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DECEMBER 1982 NEBRASKA COOPERATIVE EXTENSION SERVICE—E.C. 82-103

NEBRASKA VARIETAL TESTS OF FALL-SOWN SMALL GRAINS 1982

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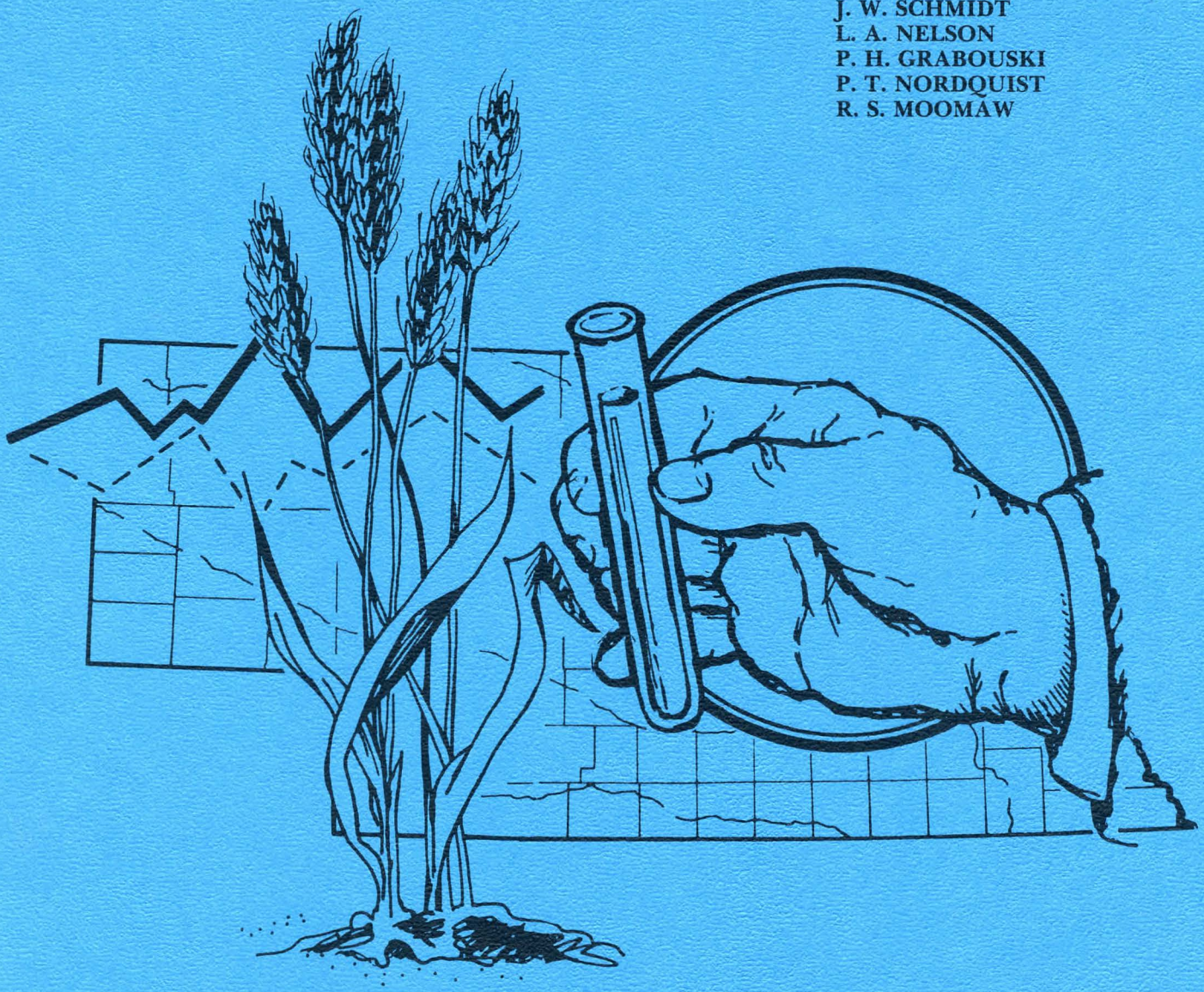

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Leo E. Lucas, Director of Cooperative Extension Service, University of Nebraska, Institute of Agriculture and Natural Resources.

NEBRASKA WHEAT PRODUCTION

The following data were obtained from Nebraska Agricultural Statistics. Acreages and yield averages include both spring and winter wheat. Separate reports series for spring and winter wheats began in 1909 and were discontinued in 1962.

Year	Planted 000 acres (hectares)	Harvested 000 acres (hectares)	Average yield bu/A (kg/ha)
1866	---- ----	43 (17)	14.0 (942)
1870	---- ----	170 (69)	11.5 (773)
1880	---- ----	1520 (616)	8.5 (572)
1890	---- ----	1775 (719)	12.0 (807)
1900	---- ----	2750 (1114)	14.7 (989)
1910	---- ----	2885 (1168)	15.8 (1063)
1920	3883 (1573)	3593 (1455)	16.8 (1130)
1930	4077 (1651)	3974 (1609)	18.8 (1264)
1940	3278 (1328)	2643 (1070)	13.1 (881)
1950	4346 (1760)	4051 (1641)	21.8 (1466)
1955	3484 (1411)	3141 (1272)	24.9 (1675)
1956	3549 (1437)	3324 (1346)	19.5 (1312)
1957	3294 (1334)	2920 (1183)	27.0 (1816)
1958	3620 (1466)	3442 (1394)	33.0 (2220)
1959	3408 (1380)	3104 (1257)	22.0 (1480)
1960	3306 (1339)	3011 (1219)	28.5 (1917)
1961	3339 (1352)	3220 (1304)	24.5 (1648)
1962	3060 (1239)	2760 (1118)	19.5 (1312)
1963	3244 (1314)	2815 (1140)	21.5 (1446)
1964	3147 (1275)	2871 (1163)	24.5 (1648)
1965	3273 (1326)	2727 (1104)	20.0 (1345)
1966	2980 (1207)	2860 (1158)	35.0 (2354)
1967	3520 (1426)	3265 (1322)	26.5 (1782)
1968	3240 (1312)	3070 (1243)	32.0 (2152)
1969	2910 (1179)	2650 (1073)	31.5 (2119)
1970	2565 (1039)	2410 (976)	38.0 (2556)
1971	2539 (1028)	2434 (986)	42.0 (2825)
1972	2742 (1111)	2509 (1016)	37.0 (2489)
1973	2800 (1134)	2680 (1085)	35.0 (2354)
1974	3000 (1215)	2900 (1175)	34.0 (2287)
1975	3200 (1296)	3070 (1243)	32.0 (2152)
1976	3400 (1377)	2950 (1195)	32.0 (2152)
1977	3300 (1337)	2950 (1195)	35.0 (2354)
1978	2900 (1175)	2550 (1033)	32.0 (2152)
1979	3000 (1215)	2550 (1033)	34.0 (2287)
1980	3200 (1279)	2850 (1154)	38.0 (2556)
1981	3100 (1256)	2950 (1195)	36.0 (2421)
1982 1/	3100 (1256)	2950 (1195)	35.0 (2354)

1/ August 1 estimate.

EXTENSION CIRCULAR 82-103

December 1982

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ACKNOWLEDGMENT

This circular is a progress report of variety trials conducted by the Agricultural Experiment Station. Trials were conducted by personnel of the Agronomy Department and the Northeast, South Central, North Platte and Panhandle Stations and their associated field and agricultural laboratories. Tests were supported in part by fees paid by entrants of private varieties or hybrids. Conduct of experiments and publication of results is a joint effort of the Agricultural Experiment Station and the Cooperative Extension Service. Special acknowledgment is made to farmer cooperators who furnished land for experiments; also to County Agents and others who assisted in conduct of tests.

NEBRASKA VARIETAL TESTS OF FALL-SOWN SMALL GRAINS 1982

This circular is a progress report of winter wheat and winter barley variety trials conducted throughout Nebraska. Entries included varieties or hybrids and promising experimental strains from breeding programs of the Nebraska and other Experiment Stations and private breeders. This was the third year for privately developed entries. The state has been divided into 8 districts for purposes of variety testing. Locations of these districts and the 1982 variety tests are shown on the map (Page 3).

Trials were located on Experiment Stations and private farms. Names of cooperators and dates of planting and harvest are shown in Table 1. Soil type, soil test data and fertilizer applications are shown in Table 2.

Plot sizes varied with location. Drill strips were used in Saunders, Clay and Lincoln Counties. Nursery type plots 6 rows wide and 15 or 35 feet long were planted at other locations. Plots were replicated 4 to 6 times.

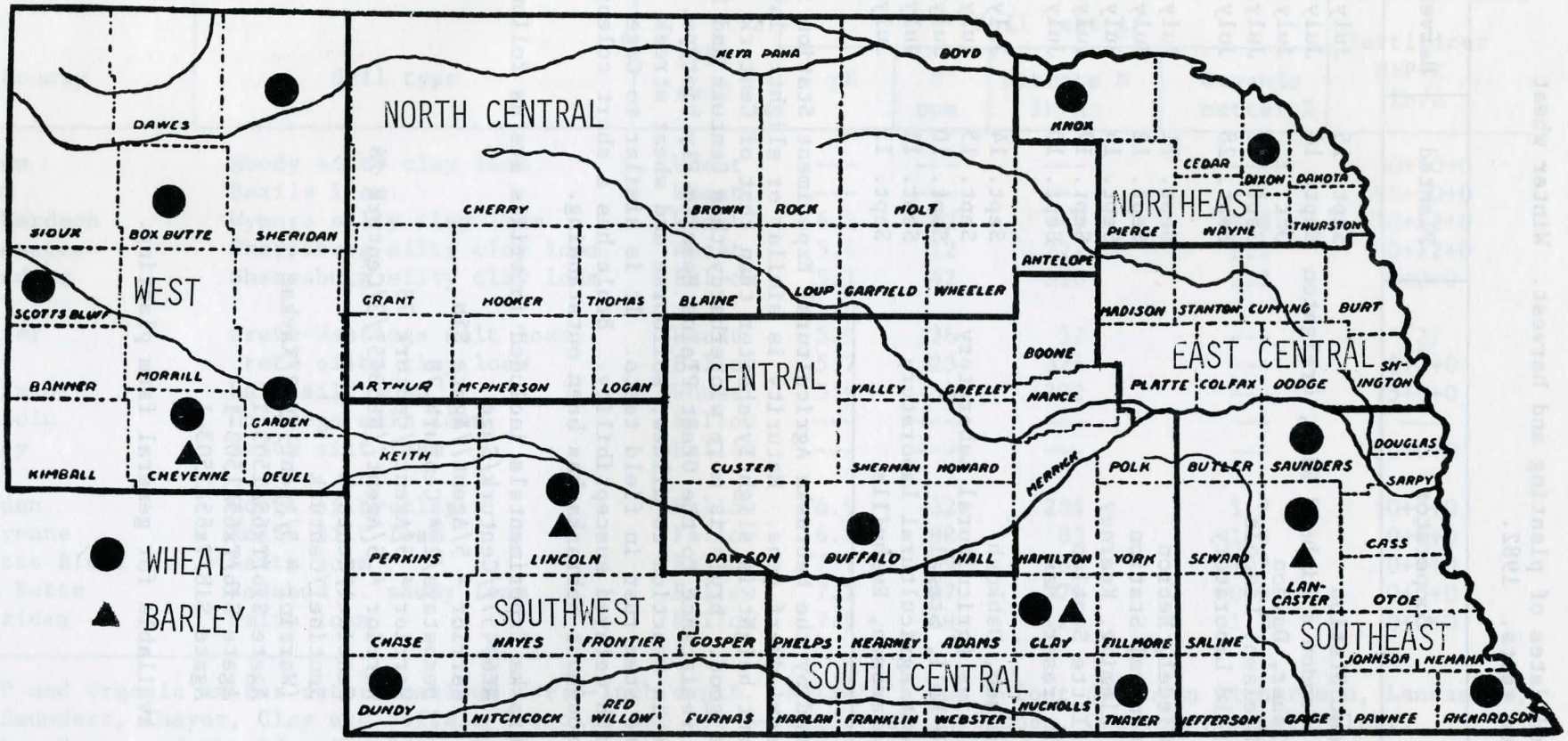
Soil moisture at seeding generally was adequate. The wheat crop entered the winter in the best condition of recent years. Winterkill was less than usual. Winter and early spring were dry in the Panhandle. Late May and June rains were adequate. In eastern Nebraska, frequent rains in late May and June caused excess plant growth and promoted development of fungal diseases. Continuing rains delayed maturity and resulted in a delayed harvest.

Wheat scab was prevalent in southeast and south central Nebraska. The causal fungus is a Fusarium. This fungus is the same one that causes one of the stalk rots of corn and sorghum. It affects wheat only in years when moisture and temperature conditions at flowering are favorable for development. Wheat scab had not been observed in damaging amounts since 1951. Earlier maturing varieties were most affected in 1982. This is related to time of flowering and not to varietal differences in resistance. Earlier fields also were most infected.

Winter Wheat Varieties

The State-Federal division of Agricultural Stations makes an annual survey of wheat varieties planted. The ten-year summary of Nebraska data is shown in Table 3. This gives an indication of changes in popularity of varieties over years. Acreages of some varieties are concentrated in specific areas while others such as Centurk and Scout 66 are widely distributed.

Characteristics of Experiment Station releases included in current Nebraska tests are shown in Table 4. These characteristics are applicable to varieties when grown in their area of adaptation. When taken out of their area of adaptation varieties may have different maturity, winterhardiness, or straw strength ratings. Several varieties adapted in western Nebraska have poor straw when grown in eastern Nebraska under more humid conditions. Races of rust and other diseases are under constant change. Varieties which in the past were resistant to stem rust are now susceptible. As rust races changes, presently resistant varieties may become susceptible.



NEBRASKA CROP TESTING DISTRICTS AND LOCATIONS OF 1982 WINTER WHEAT & WINTER BARLEY VARIETY TESTS.

Table 1. Location and dates of planting and harvest. Winter wheat performance tests. 1982.

County	Cooperator	Planted	Harvested
Dixon	Northeast Station	Sept. 15	July 16
Knox	L. & J. Condon & Richard Rice, Creighton	Sept. 14	July 14
Richardson	Jack Fisher, Dawson	Oct. 1	July 7
Lancaster	Wayne Nielsen, Lincoln	Sept. 22	July 8
Saunders	Mead Field Laboratory	Sept. 28	July 16
Thayer	Ernie Wiedel, Hebron	Sept. 21	July 8
Clay	South Central Station	Sept. 12	July 20
Buffalo	Harold Fleming, Kearney	Sept. 14	July 14
Lincoln	North Platte Station	Sept. 17	July 16
Dundy	Kenneth Fraser, Max	Sept. 10	July 8
Garden	Wes Paulsen, Oshkosh	Sept. 14	July 21
Cheyenne	High Plains Agricultural Laboratory	Sept. 15	July 22
Scotts Bluff	Kenneth Hall, Stegall	Sept. 10	July 23
Box Butte	Northwest Agricultural Laboratory	Sept. 11	July 26
Sheridan	Bill Rasmussen, Rushville	Sept. 11	July 28

Brule was released by the Nebraska Agricultural Experiment Station in 1982. It carries a semi-dwarf gene. Maturity is similar or slightly later than Centurk 78. Plant height is slightly shorter than that of Centurk 78. Lodging resistance is good. Brule is more winterhardy than Centurk and Scout type wheats. It has resistance to the Great Plains Hessian Fly biotype. Brule is intermediate in reaction to mildew, soilborne and wheat streak mosaic viruses, and to stem rust in field tests. It is similar to Gage in leaf rust reaction with delayed susceptibility. Brule has a short coleoptile. Yield performance throughout Nebraska has been outstanding.

Pedigrees of Nebraska Experimentals included in trials are as follows:

NE75424	NE69457//Centurk/Gage
NE76667	Warrior * 5/Agent//Agate Sib
NE76706	Bezostaya/2 * Centurk 78
NE77465	Warrior * 5/Agent//Centurk 78
NE77682	Warrior * 5/Agent//NE68457/3/Centurk 78
NE78414	Sentinel/Centurk
NE78415	Sentinel/Centurk
NE78668	(Warrior * 5/Agent) * 2/Kavkaz
NE78696	Agate Sib/Tx65A1503-1
NE78698	Agate Sib/Tx65A1503-1
NE78702	Agate Sib/Tx65A1503-1

Seed of these is not available for general farm planting.

Table 2. Soil series, cropping history, soil test data and fertilizer applied. Winter wheat variety tests. 1982.

County	Soil type	1981 crop	Soil test 1/				Fertilizer N+P+K lb/A
			pH	P ppm	Nitrate N lb/A	Organic matter %	
Dixon	Moody silty clay loam	Wheat	---	---	---	---	50+50+0
Knox	Bazile loam	Wheat	---	---	---	---	90+50+0
Richardson	Wymore silty clay loam	Wheat	6.2	12	49	2.8	70+12+0
Lancaster	Sharpsburg silty clay loam	Wheat	5.4	12	227	2.1	0+12+0
Saunders	Sharpsburg silty clay loam	Fallow	5.1	42	310	2.7	0+0+0
Thayer	Crete-Hastings silt loam	Wheat	5.9	36	52	---	2/
Clay	Crete silty clay loam	Fallow	5.7	23	326	---	0+0+0
Buffalo	Hall silt loam	Wheat	5.6	38	232	---	75+0+0
Lincoln	Holdrege silt loam	Fallow	---	---	---	---	---
Dundy	Keith silt loam	Fallow	---	---	---	---	30+0+0
Garden	Scott silty clay	Fallow	6.9	32	284	1.7	50+0+0
Cheyenne	Keith silt loam	Fallow	6.7	32	83	1.9	0+0+0
Scotts Bluff	Keith loam	Fallow	7.7	9	65	1.2	0+0+0
Box Butte	Rosebud f. sandy loam	Fallow	7.1	27	71	0.8	0+0+0
Sheridan	Keith loam	Fallow	7.5	19	123	1.3	0+0+0

1/ P and Organic matter determinations for 6-inch depth. Nitrate N for 6-foot depth in Richardson, Lancaster, Saunders, Thayer, Clay and Buffalo Counties and for 3-foot depth in Garden, Cheyenne, Scotts Bluff, Box Butte and Sheridan Counties.

2/ 85 lb/A, 18-46-0 and 45 lb/A N applied before sampling.

3/ Applied before sampling as NH_3.

Table 3. Estimated percentage of Nebraska winter wheat acreage planted to each variety. 1973-1982.

Variety	% of acreage									
	1973	1974	1975	1976	1977	1978	1979	1980	1981(1)	1982 (1)
Centurk & Centurk 78	22.5	31.0	33.5	32.9	35.4	39.6	41.4	41.1	42.2	42.8
Scout & Scout 66	28.8	30.2	30.3	29.0	24.1	23.3	25.4	23.4	19.1	13.4
Bennett	----	----	----	----	----	----	----	.8	4.2	5.8
Buckskin	----	----	.8	2.5	4.2	3.7	5.1	8.1	7.0	5.6
Rocky	----	----	----	----	----	----	----	(2)	1.7	5.0
Wings	----	----	----	----	----	----	(2)	(2)	2.3	4.7
Vona	----	----	----	----	----	----	.2	.3	1.0	3.5
Gage	5.4	4.9	6.2	7.1	5.7	3.3	3.7	2.7	4.5	3.2
Sage	----	----	----	.9	1.7	1.7	2.5	2.0	2.1	2.5
Lancer	17.0	13.0	8.9	7.6	6.4	7.4	4.8	4.5	2.3	1.6
Lindon	----	----	----	----	----	.2	.2	.4	1.8	1.4
Trapper	6.0	3.3	2.1	1.7	1.6	.9	.4	.8	.4	1.3
Lancota	----	----	----	.2	1.5	2.5	2.5	1.7	1.2	1.3
Scoutland	1.6	3.2	4.6	4.5	3.4	2.2	2.0	1.7	1.8	1.3
Warrior	10.2	9.5	7.0	5.0	5.5	5.8	3.7	3.5	1.1	1.2
Homestead	----	----	.2	1.0	1.7	1.5	1.6	1.0	1.0	1.1
Other Public Varieties (3)	8.5	4.9	6.4	7.6	8.0	7.6	6.3	7.2	4.9	3.1
Other Private Varieties	----	----	----	----	.8	.3	.2	.8	1.4	1.2

(1) Percentages weighted by acres of wheat planted by Crop Reporting Districts. Percentages published for prior years were not weighted.

(2) Included in "Other Private Varieties".

(3) Other public varieties planted for 1982 include Agate, Baca, Caprock, Cheyenne, Eagle, Early Triumph, Hi-Plains, Nebred, Omaha, Ottawa, Parker, Sentinel, Sturdy, Tam 105, Trader, and Wichita.

Table 4. Characteristics of winter wheat varieties included in Nebraska tests. 1/

Variety	Relative				Resistance to 2/			
	Maturity	Winter-hardiness	Straw strength	Milling & baking qualities	Hessian fly	Leaf rust	Stem rust	Soil borne mosaic 3/
Agate	Medium	Good	Medium	Good	MR	S	R	MS
Bennett	Early	Good	Strong	Excellent	MR	S	R	MR
Brule	Med. early	Good	Strong	Excellent	R	MR-MS	MR	MR-MS
Buckskin	Med. early	Fair	Strong	Excellent	MR	S	R	MR
Centurk 78	Med. early	Fair	Strong	Excellent	MS	S	R	MS
Dawn	Med. early	Fair	Medium	Excellent	R	MR-S	R	MS
Gage	Med. early	Fair	Med. strong	Good	MR	MR	R	MS
Homestead	Early	Fair	Strong	Excellent	S	S	R	R
Lancota	Med. early	Fair	Med. strong	Excellent	S	MR	R	MS
Larned	Early	Fair	Med. strong	Good	R	S	R	S
Roughrider	Med. late	Excellent	Medium	Good	MR	S	R	--
Scout 66	Early	Fair	Medium	Excellent	MS	S	R	S
Turkey	Med. late	Good	Poor	Excellent	S	S	S	S
Vona	Early	Poor	Medium	Excellent	MR	S	MR	S

1/ Experiment Station varieties. Contact the originator for information on Agripro, HybriTech, Migro, Northrup King, Rohm & Haas and Seed Research entries. When varieties are taken out of their adapted area, relative maturities, straw strength and other characteristics are subject to variations. Abnormal disease or insect infestations also cause differences in expression of plant characteristics.

2/ R = resistant, S - susceptible, MR - moderately resistant, MS = moderately susceptible.

3/ Based on limited observation and yield data.

Privately developed winter wheats were included in the 1982 trials. Developers and entries were as follows:

North American Plant Breeders P.O. Box 30 Berthoud, CO 80513	Agripro Hawk, Rocky, Wings Migro Archer
HybriTech Seed 1831 Woodrow Wichita, KS 67203	HybriTech 567a, H85b, H130, H131, NH1121
Northrup King Company 725 N. Cherry Red Cloud, NE 68970	NK Pro Brand 817, 835
Rohm & Haas Co. 6025 W. 300 S Lafayette, IN 47905	Rohm & Haas HW1001, HW1010
Seed Research Route 2, Box 48 Scott City, KS 67871	Seed Research Brawny, Citation

Some of these are varieties, others are hybrids. The entrant should be contacted for information on seed availability, adaptation and agronomic characteristics.

Winter Wheat Performance

Yield and bushel weight data by districts are shown in Tables 5 through 15. Results of 1982 trials are given along with period-of-years data. Data on other characteristics are summarized in tables as follows:

Table 16	Protein, 1982
Table 17	Protein, 1972-1982
Table 18	Kernel weight
Table 19	Height
Table 20	Scab, flower, lodging, straw yield

Protein, plant height, and kernel weight were determined at all locations. Flowering date and straw yields were determined for selected locations. Differential lodging was observed in four tests.

Yielding ability of different varieties cannot be measured with absolute accuracy because of variations in soil fartility, moisture, and other factors. For this reason, small differences in yield have no significance. Unless the difference in yield of two varieties is greater than the difference required for significance shown in the tables, little confidence can be placed in the superiority of the one over the other in that particular test. These differences are shown at the 5% level, meaning that differences as large or larger could be expected through chance alone in 1 of 20 trials.

Two trials were seeded in northeast Nebrasla. Data from Dixon and Knox Counties are shown in Table 5. In Dixon County, emergence was late, fall growth was minimal, and winter survival was relatively poor. There is some question as to whether the low survival of Brule may have been an emergence problem. In Knox County, survival was excellent except for the winter barley. A double nitrogen fertilizer application resulted in excess growth, early and severe lodging and reduced bushel weights.

Three trials were harvested in the Southeast District (Table 7). Early growth was excellent in Richardson County. Scab infection appeared by mid-June in this test. Scab also was present to a lesser degree in Lancaster County. Here, high fertility caused early and severe lodging. General recovery from winter conditions was poor in Saunders County and final yields were relatively p-or. Period-of-years data for Southeast Nebraska are shown in Table 8.

Two trials were located in the South Central District (Table 9). Early growth was good in Thayer County. Yields and bushel weights were reduced by a heavy scab infection. Winterkilling was severe at Clay Center. Development was poor and even varieties with fairly good survival failed to produce satisfactory yields. Bushel weights were low. Both trials represent severe adversity and have a low value for predicting performance in normal seasons. Period-of-years yield data for South Central Nebraska are shown in Table 10.

The 1982 and period-of-years data for the Central District are shown in Table 11. The 1982 trial was in Buffalo County. Downy brome infestation reduced yields and increased plot variability.

Southwest District tests were in Lincoln and Dundy Counties (Table 12). Conditions were favorable in Dundy County and an average yield of 62 bushels per acre was produced. Cephalosporium stripe reduced yields at North Platte (Lincoln County). Period-of-years data for the Southwest District are shown in Table 13.

Five trials were harvested in the West District (Table 14). Fall emergence was good in Garden County. A dry winter and spring caused drouth stress in early May. Heavy rainfall in late May and June resulted in excessive growth and heavy lodging. Favorable conditions in Cheyenne County led to high yields with no lodging. In Scotts Bluff County, lack of winter and spring moisture along with low soil nitrogen resulted in short plants with little tillering. The Box Butte County trial seemed under moisture stress in early spring but later rains were favorable. In Sheridan County, rainfall was excessive in May and June and plant progress was delayed. In general, late May and June rains in the Panhandle favored production of a crop much better than earlier expected for that area. Period-of-years data for the West District are shown in Table 15.

Statewide averages give an indication of whether a variety has broad adaptation. Many varieties have wide adaptation and do well over an extended range of conditions. Others are more specific in adaptation and may be included in trials on a limited basis. Often factors other than yield determine specific areas in which a variety does best. Performance of varieties in the Nebraska tests was summarized on the basis of three broad areas: the entire state, the eastern one-half and the western one-half. The Northeast District represents a set of special conditions and results were not included in statewide summaries.

A total of 18 entries were included at 13 test locations throughout Nebraska in 1982. Average yields were as follows: NE78668 46, Brule 44, NE78696 41, NE78698 41, NE76706 40, Dawn 39, Rohm & Haas HW1001 39, NE77465 39, NE77682 39, Agripro Rocky 38, Migro Archer 37, Vona 37, Centurk 78 37, NE75424 35, NE78414 34, NE78415 34, Scout 66 31, and Turkey 29 bushels per acre. These data are indicative of yield performance over a wide range of Nebraska conditions in 1982.

Previous high ranking varieties and statewide average yields were as follows: 1981 TAM 105 57, 1980 TAM 105 58, 1979 Buckskin 49, 1978 Centurk 78 and Centurk 43, 1977 Buckskin, Sage, Larned and Bennett 43, 1976 Bennett 50, 1975 Lindon 50, 1974 Centurk, Sage and Lancota 49, 1973 Sage 47, 1972 Centurk and Buckskin 48, 1971 Centurk 57, 1970 Centurk 52, and 1969 Centurk 42 bushels per acre.

In an average of five tests in eastern Nebraska, 23 varieties had 1982 average yields as follows: NE78668 42, Brule 39, NE78696 35, NE78698 34, NK Pro Brand 817 32, Dawn 31, NE76706 29, Rohm & Haas HW1001 28, Migro Archer 28, Lancota 27, Agripro Rocky 27, NE77682 27, Larned 27, NE77465 27, Bennett 26, NE75424 26, Centurk 78 26, Vona 25, Scout 66 25, NE78514 24, NE78415 22, Agripro Hawk 20 and Turkey 20 bushels per acre. Scab was a factor in three trials. Winter survival was a major factor in one trial.

Many of the same varieties were included in eight trials in the Central, Southwest and West Districts. Average 1982 grain production of 19 varieties was as follows: NE78668 48, NE76706 47, Brule 47, NE77465 47, Rohm & Haas HW1001 46, NE77682 46, Buckskin 46, NE78698 46, Rohm & Haas HW1010 46, NE78696 45, Agripro Rocky 44, Dawn 44, Vona 44, Centurk 78 43, Migro Archer 43, NE78415 42, NE78414 40, NE75424 40, Scout 66 39 and Turkey 35 bushels per acre.

Brule was released by the Nebraska Agricultural Experiment Station in 1982. It had an excellent yield record in the 1981-1982 statewide trials. The 1980-1982 seasons did not favor earlier varieties such as Bennett and the Scout types. Winterkilling was a factor in some of the 1980-1982 trials. Cold damage along with other factors reduced yields in Saunders, Clay and Dixon Counties in 1982. Centurk had a good yield record in 1980, was only average in 1981 and below average in 1982.

Protein data for 1982 are shown in Table 16. Percentages generally were low in western Nebraska. This is associated with favorable conditions during later stages of the grainfill period. Eleven-year protein data are shown in Table 17. Kernel weight data are included in Table 18. Plant heights are listed in Table 19.

Scab, flowering, lodging and straw yield data are shown in Table 20. Scab infection is closely related to time of flowering. Lodging of varieties was not consistent over locations. Straw yields were obtained in Dundy County.

Winter Barley

Winter barley trials were seeded at four locations. The Lancaster County trial had poor and uneven survival. The Clay County location also was abandoned because of severe winterkill. Data from Lincoln and Cheyenne Counties are shown in Table 21. Yield and survival data for 1978-1982 are shown in Table 22.

Dundy winter barley was released in 1982. It was developed from the cross Sabbaton/Meimi//Decatur/3/Paoli and was tested as NE76129. Winter survival has been similar to that of Kearney in southwestern Nebraska but better in southeastern Nebraska under more humid conditions. In five years of testing in Nebraska (1978-1982), Dundy outyielded Kearney by 30% and Nebar by 13%.

Table 5. Northeast District winter wheat variety tests. 1982.

Entry	Yield bu/A	Weight lb/bu	Protein %	Gms/1000 seeds	Height in.	Lodging %	Survival %
			Dixon County				
Agate	46	61.0	11.5	40.7	38	7	90
Agripro Rocky	30	58.4	12.8	29.4	35	9	43
Bennett	40	59.4	12.0	36.0	30	4	70
Brule	23	56.5	11.7	31.1	32	3	24
Centurk 78	36	59.7	11.5	31.4	34	7	65
Migro Archer	29	55.9	12.0	29.9	31	9	43
Rohm & Haas HW1001	41	58.8	12.1	35.2	31	6	40
Roughrider	48	62.0	11.8	34.5	38	7	96
Scout 66	45	60.6	12.6	38.2	35	7	68
Rymin Rye	59	55.1	10.5	35.9	41	12	100
Dundy W. Barley	17	47.5	----	----	28	28	3
NE76147 W. Barley	15	47.5	----	----	30	30	1
Dif. req. sig.	11.6	----	0.6	1.8	3.8	N.S.	20
			Knox County				
Agate	30	55.8	13.1	32.9	40	86	98
Agripro Rocky	41	55.1	13.9	26.5	37	94	98
Bennett	40	54.8	14.0	28.1	35	88	96
Brule	37	51.2	13.2	27.5	39	74	92
Centurk 78	34	53.9	14.3	25.4	37	92	96
Migro Archer	36	51.6	13.5	24.5	33	88	97
Rohm & Haas HW1001	43	54.7	12.9	28.7	36	86	89
Roughrider	19	57.0	16.6	30.0	38	54	100
Scout 66	34	55.5	13.5	30.3	39	86	98
Rymin Rye	35	48.8	12.4	33.7	44	91	100
Dundy W. Barley	50	46.8	----	----	35	59	19
NE76147 W. Barley	40	44.2	----	----	36	76	19
Dif. req. sig.	10.0	----	1.4	1.5	2.9	23	8.7

THE METRIC SYSTEM

1 centimeter	=	0.394 inches	mm = inches x 25.4
1 meter	=	39.37 inches	cm = inches x 2.54
1 hectare	=	2.471 acres	ha = acres x 0.405
1 kilogram	=	2.205 pounds	kg = pounds x 0.454
1 hectoliter	=	2.838 pounds	hl = bushels x 0.352

kilograms/hectoliter (kg/hl) = lb/bu x 1.287
kilograms/hectare (kg/ha) = bu/A x 53.81 (48# bushel)
Kilograms/hectare (kg/ha) = bu/A x 67.26 (60# bushel)

Table 6 . Northeast District Winter Wheat Variety Tests. 1977-1982. No 1978 data.

Entry	Grain yield, bu/A								Weight lb/bu		
	1977 average (2 tests)	1979 Dakota County	1980 average (2 tests)	1981 Dakota County	1982 average (2 tests)	1981-82 average (3 tests)	1980-82 average (5 tests)	1977-82 average (8 tests)	1982 average (2 tests)	1980-82 average (5 tests)	1977-82 average (8 tests)
Agate	46	50	70	65	38	52	58	54	58.4	60.4	60.7
Agripro Rocky	--	--	71	76	36	56	61	--	56.8	59.7	--
Bennett	--	--	64	64	40	52	56	--	57.1	59.5	--
Brule	--	--	--	--	30	--	--	--	53.9	--	--
Centurk	42	54	68	66	--	--	--	--	----	--	--
Centurk 78	--	--	67	66	35	51	56	--	56.8	59.4	--
Lancer	39	47	63	63	--	--	--	--	----	--	--
Migro Archer	--	--	--	63	33	48	--	--	53.8	--	--
Rohm & Haas HW1001	--	--	--	--	42	--	--	--	56.8	--	--
Roughrider	40	49	64	53	34	44	50	48	59.5	60.6	60.4
Scout 66	43	48	65	71	40	56	59	53	58.1	60.4	60.5
Rymin Rye 1/	--	--	80	72	47	60	66	--	52.0	55.0	--
Dif. req. for sig.	10.8	N.S.	8.0	9.8	N.S.	N.S.	7.4	N.S.	N.S.	1.1	N.S.

1/ 56# bushel

Location of tests (counties): 1977 Dixon, Knox; 1979 Dakota; 1980 Dixon, Dakota; 1981 Dakota; 1982 Dixon, Knox.

Table 7. Southeast District winter wheat variety tests. 1982.

Entry	Richardson County		Lancaster County		Saunders County		Average (3 tests)	
	Yield bu/a	Weight lb/bu	Yield bu/a	Weight lb/bu	Yield bu/a	Weight lb/bu	Yield bu/a	Weight lb/bu
AgriPro Hawk	37	53.3	27	46.4	13	47.5	26	49.1
Agripro Rocky	39	54.6	30	56.1	22	55.3	30	55.3
Bennett	34	55.8	31	54.8	23	55.3	29	55.3
Brule	40	54.1	43	53.8	41	54.4	41	54.1
Centurk 78	34	54.8	34	55.1	23	54.3	30	54.7
Dawn	33	53.4	39	55.6	29	56.0	34	55.0
HybriTech 567a	51	58.4	37	55.1	36	55.7	41	56.4
Gage	37	56.2	31	55.1	24	55.4	31	55.6
Homestead	34	56.2	23	52.0	24	56.0	27	54.7
Lancota	43	57.6	38	58.0	16	53.2	32	56.3
Larned	35	55.5	29	53.3	23	55.2	29	54.7
Migro Archer	47	55.3	30	48.6	20	49.9	32	51.3
NK Pro Brand 817	39	55.9	37	56.2	26	56.7	34	56.3
Rohm & Haas Hw1001	31	55.2	33	53.2	30	55.2	31	54.5
Scout 66	33	54.8	26	56.5	20	56.4	26	55.9
SR Brawny	34	55.8	37	55.9	39	54.2	37	54.2
SR Citation	31	56.3	27	46.2	33	52.9	30	51.8
Turkey	32	56.0	17	56.5	18	56.4	22	56.3
Vona	32	54.4	32	50.2	17	50.1	27	51.6
NE75424	40	58.5	33	54.9	16	54.3	30	55.9
NE76706	32	54.4	38	56.0	26	55.2	32	55.2
NE77465	33	52.5	22	52.6	27	54.7	27	53.3
NE77682	29	52.4	34	55.5	31	55.3	31	54.4
NE78414	24	49.2	37	56.1	18	53.1	26	52.8
NE78415	26	47.9	26	53.3	17	51.1	23	50.8
NE78668	49	57.7	32	57.5	60	59.0	47	58.1
NE78696	41	55.6	44	56.7	32	54.6	39	55.6
NE78698	37	54.5	42	56.8	25	55.4	35	55.6
Dif. req. for sig.	4.9	----	8.5	----	19.9	1.8	10.5	3.4

Table 8. Southeast District winter wheat variety tests, 1978-1982.

Entry	Grain yield, bu/A									Weight lb/bu		
	1978 average (2 tests)	1979 Pawnee County	1980 Gage County	1981 average (3 tests)	1982 average (3 tests)	1981-82 average (6 tests)	1980-82 average (7 tests)	1979-82 average (8 tests)	1978-82 average (10 tests)	1982 average (3 tests)	1981-82 average (6 tests)	1978-82 average (10 tests)
Agripro Hawk	--	--	--	53	26	40	--	--	--	49.1	----	----
Agripro Rocky	--	--	61	49	30	40	47	--	--	55.3	60.3	----
Bennett	50	43	53	50	29	40	44	44	45	55.3	59.8	59.5
Brule	--	--	--	54	41	48	--	--	--	54.1	----	----
Centurk 78	50	44	62	52	30	41	48	47	48	54.7	60.1	59.5
Dawn	--	--	--	54	34	44	--	--	--	55.0	----	----
HybriTech 567a	--	--	--	--	41	--	--	--	--	56.4	----	----
Gage	42	43	53	48	31	40	44	44	43	55.6	59.7	59.1
Homestead	49	52	50	49	27	38	42	45	45	54.7	59.3	59.0
Lancota	47	43	48	45	32	39	42	42	43	56.3	60.0	59.7
Larned	53	50	58	51	29	40	46	47	48	54.7	59.9	59.6
Migro Archer	--	--	--	51	32	42	--	--	--	51.3	----	----
NK Pro Brand 817	--	--	52	57	34	46	48	--	--	56.3	60.4	----
Rohm & Haas HW1001	--	--	--	51	31	41	--	--	--	54.5	----	----
Scout 66	48	47	54	48	26	37	43	44	45	55.9	60.2	59.8
SR Brawny	--	--	--	--	37	--	--	--	--	54.2	----	----
SR Citation	--	--	--	--	30	--	--	--	--	51.8	----	----
Turkey	39	38	55	37	22	30	38	38	38	56.3	59.7	59.4
Vona	44	--	--	55	27	41	--	--	--	51.6	----	----
NE75424	--	--	--	47	30	39	--	--	--	55.9	59.4	----
NE76706	--	--	--	52	32	42	--	--	--	55.2	57.9	----
NE77465	--	--	--	50	27	39	--	--	--	53.3	57.2	----
NE77682	--	--	--	54	31	43	--	--	--	54.4	57.9	----
NE78414	--	--	--	--	26	--	--	--	--	52.8	----	----
NE78415	--	--	--	--	23	--	--	--	--	50.8	----	----
NE78668	--	--	--	--	47	--	--	--	--	58.1	----	----
NE78696	--	--	--	55	39	47	--	--	--	55.6	58.2	----
NE78698	--	--	--	51	35	43	--	--	--	55.6	58.3	----
Dif. req. sig.	6.0	5.1	5.0	11.9	10.5	5.8	N.S.	N.S.	4.3	3.4	N.S.	N.S.

Location of tests (Counties): 1978 Johnson, Seward; 1979 Pawnee; 1980 Gage; 1981 Cass, Saunders, Jefferson; 1982 Richardson, Lancaster, Saunders.

Table 9. South Central District winter wheat variety tests. 1982.

Entry	Thayer County		Clay County			Average (2 tests)	
	Yield bu/A	Weight lb/bu	Survival %	Yield bu/a	Weight lb/bu	Yield bu/a	Weight lb/bu
Agripro Hawk	21	47.7	15	1	—	11	—
Agripro Rocky	36	53.7	51	9	50.2	23	52.0
Bennett	31	54.5	59	11	48.7	21	51.6
Brule	52	56.2	69	18	54.2	35	55.2
Buckskin	40	59.2	44	12	47.0	26	53.1
Centurk 78	32	53.2	50	5	52.6	19	52.9
Dawn	46	56.8	40	7	50.8	27	53.8
HybriTech H131	48	55.6	54	11	52.0	30	53.8
Lancota	35	56.6	15	5	42.3	20	49.5
Larned	39	57.1	55	9	49.5	24	53.3
Migro Archer	38	52.9	34	3	44.8	21	48.9
NK Pro Brand 817	43	58.5	74	16	54.1	30	56.3
NK Pro Brand 835	44	57.5	50	9	52.8	27	55.2
Rohm & Haas HW1001	41	56.6	34	5	44.8	23	50.7
Rohm & Haas HW1010	42	53.0	36	3	45.2	23	49.1
Scout 66	37	56.4	59	7	49.7	22	53.1
Turkey	22	57.3	79	10	53.6	16	55.5
Vona	40	52.1	29	4	40.3	22	46.2
NE75424	32	54.4	58	9	53.5	21	54.0
NE76706	42	57.4	56	7	48.5	25	53.0
NE77465	31	53.2	71	20	54.8	26	54.0
NE77682	35	55.0	38	7	47.3	21	51.2
NE78414	36	55.9	70	7	42.9	22	49.4
NE78415	33	53.4	76	9	45.4	21	49.4
NE78668	40	59.4	83	31	55.4	36	57.4
NE78696	43	56.6	64	17	47.8	30	52.2
NE78698	41	57.8	61	23	52.8	32	55.3
Dif. req. sig.	7.0	----	13.9	3.8	4.4	N.S.	N.S.

Table 10. South Central District winter wheat variety tests. 1978-1982

Entry	Grain yield, bu/A									Weight lb/bu		
	1978 average (2 tests)	1979 average (3 tests)	1980 average (2 tests)	1981 average (2 tests)	1982 average (2 tests)	1981-82 average (4 tests)	1980-82 average (6 tests)	1979-82 average (9 tests)	1978-82 average (11 tests)	1982 average (2 tests)	1980-82 average (6 tests)	1978-82 average (11 tests)
Agripro Hawk	--	--	--	74	11	43	--	--	--	--	--	--
Agripro Rocky	--	--	73	62	23	43	53	--	--	52.0	57.7	--
Bennett	40	43	67	62	21	42	50	48	47	51.6	57.1	56.9
Brule	--	--	--	74	35	55	--	--	--	55.2	--	--
Buckskin	32	46	67	63	26	45	52	51	47	53.1	57.5	57.1
Centurk 78	35	43	71	61	19	40	50	49	46	52.9	57.8	57.0
Dawn	--	--	--	76	27	52	--	--	--	53.8	--	--
HybriTech H131	--	--	--	--	30	--	--	--	--	53.8	--	--
Lancota	32	42	61	60	20	40	47	46	43	49.5	56.6	56.9
Larned	35	44	64	67	24	46	52	50	47	53.3	58.3	57.7
Migro Archer	--	--	--	74	21	48	--	--	--	48.9	--	--
NKPro Brand 817	--	--	69	70	30	50	56	--	--	56.3	59.3	--
NKPro Brand 835	--	--	68	67	27	47	54	--	--	55.2	59.0	--
Rohm & Haas HW1001	--	--	--	73	23	48	--	--	--	50.7	--	--
Rohm & Haas HW1010	--	--	--	--	23	--	--	--	--	49.1	--	--
Scout 66	34	42	60	62	22	42	48	47	44	53.1	58.0	57.6
Turkey	23	36	50	40	16	28	35	36	33	55.5	57.8	57.5
Vona	38	45	76	75	22	49	58	55	51	46.2	55.4	55.5
NE75424	--	--	--	61	21	41	--	--	--	54.0	--	--
NE76706	--	--	--	68	25	47	--	--	--	53.0	--	--
NE77465	--	--	--	67	26	47	--	--	--	54.0	--	--
NE77682	--	--	--	63	21	42	--	--	--	51.2	--	--
NE78414	--	--	--	--	22	--	--	--	--	49.4	--	--
NE78415	--	--	--	--	21	--	--	--	--	49.4	--	--
NE78668	--	--	--	--	36	--	--	--	--	57.4	--	--
NE78696	--	--	--	72	30	51	--	--	--	52.2	--	--
NE78698	--	--	--	69	32	51	--	--	--	55.3	--	--
Dif. req. sig.	2.3	N.S.	N.S.	14.5	N.S.	10.9	7.3	6.3	5.1	N.S.	N.S.	N.S.

Location of tests (Counties): 1978 Clay, Harlan; 1979 Polk, Clay, Kearney; 1980 Clay, Kearney; 1981 Clay, Franklin; 1982 Clay, Thayer.

Table 11. Central District winter wheat variety tests, 1977-1982. No 1981 data.

Entry	Grain yield, bu/A									Weight, lb/bu		
	1977 Custer County	1978 average (2 tests)	1979 average (2 tests)	1980 Nance County	1982 Buffalo County	1980-82 average (2 tests)	1979-82 average (4 tests)	1978-82 average (6 tests)	1977-82 average (7 tests)	1982 Buffalo County	1979-82 average (2 tests)	1977-82 average (7 tests)
Agate	41	35	47	65	25	45	46	43	43	57.0	58.3	59.2
Agripro Rocky	--	--	--	70	32	51	--	--	--	55.0	----	----
Agripro Wings	--	--	--	81	36	59	--	--	--	56.0	----	----
Bennett	40	37	45	72	32	52	50	47	45	55.5	58.6	59.0
Brule	--	--	--	--	36	--	--	--	--	52.0	----	----
Buckskin	37	37	49	64	32	48	48	46	44	56.0	58.8	58.9
Centurk 78	40	40	50	77	34	56	54	50	48	55.0	58.4	59.0
Dawn	--	--	--	73	32	53	--	--	--	55.0	59.3	----
Larned	36	39	50	62	39	51	50	48	45	57.0	----	59.4
Migro Archer	--	--	--	--	27	--	--	--	--	48.0	----	----
Rohm & Haas HW1001	--	--	--	--	40	--	--	--	--	57.0	----	----
Rohm & Haas HW1010	--	--	--	--	30	--	--	--	--	50.5	----	----
Scout 66	37	38	46	57	35	46	46	44	43	58.0	59.2	59.5
SR Brawny	--	--	--	--	37	--	--	--	--	55.5	----	----
SR Citation	--	--	--	--	40	--	--	--	--	57.5	----	----
Turkey	32	31	39	40	23	32	34	33	33	59.0	57.6	58.4
Vona	24	38	51	78	29	54	53	49	44	49.0	56.4	56.9
NE75424	--	--	--	--	23	--	--	--	--	58.5	----	----
NE76706	--	--	--	--	33	--	--	--	--	58.0	----	----
NE77465	--	--	--	--	36	--	--	--	--	59.5	----	----
NE77682	--	--	--	--	41	--	--	--	--	57.0	----	----
NE78414	--	--	--	--	25	--	--	--	--	51.5	----	----
NE78415	--	--	--	--	25	--	--	--	--	50.0	----	----
NE78668	--	--	--	--	40	--	--	--	--	55.0	----	----
NE78696	--	--	--	--	36	--	--	--	--	55.0	----	----
NE78698	--	--	--	--	39	--	--	--	--	55.0	----	----
Dif. reg. sig.	8.0	4.2	N.S.	6.4	11.5	N.S.	11.1	8.1	N.S.	----	N.S.	N.S.

Location of tests (counties): 1977 Custer; 1978 Sherman, Logan; 1979 Howard, Custer; 1980 Nance; 1982 Buffalo.

Table 12. Southwest District winter wheat variety tests. 1982.

Entry	Lincoln County		Dundy County		Average (2 tests)	
	Yield bu/A	Weight lb/bu	Yield bu/A	Weight lb/bu	Yield bu/A	Weight lb/bu
Agripro Hawk	23	55.2	67	60.3	45	57.8
Agripro Rocky	30	58.4	61	60.4	46	59.4
Brule	33	57.6	61	59.5	47	58.6
Buckskin	29	59.8	66	60.6	48	60.2
Centurk 78	27	58.5	64	60.5	46	59.5
Dawn	24	59.0	65	61.1	45	60.1
HybriTech H130	22	59.1	63	60.5	43	59.8
Larned	31	60.3	56	61.3	44	60.8
Migro Archer	29	57.0	67	60.3	48	58.7
NK Pro Brand 817	23	58.5	62	62.3	43	60.4
NK Pro Brand 835	17	59.8	62	60.3	40	60.1
Rohm & Haas HW1001	22	58.5	72	61.8	47	60.2
Rohm & Haas HW1010	19	57.0	69	61.9	44	59.5
Scout 66	20	59.7	54	61.4	37	60.6
SR Brawny	16	58.0	49	60.3	33	59.2
SR Citation	15	57.0	51	61.8	33	59.4
Turkey	20	57.8	52	60.4	36	59.1
Vona	18	57.3	70	61.4	44	59.4
NE75424	31	60.1	63	62.1	47	61.1
NE76706	29	58.6	68	61.2	49	59.9
NE77465	33	59.4	65	59.2	49	59.3
NE77682	24	58.1	61	61.4	43	59.8
NE78414	27	56.8	57	60.3	42	58.6
NE78415	23	55.5	64	60.2	44	57.9
NE78668	33	59.0	63	60.4	48	59.7
NE78696	27	60.0	64	61.4	46	60.7
NE78698	28	58.7	68	61.6	48	60.2
Dif. req. sig.	6.1	1.8	9.5	----	5.4	N.S.

Table 13. Southwest District winter wheat variety tests. 1978-1982.

Entry	Grain yield, bu/A									Weight, lb/bu		
	1978 average (3 tests)	1979 average (3 tests)	1980 average (3 tests)	1981 average (3 tests)	1982 average (2 tests)	1981-82 average (5 tests)	1980-82 average (8 tests)	1979-82 average (11 tests)	1978-82 average (14 tests)	1982 average (2 tests)	1980-82 average (8 tests)	1978-82 average (14 tests)
Agripro Hawk	--	--	--	--	45	--	--	--	--	57.8	--	--
Agripro Rocky	--	--	51	60	46	53	52	--	--	59.4	60.3	--
Brule	--	--	--	55	47	51	--	--	--	58.6	--	--
Buckskin	38	52	50	53	48	51	50	51	48	60.2	60.0	59.9
Centurk 78	41	50	50	59	46	53	52	51	49	59.5	60.0	60.1
Dawn	--	--	50	59	45	52	51	--	--	60.1	60.1	--
HybriTech H130	--	--	--	--	43	--	--	--	--	59.8	--	--
Larned	39	47	50	51	44	48	48	48	46	60.8	60.8	60.5
Migro Archer	--	--	--	57	48	53	--	--	--	58.7	--	--
NK Pro Brand 817	--	--	48	49	43	46	47	--	--	60.4	60.4	--
NK Pro Brand 835	--	--	45	46	40	43	44	--	--	60.1	60.1	--
Rohm & Haas HW1001	--	--	--	57	47	52	--	--	--	60.2	--	--
Rohm & Haas HW1010	--	--	--	--	44	--	--	--	--	59.5	--	--
Scout 66	39	47	48	49	37	43	45	45	44	60.6	60.6	60.6
SR Brawny	--	--	--	--	33	--	--	--	--	59.2	--	--
SR Citation	--	--	--	--	33	--	--	--	--	59.4	--	--
Turkey	32	43	40	38	36	37	38	39	38	59.1	59.4	59.3
Vona	39	48	51	60	44	52	52	51	48	59.4	59.2	59.8
NE75424	--	--	--	50	47	49	--	--	--	61.1	--	--
NE76706	--	--	--	63	49	56	--	--	--	59.9	--	--
NE77465	--	--	--	54	49	52	--	--	--	59.3	--	--
NE77682	--	--	--	57	43	50	--	--	--	59.8	--	--
NE78414	--	--	--	--	42	--	--	--	--	58.6	--	--
NE78415	--	--	--	--	44	--	--	--	--	57.9	--	--
NE78668	--	--	--	--	48	--	--	--	--	59.7	--	--
NE78696	--	--	--	49	46	48	--	--	--	60.7	--	--
NE78698	--	--	--	52	48	50	--	--	--	60.2	--	--
Dif. req. sig.	5.0	5.4	N.S.	7.5	5.4	6.8	4.8	4.5	3.8	N.S.	0.7	0.7

Location of tests (counties): 1978 Furnas, Lincoln, Chase; 1979 Hitchcock, Lincoln, Perkins; 1980 Lincoln, Hayes, Keith; 1981 Red Willow, Frontier, Lincoln; 1982 Lincoln, Dundy.

Table 14. West District winter wheat variety tests. 1982.

Entry	Garden County		Cheyenne County		Scottsbluff County		Box Butte County		Sheridan County		Average (5 tests)	
	Yield bu/A	Weight lb/bu	Yield bu/A	Weight lb/bu	Yield bu/A	Weight lb/bu	Yield bu/A	Weight lb/bu	Yield bu/A	Weight lb/bu	Yield bu/A	Weight lb/bu
Agate	47	59.9	62	62.0	43	61.0	51	60.6	39	59.4	48	60.6
Agripro Rocky	50	61.3	57	62.1	37	60.9	48	59.2	40	58.6	46	60.4
Agripro Wings	59	61.8	56	62.7	43	61.9	44	59.8	35	59.0	47	61.0
Brule	60	60.0	56	60.8	40	59.9	51	59.0	36	57.0	49	59.3
Buckskin	47	60.8	59	61.9	41	61.3	56	61.0	37	59.0	48	60.8
Centurk 78	48	61.0	56	62.0	34	60.6	44	56.3	40	58.4	44	59.7
Dawn	51	60.6	56	62.4	40	61.5	51	60.2	36	59.3	47	60.8
HybriTech H85b	59	59.6	58	62.6	38	60.4	44	54.7	39	58.4	48	58.9
HybriTech NH1121	66	60.4	55	61.5	36	60.7	45	59.4	32	59.6	47	60.3
Migro Archer	57	58.5	56	61.1	36	59.1	42	56.5	33	58.1	45	58.7
NK Pro Brand 817	57	61.9	51	63.2	33	62.7	46	60.7	29	60.5	43	61.8
NK Pro Brand 835	55	62.0	55	62.6	31	60.8	38	58.3	33	60.2	42	60.8
Rohm & Haas HW1001	48	61.3	61	62.7	37	61.2	49	59.2	40	59.9	47	60.9
Rohm & Haas HW1010	61	60.9	60	62.6	42	60.9	46	57.5	38	59.6	49	60.3
Scout 66	36	61.1	55	62.6	35	61.3	47	62.0	33	59.6	41	61.3
Turkey	35	60.5	46	62.2	35	61.4	39	57.4	29	59.5	37	60.2
Vona	59	60.6	61	62.4	38	60.7	41	53.8	36	59.7	47	59.4
NE75424	51	62.1	52	63.3	33	62.4	33	58.5	35	59.9	41	61.2
NE76667	54	60.8	54	62.1	36	61.2	49	59.5	35	59.2	46	60.6
NE76706	57	61.3	58	62.9	41	61.3	47	59.0	41	58.7	49	60.6
NE77465	54	60.5	58	61.4	37	60.5	48	56.8	41	57.7	48	59.4
NE77682	50	60.9	60	62.8	41	61.2	53	60.0	38	59.4	48	60.9
NE78414	54	60.5	52	61.3	35	60.0	40	57.8	32	58.5	43	59.6
NE78415	57	59.8	52	61.2	32	59.5	47	58.0	32	58.4	44	59.4
NE78668	58	60.3	57	61.9	43	61.4	52	58.0	34	58.0	49	59.9
NE78696	66	61.5	52	62.7	36	60.7	45	59.0	32	59.9	46	61.7
NE78698	55	61.0	54	62.7	41	61.0	47	59.5	35	59.3	46	60.7
NE78702	59	61.3	56	62.5	39	61.3	49	59.2	33	59.1	47	60.7
Dif. req. sig.	10.0	0.6	4.7	0.4	3.6	0.5	4.6	2.0	5.3	0.4	5.3	1.0

Table 15. West District winter wheat variety tests. 1978-82.

Entry	Grain yield, bu/A									Weight, lb/bu		
	1978 5 tests	1979 4 tests	1980 3 tests	1981 5 tests	1982 5 tests	1981-82 10 tests	1980-82 13 tests	1979-82 17 tests	1978-82 22 tests	1982 5 tests	1980-82 13 tests	1978-82 22 tests
Agate	43	48	40	42	48	45	43	45	44	60.6	60.4	60.2
Agripro Rocky	--	--	42	46	46	46	45	--	--	60.4	60.4	----
Agripro Wings	--	--	42	46	47	47	45	--	--	61.0	60.9	----
Brule	--	--	--	50	49	50	--	--	--	59.3	----	----
Buckskin	44	48	43	46	48	47	46	46	46	60.8	60.8	60.6
Centurk 78	46	53	41	46	44	45	44	46	46	59.7	60.0	60.0
Dawn	--	--	--	48	47	48	--	--	--	60.8	----	----
HybriTech H856	--	--	--	44	48	46	--	--	--	58.9	----	----
HybriTech NH1121	--	--	--	--	47	--	--	--	--	60.3	----	----
Migro Archer	--	--	--	48	45	47	--	--	--	58.7	----	----
NK Pro Brand 817	--	--	--	--	43	--	--	--	--	61.8	----	----
NK Pro Brand 835	--	--	--	--	42	--	--	--	--	60.8	----	----
Rohm & Haas HW1001	--	--	--	49	47	48	--	--	--	60.9	----	----
Rohm & Haas HW1010	--	--	--	--	49	--	--	--	--	60.3	----	----
Scout 66	42	46	43	43	41	42	42	43	43	61.3	61.4	61.0
Turkey	35	41	36	34	37	36	36	37	37	60.2	60.3	59.9
Vona	47	56	42	48	47	48	46	48	48	59.4	60.2	60.2
NE75424	--	--	--	42	41	42	--	--	--	61.2	----	----
NE76667	--	--	--	45	46	46	--	--	--	60.6	----	----
NE76706	--	--	--	49	49	49	--	--	--	60.6	----	----
NE77465	--	--	--	45	48	47	--	--	--	59.4	----	----
NE77682	--	--	--	47	48	48	--	--	--	60.9	----	----
NE78414	--	--	--	--	43	--	--	--	--	59.6	----	----
NE78415	--	--	--	--	44	--	--	--	--	59.4	----	----
NE78668	--	--	--	--	49	--	--	--	--	59.9	----	----
NE78696	--	--	--	48	46	47	--	--	--	61.7	----	----
NE78698	--	--	--	49	46	48	--	--	--	60.7	----	----
NE78702	--	--	--	47	47	47	--	--	--	60.7	----	----
Dif. req. sig.	5.4	5.3	N.S.	6.5	5.3	3.5	3.5	3.7	2.9	1.0	0.7	0.6

Location of test (counties): 1978 Garden, Cheyenne, Box Butte (2), Dawes; 1979 Deuel, Cheyenne, Box Butte, Dawes; 1980 Kimball, Scotts Bluff, Box Butte; 1981 Deuel, Cheyenne, Morrill, Box Butte, Dawes; 1982 Garden, Cheyenne, Scotts Bluff, Box Butte, Sheridan.

Table 16. Protein content of winter wheat varieties in Nebraska tests. 1982.

Variety	Richardson County	Lancaster County	Saunders County	Thayer County	Clay County	Buffalo County	Lincoln County	Dundy County	Garden County	Cheyenne County	Scotts Bluff County	Box Butte County	Sheridan County	Average 13 tests
Agate	----	----	----	----	----	13.4	----	----	11.6	9.6	9.8	10.8	8.3	----
Agripro Hawk	12.4	13.8	14.5	11.8	14.3	----	12.2	9.0	----	----	----	----	----	----
Agripro Rocky	13.8	14.4	15.0	10.9	14.2	14.2	12.2	9.0	11.3	9.1	10.5	12.6	7.5	11.9
Agripro Wings	----	----	----	----	----	12.4	----	----	10.4	9.6	9.3	10.6	7.5	----
Bennett	14.8	14.1	14.5	12.6	14.3	13.3	----	----	----	----	----	----	----	----
Brule	12.1	12.9	13.7	10.0	13.0	13.3	11.8	8.9	9.6	8.8	9.5	10.6	7.4	10.9
Buckskin	----	----	----	10.7	14.8	13.8	12.0	9.2	10.5	9.5	9.9	11.5	8.0	----
Centurk 78	13,1	13,8	14,6	10.6	13.8	14.0	12.0	9.2	12.6	9.2	10.6	12.7	7.6	11.8
Dawn	12.8	12.7	13.6	10.4	14.4	14.0	11.7	9.1	10.2	8.8	9.7	11.0	7.7	11.2
HybriTech 567a	14.3	13.9	14.4	----	----	----	----	----	----	----	----	----	----	----
HybriTech H85b	----	----	----	----	----	----	----	----	10.1	9.2	9.4	10.2	7.6	----
HybriTech H130	----	----	----	----	----	----	12.7	9.3	----	----	----	----	----	----
HybriTech H131	----	----	----	11.0	14.7	----	----	----	----	----	----	----	----	----
HybriTech NH1121	----	----	----	----	----	----	----	----	11.9	9.1	10.3	11.2	8.4	----
Gage	14.2	14.1	15.1	----	----	----	----	----	----	----	----	----	----	----
Homestead	15.8	14.6	14.4	----	----	----	----	----	----	----	----	----	----	----
Lancota	14.4	14.1	15.7	11.0	14.8	----	----	----	----	----	----	----	----	----
Larned	14.0	13.5	14.3	11.1	14.3	12.6	12.9	9.3	----	----	----	----	----	----
Migro Archer	13.0	13.7	14.5	11.1	14.6	14.0	12.0	9.4	10.6	10.6	10.2	11.8	8.1	11.8
NK Pro Brand 817	13.6	13.1	14.3	10.6	14.2	----	12.9	9.9	10.8	10.3	10.6	11.6	8.7	----
NK Pro Brand 835	----	----	----	10.7	14.3	----	12.9	9.2	11.6	9.3	10.1	11.3	8.0	----
Rohm & Haas HW1001	13.7	13.0	13.7	9.7	13.8	12.7	12.4	9.0	10.8	10.3	9.8	11.5	7.9	11.4
Rohm & Haas HW1010	----	----	----	12.4	13.8	13.6	13.0	8.8	9.5	8.9	9.7	11.0	7.9	----
Scout 66	13.9	13.9	14.6	10.5	13.8	13.8	13.9	10.0	12.2	10.6	10.4	10.9	8.8	12.1
Seed Research Brawny	16.3	14.0	15.5	----	----	15.3	15.3	11.6	----	----	----	----	----	----
Seed Research Citation	13.9	13.3	13.8	----	----	12.6	13.8	10.6	----	----	----	----	----	----
Turkey	13.7	14.8	15.9	12.3	14.5	15.2	12.1	9.8	12.8	10.1	10.2	13.0	8.7	12.5
Vona	13.6	13.4	13.9	11.6	13.6	14.5	13.3	8.9	10.4	8.8	8.3	11.7	7.9	11.5
NE75424	14.2	13.8	16.2	11.9	14.9	14.7	12.2	9.5	11.0	10.1	10.7	13.5	8.4	12.4
NE76667	----	----	----	----	----	----	----	----	11.2	10.0	10.0	11.8	8.3	----
NE76706	15.0	14.1	15.4	11.0	14.3	15.2	12.1	9.3	10.9	10.2	9.7	10.7	7.5	12.0
NE77465	13.1	13.6	14.0	11.1	13.4	14.0	11.8	9.9	11.7	10.1	10.7	13.2	8.0	11.9
NE77682	14.1	14.2	14.7	10.3	14.2	14.3	12.2	9.5	12.4	12.6	10.0	11.2	7.8	12.1
NE78414	15.1	14.0	14,2	10.9	14.6	15.3	12.9	9.3	11.1	11.2	10.7	11.6	8.2	12.2
NE78415	15.1	13.9	14.9	10.8	14.8	15.0	13.1	9.3	11.2	10.1	10.9	12.7	8.5	12.3
NE78668	13.3	13.3	13.3	10.4	13.9	14.0	11.8	9.6	10.0	9.6	10.1	10.8	8.0	11.4
NE78696	13.3	13.5	14.5	10.7	14.1	14.0	12.0	9.5	10.8	10.5	10.7	13.0	8.7	11.9
NE78698	13.3	13.2	13.9	10.5	13.8	13.7	12.4	9.3	11.2	10.4	9.8	12.4	8.5	11.7
NE78702	----	----	----	----	----	----	----	----	10.3	10.6	10.1	12.7	8.4	----
Average	13.9	13.7	14.5	11.0	14.2	14.0	12.6	9.5	11.0	9.9	10.1	11.7	8.1	11.8
Dif. req. sig.	0.5	0.8	0.7	0.8	0.7	0.6	----	0.7	N.S.	1.1	0.9	1.4	0.6	0.4

Table 17. Protein content of winter wheat varieties in Nebraska tests. 1972-1982.

Entry	1972 13 tests	1973 12 tests	1974 13 tests	1975 13 tests	1976 12 tests	1977 15 tests	1978 11 tests	1979 12 tests	1980 9 tests	1981 13 tests	1982 13 tests
Agate	----	12.4	11.8	12.9	13.2	12.9	13.4	11.2	10.3	----	----
Agripro Rocky	----	----	----	----	----	----	----	----	10.3	11.5	11.9
Agripro Wings	----	----	----	----	----	----	----	----	10.4	----	----
Bennett	----	----	----	----	12.8	13.1	13.4	11.5	11.1	12.7	----
Brule	----	----	----	----	----	----	----	----	----	11.0	10.9
Buckskin	11.7	12.4	11.6	12.7	12.8	12.7	13.5	11.3	10.5	11.5	----
Centurk	11.7	12.0	11.8	12.9	12.8	12.5	13.1	11.1	10.4	11.4	----
Centurk 78	----	----	----	----	12.6	12.5	13.1	11.0	10.4	11.4	11.8
Dawn	----	----	----	----	----	----	----	----	----	11.1	11.2
Lancer	11.5	12.2	11.6	12.9	12.9	12.7	13.2	11.0	10.6	11.4	----
Lancota	12.6	13.3	12.9	13.7	13.5	13.4	14.1	11.9	11.0	12.5	----
Larned	----	----	----	----	12.6	12.4	12.8	11.1	10.7	----	----
Migro Archer	----	----	----	----	----	----	----	----	----	11.4	11.8
Rohm & Haas HW1001	----	----	----	----	----	----	----	----	----	11.6	11.4
Rohm & Haas HW1003	----	----	----	----	----	----	----	----	----	12.5	----
Sage	----	12.7	12.3	13.3	12.8	12.9	13.1	11.4	10.8	----	----
Scout 66	11.8	12.1	11.8	13.0	12.7	12.6	13.1	11.3	10.6	12.0	12.1
TAM 105	----	----	----	----	----	----	----	----	10.3	11.7	----
Turkey	12.0	13.1	12.1	12.9	14.1	13.4	13.9	12.0	11.1	12.1	12.5
Vona	----	----	----	----	----	----	12.7	----	----	11.1	11.5
NE75424	----	----	----	----	----	----	----	----	----	12.5	12.4
NE76706	----	----	----	----	----	----	----	----	----	11.7	12.0
NE77465	----	----	----	----	----	----	----	----	----	11.5	11.9
NE77682	----	----	----	----	----	----	----	----	----	11.8	12.1
NE78696	----	----	----	----	----	----	----	----	----	12.0	11.9
NE78698	----	----	----	----	----	----	----	----	----	11.8	11.7
NE78414	----	----	----	----	----	----	----	----	----	----	12.2
NE78415	----	----	----	----	----	----	----	----	----	----	12.3
NE78668	----	----	----	----	----	----	----	----	----	----	11.4
Average	12.0	12.6	12.1	13.1	12.9	12.9	13.3	11.3	10.6	11.7	11.8
Dif. req. sig.	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	1.0	0.4	0.4

Protein on 14% moisture basis.

Table 18. Kernel weight at winter wheat varieties in Nebraska tests. 1982.

Entry	Weight of 1000 kernels, grams													Average 13 tests	
	Richardson County	Lancaster County	Saunders County	Thayer County	Clay County	Buffalo County	Lincoln County	Dundy County	Garden County	Cheyenne County	Scotts Bluff County	Box Butte County	Sheridan County	Gms/ 1000	Seeds/ lbs.
Agate	----	----	----	----	----	31.6	----	----	36.2	41.0	36.6	38.3	39.9	----	----
Agripro Hawk	31.6	24.3	24.6	28.3	29.0	----	28.3	41.1	----	----	----	----	----	----	----
Agripro Rocky	27.4	25.6	21.8	26.7	29.4	24.8	24.7	32.7	30.0	33.6	29.3	30.4	32.4	28.4	15,970
Agripro Wings	----	----	----	----	----	27.2	----	----	31.4	35.3	32.3	33.3	32.3	----	----
Bennett	30.4	28.7	25.6	29.9	32.6	30.5	----	----	----	----	----	----	----	----	----
Brule	26.8	26.7	26.2	29.6	32.6	24.8	24.1	37.7	32.6	36.4	33.5	34.6	35.1	30.8	14,730
Buckskin	----	----	----	30.5	29.7	27.5	27.4	37.7	33.6	37.8	35.2	35.5	36.6	----	----
Centurk 78	25.5	25.2	20.7	27.1	31.0	24.0	23.8	33.5	31.4	32.8	29.9	29.8	32.2	28.2	16,090
Dawn	24.3	27.0	25.5	29.5	32.1	24.7	25.4	36.2	32.2	35.1	32.8	33.2	34.0	30.2	15,020
HybriTech 567a	33.2	27.1	27.0	----	----	----	----	----	----	----	----	----	----	----	----
HybriTech H85b	----	----	----	----	----	----	----	----	33.5	38.2	34.9	34.6	37.6	----	----
HybriTech H130	----	----	----	----	----	----	28.5	38.1	----	----	----	----	----	----	----
HybriTech H131	----	----	----	31.0	31.1	----	----	----	----	----	----	----	----	----	----
HybriTech NH1121	----	----	----	----	----	----	----	----	33.0	36.7	34.0	35.1	37.2	----	----
Gage	28.3	26.1	24.9	----	----	----	----	----	----	----	----	----	----	----	----
Homestead	29.3	25.6	25.4	----	----	----	----	----	----	----	----	----	----	----	----
Lancota	29.7	31.6	27.8	32.7	31.7	----	----	----	----	----	----	----	----	----	----
Larned	29.4	27.8	25.9	32.6	33.1	31.5	31.1	39.2	----	----	----	----	----	----	----
Migro Archer	26.6	23.2	22.6	25.4	27.7	22.6	24.7	33.2	30.1	32.5	30.3	30.9	31.4	27.8	16,320
NK Pro Brand 817	27.7	26.9	28.7	26.6	35.7	----	25.4	35.7	31.4	35.2	32.6	34.9	34.6	----	----
NK Pro Brand 835	----	----	----	29.9	32.6	----	27.6	37.6	33.7	37.2	32.8	32.7	35.4	----	----
Rohm & Haas HW1001	28.1	27.2	26.8	31.5	30.5	29.9	27.1	37.5	33.8	37.0	34.0	33.6	37.1	31.9	14,220
Rohm & Haas HW1010	----	----	----	27.0	29.0	25.0	24.1	37.0	31.6	35.8	32.3	32.8	34.3	----	----
Scout 66	28.5	29.3	27.4	31.7	34.1	31.0	28.1	38.0	33.7	37.4	34.4	36.4	37.4	32.9	13,790
Seed Research Brawny	28.0	26.1	26.7	----	----	27.1	24.4	36.1	----	----	----	----	----	----	----
Seed Research Citation	30.4	25.2	21.6	----	----	31.3	23.7	37.2	----	----	----	----	----	----	----
Turkey	27.0	28.2	27.2	28.4	31.5	25.2	24.5	35.3	32.1	34.0	32.5	31.7	33.7	30.1	15,070
Vona	25.5	24.9	22.8	25.4	28.6	22.4	26.7	35.4	30.3	33.4	30.8	31.5	32.4	28.5	15,920
NE75424	28.2	26.5	22.1	26.6	29.6	23.8	25.2	34.2	32.7	34.3	31.8	31.6	35.0	29.4	15,430
NE76667	----	----	----	----	----	----	----	----	33.6	36.3	32.4	34.0	36.8	----	----
NE76706	24.9	27.3	25.7	28.8	32.3	27.3	24.4	36.3	32.1	35.8	33.1	33.2	34.3	30.4	14,920
NE77465	25.5	25.4	22.9	26.7	32.6	26.3	28.9	35.5	32.2	34.7	31.7	31.9	33.7	29.8	15.220
NE77682	25.6	27.1	23.7	29.2	30.4	28.5	23.8	35.2	32.2	35.8	32.7	33.5	35.2	30.2	15,020
NE78414	22.2	27.2	23.3	29.2	30.0	26.1	25.9	37.1	34.0	38.2	34.1	34.1	35.8	30.6	14,820
NE78415	22.8	26.9	24.2	27.1	32.7	25.3	23.2	37.1	33.5	37.1	32.1	34.9	34.4	30.1	15,070
NE78668	30.1	30.4	29.2	30.3	32.0	28.3	26.9	35.9	30.3	33.4	32.5	33.1	33.1	31.2	14,540
NE78696	27.2	27.5	25.3	26.1	30.5	27.4	28.7	35.5	32.2	34.9	31.2	33.3	34.2	30.3	14,970
NE78698	26.5	28.1	27.0	29.8	31.8	29.3	25.8	36.6	32.9	37.4	34.0	35.7	36.2	31.6	14,350
NE78702	----	----	----	----	----	----	----	----	32.2	35.7	32.7	33.7	34.1	----	----
Dif. req. sig.	1.8	1.8	1.3	1.4	0.9	1.5	N.S.	1.5	1.7	1.8	1.2	0.9	1.0	1.0	----

Seeds per pound = 453.6 x 1000 ÷ grams/1000 kernels.

Table 19. Height of winter wheat varieties in Nebraska tests. 1982.

Entry	Plant height, inches												
	Richardson County	Lancaster County	Saunders County	Thayer County	Clay County	Buffalo County	Dundy County	Garden County	Cheyenne County	Scotts Bluff County	Box Butte County	Sheridan County	Average 12 tests
Agate	--	--	--	--	--	45	--	41	40	31	37	34	--
Agripro Hawk	37	40	37	40	31	--	36	--	--	--	--	--	--
Agripro Rocky	42	43	42	43	39	40	42	40	38	29	35	37	39
Agripro Wings	--	--	--	--	--	35	--	35	35	26	32	29	--
Bennett	36	40	40	40	35	37	--	--	--	--	--	--	--
Brule	35	42	41	39	38	40	38	37	35	28	33	33	37
Buckskin	--	--	--	44	41	43	43	42	41	29	38	38	--
Centurk 78	49	42	41	42	35	38	49	39	36	28	34	38	38
Dawn	33	40	39	36	34	39	38	36	34	27	31	32	35
HybriTech 567a	39	38	38	--	--	--	--	--	--	--	--	--	-
HybriTech H85b	--	--	--	--	--	--	--	42	39	31	37	36	--
HybriTech H130	--	--	--	--	--	--	36	--	--	--	--	--	--
HybriTech H131	--	--	--	38	34	--	--	--	--	--	--	--	--
HybriTech NH1121	--	--	--	--	--	--	--	37	36	30	34	30	--
Gage	40	44	44	--	--	--	--	--	--	--	--	--	--
Homestead	36	37	39	--	--	--	--	--	--	--	--	--	--
Lancota	44	45	43	43	39	--	--	--	--	--	--	--	--
Larned	38	43	43	45	37	38	38	--	--	--	--	--	--
Migro Archer	36	35	35	36	29	34	33	34	32	26	29	29	32
NK Pro Brand 817	39	40	37	38	35	--	34	34	34	26	31	39	--
NK Pro Brand 835	--	--	--	36	30	--	36	33	32	25	29	30	--
Rohm & Haas HW1001	36	43	41	44	33	36	39	39	37	28	34	34	37
Rohm & Haas HW1010	--	--	--	36	29	32	34	34	33	25	30	29	--
Scout 66	39	44	44	44	40	44	42	41	40	28	35	35	40
Seed Research Brawny	30	34	33	--	--	31	32	--	--	--	--	--	--
Seed Research Citation	30	37	32	--	--	32	33	--	--	--	--	--	--
Turkey	40	46	46	44	47	44	47	44	44	34	40	41	43
Vona	30	36	32	37	28	34	34	34	33	25	30	28	32
NE75424	39	41	39	40	36	36	37	37	36	27	31	32	36
NE76667	--	--	--	--	--	--	--	41	39	29	36	36	--
NE76706	36	43	42	43	37	36	38	40	37	29	36	34	38
NE77465	40	40	42	42	38	39	41	39	37	29	35	34	38
NE77682	37	42	40	42	35	38	37	39	36	29	33	35	37
NE78414	31	40	38	38	36	37	34	35	33	27	30	30	34
NE78415	33	41	38	40	37	38	35	37	33	26	31	30	35
NE78668	38	42	42	45	39	41	43	41	38	36	37	38	40
NE78696	30	36	33	34	32	36	32	33	30	26	30	28	32
NE78698	34	38	36	38	34	36	36	35	32	26	32	31	34
NE78702	--	--	--	--	--	--	--	33	32	26	30	28	--
Dif. req. sig.	2.4	2.6	1.9	2.7	2.0	4.2	2.6	1.6	1.4	2.1	1.5	2.8	1.9

Table 20. Scab ratings, flower dates, lodging and straw yields of winter wheat varieties in Nebraska tests. 1982.

Entry	Scab rating 1/			Flower				Lodging %				Straw cwt/A
	Richardson County	Lancaster County	Thayer County	Saunders County	Clay County	Box Butte County	Sheridan County	Richardson County	Lancaster County	Saunders County	Garden County	Dundy County
Agate	---	--	---	---	---	6-12	6-15	--	--	--	54	----
Agripro Hawk	3.8	4	5.0	6-3	6-9	----	----	1	10	41	--	48.7
Agripro Rocky	3.6	0	3.4	6-3	6-7	6-13	6-15	4	38	51	48	54.4
Agripro Wings	---	--	---	---	---	6-12	6-15	--	--	--	21	----
Bennett	3.0	1	3.8	6-4	6-8	----	----	1	40	14	--	----
Brule	1.4	0	1.6	6-4	6-8	6-12	6-17	1	14	28	13	49.1
Buckskin	---	--	1.8	---	6-10	6-12	6-15	--	--	--	52	57.3
Centurk 78	2.8	1	3.4	6-2	6-8	6-14	6-15	4	32	71	50	53.2
Dawn	1.4	1	2.2	6-4	6-9	6-13	6-14	6	19	66	29	49.7
HybriTech 567a	1.0	1	---	6-2	---	----	----	1	21	14	--	----
HybriTech H85b	---	--	---	---	---	6-12	6-15	--	--	--	16	----
HybriTech H130	---	--	---	---	---	----	----	--	--	--	--	47.2
HybriTech H131	---	--	2.4	---	6-5	----	----	--	--	--	--	----
HybriTech NH1121	---	--	---	---	---	6-14	6-16	--	--	--	3	----
Gage	1.8	Tr	---	6-7	---	----	----	36	52	40	--	----
Homestead	3.8	2	---	6-4	---	----	----	49	64	30	--	----
Lancota	2.0	1	1.8	6-7	6-10	----	----	9	22	13	--	----
Larned	2.4	0	3.0	6-3	6-7	----	----	3	63	28	--	43.1
Migro Archer	2.6	1	3.0	6-3	6-8	6-12	6-15	7	31	46	7	45.9
NK Pro Brand 817	1.4	0	2.0	6-6	6-8	6-12	6-15	10	9	20	3	49.5
NK Pro Brand 835	-	-	2.8	---	6-6	6-13	6-15	--	--	--	2	48.7
Rohm & Haas HW1001	2.8	2	3.6	6-1	6-7	6-11	6-14	2	24	30	37	55.8
Rohm & Haas HW1010	-	-	4.0	---	6-6	6-13	6-15	--	--	--	11	48.3
Scout 66	2.0	2	3.2	6-3	6-7	6-12	6-12	7	64	28	53	50.8
Seed Research Brawny	1.2	3	---	5-31	---	----	----	T	2	11	--	41.4
Seed Research Citation	2.6	5	---	5-30	---	----	----	3	4	16	--	36.3
Turkey	1.0	0	1.0	6-8	6-10	6-14	6-16	41	72	46	67	60.3
Vona	2.6	1	4.0	6-4	6-8	6-12	6-14	1	6	29	21	47.2
NE75424	2.6	1	4.0	6-3	6-8	6-14	6-14	7	17	50	50	48.4
NE76667	---	--	---	---	---	6-14	6-17	--	--	--	33	----
NE76706	2.2	1	2.6	6-4	6-7	6-14	6-16	2	11	34	37	53.6
NE77465	3.4	1	3.8	6-2	6-7	6-13	6-15	1	60	31	26	57.7
NE77682	2.8	1	3.6	6-2	6-8	6-13	6-14	1	50	39	64	52.0
NE78414	2.2	0	3.4	6-5	6-10	6-14	6-16	1	8	38	10	46.0
NE78415	2.8	0	3.2	6-5	6-10	6-13	6-16	1	50	58	35	51.2
NE78668	1.6	0	1.8	6-1	6-6	6-12	6-17	2	66	12	21	61.0
NE78696	1.4	1	2.4	6-5	6-7	6-11	6-13	1	1	18	1	49.9
NE78698	1.6	0	1.6	6-5	6-9	6-13	6-16	3	9	21	19	53.0
NE78702	---	--	---	---	---	6-12	6-12	--	--	--	3	----
Dif. req. sig.	0.8	—	0.7	2.0	1.4	1.5	1.3	15	27	21	23	9.6

1/ Scored 0-9 basis. 0 = none and 9 = 100% heads affected. Lancaster County scored before maximum disease development.

Table 21. Winter barley variety tests. 1982.

Entry	Clay County	Lincoln County			Cheyenne County				
	Survival %	Survival %	Yield bu/A	Weight lb/bu	Survival %	Flower June	Height in.	Yield bu/A	Weight lb/bu
Kearney	10	96	34	46.0	69	6	30	43	49.4
Nebar	9	99	44	48.4	69	10	33	51	47.0
Herb	30	99	31	45.0	78	10	32	49	47.6
Dundy	9	86	41	47.6	78	6	26	48	48.1
NE76138 (1)	36	97	48	48.9	80	6	26	52	49.1
NE76147 (2)	29	85	29	44.4	75	11	30	47	47.0
NE80719 (3)	7	77	47	49.5	80	7	27	45	50.4
NE80725 (4)	8	78	43	49.9	67	8	31	62	45.7
NE81707 (5)	3	84	47	51.4	64	6	28	56	49.7
NE81713 (6)	4	69	45	46.7	75	6	27	54	49.0
Centurk (w.w.)	91	100	28	53.0	100	10	34	43	60.1
Dif. req. sig.	20	18	N.S.	----	10	1.6	2.5	N.S.	----

(1) Dicktoo/Reno//Shonan/Randolph/3/OAC WB-2-11/Decutur
(2) Decatur/Chase//OAC WB2-11/Decatur
(3) NE76138/VA-70-44-213
(4) Sabbaton/Meimi//Decatur/3/Dundy/4/Nebar sel/Dundy
(5) Sabbaton/Meimi//Decatur/3/Dundy
(6) Nebar sel/Dundy

Table 22. Winter barley variety tests. 1978-1982.

Entry	1978 (6 tests)		1979 (3 tests)		1980 (5 tests)		1981 (5 tests)		1982 (2 tests)		1978-1982 (21 tests)	
	Surv. %	Yield bu/A	Surv. %	Yield bu/a	Surv. %	Yield bu/A	Surv. %	Yield bu/A	Surv. %	Yield bu/A	Surv. %	Yield bu/A
Kearney	55	24	36	42	80	49	92	41	83	39	69	39
Nebar	50	30	30	38	55	61	92	47	84	48	62	45
Herb	--	--	--	--	79	56	92	45	89	40	--	--
Dundy	63	41	36	48	61	55	87	67	82	45	66	51
NE76138 (1)	72	42	35	45	56	56	88	70	89	50	68	53
NE76147 (2)	78	43	34	49	58	64	86	56	80	38	67	50
NE80719 (3)	--	--	--	--	--	--	85	68	79	46	--	--
NE80725 (4)	--	--	--	--	--	--	93	63	73	53	--	--
NE81707 (5)	--	--	--	--	--	--	--	--	74	52	--	--
NE81713 (6)	--	--	--	--	--	--	--	--	72	50	--	--
Centurk (w. w.)	97	39	91	55	100	58	95	55	100	34	97	48
Dif. req. sig.	15.3	8.9	N.S.	N.S.	9.2	N.S	4.9	10.6	N.S.	N.S.	N.S.	8.3

(1) Dicktoo/Reno/Shonan/Randolph/3/OAC 2-11 Decatur
(2) Decatur/Chase//OAC 2-11/Decatur
(3) NE76138/VA 70-44-213
(4) Sabbaton/Meimi//Decatur/3/Dundy/Neb sel/Dundy
(5) Sabbaton/Meimi//Decautr/3/Dundy
(6) Nebar sel/Dundy

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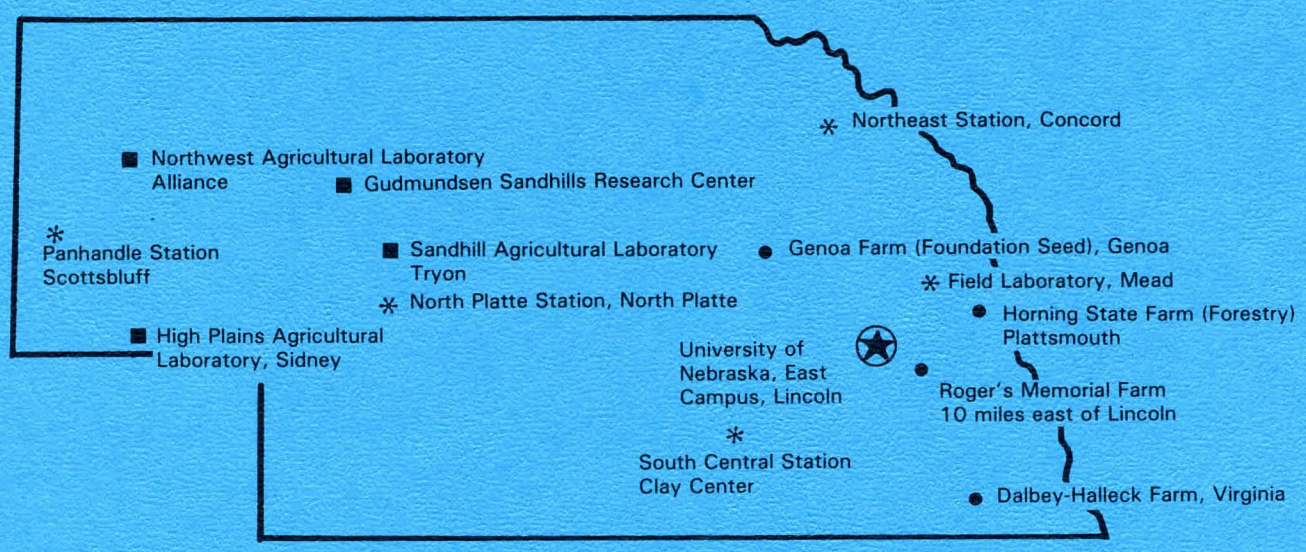

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