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 WINTER WHEAT REGION IN 1996

C. J. Peterson
Research Agronomist

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 Northern Plains 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.

Lincoln, Nebraska
March, 1997

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NORTHERN PLAINS AREA

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The writer expresses appreciation to Dick Samson and Joyce Kovar for their assistance in preparing this report.

Germplasm in the Hard Winter Wheat Regional Nursery Program is distributed and evaluated under guidelines of the 'Wheat Worker's Code of Ethics' (National Wheat Improvement Committee, Nov. 5, 1994).

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New Varieties and Germplasms

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.

VARIETIES

The Nebraska Agricultural Experiment Station and USDA-ARS announced the release of 'Windstar' hard red winter wheat. Windstar is an F3 derived line from the cross 'TX79A2729//Caldwell/Brule sel./3/Siouxland' and was tested in the NRPN in 1993 and 1994 as NE90625. Windstar is a tall semidwarf, similar in height to Niobrara and Rawhide, with short coleoptile, and it matures one day later than Arapahoe. It possesses Sr 6 and Sr 24 for resistance to stem rust, is moderately susceptible to leaf rust, and is susceptible to Hessian fly, the Russian wheat aphid, and soilborne-mosaic virus. Winterhardiness is comparable to other Nebraska varieties currently under production. Windstar has slightly lower test weight, similar to Alliance and Vista, and has acceptable milling and baking qualities. Windstar is recommended for the dryland production areas of the Nebraska Panhandle and western South Dakota.

The Texas Agricultural Experiment Station announced the release of 'TAM-110' hard red winter wheat. TAM-110 has the pedigree 'TAM-105*4/Amigo*5//Largo'. It was tested in the WPRPN in 1994 and 1995 and the SRPN in 1996 as TXGH12588-105. TAM-110 is unique among hard red winter wheat cultivars in its resistance to greenbug biotypes E and I, which are the currently predominate biotypes. It is also resistant to all previously known field biotypes. TAM-110 carries the 1AL-1RS translocation, which provides for tolerance to the wheat curl mite. TAM-110 is daylength neutral and similar to TAM-107 in plant height, maturity, and grain yield. Quality characteristics have been at least as good as those of TAM-107 and TAM-200, with grain protein content 0.5-1.0% higher than TAM-101 or TAM-200.

The Montana Agricultural Experiment Station announced the release of three hard red winter wheats in 1996: 'McGuire' (PI593890), 'Rampart' (PI593889), and 'Erhardt' (PI564761).

McGuire is an F4 derived selection from the cross 'Plainsman V/MT77003//NE7060/Froid' and was tested in the NRPN in 1995 and 1996 as MT88046. McGuire was released based on its superior protein content and milling and baking characteristics. McGuire has a long coleoptile, strong straw, and plant height similar to Arapahoe. Its maturity is similar to Arapahoe and one to two days earlier than Rocky or Judith. Winterhardiness of McGuire is similar to Tiber and

adequate for most production areas of Montana. McGuire is postulated to carry Sr10 and other unidentified genes for resistance to stem rust and is susceptible to leaf rust, stripe rust, dwarf bunt, WSMV, Russian wheat aphid, and wheat stem sawfly. McGuire has averaged over a full percentage point higher grain protein than Redwin. It has strong mixing characteristics, superior loaf volume and loaf grain and texture, and meets quality criteria for high-quality bread flour production.

Erhardt is an F4 derived selection from the cross 'Roughrider/MT6928'. MT6928 is a high yielding semidwarf from the cross 'TX55-391-56-D8/Westmont'. Erhardt was tested in the 1992 and 1993 NRPN as MT8719. Erhardt was released based on its relatively high winterhardiness combined with improved yield potential and reduced height. It is medium maturity, two days later than Judith, and intermediate in height, 9 cm shorter than Redwin. Erhardt has coleoptile length similar to Rocky and Neeley and winterhardiness similar to Roughrider and Norwin. Erhardt expresses adult plant resistance to stem rust, is resistant to tan spot, and is susceptible to leaf rust, stripe rust, dwarf bunt, WSMV, Russian wheat aphid, and wheat stem sawfly. It is heterogeneous for resistance to Hessian fly. Erhardt has protein content similar to Redwin with moderate dough strength, relatively short mix times, and excellent loaf volume and internal loaf characteristics.

Rampart is an F5 selection from the cross 'Lew/Tiber//Redwin' and was tested in the NRPN in 1996 and 1997 as MTS92042. Rampart expresses high levels of stem solidness and shows tolerance to feeding and cutting damage of the wheat stem sawfly. Rampart will supplement and/or replace Vanguard, which is a sib selection and the only other sawfly tolerant wheat available for Montana producers. Rampart is medium maturity, heading one day later than Rocky and Judith, and similar in height to Judith and Neeley with tendency to lodge under high yield conditions. It has a very long coleoptile, averaging 10 to 20 mm longer than the conventional height cultivars Rocky and Neeley. Rampart is resistant to stem rust and has field tolerance to WSVM, but is susceptible to leaf rust, stripe rust, dwarf bunt, and Russian wheat aphid. Grain protein content of Rampart is similar to Redwin with strong dough mixing requirements, relatively long mix time, and loaf volume and internal characteristics similar to Judith and Redwin.

The Oklahoma Agricultural Experiment Station has announced the release of '2174' hard red winter wheat. 2174 is derived from the cross 'IL 71-5662/PL145//2165'and was tested in the SRPN in 1994 and 1995 as HBZ374C. 2174 originated from the hard winter wheat germplasm donated to Kansas State University by Pioneer Hi-bred

International. 2174 was released for its stable grain yield potential in Oklahoma and tolerance to acid soils. Acid soil tolerance of 2174 is slightly less than 2163. It has a relatively long coleoptile and is resistant to SBMV. 2174 expresses adult plant resistance to leaf rust. Test weights of 2174 have been higher than 2137 or Jagger, and similar to Custer. 2174 has been targeted for production in central and north-central Oklahoma.

HybriTech Seed International has indicated the intent to release Quantum 7406 hybrid hard red winter wheat for commercial production in 1997. Quantum 7406 was tested in the 1994 and 1995 SRPN as XH1706. It has high yield potential and excellent winterhardiness. It has good protection to tan spot, stem rust, and powdery mildew; resistance to SBMV; moderate susceptibility to leaf rust and Septoria tritici; and is susceptible to WSMV and Hessian fly. Quantum 7406 is primarily targeted for production in western Kansas, eastern Colorado, and southwest Nebraska, with secondary adaptation to irrigated areas of the southern High Plains.

Hybrid wheats formerly released by Agripro Seeds, Inc., are now being marketed by HybriTech Seed International under the Quantum label. The Agripro hybrids AP7501, AP7510, and AP7601 are now designated as 'Quantum AP7501', 'Quantum AP7510', and 'Quantum AP7601', respectively. Quantum AP7501 was tested in the 1995 SRPN as AP7501 and Quantum AP7510 was tested in the 1995 and 1996 SRPN as WX92-0408.

GERMPLASM

The USDA-ARS and University of Nebraska announced the release of five hard red winter wheat genetic stocks carrying null alleles at the Glu-D1 locus. N86L090 (PI591816) is an F3 derived line from the cross 'Brule/3/Atlas66/NapHal//Lancota sib/Aurora' and also carries the 1BL-1RS translocation. N94L7843 (PI591817), N94L7844 (PI591818), N94L7845 (PI591819) and N94L7846 (PI591820) were F3 derived selections from the cross 'GKF-8261//NapHal/CI13449/3/NE78868'. Nap Hal is likely the source of the Glu-D1 null-allele in all five lines. The genetic stocks are notable for their significant loss of flour dough strength and mixing performance while having protein content similar to Lancota. The stocks may be useful in genetic studies to test quality effects of new HMW glutenin alleles in adapted genetic backgrounds, or to develop wheats with reduced gluten strength and highly extensible doughs.

Regional Notes

ACTIVITIES

The 1996 Hard Red Winter Wheat Breeders Field Day was held in June at Ft. Collins, CO, hosted by wheat researchers from Colorado State University, Agripro Seeds, Inc., and HybriTech Seed International. The 1997 Breeders Field Day is scheduled for May 14 at Vernon, TX, hosted by researchers from Texas A&M.

The 21st Hard Winter Wheat Workers Workshop is scheduled to be held in January, 1998 in Colorado. Specific dates and the location have yet to be announced.

PERSONNEL CHANGES

There have been many changes in scientists collaborating with the Regional Nursery program, and among members of the Hard Winter Wheat Improvement Committee, over the last 12-18 months. The following is not intended as a comprehensive list, but to document some of the changes that have occurred in program collaborators. Those are included for which we have current knowledge or information.

Dr. Stan Cox, USDA-ARS, Research Geneticist at Manhattan, KS, resigned his position in July 1996. Dr. Cox and his family subsequently moved to India where his spouse, Dr. Paula Bramel-Cox, is working with ICRISAT. Stan contributed much to the wheat region during his tenure with ARS and he will be sorely missed.

Dr. Gina Brown-Guedira has recently accepted the USDA-ARS Research Geneticist position at Manhattan, KS, which had been vacated by Dr. Stan Cox. Dr. Brown-Guedira will join the ARS Plant Science Research Unit in July, 1997.

Dr. Jim Quick began serving as 'Acting Head' of the Department of Soil and Crop Sciences at Colorado State University in fall, 1996. He will continue to lead the CSU wheat breeding effort while on temporary administrative duty.

Dr. Jerry Johnson joined Colorado State University in summer, 1995, as Extension Specialist in crop production and variety testing. He takes over the position vacated by Dr. John Shanahan. Dr. Shanahan was appointed as Coordinator of extension programs for the CSU Agricultural Experiment Station.

Dr. Allan Fritz joined the Texas A&M University faculty to develop a wheat molecular genetics program and lead the south Texas wheat breeding effort. Dr. Fritz, formerly in a post-doc position with Texas A&M, will be located in College Station.

Dr. Yue Jin joined South Dakota State University as Plant Pathologist with a specialty in wheat diseases. Dr. Jin will be working closely with wheat breeders at SDSU.

Dr. Kulvinder Gill joined the faculty of the University of Nebraska in 1996 as a Molecular Cytogeneticist, specializing in wheat cytogenetics. Dr. Gill replaces Dr. Shawn Kaeppler, who resigned to take a position with the University of Wisconsin.

Dr. Troy Weeks joined the USDA-ARS Wheat, Sorghum, and Forage Unit at Lincoln, NE in the fall of 1995. Dr. Weeks' work includes research on tranformation systems for both sorghum and wheat. Dr. Weeks was previously with the ARS program at Albany, CA, conducting research on wheat transformation.

Dr. Drake Stenger has recently accepted a position as Research Virologist with the USDA-ARS Wheat, Sorghum, and Forage Unit at Lincoln, NE. Dr. Stenger's research will focus on molecular biology and control of WSMV infections in wheat.

Dr. Jim Anderson resigned his wheat research position with North Dakota State University to take a position as Research Geneticist with USDA-ARS in Pullman, WA. Dr. Anderson has assumed responsibilities of Dr. Bob Allan, who retired in January, 1996. Winter wheat breeding activities at NDSU have since been discontinued. Dr. Erik Ericksmoen will coordinate winter wheat testing for North Dakota out of the Hettinger Experiment Station.

Dr. Don Koeltzow is Center Director for the USDA-ARS Grain Marketing and Production Research Center at Manhattan, KS. Dr. Koeltzow was formerly with the Federal Grain Inspection Service and takes over for Dr. Virgil Smail, who left ARS to join the American Baking Institute at Manhattan, KS.

Dr. Pat McCluskey joined the Kansas State University Department of Grain Science as a Cereal Chemist working with the KSU wheat breeding programs. Dr. McCluskey takes over for Dr. Bob Bequette, who had recently retired.

Dr. Jerry Bergman has assumed a dual role as Superintendent of the Sidney, MT research center for Montana State University and Superintendent of the Williston, ND research center for North Dakota State University. Winter wheat variety testing and germplasm screening formerly conducted at both Sidney and Williston are now being conducted primarily at Williston, ND.

Oklahoma State University has announced the opening of the new Oklahoma Food and Agricultural Products Research and Technology Center. Dr. Lowell Satterly, formerly of North Dakota State University, has joined Oklahoma State University as the Center Director.

HybriTech Seed International acquired the Agripro Seeds hybrid wheat program in 1996. Agripro will continue to develop and market pure-line varieties, but will no longer develop hybrid wheats. With the acquisition, there were several changes in personnel in the respective hard winter wheat breeding programs. Dr. Gordon Cisar was named Senior Project Leader for the HybriTech hard winter wheat program, now based in Berthoud, CO. Dr. Cisar was formerly Project Leader for the HybriTech eastern soft wheat breeding program. Drs. Jim Reeder and Blake Cooper, formerly with Agripro, joined the HybriTech breeding program. Dr. Reeder will be involved with hybrid wheat development at the Berthoud, CO, location. Dr. Cooper will lead the Hybritech breeding effort in the Pacific Northwest. Rob Bruns and Dr. John Moffatt remain with Agripro, also based in Berthoud, CO, as Research Director and Hard Wheat Breeder, respectively.

Dr. Elmer Heyne, Emeritus Professor, Kansas State University, passed away in February, 1997. Dr. Heyne retired in 1982 after 44 years of service as wheat breeder for KSU. Among his many contributions to wheat improvement in the region, Dr. Heyne released the variety 'Newton', which was grown on up to 6 million acres in Kansas. Dr. Heyne received numerous professional awards for his achievements in wheat research. He also served as editor for the ASA monograph 'Wheat and Wheat Improvement' and as editor for the first 18 volumes of the Annual Wheat Newletter.

CHANGES IN THE REGIONAL NURSERY PROGRAM

There were several changes in the Hard Winter Wheat Regional Nursery program that impacted the 1996 evaluations and, consequently, this report. These changes were proposed by Dr. C.J. Peterson and adopted by the Hard Winter Wheat Improvement Committee in January, 1995.

First, the Wheat Worker's Code of Ethics was adopted as formal policy under which germplasm is distributed and evaluated in the Regional Nursery program.

Second, private wheat breeding companies are now permitted to receive germplasm entered in the performance nurseries, to grow the regional nurseries, and contribute data to the Regional Report. As such, there were several new test sites added to the 1996 evaluations.

Third, the Uniform Winterhardiness Nurseries and Soilborne Mosaic Nursery were discontinued in 1995. These were replaced with the Regional Germplasm Observation Nursery (RGON). The RGON will provide for region-wide testing of germplasm for multiple diseases and insect pests and under various environmental stresses. Results for the first RGON are included in this report. For additional information, see the Proceedings of the 20th Hard Winter Wheat Worker's Workshop.

Finally, in light of ongoing efforts in both hard red and hard white wheat development in the region, the word 'red' was dropped from the name of the 'Hard Red Winter Wheat Improvement Committee'. The Committee will now be known as the 'Hard Winter Wheat Improvement Committee'. The title of this report has been modified slightly to acknowledge this change.

A web page for the Regional Nursery program is currently under development. The page is not fully operational at this time, but does have nursery lists, preliminary data, and other information posted for viewing or downloading. The internet address is:

HTTP://ianrwww.unl.edu/ianr/agronomy/region/

NOTE: The response reaction of entries to leaf and stem rust infection has been coded on a 1-9 scale to facilitate generation of this report. This same scale has been used in past reports. The response data can be interpreted as reaction type as follows: 1=VR; 1=R; 3=MR; 4=M; 5=M; 6=M; 7=MS; 8=S; and 9=VS.

1996

Southern Regional Performance Nursery

Entry No.	Variety or Pedigree	Sel. No.	Source
1**	Kharkof	CI1442	Check
2**	Scout 66	CI13996	"
3**	TAM-107	PI495594	"
4**	TAM-107*3/TA2460	KS93U206	KS,USDA
5**	2555 sib/Vona//2180	OK91P648	Oklahoma
6**	HBY250A/HGF004	OK93P735	"
7*	HBY242G/HGF092	OK93P634	"
8*	TX88V6610/PMV//Mesa	OK92403	"
9**	Pro 812/Caldwell//TX86D1310	TX91D6913	Texas
10**	TX86D1310/Kavkaz//TX86D1308	TX91D6991	"
11	TAM-200/Karl	TX92V3108	"
12	WVE047*2180/2157*HGE013	HBI0531-A2	"
13	TX85V1830/TX84V1307	TX93V5919	"
14	TX85V1830/TX84V1307	TX93V5922	"
15	TX87V1913/TAM-200	TX93V4927	"
16	OK82377/TX81V6603-2	TX92V2519	"
17*	(TX71A562-6*4/Amigo)*4/Largo ('TAM-110')	TXGH12588-105	"
18*	Mesa/Carson	CO910424	Colorado
19*	CO840104/Lamar	CO910748	"
20	HF5761/TAM-105//Bounty Hybrid 203	KS91H153-2	Kansas
21*	Karl/HBY385D//2163	KS941064-3	"
22*	" "	KS941064-6	"
23*	2180/Karl//2163	KS940935-7-2-1	"
24*	2180/Karl//2163	KS940935-125-5-2	"
25*	KS82W422/SWM754308//KS831182/KS82W422	KS85W663-11-6-MB	"
26*	KS82W418/Stephens	KS84W063-9-39-3-MB	"
27	Bennett/Brule Composite	NE90476	Nebraska
28	OK83201/Redland	NE92458	"
29	NE82413/Colt	NE92646	"
30*	NE85707/Thunderbird	NE93405	"
31*	Bez1/Ctk78//Arthur/Ctk78/3/Bennett/4/Norkan	NE93427	"
32**	'Quantum AP7510' Hybrid Wheat	WX92-0408	HybriTech
33*	Bulk Selection ('Big Dawg')	W93-460	Agripro
34**	Coker 68-15/TAM-107	T702	Trio
35**	T213 sib *2/TAM-107	T834	"
36**	TAM-107/T213 sib	T812	"
37**	TAM-107/Caldwell	T861	"
38*	T68/KS90WGRC10	T89	"
39*	Sturdy/Plainsman V seln ('G1878')	G1878	Goertzen

* New Entry
** New Seed Provided

Test Site Information - SRPN

Clovis, NM -- The irrigated nursery was planted on 9/25/95 into fallow. Plots were irrigated on 9/27/95, 10/13/95, 11/30/95, 2/14/96, 3/4/96, and 5/12/96. Fertilizer rates consisted of 100 lbs/a of 10-30-0. Seeding rate was 90 lbs/a. Harvested on June 24, 1996. The dryland nursery was planted on 9/26/95 at a rate of 40 lbs/a. Fertilizer rates consisted of 100 lbs/a of 10-30-0. The dryland nursery was irrigated on 9/27/95 and 10/13/95 to ensure germination with approximately 6 inches of water applied. Harvested on June 21. Wheat yields were generally lower than previous years due to lack of winter moisture and above normal temperatures during the growing season.

Farmington, NM -- Planted on 9/19/95 under a center pivot at a seeding rate of 100 lbs/a with 130 lbs/a N applied. Lorsban was applied on April 16 for control of Russian wheat aphid. Harvested on 8/1/96.

Bushland, TX -- No additional information.

Chillicothe, TX -- No additional information.

Prosper, TX -- No additional information.

Stillwater, OK -- Planted on 10/17/95. There were poor stands in some plots and drought during most of the growing season. No diseases were apparent. Harvested on 6/12/96.

Altus, OK -- Abandoned due to drought stress.

Lahoma, OK -- Planted on 10/10/95 and harvested on 6/18/96.

Goodwell, OK (irrigated) -- Planted on 10/6/95, harvested 6/25/96.

Hutchinson and Manhattan, KS -- Fall stand establishment was above average and plant development was normal going into the winter. A dry period beginning in October and extending into the middle of April minimized forage growth and resulted in some drought stress. Three significant freezes occurred; on Feb. 1-3 (-15°F), March 7-8 (-4°F) and March 25-26 (+5°). Each freeze event followed a warming trend which had initiated growth and was extremely detrimental on development. Although minor stand damage from these spring freezes was noted, the major impact was tiller death. Those cultivars that had initiated rapid regrowth were hurt the worst. The dry spring also reduced disease pressure significantly. Minor disease pressure was observed but had little affect on final yields. Grain filling conditions were very good, which allowed many of the selections to recover from the initial freeze damage and perform better than expected. In general, later selections were favored under these types of environment.

Hays, KS -- No additional information.

Garden City, KS -- Nursery was abandoned due to winterkilling.

Colby, KS -- Planted on 9/28/95 and harvested on 7/12/96.

Wichita, KS -- No additional information.

Winfield, KS -- Moisture was extremely marginal at planting but adequate stands were established. Tillering was minimal through the winter and severe wind erosion occurred through the winter months. Most winter survival problems occurred in late winter/early spring after breaking dormancy. There were no leaf diseases and no lodging or shattering. Late season rains helped this nursery recover amazingly well.

Hugoton, KS -- No additional information.

Colorado Sites -- The Ft. Collins nursery was affected by late hail. Yields at Burlington were reduced by a spring freeze and water stress. Yields at Akron were higher than normal.

Nebraska Stations, NE -- The SRPN and NRPN were seeded at five (Lincoln, Nelson, North Platte, Sidney, and Hemmingford) and four locations (Lincoln, North Platte, Sidney, and Hemmingford), respectively. Only two locations were harvested (Sidney and Hemmingford). Sidney suffered 10-20% hail damage shortly before harvest. The high yields at Hemmingford included some volunteer wheat, as preplant tillage was only partially successful under dry conditions. North Platte was abandoned due to hail about 2 days before the nursery was mature enough to be harvested. The remaining sites suffered from exceptionally dry planting conditions and little residual moisture due to rotational changes. Lincoln suffered from severe wind erosion. The nursery at Nelson followed alfalfa and had very poor stands due to drought.

Imperial, NE -- The nursery was irrigated with a center pivot system. The nursery had a fairly high C.V. compared with previous tests at this site, probably due to some lodging in a few isolated plots.

Brookings, SD -- (Brookings County, Aurora Farm) Planted on 9/25/95. The nursery was planted into black summer fallow with good soil moisture. Fall stands were adequate but insufficient snow cover caused a high level of winter injury throughout each of the nurseries. Variability related to non-uniform winter survival, and subsequent annual weed pressure, rendered the nurseries unsalvageable. The RGON was completely lost.

Watertown, SD -- (Codington County, NE Research Station) Planted 9/26/96. The RGON was planted into black summer fallow with good soil moisture. Fall stands were adequate, but a lack of snow cover resulted in near-complete winterkill throughout the field. Average survival estimates for a rye trial in the same field were 20% (Roughrider estimated at 5-10% survival).

Pierre, SD -- (Hughes County, Dakota Lakes No-Till Research Farm) Planted on 9/20/95 and harvested on 8/6/96. The nurseries were planted no-till into lentil stubble with adequate soil moisture. Fall stands were only adequate (cool temperatures in the fall slowed development) and significant differential winter injury was recorded (especially in the SRPN and WPRPN). Cheatgrass became a significant problem, particularly where stands were thinned or genotypes were slow in recovering from the winter freeze stress. No significant disease or insect pressure was observed.

Winner, SD -- (Tripp County, Farmer-Cooperator) Planted on 9/22/95 and harvested on 7/24/96. The nurseries were planted no-till into standing spring wheat stubble (about 8-10 inches) with soil moisture above optimal. Fall plant development was adequate but no differential winterkill was recorded. Significant leaf spotting disease pressure (mostly Tan spot) was observed and lodging was above average. Cool temperatures during grain filling prevailed throughout the state.

Columbia, MO -- Fall drought followed by cycles of freezing/thawing temperatures caused severe winterkilling.

Lind, WA -- The nursery was abandoned.

Crawfordsville, Iowa -- The fall was dry and, although germination appeared good, there was little growth prior to winter. The winter was extremely cold with fluctuating warm and cold days in early spring. The SRPN was severely damaged by winterkilling and resulting stands were too poor and inconsistent to collect yield data.

Table 1. Yield and agronomic data for 39 wheats grown in the Southern Regional Performance Nursery in 1996.

CLOVIS (IRR.), NEW MEXICO

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
NE92458	28	2795	69.1	57	118
TAM-107	3	2726	69.3	60	113
T834	35	2695	67.2	59	116
NE93405	30	2684	71.6	65	120
OK92403	8	2672	69.9	55	118
T861	37	2623	68.8	62	118
OK93P735	6	2554	70.6	54	113
KS94093512552	24	2477	68.1	58	120
NE93427	31	2450	69.6	57	114
TX92V3108	11	2389	69.4	58	119
NE92646	29	2339	67.6	55	122
T89	38	2320	67	55	116
TX93V5922	14	2274	68.8	54	116
T812	36	2274	68.1	57	116
KS940935-72-1	23	2228	70.1	54	120
SCOUT66	2	2198	69.4	60	120
TXGH12588-105	17	2198	67.3	58	118
OK93P634	7	2179	69.5	52	120
T702	34	2175	67.7	55	114
W93-460	33	2159	68.6	52	121
TX91D6991	10	2148	67.6	51	120
WX92-0408	32	2140	69.4	53	122
HBI0531-A2	12	2136	65.9	56	119
CO910424	18	2136	69.1	58	120
OK91P648	5	2117	67	49	116
TX93V5919	13	2117	69.2	55	114
TX92V2519	16	2113	69.4	55	121
NE90476	27	2102	70.3	56	117
TX91D6913	9	2079	66.4	51	116
KS93U206	4	2048	67.9	57	113
KS941064-6	22	1987	67.2	53	116
G1878	39	1983	69.2	54	117
KS85W66311-6M	25	1849	67.6	50	118
TX93V4927	15	1826	67.1	48	122
CO910748	19	1692	67.1	49	120
KS941064-3	21	1673	67.6	51	122
KS91H153-2	20	1570	68.6	46	120
KS84W0639393M	26	1562	69.1	53	116
KHARKOF	1	1233	68.8	62	112
MEAN		2178			
LSD(.05)		N.S.			
C.V.		24.5			

CLOVIS (DRYL.)

NEW MEXICO

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
SCOUT66	2	2140	73.1	50	118
NE92646	29	2018	73.7	47	118
T812	36	1987	72.7	44	115
KS91H153-2	20	1968	73.3	43	119
CO910424	18	1949	72.9	47	118
T89	38	1907	72.7	45	120
NE93405	30	1861	73.7	51	116
TAM-107	3	1780	72.1	42	117
T861	37	1750	73.3	47	116
OK91P648	5	1734	72.2	40	116
WX92-0408	32	1731	72.6	41	120
HBI0531-A2	12	1681	71.6	43	116
TX93V5919	13	1650	73.4	45	122
TX92V3108	11	1643	73.7	41	120
OK93P735	6	1574	74.2	40	120
KS93U206	4	1554	72.6	42	117
NE90476	27	1551	72.8	44	120
TX93V5922	14	1543	73.1	47	118
T702	34	1509	72.9	41	121
NE92458	28	1497	72.9	42	119
CO910748	19	1478	73.5	38	119
T834	35	1463	72.4	46	114
TX91D6991	10	1440	72	41	118
TX91D6913	9	1424	70.1	41	118
TXGH12588-105	17	1409	71.5	41	116
NE93427	31	1405	73.4	41	116
G1878	39	1405	74.6	43	118
KS941064-6	22	1401	72.7	41	118
KS94093512552	24	1382	72.7	42	118
W93-460	33	1336	73.4	41	120
TX93V4927	15	1329	72.7	42	115
TX92V2519	16	1309	72.3	43	114
OK92403	8	1286	72.4	36	120
KHARKOF	1	1206	74.5	47	125
KS940935-72-1	23	1164	73.1	38	119
KS85W66311-6M	25	1145	73.9	40	120
KS84W0639393M	26	1030	68.5	39	122
OK93P634	7	1026	72.9	38	118
KS941064-3	21	965	67.7	36	122
MEAN		1529			
LSD(.05)		N.S.			
C.V.		29.4			

FARMINGTON

NEW MEXICO

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	LODGING %
WX92-0408	32	7339	76.9	74	136	0
T702	34	7029	77.3	80	134	28
TX91D6991	10	6939	72.4	72	140	0
CO910424	18	6931	75.3	71	136	0
T812	36	6857	77.5	73	139	0
HBI0531-A2	12	6853	76.2	78	139	0
CO910748	19	6774	77.9	82	134	0
OK91P648	5	6701	72.2	73	132	0
TX93V5922	14	6628	75.9	79	135	0
OK92403	8	6510	77.8	71	136	0
TAM-107	3	6503	76.1	74	140	0
KS94093512552	24	6487	75.1	77	135	0
TX91D6913	9	6478	73.5	76	138	0
NE93427	31	6437	77.7	79	140	0
TXGH12588-105	17	6359	76.2	72	140	0
TX92V3108	11	6285	75.9	71	133	0
OK93P735	6	6280	72.5	70	135	0
TX93V4927	15	6232	75	71	128	0
KS93U206	4	5910	76	76	136	34
NE93405	30	5899	75.4	68	139	0
TX93V5919	13	5789	78.8	78	138	0
NE90476	27	5630	74.6	81	142	0
NE92458	28	5587	73.9	77	133	1
T89	38	5550	75.6	73	141	0
KS84W0639393M	26	5476	72.7	70	133	3
TX92V2519	16	5438	77	72	134	0
W93-460	33	5405	71.6	72	138	0
T861	37	5397	74.6	77	140	0
OK93P634	7	5327	73	72	134	0
KS91H153-2	20	5312	77.2	74	136	0
KS940935-72-1	23	5311	75.4	74	139	0
SCOUT66	2	5207	75.6	74	139	10
G1878	39	5155	75.6	88	140	28
NE92646	29	5128	73.5	69	139	0
KS85W66311-6M	25	5109	72.1	83	145	20
KS941064-3	21	5079	74.1	76	139	0
T834	35	5066	74.2	74	143	0
KS941064-6	22	4859	73.9	76	136	0
KHARKOF	1	3714	76.4	75	138	0
MEAN		5922				
LSD(.05)		1138				
C.V.		13.7				

BUSHLAND (IRR.)

TEXAS

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 INJURY 0-4
HBI0531-A2	12	5911	80.1	68	124	1.5
WX92-0408	32	5613	79.9	66	124	0.5
CO910424	18	5557	81.4	78	124	0.5
TX91D6991	10	5541	79.6	68	124	1.5
OK93P735	6	5497	81.4	70	125	1
TX92V3108	11	5405	83.3	73	124	1.5
TX93V5919	13	5364	82	73	129	1
KS941064-6	22	5358	78.4	67	125	1.5
OK91P648	5	5317	78.8	63	124	1.5
KS94093512552	24	5250	79.9	72	125	1.5
T702	34	5230	82.8	69	125	1.5
T812	36	5214	78.9	71	123	1
T834	35	5198	78.2	78	125	1
NE90476	27	5192	79.2	74	125	0.5
TAM-107	3	5104	80.9	72	122	0.5
KS93U206	4	5084	81.3	73	123	0.5
NE92646	29	5064	79.3	75	128	1
KS940935-72-1	23	5019	81	75	125	1.5
KS91H153-2	20	5017	82	68	125	1
OK92403	8	4977	81.1	67	124	1
CO910748	19	4968	80.8	73	127	1
NE93427	31	4918	80.5	76	125	1.5
G1878	39	4916	82.7	73	125	1
TX91D6913	9	4914	77.1	75	127	1.5
T89	38	4914	79.3	74	124	1
OK93P634	7	4835	80.1	66	125	1
TXGH12588-105	17	4685	80.2	73	124	0.5
KS941064-3	21	4678	78.6	69	125	1.5
KS84W0639393M	26	4600	79.7	76	129	1.5
NE92458	28	4580	79.9	72	124	1
KS85W66311-6M	25	4539	81.3	70	127	2
SCOUT66	2	4510	80.1	85	125	0.5
T861	37	4421	78.8	76	123	1
TX92V2519	16	4365	80.5	63	128	1
TX93V4927	15	4353	79.6	64	130	2
TX93V5922	14	4214	82.9	69	129	1.5
NE93405	30	4212	81	81	125	1
W93-460	33	4178	80.4	73	130	1.5
KHARKOF	1	3410	79.7	96	133	0.5
MEAN		4926				
LSD(.05)		432				
C.V.		5.4				

BUSHLAND (DRYL.)

TEXAS

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
TAM-107	3	1067	74	41	119
KS93U206	4	1018	73.9	42	119
T702	34	989	74.4	40	123
TX93V5919	13	953	73.4	34	124
T834	35	935	73	44	124
T861	37	876	72.5	40	120
NE92458	28	847	74.9	41	121
TXGH12588-105	17	798	72.6	38	122
SCOUT66	2	785	74.7	44	124
KS941064-3	21	758	70.2	37	122
NE90476	27	753	72.8	39	124
KS94093512552	24	740	72.6	37	122
HBI0531-A2	12	697	70.7	37	125
OK93P735	6	693	74.4	38	123
WX92-0408	32	693	74.7	36	124
KS91H153-2	20	686	74.4	35	124
CO910424	18	681	75.7	41	122
OK92403	8	675	73.9	39	120
OK91P648	5	670	70.6	36	124
T812	36	670	74.8	36	121
TX91D6991	10	659	71.2	36	121
TX91D6913	9	652	71.9	37	125
TX92V3108	11	652	76.9	35	123
KS85W66311-6M	25	648	73.9	35	125
NE93405	30	648	76	39	124
CO910748	19	646	73.4	37	125
NE92646	29	639	75.1	38	125
T89	38	628	73.1	36	120
NE93427	31	621	75.6	38	124
TX93V5922	14	549	74.4	40	124
KHARKOF	1	540	74.7	49	133
W93-460	33	540	75.2	35	125
G1878	39	534	76	40	123
TX92V2519	16	525	73	35	125
KS941064-6	22	500	71	36	123
KS940935-72-1	23	495	73	36	122
OK93P634	7	455	74.2	37	124
KS84W0639393M	26	451	70.8	38	126
TX93V4927	15	419	75.7	31	126
MEAN		687			
LSD(.05)		278			
C.V.		24.8			

CHILLICOTHE

TEXAS

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 INJURY 0-4
TAM-107	3	4353	77.4	62	108	0.8
T89	38	3936	77.3	46	109	1
NE90476	27	3788	73.5	53	114	0.5
TX93V5919	13	3782	78.3	49	110	1.3
KS93U206	4	3741	77.3	60	108	1
TX93V5922	14	3717	79.2	55	109	1.5
TX92V3108	11	3598	79.2	47	110	1
T861	37	3587	76	52	109	1
W93-460	33	3555	77.8	56	112	1
NE92458	28	3443	77.3	55	109	1
WX92-0408	32	3434	75.1	52	113	1
KS94093512552	24	3347	75.3	54	110	1.3
T702	34	3322	78.2	50	110	1
OK93P634	7	3221	77	50	112	0.8
NE93427	31	3179	78.6	52	109	1
OK93P735	6	3170	77.7	45	113	0.5
OK91P648	5	3100	74.4	50	108	1
KS941064-6	22	3080	74.8	50	110	1
NE93405	30	2959	78.2	57	110	1
KS941064-3	21	2872	74.4	50	110	1
T834	35	2860	74.2	50	116	1
KS940935-72-1	23	2851	76.1	51	112	1
CO910748	19	2840	74.3	46	116	1
TX93V4927	15	2827	77	43	114	1.3
TX91D6991	10	2759	73.9	49	111	1
TXGH12588-105	17	2739	74.8	46	108	0.5
T812	36	2719	75.6	40	110	1
OK92403	8	2688	77.9	45	110	1
G1878	39	2607	79.5	48	113	1
KS85W66311-6M	25	2495	77.5	51	115	1.5
CO910424	18	2488	76.5	40	113	1
KS91H153-2	20	2488	75.9	36	115	1
NE92646	29	2358	73.9	51	116	1
TX92V2519	16	2273	74	37	112	1
SCOUT66	2	2206	73.7	68	116	0.8
HBI0531-A2	12	2116	71.6	45	112	1
TX91D6913	9	2107	70.6	47	116	1
KS84W0639393M	26	1997	75.2	55	114	1
KHARKOF	1	1968	75.7	77	120	1
MEAN		2989				
LSD(.05)		1024				
C.V.		21.0				

PROSPER

TEXAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	DAYS TO HEADING FROM 1/1	WINTER SURVIVAL 0-9
TX91D6913	9	5207	75.2	109	4
KS941064-6	22	5169	76	103	3
OK91P648	5	5059	76.9	103	4
T702	34	5053	79.9	106	4
KS940935-72-1	23	4981	79.3	107	3
TX93V5919	13	4963	79.6	104	5
KS941064-3	21	4932	76.1	104	3
TX91D6991	10	4887	76.1	102	4
NE92458	28	4867	80.1	102	4
T812	36	4853	78.4	105	4
KS94093512552	24	4797	76.8	105	4
TX92V2519	16	4743	78.2	113	4
KS91H153-2	20	4703	78.8	114	4
HBI0531-A2	12	4690	76.4	107	4
T834	35	4651	77.3	113	4
T861	37	4642	77	105	4
KS93U206	4	4629	79.2	103	4
T89	38	4625	78	101	4
TX92V3108	11	4602	82.7	100	4
NE90476	27	4600	75.6	115	4
WX92-0408	32	4589	78.2	112	4
SCOUT66	2	4557	78.9	114	4
TAM-107	3	4555	78.3	104	4
KS85W66311-6M	25	4553	78.6	111	4
CO910748	19	4544	78	114	4
TXGH12588-105	17	4519	76.2	104	5
TX93V4927	15	4486	78.9	114	5
TX93V5922	14	4452	81.1	102	4
NE93405	30	4452	80	105	5
OK93P735	6	4398	77.1	102	4
NE92646	29	4387	77.1	117	4
G1878	39	4365	81.1	110	4
W93-460	33	4331	78.4	110	4
OK92403	8	4252	79.9	99	4
KS84W0639393M	26	4246	77.9	108	4
NE93427	31	4219	80.1	105	6
CO910424	18	4060	80.4	111	5
OK93P634	7	4004	78.7	104	5
KHARKOF	1	3118	71.9	119	4
MEAN		4583			
LSD(.05)		593			
C.V.		7.9			

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
NE92458	28	2676	76.8	53	117
T861	37	2663	74	48	116
KS94093512552	24	2649	75.5	52	119
TAM-107	3	2629	74.4	52	115
TXGH12588-105	17	2591	74.2	57	118
NE90476	27	2590	73.7	53	122
OK93P735	6	2577	77.1	52	118
T702	34	2568	75.7	50	118
NE93405	30	2559	77.4	53	119
KS84W0639393M	26	2538	75.9	58	120
WX92-0408	32	2505	75.3	48	120
T812	36	2500	74.9	52	116
KS941064-6	22	2495	75.3	48	119
NE93427	31	2480	78.2	53	118
KS941064-3	21	2435	74.9	48	119
TX92V3108	11	2407	79.9	57	118
T89	38	2387	74.8	50	116
T834	35	2378	73.8	58	122
CO910424	18	2376	77.9	55	119
TX91D6991	10	2371	75.3	50	118
KS93U206	4	2292	75.1	52	116
NE92646	29	2287	75.9	53	124
OK91P648	5	2245	73	47	118
KS940935-72-1	23	2240	77.3	50	119
OK92403	8	2224	77	45	117
OK93P634	7	2217	77	52	119
KS91H153-2	20	2208	76.9	52	121
TX93V5919	13	2163	76.4	48	119
G1878	39	2091	79.7	50	120
KS85W66311-6M	25	2055	76.6	50	123
SCOUT66	2	2026	75.6	62	123
HBI0531-A2	12	1983	73.7	48	120
TX91D6913	9	1980	71.7	48	121
W93-460	33	1783	74.3	48	122
CO910748	19	1779	75.7	50	125
TX92V2519	16	1747	75.1	43	124
TX93V4927	15	1679	76.1	47	126
KHARKOF	1	1483	74.8	63	.
TX93V5922	14	1433	77.7	47	120
MEAN		2264			
LSD(.05)		306			
C.V.		8.3			

LAHOMA

OKLAHOMA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM
TX93V5919	13	4051	74.6	63
WX92-0408	32	3899	72.2	62
T702	34	3805	73	63
NE92458	28	3770	75.1	65
NE90476	27	3676	72.2	58
T834	35	3675	69	70
T89	38	3581	72.4	60
TX92V3108	11	3508	77.3	68
NE93427	31	3472	74.7	58
KS93U206	4	3418	72.4	65
TAM-107	3	3389	73.1	63
T861	37	3319	73.1	62
HBI0531-A2	12	3284	69.4	58
KS94093512552	24	3244	72.5	62
T812	36	3230	71.3	62
KS91H153-2	20	3224	72.4	60
NE92646	29	3208	73.9	67
G1878	39	3149	77.7	65
KS941064-3	21	3133	70.3	58
OK91P648	5	3088	70.8	53
TX91D6991	10	3059	71.7	58
SCOUT66	2	3011	72.6	77
TX91D6913	9	2989	69.5	62
TXGH12588-105	17	2973	72	62
OK92403	8	2932	76	55
CO910748	19	2929	69.9	60
KS940935-72-1	23	2900	73.4	57
CO910424	18	2873	75.3	62
TX93V5922	14	2871	75.5	58
NE93405	30	2864	72.4	65
TX92V2519	16	2848	73	55
KS941064-6	22	2837	68.9	52
OK93P735	6	2821	72.2	58
KS85W66311-6M	25	2814	72.6	55
KS84W0639393M	26	2756	70.4	63
TX93V4927	15	2719	73.5	50
OK93P634	7	2625	73.5	62
KHARKOF	1	2575	70.2	78
W93-460	33	2446	71.7	60
MEAN		3153		
LSD(.05)		537		
C.V.		10.4		

GOODWELL (IRR.)

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
TX93V5919	13	7168	81.5	79	125
CO910424	18	6651	80.6	78	125
HBI0531-A2	12	6552	77.4	75	124
TX91D6991	10	6521	77.7	73	126
CO910748	19	6432	81.9	77	127
OK91P648	5	6378	76.9	69	125
TX92V2519	16	6324	80.9	71	126
OK93P735	6	6300	80.6	72	125
KS94093512552	24	6136	77.7	78	125
T812	36	6062	78.6	74	124
TX91D6913	9	6026	76.2	78	125
T702	34	6021	78.8	72	126
NE92646	29	5998	80.1	75	126
OK92403	8	5941	80.4	70	124
NE92458	28	5910	79.7	78	126
NE90476	27	5906	78.2	78	126
TAM-107	3	5903	77.5	77	126
W93-460	33	5895	79.9	77	126
TX92V3108	11	5891	78.2	79	124
TXGH12588-105	17	5853	77.8	76	124
KS93U206	4	5819	77.8	77	124
TX93V5922	14	5810	81.3	77	124
WX92-0408	32	5789	80.4	75	127
KS941064-6	22	5737	77.4	74	126
KS91H153-2	20	5683	79.3	79	126
KS84W0639393M	26	5679	79.2	80	126
OK93P634	7	5667	80.1	72	125
T834	35	5657	79.1	81	126
T89	38	5656	77.4	76	124
TX93V4927	15	5650	81.5	79	125
NE93427	31	5647	81.5	79	125
G1878	39	5610	81.5	79	126
NE93405	30	5412	80.1	83	125
KS940935-72-1	23	5358	80.1	74	126
KS85W66311-6M	25	5326	78.8	73	125
KS941064-3	21	5203	76.8	75	126
T861	37	5062	77.7	78	124
SCOUT66	2	4817	79.5	89	125
KHARKOF	1	3508	78.3	90	128

MEAN	5820
LSD(.05)	558
C.V.	5.9

HUTCHINSON

KANSAS

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
NE90476	27	4314	77.9	73	132
KS84W0639393M	26	4152	79.3	77	134
T834	35	4149	79.1	75	132
TX92V3108	11	4037	82.7	73	129
NE92646	29	4021	79.3	70	135
NE92458	28	3935	80.5	75	130
WX92-0408	32	3921	78.5	65	131
CO910424	18	3895	80	75	133
NE93427	31	3891	79.7	68	130
KS94093512552	24	3861	78.9	67	131
KS941064-3	21	3851	78.6	67	133
T702	34	3802	78.8	62	132
T812	36	3787	79	65	129
TAM-107	3	3769	79.1	68	128
NE93405	30	3694	80.1	78	130
T861	37	3694	72	73	129
KS93U206	4	3600	79.7	73	128
KS85W66311-6M	25	3599	78.4	67	135
HBI0531-A2	12	3593	67.4	62	133
KS941064-6	22	3566	79.2	65	134
W93-460	33	3556	76	63	135
TXGH12588-105	17	3477	76.1	70	129
CO910748	19	3477	80.2	68	137
JAGGER	40	3470	75.7	70	130
KS940935-72-1	23	3459	80	65	132
KS91H153-2	20	3457	84.3	70	134
SCOUT66	2	3450	79.1	85	135
TX91D6991	10	3393	74.2	63	129
G1878	39	3364	80.8	68	130
OK93P735	6	3340	78.8	60	132
TX91D6913	9	3336	74.7	63	134
T89	38	3227	79.3	67	127
OK91P648	5	3139	74	58	130
KHARKOF	1	3118	74.8	95	139
TX92V2519	16	3116	77.7	57	137
TX93V4927	15	3091	76.5	58	136
OK92403	8	2896	60.2	53	129
OK93P634	7	2887	74.8	60	132
TX93V5919	13	2794	74.7	62	134
TX93V5922	14	2004	77.7	60	134
MEAN		3530			
LSD(.05)		417			
C.V.		7.2			

HAYS

KANSAS

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 INJURY 0-9
WX92-0408	32	3720	79.6	58	139	100	2
KS84W0639393M	26	3320	79.7	64	141	97	3.3
T834	35	3310	79.5	63	140	98	2.7
SCOUT66	2	3270	79.3	79	142	88	2.3
NE90476	27	3258	77.7	60	139	97	2.3
NE92458	28	3201	80.8	61	137	100	2.3
KHARKOF	1	3185	77	96	151	100	2.7
KS93U206	4	3093	79.7	58	137	93	2.7
TAM-107	3	3040	79.2	58	136	100	2
CO910424	18	3018	80.5	60	139	98	2.7
NE92646	29	2978	78.9	62	143	88	2.7
T812	36	2960	80	57	137	88	3.3
NE93405	30	2872	79.6	64	137	100	2.3
CO910748	19	2827	77.5	67	148	62	3.7
KS85W66311-6M	25	2814	78.3	59	144	75	5
KS91H153-2	20	2786	80.7	56	140	83	4
KS940935-72-1	23	2744	80.9	57	138	92	3.7
G1878	39	2738	81.4	59	140	97	4
T89	38	2733	78.4	57	135	97	2.7
T861	37	2711	79	56	137	95	3
KS941064-3	21	2668	78.6	52	140	88	4
TX91D6913	9	2623	75.8	57	144	80	4.7
KS94093512552	24	2546	78.9	56	140	88	4
W93-460	33	2462	73.8	58	144	50	4.7
HBI0531-A2	12	2443	75.7	52	144	70	4.3
NE93427	31	2412	80.1	56	141	80	3.7
T702	34	2392	77.3	51	143	50	5
OK92403	8	2367	80.5	53	136	93	3
KS941064-6	22	2322	77.9	49	142	83	3.7
TX92V3108	11	2274	81.9	55	140	93	3.3
OK93P735	6	2266	80.4	54	140	87	3
TX91D6991	10	2226	78	48	140	77	3.3
TXGH12588-105	17	2060	77.6	54	139	80	3
OK91P648	5	1847	77.1	48	141	40	5
TX93V4927	15	1842	71.1	56	149	18	6
OK93P634	7	1818	78.5	53	141	70	4
TX93V5919	13	1644	76.4	50	143	37	5
TX92V2519	16	1467	71.9	52	148	35	4.7
TX93V5922	14	985	74.9	53	142	12	5.7
MEAN		2596					
LSD(.05)		530					
C.V.		12.5					

MANHATTAN

KANSAS

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
WX92-0408	32	5572	79.6	90	137
KS94093512552	24	5510	79.3	95	135
HBI0531-A2	12	5492	77.5	85	137
NE93427	31	5427	80.2	100	136
TX92V3108	11	5209	80.9	92	134
KS941064-3	21	5140	76.1	90	136
TX91D6913	9	5100	74.5	93	137
TX91D6991	10	5096	75.9	88	136
G1878	39	5082	81	100	137
NE92458	28	5079	79.4	102	136
OK91P648	5	5057	76.4	83	136
W93-460	33	5045	78	95	140
JAGGER	40	5007	77.6	92	135
KS84W0639393M	26	4984	78.6	97	138
TXGH12588-105	17	4964	78.3	95	134
NE93405	30	4878	79.7	100	136
KS93U206	4	4870	78	98	135
T702	34	4845	77.4	90	136
KS941064-6	22	4787	76.4	87	136
T861	37	4714	79.7	95	133
TAM-107	3	4695	78.1	95	133
T834	35	4678	78.4	97	138
T812	36	4662	78.8	92	133
CO910424	18	4661	76.8	98	136
OK92403	8	4647	80.2	85	135
OK93P634	7	4625	79.2	85	137
KS940935-72-1	23	4608	79.9	90	136
KS85W66311-6M	25	4591	79.1	85	138
NE90476	27	4569	77.3	100	137
NE92646	29	4565	77.9	97	139
KS91H153-2	20	4492	79.7	95	137
T89	38	4407	76.3	98	134
TX93V5919	13	4270	75	87	137
TX93V4927	15	4174	78.7	80	140
TX92V2519	16	4091	77.1	82	140
OK93P735	6	4082	78.1	85	136
CO910748	19	3472	79.3	93	140
TX93V5922	14	3237	77.9	78	137
SCOUT66	2	2712	77.1	105	139
KHARKOF	1	905	75.9	105	143
MEAN		4600			
LSD(.05)		624			
C.V.		8.3			

COLBY

KANSAS

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 INJURY 0-9
CO910424	18	3315	74.1	68	120	100	2.7
WX92-0408	32	3309	74.6	63	120	100	2
NE90476	27	3089	70.1	69	120	100	2
SCOUT66	2	3024	72.9	85	120	93	3
T834	35	3004	71.9	66	120	93	3.3
KS93U206	4	2930	73.2	61	120	100	2.7
KS94093512552	24	2865	68.2	59	120	93	5
KS84W0639393M	26	2827	70.6	66	120	97	3.7
T812	36	2825	71.5	56	120	93	3.7
KHARKOF	1	2789	71.3	105	120	100	2
TX91D6913	9	2757	69	63	120	92	5
T702	34	2757	67.2	59	120	67	5
NE92646	29	2724	71.6	68	120	92	4
W93-460	33	2665	67.3	66	120	67	5
TAM-107	3	2647	71.9	58	120	100	2.3
T861	37	2647	70.4	59	120	100	3
NE93405	30	2645	72.2	71	120	100	2
KS941064-6	22	2614	71.2	54	120	82	4.7
HBI0531-A2	12	2573	69.1	59	120	70	5.3
NE92458	28	2556	72.7	66	120	97	2.3
CO910748	19	2506	72.2	69	120	75	4.3
KS941064-3	21	2484	68.4	58	120	85	4.3
TX92V3108	11	2443	71.1	61	120	97	2.7
T89	38	2432	69	59	120	100	2.7
TX91D6991	10	2412	64.7	56	120	80	5
G1878	39	2369	70.7	63	120	100	3.3
TXGH12588-105	17	2356	69.6	61	120	97	3
NE93427	31	2340	71.6	64	120	93	3.7
KS940935-72-1	23	2302	67.9	54	120	93	3.7
KS91H153-2	20	2186	70	56	120	65	4
OK92403	8	2172	70.3	54	120	100	2.7
KS85W66311-6M	25	2145	70.5	61	120	73	5
OK93P735	6	1914	67.9	56	120	93	3.3
OK93P634	7	1417	66.4	58	120	68	5
TX92V2519	16	1085	64.1	56	120	18	5.3
OK91P648	5	1058	65	51	120	27	5
TX93V5919	13	1015	61.2	58	120	22	5.7
TX93V4927	15	995	59.7	52	120	10	6
TX93V5922	14	220	.	52	120	0	6

MEAN	2370
LSD(.05)	449
C.V.	11.6

GARDEN CITY

KANSAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	WINTER SURVIVAL %
KHARKOF	1	87
SCOUT66	2	47
TAM-107	3	83
KS93U206	4	60
OK91P648	5	0
OK93P735	6	37
OK93P634	7	17
OK92403	8	27
TX91D6913	9	17
TX91D6991	10	37
TX92V3108	11	63
HBI0531-A2	12	13
TX93V5919	13	0
TX93V5922	14	20
TX93V4927	15	0
TX92V2519	16	0
TXGH12588-105	17	20
CO910424	18	33
CO910748	19	7
KS91H153-2	20	20
KS941064-3	21	14
KS941064-6	22	10
KS940935-72-1	23	40
KS94093512552	24	3
KS85W66311-6M	25	0
KS84W0639393M	26	30
NE90476	27	70
NE92458	28	70
NE92646	29	63
NE93405	30	63
NE93427	31	37
WX92-0408	32	50
W93-460	33	7
T702	34	7
T834	35	50
T812	36	40
T861	37	43
T89	38	37
G1878	39	43

WICHITA

KANSAS

TWO 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
CO910424	18	4624	73.8	84	131	4
OK91P648	5	4615	72.2	71	130	5
NE90476	27	4560	72.8	84	132	0
KS94093512552	24	4426	73.6	76	130	3
WX92-0408	32	4398	72.8	76	131	3
T812	36	4280	72.7	81	129	3
TX92V3108	11	4242	77.8	81	128	3
HBI0531-A2	12	4198	73.7	74	132	7
TX91D6991	10	4156	70.2	71	131	5
KS93U206	4	4115	73.2	84	130	4
NE93427	31	4108	76	76	131	5
KS941064-6	22	4097	73.1	74	131	5
TAM-107	3	3966	74.1	79	129	4
T834	35	3964	73.1	86	132	3
T89	38	3962	71.8	76	129	4
KS84W0639393M	26	3945	76	76	132	5
G1878	39	3913	77.2	84	132	3
T861	37	3878	72.8	84	129	5
CO910748	19	3820	76.2	86	132	7
OK92403	8	3815	76.2	69	131	7
TX93V5919	13	3785	73.3	76	132	9
TX91D6913	9	3775	72.3	76	132	3
NE93405	30	3750	75.4	86	131	0
KS941064-3	21	3724	74.6	76	131	5
NE92646	29	3719	75.6	79	134	3
NE92458	28	3656	74.1	84	131	0
T702	34	3540	74	71	131	6
OK93P735	6	3383	75.4	66	131	5
W93-460	33	3336	72.3	84	132	5
TXGH12588-105	17	3333	73.5	79	131	9
KS85W66311-6M	25	3318	75.1	71	132	8
SCOUT66	2	3296	75.9	96	134	3
KS91H153-2	20	3226	76.2	81	132	5
OK93P634	7	3186	75.4	71	131	9
TX93V5922	14	2917	76.9	66	132	9
TX92V2519	16	2850	73.8	66	133	9
KS940935-72-1	23	2788	75	71	131	4
TX93V4927	15	2515	75.1	64	133	9
KHARKOF	1	2468	76	99	138	0

MEAN	3735
LSD(.05)	675
C.V.	8.9

WINFIELD

KANSAS

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	DAYS TO HEADING FROM 1/1:	WINTER SURVIVAL 0-5
NE90476	27	3933	129	1
WX92-0408	32	3445	127	1
TX91D6913	9	3443	128	1
CO910748	19	3412	130	3
KS84W0639393M	26	3288	128	1
T834	35	3261	127	1
TAM-107	3	3231	122	2
TXGH12588-105	17	3142	123	2
NE92646	29	3077	130	1
KHARKOF	1	3066	134	1
CO910424	18	3036	126	1
NE92458	28	3004	124	2
OK93P735	6	2999	127	1
SCOUT66	2	2980	130	2
NE93427	31	2963	125	1
KS85W66311-6M	25	2948	130	2
KS91H153-2	20	2928	128	2
T812	36	2912	124	2
T702	34	2910	126	3
KS941064-6	22	2862	126	2
KS93U206	4	2798	123	3
TX93V5919	13	2777	128	3
W93-460	33	2770	128	3
NE93405	30	2767	125	1
KS940935-72-1	23	2766	126	2
HBI0531-A2	12	2756	130	4
KS94093512552	24	2699	126	2
KS941064-3	21	2693	126	3
T861	37	2633	124	2
G1878	39	2628	126	3
TX92V3108	11	2579	124	2
TX91D6991	10	2572	127	2
T89	38	2506	123	2
G12019	40	2444	125	3
OK92403	8	2345	124	3
OK91P648	5	2323	128	4
OK93P634	7	2318	128	4
TX93V4927	15	1939	129	5
TX93V5922	14	1851	129	5
TX92V2519	16	1699	130	5
MEAN		2818		
LSD(.05)		445		
C.V.		9.7		

HUGOTON (IRR.)

KANSAS

FOUR REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LODGING 0-9	WINTER SURVIVAL 0-9
TX93V5919	13	6763	79	130	1	2
TX91D6991	10	6650	74	130	1	1
KS941064-6	22	6530	76	130	1	2
OK91P648	5	6462	76	175	2	1
KS94093512552	24	6406	84	129	2	1
KS941064-3	21	6230	81	129	2	1
HBI0531-A2	12	6157	74	129	1	2
TX92V3108	11	6103	86	128	3	1
CO910424	18	6077	86	130	4	1
NE93427	31	5993	86	130	2	2
KS93U206	4	5954	61	127	2	1
WX92-0408	32	5939	76	130	1	1
OK92403	8	5935	76	129	2	1
NE90476	27	5917	86	129	3	1
OK93P735	6	5915	81	130	2	1
NE92458	28	5914	86	130	2	1
T702	34	5855	84	130	2	2
NE93405	30	5814	91	130	1	1
TXGH12588-105	17	5810	86	129	4	4
KS84W0639393M	26	5784	86	183	2	1
TAM-107	3	5731	76	127	2	2
KS85W66311-6M	25	5693	76	132	2	2
T861	37	5640	81	126	2	1
TX91D6913	9	5633	91	164	1	1
T89	38	5629	81	128	3	1
NE92646	29	5585	86	132	2	1
T812	36	5563	81	127	4	2
TX92V2519	16	5422	71	132	3	5
OK93P634	7	5375	79	129	2	2
G1878	39	5369	86	130	2	1
KS940935-72-1	23	5182	81	130	2	1
TX93V5922	14	5024	81	131	1	7
T834	35	4863	81	130	4	1
W93-460	33	4438	84	132	1	4
CO910748	19	4334	81	132	2	3
KS91H153-2	20	4235	81	130	3	2
TX93V4927	15	3920	74	136	2	8
SCOUT66	2	2866	91	131	7	2
KHARKOF	1	2330	97	137	5	1
MEAN		5514				
LSD(.05)		973				
C.V.		12.6				

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	SHATTER %
CO910748	19	4965	76.8	105	151	1
TAM-107	3	4803	75.2	80	143	1
TX93V5919	13	4725	76.8	85	149	5
W93-460	33	4502	75.1	90	154	5
CO910424	18	4470	76.7	90	148	1
OK91P648	5	4401	72.3	60	144	10
TX91D6991	10	4355	73.5	80	149	1
T702	34	4288	76	90	147	5
TX91D6913	9	4261	72.7	75	150	10
NE92646	29	4221	76	85	145	5
T812	36	4181	76.1	85	145	5
YUMA	40	4130	75.2	85	147	5
TX93V4927	15	4123	76.2	75	151	5
KS84W0639393M	26	4100	74.4	95	154	5
TXGH12588-105	17	4030	75.3	80	149	1
TX93V5922	14	4005	77.3	90	148	5
HBI0531-A2	12	3979	74.9	80	144	5
NE90476	27	3968	74.6	75	144	5
NE93405	30	3964	75.7	90	149	5
OK93P735	6	3852	75.6	80	147	5
TX92V2519	16	3851	75.6	70	145	5
KS93U206	4	3838	76.1	90	144	5
OK93P634	7	3819	76.1	60	146	10
NE93427	31	3747	76.6	90	145	10
WX92-0408	32	3663	75.3	75	144	15
T89	38	3597	74.8	100	144	1
T834	35	3559	74.2	95	147	5
KS94093512552	24	3498	73.8	80	149	5
KS91H153-2	20	3375	77.3	70	144	10
G1878	39	3325	77.2	90	146	5
KS940935-72-1	23	3297	75	85	151	10
OK92403	8	3269	77.2	70	145	15
KS85W66311-6M	25	3244	75.6	85	152	10
TX92V3108	11	3238	77.9	85	144	20
SCOUT66	2	3004	76.4	110	150	1
NE92458	28	2997	76.8	85	148	10
KHARKOF	1	2949	74.4	120	156	1
T861	37	2642	74.6	95	144	5
KS941064-6	22	2333	73.8	75	152	15
KS941064-3	21	2214	73.2	75	146	20

MEAN	3770
LSD(.05)	827
C.V.	13.4

AKRON

COLORADO

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL
NE92646	29	6008	78
YUMA	40	5696	77.1
CO910748	19	5428	77.7
T834	35	5320	76.7
OK93P735	6	5278	79.7
TX91D6913	9	5215	76.2
TX93V5919	13	5180	80.2
TX91D6991	10	5161	76.3
NE90476	27	5153	76
OK91P648	5	5141	75.8
HBI0531-A2	12	5140	76.8
TX93V5922	14	5040	79.3
TAM-107	3	4983	75.6
KS85W66311-6M	25	4963	78.1
NE92458	28	4857	77.5
G1878	39	4806	79
TXGH12588-105	17	4800	76.8
KS91H153-2	20	4784	77.5
T812	36	4766	76.9
CO910424	18	4749	77.1
W93-460	33	4712	79.2
T702	34	4705	79.3
TX93V4927	15	4698	79.8
WX92-0408	32	4685	78.9
T89	38	4674	74.5
TX92V3108	11	4668	78
KS93U206	4	4614	76.7
OK93P634	7	4613	78.7
NE93405	30	4567	79.7
TX92V2519	16	4537	78.2
KS94093512552	24	4430	75.1
KS941064-6	22	4399	74.4
NE93427	31	4349	77.9
SCOUT66	2	4348	77.5
KS84W0639393M	26	4331	77.6
OK92403	8	4206	79.1
T861	37	4127	74.8
KS941064-3	21	3866	74.1
KS940935-72-1	23	3798	75.8
KHARKOF	1	3751	78.4

MEAN	4764
LSD(.05)	811
C.V.	10.4

BURLINGTON

COLORADO

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	WINTER SURVIVAL 0-9
T834	35	2828	70.9	0
T812	36	2824	71.5	0
T702	34	2796	72.4	1
T861	37	2684	72.1	0
T89	38	2633	70.3	0
WX92-0408	32	2595	73.2	0
NE90476	27	2579	70.7	0
TAM-107	3	2561	70.8	1
SCOUT66	2	2526	73.5	1
KS93U206	4	2472	72.2	0
NE92646	29	2447	71.5	2
CO910748	19	2387	72.7	1
CO910424	18	2339	72.1	1
TX91D6913	9	2215	67.2	2
YUMA	40	2200	70	0
KS91H153-2	20	2176	72.8	1
NE93427	31	2165	73.6	0
TX92V3108	11	2159	74.4	1
HBI0531-A2	12	2153	69.3	2
NE92458	28	2127	72.2	0
TX91D6991	10	2114	66.6	2
NE93405	30	2106	74	0
TXGH12588-105	17	2094	71.4	0
OK91P648	5	2088	67.6	1
KS84W0639393M	26	2022	69.6	0
OK92403	8	1997	72.3	1
KS940935-72-1	23	1950	73.9	2
KS94093512552	24	1861	68.9	0
KS941064-6	22	1804	69	1
TX92V2519	16	1786	71.7	6
KS941064-3	21	1768	69.4	0
W93-460	33	1761	72.8	0
G1878	39	1735	72.4	0
KHARKOF	1	1693	72.6	0
KS85W66311-6M	25	1679	71.4	0
TX93V5919	13	1601	67.7	3
TX93V4927	15	1434	70.9	7
OK93P634	7	1401	69.6	2
TX93V5922	14	1236	71	9
OK93P735	6	1051	66.8	1
MEAN		2101		
LSD(.05)		695		
C.V.		20.3		

SIDNEY, NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM
T834	35	5112	80.1	88
NE92652	42	4948	84.2	91
T702	34	4909	83.1	83
W93-460	33	4875	81.9	90
TAM-107	3	4857	79.1	85
CO910748	19	4775	81.3	93
T812	36	4694	82.2	84
KS93U206	4	4646	82.2	86
TXGH12588-105	17	4604	80.5	83
NE92646	29	4567	80.4	84
CO910424	18	4489	82.7	85
N93L068	45	4430	80	88
TX91D6913	9	4409	81.3	89
TX93V5919	13	4404	83.5	84
N93L067	44	4389	79.1	83
HBI0531-A2	12	4339	82.9	100
REDLAND	41	4323	80.4	85
KS84W0639393M	26	4300	81.1	91
KS91H153-2	20	4283	82.6	83
T89	38	4267	79.6	84
TX91D6991	10	4213	80.4	76
ARAPAHOE	40	4196	80.8	91
TX93V4927	15	4184	80.9	79
TX92V2519	16	3985	80	77
OK91P648	5	3968	79.1	76
SCOUT66	2	3816	82.8	105
NE93427	31	3813	82.3	88
N94L187	43	3801	80.8	93
OK93P735	6	3773	81.8	86
NE92458	28	3764	82.2	81
G1878	39	3749	83.7	84
WX92-0408	32	3697	80.5	77
NE93405	30	3681	82.9	99
T861	37	3621	80.1	84
OK92403	8	3619	81.5	84
OK93P634	7	3424	81.8	79
TX93V5922	14	3378	84	84
TX92V3108	11	3370	84.1	83
KHARKOF	1	3257	80.9	102
KS940935-72-1	23	3023	82.4	84
KS94093512552	24	2962	80.2	84
NE90476	27	2955	78.9	83
KS85W66311-6M	25	2616	82.4	84
KS941064-6	22	2334	80.6	79
KS941064-3	21	2121	80.5	81
MEAN		3976		
LSD(.05)		932		
C.V.		14.3		

HEMINGFORD, NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM
HBI0531-A2	12	4649	80.9	84
TX91D6991	10	4635	80	79
NE93427	31	4451	81.1	85
T834	35	4403	81.3	85
KS94093512552	24	4344	79.7	81
NE92646	29	4315	79.1	86
NE93405	30	4311	81.7	86
TX93V5919	13	4300	80.4	86
NE92652	42	4292	82.2	83
REDLAND	41	4275	80.5	84
WX92-0408	32	4231	80.5	79
CO910424	18	4203	80	85
KS940935-72-1	23	4165	80.8	88
KS84W0639393M	26	4079	80.5	90
SCOUT66	2	4069	81.8	95
TX91D6913	9	4065	77.1	77
KS85W66311-6M	25	4054	80.4	81
T702	34	4038	83.5	77
N94L187	43	4038	79.2	84
W93-460	33	3977	80.1	86
NE90476	27	3964	78.9	91
T861	37	3955	80.8	85
T812	36	3948	80.6	80
OK92403	8	3932	79.6	74
KS941064-3	21	3922	78.6	77
T89	38	3860	80.2	81
NE92458	28	3858	80.9	88
TAM-107	3	3853	80	76
N93L068	45	3838	75.9	80
KS941064-6	22	3824	78	83
N93L067	44	3806	75.6	84
KS93U206	4	3770	81.3	84
OK93P735	6	3720	81.1	77
TXGH12588-105	17	3697	78.3	85
OK93P634	7	3695	81	76
CO910748	19	3657	80.1	85
ARAPAHOE	40	3648	79.3	83
TX92V3108	11	3591	82.8	81
G1878	39	3498	82.8	83
TX93V5922	14	3402	81	91
KS91H153-2	20	3179	81.9	75
TX92V2519	16	3166	78.7	88
KHARKOF	1	3162	80.6	116
TX93V4927	15	3128	80	76
OK91P648	5	3015	78.8	76

MEAN	3911
LSD(.05)	594
C.V.	9.3

IMPERIAL (IRR.), NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LEAF DISEASE 0-9
HBI0531-A2	12	6922	90	149	1
TX92V3108	11	6801	102	149	2
T834	35	6476	108	149	2
T861	37	6420	108	146	3
T702	34	6366	94	151	3
OK91P648	5	6290	96	149	2
KS94093512552	24	6221	102	147	3
KS84W0639393M	26	6129	102	154	2
T812	36	6075	98	146	4
CO910748	19	5994	102	149	3
CO910424	18	5990	108	147	4
NE92646	29	5938	105	150	4
KS941064-6	22	5916	98	148	1
KS85W66311-6M	25	5887	97	151	3
KS93U206	4	5849	104	147	2
KS940935-72-1	23	5849	102	147	3
OK93P735	6	5797	95	150	3
TX93V4927	15	5777	88	150	3
ROWDY	44	5752	90	149	3
NE90476	27	5696	108	150	4
G1878	39	5685	106	151	3
KS941064-3	21	5676	100	147	2
TX91D6991	10	5665	92	151	2
NE92458	28	5642	106	149	3
HICKOK	43	5627	96	149	4
OK93P634	7	5582	92	149	4
HAWK	40	5562	107	150	4
SOLOMON	46	5553	98	151	3
PLATTE	45	5523	94	151	5
TX93V5919	13	5510	108	151	4
WX92-0408	32	5472	94	149	3
LAREDO	41	5472	94	145	5
TAM-107	3	5447	98	147	3
OGALLALA	42	5376	92	149	4
TX92V2519	16	5349	96	148	4
NE93427	31	5315	105	151	4
TX91D6913	9	5239	100	153	3
OK92403	8	5230	88	148	4
W93-460	33	5207	112	153	2
T89	38	5207	102	148	4
AP7601	48	5187	98	151	3
TXGH12588-105	17	5158	98	149	3
KS91H153-2	20	5147	95	149	4
NE93405	30	5120	112	151	3
AP7501	47	5102	92	151	3
TX93V5922	14	4858	95	149	5
SCOUT66	2	3943	118	151	6
KHARKOF	1	2782	124	157	5
MEAN		5600			
LSD(.05)		767			
C.V.		8.4			

PIERRE, S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	DAYS TO HEADING FROM 1/1	LODGING 0-9	WINTER SURVIVAL %
NE93405	30	4039	77.6	168	2	50
ARAPAHOE	40	3957	77.1	170	5	40
SD89153	43	3602	80.7	172	4	37
ROSE	42	3566	79.9	170	4	70
NE92458	28	3493	79.2	171	3	43
TAM-107	3	3358	74.1	168	3	33
WX92-0408	32	3329	77.4	169	2	17
KS941064-6	22	3320	74.8	170	1	33
SD89119	41	3295	78.2	171	3	37
NE93427	31	3250	78.6	170	5	30
NE90476	27	3172	75.9	171	5	57
SD89205	45	3154	78	170	4	43
TX91D6913	9	3143	76	171	2	13
T834	35	3109	75.4	171	5	23
KS940935-72-1	23	2809	77.6	170	1	33
ROUGHRIDER	44	2802	78.1	174	6	83
TX92V3108	11	2726	79.3	171	2	10
CO910424	18	2717	78	169	3	33
TX93V4927	15	2703	77	172	2	20
SCOUT66	2	2607	78.1	170	6	57
TX91D6991	10	2596	73.2	170	2	17
KS93U206	4	2553	76.5	169	2	33
KHARKOF	1	2515	77.3	175	7	47
KS941064-3	21	2390	75.6	170	1	27
T812	36	2302	75.4	170	6	30
T861	37	2174	77.6	168	5	30
HBI0531-A2	12	2143	75.3	170	2	13
TXGH12588-105	17	2134	77.2	169	1	13
NE92646	29	2085	79.3	172	2	33
G1878	39	1982	79.6	170	3	10
TX93V5922	14	1802	77.7	169	2	10
KS94093512552	24	1740	77.2	171	.	17
CO910748	19	1679	76.8	171	2	7
T89	38	1515	76.8	168	5	13
KS91H153-2	20	1475	79	169	1	14
W93-460	33	1419	74.3	173	1	10
KS84W0639393M	26	1349	77	171	1	10
T702	34	1054	78.9	171	.	10
TX92V2519	16	1029	75.5	173	1	7
OK93P735	6	549	75.7	172	.	4
OK93P634	7	504	71.9	169	.	4
OK92403	8	504	73.7	172	.	7
TX93V5919	13	307	76	.	.	1
OK91P648	5	126	.	.	.	1
KS85W66311-6M	25	117	.	172	.	1

MEAN	2271
LSD(.05)	1057
C.V.	28.5

BROOKINGS, S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	WINTER SURVIVAL %
KHARKOF	1	47
SCOUT66	2	37
TAM-107	3	27
KS93U206	4	33
OK91P648	5	4
OK93P735	6	7
OK93P634	7	10
OK92403	8	13
TX91D6913	9	10
TX91D6991	10	7
TX92V3108	11	20
HBI0531-A2	12	13
TX93V5919	13	7
TX93V5922	14	10
TX93V4927	15	10
TX92V2519	16	10
TXGH12588-105	17	10
CO910424	18	27
CO910748	19	20
KS91H153-2	20	7
KS941064-3	21	33
KS941064-6	22	40
KS940935-72-1	23	27
KS94093512552	24	10
KS85W66311-6M	25	1
KS84W0639393M	26	7
NE90476	27	30
NE92458	28	40
NE92646	29	13
NE93405	30	40
NE93427	31	40
WX92-0408	32	20
W93-460	33	1
T702	34	13
T834	35	37
T812	36	17
T861	37	27
T89	38	13
G1878	39	17
ARAPAHOE	40	50
SD89119	41	33
ROSE	42	40
SD89153	43	37
ROUGHRIDER	44	70
SD89205	45	40

COLUMBIA

MISSOURI

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	PLANT HEIGHT CM	LODGING 0-9
KS94093512552	24	2071	69	0
NE93405	30	1553	84	0
T861	37	1318	66	1
KS941064-3	21	1278	66	0
SCOUT66	2	1076	102	.
KHARKOF	1	1015	112	2
G1878	39	827	66	0
T812	36	807	66	0
CO910424	18	706	74	0
KS940935-72-1	23	693	74	0
TAM-107	3	666	69	0
TX91D6991	10	612	66	0
WX92-0408	32	565	71	0
KS93U206	4	511	71	0
T89	38	511	69	0
T834	35	377	74	0
NE90476	27	296	76	0
OK93P735	6	262	74	0
KS84W0639393M	26	249	74	0
TX91D6913	9	195	71	0
NE93427	31	155	69	0
KS91H153-2	20	101	64	0
NE92458	28	101	71	0
HBI0531-A2	12	94	58	0
NE92646	29	87	69	1
TXGH12588-105	17	81	58	0
T702	34	67	53	0
CO910748	19	40	61	1
OK92403	8	27	64	0
TX93V5919	13	27	61	0
KS941064-6	22	27	64	0
OK91P648	5	20	53	0
W93-460	33	20	61	0
OK93P634	7	13	58	0
KS85W66311-6M	25	13	53	0
TX92V3108	11	7	58	0
TX93V5922	14	7	.	0
TX93V4927	15	.	.	.
TX92V2519	16	.	.	.

MEAN	445
LSD(.05)	491
C.V.	67.9

BOZEMAN

MONTANA

ONE REPLICATION

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1
TX93V5919	13	6274	80.6	84	167
CO910424	18	6174	80.2	79	167
HBI0531-A2	12	6012	79.7	76	168
WX92-0408	32	5965	77.8	76	167
TX93V5922	14	5891	82.7	76	167
TX91D6913	9	5784	74.4	81	168
NE90476	27	5696	77.7	81	167
CO910748	19	5595	78.4	79	167
T702	34	5588	80.2	74	167
OK93P634	7	5454	80.2	74	167
KS941064-3	21	5434	76.9	74	167
KS941064-6	22	5393	75.7	74	168
T812	36	5373	77.8	76	166
TX92V2519	16	5340	80.4	76	167
TX91D6991	10	5319	78.6	76	167
TX92V3108	11	5313	83.1	79	167
W93-460	33	5306	80.4	84	174
T861	37	5225	78.3	81	166
NE93427	31	5219	80	81	168
NE92458	28	5198	79.5	89	167
KS94093512552	24	5185	78.7	79	167
TX93V4927	15	5172	81.4	74	168
OK91P648	5	5145	76.8	74	168
KS93U206	4	5131	77.7	79	166
TAM-107	3	5064	76.9	76	167
T834	35	5064	78.2	84	167
G1878	39	5030	82.2	81	167
T89	38	5017	77.9	76	166
KS91H153-2	20	4963	81	76	166
TXGH12588-105	17	4903	79.1	76	167
NE92646	29	4761	77.9	81	167
KS84W0639393M	26	4654	80.4	89	174
KS85W66311-6M	25	4640	80.4	81	169
KS940935-72-1	23	4627	79.1	74	168
OK92403	8	4607	80.1	74	167
SCOUT66	2	4593	80.1	102	167
OK93P735	6	4573	80.6	76	168
KHARKOF	1	4499	80.1	114	176
NE93405	30	4472	80.9	91	168
MEAN		5222			
LSD(.05)					
C.V.					

CRAWFORDSVILLE

IOWA

TWO REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	WINTER SURVIVAL %
KHARKOF	1	72
SCOUT66	2	65
TAM-107	3	71
KS93U206	4	40
OK91P648	5	23
OK93P735	6	43
OK93P634	7	52
OK92403	8	33
TX91D6913	9	63
TX91D6991	10	65
TX92V3108	11	58
HBI0531-A2	12	43
TX93V5919	13	28
TX93V5922	14	13
TX93V4927	15	23
TX92V2519	16	38
TXGH12588-105	17	33
CO910424	18	66
CO910748	19	57
KS91H153-2	20	52
KS941064-3	21	66
KS941064-6	22	62
KS940935-72-1	23	67
KS94093512552	24	58
KS85W66311-6M	25	53
KS84W0639393M	26	44
NE90476	27	77
NE92458	28	59
NE92646	29	54
NE93405	30	68
NE93427	31	47
WX92-0408	32	75
W93-460	33	36
T702	34	52
T834	35	57
T812	36	63
T861	37	69
T89	38	61
G1878	39	48

Table 2. Summary of mean yields (kg/ha) for 39 wheats grown in the 1996 Southern Regional Performance Nursery at 26 locations with state means and ranks.

VARIETY OR PEDIGREE	C.I. OR SEL. NO.	ENTRY NO.	CLOVIS (IRR.) NEW MEXICO		CLOVIS (DRYL.) NEW MEXICO		FARMINGTON NEW MEXICO		NEW MEXICO STATE MEAN	
AgriPro Seeds Hybrid Wheat	WX92-0408	32	2140	22	1731	11	7339	1	3737	1
Bennett/Brule Composite	NE90476	27	2102	28	1551	17	5630	22	3094	27
TAM-107	TAM-107	3	2726	2	1780	8	6503	11	3670	4
Mesa/Carson	CO910424	18	2136	23	1949	5	6931	4	3672	3
WVE047 2180/2157 HGE013	HBI0531-A2	12	2136	23	1681	12	6853	6	3557	6
T213 sib 2/TAM-107	T834	35	2695	3	1463	22	5066	37	3075	28
2180/KARL//2163	KS94093512552	24	2477	8	1382	29	6487	12	3449	13
OK83201/Redland	NE92458	28	2795	1	1497	20	5587	23	3293	19
TAM-107/T213 sib	T812	36	2274	13	1987	3	6857	5	3706	2
TAM-200/Karl	TX92V3108	11	2389	10	1643	14	6285	16	3439	14
TX86D1310/Kavkaz//TX86D1308	TX91D6991	10	2148	21	1440	23	6939	3	3509	8
Coker 68-15/TAM-107	T702	34	2175	19	1509	19	7029	2	3571	5
TAM-107 3/TA2460	KS93U206	4	2048	30	1554	16	5910	19	3171	24
Bez1/Ctk78//Arthur/Ctk78/3/Bnt/4/Norkan	NE93427	31	2450	9	1405	26	6437	14	3431	15
NE82413/Colt	NE92646	29	2339	11	2018	2	5128	34	3162	25
Pro 812/Caldwell//TX86D1310	TX91D6913	9	2079	29	1424	24	6478	13	3327	16
NE85707/Thunderbird	NE93405	30	2684	4	1861	7	5899	20	3481	11
TAM-107/Caldwell	T861	37	2623	6	1750	9	5397	28	3257	21
Karl/HBY385D//2163	KS941064-6	22	1987	31	1401	28	4859	38	2749	35
T68/KS90WGRC10	T89	38	2320	12	1907	6	5550	24	3259	20
TX85V1830/TX84V1307	TX93V5919	13	2117	25	1650	13	5789	21	3185	22
2555 sib/Vona//2180	OK91P648	5	2117	25	1734	10	6701	8	3518	7
(TX71A562-6 4/Amigo) 4/Largo	TXGH12588-105	17	2198	16	1409	25	6359	15	3322	17
CO840104/Lamar	CO910748	19	1692	35	1478	21	6774	7	3315	18
KS82W418/STEPHENS	KS84W0639393M	26	1562	38	1030	37	5476	25	2689	37
HBY250A/HGF004	OK93P735	6	2554	7	1574	15	6280	17	3469	12
Karl/HBY385D//2163	KS941064-3	21	1673	36	965	39	5079	36	2572	38
2180/KARL//2163	KS940935-72-1	23	2228	15	1164	35	5311	31	2901	32
Sturdy/Plainsman V seln	G1878	39	1983	32	1405	26	5155	33	2848	33
TX88V6610/PMV//Mesa	OK92403	8	2672	5	1286	33	6510	10	3490	9
Bulk Selection	W93-460	33	2159	20	1336	30	5405	27	2967	29
HF5761/TAM-105//Bounty Hybrid 203	KS91H153-2	20	1570	37	1968	4	5312	30	2950	31
KS82W422/SWM754308//KS831182/KS82W422	KS85W66311-6M	25	1849	33	1145	36	5109	35	2701	36
Scout 66	SCOUT66	2	2198	17	2140	1	5207	32	3182	23
HBY242G/HGF092	OK93P634	7	2179	18	1026	38	5327	29	2844	34
TX87V1913/TAM-200	TX93V4927	15	1826	34	1329	31	6232	18	3129	26
OK82377/TX81V6603-2	TX92V2519	16	2113	27	1309	32	5438	26	2954	30
TX85V1830/TX84V1307	TX93V5922	14	2274	14	1543	18	6628	9	3482	10
Kharkof	KHARKOF	1	1233	39	1206	34	3714	39	2051	39
	MEAN		2178		1529		5922		3210	
	LSD(.05)		N.S.		N.S.		1138		770	
	C.V.		24.5		29.4		13.7		18.7	

Table 2. Continued.

C.I. OR SEL. NO.	ENTRY NO.	PROSPER TEXAS		CHILLI-COTHE TEXAS		BUSHLAND (IRR.) TEXAS		BUSHLAND (DRYL.) TEXAS		TEXAS STATE MEAN		COLUMBIA* MISSOURI		PIERRE S. DAKOTA	
WX92-0408	32	4589	21	3434	11	5613	2	693	14	3582	6	565	13	3329	4
NE90476	27	4600	20	3788	3	5192	14	753	11	3583	5	296	17	3172	7
TAM-107	3	4555	23	4353	1	5104	15	1067	1	3770	1	666	11	3358	3
CO910424	18	4060	37	2488	31	5557	3	681	17	3197	26	706	9	2717	12
HBI0531-A2	12	4690	14	2116	36	5911	1	697	13	3354	18	94	24	2143	21
T834	35	4651	15	2860	21	5198	13	935	5	3411	15	377	16	3109	9
KS94093512552	24	4797	11	3347	12	5250	10	740	12	3533	9	2071	1	1740	26
NE92458	28	4867	9	3443	10	4580	30	847	7	3434	14	101	22	3493	2
T812	36	4853	10	2719	27	5214	12	670	19	3364	17	807	8	2302	19
TX92V3108	11	4602	19	3598	7	5405	6	652	23	3564	7	7	36	2726	11
TX91D6991	10	4887	8	2759	25	5541	4	659	21	3462	12	612	12	2596	15
T702	34	5053	4	3322	13	5230	11	989	3	3648	3	67	27	1054	32
KS93U206	4	4629	17	3741	5	5084	16	1018	2	3618	4	511	14	2553	16
NE93427	31	4219	36	3179	15	4918	22	621	29	3234	22	155	21	3250	6
NE92646	29	4387	31	2358	33	5064	17	639	27	3112	31	87	25	2085	23
TX91D6913	9	5207	1	2107	37	4914	24	652	22	3220	25	195	20	3143	8
NE93405	30	4452	28	2959	19	4212	37	648	24	3068	33	1553	2	4039	1
T861	37	4642	16	3587	8	4421	33	876	6	3382	16	1318	3	2174	20
KS941064-6	22	5169	2	3080	18	5358	8	500	35	3527	10	27	29	3320	5
T89	38	4625	18	3936	2	4914	24	628	28	3526	11	511	14	1515	28
TX93V5919	13	4963	6	3782	4	5364	7	953	4	3765	2	27	29	307	37
OK91P648	5	5059	3	3100	17	5317	9	670	19	3537	8	20	32	126	38
TXGH12588-105	17	4519	26	2739	26	4685	27	798	8	3185	27	81	26	2134	22
CO910748	19	4544	25	2840	23	4968	21	646	26	3249	21	40	28	1679	27
KS84W0639393M	26	4246	35	1997	38	4600	29	451	38	2823	38	249	19	1349	31
OK93P735	6	4398	30	3170	16	5497	5	693	14	3439	13	262	18	549	34
KS941064-3	21	4932	7	2872	20	4678	28	758	10	3310	20	1278	4	2390	18
KS940935-72-1	23	4981	5	2851	22	5019	18	495	36	3337	19	693	10	2809	10
G1878	39	4365	32	2607	29	4916	23	534	33	3105	32	827	7	1982	24
OK92403	8	4252	34	2688	28	4977	20	675	18	3148	29	27	29	504	35
W93-460	33	4331	33	3555	9	4178	38	540	31	3151	28	20	32	1419	30
KS91H153-2	20	4703	13	2488	31	5017	19	686	16	3224	24	101	22	1475	29
KS85W66311-6M	25	4553	24	2495	30	4539	31	648	25	3059	34	13	34	117	39
SCOUT66	2	4557	22	2206	35	4510	32	785	9	3014	36	1076	5	2607	14
OK93P634	7	4004	38	3221	14	4835	26	455	37	3129	30	13	34	504	35
TX93V4927	15	4486	27	2827	24	4353	35	419	39	3021	35	.	.	2703	13
TX92V2519	16	4743	12	2273	34	4365	34	525	34	2976	37	.	.	1029	33
TX93V5922	14	4452	28	3717	6	4214	36	549	30	3233	23	7	36	1802	25
KHARKOF	1	3118	39	1968	39	3410	39	540	31	2259	39	1015	6	2515	17
MEAN		4583		2989		4926		687		3296		445		2098	
LSD(.05)		593		1024		432		278		534		491		1094	
C.V.		7.9		21.0		5.4		24.8		12.0		67.9		31.9	

* Not included in regional means.

Table 2. Continued.

C.I. OR SEL. NO.	ENTRY NO.	HUTCHINSON KANSAS		HAYS KANSAS		MANHATTAN KANSAS		COLBY KANSAS		WICHITA KANSAS		WINFIELD KANSAS		HUGOTON (IRR.) KANSAS		KANSAS STATE MEAN	
WX92-0408	32	3921	7	3720	1	5572	1	3309	2	4398	5	3445	2	5939	12	4329	1
NE90476	27	4314	1	3258	5	4569	28	3089	3	4560	3	3933	1	5917	14	4234	2
TAM-107	3	3769	14	3040	9	4695	20	2647	15	3966	13	3231	7	5731	21	3868	11
CO910424	18	3895	8	3018	10	4661	23	3315	1	4624	1	3036	11	6077	9	4090	3
HBI0531-A2	12	3593	19	2443	25	5492	3	2573	19	4198	8	2756	26	6157	7	3888	9
T834	35	4149	3	3310	3	4678	21	3004	5	3964	14	3261	6	4863	33	3890	8
KS94093512552	24	3861	10	2546	23	5510	2	2865	7	4426	4	2699	27	6406	5	4045	4
NE92458	28	3935	6	3201	6	5079	10	2556	20	3656	26	3004	12	5914	16	3906	7
T812	36	3787	13	2960	12	4662	22	2825	9	4280	6	2912	18	5563	27	3856	12
TX92V3108	11	4037	4	2274	30	5209	5	2443	23	4242	7	2579	31	6103	8	3841	13
TX91D6991	10	3393	27	2226	32	5096	8	2412	25	4156	9	2572	32	6650	2	3787	18
T702	34	3802	12	2392	27	4845	17	2757	11	3540	27	2910	19	5855	17	3729	20
KS93U206	4	3600	17	3093	8	4870	16	2930	6	4115	10	2798	21	5954	11	3909	6
NE93427	31	3891	9	2412	26	5427	4	2340	28	4108	11	2963	15	5993	10	3876	10
NE92646	29	4021	5	2978	11	4565	29	2724	13	3719	25	3077	9	5585	26	3810	16
TX91D6913	9	3336	30	2623	22	5100	7	2757	11	3775	22	3443	3	5633	24	3809	17
NE93405	30	3694	15	2872	13	4878	15	2645	17	3750	23	2767	24	5814	18	3774	19
T861	37	3694	16	2711	20	4714	19	2647	16	3878	18	2633	29	5640	23	3703	21
KS941064-6	22	3566	20	2322	29	4787	18	2614	18	4097	12	2862	20	6530	3	3826	15
T89	38	3227	31	2733	19	4407	31	2432	24	3962	15	2506	33	5629	25	3557	25
TX93V5919	13	2794	38	1644	37	4270	32	1015	37	3785	21	2777	22	6763	1	3293	33
OK91P648	5	3139	32	1847	34	5057	11	1058	36	4615	2	2323	35	6462	4	3500	26
TXGH12588-105	17	3477	22	2060	33	4964	14	2356	27	3333	30	3142	8	5810	19	3592	23
CO910748	19	3477	23	2827	14	3472	36	2506	21	3820	19	3412	4	4334	35	3407	30
KS84W0639393M	26	4152	2	3320	2	4984	13	2827	8	3945	16	3288	5	5784	20	4043	5
OK93P735	6	3340	29	2266	31	4082	35	1914	33	3383	28	2999	13	5915	15	3414	29
KS941064-3	21	3851	11	2668	21	5140	6	2484	22	3724	24	2693	28	6230	6	3827	14
KS940935-72-1	23	3459	24	2744	17	4608	26	2302	29	2788	37	2766	25	5182	31	3407	31
G1878	39	3364	28	2738	18	5082	9	2369	26	3913	17	2628	30	5369	30	3638	22
OK92403	8	2896	36	2367	28	4647	24	2172	31	3815	20	2345	34	5935	13	3454	28
W93-460	33	3556	21	2462	24	5045	12	2665	14	3336	29	2770	23	4438	34	3467	27
KS91H153-2	20	3457	25	2786	16	4492	30	2186	30	3226	33	2928	17	4235	36	3330	32
KS85W66311-6M	25	3599	18	2814	15	4591	27	2145	32	3318	31	2948	16	5693	22	3587	24
SCOUT66	2	3450	26	3270	4	2712	38	3024	4	3296	32	2980	14	2866	38	3085	35
OK93P634	7	2887	37	1818	36	4625	25	1417	34	3186	34	2318	36	5375	29	3090	34
TX93V4927	15	3091	35	1842	35	4174	33	995	38	2515	38	1939	37	3920	37	2639	37
TX92V2519	16	3116	34	1467	38	4091	34	1085	35	2850	36	1699	39	5422	28	2819	36
TX93V5922	14	2004	39	985	39	3237	37	220	39	2917	35	1851	38	5024	32	2320	39
KHARKOF	1	3118	33	3185	7	905	39	2789	10	2468	39	3066	10	2330	39	2551	38
MEAN		3531		2596		4590		2370		3735		2827		5514		3595	
LSD(.05)		414		530		631		449		675		450		973		583	
C.V.		7.2		12.5		8.4		11.6		8.9		9.7		12.6		11.5	

Table 2. Continued.

C.I. OR SEL. NO.	ENTRY NO.	SIDNEY* NEBRASKA		HEMING-FORD NEBRASKA		IMPERIAL (IRR.) NEBRASKA		NEBRASKA STATE MEAN		FORT COLLINS* COLORADO		AKRON COLORADO		BURLINGTON COLORADO		COLORADO STATE MEAN	
WX92-0408	32	3697	26	4231	9	5472	26	4852	17	3663	24	4685	23	2595	6	3640	11
NE90476	27	2955	36	3964	18	5696	19	4830	18	3968	17	5153	8	2579	7	3866	4
TAM-107	3	4857	4	3853	25	5447	27	4650	27	4803	2	4983	12	2561	8	3772	6
CO910424	18	4489	10	4203	10	5990	11	5096	10	4470	5	4749	19	2339	13	3544	14
HBI0531-A2	12	4339	13	4649	1	6922	1	5786	1	3979	16	5140	10	2153	18	3647	10
T834	35	5112	1	4403	4	6476	3	5439	2	3559	26	5320	3	2828	1	4074	2
KS94093512552	24	2962	35	4344	5	6221	7	5282	3	3498	27	4430	30	1861	27	3145	31
NE92458	28	3764	24	3858	24	5642	23	4750	23	2997	35	4857	14	2127	19	3492	16
T812	36	4694	6	3948	20	6075	9	5011	11	4181	11	4766	18	2824	2	3795	5
TX92V3108	11	3370	32	3591	32	6801	2	5196	5	3238	33	4668	25	2159	17	3414	20
TX91D6991	10	4213	17	4635	2	5665	22	5150	7	4355	7	5161	7	2114	20	3637	12
T702	34	4909	2	4038	16	6366	5	5202	4	4288	8	4705	21	2796	3	3751	7
KS93U206	4	4646	7	3770	27	5849	15	4809	20	3838	21	4614	26	2472	10	3543	15
NE93427	31	3813	22	4451	3	5315	29	4883	15	3747	23	4349	32	2165	16	3257	26
NE92646	29	4567	9	4315	6	5938	12	5127	8	4221	10	6008	1	2447	11	4228	1
TX91D6913	9	4409	11	4065	14	5239	30	4652	26	4261	9	5215	5	2215	14	3715	8
NE93405	30	3681	27	4311	7	5120	36	4715	24	3964	18	4567	28	2106	21	3336	23
T861	37	3621	28	3955	19	6420	4	5188	6	2642	37	4127	36	2684	4	3406	21
KS941064-6	22	2334	38	3824	26	5916	13	4870	16	2333	38	4399	31	1804	28	3102	33
T89	38	4267	16	3860	23	5207	32	4534	32	3597	25	4674	24	2633	5	3653	9
TX93V5919	13	4404	12	4300	8	5510	25	4905	14	4725	3	5180	6	1601	35	3391	22
OK91P648	5	3968	20	3015	39	6290	6	4653	25	4401	6	5141	9	2088	23	3614	13
TXGH12588-105	17	4604	8	3697	29	5158	34	4427	34	4030	14	4800	16	2094	22	3447	18
CO910748	19	4775	5	3657	31	5994	10	4826	19	4965	1	5428	2	2387	12	3908	3
KS84W0639393M	26	4300	14	4079	12	6129	8	5104	9	4100	13	4331	34	2022	24	3177	28
OK93P735	6	3773	23	3720	28	5797	17	4758	22	3852	19	5278	4	1051	39	3164	29
KS941064-3	21	2121	39	3922	22	5676	21	4799	21	2214	39	3866	37	1768	30	2817	38
KS940935-72-1	23	3023	34	4165	11	5849	15	5007	12	3297	30	3798	38	1950	26	2874	37
G1878	39	3749	25	3498	33	5685	20	4591	30	3325	29	4806	15	1735	32	3270	25
OK92403	8	3619	29	3932	21	5230	31	4581	31	3269	31	4206	35	1997	25	3101	34
W93-460	33	4875	3	3977	17	5207	32	4592	29	4502	4	4712	20	1761	31	3236	27
KS91H153-2	20	4283	15	3179	35	5147	35	4163	36	3375	28	4784	17	2176	15	3480	17
KS85W66311-6M	25	2616	37	4054	15	5887	14	4970	13	3244	32	4963	13	1679	34	3321	24
SCOUT66	2	3816	21	4069	13	3943	38	4006	38	3004	34	4348	33	2526	9	3437	19
OK93P634	7	3424	30	3695	30	5582	24	4639	28	3819	22	4613	27	1401	37	3007	36
TX93V4927	15	4184	18	3128	38	5777	18	4453	33	4123	12	4698	22	1434	36	3066	35
TX92V2519	16	3985	19	3166	36	5349	28	4257	35	3851	20	4537	29	1786	29	3161	30
TX93V5922	14	3378	31	3402	34	4858	37	4130	37	4005	15	5040	11	1236	38	3138	32
KHARKOF	1	3257	33	3162	37	2782	39	2972	39	2949	36	3751	39	1693	33	2722	39
MEAN		3919		3900		5631		4766		3760		4740		2099		3419	
LSD(.05)		992		534		773		N.S.		827		816		691		N.S.	
C.V.		15.5		8.4		8.4		8.5		13.5		10.5		20.2		13.5	

* Not included in state or regional means.

Table 2. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	STILLWATER OKLAHOMA		LAHOMA OKLAHOMA		GOODWELL OKLAHOMA		OKLAHOMA STATE MEAN		BOZEMAN* MONTANA		REGIONAL AVERAGE	
WX92-0408	32	2505	11	3899	2	5789	23	4064	4	5965	4	4016	1
NE90476	27	2590	6	3676	5	5906	16	4057	5	5696	7	3909	2
TAM-107	3	2629	4	3389	11	5903	17	3974	8	5064	25	3877	3
CO910424	18	2376	19	2873	28	6651	2	3967	9	6174	2	3833	4
HBI0531-A2	12	1983	32	3284	13	6552	3	3940	10	6012	3	3824	5
T834	35	2378	18	3675	6	5657	28	3903	14	5064	25	3816	6
KS94093512552	24	2649	3	3244	14	6136	9	4010	6	5185	21	3792	7
NE92458	28	2676	1	3770	4	5910	15	4118	3	5198	20	3786	8
T812	36	2500	12	3230	15	6062	10	3931	12	5373	13	3785	9
TX92V3108	11	2407	16	3508	8	5891	19	3935	11	5313	16	3782	10
TX91D6991	10	2371	20	3059	21	6521	4	3984	7	5319	15	3773	11
T702	34	2568	8	3805	3	6021	12	4132	2	5588	9	3762	12
KS93U206	4	2292	21	3418	10	5819	21	3843	18	5131	24	3733	13
NE93427	31	2480	14	3472	9	5647	31	3866	17	5219	19	3704	14
NE92646	29	2287	22	3208	17	5998	13	3831	19	4761	31	3677	15
TX91D6913	9	1980	33	2989	23	6026	11	3665	26	5784	6	3655	16
NE93405	30	2559	9	2864	30	5412	33	3612	30	4472	39	3642	17
T861	37	2663	2	3319	12	5062	37	3681	25	5225	18	3619	18
KS941064-6	22	2495	13	2837	32	5737	24	3689	24	5393	12	3612	19
T89	38	2387	17	3581	7	5656	29	3875	16	5017	28	3559	20
TX93V5919	13	2163	28	4051	1	7168	1	4461	1	6274	1	3543	21
OK91P648	5	2245	23	3088	20	6378	6	3904	13	5145	23	3526	22
TXGH12588-105	17	2591	5	2973	24	5853	20	3806	20	4903	30	3507	23
CO910748	19	1779	35	2929	26	6432	5	3713	21	5595	8	3503	24
KS84W0639393M	26	2538	10	2756	35	5679	26	3658	27	4654	32	3479	25
OK93P735	6	2577	7	2821	33	6300	8	3899	15	4573	37	3462	26
KS941064-3	21	2435	15	3133	19	5203	36	3591	31	5434	11	3461	27
KS940935-72-1	23	2240	24	2900	27	5358	34	3499	33	4627	34	3408	29
G1878	39	2091	29	3149	18	5610	32	3617	29	5030	27	3408	28
OK92403	8	2224	25	2932	25	5941	14	3699	23	4607	35	3373	30
W93-460	33	1783	34	2446	39	5895	18	3374	35	5306	17	3317	31
KS91H153-2	20	2208	27	3224	16	5683	25	3705	22	4963	29	3315	32
KS85W66311-6M	25	2055	30	2814	34	5326	35	3398	34	4640	33	3288	33
SCOUT66	2	2026	31	3011	22	4817	38	3285	38	4593	36	3207	34
OK93P634	7	2217	26	2625	37	5667	27	3503	32	5454	10	3135	35
TX93V4927	15	1679	37	2719	36	5650	30	3349	37	5172	22	3079	36
TX92V2519	16	1747	36	2848	31	6324	7	3640	28	5340	14	3058	37
TX93V5922	14	1433	39	2871	29	5810	22	3371	36	5891	5	3003	38
KHARKOF	1	1483	38	2575	38	3508	39	2522	39	4499	38	2478	39
MEAN		2264		3153		5820		3745		5222		3531	
LSD(.05)		306		537		558		628		.		308	
C.V.		8.3		10.4		5.9		7.9		.		12.9	

* Not included in regional means.

Table 3. Summary of mean yields (kg/ha) and ranks for 39 wheats in the 1996 Southern Regional Performance Nursery at 16 locations from which a CV of 15.0 or less and a significant F test for entries were obtained.

C.I. OR SEL. NO.	ENTRY NO.	PROSPER TEXAS		BUSHLAND (IRR.) TEXAS		FARMINGTON NEW MEXICO		STILLWATER OKLAHOMA		LAHOMA OKLAHOMA		GOODWELL OKLAHOMA	
WX92-0408	32	4589	21	5613	2	7339	1	2505	11	3899	2	5789	23
HBI0531-A2	12	4690	14	5911	1	6853	6	1983	32	3284	13	6552	3
NE90476	27	4600	20	5192	14	5630	22	2590	6	3676	5	5906	16
CO910424	18	4060	37	5557	3	6931	4	2376	19	2873	28	6651	2
KS94093512552	24	4797	11	5250	10	6487	12	2649	3	3244	14	6136	9
TX91D6991	10	4887	8	5541	4	6939	3	2371	20	3059	21	6521	4
T702	34	5053	4	5230	11	7029	2	2568	8	3805	3	6021	12
T812	36	4853	10	5214	12	6857	5	2500	12	3230	15	6062	10
TX92V3108	11	4602	19	5405	6	6285	16	2407	16	3508	8	5891	19
T834	35	4651	15	5198	13	5066	37	2378	18	3675	6	5657	28
TAM-107	3	4555	23	5104	15	6503	11	2629	4	3389	11	5903	17
NE92458	28	4867	9	4580	30	5587	23	2676	1	3770	4	5910	15
NE92646	29	4387	31	5064	17	5128	34	2287	22	3208	17	5998	13
TX91D6913	9	5207	1	4914	24	6478	13	1980	33	2989	23	6026	11
KS93U206	4	4629	17	5084	16	5910	19	2292	21	3418	10	5819	21
NE93427	31	4219	36	4918	22	6437	14	2480	14	3472	9	5647	31
KS84W0639393M	26	4246	35	4600	29	5476	25	2538	10	2756	35	5679	26
OK91P648	5	5059	3	5317	9	6701	8	2245	23	3088	20	6378	6
TX93V5919	13	4963	6	5364	7	5789	21	2163	28	4051	1	7168	1
KS941064-6	22	5169	2	5358	8	4859	38	2495	13	2837	32	5737	24
OK93P735	6	4398	30	5497	5	6280	17	2577	7	2821	33	6300	8
CO910748	19	4544	25	4968	21	6774	7	1779	35	2929	26	6432	5
T861	37	4642	16	4421	33	5397	28	2663	2	3319	12	5062	37
NE93405	30	4452	28	4212	37	5899	20	2559	9	2864	30	5412	33
TXGH12588-105	17	4519	26	4685	27	6359	15	2591	5	2973	24	5853	20
KS941064-3	21	4932	7	4678	28	5079	36	2435	15	3133	19	5203	36
T89	38	4625	18	4914	24	5550	24	2387	17	3581	7	5656	29
G1878	39	4365	32	4916	23	5155	33	2091	29	3149	18	5610	32
KS85W66311-6M	25	4553	24	4539	31	5109	35	2055	30	2814	34	5326	35
OK92403	8	4252	34	4977	20	6510	10	2224	25	2932	25	5941	14
KS940935-72-1	23	4981	5	5019	18	5311	31	2240	24	2900	27	5358	34
KS91H153-2	20	4703	13	5017	19	5312	30	2208	27	3224	16	5683	25
W93-460	33	4331	33	4178	38	5405	27	1783	34	2446	39	5895	18
OK93P634	7	4004	38	4835	26	5327	29	2217	26	2625	37	5667	27
TX92V2519	16	4743	12	4365	34	5438	26	1747	36	2848	31	6324	7
SCOUT66	2	4557	22	4510	32	5207	32	2026	31	3011	22	4817	38
TX93V4927	15	4486	27	4353	35	6232	18	1679	37	2719	36	5650	30
TX93V5922	14	4452	28	4214	36	6628	9	1433	39	2871	29	5810	22
KHARKOF	1	3118	39	3410	39	3714	39	1483	38	2575	38	3508	39
MEAN		4583		4926		5922		2264		3153		5820	
LSD(.05)		593		432		1138		306		537		558	
C.V.		7.9		5.4		13.7		8.3		10.4		5.9	

Table 3. Continued.

C.I. OR SEL. NO.	ENTRY NO.	HUTCHINSON KANSAS		HAYS KANSAS		MANHATTAN KANSAS		COLBY KANSAS		WICHITA KANSAS		WINFIELD KANSAS	
WX92-0408	32	3921	7	3720	1	5572	1	3309	2	4398	5	3445	2
HBI0531-A2	12	3593	19	2443	25	5492	3	2573	19	4198	8	2756	26
NE90476	27	4314	1	3258	5	4569	28	3089	3	4560	3	3933	1
CO910424	18	3895	8	3018	10	4661	23	3315	1	4624	1	3036	11
KS94093512552	24	3861	10	2546	23	5510	2	2865	7	4426	4	2699	27
TX91D6991	10	3393	27	2226	32	5096	8	2412	25	4156	9	2572	32
T702	34	3802	12	2392	27	4845	17	2757	11	3540	27	2910	19
T812	36	3787	13	2960	12	4662	22	2825	9	4280	6	2912	18
TX92V3108	11	4037	4	2274	30	5209	5	2443	23	4242	7	2579	31
T834	35	4149	3	3310	3	4678	21	3004	5	3964	14	3261	6
TAM-107	3	3769	14	3040	9	4695	20	2647	15	3966	13	3231	7
NE92458	28	3935	6	3201	6	5079	10	2556	20	3656	26	3004	12
NE92646	29	4021	5	2978	11	4565	29	2724	13	3719	25	3077	9
TX91D6913	9	3336	30	2623	22	5100	7	2757	11	3775	22	3443	3
KS93U206	4	3600	17	3093	8	4870	16	2930	6	4115	10	2798	21
NE93427	31	3891	9	2412	26	5427	4	2340	28	4108	11	2963	15
KS84W0639393M	26	4152	2	3320	2	4984	13	2827	8	3945	16	3288	5
OK91P648	5	3139	32	1847	34	5057	11	1058	36	4615	2	2323	35
TX93V5919	13	2794	38	1644	37	4270	32	1015	37	3785	21	2777	22
KS941064-6	22	3566	20	2322	29	4787	18	2614	18	4097	12	2862	20
OK93P735	6	3340	29	2266	31	4082	35	1914	33	3383	28	2999	13
CO910748	19	3477	23	2827	14	3472	36	2506	21	3820	19	3412	4
T861	37	3694	16	2711	20	4714	19	2647	16	3878	18	2633	29
NE93405	30	3694	15	2872	13	4878	15	2645	17	3750	23	2767	24
TXGH12588-105	17	3477	22	2060	33	4964	14	2356	27	3333	30	3142	8
KS941064-3	21	3851	11	2668	21	5140	6	2484	22	3724	24	2693	28
T89	38	3227	31	2733	19	4407	31	2432	24	3962	15	2506	33
G1878	39	3364	28	2738	18	5082	9	2369	26	3913	17	2628	30
KS85W66311-6M	25	3599	18	2814	15	4591	27	2145	32	3318	31	2948	16
OK92403	8	2896	36	2367	28	4647	24	2172	31	3815	20	2345	34
KS940935-72-1	23	3459	24	2744	17	4608	26	2302	29	2788	37	2766	25
KS91H153-2	20	3457	25	2786	16	4492	30	2186	30	3226	33	2928	17
W93-460	33	3556	21	2462	24	5045	12	2665	14	3336	29	2770	23
OK93P634	7	2887	37	1818	36	4625	25	1417	34	3186	34	2318	36
TX92V2519	16	3116	34	1467	38	4091	34	1085	35	2850	36	1699	39
SCOUT66	2	3450	26	3270	4	2712	38	3024	4	3296	32	2980	14
TX93V4927	15	3091	35	1842	35	4174	33	995	38	2515	38	1939	37
TX93V5922	14	2004	39	985	39	3237	37	220	39	2917	35	1851	38
KHARKOF	1	3118	33	3185	7	905	39	2789	10	2468	39	3066	10
MEAN		3531		2596		4590		2370		3735		2827	
LSD(.05)		414		530		631		449		675		450	
C.V.		7.2		12.5		8.4		11.6		8.9		9.7	

Table 3. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	HUGOTON (IRR.) KANSAS		AKRON COLORADO		IMPERIAL (IRR.) NEBRASKA		HEMING-FORD NEBRASKA		REGIONAL AVERAGE	
WX92-0408	32	5939	12	4685	23	5472	26	4231	9	4652	1
HBI0531-A2	12	6157	7	5140	10	6922	1	4649	1	4575	2
NE90476	27	5917	14	5153	8	5696	19	3964	18	4503	3
CO910424	18	6077	9	4749	19	5990	11	4203	10	4501	4
KS94093512552	24	6406	5	4430	30	6221	7	4344	5	4492	5
TX91D6991	10	6650	2	5161	7	5665	22	4635	2	4455	6
T702	34	5855	17	4705	21	6366	5	4038	16	4432	7
T812	36	5563	27	4766	18	6075	9	3948	20	4406	8
TX92V3108	11	6103	8	4668	25	6801	2	3591	32	4378	10
T834	35	4863	33	5320	3	6476	3	4403	4	4378	9
TAM-107	3	5731	21	4983	12	5447	27	3853	25	4340	11
NE92458	28	5914	16	4857	14	5642	23	3858	24	4318	12
NE92646	29	5585	26	6008	1	5938	12	4315	6	4313	13
TX91D6913	9	5633	24	5215	5	5239	30	4065	14	4299	14
KS93U206	4	5954	11	4614	26	5849	15	3770	27	4297	15
NE93427	31	5993	10	4349	32	5315	29	4451	3	4276	16
KS84W0639393M	26	5784	20	4331	34	6129	8	4079	12	4258	17
OK91P648	5	6462	4	5141	9	6290	6	3015	39	4234	18
TX93V5919	13	6763	1	5180	6	5510	25	4300	8	4221	19
KS941064-6	22	6530	3	4399	31	5916	13	3824	26	4211	20
OK93P735	6	5915	15	5278	4	5797	17	3720	28	4160	21
CO910748	19	4334	35	5428	2	5994	10	3657	31	4147	22
T861	37	5640	23	4127	36	6420	4	3955	19	4120	23
NE93405	30	5814	18	4567	28	5120	36	4311	7	4114	24
TXGH12588-105	17	5810	19	4800	16	5158	34	3697	29	4111	25
KS941064-3	21	6230	6	3866	37	5676	21	3922	22	4107	26
T89	38	5629	25	4674	24	5207	32	3860	23	4085	27
G1878	39	5369	30	4806	15	5685	20	3498	33	4046	28
KS85W66311-6M	25	5693	22	4963	13	5887	14	4054	15	4026	29
OK92403	8	5935	13	4206	35	5230	31	3932	21	4024	30
KS940935-72-1	23	5182	31	3798	38	5849	15	4165	11	3967	31
KS91H153-2	20	4235	36	4784	17	5147	35	3179	35	3910	32
W93-460	33	4438	34	4712	20	5207	32	3977	17	3888	33
OK93P634	7	5375	29	4613	27	5582	24	3695	30	3762	34
TX92V2519	16	5422	28	4537	29	5349	28	3166	36	3640	35
SCOUT66	2	2866	38	4348	33	3943	38	4069	13	3630	36
TX93V4927	15	3920	37	4698	22	5777	18	3128	38	3575	37
TX93V5922	14	5024	32	5040	11	4858	37	3402	34	3434	38
KHARKOF	1	2330	39	3751	39	2782	39	3162	37	2835	39
MEAN		5514		4740		5631		3900		4131	
LSD(.05)		973		816		773		534		351	
C.V.		12.6		10.5		8.4		8.4		10.6	

Table 4. Summary of mean yields (kg/ha) and ranks of 39 wheats grown in the 1996 Southern Regional Performance Nursery for 5 intra-regional production zones (after Peterson, 1992).

C.I. OR SEL. NO.	ENTRY NO.	SOUTH-CENTRAL PLAINS		NORTH-CENTRAL PLAINS		NORTHERN HIGH PLAINS		INTER-MOUNTAIN WEST		SOUTHERN HIGH PLAINS		REGIONAL AVERAGE	
Number of locations		11		2		4		2		3		22	
WX92-0408	32	4296	2	4451	2	4015	10	5785	2	1521	18	4016	1
NE90476	27	4339	1	3870	10	4129	5	4797	21	1469	22	3909	2
TAM-107	3	4152	3	4026	7	3910	13	5178	12	1858	1	3877	3
CO910424	18	4060	7	3689	16	4098	7	5567	4	1589	11	3833	4
HBI0531-A2	12	3971	15	3817	12	4197	3	5751	3	1505	20	3824	5
T834	35	3997	14	3894	9	4407	1	4734	24	1698	6	3816	6
KS94093512552	24	4124	4	3625	17	3844	15	5416	7	1533	17	3792	7
NE92458	28	4087	6	4286	4	3796	18	4723	25	1713	4	3786	8
T812	36	4007	12	3482	20	4122	6	5403	8	1644	8	3785	9
TX92V3108	11	4059	8	3967	8	4018	9	4938	18	1561	13	3782	10
TX91D6991	10	4012	11	3846	11	3838	16	5787	1	1416	25	3773	11
T702	34	4045	10	2949	28	4156	4	5534	5	1557	14	3762	12
KS93U206	4	4049	9	3712	14	3966	12	4840	20	1540	16	3733	13
NE93427	31	3935	17	4339	3	3542	28	5444	6	1492	21	3704	14
NE92646	29	3880	19	3325	23	4279	2	4722	26	1665	7	3677	15
TX91D6913	9	3821	24	4121	5	3857	14	5272	9	1385	27	3655	16
NE93405	30	3760	26	4459	1	3610	24	5105	13	1731	3	3642	17
T861	37	3841	23	3444	21	3970	11	4676	30	1750	2	3619	18
KS941064-6	22	4005	13	4054	6	3683	20	4342	35	1296	31	3612	19
T89	38	3923	18	2961	27	3737	19	4705	27	1618	9	3559	20
TX93V5919	13	4114	5	2289	38	3327	34	5044	14	1573	12	3543	21
OK91P648	5	3961	16	2591	30	3644	23	4858	19	1507	19	3526	22
TXGH12588-105	17	3744	27	3549	18	3602	25	5028	15	1468	23	3507	23
CO910748	19	3760	25	2576	31	4079	8	5216	11	1272	33	3503	24
KS84W0639393M	26	3846	22	3167	25	3827	17	4777	22	1014	38	3479	25
OK93P735	6	3879	20	2315	37	3510	29	5000	17	1607	10	3462	26
KS941064-3	21	3856	21	3765	13	3449	32	4500	34	1132	37	3461	27
KS940935-72-1	23	3663	30	3708	15	3475	30	4738	23	1296	32	3408	29
G1878	39	3705	28	3532	19	3649	22	4327	36	1307	30	3408	28
OK92403	8	3670	29	2576	32	3401	33	5221	10	1545	15	3373	30
W93-460	33	3523	33	3232	24	3586	26	4691	28	1345	28	3317	31
KS91H153-2	20	3632	32	2983	26	3573	27	4245	38	1408	26	3315	32
KS85W66311-6M	25	3650	31	2354	36	3668	21	4581	32	1214	35	3288	33
SCOUT66	2	3363	35	2660	29	3460	31	4638	31	1708	5	3207	34
OK93P634	7	3469	34	2565	33	3253	35	4511	33	1220	34	3135	35
TX93V4927	15	3184	38	3439	22	3226	36	4680	29	1191	36	3079	36
TX92V2519	16	3350	36	2560	34	3189	37	4302	37	1316	29	3058	37
TX93V5922	14	3207	37	2520	35	2838	38	5015	16	1455	24	3003	38
KHARKOF	1	2748	39	1710	39	2754	39	3438	39	993	39	2478	39
MEAN		3812		3344		3710		4911		1464		3531	
LSD(.05)		396		N.S.		750		1125		375		308	
C.V.		10.7		16.4		11.5		13.1		28.3		12.9	

Table 5. Summary of mean yields (kg/ha) and ranks for 23 wheats grown in the Southern Regional Performance Nursery at 20 sites in 1995 and 1996 with state means and ranks.

VARIETY OR PEDIGREE	C.I. OR SEL. NO.	ENTRY NO.	PROSPER TEXAS		BUSHLAND (IRR.) TEXAS		BUSHLAND (DRYL.) TEXAS		TEXAS STATE MEAN	
AgriPro Seeds Hybrid Wheat	WX92-0408	32	4194	6	5690	4	676	18	3520	5
Pro 812/Caldwell//TX86D1310	TX91D6913	9	4646	2	5383	13	1263	1	3764	1
WVE047 2180/2157 HGE013	HBI0531-A2	12	4274	4	6121	1	732	14	3709	3
TX86D1310/Kavkaz//TX86D1308	TX91D6991	10	4212	5	5640	5	705	15	3519	6
2555 sib/Vona//2180	OK91P648	5	4781	1	5696	3	693	17	3723	2
Coker 68-15/TAM-107	T702	34	4015	14	5608	7	1209	2	3611	4
OK83201/Redland	NE92458	28	4148	8	5044	17	809	7	3334	15
TAM-107/T213 sib	T812	36	4286	3	5482	9	556	23	3441	9
T213 sib 2/TAM-107	T834	35	3741	20	5708	2	806	8	3419	12
TAM-200/Karl	TX92V3108	11	3864	17	5606	8	574	22	3348	14
Bennett/Brule Composite	NE90476	27	3952	15	5378	14	755	12	3362	13
HBY250A/HGF004	OK93P735	6	4038	12	5610	6	848	6	3499	7
NE82413/Colt	NE92646	29	3252	22	5259	15	733	13	3081	21
TAM-107 3/TA2460	KS93U206	4	4181	7	5419	11	701	16	3433	10
TX85V1830/TX84V1307	TX93V5919	13	4027	13	5437	10	974	4	3479	8
TAM-107/Caldwell	T861	37	4143	9	4620	22	606	21	3123	19
TAM-107	TAM-107	3	3918	16	5065	16	794	10	3259	17
HF5761/TAM-105//Bounty Hybrid 203	KS91H153-2	20	4089	11	5404	12	806	8	3433	11
TX85V1830/TX84V1307	TX93V5922	14	3840	18	4970	18	630	19	3147	18
TX87V1913/TAM-200	TX93V4927	15	4124	10	4946	19	783	11	3284	16
OK82377/TX81V6603-2	TX92V2519	16	3806	19	4934	20	620	20	3120	20
SCOUT 66	SCOUT66	2	3500	21	4792	21	907	5	3066	22
KHARKOF	KHARKOF	1	2172	23	3399	23	1021	3	2198	23
	MEAN		3965		5270		791		3342	
	LSD(.05)		734		602		N.S.		624	
	C.V.		7.8		7.0		24.0		8.9	

Table 5. Continued.

C.I. OR SEL. NO.	ENTRY NO.	STILLWATER OKLAHOMA		LAHOMA OKLAHOMA		GOODWELL OKLAHOMA		OKLAHOMA STATE MEAN		FORT COLLINS* COLORADO		AKRON COLORADO		BURLINGTON COLORADO		COLORADO STATE MEAN	
WX92-0408	32	2429	4	3467	1	4365	12	3420	3	4997	6	5193	7	4269	1	4731	2
TX91D6913	9	2672	3	2856	8	4906	3	3478	2	5558	2	5553	3	3995	3	4774	1
HBI0531-A2	12	1932	15	2932	6	5068	1	3310	7	4819	7	5065	13	4166	2	4616	7
TX91D6991	10	2367	5	2717	13	4950	2	3345	5	4584	10	5518	4	3741	9	4630	6
OK91P648	5	2677	2	3291	2	4794	5	3587	1	5091	5	5675	2	3637	10	4656	4
T702	34	2043	11	2732	12	4179	15	2985	14	5196	4	5156	8	3966	5	4561	8
NE92458	28	2248	6	3078	3	4259	14	3195	8	4223	17	5134	9	3618	12	4376	11
T812	36	1936	14	2686	14	4454	11	3025	12	4484	11	5074	12	3994	4	4534	9
T834	35	2113	9	2536	18	4307	13	2986	13	4229	16	5350	5	3959	6	4655	5
TX92V3108	11	1801	17	2813	9	4467	10	3027	11	3916	20	4714	15	3431	16	4072	16
NE90476	27	2045	10	2859	7	4514	8	3140	9	4445	13	4976	14	3208	19	4092	15
OK93P735	6	2786	1	2741	11	4611	6	3379	4	4731	8	5089	11	3323	18	4206	13
NE92646	29	1877	16	2360	20	4521	7	2920	16	5347	3	5887	1	3567	15	4727	3
KS93U206	4	2204	7	2990	5	4055	17	3083	10	4048	18	4473	18	3759	8	4116	14
TX93V5919	13	2022	13	3059	4	4890	4	3324	6	5644	1	5324	6	3577	14	4450	10
T861	37	2041	12	2799	10	3556	21	2798	18	3119	23	3770	21	3847	7	3809	19
TAM-107	3	1758	18	2269	21	4022	20	2683	21	4637	9	4476	17	3420	17	3948	18
KS91H153-2	20	2158	8	2638	16	4039	19	2945	15	3423	22	4235	20	3180	20	3708	21
TX93V5922	14	1488	21	2676	15	4131	16	2765	19	4479	12	5093	10	3584	13	4338	12
TX93V4927	15	1641	19	2537	17	4044	18	2741	20	4356	14	4509	16	2997	21	3753	20
TX92V2519	16	1509	20	2463	19	4488	9	2820	17	4236	15	4353	19	3631	11	3992	17
SCOUT66	2	1462	22	2013	22	3429	22	2302	22	3570	21	3105	22	2528	22	2816	22
KHARKOF	1	952	23	1517	23	2460	23	1643	23	4043	19	3081	23	1971	23	2526	23
MEAN		2007		2697		4283		2996		4486		4816		3544		4180	
LSD(.05)		N.S.		N.S.		758		760		1208		1244		N.S.		N.S.	
C.V.		10.7		11.1		8.4		9.9		10.2		12.1		17.5		14.4	

* Not included in state or regional means.

Table 5. Continued.

C.I. OR SEL. NO.	ENTRY NO.	CLOVIS (IRR.) NEW MEXICO		CLOVIS (DRYL.)* NEW MEXICO		FARMINGTON NEW MEXICO		NEW MEXICO STATE MEAN		SIDNEY* NEBRASKA		HEMING-FORD NEBRASKA		PIERRE S. DAKOTA	
WX92-0408	32	1757	16	949	10	7400	3	4579	6	4999	8	4950	3	4043	1
TX91D6913	9	2355	1	906	14	7215	6	4785	1	5356	3	4905	5	3485	2
HBI0531-A2	12	2182	3	950	9	6778	7	4480	7	4989	10	4691	9	3015	12
TX91D6991	10	1851	10	791	20	7371	4	4611	5	5350	4	5164	1	3319	5
OK91P648	5	1826	11	970	8	7605	1	4716	4	4994	9	4126	19	1919	19
T702	34	1914	8	990	5	7594	2	4754	2	5531	1	4841	7	2492	16
NE92458	28	2054	6	838	17	6304	10	4179	10	4905	11	4715	8	3321	4
T812	36	1635	21	1069	3	6254	11	3945	12	5334	5	4663	12	3024	11
T834	35	1786	13	824	19	5517	17	3652	17	5400	2	4897	6	3033	10
TX92V3108	11	1681	19	896	15	5929	14	3805	15	4392	19	4423	16	3130	8
NE90476	27	1777	14	834	18	5253	20	3515	19	3756	21	4683	10	2851	13
OK93P735	6	1953	7	979	7	6684	9	4318	9	4854	12	4505	14	2012	18
NE92646	29	1855	9	1092	2	5922	15	3888	14	5181	7	4950	4	3118	9
KS93U206	4	1411	22	853	16	5388	19	3399	20	4632	17	4666	11	3134	7
TX93V5919	13	2238	2	929	11	6689	8	4464	8	5281	6	5119	2	1159	23
T861	37	1706	17	925	12	5493	18	3599	18	4644	16	4476	15	3477	3
TAM-107	3	1803	12	987	6	5604	16	3704	16	4772	13	4509	13	3211	6
KS91H153-2	20	1654	20	1042	4	4951	21	3303	21	4444	18	4043	20	2512	15
TX93V5922	14	2108	5	908	13	7357	5	4732	3	4722	14	4339	17	1363	22
TX93V4927	15	2117	4	770	21	5997	13	4057	11	3969	20	3741	22	2767	14
TX92V2519	16	1771	15	750	22	6075	12	3923	13	4705	15	4177	18	1877	20
SCOUT66	2	1687	18	1216	1	4719	22	3203	22	3598	22	3809	21	1825	21
KHARKOF	1	1206	23	741	23	4037	23	2622	23	2801	23	3056	23	2050	17
MEAN		1840		922		6180		4010		4722		4498		2702	
LSD(.05)		N.S.		N.S.		1624		N.S.		N.S.		999		N.S.	
C.V.		28.0		33.1		13.5		16.8		13.7		12.4		23.7	

* Not included in state or regional means.

Table 5. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	HUTCHINSON KANSAS		HAYS KANSAS		MANHATTAN KANSAS		COLBY KANSAS		KANSAS STATE MEAN		COLUMBIA* MISSOURI		REGIONAL AVERAGE	
WX92-0408	32	3035	2	3595	1	3845	1	3621	2	3524	1	2144	3	3908	1
TX91D6913	9	2133	16	2940	4	3042	9	3818	1	2983	3	1768	7	3823	2
HBI0531-A2	12	2853	5	2643	9	3730	2	3463	4	3172	2	1349	18	3728	3
TX91D6991	10	2384	11	2503	12	3422	3	3137	9	2862	10	1691	8	3688	4
OK91P648	5	2439	8	2488	14	3414	5	2415	19	2689	13	1881	5	3592	5
T702	34	2422	9	2434	15	3018	11	3390	5	2816	12	1453	14	3563	6
NE92458	28	2384	12	3006	3	3153	7	2934	12	2869	9	1353	17	3513	7
T812	36	2866	4	2712	7	3037	10	3248	7	2966	4	1573	10	3494	8
T834	35	2409	10	3011	2	2749	14	3549	3	2929	7	1805	6	3467	9
TX92V3108	11	2903	3	2278	18	3323	6	3214	8	2930	6	1419	15	3384	10
NE90476	27	2588	7	2922	5	2786	13	3373	6	2918	8	1575	9	3370	11
OK93P735	6	2079	18	2292	17	2599	16	2668	15	2409	17	1552	11	3365	13
NE92646	29	2294	14	2732	6	2579	17	2942	10	2637	14	1417	16	3365	12
KS93U206	4	2663	6	2654	8	3136	8	2938	11	2848	11	1275	20	3361	14
TX93V5919	13	1889	21	2069	21	2511	18	2408	20	2219	19	1348	19	3337	15
T861	37	3037	1	2494	13	3421	4	2896	13	2962	5	2015	4	3274	16
TAM-107	3	2313	13	2381	16	2804	12	2760	14	2564	15	1547	12	3194	17
KS91H153-2	20	2171	15	2510	11	2642	15	2644	16	2492	16	1112	23	3105	18
TX93V5922	14	1889	20	1609	23	2281	21	1937	23	1929	22	1124	22	3081	19
TX93V4927	15	2060	19	2099	20	2504	20	2268	21	2233	18	.	.	3071	20
TX92V2519	16	2084	17	1850	22	2510	19	2219	22	2166	20	.	.	3023	21
SCOUT66	2	1806	22	2522	10	1506	22	2539	18	2093	21	1501	13	2634	22
KHARKOF	1	1644	23	2271	19	571	23	2542	17	1757	23	1201	21	2122	23
MEAN		2363		2522		2808		2910		2651		2135		3325	
LSD(.05)		N.S.		N.S.		1126		N.S.		N.S.		.		661	
C.V.		12.2		10.9		11.9		11.1		11.5		.		13.9	

* Not included in state or regional means.

Table 6. Mean yield, regression coefficient, coefficient of determination, and mean square deviations from regression from linear regression analysis of variety mean yield on nursery mean yield for the 39 entries in the 1996 Southern Regional Performance Nursery grown at 22 locations.

C.I. OR SEL. NO.	ENTRY NO.	REGIONAL AVERAGE KG/HA	REGRESSION COEFFICIENT (b)	COEFFICIENT OF DETERMINATION (r2)	DEVIATIONS FROM REGRESSION (MEAN SQUARE)
WX92-0408	32	4016	1.00	0.92	216336
NE90476	27	3909	0.91	0.93	144701
TAM-107	3	3877	0.90	0.94	115835
CO910424	18	3833	1.07	0.94	183144
HBI0531-A2	12	3824	1.24	0.97	126406
T834	35	3816	0.87	0.91	185562
KS94093512552	24	3792	1.13	0.97	100792
NE92458	28	3786	0.91	0.94	129526
T812	36	3785	1.03	0.97	73570
TX92V3108	11	3782	1.09	0.96	122788
TX91D6991	10	3773	1.19	0.97	100745
T702	34	3762	1.11	0.95	161172
KS93U206	4	3733	0.96	0.97	61223
NE93427	31	3704	0.99	0.94	158851
NE92646	29	3677	0.97	0.93	173261
TX91D6913	9	3655	1.04	0.93	180081
NE93405	30	3642	0.85	0.89	223897
T861	37	3619	0.87	0.93	128472
KS941064-6	22	3612	1.01	0.91	244537
T89	38	3559	0.92	0.95	113018
TX93V5919	13	3543	1.22	0.88	507206
OK91P648	5	3526	1.28	0.91	372788
TXGH12588-105	17	3507	1.01	0.97	75654
CO910748	19	3503	1.05	0.91	274482
KS84W0639393M	26	3479	1.04	0.91	241047
OK93P735	6	3462	1.15	0.93	235429
KS941064-3	21	3461	0.98	0.93	184184
KS940935-72-1	23	3408	0.94	0.93	154330
G1878	39	3408	1.00	0.97	64943
OK92403	8	3373	1.09	0.94	195577
W93-460	33	3317	0.95	0.93	164218
KS91H153-2	20	3315	0.91	0.93	146431
KS85W66311-6M	25	3288	1.06	0.92	240466
SCOUT66	2	3207	0.59	0.69	382080
OK93P634	7	3135	1.09	0.95	158378
TX93V4927	15	3079	1.03	0.90	289819
TX92V2519	16	3058	1.10	0.94	184312
TX93V5922	14	3003	1.08	0.84	545796
KHARKOF	1	2478	0.39	0.39	572449

Table 7. Mean yield, regression coefficient, coefficient of determination, and mean square deviations from regression from linear regression analysis of variety mean yield on nursery mean yield for the 23 entries in the 1995 and 1996 Southern Regional Performance Nursery grown at 16 locations.

C.I. OR SEL. NO.	ENTRY NO.	REGIONAL AVERAGE KG/HA	REGRESSION COEFFICIENT (b)	COEFFICIENT OF DETERMINATION (r2)	DEVIATIONS FROM REGRESSION (MEAN SQUARE)
WX92-0408	32	3908	1.04	0.92	247324
TX91D6913	9	3823	1.05	0.90	314401
HBI0531-A2	12	3728	1.07	0.94	186651
TX91D6991	10	3688	1.14	0.97	115490
OK91P648	5	3592	1.16	0.86	611115
T702	34	3563	1.15	0.94	214499
NE92458	28	3513	1.00	0.95	144697
T812	36	3494	1.03	0.96	121452
T834	35	3467	1.00	0.92	238663
TX92V3108	11	3384	1.00	0.95	131493
NE90476	27	3370	0.91	0.91	234563
OK93P735	6	3365	1.10	0.92	270617
NE92646	29	3365	1.07	0.92	259419
KS93U206	4	3361	0.92	0.92	190454
TX93V5919	13	3337	1.19	0.90	427048
T861	37	3274	0.82	0.85	307697
TAM-107	3	3194	0.95	0.88	324463
KS91H153-2	20	3105	0.90	0.92	177968
TX93V5922	14	3081	1.14	0.83	692195
TX93V4927	15	3071	0.95	0.93	198707
TX92V2519	16	3023	1.07	0.95	161005
SCOUT66	2	2634	0.74	0.69	662841
KHARKOF	1	2122	0.57	0.62	545313

Table 8. Summary of agronomic and yield data for 39 wheats grown in the 1996 Southern Regional Performance Nursery.

C.I. OR SEL. NO.	ENTRY NO.	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LODGING 0-9	WINTER SURVIVAL %	WINTER SURVIVAL 0-9	LEAF DISEASE 0-9	VOLUME WEIGHT KG/HL	YIELD KG/HA
NUMBER OF LOCATIONS	20		19	1	6	6	1	21	22
WX92-0408	32	67	130	1	60	2	3	76.5	4016
NE90476	27	72	131	3	72	1.6	4	75	3909
TAM-107	3	70	127	2	69	2.4	3	75.9	3877
CO910424	18	72	130	4	60	2.8	4	77.1	3833
HBI0531-A2	12	67	130	1	37	4.2	1	74.3	3824
T834	35	74	131	4	60	2.3	2	75.3	3816
KS94093512552	24	70	129	2	45	2.8	3	75.3	3792
NE92458	28	73	128	2	68	1.6	3	77	3786
T812	36	68	128	4	55	2.5	4	76.1	3785
TX92V3108	11	70	128	3	57	2.6	2	78.6	3782
TX91D6991	10	65	129	1	47	3.4	2	74.1	3773
T702	34	68	129	2	33	3.8	3	76.7	3762
KS93U206	4	71	127	2	60	2.4	2	76.3	3733
NE93427	31	72	129	2	55	3.3	4	77.6	3704
NE92646	29	72	132	2	57	2.7	4	76	3677
TX91D6913	9	69	133	1	46	3.3	3	73.2	3655
NE93405	30	77	129	1	70	1.7	3	77.5	3642
T861	37	72	128	2	61	2.7	3	75.3	3619
KS941064-6	22	66	130	1	52	3.1	1	74.5	3612
T89	38	70	128	3	54	2.5	4	75.2	3559
TX93V5919	13	69	130	1	16	4.9	4	76	3543
OK91P648	5	63	131	2	16	3.5	2	73.7	3526
TXGH12588-105	17	69	129	4	42	3.9	3	75.2	3507
CO910748	19	72	132	2	38	3.9	3	76.4	3503
KS84W0639393M	26	73	134	2	47	2.8	2	75.6	3479
OK93P735	6	66	129	2	45	2.9	3	76.4	3462
KS941064-3	21	67	130	2	52	2.9	2	74.3	3461
KS940935-72-1	23	68	130	2	59	2.9	3	76.6	3408
G1878	39	72	130	2	52	2.6	3	78.4	3408
OK92403	8	63	128	2	46	3.2	4	76.4	3373
W93-460	33	71	132	1	28	3.7	2	75.6	3317
KS91H153-2	20	67	130	3	40	3.3	4	77.3	3315
KS85W66311-6M	25	68	132	2	34	4	3	76.3	3288
SCOUT66	2	84	132	7	65	2.4	6	76.6	3207
OK93P634	7	64	130	2	37	4.6	4	76.1	3135
TX93V4927	15	63	132	2	14	6.8	3	75.6	3079
TX92V2519	16	63	131	3	18	5.7	4	75.4	3058
TX93V5922	14	68	130	1	11	6.8	5	77.6	3003
KHARKOF	1	90	137	5	75	1.6	5	75.6	2478

Table 9. Seedling infection type of entries in the 1996 Southern Regional Performance Nursery to selected isolates of stem rust (Puccinia graminis f. sp. tritici). D. V. McVey, USDA Cereal Rust Laboratory, University of Minnesota, St. Paul,MN. 55108.

No.	Line	HKCJ	QFCQ	QTHJ	RKQQ	RKRQ	RTQQ	TPMK	Postul. Sr Gene
		Infection type							
01	Kharkof	S	S	S	S	S	S	S	None
02	Scout 66	S	S	S	0;	S	0;	S	17
03	TAM-107	2=	2=	2-	2=	2=	2=	2=	Amigo
04	KS93U206	2-	2=	S?	2=	2=	;1	2=	Amigo
05	OK91P648	;	;	2=	0;	1	0;	2-	17,+
06	OK93P735	0	2-	0	0	S	0	S	6,17,36
07	OK93P634	0	2	S	S	S	0	0	5,+
08	OK92403	0	0	;1	2=	2=	;1	2=	5,+
09	TX91D6913	2=	2=	S	23N	2=	;1-N	0,2 -	+
10	TX91D6991	S	0	S	0	S	0	S	+
11	TX92V3108	;	2=	2-	2=	2-	2=	2=	5,Amigo
12	HBI0531-A2	0	1	2-	0	2=	;1-	2	5,+
13	TX93V5919	;1-	1-	1-	12	2=	2	1,S	Amigo
14	TX93V5922	;	;1	2=	2=	2=	0?	1	5,Amigo
15	TX93V4927	;,2=	1	2=	2=	;	;1-	2=	Amigo
16	TX92V2519	0	0	2=	2=	;1	2=	0;	6,Amigo
17	TXGH12588-105	2=,0	2=	2-	2=	2=	2=	2=	Amigo,seg5
18	CO910424	0	2=	2=	;1-	;1	2=	2=	5,24
19	CO910748	0	2=	2=	;1-	2=	2=	1-	5,24
20	KS91H153-2	-	0	2=	2	23	2	-	+
21	KS941064-3	0	2-	2=	2=	2-	2-	2=	5,24/or31
22	KS941064-6	0	2=	2=	2-	2=	2=	2-	5/24/or31
23	KS940935-7-2-1	0	2=	0	2-	2	2=	2-	24,36
24	KS940935-125-	0	2-	S	S	S	S	2-	5,+
25	KS85W663-11-6-	;	-	S	0;	;1-N	;1N	-	10
26	KS85W663-9-39-	2=,S	1	2-	2	2=	2	S	+
27	NE90476	0	0;	S	0;	S	S	0	6,17?
28	NE92458	;1-	0	2-	0	-	0;	0	6,17
29	NE92646	2-	-	S	-	-	2-	0	+
30	NE93405	;	2=	2=	1	2=	2=	2=	5,24
31	NE93427	S,;	-	2-	2-	-	2-	0	5,6,24
32	WX92-0408	;1-	2=	2=	1	2=	;1-N	2=	+
33	W93-460	S	;1N,S	S	0;	;1-N,S	XN	S	10
34	T702	2-	2=	2-	2=	2=	2=	2-	Amigo
35	T834	2=	2=	2=	0	2=	2=	2=	Amigo
36	T812	2=	0;	2-	0	;	;	0	6,10.17,Amigo
37	T861	2=	2-	2=	2=	2-	2=	2=	Amigo
38	T89	2-,S	2=	2-	0;,2=	2=	2=	2=	Amigo
39	G1878	S	S	2	S	-	2	S	+

		Sr gene			
Set	I	5	21	9e	7b
Set	II	11	6	8	9g
Set	III	36	9b	30	17
Set	IV	9a	9d	10	Tmp

	Code			
B	R	R	R	R
C	R	R	R	S
D	R	R	S	R
F	R	R	S	S
G	R	S	R	R
H	R	S	R	S
J	R	S	S	R
K	R	S	S	S

	Code			
L	S	R	R	R
M	S	R	R	S
N	S	R	S	R
P	S	R	S	S
Q	S	S	R	R
R	S	S	R	S
S	S	S	S	R
T	S	S	S	S

Pgt-race code, after Roelfs & Martens - Phytopathology 78,526-533.

Table 10. Seedling leaf rust infection type for entries in the 1996 Southern Regional Performance Nursery to selected isolate of Puccinia recondita. D.V.McVey, Cereal Rust Labortory, USDA-ARS, University of Minnesota, St. Paul, MN 55108.

No.	Line	KDBM	KFBM	TFBM	MFDM	MGBM	TBGM	TCBH	TFDBM
		Infection type							
01	Kharkof	S	S	S	0	s	S	0	0;
02	Scout 66	S	S	2	0	s	S	0	0;
03	TAM-107	S	S	S	S	s	S	0	0
04	KS93U206	0	0	;	0	0;	S	0	0
05	OK91P648	2	2	S	0	;2	2	0	0
06	OK93P735	0	0	;1-	0	;1-	;1-N	0	0;
07	OK93P634	0	0	1C	0;	;1-	0	0	0
08	OK92403	0;	0	1,S	;12	0;	0;	0	0
09	TX91D6913	S	S	S	0;	0;	;1	;1N	S
10	TX91D6991	0	2	;1	0	;1	2	;12	2
11	TX92V3108	2	2C	;1-	;1C	0;	0;	0	2
11	HBI0531-A2	2	23C	21C	2	0;	0;	0;	2
12	TX93V5919	S	S	S	0;	s	S	S	S
13	TX93V5922	2	23	S,;1	0;	23	;12	23C	;
14	TX93V4927	0	23	23	2	0	0;	0	0
15	TX92V2519	0	0	S	1	0	0	0	;12
16	TXGH12588-	S	S	S	0;	s	0;	0	S
17	CO910424	S	S	S	0;	0	0;	0;	S
18	CO910748	0	0	;12	0	0	0;	1C	23
19	KS91H153-2	0	0	;1-	0;	0;	0;	0	;1
20	KS941064-3	2	S	23	0	0	0	0	12C
21	KS941064	2	2	21C	0	0	0	0	;12
22	KS941064-6	0	0	23	2C	2c	0	;1-N	2
23	KS940935--	0	0	23	1C	2	0	2	;1
24	KS940935--	0	0;	;1-C	1C	;12c	0	;1	;1-N
25	KS85W663--	0	1	;1C	S	;1-n	0	0	;1
26	KS84W063--	2N	2C	;1C	;1N	12c	0	0;	2C
27	NE90476	1C	2C	;1C	;1N	2c	0;	0	12C
28	NE92458	0;	0	-	S	s	0	0,S	2-C
29	NE92646	;1-	23	S	S	;1c	0	0,S	0;
30	NE93405	1-C	2C	1C,S	S	s	0	0;	;1
31	NE93427	0	0;	S	23	;1-n	0	0	0;
32	WX92-0408	0;	0	12C	12C	;12c	0	;1N	0;
33	W93-460	0;	0	;1C	12C	12c	0,S	;1N	0;
34	T702	0,S	S	S	23	s	0	0	S
35	T834	0,S	2	S	23	23	0	0	23
36	T812	0,S	0	S	2CN	s	0	0	2C
37	T861	0	0	0	0,S	0,s	0;	0	0
38	T89	0	0	;	21C	23	0	0;	S
39	G1878								

Set	I	1	2a	2c	3
set	II	9	16	24	26
Set	III	3ka	11	17	30
Set	IV	10	18	21	15

Table 11. Entries in the 1996 Southern Regional Performance Nursery that possess a 1RS wheat-rye translocation. Analytical methods were described in the 1993 Regional Report. Data provided by Bob Graybosch, USDA-ARS, Lincoln, NE.

C.I. OR SEL. NO.	ENTRY NO.	TRANSLOCATION
KHARKOF	1	-
SCOUT66	2	-
TAM-107	3	1AL.1RS
KS93U206	4	1AL.1RS
OK91P648	5	-
OK93P735	6	-
OK93P634	7	-
OK92403	8	1AL.1RS
TX91D6913	9	-
TX91D6991	10	-
TX92V3108	11	1AL.1RS
HBI0531-A2	12	-
TX93V5919	13	-
TX93V5922	14	-
TX93V4927	15	1AL.1RS
TX92V2519	16	1AL.1RS
TXGH12588-105	17	1AL.1RS
CO910424	18	-
CO910748	19	1AL.1RS
KS91H153-2	20	-
KS941064-3	21	-
KS941064-6	22	-
KS940935-72-1	23	-
KS94093512552	24	-
KS85W66311-6M	25	-
KS84W0639393M	26	1BL.1RS
NE90476	27	-
NE92458	28	-
NE92646	29	-
NE93405	30	1AL.1RS
NE93427	31	-
WX92-0408	32	1AL.1RS
W93-460	33	-
T702	34	1AL.1RS
T834	35	1AL.1RS
T812	36	1AL.1RS
T861	37	1AL.1RS
T89	38	1AL.1RS
G1878	39	-

Table 12. Mean coleoptile length and mean seed weight of the 39 entries in the 1996 Southern Regional Performance Nursery grown in dryland and irrigated nurseries at Bushland, TX with mean plant height of entries over all locations. Coleoptile and seed weight data provided by K. B. Porter.

Entry no.	CI or Sel. No.	Coleoptile Length				2-Site 1996 Mean Wt. 16 seed	Regional mean plant ht.
		Bushland		2-Site 1996 Mean	4-Site 1995-96 Mean		
		Dryland	Irrigated	mm		mg	cm
2	CI13996	114	117	116	114	399	84
30	NE93405	111	117	114		483	77
1	CI1442	106	109	108	107	382	90
33	W93-460	96	119	108		473	71
17	TXGH12588-105	95	98	97		445	69
34	T702	90	96	93	94	514	68
4	KS93U206	85	100	93		501	71
3	PI495594	86	97	92	91	486	70
18	CO910424	83	98	91		469	72
39	G1878	89	93	91		527	72
9	TX91D6913	85	94	90	87	419	69
20	KS91H153-2	82	95	89	89	455	67
38	T89	84	88	86		488	70
7	OK93P634	82	84	83		425	64
37	T861	80	84	82	86	462	72
6	OK93P735	74	89	82	80	418	66
13	TX93V5919	75	89	82	78	424	69
19	CO910748	76	87	82		391	72
16	TX92V2519	75	84	80	80	393	63
8	OK92403	69	90	80		405	63
25	KS85W663-11-6	75	84	80		318	68
29	NE92646	74	83	79	78	393	72
23	KS940935-7-2-1	70	86	78		410	68
31	NE93427	69	83	76		395	72
15	TX93V4927	69	83	76	73	387	63
36	T812	73	78	76	74	477	68
27	NE90476	71	78	75	74	440	72
21	KS941064-3	68	81	75		369	67
35	T834	70	79	75	74	434	74
22	KS941064-6	66	82	74		396	66
14	TX93V5922	67	81	74	74	421	68
32	WX92-0408*	68	77	73	77	372	67
24	KS940935-125-5	70	75	73		423	70
26	KS84W063-9-39	70	72	71		374	73
5	OK91P648	66	74	70	70	434	63
10	TX91D6991	67	70	69	66	381	65
12	HBI0531-A2	69	69	69	69	395	67
11	TX92V3108	62	71	67	66	386	70
28	NE92458	60	67	64	66	408	73
Mean		78	87	83	81	425	
LSD (0.05)				8	5	92	
C.V%				5	4	11	

* Hybrids were evaluated using F2 seed.

Table 12a. Correlation of coleoptile length of 1996 SRPN entries from two seed sources with mean seed weight and mean plant height over locations.

	Coleoptile length		
	Bushland Dryland	Bushland Irrigated	2-Site 1996 mean
r value - coleoptile length and weight of seed	0.48	0.38	0.41
Probability > r	0.02	0.06	0.02
r value - coleoptile length and mean plant height	0.62	0.49	0.57
Probability > r	0.0001	0.0014	0.0001

Table 13. Reaction of entries in the 1996 Southern Regional Performance Nursery to soiborne mosaic and barley yellow dwarf viruses. Data provided by Les Domier and George Gregerson, USDA-ARS, Urbana, IL.

C.I. OR SEL. NO.	ENTRY NO.	BYDV REP 1 5/2	BYDV REP 1 6/12	BYDV REP 2 5/2	BYDV REP 2 6/12	SBMV REP 1	SBMV REP 2
KHARKOF	1	WK	WK	WK	WK	WK	6
SCOUT66	2	WK	WK	P	7	6	6
TAM-107	3	WK	WK	P	8	7	6
KS93U206	4	WK	WK	WK	WK	7	2
OK91P648	5	WK	WK	WK	WK	WK	WK
OK93P735	6	WK	WK	WK	WK	WK	WK
OK93P634	7	WK	WK	WK	WK	WK	WK
OK92403	8	WK	WK	WK	WK	WK	4
TX91D6913	9	P	7	WK	WK	WK	3
TX91D6991	10	WK	WK	WK	WK	2	3
TX92V3108	11	WK	WK	WK	WK	6	5
HBI0531-A2	12	WK	WK	WK	WK	WK	WK
TX93V5919	13	WK	WK	WK	WK	WK	WK
TX93V5922	14	WK	WK	WK	WK	WK	WK
TX93V4927	15	WK	WK	WK	WK	WK	WK
TX92V2519	16	WK	WK	WK	WK	WK	WK
TXGH12588-105	17	WK	WK	WK	WK	WK	WK
CO910424	18	WK	WK	WK	WK	2	4
CO910748	19	WK	WK	WK	WK	WK	WK
KS91H153-2	20	P	8	WK	WK	6	WK
KS941064-3	21	P	7	P	7	6	3
KS941064-6	22	P	8	WK	WK	4	5
KS940935-72-1	23	P	7	P	7	1	3
KS94093512552	24	P	7	WK	WK	3	5
KS85W66311-6M	25	WK	WK	WK	WK	WK	WK
KS84W0639393M	26	WK	WK	WK	WK	3	WK
NE90476	27	P	7	P	6	6	WK
NE92458	28	WK	WK	P	7	WK	4
NE92646	29	WK	WK	WK	WK	WK	WK
NE93405	30	P	8	P	6	7	WK
NE93427	31	WK	WK	WK	WK	1	5
WX92-0408	32	WK	WK	WK	WK	6	5
W93-460	33	WK	WK	WK	WK	3	WK
T702	34	WK	WK	WK	WK	3	3
T834	35	WK	WK	WK	WK	2	2
T812	36	P	7	P	8	WK	5
T861	37	P	6	P	8	2	5
T89	38	WK	WK	WK	WK	4	2
G1878	39	WK	WK	WK	WK	1	1

WK = winterkilled; P = positive; 1 = no symptoms, 9 = plant completely dead.

Table 14. Reaction of the 1996 Southern Regional Performance Nursery to Leaf Rust, Soilborne Wheat Mosaic Virus (SBWMV), and Wheat Spindle Streak Mosaic Virus (WSSMV). Data provided by Bob Hunger & John Sherwood, Plant Pathology Dept., Oklahoma State University, Stillwater, OK.

Entry/Seln. No.		Leaf rust[x](seedling-grnhse) Rep 1	Rep 2	Rep 3	SBWMV/WSSMV reaction Visual (1-4)[x]	ELISA + sd[y] SBWMV	WSSMV
01	CI1442	S	S	S	3.2	+	+
02	CI13996	S	S	S	3.5	+	+
03	PI495594	S	S	S	3.3	+	+
04	KS93U206	SEG-R	R	R	1.8	+	+
05	OK91P648	S	S	MS	1.0	±	±
06	OK93P735	R	MS	MS	1.0	+	+
07	OK93P634	R	MR	--	1.6	+	+
08	OK92403	MS	MS	MS	1.0	-	-
09	TX91D6913	S	S	S	1.0	-	±
10	TX91D6991	S	S	S	1.0	-	+
11	TX92V3108	S	MS	MS	3.7	+	±
12	HBI0531-A2	S	S	S	3.8	+	+
13	TX93V5919	S	S	S	1.0	±	±
14	TX93V5922	S	MS	S	4.0	+	±
15	TX93V4927	MS	MS	MS	4.0	+	-
16	TX92V2519	S	MS	MS	1.6	±	-
17	TXGH12588-105	S	S	-	3.7	+	+
18	CO910424	S	MS	MS	1.0	-	+
19	CO910748	S	S	S	4.0	+	+
20	KS91H153-2	R	MS	MR	3.3	+	+
21	KS941064-3	S	MS	MS	1.0	±	+
22	KS941064-6	S	SEG-S	MS	1.0	+	+
23	KS940935-7-2-1	MS	MS	MS	1.0	-	-
24	KS940935-125-5-2	S	S	MS	1.0	±	+
25	KS85W663-11-6-MB	S	MS	S	1.0	+	-
26	KS84W963-9-39-3-MBX	SEG-R	SEG-R	SEG-R	1.0	-	-
27	NE90476	MS	MS	MS	3.8	+	+
28	NE92458	MS	S	S	1.2	±	+
29	NE92646	MS	MS	MS	1.3	±	+
30	NE93405	MR	MR	MS	3.2	+	+
31	NE93427	MS	MR	S	1.0	±	+
32	WX92-0408	MR	MR	R	1.0	±	+
33	W93-460	S	MS	S	1.0	+	-
34	T702	S	S	S	1.0	+	+
35	T834	S	S	S	1.0	+	-
36	T812	S	MS	S	3.0	+	+
37	T861	S	S	S	2.8	+	+
38	T89	SEG-R	SEG-R	SEG-R	2.0	+	+
39	G1878	S	S	S	1.0	-	+

See following page for methodology.

Table 14. Continued.

[x]Reaction to leaf rust was determined following inoculation of seedlings with a mixture of *Puccinia recondita* f. sp. *tritici* races collected in Oklahoma in 1995. The avirulence/virulence formula of this mixture of races on a set of single-gene differentials plus selected cultivars was: 9 19 26 SXL / 1 2a 2c 3 3ka 11 16 17 24 30 DNE CTY. Reactions were obtained using Stakeman's rating system (USDA Bull. #E617, 1962, 53 pp) and translated for reporting to the following scale:

S=susceptible (Stakeman's 3 3- 3+ 4 3+c)
MS=moderately susceptible (Stakeman's X3; 3= 3=c 3-c 3-n 3c 3n)
MR=moderately resistant (Stakeman's X;3= X;3- X;3=c X;3-n X;3-c 3=n)
R=resistant (Stakeman's 0 ; 1 X;3=n X;1)

[y]ELISA=enzyme linked immunosorbent assay. Values from ELISA are indicative of the presence or absence of the virus in tissue and should not be used exclusively to determine reaction (i.e., resistance or susceptibility) to SBWMV or WSSMV. For additional explanation of the use ELISA in evaluating virus reaction, see Hunger et al. 1991. Crop Science 31:900-905. Samples from three reps with 3 wells/per rep were evaluated by ELISA for SBWMV. For WSSMV, one sample (one rep) with 3 wells was evaluated. Presence of SBWMV or WSSMV based on values from ELISA are reported as follows:

- = values from ELISA indicate no virus detected;
± = values from ELISA indicate little if any virus detected;
+ = values from ELISA indicate virus detected.

[z]Three reps of each entry were rated for SBWMV/WSSMV symptoms twice in the spring. Thus, values are the average of six ratings/entry where: 1=no mosaic, no stunting; 3=moderate mosaic and/or moderate stunting; 2=slight mosaic and/or slight stunting; 4=severe mosaic and/or severe stunting.

Table 15. Hessian fly reaction, Great Plains Biotype, for entries in the 1996 Southern Regional Performance Nursery. Data provided by J.H. Hatchett, USDA-ARS, Manhattan, KS.

C.I. OR SEL. NO.	ENTRY NO.	HESSIAN FLY R-S
KHARKOF	1	S
SCOUT66	2	S
TAM-107	3	S
KS93U206	4	S
OK91P648	5	S
OK93P735	6	H
OK93P634	7	S
OK92403	8	S
TX91D6913	9	H
TX91D6991	10	S
TX92V3108	11	S
HBI0531-A2	12	S
TX93V5919	13	S
TX93V5922	14	S
TX93V4927	15	S
TX92V2519	16	S
TXGH12588-105	17	S
CO910424	18	R
CO910748	19	H
KS91H153-2	20	R
KS941064-3	21	R
KS941064-6	22	R
KS940935-72-1	23	H
KS94093512552	24	H
KS85W66311-6M	25	S
KS84W0639393M	26	S
NE90476	27	S
NE92458	28	H
NE92646	29	S
NE93405	30	S
NE93427	31	S
WX92-0408	32	H
W93-460	33	S
T702	34	S
T834	35	S
T812	36	S
T861	37	S
T89	38	S
G1878	39	S

Table 17. Acid soil tolerance of 39 lines tested in the 1996 SRPN, based on three ratings collected in the field at Enid, OK (pH_{H_2O} = 4.5; Al saturation = 32%). Data provided by Brett Carver, Oklahoma State University, Stillwater, OK.

Entry No.	Sel. No.	Rating[a] 12/1/95 (1-5)	2/22/96 (1-5)	5/14/96 (1-9)
1	Kharkof	5	4	6
2	Scout 66	4	4	6
3	TAM-107	4	4	8
4	KS93U206	-	-	-
5	OK91P648	3	2	1
6	OK93P735	5	4	7
7	OK93P634	4	4	3
8	OK92403	3	3	3
9	TX91D6913	2	2	2
10	TX91D6991	2	2	3
11	TX92V3108	2	3	4
12	HBI0531-A2	1	1	1
13	TX93V5919	4	4	5
14	TX93V5922	4	4	5
15	TX93V4927	3	3	4
16	TX92V2519	5	5	8
17	TXGH12588-105	5	5	9
18	CO910424	5	5	8
19	CO910748	2	3	3
20	KS91H153-2	4	4	9
21	KS941064-3	1	2	2
22	KS941064-6	2	2	3
23	KS940935-7-2-1	1	2	1
24	KS940935-125-5-2	1	2	1
25	KS85W663-11-6-MB	1	1	2
26	KS84W063-9-39-3-MB	2	3	2
27	NE90476	4	4	5
28	NE92458	5	5	7
29	NE92646	5	5	8
30	NE93405	5	5	8
31	NE93427	4	5	8
32	WX92-0408	2	3	3
33	W93-460	3	3	4
34	T702	3	3	3
35	T834	4	4	6
36	T812	4	4	5
37	T861	4	4	6
38	T89	5	5	7
39	G1878	3	3	3

[a] Ratings range from 1 (very tolerant) to 5 (very susceptible) or 1 to 9 (very susceptible). Ratings ≤ 2 (1-5 scale) or ≤ 3 (1-9 scale) show desirable levels of tolerance based on plant vigor and tiller production.

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Entry No.	Variety or Pedigree	Sel. No.	Source
1**	Kharkof	CI1442	Check
2**	Roughrider	CI17439	"
3**	Abilene	PI511307	"
4	Brule/Chisholm	SD89153	So. Dakota
5*	Colt/Rita	SD91192	"
6*	Brule//BNT/CSM/3/Arap	SD92107	"
7*	Brule/T105//NE82651	SD92124	"
8*	NWN/RRI	SD92174	"
9*	OK81306//SD82102/NWN	SD92191	"
10*	SD76463-16//SD82195/SD82144	SD92227	"
11*	NE82651/Redland	SD92266	"
12	Rri/ND7571//Arapahoe	ND9257	No. Dakota
13	Rri/ND7656//Arapahoe	ND9272	"
14	Rri/ND7656//Arapahoe	ND9274	"
15	MV11-85/Redland	NE92628	Nebraska
16	Redland/NE82419	NE92662	"
17*	NE82413/3/Newton sib/Agate//Sage sib	NE92652	"
18*	NE82419/Arapahoe	NE93554	"
19*	NE82419/Arapahoe	NE93613	"
20**	Quantum Hybrid Wheat	XNH1798	HybriTech
21*	" "	XNH1800	"
22	PMN 5//Froid/Bez/3/HP394/Froid ('McGuire')	MT88046	Montana
23*	Lew/Tiber//Redwin ('Rampart')	MTS92042	"
24*	A76327W-2-3T/A7457W-13-1-1T-2P	IDO467	Idaho
25*	Sumner/Posavka-2	IDO483	"
26*	Rust resistant bulk (1B/1R)	AMP3JP4A7A	Alberta
27*	" "	AMQ3KC4C7B	"
28*	" "	AMQ3NQ4A7D	"
29*	" "	AMQ3KF4B7A	"

* New Entry
** New Seed Provided

Test Site Information - NRPN

Nebraska Stations -- See information for SRPN.

South Dakota Stations -- See information for SRPN.

Casselton, ND -- The nursery was abandoned due to winterkilling.

Hettinger, ND -- No additional information.

Williston, ND -- The nursery was planted on 9/13/95 into fallow and excellent stands were obtained. Soil tests indicated 74N:34P:640K available to a depth of two feet and 50N:35 P2O5:0K (lbs/a) was applied. A total of 13.2 inches of rainfall were received during the growing season compared with the long term average of 13.3. Leaf diseases were present on lower leaves, but were not rated. There was no insect pressure. Harvested on 8/8/96.

Minnesota Stations -- The winter was very severe and long with variable snow cover. The spring was wet and cold and warm weather did not appear until the first week in June. Heading date was over two weeks later than normal at both locations. Disease was not a major factor. The Waseca data may be affected by weed pressure in winterkilled or thinned plots.

Archer, WY -- Abandoned due to hail damage.

Moccasin, MT -- Planted on 9/25/95 on fallow ground. Fertilized with 60 units N applied preplant and 50 lbs/a of 18:46:0 with the seed. Growing season precipitation was 5.66 inches compared with long term average of 8.68 inches.

Sidney, MT -- Soil moisture was good at planting. No fertilizer was applied with soil residual N of 88 lba/a. The winter was very cold with some snow cover. However, winds caused the snow cover to be uneven, resulting in winterkill, especially in the third and fourth reps. Weather was cool and wet during April and May, timely rains occurred in June, followed by hot and dry conditions during grain fill. Precipitation from September to August was 12.46 inches compared with long term average of 13.71. Harvested 8/7/96.

Bozeman, MT -- No additional information.

Loma, MT -- Stands were very uneven due to dry seedbed. The nursery was damaged by washing from several heavy rains in spring. The nursery was also severely affected by wheat stem sawfly and resulting yields likely reflect some of the sawfly damage.

Lind, WA -- Abandoned

Lethbridge, Alberta -- No additional information.

Saskatoon, Saskatchewan -- The nursery was planted about one month later than recommended. The winter was very severe and the nursery had a high level of winterkilling, in part due to the late seeding date. Winter survival ratings are the only data that could be reported.

Ames, IA -- The NRPN was planted at Ames and survived better than the SRPN, which was planted in southern Iowa at Crawfordsville. Only one entry showed significant winterkilling. There were several unusually low yielding plots in the raw data. These were considered as outliers and removed from the data, which created an unbalanced set for analyses.

Table 18. Yield and agronomic data for 29 wheats grown in the 1996 Northern Regional Performance Nursery.

SIDNEY, NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM
XNH1800	21	5050	79.3	98
NE93554	18	4627	82.6	95
NE92652	17	4572	85.1	94
AMQ3KC4C7B	27	4504	80.8	105
XNH1798	20	4378	81.7	91
SD92191	9	4316	83.2	116
SD92266	11	4270	82.7	107
AMQ3NQ4A7D	28	4247	80	108
AMQ3KF4B7A	29	4150	81.4	104
SD92107	6	4149	80.9	100
SD92174	8	4122	83.2	104
NE92628	15	3924	81	97
MTS92042	23	3907	81.4	102
ND9272	13	3904	81.3	93
AMP3JP4A7A	26	3874	82.4	108
SD89153	4	3870	83.9	100
NE93613	19	3820	80.9	90
ARAPAHOE	30	3812	81.3	91
SD92227	10	3801	81	104
IDO467	24	3756	81.8	90
NE92662	16	3754	80.6	94
SD92124	7	3718	81	98
SD91192	5	3617	81.4	93
ND9257	12	3611	80.4	100
ND9274	14	3540	80.4	100
ROUGHRIDER	2	3203	83.2	105
MT88046	22	3086	81.3	89
KHARKOF	1	3048	82.6	123
ABILENE	3	2634	83.9	85
IDO483	25	2409	82.3	76
MEAN		3856		
LSD(.05)		726		
C.V.		11.5		

HEMINGFORD

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM
IDO483	25	4846	79.1	89
NE92628	15	4588	77.7	88
XNH1798	20	4538	79.1	88
ARAPAHOE	30	4477	78.8	93
SD92227	10	4444	79.3	91
SD92191	9	4363	80.1	108
ABILENE	3	4316	82.4	81
SD92266	11	4278	79.5	91
NE92662	16	4260	76.5	89
AMQ3NQ4A7D	28	4137	76.1	97
NE93554	18	4134	78.2	89
XNH1800	21	4101	75.7	93
SD91192	5	4081	78.4	93
SD89153	4	4036	80.2	99
SD92107	6	4027	78.2	94
NE92652	17	3979	78	90
AMP3JP4A7A	26	3923	77.7	99
MT88046	22	3862	79.6	90
NE93613	19	3812	76.9	89
ND9272	13	3770	79.1	86
IDO467	24	3699	78.4	84
SD92124	7	3671	77.3	89
ND9257	12	3655	77.3	94
AMQ3KC4C7B	27	3649	76.5	93
ND9274	14	3614	79.2	86
MTS92042	23	3614	78.3	97
ROUGHRIDER	2	3577	78.6	103
SD92174	8	3534	78.4	86
AMQ3KF4B7A	29	3272	76.8	94
KHARKOF	1	3200	77.8	113
MEAN		3982		
LSD(.05)		691		
C.V.		10.6		

BROOKINGS

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	WINTER SURVIVAL %
KHARKOF	1	47
ROUGHRIDER	2	87
ABILENE	3	40
SD89153	4	50
SD91192	5	60
SD92107	6	50
SD92124	7	63
SD92174	8	57
SD92191	9	67
SD92227	10	70
SD92266	11	60
ND9257	12	70
ND9272	13	57
ND9274	14	63
NE92628	15	17
NE92662	16	23
NE92652	17	20
NE93554	18	50
NE93613	19	27
XNH1798	20	30
XNH1800	21	23
MT88046	22	17
MTS92042	23	7
IDO467	24	7
IDO483	25	0
AMP3JP4A7A	26	53
AMQ3KC4C7B	27	53
AMQ3NQ4A7D	28	33
AMQ3KF4B7A	29	60
ROSE	30	47

PIERRE

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	DAYS TO HEADING FROM 1/1	LODGING 0-9	WINTER SURVIVAL %
ND9257	12	4317	76.9	174	3	87
NE92662	16	4266	75.7	171	2.7	80
SD92227	10	4140	73.7	169	6	97
SD92191	9	3986	79.2	172	4	97
SD91192	5	3979	76.8	171	4.3	87
AMQ3KF4B7A	29	3970	76.7	175	2.7	87
ND9274	14	3954	76.6	172	3.3	93
AMP3JP4A7A	26	3896	79.2	173	4.7	87
ABILENE	3	3856	75.8	171	2.7	80
AMQ3KC4C7B	27	3782	78.1	175	2.7	77
SD89153	4	3766	79.3	171	3.7	83
SD92174	8	3735	79.3	172	5.3	100
SD92266	11	3685	78.3	172	4.7	83
NE93613	19	3616	76.9	173	4.3	83
ROSE	30	3531	78.9	171	4.3	90
SD92107	6	3414	78.2	172	3.3	93
ND9272	13	3407	76.4	173	2.7	80
AMQ3NQ4A7D	28	3363	78.1	174	1.7	87
ROUGHRIDER	2	3342	77.4	172	4.3	100
NE93554	18	3264	76.6	171	5.3	80
IDO467	24	3224	74.4	175	1.7	73
KHARKOF	1	3073	77.5	174	7	90
NE92652	17	3073	78.9	172	3.7	70
XNH1800	21	3042	75.9	174	3.7	73
SD92124	7	2959	75.4	170	4.7	93
XNH1798	20	2955	76.3	171	3	67
MT88046	22	2780	78.1	169	3	73
NE92628	15	2372	76.4	172	3.3	73
MTS92042	23	1876	78.9	174	3.7	47
IDO483	25	11	.	173	1	17
MEAN		3354				
LSD(.05)		1424				
C.V.		26.0				

WINNER

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	DAYS TO HEADING FROM 1/1	GRN LEAF DURATION 0-9
NE93554	18	4647	76	165	2.5
XNH1800	21	4506	75.8	168	1.7
SD92191	9	4311	80.6	167	3
AMQ3NQ4A7D	28	4102	75.5	171	2
NE92628	15	4069	76.8	165	3.3
NE93613	19	4044	76.7	167	3.7
SD92124	7	4032	76.8	165	3.5
ROSE	30	3983	81.1	165	1.7
MT88046	22	3977	80	162	2.7
XNH1798	20	3930	77.7	163	4.3
SD92227	10	3914	76	165	4
SD91192	5	3885	77	165	5
AMQ3KC4C7B	27	3828	77.2	170	2.8
SD92107	6	3809	79.1	167	2
SD89153	4	3773	82.1	166	2
ND9272	13	3753	75.6	167	2
NE92662	16	3746	77.7	164	4.7
NE92652	17	3744	80.6	166	5
ABILENE	3	3703	79	164	5
ROUGHRIDER	2	3694	79.6	167	2
SD92266	11	3690	78.6	166	4.3
IDO483	25	3661	76	163	3.3
SD92174	8	3515	78.7	166	2.8
ND9274	14	3486	74.2	168	3.3
AMQ3KF4B7A	29	3365	75.3	171	3.3
MTS92042	23	3336	78.3	167	3.7
AMP3JP4A7A	26	3237	77.7	169	2.7
KHARKOF	1	3120	78.3	168	2
ND9257	12	3073	74.5	170	4.7
IDO467	24	2999	72.9	169	4

MEAN	3764
LSD(.05)	634
C.V.	10.4

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 %
SD92227	10	4820	80.2	88	176	98
ARAPAHOE	30	4808	79.4	86	176	92
SEWARD	32	4808	80.3	98	179	95
ND9257	12	4724	79.4	91	178	90
AMP3JP4A7A	26	4676	79.2	89	179	93
SD92107	6	4449	79.9	91	178	96
ROUGHRIDER	2	4269	81.4	101	178	98
NE93554	18	4234	78.1	80	175	85
AMQ3KF4B7A	29	4234	75.5	89	180	93
SD92174	8	4222	81.3	96	177	95
NE93613	19	4222	77.4	84	179	90
AMQ3NQ4A7D	28	4222	74.2	88	180	93
ND9272	13	4210	79.5	84	177	91
XNH1798	20	4210	79.4	79	177	78
SD92266	11	4186	81.1	95	177	98
SD91192	5	4150	80.1	84	178	87
SD92191	9	4138	81.1	102	178	95
NE92662	16	4138	78.2	83	176	85
ELKHORN	31	4126	78.9	96	179	93
SD89153	4	3887	81.2	89	177	85
SD92124	7	3707	78	86	177	95
ND9274	14	3684	79.5	95	178	90
AMQ3KC4C7B	27	3636	75.3	88	180	83
MT88046	22	3349	78.7	81	174	88
NE92652	17	2966	78.9	77	177	67
NE92628	15	2954	76.5	77	178	63
KHARKOF	1	2918	80.5	103	178	95
XNH1800	21	2739	71.6	78	178	92
ABILENE	3	2571	78.9	63	175	67
MTS92042	23	2559	76.1	80	180	67
IDO467	24	1746	68.5	71	181	83
IDO483	25	383	70.7	59	178	13
MEAN		3748				
LSD(.05)		898				
C.V.		14.7				

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 %
ELKHORN	30	3009	78.1	74	167	73
ND9257	12	2723	77.6	64	166	68
ROUGHRIDER	2	2507	79.5	68	167	80
ND9274	14	2479	77.2	61	166	51
AMQ3KC4C7B	27	2463	76.6	77	170	33
AMQ3NQ4A7D	28	2383	77.5	72	169	36
AMQ3KF4B7A	29	2252	76.1	70	169	29
ND9272	13	2179	76.7	61	167	30
SD92227	10	2156	76.8	68	166	35
SD92174	8	2120	79.4	63	167	40
AMP3JP4A7A	26	1983	79.2	68	169	52
SD92266	11	1944	78	63	166	42
SD92191	9	1939	76.7	73	169	28
SD91192	5	1920	76.5	68	166	34
SD89153	4	1720	78.2	65	165	25
ABILENE	3	1326	79.2	52	165	18
XNH1800	21	1269	77.3	45	176	12
SD92107	6	1253	76.2	63	168	15
NE93554	18	1248	76.5	62	166	24
MT88046	22	1128	76.5	62	165	16
KHARKOF	1	1117	74.7	79	169	10
SD92124	7	1072	75.9	62	166	11
NE93613	19	1021	73.1	68	168	4
IDO467	24	857	71.4	57	180	6
NE92628	15	826	73.9	72	167	9
NE92662	16	790	75.6	59	163	17
XNH1798	20	695	77.9	22	172	9
NE92652	17	662	.	62	181	4
MTS92042	23	461	75.3	55	155	4
IDO483	25	0	.	0	151	0
MEAN		1584				
LSD(.05)		946				
C.V.		42.2				

WASECA

MINNESOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LODGING 0-5	WINTER SURVIVAL %
ND9257	12	5872	62	188	1.3	97
NE93613	19	5526	68	186	1.7	90
ND9274	14	4580	63	185	2	87
ND9272	13	4570	59	186	2	95
NE93554	18	4366	69	183	2	63
SD92266	11	4234	62	188	2	82
SD92191	9	4020	58	190	2	93
SD92124	7	3654	60	185	1.7	92
ROUGHRIDER	2	3552	59	191	2.3	97
SD92174	8	3155	60	189	2	92
XNH1798	20	2992	63	181	2	65
NE92662	16	2921	61	185	1.3	25
ABILENE	3	2890	64	178	1.7	73
SD92227	10	2870	63	184	1.7	63
SD91192	5	2839	63	184	1.7	60
AMQ3KF4B7A	29	2687	62	184	1	77
NE92628	15	2595	64	181	1.3	43
NE92652	17	2499	63	182	1.3	38
AMP3JP4A7A	26	2361	68	182	1	30
SD92107	6	2198	64	184	1.3	33
KHARKOF	1	2158	59	191	2	68
SD89153	4	1689	64	183	1	42
AMQ3KC4C7B	27	1547	69	186	2.5	9
AMQ3NQ4A7D	28	1537	69	184	1	43
MTS92042	23	1486	65	184	1	40
MT88046	22	855	66	180	1.3	27
XNH1800	21	600	64	182	2.3	47
IDO467	24	122	74	177	1	7
IDO483	25	0	71	181	1	1
MEAN		2772				
LSD(.05)		1748				
C.V.		38.6				

ROSEMOUNT, MINNESOTA

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	LODGING 0-5	WINTER SURVIVAL %	STEM RUST SEV. %	STEM RUST RESP 0-9	LEAF RUST SEV. %	LEAF RUST RESP 0-9	GRAIN PROTEIN %
SD92107	6	4483	76.8	106	167	1.3	95	0	.	5	7	14
ND9257	12	4302	74.4	102	168	1	75	1	3	20	8	13.1
SD92266	11	4193	75.9	104	167	1.7	93	1	2	60	8	13.1
AMP3JP4A7A	26	4148	75.5	109	172	1	90	0	.	1	2	13.2
SD92227	10	4013	75.1	93	167	1.3	58	1	2	60	8	13.7
SD91192	5	3999	77.1	100	167	1.3	83	1	2	1	7	12.5
NE92652	17	3963	78.4	95	167	1	88	0	.	1	2	13
SD92174	8	3958	77.3	108	169	1	85	5	8	10	7	14
ROUGHRIDER	2	3949	78.6	114	168	1.3	67	1	2	5	7	13.2
SD92191	9	3947	78	115	169	1	84	0	.	5	7	12
XNH1798	20	3850	72.4	92	166	1	93	0	.	1	2	12.8
SD92124	7	3787	74.4	102	166	1	98	0	.	1	7	13.7
ND9272	13	3770	73.3	94	169	1	93	0	.	5	7	13.6
SD89153	4	3744	77.7	105	166	1	90	0	.	5	7	12.7
AMQ3KC4C7B	27	3718	73.9	102	173	1	83	0	.	1	3	13.6
NE92662	16	3681	74.4	94	166	1	92	0	.	5	7	13.4
AMQ3KF4B7A	29	3676	75.1	99	174	1	93	0	.	1	7	13
NE93554	18	3649	72.9	92	165	1	76	0	.	1	2	12.7
MTS92042	23	3351	74.2	104	168	1.3	78	1	2	10	8	14.5
ND9274	14	3347	74.6	95	169	1	70	0	.	15	7	12.6
NE92628	15	3316	73.1	93	167	1	74	1	7	5	3	13.4
MT88046	22	3040	75.3	96	166	1	83	0	.	15	8	15.2
KHARKOF	1	2913	76.4	118	169	2.7	80	40	7	30	7	14
IDO467	24	2741	66.8	80	176	1	77	0	.	5	8	14.3
ABILENE	3	2484	75.1	76	166	1	95	0	.	0	.	13.2
NE93613	19	2474	72.9	92	170	1	68	0	.	5	7	14.1
AMQ3NQ4A7D	28	2235	74.2	99	171	1	91	0	.	1	7	13
XNH1800	21	2106	70.4	94	170	1	80	0	.	5	7	13
IDO483	25	1998	73.5	82	165	1	37	10	8	10	8	14.4
MEAN		3477										
LSD(.05)		1133										
C.V.		19.9										

SIDNEY

MONTANA

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 %
ND9274	14	2900	77.5	66	170	60
SD92266	11	2876	78.4	68	169	59
ND9257	12	2850	78.2	71	171	66
SD92174	8	2778	80	73	169	64
AMQ3NQ4A7D	28	2778	78.1	76	174	45
AMQ3KF4B7A	29	2773	76.3	73	174	49
SD92191	9	2584	80.2	71	171	49
ROUGHRIDER	2	2521	79	73	170	73
ND9272	13	2505	76.7	64	170	59
SD91192	5	2428	77.6	67	170	58
AMP3JP4A7A	26	2426	77.3	68	172	45
SD92124	7	2383	76.2	64	168	53
XNH1798	20	2308	79.2	62	168	35
SD92227	10	2246	78.3	65	169	56
SD92107	6	2166	77.2	65	170	49
SD89153	4	2129	79.5	66	169	45
KHARKOF	1	1813	79.8	79	171	48
NE93613	19	1798	76.7	69	170	36
NE92662	16	1649	77.3	58	170	37
NE92652	17	1625	81.1	60	169	30
NE93554	18	1439	78.3	61	165	48
MT88046	22	1394	77.7	58	169	34
IDO467	24	1377	76.3	59	173	21
AMQ3KC4C7B	27	1323	75.4	71	174	33
XNH1800	21	972	77.7	60	172	17
NE92628	15	909	78	66	168	19
ABILENE	3	682	81.3	52	168	28
MTS92042	23	541	76.4	62	172	8
IDO483	25	0	.	52	168	1
MEAN		1937				
LSD(.05)		999				
C.V.		36.5				

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
ND9257	12	2634	72.9	79	175
KHARKOF	1	2483	77.1	91	176
AMQ3NQ4A7D	28	2404	74.2	72	179
NE92652	17	2382	78.2	69	175
SD89153	4	2272	77.7	62	175
XNH1800	21	2246	72.6	69	176
NE92662	16	2234	72.2	62	171
ND9272	13	2233	73.6	69	176
SD92124	7	2181	74.1	59	171
IDO467	24	2158	72.4	61	178
ND9274	14	2150	73.4	64	175
ROUGHRIDER	2	2111	78	70	176
XNH1798	20	2107	74.3	65	173
NE93554	18	2095	74.6	64	171
MT88046	22	2087	74.9	71	171
AMP3JP4A7A	26	2059	76.8	62	179
SD92266	11	2056	74.9	65	175
SD92191	9	2041	76.4	70	176
AMQ3KF4B7A	29	2036	74	69	179
SD92107	6	2024	74.3	69	175
SD92174	8	1996	76.5	70	175
NE93613	19	1981	74.1	64	176
ABILENE	3	1955	78.9	50	171
AMQ3KC4C7B	27	1786	74	68	178
SD91192	5	1752	75.3	66	175
SD92227	10	1696	75.1	59	171
MTS92042	23	1446	75.6	70	177
NE92628	15	1410	73	63	175
IDO483	25	713	72.4	64	178
MEAN		2025			
LSD(.05)		614			
C.V.		18.6			

BOZEMAN

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
AMQ3NQ4A7D	28	5586	77.5	91	180
IDO467	24	5461	76.9	81	177
SD92107	6	5349	79.3	97	175
XNH1798	20	5308	77.7	85	170
ND9274	14	5237	78	89	174
NE92652	17	5185	81.1	86	170
XNH1800	21	5183	78.1	81	175
SD89153	4	5145	81	93	173
NE92662	16	5084	75.8	88	170
IDO483	25	5019	79.9	75	170
SD92227	10	4981	77.8	90	171
ND9272	13	4970	78.2	87	174
NE92628	15	4970	76.6	88	169
ND9257	12	4943	78.4	97	175
SD92191	9	4920	81.2	100	177
SD92266	11	4896	79.8	95	172
MTS92042	23	4831	79.9	95	175
NE93554	18	4788	76.5	80	169
AMP3JP4A7A	26	4770	78	94	181
SD91192	5	4768	79.7	89	174
AMQ3KF4B7A	29	4712	78.1	89	180
NE93613	19	4622	77.7	88	176
SD92124	7	4620	76.7	87	171
SD92174	8	4620	80.8	98	175
ABILENE	3	4539	80.2	70	170
AMQ3KC4C7B	27	4369	77.1	94	180
MT88046	22	4214	79.3	89	169
KHARKOF	1	3959	80.3	107	178
ROUGHRIDER	2	3903	80.5	104	178
MEAN		4860			
LSD(.05)		512			
C.V.		6.4			

LOMA

MONTANA

FOUR REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	DAYS TO HEADING FROM 1/1
AMQ3NQ4A7D	28	3490	174
NE92628	15	3472	169
XNH1800	21	3277	172
MT88046	22	3274	.
AMP3JP4A7A	26	3260	175
SD92227	10	3186	171
XNH1798	20	3111	171
SD91192	5	3064	171
SD92174	8	2979	172
ND9257	12	2976	172
ROUGHRIDER	2	2911	176
NE92662	16	2909	169
KHARKOF	1	2901	176
SD92266	11	2900	172
ABILENE	3	2894	.
AMQ3KF4B7A	29	2881	177
IDO467	24	2879	174
AMQ3KC4C7B	27	2861	176
IDO483	25	2832	170
ND9272	13	2823	173
ND9274	14	2759	172
NE93554	18	2735	170
SD89153	4	2635	172
SD92191	9	2613	171
NE92652	17	2607	169
MTS92042	23	2586	172
NE93613	19	2571	171
SD92107	6	2475	172
SD92124	7	2468	172
MEAN		2908	
LSD(.05)		N.S.	
C.V.		17.8	

LETHBRIDGE

ALBERTA

FOUR REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LODGING 0-9
AMQ3NQ4A7D	28	3321	66	169	2
AMQ3KF4B7A	29	3210	67	169	2
XNH1800	21	3098	62	166	2.8
AMQ3KC4C7B	27	2835	65	169	3
SD92191	9	2782	72	167	2
XNH1798	20	2595	63	165	2
AMP3JP4A7A	26	2592	65	169	2
IDO467	24	2540	60	169	1.8
READYMADE	30	2524	68	168	2
SD92174	8	2439	68	167	2
SD89153	4	2391	67	165	2
KHARKOF	1	2230	77	167	2.3
ND9274	14	2198	63	166	2.3
SD92107	6	2165	66	166	2
NE93554	18	2162	62	164	2
NE93613	19	2136	67	166	2
SD92124	7	2135	63	164	2
ND9272	13	2004	60	166	2.5
SD91192	5	2000	65	166	2
NE92652	17	1989	61	165	2
NE92662	16	1964	67	164	2
SD92227	10	1946	62	164	2
MT88046	22	1930	67	164	2
MTS92042	23	1910	65	167	2
IDO483	25	1909	57	166	2
ROUGHRIDER	2	1855	67	168	2
ND9257	12	1810	66	167	2
NE92628	15	1676	66	164	2
SD92266	11	1574	65	164	2
ABILENE	3	1371	53	164	2

MEAN	2243
LSD(.05)	318
C.V.	10.0

SASKATOON

SASKATCHEWAN

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	WINTER SURVIVAL %
KHARKOF	1	53
ROUGHRIDER	2	71
ABILENE	3	38
SD89153	4	34
SD91192	5	62
SD92107	6	50
SD92124	7	29
SD92174	8	47
SD92191	9	41
SD92227	10	33
SD92266	11	55
ND9257	12	29
ND9272	13	71
ND9274	14	58
NE92628	15	42
NE92662	16	50
NE92652	17	33
NE93554	18	31
NE93613	19	66
XNH1798	20	45
XNH1800	21	31
MT88046	22	17
MTS92042	23	6
IDO467	24	62
IDO483	25	27
AMP3JP4A7A	26	81
AMQ3KC4C7B	27	85
AMQ3NQ4A7D	28	67
AMQ3KF4B7A	29	59
KESTREL	30	100
CLAIR	31	98
OSPREY	32	88

AMES

IOWA

TWO 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 %	LEAF RUST SEVERITY 0-9
SD92266	11	4566	75.7	94	158	100	4
ND9257	12	4479	75.7	70	161	100	1
NE93613	19	4391	72.1	93	159	98	5
ND9272	13	4284	73.1	84	160	100	6
SD92174	8	4243	74.7	89	159	100	7
NE92628	15	4227	73.6	91	157	95	2
ND9274	14	4163	71.3	82	158	100	6
SD92191	9	4153	73.8	87	160	100	4
XNH1798	20	4102	73	84	156	100	2
AMP3JP4A7A	26	4062	72.9	92	161	100	2
SD92107	6	4032	72.8	97	158	100	2
NE92662	16	4015	70.7	85	158	100	1
MTS92042	23	3931	74.2	92	159	100	7
SD91192	5	3904	74.1	82	158	98	6
NE92652	17	3840	72.8	92	157	95	2
NE93554	18	3840	73.9	85	156	98	3
SD92124	7	3837	70.6	89	156	100	2
SD92227	10	3810	73.7	81	157	100	2
ROUGHRIDER	2	3800	72	88	158	100	4
ABILENE	3	3672	74.4	94	156	100	4
MT88046	22	3638	70	84	155	100	5
SD89153	4	3480	71.3	78	158	100	7
KHARKOF	1	3379	67.1	114	161	100	7
AMQ3KC4C7B	27	3265	69.1	91	163	98	4
XNH1800	21	3114	67	88	161	100	9
AMQ3KF4B7A	29	3087	63.2	86	166	100	3
AMQ3NQ4A7D	28	3050	71.6	92	164	100	2
IDO467	24	2865	60.5	92	165	95	7
IDO483	25	2798	69.8	102	158	70	7
MEAN		3794					
LSD(.05)		.					
C.V.		.					

Table 19. Summary of mean yields (kg/ha) of 29 wheats grown in the 1996 Northern Regional Performance Nursery at 14 locations with state means and ranks.

VARIETY OR PEDIGREE	C.I. OR SEL. NO.	ENTRY NO.	PIERRE S. DAKOTA		WINNER S. DAKOTA		SOUTH DAKOTA STATE MEAN	
Rri/ND7571//Arapahoe	ND9257	12	4317	1	3073	28	3695	13
OK81306//SD82102/NWN	SD92191	9	3986	4	4311	3	4148	1
Rri/ND7656//Arapahoe	ND9274	14	3954	7	3486	23	3720	12
NE82651/Redland	SD92266	11	3685	13	3690	20	3688	14
Rri/ND7656//Arapahoe	ND9272	13	3407	16	3753	15	3580	18
SD76463-16//SD82195/SD82144	SD92227	10	4140	3	3914	10	4027	2
Rust resistant bulk (1B/1R)	AMQ3KF4B7A	29	3970	6	3365	24	3667	15
NWN/RRI	SD92174	8	3735	12	3515	22	3625	16
Rust resistant bulk (1B/1R)	AMP3JP4A7A	26	3896	8	3237	26	3566	19
Rust resistant bulk (1B/1R)	AMQ3NQ4A7D	28	3363	17	4102	4	3732	11
NE82419/Arapahoe	NE93554	18	3264	19	4647	1	3955	4
Colt/Rita	SD91192	5	3979	5	3885	11	3932	5
Quantum Hybrid Wheat	XNH1798	20	2955	25	3930	9	3442	22
Brule//BNT/CSM/3/Arap	SD92107	6	3414	15	3809	13	3611	17
Roughrider	ROUGHRIDER	2	3342	18	3694	19	3518	20
NE82419/Arapahoe	NE93613	19	3616	14	4044	6	3830	6
Redland/NE82419	NE92662	16	4266	2	3746	16	4006	3
Brule/Chisholm	SD89153	4	3766	11	3773	14	3769	10
Brule/T105//NE82651	SD92124	7	2959	24	4032	7	3495	21
Rust resistant bulk (1B/1R)	AMQ3KC4C7B	27	3782	10	3828	12	3805	7
NE82413/3/Newton sib/Agate//Sage sib	NE92652	17	3073	21	3744	17	3408	23
Quantum Hybrid Wheat	XNH1800	21	3042	23	4506	2	3774	9
Abilene	ABILENE	3	3856	9	3703	18	3779	8
MV11-85/Redland	NE92628	15	2372	27	4069	5	3220	25
Kharkof	KHARKOF	1	3073	21	3120	27	3097	27
PMN 5//Froid/Bez/3/HP394/Froid	MT88046	22	2780	26	3977	8	3378	24
A76327W-2-3T/A7457W-13-1-1T-2P	IDO467	24	3224	20	2999	29	3111	26
Lew/Tiber//Redwin	MTS92042	23	1876	28	3336	25	2606	28
Sumner/Posavka-2	IDO483	25	11	29	3661	21	1836	29
	MEAN		3348		3757		3553	
	LSD(.05)		1432		638		N.S.	
	C.V.		26.2		10.4		19.2	

Table 19. Continued.

C.I. OR SEL. NO.	ENTRY NO.	WASECA MINNESOTA		ROSEMOUNT MINNESOTA		MINNESOTA STATE MEAN		WILLISTON N. DAKOTA		HETTINGER N. DAKOTA		NORTH DAKOTA STATE MEAN	
ND9257	12	5872	1	4302	2	5087	1	2723	1	4724	2	3723	1
SD92191	9	4020	7	3947	10	3984	6	1939	12	4138	16	3039	12
ND9274	14	4580	3	3347	20	3964	7	2479	3	3684	19	3081	9
SD92266	11	4234	6	4193	3	4213	2	1944	11	4186	13	3065	10
ND9272	13	4570	4	3770	13	4170	3	2179	7	4210	12	3194	7
SD92227	10	2870	14	4013	5	3442	11	2156	8	4820	1	3488	2
AMQ3KF4B7A	29	2687	16	3676	17	3181	18	2252	6	4234	6	3243	6
SD92174	8	3155	10	3958	8	3557	10	2120	9	4222	8	3171	8
AMP3JP4A7A	26	2361	19	4148	4	3254	16	1983	10	4676	3	3330	4
AMQ3NQ4A7D	28	1537	24	2235	27	1886	26	2383	5	4222	8	3302	5
NE93554	18	4366	5	3649	18	4007	4	1248	18	4234	6	2741	16
SD91192	5	2839	15	3999	6	3419	13	1920	13	4150	14	3035	13
XNH1798	20	2992	11	3850	11	3421	12	695	26	4210	11	2452	19
SD92107	6	2198	20	4483	1	3341	14	1253	17	4449	4	2851	14
ROUGHRIDER	2	3552	9	3949	9	3751	8	2507	2	4269	5	3388	3
NE93613	19	5526	2	2474	26	4000	5	1021	22	4222	10	2621	17
NE92662	16	2921	12	3681	16	3301	15	790	25	4138	15	2464	18
SD89153	4	1689	22	3744	14	2717	20	1720	14	3887	17	2803	15
SD92124	7	3654	8	3787	12	3720	9	1072	21	3707	18	2390	20
AMQ3KC4C7B	27	1547	23	3718	15	2633	22	2463	4	3636	20	3049	11
NE92652	17	2499	18	3963	7	3231	17	662	27	2966	22	1814	26
XNH1800	21	600	27	2106	28	1353	28	1269	16	2739	25	2004	23
ABILENE	3	2890	13	2484	25	2687	21	1326	15	2571	26	1948	24
NE92628	15	2595	17	3316	21	2956	19	826	24	2954	23	1890	25
KHARKOF	1	2158	21	2913	23	2536	23	1117	20	2918	24	2017	22
MT88046	22	855	26	3040	22	1948	25	1128	19	3349	21	2238	21
IDO467	24	122	28	2741	24	1431	27	857	23	1746	28	1302	28
MTS92042	23	1486	25	3351	19	2418	24	461	28	2559	27	1510	27
IDO483	25	0	29	1998	29	999	29	0	29	383	29	191	29
MEAN		2772		3477		3124		1534		3662		2598	
LSD(.05)		1748		1133		1904		959		915		1060	
C.V.		38.6		19.9		28.9		44.2		15.3		25.9	

Table 19. Continued.

C.I. OR SEL. NO.	ENTRY NO.	SIDNEY MONTANA		MOCCASIN MONTANA		BOZEMAN MONTANA		LOMA* MONTANA		MONTANA STATE MEAN	
ND9257	12	2850	3	2634	1	4943	14	2976	10	3476	2
SD92191	9	2584	7	2041	18	4920	15	2613	24	3182	8
ND9274	14	2900	1	2150	11	5237	5	2759	21	3429	3
SD92266	11	2876	2	2056	17	4896	16	2900	14	3276	4
ND9272	13	2505	9	2233	8	4970	12	2823	20	3236	6
SD92227	10	2246	14	1696	26	4981	11	3186	6	2974	18
AMQ3KF4B7A	29	2773	6	2036	19	4712	21	2881	16	3174	10
SD92174	8	2778	4	1996	21	4620	23	2979	9	3131	11
AMP3JP4A7A	26	2426	11	2059	16	4770	19	3260	5	3085	12
AMQ3NQ4A7D	28	2778	4	2404	3	5586	1	3490	1	3589	1
NE93554	18	1439	21	2095	14	4788	18	2735	22	2774	22
SD91192	5	2428	10	1752	25	4768	20	3064	8	2983	17
XNH1798	20	2308	13	2107	13	5308	4	3111	7	3241	5
SD92107	6	2166	15	2024	20	5349	3	2475	28	3180	9
ROUGHRIDER	2	2521	8	2111	12	3903	29	2911	11	2845	19
NE93613	19	1798	18	1981	22	4622	22	2571	27	2801	20
NE92662	16	1649	19	2234	7	5084	9	2909	12	2989	16
SD89153	4	2129	16	2272	5	5145	8	2635	23	3182	7
SD92124	7	2383	12	2181	9	4620	24	2468	29	3062	14
AMQ3KC4C7B	27	1323	24	1786	24	4369	26	2861	18	2493	25
NE92652	17	1625	20	2382	4	5185	6	2607	25	3064	13
XNH1800	21	972	25	2246	6	5183	7	3277	3	2800	21
ABILENE	3	682	27	1955	23	4539	25	2894	15	2392	27
NE92628	15	909	26	1410	28	4970	13	3472	2	2430	26
KHARKOF	1	1813	17	2483	2	3959	28	2901	13	2751	23
MT88046	22	1394	22	2087	15	4214	27	3274	4	2565	24
IDO467	24	1377	23	2158	10	5461	2	2879	17	2999	15
MTS92042	23	541	28	1446	27	4831	17	2586	26	2273	28
IDO483	25	0	29	713	29	5019	10	2832	19	1911	29
MEAN		1937		2025		4860		2908		2933	
LSD(.05)		999		614		512		N.S.		819	
C.V.		36.5		18.6		6.4		17.8		18.7	

* Not included in state or regional means.

Table 19. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	SIDNEY* NEBRASKA		HEMING-FORD NEBRASKA		AMES * IOWA		LETHBRIDGE ALBERTA		REGIONAL AVERAGE	
ND9257	12	3611	23	3655	22	4479	2	1810	26	3718	1
SD92191	9	4316	6	4363	5	4153	8	2782	5	3548	2
ND9274	14	3540	24	3614	24	4163	7	2198	12	3421	3
SD92266	11	4270	7	4278	7	4566	1	1574	28	3419	4
ND9272	13	3904	14	3770	19	4284	4	2004	17	3397	5
SD92227	10	3801	18	4444	4	3810	18	1946	21	3384	6
AMQ3KF4B7A	29	4150	9	3272	28	3087	26	3210	2	3290	7
SD92174	8	4122	11	3534	27	4243	5	2439	9	3279	8
AMP3JP4A7A	26	3874	15	3923	16	4062	10	2592	7	3279	9
AMQ3NQ4A7D	28	4247	8	4137	9	3050	27	3321	1	3279	10
NE93554	18	4627	2	4134	10	3840	15	2162	14	3275	11
SD91192	5	3617	22	4081	12	3904	14	2000	18	3255	12
XNH1798	20	4378	5	4538	3	4102	9	2595	6	3226	13
SD92107	6	4149	10	4027	14	4032	11	2165	13	3212	14
ROUGHRIDER	2	3203	25	3577	26	3800	19	1855	25	3207	15
NE93613	19	3820	17	3812	18	4391	3	2136	15	3205	16
NE92662	16	3754	20	4260	8	4015	12	1964	20	3158	17
SD89153	4	3870	16	4036	13	3480	22	2391	10	3141	18
SD92124	7	3718	21	3671	21	3837	17	2135	16	3109	19
AMQ3KC4C7B	27	4504	4	3649	23	3265	24	2835	4	2994	20
NE92652	17	4572	3	3979	15	3840	15	1989	19	2915	21
XNH1800	21	5050	1	4101	11	3114	25	3098	3	2715	22
ABILENE	3	2634	28	4316	6	3672	20	1371	29	2699	23
NE92628	15	3924	12	4588	2	4227	6	1676	27	2699	24
KHARKOF	1	3048	27	3200	29	3379	23	2230	11	2635	25
MT88046	22	3086	26	3862	17	3638	21	1930	22	2601	26
IDO467	24	3756	19	3699	20	2865	28	2540	8	2448	27
MTS92042	23	3907	13	3614	24	3931	13	1910	23	2310	28
IDO483	25	2409	29	4846	1	2798	29	1909	24	1685	29
MEAN		3857		3965		3794		2233		3052	
LSD(.05)		729		702		.		322		548	
C.V.		11.6		10.8		.		10.2		21.0	

* Not included in state or regional means.

Table 20. Summary of mean yields (kg/ha) and ranks of 29 wheats grown in the 1996 Northern Regional Performance Nursery at 5 locations for which a CV of 15.5 or less and a significant F test for entries were obtained.

C.I. OR SEL. NO.	ENTRY NO.	HEMINGFORD NEBRASKA		WINNER S. DAKOTA		BOZEMAN MONTANA		HETTINGER N. DAKOTA		LETHBRIDGE ALBERTA		REGIONAL AVERAGE	
AMQ3NQ4A7D	28	4137	9	4102	4	5586	1	4222	8	3321	1	4274	1
XNH1798	20	4538	3	3930	9	5308	4	4210	11	2595	6	4116	2
SD92191	9	4363	5	4311	3	4920	15	4138	16	2782	5	4103	3
SD92227	10	4444	4	3914	10	4981	11	4820	1	1946	21	4021	4
NE93554	18	4134	10	4647	1	4788	18	4234	6	2162	14	3993	5
SD92107	6	4027	14	3809	13	5349	3	4449	4	2165	13	3960	6
XNH1800	21	4101	11	4506	2	5183	7	2739	25	3098	3	3925	7
SD89153	4	4036	13	3773	14	5145	8	3887	17	2391	10	3846	8
AMP3JP4A7A	26	3923	16	3237	26	4770	19	4676	3	2592	7	3840	9
NE92662	16	4260	8	3746	16	5084	9	4138	15	1964	20	3839	10
SD91192	5	4081	12	3885	11	4768	20	4150	14	2000	18	3777	11
NE93613	19	3812	18	4044	6	4622	22	4222	10	2136	15	3767	12
AMQ3KF4B7A	29	3272	28	3365	24	4712	21	4234	6	3210	2	3758	13
ND9272	13	3770	19	3753	15	4970	12	4210	12	2004	17	3741	14
SD92266	11	4278	7	3690	20	4896	16	4186	13	1574	28	3725	15
SD92174	8	3534	27	3515	22	4620	23	4222	8	2439	9	3666	16
AMQ3KC4C7B	27	3649	23	3828	12	4369	26	3636	20	2835	4	3663	17
NE92628	15	4588	2	4069	5	4970	13	2954	23	1676	27	3651	18
ND9274	14	3614	24	3486	23	5237	5	3684	19	2198	12	3644	19
ND9257	12	3655	22	3073	28	4943	14	4724	2	1810	26	3641	20
SD92124	7	3671	21	4032	7	4620	24	3707	18	2135	16	3633	21
NE92652	17	3979	15	3744	17	5185	6	2966	22	1989	19	3572	22
MT88046	22	3862	17	3977	8	4214	27	3349	21	1930	22	3466	23
ROUGHRIDER	2	3577	26	3694	19	3903	29	4269	5	1855	25	3460	24
ABILENE	3	4316	6	3703	18	4539	25	2571	26	1371	29	3300	25
IDO467	24	3699	20	2999	29	5461	2	1746	28	2540	8	3289	26
MTS92042	23	3614	24	3336	25	4831	17	2559	27	1910	23	3250	27
IDO483	25	4846	1	3661	21	5019	10	383	29	1909	24	3163	28
KHARKOF	1	3200	29	3120	27	3959	28	2918	24	2230	11	3085	29
MEAN		3965		3757		4860		3662		2233		3695	
LSD(.05)		702		638		512		915		322		N.S.	
C.V.		10.8		10.4		6.4		15.3		10.2		10.8	

Table 21. Summary of mean yields (kg/ha) and ranks of 29 wheats grown in the 1996 Northern Regional Performance Nursery for 5 intra-regional production zones (after Peterson, 1992).

C.I. OR SEL. NO.	ENTRY NO.	NORTH-CENTRAL PLAINS		NORTHERN HIGH PLAINS		NORTHERN PLAINS		NORTH-WEST PLAINS		NORTH-WEST		REGIONAL AVERAGE	
NUMBER OF LOCATIONS		3		1		1		3		3		11	
ND9257	12	4416	1	3655	22	4724	2	3297	1	3129	12	3718	1
SD92191	9	4093	3	4363	5	4138	16	2836	7	3248	7	3548	2
ND9274	14	3804	8	3614	24	3684	19	3111	2	3195	8	3421	3
SD92266	11	4039	4	4278	7	4186	13	2835	8	2842	22	3419	4
ND9272	13	4031	5	3770	19	4210	12	2697	12	3069	14	3397	5
SD92227	10	3599	10	4444	4	4820	1	2848	5	2874	21	3384	6
AMQ3KF4B7A	29	3242	19	3272	28	4234	6	2999	3	3319	5	3290	7
SD92174	8	3543	13	3534	27	4222	8	2878	4	3018	15	3279	8
AMP3JP4A7A	26	3249	18	3923	16	4676	3	2768	11	3140	11	3279	9
AMQ3NQ4A7D	28	2625	25	4137	9	4222	8	2841	6	3770	1	3279	10
NE93554	18	4221	2	4134	10	4234	6	1984	21	3015	16	3275	11
SD91192	5	3574	12	4081	12	4150	14	2776	10	2840	23	3255	12
XNH1798	20	3590	11	4538	3	4210	11	1986	20	3337	4	3226	13
SD92107	6	3497	14	4027	14	4449	4	2278	15	3179	10	3212	14
ROUGHRIDER	2	3732	9	3577	26	4269	5	2790	9	2623	27	3207	15
NE93613	19	4015	6	3812	18	4222	10	2145	17	2913	19	3205	16
NE92662	16	3449	15	4260	8	4138	15	2235	16	3094	13	3158	17
SD89153	4	3069	20	4036	13	3887	17	2538	13	3269	6	3141	18
SD92124	7	3824	7	3671	21	3707	18	2138	18	2979	18	3109	19
AMQ3KC4C7B	27	3031	21	3649	23	3636	20	2523	14	2997	17	2994	20
NE92652	17	3402	16	3979	15	2966	22	1787	24	3185	9	2915	21
XNH1800	21	2404	27	4101	11	2739	25	1761	26	3509	2	2715	22
ABILENE	3	3026	22	4316	6	2571	26	1954	22	2622	28	2699	23
NE92628	15	3327	17	4588	2	2954	23	1369	27	2685	26	2699	24
KHARKOF	1	2730	23	3200	29	2918	24	2001	19	2890	20	2635	25
MT88046	22	2624	26	3862	17	3349	21	1767	25	2744	24	2601	26
IDO467	24	1954	28	3699	20	1746	28	1819	23	3386	3	2448	27
MTS92042	23	2724	24	3614	24	2559	27	959	28	2729	25	2310	28
IDO483	25	1886	29	4846	1	383	29	4	29	2547	29	1685	29
MEAN		3335		3965		3662		2273		3040		3052	
LSD(.05)		N.S.		702		915		701		614		548	
C.V.		23.1		10.8		15.3		34.1		10.2		21.0	

Table 22. Summary of mean yields (kg/ha) and ranks for 11 wheats grown in the Northern Regional Performance Nursery at 11 locations in 1995 and 1996 with state means and ranks.

VARIETY OR PEDIGREE	C.I. OR SEL. NO.	ENTRY NO.	PIERRE S. DAKOTA		WINNER S. DAKOTA		SOUTH DAKOTA STATE MEAN	
Rri/ND7571//Arapahoe	ND9257	12	3499	3	2663	9	3081	6
Rri/ND7656//Arapahoe	ND9272	13	3128	7	3078	5	3103	5
Quantum Hybrid Wheat	XNH1798	20	2383	10	3597	2	2990	8
Rri/ND7656//Arapahoe	ND9274	14	3139	6	2948	7	3044	7
Redland/NE82419	NE92662	16	3839	1	3573	3	3706	1
Brule/Chisholm	SD89153	4	3398	4	3054	6	3226	4
MV11-85/Redland	NE92628	15	3156	5	3819	1	3487	3
ABILENE	ABILENE	3	3543	2	3479	4	3511	2
ROUGHRIDER	ROUGHRIDER	2	2396	9	2271	11	2334	11
PMN 5//Froid/Bez/3/HP394/Froid	MT88046	22	2912	8	2928	8	2920	9
KHARKOF	KHARKOF	1	2353	11	2385	10	2369	10
	MEAN		3068		3072		3070	
	LSD(.05)		N.S.		N.S.		N.S.	
	C.V.		22.6		11.6		18.0	

Table 22. Continued.

C.I. OR SEL. NO.	ENTRY NO.	SIDNEY MONTANA		MOCCASIN MONTANA		BOZEMAN MONTANA		MONTANA STATE MEAN		WILLISTON N. DAKOTA		HETTINGER N. DAKOTA		NORTH DAKOTA STATE MEAN	
ND9257	12	3568	1	2915	2	5927	7	4137	2	2787	1	4243	2	3515	1
ND9272	13	3416	3	2823	3	5796	9	4012	4	2381	4	4084	4	3232	2
XNH1798	20	3235	5	2957	1	7075	1	4422	1	1718	7	4155	3	2937	7
ND9274	14	3450	2	2539	6	6177	5	4055	3	2531	2	3853	6	3192	3
NE92662	16	3017	7	2332	9	6626	2	3992	6	1706	8	4391	1	3048	5
SD89153	4	3055	6	2777	4	6186	3	4006	5	2007	6	4026	5	3017	6
NE92628	15	2471	10	1958	11	6178	4	3536	9	1701	9	3853	7	2777	8
ABILENE	3	2396	11	2380	8	6007	6	3594	8	2095	5	2694	11	2394	10
ROUGHRIDER	2	3246	4	2132	10	4991	10	3456	10	2529	3	3673	8	3101	4
MT88046	22	2500	9	2605	5	5908	8	3671	7	1685	10	3392	9	2539	9
KHARKOF	1	2628	8	2436	7	4654	11	3239	11	1571	11	3003	10	2287	11
MEAN		2998		2532		5957		3829		2064		3761		2913	
LSD(.05)		N.S.		N.S.		1136		N.S.		N.S.		N.S.		N.S.	
C.V.		19.3		20.2		7.0		13.8		20.2		17.0		18.6	

Table 22. Concluded.

C.I. OR SEL. NO.	ENTRY NO.	WASECA MINNESOTA		ROSEMOUNT MINNESOTA		MINNESOTA STATE MEAN		SIDNEY* NEBRASKA		LETHBRIDGE ALBERTA		REGIONAL AVERAGE	
ND9257	12	4963	1	4209	1	4586	1	4405	5	2828	6	3760	1
ND9272	13	4292	2	4196	3	4244	2	4672	4	3406	4	3660	2
XNH1798	20	3560	7	4042	4	3801	5	5386	1	3652	1	3637	3
ND9274	14	4260	3	3816	7	4038	3	4240	7	3521	3	3623	4
NE92662	16	3728	4	4207	2	3967	4	5061	2	2810	8	3623	5
SD89153	4	2697	9	3867	5	3282	9	4255	6	3525	2	3459	6
NE92628	15	3728	5	3827	6	3777	6	4716	3	2512	11	3320	7
ABILENE	3	3440	8	3128	10	3284	8	3961	9	2641	9	3180	8
ROUGHRIDER	2	3718	6	3723	8	3720	7	3199	10	2609	10	3129	9
MT88046	22	2412	11	3493	9	2953	10	4023	8	2817	7	3065	10
KHARKOF	1	2508	10	2849	11	2678	11	2572	11	2875	5	2726	11
MEAN		3573		3760		3666		4226		3018		3380	
LSD(.05)		N.S.		N.S.		N.S.		N.S.		N.S.		N.S.	
C.V.		23.0		14.7		19.1		11.7		13.5		16.5	

* Not included in state or regional means.

Table 23. Mean yield, regression coefficient, coefficient of determination, and mean square deviations from regression from linear regression analysis of variety mean yield on nursery mean yield for the 29 entries in the 1996 Northern Regional Performance Nursery grown at 11 locations.

C.I. OR SEL. NO.	ENTRY NO.	REGIONAL AVERAGE KG/HA	REGRESSION COEFFICIENT (b)	COEFFICIENT OF DETERMINATION (r2)	DEVIATIONS FROM REGRESSION (MEAN SQUARE)
ND9257	12	3718	0.69	0.34	1090385
SD92191	9	3548	0.94	0.90	113274
ND9274	14	3421	0.73	0.61	398692
SD92266	11	3419	0.95	0.75	346143
ND9272	13	3397	0.84	0.72	326381
SD92227	10	3384	1.11	0.88	206368
AMQ3KF4B7A	29	3290	0.68	0.72	210149
SD92174	8	3279	0.77	0.85	124303
AMP3JP4A7A	26	3279	0.91	0.80	238307
AMQ3NQ4A7D	28	3279	0.85	0.56	665915
NE93554	18	3275	1.15	0.81	365501
SD91192	5	3255	1.01	0.91	113027
XNH1798	20	3226	1.21	0.92	152287
SD92107	6	3212	1.22	0.91	173913
ROUGHRIDER	2	3207	0.65	0.68	240289
NE93613	19	3205	0.99	0.53	1019779
NE92662	16	3158	1.26	0.93	132887
SD89153	4	3141	1.04	0.88	178743
SD92124	7	3109	0.94	0.85	180534
AMQ3KC4C7B	27	2994	0.85	0.69	387726
NE92652	17	2915	1.18	0.91	164831
XNH1800	21	2715	1.11	0.60	960527
ABILENE	3	2699	1.12	0.79	392933
NE92628	15	2699	1.34	0.92	187819
KHARKOF	1	2635	0.71	0.88	79988
MT88046	22	2601	1.03	0.78	342080
IDO467	24	2448	1.08	0.57	1006689
MTS92042	23	2310	1.24	0.88	246288
IDO483	25	1685	1.40	0.53	2026007

Table 24. Mean yield, regression coefficient, coefficient of determination, and mean square deviations from regression from linear regression analysis of variety mean yield on nursery mean yield for the 11 entries in the 1995 and 1996 Northern Regional Performance Nursery grown at 10 locations.

C.I. OR SEL. NO.	ENTRY NO.	REGIONAL AVERAGE KG/HA	REGRESSION COEFFICIENT (b)	COEFFICIENT OF DETERMINATION (r2)	DEVIATIONS FROM REGRESSION (MEAN SQUARE)
ND9257	12	3760	0.84	0.69	516178
ND9272	13	3660	0.90	0.89	156404
XNH1798	20	3637	1.27	0.91	248083
ND9274	14	3623	0.93	0.87	213611
NE92662	16	3623	1.22	0.92	202039
SD89153	4	3459	1.01	0.89	196042
NE92628	15	3320	1.14	0.81	513239
ABILENE	3	3180	1.07	0.85	334348
ROUGHRIDER	2	3129	0.80	0.72	407744
MT88046	22	3065	1.10	0.85	333963
KHARKOF	1	2726	0.72	0.88	116894

Table 25. Summary of agronomic and yield data for 29 wheats grown in the 1996 Northern Regional Performance Nursery.

C.I. OR SEL. NO.	ENTRY NO.	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LODGING 0-9	WINTER SURVIVAL %	STEM RUST SEV. %	STEM RUST RESP 0-9	LEAF RUST SEV. %	LEAF RUST RESP 0-9	GRN LEAF DURATION 0-9	GRAIN PROTEIN %	VOLUME WEIGHT KG/HL	YIELD KG/HA
NUMBER OF LOCATIONS		11	12	2	9	1	1	1	1	1	1	11	11
ND9257	12	82	172	2.5	76	1	3	20	8	4.7	13.1	76.9	3718
SD92191	9	88	172	3	73	0	.	5	7	3	12	79.1	3548
ND9274	14	79	171	2.8	75	0	.	15	7	3.3	12.6	76.5	3421
SD92266	11	83	171	3.3	75	1	2	60	8	4.3	13.1	78.4	3419
ND9272	13	77	172	2.6	75	0	.	5	7	2	13.6	76.7	3397
SD92227	10	79	169	4	68	1	2	60	8	4	13.7	77	3384
AMQ3KF4B7A	29	82	175	2.3	72	0	.	1	7	3.3	13	75.3	3290
SD92174	8	83	171	3.7	75	5	8	10	7	2.8	14	79.1	3279
AMP3JP4A7A	26	84	173	3.3	70	0	.	1	2	2.7	13.2	77.8	3279
AMQ3NQ4A7D	28	84	174	1.8	66	0	.	1	7	2	13	76.1	3279
NE93554	18	76	168	3.7	62	0	.	1	2	2.5	12.7	76.7	3275
SD91192	5	79	170	3.2	70	1	2	1	7	5	12.5	77.6	3255
XNH1798	20	72	170	2.5	58	0	.	1	2	4.3	12.8	77.2	3226
SD92107	6	83	171	2.7	65	0	.	5	7	2	14	77.5	3212
ROUGHRIDER	2	87	172	3.2	86	1	2	5	7	2	13.2	78.9	3207
NE93613	19	79	172	3.2	62	0	.	5	7	3.7	14.1	76	3205
NE92662	16	76	169	2.3	57	0	.	5	7	4.7	13.4	75.9	3158
SD89153	4	81	170	2.8	62	0	.	5	7	2	12.7	79.3	3141
SD92124	7	78	169	3.3	70	0	.	1	7	3.5	13.7	76	3109
AMQ3KC4C7B	27	84	174	2.8	61	0	.	1	3	2.8	13.6	75.8	2994
NE92652	17	77	171	2.8	49	0	.	1	2	5	13	79.3	2915
XNH1800	21	76	173	3.2	53	0	.	5	7	1.7	13	74.7	2715
ABILENE	3	67	168	2.3	60	0	.	0	.	5	13.2	79	2699
NE92628	15	78	169	2.7	48	1	7	5	3	3.3	13.4	76	2699
KHARKOF	1	97	173	4.6	66	40	7	30	7	2	14	77.5	2635
MT88046	22	77	168	2.5	51	0	.	15	8	2.7	15.2	77.4	2601
IDO467	24	74	174	1.7	48	0	.	5	8	4	14.3	72.8	2448
MTS92042	23	80	171	2.8	40	1	2	10	8	3.7	14.5	77.1	2310
IDO483	25	66	168	1.5	18	10	8	10	8	3.3	14.4	75.4	1685

Table 26. Seedling infection type of entries in the 1996 Northern Regional Performance Nursery to selected isolates of wheat stem rust (Puccinia graminis f. sp. Tritici). D.V. McVey, USDA-ARS, Cereal Rust Laboratory, University of Minnesota, St. Paul, MN. 55108.

No.	Line	HKCJ	QFCQ	QTHJ	RKQQ	RKRQ	RTQQ	TPMK	TTRT	Postu.
		Infection type								Sr gene
01	Kharkof	S	2-	S	S	S	S	S	S	None
02	Roughrider	0	;1-	;	S	S	S	S	S	36
03	Abilene	2=	;1-	2=	2=	2=	2=	2-	2=	24
04	SD89153	0,S	;1-N	2=	0;	0	;1-	S	S	10,seg5
05	SD91192	0,2=	0	2-	S	0;,S	;S	0	S	6,seg5
06	SD92107	2=	0;	2-	S	0;1-	2-	0	2	6,+
07	SD92124	0	0	S	S	0,S	S	0	S	5,6
08	SD92174	S	S	2=	2	2=	2-	S	S	+
09	SD92191	;,2=	;1-N	S	S	1N,S	S	0;	S	6,+,seg5
10	SD92227	2=	0	2=	2;	0	2-	0	2=	6,24
11	SD92266	;	0,S	S	S	0	S	0;	S	5,6
12	ND9257	0	2-	S,2=	S	0	S,2-	0	2=,S	5,+
13	ND9272	0,S	0	2-	S	23	S	0	2	6,seg5
14	ND9274	0,S	0	;,2=	32	23	2	0	S	6,seg5,+
15	NE92628	2-	0	2=	2;	-	2=	-	S	6,+
16	NE92662	0,2?	0	2-	2	0;	1	0	S	6,+
17	NE92652	0	2=	0	2-	0;	1	0	2=	24,36
18	NE93554	S	0	0	-	1-N	2	0;	S	6,36,+
19	NE93613	2=	0	0	2	0	2=	0	2=	6,24,36
20	XNH1798	-	0	0	;1-	1,S	2=	0	1-	6,36,+
21	XNH1800	2-?	0	;	S	S	2=	0,S	S	5,+,seg6
22	MT88046	0,2	2=	0	1	0	2=	S	2-	+
23	MTS92042	0	S	S	S	S	S	S	S	5
24	IOD467	0	S	S	S	S	S	S	S	5
25	IDO483	0	S	S	S	S	S	S	S	5
26	AMP3JP4A7A	1	2=	2=	2=	0	0;	2=	2=	+
27	AMQ3KC4C7B	0	2=	2=	2=	2=	2=	0	2=	5,+
28	AMQ3NQ4A7D	0	2=	2-	2=	2=	;1-	0	2=	5,+
29	AMQ3KF4B7A	0	2=	2=	2=	-	2=	1-	2=	5,+

	Sr gene			
Set I	5	21	9e	7b
Set II	11	6	8	9g
Set III	36	9b	30	17
Set IV	9a	9d	10	Tmp

	Code			
B	R	R	R	R
C	R	R	R	S
D	R	R	S	R
F	R	R	S	S
G	R	S	R	R
H	R	S	R	S
J	R	S	S	R
K	R	S	S	S

	Code			
L	S	R	R	R
M	S	R	R	S
N	S	R	S	R
P	S	R	S	S
Q	S	S	R	R
R	S	S	R	S
S	S	S	S	R
T	S	S	S	S

Pgt-race code, after Roelfs & Martens - Phytopathology 78,526-533.

Table 27. Seedling infection type of entries in the 1996 Northern Regional Performance Nursery to selected isolates of leaf rust (Puccinia recondita). D.V. McVey, USDA-ARS, Cereal Rust Labortory, University of Minnesota, St. Paul, MN 55108)

Entry	Sel. No.	KDBM	KFBM	TFBM	MFDM	MGBM	TBGM	TCBH	TDBM
					Infection Type				
01	Kharkof	S	S	S	S	0	;	S	S
02	Roughrider	S	S	S	S	0	;	S	S
03	Abilene	-	0	S	S	;	0	0	;:23
04	SD89153	-	0	S	S	S	23	0:S	S
05	SD91192	-	S	;1C,S	23	;	;	;1	23C
06	SD92107	1CN	2CN	;1C	;1N	0	0	;	12CN
07	SD92124	0	;	;1C,S	;1N	;1C	;1-C	;	;
08	SD92174	S	0	S	S	S	23	;,S	S
09	SD92191	S	S	S	23	0	0	23	23C
10	92227	1CN	1CN	;1-C	;1N	;	0	;	;1C
11	SD92266	S	1CN,S	S	23C	S	;,S	;	2C
12	ND9257	1N	;	21C	;1-N	;1C	;	;	1CN
13	ND9272	S	1CN	21C	23	0	;	23,;	1C
14	ND9274	1CN,S	S	S,2C	1C	0	;	23,;	21C
15	NE92628	1-CN	1C	12C	1C	S	12C	12,S	1N
16	NE92662	-	-	;1-C	;1C	;1C	;1	;	1N
17	NE92652	1CN,S	1CN	23	23C	;,S	23	S	-
18	NE93554	1CN	1CN	12C	1C	;,23C	1C	;1	1N
19	NE93613	1C	1CN	;1C	;1C	;	0	;	;1-N
20	XNH1798	;1-N	S	S	1N	-	;	1N,S	;
21	XNH1800	S	-	-	S	-	S	S	23C
22	MT88046	S	S	S	23C	S	23C	S,;	23C
23	MTS92042	S	S	S	23C	S	;	S	23C
24	IOD467	S	S	S	23C	23C	S	S,0	23C
25	IDO483	0	;1C	;1	;1N	1N	0	1N	;1-
26	AMP3JP4A7A	0	23C	2	1C	;1N	;1-C	S	;
27	AMQ3KC4C7B	0	S	S	23C	;1C	;1-C	-	;
28	AMQ3NQ4A7D	0	23C	23	23C	;	;1-C	23	;
29	AMQ3KF4B7A	0	S	S	23C	;1C	;1-C	23	;

Set	I	1	2a	2c	3
set	II	9	16	24	26
Set	III	3ka	11	17	30
Set	IV	10	18	21	15

Table 28. Entries in the 1996 Northern Regional Performance Nursery that possess a 1RS wheat-rye translocation. Data provided by Bob Graybosch, USDA-ARS, Lincoln, NE. Analytical methods were described in the 1993 Regional Report.

C.I. OR SEL. NO.	ENTRY: NO.	TRANSLOCATION
KHARKOF	1	-
ROUGHRIDER	2	-
ABILENE	3	-
SD89153	4	-
SD91192	5	-
SD92107	6	-
SD92124	7	-
SD92174	8	-
SD92191	9	-
SD92227	10	-
SD92266	11	-
ND9257	12	-
ND9272	13	-
ND9274	14	-
NE92628	15	-
NE92662	16	-
NE92652	17	-
NE93554	18	-
NE93613	19	-
XNH1798	20	1BL.1RS
XNH1800	21	-
MT88046	22	-
MTS92042	23	-
IDO467	24	-
IDO483	25	-
AMP3JP4A7A	26	1BL.1RS
AMQ3KC4C7B	27	1BL.1RS
AMQ3NQ4A7D	28	1BL.1RS
AMQ3KF4B7A	29	1BL.1RS

Table 29. Reaction of entries in the 1996 Northern Regional Performance Nursery to soiborne mosaic and barley yellow dwarf viruses. Data provided by Les Domier and George Gregerson, USDA-ARS, Urbana, IL.

C.I. OR SEL. NO.	ENTRY NO.	BYDV REP 1 5/2	BYDV REP 1 6/12	BYDV REP 2 5/2	BYDV REP 2 6/12	SBMV REP 1	SBMV REP 2
KHARKOF	1	P	7	P	7	7	6
ROUGHRIDER	2	P	6	P	4	6	3
ABILENE	3	P	7	P	7	2	2
SD89153	4	P	6	WK	WK	7	6
SD91192	5	P	7	P	7	8	WK
SD92107	6	P	7	P	6	6	3
SD92124	7	P	6	P	8	2	3
SD92174	8	P	8	P	6	1	2
SD92191	9	P	5	P	6	8	5
SD92227	10	P	6	P	8	5	5
SD92266	11	P	7	P	7	7	4
ND9257	12	P	8	P	7	7	3
ND9272	13	P	8	P	7	7	7
ND9274	14	P	7	P	7	4	5
NE92628	15	P	8	WK	WK	8	3
NE92662	16	WK	WK	WK	WK	2	3
NE92652	17	WK	WK	WK	WK	WK	WK
NE93554	18	WK	WK	WK	WK	4	4
NE93613	19	WK	WK	WK	WK	4	5
XNH1798	20	P	8	P	8	8	7
XNH1800	21	P	9	WK	WK	WK	WK
MT88046	22	P	6	WK	WK	3	8
MTS92042	23	WK	WK	WK	WK	8	8
IDO467	24	WK	WK	WK	WK	8	8
IDO483	25	WK	WK	WK	WK	WK	WK
AMP3JP4A7A	26	P	5	P	7	2	1
AMQ3KC4C7B	27	P	7	P	7	4	3
AMQ3NQ4A7D	28	P	6	P	8	5	3
AMQ3KF4B7A	29	P	8	P	8	6	8

WK = winterkilled; P = positive; 1 = no symptoms, 9 = plant completely dead.

Table 30. Reaction of the 1996 Northern Regional Performance Nursery to Leaf Rust, Soilborne Wheat Mosaic Virus (SBWMV). Data provided by Bob Hunger & John Sherwood, Plant Pathology Dept., Oklahoma State University, Stillwater, OK.

Entry	Seln. No.	Leaf rust*(seedling-grnhse) Rep 1	Rep 2	Rep 3	SBWMV reaction Visual (1-4)*	ELISA
01	CI1442	S	S	S	3.8	+
02	CI17439	S	S	S	3.0	+
03	PI511307	MS	MS	MS	1.3	±
04	SD89153	S	S	S	3.0	+
05	SD91192	S	S	S	3.2	+
06	SD92107	MR	MR	MR	2.5	+
07	SD92124	S	S	S	1.2	±
08	SD92174	S	S	S	1.0	±
09	SD92191	S	S	S	3.2	+
10	SD92227	MR	MS	MS	3.3	+
11	SD92266	S	MS	S	3.7	+
12	ND9257	MS	MS	S	3.0	+
13	ND9272	S	S	S	4.0	+
14	ND9274	S	S	S	4.0	+
15	NE92628	MS	MS	MS	2.3	+
16	NE92662	MS	MS	MS	1.0	-
17	NE92652	MS	MS	MS	1.0	±
18	NE93554	MR	MS	MS	3.3	+
19	NE93613	MS	MS	MS	3.7	+
20	XNH1798	MR	MR	MR	3.0	+
21	XNH1800	S	S	S	3.2	+
22	MT88046	S	S	S	3.3	+
23	MTS92042	S	S	S	3.8	+
24	ID0467	S	S	S	3.3	+
25	ID0483	S	S	S	4.0	+
26	AMP3JP4A7A	MR	MR	MR	1.0	±
27	AMQ3KC4C7B	MR	MR	MR	1.0	±
28	AMQ3NQ4A7D.	MR	MR	MR	3.2	+
29	AMQ3KF4B7A	MR	MR	MR	3.3	+

See Table 14 in the SRPN section for information regarding methodology.

Table 31. Hessian fly reaction, Great Plains Biotype, for entries in the 1996 Northern Regional Performance Nursery. Data provided by J.H. Hatchett, USDA-ARS, Manhattan, KS.

C.I. OR SEL. NO.	ENTRY NO.	HESSIAN FLY R-S
KHARKOF	1	S
ROUGHRIDER	2	R
ABILENE	3	S
SD89153	4	S
SD91192	5	H
SD92107	6	H
SD92124	7	R
SD92174	8	S
SD92191	9	R
SD92227	10	R
SD92266	11	H
ND9257	12	H
ND9272	13	S
ND9274	14	S
NE92628	15	H
NE92662	16	R
NE92652	17	S
NE93554	18	S
NE93613	19	S
XNH1798	20	S
XNH1800	21	S
MT88046	22	S
MTS92042	23	S
IDO467	24	S
IDO483	25	S
AMP3JP4A7A	26	S
AMQ3KC4C7B	27	S
AMQ3NQ4A7D	28	S
AMQ3KF4B7A	29	S

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Entry No.	Variety or Pedigree	Sel. No.	Source
1**	Larned	CI17650	Check
2**	Siouxland	PI483469	"
3**	Lamar	PI559719	"
4**	Arapahoe	PI518591	"
5*	Halt(Sumner/CO820026,F1//PI372129,F1/3/TAM-107)	CO910927	Colorado
6*	KS831374/TAM-107	CO910239	"
7*	Mesa/Carson	CO910424	"
8*	CO840104/Lamar	CO910748	"
9	NE82671/NE80413(Ctk78*2/Lov 13)	NE91648	Nebraska
10	OK83201/Redland	NE92458	"
11	Redland/NE82419	NE92662	"
12*	NE82761/Redland	NE91631	"
13	Arapahoe/NE87U121	N92L005	NE, USDA
14	KS831024/4/Aur/Lanc 's'/3/NE7060/2/Ran12/Bez4	N92V112	"
15*	KS831672/3/Rannaya12/Bez4/2/Lancota/F9-67	N94L187	"
16	TX79A2729/TAM-108	TX88A6558	Texas
17	TAM-108/Balkan	TX91A346	"
18	TAM-105/10334	TX90A9528	"
19	TAM-108/Vee 's'	TX88V4122	"
20	TAM-105/Concho	TX90A9516	"
21	TAM W-101/Siouxland	TX91A207	"
22	Ctk78*6/CI9321	TX91A590	"
23*	TXGH10563B/KS90WGRC10	T91	Trio
24*	Red Kleo/2157	KHEOPS No.3	Pharaoh
25*	" "	KHEOPS No.5	"
26*	" "	KHEOPS No.8	"
27	NE74736/MN72316//Huenufen/3/NK77W4593	CRL83034	USDA,MN

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* New Entries
** New seed provided

Test Site Information - WPRPN

Bushland, TX -- No additional information.

Goodwell, OK -- The dryland nursery was harvested on 6/25/96.

Colby, KS -- Planted on 9/28/95 and harvested on 7/15/96.

Akron, CO -- See information for the SRPN.

Scottsbluff, NE -- Planted on 9/11/95 on cooperator farm near Stegall, NE. Hail in mid-June caused approximately 10-15% damage. Harvested on 7/23/96.

Pierre, SD -- See information for the SRPN.

Table 32. Yield and agronomic data for 27 wheats grown in the 1996 Western Plains Regional Performance Nursery.

BUSHLAND (DRYL.), TEXAS

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
CO910424	7	1002	76.9	98	121
TX90A9528	18	863	75.5	100	124
CO910748	8	778	72.9	86	124
TX88A6558	16	762	73.7	98	125
TX90A9516	20	760	73.8	87	123
TX91A346	17	751	71.8	99	126
T91	23	726	72.5	85	119
CO910239	6	713	76.8	93	125
KHEOPS No.8	26	711	77	92	121
KHEOPS No.3	24	706	77.3	90	121
NE92458	10	693	74.6	89	124
CO910927	5	668	73.1	79	121
NE91631	12	657	74.1	108	129
KHEOPS No.5	25	632	76.8	90	122
TX91A207	21	594	74.5	83	127
SIOUXLAND	2	587	73.9	91	125
ARAPAHOE	4	583	75	86	126
N92L005	13	574	74.4	88	125
NE92662	11	551	75.2	92	127
LARNED	1	507	75.3	91	125
TX91A590	22	504	74.1	91	127
NE91648	9	448	75.4	91	127
N92V112	14	435	74.1	84	127
TX88V4122	19	421	71.5	93	128
LAMAR	3	410	76	63	130
N94L187	15	354	74.7	87	127
CRL83034	27	309	75.1	97	131
MEAN		618			
LSD(.05)		204			
C.V.		20.0			

GOODWELL

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
TX91A207	21	2251	71	42	124
TX90A9528	18	2146	70	46	122
KHEOPS No.3	24	2024	73.4	47	120
NE92458	10	2015	71.9	46	122
CO910927	5	1952	69.7	41	118
KHEOPS No.8	26	1952	73.8	46	120
TX90A9516	20	1882	68.4	46	121
KHEOPS No.5	25	1879	73.5	45	119
N92V112	14	1876	72.9	48	123
NE92662	11	1835	73.3	45	124
TX88A6558	16	1799	68.2	44	122
CO910424	7	1769	73.3	46	120
T91	23	1763	68	46	119
NE91631	12	1759	73.9	47	125
TX91A346	17	1725	64.8	47	123
LAMAR	3	1713	72.8	45	124
TX91A590	22	1699	70.3	45	124
CO910239	6	1687	73.7	43	123
SIOUXLAND	2	1670	69	43	123
ARAPAHOE	4	1558	72.5	43	123
LARNED	1	1544	69	47	122
TX88V4122	19	1523	66.3	43	123
CO910748	8	1376	66.6	42	123
NE91648	9	1217	73	45	125
N92L005	13	1145	72	39	124
N94L187	15	1095	71.1	47	124
CRL83034	27	1093	76.2	44	126
MEAN		1702			
LSD(.05)		345			
C.V.		12.4			

COLBY

KANSAS

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 INJURY 0-5
NE91648	9	3968	73.8	80	150	100	2.7
CO910239	6	3835	74.4	76	144	100	2
NE91631	12	3632	71.7	85	153	100	2.3
TX90A9528	18	3528	72.3	69	149	97	3
NE92662	11	3515	72	80	151	97	3.7
ARAPAHOE	4	3501	72.4	76	149	100	2
CRL83034	27	3407	72.4	88	156	100	3.3
LAMAR	3	3358	74.8	78	150	95	3.3
CO910424	7	3358	73.1	68	143	100	3
TX88A6558	16	3354	71	68	144	95	2.3
N92L005	13	3322	71.6	81	146	100	2.3
NE92458	10	3309	73.7	71	142	100	2.7
N92V112	14	3246	73.8	78	146	100	2.7
CO910748	8	3228	74.1	73	152	67	4.7
TX90A9516	20	3167	71.7	66	142	100	2
T91	23	3156	71.9	63	141	92	2.7
TX91A207	21	3020	70.7	68	150	92	4.3
SIOUXLAND	2	2959	72.5	78	144	100	2
LARNED	1	2910	73.4	80	146	90	3
CO910927	5	2885	70.2	58	141	100	3.3
KHEOPS No.3	24	2833	74	66	142	90	4.3
TX91A346	17	2710	66	64	149	88	3.3
KHEOPS No.8	26	2708	72.8	64	142	87	4.7
N94L187	15	2591	69.9	73	151	97	2.7
TX91A590	22	2562	71.3	85	150	92	3.3
KHEOPS No.5	25	2484	73.1	61	142	80	4.7
TX88V4122	19	1762	63.1	63	152	38	5.7
MEAN		3123					
LSD(.05)		468					
C.V.		9.1					

AKRON

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
TX88A6558	16	5838	77.5	85	148
CO910424	7	5671	76.4	85	150
NE91631	12	5525	75.4	100	155
TX90A9528	18	5508	76.7	90	150
TX91A346	17	5503	75	85	149
YUMA	28	5471	77	90	150
CO910748	8	5402	76.4	85	151
SIOUXLAND	2	5327	76.6	95	148
LAMAR	3	5276	79.9	95	150
CO910239	6	5152	77.9	90	150
N92L005	13	5027	77.1	90	148
HALT	30	4990	74.7	.	.
TAM-107	29	4984	75.1	.	.
NE92662	11	4963	75	90	148
TX88V4122	19	4927	74.4	85	148
CO910927	5	4917	74.5	80	149
LARNED	1	4916	76.9	95	148
ARAPAHOE	4	4903	75.4	90	150
NE92458	10	4801	76	85	150
TX90A9516	20	4685	77	85	151
KHEOPS No.3	24	4603	77.4	90	151
NE91648	9	4586	75.5	100	149
TX91A207	21	4581	78.1	80	150
KHEOPS No.8	26	4494	77.3	90	149
KHEOPS No.5	25	4417	77.4	90	150
TX91A590	22	4393	78.4	100	148
N94L187	15	4274	76.6	85	155
T91	23	4127	74.1	80	150
N92V112	14	4126	77.5	95	150
CRL83034	27	4087	79.3	105	157

MEAN	4916
LSD(.05)	772
C.V.	9.6

SCOTTSBLUFF

NEBRASKA

FOUR REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	PLANT HEIGHT CM	WINTER SURVIVAL 0-9
NE91631	12	2230	78.4	79	8
CRL83034	27	2175	80	83	8
NE91648	9	2018	79.6	74	8
LAMAR	3	1985	82	72	8
NE92662	11	1978	78.5	69	8
TX91A207	21	1952	78.5	62	8
N92L005	13	1946	79.7	67	8
ARAPAHOE	4	1944	78.9	74	8
TX91A346	17	1944	79.2	58	8
CO910239	6	1940	79.9	68	8
TX90A9528	18	1909	78.9	66	8
CO910927	5	1876	79	61	8
NE92458	10	1871	79.8	67	7
SIOUXLAND	2	1853	79.1	79	8
TX90A9516	20	1848	79.8	57	8
LARNED	1	1769	79.9	70	9
TX88A6558	16	1703	80.3	57	8
CO910748	8	1700	80	67	6
KHEOPS No.8	26	1691	81.3	70	8
TX88V4122	19	1683	74.8	65	5
KHEOPS No.5	25	1681	80.5	69	8
CO910424	7	1679	80.3	65	8
TX91A590	22	1662	80	77	8
N92V112	14	1654	79.5	67	8
KHEOPS No.3	24	1572	81	67	8
N94L187	15	1487	78.9	68	9
T91	23	1289	77.3	61	8
MEAN		1816			
LSD(.05)		378			
C.V.		14.7			

PIERRE

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY NO.	YIELD KG/HA	VOLUME WEIGHT KG/HL	DAYS TO HEADING FROM 1/1	LODGING 0-9	WINTER SURVIVAL %
SIOUXLAND	2	4651	77.4	168	2.3	63
N92L005	13	4255	76.9	172	3.3	60
TX91A346	17	4241	73.8	170	4	50
SD89205	30	3714	77.7	170	4.3	47
SD89119	28	3618	79.6	172	4	50
NE91648	9	3598	78.9	172	3.3	57
SD89153	29	3587	80.1	172	4.7	57
NE92662	11	3562	77	171	3.7	40
ARAPAHOE	4	3383	75.9	173	5.7	47
TX90A9528	18	3378	76.8	172	3	37
CO910927	5	3125	74.7	169	2	33
CO910239	6	3102	78.9	171	4.3	37
NE92458	10	2773	80.6	171	2.3	33
LARNED	1	2762	77.7	171	5.7	53
TX90A9516	20	2605	75.1	170	3	50
NE91631	12	2603	79.6	174	3	50
LAMAR	3	2538	78.6	173	2	17
TX91A207	21	2468	76.8	173	2.5	37
CO910424	7	2396	77.9	170	3	27
T91	23	2385	76.3	170	3.7	27
KHEOPS No.5	25	2284	76.5	169	2.7	30
N92V112	14	2273	77.7	171	3.3	30
KHEOPS No.3	24	2204	77.1	169	2.3	27
N94L187	15	2174	75.6	173	2	13
TX88A6558	16	2139	76.3	171	2.5	23
TX91A590	22	2031	81.4	172	5.3	37
CRL83034	27	2020	76.9	175	2	37
TX88V4122	19	1923	74.3	174	1.7	13
KHEOPS No.8	26	1713	76.9	169	3.5	27
CO910748	8	1641	78.8	172	1.5	10
MEAN		2838				
LSD(.05)		1365				
C.V.		29.5				

Table 33. Summary of mean yields (kg/ha) and ranks for 27 wheats grown in the Western Plains Regional Performance Nursery at 6 locations.

C.I. OR SEL. NO.	ENTRY NO.	BUSHLAND (DRYL.) TEXAS		GOODWELL OKLAHOMA		COLBY KANSAS		AKRON COLORADO		SCOTTS-BLUFF NEBRASKA		PIERRE S. DAKOTA		REGIONAL AVERAGE	
TX90A9528	18	863	2	2146	2	3528	4	5508	4	1909	11	3378	7	2889	1
SIOUXLAND	2	587	16	1670	19	2959	18	5327	7	1853	14	4651	1	2841	2
TX91A346	17	751	6	1725	15	2710	22	5503	5	1944	8	4241	3	2812	3
CO910239	6	713	8	1687	18	3835	2	5152	9	1940	10	3102	9	2738	4
NE92662	11	551	19	1835	10	3515	5	4963	11	1978	5	3562	5	2734	5
NE91631	12	657	13	1759	14	3632	3	5525	3	2230	1	2603	13	2734	6
N92L005	13	574	18	1145	25	3322	11	5027	10	1946	7	4255	2	2711	7
CO910424	7	1002	1	1769	12	3358	8	5671	2	1679	22	2396	16	2646	8
ARAPAHOE	4	583	17	1558	20	3501	6	4903	15	1944	8	3383	6	2645	9
NE91648	9	448	22	1217	24	3968	1	4586	19	2018	3	3598	4	2639	10
TX88A6558	16	762	4	1799	11	3354	10	5838	1	1703	17	2139	22	2599	11
NE92458	10	693	11	2015	4	3309	12	4801	16	1871	13	2773	10	2577	12
CO910927	5	668	12	1952	5	2885	20	4917	13	1876	12	3125	8	2570	13
LAMAR	3	410	25	1713	16	3358	8	5276	8	1985	4	2538	14	2546	14
TX90A9516	20	760	5	1882	7	3167	15	4685	17	1848	15	2605	12	2491	15
TX91A207	21	594	15	2251	1	3020	17	4581	20	1952	6	2468	15	2477	16
LARNED	1	507	20	1544	21	2910	19	4916	14	1769	16	2762	11	2401	17
CO910748	8	778	3	1376	23	3228	14	5402	6	1700	18	1641	27	2354	18
KHEOPS No.3	24	706	10	2024	3	2833	21	4603	18	1572	25	2204	20	2324	19
N92V112	14	435	23	1876	9	3246	13	4126	26	1654	24	2273	19	2268	20
T91	23	726	7	1763	13	3156	16	4127	25	1289	27	2385	17	2241	21
KHEOPS No.5	25	632	14	1879	8	2484	26	4417	22	1681	21	2284	18	2229	22
KHEOPS No.8	26	711	9	1952	5	2708	23	4494	21	1691	19	1713	26	2211	23
CRL83034	27	309	27	1093	27	3407	7	4087	27	2175	2	2020	24	2182	24
TX91A590	22	504	21	1699	17	2562	25	4393	23	1662	23	2031	23	2142	25
TX88V4122	19	421	24	1523	22	1762	27	4927	12	1683	20	1923	25	2040	26
N94L187	15	354	26	1095	26	2591	24	4274	24	1487	26	2174	21	1996	27
MEAN		618		1702		3123		4890		1816		2749		2483	
LSD(.05)		204		345		468		750		378		1440		467	
C.V.		20.0		12.4		9.1		9.3		14.7		31.9		17.7	

Table 34. Summary of agronomic and yield data for 27 wheats grown in the 1996 Western Plains Regional Performance Nursery.

VARIETY OR PEDIGREE	C.I. OR SEL. NO.	ENTRY NO.	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LODGING %	WINTER SURVIVAL %	VOLUME WEIGHT KG/HL	YIELD KG/HA
NUMBER OF LOCATIONS			5	5	1	2	6	6
TAM-105/10334	TX90A9528	18	74	143	3	67	75	2889
SIOUXLAND	SIOUXLAND	2	77	142	2.3	82	74.8	2841
TAM-108/Balkan	TX91A346	17	71	143	4	69	71.8	2812
KS831374/TAM-107	CO910239	6	74	143	4.3	68	76.9	2738
Redland/NE82419	NE92662	11	75	144	3.7	68	75.2	2734
NE82761/Redland	NE91631	12	84	147	3	75	75.5	2734
Arapahoe/NE87U121	N92L005	13	73	143	3.3	80	75.3	2711
Mesa/Carson	CO910424	7	72	141	3	63	76.3	2646
ARAPAHOE	ARAPAHOE	4	74	144	5.7	73	75	2645
NE82671/NE80413(Ctk78 2/Lov 13)	NE91648	9	78	144	3.3	78	76	2639
TX79A2729/TAM-108	TX88A6558	16	70	142	2.5	59	74.5	2599
OK83201/Redland	NE92458	10	72	142	2.3	67	76.1	2577
Halt	CO910927	5	64	140	2	67	73.5	2570
LAMAR	LAMAR	3	71	145	2	56	77.3	2546
TAM-105/Concho	TX90A9516	20	68	141	3	75	74.3	2491
TAM W-101/Siouxland	TX91A207	21	67	145	2.5	64	74.9	2477
LARNED	LARNED	1	77	142	5.7	72	75.3	2401
CO840104/Lamar	CO910748	8	71	145	1.5	38	74.8	2354
Red Kleo/2157	KHEOPS No.3	24	72	141	2.3	58	76.7	2324
KS831024/4/Aur/Lanc/3/NE7060/2/Ran12/Bez	N92V112	14	74	143	3.3	65	75.9	2268
TXGH10563B/KS90WGRC10	T91	23	67	140	3.7	59	73.3	2241
Red Kleo/2157	KHEOPS No.5	25	71	140	2.7	55	76.3	2229
Red Kleo/2157	KHEOPS No.8	26	73	140	3.5	57	76.5	2211
NE74736/MN72316//Huenufen/3/NK77W4593	CRL83034	27	83	149	2	68	76.6	2182
Ctk78 6/CI9321	TX91A590	22	80	144	5.3	64	75.9	2142
TAM-108/Vee 's'	TX88V4122	19	70	145	1.7	26	70.7	2040
KS831672/3/Ran12/Bez4/2/Lanc/F9-67	N94L187	15	72	146	2	55	74.5	1996

Table 35. Summary of mean yields (kg/ha) and ranks of 18 wheats grown in the Western Plains Regional Performance Nursery in 1995 and 1996 at 5 locations.

C.I. OR SEL. NO.	ENTRY NO.	BUSHLAND (DRYL.) TEXAS		COLBY KANSAS		AKRON COLORADO		SCOTTS-BLUFF NEBRASKA		PIERRE S. DAKOTA		REGIONAL AVERAGE	
TX90A9528	18	1261	2	3655	5	5267	2	2468	5	3009	6	3132	1
NE92662	11	984	9	3748	3	5041	4	2593	2	3269	3	3127	2
TX91A346	17	1162	4	3498	7	4585	12	2505	3	3518	1	3054	3
NE91648	9	1018	8	3741	4	4776	10	2438	8	3244	4	3043	4
N92L005	13	1258	3	3575	6	5071	3	2449	7	2744	11	3019	5
TX88A6558	16	1332	1	3822	1	5535	1	2106	15	2243	15	3008	6
ARAPAHOE	4	758	14	3784	2	5016	5	2499	4	2861	8	2984	7
TX91A207	21	950	10	3350	11	4991	6	2418	9	2622	12	2866	8
SIOUXLAND	2	791	13	2941	17	4838	7	2233	12	3395	2	2840	9
NE92458	10	684	17	3488	8	4792	8	2207	13	2779	10	2790	10
TX90A9516	20	1157	5	3171	13	4342	13	2114	14	2992	7	2755	11
LAMAR	3	912	11	3449	10	4663	11	2464	6	2225	16	2743	12
CO910927	5	619	18	2959	16	4313	14	2647	1	3017	5	2711	13
TX88V4122	19	1083	6	2938	18	4782	9	2236	11	2423	14	2692	14
N92V112	14	725	15	3473	9	4006	17	2093	16	2830	9	2626	15
CRL83034	27	1055	7	3172	12	4190	15	2359	10	2102	17	2575	16
LARNED	1	725	15	3002	14	4065	16	2062	17	2505	13	2472	17
TX91A590	22	870	12	2976	15	3790	18	1954	18	1777	18	2273	18
MEAN		963		3375		4670		2334		2753		2819	
LSD(.05)		N.S.		N.S.		N.S.		N.S.		N.S.		N.S.	
C.V.		19.0		8.7		9.7		11.8		24.9		14.6	

Table 36. Seedling infection types of entries of the 1996 Western Plains Regional Performance Nursery to selected isolates of wheat stem rust (Puccinia graminis f. tritici). D.V. McVey, Cereal Rust Labortory, USDA-ARS, University of Minnesota, St. Paul, MN, 55108.

No.	Line	HKCJ	QFCQ	QTHJ	RKQQ	RHQS	RTQQ	TPMK
		Infection Type						
01	Larned	S	2-	S	S	0	S	S
02	Siouxland	0	2=	2=	2=	2=	2=	2=
03	Lamar	;1	2-	2=	2=	0;	2	2-
04	Arapahoe	2=	0	2=	2-	0	2-	0
05	CO910927	1-	2=	2=	2=	0	2=	2
06	CO910239	2=	22-	2-2	2	2=	2=	2=,S
07	CO910424	2=	2=	2=	2=	2=	2=	2-
08	CO910748	2=	0;	2=	2=	2=	2=	2=
09	NE91648	0	0	23	2	0	32=	0
10	NE92458	2=	0	-	1	-	2	0
11	NE92662	2	0;	-	2	0	2=	0
12	NE91631	2	0	0	2-	0	2	0
13	N92L005	0	0,S	S	S	0	S	0,S
14	N92V112	;1	2=	2=	2=	2=	2=	2=
15	N94L187	2	2	0	S	S	S	S
16	TX88A6558	2	2=	0	2	0	2-	0,S
17	TX91A346	2-	0	0	S	0	2-	0
18	TX90A9528	0	S	S	S	2	2	S
19	TX88V4122	0	0	0	;1-	0	;1-	0
20	TX90A9516	S	2=	0	S	S	2-2	0,S
21	TX91A207	0	2=	0	;1-	0	;1-	0
22	TX91A590	0	S,0	S,0	S	0	S=	0
23	T91	-	2=	0	2=	2=	;1-	2
24	KHEOPS No 3	0	0,2-,S	0	S	;1-	S	S
25	KHEOPS No 5	S	S	S	S	0;	S	S
26	KHEOPS No 8	S	S	S	S	0;	S	S
27	CRL83034	0	0	2-	0	0	;	0

Table 37. Seedling infection type of entries in the 1996 Western Plains Regional Performance Nursery to selected isolated of leaf rust (Puccinia recondita). D.V. McVey, Cereal Rust Labortory, USDA-ARS, University of Minnesota, St. Paul, MN, 55108.

No.	Line	KDBM	KFBM	TFBM	MFBM	MGBM	TBGM	TCBH	TDBM
		Infection Type							
01	Larned	0	12	0	0	0;	-	S	1
02	Siouxland	0	S	0	0	0	0	;1	0;
03	Lamar	S	S	S	0	0;	S	S	S
04	Arapahoe	1C	1cn	0	0	0	0	-	1C
05	CO910927	S	23	0;	0	0	23	S	S
06	CO910239	1C	0:23	0	0	0	;12	S	S
07	CO910424	S	S	0	0	0	-	0	S
08	CO910748	23	2	0	0	0	2C	12C	S
09	NE91648	1C	2cn	1C	0	23	;1C	1CN	2CN
10	NE92458	1C	2c	0	0;	2	;1-N	;1-CN	2C
11	NE92662	0	1-N	0	0;	2	;1C	1CN	1C
12	NE91631	S	S	S	1C	1C	21	2	23
13	N92L005	1C	23	0	0	;12	0	0	2CN
14	N92V112	0	23	0	S,1C	;1-C	0	12	;
15	N94L187	0	0;	0	S	S	12C	23	S
16	TX88A6558	0	0;	0	S	S	S	23	S
17	TX91`A346	0	0	S	2	2C	12	0	S
18	TX90A9528	0	0	S	S	S	0;	0;	S
19	TX88V4122	0	0	0	0;	;1-	0	;1N	0;
20	TX90A9516	0	0	0	S	S	0	0	S
21	TX91A207	0	0	0	2CN	0;	0	0	0;
22	TX91A590	0	0	S	1C	2	0	0	21
23	T91	0	0	S	0	0	0,S	0,S	S
24	KHEOPS No 3	0	0	S	S?	S	0	2	S
25	KHEOPS No 5	S	S	S	S	23	0;	2	S
26	KHEOPS No 8	S	S	S	S	23	0	0	S
27	CRL83034	0	0	0	S	;1C	0	0;	0;

	Lr gene					Code					Code			
Set	I	1	2a	2c	3	B	R	R	R	R	L	S	R	R	R
set	II	9	16	24	26	C	R	R	R	S	M	S	R	R	S
Set	III	3ka	11	17	30	D	R	R	S	R	N	S	R	S	R
Set	IV	10	18	21	15	F	R	R	S	S	P	S	R	S	S
						G	R	S	R	R	Q	S	S	R	R
						H	R	S	R	S	R	S	S	R	S
						J	R	S	S	R	S	S	S	S	R
						K	R	S	S	S	T	S	S	S	S

Table 38. Entries in the 1996 Western Plains Regional Performance Nursery that possess a 1RS wheat-rye translocation. Data provided by Bob Graybosch, USDA-ARS, Lincoln, NE. Analytical methods were described in the 1993 Regional Report.

C.I. OR SEL. NO.	ENTRY NO.	TRANSLOCATION
LARNED	1	-
SIOUXLAND	2	1BL.1RS
LAMAR	3	-
ARAPAHOE	4	-
CO910927	5	1AL.1RS
CO910239	6	1AL.1RS
CO910424	7	-
CO910748	8	1AL.1RS
NE91648	9	-
NE92458	10	-
NE92662	11	-
NE91631	12	-
N92L005	13	-
N92V112	14	1BL.1RS
N94L187	15	-
TX88A6558	16	-
TX91A346	17	-
TX90A9528	18	-
TX88V4122	19	1BL.1RS
TX90A9516	20	-
TX91A207	21	1BL.1RS
TX91A590	22	-
T91	23	1AL.1RS
KHEOPS No.3	24	-
KHEOPS No.5	25	-
KHEOPS No.8	26	-
CRL83034	27	1BL.1RS

1996 Regional Germplasm Observation Nursery
Test Information

Table 1 (page 125):

Pedigree and Origin.

Russian Wheat Aphid (RWA); ARS, OK; Seedling ratings from S (susceptible) to HR (highly resistant). Local checks: 1) PI372129; 2) STARS-9302; 3)3-8. Data provided by David Porter and Cheryl Baker, USDA-ARS, Stillwater, OK.

Greenbug; ARS, OK; Seedling Greenbug ratings (biotype 'E') from S (susceptible) to HR (highly resistant). Local checks: 1) Amigo; 2) Largo; 3) GRS1201. Data provided by David Porter and Cheryl Baker, USDA-ARS, Stillwater, OK.

Hessian fly; ARS, KS; Seedling reaction to Hessian fly, Great Plains biotype, from S (susceptible) to R (resistant). Ratings for local checks were Newton - S; Ike - R; Caldwell - R; and Seneca - R. Data provided by J. Hatchett, USDA-ARS, Manhattan, KS.

Table 2 (page 136):

Leaf rust; ARS, KS; Seedling ratings from 0 (highly resistant) to 9 (highly susceptible). Race composite has virulence to lr 1, 2a, 2c, 3, 3ka, 9, 10, 11, 15, 17, 18, 24, 26, and 30. No local checks were included. Data provided by Merle Eversmeyer and Stan Cox, USDA-ARS, Manhattan, KS.

Leaf rust; Two reps; OSU, OK; Seedling ratings from R (resistant) to S (susceptible). Race composite has avirulence/virulence formula of 9 19 26 SXL / 1 2a 2c 3 3ka 11 16 17 24 30 DNE CTY. Local checks: 1) Thatcher, Lr19; 2) Century; and 3) Siouxland. Data provided by Bob Hunger and John Sherwood, Oklahoma State University, Stillwater, OK.

Stem Rust; Mead, NE; Field stem rust rating at Mead, NE from combined natural and artificial infection. Only those lines with susceptible reactions are noted. Local checks were included, but not recorded. Data provided by Stephen Baenziger, University of Nebraska, Lincoln, NE.

Wheat Streak Mosaic; KSU, Hays, KS; Field ratings from S (susceptible) to R (resistant). Local Checks: 1) Jagger; 2) 2137; and 3) KS93U206. Presence of BYDV was confirmed in the nursery which may have caused some mis-readings of WSMV infection. Data provided by Joe Martin, Kansas State University, Hays, KS.

Soilborne Mosaic Virus (SBMV), Visual ratings from March, 1996; OSU, OK; Field ratings of 1 (no mosaic or stunting), 2 (slight mosaic and/or stunting), 3 (moderate mosaic and/or stunting) or 4 (severe mosaic and/or stunting). Local checks: 1) Vona; 2) Hawk; and 3) Sierra. Data provided by Bob Hunger and John Sherwood, Oklahoma State University, Stillwater, OK.

Soilborne Mosaic Virus (SBMV), Elisa values; OSU, OK; Ratings from 'a' (no virus detected), '-+' (some virus detected), to '+' (virus detected). Local checks: 1) Vona; 2) Hawk; and 3) Sierra. For information regarding methodology see Table 14 in the SRPN section. Data provided by Bob Hunger and John Sherwood, Oklahoma State University, Stillwater, OK.

Wheat Spindle Streak Mosaic Virus (WSSMV), Elisa values; OSU, OK; Ratings from 'a' (no virus detected), '-+' (some virus detected), '+' (virus detected). Local checks: 1) Vona; 2) Hawk; and 3) Sierra. For information regarding methodology see Table 14 in the SRPN section. Data provided by Bob Hunger and John Sherwood, Oklahoma State University, Stillwater, OK.

Table 3 (page 147):

Acid Soil Tolerance; OSU, OK; Field ratings from Enid, OK on 12/1/95 and 2/22/96; 0 (Tolerant) to 9 (Susceptible). Local checks: 1) 2163; 2) OK91P648; and 3) Jagger. Entries with WK suffered winterkill. Data provided by Brett Carver, Oklahoma State University, Stillwater, OK.

Winter Damage - Prosper, TX; Texas A&M; Winter damage rating on 0-9 scale; Local Checks: 1) Sturdy; 2) TAM-300; 3) TAM-301. Data provided by David Marshall, Texas A&M, Dallas, TX.

Spring Stand-Bushland; Texas A&M; % Stand rated on April 20. Reflective of cumulative winter damage. Local Checks: 1) TAM-109; 2) TAM-200; 3) Eagle. Data provided by Mark Lazar, Texas A&M, Bushland, TX.

Winter Survival; Mead, NE; Winter survival rating on 1 (10% survival) to 9 (90%+ survival) scale; Local Checks were included, but not recorded. Data provided by Stephen Baenziger, University of Nebraska, Lincoln, NE.

Heading Date - Prosper, TX; Texas A&M; Heading date from 1/1. Local Checks: 1) Sturdy; 2) TAM-300; TAM-301. Data provided by David Marshall, Texas A&M, Dallas, TX.

Table 4 (page 158):

Drought Response, 4/20; Texas A&M, Bushland; Rating of flag leaf (0-4) on April 20, where 0=no green leaf, 1=half green leaf, 2=burnt leaf tip, 3=fully green but rolled, 4=flat green leaf. Local Checks: 1) TAM-109; 2) TAM-200; 3) Eagle. Data provided by Mark Lazar, Texas A&M, Bushland, TX.

Drought Response, 5/14; Texas A&M, Bushland; Rating of flag leaf (0-4) on May 14, where 0=no green leaf, 1=half green leaf, 2=burnt leaf tip, 3=fully green but rolled, 4=flat green leaf. Local Checks: 1) TAM-109; 2) TAM-200; 3) Eagle. Data provided by Mark Lazar, Texas A&M, Bushland, TX.

1996 Regional Germplasm Observation Nursery (Table 1 of 4)

Entry	Sel. No.	Pedigree	Origin	RW Aphid	Greenbug	Hessian Fly
				ARS, OK	ARS, OK	ARS, KS
				Seedling	Seedling	Seedling
				S-HR	S-HR	R-S
1	TAM-107	PI495594	Check	S	S	S
2	KARL 92	PI564245	Check	S	S	S
3	ARAPAHOE	PI518591	Check	S	S	R
4	LOCAL CHECK-1	See text	Check	R	S	.
5	LOCAL CHECK-2	See text	Check	R	R	.
6	LOCAL CHECK-3	See text	Check	R	HR	.
7	HBG0289	W3420/2165//2180	Marshall, Texas A&M	S	S	S
8	TX89D9627	MIT/KVZ	"	S	S	.
9	TX91D6198	SXL/VEE//2180	"	S	S	S
10	TX91D6791	PYN/MIT//P2165/P2548	"	S	S	S
11	TX91D6825	TXGH12588/TX86D1317	"	S	S	S
12	TX91D6839	TX86D1312/TX86A7169	"	S	S	S
13	TX91D6856	KVZ/TX86D1308//SDY/T300	"	S	S	R
14	TX91D6889	PB812/CWL//T300/3/2163	"	S	S	S
15	TX91D6901	T200/CWL//TX86D1310	"	S	S	H
16	TX91D6926	T200/CWL//CI13227/3/PB835/SDY	"	S	S	H
17	TX91D6960	T300/2163	"	S	S	S
18	TX91D7006	P2551/PB812//T300	"	S	S	R
19	TX92D7105	P2165//SN81/TX71A1039-V6	"	S	S	S
20	TX92D7194	PB812//CSM/ERA	"	S	S	S
21	TX92D7415	T300/3/SDY/C6815//CSM	"	S	S	S
22	TX92D7487	T200//SXL/TAN/3/PB812	"	S	S	S
23	TX92D7680	BULK SELECTION	"	S	S	S
24	TX92D7747	TX87V1138/MIT	"	S	S	S
25	TX92D8134	TX86D1310/CA8055	"	S	S	R
26	TX93D1451	BULK SELECTION	"	S	S	S
27	TX93D2066	TX89D9627//T108/BOW	"	S	S	S
28	TX93D2627	TX87V1119//SPN/ANI/3/T300/RL6009	"	S	S	S
29	TX93D3173	P2165//SN81/TX71A1039-V6	"	S	S	S
30	TX93D3180	P2172//SN81/TX71A1039-V6	"	S	S	S
31	TX94D4104	TX86D1320/TX84U4268	"	S	S	S

1996 Regional Germplasm Observation Nursery (Table 1 of 4)

Entry	Sel. No.	Pedigree	Origin	RW Aphid	Greenbug	Hessian Fly
				ARS, OK	ARS, OK	ARS, KS
				Seedling	Seedling	Seedling
				S-HR	S-HR	R-S
32	TX94D5725	BULK SELECTION	"	S	S	S
33	TX94D5740	BULK SELECTION	"	S	S	S
34	TX94D6101	MIT/3/2548/MSL//RL6080	"	S	S	S
35	TX94D6159	JB#54 SELECTION	"	S	S	R
36	TX94D7570	2180//TX89D9627	"	S	S	S
37	OK95G701	Rio Blanco/TAM 200	Carver, OSU	S	S	S
38	OK95G702	Rio Blanco/TAM 200	"	S	S	S
39	OK95G703	KS831374-154B/OR300764 (KS87W822-2-1)	"	S	S	S
40	OK95G704	KS84HW196*Rio Blanco/HBY762A	"	S	S	S
41	OK95G705	OK79256/PmV C2X5 reseln	"	S	S	S
42	OK95G706	OK79256/PmV C2X5 reseln	"	S	S	S
43	OK95G707	OK79256/PmV C2X5 reseln	"	S	S	S
44	OK95G708	OK79256/PmV C3X3	"	S	S	S
45	OK95G709	T101 HPS/Csm//T101 HPS/Mesa	"	S	S	S
46	TAM-107	PI495594	Check	S	S	S
47	KARL 92	PI564245	Check	S	S	S
48	ARAPAHOE	PI518591	Check	S	S	R
49	LOCAL CHECK-1	See text	Check	R	S	S
50	LOCAL CHECK-2	See text	Check	R	R	S
51	LOCAL CHECK-3	See text	Check	R	HR	S
52	OKRMHGP07/95	IWWRN #082 (IPPO 5 - HUNGARY)	Hunger, OSU	S	S	S
53	OKRMHGP08/95	IWWRN #189 (TR961-54 - BULGARIA)	"	S	S	S
54	OKRMHGP09/95	IWWRN #271 (TR880-152 - BULGARIA)	"	S	S	S
55	OKRMHGP10/95	CSM/#082//TBD	"	S	S	S
56	OKRMHGP11/95	MESA/#082	"	S	S	R
57	OKRMHGP12/95	MESA/#189	"	S	S	S
58	OKRMHGP13/95	MESA/#271	"	S	S	H
59	OKRMHGP14/95	TAM 108/#189	"	S	S	S
60	OKRMHGP15/95	TBD/#189	"	S	S	S
61	OKRMHGP16/95	TBD/#271	"	S	S	S
62	OKRMHGP17/95	VTY/#082	"	S	S	S

1996 Regional Germplasm Observation Nursery (Table 1 of 4)

Entry	Sel. No.	Pedigree	Origin	RW Aphid	Greenbug	Hessian Fly
				ARS, OK	ARS, OK	ARS, KS
				Seedling	Seedling	Seedling
				S-HR	S-HR	R-S
63	OKRMHGP18/95	VTY/#189	"	S	S	S
64	OKRMHGP19/95	VTY/#271	"	S	S	S
65	OKRMHDP20/95	#082/CSM	"	S	S	S
66	OKRMHGP21/95	#082/CTY	"	S	S	S
67	OKRMHGP22/95	#189/CSM	"	S	S	S
68	OKRMHGP23/95	#189/CTY	"	S	S	S
69	STARS-9302W	Bobwhite/PI 149898	Porter, ARS, OK	R	S	S
70	STARS-9303W	Bobwhite/PI 149898	"	R	S	S
71	STARS-GRS1201	TAM W-101/TX 4386-4	"	S	HR	S
72	STARS-GRS1204	Vona/TX 4384	"	S	HR	H
73	Karl	Check	Cox, ARS, KS	S	S	S
74	KS93U10	Karl*3//PI266844/PI355520	"	S	S	S
75	KS93U40	TAM 200*3/TA2460	"	S	S	S
76	KS93U50	Century*3/TA2450	"	S	S	H
77	KS93U123	Kamigo 94/TA2378//Karl	"	S	S	S
78	KS93U134	Karl*2//PI355520/PI265008/3/Century*3/TA2460	"	S	S	S
79	KS93U141	TAM 200*3/TA2460	"	S	S	S
80	KS93U164	Century*3/TA2460	"	S	S	S
81	KS94U210	Bulk Selection	"	S	S	S
82	KS94U215	Bulk Selection	"	S	S	S
83	TAM 107	Check	"	S	S	S
84	KS93U76	TAM 107*3/TA2460	"	S	S	S
85	KS93U109	TAM 107*2//KS811163-4/TA2470	"	S	S	S
86	KS94U241	TAM 107*2/TA759	"	S	S	S
87	KS94U261	TAM 107*2//PI355520/PI265008	"	S	S	S
88	KS94U276	KS90WGRC10 sib/KS92WGRC16	"	S	S	S
89	KS94U290	Karl*3/PI355520//KS90WGRC10 sib	"	S	S	S
90	KS94U306	TAM107*2/TA2527	"	S	R	S
91	KS94U328	KS90WGRC10 sib *2/TA2397	"	S	S	S
92	KS94U337	KS90WGRC10 sib *2/TA2455	"	S	S	S
93	KS94U338	KS90WGRC10 sib *2/TA2455	"	S	S	S

1996 Regional Germplasm Observation Nursery (Table 1 of 4)

Entry	Sel. No.	Pedigree	Origin	RW Aphid	Greenbug	Hessian Fly
				ARS, OK	ARS, OK	ARS, KS
				Seedling	Seedling	Seedling
				S-HR	S-HR	R-S
94	KS94U352	KS90WGRC10 sib *3/TA2397	"	S	S	S
95	KS94U415	KS90WGRC10 sib*3/TA2455	"	S	S	S
96	TAM-107	PI495594	Check	S	S	S
97	KARL 92	PI564245	Check	S	S	S
98	ARAPAHOE	PI518591	Check	S	S	R
99	LOCAL CHECK-1	See text	Check	R	S	.
100	LOCAL CHECK-2	See text	Check	R	R	.
101	LOCAL CHECK-3	See text	Check	R	HR	.
102	HBG0332-1	W3438/W3453//W9426	Sears, KSU	S	S	R
103	HBK0935-73-3	2180/Karl//2163	"	S	S	R
104	HBK0935-117-1	" " "	"	S	S	R
105	HBK0935-35-1-2	" " "	"	S	S	R
106	HBK0630-4	HBA142A/HBZ621A//Abiliene	"	S	S	H
107	HBK0771-10	HBZ588B/Karl//2163	"	S	S	S
108	HBK1157-14	HBZ252C/2163//HBZ356A/2163	"	S	S	H
109	KS87436H-3-1-2	SD2980/Karl//KS79259-3	"	S	S	R
110	KS90061-7	Karl/M1610-87//T200	"	S	S	S
111	KS84063-9-6A	KS82W418/SPN	"	S	S	S
112	KS84063-9-45A	" "	"	S	S	H
113	HBE0780B-1	2163/W9523A	"	S	S	H
114	KS86323A-5-2	P2157/79-9176-5W/Karl	"	S	S	S
115	KS87024F-5-1	TX81V6614/KS831943//SB114	"	S	S	H
116	VBF0589-1	W1062A/HVA114//W3416	"	S	S	H
117	KS87262F-7-3	RHS7837/ND615//79-9176-5W	"	S	S	S
118	KS87581I-2-1	KS82135I-2/MN80056//KS831022	"	S	S	S
119	KS87024F-4-1-1	TX81V6614/KS831943//SB114	"	S	S	S
120	KS940935-35-1-1	2180/Karl//2163	"	S	S	S
121	HBK1157-13	HBZ252C/2163//HBZ356A/2163	"	S	S	H
122	G1594	BCD-1828/83 (G1420) reselection	Goertzen, Seeds, KS	S	S	S
123	KHEOPS No.3	Red Kleo/Pioneer 2157	Schraeder, KS	S	S	S
124	KHEOPS No.5	" "	"	S	S	S

1996 Regional Germplasm Observation Nursery (Table 1 of 4)

Entry	Sel. No.	Pedigree	Origin	RW Aphid	Greenbug	Hessian Fly
				ARS, OK	ARS, OK	ARS, KS
				Seedling	Seedling	Seedling
				S-HR	S-HR	R-S
125	KHEOPS No.8	" "	"	S	S	S
126	KS94HW59	KS84HW196/TAM200	Martin, KSU	S	S	S
127	KS94HW63	" "	"	S	S	S
128	KS94HW80	KS84HW200/B203//KS87H22	"	S	S	S
129	KS94HW101	KS87H65//84WS164/2157	"	S	S	S
130	KS94HW108	" "	"	S	S	S
131	KS94HW115	HBA 1442A/HBZ6211A//RioBlanco	"	S	S	S
132	KS94H147	KS87H22/Mesa	"	S	S	S
133	KS94H215-1	KS87H326/KS87H186	"	S	S	S
134	KS94H215-4	" "	"	S	S	S
135	KS95HW12	KS91H184/3*RB	"	S	S	S
136	KS95HW22	Arlinsib/KS91H184//RB	"	S	S	S
137	KS95HW42	PI220127/P5//TAM200/KS87H66	"	R	S	S
138	KS95HW44	KS87H22/MW09	"	S	S	S
139	KS95HW53	"	"	S	S	S
140	KS95HW62	KS87H325/RioBlanco	"	S	S	S
141	KS95HW66	KS87H325/MW09	"	S	S	H
142	KS95HW68	"	"	S	S	H
143	KS95H89	KS91H184/KS89H185//KS87H6	"	S	S	S
144	KS95H100	KS91H184/Ks89H20//TAM107	"	S	S	H
145	KS95H105	KS91H174/Ike//TAM107	"	S	S	H
146	KS95H106	" "	"	S	S	H
147	KS95H122	KS91H174/KS89H33	"	S	S	H
148	KS95H124	KS91H184/KS89H20	"	S	S	H
149	KS95H129	" "	"	S	S	H
150	KS95H130	" "	"	S	S	H
151	KS95H149	KS87H22/X8034-5-10-4	"	S	S	H
152	KS95H151	PI220127/P5//TAM200/KS87H66	"	R	S	H
153	KS95H154	" "	"	R	S	S
154	KS95H163	KS87H325/4/PI220127/P5/3/KS84HW196/NRK//TAM200	"	MS-M	S	H
155	KS95H167	PI220350/KS87H57//TAM200/KS87H66/3/KS87H325	"	MS-MR	S	S

1996 Regional Germplasm Observation Nursery (Table 1 of 4)

Entry	Sel. No.	Pedigree	Origin	RW Aphid	Greenbug	Hessian Fly
				ARS, OK	ARS, OK	ARS, KS
				Seedling	Seedling	Seedling
				S-HR	S-HR	R-S
156	KS95H169	" "	"	MR	S	S
157	KS95H171	" "	"	MR	S	H
158	KS95H176	" "	"	MS-MR	S	H
159	TAM-107	PI495594	Check	S	S	S
160	KARL 92	PI564245	Check	S	S	S
161	ARAPAHOE	PI518591	Check	S	S	R
162	LOCAL CHECK-1	See text	Check	R	S	.
163	LOCAL CHECK-2	See text	Check	R	R	.
164	LOCAL CHECK-3	See text	Check	R	HR	.
165	94L10135	Mironovskaya 10/NE7060///NE80413 (1B/1R)	Graybosch, ARS, NE	S	S	S
166	94L10157	" " (1R)	"	S	S	S
167	94L10159	" " (1R)	"	S	S	S
168	94L10244	" " (1B/1R)	"	S	S	S
169	94L10333	" " (1B/1R)	"	S	S	S
170	94L10337	" " (1B/1R)	"	S	S	S
171	94L10404	" " (1R)	"	S	S	S
172	94L10407	" " (1R)	"	S	S	S
173	94L10521	" " (1R)	"	S	S	S
174	94L10326	" " (1B/1R)	"	S	S	S
175	CO910927	HALT	Quick, CSU	R	S	S
176	CO910423	Mesa/Carson	"	S	S	S
177	CO910424	Mesa/Carson	"	S	S	H
178	CO910748	CO840104/Lamar	"	S	S	H
179	CO910239	KS831374/TAM107	"	S	S	S
180	CO920010	TAM200/TAM107	"	S	S	S
181	CO920119	OK85310/CO820026	"	S	S	H
182	CO920178	TXGH105638/Lamar	"	S	MR	S
183	CO920696	Yuma/TAM107	"	S	S	H
184	CO920776	CO850260/TAM200	"	S	S	S
185	CO920790	CO850267/Lamar	"	S	S	H
186	XH1861	Quantum Hybrid Wheat	HybriTech Seeds, KS	S	S	S

1996 Regional Germplasm Observation Nursery (Table 1 of 4)

Entry	Sel. No.	Pedigree	Origin	RW Aphid	Greenbug	Hessian Fly
				ARS, OK	ARS, OK	ARS, KS
				Seedling	Seedling	Seedling
				S-HR	S-HR	R-S
187	XH1862	" "	"	S	S	S
188	XH1863	" "	"	S	S	H
189	XH1864	" "	"	S	S	S
190	XH1865	" "	"	S	S	H
191	XH1866	" "	"	S	S	S
192	XH1867	" "	"	S	S	S
193	XH1869	" "	"	S	S	H
194	XH1878	" "	"	S	S	S
195	XH1881	" "	"	S	S	H
196	XH1882	" "	"	S	S	S
197	XH1888	" "	"	S	S	S
198	XH1889	" "	"	S	S	S
199	XH1895	" "	"	S	S	S
200	XH1904	" "	"	S	S	S
201	TAM-107	PI495594	Check	S	S	S
202	KARL 92	PI564245	Check	S	S	S
203	ARAPAHOE	PI518591	Check	S	S	R
204	LOCAL CHECK-1	See text	Check	R	S	.
205	LOCAL CHECK-2	See text	Check	R	R	.
206	LOCAL CHECK-3	See text	Check	R	HR	.
207	NE94407	NE87526//Y51 X. Cerros x ZG-K-172/82 x FL301	Baenziger, UN-L	S	S	S
208	NE94413	NE87632/TX80A5901-1	"	S	S	H
209	NE94445	Pion W9021L/Cody//Rawhide	"	S	S	R
210	NE94479	Arapahoe/Abilene//NE86488	"	S	S	R
211	NE94481	" "	"	S	S	R
212	NE94482	" "	"	S	S	R
213	NE94489	Arapahoe/OK81322//NE82438	"	S	S	S
214	NE94507	NE86488/NE87...	"	S	S	S
215	NE94512	NE86487/NE86582	"	S	S	S
216	NE94518	NE86606/NE87636	"	S	S	S
217	NE94567	KS86H187/Cody	"	S	S	R

1996 Regional Germplasm Observation Nursery (Table 1 of 4)

Entry	Sel. No.	Pedigree	Origin	RW Aphid	Greenbug	Hessian Fly
				ARS, OK	ARS, OK	ARS, KS
				Seedling	Seedling	Seedling
				S-HR	S-HR	R-S
218	NE94577	TX78A3345-V34/NE87408	"	S	S	H
219	NE94585	OK85310/TAM200	"	S	S	H
220	NE94588	TX84V122/NE84557	"	S	S	S
221	NE94589	" "	"	S	S	S
222	NE94632	Abilene/Norkan//Rawhide	"	S	S	S
223	NE94653	Arapahoe/Abilene//Arapahoe	"	S	S	H
224	NE94654	" "	"	S	S	R
225	NE94655	" "	"	S	S	H
226	NE94661	N86L250/Vista	"	S	S	R
227	NE94665	N86L250/Vista	"	S	S	S
228	NE94666	N86L420/NE86488	"	S	S	S
229	NE94673	KS831936-3/NE86501	"	S	S	S
230	NE94685	NE87449/N86L200	"	S	S	S
231	N92L053	NB68495/NB66490//TJB54-224/3/KS821170	Peterson, ARS, NE	S	S	S
232	N92L249	KS831672/3/Rannaya12/Bez4/2/Lanc/F9-67	"	S	S	S
233	N92L250	" "	"	S	S	S
234	N93L129	NE87449/N86L200	"	S	S	H
235	N93L068	KS831936-3//Colt/Cody	"	S	S	H
236	N93L207	" "	"	S	S	S
237	N95L139	" "	"	S	S	S
238	N95L141	" "	"	S	S	S
239	N95L158	" "	"	S	S	S
240	N95L159	" "	"	S	S	S
241	N95L160	" "	"	S	S	S
242	N95L161	" "	"	S	S	S
243	N95L162	" "	"	S	S	S
244	N95L164	" "	"	S	S	S
245	N95L172	" "	"	S	S	R
246	N95L173	" "	"	S	S	R
247	N94L026	ND643/Siouxland//NE87619	"	S	S	S
248	N94L028	" "	"	S	S	H

1996 Regional Germplasm Observation Nursery (Table 1 of 4)

Entry	Sel. No.	Pedigree	Origin	RW Aphid	Greenbug	Hessian Fly
				ARS, OK	ARS, OK	ARS, KS
				Seedling	Seedling	Seedling
				S-HR	S-HR	R-S
249	N94L153	Sxl/Vee's'/4/NE75424/3/NapHal/At66//NS10-18	"	S	S	R
250	N94L179	Sel.14-53/3/Lcr/2/At66/Cmn/4/Od-3/5/KS831936-3	"	S	S	R
251	N94L182	KS831170/4/Aur/NE701154/3/Ne7060/2/Ran12/Bez4	"	S	S	S
252	N94L205	OK11252A/HW76-1226/2/Ks831862	"	S	S	S
253	N94L212	NE7060/2/Ok11252A/HW76-1226	"	S	S	S
254	N94L338	Unknown	"	S	S	S
255	N94L187	KS831672/3/Rannaya12/Bez4/2/Lancota/F9-67	"	S	S	S
256	N95S003	KS87809-10/Arapahoe	"	S	S	H
257	N95S004	KS87809-10/Arapahoe	"	S	S	S
258	N95S065	N87U111/Madsen//Luke/PI228295/NGN/SPN	"	S	S	S
259	N95S074	N87U111/WA7433//IDO81227-SPN/NAC-76	"	S	S	S
260	N95L076	" "	"	S	S	S
261	TAM-107	PI495594	Check	S	S	S
262	KARL 92	PI564245	Check	S	S	S
263	ARAPAHOE	PI518591	Check	S	S	R
264	LOCAL CHECK-1	See text	Check	R	S	.
265	LOCAL CHECK-2	See text	Check	R	R	.
266	LOCAL CHECK-3	See text	Check	R	HR	.
267	SD89119	BRUL/AGAT	Haley, SDSU	S	S	R
268	SD89153	BRUL/CSM	"	S	S	S
269	SD89205	CTA/DAWN	"	S	S	H
270	SD91192	COLT/RITA	"	S	S	H
271	SD92107	BRUL//BNT/CSM/3/ARAP	"	S	S	H
272	SD92124	BRUL/T105//NE82651	"	S	S	S
273	SD92174	NWN/RRI	"	S	S	S
274	SD92191	OK81306//SD82102/NWN	"	S	S	R
275	SD92227	SD76463-16//SD82195/SD82144	"	S	S	R
276	SD92266	NE82651/RLD	"	S	S	S
277	SD93104	LCO/SXL	"	S	S	S
278	SD93128	ROSE/SXL	"	S	S	S
279	SD93164	SD8026/AGZ//CSM	"	S	S	H

1996 Regional Germplasm Observation Nursery (Table 1 of 4)

Entry	Sel. No.	Pedigree	Origin	RW Aphid	Greenbug	Hessian Fly
				ARS, OK	ARS, OK	ARS, KS
				Seedling	Seedling	Seedling
				S-HR	S-HR	R-S
280	SD93189	SD8026/RRI//TBD	"	S	S	S
281	SD93205	SD8026/RRI//TBD	"	S	S	S
282	SD93223	RLD/COLT//SD76598-7	"	S	S	S
283	SD93229	BRUL/SD82102	"	S	S	S
284	SD93267	SD8026/RRI//SD76598-7/AGZ	"	S	S	S
285	SD93336	MT8030/TX81V-6180	"	S	S	H
286	SD93340	RLD/NWN	"	S	S	S
287	SD93344	RLD/NWN	"	S	S	S
288	SD93352	RDW/BRUL	"	S	S	S
289	SD93359	BRUL/TAM 105//NE82651	"	S	S	R
290	SD93364	BRUL/TAM 105//NE82651	"	S	S	S
291	SD93380	TX80A-5901-1/NE78488	"	S	S	R
292	SD93406	BRUL//BNT/CSM/3/NE82651	"	S	S	S
293	SD93407	NWN/RRI	"	S	S	S
294	SD93461	SD74221-15/4/CTK78/JMS//NAPB8300/CTK78	"	S	S	S
295	SD93471	SD74221-15/4/CTK78/JMS//NAPB8300/CTK78	"	S	S	S
296	SD93476	CTK78/NE82651	"	S	S	R
297	SD93478	CTK78/NE82651	"	S	S	R
298	SD93487	RLD/CTK78	"	S	S	S
299	SD93489	RLD/CTK78	"	S	S	S
300	SD93493	RLD/CTK78	"	S	S	S
301	SD93500	MT8039/RDW	"	S	S	R
302	TAM-107	PI495594	Check	S	S	S
303	KARL 92	PI564245	Check	S	S	S
304	ARAPAHOE	PI518591	Check	S	S	R
305	LOCAL CHECK-1	See text	Check	R	S	.
306	LOCAL CHECK-2	See text	Check	R	R	.
307	LOCAL CHECK-3	See text	Check	R	HR	.
308	ND9304	ND8471/NE82651	Anderson, NDSU	S	S	S
309	ND9324	ND8408/NE82658	"	S	S	S
310	ND9382	SEWARD/ND8415	"	S	S	S

1996 Regional Germplasm Observation Nursery (Table 1 of 4)

Entry	Sel. No.	Pedigree	Origin	RW Aphid	Greenbug	Hessian Fly
				ARS, OK	ARS, OK	ARS, KS
				Seedling	Seedling	Seedling
				S-HR	S-HR	R-S
311	ND9402	ND8286/SD82144	"	S	S	S
312	ND9416	ND8581/ABILENE	"	S	S	S
313	ND9417	ND8581/ABILENE	"	S	S	S
314	ND9419	ND85105/MT8030	"	S	S	S
315	ND9420	ND85111/ABILENE	"	S	S	S
316	ND9421	ND8215/TXGH13622	"	S	S	S
317	ND9430	ND8407/AGC-111	"	S	S	S
318	ND9438	SEWARD/AGC-111	"	S	S	S
319	ND9439	SEWARD/NE78488	"	S	S	S
320	ND9448	ND8407/RL845455	"	S	S	S
321	ND9454	ND85105/KARL	"	S	S	S
322	ND9458	SEWARD/RL845455	"	S	S	S
323	ND9460	SEWARD/RL845455	"	S	S	S
324	ND9461	SEWARD/SD78207-4	"	S	S	S
325	ND9464	SEWARD//ND8286/KARL	"	S	S	S
326	ND9478	ND8215//SEWARD/NE82658	"	S	S	S
327	ND9479	ND8215//ND8471/SIOUXLAND	"	S	S	S
328	ND9480	ND8286//ND8407/NE82658	"	S	S	S
329	ND9483	SEWARD//ND8215/CODY	"	S	S	S
330	ND9488	SEWARD//ND8382/AUBURN	"	S	S	S
331	ND9489	SEWARD//SEWARD/AUBURN	"	S	S	S
332	ND9490	SEWARD//SEWARD/AUBURN	"	S	S	S
333	ND9494	RRR//ND8286/BALKAN	"	S	S	S
334	ND9496	SEWARD//SEWARD/5501	"	S	S	S
335	ND9497	ND8215/ND8530	"	S	S	S
336	ND94103	SEWARD/ND85137	"	S	S	S
337	ND94108	KS87UP9/ND8407	"	S	S	S
338	TAM-107	PI495594	Check	S	S	S
339	KARL 92	PI564245	Check	S	S	S
340	ARAPAHOE	PI518591	Check	S	S	R

1996 Regional Germplasm Observation Nursery (Table 2 of 4)

Entry	Sel. No.	Leaf Rust	Leaf Rust	Leaf Rust	Stem Rust	WSM Virus	SBM Virus	SBM Virus	WSSM Virus
		ARS, KS	OSU, OK	OSU, OK	UNL, NE	KSU, Hays	OSU, OK	OSU, OK	OSU, OK
		Seedling	Seedling	Seedling	Field Rxn		Visual	ELISA	ELISA
		0-9	Rep 1;R-S	Rep 2;R-S	R-S	S-R	1-4	+,a	+,a
1	TAM-107	9	S	S	.	MS	3	+	+
2	KARL 92	8	S	S	.	S	1	a	a
3	ARAPAHOE	2	R	R	.	S	3	+	+
4	LOCAL CHECK-1	.	R	R	.	.	4	+	+
5	LOCAL CHECK-2	.	MR	MR	.	.	1	a	a
6	LOCAL CHECK-3	.	MR	MR	.	.	2	a	+
7	HBG0289	7	MR	MS	.	S	2	+	+
8	TX89D9627	3	MR	MR	.	S	3	a	a
9	TX91D6198	2	R	MR	.	MS	4	+	±
10	TX91D6791	8	MS	S	.	MS	1	+	+
11	TX91D6825	7	MS	MS	.	MR	1	a	+
12	TX91D6839	7	R	MR	.	S	3	+	+
13	TX91D6856	2	MR	MR	.	MS	3	+	±
14	TX91D6889	7	S	S	.	S	2	+	+
15	TX91D6901	8	S	S	.	MR	1	a	+
16	TX91D6926	4	MR	MR	.	S	1	a	+
17	TX91D6960	1	MR	MR	.	MR	1	±	+
18	TX91D7006	5	MR	MR	S	MS	1	a	±
19	TX92D7105	9	S	S	.	MS	1	a	±
20	TX92D7194	1	S	S	.	MS	3	+	+
21	TX92D7415	9	MR	MR	.	MR	3	+	+
22	TX92D7487	1	R	R	S	MR	3	+	a
23	TX92D7680	9	MR	MR	.	MS	4	+	a
24	TX92D7747	2	MR	MR	.	VS	1	+	±
25	TX92D8134	4	MR	MR	.	S	1	+	+
26	TX93D1451	9	MS	MR	.	S	1	a	+
27	TX93D2066	1	R	R	.	MS	4	+	a
28	TX93D2627	2	MR	MR	.	MR	3	+	±
29	TX93D3173	9	S	S	.	MS	1	a	a
30	TX93D3180	9	S	S	.	MS	1	a	+
31	TX94D4104	8	MS	MS	S	MS	4	+	+

1996 Regional Germplasm Observation Nursery (Table 2 of 4)

Entry	Sel. No.	Leaf Rust	Leaf Rust	Leaf Rust	Stem Rust	WSM Virus	SBM Virus	SBM Virus	WSSM Virus
		ARS, KS	OSU, OK	OSU, OK	UNL, NE	KSU, Hays	OSU, OK	OSU, OK	OSU, OK
		Seedling	Seedling	Seedling	Field Rxn		Visual	ELISA	ELISA
		0-9	Rep 1;R-S	Rep 2;R-S	R-S	S-R	1-4	+,a	+,a
32	TX94D5725	5	S	S	.	MR	4	+	+
33	TX94D5740	7	S	S	.	S	4	+	+
34	TX94D6101	6	S	S	S	S	1	+	a
35	TX94D6159	8	S	S	.	MS	1	a	+
36	TX94D7570	2	R	R	S	S	3	+	±
37	OK95G701	3	MR	MR	.	S	2	+	±
38	OK95G702	1	MS	MS	.	S	2	+	+
39	OK95G703	5	MS	MS	.	S	1	a	a
40	OK95G704	3	S	S	.	S	3	+	+
41	OK95G705	1	MS	MR	.	.	4	+	a
42	OK95G706	8	S	S	.	MS	3	+	a
43	OK95G707	6	MR	MS	.	S	2	+	+
44	OK95G708	5	S	S	.	S	2	+	a
45	OK95G709	4	S	S	.	.	2	+	+
46	TAM-107	9	S	S	.	MS	3	+	+
47	KARL 92	8	S	S	.	S	1	a	a
48	ARAPAHOE	3	MS	MR	.	S	3	+	+
49	LOCAL CHECK-1	.	R	R	.	MR	4	+	a
50	LOCAL CHECK-2	.	S	S	.	MR	1	a	a
51	LOCAL CHECK-3	.	MR	MR	.	MS	1	a	+
52	OKRMHGP07/95	3	MR	MR	.	S	4	+	a
53	OKRMHGP08/95	1	R	R	.	S	4	+	a
54	OKRMHGP09/95	1	R	MR	.	S	4	+	±
55	OKRMHGP10/95	4	MS	MR	.	S	1	+	+
56	OKRMHGP11/95	4	S	S	.	MR	1	a	+
57	OKRMHGP12/95	2	MR	MR	.	MR	1	a	a
58	OKRMHGP13/95	2	MS	MR	.	MS	2	+	±
59	OKRMHGP14/95	1-5	MS	S	.	S	1	a	a
60	OKRMHGP15/95	1	MS	MR	.	S	1	a	a
61	OKRMHGP16/95	2	MR	MR	.	S	1	a	±
62	OKRMHGP17/95	5	MS	MR	.	MS	1	a	+

1996 Regional Germplasm Observation Nursery (Table 2 of 4)

Entry	Sel. No.	Leaf Rust	Leaf Rust	Leaf Rust	Stem Rust	WSM Virus	SBM Virus	SBM Virus	WSSM Virus
		ARS, KS	OSU, OK	OSU, OK	UNL, NE	KSU, Hays	OSU, OK	OSU, OK	OSU, OK
		Seedling	Seedling	Seedling	Field Rxn		Visual	ELISA	ELISA
		0-9	Rep 1;R-S	Rep 2;R-S	R-S	S-R	1-4	+,a	+,a
63	OKRMHGP18/95	6	S	MR	.	S	2	a	+
64	OKRMHGP19/95	7	S	MS	.	S	1	a	a
65	OKRMHDP20/95	4	S	S	.	S	4	+	±
66	OKRMHGP21/95	3	MS	MR	.	MR	4	+	±
67	OKRMHGP22/95	7	S	S	.	S	4	+	+
68	OKRMHGP23/95	2	MS	MR	.	MR	3	+	a
69	STARS-9302W	2	MR=	MR	.	S	W	WK	WK
70	STARS-9303W	2	R	MR	.	S	W	WK	WK
71	STARS-GRS1201	7	MS	S	S	MR	3	+	±
72	STARS-GRS1204	5	MS	MS	.	MR	3	+	a
73	Karl	7	MS	S	.	S	1	±	±
74	KS93U10	0	R	R	.	S	1	+	±
75	KS93U40	-	R	R	.	S	4	+	a
76	KS93U50	1	MR	MR	.	MS	4	+	a
77	KS93U123	0	MR	MR	.	S	1	a	a
78	KS93U134	1	R	R	.	S	1	a	a
79	KS93U141	0	R(3p3)	R(1p3)	.	MS	1	+	±
80	KS93U164	1	MS	R	.	MS	3	+	±
81	KS94U210	0	R	R	.	MR	3	+	a
82	KS94U215	0	R	R	.	MR	3	+	+
83	TAM 107	9	S	S	.	MS	4	+	+
84	KS93U76	1	R	R(2p3)	.	MS	2	+	+
85	KS93U109	2	R	R	.	MS	4	+	+
86	KS94U241	1	MS	R	.	MS	4	+	+
87	KS94U261	0	MR	MR	S	MS	1	a	a
88	KS94U276	1	R	R	S	MS	1	a	+
89	KS94U290	2	MS	MS	.	MS	1	a	+
90	KS94U306	2	MR	MS	.	MS	4	+	a
91	KS94U328	2	S	S	.	MR	1	a	+
92	KS94U337	0	MR	R	.	MR	3	+	±
93	KS94U338	4	S	S	.	MS	1	a	a

1996 Regional Germplasm Observation Nursery (Table 2 of 4)

Entry	Sel. No.	Leaf Rust	Leaf Rust	Leaf Rust	Stem Rust	WSM Virus	SBM Virus	SBM Virus	WSSM Virus
		ARS, KS	OSU, OK	OSU, OK	UNL, NE	KSU, Hays	OSU, OK	OSU, OK	OSU, OK
		Seedling	Seedling	Seedling	Field Rxn		Visual	ELISA	ELISA
		0-9	Rep 1;R-S	Rep 2;R-S	R-S	S-R	1-4	+,a	+,a
94	KS94U352	1	MR	R	.	MS	3	+	a
95	KS94U415	1	MR	MR	.	MR	3	+	+
96	TAM-107	9	S	S	.	MS	4	+	+
97	KARL 92	6	S	S	.	S	1	a	a
98	ARAPAHOE	1	MS	MR	.	S	4	+	a
99	LOCAL CHECK-1	.	R	R	.	.	3	+	+
100	LOCAL CHECK-2	.	S	S	.	.	1	+	a
101	LOCAL CHECK-3	.	R	MR	.	.	1	+	+
102	HBG0332-1	5	S	S	.	MR	1	a	+
103	HBK0935-73-3	8	S	S	.	MR	1	+	+
104	HBK0935-117-1	7	MS	MS	.	S	2	+	±
105	HBK0935-35-1-2	6	MS	S	.	MS	1	a	+
106	HBK0630-4	3	R	MR	.	S	2	+	+
107	HBK0771-10	6	S	S	.	MR	1	a	+
108	HBK1157-14	4	S	S	.	MS	2	+	+
109	KS87436H-3-1-2	7	R(2p3)	R(1p3)	.	MS	2	+	+
110	KS90061-7	4	MS	MR	.	MS	4	+	a
111	KS84063-9-6A	7	MS	MS	.	MS	1	+	±
112	KS84063-9-45A	8	MS	S	.	MS	1	+	+
113	HBE0780B-1	7	MS	MS	.	MR	1	+	+
114	KS86323A-5-2	5	S	S	.	MS	1	±	a
115	KS87024F-5-1	9	S	S	.	VS	1	a	a
116	VBF0589-1	8	MR	MS	.	MS	1	±	+
117	KS87262F-7-3	3	R	R	.	S	1	a	+
118	KS87581I-2-1	0	MR	MR	.	S	1	+	a
119	KS87024F-4-1-1	9	MR	MR	.	S	1	±	±
120	KS940935-35-1-1	5	MR	S	.	MR	1	+	+
121	HBK1157-13	6	R	R	MS	MS	1	a	+
122	G1594	9	MR	MS	S	MS	1	a	a
123	KHEOPS No.3	7	MR	MR	.	MR	1	a	+
124	KHEOPS No.5	7	S	S	.	MR	1	a	+

1996 Regional Germplasm Observation Nursery (Table 2 of 4)

Entry	Sel. No.	Leaf Rust	Leaf Rust	Leaf Rust	Stem Rust	WSM Virus	SBM Virus	SBM Virus	WSSM Virus
		ARS, KS	OSU, OK	OSU, OK	UNL, NE	KSU, Hays	OSU, OK	OSU, OK	OSU, OK
		Seedling	Seedling	Seedling	Field Rxn		Visual	ELISA	ELISA
		0-9	Rep 1;R-S	Rep 2;R-S	R-S	S-R	1-4	+,a	+,a
125	KHEOPS No.8	6	S	S	.	MR	1	a	±
126	KS94HW59	4	MR	MR	.	MR	4	+	+
127	KS94HW63	4	MS	MR	.	MR	3	+	a
128	KS94HW80	5	MR	MR	.	S	4	+	+
129	KS94HW101	5	MR	MR	.	MR	4	+	+
130	KS94HW108	2	S	MS	.	MR	1	a	a
131	KS94HW115	2	S	S	.	S	1	a	±
132	KS94H147	2	S	S	.	MR	1	+	+
133	KS94H215-1	2	S	S	.	S	4	+	+
134	KS94H215-4	2	S	S	.	S	4	+	a
135	KS95HW12	3	S	S	.	R	1	a	a
136	KS95HW22	3	R	MR	.	MS	1	a	a
137	KS95HW42	3	R	MR	.	S	4	+	a
138	KS95HW44	5	S	S	S	MS	3	+	+
139	KS95HW53	3	R(1p3)	R(2p3)	.	MS	2	+	+
140	KS95HW62	1	MR	MR	S	MS	2	±	+
141	KS95HW66	8	S	S	.	MS	3	+	+
142	KS95HW68	8	MS	MR	.	MS	3	+	+
143	KS95H89	8	MS	S	.	H	1	+	±
144	KS95H100	8	R	MS	.	R	3	+	a
145	KS95H105	2	MR	MR	.	H	3	+	+
146	KS95H106	3	MR	MR	.	R	3	+	+
147	KS95H122	5	S	S	.	R	3	+	a
148	KS95H124	6	S	S	.	H	3	+	+
149	KS95H129	8	S	S	.	H	3	+	+
150	KS95H130	5	S	S	.	H	3	+	±
151	KS95H149	0	MR	MR	.	MS	1	±	+
152	KS95H151	3	S	S	.	S	4	+	+
153	KS95H154	9	S	S	.	MS	4	+	±
154	KS95H163	3	S	S	.	S	2	+	±
155	KS95H167	7	R	R	.	MS	1	a	+

1996 Regional Germplasm Observation Nursery (Table 2 of 4)

Entry	Sel. No.	Leaf Rust	Leaf Rust	Leaf Rust	Stem Rust	WSM Virus	SBM Virus	SBM Virus	WSSM Virus
		ARS, KS	OSU, OK	OSU, OK	UNL, NE	KSU, Hays	OSU, OK	OSU, OK	OSU, OK
		Seedling	Seedling	Seedling	Field Rxn		Visual	ELISA	ELISA
		0-9	Rep 1;R-S	Rep 2;R-S	R-S	S-R	1-4	+,a	+,a
156	KS95H169	1	R	MR	.	MR	3	+	+
157	KS95H171	4	MR	MR	.	MR	3	+	+
158	KS95H176	3	S	S	.	MS	3	+	+
159	TAM-107	9	S	S	.	MS	3	+	+
160	KARL 92	8	S	S	.	S	1	a	a
161	ARAPAHOE	-	S	S	.	S	3	+	a
162	LOCAL CHECK-1	.	R	R	.	.	4	+	+
163	LOCAL CHECK-2	.	S	S	.	.	1	a	a
164	LOCAL CHECK-3	.	MR	MR	.	.	2	+	a
165	94L10135	0	S	MR	.	MS	3	+	a
166	94L10157	0	S	S	.	S	1	+	a
167	94L10159	1	S	MS	.	S	4	+	a
168	94L10244	0	S	MS	.	S	1	±	a
169	94L10333	1	MR	MR	.	S	1	+	a
170	94L10337	1	S	S	.	S	1	+	a
171	94L10404	0	S	S	.	S	3	+	a
172	94L10407	0	R	R	.	S	3	+	a
173	94L10521	1	MR	MR	.	S	4	+	a
174	94L10326	1-9	R(1p3)	R(2p3)	.	S	1	+	a
175	CO910927	9	S	S	.	MS	1	+	a
176	CO910423	4	S	S	.	MS	4	+	a
177	CO910424	3	MR	MS	.	MR	1	a	a
178	CO910748	8	MR	MS	.	S	4	+	a
179	CO910239	9	S	S	.	S	4	+	a
180	CO920010	3	S	S	.	S	4	+	a
181	CO920119	8	S	S	.	S	3	+	a
182	CO920178	9	S	S	.	MS	4	+	a
183	CO920696	9	S	S	.	MS	4	+	a
184	CO920776	2	MS	MR	.	S	3	+	a
185	CO920790	9	S	S	.	S	4	+	a
186	XH1861	1	R(1p3)	R(1p3) .	MS	S	1	+	a

1996 Regional Germplasm Observation Nursery (Table 2 of 4)

Entry	Sel. No.	Leaf Rust	Leaf Rust	Leaf Rust	Stem Rust	WSM Virus	SBM Virus	SBM Virus	WSSM Virus
		ARS, KS	OSU, OK	OSU, OK	UNL, NE	KSU, Hays	OSU, OK	OSU, OK	OSU, OK
		Seedling	Seedling	Seedling	Field Rxn		Visual	ELISA	ELISA
		0-9	Rep 1;R-S	Rep 2;R-S	R-S	S-R	1-4	+,a	+,a
187	XH1862	1	R(3p3)	R(2p3)	S	S	1	a	a
188	XH1863	1	R	R	S	MS	1	a	a
189	XH1864	3	R	R	.	MS	1	a	a
190	XH1865	3	R	MR	.	MS	1	+	a
191	XH1866	3	MR	MR	.	MS	1	a	a
192	XH1867	4	MR	MR	.	MS	1	a	a
193	XH1869	3	MR	MR	.	MR	1	+	a
194	XH1878	1	MR	MR	.	MS	2	+	a
195	XH1881	2	MR	MR	.	S	1	a	a
196	XH1882	1	R	MR	.	MS	1	+	a
197	XH1888	3	MR	R	.	S	1	a	a
198	XH1889	2	S	S	.	S	1	+	a
199	XH1895	8	S	S	.	MS	1	a	a
200	XH1904	8	R	R(1p3)	.	MS	1	a	a
201	TAM-107	9	S	S	.	MS	4	+	a
202	KARL 92	7	S	S	.	S	1	+	a
203	ARAPAHOE	1	MR	R	.	S	3	+	a
204	LOCAL CHECK-1	.	R	R	.	.	4	+	a
205	LOCAL CHECK-2	.	S	S	.	.	1	a	a
206	LOCAL CHECK-3	.	MR	R	.	.	2	±	a
207	NE94407	7	MR	MS	.	S	3	+	a
208	NE94413	9	MR	MR	.	S	3	+	a
209	NE94445	9	S	S	.	S	4	+	a
210	NE94479	-	MR	MR	.	S	4	+	a
211	NE94481	-	MS	MS	.	S	4	+	a
212	NE94482	1	MS	S	.	S	3	+	a
213	NE94489	-	MR	MR	.	S	3	+	a
214	NE94507	2	MS	S	.	S	1	+	a
215	NE94512	3	S	S	.	S	1	a	a
216	NE94518	3	S	S	.	MR	1	+	a
217	NE94567	-	MS	MS	.	S	4	+	a

1996 Regional Germplasm Observation Nursery (Table 2 of 4)

Entry	Sel. No.	Leaf Rust	Leaf Rust	Leaf Rust	Stem Rust	WSM Virus	SBM Virus	SBM Virus	WSSM Virus
		ARS, KS	OSU, OK	OSU, OK	UNL, NE	KSU, Hays	OSU, OK	OSU, OK	OSU, OK
		Seedling	Seedling	Seedling	Field Rxn		Visual	ELISA	ELISA
		0-9	Rep 1;R-S	Rep 2;R-S	R-S	S-R	1-4	+,a	+,a
218	NE94577	-	MS	S	S	S	4	+	a
219	NE94585	-	MS	MR	.	S	1	+	a
220	NE94588	-	S	S	.	S	3	+	a
221	NE94589	1-8	S	S	.	MS	4	+	a
222	NE94632	8	S	S	.	S	4	+	a
223	NE94653	2	MR	MR	.	S	4	+	a
224	NE94654	-	MR	MR	.	S	4	+	a
225	NE94655	-	S	MS	.	S	4	+	a
226	NE94661	2-8	S	S	.	S	4	+	a
227	NE94665	3	MR	MR	.	S	4	+	a
228	NE94666	3-8	MR	MR	.	S	3	+	a
229	NE94673	1	S	S	.	MS	3	+	a
230	NE94685	5	MR	MS	.	S	1	a	a
231	N92L053	3	S	S	.	S	3	+	a
232	N92L249	1	R(2p3)	R	.	MS	1	a	a
233	N92L250	9	S	S	.	MS	1	a	a
234	N93L129	5	MS	MS	.	MS	1	a	a
235	N93L068	1	MS	MS	.	MS	1	a	a
236	N93L207	8	S	S	.	.	3	+	a
237	N95L139	7	S	S	.	.	1	a	a
238	N95L141	2	MR	MR	.	.	1	a	a
239	N95L158	3	S	S	.	.	1	±	a
240	N95L159	5	S	S	.	.	1	a	a
241	N95L160	7	S	S	.	MS	1	a	a
242	N95L161	4	MS	MS	.	MS	3	+	a
243	N95L162	3	S	MS	.	S	1	a	a
244	N95L164	2	S	S	.	MS	1	a	a
245	N95L172	0	MS	S	.	S	1	a	a
246	N95L173	0	MR	MS	.	S	1	a	a
247	N94L026	8	MS	MR	.	S	4	+	a
248	N94L028	7	S	S	.	S	4	+	a

1996 Regional Germplasm Observation Nursery (Table 2 of 4)

Entry	Sel. No.	Leaf Rust	Leaf Rust	Leaf Rust	Stem Rust	WSM Virus	SBM Virus	SBM Virus	WSSM Virus
		ARS, KS	OSU, OK	OSU, OK	UNL, NE	KSU, Hays	OSU, OK	OSU, OK	OSU, OK
		Seedling	Seedling	Seedling	Field Rxn		Visual	ELISA	ELISA
		0-9	Rep 1;R-S	Rep 2;R-S	R-S	S-R	1-4	+,a	+,a
249	N94L153	9	S	S	.	MS	4	+	a
250	N94L179	8	S	S	.	S	4	+	a
251	N94L182	4	R	R(1p3)	.	S	1	a	a
252	N94L205	4	S	S	MR	MS	4	+	a
253	N94L212	9	S	S	MS	MS	1	a	a
254	N94L338	7	S	S	.	S	3	+	a
255	N94L187	7	S	S	.	S	1	+	a
256	N95S003	4	MR	MS	S	S	2	+	a
257	N95S004	3	MR	MR	S	S	2	+	a
258	N95S065	9	S	S	.	S	3	+	a
259	N95S074	9	S	S	S	S	4	+	a
260	N95L076	9	S	S	S	S	4	+	a
261	TAM-107	9	S	S	.	MS	4	+	a
262	KARL 92	8	S	S	.	S	1	a	a
263	ARAPAHOE	5	MR	MR	.	S	4	+	a
264	LOCAL CHECK-1	.	R	R	S	.	4	+	a
265	LOCAL CHECK-2	.	S	S	.	.	1	a	a
266	LOCAL CHECK-3	.	MR	MR	.	.	2	+	a
267	SD89119	9	S	S	.	VS	4	+	a
268	SD89153	9	S	S	.	MR	3	+	a
269	SD89205	9	MR	MS	.	MS	3	+	a
270	SD91192	9	S	S	.	MS	3	+	a
271	SD92107	3	MR	MR	.	S	4	+	a
272	SD92124	8	S	S	.	MS	4	+	a
273	SD92174	9	S	S	S	S	1	a	a
274	SD92191	9	S	S	.	S	3	+	a
275	SD92227	1	MR	MR	.	MS	3	+	a
276	SD92266	9	S	S	.	S	3	+	a
277	SD93104	9	S	S	.	MR	3	+	a
278	SD93128	3	MS	MR	.	S	3	+	a
279	SD93164	8	S	S	.	S	3	+	a

1996 Regional Germplasm Observation Nursery (Table 2 of 4)

Entry	Sel. No.	Leaf Rust	Leaf Rust	Leaf Rust	Stem Rust	WSM Virus	SBM Virus	SBM Virus	WSSM Virus
		ARS, KS	OSU, OK	OSU, OK	UNL, NE	KSU, Hays	OSU, OK	OSU, OK	OSU, OK
		Seedling	Seedling	Seedling	Field Rxn		Visual	ELISA	ELISA
		0-9	Rep 1;R-S	Rep 2;R-S	R-S	S-R	1-4	+,a	+,a
280	SD93189	1	MR	MR	.	S	3	+	a
281	SD93205	8	S	S	MS	S	1	+	a
282	SD93223	7	S	S	.	MS	1	+	a
283	SD93229	5	MR	MR	.	S	3	+	a
284	SD93267	8	S	MS	.	MS	3	+	a
285	SD93336	5	MR	MR	.	S	4	+	a
286	SD93340	9	S	S	MS	S	3	+	a
287	SD93344	9	MS	MS	S	S	2	+	a
288	SD93352	2	MR	MR	.	S	1	a	a
289	SD93359	8	S	S	.	S	3	+	a
290	SD93364	9	S	S	.	S	3	+	a
291	SD93380	2	MR	MR	.	MR	3	+	a
292	SD93406	9	S	S	.	MS	3	+	a
293	SD93407	9	S	S	.	S	1	a	a
294	SD93461	9	MS	MR	.	S	3	+	a
295	SD93471	8	S	S	.	S	4	+	a
296	SD93476	4	MR	MR	.	S	4	+	a
297	SD93478	8	S	S	.	MR	3	+	a
298	SD93487	9	S	S	.	S	3	+	a
299	SD93489	6	MR	MR	.	S	3	+	a
300	SD93493	8	S	S	.	S	3	+	a
301	SD93500	8	S	S	.	S	3	+	a
302	TAM-107	9	S	S	.	MS	3	+	a
303	KARL 92	8	S	S	.	S	1	a	a
304	ARAPAHOE	1	MR	MR	.	S	3	+	a
305	LOCAL CHECK-1	.	R	R	.	.	3	+	a
306	LOCAL CHECK-2	.	S	S	S	.	.	.	.
307	LOCAL CHECK-3	.	MR	MR	.	.	2	a	a
308	ND9304	9	S	S	.	S	4	+	a
309	ND9324	2	MR	MR	.	MS	4	+	a
310	ND9382	9	S	S	.	S	3	+	a

1996 Regional Germplasm Observation Nursery (Table 2 of 4)

Entry	Sel. No.	Leaf Rust	Leaf Rust	Leaf Rust	Stem Rust	WSM Virus	SBM Virus	SBM Virus	WSSM Virus
		ARS, KS	OSU, OK	OSU, OK	UNL, NE	KSU, Hays	OSU, OK	OSU, OK	OSU, OK
		Seedling	Seedling	Seedling	Field Rxn		Visual	ELISA	ELISA
		0-9	Rep 1;R-S	Rep 2;R-S	R-S	S-R	1-4	+,a	+,a
311	ND9402	9	S	S	S	VS	3	+	a
312	ND9416	8	S	S	S	MS	1	a	a
313	ND9417	9	S	S	.	S	3	+	a
314	ND9419	9	S	S	S	S	3	+	a
315	ND9420	9	S	S	.	S	4	+	a
316	ND9421	8	S	S	S	S	4	+	a
317	ND9430	7	S	S	.	S	4	+	a
318	ND9438	8	MS	MS	.	S	3	+	a
319	ND9439	6	MS	MS	.	MR	4	+	a
320	ND9448	7	S	S	.	MR	3	+	a
321	ND9454	8	S	S	.	S	3	+	a
322	ND9458	8	S	S	.	S	4	+	a
323	ND9460	8	S	S	.	S	3	+	a
324	ND9461	1	R	R	S	MS	3	+	a
325	ND9464	8	S	S	.	S	3	+	a
326	ND9478	3	S	MS	.	S	4	+	a
327	ND9479	8	MS	S	.	S	3	+	a
328	ND9480	3	MS	MS	.	S	3	+	a
329	ND9483	8	S	S	.	S	3	+	a
330	ND9488	8	S	S	.	MS	3	+	a
331	ND9489	7	MR	MS	.	MR	4	+	a
332	ND9490	8	S	S	S	S	3	+	a
333	ND9494	8	S	S	.	S	3	+	a
334	ND9496	6	MR	MR	.	S	4	+	a
335	ND9497	8	S	S	.	S	4	+	a
336	ND94103	7	S	S	.	MS	3	+	a
337	ND94108	8	MS	MS	.	S	3	+	a
338	TAM-107	9	S	S	.	MS	4	+	a
339	KARL 92	7	S	S	.	S	1	a	a
340	ARAPAHOE	2	MR	MR	.	S	3	+	a

1996 Regional Germplasm Observation Nursery (Table 3 of 4)

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Damage	Spring Stand	Winter Survival	Winter Survival	Heading Date
		OSU, OK	OSU, OK	TX A&M	TX A&M	UNL, NE	MSU, MT	TX A&M
		12/1/95	2/22/96	Prosper	Bushland	Mead	Sidney	Prosper
		0-9	0-9	0-9	%	0-9	%	from 1/1
1	TAM-107	8	8	4	85	9	25	106
2	KARL 92	7	8	4	95	9	40	106
3	ARAPAHOE	8	8	3	75	9	15	122
4	LOCAL CHECK-1	2	3	6	60	9	50	110
5	LOCAL CHECK-2	3	2	5	80	9	20	114
6	LOCAL CHECK-3	4	5	6	30	7	10	107
7	HBG0289	3	5	5	85	9	1	106
8	TX89D9627	7	8	7	20	2	0	107
9	TX91D6198	9	9	6	50	2	1	113
10	TX91D6791	7	7	5	85	9	5	105
11	TX91D6825	4	5	4	95	9	1	109
12	TX91D6839	5	5	4	90	9	1	110
13	TX91D6856	8	8	3	95	9	5	110
14	TX91D6889	7	7	3	85	9	10	109
15	TX91D6901	3	4	3	80	9	5	109
16	TX91D6926	2	2	5	60	9	2	105
17	TX91D6960	6	7	5	70	7	1	109
18	TX91D7006	8	8	5	50	8	3	107
19	TX92D7105	7	8	5	70	7	0	110
20	TX92D7194	7	8	6	65	5	1	111
21	TX92D7415	8	8	6	70	5	5	111
22	TX92D7487	7	8	5	75	9	10	112
23	TX92D7680	8	8	4	60	8	1	104
24	TX92D7747	9	9	5	60	1	0	109
25	TX92D8134	9	9	4	75	8	10	110
26	TX93D1451	7	8	6	55	8	15	105
27	TX93D2066	9	7	4	90	7	3	107
28	TX93D2627	9	9	5	10	0	1	110
29	TX93D3173	8	8	5	70	1	0	111
30	TX93D3180	8	8	6	65	2	0	107
31	TX94D4104	2	3	5	60	4	0	106

1996 Regional Germplasm Observation Nursery (Table 3 of 4)

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Damage	Spring Stand	Winter Survival	Winter Survival	Heading Date
		OSU, OK	OSU, OK	TX A&M	TX A&M	UNL, NE	MSU, MT	TX A&M
		12/1/95	2/22/96	Prosper	Bushland	Mead	Sidney	Prosper
		0-9	0-9	0-9	%	0-9	%	from 1/1
32	TX94D5725	9	8	5	70	7	0	110
33	TX94D5740	5	7	5	90	8	0	111
34	TX94D6101	3	2	6	40	8	0	103
35	TX94D6159	6	7	2	65	9	0	109
36	TX94D7570	6	6	5	65	7	0	115
37	OK95G701	6	6	6	70	4	0	113
38	OK95G702	7	7	6	50	5	0	112
39	OK95G703	4	5	3	80	7	0	111
40	OK95G704	9	8	7	65	7	2	106
41	OK95G705	7	7	6	60	8	3	103
42	OK95G706	6	6	6	75	7	1	103
43	OK95G707	6	5	6	70	9	5	105
44	OK95G708	6	5	5	60	5	0	105
45	OK95G709	8	8	5	60	4	1	112
46	TAM-107	9	8	6	85	9	20	104
47	KARL 92	8	7	5	90	9	15	104
48	ARAPAHOE	9	8	4	80	9	10	122
49	LOCAL CHECK-1	2	2	6	60	9	25	106
50	LOCAL CHECK-2	3	2	5	70	9	10	113
51	LOCAL CHECK-3	3	3	6	20	9	1	107
52	OKRMHGP07/95	6	6	6	70	7	0	113
53	OKRMHGP08/95	8	8	5	80	1	0	113
54	OKRMHGP09/95	7	7	6	50	3	0	109
55	OKRMHGP10/95	7	7	4	85	8	0	109
56	OKRMHGP11/95	7	6	6	65	4	0	114
57	OKRMHGP12/95	6	6	6	65	8	0	113
58	OKRMHGP13/95	6	7	3	85	7	5	107
59	OKRMHGP14/95	5	6	6	70	9	1	106
60	OKRMHGP15/95	7	7	5	80	8	1	107
61	OKRMHGP16/95	7	7	6	80	3	1	113
62	OKRMHGP17/95	6	6	6	70	5	5	107

1996 Regional Germplasm Observation Nursery (Table 3 of 4)

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Damage	Spring Stand	Winter Survival	Winter Survival	Heading Date
		OSU, OK	OSU, OK	TX A&M	TX A&M	UNL, NE	MSU, MT	TX A&M
		12/1/95	2/22/96	Prosper	Bushland	Mead	Sidney	Prosper
		0-9	0-9	0-9	%	0-9	%	from 1/1
63	OKRMHGP18/95	8	7	4	65	4	2	114
64	OKRMHGP19/95	7	7	4	70	4	1	115
65	OKRMHDP20/95	5	5	6	90	6	5	113
66	OKRMHGP21/95	7	6	6	80	8	10	105
67	OKRMHGP22/95	8	8	5	80	8	5	106
68	OKRMHGP23/95	7	7	4	60	8	2	113
69	STARS-9302W	5	WK	8	0	0	0	110
70	STARS-9303W	4	WK	8	0	0	1	116
71	STARS-GRS1201	7	7	4	70	5	5	115
72	STARS-GRS1204	8	8	7	80	6	3	110
73	Karl	8	7	5	85	9	10	105
74	KS93U10	8	8	5	65	9	15	106
75	KS93U40	3	3	6	50	9	1	114
76	KS93U50	6	6	5	80	9	25	110
77	KS93U123	7	7	6	85	9	10	103
78	KS93U134	6	6	5	75	9	20	110
79	KS93U141	5	4	5	90	9	10	111
80	KS93U164	7	7	5	80	9	15	113
81	KS94U210	6	6	4	85	9	20	127
82	KS94U215	6	7	5	85	8	25	109
83	TAM 107	7	8	6	80	8	15	105
84	KS93U76	6	7	5	85	6	10	106
85	KS93U109	8	8	5	75	7	20	112
86	KS94U241	9	9	6	50	8	20	111
87	KS94U261	9	9	5	85	8	5	105
88	KS94U276	8	9	5	65	8	5	110
89	KS94U290	8	8	4	90	9	20	107
90	KS94U306	9	9	6	75	8	5	107
91	KS94U328	8	8	6	65	6	5	107
92	KS94U337	8	8	5	80	6	1	107
93	KS94U338	9	9	5	95	9	5	105

1996 Regional Germplasm Observation Nursery (Table 3 of 4)

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Damage	Spring Stand	Winter Survival	Winter Survival	Heading Date
		OSU, OK	OSU, OK	TX A&M	TX A&M	UNL, NE	MSU, MT	TX A&M
		12/1/95	2/22/96	Prosper	Bushland	Mead	Sidney	Prosper
		0-9	0-9	0-9	%	0-9	%	from 1/1
94	KS94U352	9	9	5	70	8	2	106
95	KS94U415	7	7	5	85	9	1	109
96	TAM-107	8	8	5	85	9	0	105
97	KARL 92	6	6	4	80	9	2	105
98	ARAPAHOE	7	7	3	70	9	5	121
99	LOCAL CHECK-1	2	2	6	60	9	15	111
100	LOCAL CHECK-2	3	2	4	65	9	1	111
101	LOCAL CHECK-3	2	2	5	25	8	0	106
102	HBG0332-1	2	2	5	90	9	5	105
103	HBK0935-73-3	2	3	3	80	9	5	113
104	HBK0935-117-1	6	6	4	85	8	5	104
105	HBK0935-35-1-2	3	4	6	65	9	1	104
106	HBK0630-4	6	7	6	90	9	15	105
107	HBK0771-10	2	2	5	85	9	10	107
108	HBK1157-14	2	1	6	60	7	0	106
109	KS87436H-3-1-2	2	2	4	70	8	10	111
110	KS90061-7	6	5	5	70	7	15	106
111	KS84063-9-6A	3	3	4	85	8	5	112
112	KS84063-9-45A	5	6	4	85	8	2	112
113	HBE0780B-1	4	5	4	80	8	5	111
114	KS86323A-5-2	4	5	5	90	8	15	106
115	KS87024F-5-1	3	4	5	90	8	10	110
116	VBF0589-1	2	2	5	60	6	1	104
117	KS87262F-7-3	4	3	6	40	8	1	105
118	KS87581I-2-1	5	5	5	70	9	1	109
119	KS87024F-4-1-1	4	5	6	75	9	1	106
120	KS940935-35-1-1	3	2	5	85	9	0	103
121	HBK1157-13	2	2	5	85	9	1	104
122	G1594	4	5	5	85	8	3	109
123	KHEOPS No.3	4	5	5	90	8	1	105
124	KHEOPS No.5	4	5	4	80	8	1	103

1996 Regional Germplasm Observation Nursery (Table 3 of 4)

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Damage	Spring Stand	Winter Survival	Winter Survival	Heading Date
		OSU, OK	OSU, OK	TX A&M	TX A&M	UNL, NE	MSU, MT	TX A&M
		12/1/95	2/22/96	Prosper	Bushland	Mead	Sidney	Prosper
		0-9	0-9	0-9	%	0-9	%	from 1/1
125	KHEOPS No.8	5	5	5	85	8	2	103
126	KS94HW59	3	5	4	70	6	1	109
127	KS94HW63	5	4	3	90	9	5	113
128	KS94HW80	5	5	5	60	6	1	115
129	KS94HW101	6	6	5	60	7	5	105
130	KS94HW108	4	5	2	70	5	3	115
131	KS94HW115	8	7	6	75	7	1	107
132	KS94H147	7	7	5	85	9	5	118
133	KS94H215-1	7	7	4	90	9	20	116
134	KS94H215-4	6	7	4	75	9	5	114
135	KS95HW12	7	6	4	75	9	5	114
136	KS95HW22	8	7	6	80	8	10	110
137	KS95HW42	7	7	4	85	8	10	114
138	KS95HW44	5	6	3	80	9	10	115
139	KS95HW53	7	6	3	85	9	5	115
140	KS95HW62	8	8	4	80	8	10	112
141	KS95HW66	5	6	4	85	8	5	112
142	KS95HW68	5	6	4	70	8	10	112
143	KS95H89	8	8	3	90	8	5	113
144	KS95H100	9	8	4	80	9	2	115
145	KS95H105	9	8	4	75	9	10	114
146	KS95H106	8	8	4	90	9	5	114
147	KS95H122	9	8	4	80	9	1	119
148	KS95H124	8	8	3	90	9	3	115
149	KS95H129	8	8	4	80	8	10	118
150	KS95H130	8	7	4	70	9	10	115
151	KS95H149	8	8	5	75	8	10	106
152	KS95H151	8	7	4	85	9	2	112
153	KS95H154	8	7	4	90	0	2	113
154	KS95H163	9	8	6	75	6	3	109
155	KS95H167	8	8	5	90	8	5	109

1996 Regional Germplasm Observation Nursery (Table 3 of 4)

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Damage	Spring Stand	Winter Survival	Winter Survival	Heading Date
		OSU, OK	OSU, OK	TX A&M	TX A&M	UNL, NE	MSU, MT	TX A&M
		12/1/95	2/22/96	Prosper	Bushland	Mead	Sidney	Prosper
		0-9	0-9	0-9	%	0-9	%	from 1/1
156	KS95H169	8	8	5	85	9	5	110
157	KS95H171	7	7	4	85	9	0	107
158	KS95H176	8	7	3	90	9	0	121
159	TAM-107	9	8	5	75	9	0	106
160	KARL 92	7	7	3	95	9	0	105
161	ARAPAHOE	8	8	4	70	9	1	120
162	LOCAL CHECK-1	2	2	5	50	9	2	106
163	LOCAL CHECK-2	3	4	5	85	9	1	112
164	LOCAL CHECK-3	4	5	5	20	8	0	110
165	94L10135	6	6	5	65	8	1	111
166	94L10157	7	7	3	85	9	5	128
167	94L10159	6	6	6	50	9	2	112
168	94L10244	5	5	6	60	9	0	111
169	94L10333	6	5	4	65	9	2	125
170	94L10337	4	3	5	70	9	10	125
171	94L10404	4	4	5	85	8	5	105
172	94L10407	6	5	4	75	8	5	111
173	94L10521	5	4	5	60	9	5	125
174	94L10326	5	4	5	75	9	5	116
175	CO910927	7	6	5	90	9	5	106
176	CO910423	8	7	5	95	8	3	114
177	CO910424	7	7	4	85	9	2	115
178	CO910748	5	3	4	65	9	3	123
179	CO910239	8	7	3	80	9	2	119
180	CO920010	7	6	5	65	9	0	112
181	CO920119	7	7	4	80	9	0	115
182	CO920178	7	8	5	75	8	3	111
183	CO920696	7	8	4	80	9	0	112
184	CO920776	8	8	5	75	8	0	112
185	CO920790	7	8	4	85	9	3	111
186	XH1861	6	5	5	85	9	5	109

1996 Regional Germplasm Observation Nursery (Table 3 of 4)

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Damage	Spring Stand	Winter Survival	Winter Survival	Heading Date
		OSU, OK	OSU, OK	TX A&M	TX A&M	UNL, NE	MSU, MT	TX A&M
		12/1/95	2/22/96	Prosper	Bushland	Mead	Sidney	Prosper
		0-9	0-9	0-9	%	0-9	%	from 1/1
187	XH1862	2	1	4	85	9	5	105
188	XH1863	6	6	6	85	8	5	105
189	XH1864	8	6	5	90	7	3	110
190	XH1865	3	1	4	90	9	10	109
191	XH1866	2	1	5	90	9	15	104
192	XH1867	2	2	3	85	9	3	106
193	XH1869	3	4	5	95	8	10	106
194	XH1878	5	6	5	85	9	10	106
195	XH1881	2	3	4	80	9	10	106
196	XH1882	3	5	4	90	9	5	111
197	XH1888	6	6	4	95	9	3	110
198	XH1889	3	5	5	80	8	3	105
199	XH1895	8	8	4	85	8	1	107
200	XH1904	1	1	5	90	8	2	105
201	TAM-107	8	8	5	95	9	2	105
202	KARL 92	7	7	5	80	9	20	106
203	ARAPAHOE	8	8	4	75	9	5	121
204	LOCAL CHECK-1	2	2	5	60	9	25	106
205	LOCAL CHECK-2	3	3	5	85	9	10	111
206	LOCAL CHECK-3	3	2	5	20	9	2	109
207	NE94407	9	8	5	70	7	5	127
208	NE94413	9	8	4	90	8	3	120
209	NE94445	8	7	4	70	9	3	112
210	NE94479	9	8	2	65	8	2	126
211	NE94481	9	8	3	70	9	3	126
212	NE94482	8	7	3	85	7	0	126
213	NE94489	9	8	4	85	8	3	113
214	NE94507	9	7	4	90	6	10	107
215	NE94512	9	8	3	60	9	3	120
216	NE94518	7	7	3	60	6	0	126
217	NE94567	9	8	6	55	9	0	112

1996 Regional Germplasm Observation Nursery (Table 3 of 4)

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Damage	Spring Stand	Winter Survival	Winter Survival	Heading Date
		OSU, OK	OSU, OK	TX A&M	TX A&M	UNL, NE	MSU, MT	TX A&M
		12/1/95	2/22/96	Prosper	Bushland	Mead	Sidney	Prosper
		0-9	0-9	0-9	%	0-9	%	from 1/1
218	NE94577	9	8	4	80	8	1	112
219	NE94585	6	6	4	90	9	2	121
220	NE94588	6	6	2	70	4	0	127
221	NE94589	5	5	3	95	8	0	126
222	NE94632	7	7	4	85	9	0	116
223	NE94653	9	8	4	90	9	0	123
224	NE94654	8	8	4	85	8	0	114
225	NE94655	7	8	3	70	9	0	119
226	NE94661	5	6	5	85	9	0	113
227	NE94665	5	6	4	90	9	0	114
228	NE94666	6	6	3	80	9	0	124
229	NE94673	6	5	5	90	8	0	107
230	NE94685	9	8	3	75	8	0	123
231	N92L053	7	7	4	60	9	1	123
232	N92L249	5	3	4	90	8	0	120
233	N92L250	8	7	3	80	9	0	123
234	N93L129	8	7	4	85	9	0	119
235	N93L068	6	5	4	80	9	0	114
236	N93L207	2	3	5	80	9	0	106
237	N95L139	3	4	5	85	0	2	106
238	N95L141	6	6	4	65	9	5	114
239	N95L158	5	4	4	75	9	5	120
240	N95L159	5	4	4	75	9	5	120
241	N95L160	5	5	5	70	9	3	114
242	N95L161	5	5	4	80	9	5	121
243	N95L162	6	6	3	90	9	5	127
244	N95L164	6	6	3	95	9	5	127
245	N95L172	5	3	4	75	9	5	120
246	N95L173	5	4	5	85	9	10	115
247	N94L026	7	6	5	90	9	5	115
248	N94L028	6	4	4	85	7	2	121

1996 Regional Germplasm Observation Nursery (Table 3 of 4)

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Damage	Spring Stand	Winter Survival	Winter Survival	Heading Date
		OSU, OK	OSU, OK	TX A&M	TX A&M	UNL, NE	MSU, MT	TX A&M
		12/1/95	2/22/96	Prosper	Bushland	Mead	Sidney	Prosper
		0-9	0-9	0-9	%	0-9	%	from 1/1
249	N94L153	9	9	6	90	9	10	114
250	N94L179	9	8	3	90	7	15	115
251	N94L182	8	8	3	90	9	15	125
252	N94L205	6	6	4	85	9	5	127
253	N94L212	9	8	3	95	9	2	130
254	N94L338	9	8	4	85	9	10	113
255	N94L187	8	7	4	85	9	1	120
256	N95S003	8	8	5	95	9	10	103
257	N95S004	9	8	5	90	9	10	114
258	N95S065	7	7	5	75	9	2	126
259	N95S074	8	8	5	80	9	1	126
260	N95L076	7	7	5	70	9	0	126
261	TAM-107	8	8	5	95	9	1	106
262	KARL 92	8	8	5	95	9	2	103
263	ARAPAHOE	9	8	4	85	9	0	119
264	LOCAL CHECK-1	2	2	6	70	9	2	105
265	LOCAL CHECK-2	2	3	5	80	9	0	111
266	LOCAL CHECK-3	4	3	6	25	8	0	106
267	SD89119	7	7	3	95	9	0	118
268	SD89153	8	8	3	95	9	0	124
269	SD89205	8	7	4	90	9	0	114
270	SD91192	8	7	4	90	9	0	115
271	SD92107	8	8	3	90	9	5	123
272	SD92124	7	7	3	80	9	0	121
273	SD92174	7	7	3	90	9	5	123
274	SD92191	7	7	3	85	9	3	119
275	SD92227	7	8	4	90	9	3	121
276	SD92266	6	6	2	90	9	1	120
277	SD93104	8	7	2	85	9	5	123
278	SD93128	8	8	2	90	9	5	118
279	SD93164	8	8	3	80	9	5	123

1996 Regional Germplasm Observation Nursery (Table 3 of 4)

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Damage	Spring Stand	Winter Survival	Winter Survival	Heading Date
		OSU, OK	OSU, OK	TX A&M	TX A&M	UNL, NE	MSU, MT	TX A&M
		12/1/95	2/22/96	Prosper	Bushland	Mead	Sidney	Prosper
		0-9	0-9	0-9	%	0-9	%	from 1/1
280	SD93189	8	8	3	85	9	0	107
281	SD93205	9	8	3	75	9	3	114
282	SD93223	8	8	4	85	9	0	116
283	SD93229	9	8	4	80	9	5	105
284	SD93267	5	5	4	90	9	3	120
285	SD93336	9	8	3	85	8	5	123
286	SD93340	9	8	3	80	9	3	123
287	SD93344	9	9	2	85	9	5	123
288	SD93352	9	9	3	80	9	1	113
289	SD93359	9	8	2	75	9	1	115
290	SD93364	9	8	2	85	9	3	123
291	SD93380	9	8	3	85	9	3	119
292	SD93406	7	7	2	70	9	5	123
293	SD93407	7	7	3	80	9	3	115
294	SD93461	9	8	4	80	9	3	116
295	SD93471	9	8	2	80	9	2	123
296	SD93476	8	8	3	85	9	3	124
297	SD93478	8	8	2	90	9	5	120
298	SD93487	7	7	2	90	9	2	120
299	SD93489	7	7	4	90	9	5	112
300	SD93493	8	8	2	75	9	15	130
301	SD93500	8	8	2	90	9	60	121
302	TAM-107	9	8	4	85	9	10	105
303	KARL 92	9	8	4	95	9	5	105
304	ARAPAHOE	9	8	3	80	9	3	119
305	LOCAL CHECK-1	2	2	6	65	9	25	105
306	LOCAL CHECK-2	3	3	5	65	9	5	110
307	LOCAL CHECK-3	6	6	6	15	9	1	106
308	ND9304	7	6	2	80	9	20	121
309	ND9324	7	6	3	80	9	10	126
310	ND9382	9	8	2	85	9	10	121

1996 Regional Germplasm Observation Nursery (Table 3 of 4)

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Damage	Spring Stand	Winter Survival	Winter Survival	Heading Date
		OSU, OK	OSU, OK	TX A&M	TX A&M	UNL, NE	MSU, MT	TX A&M
		12/1/95	2/22/96	Prosper	Bushland	Mead	Sidney	Prosper
		0-9	0-9	0-9	%	0-9	%	from 1/1
311	ND9402	8	8	3	90	9	20	120
312	ND9416	8	8	3	90	9	5	120
313	ND9417	8	8	2	90	9	30	123
314	ND9419	8	8	2	80	9	20	123
315	ND9420	7	8	3	90	9	10	119
316	ND9421	8	8	5	70	9	5	112
317	ND9430	8	7	5	90	9	20	114
318	ND9438	9	8	4	90	9	15	115
319	ND9439	8	8	3	85	9	20	129
320	ND9448	7	6	3	85	9	5	116
321	ND9454	8	8	4	85	9	20	127
322	ND9458	8	8	4	80	9	10	124
323	ND9460	9	8	4	80	9	10	125
324	ND9461	9	8	2	70	9	5	129
325	ND9464	8	8	2	85	9	15	128
326	ND9478	8	8	4	85	9	10	128
327	ND9479	8	8	3	90	9	5	123
328	ND9480	8	8	3	95	9	20	123
329	ND9483	8	8	2	80	9	10	125
330	ND9488	8	7	1	80	9	5	127
331	ND9489	8	8	1	80	8	3	130
332	ND9490	8	7	2	75	7	5	129
333	ND9494	4	6	2	95	9	15	114
334	ND9496	8	8	4	80	8	5	125
335	ND9497	8	8	5	90	9	5	121
336	ND94103	8	8	3	95	9	3	120
337	ND94108	5	6	2	80	9	5	121
338	TAM-107	9	8	5	85	9	3	106
339	KARL 92	8	8	4	90	9	5	105
340	ARAPAHOE	8	8	3	75	9	3	122

1996 Regional Germplasm Observation Nursery (Table 4 of 4)

Entry	Sel. No.	Drought Response TX A&M Bushland 0-4; 4/20/96	Drought Response TX A&M Bushland 0-4; 5/14/96
1	TAM-107	3.0	1.5
2	KARL 92	3.5	1.5
3	ARAPAHOE	3.0	2.0
4	LOCAL CHECK-1	4.0	3.0
5	LOCAL CHECK-2	2.5	2.5
6	LOCAL CHECK-3	3.0	2.5
7	HBG0289	4.0	3.0
8	TX89D9627	3.5	3.0
9	TX91D6198	3.5	3.0
10	TX91D6791	3.0	1.5
11	TX91D6825	3.0	1.5
12	TX91D6839	3.5	2.0
13	TX91D6856	2.5	1.0
14	TX91D6889	2.5	1.0
15	TX91D6901	3.5	1.0
16	TX91D6926	3.0	0.5
17	TX91D6960	2.5	2.0
18	TX91D7006	3.0	1.5
19	TX92D7105	2.0	1.0
20	TX92D7194	3.5	2.0
21	TX92D7415	2.5	2.0
22	TX92D7487	2.5	1.5
23	TX92D7680	3.0	2.0
24	TX92D7747	2.5	2.0
25	TX92D8134	3.5	2.0
26	TX93D1451	3.0	1.5
27	TX93D2066	3.0	2.0
28	TX93D2627	3.0	2.5
29	TX93D3173	2.5	2.5
30	TX93D3180	2.5	2.0
31	TX94D4104	2.5	1.5

1996 Regional Germplasm Observation Nursery (Table 4 of 4)

Entry	Sel. No.	Drought Response TX A&M Bushland 0-4; 4/20/96	Drought Response TX A&M Bushland 0-4; 5/14/96
32	TX94D5725	3.5	2.0
33	TX94D5740	3.0	2.0
34	TX94D6101	3.0	2.0
35	TX94D6159	3.0	2.5
36	TX94D7570	2.5	2.5
37	OK95G701	2.5	2.5
38	OK95G702	2.5	2.5
39	OK95G703	3.0	2.0
40	OK95G704	3.0	3.0
41	OK95G705	3.0	1.0
42	OK95G706	3.0	1.5
43	OK95G707	3.0	1.5
44	OK95G708	3.5	1.0
45	OK95G709	2.0	2.0
46	TAM-107	3.0	2.0
47	KARL 92	2.5	1.5
48	ARAPAHOE	3.5	3.0
49	LOCAL CHECK-1	3.5	2.5
50	LOCAL CHECK-2	2.5	2.5
51	LOCAL CHECK-3	3.0	2.5
52	OKRMHGP07/95	3.0	3.0
53	OKRMHGP08/95	3.0	2.5
54	OKRMHGP09/95	3.0	3.0
55	OKRMHGP10/95	3.5	2.5
56	OKRMHGP11/95	2.5	2.0
57	OKRMHGP12/95	2.5	2.5
58	OKRMHGP13/95	3.5	3.0
59	OKRMHGP14/95	2.5	2.0
60	OKRMHGP15/95	3.0	2.0
61	OKRMHGP16/95	3.0	2.0
62	OKRMHGP17/95	3.0	1.5

1996 Regional Germplasm Observation Nursery (Table 4 of 4)

Entry	Sel. No.	Drought Response TX A&M Bushland 0-4; 4/20/96	Drought Response TX A&M Bushland 0-4; 5/14/96
63	OKRMHGP18/95	2.0	1.5
64	OKRMHGP19/95	2.5	1.5
65	OKRMHDP20/95	3.0	2.5
66	OKRMHGP21/95	2.5	1.5
67	OKRMHGP22/95	3.0	2.0
68	OKRMHGP23/95	2.0	2.0
69	STARS-9302W		
70	STARS-9303W		
71	STARS-GRS1201	3.5	3.0
72	STARS-GRS1204	2.5	1.5
73	Karl	2.5	1.5
74	KS93U10	3.0	1.0
75	KS93U40	3.0	3.0
76	KS93U50	2.0	2.5
77	KS93U123	2.5	1.5
78	KS93U134	2.5	2.0
79	KS93U141	3.0	3.0
80	KS93U164	2.0	2.0
81	KS94U210	2.5	2.0
82	KS94U215	3.0	1.5
83	TAM 107	3.0	2.0
84	KS93U76	3.0	2.0
85	KS93U109	3.0	1.5
86	KS94U241	2.5	2.0
87	KS94U261	2.0	1.5
88	KS94U276	3.0	2.0
89	KS94U290	3.0	1.5
90	KS94U306	2.5	2.0
91	KS94U328	3.0	2.0
92	KS94U337	3.0	2.0
93	KS94U338	2.5	1.5

1996 Regional Germplasm Observation Nursery (Table 4 of 4)

Entry	Sel. No.	Drought Response TX A&M Bushland 0-4; 4/20/96	Drought Response TX A&M Bushland 0-4; 5/14/96
94	KS94U352	3.0	1.0
95	KS94U415	3.0	2.0
96	TAM-107	3.0	1.5
97	KARL 92	2.5	1.0
98	ARAPAHOE	3.0	2.5
99	LOCAL CHECK-1	3.5	3.0
100	LOCAL CHECK-2	2.5	3.0
101	LOCAL CHECK-3	3.0	3.0
102	HBG0332-1	3.5	2.0
103	HBK0935-73-3	2.5	2.5
104	HBK0935-117-1	3.0	2.0
105	HBK0935-35-1-2	3.0	1.5
106	HBK0630-4	2.0	2.0
107	HBK0771-10	3.0	2.5
108	HBK1157-14	3.0	2.5
109	KS87436H-3-1-2	3.5	2.0
110	KS90061-7	3.5	2.5
111	KS84063-9-6A	3.0	3.0
112	KS84063-9-45A	3.5	3.0
113	HBE0780B-1	2.5	1.5
114	KS86323A-5-2	2.5	1.0
115	KS87024F-5-1	3.0	1.5
116	VBF0589-1	3.5	2.0
117	KS87262F-7-3	3.0	2.0
118	KS87581I-2-1	3.5	2.5
119	KS87024F-4-1-1	3.0	1.5
120	KS940935-35-1-1	3.5	2.5
121	HBK1157-13	3.5	3.0
122	G1594	3.5	3.0
123	KHEOPS No.3	3.0	2.0
124	KHEOPS No.5	3.0	2.0

1996 Regional Germplasm Observation Nursery (Table 4 of 4)

Entry	Sel. No.	Drought Response TX A&M Bushland 0-4; 4/20/96	Drought Response TX A&M Bushland 0-4; 5/14/96
125	KHEOPS No.8	3.0	1.5
126	KS94HW59	2.0	1.0
127	KS94HW63	2.5	2.5
128	KS94HW80	3.0	2.0
129	KS94HW101	3.0	2.5
130	KS94HW108	3.0	3.0
131	KS94HW115	3.0	2.0
132	KS94H147	2.5	2.5
133	KS94H215-1	2.5	2.0
134	KS94H215-4	3.0	2.0
135	KS95HW12	2.0	1.5
136	KS95HW22	3.0	1.5
137	KS95HW42	2.5	1.5
138	KS95HW44	3.5	2.5
139	KS95HW53	3.0	3.0
140	KS95HW62	2.5	1.0
141	KS95HW66	3.0	1.5
142	KS95HW68	3.5	1.5
143	KS95H89	3.0	2.5
144	KS95H100	2.5	2.0
145	KS95H105	3.0	3.0
146	KS95H106	3.0	2.5
147	KS95H122	2.5	2.5
148	KS95H124	2.5	2.5
149	KS95H129	2.5	1.5
150	KS95H130	2.5	2.0
151	KS95H149	2.5	1.0
152	KS95H151	3.0	1.5
153	KS95H154	3.0	2.0
154	KS95H163	3.0	1.5
155	KS95H167	2.5	1.0

1996 Regional Germplasm Observation Nursery (Table 4 of 4)

Entry	Sel. No.	Drought Response	Drought Response
		TX A&M	TX A&M
		Bushland	Bushland
		0-4; 4/20/96	0-4; 5/14/96
156	KS95H169	3.0	1.5
157	KS95H171	3.0	1.5
158	KS95H176	2.5	2.0
159	TAM-107	2.5	1.5
160	KARL 92	3.0	1.5
161	ARAPAHOE	2.5	2.0
162	LOCAL CHECK-1	3.5	3.0
163	LOCAL CHECK-2	2.5	2.5
164	LOCAL CHECK-3	2.5	2.0
165	94L10135	3.5	2.5
166	94L10157	3.5	3.0
167	94L10159	3.5	2.5
168	94L10244	3.0	1.5
169	94L10333	3.5	3.0
170	94L10337	3.5	2.5
171	94L10404	3.0	2.0
172	94L10407	3.5	3.0
173	94L10521	3.5	1.5
174	94L10326	3.0	1.5
175	CO910927	3.0	1.5
176	CO910423	2.5	2.0
177	CO910424	2.5	1.5
178	CO910748	3.0	2.0
179	CO910239	3.0	2.0
180	CO920010	3.0	2.0
181	CO920119	2.5	2.0
182	CO920178	3.0	1.0
183	CO920696	2.5	1.5
184	CO920776	3.5	1.5
185	CO920790	3.0	1.0
186	XH1861	2.5	2.0

1996 Regional Germplasm Observation Nursery (Table 4 of 4)

Entry	Sel. No.	Drought Response TX A&M Bushland 0-4; 4/20/96	Drought Response TX A&M Bushland 0-4; 5/14/96
187	XH1862	3.0	1.5
188	XH1863	2.5	1.5
189	XH1864	2.5	1.0
190	XH1865	3.0	1.5
191	XH1866	3.0	1.5
192	XH1867	3.0	1.5
193	XH1869	2.5	1.5
194	XH1878	2.5	1.5
195	XH1881	2.5	1.0
196	XH1882	2.5	2.0
197	XH1888	2.5	2.0
198	XH1889	2.5	2.0
199	XH1895	2.5	2.5
200	XH1904	3.0	2.5
201	TAM-107	3.0	1.5
202	KARL 92	2.5	1.0
203	ARAPAHOE	3.0	2.0
204	LOCAL CHECK-1	3.5	3.0
205	LOCAL CHECK-2	3.0	2.5
206	LOCAL CHECK-3	3.0	2.5
207	NE94407	3.5	3.0
208	NE94413	3.5	2.5
209	NE94445	3.0	1.5
210	NE94479	3.0	3.0
211	NE94481	2.5	2.5
212	NE94482	3.0	2.5
213	NE94489	2.5	2.5
214	NE94507	3.0	2.0
215	NE94512	3.0	2.0
216	NE94518	3.0	3.0
217	NE94567	3.0	2.0

1996 Regional Germplasm Observation Nursery (Table 4 of 4)

Entry	Sel. No.	Drought Response TX A&M Bushland 0-4; 4/20/96	Drought Response TX A&M Bushland 0-4; 5/14/96
218	NE94577	3.0	3.0
219	NE94585	3.0	2.5
220	NE94588	2.5	1.5
221	NE94589	3.0	1.5
222	NE94632	2.5	1.5
223	NE94653	3.0	3.0
224	NE94654	3.0	2.5
225	NE94655	2.0	2.5
226	NE94661	3.0	2.0
227	NE94665	3.0	1.5
228	NE94666	3.0	1.5
229	NE94673	3.5	2.5
230	NE94685	3.0	2.0
231	N92L053	3.0	2.5
232	N92L249	3.0	2.0
233	N92L250	2.0	2.0
234	N93L129	2.5	2.0
235	N93L068	3.0	2.5
236	N93L207	2.5	1.5
237	N95L139	2.5	1.5
238	N95L141	3.0	2.0
239	N95L158	3.0	2.0
240	N95L159	3.5	2.0
241	N95L160	2.5	2.0
242	N95L161	3.0	2.0
243	N95L162	3.0	1.5
244	N95L164	3.0	1.5
245	N95L172	3.0	1.0
246	N95L173	3.0	1.5
247	N94L026	3.0	2.0
248	N94L028	3.5	2.0

1996 Regional Germplasm Observation Nursery (Table 4 of 4)

Entry	Sel. No.	Drought Response TX A&M Bushland 0-4; 4/20/96	Drought Response TX A&M Bushland 0-4; 5/14/96
249	N94L153	2.5	2.0
250	N94L179	2.5	1.5
251	N94L182	3.0	1.5
252	N94L205	3.0	2.0
253	N94L212	3.0	2.0
254	N94L338	2.5	2.0
255	N94L187	2.5	2.0
256	N95S003	2.0	1.0
257	N95S004	3.0	1.5
258	N95S065	2.5	2.5
259	N95S074	3.0	3.0
260	N95L076	3.0	2.5
261	TAM-107	3.0	1.5
262	KARL 92	2.5	1.0
263	ARAPAHOE	3.0	2.5
264	LOCAL CHECK-1	3.5	3.0
265	LOCAL CHECK-2	3.0	2.5
266	LOCAL CHECK-3	3.0	2.0
267	SD89119	2.5	2.5
268	SD89153	2.0	2.0
269	SD89205	2.5	1.5
270	SD91192	2.5	1.0
271	SD92107	2.5	1.5
272	SD92124	3.0	2.5
273	SD92174	2.0	1.5
274	SD92191	3.0	2.0
275	SD92227	3.0	2.0
276	SD92266	3.0	1.5
277	SD93104	2.5	1.5
278	SD93128	2.5	1.5
279	SD93164	3.0	1.5

1996 Regional Germplasm Observation Nursery (Table 4 of 4)

Entry	Sel. No.	Drought Response TX A&M Bushland 0-4; 4/20/96	Drought Response TX A&M Bushland 0-4; 5/14/96
280	SD93189	2.0	1.5
281	SD93205	3.0	2.0
282	SD93223	2.5	2.0
283	SD93229	2.5	1.5
284	SD93267	3.5	2.0
285	SD93336	2.5	2.0
286	SD93340	3.0	1.5
287	SD93344	3.0	1.5
288	SD93352	2.5	1.5
289	SD93359	2.0	1.5
290	SD93364	2.5	1.5
291	SD93380	2.5	1.5
292	SD93406	2.5	2.0
293	SD93407	3.0	2.5
294	SD93461	3.0	2.0
295	SD93471	2.0	1.5
296	SD93476	2.5	2.5
297	SD93478	2.5	2.0
298	SD93487	2.0	2.0
299	SD93489	2.5	1.5
300	SD93493	3.0	1.5
301	SD93500	2.0	1.0
302	TAM-107	2.0	1.0
303	KARL 92	2.0	1.0
304	ARAPAHOE	2.5	2.0
305	LOCAL CHECK-1	3.5	2.5
306	LOCAL CHECK-2	2.5	2.5
307	LOCAL CHECK-3	3.0	2.5
308	ND9304	3.0	2.0
309	ND9324	3.0	2.5
310	ND9382	3.0	2.0

1996 Regional Germplasm Observation Nursery (Table 4 of 4)

Entry	Sel. No.	Drought Response TX A&M Bushland 0-4; 4/20/96	Drought Response TX A&M Bushland 0-4; 5/14/96
311	ND9402	3.0	2.0
312	ND9416	3.0	2.0
313	ND9417	2.5	1.5
314	ND9419	3.0	1.5
315	ND9420	3.5	1.5
316	ND9421	3.0	1.5
317	ND9430	3.0	1.0
318	ND9438	3.5	1.5
319	ND9439	2.5	2.0
320	ND9448	3.5	2.5
321	ND9454	3.0	2.0
322	ND9458	3.0	1.5
323	ND9460	3.0	1.5
324	ND9461	3.5	1.5
325	ND9464	3.0	1.0
326	ND9478	3.0	1.5
327	ND9479	3.5	2.5
328	ND9480	3.5	2.0
329	ND9483	3.0	2.0
330	ND9488	3.0	2.0
331	ND9489	3.5	3.0
332	ND9490	3.5	2.5
333	ND9494	3.0	1.5
334	ND9496	3.0	2.0
335	ND9497	2.5	1.5
336	ND94103	3.5	2.5
337	ND94108	3.0	3.0
338	TAM-107	3.0	2.0
339	KARL 92	3.0	1.5
340	ARAPAHOE	2.5	2.5