

1986

EC86-103 Nebraska Fall-Sown Small Grain Variety Tests 1986

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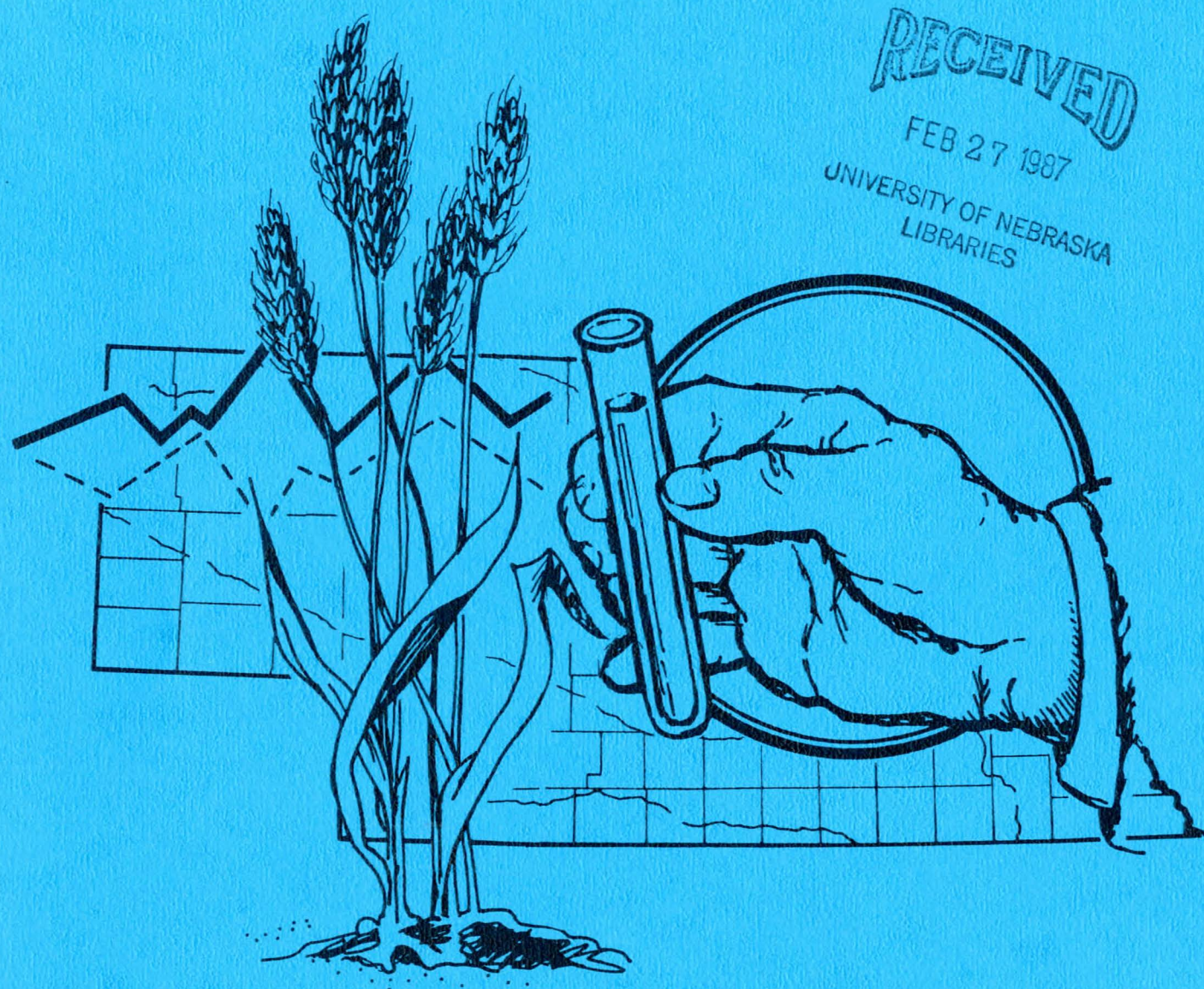
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NEBRASKA FALL-SOWN SMALL GRAIN VARIETY TESTS 1986

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NEBRASKA FALL-SOWN SMALL GRAIN

VARIETY TESTS

September 1986

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Dr. John W. Schmidt has retired as wheat breeder after 31 years of service. Dr. P. Stephen Baenziger was selected for this position and began work in June, 1986.

ACKNOWLEDGMENTS

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METRIC EQUIVALENTS

1 centimeter = 0.394 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 bushels	hl = bushels x 0.35

Kilogram/hectoliter = lb/bu x 1.287
Kilogram/hectare = bu/A x 53.81 (48# bushel)
Kilogram/hectare = bu/A x 67.26 (60# bushel)

EXTENSION CIRCULAR 86-103

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NEBRASKA WINTER WHEAT PRODUCTION

Year	Planted 000 acres (hectares)	Harvested 000 acres (hectares)	Average yield bu/A (kg/ha)
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	3000 (1215)	2850 (1154)	38.0 (2556)
1981	3000 (1215)	2900 (1175)	36.0 (2421)
1982	3050 (1235)	2900 (1175)	35.0 (2354)
1983	2800 (1134)	2300 (932)	43.0 (2892)
1984	3200 (1296)	2250 (911)	36.0 (2421)
1985	2600 (1053)	2300 (932)	39.0 (2623)
1986 ¹	2300 (932)	2000 (810)	39.0 (2623)

¹ August 1 estimate.

NEBRASKA FALL-SOWN SMALL GRAIN
VARIETY TESTS
1986

This circular reports data from winter wheat, winter barley and rye variety trials conducted throughout Nebraska. Entries included varieties or hybrids and promising experimental strains from Nebraska and surrounding states and private breeders. This was the seventh year for privately developed varieties. The state has been divided into eight districts for purposes of variety testing. Locations of these trials and the 1986 variety tests are shown on the map (page 4).

Trials were located on Research Centers 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 Lincoln (field plots) and Saunders Counties. Nursery type plots six rows wide and 15 to 35 feet long were planted at other locations. All tests were direct combined. Entries were replicated 4 to 6 times.

April 1 to August 30 precipitation in 1985 was normal or near normal for all except the Southwest and West Cropping Districts. Rainfall was especially deficient in the West during this period. Wheat seeding lagged behind average all fall. On September 29, 75 per cent of the crop was seeded. Average for this date is 90 per cent.

Cold wet weather delayed seeding in south central and southeast counties. On October 6, near one-third of the acreage remained to be sown in these areas. Completion of final seeding was two to three weeks late.

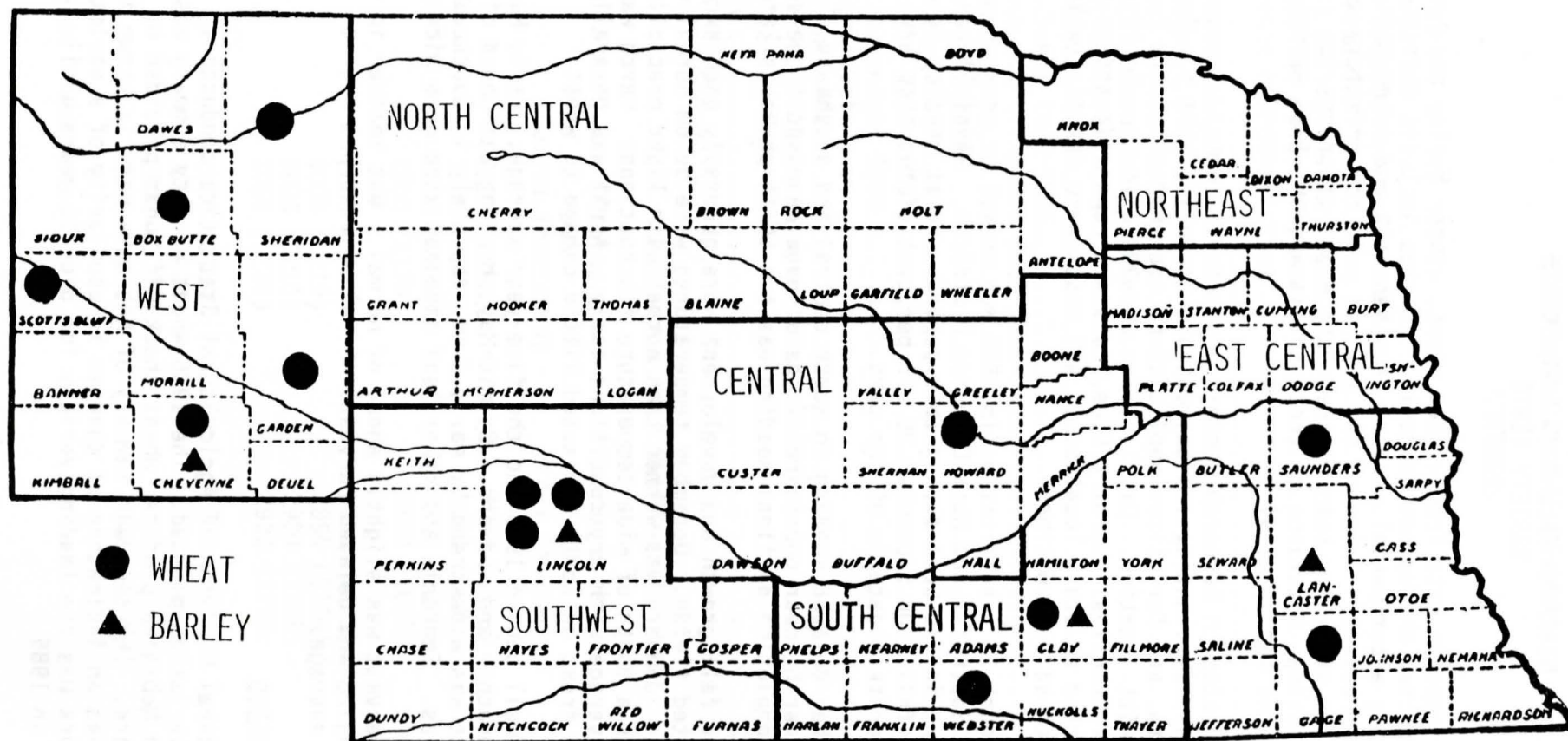
Conditions for fall growth and development were generally good except for the later planted fields. December temperatures were below normal with scattered moisture. January was warmer than normal with light precipitation. February was a month of wide temperature fluctuations. March was much warmer than average with dry conditions early. April was generally wet and mild. A heavy frost on April 20 caused little damage to wheat.

Jointing was well behind 1985 and the five-year average. Early May was a period of warm weather and showers. By mid-May, heading was ahead of average. Leaf rust was widespread by early June, especially in Southeast and South Central fields. Septoria and other leaf diseases also were widespread.

Early wheat harvest was slightly ahead of normal. Wet weather in early July increased lodging and delayed harvest. Final harvest was near or slightly ahead of average.

Winter Wheat varieties

The State-Federal Division of Agricultural Statistics conducts an annual survey of varieties planted. The 1986 wheat variety summary was made possible with Nebraska producer wheat check off funds provided by the Nebraska Wheat Board. The ten-year summary of Nebraska data is shown in Table 3. This gives an indication of changes in popularity of a variety over years. Centurk was the leading variety for over 10 years until replaced by Brule in 1985.



NEBRASKA CROP TESTING DISTRICTS AND LOCATIONS OF 1986
WINTER WHEAT & WINTER BARLEY VARIETY TESTS.

Table 1. Location and dates of planting and harvest. Nebraska winter wheat variety tests. 1986.

County	Cooperator	Planted	Harvested
Gage	Wayne Busboom, Filley	Oct. 7	-----
Saunders	Agricultural Res. & Dev. Center	Oct. 8	July 16
Webster	Derald Chartier, Red Cloud	Oct. 5	July 3
Clay	South Central Res. & Ext. Center	Sept. 27	July 16
Howard	Gerald Rathman, Farwell	Sept. 27	July 14
Lincoln (Nursery)	West Central Res. & Ext. Center	Sept. 17	July 23
Lincoln (Field Plots)	West Central Res. & Ext. Center	Sept. 17	July 15
Lincoln (Irrigated)	West Central Res. & Ext. Center	Sept. 17	July 21
Garden	Bud Peterson, Oshkosh	Sept. 20	July 11
Cheyenne	High Plains Agricultural Laboratory	Sept. 19	July 21
Scotts Bluff	Kenneth Hall, Stegall	Sept. 10	July 22
Box Butte	Northwest Agricultural Laboratory	Sept. 16	July 23
Sheridan	Cliff Hale, Hay Springs	Sept. 17	July 24

Characteristics of publicly released varieties in Nebraska tests are shown in Table 4. These characteristics generally are applicable to varieties when grown in their area of adaptation. When taken out of this area, varieties may have different maturity, winterhardiness or straw strength ratings. Several varieties adapted to western Nebraska have poor straw when grown in eastern Nebraska under more humid conditions. Races of rust and other diseases are under continuous change. Varieties which in the past were resistant to rust may become susceptible. Colt was originally rated as having some resistance to leaf rust. It was rated as susceptible to the leaf rust races present in 1985 and 1986.

Redland and Cody were released by the Nebraska Agricultural Research Division in June, 1985. Redland is a selection from Brule. The basis of selection was stem rust reaction and Hessian fly resistance. Redland is similar to Brule in disease reaction except for stem rust. Brule is heterogeneous for a major stem rust resistance gene, while Redland is homogeneous for that gene according to seedling stem rust reaction tests.

Cody was selected from a cross of Warrior*5/Agent with Centurk 78. Cody is similar to Centurk 78 in plant height and maturity, is more winter-hardy and lodges somewhat less. Cody was released, in part, because of its tolerance to Cephalosporium stripe in field tests. It has been widely tested in Nebraska.

Norkan is a recent release of the Kansas Agricultural Experiment Station. The pedigree is Plainsman V/3/2*Larned/Eagle/2/Sage. It is a semidwarf. Winterhardiness equals Scout 66. It is resistant to leaf rust, stem rust and Hessian fly. Norkan has a good yield record in northern Kansas tests.

Table 2. Soil series, cropping history, soil test data, and fertilizer applied. Nebraska winter wheat variety tests. 1986.

County	Soil type	1985 crop	Soil test data ¹				Fertilizer N+P ₂ O ₅ +K lb/A
			pH	p ppm	Nitrate lb/A	Organic matter %	
Saunders	Sharpsburg silty clay loam	Fallow	6.6	30	231	3.1	-----
Webster	Roxbury silt loam	Fallow	6.4	43	427	---	40+26+0
Clay	Hastings silt loam	Fallow	---	--	66	---	56+55+0
Howard	Holder silty clay loam	Wheat	7.8	10	44	---	Hog manure
Lincoln (Field)	Hall silt loam	Fallow	6.7	16	91	1.4	60+40+0
Lincoln (Nursery)	Hall silt loam	Fallow	5.8	--	187	2.1	60+40+0
Lincoln (irr.)	Cozad silt loam	Fallow	7.4	31	295	1.7	150+0+0
Garden	Dawes silt loam	Fallow	6.8	23	200	1.4	6+21+0
Cheyenne	Keith silt loam	Fallow	7.0	20	121	1.7	6+21+0
Scotts Bluff	Keith silt loam	Fallow	7.9	12	149	1.2	6+21+0
Box Butte	Keith silt loam	Fallow	7.8	16	101	0.9	6+21+0
Sheridan	Dawes silt loam	Fallow	6.9	10	109	0.8	6+21+0

¹ P and organic matter determinations for 6-inch depth. Nitrate sampled to 36-inch (Clay 48-inch) depth. Converted to 6-foot depth assuming 75% of N is in top 3-feet.

Table 3. Estimated percentage of Nebraska winter wheat acreage planted to each variety. 1977-1986.

Variety	% of acreage									
	1977	1978	1979	1980	1981 ¹	1982 ¹	1983 ¹	1984 ¹	1985 ¹	1986 ¹
Brule	----	----	----	----	----	<u>2/</u>	2.6	20.1	32.7	28.6
Centurk & Centurk 78	35.4	39.6	41.4	41.1	42.2	42.8	40.0	28.1	20.5	19.0
Centura	----	----	----	----	----	----	0.1	<u>2/</u>	1.2	6.9
Buckskin	4.2	3.7	5.1	8.1	7.0	5.6	5.3	4.4	6.0	5.4
Scout & Scout 66	24.1	23.3	25.4	23.4	19.1	13.4	9.7	6.4	5.1	5.0
AgriPro Hawk	----	----	----	----	----	----	0.7	3.5	4.5	4.7
Colt	----	----	----	----	----	----	----	<u>2/</u>	<u>3/</u>	3.5
AgriPro Rocky	----	----	----	<u>2/</u>	1.7	5.0	6.4	4.4	3.9	3.3
Vona	----	----	0.2	0.3	1.0	3.5	4.3	5.2	3.8	3.2
Siouxland	----	----	----	----	----	----	----	----	<u>2/</u>	2.8
AgriPro Wings	----	----	<u>2/</u>	<u>2/</u>	2.3	4.7	6.6	8.4	3.9	2.6
Newton	----	----	----	----	1.2	----	2.2	2.5	1.5	1.5
Bennett	----	----	----	0.8	4.2	5.8	4.7	3.1	2.5	1.3
Pioneer Brand 2157	----	----	----	----	----	----	----	----	<u>2/</u>	1.1
Gage	5.7	3.3	3.7	2.7	4.5	3.2	3.4	2.1	2.5	1.0
Other public varieties	29.8	29.6	24.0	22.8	15.4	14.8	11.8	7.3	6.7	4.5
Other private varieties	0.8	0.3	0.2	0.8	1.4	1.2	2.2	4.5	5.2	5.6

^{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/} Less than 0.1 percent.

Table 4. Characteristics of winter wheats included in Nebraska tests. 1986.^{1/}

Entry	Year released	Relative				Semi-dwarf	Resistance to ^{2/}				
		Maturity	Winter-hardiness	Straw strength	Plant height		Hessian fly	Leaf rust	Stem rust	Soil-borne mosaic	Wheat streak mosaic
Agate	1976	med-late	good	medium	medium	no	MR	S	R	MS	MS
Arkan	1983	early+	fair	strong	short	no	R	R	R	R	S
Bennett	1978	early	good	strong	medium	no	MR-MS	S	R	MR	S
Brule	1982	med-early	good	strong	medium	yes	R	MR-MS	R-S	MR-MS	T
Buckskin	1973	med-early	fair	med-strong	med-tall	no	MR	S	MR-MS	MR	MS
Centura	1983	med-early	fair	strong	medium	no	MS	MR	R	MS	T
Centurk 78	1978	med-early	fair	med-strong	medium	no	MS	MS	R	MS	MS
Cody	1986	medium	good	medium	med-tall	no	S	R	R	MS	T
Colt	1983	medium	good	strong	short	yes	MR	S	R	MS	S
Gage	1963	med-early	fair	med-strong	medium	no	MS	MR-MS	R	MS	S
Homestead	1973	early	fair	med-strong	medium	no	S	MS	R	R	S
Redland	1986	med-early	good	strong	medium	yes	R	MR-MS	R	MR-MS	MS
Scout 66	1966	early	fair	medium	medium	no	MS	S	MR	S	MR
Siouxland	1984	med-early	fair	med-strong	medium	no	S	R	MR	S	S
TAM 107	1984	early+	fair	med-strong	short	yes	S	S	R	MS	--
Turkey	----	med-late	good	poor	med-tall	no	S	S	S	S	--
Vona	1976	early	poor	strong	short	yes	MR	S	MR-MS	VS	S

^{1/} Experiment Station releases. Contact the originator or seed producer for information on privately-developed varieties. When varieties are taken out of their adapted area, relative maturities, straw strength and other characteristics may be subject to abnormal variations.

^{2/} R = resistant, S = susceptible, MR = moderately resistant, MS = moderately susceptible, T = tolerant, VS = very susceptible.

Pedigrees of Nebraska experimental strains are as follows:

NE78488 Warrior*5/Agent//Aurora/3/Centurk 78
 NE82651 Brule//Sentinel/Centurk
 NE82652 Brule//Sentinel/Centurk
 NE82656 Brule/3/Parker*4/Agent//Beloterkovskaia 198/Lancer
 NE82658 Brule/3/Parker*4/Agent//Beloterkovskaia 198/Lancer

The most promising of these will be included in further testing for possible release.

Privately developed winter wheats were included in these trials. Entries were on a voluntary basis. A fee was charged to pay a portion of the testing costs. Entries and areas were selected by the seed producer.

The following made entries as indicated:

NAPB 806 N. Second St. Berthoud, CO 80513	AgriPro Mustang, Ram, Thunderbird, Trailblazer, Victory, Wrangler
Cargill Incorporated 2540 E. Drake Rd. Ft. Collins, CO 80525	Bounty Hybrid 202, 205, 301
Garst Seed Eminence Route, Mun. Airport Garden City, KS 67846	Garst HR48, HR64
HybriTech Seed 5912 N. Meridian Wichita, KS 67204	Quantum 555, XH140a, XH500, XH510
Rohm & Haas Seeds Inc. RR 1, Box 45B Mt. Hope, KS 67108	RHS Pony, Rodeo, 7833, 7837

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 weight per bushel data for locations and/or districts are shown in Tables 5 through 13. Results of 1986 trials are given along with period-of-years data. Data for other characteristics are summarized in tables as follows:

Table 14 Protein, 1986
 15 Protein, 1977-1986
 16 Kernel weight, 1986
 17 Height, 1986
 18 Lodging, 1986
 19 Survival, flower date and disease 1986

Protein, kernel weight and height data generally are shown for 11 locations. Data from the irrigated trial in Lincoln County are shown in a separate table (Table 11).

Yielding ability of different varieties cannot be measured with absolute accuracy because of variations in soil fertility, 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 planted in the Southeast District. Very heavy rains following seeding in Gage County resulted in severe crusting and uneven stands. The test was abandoned. In Saunders County, planting was delayed and fall growth was poor (Table 5). Winter conditions did not favor wheat. These were marked varietal differences in survival. Wintertender varieties did not yield well. Heavy leaf rust infection reduced yields of susceptible varieties. Stem rust infection was light. The 1986 and period-of-years data from the Southeast District are shown in Table 5.

South Central District trials were located in Clay and Webster counties (Table 6). Leaf rust was severe at both locations. In Webster County, high soil fertility and favorable growing conditions resulted in heavy growth and early severe lodging. Tender varieties suffered slight winter damage in Clay County. Period-of-years data for this area are shown in Table 7.

A Central District trial planned for Nance County was not planted because of wet September weather. Results from Howard County are shown in Table 8 along with five-year data. The 1986 trial was on a north slope. Winter injury was the primary factor affecting final yields.

Two nonirrigated trials were planted at North Platte (Lincoln County, Table 9). Yields were especially high in the nursery plots. This area had a light *Cephalosporium* stripe infection. Severe lodging occurred on certain varieties in both trials. The 1982-1986 data from the Southwest District are shown in Table 10.

Two-year irrigated data from Lincoln County are shown in Table 11. Irrigation apparently provided no real benefit in 1986. Bushel weights were low.

Good yields were produced in five western Nebraska tests (Table 12). These represent a wide range of western Nebraska growing conditions. Average bushels per acre by location were as follows: Garden 50, Cheyenne 57, Scotts Bluff 50, Box Butte 47, and Sheridan 43. Varietal performance over locations and over years was relatively consistent (Table 13).

Statewide averages give an indication of whether a variety has broad adaptation. Some 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 is best adaptable. 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. Results of an irrigated test at North Platte (Lincoln County) were not included in these summaries.

Twenty seven entries were included in statewide tests at 11 locations in 1986. Average yields were as follows: NE82656 52, Bounty Hybrid 205 50, Siouxland 50, Cody 50, Bounty Hybrid 301 49, Thunderbird 48, NE78488 48, RHS 7833 47, Rodeo 46, NE82658 46, AgriPro Victory 44, Brule 44, Centura 44, Colt 44, NE82652 44, Norkan 44, Redland 43, RHS 7837 43, TAM 107 43, NE82651 43, Bounty Hybrid 202 41, Centurk 78 39, RHS Pony 39, Scout 66 38, Vona 36, Buckskin 34, and Turkey 28 bushels per acre.

Previous high ranking entries and statewide average yields were as follows: 1985 Bounty Hybrid 301 53, 1984 Bounty Hybrid 203 56, 1983 AgriPro Hawk and Brule 59, 1982 Siouxland 46, 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 3 trials in the eastern one-half of Nebraska (Southeast and South Central), 34 entries produced yields as follows: Siouxland 46, AgriPro Thunderbird 44, NE82656 44, Bounty Hybrid 205 41, Cody 41, Bounty Hybrid 301 40, AgriPro Victory 38, Arkan 38, RHS 7837 38, NE78488 37, NE82656 36, Norkan 35, RHS Rodeo 33, RHS 7833 33, Centurk 32, TAM 107 31, Bennett 30, Quantum XH500 30, NE82651 30, Colt 29, Quantum XH510 29, Redland 28, Pony 28, Brule 27, Scout 66 25, Bounty Hybrid 202 24, NE82652 23, AgriPro Mustang 22, Centurk 78 22, Garst HR48 22, Garst HR64 19, Vona 16, Buckskin 14, and Turkey 13 bushels per acre.

In an average of 8 trials of farther west (Central, Southwest and West Cropping Districts), 27 entries had 1986 average yields as follows: NE82656 55, Bounty Hybrid 205 53, Bounty Hybrid 301 52, Cody 53, NE78488 53, RHS 7833 52, Siouxland 52, RHS Rodeo 51, NE82652 51, AgriPro Thunderbird 50, Brule 50, Colt 50, Redland 49, Centura 49, NE82651 49, NE82658 49, TAM 107 48, AgriPro Victory 47, Bounty Hybrid 202 47, Norkan 47, Centurk 78 45, RHS 7837 45, RHS Pony 43, Scout 66 43, Vona 43, Buckskin 41, and Turkey 34. Wheat growing conditions in this area generally were more favorable than farther east.

Protein data for 1986 are shown in Table 14. Ten-year protein data are shown in Table 15. Seed size data for 1986 are shown in Table 16. Relatively heavy seeds were produced in 1983, 1984 and 1985. This is a reflection of favorable conditions for grain-fill.

Plant height data are shown in Table 17. Lodging data from six 1986 locations are shown in Table 18. Lodging was much more severe than usual. Survival, flower date and disease readings are shown in Table 19. Stem rust infection was light in Saunders County. In Lancaster County, immediately south of Saunders County, stem rust was much more severe.

Winter Barley

Winter barley trials were seeded at four locations. Severe winterkill at Clay Center forced abandonment of the experiment. Yield and other data from Lancaster, Lincoln and Cheyenne counties are shown in Table 20. Survival scores were not consistent over locations. Several experimental

strains show promise. Period-of-years data for winter barley are shown in Table 21.

Rye

Rymin rye was released by the Minnesota Agricultural Experiment Station in 1973. It has had a good record in Nebraska. Frederick rye was selected from Von Lochow by the South Dakota Station. It was released in 1984.

Frederick and Rymin were compared at five locations in Nebraska in 1986. Yield results were as follows:

Location	Rymin, bu/A	Frederick, bu/A
Lincoln	48	45
Clay Center	32	37
North Platte	43	39
Sidney	50	50
Alliance	<u>45</u>	<u>42</u>
Average	43.6	42.6

The average flowering date at four locations was May 28 for Frederick and May 30 for Rymin. Bushel weights at Lincoln were Rymin 50.2 and Frederick 50.5 pounds. Heights were 52 and 53 inches respectively. Both were resistant to stem rust under severe infection at Lincoln.

These data indicate that these varieties have similar yield potentials in Nebraska. Frederick is slightly earlier in heading and has poorer straw. Grain appearance and quality are similar.

Table 5. Southeast District winter wheat variety tests. 1982-1986.

Entry	Grain yield, bu/A									Weight, lb/bu		
	1982 average (3 tests)	1983 average (3 tests)	1984 average (3 tests)	1985 average (3 tests)	1986 Saunders County	1985-86 average (4 tests)	1984-86 average (6 tests)	1983-86 average (9 tests)	1982-86 average (12 tests)	1986 Saunders County	1984-86 average (6 tests)	1982-86 average (12 tests)
AgriPro Mustang	--	--	--	--	15	--	--	--	--	51.8	----	----
AgriPro Thunderbird	--	--	--	65	39	52	--	--	--	56.6	----	----
AgriPro Victory	--	--	--	67	37	52	--	--	--	52.7	----	----
AgriPro Wrangler	--	--	--	59	19	39	--	--	--	53.8	----	----
Arkan	--	56	41	63	30	47	45	48	--	53.4	57.9	
Bennett	29	43	37	58	26	42	40	41	39	54.2	58.1	57.8
Bounty Hybrid 202	--	--	--	--	14	--	--	--	--	49.1	----	----
Bounty Hybrid 205	--	--	--	68	32	50	--	--	--	53.7	----	----
Bounty Hybrid 301	--	--	50	71	29	50	50	--	--	52.1	57.5	----
Brule	41	63	44	65	26	46	45	50	48	50.9	55.7	55.9
Buckskin	--	43	41	58	8	33	36	38	--	47.8	56.0	----
Centura	31	55	39	64	29	47	44	47	44	54.8	58.2	57.7
Centurk 78	30	52	37	59	17	38	38	41	39	53.2	57.5	57.4
Cody	27	52	41	63	38	51	47	49	44	54.5	58.0	57.3
Colt	39	--	39	62	21	42	41	--	--	51.7	56.5	----
Gage	31	45	34	54	29	42	39	41	39	54.9	58.1	58.0
Garst HR48	--	--	37	61	15	38	38	--	--	48.7	55.0	----
Garst HR64	--	56	35	60	16	38	37	42	--	48.2	54.0	----
Homestead	27	42	34	57	28	43	40	40	38	54.0	57.6	57.3
Norkan	--	--	--	--	35	--	--	--	--	55.5	----	----
Quantum XH500	--	--	--	--	15	--	--	--	--	45.6	----	----
Quantum XH510	--	--	--	--	19	--	--	--	--	48.0	----	----
Redland	--	--	--	--	23	--	--	--	--	50.2	----	----
RHS Pony	--	--	43	60	26	43	43	--	--	54.0	58.3	----
RHS Rodeo	--	--	42	62	25	44	43	--	--	55.3	58.7	----
RHS 7833	--	--	--	--	25	--	--	--	--	53.0	----	----
RHS 7837	--	--	--	--	32	--	--	--	--	54.4	----	----
Scout 66	26	48	40	57	24	41	40	42	39	54.9	58.8	58.4
Siouxland	47	65	50	70	38	54	53	56	54	54.7	59.2	59.3
TAM 107	--	--	--	58	26	42	--	--	--	50.0	----	----
Turkey	22	--	35	44	11	28	30	--	--	48.4	56.2	----
Vona	27	53	39	52	5	29	32	37	35	48.8	54.9	55.0
NE78488	--	--	--	--	32	--	--	--	--	54.6	----	----
NE82651	--	--	--	--	31	--	--	--	--	56.2	----	----
NE82652	--	--	--	--	24	--	--	--	--	51.1	----	----
NE82656	--	--	--	--	50	--	--	--	--	54.7	----	----
NE82658	--	--	--	--	33	--	--	--	--	53.7	----	----
Dif. req. sig.	10.5	13.2	7.1	6.2	4.7	10.2	7.9	7.6	6.2	0.9	2.2	1.1

Location of tests (counties): 1982 Richardson, Lancaster, Saunders; 1983 Gage, Saunders, Butler; 1984 Otoe, Saline; 1985 Johnson, Jefferson, Saunders; 1986 Saunders.

Table 6. South Central District winter wheat variety tests. 1986.

Entry	Clay County		Webster County		Average 2 tests	
	Yield bu/A	Weight lb/bu	Yield bu/A	Weight lb/bu	Yield bu/A	Weight lb/bu
AgriPro Mustang	25	51.8	27	47.8	26	49.8
AgriPro Thunderbird	45	57.1	47	54.6	46	55.9
AgriPro Trailblazer	41	54.8	36	46.5	39	50.7
AgriPro Victory	41	53.4	36	48.7	39	51.1
Arkan	39	54.7	45	50.8	42	52.8
Bennett	35	53.8	30	48.0	33	50.9
Bounty Hybrid 202	21	47.6	38	46.0	30	46.8
Bounty Hybrid 205	43	54.7	49	51.7	46	53.2
Bounty Hybrid 301	48	54.5	43	48.4	46	51.5
Brule	34	51.5	22	47.0	28	49.3
Buckskin	22	51.3	12	43.0	17	47.2
Centura	38	56.4	28	51.0	33	53.7
Centurk 78	26	52.0	24	50.5	25	51.3
Cody	51	56.8	34	50.6	43	53.7
Colt	38	54.0	27	46.1	33	50.1
Garst HR48	24	50.1	26	42.7	25	46.4
Garst HR64	26	45.7	16	41.4	21	43.6
Norkan	48	56.5	22	43.0	35	49.8
Quantum XH500	37	51.9	37	49.7	37	50.8
Quantum XH510	37	51.8	31	49.4	34	50.6
Redland	35	51.4	26	46.1	31	48.8
RHS Pony	33	56.5	24	45.5	29	51.0
RHS Rodeo	44	57.6	30	47.8	37	52.7
RHS 7833	40	53.6	34	43.1	37	48.4
RHS 7837	44	54.7	38	46.4	41	50.6
Scout 66	35	57.4	17	48.8	26	53.1
Siouxland	50	56.3	49	48.7	50	52.5
TAM 107	31	51.4	37	46.2	34	48.8
Turkey	24	52.8	4	40.0	14	46.4
Vona	19	47.5	25	44.2	22	45.9
NE78488	40	56.0	40	53.3	40	54.7
NE82651	37	56.2	21	50.1	29	53.2
NE82652	32	52.2	13	41.6	23	46.9
NE82656	52	56.5	30	49.2	41	52.9
NE82658	47	55.3	27	49.1	37	52.2
Dif. req. sig.	6.5	2.3	9.3	3.1	13.9	4.5

Table 7. South Central District winter wheat variety tests. 1981-1986. No 1984 data.

Entry	Grain yield, bu/A									Weight, lb/bu		
	1981 average (2 tests)	1982 average (2 tests)	1983 average (2 tests)	1985 average (2 tests)	1986 average (2 tests)	1985-86 average (4 tests)	1983-86 average (6 tests)	1982-86 average (8 tests)	1981-86 average (10 tests)	1986 average (2 tests)	1983-86 average (6 tests)	1981-86 average (10 tests)
AgriPro Mustang	--	--	--	51	26	39	--	--	--	49.8	----	----
AgriPro Thunderbird	--	--	--	57	46	52	--	--	--	55.9	----	----
AgriPro Trailblazer	--	--	--	--	39	--	--	--	--	50.7	----	----
AgriPro Victory	--	--	--	52	39	46	--	--	--	51.1	----	----
Arkan	--	--	62	53	42	48	52	--	--	52.8	57.4	----
Bennett	62	21	58	52	33	43	48	41	45	50.9	57.5	56.8
Bounty Hybrid 202	--	--	--	--	30	--	--	--	--	46.8	----	----
Bounty Hybrid 205	--	--	--	58	46	52	--	--	--	53.2	----	----
Bounty Hybrid 301	--	--	--	64	46	55	--	--	--	51.5	----	----
Brule	74	35	69	54	28	41	50	47	52	49.3	55.5	56.0
Buckskin	63	26	50	51	17	34	39	36	41	47.2	55.4	55.7
Centura	63	21	62	50	33	42	48	42	46	53.7	58.3	57.4
Centurk 78	61	19	54	50	25	38	43	37	42	51.3	57.2	56.9
Cody	67	26	60	56	43	50	53	46	50	53.7	57.8	57.4
Colt	72	30	67	50	33	42	50	45	50	50.1	57.0	56.7
Garst HR48	--	--	--	43	25	34	--	--	--	46.4	----	----
Garst HR64	--	--	64	46	21	34	44	--	--	43.6	54.1	----
Norkan	--	--	--	--	35	--	--	--	--	49.8	----	----
Quantum XH500	--	--	--	--	37	--	--	--	--	50.8	----	----
Quantum XH510	--	--	--	--	34	--	--	--	--	50.6	----	----
Redland	--	--	--	--	31	--	--	--	--	48.8	----	----
RHS Pony	--	--	--	48	29	39	--	--	--	51.0	----	----
RHS Rodeo	--	--	--	51	37	44	--	--	--	52.7	----	----
RHS 7833	--	--	--	--	37	--	--	--	--	48.4	----	----
RHS 7837	--	--	--	--	41	--	--	--	--	50.6	----	----
Scout 66	62	22	46	53	26	40	42	37	42	53.1	58.4	57.7
Siouxland	--	36	66	54	50	52	57	52	--	52.5	57.7	----
TAM 107	--	--	--	40	34	37	--	--	--	48.8	----	----
Turkey	40	16	--	46	14	30	--	--	--	46.4	----	----
Vona	75	22	63	45	22	34	43	38	45	45.9	55.1	54.3
NE78488	--	--	--	--	40	--	--	--	--	54.7	----	----
NE82651	--	--	--	--	29	--	--	--	--	53.2	----	----
NE82652	--	--	--	--	23	--	--	--	--	46.9	----	----
NE82656	--	--	--	--	41	--	--	--	--	52.9	----	----
NE82658	--	--	--	--	37	--	--	--	--	52.2	----	----
Dif. req. sig.	14.5	N.S.	8.3	N.S.	13.9	11.6	10.3	8.0	6.5	4.5	N.S.	2.1

Location of tests (counties): 1981 Clay, Franklin; 1982 Clay, Thayer; 1983 Fillmore, Clay; 1985 Nuckolls, Clay; 1986 Clay, Webster.

Table 8. Central District winter wheat variety tests. 1979-1986. No 1981, 1984, 1985 data.

Entry	Grain yield, bu/A									Weight, lb/bu		
	1979 average (2 tests)	1980 Nance County	1982 Buffalo County	1983 Sherman County	1986 Howard County	1983-86 average (2 tests)	1982-86 average (3 tests)	1980-86 average (4 tests)	1979-86 average (6 tests)	1986 Howard County	1983-1986 average (2 tests)	1979-86 average (6 tests)
Agate	47	65	25	23	37	30	28	38	39	56.8	57.6	58.0
AgriPro Thunderbird	--	--	--	--	32	--	--	--	--	55.5	----	----
AgriPro Trailblazer	--	--	--	--	29	--	--	--	--	55.0	----	----
AgriPro Victory	--	--	--	--	29	--	--	--	--	53.1	----	----
Bennett	45	72	32	33	35	34	33	43	43	55.9	56.8	57.9
Bounty Hybrid 202	--	--	--	--	14	--	--	--	--	51.5	----	----
Bounty Hybrid 205	--	--	--	--	29	--	--	--	--	55.1	----	----
Bounty Hybrid 301	--	--	--	--	32	--	--	--	--	54.8	----	----
Brule	--	--	36	38	38	38	37	--	--	54.0	54.9	----
Buckskin	49	64	32	27	29	28	29	38	40	53.5	53.4	56.6
Centura	--	--	41	42	32	37	38	--	--	55.6	57.8	----
Centurk 78	50	77	34	29	28	29	30	42	44	55.9	55.8	57.3
Cody	--	--	36	26	39	33	34	--	--	56.3	55.3	----
Colt	--	--	36	38	32	35	35	--	--	54.5	56.4	----
Garst HR48	--	--	--	--	17	--	--	--	--	52.4	----	----
Garst HR64	--	--	--	40	27	34	--	--	--	52.3	54.0	----
Norkan	--	--	--	--	30	--	--	--	--	56.5	----	----
Redland	--	--	--	--	34	--	--	--	--	54.1	----	----
RHS Pony	--	--	--	--	22	--	--	--	--	55.2	----	----
RHS Rodeo	--	--	--	--	33	--	--	--	--	56.5	----	----
RHS 7833	--	--	--	--	35	--	--	--	--	55.1	----	----
RHS 7837	--	--	--	--	19	--	--	--	--	51.3	----	----
Scout 66	46	57	35	20	35	28	30	37	39	57.1	56.6	58.1
Siouxland	--	--	40	35	36	36	37	--	--	56.0	57.1	----
TAM 107	--	--	--	--	27	--	--	--	--	57.1	----	----
Turkey	39	40	23	8	27	18	19	25	27	53.9	51.7	55.2
Vona	51	78	29	38	8	23	25	38	41	49.5	52.9	55.0
NE78488	--	--	--	--	34	--	--	--	--	57.1	----	----
NE82651	--	--	--	--	38	--	--	--	--	57.4	----	----
NE82652	--	--	--	--	39	--	--	--	--	54.0	----	----
NE82656	--	--	--	--	47	--	--	--	--	56.2	----	----
NE82658	--	--	--	--	39	--	--	--	--	56.5	----	----
Dif. req. sig.	N.S.	6.4	11.5	3.7	5.8	N.S.	N.S.	N.S.	N.S.	1.0	N.S.	N.S.

Location of tests (counties): 1979 Howard, Custer; 1980 Nance; 1982 Buffalo; 1983 Sherman; 1986 Howard.

Table 9. Southwest District Nonirrigated winter wheat variety tests. Lincoln County. 1986.

Entry	Nursery		Field plots		Average	
	Yield bu/A	Weight lb/bu	Yield bu/A	Weight lb/bu	Yield bu/A	Weight lb/bu
AgriPro Mustang	46	54.7	42	55.4	44	55.1
AgriPro Thunderbird	62	56.6	59	57.2	61	56.9
AgriPro Ram	61	54.4	44	53.8	53	54.1
AgriPro Victory	54	54.4	49	55.0	52	54.7
Bounty Hybrid 202	50	53.8	55	56.4	53	55.1
Bounty Hybrid 205	64	55.4	59	56.8	62	56.1
Bounty Hybrid 301	66	55.9	61	57.0	64	56.5
Brule	65	54.0	53	54.2	59	54.1
Buckskin	44	53.5	26	54.5	35	54.0
Centura	58	55.7	45	57.1	52	56.4
Centurk 78	53	56.6	39	56.5	46	56.6
Cody	65	57.3	56	56.3	61	56.8
Colt	62	55.5	50	55.6	56	55.6
Garst HR48	50	53.3	39	53.3	45	53.3
Garst HR64	56	54.3	43	54.3	50	54.3
Norkan	59	56.6	53	57.3	56	57.0
Redland	61	54.4	52	53.9	57	54.2
RHS Pony	48	55.8	44	57.2	46	56.5
RHS Rodeo	66	57.5	51	57.8	59	57.7
RHS 7833	58	55.3	56	55.6	57	55.5
RHS 7837	53	55.6	55	57.2	54	56.4
Scout 66	47	56.2	30	57.1	39	56.7
Siouxland	67	56.4	57	56.5	62	56.5
TAM 107	49	54.3	47	53.9	48	54.1
Turkey	40	54.0	13	51.4	27	52.7
Vona	44	52.8	43	54.3	44	53.6
NE78488	64	57.2	58	56.9	61	57.1
NE82651	59	57.1	44	56.9	52	57.0
NE82652	61	54.5	51	54.2	56	54.4
NE82656	70	55.8	57	55.6	64	55.7
NE82658	61	55.9	53	55.9	57	55.9
Dif. req. sig.	10.2	1.2	7.1	1.1	9.6	1.4

Table 10. Southwest District winter wheat variety tests. 1982-1986.

Entry	Grain yield, bu/A									Weight, lb/bu		
	1982 average (2 tests)	1983 Lincoln County	1984 average (3 tests)	1985 Lincoln County	1986 average (2 tests)	1985-86 average (3 tests)	1984-86 average (6 tests)	1983-86 average (7 tests)	1982-86 average (9 tests)	1986 average (2 tests)	1984-86 average (6 tests)	1983-86 average (9 tests)
AgriPro Mustang	--	--	63	58	44	51	55	--	--	55.1	58.3	----
AgriPro Thunderbird	--	--	--	54	61	58	--	--	--	56.9	----	----
AgriPro Ram	--	--	64	55	53	54	57	--	--	54.1	55.7	----
AgriPro Victory	--	--	--	--	52	--	--	--	--	54.7	----	----
Bounty Hybrid 202	--	--	70	--	53	--	--	--	--	55.1	----	----
Bounty Hybrid 205	--	--	--	57	62	60	--	--	--	56.1	----	----
Bounty Hybrid 301	--	--	76	60	64	62	67	--	--	56.5	58.5	----
Brule	47	50	71	52	59	56	61	58	56	54.1	57.4	57.3
Buckskin	48	41	54	48	35	42	46	45	45	54.0	58.5	58.5
Centura	43	44	65	54	52	53	57	54	52	56.4	59.6	59.3
Centurk 78	46	50	65	50	46	48	54	53	51	56.6	59.8	59.3
Cody	49	44	68	57	61	59	62	58	56	56.8	59.3	59.0
Colt	46	51	76	50	56	53	61	58	56	55.6	59.1	59.0
Garst HR48	--	--	63	60	45	53	56	--	--	53.3	56.9	----
Garst HR64	--	50	67	58	50	54	58	55	--	54.3	57.2	----
Norkan	--	--	--	--	56	--	--	--	--	57.0	----	----
Redland	--	--	--	56	57	57	--	--	--	54.2	----	----
RHS Pony	--	--	70	53	46	50	56	--	--	56.5	58.9	----
RHS Rodeo	--	--	76	59	59	59	65	--	--	57.7	60.0	----
RHS 7833	--	--	--	--	57	--	--	--	--	55.5	----	----
RHS 7837	--	--	--	--	54	--	--	--	--	56.4	----	----
Scout 66	37	37	56	46	39	43	47	45	43	56.7	60.0	59.6
Siouxland	48	50	73	56	62	59	64	60	58	56.5	60.2	59.5
TAM 107	--	--	--	54	48	51	--	--	--	54.1	----	----
Turkey	36	34	41	37	27	32	35	35	35	52.7	57.1	57.4
Vona	44	41	68	49	44	47	54	51	49	53.6	57.5	57.6
NE78488	--	--	--	--	61	--	--	--	--	57.1	----	----
NE82651	--	--	--	--	52	--	--	--	--	57.0	----	----
NE82652	--	--	--	--	56	--	--	--	--	54.4	----	----
NE82656	--	--	--	--	64	--	--	--	--	55.7	----	----
NE82658	--	--	--	--	57	--	--	--	--	55.9	----	----
Dif. req. sig.	5.4	7.0	8.8	8.5	9.6	10.6	7.1	6.3	5.9	1.4	1.5	0.9

Location of tests (counties): 1982 Lincoln, Dundy; 1983 Lincoln; 1984 Gosper, Lincoln (2); 1985 Lincoln; 1986 Lincoln (2).

Table 11. Southwest District irrigated winter wheat variety tests. Lincoln County. 1985-1986.

Entry	1986						1985-86 Average	
	Yield bu/A	Weight lb/bu	Height inches	Lodging %	gms/1000 seeds	Protein %	Yield bu/A	Weight lb/bu
AgriPro Mustang	42	51.8	31	16	26.2	12.9	56	56.5
AgriPro Thunderbird	52	55.3	35	23	29.7	14.3	68	59.0
AgriPro Trailblazer	46	53.5	33	56	26.3	14.0	--	----
AgriPro Victory	46	51.5	31	25	28.2	13.9	--	----
Arkan	52	53.3	33	11	27.7	14.0	--	----
Bounty Hybrid 202	55	50.8	38	0	31.7	12.7	--	----
Bounty Hybrid 205	46	52.6	37	40	26.8	14.3	63	56.5
Bounty Hybrid 301	46	54.0	39	53	29.0	14.1	68	57.3
Brule	48	52.2	38	25	26.6	11.8	63	56.7
Centura	38	55.0	40	51	26.4	13.7	58	58.4
Centurk 78	35	54.0	39	41	22.9	13.4	50	57.9
Cody	52	54.4	39	29	27.7	13.6	57	57.5
Colt	50	52.0	34	0	23.9	13.0	62	55.8
Garst HR48	43	52.0	32	1	26.0	13.2	58	55.7
Garst HR64	47	49.3	34	0	18.9	13.1	60	54.5
Norkan	45	54.3	35	19	26.7	13.6	--	----
Quantum 555	44	48.0	35	0	23.2	12.1	--	----
Quantum XH140a	44	53.1	37	10	24.0	12.8	--	----
Redland	53	50.6	39	22	26.3	12.2	71	54.9
RHS Pony	41	55.0	31	18	25.5	14.4	54	57.8
RHS Rodeo	49	53.1	36	33	27.2	13.7	63	56.9
RHS 7833	56	50.9	33	1	25.5	13.1	--	----
RHS 7837	49	53.4	34	14	25.2	13.9	--	----
Siouxland	60	55.0	41	24	30.2	14.0	64	57.6
TAM 107	47	50.6	32	3	28.2	12.8	56	55.9
Vona	51	51.6	33	9	22.2	12.0	59	56.2
NE78488	73	56.0	42	6	26.2	13.6	--	----
NE82651	46	54.7	41	43	28.2	13.3	--	----
NE82652	55	49.8	38	23	25.1	13.4	--	----
NE82656	58	53.5	39	40	29.0	13.6	--	----
NE82658	52	52.8	39	26	25.5	13.2	--	----
Average all entries	49.1	52.7	36.1	21.4	26.3	13.3	60.6	56.8
Dif. req. for sig.	9.4	1.4	2.2	30.2	3.2	0.7	N.S.	N.S.

Table 12. West District winter wheat variety tests. 1986.

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	48	57.9	57	60.2	54	59.6	43	59.2	40	59.6	48	59.3
AgriPro Thunderbird	51	58.8	56	60.7	47	59.7	44	59.2	45	60.2	49	59.7
AgriPro Ram	52	52.7	60	58.6	54	58.6	48	57.7	42	57.8	51	57.1
AgriPro Victory	55	56.2	58	58.8	47	58.1	46	57.7	37	58.2	49	57.8
Bounty Hybrid 202	52	54.8	63	59.2	52	58.5	49	57.8	43	57.9	52	57.6
Bounty Hybrid 205	56	57.5	61	58.8	53	58.6	50	58.1	51	58.4	54	58.3
Bounty Hybrid 301	48	55.4	58	59.3	57	58.6	47	58.6	51	58.7	52	58.1
Brule	52	55.2	62	57.3	50	57.4	46	56.5	37	56.6	49	56.6
Buckskin	38	54.3	49	58.4	54	59.2	46	59.3	45	58.3	46	57.9
Centura	50	57.0	60	60.2	53	59.3	48	58.9	43	59.5	51	59.0
Centurk 78	45	55.6	56	59.9	50	59.0	45	59.1	42	58.6	48	58.4
Cody	52	56.1	60	59.5	57	59.0	52	58.6	46	59.0	53	58.4
Colt	51	55.4	60	59.8	50	58.3	47	58.8	45	58.5	51	58.2
Norkan	49	58.8	53	60.4	45	59.7	43	59.6	46	60.6	47	59.8
Quantum 555	36	51.7	52	58.0	51	59.1	45	57.6	41	56.4	45	56.6
Quantum XH140a	56	54.4	61	59.3	54	58.6	52	58.1	46	58.2	54	57.7
Redland	51	54.3	59	57.0	48	57.0	46	56.1	41	56.9	49	56.3
RHS Pony	53	57.9	52	60.1	42	59.9	43	59.2	43	59.3	47	59.3
RHS Rodeo	51	57.8	58	60.9	53	60.6	52	59.7	47	59.5	52	59.7
RHS 7833	53	57.2	64	59.9	52	59.2	51	57.9	45	58.8	53	58.6
RHS 7837	48	56.0	58	59.4	47	59.7	41	58.1	42	58.7	47	58.4
Scout 66	48	58.6	49	60.2	47	59.4	44	59.0	41	59.4	46	59.3
Siouxland	51	56.4	60	59.2	53	58.3	46	58.1	43	58.5	51	58.1
TAM 107	55	57.2	62	59.3	47	57.6	49	57.4	45	58.7	52	58.1
Turkey	36	54.6	38	58.8	41	58.9	42	59.2	35	57.4	38	57.8
Vona	50	57.5	61	60.1	50	60.0	48	58.8	39	59.3	50	59.1
NE78488	53	58.3	62	60.3	55	59.4	46	59.4	49	59.7	53	59.4
NE82651	51	58.0	58	59.9	50	59.2	47	59.2	42	59.3	50	59.1
NE82652	51	54.9	65	58.2	53	57.5	50	57.4	41	57.8	52	57.1
NE82656	58	55.0	60	58.5	53	58.3	47	58.1	48	58.5	53	57.7
NE82658	49	55.8	57	59.3	46	58.8	46	58.3	44	58.5	48	58.1
Dif. req. sig.	4.3	1.3	5.1	0.4	5.6	1.2	5.9	0.6	N.S.	1.3	4.0	0.9

Table 13. West District winter wheat variety tests. 1982-1986.

Entry	Grain yield, bu/A									Weight, lb/bu		
	1982 average (5 tests)	1983 average (5 tests)	1984 average (5 tests)	1985 average (4 tests)	1986 average (5 tests)	1985-86 average (9 tests)	1984-86 average (14 tests)	1983-86 average (19 tests)	1982-86 average (24 tests)	1986 average (5 tests)	1984-86 average (14 tests)	1982-86 average (24 tests)
Agate	48	44	43	33	48	41	41	42	43	59.3	60.0	60.1
AgriPro Thunderbird	--	--	--	30	49	40	--	--	--	59.7	----	----
AgriPro Ram	--	--	46	33	51	42	43	--	--	57.1	----	----
AgriPro Victory	--	--	--	--	49	--	--	--	--	57.8	----	----
Bounty Hybrid 202	--	--	--	--	52	--	--	--	--	57.6	----	----
Bounty Hybrid 205	--	--	--	32	54	43	--	--	--	58.3	----	----
Bounty Hybrid 301	--	--	43	33	52	43	43	--	--	58.1	59.3	----
Brule	49	58	46	34	49	42	43	47	47	56.6	58.5	59.3
Buckskin	48	50	44	30	46	38	40	43	44	57.9	59.5	59.8
Centura	48	51	44	32	51	42	42	45	45	59.0	59.8	60.1
Centurk 78	44	51	45	32	48	40	42	44	45	58.4	59.9	59.9
Cody	48	52	46	35	53	44	45	47	47	58.4	59.7	59.6
Colt	46	55	44	34	51	43	43	46	46	58.2	59.5	60.1
Norkan	--	--	--	--	47	--	--	--	--	59.8	----	----
Quantum 555	--	--	45	36	45	41	42	--	--	56.6	58.5	----
Quantum XH140a	--	--	--	--	54	--	--	--	--	57.7	----	----
Redland	--	--	--	34	49	42	--	--	--	56.3	----	----
RHS Pony	--	--	--	30	47	39	--	--	--	59.3	----	----
RHS Rodeo	--	--	--	33	52	43	--	--	--	59.7	----	----
RHS 7833	--	--	--	--	53	--	--	--	--	58.6	----	----
RHS 7837	--	--	--	--	47	--	--	--	--	58.4	----	----
Scout 66	41	42	43	31	46	39	40	41	41	59.3	60.3	60.4
Siouxland	49	52	44	32	51	42	42	45	46	58.1	59.4	59.4
TAM 107	--	--	--	30	52	41	--	--	--	58.1	----	----
Turkey	37	36	39	28	38	33	35	35	36	57.8	59.3	59.4
Vona	47	57	40	32	50	41	41	45	45	59.1	60.2	59.8
NE78488	--	--	--	--	53	--	--	--	--	59.4	----	----
NE82651	--	--	--	--	50	--	--	--	--	59.1	----	----
NE82652	--	--	--	--	52	--	--	--	--	57.1	----	----
NE82656	--	--	--	--	53	--	--	--	--	57.7	----	----
NE82658	--	--	--	--	48	--	--	--	--	58.1	----	----
Dif. req. sig.	5.3	8.5	4.3	2.6	4.0	4.8	3.3	4.2	3.4	0.9	0.7	0.7

Location of tests (counties): 1982 Garden, Cheyenne, Scotts Bluff, Box Butte, Sheridan; 1983 Morrill, Cheyenne, Banner, Box Butte, Dawes; 1984 Duel, Cheyenne, Scotts Bluff, Box Butte, Sheridan; 1985 Morrill, Kimball, Box Butte, Dawes; 1986

Table 14. Protein content of winter wheat entries in Nebraska tests. 1986.

Entry	% Protein, 14% moisture basis										
	Saunders County	Clay County	Webster County	Howard County	Lincoln County		Cheyenne County	S. Bluff County	B. Butte County	Sheridan County	Average 10 tests
					Nurs.	F.P.					
Agate	----	----	----	10.2	----	----	9.8	9.7	8.4	10.2	----
AgriPro Mustang	13.6	12.5	12.6	----	11.1	11.5	----	----	---	----	----
AgriPro Ram	----	----	----	----	11.3	12.0	8.8	10.1	8.2	9.7	----
AgriPro Thunderbird	13.7	13.0	13.5	11.6	11.9	13.0	10.2	11.7	9.2	10.5	11.8
AgriPro Trailblazer	----	12.6	14.6	11.2	----	----	----	----	---	----	----
AgriPro Victory	13.2	12.5	13.4	10.8	11.6	11.6	9.6	10.4	9.3	10.3	11.3
AgriPro Wrangler	13.2	----	----	----	----	----	----	----	---	----	----
Arkan	14.9	13.6	14.3	----	----	----	----	----	---	----	----
Bennett	13.5	12.9	14.5	11.2	----	----	----	----	---	----	----
Bounty Hybrid 202	13.3	12.8	13.6	11.5	11.0	10.7	9.1	9.0	8.8	9.5	10.9
Bounty Hybrid 205	13.9	12.1	13.3	11.5	10.9	11.0	9.0	10.2	8.4	10.4	11.1
Bounty Hybrid 301	14.1	12.1	14.1	11.5	11.3	11.7	9.0	9.7	8.9	9.6	11.2
Brule	12.1	11.5	12.7	9.2	9.5	10.3	8.6	9.2	7.9	9.2	10.0
Buckskin	13.3	12.1	12.2	10.2	10.0	10.8	8.9	9.7	8.7	10.0	10.6
Centura	13.0	12.2	14.3	10.7	11.6	12.8	9.4	9.6	8.7	10.2	11.3
Centurk 78	13.1	12.5	14.1	10.7	11.0	12.4	9.3	9.4	8.6	8.9	11.0
Cody	12.8	12.2	13.6	10.9	10.9	12.9	10.0	10.3	9.3	10.0	11.3
Colt	13.5	12.4	13.7	10.9	11.3	11.6	9.8	10.5	7.9	9.9	11.2
Gage	13.8	----	----	----	----	----	----	----	---	----	----
Garst HR48	14.2	12.4	14.3	11.0	10.4	11.3	----	----	---	----	----
Garst HR64	13.5	12.2	13.6	10.7	11.0	11.4	----	----	---	----	----
Homestead	13.8	----	----	----	----	----	----	----	---	----	----
Norkan	13.4	11.9	14.1	11.8	11.6	12.0	10.3	11.1	9.5	11.7	11.7
Quantum 555	----	----	----	----	----	----	8.4	9.2	8.6	9.3	----
Quantum XH140a	----	----	----	----	----	----	8.7	9.7	11.0	9.7	----
Quantum XH500	11.7	10.5	12.4	----	----	----	----	----	---	----	----
Quantum XH510	11.8	10.7	12.3	----	----	----	----	----	---	----	----
Redland	13.3	11.4	12.9	9.2	10.4	10.5	8.7	9.7	8.1	9.3	10.4
RHS Pony	14.5	13.7	14.9	11.6	12.4	13.1	8.7	11.7	10.1	11.5	12.2
RHS Rodeo	13.0	12.3	14.1	10.4	11.3	11.4	10.2	10.7	9.2	10.0	11.3
RHS 7833	12.5	11.9	13.4	10.9	10.6	12.0	9.7	11.1	9.4	10.6	11.2
RHS 7837	14.4	13.7	14.4	12.9	11.1	12.7	9.7	10.8	9.2	10.8	12.0
Scout 66	13.3	12.5	14.1	11.2	11.6	12.2	9.7	10.4	8.3	10.2	11.4
Siouxland	13.2	12.4	13.3	11.5	11.8	12.4	9.9	10.7	8.9	10.2	11.4
TAM 107	13.1	12.4	13.4	11.2	11.8	12.6	9.3	10.3	8.8	9.8	11.3
Turkey	12.2	11.2	13.2	10.4	10.6	11.7	8.7	10.2	8.9	8.5	10.6
Vona	12.5	12.3	13.2	11.1	10.7	11.5	8.4	9.6	8.1	10.0	10.7
NE78488	12.7	12.1	12.5	10.8	11.7	12.8	9.6	9.8	8.9	10.0	11.1
NE82651	13.3	12.7	14.0	11.5	11.2	12.3	9.7	10.2	7.3	9.8	11.2
NE82652	13.4	12.8	14.8	11.2	11.5	12.1	9.0	9.6	9.1	9.3	11.3
NE82656	13.3	12.8	13.4	11.2	11.7	12.1	9.7	10.5	9.2	10.7	11.5
NE82658	13.1	12.6	13.6	11.2	11.4	11.7	10.1	10.7	9.4	10.7	11.5
Average	13.0	12.3	13.6	11.0	11.2	11.9	9.4	10.2	8.8	10.0	11.2
Dif. req. sig.	0.7	0.6	0.6	1.1	1.0	1.3	0.6	1.1	0.9	1.3	0.4

Table 15. Protein content of entries in Nebraska statewide tests. 1977-1986.

Entry	Protein, 14% moisture basis									
	1977 (15 tests)	1978 (11 tests)	1979 (12 tests)	1980 (9 tests)	1981 (13 tests)	1982 (13 tests)	1983 (12 tests)	1984 (10 tests)	1985 (10 tests)	1986 (10 tests)
Agate	12.9	13.4	11.2	10.3	----	----	----	----	----	----
AgriPro Thunderbird	----	----	----	----	----	----	----	----	12.5	11.8
AgriPro Victory	----	----	----	----	----	----	----	----	----	11.3
Bennett	13.1	13.4	11.5	11.1	12.7	----	----	----	----	----
Bounty Hybrid 202	----	----	----	----	----	----	----	----	----	10.9
Bounty Hybrid 205	----	----	----	----	----	----	----	----	12.1	11.1
Bounty Hybrid 301	----	----	----	----	----	----	----	11.7	12.2	11.2
Brule	----	----	----	----	11.0	10.9	11.0	11.2	11.4	10.0
Buckskin	12.7	13.5	11.3	10.5	11.5	----	11.7	11.8	12.1	10.6
Centura	----	----	----	----	11.8	12.1	11.8	12.2	12.3	11.3
Centurk 78	12.5	13.1	11.0	10.4	11.4	11.8	12.0	11.7	11.9	11.0
Cody	----	----	----	----	11.5	11.9	11.9	11.6	11.9	11.3
Colt	----	----	----	----	12.0	11.9	----	11.8	12.0	11.2
Garst HR48	----	----	----	----	----	----	----	12.0	12.1	----
Garst HR64	----	----	----	----	----	----	11.8	11.9	12.1	----
Norkan	----	----	----	----	----	----	----	----	----	11.7
RHS Pony	----	----	----	----	----	----	----	----	13.0	12.2
RHS Rodeo	----	----	----	----	----	----	----	----	12.3	11.3
RHS 7833	----	----	----	----	----	----	----	----	----	11.2
RHS 7837	----	----	----	----	----	----	----	----	----	12.0
Scout 66	12.6	13.1	11.3	10.6	12.0	12.1	12.1	12.0	12.1	11.4
Siouxland	----	----	----	----	----	11.4	11.7	11.8	12.2	11.4
TAM 107	----	----	----	----	----	----	----	----	12.0	11.3
Turkey	13.4	13.9	12.0	11.1	12.1	12.5	----	12.3	12.7	10.6
Vona	----	----	----	----	11.1	11.5	11.0	11.5	11.5	10.7
NE78488	----	----	----	----	----	----	----	----	----	11.1
NE82651	----	----	----	----	----	----	----	----	----	11.2
NE82652	----	----	----	----	----	----	----	----	----	11.3
NE82656	----	----	----	----	----	----	----	----	----	11.5
NE82658	----	----	----	----	----	----	----	----	----	11.5
Average	12.9	13.3	11.3	10.6	11.7	11.8	11.6	11.8	11.5	11.2
Dif. req. sig.	0.4	0.4	0.3	1.0	0.4	0.4	0.4	N.S.	0.4	0.4

Table 16. Kernel weight of entries in Nebraska winter wheat tests. 1986.

Entry	Weight of 1000 kernels, grams										Average 10 tests	
	Saunders County	Clay County	Webster County	Howard County	Lincoln Co.		Cheyenne County	S. Bluff County	B. Butte County	Sheridan County	Gms/1000 seeds	Seeds/lb.
					Nurs.	F.P.						
Agate	----	----	----	32.7	----	----	37.3	38.8	36.3	37.3	----	-----
AgriPro Mustang	23.6	22.4	18.2	----	29.0	24.7	----	----	----	----	----	-----
AgriPro Ram	----	----	----	----	30.3	28.5	37.1	38.2	36.4	36.2	----	-----
AgriPro Thunderbird	30.6	28.9	23.0	28.4	31.0	29.3	33.2	34.1	32.7	34.8	30.6	14,820
AgriPro Trailblazer	----	22.4	16.5	24.5	----	----	----	----	----	----	----	-----
AgriPro Victory	27.1	27.3	20.0	27.1	31.8	29.1	35.9	37.9	34.8	34.4	30.5	14,870
AgriPro Wrangler	26.7	----	----	----	----	----	----	----	----	----	----	-----
Arkan	24.9	25.2	19.8	----	----	----	----	----	----	----	----	-----
Bennett	27.7	28.8	19.5	30.0	----	----	----	----	----	----	----	-----
Bounty Hybrid 202	24.1	23.8	22.6	24.8	33.3	33.9	38.7	41.2	38.0	40.1	32.1	14,130
Bounty Hybrid 205	25.8	27.6	22.3	25.7	31.6	32.5	35.5	36.7	34.4	34.6	30.7	14,780
Bounty Hybrid 301	24.3	28.9	19.8	27.8	30.5	29.8	35.1	37.1	34.2	35.6	30.3	14,970
Brule	23.0	23.6	15.9	26.6	29.7	26.9	32.1	33.2	33.0	33.4	27.7	16,380
Buckskin	18.5	21.8	15.2	24.3	25.7	24.3	29.4	35.8	33.8	32.1	26.1	17,380
Centura	24.7	26.5	19.0	26.5	29.7	26.4	31.3	33.0	31.4	32.3	28.1	16,140
Centurk 78	21.1	20.7	16.7	22.6	26.2	21.3	29.0	30.5	27.8	29.2	24.5	18,510
Cody	25.7	27.8	20.2	27.1	29.5	26.1	31.9	32.7	31.7	32.2	28.5	15,920
Colt	22.9	25.1	15.9	25.6	29.0	25.4	32.6	33.0	32.2	32.4	27.4	16,550
Gage	26.6	----	----	----	----	----	----	----	----	----	----	-----
Garst HR48	22.3	21.9	15.7	22.8	28.6	24.5	----	----	----	----	----	-----
Garst HR64	20.2	20.6	13.4	22.2	25.3	25.7	----	----	----	----	----	-----
Homestead	27.8	----	----	----	----	----	----	----	----	----	----	-----
Norkan	26.6	26.6	15.8	27.5	30.3	28.0	31.6	33.4	31.2	33.2	28.4	15,970
Quantum 555	----	----	----	----	----	----	27.4	34.1	30.2	31.1	----	-----
Quantum XH140a	----	----	----	----	----	----	30.9	31.6	29.6	33.1	----	-----
Quantum XH500	20.2	23.2	19.9	----	----	----	----	----	----	----	----	-----
Quantum XH510	19.6	22.5	18.2	----	----	----	----	----	----	----	----	-----
Redland	21.8	22.9	16.7	26.6	29.1	25.6	32.1	34.2	32.2	33.3	27.5	16,490
RHS Pony	23.5	24.8	15.7	22.3	26.2	25.6	28.2	29.2	27.3	29.0	25.2	18,000
RHS Rodeo	25.1	26.9	17.9	27.6	28.8	29.7	35.0	34.4	32.4	34.1	29.2	15,530
RHS 7833	25.6	26.6	17.6	27.5	30.2	26.3	34.6	35.0	32.3	33.4	28.9	15,700
RHS 7837	25.7	26.6	17.2	23.0	29.9	28.3	29.3	31.7	29.1	30.3	27.1	16,740
Scout 66	28.3	30.2	19.5	30.5	31.8	29.2	33.9	36.4	32.9	35.4	30.8	14,730
Siouxland	29.0	31.5	20.9	29.3	31.7	28.6	32.2	33.0	32.1	33.5	30.2	15,020
TAM 107	26.5	25.3	20.0	25.7	30.1	25.3	34.0	35.4	35.3	35.9	29.4	15,430
Turkey	18.2	22.4	13.0	24.0	24.8	19.0	29.5	31.9	31.1	30.0	24.4	18,590
Vona	19.3	18.8	13.7	20.7	24.2	21.6	28.1	32.2	28.9	31.3	23.9	18,980
NE78488	25.1	26.9	20.8	26.8	28.9	25.8	31.2	31.8	31.4	32.0	28.1	16,140
NE82651	26.1	26.4	18.5	28.8	30.5	26.2	34.4	35.3	34.0	33.5	29.4	15,430
NE82652	24.1	23.7	14.2	27.1	29.1	25.4	32.8	35.0	33.1	33.2	27.8	16,320
NE82656	27.0	28.3	18.6	28.5	30.1	28.6	30.9	32.1	30.9	32.7	28.8	15,750
NE82658	24.3	27.4	17.4	28.2	28.7	26.5	31.1	31.6	30.2	31.2	27.7	16,380
Dif. req. sig.	1.4	1.9	2.2	2.1	2.8	3.2	1.2	1.6	1.6	1.5	1.4	-----

Table 17. Height of entries in Nebraska winter wheat tests. 1986.

Entry	Plant height, inches										
	Saunders County	Clay County	Howard County	Lincoln Nurs.	County F.P.	Garden County	Cheyenne County	S. Bluff County	B. Butte County	Sheridan County	Average 10 tests
Agate	--	--	38	--	--	42	35	35	36	39	--
AgriPro Mustang	32	31	--	30	33	--	--	--	--	--	--
AgriPro Ram	--	--	--	37	39	37	33	31	32	34	--
AgriPro Thunderbird	36	37	30	35	38	36	32	30	32	34	34
AgriPro Trailblazer	--	33	31	--	--	--	--	--	--	--	--
AgriPro Victory	36	34	27	31	32	33	30	27	29	30	31
AgriPro Wrangler	31	--	--	--	--	--	--	--	--	--	--
Arkan	36	32	--	--	--	--	--	--	--	--	--
Bennett	43	40	33	--	--	--	--	--	--	--	--
Bounty Hybrid 202	34	32	30	33	37	36	34	32	32	34	33
Bounty Hybrid 205	32	38	31	33	37	36	33	31	32	34	34
Bounty Hybrid 301	40	38	30	36	40	36	35	33	34	37	36
Brule	42	39	34	35	39	36	33	32	31	33	35
Buckskin	49	48	37	45	46	42	39	36	37	42	42
Centura	43	40	33	39	42	38	35	31	34	36	37
Centurk 78	42	40	36	37	43	38	35	32	32	36	37
Cody	42	41	33	37	43	39	32	33	36	37	37
Colt	34	33	28	30	33	31	29	28	29	30	31
Gage	48	--	--	--	--	--	--	--	--	--	--
Garst HR48	32	31	29	31	33	--	--	--	--	--	--
Garst HR64	34	31	27	33	33	--	--	--	--	--	--
Homestead	42	--	--	--	--	--	--	--	--	--	--
Norkan	40	37	30	33	36	34	31	29	31	33	33
Quantum 555	--	--	--	--	--	33	30	31	30	32	--
Quantum XH140a	--	--	--	--	--	34	31	31	30	32	--
Quantum XH500	38	36	--	--	--	--	--	--	--	--	--
Quantum XH510	38	37	--	--	--	--	--	--	--	--	--
Redland	40	38	32	36	38	36	32	32	31	34	35
RHS Pony	32	30	26	32	33	33	29	27	29	31	30
RHS Rodeo	37	36	32	33	34	34	31	32	33	33	34
RHS 7833	36	35	30	31	34	34	30	30	30	32	32
RHS 7837	33	33	27	32	34	32	30	27	31	32	31
Scout 66	49	47	36	43	45	40	37	34	36	40	41
Siouxland	41	39	32	40	45	40	37	36	39	39	39
TAM 107	33	31	27	30	32	33	30	27	29	30	30
Turkey	50	49	41	47	47	42	37	39	36	43	43
Vona	31	28	28	29	32	35	31	29	28	30	30
NE78488	41	39	32	41	43	40	36	34	37	39	38
NE82651	46	42	33	41	42	40	34	34	34	36	38
NE82652	33	37	30	36	37	34	32	32	31	34	34
NE82656	41	39	33	36	39	36	33	33	30	33	35
NE82658	40	37	29	35	38	35	32	30	32	32	34
Dif. req. sig.	2.7	2.2	3.1	3.6	2.1	1.8	2.5	1.4	2.1	2.1	1.5

Table 18. Lodging of entries in Nebraska winter wheat tests. 1986.

Entry	Lodging %						Average 6 tests
	Saunders County	Clay County	Howard County	Lincoln N.P. Nurs.	Lincoln N.P.F.P.	Garden County	
Agate	--	--	5	--	--	11	--
AgriPro Mustang	13	33	--	10	19	--	--
AgriPro Ram	--	--	--	10	28	17	--
AgriPro Trailblazer	--	3	0	--	--	--	--
AgriPro Thunderbird	3	5	5	3	5	2	4
AgriPro Victory	5	4	2	5	4	6	4
AgriPro Wrangler	30	--	--	--	--	--	--
Arkan	6	3	--	--	--	--	--
Bennett	19	10	3	--	--	--	--
Bounty Hybrid 202	15	35	5	0	2	9	11
Bounty Hybrid 205	5	6	2	2	3	0	3
Bounty Hybrid 301	5	1	1	3	2	3	3
Brule	9	13	0	5	6	0	6
Buckskin	31	34	4	40	30	9	25
Centura	34	64	11	23	51	9	32
Centurk 78	30	78	10	43	48	9	36
Cody	14	10	7	0	7	6	7
Colt	18	0	0	0	3	2	4
Gage	40	--	--	--	--	--	--
Garst HR48	25	20	3	0	1	--	--
Garst HR64	29	59	1	0	1	--	--
Homestead	30	--	--	--	--	--	--
Norkan	18	6	0	5	17	2	8
Quantum 555	--	--	--	--	--	2	--
Quantum XH140a	--	--	--	--	--	0	--
Quantum XH500	14	1	--	--	--	--	--
Quantum XH510	13	1	--	--	--	--	--
RHS Pony	30	3	3	10	26	0	12
RHS Rodeo	38	40	5	0	8	9	17
RHS 7833	33	70	7	3	23	9	24
RHS 7837	8	11	2	2	3	11	6
Scout 66	63	49	15	90	99	22	56
Siouxland	18	4	3	0	2	2	5
TAM 107	9	1	1	5	2	6	4
Turkey	43	38	12	58	75	14	40
Vona	30	68	2	7	15	2	21
NE78488	24	30	8	2	18	0	14
NE82651	15	36	3	13	34	9	18
NE82652	24	26	2	3	8	0	11
NE82656	18	14	1	7	13	0	9
NE82658	14	1	0	7	5	0	5
Dif. req. sig.	13	27	5	13	24	6	14

No differential lodging at other locations except Webster (data lost), Scotts Bluff (Scout 66 20 and Turkey 13), and Sheridan (Scout 66 11, Siouxland 2 and Turkey 13 % lodged).

Table 19. Survival, flower date and disease ratings. Nebraska winter wheat tests. 1986.

Entry	Survival		Flower date		Leaf rust		Stem Rust ³ Saunders	Cephalosporium Lincoln ⁴ N.P. Nurs.
	Saunders Score ¹	Howard %	Saunders County	Clay County	Saunders County	Clay ² County		
Agate	---	100	----	----	---	---	--	--
AgriPro Mustang	1.5	---	5/31	5/30	90S	3.5	R	60
AgriPro Ram	---	---	----	----	---	---	--	20
AgriPro Trailblazer	---	65	----	6/1	---	1.5	--	--
AgriPro Thunderbird	4.3	75	5/30	5/31	TR	1.3	MR	50
AgriPro Victory	5.3	65	6/1	6/1	TR	2.5	S	20
AgriPro Wrangler	4.3	---	5/25	----	90S	---	R	--
Arkan	4.3	---	5/29	5/28	TR	2.0	R	--
Bennett	6.5	95	5/31	5/31	90S	3.0	R	--
Bounty Hybrid 202	0.8	20	6/1	6/1	80S	3.5	R	30
Bounty Hybrid 205	5.3	55	6/1	5/31	TR-25MS	3.3	MR	20
Bounty Hybrid 301	4.8	53	6/3	6/1	TR	1.3	S	15
Brule	6.9	90	6/1	6/1	TR-90S	2.8	R	10
Buckskin	5.0	90	6/3	6/2	90S	2.3	MS	25
Centura	8.0	80	5/29	5/27	TR-40MS	3.3	R	40
Centurk 78	5.0	75	6/1	6/1	90S	3.3	R	40
Cody	6.9	90	5/29	5/29	TR-90S	1.0	R	10
Colt	6.0	73	6/2	6/2	TR-90S	2.8	R	50
Gage	8.8	---	5/30	----	60MS	---	R	--
Garst HR48	2.3	30	5/30	5/31	90S	4.0	R	60
Garst HR64	4.8	80	5/31	6/1	90S	4.0	R	25
Homestead	6.5	---	5/31	----	80S	---	R	--
Norkan	6.5	63	5/31	5/30	75S	1.8	R	25
Quantum XH500	6.9	---	5/29	5/27	TR-90S	2.0	S	--
Quantum XH510	7.0	---	5/29	5/28	TR-50MS	2.5	S	--
RHS Pony	3.3	40	5/28	5/25	TR-90S	1.3	MS	80
RHS Rodeo	6.8	88	5/29	5/28	90S	3.0	R	50
RHS 7833	3.8	80	5/31	5/30	TR-90S	3.3	R	40
RHS 7837	3.8	33	5/30	5/28	TR	2.5	R	25
Scout 66	8.0	88	5/30	5/31	90S	3.8	R	25
Siouxland	7.4	78	5/26	5/25	TR	1.0	MR	20
TAM 107	5.1	65	5/24	5/23	90S	5.0	MS	60
Turkey	8.8	98	6/2	6/2	90S	2.3	MS	20
Vona	1.0	8	6/1	5/29	90S	5.0	MS	40
NE78488	7.3	90	5/29	5/27	TR-90S	2.3	R	25
NE82651	8.8	90	5/31	5/31	90S	3.0	R	15
NE82652	7.4	90	6/2	6/2	30MS	2.5	R	TR-10
NE82656	8.0	80	6/1	5/30	TR	2.0	R	10
NE82658	6.4	85	6/2	6/2	TR-90S	1.5	R	25
Dif. req. sig.	---	18.6	1.0	2.3	---	0.7	--	--

¹ Combination of survival, stand and vigor scored 1-9. 1 = very poor, 9 = very good.

² Scored 1-5. 1 = least, 5 = most.

³ R = resistant, S = susceptible, M = moderately.

⁴ % of leaf area affected.

Table 20. Winter barley tests. 1986.

Entry	Lancaster County				Lincoln County	Cheyenne County			Average		
	Flower date	Height inches	Survival ¹ score	Yield bu/A	Yield bu/A	Flower date	Survival ¹ score	Yield bu/A	Flower date	Survival ¹ score	Yield bu/A
Dundy	5/21	33	7	68	55	5/24	6	54	5/23	6.5	59
Hitchcock	5/27	37	7	68	31	5/30	2	67	5/29	4.5	55
Kearney	5/17	37	8	43	33	5/22	8	21	5/20	8.0	32
Nebar	5/21	42	7	60	38	5/25	8	61	5/23	7.5	53
Schuyler	6/7	28	4	33	69	5/26	8	54	6/1	6.0	52
NE81713 ²	5/20	37	7	64	37	5/26	5	52	5/23	6.0	51
NE80719 ³	5/22	36	6	66	42	5/27	7	56	5/25	6.5	55
NE80725 ⁴	5/22	40	6	74	38	5/27	7	66	5/25	6.5	59
NE83803 ⁵	5/27	36	5	60	47	5/25	8	56	5/26	6.5	54
NE83810 ⁵	5/27	37	6	69	45	5/25	7	62	5/26	6.5	59
NE83812 ⁵	5/27	35	4	63	43	5/24	7	54	5/26	5.5	50
NE83820 ⁵	5/25	38	5	55	43	5/24	7	60	5/25	6.0	53
NE83821 ⁵	5/28	34	5	63	46	5/27	7	76	5/28	6.0	62
NE85801 ⁶	5/18	36	7	76	41	5/26	8	68	5/22	7.5	62
NE85802 ⁶	5/22	36	6	66	48	5/27	8	43	5/25	7.0	52
NE85806 ⁶	5/19	37	7	74	44	5/25	7	62	5/22	7.0	60
NE85807 ⁶	5/19	37	8	67	46	5/26	7	57	5/23	7.5	57
NE85808 ⁶	5/23	37	8	69	54	5/26	8	63	5/25	8.0	62
NE85811 ⁶	5/22	36	6	72	49	5/25	7	54	5/24	6.5	58
NE85814 ⁶	5/28	38	5	57	45	5/26	8	63	5/27	6.5	55
NE85815 ⁶	5/20	37	7	68	47	5/25	7	61	5/23	7.0	59
NE85816 ⁶	5/16	36	7	80	42	5/25	6	50	5/21	6.5	57
NE851804 ⁶	5/29	35	6	76	54	5/28	6	75	5/29	6.0	68
NE851805 ⁶	5/25	32	5	53	50	5/25	7	45	5/25	6.0	49
NE851806 ⁶	5/23	36	7	65	49	5/25	8	39	5/24	7.5	51
NE851808 ⁶	5/25	35	7	81	54	5/26	7	83	5/26	7.0	73
NE851811 ⁶	5/19	31	6	71	45	5/25	6	44	5/22	6.0	53
OK82850 ⁷	5/29	36	5	88	47	5/25	7	67	5/27	6.0	67
WB158-1 ⁸	6/1	37	4	39	47	5/26	8	54	5/29	6.0	47
Centurk 78 wheat	5/23	42	9	53	50	6/5	9	54	5/30	9.0	52
Dif. req. sig.	----	--	-	--	--	----	-	--	N.S.	N.S.	8.6

¹Survival scored 0-9. 0 = none, 9 = 100%²Nebar Sel/Dundy³Hitchcock/VA 70-44-213⁴Sabbaton/Meimi//Decatur/3/Dundy/Nebar Sel/Dundy⁵Dundy/4/Decatur/cnase/3/Mo 1222//Sabbaton/Meimi⁶SD W79-1/Dundy⁷Post Selection⁸WB 74-69//WB 74-69/Huron

Table 21. Winter barley variety tests. 1981-1986. No 1984 data.¹

Entry	1981 (5 tests)		1982 (2 tests)		1983 (1 test)		1985 (1 test)		1986 (3 tests)		1981-1985 (12 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
Dundy	87	67	82	45	100	65	66	77	72	59	81	63
Hitchcock	88	70	89	50	100	59	77	78	50	55	81	62
Kearney	92	41	83	39	100	54	66	72	88	32	86	48
Nebar	92	47	84	48	100	70	58	81	83	53	83	60
NE80719 ²	85	68	79	46	100	70	44	73	72	55	79	62
NE80725 ³	93	63	73	53	100	70	50	73	72	59	78	64
NE81713 ⁴	--	--	72	50	100	76	58	81	66	51	--	--
NE83803 ⁵	--	--	--	--	--	--	33	83	72	54	--	--
NE83810 ⁵	--	--	--	--	--	--	61	84	72	59	--	--
NE83812 ⁵	--	--	--	--	--	--	55	84	61	50	--	--
NE83820 ⁵	--	--	--	--	--	--	55	83	66	53	--	--
NE83821 ⁵	--	--	--	--	--	--	42	82	66	62	--	--
OK82850 ⁶	--	--	--	--	--	--	39	80	66	67	--	--
Centurk (w.w.)	95	55	100	34	100	42	97	66	99	52	98	50
Dif. req. sig.	4.9	10.6	N.S.	N.S.	N.S.	11.2	--	19.9	N.S.	8.6	12.5	8.4

¹ Includes only entries with 2 or more data years.² Hitchcock/VA 70-44-213.³ Sabbaton/Meimi//Decatur/3/Dundy/Neb sel/Dundy.⁴ Nebar sel/Dundy.⁵ Dundy/NE76144.⁶ Post selection.