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EC87-103 Nebraska Fall-Sown Small Grain Variety Tests 1987

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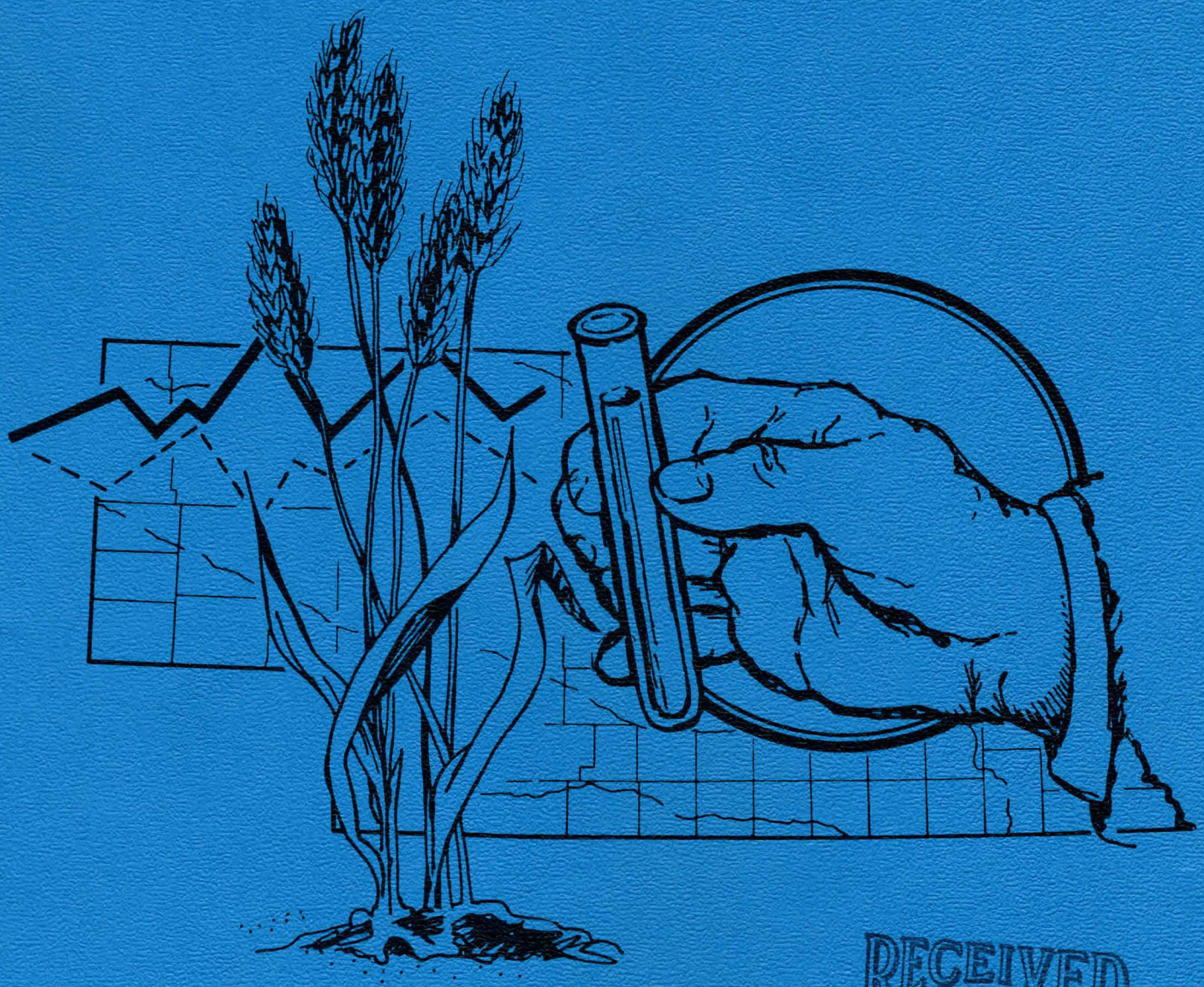
NEBRASKA FALL-SOWN SMALL GRAIN VARIETY TESTS 1987



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NEBRASKA FALL-SOWN SMALL GRAIN

VARIETY TESTS

November 1987

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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 87-103

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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	2300 (932)	2000 (810)	39.0 (2623)
1987[1]	2200 (891)	1950 (790)	44.0 (2959)

[1] August 1 estimate.

NEBRASKA FALL-SOWN SMALL GRAIN VARIETY TESTS 1987

This circular reports data from winter wheat and winter barley 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 eighth 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. Entries were replicated 4 to 6 times. Tests in Gage and Nance County were bundled and threshed later. All other locations were direct combined.

April 1 to September 1 precipitation was above normal in all except the Southwest and South Central Cropping Districts. Wheat planting proceeded at the normal rate. Emergence was good. Rains delayed seeding in areas of eastern Nebraska.

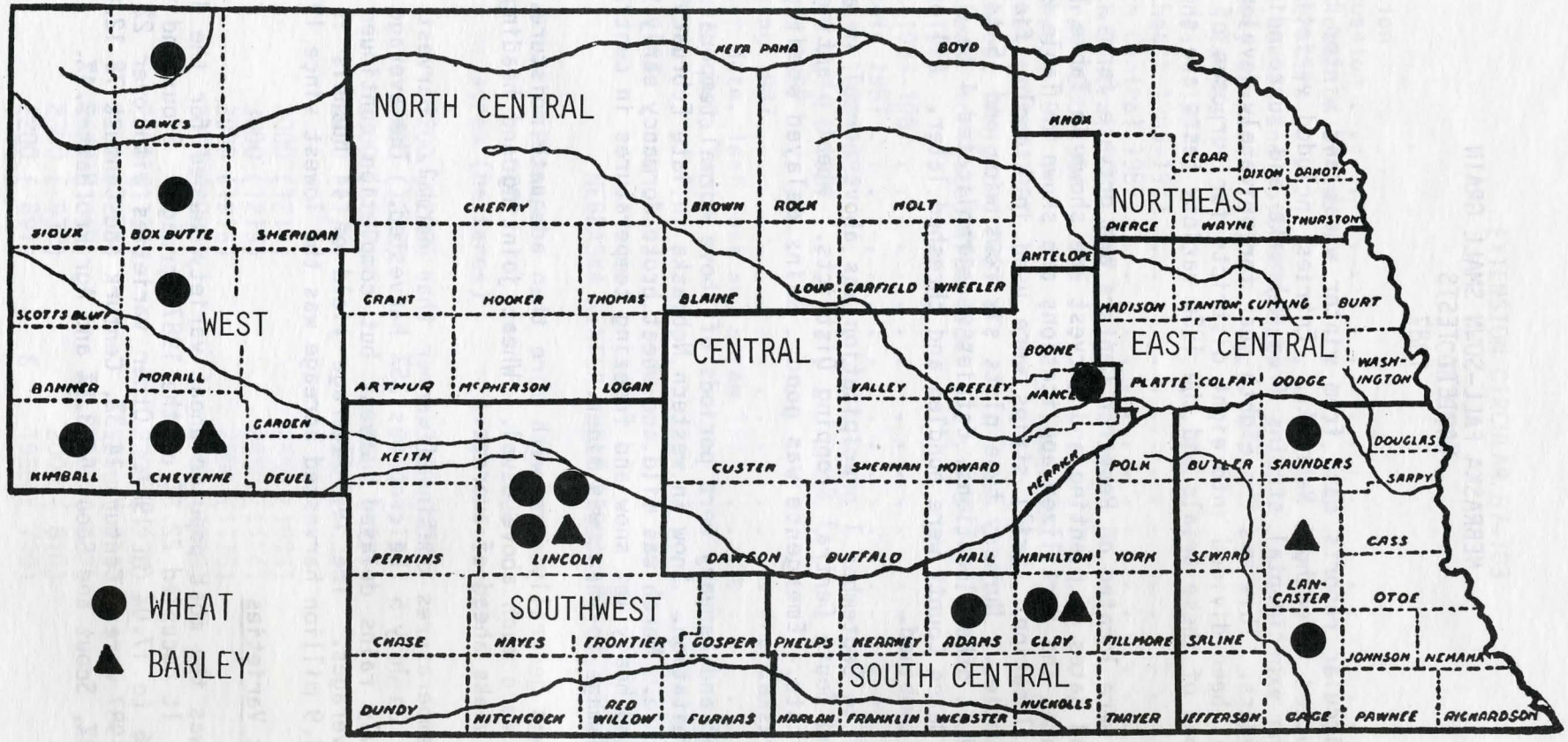
December and January were periods of above normal temperatures and below normal precipitation. Snow in western Nebraska in late February provided much needed moisture. March was mild and wheat broke dormancy early. A late March storm produced heavy wet snow and freezing temperatures in central and eastern Nebraska. Damage to wheat was minor.

April was generally warm with more than adequate moisture. May temperatures also were much above usual. Wheat jointing and heading were approximately two weeks ahead of average.

June temperatures continued warmer than normal. Harvest began earlier than usual. On July 5 the crop was 35% harvested. The average for this date is 13%. July rains delayed harvest but completion continued ahead of the five-year averages. The 1987 average yield of 44 bushels is a new record high. The 1.9 million harvested acreage was the lowest since 1917.

Winter Wheat Varieties

Brule was the most popular wheat variety seeded for the 1985, 1986 and 1987 crops. It occupied 22.5% of the 1987 acreage. Siouxland increased from 2.8% in 1986 to 17.0% in 1987. Other varieties with over 2% of the state acreage in 1987 were: Centura 14.3%, Centurk and Centurk 78 12.4%, Colt 4.2%, Buckskin 3.8%, Scout and Scout 66 3.5% and AgriPro Hawk 3.4%.



NEBRASKA CROP TESTING DISTRICTS AND LOCATIONS OF 1987
WINTER WHEAT & WINTER BARLEY VARIETY TESTS.

Characteristics of publicly released varieties in Nebraska tests are shown in Table 3. 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. Arkan, Norkan and Siouxland showed some susceptibility to leaf rust in 1987. These previously had been classified as resistant to the races of leaf rust prevalent at that time.

Pedigrees of Nebraska experimental strains are as follows:

NE78488 Warrior*5/Agent//Aurora/3/Centurk 78
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.

Table 1. Location and dates of planting and harvest. Nebraska winter wheat variety tests. 1987.

County	Cooperator	Planted	Harvested
Gage	Wayne Busboom, Filley	Sept. 26	June 23
Saunders	Agricultural Res. & Dev. Center	Oct. 9	July 15
Clay	South Central Res. & Ext. Center	Sept. 24	July 1
Adams	Henry Grothen, Juniata	Sept. 26	June 30
Nance	Steve Dubas, Fullerton	Sept. 17	June 24
Lincoln (Nursery)	West Central Res. & Ext. Center	Sept. 11	July 15
Lincoln (Field Plots)	West Central Res. & Ext. Center	Sept. 22	July 16
Lincoln (Irrigated)	West Central Res. & Ext. Center	Sept. 11	July 16
Cheyenne	High Plains Agricultural Laboratory	Sept. 16	July 16
Kimball	Larry Engstrom, Kimball	Sept. 8	July 15
Morrill	Ed Donnell, Angora	Sept. 9	July 20
Box Butte	Northwest Agricultural Laboratory	Sept. 12	July 8
Dawes	John Haines, Whitney	Sept. 12	July 8

Table 2. Soil series, cropping history, soil test data, and fertilizer applied. Nebraska winter wheat variety tests. 1987.

County	Soil type	1985 crop	Soil test data[1/]				Fertilizer $N+P_2O_5+K$ lb/A
			pH	Nitrate lb/A	P ppm	Organic matter %	
Gage	Crete silty clay loam	Fallow	5.6	284	17	3.0	40+0+0
Saunders	Sharpsburg silty clay loam	Fallow	6.8	239	28	2.6	------
Clay	Hastings silt loam	Fallow	5.4	149	19	2.3	20+40+0
Adams	Holder silt loam	Fallow	6.0	165	9	---	31+78+0
Nance	Belfore silt loam	Fallow	5.0	268	53	3.2	------
Lincoln (Nursery)	Hall silt loam	Fallow	6.4	114	15	1.1	60+40+0[2/]
Lincoln (Field Plots)	Hall silt loam	Fallow	5.9	331	59	1.7	60+40+0[2/]
Lincoln (Irrigated)	Cozad silt loam	Fallow	7.9	386	47	1.3	100+100+0[2/]
Cheyenne	Keith loam	Fallow	6.8	371	36	2.0	6+20+0
Kimball	Rosebud loam	Fallow	7.2	63	13	0.7	6+20+0
Morrill	Busher fine sandy loam	Fallow	7.2	160	19	1.0	6+20+0
Box Butte	Keith loam	Fallow	7.4	116	24	0.9	6+20+0
Dawes	Keith silt loam	Fallow	7.7	185	16	1.6	6+20+0

1/ P and organic matter determinations for 0-6 and 0-8 inch depths. Nitrate sampled to 36-, 48- or 60-inch depths. Converted to 6-foot depth assuming 70% of nitrate in 3-, 80% in 4-, and 90% in 5-foot profiles.

2/ Applied prior to soil test.

Table 3. Characteristics of winter wheat varieties.[1]

Entry	Year released	Origin	P.V.P.[2]	Relative				Semi-dwarf[3]	Resistance to[4]				
				Maturity	Winter-hardiness	Straw strength	Plant height		Hessian fly	Leaf rust	Stem rust	Soil-borne mosaic	Wheat streak mosaic
Agate	1976	NE	Yes	Med-late	Good	Medium	Medium	No	MR	S	R	MR-MS	MR
Arkan	1983	KS	Yes	Early+	Fair	Strong	Med-short	No	R	MR	R	R	S
Bennett	1978	NE	Yes	Early	Good	Strong	Medium	No	MR	S	R	MR	MS
Brule	1982	NE	No	Med-early	Good	Strong	Medium	Yes	R	MR-MS	MR	S	MR-MS
Buckskin	1973	NE	Yes	Med-early	Fair	Med-Strong	Med-tall	No	MR	S	MR-MS	MR	S
Centura	1983	NE	Yes	Med-early	Fair	Med-Strong	Medium	No	S	MR-MS	MR	MS	MS
Centurk 78	1978	NE	Yes	Med-early	Fair	Med-Strong	Medium	No	S	MS	MR	MS	MS
Cody	1986	NE	Yes	Med-early	Good	Medium	Medium	No	S	MR	MR-R	MR-MS	S
Colt	1983	NE	Yes	Medium	Good	Strong	Short	Yes	MR	MS-MR	R	MS	S
Gage	1963	NE	No	Med-early	Fair	Med-Strong	Medium	No	MS	MR-MS	R	MS	S
Norkan	1986	KS	Yes	Med-early	Fair	Strong	Med-short	Yes	R	MR	R	R	S
Redland	1986	NE	Yes	Med-early	Good	Strong	Medium	Yes	R	MR-MS	R	S	MR-MS
Scout 66	1966	NE	No	Early	Fair	Medium	Med-tall	No	MS	MS	MR	S	MR-MS
Siouxland	1984	NE	Yes	Med-early	Fair	Med-Strong	Medium	No	S	R	MR	S	S
TAM 107	1984	TX	Yes	Early+	Fair	Med-Strong	Short	Yes	S	S	MR-MS	S	MS
Vona	1976	CO	Yes	Early	Poor	Strong	Short	Yes	MR	S	MR-MS	S	S

[1] These apply only to area of adaptation. When varieties are taken out of their primary area of adaptation, relative maturity, straw strength and other characteristics are subject to variations. Disease and insect races are constantly changing. Several varieties rated strong straw strength lodged under extreme conditions in 1987.

[2] If yes, the variety is registered under the U.S. Plant Variety Protection Act and may only be sold for seed as Registered or Certified.

[3] Semidwarf winter wheats usually have short coleoptile lengths. This may hinder emergence when seeded deep.

[4] R = resistant; MR = moderately resistant; S = susceptible; MS = moderately susceptible.

The following made entries as indicated:

Nickerson American Plant Breeders P.O. Box 30 Berthoud, CO 80537	AgriPro Abilene, Thunderbird, Trailblazer, Victory
Cargill Incorporated 2540 E. Drake Rd. Ft. Collins, CO 80525	Bounty BH205, BH301
HybriTech Seed 5912 N. Meridian Wichita, KS 67204	Quantum XH140a, XH696
Rohm & Haas Seeds Inc. 6025 West, 300 South Lafayette, IN 47905	RHS Rodeo, 7805, 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 4 through 14. Results of 1987 trials are given along with period-of-years data. Protein, kernel weight and height data generally are shown for 12 locations. Data from the irrigated trial in Lincoln County are shown in separate tables (Tables 11 and 12).

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 seeded in the Southeast District (Table 4). The combination of high soil fertility, more than adequate moisture and warm temperatures led to severe lodging in Gage County. This trial had a heavy infection of powdery mildew. This also affected lodging and final yields. The Saunders County trial was seeded late. Fall growth was minimal and spring growth began late with little tillering. Period-of-years data for Southeast District Tests are shown in Table 5.

Results of South Central District trials in Clay and Adams Counties are shown in Table 6. Yields were especially good in Adams County. Lodging was not a factor in yield. Period-of-years data for this area are shown in Table 7.

The Central District trial was located in Namce County (Table 8). This plot was seeded under ideal conditions. Emergence was rapid and fall growth was heavy. Spring conditions favored early growth. Scout 66 and Turkey lodged early and severly. There was a highly significant negative correlation (r = -.93) lodging and grain yield. Varietal performance over years has not been consistent in this area. Lodging was severe in 1982, 1983 and 1987.

Two nonirrigated trials were planted at North Platte (Table 8). Rain delayed harvest. Yield levels in the two trials were similar. Soil fertility was high for the field plots and lodging was severe. Varietal performance differed with location. Period-of-years averages for the Southwest District are shown in Table 10.

An irrigated trial was conducted at North Platte (Table 11). Yields were in the same range as the nonirrigated tests. Soil fertility was high. Only a few varieties lodged badly. Three-year data from this trial are shown in Table 12.

Results of five tests in western Nebraska are shown in Table 13. These represent a wide range of growing conditions. The Cheyenne County test was seeded into no-till stubble. Downy brome was a problem. Moisture conditions were good and high yields resulted. Some varieties lodged badly. The Kimball County test had good emergence but yields were reduced by early spring moisture stress. A light hail damaged the test prior to harvest.

In Morrill County, good fall moisture and above-average rainfall during the growing season produced good yields. Lodging was not a problem. The Box Butte County plot had generally good stands and moisture and no lodging. The Dawes plot had good fall moisture. This test started early and progressed ahead of wheat in the Panhandle. Moisture was adequate and high yields were produced. Lodging was minor.

Period-of-years averages from wheat variety tests in the Panhandle are shown in Table 14. Average yields are in the range of 40-50 bushels. Variety performance is more consistent over years than from any other area of Nebraska.

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 entries were included in statewide tests at 12 locations in 1987. Average yields were as follows: TAM 107 61, AgriPro Abilene 60, RHS 7846 60, Bounty BH205 59, Bounty GH301 59, Brule 57, Redland 57, NE82656 57, Vona 56, Colt 54, Norkan 54, NE82652 54, AgriPro Thunderbird 53, Siouxland 53, NE78488 53, Centura 52, Cody 51, NE82658 51, Scout 66 46 and Turkey 38 bushels.

Previous high-ranking entries and statewide average yields were as follows: 1986 NE82656 52, 1985 Bounty BH301 53, 1984 Bounty BH203 56, 1983 AgriPro Hawk and Brule 59, 1982 Siouxland 46, 1981 TAM 195 58, 19879 Buckskin 49, 1978 Centurk 78 and Centurk 43, 1976 Bennett 50, 1975 Linden 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 5 trials in the eastern one-half of Nebraska (Southeast, South Central and Central), 23 entries produced yields as follows: AgriPro Abilene 67, RHS 7846 65, Redland 62, TAM 107 62, Bounty BH205 61, AgriPro Victory 60, Bounty BH301 60, NE82656 60, Brule 59, Norkan 59, AgriPro Trailblazer 58, Colt 57, Vona 57, NE82658 55, AgriPro Thunderbird 54, NE82652 54, Siouxland 53, NE78488 53, Cody 50, Centura 47, Bennett 45, Scout 66 41 and Turkey 33 bushels per acre. A combination of high fertility, more than adequate spring moisture and warm weather resulted in severe lodging in Gage and Nance Counties. Grain yields were closely and negatively correlated with lodging at these locations.

In an average of 7 trials farther west (Southwest and West), 25 entries had 1987 average yields as follows: TAM 107 60, Bounty BH301 58, Bounty BH 205 57, RHS 7805 56, RHS 7846 56, Vona 56, Brule 55, Centura 55, AgriPro Abilene 54, Redland 54, RHS 7833 54, NE82652 54, NE82656 54, Centurk 78 53, RHS Rodeo 53, Siouxland 53, NE82658 53, AgriPro Thunderbird 52, Cody 52, Colt 52, Buckskin 51. Norkan 51. Scout 66 50. NE78488 48 and Turkey 42 bushels per acre. Yields reflect the relatively mild winter and generally favorable growing conditions. Lodging was severe only in one trial in Lincoln County. Many varieties had equivalent yield records.

Protein data for 1986 are shown in Table 15. Ten-year protein data are shown in Table 16. Seed size data for 1987 are shown in Table 17. Relatively heavy seeds were produced in 1983, 1984, 1985 and 1987. This is a reflection of favorable conditions for grain-fill.

Plant height data are shown in Table 18. Lodging data from ten 1987 locations are shown in Table 19. The combination of high fertility, more than adequate moisture and warm spring temperatures resulted in excessive lodging at many locations. Plant heights were not excessive. There was a close correlation between lodging and reduced yields in Gage, Nance and Lincoln (field plot) trials. Some varieties which have been considered as having strong straw lodged under 1987 conditions.

Flower date, leaf rust reaction and straw yield data are shown in Table 20. Straw yields were obtained for Gage and Nance Counties.

Winter Barley

Winter barley trials were seeded at four locations (Table 21). Because of the mild winter, winterkill was minor. Yields were especially high in Lancaster and Cheyenne Counties. Survival and yield performance of strains tested for two or more years are shown in Table 22.

Table 4. Southeast District winter wheat variety tests. 1987.

Entry	Gage County		Saunders County		Average 2 tests	
	Yield bu/A	Weight lb/bu	Yield bu/A	Weight lb/bu	Yield bu/A	Weight lb/bu
AgriPro Abilene	66	60.6	48	56.3	57	58.5
AgriPro Thunderbird	65	60.6	39	56.0	52	58.3
AgriPro Trailblazer	54	58.8	42	55.0	48	58.8
AgriPro Victory	63	57.8	43	53.9	53	55.9
Arkan	56	57.3	35	54.2	46	55.8
Bennett	51	58.2	32	53.3	42	55.8
Bounty BH205	61	58.1	42	53.9	52	56.0
Bounty BH301	61	58.1	31	52.8	46	55.5
Brule	66	57.3	38	51.8	52	54.6
Centura	45	59.3	40	55.8	43	57.6
Centurk 78	54	58.1	--	----	--	----
Cody	48	58.8	45	54.4	47	56.6
Colt	61	57.3	36	52.2	49	54.8
Gage	43	57.5	36	53.9	40	55.7
Norkan	64	57.9	40	55.4	52	56.7
Redland	72	56.7	41	51.8	57	54.3
RHS 7846	63	58.4	40	57.2	52	57.8
Scout 66	38	58.0	35	55.0	37	56.5
Siouxland	53	58.6	41	54.7	46	56.7
TAM 107	73	56.9	40	54.9	57	55.9
Turkey	27	55.9	33	54.2	30	55.1
Vona	62	58.0	27	55.0	45	56.5
NE78488	52	59.0	42	55.7	47	57.4
NE82652	60	56.1	40	52.4	50	54.3
NE82656	60	57.3	47	54.6	54	56.0
NE82658	60	57.4	37	54.8	49	56.1
Average	56.8	58.0	38.8	54.4	48.1	56.3
Dif. req. sig.	10.0	----	7.3	0.8	NS	0.8

Table 5. Southeast District winter wheat variety tests. 1983-1987.

Entry	Grain yield, bu/A									Weight, lb/bu		
	1983 average (3 tests)	1984 average (3 tests)	1985 average (3 tests)	1986 Saunders County	1987 average (2 tests)	1986-87 average (3 tests)	1985-87 average (6 tests)	1984-87 average (9 tests)	1983-87 average (12 tests)	1987 average (2 tests)	1985-87 average (6 tests)	1983-87 average (12 tests)
AgriPro Abilene	--	--	--	--	57	--	--	--	--	58.5	----	----
AgriPro Thunderbird	--	--	65	39	52	46	52	--	--	58.3	59.3	----
AgriPro Trailblazer	--	--	--	--	48	--	--	--	--	58.8	----	----
AgriPro Victory	--	--	67	37	53	45	52	--	--	55.9	56.4	----
Arkan	56	41	63	30	46	38	46	45	47	55.8	56.9	57.8
Bennett	43	37	58	26	42	34	42	41	41	55.8	57.1	57.9
Bounty Hybrid 205	--	--	68	32	52	42	51	--	--	56.0	57.2	----
Bounty Hybrid 301	--	50	71	29	46	38	49	49	--	55.5	56.3	----
Brule	63	44	65	26	52	39	48	47	50	54.6	55.1	----
Centura	55	39	64	29	43	36	45	44	46	57.6	58.1	58.4
Centurk 78	52	37	59	17	--	--	--	--	--	----	----	----
Cody	52	41	63	38	47	43	49	47	48	56.6	57.5	58.0
Colt	--	39	62	21	49	35	44	43	--	54.8	55.5	----
Gage	45	34	54	29	40	35	41	39	40	55.7	57.4	58.0
Norkan	--	--	--	35	52	44	--	--	--	56.7	----	----
Redland	--	--	--	23	57	40	--	--	--	54.3	----	----
RHS 7846	--	--	--	--	52	--	--	--	--	57.8	----	----
Scout 66	48	40	57	24	37	31	39	40	41	56.5	57.7	58.6
Siouxland	65	50	70	38	47	43	52	51	54	56.7	57.9	59.0
TAM 107	--	--	58	26	57	42	47	--	--	55.9	54.9	----
Turkey	--	35	44	11	30	21	28	30	--	55.1	54.7	----
Vona	53	39	52	5	45	25	34	35	39	56.5	54.9	56.0
NE78488	--	--	--	32	47	40	--	--	--	57.4	----	----
NE82652	--	--	--	24	50	37	--	--	--	54.3	----	----
NE82656	--	--	--	50	54	52	--	--	--	56.0	----	----
NE82658	--	--	--	33	49	41	--	--	--	56.1	----	----
Dif. req. sig.	13.2	7.1	6.2	4.7	NS	13.0	8.2	6.9	6.2	0.8	1.8	1.4

Location of tests (counties): 1983 Gage, Saunders, Butler; 1984 Otoe, Saline; 1985 Johnson, Jefferson, Saunders; 1986 Saunders; 1987 Gage, Saunders.

Table 6. South Central District winter wheat variety tests. 1987.

Entry	Clay County		Adams County		Average 2 tests	
	Yield bu/A	Weight lb/bu	Yield bu/A	Weight lb/bu	Yield bu/A	Weight lb/bu
AgriPro Abilene	60	54.6	78	57.3	69	56.0
AgriPro Thunderbird	48	56.4	67	57.4	58	56.9
AgriPro Trailblazer	53	54.2	73	57.0	63	55.6
AgriPro Victory	50	53.9	70	55.5	60	54.7
Arkan	49	53.1	65	55.5	57	54.3
Bennett	43	54.1	61	56.0	52	55.1
Bounty BH205	60	53.9	76	56.8	68	55.4
Bounty BH301	61	54.1	76	56.3	69	55.2
Brule	53	51.9	70	54.6	62	53.3
Centura	55	54.9	62	57.6	59	56.3
Centurk 78	45	53.7	62	57.1	54	55.4
Cody	47	52.7	65	56.5	56	54.6
Colt	49	51.6	66	55.0	58	53.3
Norkan	49	54.1	66	57.2	58	55.7
Quantum XH696	49	51.6	67	54.8	58	53.2
Redland	58	52.3	68	54.9	63	53.6
RHS Rodeo	50	54.6	71	56.9	61	55.8
RHS 7805	53	53.3	71	56.5	62	54.9
RHS 7833	53	53.3	71	56.8	62	55.1
RHS 7846	67	56.6	77	57.8	72	57.2
Scout 66	47	55.2	51	57.2	49	56.2
Siouxland	56	54.5	65	55.9	61	55.2
TAM 107	54	53.7	72	55.9	63	54.8
Turkey	39	53.3	41	54.7	40	54.0
Vona	50	53.7	71	56.2	61	55.0
NE78488	56	53.7	68	56.9	62	55.3
NE82652	47	51.4	56	52.8	52	52.1
NE82656	64	54.6	71	55.5	68	55.1
NE82658	56	54.1	59	54.7	58	54.4
Average	52.4	53.8	66.8	56.1	59.8	55.0
Dif. req. sig.	4.6	1.3	4.5	1.0	8.2	1.2

Table 7. South Central District winter wheat variety tests. 1982-1987. No 1984 data.

Entry	Grain yield, bu/A									Weight, lb/bu		
	1982 average (2 tests)	1983 average (2 tests)	1985 average (2 tests)	1986 average (2 tests)	1987 average (2 tests)	1986-87 average (4 tests)	1985-87 average (6 tests)	1983-87 average (8 tests)	1982-87 average (10 tests)	1987 average (2 tests)	1985-87 average (6 tests)	1982-87 average (10 tests)
AgriPro Abilene	--	--	--	--	69	--	--	--	--	56.0	----	----
AgriPro Thunderbird	--	--	57	46	58	52	54	--	--	56.9	58.3	----
AgriPro Trailblazer	--	--	--	39	63	51	--	--	--	55.6	----	----
AgriPro Victory	--	--	52	39	60	50	50	--	--	54.7	55.0	----
Arkan	--	62	53	42	57	50	51	54	--	54.3	55.6	----
Bennett	21	58	52	33	52	43	46	49	43	55.1	55.5	55.9
Bounty Hybrid 205	--	--	58	46	68	57	57	--	--	55.4	56.2	----
Bounty Hybrid 301	--	--	64	46	69	58	60	--	--	55.2	55.6	----
Brule	35	69	54	28	62	45	48	53	50	53.3	53.8	55.0
Centura	21	62	50	33	59	46	47	51	45	56.3	56.7	56.5
Centurk 78	19	54	50	25	54	40	43	46	40	55.4	55.5	56.0
Cody	26	60	56	43	56	50	52	54	48	54.6	56.1	56.4
Colt	30	67	50	33	58	46	47	52	48	55.3	54.5	55.3
Norkan	--	--	--	35	58	47	--	--	--	55.7	----	----
Quantum XH696	--	--	--	--	58	--	--	--	--	53.2	----	----
Redland	--	--	--	31	63	47	--	--	--	53.6	----	----
RHS Rodeo	--	--	51	37	61	49	50	--	--	55.8	56.4	----
RHS 7805	--	--	--	--	62	--	--	--	--	54.9	----	----
RHS 7833	--	--	--	37	62	50	--	--	--	55.1	----	----
RHS 7846	--	--	--	--	72	--	--	--	--	57.2	----	----
Scout 66	22	46	53	26	49	38	43	44	39	56.2	56.8	56.9
Siouxland	36	66	54	50	61	56	55	58	53	55.2	56.1	57.1
TAM 107	--	--	40	34	63	49	46	--	--	54.8	53.9	----
Turkey	16	--	46	14	40	27	33	--	--	54.0	53.5	----
Vona	22	63	45	22	61	42	43	48	43	55.0	53.5	53.3
NE78488	--	--	--	40	62	51	--	--	--	55.3	----	----
NE82652	--	--	--	23	52	38	--	--	--	52.1	----	----
NE82656	--	--	--	41	68	55	--	--	--	55.1	----	----
NE82658	--	--	--	37	58	48	--	--	--	54.4	----	----
Dif. req. sig.	N.S.	8.3	N.S.	13.9	8.2	9.6	8.8	7.5	6.4	1.2	2.2	2.2

Location of tests (counties): 1982 Clay, Thayer; 1983 Fillmore, Clay; 1985 Nuckolls, Clay; 1986 Clay, Webster; 1987 Clay, Adams.

Table 8. Central District winter wheat variety tests. 1980-1987. No 1981, 1984, 1985 data.

Entry	Grain yield, bu/A									Weight, lb/bu		
	1980 Nance County	1982 Buffalo County	1983 Sherman County	1986 Howard County	1987 Nance County	1986-87 average (2 tests)	1983-87 average (3 tests)	1982-87 average (4 tests)	1980-87 average (5 tests)	1987 Nance County	1986-87 average (2 tests)	1982-87 average (4 tests)
Agate	65	25	23	37	44	41	35	32	39	59.1	58.0	57.8
AgriPro Abilene	--	--	--	--	81	--	--	--	--	62.8	----	----
AgriPro Thunderbird	--	--	--	32	51	42	--	--	--	62.3	58.9	----
AgriPro Trailblazer	--	--	--	29	70	50	--	--	--	61.1	58.1	----
AgriPro Victory	--	--	--	29	72	51	--	--	--	60.6	56.9	----
Bennett	72	32	33	35	39	37	36	35	42	59.8	57.9	57.2
Bounty Hybrid 205	--	--	--	29	68	49	--	--	--	60.9	58.0	----
Bounty Hybrid 301	--	--	--	32	70	51	--	--	--	59.6	57.2	----
Brule	--	36	38	38	69	54	48	45	--	58.6	56.3	55.1
Buckskin	64	32	27	29	43	36	33	33	39	59.5	56.5	55.6
Centura	--	41	42	32	35	34	36	38	--	59.8	57.7	58.1
Centurk 78	77	34	29	28	52	40	36	36	44	60.2	58.1	56.7
Cody	--	36	26	39	46	43	37	37	--	59.5	57.9	57.4
Colt	--	36	38	32	72	52	47	45	--	60.8	57.7	57.2
Norkan	--	--	--	30	74	52	--	--	--	62.6	59.6	----
Redland	--	--	--	34	69	52	--	--	--	59.1	56.6	----
RHS Rodeo	--	--	--	33	73	53	--	--	--	61.4	59.0	----
RHS 7805	--	--	--	--	64	--	--	--	--	60.6	----	----
RHS 7833	--	--	--	35	71	53	--	--	--	61.9	58.5	----
RHS 7846	--	--	--	--	78	--	--	--	--	62.5	----	----
Scout 66	57	35	20	35	33	34	29	31	36	60.0	58.6	57.8
Siouxland	--	40	35	36	51	44	41	41	--	59.8	57.9	57.3
TAM 107	--	--	--	27	72	50	--	--	--	60.4	57.8	----
Turkey	40	23	8	27	25	20	20	21	25	56.0	55.0	54.6
Vona	78	29	38	8	73	41	40	37	45	62.5	56.0	56.8
NE78488	--	--	--	34	47	41	--	--	--	59.5	58.3	----
NE82652	--	--	--	39	67	53	--	--	--	59.4	56.7	----
NE82656	--	--	--	47	57	52	--	--	--	58.4	57.3	----
NE82658	--	--	--	39	61	50	--	--	--	60.0	58.3	----
Dif. req. sig.	6.4	11.5	3.7	5.8	9.6	NS	NS	NS	12.7	----	NS	NS

Location of tests (counties): 1980 Nance; 1982 Buffalo; 1983 Sherman; 1986 Howard, 1987 Nance.

Table 9. Southwest District nonirrigated winter wheat variety tests. Lincoln County. 1987.

Entry	Nursery		Field plots		Average	
	Yield bu/A	Weight lb/bu	Yield bu/A	Weight lb/bu	Yield bu/A	Weight lb/bu
AgriPro Abilene	49	58.6	67	59.9	58	59.3
AgriPro Thunderbird	46	57.7	52	58.2	49	58.0
AgriPro Trailblazer	54	57.6	57	58.1	56	57.9
AgriPro Victory	48	56.0	54	56.9	51	56.5
Bounty BH205	53	55.8	60	57.2	57	56.5
Bounty BH301	61	57.2	55	57.6	58	57.4
Brule	51	54.6	56	54.8	54	54.7
Buckskin	52	57.2	45	57.6	49	57.4
Centura	56	58.8	50	58.0	53	58.4
Centurk 78	52	57.0	51	58.3	52	57.7
Cody	52	56.2	50	57.6	51	56.9
Colt	53	56.5	57	57.6	55	57.1
Norkan	53	57.5	54	58.0	54	57.8
Redland	50	54.6	60	55.3	55	55.0
RHS Rodeo	49	57.1	60	58.8	55	58.0
RHS 7805	59	57.5	55	58.5	57	58.0
RHS 7833	49	55.4	54	56.1	52	55.8
RHS 7846	53	58.2	55	59.6	54	58.9
Scout 66	48	57.4	37	57.9	43	57.7
Siouxland	54	57.0	51	57.9	53	57.5
TAM 107	57	56.6	68	57.3	63	57.0
Turkey	42	56.5	36	55.6	39	56.1
Vona	48	57.2	62	58.9	55	58.1
NE78488	53	57.5	48	59.1	51	58.3
NE82652	52	54.3	55	55.6	54	55.0
NE82656	58	55.4	53	56.4	56	55.9
NE82658	48	55.4	49	57.4	49	56.4
Average	51.9	56.7	53.7	57.6	53.1	57.2
Dif. req. sig.	8.1	----	7.5	0.8	NS	1.0

Table 10. Southwest District winter wheat variety tests. 1983-1987.

Entry	Grain yield, bu/A									Weight, lb/bu		
	1983 Lincoln County	1984 average (3 tests)	1985 Lincoln County	1986 average (2 tests)	1987 average (2 tests)	1986-87 average (4 tests)	1985-87 average (5 tests)	1984-87 average (8 tests)	1983-87 average (9 tests)	1987 average (2 tests)	1985-87 average (5 tests)	1983-87 average (9 tests)
AgriPro Abilene	--	--	--	--	58	--	--	--	--	59.3	--	--
AgriPro Thunderbird	--	--	54	61	49	55	55	--	--	58.0	58.8	--
AgriPro Trailblazer	--	--	--	--	56	--	--	--	--	57.9	--	--
AgriPro Victory	--	--	--	52	51	52	--	--	--	56.5	--	--
Bounty Hybrid 205	--	--	57	62	57	59	--	--	--	56.5	57.6	--
Bounty Hybrid 301	--	76	60	64	58	61	61	65	--	57.4	57.3	--
Brule	50	71	52	59	54	57	55	59	57	54.7	56.1	56.5
Buckskin	41	54	48	35	49	42	44	47	45	57.4	57.5	58.0
Centura	44	65	54	52	53	53	53	56	54	58.4	58.9	59.1
Centurk 78	50	65	50	46	52	49	49	53	53	57.7	58.8	58.9
Cody	44	68	57	61	51	56	56	59	56	56.9	58.2	58.6
Colt	51	76	50	56	55	56	54	59	58	57.1	58.2	58.3
Norkan	--	--	--	56	54	55	--	--	--	57.8	--	--
Redland	--	--	56	57	55	56	56	--	--	55.0	56.4	--
RHS Rodeo	--	76	59	59	55	57	58	62	--	58.0	59.0	--
RHS 7805	--	--	--	--	57	--	--	--	--	58.0	--	--
RHS 7833	--	--	--	57	52	55	--	--	--	55.8	--	--
RHS 7846	--	--	--	--	54	--	--	--	--	58.9	--	--
Scout 66	37	56	46	39	43	41	43	46	44	57.7	58.9	59.0
Siouxland	50	73	56	62	53	58	57	61	59	57.5	59.1	59.1
TAM 107	--	--	54	48	63	56	55	--	--	57.0	56.7	--
Turkey	34	41	37	27	39	33	34	36	36	56.1	56.3	56.8
Vona	41	68	49	44	55	50	49	54	51	58.1	57.0	57.3
NE78488	--	--	--	61	51	56	--	--	--	58.3	--	--
NE82652	--	--	--	56	54	55	--	--	--	55.0	--	--
NE82656	--	--	--	64	56	60	--	--	--	55.9	--	--
NE82658	--	--	--	57	49	53	--	--	--	56.4	--	--
Dif. req. sig.	7.0	8.8	8.5	9.6	NS	11.7	7.9	6.2	5.6	1.0	1.6	0.9

Location of tests (counties): 1983 Lincoln; 1984 Gosper, Lincoln (2); 1985 Lincoln; 1986 Lincoln (2); 1987 Lincoln (2).

Table 11. Southwest District irrigated winter wheat variety tests. 1987.

Entry	Yield bu/A	Weight lb/bu	Gms/1000 seeds	Protein %	Lodging %
AgriPro Abilene	65	57.5	27.2	15.8	0
AgriPro Thunderbird	49	55.7	26.9	16.7	0
AgriPro Victory	43	52.8	30.7	15.0	14
Arkan	43	52.6	25.1	16.4	1
Bounty BH205	55	52.5	30.6	15.6	10
Bounty BH301	51	54.6	28.2	15.8	5
Brule	47	51.8	26.3	14.9	4
Centura	37	54.4	26.5	16.6	51
Centurk 78	49	55.0	26.7	16.0	31
Cody	54	55.1	28.2	15.0	3
Colt	59	54.5	27.9	15.0	3
Norkan	47	54.3	28.2	16.9	9
Redland	56	52.5	27.2	14.8	4
RHS Rodeo	52	55.4	30.2	15.6	5
RHS 7805	51	55.5	31.5	14.4	14
RHS 7833	47	52.7	26.7	15.4	1
RHS 7846	60	56.3	24.2	14.8	0
Siouxland	46	55.4	28.3	16.6	3
TAM 107	62	55.1	34.8	14.6	0
Vona	50	55.0	24.6	14.8	0
NE78488	51	56.3	28.3	15.6	0
NE82652	52	51.6	26.4	14.9	0
NE82656	56	53.7	28.5	15.9	5
NE82658	50	51.8	24.9	16.5	3
Average	51.3	54.3	27.8	15.6	6.9
Dif. req. for sig.	8.9	----	1.9	0.7	12.8

Table 12. Southwest District irrigated winter wheat variety tests. 1985-1987.

Entry	Grain Yield, bu/A					Weight, lb./bu.	
	1984 Lincoln County	1986 Lincoln County	1987 Lincoln County	1986-87 Average (2 tests)	1985-87 Average County	1987 Lincoln County	1985-87 Average (3 tests)
AgriPro Abilene	--	--	65	--	--	57.5	----
AgriPro Thunderbird	83	52	49	51	61	55.7	57.9
AgriPro Victory	--	46	43	45	--	52.8	----
Arkan	--	52	43	48	--	52.6	----
Bounty BH205	80	46	55	51	60	52.5	55.2
Bounty BH301	90	46	51	49	62	54.6	56.4
Brule	78	48	47	48	58	51.8	54.4
Centura	77	38	37	38	51	54.4	57.1
Centurk 78	65	35	49	42	50	55.0	56.9
Cody	62	52	54	53	56	55.1	56.7
Colt	74	50	59	55	61	54.5	55.4
Norkan	--	45	47	46	--	54.3	----
Redland	89	53	56	55	66	52.5	54.1
RHS Rodeo	76	49	52	51	59	55.4	56.4
RHS 7805	--	--	51	--	--	55.5	----
RHS 7833	--	56	47	52	--	52.7	----
RHS 7846	--	--	60	--	--	56.3	----
Siouxland	67	60	46	53	58	55.4	56.8
TAM 107	65	47	62	55	58	55.1	55.3
Vona	66	51	50	51	56	55.0	55.8
NE78488	--	73	51	62	--	56.3	----
NE82652	--	55	52	54	--	51.6	----
NE82656	--	58	56	57	--	53.7	----
NE82658	--	52	50	51	--	51.8	----
Dif. req. sig.	13.4	9.4	8.9	NS	NS	----	1.5

Table 13. West District winter wheat variety tests. 1987.

Entry	Cheyenne County		Kimball County		Morrill County		Box Butte County		Dawes 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	63	59.9	36	61.5	48	60.8	50	61.3	59	61.8	51	61.1
AgriPro Abilene	73	61.4	30	60.1	51	60.0	47	61.8	64	61.1	53	60.9
AgriPro Thunderbird	68	61.4	30	59.2	56	59.3	49	61.8	62	62.7	53	60.9
Bounty BH205	80	59.7	36	57.2	52	57.6	48	60.6	68	61.0	57	59.2
Bounty BH301	75	60.3	35	58.7	52	58.4	55	59.9	71	61.4	58	59.7
Brule	75	59.8	34	59.0	51	57.2	52	60.9	64	59.9	55	59.4
Buckskin	64	60.4	37	59.5	50	58.7	45	61.1	61	61.7	51	60.3
Centura	77	60.8	36	59.1	56	59.6	48	61.3	63	61.6	56	60.5
Centurk 78	68	61.2	38	59.6	55	58.9	45	60.4	64	61.7	54	60.4
Cody	73	60.3	30	59.2	48	57.5	51	60.4	61	60.4	53	59.6
Colt	72	60.4	33	59.0	46	58.0	45	60.2	61	60.3	51	59.6
Norkan	73	60.6	29	59.7	41	58.8	43	60.8	64	61.4	50	60.3
Quantum XH140a	75	59.8	38	59.1	48	59.0	49	60.0	63	59.9	55	59.6
Redland	74	59.5	33	58.5	53	57.8	44	60.2	65	59.0	54	59.0
RHS Rodeo	74	61.5	32	61.0	45	59.0	47	60.6	62	62.1	52	60.8
RHS 7805	72	60.6	36	60.2	53	59.5	48	61.1	66	61.2	55	60.5
RHS 7833	73	60.0	34	59.6	54	57.2	47	60.4	66	60.3	55	59.5
RHS 7846	76	62.3	38	60.9	58	61.5	50	61.3	59	62.2	56	61.6
Scout 66	61	60.6	36	59.0	56	59.7	48	61.3	62	61.7	53	60.5
Siouxland	73	60.5	33	59.8	51	59.1	47	60.6	60	60.3	53	60.1
TAM 107	79	60.1	40	59.9	62	58.8	51	59.8	65	60.4	59	59.8
Turkey	45	60.2	33	59.5	41	58.0	42	59.6	54	60.9	43	59.6
Vona	77	61.5	39	60.6	57	59.6	47	59.3	64	61.8	57	60.6
NE78488	72	61.3	33	60.6	48	58.6	53	61.8	61	62.7	53	61.0
NE82652	72	59.7	36	59.0	53	56.5	47	60.5	63	59.3	54	59.0
NE82656	72	59.6	33	58.8	53	56.7	48	60.5	64	59.9	54	59.1
NE82658	65	60.4	29	59.5	48	58.2	44	59.5	56	60.1	48	59.5
Average	71.1	60.5	34.3	59.5	51.3	58.7	47.8	60.6	62.7	61.0	53.5	60.1
Dif. reg. for sig.	7.2	0.8	4.2	1.1	7.8	1.5	NS	NS	5.4	1.1	4.6	0.8

Table 14. West District winter wheat variety tests. 1983-1987.

Entry	Grain yield, bu/A									Weight, lb/bu		
	1983 average (5 tests)	1984 average (5 tests)	1985 average (4 tests)	1986 average (5 test)	1987 average (5 tests)	1986-87 average (10 tests)	1985-87 average (14 tests)	1984-87 average (19 tests)	1983-87 average (24 tests)	1987 average (5 tests)	1985-87 average (14 tests)	1983-87 average (24 tests)
Agate	44	43	33	48	51	50	44	44	44	61.1	60.3	60.2
AgriPro Abilene	--	--	--	--	53	--	--	--	--	60.9	----	----
AgriPro Thunderbird	--	--	30	49	53	51	44	--	--	60.9	60.9	----
Bounty Hybrid 205	--	--	32	54	57	56	48	--	--	59.2	59.2	----
Bounty Hybrid 301	--	43	33	52	58	55	48	47	--	59.7	59.3	----
Brule	58	46	34	49	55	52	46	46	48	59.4	58.7	58.6
Buckskin	50	44	30	46	51	49	42	43	44	60.3	59.6	60.3
Centura	51	44	32	51	56	54	46	46	47	60.5	60.0	60.0
Centurk 78	51	45	32	48	54	51	45	45	45	60.4	60.0	60.0
Cody	52	46	35	53	53	53	47	47	48	59.6	59.6	59.6
Colt	55	44	34	51	51	51	45	45	47	59.6	59.4	59.7
Norkan	--	--	--	47	50	49	--	--	--	60.3	----	----
Quantum XH140a	--	--	--	54	55	55	--	--	--	59.6	----	----
Redland	--	--	34	49	54	52	46	--	--	59.0	58.4	----
RHS Rodeo	--	--	33	52	52	52	46	--	--	60.8	60.6	----
RHS 7805	--	--	--	--	55	--	--	--	--	60.5	----	----
RHS 7833	--	--	--	53	55	54	--	--	--	59.5	----	----
RHS 7846	--	--	--	--	56	--	--	--	--	61.6	----	----
Scout 66	42	43	31	46	53	50	43	43	43	60.5	60.3	60.2
Siouxland	52	44	32	51	53	52	45	45	46	60.1	59.6	59.5
TAM 107	--	--	30	52	59	56	47	--	--	59.8	59.2	----
Turkey	36	39	28	38	43	41	36	37	37	59.6	59.2	59.3
Vona	57	40	32	50	57	54	46	45	47	60.6	60.5	60.1
NE78488	--	--	--	53	53	53	--	--	--	61.0	----	----
NE82652	--	--	--	52	54	53	--	--	--	59.0	----	----
NE82656	--	--	--	53	54	54	--	--	--	59.1	----	----
NE82658	--	--	--	48	48	48	--	--	--	59.5	----	----
Dif. req. sig.	8.5	4.3	2.6	4.0	4.6	3.8	3.5	2.0	3.5	0.8	0.7	0.5

Location of tests (counties): 1983 Morrill, Cheyenne, Banner, Box Butte, Dawes; 1984 Duel, Cheyenne, Scotts Bluff, Box Butte, Sheridan; 1985 Morrill, Kimball, Box Butte, Dawes; 1986 Garden, Cheyenne, Scotts Bluff, Box Butte, Sheridan; 1987 Cheyenne, Kimball, Merrill, Box Butte, Dawes.

Table 15. Protein content of entries in Nebraska winter wheat variety tests. 1987.

Entry	Protein, 12% moisture basis												
	Gage County	Saunders County	Clay County	Adams County	Nance County	Lincoln County Nursery	Lincoln County Field Plots	Cheyenne County	Kimball County	Morrill County	Box Butte County	Dawes County	Average 12 Tests
Agate	----	----	----	----	13.6	----	----	11.0	9.0	10.7	10.2	12.5	----
AgriPro Abilene	13.9	15.5	13.4	12.8	12.5	10.8	11.7	11.1	9.2	10.9	10.4	12.3	12.0
AgriPro Thunderbird	14.0	15.9	14.4	14.3	13.9	11.4	12.7	11.9	9.6	11.3	10.5	13.3	12.8
AgriPro Trailblazer	14.0	15.3	14.0	12.6	12.9	10.9	11.5	----	----	----	----	----	----
AgriPro Victory	13.4	14.6	14.1	12.7	13.0	10.6	11.7	----	----	----	----	----	----
Arkan	13.9	16.0	14.1	13.8	----	----	----	----	----	----	----	----	----
Bennett	15.1	15.3	14.5	12.9	15.0	----	----	----	----	----	----	----	----
Bounty BH205	13.7	15.5	13.9	13.0	12.9	10.9	11.9	10.3	9.0	10.6	10.7	11.5	12.0
Bounty BH301	13.8	15.5	13.9	12.5	13.2	10.7	10.6	10.1	8.8	10.5	10.3	11.4	11.8
Brule	12.9	14.1	12.6	12.4	12.1	10.2	11.6	9.7	9.0	9.9	9.4	11.0	11.2
Buckskin	----	----	----	----	14.0	10.6	12.7	10.8	8.9	11.3	10.3	13.0	----
Centura	15.2	14.8	13.9	13.6	14.3	10.6	12.7	10.2	8.5	10.0	10.0	12.3	12.2
Centurk 78	14.3	----	13.8	13.2	13.9	11.0	12.4	10.2	8.8	10.3	10.6	12.5	----
Cody	13.8	14.4	13.7	13.5	14.0	11.2	12.3	10.6	9.6	10.9	11.0	12.3	12.3
Colt	13.6	14.7	13.5	12.7	12.5	10.9	11.6	10.5	9.5	11.0	10.5	12.3	11.9
Gage	15.7	15.4	----	----	----	----	----	----	----	----	----	----	----
Norkan	14.1	15.6	13.9	13.4	13.0	11.5	12.0	11.1	9.2	10.9	11.0	12.7	12.4
Quantum XH140A	----	----	----	----	----	----	----	10.0	8.6	10.1	9.7	11.9	----
Quantum XH696	----	----	14.3	13.0	----	----	----	----	----	----	----	----	----
Redland	12.5	14.4	13.0	12.1	11.4	10.4	11.0	10.1	8.8	9.9	10.3	10.9	11.2
RHS Rodeo	----	----	14.4	13.5	12.6	11.1	11.7	11.1	8.9	10.4	10.9	12.5	----
RHS 7805	----	----	13.5	13.7	13.3	11.1	11.4	10.9	8.8	10.5	10.7	11.6	----
RHS 7833	----	----	13.6	13.2	13.7	11.4	12.0	10.9	9.3	10.7	10.6	12.5	----
RHS 7846	13.8	14.5	12.9	13.2	12.7	10.5	11.2	10.1	8.6	9.8	9.3	11.6	11.5
Scout 66	15.2	15.4	13.4	13.7	14.6	10.6	12.5	10.1	8.7	10.3	10.3	12.1	12.2
Siouxland	14.0	14.6	13.7	13.5	13.7	11.2	12.3	10.4	9.0	10.5	10.1	11.6	12.1
TAM 107	12.9	13.8	12.9	12.5	12.1	10.4	11.0	10.0	8.8	9.6	9.5	12.2	11.3
Turkey	16.0	15.2	14.8	14.3	15.2	11.5	14.2	12.1	9.4	11.4	10.7	12.9	13.1
Vona	13.0	13.7	12.9	12.4	12.0	10.3	10.7	9.9	8.4	9.4	10.2	11.7	11.2
NE78488	14.0	14.5	13.6	13.3	13.9	11.5	12.2	11.4	8.8	11.1	10.7	11.7	12.2
NE82652	13.2	14.6	13.3	13.5	12.4	9.6	11.5	10.7	9.0	10.5	9.8	11.8	11.7
NE82656	14.1	15.1	13.7	13.6	13.9	11.2	12.2	10.3	9.5	11.2	10.0	12.1	12.2
NE82658	13.8	15.4	13.4	13.2	13.1	11.6	11.8	11.2	10.2	11.1	10.3	11.7	12.2
Average all entries	14.0	15.0	13.7	13.2	13.3	10.9	11.9	10.6	9.0	10.5	10.3	12.1	12.0
Dif. reg. for sig.	0.7	0.4	0.8	0.7	0.8	0.8	1.0	0.7	0.5	0.7	NS	0.8	0.4

Table 16. Protein content of entries in Nebraska statewide tests. 1978-1987.

Entry	Protein, 12% moisture basis									
	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)	1987 (12 tests)
Agate	13.1	10.9	10.1	----	----	----	----	----	----	----
AgriPro Abilene	----	----	----	----	----	----	----	----	----	12.0
AgriPro Thunderbird	----	----	----	----	----	----	----	12.2	11.5	12.8
AgriPro Victory	----	----	----	----	----	----	----	----	11.0	----
Bennett	13.1	11.2	10.8	12.4	----	----	----	----	----	----
Bounty BH205	----	----	----	----	----	----	----	11.8	10.8	12.0
Bounty BH301	----	----	----	----	----	----	11.4	11.9	10.9	11.8
Brule	----	----	----	10.8	10.7	10.8	10.9	11.1	9.8	11.2
Buckskin	13.2	11.0	10.3	11.2	----	11.4	11.5	11.8	10.4	----
Centura	----	----	----	11.5	11.8	11.5	11.9	12.0	10.8	12.2
Centurk 78	12.8	10.8	10.2	11.1	11.5	11.7	11.4	11.6	10.8	----
Cody	----	----	----	11.2	11.6	11.6	11.3	11.6	11.0	12.3
Colt	----	----	----	11.7	11.6	----	11.5	11.7	10.9	11.9
Norkan	----	----	----	----	----	----	----	----	11.4	12.4
Redland	----	----	----	----	----	----	----	----	10.2	11.2
RHS Rodeo	----	----	----	----	----	----	----	12.0	11.0	----
RHS 7833	----	----	----	----	----	----	----	----	10.9	----
RHS7846	----	----	----	----	----	----	----	----	----	11.5
Scout 66	12.8	11.0	10.4	11.7	11.8	11.8	11.7	11.8	11.1	12.2
Siouxland	----	----	----	----	11.1	11.4	11.5	11.9	11.1	12.1
TAM 107	----	----	----	----	----	----	----	11.7	11.0	11.3
Turkey	13.6	11.7	10.8	11.8	12.2	----	12.0	12.4	10.4	13.1
Vona	----	----	----	10.8	11.2	10.8	11.2	11.2	10.5	11.2
NE78488	----	----	----	----	----	----	----	----	10.8	12.2
NE82652	----	----	----	----	----	----	----	----	11.0	11.7
NE82656	----	----	----	----	----	----	----	----	11.2	12.2
NE82658	----	----	----	----	----	----	----	----	11.2	12.2
Average	13.1	11.1	10.4	11.4	11.5	11.4	11.5	11.8	10.9	12.0
Dif. req. sig.	0.4	0.3	NS	0.4	0.4	0.4	NS	0.4	0.4	0.4

Table 17. Kernel weight of entries in Nebraska winter wheat variety tests. 1987.

Entry	Weight of 1000 kernels, grams												Average 12 tests	
	Gage County	Saunders County	Clay County	Adams County	Nance County	Lincoln Nursery	County F. plots	Cheyenne County	Kimball County	Morrill County	Box Butte County	Dawes County	Grams/ 1000	Seeds/ lb.
Agate	----	----	----	----	30.9	----	----	35.9	35.0	35.6	37.0	35.8	----	------
AgriPro Abilene	26.1	25.5	23.2	26.4	27.4	29.6	29.1	31.3	30.0	28.7	30.3	29.5	28.1	16,140
AgriPro Thunderbird	29.9	30.8	29.6	31.9	29.5	30.9	31.6	34.2	32.9	31.4	32.9	31.7	31.4	14,450
AgriPro Trailblazer	25.6	27.1	25.3	29.0	26.8	28.7	29.7	----	----	----	----	----	----	------
AgriPro Victory	27.1	31.1	27.7	34.8	31.9	31.9	34.1	----	----	----	----	----	----	------
Arkan	26.4	30.9	27.0	31.0	----	----	----	----	----	----	----	----	----	------
Bennett	26.8	28.4	25.7	32.1	28.6	----	----	----	----	----	----	----	----	------
Bounty BH205	26.8	31.0	28.5	32.6	30.6	32.1	30.4	36.4	33.9	33.2	35.8	35.3	32.2	14,090
Bounty BH301	30.1	28.4	27.3	32.9	30.9	32.6	34.2	35.1	32.9	33.2	34.3	35.0	32.2	14,090
Brule	25.6	27.4	25.0	30.0	28.7	29.5	27.3	33.1	31.2	31.0	34.1	32.3	29.6	15,320
Buckskin	----	----	----	----	26.8	31.2	30.7	34.8	32.9	32.0	33.1	32.8	----	------
Centura	24.3	30.1	26.0	30.0	26.9	29.3	29.7	34.1	31.5	31.3	31.6	31.4	29.7	15,270
Centurk 78	23.1	----	22.1	26.4	24.8	26.7	25.7	30.2	28.8	27.1	30.0	27.8	----	------
Cody	26.6	27.9	24.0	27.3	25.0	27.8	28.4	31.9	27.9	29.6	31.3	31.1	28.2	16,090
Colt	26.3	26.6	22.9	27.8	25.8	29.0	29.9	31.5	31.2	29.5	32.3	31.9	28.7	15,800
Gage	27.3	31.7	25.8	----	----	----	----	----	----	----	----	----	----	------
Norkan	27.4	29.1	22.3	31.2	29.0	29.6	30.5	32.5	30.7	30.7	31.6	32.0	29.7	15,270
Quantum XH140A	----	----	----	----	----	----	----	31.9	30.3	29.5	31.3	29.8	----	------
Quantum XH696	----	----	----	27.6	----	----	----	----	----	----	----	----	----	------
Redland	26.7	28.9	25.5	28.8	29.7	27.4	29.6	33.1	30.6	30.0	31.4	32.1	29.5	15,380
RHS Rodeo	----	----	25.0	30.4	30.0	29.7	32.2	33.1	32.4	31.1	34.0	32.7	----	------
RHS 7805	----	----	27.7	31.5	33.2	30.9	31.9	36.1	33.0	33.3	35.2	35.6	----	------
RHS 7833	----	----	25.1	30.5	31.1	28.8	29.5	33.3	30.1	29.9	32.0	32.2	----	------
RHS 7846	21.9	25.6	23.5	25.7	25.3	24.7	26.0	28.8	29.2	27.6	28.3	26.9	26.1	17,380
Scout 66	25.7	33.9	29.4	32.6	30.7	31.6	32.8	36.3	33.5	33.9	35.9	35.7	31.9	14,220
Siouxland	28.3	31.4	28.5	30.8	28.2	28.6	30.5	32.7	29.3	30.5	32.2	31.1	30.2	15,020
TAM 107	30.5	36.2	31.2	34.4	31.7	34.2	34.8	37.8	35.7	35.3	36.0	36.0	34.5	13,150
Turkey	23.7	28.7	26.1	26.9	24.8	27.2	29.3	31.6	30.2	28.6	30.4	30.1	28.1	16,140
Vona	23.6	26.8	24.2	28.6	26.2	27.6	30.0	31.7	30.3	28.6	31.1	28.1	28.1	16,140
NE78488	25.0	28.8	24.2	29.7	28.1	28.6	30.5	31.5	29.6	29.0	31.9	30.4	28.9	15,700
NE82652	25.9	27.5	25.6	26.2	28.9	29.2	29.3	33.4	31.3	30.2	33.2	31.5	29.4	15,430
NE82656	25.6	29.5	27.2	27.7	27.6	27.6	29.3	30.5	28.5	28.3	31.1	29.5	28.5	15,920
NE82658	25.4	28.4	26.1	25.1	27.3	26.8	29.0	29.6	28.0	27.3	29.9	29.3	27.7	16,380
Average all entries	26.2	29.3	25.9	29.7	28.5	29.3	30.2	33.1	31.1	30.6	32.5	31.8	29.9	15,369
Dif. reg. for sig.	2.6	1.8	1.8	2.0	2.3	2.2	2.6	2.0	1.6	1.3	1.8	1.3	1.0	454

Table 18. Height of entries in Nebraska winter wheat variety tests. 1987.

Entry	Plant height, inches											
	Gage County	Saunders County	Clay County	Adams County	Nance County	Lincoln Co. F.P.	Cheyenne County	Kimball County	Morrill County	Box Butte County	Dawes 1000	Average 11 tests
Agate	--	--	--	--	41	--	46	35	40	38	41	--
AgriPro Abilene	34	29	32	34	38	31	32	25	30	27	30	31
AgriPro Thunderbird	39	28	37	39	40	33	40	31	36	35	33	36
AgriPro Trailblazer	34	31	33	36	39	31	--	--	--	--	--	--
AgriPro Victory	38	31	35	36	39	32	--	--	--	--	--	--
Arkan	39	29	37	39	--	--	--	--	--	--	--	--
Bennett	41	33	39	41	40	--	--	--	--	--	--	--
Bounty BH205	40	34	40	42	42	35	39	31	36	32	35	37
Bounty BH301	41	35	41	42	43	35	39	31	35	34	36	37
Brule	40	35	40	41	43	34	40	30	36	34	36	37
Buckskin	--	--	--	--	45	37	46	36	40	39	40	--
Centura	41	32	42	43	42	36	43	32	38	37	36	38
Centurk 78	41	--	42	42	41	37	44	33	36	35	37	--
Cody	40	34	41	44	42	37	43	32	37	37	36	38
Colt	34	31	33	34	37	30	32	27	30	29	31	32
Gage	42	39	--	--	--	--	--	--	--	--	--	--
Norkan	36	32	36	38	41	33	36	29	34	30	34	34
Quantum XH140A	--	--	--	--	--	--	36	28	34	31	34	--
Quantum XH696	--	--	39	39	--	--	--	--	--	--	--	--
Redland	40	35	38	41	44	35	38	30	35	32	37	37
RHS Rodeo	--	--	37	39	42	34	37	28	32	32	34	--
RHS 7805	--	--	38	39	41	34	39	31	36	33	35	--
RHS 7833	--	--	36	37	39	31	35	30	32	29	33	--
RHS 7846	38	29	36	37	40	30	37	28	33	29	31	33
Scout 66	43	38	45	43	43	35	45	36	40	37	39	40
Siouxland	42	35	44	44	41	40	45	36	41	38	38	40
TAM 107	37	28	33	36	39	31	35	27	32	30	31	33
Turkey	40	44	49	43	42	35	48	38	39	41	43	42
Vona	36	28	33	36	39	31	36	25	31	27	31	32
NE78488	42	33	42	44	42	38	44	35	39	36	37	39
NE82652	38	34	37	40	43	34	37	29	33	32	35	36
NE82656	38	35	39	41	41	33	39	31	36	34	35	37
NE82658	38	34	38	39	42	33	37	29	34	33	33	35
Average all entries	38.9	33.1	38.3	39.6	41.1	33.9	39.6	31.0	35.4	33.4	35.2	36.2
Dif. reg. for sig.	2.0	2.0	1.4	1.5	2.5	2.4	1.5	1.5	1.6	1.9	1.7	1.3

Table 19. Lodging of entries in Nebraska winter wheat variety tests. 1987.

Entry	Lodging %										
	Gage County	Saunders County	Clay County	Adams County	Nance County	Lincoln Co. F.P.	Cheyenne County	Kimball County	Morrill County	Dawes County	Average 10 tests
Agate	--	--	--	--	83	--	25	3	3	2	--
AgriPro Abilene	6	0	0	0	0	0	0	2	3	2	1
AgriPro Thunderbird	10	0	0	3	25	9	0	2	2	1	5
AgriPro Trailblazer	32	10	0	4	11	21	--	--	--	--	--
AgriPro Victory	26	3	0	4	5	2	--	--	--	--	--
Arkan	39	3	0	5	--	--	--	--	--	--	--
Bennett	46	5	0	4	56	--	--	--	--	--	--
Bounty BH205	29	3	0	2	8	5	0	3	3	3	6
Bounty BH301	53	3	0	6	19	4	0	3	4	4	10
Brule	21	0	Tr.	1	4	25	0	3	3	3	6
Buckskin	--	--	--	--	54	63	18	3	3	3	--
Centura	72	28	2	10	73	63	5	3	3	2	26
Centurk 78	54	--	2	7	52	53	12	3	4	3	--
Cody	45	0	Tr.	8	51	33	2	2	3	2	15
Colt	6	0	0	0	0	0	0	2	3	3	1
Gage	75	15	0	--	--	--	--	--	--	--	--
Norkan	6	3	0	8	4	8	0	2	3	3	4
Quantum XH140A	--	--	--	--	--	--	0	4	4	4	--
Quantum XH696	--	--	0	Tr.	--	--	--	--	--	--	--
Redland	20	0	0	2	Tr.	21	0	3	3	3	5
RHS Rodeo	--	--	2	3	6	1	0	2	3	3	--
RHS 7805	--	--	3	6	7	11	0	4	4	5	--
RHS 7833	--	--	1	6	1	28	0	3	4	3	--
RHS 7846	33	15	Tr.	2	4	1	0	4	4	4	7
Scout 66	85	60	8	10	81	73	43	4	6	4	37
Siouxland	29	4	Tr.	1	36	12	0	2	3	2	9
TAN 107	7	11	0	2	2	1	0	2	2	2	3
Turkey	91	33	6	10	95	94	52	5	5	6	40
Vona	11	1	0	7	2	5	0	3	3	3	4
NE78488	53	1	2	7	54	23	3	3	2	2	15
NE82652	17	1	1	3	0	6	0	3	3	3	4
NE82656	60	5	Tr.	8	51	58	0	3	3	5	19
NE82658	29	1	0	8	2	11	0	2	3	3	6
Average all entries	36.7	8.2	0.9	4.7	27.1	23.4	5.9	2.9	3.3	3.1	11.2
Dif. req. for sig.	25.8	19.5	1.2	3.3	23.6	22.3	5.6	0.5	0.6	0.6	12.0

Table 20. Flower date, leaf rust reaction and straw yields. 1987.

Entry	Flower, May		Leaf rust [1/]		Scab[2/]	% SLB[3/]	Straw, cwt/A	
	Saunders County	Clay County	Saunders County	Clay County	Clay County	Clay County	Gage County	Nance County
Agate	--	--	--	--	---	--	--	96.1
AgriPro Abilene	21	20	S	4	2.3	32	57.0	78.0
AgriPro Thunderbird	22	23	Seg.	4	4.3	20	66.5	77.4
AgriPro Trailblazer	21	21	S	18	2.3	12	54.6	80.4
AgriPro Victory	22	22	R	2	2.0	60	62.3	77.7
Arkan	19	17	S	5	1.0	32	64.4	----
Bennett	24	23	S	17	3.0	30	70.4	76.3
Bounty BH205	22	20	S-MS	18	1.8	12	70.8	92.9
Bounty BH301	25	22	MR	5	3.5	5	74.2	93.6
Brule	23	21	S	27	2.5	15	67.5	85.9
Buckskin	--	--	--	--	---	--	----	84.7
Centura	--	22	MS-S	9	3.0	30	65.2	77.4
Centurk 78	--	22	S	22	3.5	33	65.4	83.2
Cody	23	21	S	7	4.0	22	57.1	79.6
Colt	22	20	S	12	2.5	27	65.4	87.9
Gage	24	--	S	--	---	--	67.6	----
Norkan	21	21	S	27	2.8	40	67.2	87.4
Quantum XH696	--	22	--	5	3.5	28	----	----
Redland								
RHS Rodeo	--	21	--	25	2.3	30	----	88.7
RHS 7805	--	21	--	7	3.0	18	----	75.4
RHS 7833	--	21	--	10	2.0	37	----	81.4
RHS 7846	19	19	S	7	2.3	8	64.8	86.7
Scout 66	22	21	S	28	2.3	50	59.9	75.0
Siouxland	20	22	S	12	2.0	43	63.3	85.7
TAM 107	19	18	S	57	1.0	27	62.6	78.2
Turkey	26	23	S	50	1.0	23	56.7	82.8
Vona	20	18	S	40	3.0	27	61.9	81.6
NE78488	21	22	MR-MS	12	4.3	33	62.4	84.8
NE82652	25	23	MR-MS	12	3.0	35	68.5	87.9
NE82656	21	20	MR	5	2.3	7	67.2	86.1
NE82658	22	21	MR	4	1.8	20	71.4	94.7
Average all entries	22.1	20.9	--	--	---	--	64.8	83.8
Dif. req. for sig.	1.5	1.8	--	13.8	0.6	16.7	7.0	10.5

1/ Leaf rust reaction in Saunders County. Infection was light. Leaf rust % in Clay County.
2/ Scab rated 1 - 5; 1 = none.
3/ SLB. Septoria leaf blotch and tan spot.

Table 21. Winter barley variety tests. 1987.

Entry	Lancaster County		Clay County	Lincoln County		Cheyenne County			Average 4 tests[1]				
	Flower May	Yield bu/A	Yield bu/A	Survival %	Yield bu/A	Flower Date	Survival %	Yield bu/A	Flower May	Height inches	Survival %	Yield bu/A	Weight lb./bu.
Dundy	7	43	48	95	44	5/26	86	86	17	31	91	55	48.6
Hitchcock	14	47	48	95	51	6/3	84	82	24	31	90	57	49.7
Kearney	9	41	47	90	31	5/29	83	67	19	36	87	47	48.7
Nebar	12	60	55	80	50	6/1	88	79	22	38	84	61	48.3
Schuyler	20	61	42	75	50	6/11	71	76	31	28	73	57	45.0
KS76C409[2]	9	65	47	90	50	5/27	88	88	18	34	89	63	47.5
NE80719[3]	10	62	55	80	42	5/30	80	73	20	33	80	58	49.9
NE80725[4]	12	68	56	75	54	6/1	84	84	22	35	80	66	49.8
NE83803[5]	9	71	64	90	56	6/1	79	77	21	32	85	67	49.5
NE83810[5]	10	72	65	90	42	6/3	79	67	22	33	85	62	51.2
NE83821[6]	10	77	61	90	40	6/5	83	61	23	29	87	60	49.4
NE85801[6]	7	64	62	90	44	5/26	86	85	17	36	88	64	50.7
NE86806[6]	9	67	60	90	44	6/1	80	68	21	35	85	60	48.9
NE85807[6]	9	56	51	95	49	5/27	89	91	18	35	92	62	48.7
NE85808[6]	11	56	55	70	43	6/1	84	81	22	33	77	59	50.0
NE85811[6]	11	55	56	95	57	5/29	88	87	20	33	92	64	48.1
NE85814[6]	11	62	61	90	49	6/3	75	70	23	35	83	61	50.4
NE85815[6]	9	65	60	90	41	5/30	83	69	20	35	87	59	48.7
NE85816[7]	7	59	43	80	37	5/27	83	63	17	34	82	51	48.3
NE851804[7]	12	75	45	90	51	6/1	85	94	22	30	88	66	50.4
NE851808[7]	12	86	54	70	55	5/29	89	99	21	32	80	74	51.2
NE851811[8]	10	61	52	80	43	5/30	80	77	20	27	80	58	51.3
NE86815[9]	10	68	70	90	56	6/2	81	87	22	31	86	70	49.7
NE86841[10]	17	53	49	85	58	6/3	90	92	26	30	88	63	45.6
NE86862[11]	11	60	66	90	58	6/8	79	76	25	32	85	65	47.4
NE86878[12]	11	58	68	95	49	5/25	84	73	18	35	90	62	50.1
NE86902[13]	10	62	53	95	58	6/1	90	86	21	34	93	65	49.2
NE86911[14]	10	51	40	95	42	5/25	76	52	18	37	86	46	53.6
NE86937[15]	6	78	58	90	32	6/1	75	59	19	31	83	57	50.6
NE86951[15]	9	72	66	90	57	5/28	80	72	19	28	85	67	48.1
NE86953[15]	10	69	66	95	51	5/26	75	71	18	31	85	64	49.7
NE86954[16]	12	70	53	90	58	6/2	88	85	23	29	89	67	48.3
NE86968[17]	11	60	50	95	49	5/28	88	68	20	36	92	57	52.8
OK82850	11	97	75	85	61	5/30	80	92	21	33	83	81	49.2
Centurk 78 (W.W.)	16	59	68	90	77	6/1	90	89	24	42	90	73	61.9
Dif. reg. sig.	--	9.1	12.0	--	11.3	--	--	11.8	4.5	2.8	NS	11.7	3.8

[1] Flower--Lancaster & Cheyenne, Height--Lancaster & Clay, Survival--Lincoln & Cheyenne, Weight--Lancaster & Cheyenne.

[2] Paoli/3/Shon./Marna//Kirusin/Ire.

[3] Hitchcock/VA/70/44-213

[4] Sabbaton/Meimi//Decatur/3/Dundy//Nebar Sel./Dundy

[5] Dundy/4/Decatur/Chase/3/MO1222//Sabbaton/Meimi

[6] SD W79-1/Dundy

[7] Nebar Sel./Dundy

[8] Hitchcock/Post

[9] NE76147/Post

[10] NE76148/MO B2633//NE76147/MD 45-286-13

[11] Hitchcock/Kruglic 21

[12] NE76148/MO B2633//NE76147

[13] Nebar/MO B2633//NE80719

[14] Hitchcock/Post//Dundy/Hitchcock

[15] Hitchcock/Post//NE80179

[16] MO B2690/Hitchcock//Dundy/Herb

[17] Post Sel.

Table 22. Winter barley variety tests. 1982-1987. No 1984 data.[1]

Entry	1982 (2 tests)		1983 (1 test)		1985 (1 test)		1986 (3 tests)		1987 (4 tests)		1982-1985 average	
	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	82	45	100	65	66	77	72	59	91	55	82	60
Hitchcock	89	50	100	59	77	78	50	55	90	57	81	60
Kearney	83	39	100	54	66	72	89	32	87	47	85	49
Nebar	84	48	100	70	58	81	83	53	84	61	82	63
Schuyler	--	--	---	--	--	--	67	52	73	57	--	--
NE80719[2]	79	46	100	70	44	73	72	55	80	58	75	60
NE80725[3]	73	53	100	70	50	73	72	59	80	66	75	64
NE83803[4]	--	--	---	--	33	83	72	54	85	67	--	--
NE83810[4]	--	--	---	--	61	84	72	59	83	62	--	--
NE83821[4]	--	--	---	--	42	82	67	62	87	60	--	--
NE85801[5]	--	--	---	--	--	--	83	62	88	64	--	--
NE85806[5]	--	--	---	--	--	--	78	60	85	60	--	--
NE85807[5]	--	--	---	--	--	--	83	57	92	62	--	--
NE85808[5]	--	--	---	--	--	--	89	62	77	59	--	--
NE85811[5]	--	--	---	--	--	--	72	58	92	64	--	--
NE85814[5]	--	--	---	--	--	--	72	55	83	61	--	--
NE85815[5]	--	--	---	--	--	--	78	59	87	59	--	--
NE85816[5]	--	--	---	--	--	--	72	57	82	51	--	--
NE851804[6]	--	--	---	--	--	--	67	68	88	66	--	--
NE851808[6]	--	--	---	--	--	--	78	73	80	74	--	--
NE851811[6]	--	--	---	--	--	--	67	53	80	58	--	--
OK82850[7]	--	--	---	--	39	80	67	67	83	81	--	--
Centurk 78 (w.w.)	100	34	100	42	97	66	100	52	90	73	97	53
Dif. req. sig.	NS	NS	NS	11.2	--	19.9	NS	8.6	NS	11.7	12.6	8.9

[1] Includes only entries with 2 or more data years.
[2] Hitchcock/VA 70-44-213.
[3] Sabbaton/Meimi//Decatur/3/Dundy/Nebar sel/Dundy.
[4] Dundy/4/Decatur/Chase/3/MO 1222//Sabbaton/Memi
[5] SD W79-1/Dundy
[6] Nebar sel./Dundy
[7] Post selection

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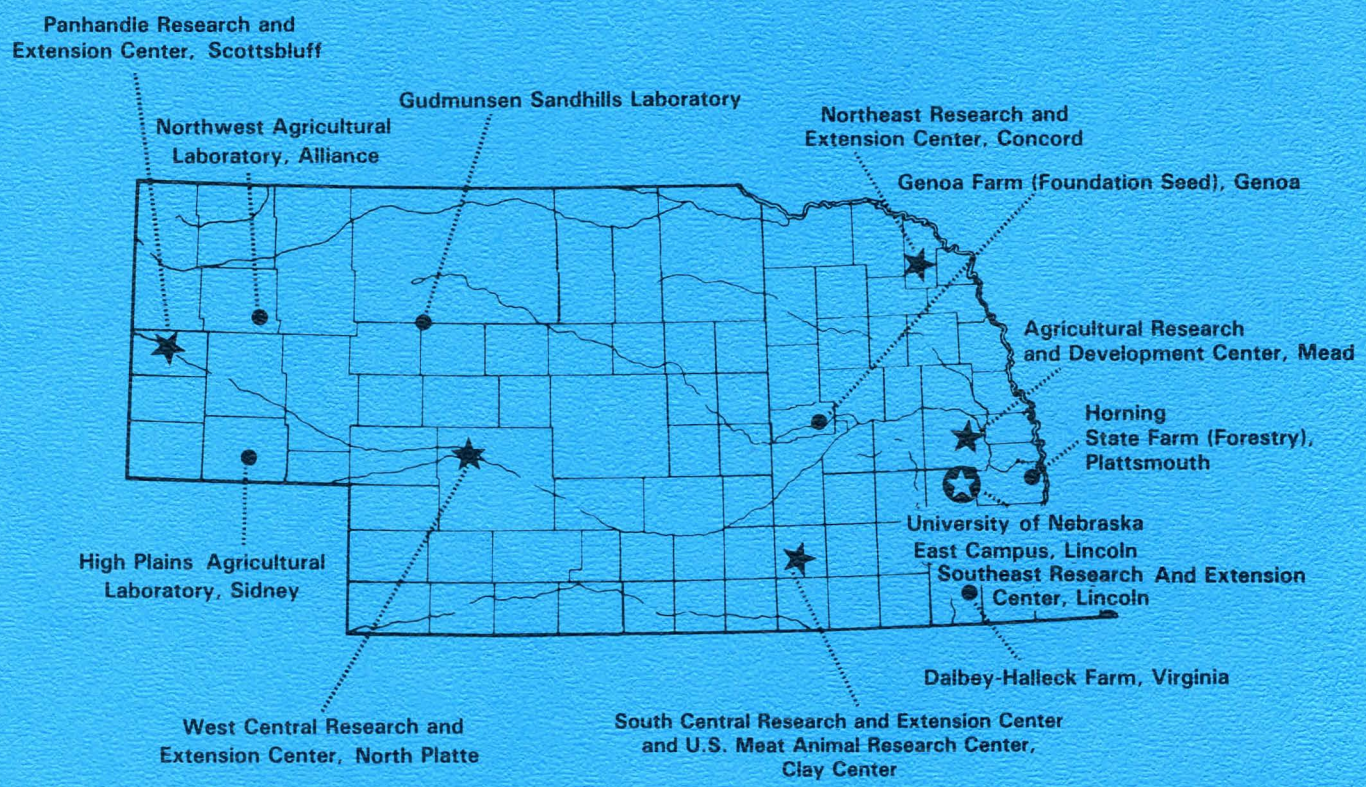

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