

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

COMPARISON OF
WINTER WHEAT VARIETIES GROWN IN COOPERATIVE
NURSERY EXPERIMENTS IN THE
HARD RED WINTER WHEAT REGION
IN 1983

V. A. Johnson
Leader, Wheat Research

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 North Central Region, 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.

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
NORTH CENTRAL REGION

COMPARISON OF WINTER WHEAT VARIETIES GROWN IN COOPERATIVE
NURSERY EXPERIMENTS IN THE HARD RED WINTER WHEAT REGION
IN 1983

By

V. A. Johnson¹

CONTENTS

	<u>Page</u>
Cooperating agencies, stations, and personnel -----	1
Regional notes -----	4
New varieties and hybrids -----	6
The 1983 crop year -----	8
Southern Regional Performance Nursery -----	10
Test site information -----	11
Summary of SRPN yields -----	44
Summary of agronomic data -----	59
Northern Regional Performance Nursery -----	64
Test site information -----	65
Summary of NRPN yields -----	84
Summary of agronomic data -----	95
Quality data -----	99
Uniform Winterhardiness Nursery -----	99
Soil-borne Mosaic Nursery -----	99

¹The writer expresses appreciation to Katie Meierhenry, Sue Groepper, and C. James Peterson for their assistance in preparing this report.

COOPERATING AGENCIES, STATIONS, AND PERSONNEL
(The asterisk denotes U.S.D.A. employees)

AGRICULTURAL RESEARCH SERVICE, U.S.D.A.:

Hard Red Winter Wheat	V. A. Johnson*
Uniform and International Rust Nurseries	J. G. Moseman*
Hard Red Winter Wheat Quality	M. Shogren*
Uniform Hessian Fly Nursery	J. Hatchett*
Leaf Rust Investigations	L. E. Browder*
Stem Rust Investigations	D. V. McVey*

TEXAS AGRICULTURAL EXPERIMENT STATION:

College Station	Texas A & M University
Soil and Crop Sciences	L. W. Rooney
Dallas	
TAMU Research and Extension Center	J. H. Gardenhire
Chillicothe	
TAMU Agricultural Research Station	W. D. Worrall
Bushland	
U.S.D.A. Southwestern Great Plains	
Research Center	K. B. Porter

NEW MEXICO AGRICULTURAL EXPERIMENT STATION:

Clovis	
Plains Branch Station	R. E. Finkner
Farmington	
San Juan Branch Station	E. J. Gregory

OKLAHOMA AGRICULTURAL EXPERIMENT STATION:

Stillwater	Oklahoma State University
Agronomy	E. L. Smith
	E. E. Sebesta*
	O. G. Merkle*
	H. J. Nguyen
	B. B. Tucker
Botany and Plant Pathology	R. M. Hunger
	F. J. Gough*
Biochemistry	D. C. Abbott
Entomology	J. A. Webster*
Lahoma	
North Central Research Station	R. J. Sidwell
Goodwell	
Panhandle Experiment Station	R. G. Merritt
Altus	
Irrigation Experiment Station	R. Foraker

IOWA AGRICULTURAL EXPERIMENT STATION:

Ames	Iowa State University
Agronomy	R. E. Atkins

WASHINGTON AGRICULTURAL EXPERIMENT STATION:

Lind

Dry Land Research Unit

E. Donaldson

KANSAS AGRICULTURAL EXPERIMENT STATION:

Manhattan

Kansas State University

Agronomy

R. G. Sears

T. S. Cox*

T. L. Walter

Plant Pathology

L. E. Browder*

Entomology

J. Hatchett*

Grain Science and Industry

A. B. Ward

Hays

T. J. Martin

Ft. Hays Experiment Station

Garden City

M. D. Witt

Garden City Experiment Station

Colby

J. R. Lawless

Colby Experiment Station

Hutchinson

G. Mueller

South Central Experiment Field

COLORADO AGRICULTURAL EXPERIMENT STATION:

Ft. Collins

Colorado State University

Agronomy

J. S. Quick

Akron

J. S. Quick

Central Great Plains Research Center

J. F. Shanahan

Springfield

J. S. Quick

Southeastern Colorado Research Center

J. S. Quick

Julesburg

J. S. Quick

Burlington

NEBRASKA AGRICULTURAL EXPERIMENT STATION:

Lincoln

University of Nebraska

Agronomy

V. A. Johnson*

J. W. Schmidt

M. R. Morris

P. J. Mattern

S. L. Kuhr*

C. J. Peterson*

North Platte

P. T. Nordquist

North Platte Station

Alliance

A. P. Mann

Northwest Agricultural Laboratory

Sidney

L. A. Nelson

High Plains Agricultural Laboratory

Clay Center

J. W. Schmidt

South Central Station

WYOMING AGRICULTURAL EXPERIMENT STATION:

Laramie	University of Wyoming	
Division of Plant Science		
(Crops Section)		B. J. Kolp
Cheyenne		
Archer Substation		B. J. Kolp
Sheridan		
Sheridan Substation		G. L. Costel

SOUTH DAKOTA AGRICULTURAL EXPERIMENT STATION:

Brookings	South Dakota State University	
Plant Science		J. L. Gellner
		W. S. Gardner
		G. W. Buchenau
Highmore		J. L. Gellner
Presho		J. L. Gellner

NORTH DAKOTA AGRICULTURAL EXPERIMENT STATION:

Fargo	North Dakota State University	
Agronomy		D. J. Cox
Williston		
Williston Substation		N. R. Riveland
Hettinger		
Hettinger Substation		D. J. Cox
		T. C. Faller

MONTANA AGRICULTURAL EXPERIMENT STATION:

Bozeman	Montana State University	
Plant and Soil Science		G. A. Taylor
Moccasin		
Central Agricultural Research Center		A. L. Dubbs
Sidney		
Eastern Agricultural Research Center		J. W. Bergman
Conrad		
Western Triangle Research Center		G. D. Kushnak

IDAHO AGRICULTURAL EXPERIMENT STATION:

Aberdeen		
Aberdeen Branch Station		D. W. Sunderman*
Tetonia		
Tetonia Branch Station		D. W. Sunderman*

MINNESOTA AGRICULTURAL EXPERIMENT STATION:

St. Paul	Institute of Agriculture	
Agronomy and Plant Genetics		R. H. Busch*
Waseca		
Southern Experiment Station		R. H. Busch*
		W. E. Lueschen

ILLINOIS AGRICULTURAL EXPERIMENT STATION:

Urbana	University of Illinois	
Agronomy		C. M. Brown
Plant Pathology		R. E. Ford
		H. Jedlinski*

MISSOURI AGRICULTURAL EXPERIMENT STATION:

Columbia University of Missouri
Field Crops

D. T. Sechler

CANADA DEPARTMENT OF AGRICULTURE:

Lethbridge
Canada Agricultural Research Station

J. Thomas

UNIVERSITY OF MANITOBA:

Winnipeg
Department of Plant Science

D. Zuzens

REGIONAL NOTES

The 1983 Hard Red Winter Wheat Breeders Field Day was held in Nebraska on June 23. The program included stops at the University of Nebraska South Central Station and North American Plant Breeders winter wheat nurseries at Clay Center, and Northrup King and Cargill winter wheat nurseries at York, Nebraska. The 1984 Breeders Field Day is tentatively scheduled for Oklahoma.

A Cereal Virus Conference was held at the Fort Hays Agricultural Experiment Station in Hays, Kansas on December 14-15, 1982. The next Cereal Virus Conference will be held at Purdue University in 1985.

An International Workshop on Septoria Diseases of Cereals was held August 2-4, 1983 at Montana State University, Bozeman, Montana.

In the most recent reorganization of the Agricultural Research Service some changes have occurred that impact on the hard red winter wheat region. Basic research, including new biotechnologies and genetic engineering, will be given increased emphasis in the new direction of research in ARS. The Mid Great Plains Area of which Nebraska, Kansas, Missouri, and Iowa were a part, has become the Central Plains Area and includes the National Animal Disease Center at Ames, IA. The Area Office has been moved from Columbia, MO to Ames, IA. Paul Putnam, formerly Director of the Beltsville Agricultural Research Center, has been named Director of the Central Plains Area with C. W. Alexander the Associate Director, and R. E. Dolphin, Assistant Director. Paul Fitzgerald, Regional Administrator, North Central Region has become Deputy Administrator responsible for the North Central Region.

Charles F. Murphy, formerly small grains breeder at North Carolina State University, was named member of the ARS National Program Staff as national program leader for cereals.

Steve Baenziger, ARS coordinator of the Eastern and Southern Uniform Soft Wheat nurseries resigned from ARS to accept a wheat genetics position with the Monsanto Corporation in St. Louis, MO. J. R. Tomerlin, Beltsville, MD, will fill in for Steve as nursery coordinator.

Vance Goodfellow, president of the Crop Quality Council, Minneapolis, Minnesota, for the last 22 years retired on August 31, 1983. His retirement coincided with the dissolution of the Crop Quality Council after 61 years of service to North American agriculture.

John Foster has assumed ARS responsibility for Hessian Fly research at Purdue University. Jimmy Hatchett, ARS Entomologist at Kansas State University, will evaluate entries in the SRPN and NRPN for Hessian Fly reaction in the future.

Karl Finney, longtime cereal chemist in charge of the Regional Wheat Quality Laboratory in Manhattan, Kansas retired in 1983 after 45 years of service with the USDA. Responsibility for evaluation of quality samples from regional nurseries has been assumed by Merle Shogren.

Norris Daniels, longtime entomologist at Bushland, Texas, retired in May of 1982.

T. S. Cox (Iowa State University) became the new ARS wheat geneticist at Kansas State University in 1983.

Two new ARS wheat positions were filled at the University of Nebraska in 1983. S. L. Kuhr (University of Nebraska) is the new research geneticist and C. J. Peterson (University of Nebraska) was named research agronomist.

The wheat division of HybriTech Seed International, Inc., added three people to its staff in 1983. Scott Nykaza (Colorado State University) will be responsible for B-line breeding; Mark Stearns is new cereal chemist; and Kenneth Hardesty (Oklahoma State University) will have responsibility for disease evaluation.

Steve Sebesta, M.S. from Oklahoma State University, was added to the Cargill wheat staff in 1983.

NEW VARIETIES AND HYBRIDS

Varieties

Colt (P.I.476975) -- developed and released by the Nebraska Agricultural Experiment Station and USDA-Agricultural Research Service in 1983.

Pedigree: Agate Sib (NE69441)//TX65A1503-1. Tested as NE78696 in the NRPN in 1982 and 1983, in the SRPN in 1983. An awned, white-glumed, semidwarf cultivar similar in height to Vona or 6 inches shorter than Centurk 78, slightly later in maturity than Centurk 78, superior to Vona in winterhardiness, bushel weight, kernel weight and protein content, similar in grain yield and lodging resistance. Intermediate field reaction to mildew, soil-borne mosaic, stem rust, and Great Plains biotype of Hessian fly (in greenhouse tests). Similar to Scout 66 in milling and baking quality.

Centura (P.I.476974) -- developed and released by the Nebraska Agricultural Experiment Station and USDA-ARS in 1983. Pedigree: Warrior*5/

Agent (CO68F6635)//NE68457/3/Centurk Selection. Tested as NE77682 in the SRPN in 1981-1983 and in the NRPN in 1983. Awned, white-glumed, similar in height and appearance to Centurk 78; between Centurk 78 and Scout 66 in maturity; better than Centurk 78 in yield, bushel weight and kernel weight, similar in straw strength. Intermediate field reaction to mildew, SBMV, WSMV, stem rust and Great Plains biotype of Hessian fly (in greenhouse tests). Similar to Centurk 78 in quality.

Siouxland (P.I. no. not yet assigned) -- to be released and distributed in 1984 by the Nebraska Agricultural Experiment Station, Texas Agricultural Experiment Station, and USDA-ARS. Pedigree: (Warrior*5/Agent)*2//Kavkaz. Tested as NE78668 in the SRPN in 1981-1983 and in the NRPN in 1984. Awned, white-glumed, similar in appearance and height to Centurk 78 but slightly earlier maturing and more winterhardy than Centurk 78; better resistance to lodging, higher kernel weight, and more productive than Centurk 78. Resistant to mildew, leaf rust and stem rust in the field; susceptible to SBMV, WSMV, and Hessian fly. Similar to Scout 66 in milling and baking quality.

Agassiz -- developed and released by the North Dakota Agricultural Experiment Station in 1983. Pedigree: YTO-117/Trader. Tested as ND7687 in North Dakota state trials beginning in 1977. Awned, similar in appearance to Roughrider but slightly taller and one day later. Equal to Winoka in winterhardiness. More productive than Roughrider. Field resistance to stem rust, intermediate reaction to tan spot and white blotch, susceptible to leaf rust. Milling and baking quality satisfactory.

OK754615E (Early Sturdy/Nicoma) -- was released under the name Chisholm in January, 1983 by the Oklahoma Experiment Station. Chisholm was tested in the SRPN in 1982 and 1983. It is an early maturity semidwarf with excellent straw. It has field resistance to leaf rust but is susceptible to SBMV and Hessian fly.

OK79256 (Aurora/2*TAM W-101) -- tested in the SRPN in 1982 and 1983 and is undergoing preliminary seed increase in Oklahoma.

Two experimental lines are being increased in Texas for probable release in 1984. They are TX80GH2875 (TAM 105*4/Amigo) and TX71A562-6-28 (Sturdy sib/Triumph//Centurk). Both were tested in the SRPN from 1982-1984.

Northrup King plans to release three hard red winter wheat varieties for certified seed sales, probably in 1985. They are:

Rodeo -- tested as 77W4093 in the 1982 and 1983 SRPN. Pedigree: Scout*5/Agent//Sturdy/3/Centurk. A tall semidwarf with moderate resistance to leaf and stem rust but susceptible to Hessian fly and SBMV.

Pony -- tested as 77W4505 in the 1982 and 1983 SRPN. Pedigree: Scout *5/Agent//Sturdy. An early semidwarf with moderate resistance to leaf and stem rust but susceptible to Hessian fly and SBMV.

78W296 -- tested in the 1982 and 1983 NRPN. Pedigree: Warrior/Minn III-54-12//Sturdy/3/Winoka/Ark. A winterhardy semidwarf with adult plant resistance to stem rust. Moderately resistant to leaf rust but susceptible to Hessian fly. Not yet officially named but suggested name is "Bighorn".

North American Plant Breeders offered seed of "Jesse" for sale in 1983. It plans to sell seed of three additional hard red winter wheat varieties in 1984.

Jesse -- an awned semidwarf medium-early variety similar to Hawk and Newton. Resistant to SBMV and moderately resistant to stem rust. Shows some resistance to WSMV but is susceptible to Hessian fly.

Mustang -- early maturing, awned semidwarf slightly taller than TAM W101. Resistant to SBMV, moderately resistant to stem rust, Hessian fly.

Ram -- an awned, tall semidwarf variety with maturity similar to the Centurk wheats. Excellent straw, moderately resistant to stem rust, leaf rust, and SBMV; some resistance to WSMV; susceptible to Hessian fly.

Wrangler -- awned, early maturing semidwarf variety similar in appearance to Mustang with resistance to SBMV and moderate resistance to stem rust and Hessian fly.

Pioneer Hi-Bred International will release two hard red winter wheat varieties for sale in 1984. They are:

2157 -- semidwarf early maturing variety best adapted to the southern plains.

2165 -- semidwarf early maturing variety intended for the central plains.

Hybrids

Several hard red winter wheat hybrids were marketed in the region in 1983.

Rohm and Haas sold seed of 8 hybrids; Cargill marketed 9 hybrids; and HybriTech 2 hybrids as follows:

<u>Rohm and Haas</u>	<u>Cargill</u>	<u>HybriTech</u>
HW-1001	Bounty 100	Quantum 555
" 1010	" 200	" 568
" 1018	" 201	
" 1019	" 202	
" 1020	" 203	
" 1021	" 204	
" 1024	" 301	
" 1030	" 302	
	" 310	

THE 1983 CROP YEAR

Record yields of winter wheat were reported by most states in the hard red winter wheat region in 1983. The harvested U. S. winter wheat area of 19.3 million hectares was down 18% from the 1982 hectarage but the record high yield of 2787 kg/ha was well above the previous high of 2460 kg/ha made in 1979. The crop year was characterized by below-normal precipitation in the fall, a generally mild winter with normal to above-normal precipitation, and a cool wet spring. In most areas the wheat crop was one to two weeks later than normal. Wet weather continued into late spring and caused delays in harvest in many areas.

Despite the high yields, foliar diseases, favored by the cool wet weather, became heavy and caused higher than normal estimated losses in most states of the region. Septoria tritici was damaging in the southern and central areas and leaf rust and tan spot also were destructive. Soil-borne and wheat streak mosaic were readily found in the central part of the region. Barley Yellow Dwarf also was observed throughout much of the region. The delayed maturity and the wet cool spring favored stem rust which became heavy on susceptible varieties in some areas. Take-all was prevalent but Cephalosporium stripe and scab, both destructive in portions of Kansas and Nebraska in 1982, were much less severe. Mildew was prevalent and frequently destructive in the southern and central wheat areas. Stripe rust favored by the cool spring made an infrequent appearance and caused early defoliation in some parts of the south. Eastern North Dakota experienced the worst epidemic of stem rust in the last 10 years. Tan spot also was severe on susceptible varieties in the area.

Wheat production statistics for states in the hard red winter wheat region, 1983.

State	Hectares seeded	Hectares harvested	Abandonment for grain harvest	Yield per harvested hectare	Production (metric tons)
	1,000	1,000	%	Quintals	1,000
New Mexico	304	190	37	19.5	371
Texas	3,179	1,863	41	23.5	4,385
Oklahoma	3,159	1,742	45	23.5	4,099
Colorado	1,620	1,215	25	26.2	3,186
Kansas	5,346	4,374	18	27.9	12,206
Nebraska	1,154	932	19	28.9	2,693
Wyoming	117	92	21	22.2	205
Montana	1,033	915	11	23.5	2,154
So. Dakota	608	506	17	27.6	1,396
No. Dakota	81	69	15	20.8	144

Source: Crop Production, Small Grains, 1983 Annual Summary,
Crop Reporting Board, Statistical Reporting Service,
USDA, Washington, DC. CrPr 2-2 (83).

1983
SOUTHERN REGIONAL PERFORMANCE NURSERY

Entry no.	Variety	C.I. or Sel. No.	Source
1	Kharkof	1442	Check
2	Scout 66	13996	"
3	Sage	17277	"
4	Sdy sib/Kaw(TX62A2522-1)//Ctk	TX78V3630	Texas
5	Short Wheat/Sut(TX69A509-2)//Fox	TX78V2408	"
6	Sdy sib/Triumph//Ctk	TX71A562-6-28	"
7	TAM 105*4/Amigo	TXGH2875	"
8	Arkan	KS79H69	Kansas
9	Sut*5/Ag//Sdy/3/Ctk	NK77W4093	N-K
10	Sut*5/Ag//Sdy	NK77W4505	"
11	Kavkaz/Centurk	NK77W4593	"
12	Wrr*5/Agent//NE68457/3/Ctk 78	NE77682	Nebraska
13	(Wrr*5/Agent)*2/Kavkaz	NE78668	"
14*	Lovrin 13/2*Ctk 78	NE80413	"
15**	Agate sib (NE69441)/TX65A1503-1	NE78696	"
16*	C073F18298-6/McNair 4823	NA80137	NAPB
17*	Bulk Selection	NA80310	"
18*	" "	NA80300	"
19*	Caprock/B86//SC3212	W7442B	Pioneer
20*	Sturdy/B48//Sturdy	W7452B	"
21*	TAM 105 Reselection	TX69A569-1-69	Texas
22*	TAM W-103//Sh Wheat/Sut (TX69A509-1)	TX80A5609	"
23*	Sdy sib/Tcs//Ctk(73A2694)/3/Amigo	TX80A6025	"
24*	TAM 105*4/Amigo	TX80GH2679	"
25*	Sdy sib/Triumph//Ctk(TX71A562-6)*4/ Amigo	TX80GH3006	"
26	Ey Sdy/Ncm	OK754615E	Oklahoma
27	Aurora/2* TAM W-101	OK79257	"
28	" "	OK79256	"
29*	Payne/Amigo	OK80019	"
30*	Payne//TAM W-101/Amigo	OK80268	"
31	C0723117/C0725856	C0796326	Colorado
32	" "	C0796386	"
33***	Hard Winter Wheat Hybrid	RH790610	Rohm & Haas
34	Ctk//KS6623/TX62A2522-8-2	IL76-3845	Illinois
35	Kavkaz/TX69A330-1	IL77-4259	"

* New entry in 1983.

** Entered from the NRPN.

*** New seed provided.

SRPN Test Sites

Clovis, New Mexico	Ft. Collins, Colorado
Farmington, New Mexico	Julesburg, Colorado
Dallas, Texas	Akron, Colorado
Chillicothe, Texas	Burlington, Colorado
Bushland, Texas	Walsh, Colorado
Stillwater, Oklahoma	Mead, Nebraska
Lahoma, Oklahoma	Clay Center, Nebraska
Altus, Oklahoma	North Platte, Nebraska
Goodwell, Oklahoma	Sidney, Nebraska
Hutchinson, Kansas	Alliance, Nebraska
Hays, Kansas	Brookings, South Dakota
Garden City, Kansas	Presho, South Dakota
Colby, Kansas	Highmore, South Dakota
Columbia, Missouri	Ames, Iowa
Urbana, Illinois	Aberdeen, Idaho
Lind, Washington	Tetonia, Idaho
St. Paul, Minnesota (rust plots)	

Test Site Information - SRPN

Clovis, NM -- Irrigated nursery seeded September 14 and fertilized with 150-0-0. Received 3 irrigations on 9-17, 5-2, and 5-23. Dryland nursery seeded September 13 with no fertilizer applied. Soil moisture was ample at seeding time. Dryland nursery had a total of 8.62 inches of precipitation. Light hailstorms on 5-20, 5-26, 6-7, and 6-8 damaged the nurseries making reliability of the data questionable.

Farmington, NM -- No information.

Bushland, TX -- Both irrigated and dryland nurseries destroyed by hail on May 13.

Chillicothe, TX -- Dry conditions prevailed throughout the fall. Nursery seeding was delayed until November 16 on preirrigated ground. Fall tillering minimal due to late seeding and cool weather after seeding. Winter and spring precipitation above average and well distributed. Moderate temperatures throughout the season except for three days of high temperatures and high winds in April that killed lower leaves of susceptible entries. Nursery not harvested until mid-June. Leaf rust, powdery mildew and tan spot present but not damaging.

Dallas, TX -- Nursery seeded October 18 in good moisture. Received 100 lbs. 18-46-0 preplant and topdressed with 60 lbs. N on 2-16-83. Winter and spring temperatures somewhat below normal. Powdery mildew and leaf rust appeared in mid-January but did not spread. One month later stripe rust was found and severely damaged some entries. Heading was later than normal because of low spring temperatures. Stripe rust and BYDV were the major disease problems. October-May precipitation totaled 25.8 inches.

Stillwater, OK -- Nursery observed in early June. Heavy incidence of foliar diseases including severe mildew and leaf rust, Septoria, tan spot, brown necrosis and bacterial black chaff. Diseases probably the dominant effect in 1983.

Lahoma, OK -- Stripe rust, leaf rust, Septoria, tan spot and mildew present in the nursery. Excellent nursery with high yield potential when observed in early June.

Altus, OK -- Early drought stress evident in June. Entries appeared ragged and similar in maturity.

Goodwell, OK -- The irrigated nursery was one of the best seen at Goodwell in recent years. Excellent stands with very high yield potential and no diseases when observed in early June.

Hutchinson, KS -- Nursery approximately two weeks later than normal. Septoria, some mildew and tan spot, and trace of leaf rust observed in early June. High yield potential.

Garden City, KS -- Excellent nursery but two weeks later than normal. Some Septoria but no other diseases observed. Some lodging already occurring in early June.

Hays, KS -- Excellent conditions in the fall for stand establishment and plant development. After a mild winter the April-June period was dry and cool with no effective rains in either April or June. Wheat finished well and made high yields, mostly attributable to the below-normal temperatures. Some hail damage occurred on May 17 resulting in some trapped, partially filled heads. There were no disease problems.

Colby, KS -- Drill malfunction at seeding time may have affected some plots in the nursery. Examination of individual plot yield data from the area of the nursery affected by the malfunction indicated the effect was minor or non-existent.

Colorado Stations -- No information.

Mead, NE -- Fall conditions were good and the winter was mild. The spring was wet and temperatures were below normal. The wheat was damaged by geese feeding in the spring -- the NRPN was damaged, the SRPN not. A fairly heavy leaf rust epidemic was present. Stem rust was the heaviest in many years, but came in too late to cause much damage.

Clay Center, NE -- Seeding conditions were not ideal -- too much moisture. This plus deep seeding led to poor tillering in the SRPN. Stem rust, leaf rust, and Septoria were quite heavy but came in too late to cause much damage.

North Platte, NE -- Growing conditions were favorable but delayed germination of year-old seed even in fallowed ground caused a volunteer wheat problem. This could have been a factor in yields since the volunteer wheat was not distributed uniformly.

Sidney, NE -- Nursery destroyed by hail.

Alliance, NE -- Growing conditions were favorable except for a hard freeze during the week ending May 15. This caused some leaf and tiller loss which reduced yields somewhat. Diseases were not a problem.

South Dakota Stations -- No winterkill occurred in the 1982-1983 nurseries at Brookings, Presho and Highmore. Tan spot, leaf rust and stem rust were present at Brookings. Some tan spot and leaf rust observed at Presho and Highmore.

Columbia, MO -- No information.

Ames, IA -- No information.

Urbana, IL -- Nursery seeded under near-optimum conditions in early October. Fall emergence was excellent and no winterkilling occurred. Favorable conditions persisted through early spring but late spring and summer were hot and dry. Soil-borne mosaic was the only disease that caused significant damage in the nursery.

Aberdeen, ID -- Conditions not reported.

Lind, WA -- Conditions not reported.

Table 1. Yield and agronomic data for 35 entries in the Southern Regional Performance Nursery in 1983.

CLOVIS, NEW MEXICO (IRR.)						
THREE REPLICATIONS						
C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD : KG/HA	: VOLUME : WEIGHT : KG/HA	: PLANT : HEIGHT : CM	: LODGING : %	: DAYS TO : HEADING : FROM 1/1
TX69A569-1-69	21	3396	75.6	78	10	128
NA80300	18	3044	74.9	80	13	130
TX80GH2679	24	3025	75.3	79	13	127
W7442B	19	2966	75.2	80	10	131
TX71A562-6-28	6	2869	73.4	81	20	132
OK80268	30	2869	74.5	80	10	131
NE78696	15	2791	74.5	73	10	129
NA80310	17	2752	74.7	73	13	130
OK79256	28	2654	74	74	20	128
TX80A6025	23	2635	76.3	78	17	129
TXGH2875	7	2615	73.4	80	20	126
OK79257	27	2518	73.6	75	13	128
OK80019	29	2342	74.9	75	10	132
NK77W4505	10	2205	74	75	13	128
KS79H69	8	2166	75.6	75	27	127
TX80GH3006	25	2127	74.8	75	30	130
W7452B	20	2030	71.3	75	30	129
OK754615E	26	1854	75.3	82	33	126
NK77W4093	9	1678	70.2	78	20	131
NE80413	14	1678	74	80	33	132
RH790610	33	1678	76.9	78	33	128
CI17277	3	1600	75.1	85	47	131
TX80A5609	22	1522	73.6	80	30	127
NE78668	13	1483	74	84	23	131
TX78V2408	5	1405	75.2	77	40	129
CO796386	32	1386	76	84	40	129
NA80137	16	1366	75.3	73	33	129
IL76-3845	34	1366	72.7	76	40	129
NK77W4593	11	1269	74.9	81	30	132
CO796326	31	1210	75.6	86	63	129
CI1442	1	1190	75.2	91	47	135
CI13996	2	1190	75.3	91	63	130
TX78V3630	4	1190	73.8	75	40	127
NE77682	12	1054	74.3	84	60	131
IL77-4259	35	722	73.6	81	57	132
MEAN						
LSD(.05)		1996	588			
C.V.		18.0				

CLOVIS, NEW MEXICO (DRYL.)

THREE REPLICATIONS

C.I. OR SEL. NO.	: : ENTRY: : NO. :	: YIELD : KG/HA :	: VOLUME : WEIGHT : KG/HA :	: PLANT : HEIGHT : CM :	: DAYS TO : HEADING : FROM 1/1
TX80GH3006	25	1724	74	68	130
W7442B	19	1708	75	69	129
OK80019	29	1708	73.8	67	130
OK80268	30	1675	74	67	130
NA80310	17	1659	72.4	65	129
NE78696	15	1529	74	64	128
NA80300	18	1301	72.7	66	129
OK79256	28	1301	71.6	65	126
TX69A569-1-69	21	1171	74.3	67	126
TX80GH2679	24	1171	74	69	125
TXGH2875	7	1090	74.6	66	126
TX71A562-6-28	6	1073	71.8	70	130
TX80A5609	22	1041	69.9	70	126
TX80A6025	23	992	74.2	63	126
CI17277	3	943	73.5	73	128
W7452B	20	943	72.1	68	129
C0796386	32	943	74.6	75	127
NK77W4505	10	911	71.5	62	128
CI13996	2	895	74.7	75	128
NK77W4593	11	880	71.4	75	130
NE80413	14	862	72.8	73	130
OK79257	27	862	71.3	64	126
C0796326	31	830	74.2	73	129
TX78V2408	5	764	71.9	66	127
NK77W4093	9	764	72.9	69	129
NA80137	16	748	73	67	127
OK754615E	26	708	73.5	69	126
KS79H69	8	699	71.6	65	125
NE78668	13	699	72.6	71	131
RH790610	33	683	74.2	63	127
CI1442	1	667	71.9	81	132
TX78V3630	4	572	73.3	63	126
NE77682	12	504	72.1	71	128
IL76-3845	34	358	.	61	127
IL77-4259	35	228	.	69	131

MEAN 989
LSD(.05) 316
C.V. 19.6

FARMINGTON

NEW MEXICO

FOUR REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : KG/HA	: VOLUME : WEIGHT : KG/HA	: PLANT : HEIGHT : CM	: DAYS TO : HEADING : FROM 1/1
TX80GH3006	25	8658	71	86	152
OK80268	30	7851	69.7	84	153
NA80310	17	7587	71.6	78	154
OK80019	29	7484	70.3	91	154
TX80GH2679	24	7470	73.5	81	147
NE78696	15	7455	72.9	85	152
CO796386	32	7382	73.9	91	148
NK77W4593	11	7308	73.5	95	152
TX78V2408	5	7249	71.3	82	149
TX78V3630	4	7220	69.3	74	148
CO796326	31	7205	71.3	93	149
NK77W4093	9	7147	72.9	91	151
TXGH2875	7	7117	72.2	84	148
CI1442	1	6809	70.3	104	158
TX80A5609	22	6751	71.9	81	148
CI17277	3	6736	69.7	75	153
W7442B	19	6706	71.3	79	152
TX69A569-1-69	21	6574	71.9	77	148
OK754615E	26	6545	69	77	148
CI13996	2	6457	72.9	96	149
RH790610	33	6398	71.6	76	150
IL76-3845	34	6281	70.6	77	150
NA80137	16	6252	69	83	152
NA80300	18	6252	71.9	86	154
NE78668	13	6237	68	92	154
TX80A6025	23	6237	72.2	83	152
NK77W4505	10	6134	71	77	150
OK79256	28	6017	71.3	76	150
KS79H69	8	5870	70	74	150
IL77-4259	35	5797	69.7	88	154
NE80413	14	5782	74.2	93	153
W7452B	20	5782	72.9	76	151
NE77682	12	5767	71.3	89	150
OK79257	27	5283	70.3	71	150
TX71A562-6-28	6	5210	71.3	80	152

MEAN	6652
LSD(.05)	N.S.
C.V.	23.1

CHILLICOTHE

TEXAS

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : : KG/HA :	: VOLUME : : WEIGHT : : KG/HA :	: PLANT : : HEIGHT : : CM :	: DAYS TO : HEADING : FROM 1/1
NE78668	13	4257	77.9	73	122
TX80GH2679	24	4136	79.3	71	120
TX80A6025	23	4066	79.1	67	121
OK79256	28	3972	80	65	124
OK754615E	26	3968	78.8	74	118
NA80310	17	3952	74.7	63	123
NE78696	15	3943	80.4	64	129
TX80A5609	22	3887	77.3	67	121
TXGH2875	7	3858	77.1	69	119
NE80413	14	3853	79.7	74	126
NA80137	16	3824	78.4	65	125
TX69A569-1-69	21	3811	79.3	65	125
TAM101		3809	79.9	64	124
NK77W4093	9	3768	79.7	69	123
TX71A562-6-28	6	3766	74.9	65	125
W7442B	19	3753	80.2	70	120
OK80019	29	3746	77.9	64	122
RH790610	33	3737	76.6	69	119
TAM105		3723	79.7	62	126
OK79257	27	3721	78.2	67	122
TX80GH3006	25	3694	74.4	69	123
CI17277	3	3688	78.8	70	128
TX78V2408	5	3670	78.4	63	125
NK77W4593	11	3658	78.2	75	125
IL77-4259	35	3649	78.6	75	121
OK80268	30	3632	76.6	65	122
NA80300	18	3607	77.1	67	122
W7452B	20	3596	78.3	69	120
IL76-3845	34	3584	78.4	65	125
CO796386	32	3571	80.6	77	118
TX78V3630	4	3562	76.8	66	121
CO796326	31	3560	78.6	75	119
NE77682	12	3454	79.3	70	125
CI13996	2	3439	78.7	77	126
KS79H69	8	3376	76.6	67	119
NK77W4505	10	3226	76.5	64	119
CI1442	1	2629	80	83	133
MEAN		3703			
LSD(.05)		269			
C.V.		4.5			

DALLAS
TEXAS
THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY: NO.	YIELD KG/HA	VOLUME KG/HA	PLANT HEIGHT CM	DAYS TO HEADING	STRIPE RUST FROM 1/1:SEV.:RESP:	DROUGHT DAMAGE 0-9	LEAF RUST SEV.:RESP:	LEAF RUST SEV.:RESP:	LEAF RUST SEV.:RESP:	MILDEW SEV.:RESP:
						1-9		%	1-9: %	1-9: %	1-9:1-9: %
NA80137	16	3672	74.2	102	116	1	0	1	.	15	8
RH790610	33	3575	77.4	107	110	3	0	1	.	30	8
W7442B	19	3533	78.7	98	113	4	1	1	.	0	.
OK79257	27	3522	76.8	98	120	1	0	1	.	1	.
KS79H69	8	3499	76.1	99	109	5	0	1	.	1	.
W7452B	20	3448	77.4	86	112	4	0	1	.	1	.
NK77W4593	11	3441	77.4	107	118	2	0	10	8	10	8
NK77W4505	10	3416	76.8	99	109	2	2	5	8	10	7
NK77W4093	9	3401	77.4	97	117	2	1	15	8	20	8
OK80268	30	3358	74.8	102	113	3	2	10	8	5	7
NE78668	13	3304	74.8	110	113	5	0	1	.	1	.
OK754615E	26	3286	78.7	103	111	3	0	20	8	30	8
NE80413	14	3266	76.8	108	117	3	0	1	.	0	.
NA80310	17	3264	74.8	93	114	2	0	1	.	15	8
OK79256	28	3226	78	99	121	2	0	1	.	1	.
IL77-4259	35	3185	78.7	110	114	4	0	1	.	1	.
TX80GH3006	25	3132	69.7	97	119	2	1	1	.	20	8
TX78V3630	4	3044	74.8	91	115	3	0	1	.	10	8
TX80GH2679	24	3028	75.5	102	112	5	2	10	8	30	8
OK80019	29	2950	76.1	95	115	5	3	1	.	30	8
NA80300	18	2948	74.8	103	115	3	0	1	.	10	8
TX71A562-6-28	6	2919	73	95	120	2	0	10	8	30	8
NE77682	12	2854	78	105	118	4	0	5	8	10	8
TX89A569-1-69	21	2851	73.5	94	119	4	0	10	8	20	8
TX8H2875	7	2793	74.2	97	108	5	3	1	.	30	8
TX80A6025	23	2768	75.5	99	113	4	4	10	8	20	8
IL76-3845	34	2768	76.8	97	119	3	0	1	.	5	7
CO796386	32	2733	79.3	104	112	4	0	1	.	30	8
TX78V2408	5	2726	76.8	94	119	2	0	10	8	5	2
CI13996	2	2721	78.7	110	122	2	0	10	8	10	8
TX80A5609	22	2623	76.1	97	115	4	2	20	8	10	8
CO796326	31	2571	78.7	95	113	4	0	10	8	20	8
NE78696	15	2255	74.8	95	123	3	0	20	7	30	8
CI17277	3	2094	77.4	104	124	4	0	10	8	5	2
CI1442	1	1896	78	108	.	4	0	20	8	40	8

MEAN 3042
LSD(.05) 703
C.V. 14.2

*Leaf Rust notes from three dates: 3/1, 4/1, and 5/12.

STILLWATER

OKLAHOMA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY: NO.	YIELD KG/HA	VOLUME KG/HA	PLANT HEIGHT CM	DAYS TO HEADING FROM 1/1	LEAF RUST: SEV.: %	STEM RUST: SEV.: %	MILDEW: SEV.: %	HEAD BLIGHT 1-5
OK80019	29	3324	76.8	79	132	1	3	1	0 . 1.5
NA80137	16	3320	75	85	133	15	8	1	1 8 2.5
TXGH2875	7	3226	74.8	74	126	75	8	1	0 . 2.5
NK77W4593	11	3201	76.8	90	133	5	8	1	11 8 3
W7452B	20	3118	76.9	75	129	1	8	3	16 8 3
OK79256	28	3105	76	80	133	5	7	2	23 8 3
OK80268	30	2977	76.6	77	132	1	2	1	0 . 2.5
TX71A562-6-28	6	2948	73	83	132	8	8	1	8 8 2.3
TX80GH3006	25	2932	70.8	80	132	35	8	1	0 . 3.3
TX78V3630	4	2869	76.1	71	131	5	8	1	20 8 2.8
KS79H69	8	2867	76.1	73	129	1	8	1	60 8 3.8
NE78668	13	2827	76.4	84	132	0	.	1	0 . 3
IL76-3845	34	2730	72.6	89	133	40	8	2	0 . 3
OK754615E	26	2703	77.4	73	126	40	8	3	70 8 3
W7442B	19	2699	78.4	75	127	1	8	5	60 8 2.8
C0796386	32	2688	79.6	85	129	45	8	4	8 8 2.5
C0796326	31	2681	79.5	82	129	60	8	3	18 7 1.6
NE78696	15	2659	75.6	86	138	1	8	1	15 8 1.5
TX78V2408	5	2641	75.3	83	134	18	8	1	70 8 2.5
NE77682	12	2616	75.2	88	133	6	7	1	35 8 3.3
OK79257	27	2580	73.9	77	133	15	3	2	50 8 3.3
NE80413	14	2576	74.6	89	134	0	.	1	1 8 3.5
TX80GH2679	24	2508	71.9	76	131	65	8	1	0 . 1.5
CI13996	2	2466	77.4	99	134	25	8	1	5 8 2
NK77W4093	9	2464	77.5	80	131	3	8	1	45 8 3.3
IL77-4259	35	2414	77.8	81	130	5	3	1	0 . 3.3
NA80300	18	2403	74.6	85	130	50	8	1	1 7 2.8
RH790610	33	2367	76.6	77	128	50	8	2	23 8 3
TX69A569-1-69	21	2338	73	80	133	25	8	2	40 8 3
TX80A6025	23	2304	75.7	75	132	11	8	1	28 8 3.5
NK77W4505	10	2273	76.2	69	128	1	2	1	85 8 3
NA80310	17	2148	73	77	131	25	8	1	25 8 2.8
TX80A5609	22	2051	71	76	130	70	8	2	60 8 3.5
CI17277	3	1932	74.8	92	137	8	8	1	35 8 3.8
CI1442	1	1854	74.7	115	142	20	8	2	6 8 2

MEAN 2652
LSD(.05) 571.
C.V. 13.2

LAHOMA

OKLAHOMA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : : KG/HA :	: VOLUME : : WEIGHT : : KG/HA :	: PLANT : : HEIGHT : : CM :	: LODGING : : % :
OK80019	29	5093	73	93	0
OK80268	30	4909	73.7	90	0
TXGH2875	7	4815	72.3	84	0
TX80GH3006	25	4725	70.5	88	7
OK754615E	26	4654	76.6	87	0
OK79256	28	4609	73.2	91	0
TX80GH2679	24	4595	73.4	88	0
W7452B	20	4582	75.6	86	0
NK77W4505	10	4555	74.1	86	12
KS79H69	8	4506	74.2	88	0
TX71A562-6-28	6	4483	69.9	95	3
TX78V2408	5	4479	73.7	96	0
NE78668	13	4353	75.2	105	0
IL77-4259	35	4326	76	98	0
NA80137	16	4304	73.3	97	0
OK79257	27	4250	73	87	0
NE78696	15	4192	75.7	97	3
W7442B	19	4183	76.4	87	0
TX69A569-1-69	21	4170	71.9	90	0
RH790610	33	4152	73.3	92	0
NK77W4093	9	4120	76.1	93	7
NK77W4593	11	4107	76.4	102	0
NE77682	12	4098	74.6	99	55
IL76-3845	34	4075	74.1	99	0
TX78V3630	4	4035	72.3	84	0
NA80300	18	4031	72.5	97	0
CI17277	3	3959	76.9	110	0
TX80A6025	23	3954	72.8	90	58
NE80413	14	3842	74.4	102	7
NA80310	17	3842	68.9	87	82
CO796326	31	3649	76.1	97	13
CI13996	2	3412	75.1	108	7
CO796386	32	3407	76.2	99	0
TX80A5609	22	3354	70.1	91	17
CI1442	1	2237	74.8	115	27

MEAN 4173
LSD(.05) 502
C.V. 7.4

ALTUS

OKLAHOMA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : : KG/HA :	: VOLUME : : WEIGHT : : KG/HA :	: PLANT : : HEIGHT : : CM :	:STEM RUST :SEV.:RESP :1-9 : 1-9
NE80413	14	3757	80.5	72	1
TX71A562-6-28	6	3632	78.3	64	2
RH790610	33	3632	79.3	66	4
NK77W4593	11	3614	80.5	72	1
TXGH2875	7	3573	78.3	65	2
NK77W4093	9	3510	80.9	64	2
NE78668	13	3497	78.8	73	1
OK80268	30	3470	78.4	60	1
NA80137	16	3466	79.2	59	2
TX80GH3006	25	3466	76.4	62	1
OK80019	29	3448	79.6	61	1
TX80A6025	23	3434	79.7	62	1
NA80300	18	3416	78.3	61	1
TX69A569-1-69	21	3412	79.1	63	5
TX80A5609	22	3407	77.8	63	3
OK79256	28	3407	80.2	65	3
TX78V3630	4	3380	79.6	55	1
NA80310	17	3349	77.2	62	1
W7452B	20	3349	79.2	66	5
CO796386	32	3349	81.1	70	3
OK79257	27	3345	79.2	66	3
CO796326	31	3286	80.4	71	3
NK77W4505	10	3259	78.8	59	2
OK754615E	26	3255	79.7	65	5
KS79H69	8	3224	78.6	63	1
CI17277	3	3183	80.5	76	1
CI13996	2	3179	80	79	1
TX80GH2679	24	3156	78.7	64	2
NE77682	12	3125	80.2	68	1
TX78V2408	5	3062	78.6	60	3
W7442B	19	3049	81.1	68	8
NE78696	15	2995	80.6	67	2
IL77-4259	35	2981	79.7	68	1
IL76-3845	34	2968	77.7	64	7
CI1442	1	2318	77.3	86	4

MEAN 3313
LSD(.05) 252
C.V. 4.7

GOODWELL

OKLAHOMA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : : KG/HA :	: VOLUME : : WEIGHT : : KG/HA :	: PLANT : : HEIGHT : : CM :	: LODGING : : % :	: DAYS TO : HEADING : FROM 1/1
W7452B	20	6795	78.4	99	0	138
OK754615E	26	6795	79	98	0	133
W7442B	19	6762	80.2	98	0	140
KS79H69	8	6705	77.7	92	0	141
NE78668	13	6664	79.1	113	5	144
OK79256	28	6591	77.4	95	32	142
NE80413	14	6582	78.3	107	0	145
TXGH2875	7	6550	75.7	101	0	134
TX69A569-1-69	21	6468	76	102	0	139
NA80137	16	6378	76.6	100	0	143
TX80GH2679	24	6321	75	99	0	135
NK77W4505	10	6280	77.8	95	3	136
NK77W4093	9	6125	78.7	97	0	143
RH790610	33	6052	76.1	102	0	135
OK80268	30	6003	75.5	91	3	143
TX78V3630	4	5994	76.8	91	3	139
TX71A562-6-28	6	5970	72.3	94	33	143
IL77-4259	35	5929	79.9	103	0	143
NE78696	15	5905	77	103	0	145
TX80GH3006	25	5864	71.7	97	3	144
NA80300	18	5766	76.4	102	5	143
CI17277	3	5741	78.8	107	10	144
OK79257	27	5660	76.1	89	28	142
TX78V2408	5	5635	73.3	97	20	142
NK77W4593	11	5627	78.6	106	8	145
TX80A5609	22	5578	74.4	99	3	138
NA80310	17	5431	73.8	96	0	142
IL76-3845	34	5423	76.2	100	0	144
NE77682	12	5415	78.2	104	13	144
TX80A6025	23	5170	75.1	94	33	141
CI13996	2	5063	79	112	32	143
OK80019	29	5055	74.1	100	48	144
CO796386	32	4941	79.5	103	13	135
CO796326	31	4745	78.2	100	37	143
CI1442	1	3210	75.1	118	42	150

MEAN 5863
LSD(.05) 672
C.V. 7.0

HUTCHINSON

KANSAS

FOUR REPLICATIONS

G.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : KG/HA	: VOLUME : WEIGHT : KG/HA	: PLANT : HEIGHT : CM	: DAYS TO : HEADING : FROM 1/1 :	: LEAF RUST : SEV.:RESP : %	: STEM RUST : SEV.:RESP : 1-9	: 1-9
OK754615E	26	4805	76.6	93	136	70	8	9
TXGH2875	7	4732	73.7	88	135	70	8	6
TX69A569-1-69	21	4683	75.5	94	139	80	8	9
TX71A562-6-28	6	4682	72.2	95	141	15	7	6
TX80GH3006	25	4521	73	91	143	70	8	4
TX80GH2679	24	4507	76.1	89	137	99	8	4
NA80300	18	4332	74.7	98	141	30	8	4
NE78668	13	4319	76	110	142	1	3	3
OK80019	29	4316	74	96	143	0	2	5
RH790610	33	4270	72.8	97	137	30	7	7
TX78V2408	5	4204	72.8	98	143	30	8	7
TX80A6025	23	4182	75.1	90	141	0	8	7
OK80268	30	4179	73.7	94	143	0	2	4
NE78696	15	4126	76	95	145	10	7	1
NK77W4093	9	4094	75.6	96	140	10	7	4
KS79H69	8	4077	73.4	95	139	0	2	1
OK79257	27	4046	72.8	88	141	60	8	9
NA80137	16	4023	75.9	95	143	10	7	4
W7442B	19	4023	75.2	86	140	5	7	9
NK77W4505	10	4019	74.6	90	139	0	2	3
W7452B	20	3964	74.9	91	139	20	8	9
IL76-3845	34	3911	75.1	99	144	60	8	9
NE77682	12	3860	76.1	103	145	10	7	3
TX80A5609	22	3847	70.8	93	138	99	8	7
NK77W4593	11	3839	74.3	105	146	5	3	3
NA80310	17	3813	72.9	92	141	10	7	2
CO796326	31	3810	77.5	100	139	90	8	6
OK79256	28	3777	74.6	89	142	50	8	9
TX78V3630	4	3625	70.7	83	139	20	7	5
CI17277	3	3610	76.2	108	144	5	7	5
CO796386	32	3600	76.1	104	138	90	8	7
IL77-4259	35	3497	75.1	95	140	10	3	5
NE80413	14	3490	74.4	106	146	0	2	1
CI13996	2	3480	74.2	109	143	70	8	5
CI1442	1	3025	74.6	126	151	50	8	9

MEAN 4037
LSD(.05) 625
C.V. 11.1

GARDEN

CITY

KANSAS

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : : KG/HA :	: VOLUME : : WEIGHT : : KG/HA :	: LODGING : : % :	: DAYS TO : : HEADING : : FROM 1/1 :	: PLANT : : HEIGHT : : CM :
TXGH2875	7	4210	75.2	43	145	97
TX80GH2679	24	4015	74.8	37	146	101
NA80310	17	3775	72.8	30	148	100
TX80GH3006	25	3723	71.6	40	150	102
TX69A569-1-69	21	3654	73.6	37	146	101
NE78668	13	3587	75.5	43	148	108
W7452B	20	3522	74.2	27	147	100
TX78V3630	4	3457	74.3	47	147	91
OK754615E	26	3448	76.3	47	145	97
NK77W4505	10	3419	75.5	43	147	100
RH790610	33	3410	74.4	43	146	104
OK80019	29	3347	74.4	47	149	108
KS79H69	8	3331	74.6	37	147	101
NK77W4593	11	3329	75.5	40	150	108
OK80268	30	3309	74.8	53	148	99
IL76-3845	34	3239	74	37	147	104
NA80137	16	3235	71.4	40	149	104
TX71A562-6-28	6	3212	72.5	47	150	99
TX80A5609	22	3125	71.4	40	146	98
NK77W4093	9	3042	74.5	43	149	99
NE78696	15	2972	73.8	40	150	101
IL77-4259	35	2932	77.1	30	148	111
NE80413	14	2914	73.2	40	150	111
NA80300	18	2907	71.7	40	148	102
OK79256	28	2876	72.2	40	148	108
CO796386	32	2872	78	50	147	108
W7442B	19	2849	73.6	37	149	97
TX78V2408	5	2829	73.2	53	147	95
OK79257	27	2791	71.4	43	148	104
NE77682	12	2789	75.8	50	148	102
CI17277	3	2665	76.5	53	150	108
CO796326	31	2616	76.3	47	147	108
TX80A6025	23	2589	72.3	50	149	98
CI13996	2	2470	75.2	50	148	113
CI1442	1	1722	69.5	50	151	109

MEAN 3148
LSD(.05) 561
C.V. 10.9

HAYS

KANSAS

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HA	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1:	: SHATTER %
TX71A562-6-28	6	5355	75.3	102	144	0
TX69A569-1-69	21	5194	79	94	142	0
OK79256	28	5122	79.3	94	142	0
TX80GH3006	25	5109	76	91	144	0
TX80GH2679	24	5055	78.3	91	141	0
TAM105	36	5035	77	96	141	0
OK754615E	26	5021	80.7	98	140	1
OK79257	27	5021	78.7	86	142	0
NA80310	17	5001	75.7	91	143	0
NA80300	18	4947	77	103	145	0
TXGH2875	7	4927	77	91	140	0
W7442B	19	4909	80.7	92	143	0
TX80A5609	22	4844	76.3	94	142	0
W7452B	20	4685	79.3	96	142	0
NK77W4093	9	4459	78.7	101	143	0
TX78V2408	5	4452	76	98	143	0
NK77W4505	10	4452	76.7	94	142	0
RH790610	33	4298	78	96	141	1
NA80137	16	4295	76.7	97	144	0
OK80268	30	4221	76.3	98	145	0
OK80019	29	4187	75.3	101	145	1
NE78696	15	4161	77.7	99	145	0
TX80A6025	23	4013	76.3	93	144	2
CO796386	32	4013	80.7	108	142	0
CI17277	3	3822	78.7	107	144	2
IL77-4259	35	3802	79.7	98	144	0
IL76-3845	34	3784	78	102	144	3
NE77682	12	3746	78.3	105	143	5
KS79H69	8	3735	77.3	93	141	1
CI13996	2	3730	78.7	106	143	0
CO796326	31	3652	80	104	144	1
NE78668	13	3587	77	106	145	0
TX78V3630	4	3322	78	83	141	50
NE80413	14	3277	78.3	104	145	2
NK77W4593	11	3181	79.3	101	145	5
CI1442	1	2571	77.3	111	148	3

MEAN 4284
LSD(.05) 502
C.V. 7.2

COLBY

KANSAS

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : KG/HA	: VOLUME : WEIGHT : KG/HA	: PLANT : HEIGHT : CM	: LODGING : %	: DAYS TO : HEADING : FROM 1/1
NK77W4093	9	4598	79.3	100	2	150
TX80GH3006	25	4591	74.4	91	0	152
TX71A562-6-28	6	4544	73.6	95	3	151
TXGH2875	7	4459	75.4	91	0	147
NE77682	12	4427	77	110	8	150
NK77W4593	11	4421	77.2	108	3	152
TX80GH2679	24	4291	75.8	90	0	147
NK77W4505	10	4264	76.6	90	0	148
OK80019	29	4264	75.7	99	3	153
NA80310	17	4252	74.1	91	0	150
OK80268	30	4221	75.8	93	0	152
NE78668	13	4217	75.2	108	4	152
KS79H69	8	4163	75.2	94	0	148
TX78V3630	4	4120	76.4	85	0	148
NA80137	16	4111	73.7	92	2	151
NE78696	15	4109	75.8	95	2	152
TX80A6025	23	4102	75.1	97	0	150
RH790610	33	4089	74.4	97	2	148
TX78V2408	5	4026	73.7	98	7	149
NE80413	14	3979	75.5	107	5	153
NA80300	18	3974	75.6	99	2	151
CI17277	3	3909	76.6	113	15	150
IL77-4259	35	3842	77.6	102	0	152
CI13996	2	3748	77.3	114	30	149
CO796326	31	3701	76.9	108	17	149
OK79256	28	3490	74.2	91	0	149
TX80A5609	22	3414	67.3	92	0	148
OK79257	27	3293	72.1	91	0	149
CO796386	32	3257	76	103	17	148
W7452B	20	3147	73.2	91	0	150
OK754615E	26	3042	72.8	93	0	147
TX69A569-1-69	21	3008	68.1	93	0	148
IL76-3845	34	2993	68.2	98	3	151
CI1442	1	2699	72.8	130	30	154
W7442B	19	2589	68.2	84	0	149

MEAN 3867
LSD(.05) 339
C.V. 5.4

FORT

COLLINS

COLORADO

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : KG/HA	: VOLUME : WEIGHT : KG/HA	: PLANT : HEIGHT : CM	: LODGING : 0-9	: DAYS TO : HEADING : FROM 1/1
TX80GH3006	25	8011	74.3	93	2	170
TX80A6025	23	7562	78.3	93	0	170
RH790610	33	7479	79.6	98	0	167
NA80137	16	7396	76.1	108	0	169
OK754615E	26	7325	79.2	89	0	166
NK77W4093	9	7276	78.3	103	0	170
TX80A5609	22	7255	74.6	93	0	167
NA80300	18	7208	76.5	107	1	171
TX80GH2679	24	7188	78.4	91	0	167
NE80413	14	7177	80.1	114	1	171
TX78V2408	5	7066	74	97	3	168
NK77W4593	11	7037	79.6	114	0	171
OK79257	27	7035	77.4	86	0	168
OK80019	29	6990	78.3	98	2	171
NA80310	17	6959	72.5	88	0	169
NE78696	15	6952	78.9	86	0	171
TX71A562-6-28	6	6798	73.9	94	2	170
IL76-3845	34	6755	78.9	98	0	168
OK80268	30	6716	78	93	0	171
TX69A569-1-69	21	6633	77.7	86	0	166
NE78668	13	6630	78.9	113	0	172
TX78V3630	4	6604	77.7	80	0	166
OK79256	28	6522	78.9	98	0	168
NK77W4505	10	6401	78.3	86	0	168
W7442B	19	6399	80	88	0	168
TXGH2875	7	6356	76.8	94	0	167
NE77682	12	6335	78.9	104	1	171
CO796386	32	6329	80.5	109	2	168
W7452B	20	6284	79.2	90	0	168
CO796326	31	6165	79.6	116	6	168
CI17277	3	5990	77.7	118	3	168
IL77-4259	35	5548	79.6	103	0	169
KS79H69	8	5391	76.1	105	0	168
CI13996	2	5328	77.7	113	8	168
CI1442	1	3679	77.1	128	8	174

MEAN 6651
LSD(.05) 863
C.V. 7.9

BURLINGTON

COLORADO

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : : KG/HA :	: VOLUME : WEIGHT : KG/HA
OK754615E	26	4187	74
TXGH2875	7	4120	73
KS79H69	8	4067	74.6
OK79256	28	4008	75.2
NA80137	16	3945	72.1
OK79257	27	3927	72.4
TX80GH2679	24	3886	71.5
TX69A569-1-69	21	3838	69.9
IL76-3845	34	3813	73
NK77W4505	10	3801	71.5
TX80GH3006	25	3758	69.3
IL77-4259	35	3637	77.1
NK77W4093	9	3601	73.7
TX80A6025	23	3560	69.7
NE78696	15	3551	74
OK80019	29	3513	66.6
OK80268	30	3463	73.3
NE78668	13	3413	70.2
TX78V3630	4	3399	69.7
NK77W4593	11	3379	74
W7452B	20	3347	68.4
TX78V2408	5	3341	65.9
RH790610	33	3280	65.9
NE80413	14	3209	71.7
CI17277	3	3162	72.1
TX71A562-6-28	6	3144	65.9
W7442B	19	3133	69.3
NE77682	12	3122	66.2
NA80300	18	3082	67.9
NA80310	17	3048	67.5
TX80A5609	22	2856	65
CO796326	31	2713	71.7
CI13996	2	2631	74.6
CO796386	32	2483	73.3
CI1442	1	1878	72.8

MEAN	3408
LSD(.05)	602
C.V.	10.8

SPRINGFIELD

COLORADO

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : : KG/HA :	: VOLUME : : WEIGHT : : KG/HA :	: PLANT : : HEIGHT : : CM :
TX80GH3006	25	2237	77.7	62
TX78V2408	5	2216	76.1	66
NA80310	17	2183	76.5	59
NK77W4593	11	2118	77.4	75
TX78V3630	4	2088	79.5	60
CI17277	3	2078	78	74
TX80A5609	22	2047	77.4	64
W7442B	19	1993	78.7	71
CO796386	32	1973	79.9	70
KS79H69	8	1971	76.8	58
TX80A6025	23	1955	77	65
NA80300	18	1947	76.5	69
CO796326	31	1943	80.8	65
NE77682	12	1837	78	63
TX80GH2679	24	1799	78.9	59
OK80268	30	1779	77.4	64
NK77W4093	9	1758	77.7	69
TX69A569-1-69	21	1727	78.7	62
OK754615E	26	1726	77.4	61
RH790610	33	1658	78.4	59
NK77W4505	10	1652	78	64
TXGH2875	7	1625	76.1	57
OK79257	27	1604	75.2	64
NE78668	13	1564	77	70
TX71A562-6-28	6	1536	76.5	61
NE80413	14	1513	77.4	71
IL76-3845	34	1489	75.6	64
CI13996	2	1481	78.9	76
OK79256	28	1454	74.9	62
NE78696	15	1434	76.5	63
NA80137	16	1393	76.5	64
CI1442	1	1391	78	88
W7452B	20	1339	78	63
OK80019	29	1199	74.3	62
IL77-4259	35	1164	76.5	67

MEAN	1739
LSD(.05)	N.S.
C.V.	26.0

AKRON

COLORADO

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : KG/HA	: VOLUME : WEIGHT : KG/HA	: PLANT : HEIGHT : CM	: DAYS TO : HEADING : FROM 1/1
TX80A6025	23	2833	77.1	71	164
NA80310	17	2668	73.7	66	165
TX80GH3006	25	2642	72.4	66	166
KS79H69	8	2592	74.6	81	163
OK80019	29	2554	74.9	79	166
RH790610	33	2419	75.9	81	163
NA80300	18	2418	75.6	74	165
OK80268	30	2415	74.6	74	166
NA80137	16	2386	73.7	64	166
TX80A5609	22	2348	74.3	71	164
OK79256	28	2275	75.9	69	163
W7442B	19	2247	75.9	69	164
NE78668	13	2241	75.9	86	166
CO796326	31	2204	78	86	163
NK77W4505	10	2185	76.1	69	163
TX80GH2679	24	2158	76.1	64	163
OK754615E	26	2155	76.1	69	162
IL76-3845	34	2132	73.3	81	165
TXGH2875	7	2053	74.3	71	163
W7452B	20	2036	74.9	66	164
NK77W4593	11	2015	76.8	79	167
NE78696	15	1960	73.3	64	165
TX69A569-1-69	21	1944	74.9	66	164
TX78V3630	4	1923	76.1	64	164
NK77W4093	9	1923	75.2	71	165
TX78V2408	5	1899	72.8	66	164
CO796386	32	1867	79.2	89	163
OK79257	27	1800	74.6	69	165
NE77682	12	1731	74.6	81	167
NE80413	14	1720	72.4	81	168
TX71A562-6-28	6	1713	69.7	61	165
CI13996	2	1685	74	76	163
IL77-4259	35	1568	75.2	76	165
CI1442	1	1510	72.1	102	169
CI17277	3	1287	75.2	76	165

MEAN	2100
LSD(.05)	658
C.V.	19.2

JULESBURG

COLORADO

TWO REPLICATIONS

C.I. OR SEL. NO.	: :ENTRY: : NO. :	: YIELD : : KG/HA :	: PLANT : HEIGHT : CM
W7442B	19	3160	95
CO796326	31	3148	109
OK80268	30	3065	81
RH790610	33	3031	77
CO796386	32	2961	107
TX78V3630	4	2855	76
NE78696	15	2852	80
TX80GH2679	24	2819	79
OK80019	29	2815	89
NA80137	16	2804	84
NK77W4505	10	2789	75
NE78668	13	2752	103
TX80A6025	23	2731	83
KS79H69	8	2716	88
NE77682	12	2701	91
CI17277	3	2692	114
TX69A569-1-69	21	2669	84
OK754615E	26	2652	76
NK77W4093	9	2617	86
TX80GH3006	25	2612	81
NE80413	14	2608	89
TX78V2408	5	2603	83
W7452B	20	2597	79
TX80A5609	22	2583	80
IL76-3845	34	2548	102
NK77W4593	11	2545	86
CI13996	2	2483	112
OK79257	27	2454	76
OK79256	28	2451	80
NA80300	18	2442	84
TXGH2875	7	2312	81
NA80310	17	2144	81
IL77-4259	35	2136	98
CI1442	1	2110	124
TX71A562-6-28	6	1972	81

MEAN	2641
LSD(.05)	418
C.V.	7.8

MEAD

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY: NO.	YIELD KG/HA	VOLUME WEIGHT KG/HA	PLANT HEIGHT CM	DAYS TO HEADING	LEAF RUST: SEV.	STEM RUST: SEV.	STEM RUST: SEV.	SEPTORIA 0-9
						1-9: %	1-9: %	1-9: %	
NE78668	13	4483	77	113	160	1	2	50	8
NK77W4593	11	4353	77.4	110	161	1	2	1	2
NK77W4093	9	4340	78.4	95	159	5	8	20	3
TX71A562-6-28	6	4320	74.8	89	159	25	7	1	2
KS79H69	8	4282	78.9	96	157	1	2	0	2
NK77W4505	10	4203	78.8	85	157	1	2	10	3
OK79256	28	4109	.	92	159	25	7	80	8
IL77-4259	35	3979	78.3	104	158	1	2	40	7
RH790610	33	3921	77.7	93	157	40	8	60	7
OK79257	27	3876	76	86	159	1	2	70	8
TXGH2875	7	3867	75.7	82	156	40	8	1	3
TX80GH2679	24	3800	75.7	84	160	50	8	40	7
W7452B	20	3773	79.6	88	156	1	2	80	8
NA80300	18	3768	75.9	95	159	40	7	10	3
TX80GH3006	25	3726	72.8	86	159	40	8	1	3
NA80137	16	3674	76.4	90	159	5	8	50	7
CI17277	3	3620	77.8	115	160	1	2	1	2
NE78696	15	3566	76.4	88	161	5	8	1	2
W7442B	19	3553	79.2	84	158	5	8	80	8
OK80019	29	3508	77.4	93	160	1	2	40	3
NE80413	14	3347	75.5	106	161	1	2	1	2
IL76-3845	34	3342	75.3	96	160	65	8	90	8
CO796386	32	3275	80.2	109	156	80	8	50	7
CO796326	31	3230	78.9	106	156	80	8	65	7
TX80A6025	23	3212	74.4	91	159	5	8	10	3
TX69A569-1-69	21	3134	74.4	88	158	10	8	80	7
TX78V2408	5	3118	69	93	160	1	2	65	8
NA80310	17	3020	71.9	86	160	10	8	1	2
TX78V3630	4	3002	78.2	74	157	10	8	25	7
OK80268	30	2984	77	85	161	1	2	30	3
TX80A5609	22	2925	71.6	89	158	10	8	20	8
NE77682	12	2789	76.5	100	161	10	8	10	2
OK754615E	26	2609	78.3	86	156	30	7	70	8
CI13996	2	2549	76	114	160	65	8	1	2
CI1442	1	1858	68.4	119	166	40	8	80	8

MEAN 3520
LSD(.05) 634
C.V. 11.0

*Readings from artificially inoculated Mead Stem Rust Nursery.

CLAY CENTER

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY: NO.	YIELD KG/HA	VOLUME WEIGHT KG/HA	PLANT HEIGHT CM	LODGING 0-9	DAYS TO HEADING FROM 1/1	LEAF RUST SEV. %	STEM RUST SEV. %	SEPTORIA 0-9
NE78668	13	3987	79.3	110	0	159	1	2	3
NK77W4093	9	3769	80.6	95	0	158	10	8	7
OK80268	30	3688	77.4	92	0	159	1	2	3
OK80019	29	3500	78	94	0	159	1	2	3
CI17277	3	3469	78	114	1	159	10	3	2
TX80GH3006	25	3439	75.5	92	0	157	50	8	6
NA80137	16	3424	79.3	97	0	158	20	8	7
TXGH2875	7	3408	76.1	88	0	155	70	8	3
RH790610	33	3399	78.7	98	0	156	.	.	7
KS79H69	8	3366	78.7	94	0	155	0	2	2
TX80A6025	23	3363	78	96	0	158	1	2	2
OK79256	28	3337	79.3	89	0	157	1	2	9
W7442B	19	3315	78	91	0	156	10	8	9
OK79257	27	3253	76.1	88	0	157	1	2	8
TX80GH2679	24	3220	78	88	0	155	.	.	3
TX69A569-1-69	21	3188	76.8	90	0	156	.	.	8
TX71A562-6-28	6	3123	73.5	93	0	158	20	8	3
TX78V3630	4	3067	78.7	84	0	157	5	7	7
OK754615E	26	2982	77.5	90	0	154	30	7	8
CO796326	31	2959	78.7	103	1	156	.	.	2
NA80310	17	2947	76.8	90	0	158	20	8	3
NE78696	15	2937	78.7	91	0	159	1	2	2
NK77W4505	10	2737	79.3	88	0	156	1	2	3
NE77682	12	2685	77.4	104	0	159	15	7	3
NK77W4593	11	2639	79.3	101	0	160	5	7	3
IL77-4259	35	2622	80	97	0	158	1	2	3
TX80A5609	22	2595	75.5	95	0	157	.	.	3
IL76-3845	34	2538	76.1	99	0	159	70	8	9
TX78V2408	5	2517	76.8	95	0	159	1	2	8
W7452B	20	2449	78	92	0	156	10	7	9
NE80413	14	2437	78	103	0	159	1	2	3
NA80300	18	2348	77.4	102	0	158	50	7	3
CI13996	2	2289	78	116	2	159	70	8	2
CO796386	32	2215	80	109	1	155	.	.	7
CI1442	1	1460	69.7	117	4	164	30	8	8
MEAN		2991							
LSD(.05)		989							
C.V.		20.3							

NORTH PLATTE

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HA	: PLANT HEIGHT CM
TX80GH3006	25	4920	74.3	94
TX71A562-6-28	6	4684	74.8	100
TX78V3630	4	4543	76.8	96
NA80137	16	4379	76.1	102
NK77W4505	10	4338	78	97
W7442B	19	4330	77.4	97
KS79H69	8	4247	76.8	106
TX80A6025	23	4230	75.7	99
OK80019	29	4143	76.1	107
NK77W4093	9	4101	78.8	102
NE78668	13	4099	77.4	119
OK754615E	26	4021	79.3	99
TX80GH2679	24	4008	77.3	95
TX78V2408	5	4004	76.1	104
IL77-4259	35	3985	77.4	116
NA80300	18	3940	77.4	106
RH790610	33	3904	80	108
W7452B	20	3814	77	96
OK79257	27	3776	78.9	95
IL76-3845	34	3749	76.1	102
OK79256	28	3748	78.7	97
NE78696	15	3672	76.8	93
TX80A5609	22	3512	76.5	100
NE77682	12	3418	78.7	112
TXGH2875	7	3412	76.1	90
TX69A569-1-69	21	3404	77.1	94
OK80268	30	3365	76.1	95
CO796326	31	3350	77.4	116
CI17277	3	3346	76.8	116
NK77W4593	11	3342	78.7	112
CO796386	32	3326	78.7	116
NE80413	14	3308	77.4	116
NA80310	17	2647	76.1	91
CI13996	2	2307	77.4	116
CI1442	1	2082	76.1	126

MEAN	3753
LSD(.05)	1072
C.V.	17.5

ALLIANCE

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : : KG/HA :	: VOLUME : : WEIGHT : : KG/HA :	: PLANT : : HEIGHT : : CM :	: DAYS TO : : HEADING : : FROM 1/1 :	: FREEZE : : DAMAGE : : 1-4 :
TX80GH3006	25	4408	78.8	80	172	2
NK77W4593	11	3563	80	92	174	3
NA80137	16	3563	76.1	84	172	2
CO796326	31	3399	80	91	171	2
RH790610	33	3380	80	80	170	3
TX80A6025	23	3334	81	78	173	2
IL76-3845	34	3178	76.8	81	171	3
TX80A5609	22	3166	76.1	78	170	3
IL77-4259	35	3135	80	87	172	3
OK754615E	26	3083	80	75	167	4
NE77682	12	3074	78.7	86	174	2
OK79257	27	3063	78.7	74	173	4
OK80019	29	3048	77.4	83	172	2
TX80GH2679	24	3030	.	73	167	3
CO796386	32	3007	81.3	91	171	3
CI13996	2	3001	78.7	97	170	3
NE78696	15	2981	78.7	73	171	2
CI17277	3	2959	80	91	171	3
W7442B	19	2949	82.6	74	172	3
NA80310	17	2945	77.4	75	174	2
NK77W4505	10	2897	78.7	75	169	3
NE80413	14	2893	78.7	90	171	2
TX71A562-6-28	6	2817	78	80	170	3
OK80268	30	2796	75.5	78	172	2
W7452B	20	2786	80	77	173	3
KS79H69	8	2731	77.4	78	171	3
NE78668	13	2683	78.7	91	172	2
CI1442	1	2677	77.4	105	173	2
TXGH2875	7	2659	77.4	74	168	3
TX69A569-1-69	21	2656	78.7	71	168	3
TX78V2408	5	2624	77.4	80	168	3
NK77W4093	9	2545	81.3	80	171	2
NA80300	18	2445	79.3	83	172	2
OK79256	28	2365	78.7	75	170	4
TX78V3630	4	2221	80	71	167	3

MEAN	2973
LSD(.05)	N.S.
C.V.	18.6

BROOKINGS

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HA	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1
NE77682	12	4093	76.4	83	166
NA80137	16	3910	77.4	73	167
NK77W4593	11	3638	76.4	83	167
NK77W4505	10	3405	77	68	164
OK80019	29	3378	76.1	70	166
NE80413	14	3254	75.5	70	167
TX71A562-6-28	6	3132	72.1	71	165
NE78668	13	3127	76.8	86	167
TX80GH2679	24	3077	73.9	67	164
OK80268	30	3021	74.1	69	169
KS79H69	8	2960	76.1	70	164
NE78696	15	2957	71.9	68	165
CI17277	3	2900	75.3	78	168
CI13996	2	2875	75	81	164
TX78V3630	4	2770	73.7	63	164
TX80GH3006	25	2754	67.2	67	165
NK77W4093	9	2717	78.6	73	167
TXGH2875	7	2678	70.6	69	164
TX80A6025	23	2539	72.8	63	165
IL77-4259	35	2491	73.9	76	166
TX80A5609	22	2466	67.2	69	164
TX78V2408	5	2443	69.2	67	164
RH790610	33	2421	67.7	69	164
CO796326	31	2400	73	74	164
NA80310	17	2371	66.2	66	168
OK79257	27	2354	66.2	68	164
W7452B	20	2275	68.8	67	164
W7442B	19	2187	67.5	69	165
CI1442	1	2135	69.5	93	172
CO796386	32	2109	72.1	76	164
NA80300	18	2093	70.1	69	166
TX69A569-1-69	21	1721	67	65	164
OK79256	28	1590	67	66	165
OK754615E	26	1441	67.2	62	164
IL76-3845	34	1226	63	65	170

MEAN	2655
LSD(.05)	720
C.V.	16.6

HIGHMORE

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HA	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1
TX71A562-6-28	6	4406	77.4	80	161
TX80A5609	22	4127	76.1	85	161
TX80GH3006	25	4123	76.1	75	162
CI17277	3	3961	80	95	161
TX80A6025	23	3888	77.4	78	163
OK80268	30	3818	80	79	162
TX78V3630	4	3780	78.7	73	160
TX80GH2679	24	3770	77.4	74	160
CO796326	31	3714	77.4	91	160
NK77W4093	9	3677	81.3	86	163
KS79H69	8	3665	78.7	80	161
OK80019	29	3660	78.7	82	163
TX69A569-1-69	21	3650	74.8	75	159
TXGH2875	7	3573	77.4	75	160
IL76-3845	34	3559	77.4	90	161
CO796386	32	3551	78.7	92	159
NE80413	14	3537	80	89	162
NE78668	13	3510	76.1	94	163
TX78V2408	5	3467	77.4	78	161
NE78696	15	3460	80	80	161
RH790610	33	3416	78.7	80	160
NK77W4593	11	3382	80	95	162
NE77682	12	3350	80	92	162
OK754615E	26	3310	78.7	80	160
NA80300	18	3301	77.4	85	163
NA80137	16	3267	78.7	83	164
CI1442	1	3195	78.7	108	167
CI13996	2	3091	78.7	97	160
NA80310	17	3087	76.1	75	163
OK79256	28	3028	78.7	75	161
IL77-4259	35	3028	78.7	86	162
NK77W4505	10	3012	78.7	72	161
OK79257	27	2931	77.4	74	161
W7442B	19	2900	78.7	76	161
W7452B	20	2822	77.4	77	161

MEAN 3486
LSD(.05) 653
C.V. 11.5

PRESHO

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : : KG/HA :	: VOLUME : : WEIGHT : : KG/HA :	: PLANT : : HEIGHT : : CM :	: DAYS TO : HEADING : : FROM 1/1 :
TX71A562-6-28	6	5208	79	88	162
TX80A5609	22	5129	78.3	91	161
TX80GH2679	24	4761	79.4	86	159
TX69A569-1-69	21	4656	79.7	86	159
TX80GH3006	25	4608	78.1	80	163
TX78V2408	5	4518	76.8	86	161
RH790610	33	4516	80.6	91	160
CI13996	2	4395	78.6	105	162
TXGH2875	7	4392	76.6	81	161
NK77W4093	9	4365	80.1	86	162
NA80310	17	4240	79.5	83	163
NE80413	14	4176	79.4	98	164
TX78V3630	4	4155	79.5	75	160
CI17277	3	4140	80.8	104	161
TX80A6025	23	4122	79	86	162
OK80268	30	4118	81	87	162
NE77682	12	4091	78.3	105	164
NK77W4505	10	4046	79.9	84	160
OK80019	29	4035	83	97	163
NE78696	15	3998	79	88	163
W7452B	20	3893	80.1	86	163
KS79H69	8	3876	76.4	91	161
NE78668	13	3872	80.6	106	163
CO796386	32	3848	81.9	97	159
OK79257	27	3795	79.9	80	160
CI1442	1	3792	78.8	114	169
CO796326	31	3756	80.6	98	161
IL76-3845	34	3729	78.6	84	164
OK754615E	26	3664	79.9	82	160
NA80300	18	3515	78.6	91	164
NA80137	16	3445	82.3	96	163
NK77W4593	11	3345	81.2	104	164
IL77-4259	35	3273	80.1	92	163
W7442B	19	3173	81	82	163
OK79256	28	2919	79.2	75	161

MEAN	4045
LSD(.05)	706
C.V.	10.7

COLUMBIA

MISSOURI

TWO REPLICATIONS

C.I. OR SEL. NO.	ENTRY: NO.	YIELD KG/HA	VOLUME WEIGHT KG/HA	PLANT HEIGHT CM	LODGING %	DAYS TO HEADING FROM 1/1:	SEPTORIA TRITICI %	SEPTORIA NODORUM %
NA80137	16	4603	77.4	103	3	176	38	5
TX69A569-1-69	21	4292	76.1	95	0	175	37	2
OK80019	29	4211	74.8	104	5	176	21	5
TX80GH3006	25	4170	73.5	94	0	176	28	3
TX80GH2679	24	3881	76.1	99	1	173	38	7
OK80268	30	3833	76.1	97	0	176	31	5
OK79256	28	3830	77.4	99	5	178	38	5
KS79H69	8	3819	75.5	94	5	171	43	23
RH790610	33	3798	76.1	98	4	173	55	15
OK754615E	26	3779	78	99	4	172	48	10
NK77W4093	9	3775	78	99	3	176	33	3
NE78696	15	3765	77.4	104	1	183	33	3
NA80310	17	3662	74.2	93	0	176	38	4
NK77W4505	10	3644	75.5	98	1	173	34	2
OK79257	27	3625	76.1	95	4	177	38	9
TX71A562-6-28	6	3608	74.8	89	0	181	30	4
TX80A6025	23	3556	74.8	95	1	177	42	12
W7442B	19	3545	77.4	95	0	174	48	24
W7452B	20	3535	75.5	94	0	174	48	13
TX78V3630	4	3511	75.5	90	1	175	38	1
TXGH2875	7	3470	74.8	86	0	172	41	7
TX78V2408	5	3337	76.8	102	0	179	28	1
IL76-3845	34	3252	77.4	102	0	179	38	5
NA80300	18	3249	76.1	103	2	176	43	8
NE77682	12	3230	77.4	117	10	179	33	2
CO796386	32	3180	78	110	10	172	60	13
NK77W4593	11	3170	76.1	113	1	178	35	4
NE80413	14	3153	76.1	110	9	178	38	7
CI117277	3	3133	78	117	10	181	38	14
NE78668	13	3076	76.8	114	0	174	30	1
CI13996	2	3035	78	128	8	178	38	8
CO796326	31	2986	78.7	108	23	174	45	8
CI1442	1	2916	79.3	133	14	184	31	1
TX80A5609	22	2703	71.6	95	5	173	58	21
IL77-4259	35	2694	76.8	98	0	176	38	13
MEAN		3515						
LSD(.05)		950						
C.V.		13.2						

AMES

IOWA

THREE REPLICATIONS

C.I. OR SEL. NO.	ENTRY: NO.	YIELD KG/HA	VOLUME WEIGHT KG/HA	PLANT HEIGHT CM	LODGING %	DAYS TO HEADING FROM 1/1	DAYS TO RIPENING FROM 1/1	WINTER SURVIVAL %
OK80019	29	4407	74.3	96	55	160	192	100
TX80GH2679	24	4394	72.6	95	8	155	188	100
OK80268	30	4382	76	87	30	160	191	100
NA80137	16	4367	76.1	97	2	158	191	100
W7442B	19	4275	77.5	86	0	158	192	100
OK79257	27	4270	76.9	83	20	158	192	99
TXGH2875	7	4241	72.2	93	0	155	189	100
TX69A569-1-69	21	4158	73	99	23	156	190	100
W7452B	20	4156	76.2	85	0	158	191	100
OK754615E	26	4129	77.3	88	0	155	189	97
IL76-3845	34	4069	76.2	97	0	160	191	100
NE78668	13	4066	73.5	105	7	160	195	100
OK79256	28	4060	77.7	80	10	160	192	88
IL77-4259	35	4051	78.2	99	0	160	192	95
TX80A6025	23	4004	70.8	88	33	160	191	100
KS79H69	8	3986	76.1	94	3	157	190	100
NK77W4593	11	3977	76	100	17	162	194	96
NE77682	12	3912	76.9	106	23	160	191	100
TX80GH3006	25	3880	67.1	90	42	159	192	100
NK77W4093	9	3860	73.7	96	3	158	192	100
NA80310	17	3820	72.8	87	0	158	190	100
RH790610	33	3764	73.8	91	0	157	189	100
NE78696	15	3744	75.2	88	0	160	191	100
NE80413	14	3672	72.8	102	60	162	193	100
TX71A562-6-28	6	3524	70.3	91	0	160	191	100
TX78V3630	4	3490	72.1	82	0	156	189	100
CO796386	32	3333	78.4	103	50	156	190	100
TX78V2408	5	3284	74.7	86	0	159	190	85
NK77W4505	10	3208	76.9	80	0	158	191	87
CI17277	3	3105	75.3	105	75	160	191	100
CO796326	31	3098	78.7	102	60	157	191	100
NA80300	18	2910	72.9	98	3	158	190	100
TX80A5609	22	2910	64.5	91	65	156	190	100
CI13996	2	2607	74.8	106	88	159	192	100
CI1442	1	2239	70.6	108	95	164	194	100

MEAN 3753
LSD(.05) 466
C.V. 7.6

URBANA
ILLINOIS
THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	YIELD : KG/HA	VOLUME : WEIGHT : KG/HA	PLANT : HEIGHT : CM	LODGING : 0-9	DAYS TO : HEADING : FROM 1/1
TX69A569-1-69	21	5058	79.7	86	3	149
TX80GH3006	25	5028	75	86	5	151
TXGH2875	7	4872	77.7	79	3	147
RH790610	33	4870	78.7	90	3	146
IL76-3845	34	4765	80.1	94	3	151
W7452B	20	4738	78.3	86	3	147
NA80310	17	4735	76.9	91	2	148
TX80GH2679	24	4724	78.2	84	3	145
NA80137	16	4703	78.1	91	3	149
OK754615E	26	4694	79.3	80	3	147
W7442B	19	4460	79.2	86	3	149
OK79256	28	4342	79.5	86	3	150
NE78668	13	4223	77.1	91	3	150
KS79H69	8	4215	78.2	85	4	146
TX71A562-6-28	6	4159	74.6	89	6	151
NK77W4093	9	4105	78.6	90	4	149
TX80A6025	23	4078	76.4	75	2	152
NE80413	14	4070	76.7	95	5	151
NK77W4505	10	3916	77.5	79	1	150
NE78696	15	3849	78.2	89	2	152
IL77-4259	35	3846	80.9	94	2	150
TX78V3630	4	3816	78	76	2	148
NK77W4593	11	3733	79.5	92	4	151
TX80A5609	22	3733	74.8	81	1	149
OK80268	30	3509	77.1	75	1	154
TX78V2408	5	3480	75.7	80	3	153
NE77682	12	3458	77.2	88	4	152
OK80019	29	3450	73.8	80	4	154
NA80300	18	3391	75.7	96	6	149
CO796386	32	3310	78.1	89	5	145
CI13996	2	3305	74.2	87	6	151
CI17277	3	3251	77.6	83	6	153
OK79257	27	3243	78.3	78	3	149
CO796326	31	3122	79.9	86	7	147
CI1442	1	2844	76.9	99	6	155

MEAN 4036
LSD(.05) 608
C.V. 9.2

ABERDEEN

IDAHO

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME KG/HA	: PLANT HEIGHT CM	: LODGING 0-9	: DAYS TO HEADING FROM 1/1
TX80GH3006	25	7301	74.6	91	2	166
TX71A562-6-28	6	7259	75.9	89	1	165
NA80310	17	6922	74.6	86	1	168
RH790610	33	6891	77.1	94	1	162
NK77W4093	9	6889	77.4	99	1	166
NA80137	16	6830	76.8	91	1	167
TX80GH2679	24	6821	75.6	89	1	162
NE80413	14	6770	75.5	112	3	170
OK754615E	26	6662	77.1	91	1	160
NE78696	15	6534	75.5	89	1	167
TX69A569-1-69	21	6521	76.4	89	1	161
TXGH2875	7	6425	75.6	91	1	162
NA80300	18	6315	75.6	102	2	167
W7452B	20	6279	76.5	86	1	164
W7442B	19	6261	75.9	89	1	166
IL76-3845	34	6252	76.8	94	1	166
TX80A5609	22	6221	73.7	91	1	164
IL77-4259	35	6120	76.2	102	2	166
CI17277	3	6106	76.2	109	4	165
OK79257	27	6073	74.2	86	1	162
NE77682	12	5979	75.9	109	2	168
KS79H69	8	5970	76.5	97	1	163
TX78V3630	4	5945	78.7	86	1	161
NE78668	13	5891	73.5	114	3	168
OK80268	30	5840	73.9	91	1	169
OK79256	28	5837	75.5	91	1	165
NK77W4505	10	5667	76.1	89	1	163
TX80A6025	23	5636	71.6	97	2	168
TX78V2408	5	5613	74.9	91	1	164
CO796386	32	5532	77.5	114	3	163
OK80019	29	5275	71.3	99	2	170
NK77W4593	11	5234	76.2	109	2	168
CO796326	31	5064	75.6	117	5	165
CI13996	2	4746	76.9	112	6	166
CI1442	1	4255	74.6	112	9	170

MEAN	6112
LSD(.05)	1022
C.V.	10.2

LIND
WASHINGTON
THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : : KG/HA :	: VOLUME : : WEIGHT : : KG/HA :	: PLANT : : HEIGHT : : CM :	: DAYS TO : HEADING : : FROM 1/1 :
TX80GH3006	25	2511	78.4	60	144
NE80413	14	1403	77	69	145
NA80137	16	1397	76.2	63	146
OK80268	30	1237	78.4	57	145
TX71A562-6-28	6	1200	77.4	62	145
CO796386	32	1184	80.1	69	143
OK79256	28	1179	76.1	59	144
TX80A6025	23	1110	78.6	58	145
TX78V3630	4	1083	78.7	61	143
CI1442	1	1058	78.4	75	148
OK754615E	26	1038	77.1	62	141
CI17277	3	1031	78.2	70	144
NE77682	12	1027	77.8	71	144
OK80019	29	1027	77.3	60	145
NA80310	17	1004	77.3	61	145
W7442B	19	975	78.4	60	144
OK79257	27	973	78.2	61	143
RH790610	33	966	77.9	63	144
NE78696	15	964	77.7	64	145
NK77W4093	9	933	78.4	58	144
TX80A5609	22	912	78.2	59	144
NE78668	13	901	74.4	69	144
NA80300	18	901	77.7	64	144
NK77W4505	10	868	78.3	55	143
TX78V2408	5	861	75.2	61	144
CI13996	2	838	77.8	66	144
NK77W4593	11	836	77.5	69	144
CO796326	31	820	78.6	65	143
KS79H69	8	800	76.9	60	144
W7452B	20	751	78	65	143
TX69A569-1-69	21	720	78.7	63	144
IL77-4259	35	677	76.6	65	144
TXGH2875	7	621	76.6	55	143
IL76-3845	34	581	76.2	69	143
TX80GH2679	24	455	77.4	60	143

MEAN	993
LSD(.05)	N.S.
C.V.	53.3

Table 2. Summary of mean yields (kg/ha) of 35 wheats grown in the 1983 Southern Regional Performance Nursery at 30 locations, with state means and ranks. (Clovis, NM irrigated and dryland nurseries and Lind, WA are not included in the regional average.)

VARIETY OR PEDIGREE	C.I. OR SEL. NO.	ENTRY: NO.	MEAD NEBRASKA	CLAY CENTER NEBRASKA	NORTH PLATTE NEBRASKA	ALLIANCE NEBRASKA	NEBRASKA STATE MEAN					
SDY SIB/TRIUMPH//CTK(TX71A562-6)*4/AMIGO	TX80GH3006	25	3726	15	3439	6	4920	1	4408	1	4123	1
TAM105*4/AMIGO	TX80GH2679	24	3800	12	3220	15	4008	13	3030	14	3514	12
C073F18298-6/MCNAIR 4823	NA80137	16	3674	16	3424	7	4379	4	3563	3	3760	3
TAM105*4/AMIGO	TXGH2875	7	3867	11	3408	8	3412	25	2659	29	3337	18
SDY SIB/TRIUMPH//CTK	TX71A562-6-28	6	4320	4	3123	17	4684	2	2817	23	3736	4
HARD WINTER WHEAT HYBRID	RH790610	33	3921	9	3399	9	3904	17	3380	5	3651	7
SUT*5/AG//SDY/3/CTK	NK77W4093	9	4340	3	3769	2	4101	10	2545	32	3688	5
PAYNE//TAMW-101/AMIGO	OK80268	30	2984	30	3688	3	3365	27	2796	24	3208	21
PAYNE/AMIGO	OK80019	29	3508	20	3500	4	4143	9	3048	13	3550	8
(WRR*5/AGENT)*2/KAVKAZ	NE78668	13	4483	1	3987	1	4099	11	2683	27	3813	2
EY SDY/NCM	OK754615E	26	2609	33	2982	19	4021	12	3083	10	3174	25
TAM105 RESELECTION	TX69A569-1-69	21	3134	26	3188	16	3404	26	2656	30	3096	27
ARKAN	KS79H69	8	4282	5	3366	10	4247	7	2731	26	3657	6
BUCK SELECTION	NA80310	17	3020	28	2947	21	2647	33	2945	20	2890	33
SDY SIB/TCS//CTK(73A2694)/3/AMIGO	TX80A6025	23	3212	25	3363	11	4230	8	3334	6	3535	11
SUT*5/AG//SDY	NK77W4505	10	4203	6	2737	23	4338	5	2897	21	3544	9
KAVKAZ/CENTURK	NK77W4593	11	4353	2	2639	25	3342	30	3563	3	3474	14
AGATE SIB(NE69441)/TX65A1503-1	NE78696	15	3566	18	2937	22	3672	22	2981	17	3289	19
CAPROCK/586//SC3212	W7442B	19	3553	19	3315	13	4330	6	2949	19	3537	10
STURDY/B48//STURDY	W7452B	20	3773	13	2449	30	3814	18	2786	25	3205	23
AURORA/2*TAMW-101	OK79256	28	4109	7	3337	12	3748	21	2365	34	3390	16
SDY SIB/KAW(TX62A2522-1)//CTK	TX78V3630	4	3002	29	3067	18	4543	3	2221	35	3208	22
AURORA/2*TAMW-101	OK79257	27	3876	10	3253	14	3776	19	3063	12	3492	13
SHORT WHEAT/SUT(TX69A509-2)//FOX	TX78V2408	5	3118	27	2517	29	4004	14	2624	31	3066	28
LOWRIN 13/2*CTK78	NE80413	14	3347	21	2437	31	3308	32	2893	22	2996	30
TAMW-103//SH WHEAT/SUT (TX69A509-1)	TX80A5609	22	2925	31	2595	27	3512	23	3166	8	3050	29
BULK SELECTION	NA80300	18	3768	14	2348	32	3940	16	2445	33	3125	26
CTK//KS6623/TX62A2522-8-2	IL76-3845	34	3342	22	2538	28	3749	20	3178	7	3202	24
WRR*5/AGENT//NE68457/3/CTK78	NE77682	12	2789	32	2685	24	3418	24	3074	11	2991	31
SAGE	CI17277	3	3620	17	3469	5	3346	29	2959	18	3349	17
KAVKAZ/TX69A330-1	IL77-4259	35	3979	8	2622	26	3985	15	3135	9	3430	15
C0723117/C0725856	C0796326	31	3230	24	2959	20	3350	28	3399	4	3235	20
C0723117/C0725856	C0796386	32	3275	23	2215	34	3326	31	3007	15	2956	32
SCOUT66	CI13996	2	2549	34	2209	33	2307	34	3001	16	2536	34
KHARKOF	CI1442	1	1858	35	1460	35	2082	35	2677	28	2019	35
MEAN			3520		2991		3753		2973		3305	
LSD(.05)			634		989		1072		N.S.		606	
C.V.			11.0		20.3		17.5		18.6		17.0	

Table 2. (continued)

C.I. OR SEL. NO.	ENTRY: NO.	STILLWATER OKLAHOMA	ALTUS OKLAHOMA	LAHOMA OKLAHOMA	GOODWELL OKLAHOMA	OKLAHOMA STATE MEAN	DALLAS TEXAS	CHILLI- COTHE TEXAS	TEXAS STATE MEAN
TX80GH3006	25	2932 9	3466 10	4725 4	5864 20	4247 10	3132 17	3694 19	3413 18
TX80GH2679	24	2508 23	3156 28	4595 7	6321 11	4145 14	3028 19	4136 2	3582 10
NA80137	16	3320 2	3466 10	4304 15	6378 10	4367 4	3672 1	3824 11	3748 2
TXGH2875	7	3226 3	3573 5	4815 3	6550 8	4541 1	2793 25	3858 9	3326 22
TX71A562-6-28	6	2948 8	3632 3	4483 11	5970 17	4258 9	2919 22	3766 14	3342 20
RH790610	33	2367 28	3632 3	4152 20	6052 14	4050 20	3575 2	3737 17	3656 3
NK77W4093	9	2464 25	3510 6	4120 21	6125 13	4055 19	3401 9	3768 13	3584 9
OK80268	30	2977 7	3470 8	4909 2	6003 15	4340 6	3358 10	3632 24	3495 14
OK80019	29	3324 1	3448 11	5093 1	5055 32	4230 11	2950 20	3746 16	3348 19
NE78668	13	2827 12	3497 7	4353 13	6664 5	4335 7	3304 11	4257 1	3781 1
OK754615E	26	2703 14	3255 24	4654 5	6795 2	4352 5	3286 12	3968 5	3627 5
TX69A569-1-69	21	2338 29	3412 14	4170 19	6468 9	4097 16	2851 24	3811 12	3331 21
KS79H69	8	2867 11	3224 25	4506 10	6705 4	4325 8	3499 5	3376 33	3438 15
NA80310	17	2148 32	3349 20	3842 30	5431 27	3692 30	3264 14	3952 6	3608 7
TX80A6025	23	2304 30	3434 12	3954 28	5170 30	3716 28	2768 27	4066 3	3417 17
NK77W4505	10	2273 31	3259 23	4555 9	6280 12	4092 17	3416 8	3226 34	3321 23
NK77W4593	11	3201 4	3614 4	4107 22	5627 25	4137 15	3441 7	3658 22	3550 12
NE78696	15	2659 18	2995 32	4192 17	5905 19	3937 23	2255 33	3943 7	3099 31
W7442B	19	2699 15	3049 31	4183 18	6762 3	4173 13	3533 3	3753 15	3643 4
W7452B	20	3118 5	3349 20	4582 8	6795 2	4461 2	3448 6	3596 26	3522 13
OK79256	28	3105 6	3407 16	4609 6	6591 6	4428 3	3226 15	3972 4	3599 8
TX78V3630	4	2869 10	3380 17	4035 25	5994 16	4070 18	3044 18	3562 29	3303 24
OK79257	27	2580 21	3345 21	4250 16	5660 23	3959 21	3522 4	3721 18	3621 6
TX78V2408	5	2641 19	3062 30	4479 12	5635 24	3954 22	2726 29	3670 21	3198 27
NE80413	14	2576 22	3757 1	3842 30	6582 7	4189 12	3266 13	3853 10	3560 11
TX80A5609	22	2051 33	3407 16	3354 34	5578 26	3597 31	2623 31	3887 8	3255 26
NA80300	18	2403 27	3416 13	4031 26	5766 21	3904 25	2948 21	3607 25	3277 25
IL76-3845	34	2730 13	2968 34	4075 24	5423 28	3799 27	2768 27	3584 27	3176 28
NE77682	12	2616 20	3125 29	4098 23	5415 29	3813 26	2854 23	3454 31	3154 29
CI117277	3	1932 34	3183 26	3959 27	5741 22	3704 29	2094 34	3688 20	2891 34
IL77-4259	35	2414 26	2981 33	4326 14	5929 18	3913 24	3185 16	3649 23	3417 17
CO796326	31	2681 17	3286 22	3649 31	4745 34	3590 33	2571 32	3560 30	3065 33
CO796386	32	2688 16	3349 20	3407 33	4941 33	3596 32	2733 28	3571 28	3152 30
CI13996	2	2466 24	3179 27	3412 32	5063 31	3530 34	2721 30	3439 32	3080 32
CI1442	1	1854 35	2318 35	2237 35	3210 35	2405 35	1896 35	2629 35	2263 35
MEAN		2652	3313	4173	5863	4000	3042	3703	3374
LSD(.05)		571	252	502	672	523	703	269	N.S.
C.V.		13.2	4.7	7.4	7.0	8.0	14.2	4.5	9.6

Table 2. (continued)

C.I. OR SEL. NO.	: ENTRY: NO.	: CLOVIS (IRR.) NEW MEXICO	: CLOVIS (DRYL.) NEW MEXICO	: FARMINGTON NEW MEXICO	: NEW MEXICO STATE MEAN	: BROOKINGS S. DAKOTA	: HIGHMORE S. DAKOTA	: PRESHO S. DAKOTA	: SOUTH DAKOTA STATE MEAN
TX80GH3006	25	2127 16	1724 1	8658 1	4170 1	2754 16	4123 3	4608 5	3828 5
TX80GH2679	24	3025 3	1171 10	7470 5	3888 5	3077 9	3770 8	4761 3	3869 3
NA80137	16	1366 28	748 26	6252 24	2789 31	3910 2	3267 26	3445 31	3541 13
TXGH2875	7	2615 11	1090 11	7117 13	3607 9	2678 18	3573 14	4392 9	3548 12
TX71A562-6-28	6	2869 5	1073 12	5210 35	3051 21	3132 7	4406 1	5208 1	4249 1
RH790610	33	1678 20	683 30	6398 21	2920 24	2421 23	3416 21	4516 7	3451 22
NX77W4093	9	1678 21	764 24	7147 12	3196 14	2717 17	3677 10	4365 10	3586 10
OK80268	30	2869 6	1675 4	7851 2	4132 2	3021 10	3818 6	4118 16	3652 9
OK80019	29	2342 13	1708 3	7484 4	3845 6	3378 5	3660 12	4035 19	3691 6
NE78668	13	1483 24	699 29	6237 26	2806 30	3127 8	3510 18	3872 23	3503 15
OK754615E	26	1854 18	708 27	6545 19	3036 22	1441 34	3310 24	3664 29	2805 33
TX69A569-1-69	21	3396 1	1171 10	6574 18	3714 8	1721 32	3650 13	4656 4	3342 23
KS79H69	8	2166 15	699 29	5870 29	2912 26	2960 11	3665 11	3876 22	3501 16
NA80310	17	2752 8	1659 5	7587 3	3999 3	2371 25	3087 29	4240 11	3232 25
TX80A6025	23	2635 10	992 14	6237 26	3288 12	2539 19	3888 5	4122 15	3516 14
NK77W4505	10	2205 14	911 18	6134 27	3083 19	3405 4	3012 32	4046 18	3488 17
NK77W4593	11	1269 29	880 20	7308 8	3152 15	3638 3	3382 22	3345 32	3455 20
NE78696	15	2791 7	1529 6	7455 6	3925 4	2957 12	3460 20	3998 20	3471 19
W7442B	19	2966 4	1708 2	6706 17	3794 7	2187 28	2900 34	3173 34	2753 34
W7452B	20	2030 17	943 16	5782 32	2918 25	2275 27	2822 35	3893 21	2997 29
OK79256	28	2654 9	1301 8	6017 28	3324 11	1590 33	3028 31	2919 35	2512 35
TX78V3630	4	1190 31	572 32	7220 10	2994 23	2770 15	3780 7	4155 13	3569 11
OK79257	27	2518 12	862 22	5283 34	2888 28	2354 26	2931 33	3795 25	3026 28
TX78V2408	5	1405 25	764 25	7249 9	3140 16	2443 22	3467 19	4518 6	3476 18
NE80413	14	1678 20	862 21	5782 32	2774 32	3254 6	3537 17	4176 12	3656 8
TX80A5609	22	1522 23	1041 13	6751 15	3105 17	2466 21	4127 2	5129 2	2908 2
NA80300	18	3044 2	1301 8	6252 24	3532 10	2093 31	3301 25	3515 30	2969 30
IL76-3845	34	1366 28	358 34	6281 22	2668 33	1226 35	3559 15	3729 28	2838 32
NE77682	12	1054 34	504 33	5767 33	2442 34	4093 1	3350 23	4091 17	3845 4
CI17277	3	1600 22	943 17	6736 16	3093 18	2900 13	3961 4	4140 14	3667 7
IL77-4259	35	722 35	228 35	5797 30	2249 35	2491 20	3028 31	3273 33	2931 31
CO796326	31	1210 30	830 23	7205 11	3082 20	2400 24	3714 9	3756 27	3290 24
CO796386	32	1386 26	943 16	7382 7	3237 13	2109 30	3551 16	3848 24	3170 26
CI13996	2	1190 33	895 19	6457 20	2847 29	2875 14	3091 28	4395 8	3454 21
CI1442	1	1190 33	667 31	6809 14	2889 27	2135 29	3195 27	3792 26	3041 27
MEAN		1996	989	6652	3212	2655	3486	4045	3395
LSD(.05)		588	316	N.S.	913	720	653	706	729
C.V.		18.0	19.6	23.1	28.9	16.6	11.5	10.7	12.5

Table 2. (continued)

C.I. OR SEL. NO.	: ENTRY: NO.	: FORT COLLINS COLORADO	: SPRING- FIELD COLORADO	: BURLINGTON COLORADO	: AKRON COLORADO	: JULESBURG COLORADO	: COLORADO STATE MEAN	: ABERDEEN IDAHO	: LIND WASHINGTON
TX80GH3006	25	8011 1	2237 1	3758 11	2642 3	2612 20	3852 1	7301 1	2511 1
TX80GH2679	24	7188 9	1799 15	3886 7	2158 16	2819 8	3570 6	6821 7	455 35
NA80137	16	7396 4	1393 31	3945 5	2386 9	2804 10	3585 4	6830 6	1397 3
TXGH2875	7	6356 26	1625 22	4120 2	2053 19	2312 31	3293 25	6425 12	621 33
TX71A562-6-28	6	6798 17	1536 25	3144 26	1713 31	1972 35	3033 32	7259 2	1200 5
RH790610	33	7479 3	1658 20	3280 23	2419 6	3031 4	3573 5	6891 4	966 18
NK77W4093	9	7276 6	1758 17	3601 13	1923 24	2617 19	3435 8	6889 5	933 20
OK80268	30	6716 19	1779 16	3463 17	2415 8	3065 3	3488 7	5840 25	1237 4
OK80019	29	6990 14	1199 34	3513 16	2554 5	2815 9	3414 13	5275 31	1027 14
NE78668	13	6630 21	1564 24	3413 18	2241 13	2752 12	3320 24	5891 24	901 23
OK754615E	26	7325 5	1726 19	4187 1	2155 17	2652 18	3609 3	6662 9	1038 11
TX69A569-1-69	21	6633 20	1727 18	3838 8	1944 23	2669 17	3362 19	6521 11	720 31
KS79H69	8	5391 33	1971 10	4067 3	2592 4	2716 14	3347 22	5970 22	800 29
NA80310	17	6959 15	2183 3	3048 30	2668 2	2144 32	3400 14	6922 3	1004 15
TX80A6025	23	7562 2	1955 11	3560 14	2833 1	2731 13	3728 2	5636 28	1110 8
NK77W4505	10	6401 24	1652 21	3801 10	2185 15	2789 11	3366 17	5667 27	868 24
NK77W4593	11	7037 12	2118 4	3379 20	2015 21	2545 26	3419 11	5234 32	836 27
NE78696	15	6952 16	1434 30	3551 15	1960 22	2852 7	3350 20	6534 10	964 19
W7442B	19	6399 25	1993 8	3133 27	2247 12	3160 1	3386 15	6261 15	975 16
W7452B	20	6284 29	1339 33	3347 21	2036 20	2597 23	3121 30	6279 14	751 30
OK79256	28	6522 23	1454 29	4008 4	2275 11	2451 29	3342 23	5837 26	1179 7
TX78V3630	4	6604 22	2088 5	3399 19	1923 25	2855 6	3374 16	5945 23	1083 9
OK79257	27	7035 13	1604 23	3927 6	1800 28	2454 28	3364 18	6073 20	973 17
TX78V2408	5	7066 11	2216 2	3341 22	1899 26	2603 22	3425 9	5613 29	861 25
NE80413	14	7177 10	1513 26	3209 24	1720 30	2608 21	3246 26	6770 8	1403 2
TX80A5609	22	7255 7	2047 7	2856 31	2348 10	2583 24	3418 12	6221 17	912 21
NA80300	18	7208 8	1947 12	3082 29	2418 7	2442 30	3419 10	6315 13	901 23
IL76-3845	34	6755 18	1489 27	3813 9	2132 18	2548 25	3348 21	6252 16	581 34
NE77682	12	6335 27	1837 14	3122 28	1731 29	2701 15	3145 28	5979 21	1027 14
CI17277	3	5990 31	2078 6	3162 25	1287 35	2692 16	3042 31	6106 19	1031 12
IL77-4259	35	5548 32	1164 35	3637 12	1568 33	2136 33	2811 33	6120 18	677 32
CO796326	31	6165 30	1943 13	2713 32	2204 14	3148 2	3235 27	5064 33	820 28
CO796386	32	6329 28	1973 9	2483 34	1867 27	2961 5	3123 29	5532 30	1184 6
CI13996	2	5328 34	1481 28	2631 33	1685 32	2483 27	2722 34	4746 34	838 26
CI1442	1	3679 35	1391 32	1878 35	1510 34	2110 34	2114 35	4255 35	1058 10
MEAN		6651	1739	3408	2100	2641	3308	6112	993
LSD(.05)		863	N.S.	602	658	418	515	1022	N.S.
C.V.		7.9	26.0	10.8	19.2	7.8	12.6	10.2	53.3

Table 2. (concluded)

C.I. OR SEL. NO.	: ENTRY: NO.	: HUTCHINSON: KANSAS	: HAYS: KANSAS	: GARDEN CITY: KANSAS	: COLBY: KANSAS	: KANSAS STATE MEAN	: AMES IOWA	: COLUMBIA MISSOURI	: URBANA ILLINOIS	: 27-site REGIONAL AVERAGE
TX80GH3006	25	4521 5	5109 4	3723 4	4591 2	4486 2	3880 19	4170 4	5028 2	4372
TX80GH2679	24	4507 6	5055 5	4015 2	4291 7	4467 3	4394 2	3881 5	4724 8	4164
NA80137	16	4023 19	4295 18	3235 17	4111 15	3916 15	4367 4	4603 1	4703 9	4110
TXGH2875	7	4732 2	4927 10	4210 1	4459 4	4582 1	4241 7	3470 21	4872 3	4064
TX71A562-6-28	6	4682 4	5355 1	3212 18	4544 3	4448 4	3524 25	3608 16	4159 15	4005
RH790610	33	4270 10	4298 17	3410 11	4089 18	4016 12	3764 22	3798 9	4870 4	4005
NK77W4093	9	4094 15	4459 14	3042 20	4598 1	4048 8	3860 20	3775 11	4105 16	4002
OK80268	30	4179 13	4221 19	3309 15	4221 11	3982 13	4382 3	3833 6	3509 25	3960
OK80019	29	4316 9	4187 20	3347 12	4264 9	4028 11	4407 1	4211 3	3450 28	3959
NE78668	13	4319 8	3587 31	3587 6	4217 12	3927 14	4066 12	3076 30	4223 13	3943
OK754615E	26	4805 1	5021 7	3448 9	3042 31	4079 7	4129 10	3779 10	4694 10	3924
TX69A569-1-69	21	4683 3	5194 2	3654 5	3008 32	4135 6	4158 8	4292 2	5058 1	3904
KS79H69	8	4077 16	3735 28	3331 13	4163 13	3826 19	3986 16	3819 8	4215 14	3897
NA80310	17	3813 26	5001 8	3775 3	4252 10	4211 5	3820 21	3662 13	4735 7	3845
TX80A6025	23	4182 12	4013 23	2589 33	4102 17	3722 23	4004 15	3556 17	4078 17	3830
NK77W4505	10	4019 20	4452 16	3419 10	4264 9	4038 10	3208 29	3644 14	3916 19	3822
NK77W4593	11	3839 25	3181 34	3329 14	4421 6	3692 25	3977 17	3170 27	3733 24	3822
NE78696	15	4126 14	4161 21	2972 21	4109 16	3842 17	3744 23	3765 12	3849 20	3814
W7442B	19	4023 18	4909 11	2849 27	2589 35	3593 27	4275 5	3545 18	4460 11	3812
W7452B	20	3964 21	4685 13	3522 7	3147 30	3830 18	4156 9	3535 19	4738 6	3782
OK79256	28	3777 28	5122 3	2876 25	3490 26	3816 20	4060 13	3830 7	4342 12	3780
TX78V3630	4	3625 29	3322 32	3457 8	4120 14	3631 26	3490 26	3511 20	3816 22	3770
OK79257	27	4046 17	5021 7	2791 29	3293 28	3788 22	4270 6	3625 15	3243 33	3726
TX78V2408	5	4204 11	4452 16	2829 28	4026 19	3878 16	3284 28	3337 22	3480 26	3722
NE80413	14	3490 33	3277 33	2914 23	3979 20	3415 33	3672 24	3153 28	4070 18	3710
TX80A5609	22	3847 24	4844 12	3125 19	3414 27	3808 21	2910 33	2703 34	3733 24	3684
NA80300	18	4332 7	4947 9	2907 24	3974 21	4040 9	2910 33	3249 24	3391 29	3665
IL76-3845	34	3911 22	3784 26	3239 16	2993 33	3482 30	4069 11	3252 23	4765 5	3635
NE77682	12	3860 23	3746 27	2789 30	4427 5	3706 24	3912 18	3230 25	3458 27	3628
CI17277	3	3610 30	3822 24	2665 31	3909 22	3502 29	3105 30	3133 29	3251 32	3576
IL77-4259	35	3497 32	3802 25	2932 22	3842 23	3518 28	4051 14	2694 35	3846 21	3542
CO796326	31	3810 27	3652 30	2616 32	3701 25	3445 31	3098 31	2986 32	3122 34	3508
CO796386	32	3600 31	4013 23	2872 26	3257 29	3435 32	3333 27	3180 26	3310 30	3486
CI13996	2	3480 34	3730 29	2470 34	3748 24	3357 34	2607 34	3035 31	3305 31	3258
CI1442	1	3025 35	2571 35	1722 35	2699 34	2504 35	2239 35	2916 33	2844 35	2629
MEAN		4037	4284	3148	3867	3834	3753	3515	4036	3782
LSD(.05)		625	502	561	339	498	466	950	608	240
C.V.		11.1	7.2	10.9	5.4	11.1	7.6	13.2	9.2	14.2

BEGIN

Table 3. Summary of mean yields (kg/ha) and ranks of 35 wheats grown in the 1983 Southern Regional Performance Nursery at 18 locations from the midwest from which a C.V. of 15 or less and a significant F test for entries were obtained.

VARIETY OR PEDIGREE	C.I. OR SEL. NO.	ENTRY: NO.	MEAD NEBRASKA	STILLWATER OKLAHOMA	GOODWELL OKLAHOMA	LAHOMA OKLAHOMA	ALTUS OKLAHOMA
SDY SIB/TRIUMPH//CTK(TX71A562-6)*4/AMIGO	TX80GH3006	25	3726 15	2932 9	5864 20	4725 4	3466 10
TAM105*4/AMIGO	TX80GH2679	24	3800 12	2508 23	6321 11	4595 7	3156 28
TAM105*4/AMIGO	TXGH2875	7	3867 11	3226 3	6550 8	4815 3	3573 5
SDY SIB/TRIUMPH//CTK	TX71A562-6-28	6	4320 4	2948 8	5970 17	4483 11	3632 3
CO73F18298-6/MCNAIR 4823	NA80137	16	3674 16	3320 2	6378 10	4304 15	3466 10
SUT*5/AG//SDY/3/CTK	NK77W4093	9	4340 3	2464 25	6125 13	4120 21	3510 6
PAYNE/AMIGO	OK80019	29	3508 20	3324 1	5055 32	5093 1	3448 11
HARD WINTER WHEAT HYBRID	RH790610	33	3921 9	2367 28	6052 14	4152 20	3632 3
PAYNE//TAMW-101/AMIGO	OK80268	30	2984 30	2977 7	6003 15	4909 2	3470 8
EY SDY/NCM	OK754615E	26	2609 33	2703 14	6795 2	4654 5	3255 24
TAM105 RESELECTION	TX69A569-1-69	21	3134 26	2338 29	6468 9	4170 19	3412 14
(WRR*5/AGENT)*2/KAVKAZ	NE78668	13	4483 1	2827 12	6664 5	4353 13	3497 7
ARKAN	KS79H69	8	4282 5	2867 11	6705 4	4506 10	3224 25
AURORA/2*TAMW-101	OK79256	28	4109 7	3105 6	6591 6	4609 6	3407 16
STURDY/B48//STURDY	W7452B	20	3773 13	3118 5	6795 2	4582 8	3349 20
SUT*5/AG//SDY	NK77W4505	10	4203 6	2273 31	6280 12	4555 9	3259 23
AURORA/2*TAMW-101	OK79257	27	3876 10	2580 21	5660 23	4250 16	3345 21
KAVKAZ/CENTURK	NK77W4593	11	4353 2	3201 4	5627 25	4107 22	3614 4
AGATE SIB(NE69441)/TX65A1503-1	NE78696	15	3566 18	2659 18	5905 19	4192 17	2995 32
SDY SIB/TCS//CTK(73A2694)/3/AMIGO	TX80A6025	23	3212 25	2304 30	5170 30	3954 28	3434 12
BULK SELECTION	NA80310	17	3020 28	2148 32	5431 27	3842 30	3349 20
CAPROCK/B86//SC3212	W7442B	19	3553 19	2699 15	6762 3	4183 18	3049 31
SHORT WHEAT/SUT(TX69A509-2)//FOX	TX78V2408	5	3118 27	2641 19	5635 24	4479 12	3062 30
LOVRIN 13/2*CTK78	NE80413	14	3347 21	2576 22	6582 7	3842 30	3757 1
SDY SIB/KAW(TX62A2522-1)//CTK	TX78V3630	4	3002 29	2869 10	5994 16	4035 25	3380 17
BULK SELECTION	NA80300	18	3768 14	2403 27	5766 21	4031 26	3416 13
TAMW-103//SH WHEAT/SUT (TX69A509-1)	TX80A5609	22	2925 31	2051 33	5578 26	3354 34	3407 16
CTK//KS6623/TX62A2522-8-2	IL76-3845	34	3342 22	2730 13	5423 28	4075 24	2968 34
WRR*5/AGENT//NE68457/3/CTK78	NE77682	12	2789 32	2616 20	5415 29	4098 23	3125 29
KAVKAZ/TX69A330-1	IL77-4259	35	3979 8	2414 26	5929 18	4326 14	2981 33
SAGE	CI17277	3	3620 17	1932 34	5741 22	3959 27	3183 26
CO723117/CO725856	CO796386	32	3275 23	2688 16	4941 33	3407 33	3349 20
CO723117/CO725856	CO796326	31	3230 24	2681 17	4745 34	3649 31	3286 22
SCOUT66	CI13996	2	2549 34	2466 24	5063 31	3412 32	3179 27
KHARKOF	CI1442	1	1858 35	1854 35	3210 35	2237 35	2318 35
MEAN			3520	2652	5863	4173	3313
LSD(.05)			634	571	672	502	252
C.V.			11.0	13.2	7.0	7.4	4.7

Table 3. (continued)

C.I. OR SEL. NO.	ENTRY: NO.	DALLAS TEXAS	CHILLI- COTHE TEXAS	HAYS KANSAS	COLBY KANSAS	GARDEN CITY KANSAS	HUTCHINSON KANSAS	AMES IOWA
TX80GH3006	25	3132 17	3694 19	5109 4	4591 2	3723 4	4521 5	3880 19
TX80GH2679	24	3028 19	4136 2	5055 5	4291 7	4015 2	4507 6	4394 2
TXGH2875	7	2793 25	3858 9	4927 10	4459 4	4210 1	4732 2	4241 7
TX71A562-6-28	6	2919 22	3766 14	5355 1	4544 3	3212 18	4682 4	3524 25
NA80137	16	3672 1	3824 11	4295 18	4111 15	3235 17	4023 19	4367 4
NK77W4093	9	3401 9	3768 13	4459 14	4598 1	3042 20	4094 15	3860 20
OK80019	29	2950 20	3746 16	4187 20	4264 9	3347 12	4316 9	4407 1
RH790610	33	3575 2	3737 17	4298 17	4089 18	3410 11	4270 10	3764 22
OK80268	30	3358 10	3632 24	4221 19	4221 11	3309 15	4179 13	4382 3
OK754615E	26	3286 12	3968 5	5021 7	3042 31	3448 9	4805 1	4129 10
TX69A569-1-69	21	2851 24	3811 12	5194 2	3008 32	3654 5	4683 3	4158 8
NE78668	13	3304 11	4257 1	3587 31	4217 12	3587 6	4319 8	4066 12
KS79H69	8	3499 5	3376 33	3735 28	4163 13	3331 13	4077 16	3986 16
OK79256	28	3226 15	3972 4	5122 3	3490 26	2876 25	3777 28	4060 13
W7452B	20	3448 6	3596 26	4685 13	3147 30	3522 7	3964 21	4156 9
NK77W4505	10	3416 8	3226 34	4452 16	4264 9	3419 10	4019 20	3208 29
OK79257	27	3522 4	3721 18	5021 7	3293 28	2791 29	4046 17	4270 6
NK77W4593	11	3441 7	3658 22	3181 34	4421 6	3329 14	3839 25	3977 17
NE78696	15	2255 33	3943 7	4161 21	4109 16	2972 21	4126 14	3744 23
TX80A6025	23	2768 27	4066 3	4013 23	4102 17	2589 33	4182 12	4004 15
NA80310	17	3264 14	3952 6	5001 8	4252 10	3775 3	3813 26	3820 21
W7442B	19	3533 3	3753 15	4909 11	2589 35	2849 27	4023 18	4275 5
TX78V2408	5	2726 29	3670 21	4452 16	4026 19	2829 28	4204 11	3284 28
NE80413	14	3266 13	3853 10	3277 33	3979 20	2914 23	3490 33	3672 24
TX78V3630	4	3044 18	3562 29	3322 32	4120 14	3457 8	3625 29	3490 26
NA80300	18	2948 21	3607 25	4947 9	3974 21	2907 24	4332 7	2910 33
TX80A5609	22	2623 31	3887 8	4844 12	3414 27	3125 19	3847 24	2910 33
IL76-3845	34	2768 27	3584 27	3784 26	2993 33	3239 16	3911 22	4069 11
NE77682	12	2854 23	3454 31	3746 27	4427 5	2789 30	3860 23	3912 18
IL77-4259	35	3185 16	3649 23	3802 25	3842 23	2932 22	3497 32	4051 14
CI17277	3	2094 34	3688 20	3822 24	3909 22	2665 31	3610 30	3105 30
CO796386	32	2733 28	3571 28	4013 23	3257 29	2872 26	3600 31	3333 27
CO796326	31	2571 32	3560 30	3652 30	3701 25	2616 32	3810 27	3098 31
CI13996	2	2721 30	3439 32	3730 29	3748 24	2470 34	3480 34	2607 34
CI1442	1	1896 35	2629 35	2571 35	2699 34	1722 35	3025 35	2239 35
MEAN		3042	3703	4284	3867	3148	4037	3753
LSD(.05)		703	269	502	339	561	625	466
C.V.		14.2	4.5	7.2	5.4	10.9	11.1	7.6

Table 3. (concluded)

C.I. OR SEL. NO.	: ENTRY: NO.	: FORT COLLINS COLORADO	: JULESBURG COLORADO	: BURLINGTON COLORADO	: PRESHO S. DAKOTA	: HIGHMORE S. DAKOTA	: COLUMBIA MISSOURI	: REGIONAL AVERAGE
TX80GH3006	25	8011 1	2612 20	3758 11	4608 5	4123 3	4170 4	4258 1
TX80GH2679	24	7188 9	2819 8	3886 7	4761 3	3770 8	3881 5	4228 2
TXGH2875	7	6356 26	2312 31	4120 2	4392 9	3573 14	3470 21	4193 3
TX71A562-6-28	6	6798 17	1972 35	3144 26	5208 1	4406 1	3608 16	4138 4
NA80137	16	7396 4	2804 10	3945 5	3445 31	3267 26	4603 1	4118 5
NK77W4093	9	7276 6	2617 19	3601 13	4365 10	3677 10	3775 11	4061 6
OK80019	29	6990 14	2815 9	3513 16	4035 19	3660 12	4211 3	4048 7
RH790610	33	7479 3	3031 4	3280 23	4516 7	3416 21	3798 9	4044 8
OK80268	30	6716 19	3065 3	3463 17	4118 16	3818 6	3833 6	4037 9
OK754615E	26	7325 5	2652 18	4187 1	3664 29	3310 24	3779 10	4035 10
TX69A569-1-69	21	6633 20	2669 17	3838 8	4656 4	3650 13	4292 2	4034 11
NE78668	13	6630 21	2752 12	3413 18	3872 23	3510 18	3076 30	4023 12
KS79H69	8	5391 33	2716 14	4067 3	3876 22	3665 11	3819 8	3960 13
OK79256	28	6522 23	2451 29	4008 4	2919 35	3028 31	3830 7	3950 14
W7452B	20	6284 29	2597 23	3347 21	3893 21	2822 35	3535 19	3923 15
NK77W4505	10	6401 24	2789 11	3801 10	4046 18	3012 32	3644 14	3904 16
OK79257	27	7035 13	2454 28	3927 6	3795 25	2931 33	3625 15	3897 17
NK77W4593	11	7037 12	2545 26	3379 20	3345 32	3382 22	3170 27	3867 18
NE78696	15	6952 16	2852 7	3551 15	3998 20	3460 20	3765 12	3845 20
TX80A6025	23	7562 2	2731 13	3560 14	4122 15	3888 5	3556 17	3845 19
NA80310	17	6959 15	2144 32	3048 30	4240 11	3087 29	3662 13	3823 21
W7442B	19	6399 25	3160 1	3133 27	3173 34	2900 34	3545 18	3805 22
TX78V2408	5	7066 11	2603 22	3341 22	4518 6	3467 19	3337 22	3803 23
NE80413	14	7177 10	2608 21	3209 24	4176 12	3537 17	3153 28	3801 24
TX78V3630	4	6604 22	2855 6	3399 19	4155 13	3780 7	3511 20	3789 25
NA80300	18	7208 8	2442 30	3082 29	3515 30	3301 25	3249 24	3767 26
TX80A5609	22	7255 7	2583 24	2856 31	5129 2	4127 2	2703 34	3701 27
IL76-3845	34	6755 18	2548 25	3813 9	3729 28	3559 15	3252 23	3697 28
NE77682	12	6335 27	2701 15	3122 28	4091 17	3350 23	3230 25	3662 29
IL77-4259	35	5548 32	2136 33	3637 12	3273 33	3028 31	2694 35	3606 30
CI17277	3	5990 31	2692 16	3162 25	4140 14	3961 4	3133 29	3578 31
CO796386	32	6329 28	2961 5	2483 34	3848 24	3551 16	3180 26	3522 32
CO796326	31	6165 30	3148 2	2713 32	3756 27	3714 9	2986 32	3505 33
CI13996	2	5328 34	2483 27	2631 33	4395 8	3091 28	3035 31	3324 34
CI1442	1	3679 35	2110 34	1878 35	3792 26	3195 27	2916 33	2546 35
MEAN		6651	2641	3408	4045	3486	3515	3839
LSD(.05)		863	418	602	706	653	950	269
C.V.		7.9	7.8	10.8	10.7	11.5	13.2	9.4

BEGIN

Table 4. Summary of mean yields (kg/ha) for 21 wheats grown in the Southern Regional Performance Nursery at 28 sites in 1982 and 1983 with state means and ranks. (Clovis, NM irrigated and dryland nurseries, Lind, WA, and Brookings, SD are not included in the state and regional means.)

VARIETY OR PEDIGREE	: C.I. OR : SEL. NO.	: ENTRY: : NO. :	: MEAD : NEBRASKA	: CLAY : CENTER : NEBRASKA	: NORTH : PLATTE : NEBRASKA	: ALLIANCE : NEBRASKA	: NEBRASKA : STATE MEAN					
(WRR*5/AGENT)*2/KAVKAZ	NE78668	13	4217	1	3436	1	3264	2	3357	6	3569	1
TAM105*/AMIGO	TXGH2875	7	3268	8	2227	8	2523	12	3220	9	2810	9
SDY SIB/TRIUMPH//CTK	TX71A562-6-28	6	3461	7	2147	7	3043	5	3047	15	2925	4
SUT*5/AG//SDY/3/CTK	NK77W4093	9	3658	6	2773	6	3175	3	3380	4	3247	2
HARD WINTER WHEAT HYBRID	RH790610	33	2958	13	2081	13	2466	14	3608	1	2778	10
EY SDY/NCM	OK754615E	26	2533	16	1868	16	2368	15	3211	10	2495	17
SUT*5/AG//SDY	NK77W4505	10	3698	5	2301	5	2614	9	3122	12	2934	3
ARKAN	KS79H69	8	3840	2	2133	2	2577	11	2750	19	2825	6
SDY SIB/KAW(TX62A2522-1)//CTK	TX78V3630	4	2554	15	1885	15	3668	1	2792	17	2725	12
AURORA/2*TAMW-101	OK79257	27	3246	9	1916	9	2944	6	3134	11	2810	8
AURORA/2*TAMW-101	OK79256	28	2997	12	1801	12	3162	4	2743	20	2676	13
KAVKAZ/CENTURK	NK77W4593	11	3735	3	1727	3	2768	8	3428	2	2914	5
WRR*5/AGENT//NE68457/3/CTK78	NE77682	12	2957	14	1834	14	2359	17	3325	7	2619	14
SAGE	CI17277	3	3091	10	2574	10	2360	16	3066	14	2773	11
CTK//KS6623/TX62A2522-8-2	IL76-3845	34	3080	11	1787	11	2823	7	2762	18	2613	15
SHORT WHEAT/SUT(TX69A509-2)//FOX	TX78V2408	5	2507	17	1336	17	2510	13	2708	21	2265	19
KAVKAZ/TX69A330-1	IL77-4259	35	3705	4	1546	4	2588	10	3425	3	2816	7
C0723117/C0725856	C0796326	31	2485	18	1933	18	2250	18	3370	5	2510	16
C0723117/C0725856	C0796386	32	2455	19	1403	19	1988	19	3254	8	2275	18
SCOUT66	CI13996	2	2315	20	1592	20	1812	20	3110	13	2207	20
KHARKOF	CI1442	1	1754	21	1196	21	1377	21	2980	16	1827	21
	MEAN		3069		1976		2591		3133		2691	
	LSD(.05)		906		920		N.S.		N.S.		649	
	C.V.		14.1		25.9		22.6		15.0		18.7	

Table 4. (continued)

C.I. OR SEL. NO.	: ENTRY: : NO. :	: STILLWATER : OKLAHOMA :	: ALTUS : OKLAHOMA :	: LAHOMA : OKLAHOMA :	: GOODWELL : OKLAHOMA :	: OKLAHOMA : STATE MEAN :	: DALLAS : TEXAS :	: CHILLI- COTHE : TEXAS :	: TEXAS : STATE MEAN
NE78668	13	2743 5	3552 7	4498 6	6212 8	4251 5	3247 1	3844 1	3546 1
TXGH2875	7	2955 4	3759 1	4647 3	6860 1	4555 1	2371 14	3453 4	2912 9
TX71A562-6-28	6	2963 2	3677 3	4490 7	6073 10	4301 4	2517 12	3756 2	3137 3
NK77W4093	9	2520 13	3299 10	4189 12	6260 6	4067 12	2773 9	3037 13	2905 10
RH790610	33	2346 18	3582 6	4355 9	6210 9	4123 9	2972 4	3259 8	3116 5
OK754615E	26	2700 7	3665 4	4599 4	6485 3	4362 3	2809 7	3514 3	3161 2
NK77W4505	10	2390 16	3162 16	4761 1	6226 7	4135 8	2882 6	2885 16	2883 11
KS79H69	8	2647 8	3196 14	4519 5	6526 2	4222 6	2980 3	2646 19	2813 14
TX78V3630	4	2568 11	3284 11	4071 15	6419 5	4086 10	2771 10	3442 5	3106 6
OK79257	27	2725 6	3720 2	4391 8	5968 11	4201 7	2943 5	3014 14	2979 8
OK79256	28	3095 1	3623 5	4664 2	6434 4	4454 2	2800 8	3299 7	3049 7
NK77W4593	11	2958 3	3393 8	4110 13	5826 12	4072 11	3074 2	3198 9	3136 4
NE77682	12	2597 10	3263 12	4089 14	5594 16	3886 13	2664 11	3081 11	2873 12
CI17277	3	2132 20	3157 17	3889 17	5639 14	3704 17	1774 21	3053 12	2414 18
IL76-3845	34	2563 12	2974 19	4003 16	5770 13	3827 15	2153 17	2664 18	2409 19
TX78V2408	5	2624 9	3331 9	4191 11	5337 17	3871 14	2340 15	3312 6	2826 13
IL77-4259	35	2368 17	2831 20	4339 10	5634 15	3793 16	2383 13	2627 20	2505 16
CO796326	31	2306 19	3199 13	3697 18	5058 20	3565 19	1921 18	2915 15	2418 17
CO796386	32	2471 14	3188 15	3553 19	5229 18	3610 18	2167 16	3082 10	2624 15
CI13996	2	2400 15	3033 18	3278 20	5190 19	3475 20	1815 20	2829 17	2322 20
CI1442	1	1903 21	2285 21	2251 21	3356 21	2449 21	1896 19	2451 21	2174 21
MEAN		2570	3294	4123	5824	3953	2557	3133	2839
LSD(.05)		456	541	358	756	407	692	737	N.S.
C.V.		12.0	10.3	6.5	7.2	8.5	15.0	8.8	11.7

Table 4. (continued)

C.I. OR~ SEL. NO.	: : ENTRY: : NO.	: CLOVIS (IRR.) : NEW MEXICO	: CLOVIS (DRYL.) : NEW MEXICO	: FARMINGTON : NEW MEXICO	: NEW MEXICO : STATE MEAN	: BROOKINGS : S. DAKOTA	: HIGHMORE : S. DAKOTA	: PRESNO : S. DAKOTA	: SOUTH DAKOTA : STATE MEAN								
NE78668	13	3437	14	1897	5	7517	8	4284	8	4796	1	3810	4	4140	3	3975	4
TXGH2875	7	4244	2	1667	10	8744	1	4885	1	1518	13	3129	18	3653	10	3391	13
TX71A562-6-28	6	4601	1	1967	2	7546	6	4705	2	1566	12	4241	1	4041	4	4141	1
NK77W4093	9	4009	5	1733	9	7795	4	4512	4	3348	3	4192	2	4028	5	4110	2
RH790610	33	4226	3	1616	12	7470	10	4437	6	1579	11	3631	5	4152	2	3891	5
OK754615E	26	3522	13	1236	19	7537	7	4098	12	1491	14	3381	12	3418	16	3400	12
NK77W4505	10	3924	6	1446	16	7173	13	4181	9	2466	6	3202	16	3489	13	3345	15
KS79H69	8	4198	4	1267	18	6955	15	4140	10	1715	9	3617	6	3646	11	3631	9
TX78V3630	4	3820	7	1207	20	7094	14	4040	14	2148	7	3559	8	4173	1	3866	6
OK79257	27	3819	8	1546	15	6491	21	3952	17	1856	8	2873	20	3449	14	3161	17
OK79256	28	3575	11	1644	11	6699	18	3973	15	795	21	2479	21	2432	21	2455	21
NK77W4593	11	3611	9	1824	6	7967	3	4468	5	2654	5	3402	11	2730	20	3066	19
NE77682	12	2906	19	1553	14	7215	12	3891	18	3548	2	3546	9	3855	8	3700	8
CI17277	3	3291	16	1986	1	8261	2	4513	3	2755	4	4151	3	3908	6	4029	3
IL76-3845	34	3598	10	1047	21	6661	19	3768	19	1715	10	3367	14	3679	9	3523	11
TX78V2408	5	3566	12	1956	3	7694	5	4405	7	1222	20	2912	19	3397	17	3154	18
IL77-4259	35	2429	21	1286	17	6858	17	3524	21	1463	15	3132	17	2992	19	3062	20
C0796326	31	3110	18	1585	13	7471	9	4055	13	1362	18	3514	10	3544	12	3529	10
C0796386	32	3304	15	1813	7	7247	11	4121	11	1285	19	3290	15	3422	15	3356	14
CI13996	2	3112	17	1930	4	6858	16	3967	16	1438	16	3580	7	3907	7	3743	7
CI1442	1	2670	20	1747	8	6516	20	3644	20	1414	17	3378	13	3081	18	3229	16
MEAN		3570		1617		7322		4170		2128		3452		3588		3520	
LSD(.05)		N.S.		N.S.		N.S.		N.S.		N.S.		N.S.		N.S.		772	
C.V.		13.5		19.2		18.9		21.3		36.0		15.7		17.2		16.5	

Table 4. (continued)

C.I. OR SEL. NO.	: ENTRY: : NO. :	: HUTCHINSON : KANSAS :	: HAYS : KANSAS :	: GARDEN : CITY : KANSAS :	: COLBY : KANSAS :	: KANSAS : STATE MEAN :	: AMES : IOWA :	: COLUMBIA : MISSOURI :	: URBANA : ILLINOIS :
NE78668	13	4389 2	4379 11	4304 3	3138 17	4053 10	4511 1	3099 11	3937 6
TXGH2875	7	3847 14	5276 3	4886 1	3799 5	4452 2	3766 7	3406 2	4822 1
TX71A562-6-28	6	4393 1	5688 1	4480 2	3838 4	4600 1	3318 13	2925 16	3643 11
NK77W4093	9	4025 8	4970 6	4103 9	3908 3	4252 4	3228 15	3154 9	3498 13
RH790610	33	3919 10	4804 8	4159 5	3483 10	4091 8	3415 12	3439 1	4374 4
OK754615E	26	4199 4	5253 5	4190 4	3183 16	4206 5	3428 11	3388 3	4667 2
NK77W4505	10	4152 5	4824 7	4130 7	4004 1	4277 3	3643 8	3239 6	3902 7
KS79H69	8	4118 6	4277 13	3949 14	3663 8	4002 12	4269 2	3319 4	3902 8
TX78V3630	4	3663 15	4142 17	4146 6	3746 7	3924 13	3045 19	3180 7	3873 9
OK79257	27	3925 9	5277 2	4038 11	2978 18	4055 9	3966 4	3155 8	3834 10
OK79256	28	3864 13	5257 4	4013 12	3281 13	4104 7	3777 6	2796 18	4163 5
NK77W4593	11	3898 11	3413 20	4008 13	3563 9	3720 15	3981 3	3077 12	3112 18
NE77682	12	4067 7	4183 15	3912 15	3952 2	4028 11	3526 10	2681 19	3230 15
CI17277	3	3895 12	4287 12	3728 16	3481 11	3848 14	3248 14	2888 17	3040 19
IL76-3845	34	3570 18	4163 16	4110 8	2739 20	3645 18	3570 9	3073 13	4525 3
TX78V2408	5	4241 3	4770 9	4048 10	3765 6	4206 6	3080 17	2934 15	3607 12
IL77-4259	35	3488 20	3880 19	3432 20	3268 14	3517 20	3943 5	3280 5	3222 16
CO796326	31	3639 16	4259 14	3708 17	3248 15	3714 16	2822 20	2994 14	2802 20
CO796386	32	3604 17	4396 10	3681 18	2932 19	3653 17	3150 16	3142 10	3311 14
CI13996	2	3544 19	3963 18	3496 19	3381 12	3596 19	3055 18	2648 20	3120 17
CI1442	1	3348 21	2780 21	2701 21	2142 21	2743 21	2009 21	2300 21	2587 21
MEAN		3905	4488	3963	3404	3939	3464	3011	3675
LSD(.05)		N.S.	572	686	764	468	1014	N.S.	853
C.V.		9.6	6.6	7.4	8.5	8.1	12.0	18.9	13.5

BEGIN

Table 4. (concluded)

C.I. OR SEL. NO.	: ENTRY: : NO. :	: BURLINGTON : COLORADO :	: AKRON : COLORADO :	: JULESBURG : COLORADO :	: COLORADO : STATE MEAN :	: ABERDEEN : IDAHO :	: LIND : WASHINGTON :	: 24-site : REGIONAL : AVERAGE
NE78668	13	3786 13	2320 2	3259 4	3122 6	5669 15	1111 6	4026
TXGH2875	7	4421 1	2209 9	3030 10	3220 4	5980 10	939 19	4011
TX71A562-6-28	6	4190 5	2112 12	2733 19	3011 9	7301 1	1160 3	3984
NK77W4093	9	4341 2	2232 7	3448 1	3340 1	6484 4	1078 9	3936
RH790610	33	3890 8	2585 1	3403 2	3293 2	7041 2	1106 7	3900
OK754615E	26	4314 3	2273 5	3132 7	3240 3	6591 3	1117 5	3863
NK77W4505	10	4253 4	2154 10	2987 11	3131 5	5829 11	1221 2	3793
KS79H69	8	3848 9	2320 3	2951 13	3040 7	5560 16	980 17	3759
TX78V3630	4	3800 12	2011 18	3161 5	2991 11	6347 6	1003 16	3725
OK79257	27	4005 6	2064 15	2850 17	2973 13	6267 7	1069 11	3715
OK79256	28	3977 7	2216 8	2899 15	3030 8	6149 8	1264 1	3692
NK77W4593	11	3577 17	2314 4	3053 9	2981 12	5312 18	1033 13	3651
NE77682	12	3837 10	2110 13	3063 8	3003 10	6001 9	1015 15	3622
CI17277	3	3703 16	1826 21	3152 6	2894 16	5731 13	1070 10	3585
IL76-3845	34	3832 11	2060 16	2986 12	2960 15	6459 5	836 20	3557
TX78V2408	5	3750 15	2069 14	2745 18	2854 18	5742 12	1152 4	3540
IL77-4259	35	3783 14	2006 19	2656 20	2815 19	5706 14	768 21	3462
CO796326	31	3342 19	2234 6	3308 3	2961 14	5016 19	1018 14	3376
CO796386	32	3470 18	2146 11	2950 14	2855 17	5340 17	1052 12	3370
CI13996	2	3331 20	2035 17	2856 16	2740 20	4814 20	958 18	3248
CI1442	1	2643 21	1930 20	2349 21	2307 21	4014 21	1082 8	2634
MEAN		3814	2154	3079	3012	5874	1044	3640
LSD(.05)		N.S.	N.S.	N.S.	N.S.	769	N.S.	257
C.V.		14.8	16.5	9.9	14.4	11.1	23.6	14.8

Table 5. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for the 35 entries in the 1983 Southern Regional Performance Nursery.

1983 Entry no. :	C. I. or Sel. No. :	Mean Yield: over 27 locations (kg/ha) :	Regression Coefficient: (by x) :	Correlation: (r) :	Coefficient of Determination: (r ²) :
25	TX80GH3006	4372	1.21	0.96	0.93
24	TX80GH2679	4164	1.14	0.99	0.97
16	NA80137	4110	0.99	0.94	0.89
7	TXGH2875	4064	1.07	0.96	0.92
6	TX71A562-6-28	4005	1.02	0.91	0.82
33	RH790610	4005	1.06	0.97	0.95
9	NK77W4093	4002	1.13	0.98	0.96
30	OK80268	3960	1.02	0.96	0.92
29	OK80019	3959	0.94	0.93	0.87
13	NE78668	3943	0.94	0.95	0.90
26	OK754615E	3924	1.15	0.95	0.90
21	TX69A569-1-69	3904	1.10	0.95	0.89
8	KS79H69	3897	0.81	0.93	0.87
17	NA80310	3845	1.11	0.94	0.89
23	TX80A6025	3830	0.93	0.95	0.90
10	NK77W4505	3822	0.92	0.95	0.91
11	NK77W4593	3822	0.91	0.92	0.84
15	NE78696	3814	1.13	0.99	0.97
19	W7442B	3812	1.02	0.94	0.88
20	W7452B	3782	1.01	0.94	0.89
28	OK79256	3780	1.00	0.93	0.86
4	TX78V3630	3770	1.00	0.96	0.92
27	OK79257	3726	0.94	0.94	0.88
5	TX78V2408	3722	1.06	0.97	0.95
14	NE80413	3710	1.06	0.95	0.90
22	TX80A5609	3684	1.06	0.94	0.88
18	NA80300	3665	1.06	0.96	0.93
34	IL76-3845	3635	1.02	0.95	0.91
12	NE77682	3628	0.87	0.94	0.88
3	CI17277	3576	0.98	0.95	0.91
35	IL77-4259	3542	0.94	0.95	0.90
31	CO796326	3508	0.86	0.94	0.87
32	CO796386	3486	0.97	0.95	0.91
2	CI13996	3258	0.84	0.93	0.86
1	CI1442	2629	0.72	0.81	0.66

Table 6. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield for 21 entries in the 1982 and 1983 Southern Regional Performance Nursery.

1983 :		:Mean yield:	:	:Coefficient	
Entry:		: C.I. or :	: over 24 :	:Regression :	:Correlation:
no. :		: Sel. No.:	: locations :	:Coefficient:	:Coefficient:
		: :	: (kg/ha) :	: (by·x) :	: (r)
					: (r ²)
13	NE78668	4026	0.87	0.91	0.83
7	TXGH2875	4011	1.21	0.96	0.92
6	TX71A562-6-28	3984	1.19	0.94	0.89
9	NK77W4093	3936	1.06	0.96	0.92
33	RH790610	3900	1.10	0.97	0.95
26	OK754615E	3863	1.11	0.96	0.92
10	NK77W4505	3793	0.99	0.96	0.92
8	KS79H69	3759	0.97	0.95	0.89
4	TX78V3630	3725	0.97	0.93	0.87
27	OK79257	3715	0.97	0.94	0.89
28	OK79256	3692	1.00	0.91	0.84
11	NK77W4593	3651	0.94	0.93	0.87
12	NE77682	3622	0.99	0.97	0.94
3	CI17277	3585	1.09	0.96	0.92
34	IL76-3845	3557	0.96	0.95	0.89
5	TX78V2408	3540	1.08	0.96	0.93
35	IL77-4259	3462	0.96	0.94	0.88
31	CO796326	3376	0.95	0.95	0.91
32	CO796386	3370	0.97	0.96	0.92
2	CI13996	3248	0.90	0.95	0.89
1	CI1442	2634	0.75	0.85	0.73

Table 7. Summary of agronomic and yield data for 35 wheats grown in the 1983 Southern Regional Performance Nursery.

VARIETY OR PEDIGREE	: : C.I. OR : SEL. NO.	: : ENTRY: : NO. :	: PLANT : HEIGHT : : CM :	: DAYS TO : HEADING : : FROM 1/1:	: DAYS TO : RIPENING: : FROM 1/1:	: LODGING : : % :	: SHATTER : : % :	: WINTER : SURVIVAL : % :
NUMBER OF TRIALS			29	24	1	7	1	1
SDY SIB/TRIUMPH//CTK(TX71A562-6)*4/AMIGO	TX80GH3006	25	82	151	192	17	0	100
TAM105*4/AMIGO	TX80GH2679	24	82	148	188	8	0	100
CO73F18298-6/MCNAIR 4823	NA80137	16	86	151	191	11	0	100
TAM105*4/AMIGO	TXGH2875	7	81	147	189	9	0	100
SDY SIB/TRIUMPH//CTK	TX71A562-6-28	6	84	151	191	15	0	100
HARD WINTER WHEAT HYBRID	RH790610	33	86	148	189	12	1	100
SUT*5/AG//SDY/3/CTK	NK77W4093	9	87	151	192	11	0	100
PAYNE//TAMW-101/AMIGO	OK80268	30	83	152	191	14	0	100
PAYNE/AMIGO	OK80019	29	87	152	192	24	1	100
(WRR*5/AGENT)*2/KAVKAZ	NE78668	13	97	151	195	12	0	100
EY SDY/NCM	OK754615E	26	83	147	189	12	1	97
TAM105 RESELECTION	TX69A569-1-69	21	83	149	190	10	0	100
ARKAN	KS79H69	8	85	148	190	10	1	100
BULK SELECTION	NA80310	17	81	151	190	18	0	100
SDY SIB/TCS//CTK(73A2694)/3/AMIGO	TX80A6025	23	83	151	191	28	2	100
SUT*5/AG//SDY	NK77W4505	10	80	148	191	10	0	87
KAVKAZ/CENTURK	NK77W4593	11	95	152	194	14	5	96
AGATE SIB(NE69441)/TX65A1503-1	NE78696	15	84	152	191	8	0	100
CAPROCK/B86//SC3212	W7442B	19	83	150	192	7	0	100
STURDY/B48//STURDY	W7452B	20	82	149	191	8	0	100
AURORA/2*TAMW-101	OK79256	28	82	150	192	15	0	88
SDY SIB/KAW(TX62A2522-1)//CTK	TX78V3630	4	77	148	189	13	50	100
AURORA/2*TAMW-101	OK79257	27	80	150	192	16	0	99
SHORT WHEAT/SUT(TX69A509-2)//FOX	TX78V2408	5	84	150	190	17	0	85
LOVRIN 13/2*CTK78	NE80413	14	95	153	193	22	2	100
TAMW-103//SH WHEAT/SUT (TX69A509-1)	TX80A5609	22	84	149	190	23	0	100
BULK SELECTION	NA80300	18	89	151	190	9	0	100
CTK//KS6623/TX62A2522-8-2	IL76-3845	34	88	151	191	11	3	100
WRR*5/AGENT//NE68457/3/CTK78	NE77682	12	94	152	191	31	5	100
SAGE	CI17277	3	97	152	191	30	2	100
KAVKAZ/TX69A330-1	IL77-4259	35	91	151	192	12	0	95
CO723117/CO725856	CO796326	31	94	149	191	37	1	100
CO723117/CO725856	CO796386	32	95	148	190	26	0	100
SCOUT66	CI13996	2	100	151	192	40	0	100
KHARKOF	CI1442	1	108	158	194	43	3	100

Table 7. (concluded)

		: STRIPE		:LEAF RUST:STEM RUST: SEPTORIA:SEPTORIA		: MILDEW		: FREEZE		: DROUGHT		: VOLUME		: YIELD	
C.I. OR	:ENTRY:	RUST	:SEV.:RESP:	:SEV.:RESP:	: TRITICI	:NODORUM	:SEV.:RESP:	DAMAGE	: DAMAGE	: WEIGHT	:	:	:	:	:
SEL. NO.	: NO.	:SEV.:RESP:	%	: 1-9:1-9	: 0-9	%	%	%	:1-9	1-4	: 0-9	: KG/HA	: KG/HA	:	:
Number of trials			5	5	3	2	1	1	1	1	1	29	27		
TX80GH3006	25	2	43	8	2	6	28	3	0	.	2	1	73.6	4372	
TX80GH2679	24	5	61	8	2	7	38	7	0	.	3	2	76	4164	
NA80137	16	1	14	8	2	7	38	5	1	8	2	0	75.9	4110	
TXGH2875	7	5	53	8	3	7	41	7	0	.	3	3	75.2	4064	
TX71A562-6-28	6	2	18	7	3	7	30	4	8	8	3	0	73.8	4005	
RH790610	33	3	45	8	4	8	55	15	23	8	3	0	76.2	4005	
NK77W4093	9	2	7	8	2	6	33	3	45	8	2	1	77.4	4002	
OK80268	30	3	1	2	2	2	31	5	0	.	2	2	75.9	3960	
OK80019	29	5	1	2	2	3	21	5	0	.	2	3	75.5	3959	
NE78668	13	5	2	2	2	3	30	1	0	.	2	0	76	3943	
OK754615E	26	3	40	8	6	7	48	10	70	8	4	0	76.9	3924	
TX69A569-1-69	21	4	39	8	5	8	37	2	40	8	3	0	75.3	3904	
KS79H69	8	5	2	4	1	5	43	23	60	8	3	0	76	3897	
NA80310	17	2	21	8	1	6	38	4	25	8	2	0	74	3845	
TX80A6025	23	4	5	6	3	4	42	12	28	8	2	4	75.6	3830	
NK77W4505	10	2	1	2	2	3	34	2	85	8	3	2	76.5	3822	
NK77W4593	11	2	3	5	2	2	35	4	11	8	3	0	77.2	3822	
NE78696	15	3	11	7	1	5	33	3	15	8	2	0	76.4	3814	
W7442B	19	4	4	8	7	4	48	24	60	8	3	1	76.9	3812	
W7452B	20	4	10	7	5	4	48	13	16	8	3	0	76.2	3782	
OK79256	28	2	16	6	4	5	38	5	23	8	4	0	76.2	3780	
TX78V3630	4	3	12	8	2	8	38	1	20	8	3	0	76	3770	
OK79257	27	1	19	4	5	3	38	9	50	8	4	0	75.3	3726	
TX78V2408	5	2	13	5	4	4	28	1	70	8	3	0	74.4	3722	
NE80413	14	3	1	2	1	6	38	7	1	8	2	0	76.2	3710	
TX80A5609	22	4	50	8	4	8	58	21	60	8	3	2	73.2	3684	
NA80300	18	3	46	8	2	7	43	8	1	7	2	0	75.3	3665	
IL76-3845	34	3	53	8	6	5	38	5	0	.	3	0	75.2	3635	
NE77682	12	4	12	7	2	7	33	2	35	8	2	0	76.5	3628	
CI17277	3	4	7	5	2	5	38	14	35	8	3	0	76.9	3576	
IL77-4259	35	4	5	3	2	3	38	13	0	.	3	0	77.5	3542	
CO796326	31	4	58	8	4	8	45	8	18	7	2	0	77.6	3508	
CO796386	32	4	69	8	5	9	60	13	8	8	3	0	78.3	3486	
CI13996	2	2	52	8	2	8	38	8	5	8	3	0	76.8	3258	
CI1442	1	4	40	8	5	5	31	1	6	8	2	0	74.8	2629	

Table 8.

Seedling reaction of the 1983 Southern Regional Hard Red Winter Performance Nursery to *Puccinia graminis* f. sp. *tritici*. (Data provided by D. V. McVey, USDA Cereal Rust Laboratory, St. Paul, MN.)

		Reaction to isolates							
		72-00-1370C	72-44-703C	71-21-584B	72-18-630B	72-00-53A	75-32-1622A	72-4-1A	74-21-1409A
		151			11-32-113			15B-2	
Cultivar or Sel. No.		QFBS	QSHS	RHRS	RSHS	RTQQ	RTQS	TNMH	TNMK
1. Kharkof		S,2-	S	S	S	S	S	S	S
2. Scout 66		S	S	S	S	;1-	S	;1	S
3. Sage		2	2	2-	2	;	2-	;	2
4. TX 78V3630		0;	2	S	S	2=	23	0;	0
5. TX 78V2408		2=	2	2-	S	2=	23	2,S	2,S
6. TX 71A562-6-28		0	2	2-	2	0	2-	0	-
7. TX GH2875		2=	2-	2-	1	1	1	1	2-
8. KS 79H69		0	0	2=	0;	;1	1	2=	-
9. NK 77W4093		0	2-	2-	2-	2-	2-	;	0;
10. NK 77W505		2-	2	2-	2-	;	2-	;	2=
11. NK 77W4593		0;	2=	0;	2=	0;	;1	0;	0;
12. NE 77682		0;	2	2	2	0	2	0	0;
13. NE 78668		2=	2=	2=	2=	1	1	2=	2=
14. NE 80413		0;	2=	0;	2=	0;	1	0;	0;
15. NE 78696		0	2-	2=	2	;	2=	0;	0;
16. NA 80137		0,S	S	2-	2,S	0;,S	2,S	0;	0,2
17. NA 80310		0	2-	2=	2=	2-	2-	0;	0;
18. NA 80300		0;	2-	;1	2-	2-	2-	0;	0;
19. W 7442B		S	S	S	S	S	S	S	S
20. W 7452B		2	2-	S	S	S	S	S	S
21. TX 69A569-1-69		2	S	S	S	S	S	S	S
22. TX 80A5609		2-	2-	2	S	2	S	S	S
23. TX 80A6025		0	2-	2,S	1	;,S	1,S	0;	0;
24. TX 80GH2679		2=	2=	2-	2-	2-	2=	2=	2-
25. TX 80GH3009		0	2-	2=	;1-C	0;	1	0	0;
26. OK 754615E		S	S	S	S	S	S	S	S
27. OK 79257		2=	2-	0;,2=	1	1,S	;1,S	1,S	S,1
28. OK 79256		1,S	2=,S	2=,S	1,S	S,1	S;,1	S,1-	S,1
29. OK 80019		2=	2=	2=	2=	1	1	2=	2=
30. OK 80268		2=	2=	2=	2=	1	1	2=	2=
31. CO 796326		1,S	S	2=,S	2=,S	;	S	;1-	S
32. CO 796386		S	S	S	S	S	S	S	S
33. RH 790610		;,2=	S,2	1	S	2	23	0;,S	S
34. IL 76-3845		2	2	2=	S	;1-N	S	;1-N	S
35. IL 77-4259		2=	2=	2=	2=	2=	1	2=	2=

Table 9.

Adult plant reaction of the 1983 Southern Regional Hard Red Winter Performance Nursery to Puccinia graminis f. sp. tritici inoculated nursery at St. Paul, MN. (Data provided by D. V. McVey, USDA Cereal Rust Laboratory, St. Paul, MN.)

	Cultivar or Sel. No.	Stem Rust
1.	Kharkof	40S
2.	Scout 66	TMS-S
3.	Sage	TR
4.	TX 78V3630	TR
5.	TX 78V2408	TR
6.	TX 71A562-6-28	0
7.	TX GH2875	0
8.	KS 79H69	0
9.	NK 77W4093	0
10.	NK 77W505	0
11.	NK 77W4593	0
12.	NE 77682	0
13.	NE 78668	0
14.	NE 80413	0
15.	NE 78696	0
16.	NA 80137	TMR
17.	NA 80310	0
18.	NA 80300	0
19.	W 7442B	20S
20.	W 7452B	TR
21.	TX 96A569-1-69	40S
22.	TX 80A5609	10S
23.	TX 80A6025	TMR
24.	TX 80GH2697	0
25.	TX 80GH3009	0
26.	OK 754615E	20MS-S
27.	OK 79257	60MS-S
28.	OK 79256	40MS-S
29.	OK 80019	0
30.	OK 80268	0
31.	CO 796326	40S
32.	CO 796386	40S
33.	RH 790610	60MS-S
34.	IL 76-3845	40MS-S
35.	IL 77-4259	20MS-S

Table 10.

Southern Regional Performance Nursery
Soil-borne Wheat Mosaic Field Infection Data
Urbana, Illinois¹

Entry No.	Disease Severity	
	Rep I	Rep II
1	VS	VS
2	VS-DW	VS-DW
3	VS	VS-DW
4	VS-DW	VS-DW
5	VS-DW	VS-DW
6	VR	VR
7	VS-DW	VS-DW
8	S	S
9	VS	VS-DW
10	VS-DW	VS-DW
11	VR	VR
12	MS	S
13	VS	S
14	MR	R
15	VS	VS
16	MS	S
17	MS	MS
18	R	R
19	MR	MR
20	MR	MS
21	VS-DW	VS-DW
22	VS-DW	VS-DW
23	VS	S
24	VS	VS
25	VS	VS
26	VS-DW	VS-DW
27	R	MR
28	R	R
29	VS-DW	VS-DW
30	VS-DW	VS-DW
31	VS-DW	VS-DW
32	VS-DW	VS
33	S	MS
34	MS	MS
35	R	MR

¹The nursery was planted in soil-borne mosaic nursery at Urbana, IL on October 5, 1982. Optimal conditions for infection after seeding resulted in uniform infection with about 100% disease incidence in susceptible entries in the spring of 1983. Prolonged low temperature and wet conditions early in the season accentuated disease severity. First symptoms were observed on 3-3-83 with resumption in growth. Final notes on disease severity were taken on 4-21-83. Disease severity rating scale is the same as that in previous years ranging from VS, most susceptible to VR, most resistant; ROS=rosetting; DW=severe dwarfing; WK=winter killed.

1983
NORTHERN REGIONAL PERFORMANCE NURSERY

Entry no.	Variety	C.I. or Sel. No.	Source
1	Kharkof	1442	Check
2	Warrior	13190	"
3	Roughrider	17439	"
4	Wrr*5/Agent//Ctk 78	NE77465	Nebraska
5	Sentinel/Centurk	NE78414	"
6	Agate sib (NE69441)/TX65A1503-1	NE78696	"
7	Wrr/III-54-12//Sdy/3/Wnk/Ark	NK78W296	N-K
8	NB68639//Wrr/III-54-12/3/Wnk/ CI14059	NK78W283	"
9*	Agate sib (NE69441)/TX65A1503-1	NE78702	Nebraska
10*	Bezostaya 1/2*Ctk 78	NE76706	"
11**	Wrr*5/Agent//NE68457/3/Ctk 78	NE77682	"
12	Centurk*2/Hand	SD74221	So. Dak.
13	"	SD74209	"
14	Centurk*5/Hand	SD76705	"
15	Agent*4Sut*2//Hand	SD75284	"
16	CI15322//Agent/4*Sut/3/Ctk	SD76598	"
17	Centurk*5/Hand	SD76694	"
18*	Sage/SD75375	SD79613	"
19*	SD75375/OK7112481	SD791112	"
20*	CO695625/Ctk	CO745775-4	"
21*	Sage/Hand//Bennett	SD79560	"
22*	Sage*2/Hand	SD791041	"
23*	Sage/Hand//Bennett	SD791058	"
24*	YTO-117/Trader	ND7687	No. Dak.
25*	Pau 45/Cheyenne	WT166	Lethbridge
26	Froid/Wnk//MT6	MT7811	Montana
27*	Trader/Froid//Wanser/Winoka	MT7840	"
28*	NE70137/TX65A1503	MT7877	"
29*	Redwin Selection	MT8003	"

* New entry in 1983.

**Entered from SRPN.

Test Sites

Clovis, New Mexico	Archer, Wyoming
Mead, Nebraska	Sheridan, Wyoming
North Platte, Nebraska	St. Paul, Minnesota
Sidney, Nebraska	Waseca, Minnesota
Alliance, Nebraska	Moccasin, Montana
Brookings, South Dakota	Sidney, Montana
Presho, South Dakota	Conrad, Montana
Highmore, South Dakota	Lind, Washington
Casselton, North Dakota	Lethbridge, Alberta
Hettinger, North Dakota	Tetonia, Idaho
Williston, North Dakota	Aberdeen, Idaho (single plots)

Test Site Information - NRPN

Clovis, NM -- See information for SRPN.

Nebraska Stations -- See information for SRPN.

South Dakota Stations -- See information for SRPN.

Casselton, ND -- Moisture adequate at seeding. Mild winter permitted full survival of nursery entries. Timely precipitation through spring growing season. Stem rust became heavy on susceptible entries by the mid-dough stage of development. Tan spot also was severe on susceptible varieties.

Hettinger, ND -- Nursery seeded second week of September on summer fallowed land. Winter mild and winterkill was minimal. Well above-average precipitation during growing season.

Williston, ND -- No information.

St. Paul, MN -- Nursery occupied a poor area of ground and was too variable to harvest for yield.

Waseca, MN -- No information.

Wyoming Stations -- No information.

Sidney, MT -- Good fall moisture, excellent stand establishment. Spring stands generally satisfactory. Fourteen inch snowfall on May 12 provided needed moisture in spring. Very light hail on June 21; damage minimal. Below-normal precipitation with much above-normal temperatures in July and August. April-August precipitation of 5.17 inches was 4.31 inches below normal for the period. Excellent yields, however. Pseudomonas syringae noted in nursery in mid-July; MT7877 observed to be quite susceptible.

Moccasin, MT -- A mild winter resulted in no winterkill in nursery at Moccasin. No lodging or diseases.

Conrad, MT -- Nursery lost to hail.

Aberdeen and Tetonia, ID -- No information. No data from Tetonia.

Lind, WA -- No information.

Lethbridge, Alberta -- No information. Data not received.

Table 11. Yield and agronomic data for 29 entries in the 1983 Northern Regional Performance Nursery.

CLOVIS (IRR.) NEW MEXICO THREE REPLICATIONS						
C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HA	: PLANT HEIGHT CM	: LODGING %	: DAYS TO HEADING FROM 1/1
MT7877	28	2937	74.1	69	0	134
NE78696	6	2752	76	74	5	129
MT8003	29	2420	73.9	88	7	134
NK78W296	7	2069	75.8	81	13	134
WT166	25	1952	73.7	83	7	130
NE78414	5	1932	74.3	74	13	132
MT7811	26	1893	75.6	88	13	138
NK78W283	8	1815	74.5	84	13	134
NE78702	9	1522	75.3	77	18	131
CO745775-4	20	1522	74.1	90	13	136
MT7840	27	1464	74.4	78	23	132
SD791112	19	1444	77.6	84	27	132
SD75284	15	1405	75.3	84	27	130
NE76706	10	1347	77	84	23	131
CI13190	2	1308	76.7	88	33	133
SD791058	23	1308	77.7	86	33	131
SD76598	16	1288	75.3	86	17	133
SD79560	21	1229	56.5	81	40	130
SD79613	18	1210	77.3	81	23	133
CI17439	3	1190	75.4	81	47	133
SD76705	14	1132	74.1	75	33	131
SD74209	13	1112	75.7	85	30	131
NE77465	4	1093	76.9	80	40	132
SD74221	12	1073	75.7	80	33	132
NE77682	11	1025	76.2	81	43	130
SD76694	17	956	74.7	75	33	132
CI1442	1	937	76.5	94	40	136
ND7687	24	937	76.5	91	37	139
SD791041	22	722	76.4	84	80	131
MEAN		1482				
LSD(.05)		553				
C.V.		22.9				

CLOVIS
(DRYL.)
NEW MEXICO
THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : : KG/HA :	: VOLUME : : WEIGHT : : KG/HA :	: PLANT : : HEIGHT : : CM :	: DAYS TO : : HEADING : : FROM 1/1 :
NE78414	5	1659	72.4	66	132
MT8003	29	1642	72.9	77	133
MT7877	28	1610	72.4	55	134
NE78696	6	1577	73.1	67	128
NK78W283	8	1350	71.9	68	133
NE76706	10	1155	74.4	69	129
CO745775-4	20	1122	72.6	79	134
CI13190	2	1113	72.8	79	132
SD791112	19	1090	75	75	130
SD76598	16	1073	72.9	70	132
MT7840	27	1057	71.9	66	132
NE78702	9	1025	72.4	67	129
SD75284	15	1025	72.8	70	129
NK78W296	7	992	72	64	134
SD791058	23	992	74.7	75	130
MT7811	26	927	72.8	68	135
WT166	25	846	70.4	66	131
SD74209	13	813	72.5	71	130
SD74221	12	748	72.6	75	131
SD76705	14	716	71.1	69	130
CI1442	1	699	72	80	135
NE77465	4	699	72.4	71	130
SD791041	22	667	72.6	71	130
SD76694	17	618	71.3	69	130
CI17439	3	602	69.8	78	132
ND7687	24	602	70.2	79	135
SD79560	21	586	74.7	71	128
SD79613	18	569	72.1	73	130
NE77682	11	472	72.4	69	129

MEAN 967
LSD(.05) 324
C.V. 20.5

MEAD

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	: : NO.	: VOLUME : WEIGHT : KG/HA	: PLANT : HEIGHT : CM	: DAYS TO : HEADING : FROM 1/1	: LEAF RUST : SEV.: RESP : %	: STEM RUST : SEV.: RESP : %	: 1-9 : %	: 1-9 : %
CI1442	1	.	112	133	30	8	90	8
CI13190	2	73.5	104	132	25	8	80	8
CI17439	3	73.5	109	132	50	8	10	8
NE77465	4	76.8	107	131	15	8	20	8
NE78414	5	74.8	109	131	25	7	1	7
NE78696	6	76.8	99	131	1	2	1	2
NK78W296	7	.	103	132	5	7	1	7
NK78W283	8	75.5	102	131	1	2	90	2
NE78702	9	74.2	107	131	10	7	1	7
NE76706	10	76.1	111	132	10	8	60	8
NE77682	11	76.8	105	133	25	7	30	7
SD74221	12	78	107	132	10	7	1	7
SD74209	13	77.4	98	132	25	8	50	8
SD76705	14	77.4	94	130	1	2	1	2
SD75284	15	76.1	98	129	40	8	60	8
SD76598	16	.	102	130	10	8	1	8
SD76694	17	76.8	103	129	10	7	1	7
SD79613	18	.	102	131	65	8	40	8
SD791112	19	75.5	101	130	1	2	30	2
CO745775-4	20	77.4	107	130	40	8	30	8
SD79560	21	73.5	102	132	1	2	50	2
SD791041	22	78	104	131	1	2	65	2
SD791058	23	77.4	107	130	1	2	1	2
ND7687	24	76.1	106	131	65	8	60	8
WT166	25	73.5	104	133	80	8	40	8
MT7811	26	69.7	114	133	50	8	90	8
MT7840	27	67.7	112	133	80	8	90	8
MT7877	28	69	97	132	40	7	1	7
MT8003	29	69.7	101	132	40	8	90	8

NORTH

PLATTE

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HA	: PLANT HEIGHT CM
NE78702	9	4491	77.3	98
NK78W296	7	4460	77.4	98
SD79613	18	4134	77.4	117
NE78696	6	4097	77.4	107
SD79560	21	3919	76.4	105
MT7840	27	3707	74.8	118
NK78W283	8	3631	77.4	107
SD76598	16	3600	77.7	118
MT7811	26	3536	75.1	115
NE77682	11	3529	80	118
SD76694	17	3500	76.8	107
NE77465	4	3424	76.8	114
MT8003	29	3296	76.1	113
NE76706	10	3267	77.4	115
NE78414	5	3129	76.8	107
ND7687	24	3116	76.1	116
SD74221	12	3063	78.7	114
SD76705	14	3042	77.4	99
CO745775-4	20	3015	74.8	115
SD791041	22	2995	76.8	113
SD791112	19	2906	76.1	111
SD75284	15	2896	76.4	110
SD791058	23	2887	77.4	110
CI17439	3	2824	77.4	119
WT166	25	2730	77.4	115
CI13190	2	2678	74.2	119
MT7877	28	2516	76.1	94
SD74209	13	2276	77.4	108
CI1442	1	1982	76.1	124

MEAN	3264
LSD(.05)	1018
C.V.	19.1

ALLIANCE

NEBRASKA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : KG/HA	: VOLUME : WEIGHT : KG/HA	: PLANT : HEIGHT : CM	: DAYS TO : HEADING : FROM 1/1:	: WINTER : SURVIVAL : 0-9
SD79560	21	4765	78.3	106	142	2
SD79613	18	4663	78.7	100	142	2
SD76598	16	4422	79.6	110	142	2
NE77682	11	3947	78.7	97	143	2
WT166	25	3856	77.4	108	143	2
SD74209	13	3811	79.3	100	143	2
SD791112	19	3734	77.4	101	142	2
SD76705	14	3652	78	92	141	2
SD76694	17	3567	78	91	142	2
NE78414	5	3560	78.7	91	143	2
CO745775-4	20	3520	79.3	102	143	2
NE78696	6	3512	77.4	84	138	2
MT7840	27	3339	77.4	101	141	3
NE78702	9	3304	78.7	74	137	2
NK78W283	8	3292	73.4	85	141	2
NE76706	10	3240	80	96	139	3
MT7811	26	3236	75.5	94	142	3
SD74221	12	3194	79.3	91	142	2
CI13190	2	3106	78	100	142	2
CI1442	1	3028	78.7	108	142	2
SD791041	22	3028	79.6	97	140	2
NK78W296	7	3027	77.4	77	142	2
NE77465	4	3005	78	94	142	2
ND7687	24	2903	78.7	96	139	2
MT8003	29	2856	76.1	101	142	2
SD791058	23	2847	80	87	140	2
MT7877	28	2730	77.4	69	143	2
CI17439	3	2686	78.7	95	143	2
SD75284	15	2678	78.7	91	138	2

MEAN 3397
LSD(.05) 1099
C.V. 19.8

HIGHMORE

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HA	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1
SD76705	14	4132	80.3	89	163
SD79613	18	4013	78.4	92	164
NE77682	11	3749	77.5	91	162
CO745775-4	20	3729	78.6	93	165
NE76706	10	3722	77.9	88	160
NE78702	9	3646	79.7	73	160
SD791112	19	3627	80.6	94	163
SD76598	16	3572	79.7	94	164
ND7687	24	3549	79.5	105	166
NE78696	6	3540	78.8	73	161
SD74209	13	3504	79	93	163
SD76694	17	3364	81	80	163
NE77465	4	3332	76.4	88	162
CI17439	3	3246	78.6	101	165
CI13190	2	3099	78.6	104	163
SD791041	22	3090	79	85	161
SD791058	23	3069	78.8	90	160
MT7840	27	3047	75.5	85	165
WT166	25	3033	76.6	89	165
NE78414	5	2999	77.5	75	161
MT8003	29	2990	77.7	94	165
SD75284	15	2949	78.1	80	160
CI1442	1	2907	78.3	106	166
SD74221	12	2880	78.8	87	163
NK78W296	7	2751	77	75	164
MT7877	28	2746	78.6	72	165
NK78W283	8	2625	75.5	77	163
SD79560	21	2569	80.4	85	161
MEAN		3267			
LSD(.05)		822			
C.V.		15.4			

PRESHO

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD : KG/HA	: VOLUME : WEIGHT : KG/HA	: PLANT : HEIGHT : CM	: DAYS TO : HEADING : FROM 1/1
MT7840	27	4379	76.3	108	165
ND7687	24	4338	80.6	121	167
NE78696	6	4293	78.4	81	162
NE77682	11	4227	79.2	106	164
SD76705	14	4172	79.4	98	164
SD791112	19	4171	76.6	110	164
SD76598	16	4062	79.9	100	165
NE78702	9	4047	78.1	85	162
NE78414	5	4011	78.8	94	165
MT8003	29	3928	79.5	114	167
CI13190	2	3927	80.4	102	165
NE76706	10	3892	77.4	95	161
SD74209	13	3855	78.3	100	165
NK78W296	7	3770	77.7	84	165
SD79613	18	3698	78.4	105	165
SD76694	17	3695	78.3	98	164
MT7877	28	3678	80.8	70	167
CO745775-4	20	3660	78.6	106	166
SD791058	23	3648	80.3	97	163
NK78W283	8	3615	78.4	100	165
SD74221	12	3612	81	101	165
SD75284	15	3601	77.7	104	163
CI1442	1	3595	78.6	109	167
NE77465	4	3590	77	105	164
SD791041	22	3517	80.6	95	161
SD79560	21	3408	81.9	102	160
WT166	25	3369	80.6	108	166
CI17439	3	3299	78.6	111	167

MEAN	3823
LSD(.05)	N.S.
C.V.	11.4

BROOKINGS

S. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HA	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1
SD76598	16	4090	75.9	93	171
NE78696	6	3559	72.1	73	168
SD791041	22	3439	76.3	80	168
ND7687	24	3418	75.5	102	173
SD79613	18	3367	73.2	92	172
SD76705	14	3329	75.3	82	171
SD791112	19	3250	72.4	86	168
NE77465	4	3242	74.8	88	169
SD76694	17	3218	75	86	171
CO745775-4	20	3166	75.3	92	172
NE76706	10	2981	71.5	85	168
SD79560	21	2929	74.6	85	167
NE77682	11	2920	72.1	85	169
NE78702	9	2829	71.3	72	165
SD74209	13	2690	74.4	85	171
SD791058	23	2686	70.3	86	168
SD75284	15	2624	65.5	88	168
NE78414	5	2594	72.4	80	171
CI17439	3	2486	72.4	95	173
NK78W296	7	2459	75.3	74	172
NK78W283	8	2413	68.3	82	173
CI13190	2	2253	64.8	98	172
SD74221	12	2133	71	77	173
MT7840	27	2133	66.6	85	168
CI1442	1	2002	67.2	106	173
WT166	25	1611	59.7	92	172
MT8003	29	1239	61.3	92	173
MT7877	28	1058	66.2	65	172
MEAN		2705			
LSD(.05)		780			
C.V.		17.7			

CASSELTON

N. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : KG/HA :	: VOLUME : WEIGHT : KG/HA :	: PLANT : HEIGHT : CM :	: DAYS TO : HEADING : FROM 1/1 :	: WINTER : SURVIVAL : % :
CO745775-4	20	3738	77.1	91	171	100
SD76598	16	3688	76.9	93	169	100
SD791112	19	3568	76.6	92	166	100
WT166	25	3537	75.4	95	170	100
NE76706	10	3366	76.6	79	165	98
CI13190	2	3353	74.8	97	168	100
SD75284	15	3343	76.2	85	164	100
NE77682	11	3298	77.2	84	165	98
NE77465	4	3280	76.5	84	167	98
SD79613	18	3178	76.8	90	169	100
NE78414	5	3171	76.4	74	168	100
ND7687	24	3093	76.7	103	171	100
SD74209	13	3081	76.6	86	166	100
SD76705	14	3081	76.1	78	167	98
SD76694	17	3044	75.1	80	168	100
SD74221	12	2972	76.2	80	168	100
SD791058	23	2915	76.1	91	166	100
CI17439	3	2878	76.3	99	170	100
SD791041	22	2833	76.6	85	165	97
NK78W296	7	2832	74	74	169	98
CI1442	1	2809	75.2	104	171	100
MT7840	27	2791	74.8	90	171	100
SD79560	21	2765	76.7	80	165	100
NE78702	9	2742	74.7	73	165	100
MT8003	29	2707	75.5	94	171	100
NK78W283	8	2675	73.4	78	171	100
NE78696	6	2537	75.3	66	166	100
MT7877	28	2083	73.7	69	170	100
MEAN		3048				
LSD(.05)		607				
C.V.		12.2				

HETTINGER

N. DAKOTA

THREE REPLICATIONS

C.I. OR SEL. NO.	: :ENTRY: : NO. :	: YIELD : KG/HA	: VOLUME : WEIGHT : KG/HA	: DAYS TO : HEADING : : FROM 1/1:	: WINTER : SURVIVAL : %
SD76598	16	5113	74.7	167	100
SD74221	12	4962	75.8	167	98
NK78W296	7	4906	70.8	169	83
CO745775-4	20	4846	73.3	169	100
SD76705	14	4777	73.4	167	97
SD74209	13	4721	74.2	167	93
SD75284	15	4691	76.2	165	98
WT166	25	4651	74	172	98
NE77465	4	4598	73.2	167	83
NE78414	5	4585	74.8	167	90
SD76694	17	4559	73	167	90
MT7840	27	4518	72.5	167	100
SD79613	18	4484	73	166	97
ND7687	24	4363	74.2	172	98
CI13190	2	4361	73.1	168	83
NK78W283	8	4350	73.3	169	97
MT8003	29	4333	73.2	172	100
SD791058	23	4326	76.2	166	100
NE76706	10	4248	74.5	166	95
SD791112	19	4194	74.5	167	85
NE77682	11	4088	74.5	166	95
NE78702	9	4075	74.7	165	98
SD791041	22	3925	77	166	95
SD79560	21	3902	76.1	165	100
CI1442	1	3452	72.8	172	90
CI17439	3	3312	74.2	172	88
NE78696	6	2943	72.7	165	77
MT7877	28	2887	69.4	172	97
MEAN		4292			
LSD(.05)		827			
C.V.		11.8			

WILLISTON
N. DAKOTA
FOUR REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : : KG/HA :	: VOLUME : : WEIGHT : : KG/HA :	: PLANT : : HEIGHT : : CM :	: DAYS TO : HEADING : : FROM 1/1 :
NORSTAR	30	3126	80.2	91	167
WT166	25	3028	79.7	74	165
NE77465	4	2990	78.3	73	163
MT7877	28	2985	79.9	59	164
ND7687	24	2969	79	82	166
NE78414	5	2957	78.1	63	163
CO745775-4	20	2942	78.1	73	163
NK78W296	7	2906	78.7	65	165
CI1442	1	2895	79.3	83	165
MT8003	29	2885	80.5	75	166
SD791112	19	2844	80.3	71	163
CI17439	3	2833	79.4	75	164
SD76598	16	2825	79.5	75	164
NE76706	10	2771	78.2	70	162
SD76694	17	2744	77.4	66	163
CI13190	2	2714	79.3	75	162
NK78W283	8	2712	77.8	66	164
NE78696	6	2711	78.3	63	162
MT7811	26	2704	79.3	77	164
SD74209	13	2682	79.2	74	164
SD79613	18	2626	78.3	70	164
SD791058	23	2584	79.6	78	161
SD75284	15	2580	78.5	75	161
NE78702	9	2564	78.9	64	161
SD74221	12	2563	79.9	70	163
MT7840	27	2539	76.6	69	165
SD76705	14	2535	78.8	67	164
NE77682	11	2328	77.9	76	162
SD791041	22	2234	79.3	70	161
SD79560	21	2194	79.5	71	160

MEAN 2732
LSD(.05) 359
C.V. 9.3

WASECA
MINNESOTA
THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HA	: PLANT HEIGHT CM	: LODGING 0-9	: DAYS TO HEADING FROM 1/1:	: WINTER SURVIVAL %	: LEAF RUST SEV.: % : 1-9
NK78W296	7	5703	78.7	85	1	168	96	20 7
NE78696	6	5203	78.7	75	1	164	95	40 8
NE77465	4	5166	78.7	93	1	163	95	20 8
SD79613	18	5055	79.3	97	2	165	93	10 2
SD76598	16	5037	80	98	3	167	95	10 8
SD74209	13	4907	78.7	92	3	164	96	80 8
CO745775-4	20	4907	78.7	97	2	167	91	20 7
CI17439	3	4759	80	105	2	167	94	80 8
NE78414	5	4740	78.7	85	1	164	93	20 7
NE77682	11	4703	78.7	92	3	162	74	40 7
SD76705	14	4703	80	87	2	165	97	20 7
NE76706	10	4685	79.3	95	2	164	93	40 7
SD791112	19	4648	78.7	93	2	164	96	40 7
ND7687	24	4648	80	110	3	168	98	80 8
WT166	25	4648	78.7	95	1	168	98	60 8
NK78W283	8	4629	79.3	88	1	167	89	20 8
CI13190	2	4537	80	97	2	164	98	60 8
MT7811	26	4537	78.7	97	1	168	96	40 7
SD74221	12	4518	80	97	4	165	95	40 7
MT8003	29	4481	80	100	2	168	97	99 8
SD76694	17	4425	78.7	82	3	167	88	10 2
SD79560	21	4351	80.6	90	2	162	93	1 7
SD791041	22	4296	80	88	2	163	85	10 7
MT7840	27	4092	76.8	87	1	168	84	60 8
SD791058	23	4074	79.3	95	3	164	85	60 7
CI1442	1	3881	78.7	107	4	167	92	20 8
NE78702	9	3870	78.7	80	1	164	92	60 8
SD75284	15	3555	80	83	2	163	96	80 8
MT7877	28	2574	74.2	72	1	170	66	10 7

MEAN 4529
LSD(.05) 683
C.V. 9.2

ARCHER
WYOMING
THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : : KG/HA :	: VOLUME : : WEIGHT : : KG/HA :	: PLANT : : HEIGHT : : CM :
SD76598	16	3140	75.6	64
SD76694	17	3035	75.2	56
NE77682	11	2988	75.5	64
ND7687	24	2975	77.5	56
CI17439	3	2971	76.9	58
NK78W296	7	2939	76.9	46
CI13190	2	2893	74.9	61
NE78702	9	2866	76.9	56
SD74209	13	2843	76	61
SD791058	23	2780	76.8	66
CI1442	1	2766	76.6	66
MT8003	29	2763	77.1	53
NE76706	10	2762	76	61
NE77465	4	2717	74.9	58
SD79613	18	2696	75.3	58
MT7840	27	2674	74.9	61
CO745775-4	20	2670	74.4	61
NE78414	5	2571	76.6	58
WT166	25	2485	76	58
NE78696	6	2453	76.6	51
SD74221	12	2449	77	56
SD76705	14	2440	75.6	48
MT7877	28	2416	77.9	69
SD75284	15	2338	75.6	66
SD791112	19	2330	76.1	61
NK78W283	8	2288	76.9	48
SD791041	22	2250	76.9	58
SD79560	21	1986	76.9	58

MEAN	2660
LSD(.05)	N.S.
C.V.	18.8

SHERIDAN

WYOMING

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO.	: YIELD : KG/HA	: VOLUME : WEIGHT : KG/HA	: PLANT : HEIGHT : CM	: DAYS TO : HEADING : FROM 1/1
SD74221	12	2851	81.3	74	166
NE76706	10	2822	80.1	78	164
SD74209	13	2715	80.4	74	167
MT7840	27	2666	78.6	78	168
CI13190	2	2662	80.1	83	168
MT8003	29	2616	78.9	80	170
SD76598	16	2590	79.5	78	167
WT166	25	2578	79.8	75	169
NE77465	4	2572	79.8	70	166
SD791112	19	2571	81.9	77	167
NK78W296	7	2544	78.9	59	168
SD76705	14	2486	80.1	71	167
ND7687	24	2465	79.8	82	170
NE78702	9	2428	80.1	61	163
NE77682	11	2427	80.4	72	166
CO745775-4	20	2410	79.8	74	169
SD76694	17	2395	77.7	67	167
SD79613	18	2390	78.9	75	168
NE78414	5	2373	79.5	66	167
SD75284	15	2352	79.5	71	164
NE78696	6	2342	79.8	62	162
SD791058	23	2329	80.1	73	165
MT7877	28	2282	79.8	54	171
CI17439	3	2263	79.5	80	368
CI1442	1	2239	78.9	92	171
NK78W283	8	2125	77.7	69	170
SD79560	21	2058	79.5	72	161
SD791041	22	2037	79.8	65	165

MEAN	2450
LSD(.05)	441
C.V.	11.0

SIDNEY

MONTANA

FOUR REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : KG/HA :	: VOLUME : WEIGHT : KG/HA :	: PLANT : HEIGHT : CM :	: DAYS TO : HEADING : FROM 1/1:	: WINTER : SURVIVAL : % :
MT8003	29	1578	80.6	77	171	79
MT7840	27	1566	79.3	73	170	89
CI13190	2	1475	80.6	77	168	94
SD76598	16	1475	80.6	69	168	78
NE76706	10	1472	80.6	72	167	89
NE77465	4	1465	81.3	72	168	91
NE78414	5	1464	80	65	168	94
SD791112	19	1464	81.3	72	168	89
SD74209	13	1440	80.6	73	169	86
WT166	25	1439	80	75	169	93
ND7687	24	1435	80	91	171	84
SD75284	15	1415	80	66	167	78
NK78W296	7	1411	80	63	169	79
CI17439	3	1387	79.3	82	171	99
SD791041	22	1363	81.3	65	167	86
CO745775-4	20	1355	80	76	169	93
CI1442	1	1348	79.3	84	171	91
NE78702	9	1344	80.6	61	166	88
SD791058	23	1340	81.9	72	168	86
NE78696	6	1337	80	62	167	88
SD74221	12	1315	80	70	169	96
SD76705	14	1292	80.6	64	169	81
MT7877	28	1270	80	57	169	99
NE77682	11	1268	80.6	70	168	76
SD79560	21	1264	80.6	70	167	94
SD76694	17	1251	80	64	168	84
NK78W283	8	1250	79.3	66	169	91
MT7811	26	1237	80.6	76	169	75
SD79613	18	1224	80.6	71	168	80

MEAN 1377
LSD(.05) 187
C.V. 9.6

MOCCASIN

MONTANA

THREE REPLICATIONS

C.I. OR SEL. NO.	: : NO.	: YIELD : KG/HA	: VOLUME : WEIGHT : KG/HA	: PLANT : HEIGHT : CM	: DAYS TO : HEADING : FROM 1/1
NE76706	10	4039	82.6	82	167
MT7811	26	4006	80.9	86	169
SD76598	16	3927	82	91	168
NE78414	5	3923	80.9	79	167
NE78702	9	3876	82.2	79	165
NE77465	4	3800	82.7	88	166
NK78W296	7	3791	82	76	169
SD74209	13	3788	82.6	82	167
SD791058	23	3712	83.1	85	167
NE78696	6	3708	82.4	74	165
WT166	25	3699	80.6	94	168
CI13190	2	3670	81.8	90	168
CO745775-4	20	3654	81.9	89	169
NE77682	11	3643	81.9	80	167
CI17439	3	3627	81.5	95	170
SD791112	19	3607	83.5	90	167
CI1442	1	3566	81.5	100	171
SD76705	14	3544	82	76	167
SD75284	15	3531	81.1	81	165
SD76694	17	3526	82	73	167
SD79613	18	3508	81.7	77	168
NK78W283	8	3439	81.8	78	169
SD74221	12	3425	82.7	76	168
ND7687	24	3237	81.8	100	172
SD79560	21	2829	82.2	77	165
SD791041	22	2625	81.7	78	166
MEAN		3604			
LSD(.05)		546			
C.V.		9.3			

ABERDEEN

IDAHO

THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: : NO. :	: YIELD : KG/HA :	: VOLUME : WEIGHT : KG/HA :	: PLANT : HEIGHT : CM :	: LODGING : 0-9 :	: DAYS TO : HEADING : FROM 1/1
NE78696	6	6153	76.2	84	1	167
MT7811	26	6010	73.5	97	1	172
NE78414	5	5905	77.7	97	1	170
SD74209	13	5869	78.2	112	3	172
SD76694	17	5862	77.1	104	3	174
NE77682	11	5743	78.8	104	2	169
SD76598	16	5727	78	112	2	171
NE77465	4	5710	76.8	102	2	170
NE76706	10	5660	78.4	107	3	168
SD791112	19	5651	78.4	112	3	170
SD79613	18	5649	77.4	112	4	171
WT166	25	5546	77.4	102	2	170
MT7840	27	5530	76.2	104	1	171
NK78W283	8	5481	76.8	97	1	171
CO745775-4	20	5474	75.5	117	2	173
NK78W296	7	5458	74.9	89	1	173
SD75284	15	5416	78	104	3	167
NE78702	9	5380	77.7	89	1	168
SD76705	14	5216	77.4	102	2	174
SD74221	12	4934	79.1	107	3	170
SD791058	23	4909	78.3	112	3	168
MT8003	29	4880	77.1	119	2	174
MT7877	28	4851	75.2	79	1	176
SD791041	22	4595	78	91	2	168
ND7687	24	4313	76.5	130	8	175
SD79560	21	4275	78.7	94	2	166
CI13190	2	4219	72.9	127	6	173
CI17439	3	4122	77.1	119	4	174
CI1442	1	3880	73.9	132	7	173

MEAN 5256
LSD(.05) 964
C.V. 11.2

LIND
WASHINGTON
THREE REPLICATIONS

C.I. OR SEL. NO.	: ENTRY: NO.	: YIELD KG/HA	: VOLUME WEIGHT KG/HA	: PLANT HEIGHT CM	: DAYS TO HEADING FROM 1/1
MT8003	29	1742	78.9	69	148
NE77682	11	1733	75.9	65	146
NE77465	4	1652	77.7	69	144
NE76706	10	1610	78.4	67	145
NK78W283	8	1594	76.5	61	148
ND7687	24	1459	77.9	73	150
SD74209	13	1410	78.2	66	144
NK78W296	7	1363	78	60	148
CO745775-4	20	1325	77.4	74	148
MT7811	26	1280	78.6	70	146
NE78696	6	1249	78.2	61	144
SD76705	14	1219	76.9	63	144
MT7840	27	1202	77.1	62	147
SD74221	12	1186	74.3	60	145
MT7877	28	1186	78.4	57	148
SD76694	17	1161	77.3	60	145
CI1442	1	1145	78.3	80	148
SD79613	18	1137	78.6	64	146
SD791112	19	1137	78.7	67	145
SD76598	16	1110	77.5	69	145
NE78702	9	1065	77.7	64	144
CI13190	2	1040	75.6	64	144
NE78414	5	1036	77	61	145
SD791058	23	1036	77.1	71	144
CI17439	3	964	77.9	67	148
SD75284	15	924	77.1	69	143
SD79560	21	769	77.3	65	143
SD791041	22	619	72.2	58	145

MEAN	1234
LSD(.05)	497
C.V.	24.6

Table 12. Summary of mean yields (kg/ha) of 29 wheats grown in the 1983 Northern Regional Performance Nursery at 17 locations, with state means and ranks. (Clovis, NM irrigated and dryland nurseries not included in the regional average.)

VARIETY OR PEDIGREE	: : C.I. OR : SEL. NO.	: : ENTRY: : NO. :	: NORTH : PLATTE : NEBRASKA	: : ALLIANCE : NEBRASKA	: : NEBRASKA : STATE MEAN	: : WASECA : MINNESOTA
CI15322//AGENT/4*SUT/3/CTK	SD76598	16	3600 8	4422 3	4011 3	5037 5
SAGE/SD75375	SD79613	18	4134 3	4663 2	4399 1	5055 4
WRR*5/AGENT//NE68457/3/CTK78	NE77682	11	3529 9	3947 4	3738 7	4703 11
WRR*5/AGENT//CTK78	NE77465	4	3424 11	3005 22	3214 17	5166 3
BEZOSTAYA1/2*CTK78	NE76706	10	3267 13	3240 16	3253 16	4685 12
CO695625/CTK	CO745775-4	20	3015 18	3520 11	3268 15	4907 7
WRR/III-54-12//SDY/3/WNK/ARK	NK78W296	7	4460 2	3027 21	3744 6	5703 1
SD75375/OK7112481	SD791112	19	2906 20	3734 7	3320 13	4648 15
AGATE SIB(NE69441)/TX65A1503-1	NE78696	6	4097 4	3512 12	3805 5	5203 2
CENTURK*5/HAND	SD76705	14	3042 17	3652 8	3347 11	4703 11
CENTURK*2/HAND	SD74209	13	2276 27	3811 6	3044 20	4907 7
PAU45/CHEYENNE	WT166	25	2730 24	3856 5	3293 14	4648 15
CENTURK*5/HAND	SD76694	17	3500 10	3567 9	3533 8	4425 20
SENTINEL/CENTURK	NE78414	5	3129 14	3560 10	3345 12	4740 9
AGATE SIB(NE69441)/TX65A1503-1	NE78702	9	4491 1	3304 14	3897 4	3870 26
YTO-117/TRADER	ND7687	24	3116 15	2903 23	3010 22	4648 15
TRADER/FROID//WANSER/WINOKA	MT7840	27	3707 6	3339 13	3523 9	4092 23
NB68639//WRR/III-54-12/3/WNK/CI14059	NK78W283	8	3631 7	3292 15	3462 10	4629 16
CENTURK*2/HAND	SD74221	12	3063 16	3194 17	3128 18	4518 18
WARRIOR	CI13190	2	2678 25	3106 18	2892 23	4537 17
REDWIN SELECTION	MT8003	29	3296 12	2856 24	3076 19	4481 19
SAGE/HAND//BENNETT	SD791058	23	2887 22	2847 25	2867 24	4074 24
AGENT*4SUT*2//HAND	SD75284	15	2896 21	2678 28	2787 25	3555 27
SAGE/HAND//BENNETT	SD79560	21	3919 5	4765 1	4342 2	4351 21
ROUGH RIDER	CI17439	3	2824 23	2686 27	2755 26	4759 8
SAGE*2/HAND	SD791041	22	2995 19	3028 20	3012 21	4296 22
KHARKOF	CI1442	1	1982 28	3028 20	2505 28	3881 25
NE70137/TX65A1503	MT7877	28	2516 26	2730 26	2623 27	2574 28
	MEAN		3254	3403	3328	4529
	LSD(.05)		1024	1112	976	683
	C.V.		19.3	20.0	19.7	9.2

Table 12. (continued)

C.I. OR SEL. NO.	: :ENTRY: : NO.	: CLOVIS (DRYL.) : NEW MEXICO	: CLOVIS (IRR.) : NEW MEXICO	: : NEW MEXICO : STATE MEAN	: : ARCHER : WYOMING	: : SHERIDAN : WYOMING	: : WYOMING : STATE MEAN						
SD76598	16	1073	10	1288	16	1181	15	3140	1	2590	7	2865	1
SD79613	18	569	27	1210	18	890	23	2696	15	2390	18	2543	16
NE77682	11	472	28	1025	24	748	27	2988	3	2427	15	2708	8
NE77465	4	699	21	1093	22	896	21	2717	14	2572	9	2645	13
NE76706	10	1155	6	1347	13	1251	12	2762	13	2822	2	2792	2
CO745775-4	20	1122	7	1522	9	1322	8	2670	17	2410	16	2540	17
NK78W296	7	992	14	2069	4	1530	6	2939	6	2544	11	2742	5
SD791112	19	1090	9	1444	11	1267	10	2330	25	2571	10	2451	22
NE78696	6	1577	4	2752	2	2165	2	2453	20	2342	21	2397	23
SD76705	14	716	19	1132	20	924	18	2440	22	2486	12	2463	21
SD74209	13	813	17	1112	21	963	17	2843	9	2715	3	2779	3
WT166	25	846	16	1952	5	1399	7	2485	19	2578	8	2532	18
SD76694	17	618	23	956	25	787	25	3035	2	2395	17	2715	7
NE78414	5	1659	1	1932	6	1795	4	2571	18	2373	19	2472	20
NE78702	9	1025	12	1522	8	1273	9	2866	8	2428	14	2647	12
ND7687	24	602	24	937	27	769	26	2975	4	2465	13	2720	6
MT7840	27	1057	11	1464	10	1260	11	2674	16	2666	4	2670	10
NK78W283	8	1350	5	1815	7	1582	5	2288	26	2125	26	2207	26
SD74221	12	748	18	1073	23	911	19	2449	21	2851	1	2650	11
CI13190	2	1113	8	1308	14	1210	14	2893	7	2662	5	2777	4
MT8003	29	1642	2	2420	3	2031	3	2763	12	2616	6	2689	9
SD791058	23	992	15	1308	15	1150	16	2780	10	2329	22	2555	15
SD75284	15	1025	13	1405	12	1215	13	2338	24	2352	20	2345	25
SD79560	21	586	26	1229	17	907	20	1986	28	2058	27	2022	28
CI17439	3	602	25	1190	19	896	22	2971	5	2263	24	2617	14
SD791041	22	667	22	722	28	694	28	2250	27	2037	28	2143	27
CI1442	1	699	21	937	27	818	24	2766	11	2239	25	2502	19
MT7877	28	1610	3	2937	1	2273	1	2416	23	2282	23	2349	24
MEAN		967		1482		1218		2660		2450		2555	
LSD(.05)		324		553		466		N.S.		441		397	
C.V.		20.5		22.9		22.8		18.8		11.0		15.7	

Table 12. (continued)

C.I. OR SEL. NO.	: ENTRY: : NO.	: BROOKINGS : S. DAKOTA	: HIGHMORE : S. DAKOTA	: PRESHO : S. DAKOTA	: SOUTH : DAKOTA : STATE MEAN	: MOCCASIN : MONTANA	: SIDNEY : MONTANA	: MONTANA : STATE MEAN
SD76598	16	4090 1	3572 8	4062 7	3908 1	3927 2	1475 4	2701 2
SD79613	18	3367 5	4013 2	3698 15	3692 5	3508 20	1224 28	2366 21
NE77682	11	2920 13	3749 3	4227 4	3632 7	3643 13	1268 24	2455 17
NE77465	4	3242 8	3332 13	3590 24	3388 12	3800 5	1465 6	2632 4
NE76706	10	2981 11	3722 5	3892 12	3532 8	4039 1	1472 5	2756 1
CO745775-4	20	3166 10	3729 4	3660 18	3518 9	3654 12	1355 16	2505 14
NK78W296	7	2459 20	2751 25	3770 14	2993 21	3791 6	1411 13	2601 7
SD791112	19	3250 7	3627 7	4171 6	3683 6	3607 15	1464 8	2535 10
NE78696	6	3559 2	3540 10	4293 3	3797 3	3708 9	1337 20	2522 12
SD76705	14	3329 6	4132 1	4172 5	3878 2	3544 17	1292 22	2418 18
SD74209	13	2690 15	3504 11	3855 13	3350 13	3788 7	1440 9	2614 5
WT166	25	1611 26	3033 19	3369 27	2671 27	3699 10	1439 10	2569 9
SD76694	17	3218 9	3364 12	3695 16	3426 11	3526 19	1251 26	2388 19
NE78414	5	2594 18	2999 20	4011 9	3201 15	3923 3	1464 8	2693 3
NE78702	9	2829 14	3646 6	4047 8	3507 10	3876 4	1344 18	2610 6
ND7687	24	3418 4	3549 9	4338 2	3768 4	3237 23	1435 11	2336 23
MT7840	27	2133 24	3047 18	4379 1	3186 16	.	1566 2	1566 27
NK78W283	8	2413 21	2625 27	3615 20	2885 23	3439 21	1250 27	2344 22
SD74221	12	2133 24	2880 24	3612 21	2875 24	3425 22	1315 21	2370 20
CI13190	2	2253 22	3099 15	3927 11	3093 18	3670 11	1475 4	2573 8
MT8003	29	1239 27	2990 21	3928 10	2719 26	.	1578 1	1578 26
SD791058	23	2686 16	3069 17	3648 19	3135 17	3712 8	1340 19	2526 11
SD75284	15	2624 17	2949 22	3601 22	3058 19	3531 18	1415 12	2473 15
SD79560	21	2929 12	2569 28	3408 26	2969 22	2829 24	1264 25	2046 24
CI17439	3	2486 19	3246 14	3299 28	3010 20	3627 14	1387 14	2507 13
SD791041	22	3439 3	3090 16	3517 25	3348 14	2625 25	1363 15	1994 25
CI1442	1	2002 25	2907 23	3595 23	2835 25	3566 16	1348 17	2457 16
MT7877	28	1058 28	2746 26	3678 17	2494 28	.	1270 23	1270 28
MEAN		2719	3267	3823	3270	3588	1382	2372
LSD(.05)		745	822	N.S.	637	555	182	N.S.
C.V.		16.7	15.4	11.4	14.2	9.5	9.3	10.2

Table 12. (concluded)

C.I. OR SEL. NO.	: ENTRY: : NO.	: CASSELTON : N. DAKOTA	: WILLISTON : N. DAKOTA	: HETTINGER : N. DAKOTA	: NORTH : DAKOTA : STATE MEAN	: ABERDEEN : IDAHO	: LIND : WASHINGTON	: 15-site : REGIONAL : AVERAGE
SD76598	16	3688 2	2825 12	5113 1	3875 1	5727 6	1110 19	3625
SD79613	18	3178 10	2626 19	4484 13	3429 16	5649 10	1137 18	3455
NE77682	11	3298 8	2328 26	4088 21	3238 21	5743 5	1733 2	3373
NE77465	4	3280 9	2990 2	4598 9	3623 4	5710 7	1652 3	3370
NE76706	10	3366 5	2771 13	4248 19	3462 14	5660 8	1610 4	3369
CO745775-4	20	3738 1	2942 6	4846 4	3842 2	5474 14	1325 9	3361
NK78W296	7	2832 20	2906 7	4906 3	3548 6	5458 15	1363 8	3355
SD791112	19	3568 3	2844 10	4194 20	3535 8	5651 9	1137 18	3313
NE78696	6	2537 27	2711 17	2943 27	2730 27	6153 1	1249 10	3309
SD76705	14	3081 13	2535 25	4777 5	3465 13	5216 18	1219 11	3308
SD74209	13	3081 14	2682 18	4721 6	3495 10	5869 3	1410 7	3306
WT166	25	3537 4	3028 1	4651 8	3739 3	5546 11	.	3301
SD76694	17	3044 15	2744 14	4559 11	3449 15	5862 4	1161 15	3290
NE78414	5	3171 11	2957 5	4585 10	3571 5	5905 2	1036 23	3268
NE78702	9	2742 24	2564 22	4075 22	3127 22	5380 17	1065 20	3235
ND7687	24	3093 12	2969 4	4363 14	3475 12	4313 24	1459 6	3219
MT7840	27	2791 22	2539 24	4518 12	3283 18	5530 12	1202 12	3156
NK78W283	8	2675 26	2712 16	4350 16	3246 20	5481 13	1594 5	3075
SD74221	12	2972 16	2563 23	4962 2	3499 9	4934 19	1186 14	3070
CI13190	2	3353 6	2714 15	4361 15	3476 11	4219 26	1040 21	3066
MT8003	29	2707 25	2885 9	4333 17	3308 17	4880 21	1742 1	3021
SD791058	23	2915 17	2584 20	4326 18	3275 19	4909 20	1036 23	3010
SD75284	15	3343 7	2580 21	4691 7	3538 7	5416 16	924 25	2993
SD79560	21	2765 23	2194 28	3902 24	2954 26	4275 25	769 26	2932
CI17439	3	2878 18	2833 11	3312 26	3007 24	4122 27	964 24	2910
SD791041	22	2833 19	2234 27	3925 23	2997 25	4595 23	619 27	2856
CI1442	1	2809 21	2895 8	3452 25	3052 23	3880 28	1145 16	2766
MT7877	28	2083 28	2985 3	2887 28	2652 28	4851 22	1186 14	2519
MEAN		3048	2719	4292	3357	5229	1232	3173
LSD(.05)		607	365	827	565	962	496	272
C.V.		12.2	9.5	11.8	11.4	11.3	24.7	14.1

Table 13. Summary of mean yields (kg/ha) and ranks of 29 wheats grown in the 1983 Northern Regional Performance Nursery at 9 central and northern locations from which a C.V. of 16 or less and a significant F test for entries were obtained.

VARIETY OR PEDIGREE	: : C.I. OR : SEL. NO.	: : ENTRY: : NO.	: : WASECA : MINNESOTA	: : HIGHMORE : S. DAKOTA	: : MOCCASIN : MONTANA	: : SIDNEY : MONTANA
CI15322//AGENT/4*SUT/3/CTK	SD76598	16	5037 5	3572 8	3927 2	1475 4
CO695625/CTK	CO745775-4	20	4907 7	3729 4	3654 12	1355 16
WRR*5/AGENT//CTK78	NE77465	4	5166 3	3332 13	3800 5	1465 6
BE20STAYA1/2*CTK78	NE76706	10	4685 12	3722 5	4039 1	1472 5
CENTURK*2/HAND	SD74209	13	4907 7	3504 11	3788 7	1440 9
WRR/III-54-12//SDY/3/WNK/ARK	NK78W296	7	5703 1	2751 25	3791 6	1411 13
SD75375/OK7112481	SD791112	19	4648 15	3627 7	3607 15	1464 8
PAU45/CHEYENNE	WT166	25	4648 15	3033 19	3699 10	1439 10
SAGE/SD75375	SD79613	18	5055 4	4013 2	3508 20	1224 28
SENTINEL/CENTURK	NE78414	5	4740 9	2999 20	3923 3	1464 8
CENTURK*5/HAND	SD76705	14	4703 11	4132 1	3544 17	1292 22
WRR*5/AGENT//NE68457/3/CTK78	NE77682	11	4703 11	3749 3	3643 13	1268 24
CENTURK*5/HAND	SD76694	17	4425 20	3364 12	3526 19	1251 26
AGATE SIB(NE69441)/TX65A1503-1	NE78696	6	5203 2	3540 10	3708 9	1337 20
CENTURK*2/HAND	SD74221	12	4518 18	2880 24	3425 22	1315 21
TRADER/FROID//WANSER/WINOKA	MT7840	27	4092 23	3047 18	.	1566 2
WARRIOR	CI13190	2	4537 17	3099 15	3670 11	1475 4
YTO-117/TRADER	ND7687	24	4648 15	3549 9	3237 23	1435 11
AGATE SIB(NE69441)/TX65A1503-1	NE78702	9	3870 26	3646 6	3876 4	1344 18
AGENT*4SUT*2//HAND	SD75284	15	3555 27	2949 22	3531 18	1415 12
REDWIN SELECTION	MT8003	29	4481 19	2990 21	.	1578 1
NB68639//WRR/III-54-12/3/WNK/CI14059	NK78W283	8	4629 16	2625 27	3439 21	1250 27
SAGE/HAND//BENNETT	SD791058	23	4074 24	3069 17	3712 8	1340 19
ROUGH RIDER	CI17439	3	4759 8	3246 14	3627 14	1387 14
SAGE*2/HAND	SD791041	22	4296 22	3090 16	2625 25	1363 15
KHARKOF	CI1442	1	3881 25	2907 23	3566 16	1348 17
SAGE/HAND//BENNETT	SD79560	21	4351 21	2569 28	2829 24	1264 25
NE70137/TX65A1503	MT7877	28	2574 28	2746 26	.	1270 23
	MEAN		4529	3267	3588	1382
	LSD(.05)		683	822	555	182
	C.V.		9.2	15.4	9.5	9.3

Table 13. (concluded)

C.I. OR SEL. NO.	: ENTRY: : NO. :	SHERIDAN : WYOMING	: CASSELTON : N. DAKOTA	: WILLISTON : N. DAKOTA	: HETTINGER : N. DAKOTA	: ABERDEEN : IDAHO	: REGIONAL : AVERAGE
SD76598	16	2590 7	3688 2	2825 12	5113 1	5727 6	3773 1
CO745775-4	20	2410 16	3738 1	2942 6	4846 4	5474 14	3673 2
NE77465	4	2572 9	3280 9	2990 2	4598 9	5710 7	3657 3
NE76705	10	2822 2	3366 5	2771 13	4248 19	5660 8	3643 4
SD74209	13	2715 3	3081 14	2682 18	4721 6	5869 3	3634 5
NK78W296	7	2544 11	2832 20	2906 7	4906 3	5458 15	3589 6
SD791112	19	2571 10	3568 3	2844 10	4194 20	5651 9	3575 7
WT166	25	2578 8	3537 4	3028 1	4651 8	5546 11	3573 8
SD79613	18	2390 18	3178 10	2626 19	4484 13	5649 10	3570 9
NE78414	5	2373 19	3171 11	2957 5	4585 10	5905 2	3569 10
SD76705	14	2486 12	3081 13	2535 25	4777 5	5216 18	3530 11
NE77682	11	2427 15	3298 8	2328 26	4088 21	5743 5	3472 12
SD76694	17	2395 17	3044 15	2744 14	4559 11	5862 4	3463 13
NE78696	6	2342 21	2537 27	2711 17	2943 27	6153 1	3386 14
SD74221	12	2851 1	2972 16	2563 23	4962 2	4934 19	3380 15
MT7840	27	2666 4	2791 22	2539 24	4518 12	5530 12	3344 16
CI13190	2	2662 5	3353 6	2714 15	4361 15	4219 26	3343 17
ND7687	24	2465 13	3093 12	2969 4	4363 14	4313 24	3341 18
NE78702	9	2428 14	2742 24	2564 22	4075 22	5380 17	3325 19
SD75284	15	2352 20	3343 7	2580 21	4691 7	5416 16	3315 20
MT8003	29	2616 6	2707 25	2885 9	4333 17	4880 21	3309 21
NK78W283	8	2125 26	2675 26	2712 16	4350 16	5481 13	3254 22
SD791058	23	2329 22	2915 17	2584 20	4326 18	4909 20	3251 23
CI17439	3	2263 24	2878 18	2833 11	3312 26	4122 27	3158 24
SD791041	22	2037 28	2833 19	2234 27	3925 23	4595 23	3000 25
CI1442	1	2239 25	2809 21	2895 8	3452 25	3880 28	2997 26
SD79560	21	2058 27	2765 23	2194 28	3902 24	4275 25	2912 27
MT7877	28	2282 23	2083 28	2985 3	2887 28	4851 22	2710 28
MEAN		2450	3048	2719	4292	5229	3389
LSD(.05)		441	607	365	827	962	335
C.V.		11.0	12.2	9.5	11.8	11.3	11.7

Table 14. Summary of mean yields (kg/ha) for 14 wheats grown in the Northern Regional Performance Nursery at 15 sites in 1982 and 1983 with state means and ranks. (Clovis, NM irrigated and dryland nurseries and Brookings, SD not used in the regional average.)

VARIETY OR PEDIGREE	: : C.I. OR : SEL. NO.	: : ENTRY: : NO. :	: NORTH : PLATTE : NEBRASKA	: : ALLIANCE : NEBRASKA	: : NEBRASKA : STATE MEAN	: : WASECA : MINNESOTA	: : MOCCASIN : MONTANA
CI15322//AGENT/4*SUT/3/CTK	SD76598	16	2902 4	4076 1	3489 1	3526 3	3364 3
SENTINEL/CENTURK	NE78414	5	2676 5	3149 9	2913 7	3194 9	3264 4
WRR/III-54-12//SDY/3/WNK/ARK	NK78W296	7	3357 1	3118 10	3237 2	3588 1	3158 6
CENTURK*5/HAND	SD76694	17	2494 7	3527 3	3010 5	3129 12	3100 7
WRR*5/AGENT//CTK78	NE77465	4	3005 2	3099 11	3052 4	3534 2	3398 2
CENTURK*5/HAND	SD76705	14	2180 9	3464 4	2822 8	3266 8	3233 5
CENTURK*2/HAND	SD74209	13	1818 13	3546 2	2682 9	3331 5	3570 1
AGATE SIB(NE69441)/TX65A1503-1	NE78696	6	2949 3	3212 7	3081 3	3520 4	2898 14
NB68639//WRR/III-54-12/3/WNK/CI14059	NK78W283	8	2640 6	3232 5	2936 6	3286 6	3061 11
WARRIOR	CI13190	2	1991 10	3231 6	2611 11	3274 7	3077 9
CENTURK*2/HAND	SD74221	12	1915 11	3211 8	2563 12	3183 10	3081 8
AGENT*4SUT*2//HAND	SD75284	15	2304 8	2956 12	2630 10	2642 14	2962 13
ROUGH RIDER	CI17439	3	1859 12	2772 14	2315 13	3161 11	3068 10
KHARKOF	CI1442	1	1558 14	2856 13	2207 14	2679 13	2974 12
	MEAN		2404	3246	2825	3237	3259
	LSD(.05)		860	629	N.S.	N.S.	N.S.
	C.V.		20.9	16.4	18.3	12.3	9.4

Table 14. (continued)

C.I. OR SEL. NO:	: : ENTRY: : NO. :	: : BROOKINGS : S. DAKOTA	: : HIGHMORE : S. DAKOTA	: : PRESHO : S. DAKOTA	: : SOUTH : DAKOTA : STATE MEAN	: : ARCHER : WYOMING	: : SHERIDAN : WYOMING	: : WYOMING : STATE MEAN	: : ABERDEEN : IDAHO
SD76598	16	3756 2	3263 9	3466 6	3364 8	2924 4	3067 4	2996 4	5348 10
NE78414	5	1862 14	3604 4	3818 2	3711 2	2748 8	2727 10	2737 9	5953 2
NK78W296	7	3189 5	3552 5	3553 5	3553 4	3019 1	2977 5	2998 3	5483 9
SD76694	17	3026 7	3735 1	3311 8	3523 5	3008 2	2920 6	2964 5	5633 7
NE77465	4	3779 1	3304 8	3150 11	3227 10	2822 7	2852 7	2837 7	5643 6
SD76705	14	2291 11	3630 3	3685 3	3658 3	2576 13	2838 8	2707 11	5769 5
SD74209	13	2457 9	3118 12	3647 4	3382 7	2955 3	3109 2	3032 2	5829 4
NE78696	6	3358 3	3680 2	3180 10	3430 6	2595 11	2566 13	2580 12	6201 1
NK78W283	8	3190 4	2939 13	2843 14	2891 14	2577 12	2551 14	2564 13	5829 3
CI13190	2	3096 6	3526 6	3935 1	3731 1	2875 5	3221 1	3048 1	4622 12
SD74221	12	2357 10	3261 10	3413 7	3337 9	2645 10	3084 3	2865 6	4994 11
SD75284	15	2147 13	2852 14	3196 9	3024 13	2457 14	2634 12	2546 14	5503 8
CI17439	3	2916 8	3439 7	2880 13	3159 11	2867 6	2800 9	2833 8	4461 13
CI1442	1	2203 12	3191 11	2899 12	3045 12	2728 9	2701 11	2715 10	4170 14
MEAN		2867	3349	3356	3353	2771	2861	2816	5367
LSD(.05)		N.S.	N.S.	N.S.	N.S.	N.S.	342	N.S.	698
C.V.		30.3	18.0	15.6	16.8	18.7	10.4	15.0	11.1

Table 14. (concluded)

C.I. OR SEL. NO.	: ENTRY: : NO.	: CLOVIS (IRR.) : NEW MEXICO	: CLOVIS (DRYL.) : NEW MEXICO	: NEW MEXICO : STATE MEAN	: CASSELTON : N. DAKOTA	: WILLISTON : N. DAKOTA	: NORTH : DAKOTA : STATE MEAN	: LIND : WASHINGTON	: 12-site : REGIONAL : AVERAGE
SD76598	16	3221 7	1627 6	2424 8	4045 4	2511 8	3278 3	1084 11	3298
IE78414	5	3687 3	1850 4	2768 2	4046 3	3065 1	3555 1	1214 9	3288
IK78W296	7	3856 2	1621 8	2739 3	3791 6	2622 5	3207 5	1234 7	3288
SD76694	17	2950 10	1278 14	2114 11	4139 2	2532 6	3336 2	1065 12	3216
IE77465	4	3353 6	1533 9	2443 7	4308 1	1793 14	3050 7	1561 1	3206
SD76705	14	3611 4	1665 5	2638 4	3730 7	2523 7	3126 6	1179 10	3173
SD74209	13	2967 9	1481 10	2224 10	3322 11	1968 13	2645 14	1384 2	3133
IE78696	6	3958 1	1864 3	2911 1	3365 10	2178 10	2772 11	1217 8	3130
IK78W283	8	3588 5	1627 7	2608 5	3832 5	2631 4	3232 4	1383 3	3067
II13190	2	2871 11	1878 2	2374 9	3421 9	2003 12	2712 12	1318 4	3041
SD74221	12	2551 13	1412 12	1982 13	3053 14	2254 9	2653 13	1252 6	2946
SD75284	15	3096 8	1904 1	2500 6	3719 8	2107 11	2913 10	1051 13	2865
II17439	3	2820 12	1310 13	2065 12	3108 12	2722 3	2915 9	993 14	2844
II1442	1	2394 14	1421 11	1908 14	3058 13	2841 2	2949 8	1262 5	2743
MEAN		3209	1605	2407	3638	2461	3050	1225	3088
SD(.05)		N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	273
S.V.		18.7	19.6	19.9	19.5	21.2	20.3	20.9	16.3

Table 15. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for the 29 entries in the 1983 Northern Regional Performance Nursery.

1983 Entry no.	: C.I. or Sel. No.	: Mean yield: over 15 locations : (kg/ha)	: Regression Coefficient: (by·x)	: Correlation: Coefficient: (r)	: Coefficient of Determination: (r ²)
16	SD76598	3625	1.13	0.96	0.92
18	SD79613	3455	1.14	0.95	0.90
11	NE77682	3373	1.04	0.97	0.94
4	NE77465	3370	1.04	0.97	0.94
10	NE76706	3369	0.99	0.98	0.97
20	CO745775-4	3361	1.07	0.98	0.95
7	NK78W296	3355	1.14	0.93	0.87
19	SD791112	3313	1.06	0.97	0.95
6	NE78696	3309	1.10	0.90	0.81
14	SD76705	3308	1.07	0.97	0.93
13	SD74209	3306	1.11	0.96	0.92
25	WT166	3301	1.10	0.92	0.86
17	SD76694	3290	1.09	0.98	0.97
5	NE78414	3268	1.16	0.99	0.98
9	NE78702	3235	0.99	0.93	0.87
24	ND7687	3219	0.83	0.93	0.86
27	MT7840	3156	1.04	0.96	0.92
8	NK78W283	3075	1.04	0.97	0.94
12	SD74221	3070	1.01	0.96	0.93
2	CI13190	3066	0.88	0.94	0.89
29	MT8003	3021	0.89	0.91	0.82
23	SD791058	3010	0.94	0.98	0.97
15	SD75284	2993	1.00	0.95	0.90
21	SD79560	2932	0.94	0.86	0.74
3	CI17439	2910	0.81	0.92	0.85
22	SD791041	2856	0.93	0.94	0.89
1	CI1442	2766	0.73	0.91	0.82
28	MT7877	2519	0.73	0.81	0.66

Table 16. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for 14 entries in the 1982 and 1983 Northern Regional Performance Nursery.

Entry no.	Sel. No.	Mean yield: (kg/ha)	Regression Coefficient (by x)	Correlation Coefficient (r)	Determination Coefficient (r ²)
16	SD76598	3298	1.00	0.95	0.90
5	NE78414	3288	1.07	0.95	0.91
7	NK78W296	3288	1.07	0.95	0.89
17	SD76694	3216	1.08	0.97	0.95
4	NE77465	3206	1.05	0.93	0.86
14	SD76705	3173	1.08	0.97	0.94
13	SD74209	3133	1.05	0.94	0.88
6	NE78696	3130	1.21	0.96	0.92
8	NK78W283	3067	1.06	0.95	0.90
2	CI13190	3041	0.86	0.91	0.83
12	SD74221	2946	0.91	0.96	0.92
15	SD75284	2865	0.97	0.96	0.93
3	CI17439	2844	0.87	0.94	0.88
1	CI1442	2743	0.72	0.91	0.83

Table 17. Summary of agronomic and yield data for 29 wheats grown in the 1983 Northern Regional Performance Nursery.

VARIETY OR PEDIGREE	: C.I. OR : SEL. NO.	: ENTRY: : NO. :	: PLANT : HEIGHT : CM	: DAYS TO : HEADING : FROM 1/1:	: LODGING : 0-9	: WINTER : : SURVIVAL : %	: LEAF RUST:SEV.: : %	: STEM RUST:SEV.: : 1-9: %	: VOLUME : KG/HA	: YIELD : KG/HA		
Number of trials			17	16	2	4	2	2	1	1	18	15
CI15322//AGENT/4*SUT/3/CTK	SD76598	16	90	158	2	93	10	8	1	2	77	3625
SAGE/SD75375	SD79613	18	87	158	3	92	38	5	40	3	76.4	3455
WRR*5/AGENT//NE68457/3/CTK78	NE77682	11	86	156	3	86	33	7	30	7	76.5	3373
WRR*5/AGENT//CTK78	NE77465	4	86	156	1	92	18	8	20	3	76.2	3370
BEZOSTAYA1/2*CTK78	NE76706	10	85	155	2	94	25	8	60	8	76.6	3369
CO695625/CTK	CO745775-4	20	90	159	2	96	30	8	30	7	76.1	3361
WRR/III-54-12//SDY/3/WNK/ARK	NK78W296	7	75	159	1	89	13	7	1	2	75.8	3355
SD75375/OK7112481	SD791112	19	88	157	3	92	21	5	30	3	76.9	3313
AGATE SIB(NE69441)/TX65A1503-1	NE78696	6	74	155	1	90	21	5	1	2	76.2	3309
CENTURK*5/HAND	SD76705	14	80	157	2	93	11	5	1	2	76.5	3308
CENTURK*2/HAND	SD74209	13	86	157	3	94	53	8	50	7	76.8	3306
PAU45/CHEYENNE	WT166	25	90	159	1	97	70	8	40	7	75	3301
CENTURK*5/HAND	SD76694	17	80	157	3	90	10	5	1	2	76	3290
SENTINEL/CENTURK	NE78414	5	79	157	1	94	23	7	1	2	76	3268
AGATE SIB(NE69441)/TX65A1503-1	NE78702	9	75	155	1	94	35	8	1	8	76.2	3235
YTO-117/TRADER	ND7687	24	97	160	5	95	73	8	60	7	76.6	3219
TRADER/FROID//WANSE/WINOKA	MT7840	27	86	157	1	93	70	8	90	8	73.8	3156
NB68639//WRR/III-54-12/3/WNK/CI14059	NK78W283	8	80	159	1	94	11	5	90	8	75	3075
CENTURK*2/HAND	SD74221	12	84	157	4	97	25	7	1	2	76.9	3070
WARRIOR	CI13190	2	92	158	4	94	43	8	80	8	75.3	3066
REDWIN SELECTION	MT8003	29	91	159	2	94	70	8	90	8	74.9	3021
SAGE/HAND//BENNETT	SD791058	23	87	156	3	93	31	5	1	2	77.1	3010
AGENT*4SUT*2//HAND	SD75284	15	84	155	2	93	60	8	60	7	75.9	2993
SAGE/HAND//BENNETT	SD79560	21	83	155	2	97	1	5	50	3	76.2	2932
ROUGH RIDER	CI17439	3	92	172	3	95	65	8	10	2	76.1	2910
SAGE*2/HAND	SD791041	22	82	155	2	91	6	5	65	7	76.9	2856
KHARKOF	CI1442	1	99	160	5	93	25	8	90	8	75.6	2766
NE70137/TX65A1503	MT7877	28	69	159	1	90	25	7	1	2	74.5	2519

Table 18. Adult plant reaction of the 1983 Northern Regional Hard Red Winter Wheat Performance Nursery to *Puccinia graminis* f. sp. *tritici* inoculated nursery at St. Paul, MN. (Data provided by D. V. McVey, Cereal Rust Laboratory.)

	Cultivar or Sel. No.	Stem Rust
1.	Kharkof	60S
2.	Warrior	10S
3.	Roughrider	0
4.	NE 77465	TMR
5.	NE 78414	TR
6.	NE 78696	0
7.	NK 78W296	0
8.	NK 78W283	10MS-S
9.	NE 78702	TR
10.	NE 76706	TMR
11.	NE 77682	0
12.	SD 74221	0
13.	SD 74209	5MS-S
14.	SD 76705	0
15.	SD 75284	30S
16.	SD 76598	0
17.	SD 76694	TMR
18.	SD 79613	5MR
19.	SD 79112	TMR
20.	CO 745775-4	TR
21.	SD 79560	40MS-S
22.	SD 791041	TR
23.	SD 791058	5MS-S
24.	ND 7687	TR
25.	WT 166	5MS-S
26.	MT 7811	0
27.	MT 7840	40S
28.	MT 7877	5MR
29.	MT 8003	40S

Table 19.
Seedling reaction of the 1983 Northern Regional Hard Red Winter Wheat
Performance Nursery to Puccinia graminis f. sp. tritici. (Data pro-
vided by D. V. McVey, Cereal Rust Laboratory, St. Paul, MN.)

		Reaction to Isolates							
		72-00-1370C	72-44-703C	71-21-584B	72-18-630B	72-00-53A	75-32-1622A	72-4-1A	74-21-1409A
		151		11-32-113				15B-2	
Cultivar or Sel. No.		QFBS	QSHS	RHRS	RSHS	RTQQ	RTQS	TNMH	TNMK
1. Kharkof		S,2	S	S	S	S	S	S	S
2. Warrior		S	S	S	S	S,23CN	S	S	S
3. Roughrider		0	0	S	0	S	S	S	S
4. NE 77465		0	S	0;	2	0	S	0	0;
5. NE 78414		0	S	1	;1	;1-	23CN	0;	0;
6. NE 78696		0;	2-	2	S	0;	2	0;	0;
7. NK 78W296		0	0	S	0	S	S	S	S
8. NK 78W283		S	S	S	S	;1-	S	;1-	S
9. NE 78702		0	S	S	-	0;;S	S	0;	0;
10. NE 76706		0;	S	S	S	;	S,2CN	;	0;
11. NE 77682		-	S	-	S	;;S	-	-	S
12. SD 74221		0	0,S	2-	S	S	S	0;;S	S,0;
13. SD 74209		0	0,S	2-	2	0;	S	0	0;;S
14. SD 76705		0	0	0	0	0	S	0;	0;
15. SD 75284		2	2	0	S	0;	S	;1	S
16. SD 76598		0;	2	;1-	2=	0;	;1	0;	0;
17. SD 76694		0	0	0;	2	0;	;1	0	0;
18. SD 79613		0	S	0;	S	0;	S	0;	0;
19. SD 79112		0	S	2	S	0,S	S;;1	0;	0;
20. CO 745775-4		2-,0;;S	2,S	;1	2-,S	0;	2-,S	;1-N	S,R
21. SD 79560		S	S,2-	S,2=	2,S	S;;	S,2	S;;	S,2
22. SD 791041		0;;2-	0	0	0	0;	2-,1	2-,0;	2
23. SD 791058		0;	S,2	S,2	S,2	S;;	S	;	0;
24. ND 7687		0	S	S	S	S	S	0;	0;
25. WT 166		S	S	S	S	S	S	S	S
26. MT 7811		0	2=C	0	2=	0	-	0	0
27. MT 7840		1N	S	S	;1	;1-N	1N	;1N	S
28. MT 7877		S	S	S	S	S	S	S	S
29. MT 8003		S	S	S	S	S	S	S	S

Table 20.

Northern Regional Performance Nursery
Soil-borne Wheat Mosaic Field Infection Data
Urbana, Illinois¹

Entry No.	Disease Severity	
	Rep I	Rep II
1	VS	VS
2	VS	VS
3	S	S
4	MS	MS
5	VS	VS-DW
6	MS	S
7	VS-DW	VS-DW
8	S	S
9	S	VS
10	S	S
11	MS	MS
12	S	S
13	MR	MR
14	MS	S
15	S	VS
16	VS-DW	VS
17	S	VS
18	VS-DW	VS-DW
19	MS	S
20	VS-DW	VS-DW
21	VS	VS
22	VS-DW	VS-DW
23	S	S
24	VS-DW	VS
25	VS	VS
26	R	R
27	VS-DW	VS-DW
28	VS	VS-DW
29	VS	VS

¹The nursery was planted in soil-borne mosaic nursery at Urbana, IL on October 5, 1982. Optimal conditions for infection after seeding resulted in uniform infection with about 100% disease incidence in susceptible entries in the spring of 1983. Prolonged low temperature and wet conditions early in the season accentuated disease severity. First symptoms were observed on 3-3-83 with resumption of growth. Final notes on disease severity were taken on 4-21-83. Disease severity rating scale is the same as that in previous years ranging from VS, most susceptible to VR, most resistant; ROS=rosetting; DW-severe dwarfing; WK=winter killed.

Cooperators: H. Jedlinski and C. M. Brown

QUALITY DATA

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

UNIFORM WINTERHARDINESS NURSERY

The nursery is comprised of Southern and Northern Materials Sections. The Southern Section contained 132 entries and the Northern Section 233 entries in 1983. Nursery lists and survival data from test sites at which there was differential survival appear in the tabulations that follow.

SOIL-BORNE MOSAIC NURSERY

The nursery was made up of 60 entries in 1983. Infection data were reported from Urbana, Illinois and Lincoln, Nebraska. The nursery list and reaction data from these two reporting sites are reported herein.

1983
UNIFORM WINTERHARDINESS NURSERY
(Southern Materials Section)

Entry no.	Variety or Pedigree	C. I. or Sel. No.	Source
1	Warrior	13190	Check
2	David/2*Cheney	KS82H255	Kansas
3	Pm4/3*Cheney/3/Olesen's dwf/ 2*Eagle//Pn/Durum	KS82H238	"
4	Plainsman V/3/Larned/Eagle//Sage	KS82H4	"
5	SBM Sage/Lovrin 12	KS82H11	"
6	LC Eagle/3/Larned/Eagle//Sage	KS82H14	"
7	"	KS82H19	"
8	KS74H123/3/Larned/Eagle//Sage	KS82H38	"
9	"	KS82H41	"
10	Scout 66	13996	Check
11	KS74H123/3Larned/Eagle//Sage	KS82H43	Kansas
12	KS73H530//Sage/Arthur	KS82H116	"
13	"	KS82H136	"
14	"	KS82H144	"
15	"	KS82H147	"
16	"	KS82H156	"
17	"	KS82H159	"
18	"	KS82H165	"
19	"	KS82H209	"
20	Tascosa	13023	Check
21	KS73H530//Sage/Arthur	KS82H212	Kansas
22	"	KS82H215	"
23	"	KS82H219	"
24	Newton/TAM W-101	KS83501	"
25	"	KS83502	"
26	"	KS83503	"
27	Newton/Vona	KS83586	"
28	"	KS83602	"
29	"	KS83609	"
30	Warrior	13190	Check
31	Newton/Vona	KS83612	Kansas
32	"	KS83634	"
33	Newton/Harveyland	KS83636	"
34	"	KS83664	"
35	Newton/KS75216	KS83678	"
36	"	KS83691	"
37	"	KS83692	"
38	"	KS83706	"
39	"	KS83735	"
40	Scout 66	13996	Check
41	Newton/KS75216	KS83742	Kansas
42	"	KS83750	"
43	"	KS83753	"
44	Newton/Priboy	KS83847	"
45	"	KS83854	"

1983 UWHN (Southern Materials Section) continued:

Entry no.	Variety or Pedigree	C. I. or Sel. No.	Source
46	Newton/KS75216	KS83898	Kansas
47	"	KS83899	"
48	Sdy sib/Kaw(TX62A2522-1)//Ctk	TX78V3630	SRPN
49	Short Wheat/Sut(TX69A509-2)//Fox	TX78V2408	"
50	Tascosa	13023	Check
51	Sdy sib/Triumph//Ctk	TX71A562-6-28	SRPN
52	TAM 105*4/Amigo	TXGH2875	"
53	Arkan	KS79H69	"
54	Sut*5/Ag//Sdy/3/Ctk	NK77W4093	"
55	Sut*5/Ag//Sdy	NK77W4505	"
56	Kavkaz/Centurk	NK77W4593	"
57	Wrr*5/Agent//NE68457/3/Ctk 78	NE77682	"
58	(Wrr*5/Agent)*2/Kavkaz	NE78668	"
59	Lovrin 13/2*Ctk 78	NE80413	"
60	Warrior	13190	Check
61	Agate sib (NE69441)/TX65A1503-1	NE78696	SRPN
62	CO73F18298-6/McNair 4823	NA80137	"
63	Bulk Selection	NA80310	"
64	" "	NA80300	"
65	Caprock/B86//SC3212	W7442B	"
66	Sturdy/B48//Sturdy	W7452B	"
67	TAM 105 Reselection	TX69A569-1-69	"
68	TAM W-103//Sh Wheat/Sut (TX69A509-1)	TX80A5609	"
69	Sdy sib/Tcs//Ctk(73A2694)/3/Amigo	TX80A6025	"
70	Scout 66	13996	Check
71	TAM 105*4/Amigo	TX80GH2679	SRPN
72	Sdy sib/Triumph//Ctk(TX71A562-6)*4/ Amigo	TX80GH3006	"
73	Ey Sdy/Ncm	OK754615E	"
74	Aurora/2* TAM W-101	OK79257	"
75	" "	OK79256	"
76	Payne/Amigo	OK80019	"
77	Payne//TAM W-101/Amigo	OK80268	"
78	CO723117/CO725856	CO796326	"
79	" "	CO796386	"
80	Tascosa	13023	Check
81	Hard Winter Wheat Hybrid	RH790610	SRPN
82	Ctk//KS6623/TX62A2522-8-2	IL76-3845	"
83	Kavkaz/TX69A330-1	IL77-4259	"
84	Brule	NE75414	Nebraska
85	NE68446//NE68723/Centurk	NE76404	"
86	Bezostaya 1/2*Centurk 78	NE76706	"
87	Wrr*5/Agent//Centurk 78	NE77465	"
88	Sentinel/Centurk	NE78414	"
89	Wrr*5/Agent//Aurora/3/Centurk 78	NE78488	"
90	Warrior	13190	Check
91	Centurk 78	17724	Nebraska
92	Rocky Selection	KS81767	"

1983 UWHN (Southern Materials Section) continued:

Entry no.	Variety or Pedigree	C. I. or Sel. No.	Source
93	Wrr*5/Agent//Centurk 78	NE78659	Nebraska
94	Agate Sib (NE69441)/TX65A1503-1	NE78702	"
95	Wrr/Minn III-54-12//NE69559	NE78868	"
96	Lancota Sel.	NE78911	"
97	" "	KS80467	"
98	Lancota	17389	"
99	Sage/3/Fertodi/Lcr//Homestead	NE79553	"
100	Scout 66	13996	Check
101	Sage/3/Fertodi/Lcr//Homestead	NE79554	Nebraska
102	Sage/3/Sh. Wheat Sut//HiPlains	NE79561	"
103	Sage/3/Fertodi/Lcr//Homestead	NE80426	"
104	Fertodi/Lcr//Sage	NE80428	"
105	NE69613/Sage	NE80431	"
106	Tp/Bsn/Cns*2/Ae/Pn/Ko//391-56-D1-8/ Tsc//NE68433	NE80435	"
107	At166/Cmn/2/NE68709//Zg. 1480-69	NE80473	"
108	NE69559/NE701134	NE80476	"
109	" "	NE80477	"
110	Tascosa	13023	Check
111	Gage/Lcr (NE68428)//Homestead NE73624 x Buckskin x Sentinel/ Centurk NE73510	NE81161	Nebraska
112	Gage/Lcr (NE68428)//Homestead NE73624 x Agent/4*Scout x Sentinel/Centurk NE73510	NE81182	"
113	Sut/CI12995 (68432)//Homestead NE73640 x Lancota	NE81251	"
114	HiPlains x Scout Sel. OK66V2621	NE81433	"
115	Sentinel/Centurk x Agate	NE81446	"
116	Centurk 78 x S.Dak. BC73V4-0 274164-2 plant CI15322//2 2*Agent/4*Scout	NE81489	"
117	NE77655 Bez 1/Centurk 78//Arthur/ Centurk 78	NE81497	"
118	Gage/Lcr (NE68428)//Homestead NE73624 x Martonvasar 3 (69-12) x Parker*4/Agent/3/Beloterkovskaia 198//Lcr NE75586	NE81515	"
119	Larned x Sentinel/Centurk NE73510	NE81521	"
120	Warrior	13190	Check
121	NE73510 Sentinel/Centurk x Agate	NE81526	Nebraska
122	" " " "	NE81531	"
123	" " " "	NE81534	"
124	Gage/Lcr (NE68428)//Homestead NE73624 x Agent/4*Scout x Pnc/ 2*Cnn//I1#1-Cns*2/TT/2/Cnn-Tm- Mi-Hope/3/Sando 60/6/MM/Ech/Rm/ 4/2*(Hope/Tk/Cnn)/5/Pnc/2*Cnn NE73836	NE81536	"

1983 UWHN (Southern Materials Section) concluded:

<u>Entry no.</u>	<u>Variety or Pedigree</u>	<u>C. I. or Sel. No.</u>	<u>Source</u>
125	Parker*4/Agent/3/ Beloterkovskaia 198//Lcr NE75586 x Mir. Jub. 50	NE81553	Nebraska
126	" " "	NE81554	"
127	" " "	NE81555	"
128	Pn/2*Cnn//I1#1-Cns*2/TT/2/Cnn/Tm- Mi-Hope/3/Sando 60/6/MM/Ech/Rm/ 4/2*(Hope/Tk/Cnn)/5/Pnc/2*Cnn NE73835 x Sut CI12995 (68432)/ Homestead NE73641	NE81562 NE81578	" "
129	NS984-1/Centurk	13996	Check
130	Scout 66	NE81622	Nebraska
131	NS974/NB69565	13023	Check
132	Tascosa		

1983
UNIFORM WINTERHARDINESS NURSERY
(Northern Materials Section)

Entry no.	Variety or Pedigree	C.I. or Sel. No.	Source
1	Froid	14486	Check
2	Wnk//Rogue 66/TX65A1304	SD72311	So. Dak.
3	Scout Sel./Capitan	SD73176 sel.	"
4	Ctk*4/Hand	SD74124-1	"
5	Ctk*2/Hand	SD74217-1-1	"
6	"	SD74221-1	"
7	"	-2	"
8	"	-4	"
9	"	-6	"
10	Winoka	14000	Check
11	Ctk*2/Hand	SD74221-12	So. Dak.
12	"	-13	"
13	"	-15	"
14	"	SD75244-2	"
15	Agent/4*Scout//Hand	SD75269-7	"
16	"	-20	"
17	(Agent/4*Scout)*2//Hand	SD75272-1	"
18	Ctk*4/Hand//Ctk*3/Nap Hal	SD75375-103	"
19	"	-106	"
20	Warrior	13190	Check
21	Minter/PI117807//Ctk	SD75465-101	So. Dak.
22	"	-108	"
23	CI15322//3*(Agt/4*Sut)	SD76146-107	"
24	"	SD76169-17	"
25	"	SD76177-3	"
26	"	-5	"
27	"	-36	"
28	"	-38	"
29	"	-49	"
30	Froid	14486	Check
31	CI15092/Speltoides//Wheat/3/5*Ctk	SD76189	So. Dak.
32	CI15322//Agt/4*Sut/3/Ctk*4/Nap Hal	SD76367	"
33	"	SD76369	"
34	"	SD76369-2	"
35	"	-5	"
36	"	-10	"
37	CI15322//3*(Agent/4*Sut)	SD76463	"
38	"	SD76463-5	"
39	"	-7	"
40	Winoka	14000	Check
41	CI15322//3*(Agent/4*Sut)	SD76463-15	So. Dak.
42	"	-16	"
43	"	-19	"
44	"	-20	"
45	"	-25	"
46	Centurk*5/Hand	SD76709	"

1983 UWHN (Northern Materials Section) continued:

<u>Entry no.</u>	<u>Variety or Pedigree</u>	<u>C.I. or Sel. No.</u>	<u>Source</u>
47	CI15092/Speltoides//Fch/3/6*Ctk	SD79219	So. Dak.
48	Lancota/Translocation B	SD79299	"
49	Ctk*3/Hand//SD75375	SD79342	"
50	Warrior	13190	Check
51	Sage*2/Hand	SD79374	So. Dak.
52	"	SD79380	"
53	"	SD79383	"
54	"	SD79391	"
55	Sage/Hand//Bennett	SD79428	"
56	"	SD79430	"
57	"	SD79438	"
58	Sage*2/Hand	SD79460	"
59	"	SD79473	"
60	Froid	14486	Check
61	Sage*2/Hand	SD79501	So. Dak.
62	"	SD79504	"
63	"	SD79512	"
64	"	SD79514	"
65	Sage/Hand//Bennett	SD79529	"
66	"	SD79545	"
67	"	SD79560	"
68	SD75400-1/SD74212	SD79631	"
69	"	SD79639	"
70	Winoka	14000	Check
71	SD75375/OK711248-1	SD79664	So. Dak.
72	"	SD79677	"
73	CI15322//4*(Agent/4*Sut)	SD79892	"
74	Sage*2/Hand	SD791034	"
75	"	SD791041	"
76	"	SD791048	"
77	"	SD791051	"
78	"	SD791053	"
79	Sage/Hand//Bennett	SD791054	"
80	Warrior	13190	Check
81	Sage/Hand//Bennett	SD791058	So. Dak.
82	SD75375/OK711248-1	SD791109	"
83	"	SD791112	"
84	"	SD791115	"
85	"	SD791117	"
86	Sage*2/Hand	SD791290	"
87	"	SD791295	"
88	"	SD791338	"
89	"	SD791339	"
90	Froid	14486	Check
91	Sage*2/Hand	SD791346	So. Dak.
92	SD75375/OK711248-1	SD791350	"
93	TB, CI15092/Speltoides//Fch/3/6*Ctk	SD791359	"
94	Lancota/translocation B	SD791366	"
95	Winoka/Centurk	SD80104	"
96	TB, CI15092/Speltoides//Fch/3/6*Ctk	SD80113	"

1983 UWHN (Northern Materials Section) continued:

Entry no.	Variety or Pedigree	C.I. or Sel. No.	Source
97	Sage*2/Hand	SD80119	So. Dak.
98	"	SD80124	"
99	Winoka/Centurk	SD80136	"
100	Winoka	14000	Check
101	Winoka/Centurk	SD80140	So. Dak.
102	"	SD80142	"
103	Roughrider/SD74209	SD80149	"
104	"	SD80156	"
105	"	SD80162	"
106	"	SD80163	"
107	Wnk/II23528//Pkr	CO743909-6	"
108	CO695552/Ctk	CO745597-4	"
109	"	-7	"
110	Warrior	13190	Check
111	CO695552/Ctk	CO745597-18	So. Dak.
112	"	CO745620-3	"
113	"	CO745622	"
114	CO695625/Ctk	CO745775-4	"
115	Centurk 78	17724	"
116	Scout 66	13996	"
117	Buckskin	17263	"
118	CI15322//Agt/4*Sut/3/Ctk	SD76560-2	"
119	ND crosses with Minter	SD82101	"
120	Froid	14486	Check
121	NE70545/NE70537//CO672135/CO662079	SD82102	So. Dak.
122	SD73233-2//Predgorna/Cheney	SD82107	"
123	SD74221*2/Lathrop	SD82114	"
124	Larned/2*SD75269	SD82115	"
125	SD76669*2/Magnif 41 Mutant 1	SD82116	"
126	Translocation B//Ctk*4/CIMMYT Sel.	SD82125	"
127	"	SD82126	"
128	"	SD82127	"
129	"	SD82128	"
130	Winoka	14000	Check
131	Translocation B//Ctk*4/CIMMYT Sel.	SD82129	So. Dak.
132	CI15322//Agt/4*Sut/3/SD713-11	SD76501-28-1	"
133	"	-3	"
134	"	-4	"
135	"	-5	"
136	"	-6	"
137	"	-7	"
138	"	-8	"
139	"	-9	"
140	Warrior	13190	Check
141	CI15322//Agt/4*Sut/3/SD713-11	SD76501-28-10	So. Dak.
142	"	-13	"
143	"	-15	"
144	"	-18	"
145	"	-30-3	"
146	"	-5	"
147	"	-8	"
148	"	-34-3	"
149	"	-4	"

1983 UWHN (Northern Materials Section) continued:

Entry no.	Variety or Pedigree	C.I. or Sel. No.	Source
150	Froid	14486	Check
151	CI15322//Agt/4*Sut/3/SD713-11	SD76501-34-9	So. Dak.
152	"	-10	"
153	"	-35-2	"
154	"	-4	"
155	"	-5	"
156	"	-8	"
157	"	-9	"
158	"	-41-6	"
159	"	-9	"
160	Winoka	14000	Check
161	CI15322//Agt/4*Sut/3/SD713-11	SD76501-41-11	So. Dak.
162	"	-12	"
163	"	-13	"
164	"	-14	"
165	"	-42-6	"
166	"	-7	"
167	"	-63-2	"
168	"	-3	"
169	"	-4	"
170	Warrior	13190	Check
171	CI15322//Agt/4*Sut/3/SD713-11	SD76501-63-6	So. Dak.
172	"	-7	"
173	CI15322//Agt/4*Sut/3/Ctk/4/SD74221	SD82144	"
174	"	SD82145	"
175	"	SD82146	"
176	"	SD82147	"
177	"	SD82149	"
178	"	SD82156	"
179	"	SD82157	"
180	Froid	14486	Check
181	CI15322//Agt/4*Sut/3/Ctk/4/SD74221	SD82158	So. Dak.
182	"	SD82159	"
183	CI15322//Agt/4*Sut/3/Ctk/4/SD75375	SD82170	"
184	CI15092/Speltoides//Fch/3/6*Ctk	SD82176	"
185	"	SD82177	"
186	"	SD82178	"
187	Scout/Tascosa//CI15322/Sage	SD82179	"
188	"	SD82194	"
189	CI15322//Agt/4*Sut/3/Ctk	SD76598-3	"
190	Winoka	14000	Check
191	CI15322//Agt/4*Sut/3/Ctk	SD76598-7	So. Dak.
192	"	-8	"
193	CI15322//3*(Agt/4*Sut)/3/Ctk	SD76560-2	"
194	"	-3	"
195	Amigo/2*Ctk//SD74223	SD82197	"
196	"	SD82198	"
197	Amigo/2*Ctk//Bennett	SD82199	"
198	"	SD82200	"
199	"	SD82202	"
200	Warrior	13190	Check
201	Amigo/2*Ctk//SD75269	SD82205	So. Dak.
202	SD76669*2/Magnif 41 Mutant 1	SD82206	"

1983 UWHN (Northern Materials Section) concluded:

<u>Entry no.</u>	<u>Variety or Pedigree</u>	<u>C. I. or Sel. No.</u>	<u>Source</u>
203	Rose	17795	So. Dak.
204	Wrr*5/Agent//Ctk 78	NE77465	NRPN
205	Sentinel/Centurk	NE78414	"
206	Agate sib (NE69441)/TX65A1503-1	NE78696	"
207	Wrr/III-54-12//Sdy/3/Wnk/Ark	NK78W296	"
208	NB68639//Wrr/III-54-12/3/Wnk/CI14059	NK78W283	"
209	Agate sib (NE69441)/TX65A1503-1	NE78702	"
210	Froid	14486	Check
211	Bezostaya 1/2*Ctk 78	NE76706	NRPN
212	Wrr*5/Agent//NE68457/3/Ctk 78	NE77682	"
213	Centurk*2/Hand	SD74221	"
214	"	SD74209	"
215	Centurk*5/Hand	SD76705	"
216	Agent/*4Sut*2//Hand	SD75284	"
217	CI15322//Agent/4*Sut/3/Ctk	SD76598	"
218	Centurk*5/Hand	SD76694	"
219	Sage/SD75375	SD79613	"
220	Winoka	14000	Check
221	SD75375/OK7112481	SD791112	NRPN
222	C0695625/Ctk	C0745775-4	"
223	Sage/Hand//Bennett	SD79560	"
224	Sage*2/Hand	SD791041	"
225	Sage/Hand//Bennett	SD791058	"
226	YT0-117/Trader	ND7687	"
227	Pau 45/Cheyenne	WT166	"
228	Froid/Wnk//MT6	MT7811	"
229	Trader/Froid//Wanser/Winoka	MT7840	"
230	Warrior	13190	Check
231	NE70137/TX65A1503	MT7877	NRPN
232	Redwin Selection	MT8003	"
233	Froid	14486	Check

1983
UNIFORM WINTERHARDINESS NURSERY
(% Survival)

Entry no.	Northern Materials Section		Southern Materials Section			
	Brookings, SD		Brookings, SD		St. Paul, MN	
	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2
1	10	5	25	40	100	100
2	20	20	10	25	95	100
3	30	10	1	30	100	100
4	40	25	20	30	100	100
5	25	25	20	85	90	100
6	25	40	10	50	90	100
7	40	25	10	95	95	100
8	40	15	5	95	100	100
9	10	40	15	50	95	100
10	10	25	0	80	100	100
11	15	25	10	75	100	100
12	10	40	15	60	90	100
13	30	40	20	50	95	100
14	30	75	20	90	90	100
15	25	50	10	50	85	100
16	50	75	20	50	90	100
17	75	75	25	50	95	100
18	50	75	10	75	95	100
19	50	25	30	25	100	100
20	80	20	50	40	95	100
21	25	20	30	30	100	100
22	50	10	80	25	100	100
23	50	10	40	15	100	100
24	50	10	25	20	100	100
25	85	10	50	25	100	100
26	50	10	30	10	100	100
27	50	5	25	30	100	100
28	30	5	50	95	90	100
29	20	1	10	75	100	100
30	10	15	25	75	100	100
31	40	15	10	80	100	100
32	50	1	60	65	75	100
33	50	0	50	65	80	100
34	40	1	30	50	85	100
35	20	1	15	75	95	100
36	25	5	10	90	85	100
37	25	10	10	50	90	100
38	25	20	40	50	100	100
39	15	15	40	60	95	100
40	20	25	50	75	100	100
41	75	25	10	80	95	100
42	50	15	30	80	90	100
43	25	20	10	75	85	100
44	50	20	20	50	95	90
45	75	20	10	65	100	100

1983 Uniform Winterhardiness Nursery (% survival) continued:

Entry no.	Northern Materials Section		Southern Materials Section			
	Brookings, SD		Brookings, SD		St. Paul, MN	
	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 2
46	75	5	10	80	95	100
47	75	1	5	75	95	100
48	40	10	5	90	100	100
49	50	15	20	50	100	100
50	75	15	40	75	100	100
51	30	10	50	50	100	100
52	75	40	75	75	100	100
53	75	75	40	85	100	95
54	85	15	15	90	100	95
55	25	25	25	75	100	95
56	50	25	50	40	100	95
57	25	25	5	85	100	95
58	50	40	80	75	100	95
59	50	40	20	75	100	95
60	10	25	20	90	100	95
61	50	40	10	85	100	95
62	50	40	10	85	100	95
63	75	40	20	75	100	95
64	50	25	15	75	100	95
65	50	25	50	95	100	95
66	50	25	20	85	100	95
67	50	15	20	50	100	95
68	50	10	20	40	100	95
69	15	5	20	95	100	90
70	25	1	5	85	100	100
71	40	5	25	25	100	100
72	25	10	20	25	100	100
73	25	10	10	75	100	100
74	25	5	10	75	100	100
75	40	5	10	75	100	100
76	25	10	20	75	100	100
77	20	0	20	75	100	100
78	50	1	10	70	100	100
79	75	5	5	25	100	85
80	25	1	40	50	100	85
81	50	1	75	85	100	100
82	40	5	10	90	100	100
83	25	20	15	75	100	100
84	75	20	80	40	100	100
85	85	15	50	75	100	100
86	10	10	40	75	100	100
87	75	10	30	75	100	100
88	15	40	5	25	100	100
89	20	10	5	75	100	100
90	10	5	1	50	100	100
91	40	5	10	25	100	100
92	25	0	50	25	100	85

1983 Uniform Winterhardiness Nursery (% survival) continued:

Entry no.	<u>Northern Materials Section</u>		<u>Southern Materials Section</u>			
	<u>Brookings, SD</u>		<u>Brookings, SD</u>		<u>St. Paul, MN</u>	
	<u>Rep 1</u>	<u>Rep 2</u>	<u>Rep 1</u>	<u>Rep 2</u>	<u>Rep 1</u>	<u>Rep 2</u>
93	50	0	50	75	100	100
94	20	10	50	30	100	100
95	10	10	40	15	100	100
96	40	20	30	10	90	100
97	25	25	30	25	100	95
98	50	20	40	50	100	100
99	40	5	40	10	100	100
100	20	10	85	10	100	100
101	20	20	75	15	100	100
102	15	20	50	10	100	100
103	40	10	30	15	100	100
104	25	5	40	10	100	100
105	25	5	75	10	100	100
106	40	5	25	1	100	100
107	20	1	60	15	100	100
108	25	20	25	1	100	100
109	50	20	75	10	100	100
110	30	20	20	5	100	100
111	50	15	75	15	100	100
112	25	0	75	15	100	100
113	10	1	80	15	100	100
114	50	0	25	25	100	100
115	10	1	50	10	100	100
116	15	15	50	5	100	100
117	15	5	40	40	100	100
118	30	15	45	40	100	100
119	25	10	40	25	100	100
120	5	10	75	50	100	100
121	25	20	95	10	100	100
122	25	20	80	40	100	100
123	10	15	50	1	100	100
124	20	10	50	5	100	100
125	75	10	50	15	100	100
126	50	10	50	50	100	100
127	25	5	50	20	100	100
128	25	10	75	10	100	100
129	25	15	75	50	100	100
130	10	15	85	40	100	100
131	10	15	50	25	100	100
132	5	10	25	20	60	100
133	5	10				
134	5	10				
135	5	15				
136	5	5				
137	5	5				
138	5	5				
139	10	5				
140	20	15				

1983 Uniform Winterhardiness Nursery (% survival) continued:

Entry no.	Northern Materials Section	
	Brookings, SD	
	Rep 1	Rep 2
141	15	10
142	15	5
143	15	5
144	10	10
145	20	10
146	25	10
147	15	10
148	5	15
149	10	15
150	10	15
151	20	15
152	20	20
153	15	20
154	10	25
155	10	25
156	10	20
157	10	20
158	10	20
159	10	20
160	15	20
161	20	15
162	10	15
163	15	5
164	10	10
165	10	20
166	1	10
167	1	5
168	1	1
169	1	1
170	5	10
171	5	5
172	5	0
173	10	5
174	10	25
175	15	40
176	1	25
177	1	40
178	5	25
179	5	25
180	1	25
181	1	50
182	5	40
183	20	25
184	15	25
185	40	25
186	40	40
187	10	20

Entry no.	Northern Materials Section	
	Brookings, SD	
	Rep 1	Rep 2
188	10	25
189	15	5
190	15	5
191	10	15
192	10	10
193	10	20
194	10	15
195	20	5
196	10	5
197	20	1
198	10	15
199	10	15
200	10	20
201	25	20
202	25	10
203	20	5
204	40	5
205	50	15
206	40	10
207	40	15
208	20	0
209	25	0
210	10	0
211	5	0
212	1	0
213	5	1
214	1	1
215	10	0
216	20	5
217	10	5
218	5	1
219	5	0
220	0	0
221	1	5
222	1	10
223	0	10
224	5	10
225	15	20
226	25	40
227	25	40
228	40	15
229	80	20
230	75	20
231	80	15
232	25	20
233	10	10

Survival Data
1983 Uniform Winterhardiness Nursery
Southern Materials Section
Fargo, North Dakota

<u>Entry No.</u>	<u>Rep I</u>	<u>Rep II</u>	<u>Entry No.</u>	<u>Rep I</u>	<u>Rep II</u>
1	100	100	41	80	70
2	80	100	42	90	90
3	80	100	43	100	90
4	100	100	44	100	100
5	100	100	45	100	100
6	100	100	46	100	100
7	100	100	47	100	100
8	100	100	48	100	100
9	100	100	49	100	100
10	100	100	50	80	20
11	100	100	51	100	100
12	70	100	52	100	100
13	90	100	53	100	100
14	100	100	54	100	100
15	100	100	55	100	100
16	100	100	56	90	100
17	100	100	57	100	100
18	100	100	58	100	100
19	100	90	59	100	90
20	80	90	60	100	100
21	80	100	61	90	100
22	90	70	62	100	90
23	70	90	63	100	50
24	70	80	64	70	60
25	100	100	65	80	80
26	100	100	66	100	80
27	100	100	67	100	100
28	100	100	68	100	100
29	100	100	69	100	90
30	100	100	70	100	100
31	100	100	71	100	100
32	100	100	72	100	60
33	100	100	73	100	60
34	100	100	74	100	100
35	100	100	75	90	50
36	100	100	76	100	90
37	100	100	77	60	90
38	100	100	78	100	100
39	100	100	79	100	100
40	100	100	80	80	50

1983 UWHN (Southern Materials Section)
Survival Data, Fargo, North Dakota concluded:

<u>Entry</u> <u>No.</u>	<u>Rep I</u>	<u>Rep II</u>	<u>Entry</u> <u>No.</u>	<u>Rep I</u>	<u>Rep II</u>
81	100	90	106	100	100
82	100	90	107	100	100
83	100	100	108	100	100
84	100	100	109	100	100
85	100	100	110	50	60
86	100	100	111	100	100
87	95	100	112	100	100
88	100	100	113	90	100
89	100	100	114	100	100
90	100	100	115	100	100
91	100	100	116	100	100
92	100	100	117	90	100
93	100	100	118	100	100
94	100	100	119	100	100
95	100	100	120	100	100
96	95	100	121	100	100
97	100	100	122	100	100
98	100	100	123	90	100
99	100	100	124	100	100
100	100	100	125	100	100
101	100	100	126	100	100
102	100	100	127	100	100
103	100	100	128	100	100
104	100	100	129	100	100
105	100	100	130	100	100
			131	100	100
			132	40	50

Survival Data
1983 Uniform Winterhardiness Nursery
Northern Materials Section
Fargo, North Dakota

<u>Entry</u> <u>No.</u>	<u>Rep I</u>	<u>Rep II</u>	<u>Entry</u> <u>No.</u>	<u>Rep I</u>	<u>Rep II</u>
1	60	100	41	100	100
2	80	100	42	100	100
3	80	100	43	100	100
4	90	90	44	80	100
5	100	100	45	100	100
6	100	100	46	100	90
7	100	100	47	60	100
8	60	95	48	90	100
9	80	100	49	100	100
10	90	100	50	100	100
11	100	100	51	90	100
12	100	100	52	100	100
13	70	100	53	100	100
14	60	100	54	90	100
15	90	100	55	80	80
16	50	100	56	90	100
17	60	100	57	90	100
18	70	100	58	80	100
19	70	100	59	100	100
20	70	100	60	60	90
21	80	95	61	100	100
22	80	95	62	100	100
23	100	100	63	100	100
24	100	100	64	100	100
25	80	100	65	100	100
26	100	100	66	100	100
27	70	90	67	100	100
28	90	100	68	90	100
29	80	100	69	90	95
30	70	60	70	95	80
31	90	95	71	100	100
32	90	100	72	100	100
33	100	100	73	100	100
34	60	95	74	100	100
35	80	100	75	100	100
36	90	80	76	100	100
37	80	100	77	100	100
38	100	90	78	90	100
39	90	100	79	100	90
40	100	100	80	100	100

1983 UWHN (Northern Materials Section)
Survival Data, Fargo, North Dakota continued:

<u>Entry No.</u>	<u>Rep I</u>	<u>Rep II</u>	<u>Entry No.</u>	<u>Rep I</u>	<u>Rep II</u>
81	100	100	121	100	100
82	100	100	122	80	100
83	100	100	123	100	100
84	100	100	124	100	100
85	100	100	125	100	100
86	100	100	126	100	100
87	100	100	127	100	100
88	100	100	128	70	100
89	100	90	129	80	100
90	90	90	130	90	100
91	100	100	131	100	100
92	100	100	132	100	100
93	100	100	133	100	100
94	100	100	134	100	100
95	100	100	135	100	100
96	100	100	136	80	100
97	95	100	137	100	100
98	80	100	138	100	90
99	100	100	139	100	100
100	80	100	140	100	100
101	100	100	141	100	100
102	100	100	142	70	100
103	100	100	143	100	100
104	100	100	144	80	100
105	100	100	145	50	100
106	100	100	146	100	100
107	100	100	147	80	100
108	100	100	148	90	95
109	100	100	149	80	100
110	100	100	150	90	100
111	100	100	151	100	100
112	100	100	152	100	100
113	90	100	153	80	100
114	100	100	154	100	100
115	100	100	155	100	100
116	100	100	156	100	100
117	100	90	157	100	100
118	100	95	158	100	100
119	100	100	159	100	100
120	80	100	160	90	100

1983 UWHN (Northern Materials Section)
Survival Data, Fargo, North Dakota concluded:

<u>Entry</u> <u>No.</u>	<u>Rep I</u>	<u>Rep II</u>	<u>Entry</u> <u>No.</u>	<u>Rep I</u>	<u>Rep II</u>
161	100	100	201	100	100
162	70	95	202	100	100
163	100	100	203	100	100
164	100	100	204	100	100
165	100	100	205	100	100
166	100	100	206	100	100
167	100	100	207	100	100
168	100	100	208	100	100
169	90	100	209	100	100
170	100	100	210	70	90
171	80	100	211	100	100
172	90	100	212	80	100
173	100	100	213	100	100
174	100	100	214	100	100
175	100	100	215	100	100
176	100	100	216	100	100
177	80	100	217	100	100
178	90	100	218	100	100
179	100	100	219	100	100
180	90	100	220	100	100
181	100	100	221	90	100
182	95	100	222	100	100
183	95	100	223	100	100
184	95	100	224	80	100
185	80	100	225	100	100
186	95	100	226	100	100
187	100	100	227	100	100
188	90	100	228	100	100
189	100	100	229	100	100
190	100	100	230	100	100
191	100	100	231	100	100
192	100	100	232	100	100
193	95	100	233	100	100
194	95	100			
195	100	100			
196	95	100			
197	100	100			
198	100	100			
199	100	100			
200	100	100			

1983
SOIL-BORNE MOSAIC NURSERY

Entry no.	Variety or Pedigree	C. I. or Sel. No.	Source
1	Pawnee	11669	Check
2	Newton/TAM W-101	KS83501	Kansas
3	" "	KS83502	"
4	" "	KS83503	"
5	Newton/Vona	KS83586	"
6	" "	KS83602	"
7	" "	KS83609	"
8	" "	KS83612	"
9	" "	KS83634	"
10	Concho	12517	Check
11	Newton/Harveyland	KS83636	Kansas
12	" "	KS83664	"
13	Newton/KS75216	KS83678	"
14	" "	KS83691	"
15	" "	KS83692	"
16	" "	KS83706	"
17	" "	KS83735	"
18	" "	KS83742	"
19	" "	KS83750	"
20	Bison	12518	Check
21	Newton/KS75216	KS83753	Kansas
22	Newton/Priboy	KS83847	"
23	" "	KS83854	"
24	Newton/KS75216	KS83898	"
25	" "	KS83899	"
26	TAM W-103//Sh Wheat/Sut (TX69A509-1)	TX80A5609	SRPN
27	Sdy sib/Tcs//Ctk(73A2694)/3/Amigo	TX80A6025	"
28	TAM 105*4/Amigo	TX80GH2679	"
29	Sdy sib/Triumph//Ctk(TX71A562-6)*4/ Amigo	TX80GH3006	"
30	Pawnee	11669	Check
31	Caprock/B86//SC3212	W7442B	SRPN
32	Sturdy/B48//Sturdy	W7452B	"
33	Wrr*5/Agent//NE68457/3/Ctk 78	NE77682	"
34	(Wrr*5/Agent)*2/Kavkaz	NE78668	"
35	Lovrin 13/2*Ctk 78	NE80413	"
36	Agate sib (NE69441)/TX65A1503-1	NE78696	"
37	Wrr*5/Agent//Centurk 78	NE77465	Nebraska
38	Rocky Selection	KS81767	"
39	Agate sib (NE69441)/TX65A1503-1	NE78702	"
40	Concho	12517	Check
41	Wrr/Minn III-54-12//NE69559	NE78868	Nebraska
42	Lancota Selection	NE78911	"
43	" "	KS80467	"
44	Lancota	17389	"
45	NE69613/Sage	NE80431	"

1983 Soil-borne Mosaic Nursery (concluded):

<u>Entry no.</u>	<u>Variety or Pedigree</u>	<u>C. I. or Sel. No.</u>	<u>Source</u>
46	Tp/Bsn/Cns*2/Ae/Pn/Ko//391-56-D1-8/ Tsc//NE68433	NE80435	Nebraska
47	Gage/Lcr (NE68428)//Homestead NE73624 x Buckskin x Sentinel/Centurk NE73510	NE81161	"
48	Gage/Lcr (NE68428)//Homestead NE73624 x Agent/4*Scout x Sentinel/Centurk NE73510	NE81182	"
49	Sut/CI12995 (68432)//Homestead NE73640 x Lancota	NE81251	"
50	Bison	12518	Check
51	HiPlains x Scout Sel. OK66V2621	NE81433	Nebraska
52	Sentinel/Centurk x Agate	NE81446	"
53	NE77655 Bez 1/Centurk 78//Arthur/ Centurk 78	NE 81497	"
54	Gage/Lcr (NE68428)//Homestead NE73624 x Agent/4*Scout x Pnc/2*Cnn// Il#1-Cns*2/TT/2/Cnn-Tm-Mi-Hope/3/ Sando 60/6/MM/Ech/Rm/4/2*(Hope/Tk/ Cnn)/5/Pnc/2*Cnn NE73836	NE81536	"
55	Parker*4/Agent/3/Beloterkovskaia 198// Lcr NE75586 x Mir. Jub. 50	NE81553	"
56	" " "	NE81554	"
57	Pn/2*Cnn/Il#1-Cns*2/TT/2/Cnn/Tm-Mi- Hope/3/Sando 60/6/MM/Ech/Rm/4/2* (Hope/Tk/Cnn)/5/Pnc/2*Cnn NE73835 x Sut CI12995 (68432)/Homestead NE73641	NE81562	"
58	Concho	12517	Check
59	Bison	12518	Check
60	Pawnee	11669	Check

1983
SOIL-BORNE MOSAIC NURSERY

Entry no.	Urbana, Illinois ¹		Lincoln, Nebraska
	Disease severity		Disease rating (0-5 scale)
	Rep 1	Rep 2	
1	VS-DW	VS-DW	3
2	MR	MR	0
3	MR	MS	1
4	MR	MR	1
5	R	MR	1
6	MS	MS	0
7	MR	MR	1
8	MS	MR	2
9	MS	MS	2
10	MR	MS	1
11	MS	MS	0
12	MS	MS	0
13	VR	VR	1
14	MS	MS	1
15	VR	VR	1
16	MR	MR	1
17	MS	MS	2
18	R	R	1.5
19	R	R	1
20	VS-ROS	VS-ROS	2.5
21	VR	VR	1
22	MS	MS	0
23	MR	MR	1
24	MS	MS	1.5
25	MS	MS	1
26	VS-DW	VS-DW	3
27	VS	VS	3
28	VS	VS	4
29	VS	VS	3
30	VS	VS	3
31	R	R	1
32	MR	MR	2
33	MS	MS	3.5
34	S	S	3
35	MR	MR	3
36	S	S	3
37	MS	MS	3
38	R	VR	2
39	S	S	3
40	MS	MS	2
41	VS	VS	3
42	MS	MS	2
43	MS	S	2
44	S	VS	4
45	S	S	3

1983 Soil-Borne Mosaic Nursery (disease ratings)
(concluded).

Entry no.	Urbana, Illinois		Lincoln, Nebraska
	Disease severity		Disease rating
	Rep 1	Rep 2	(0-5 scale)
46	VS-ROS	VS-ROS	4
47	VS	VS	3
48	S	VS	3
49	S	S	1
50	S	VS-ROS	3
51	S	S	3
52	S	S	3
53	MS	MS	2
54	MS	MS	1
55	MR	MS	3
56	VR	VR	3
57	MS	MS	3
58	MR	MR	2
59	VS-ROS	VS-ROS	3
60	VS	VS-DW	3

¹The nursery was planted in soil-borne mosaic nursery at Urbana, IL on October 5, 1982. Optimal conditions for infection after seeding resulted in uniform infection with about 100% disease incidence in susceptible entries in the spring of 1983. Prolonged low temperature and wet conditions early in the season accentuated disease severity. First symptoms were observed on 3-3-83 with resumption in growth. Final notes on disease severity were taken on 4-21-83. Disease severity rating scale is the same as that in previous years ranging from VS, most susceptible to VR, most resistant; ROS=rosetting; DW=severe dwarfing; WK=winter killed.

Cooperators: H. Jedlinski and C. M. Brown

