2*Ctk 78	NE80413	"
14	CI15322//Agent/4*Sut/3/ Ctk/4/SD75375	SD82163	"
15	Amigo/2*Ctk 78//Rose	SD82119	"
16	Sage*2/Hand	SD79391	"
17	Amigo/Ctk*2//SD74221	SD82195	"
18	NE70545/NE70537//CO672135/ CO662079	SD82102	"
19	CI15322//Agate/Scout*4/3/Ctk 78	SD76598-7	"
20	Centurk 78	17724	Check
21	Winter Wheat Hybrid	RH830201	NRPN
22	" " "	RH830301	"
23	" " "	RH846835	"
24	Ctk//Froid/7759-19	ND8002	"
25	Wnk*2/II64-27	ND8061	"
26	Wnk/Rrr	ND8095	"
27	Bulk Selection	NA-HW81-459	"
28	Winter Wheat Hybrid	XNH1150	"
29	" " "	XH385	"
30	Norstar	17735	Check
31	Winter Wheat Hybrid	XNH1251	NRPN
32	Norwin	MT7877	"
33	Redwin Selection	MT8003	"
34	TAM 107	TXGH2875	"
35	TAM 108	TX71A562-6-28	"
36	ND7796/SD74221	SD801109 sel.	So. Dakota
37	YTO-117/Wnk//Pitic/3/ Pred./Cheney	SD75214-0-5-1	" "
38	"	SD75214-0-5-2	" "
39	SD76669*2/KS71591	SD79123-2	" "
40	Warrior	13190	Check

1985 Uniform Winterhardiness Nursery (Northern Materials Section) continued:

<u>Entry no.</u>	<u>Variety or Pedigree</u>	<u>C.I. or Sel. No.</u>	<u>Source</u>
41	SD76669*2/KS71591	SD79123-3	So. Dakota
42	Ctk*5/Hand	SD76709-1	" "
43	"	SD76709-2	" "
44	Protur/Bennett//SD75269/Rose	SD79213-6	" "
45	"	SD79213-8	" "
46	Ellar/Bennett//SD75393/Rose	SD79215-2	" "
47	"	SD79215-3	" "
48	Protur/CI15322//SD76169/Ctk 78	SD79218-3	" "
49	Ctk*2/Hand//TX71A911-3	SD80185	" "
50	Centurk 78	17724	Check
51	NE76Y335/ND7532	SD80384	So. Dakota
52	ND7796//Wnk*3/TX71A30	SD801105-3	" "
53	SD75375/Rr/3/Amigo/2*Ctk// NE76Y342	SD80902 sel.	" "
54	ND7796//TX71A30/2*Rr	SD801104-4	" "
55	"	SD801104-6	" "
56	SD72313/ND7747	SD80339-3	" "
57	"	SD80339-4	" "
58	"	SD80339-5	" "
59	ND7747/Rose	SD801047-1	" "
60	Norstar	17735	Check
61	ND7747/Rose	SD801047-2	So. Dakota
62	"	SD801047-3	" "
63	SD75125-1/SD74221	SD80989-2	" "
64	Lancer/ND7622	SD80307-1	" "
65	"	SD80307-3	" "
66	SD76109/MT7420	SD80105-3	" "
67	SD75284/MT7840	SD80344-1	" "
68	SD75223//Rr/SD74221	SD80953-2	" "
69	NE74649//TX71A30/3*Rr	SD80353	" "
70	Warrior	13190	Check
71	Rocky/ND7658	SD80225	So. Dakota
72	Rr/SD74221//TX71A30	SD80910-2	" "
73	OK78047/NB7796	SD801090	" "
74	Amigo/2*Ctk//TX71A968-6/3/ SD74221	SD801008-3	" "
75	ND7752/Rita	SD801057	" "
76	"	SD801057-3	" "
77	SD74213-2/OK78047	SD80168-1	" "
78	"	SD80168-2	" "
79	OK78058/ND7573	SD801073-1	" "
80	Centurk 78	17724	Check
81	OK78058/ND7573	SD801073-3	So. Dakota
82	Rr/MT7877	SD80106-2	" "

1985 Uniform Winterhardiness Nursery (Northern Materials Section) concluded:

<u>Entry no.</u>	<u>Variety or Pedigree</u>	<u>C.I. or Sel. No.</u>	<u>Source</u>
83	OK78014/MT7977	SD80335-3	So. Dakota
84	ND7752//Rr/SD74221	SD801065-2	" "
85	ND7620//TX71A30/2*Rr	SD80103	" "
86	Agate/TX71A916-3	SD80298	" "
87	Agate//Rr/Era	SD80299	" "
88	Bsk/ND7659	SD80261-4	" "
89	Rr/CO778766	SD80107-2	" "
90	Norstar	17735	Check
91	Rr/CO778766	SD80107-4	So. Dakota
92	"	SD80107-5	" "
93	"	SD80107-7	" "
94	"	SD80107-9	" "
95	SD73176/3/Amigo/2*Ctk//Rr	SD80249-3	" "
96	TX73Y169/SD75284	SD80292-1	" "
97	"	SD80292-3	" "
98	Lancota/3/SD74221/Larned// SD75375*2/Mag 41 Mal	SD80719	" "
99	ND7752/SD75269	SD801069-2	" "
100	Warrior	13190	Check
101	HiPlains/ND7747	SD80662-3	So. Dakota
102	MT7927//Rr/SD74221	SD80574-4	" "

1985 UNIFORM WINTERHARDINESS NURSERY

Northern Materials Section*

Survival Data (%)

Entry no.	Minnesota			Montana			South Dakota						North Dakota		
	St. Paul			Moccasin			Highmore			Brookings			Williston		
	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean
1	100	100	100	20	30	25	100	90	95	100	100	100	5	1	3
2	100	100	100	35	35	35	100	90	95	100	60	80	10	50	30
3	100	100	100	10	35	23	100	90	95	70	--	70	1	10	6
4	100	100	100	15	30	23	90	100	95	80	100	90	1	0	1
5	100	100	100	15	10	13	90	100	95	90	100	95	0	0	0
6	100	100	100	25	10	18	90	100	95	90	100	95	10	1	1
7	100	100	100	30	20	25	90	100	93	90	100	95	50	0	25
8	100	100	100	40	20	30	95	100	98	100	100	100	60	1	31
9	100	100	100	30	10	20	95	100	98	70	100	85	5	1	3
10	100	100	100	20	10	15	95	100	98	80	100	90	5	0	3
11	60	100	80	10	30	20	100	100	100	100	100	100	60	30	45
12	20	70	45	5	10	8	100	100	100	100	100	100	0	0	0
13	40	40	40	5	5	5	100	60	80	90	100	95	1	0	1
14	70	70	70	10	15	13	100	50	75	90	80	85	0	0	0
15	90	80	85	5	30	18	100	80	90	90	100	95	0	0	0
16	95	80	88	5	45	25	100	40	70	--	100	100	5	0	3
17	100	100	100	10	40	25	100	90	95	60	100	80	5	0	3
18	100	100	100	3	30	17	100	100	100	--	100	100	1	0	1
19	100	90	95	5	35	20	100	100	100	80	100	90	1	0	1
20	95	80	88	5	40	23	100	100	100	90	100	95	1	0	1
21	85	90	88	10	40	25	100	100	100	60	100	80	1	0	1
22	65	85	75	5	20	13	100	100	100	80	100	90	0	0	0
23	20	70	--	20	30	25	100	80	90	90	90	90	0	0	0
24	100	100	100	30	30	30	100	90	95	60	100	80	10	5	8
25	100	100	100	40	40	40	100	80	90	--	100	100	5	0	3
26	100	100	100	25	30	28	100	80	90	70	90	80	65	10	38
27	90	100	95	30	20	25	100	100	100	100	90	95	0	0	0
28	80	80	80	30	40	35	100	100	100	100	100	100	5	0	3
29	50	70	60	40	45	43	100	100	100	100	80	90	1	0	1
30	100	100	100	40	45	43	100	90	95	100	80	90	65	5	35
31	85	100	93	40	40	40	100	80	90	100	100	100	0	0	0
32	80	90	85	45	40	43	100	70	85	0	40	20	10	0	5

1985 UNIFORM WINTERHARDINESS NURSERY
Northern Materials Section
(Continued)

Entry no.	Minnesota			Montana			South Dakota						North Dakota		
	St. Paul			Moccasin			Highmore			Brookings			Williston		
	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean
33	50	80	65	40	20	30	100	80	90	60	30	45	1	0	1
34	10	60	35	30	30	30	100	100	100	80	--	80	1	0	1
35	15	70	43	25	15	20	100	100	100	0	80	40	1	0	1
36	100	100	100	20	20	20	100	100	100	--	--	--	5	0	3
37	20	70	45	15	15	15	100	90	95	20	100	60	0	0	0
38	15	70	43	5	15	10	100	90	95	40	100	70	0	0	0
39	20	75	48	10	20	15	100	100	100	60	90	75	0	0	0
40	100	100	100	30	20	25	100	100	100	90	90	90	5	0	3
41	60	80	70	25	15	20	100	100	100	100	90	95	1	0	1
42	70	100	85	20	15	18	100	90	95	100	80	90	1	1	1
43	80	100	90	30	20	25	100	100	100	--	--	--	0	0	0
44	70	100	85	40	20	30	100	100	100	40	70	55	1	1	1
45	50	100	75	40	30	35	100	100	100	--	100	100	0	1	1
46	30	50	40	40	30	35	100	100	100	40	100	70	1	0	1
47	90	100	95	40	30	35	100	100	100	90	100	95	1	0	1
48	90	80	85	20	15	18	100	100	100	100	50	75	5	0	3
49	100	100	100	10	10	10	100	100	100	100	90	95	1	0	1
50	100	100	100	15	20	18	100	100	100	90	100	95	1	1	1
51	100	100	100	25	30	28	100	100	100	0	100	50	1	0	1
52	100	90	95	70	60	65	100	100	100	40	50	45	25	0	13
53	100	100	100	35	25	30	100	100	100	90	50	70	10	1	6
54	100	100	100	50	20	35	100	100	100	90	--	90	10	0	5
55	100	100	100	30	15	23	100	100	100	90	50	70	25	5	15
56	100	100	100	45	20	33	100	100	100	80	30	55	1	0	1
57	100	80	90	40	25	33	100	100	100	100	80	90	1	1	1
58	100	90	95	30	25	28	100	100	100	0	90	45	5	0	3
59	100	95	98	25	30	28	100	100	100	70	100	65	35	1	18
60	100	100	100	40	40	40	100	100	100	100	100	100	70	10	40
61	100	100	100	20	30	35	100	100	100	100	--	100	25	0	13
62	100	100	100	15	30	23	100	90	95	100	70	85	35	0	18
63	100	100	100	10	30	20	100	100	100	100	--	100	5	0	3
64	100	100	100	40	30	35	100	80	90	100	90	95	5	1	3
65	90	90	90	30	30	30	80	100	90	80	80	80	10	0	5
66	90	70	80	30	40	35	80	100	90	100	80	90	30	0	15
67	100	70	85	20	35	28	80	100	90	100	100	100	5	1	3
68	100	80	90	15	20	18	100	100	100	100	100	100	25	0	13

1985 UNIFORM WINTERHARDINESS NURSERY
Northern Materials Section
(Concluded)

Entry no.	Minnesota			Montana			South Dakota						North Dakota		
	St. Paul			Moccasin			Highmore			Brookings			Williston		
	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean	Rep 1	Rep 2	Mean
69	100	70	85	35	25	30	100	100	100	100	70	85	5	1	3
70	100	70	85	30	20	25	100	70	85	60	70	65	20	1	11
71	100	60	80	5	20	13	100	80	90	90	100	95	70	5	38
72	100	--	100	15	20	18	100	50	75	90	100	95	60	5	33
73	100	10	55	10	15	13	100	90	95	100	100	100	5	0	3
74	100	50	75	20	15	18	100	60	80	100	100	100	1	1	1
75	100	60	80	20	10	15	100	100	100	100	100	100	1	0	1
76	100	100	100	15	10	13	100	90	95	100	100	100	5	0	3
77	30	20	25	5	5	5	100	80	90	100	100	100	0	1	1
78	90	40	65	10	5	8	100	80	90	--	100	100	0	0	0
79	90	90	90	10	10	10	100	80	90	100	90	95	0	0	0
80	100	100	100	10	10	10	100	80	90	100	90	95	0	0	0
81	80	5	43	5	5	5	100	90	95	70	80	75	0	0	0
82	100	90	95	25	10	18	100	90	95	80	90	85	0	5	3
83	60	5	33	5	5	5	100	90	95	90	100	95	1	1	1
84	80	20	50	30	5	18	100	90	95	90	90	90	1	1	1
85	100	80	90	20	10	15	100	100	100	--	90	90	5	5	5
86	100	70	85	15	5	10	100	100	100	60	80	70	1	1	1
87	100	50	75	5	5	5	100	100	100	90	100	95	0	0	0
88	100	50	75	15	5	10	100	100	100	100	100	100	0	0	0
89	100	80	90	30	10	20	100	100	100	100	100	100	10	1	6
90	100	95	98	50	10	30	100	100	100	100	70	85	50	30	40
91	100	75	88	25	15	20	100	100	100	80	70	75	0	1	1
92	100	70	85	20	10	15	100	100	100	100	70	85	5	0	3
93	100	60	80	30	15	23	100	70	85	100	--	100	1	1	1
94	100	70	85	25	10	18	100	80	90	20	20	20	5	10	8
95	100	40	70	20	5	13	100	90	95	20	10	15	0	0	0
96	100	30	65	25	5	15	100	100	100	--	40	40	0	0	0
97	100	10	55	35	10	23	100	100	100	50	50	50	0	0	0
98	100	10	55	45	15	30	100	100	100	80	20	50	0	0	0
99	100	30	65	40	10	25	100	100	100	80	20	50	1	0	1
100	100	50	75	40	15	28	100	100	100	70	50	60	0	0	0
101	100	10	55	35	10	23	100	95	98	100	0	50	0	0	0
102	100	0	50	30	5	18	100	90	95	100	--	100	0	0	0

* Northern materials at Casselton, ND, were 100% winterkilled.

1985
SOILBORNE MOSAIC NURSERY

Entry no.	Variety or Pedigree	C.I. or Sel. No.	Source
1	Pawnee	11669	Check
2	Pm4/3*Cheney/3/Olesen's dwf/ 2*Eagle//Pn/Durum	KS82H238-1	Kansas
3	Priboy/Eagle/3/Pnn/2*Eagle// Cheney	KS84H83	"
4	"	KS84H84	"
5	"	KS84H97	"
6	"	KS84H98	"
7	"	KS84H99	"
8	TAM W-101/W558	XW131 (Y8460D)	Pioneer
9	Aurora/2*TAM W-101	OK79256-14	Oklahoma
10	Concho	12517	Check
11	Aurora/2*TAM W-101	OK79256-21	Oklahoma
12	"	OK79256-22	"
13	"	OK79256-20	"
14	"	OK79256-16	"
15	"	OK79256-23	"
16	"	OK79256-5	"
17	"	OK79256-17	"
18	Bulk Selection	NA-HW81-283	NAPB
19	"	NA-HW81-297	"
20	Bison	12518	Check
21	Bulk Selection	NA-HW81-459	NAPB
22	OK11252A/HW76-1226	NA-HW81-170	"
23	"	NA-HW81-157	"
24	Winter Wheat Hybrid	RH830101	R-H
25	"	RH830201	"
26	"	RH845202	"
27	"	RH830301	"
28		RH846835	"
29	TX71A1039-V1*3/Amigo	TX81V6180	Texas
30	Pawnee	11669	Check
31	TAM 105/TAM W-101	TX80A4135-6	Texas
32	TX71A1039-V1*3/Amigo	TX81V6183	"
33	TAM W-103//Short Wheat/Scout (TX69A509-1)	TX83A5930	"
34	MV69-12/TAM W-103	TX78A3345-V42	"
35	TAM W-101/Newton	TX80A5172-4	"
36	Short Wheat/Scout (TX69A509-2)// Fox	TX78V2430-36	"
37	TX71A1039-V1*3/Amigo	TX81V6187	"
38	Bulk Population	77DW48	Harpool
39	"	77DW19	"
40	Concho	12517	Check

1985 Soilborne Mosaic Nursery (continued):

<u>Entry no.</u>	<u>Variety or Pedigree</u>	<u>C.I. or Sel. No.</u>	<u>Source</u>
41	Experimental Line	AGC101	Agrigenetics
42	"	AGC103	"
43	"	AGC104	"
44	"	AGC105	"
45	"	AGC102	"
46	Winter Wheat Hybrid	XH183a	HybriTech
47	"	XH215c	"
48	"	XH385	"
49	"	XNH1251	"
50	Bison	12518	Check
51	Pv/TAM W-101	KS787-3	Kansas
52	"	KS787-11	"
53	"	KS787-12	"
54	"	KS787-22	"
55	Pv/TAM 105	KS789-12	"
56	"	KS789-13	"
57	"	KS789-14	"
58	"	KS789-16	"
59	"	KS789-19	"
60	Pawnee	11669	Check
61	Pv/TAM 105	KS789-28	Kansas
62	Pv/KS75216	KS7811-3	"
63	"	KS7811-8	"
64	Pv//SD69105/Egl	KS7814-1	"
65	Pv//SD69105/Pkr	KS7833-3	"
66	Nwt/NE76696	KS7866-3	"
67	"	KS7866-11	"
68	"	KS7866-15	"
69	"	KS7866-16	"
70	Concho	12517	Check
71	Nwt/David	KS7878-3	Kansas
72	Nwt//SD69105/Egl	KS78107-3	"
73	Nwt/3/Tsn//SD69105/Ctk	KS78110-1	"
74	Nwt/3/Nph/A66//Tsn	KS78139-3	"
75	"	KS78139-12	"
76	Nwt/3/Nph/A66//Pronto	KS78140-1	"
77	MS-AZ/Nwt	KS78141-5	"
78	KS75216//Nwt/Php	KS78151-6	
79	"	KS78151-8	
80	Bison	12518	Check
81	Nwt "S"/Hsd "S"	KS78152-2	Kansas
82	Nwt 'S'/4/KS73148/3/SD69105// K/A	KS78156-1	"
83	Pkr 76/C-S	KS79238-2	"
84	Nwt/Wings	KS79387-1	"
85	"	KS79428-1	"

1985 Soilborne Mosaic Nursery (concluded):

<u>Entry no.</u>	<u>Variety or Pedigree</u>	<u>C.I. or Sel. No.</u>	<u>Source</u>
86	Nwt/Ldn	KS79444-3	Kansas
87	"	KS79446-1	"
88	Pv/Ldn	KS80259-3	"
89	KS73165/3/Sdy//A/K	KS80301-3	"
90	Pawnee	11669	Check
91	Nwt/TAM W-101	KS7643-5	Kansas
92	"	KS7643-21	"
93	"	KS7643-24	"
94	"	KS7643-25	"
95	"	KS7643-32	"
96	Nwt/Wings	KS7645-8	"
97	R3-Arkan	KSTC84139	"
98	Wrr*5/Agent//Ctk 78	NE77465	Nebraska
99	Tpr//Cmn/Ot/3/CIMMYT/Sut// Buckskin Sib/Homestead	NE82419	"
100	Concho	12517	Check
101	Fuzz/3/Gage/Lcr//Homestead	NE82567	Nebraska
102	Brule/Pkr*4/Agent//Belot.198/ Lcr	NE82655	"
103	"	NE82656	"
104	"	NE82657	"
105	"	NE82658	"
106	NE68719/Arthur//NE69457 NE76434/Ctk 78	NE83509	"
107	"	NE83511	"
108	Vogel Sel. 14/53-101/Tpr// TX65A1503/Arthur/Ctk 78	NE83626	"
109	Buckskin//NE68719/Arthur// Bez.1/2*Ctk 78	NE83704	"
110	"	NE83707	"

1985 SOILBORNE MOSAIC NURSERY
FIELD REACTION DATA

ENTRY NO.	LINCOLN, NE	MANHATTAN, KS		URBANA, IL	
	INFECTION TYPE (0-5)*	REACTION TYPE		REACTION TYPE	
		3/18	4/3	REP 1	REP 2
1	3	MS	S	S	VS
2	1	R	R	MS	MR
3	0	R	R	VR	VR
4	0	R	R	VR	VR
5	0	R	R	VR	VR
6	0	R	R	R	R
7	1	R	R	R-MR	R-MR
8	0	R	R	MS	MS
9	4	S-R (#)	S-R	VS-ROS (+)	VS-ROS
10	0	R	R	VR	VR
11	4.5	S	S-R	VS-ROS	VS-ROS
12	3.5	S	S	VS	VS
13	3.5	S	S	VS	VS
14	3.5	S	S	VS	VS-ROS
15	3.5	S	S	VS	VS-ROS
16	4	S	S	VS	VS-ROS
17	3	S	S-R	VS	VS-ROS
18	0	R	R	S	MS
19	0	R	R	MS	MS
20	4.5	S	S	VS-ROS	VS-ROS
21	0	R	R	MR	MR
22	0	R	R	MS-MR	MS
23	0	R	R	MS	MS
24	3	MR	MR	S	S
25	3	MR	MS	VS	VS
26	2	R	MR	S	S
27	2	R	MR	S	S
28	3	MR	MS	VS	VS
29	3	S	S	VS	VS
30	3.5	MS	MS	VS	VS
31	3	S	S	VS	VS
32	3.5	S	S	VS	VS
33	3.5	S-R	S-R	S	S
34	3	R-S	R-S	MR-MS	MS-S
35	1	R	R	MS	MS
36	4.5	VS	VS	VS	WK
37	3	VS	VS	VS	VS
38	3	MS	S	VS	VS
39	3	MS	S	VS	VS
40	1	R	R	R	R

* Infection type: 0 = Very Resistant (no infection)
to 5 = Very Susceptible

(+) ROS = rosetting, WK = Winter Kill

(#) Segregating or mixed reaction type. First reaction is predominant.

1985 SOILBORNE MOSAIC NURSERY - CONT.

ENTRY NO.	LINCOLN, NE	MANHATTAN, KS		URBANA, IL	
	INFECTION TYPE (0-5)	REACTION TYPE		REACTION TYPE	
		3/18	4/3	REP 1	REP 2
41	0	R	R	VR	VR
42	1	R	R	R	VR
43	1	R	R	MR	MR
44	3	MS	S-R	VS	VS
45	0	R	R	R	VR
46	1	R	R	MS	MS
47	1	R	R	MR-R	MR-R
48	0	R	R	MR-R	VR
49	2	R	MR	MR-R	MS
50	3	S	S	VS-ROS	VS-ROS
51	2	R	R	MR	MR
52	1	R	R	MR	MR
53	1	R	R	VR	R
54	2.5	S	S	VS	VS
55	2	R	R	MR-MS	MR-MS
56	0	R	R	MR	MR
57	2	R	R	S	S
58	0	R	R	VR	VR
59	0	R	R	R	MR
60	3	MS	S	S	VS
61	0	R	R	VR	R
62	1	R	R	VR	VR
63	0	R	R	VR	R
64	0	R	R	VR	VR
65	0	R	R	MR	MR
66	0	R	R	R	MS
67	0	R	R	MS	MS
68	0	R	R	MS	R-MS
69	0	R	R	R	R
70	0	R	R	R	VR
71	0	R	R	MR	MR
72	0.5	R	R	R	R
73	0	R	R	R	R
74	0.5	R	R	MS	MS
75	0	R	R	R	R
76	0	R	R	MR	MR
77	0	R	R	MS	MR
78	0	R	R	MR	MR
79	0.5	R	R	R	R
80	3	S	MS	VS-ROS	VS-ROS

1985 SOILBORNE MOSAIC NURSERY - CONCL.

ENTRY NO.	<u>LINCOLN, NE</u>	<u>MANHATTAN, KS</u>		<u>URBANA, IL</u>	
	INFECTION TYPE (0-5)	REACTION TYPE		REACTION TYPE	
		<u>3/18</u>	<u>4/3</u>	<u>REP 1</u>	<u>REP 2</u>
81	0	R	R	MR-MS	MR-MS
82	0	R	R	R	R
83	0.5	R	R	VR	VR
84	0	R	R	R	R
85	0.5	R	R	R	R
86	0	R	R	MR	MR
87	0.5	R	R	R	MR-MS
88	0.5	R	R	R	VR
89	0	R	R	MS	MS
90	3	S	S	S	VS
91	1	R	MR	MS	MS
92	1	R	R	MR	MR
93	0	R	R	MR	MR
94	1	R	R	MS	MS-MR
95	1	R	R	R	R
96	1	R	R	MS	MS
97	3	S	S	S	S
98	2.5	S-R	S-R	VR	VR
99	3	S-R	S-R	S	S
100	1.5	R	R	MR	R
101	4	R-S	R-S	S	S
102	3	S	S	VS	VS
103	3	S	S	VS	VS
104	3	S	S	VS	VS
105	3	S-R	S-R	VS	VS
106	4	S	MS	MS	MS
107	2	S	MS	MR	MR
108	4	S	S	VS	S
109	3	S-R	S-R	S	S
110	3	S	S	S	VS