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EC00-103 Nebraska Fall-Sown Small Grain Variety Tests 2000

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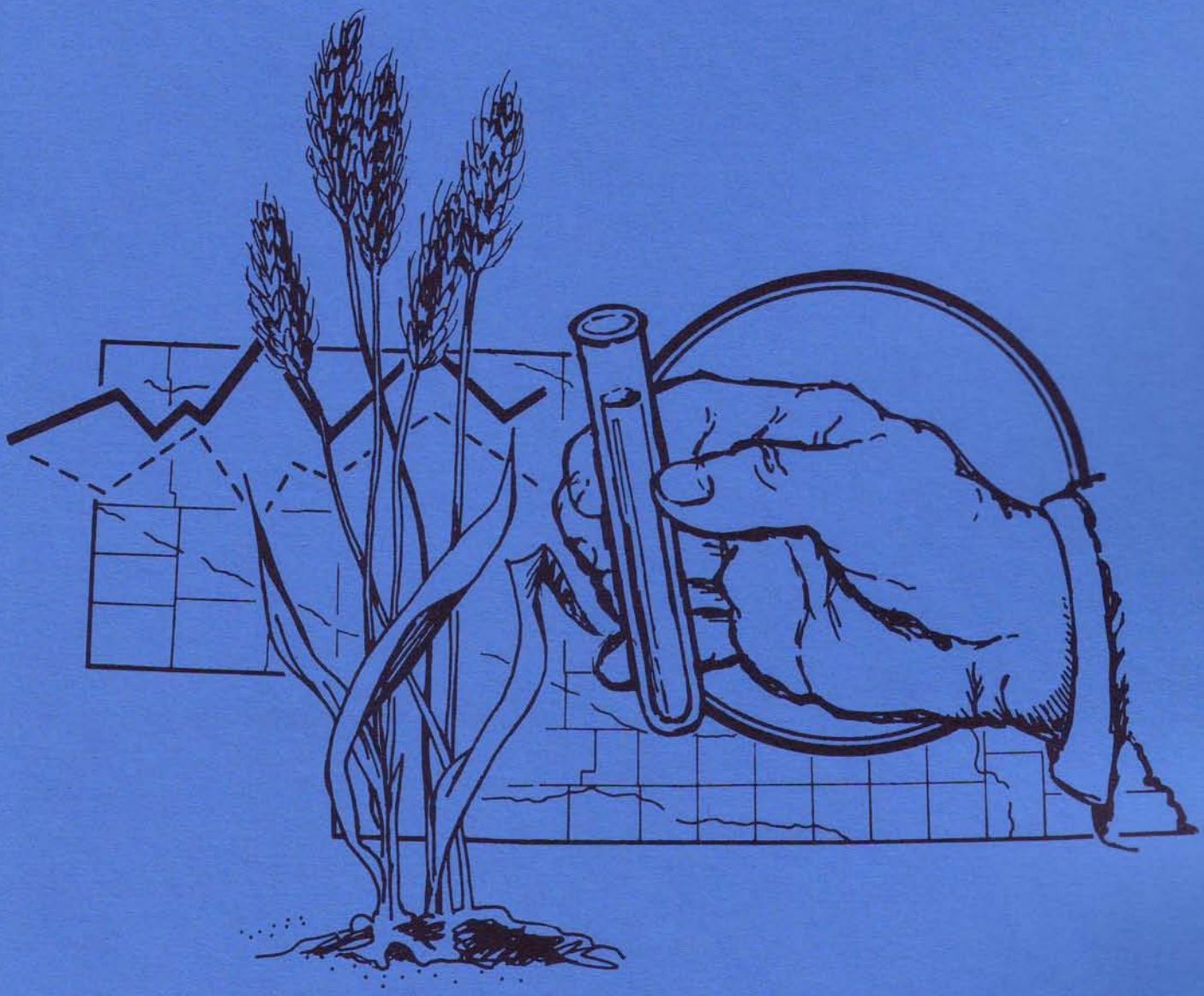
EC 00-103-A

NEBRASKA FALL–SOWN SMALL GRAIN VARIETY TESTS 2000



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EXTENSION CIRCULAR 00-103
NEBRASKA FALL-SOWN SMALL GRAIN VARIETY TESTS

August 2000

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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 00-103

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NEBRASKA WINTER WHEAT PRODUCTION

Year	Planted 000 acres (hectares)	Harvested 000 acres (hectares)	Average yield bu/a (kg/ha)
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	2200 (891)	1950 (790)	44.0 (2959)
1988	2300 (932)	2000 (810)	36.0 (2421)
1989	2300 (932)	2050 (830)	27.0 (1816)
1990	2400 (975)	2250 (911)	38.0 (2556)
1991	2350 (952)	2000 (810)	32.0 (2152)
1992	2350 (952)	1950 (790)	31.0 (2085)
1993	2350 (952)	2100 (851)	35.0 (2354)
1994	2200 (891)	2100 (851)	34.0 (2287)
1995	2150 (870)	2100 (851)	41.0 (2758)
1996	2300 (932)	2100 (851)	35.0 (2354)
1997	2000 (809)	1900 (769)	37.0 (2489)
1998	1900 (769)	1800 (729)	46.0 (3093)
1999	2000 (809)	1800 (729)	48.0 (3228)
2000*	1850 (749)	1750 (709)	36.0 (2421)

* August 1 estimate.

NEBRASKA FALL-SOWN SMALL GRAIN VARIETY TESTS 2000

The 2000 estimated winter wheat yield for Nebraska was a 36 bushels per acre from 1,750,000 harvested acres. The total production of winter wheat for the state was 63,000,000 bushels.

This circular reports data from winter wheat trials conducted throughout Nebraska. Entries included varieties or hybrids and promising experimental strains from Nebraska and surrounding states and private breeders. This was the ninetenth year for privately developed varieties. The state has been divided into four districts for purposes of variety testing. Locations of the 2000 variety tests are shown on the map on page 12.

Trials were located on Research Centers and private farms. Names of cooperators and dates of planting and harvest are shown in Table A. Soil type, soil test data, and fertilizer applications are shown in Table B. Plot sizes varied with location. 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.

Winter Wheat Varieties

'Culver' is an medium maturing, medium height variety with fair to good winterhardiness. It is best adapted to south central and south west Nebraska and similar dryland wheat production areas in adjacent states. This variety was developed by Nebraska and the USDA-ARS from the cross of NE82419/Arapahoe and was tested under the designation NE93554.

'Wesley' is a moderately early maturing, moderately short height variety with excellent straw strength. Compared to 2137, it has similar adaptation and yield on optimum production sites. It has good winterhardiness and tillering ability. This variety was developed by USDA-ARS in cooperation with Nebraska and co-released with South Dakota. Wesley was derived from the cross Sumner sib (Plainsman V/Odesskaya 51)//Colt/Cody.

'Cougar' (new for 2000) is a medium maturing, medium height variety that is well adapted to both dryland and irrigated production conditions. Yield performance and protein content are similar to Arapahoe but with much superior standability and test weight patterns. Cougar was developed by Nebraska and the USDA-ARS from the cross NE85707/Thunderbird. It was tested under the designation NE93496.

'Millennium (new for 2000) is a medium maturing, medium height variety that is well adapted to most of Nebraska's dryland wheat production areas. It has fair to good winterhardiness, medium length coleoptile, very good tillering ability, and moderately strong straw. Millennium was developed by Nebraska and the USDA-ARS from the cross Arapahoe/Abilene//NE86488. It was tested under the designation NE94479.

'Nuplains (new for 2000) is a moderately early maturing variety that was targeted for dryland production in south central and west central Nebraska and irrigated production in the panhandle and south west areas of Nebraska. It is moderately short with good straw strength. Test weight patterns are good to very good with above average protein. Nuplains was developed

cooperatively by the USDA-ARS and the Nebraska Agriculture Experiment Station. Nuplains was derived from the cross Abilene/KS831872.

'Trego' (new for 2000) is a moderately early maturing, moderately short variety that is well adapted to the central and western production areas of Nebraska. It has fair to good standability and test weight patterns. It is moderatly resistent to stem rust, leaf rust, and soilborne mosiac virus.

Winter Wheat Performance

Yield, bushel weight, and other agronomic data from each district are listed on pages 13 - 28. Each district is listed on separate tables with yields of individual locations, average agronomic data, and a summary of the last five years. Page 28 summarizes the yield of each variety at each of the locations where it was entered and page 30 shows the yields as a percentage of three check varieties (Arapahoe, Alliance, and Windstar). Page 32 lists the bushel weights for the varieties at each of the locations where it was tested. Page 34 summarizes the protein data for each location.

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 (5%). Even though two varieties are not statistically different, there may be other factors which influence the choice of one over the other.

Such factors as their ability to complement other varieties, disease resistance, or availability of seed may influence that decision. Complementary varieties are important when selecting additional varieties to grow on your farm. One definition of complementary varieties is that they come from diverse parentages. In order to help select varieties with diverse parentages, the related families of many varieties is included in the characteristics chart (table C) on page 10.

There were two trials conducted in the Southeast district, one in Jefferson County and one in Saunders County. The Jefferson County test was planted October 1st at a seeding rate of 60 lbs/acre. The previous crop was wheat which was disked prior to planting. Dry conditions at planting caused uneven germination with some seed not sprouting till early spring. The plot was harvested June 30th and averaged 47 bushels per acre. The Saunders County test was planted September 28th and harvested July 10th. Timely spring rain helped this test to average 61 bushels per acre.

The two trials in South Central Nebraska were in Clay and Webster Counties. The Clay County plot was located at the South Central Research & Extension Center, Clay Center. The soil type was a Crete silt loam that was fallow in 1999. The 28 varieties were planted on September 21st at a rate of 75 lbs/acre in a 30 foot plot. Wheat was harvested on July 13th & 14th and averaged 65 bushels per acre. The Webster County trial was planted October 4th at a rate of 75 lbs/acre. This test was suppose to be no-till plot into corn residue. Due to the dry conditions the plot was shredded and disked to get acceptable performance with the plot equipment. This left the seed bed rough and dry with high residue. The wheat

did not emerge until February. This test was harvested June 30th and averaged 45 bushels per acre.

Five trials were conducted in the west central district. These were located in Keith, Perkins, Red Willow, Furnas, and Lincoln County. The Keith County test was planted September 10th without starter. This test was harvested June 29th and averaged 52 bushels per acre. The Perkins County test was planted October 27th and was no-tilled into popcorn stubble. This plot was harvested July 11th and averaged 38 bushels per acre. The Red Willow County test was planted September 21st without starter. This test averaged 48 bushels per acre and was harvested June 23th. The Furnas County test was planted September 22nd no-till into corn stubble. This test was harvested June 27th and averaged 26 bushels per acre. The Lincoln County test was planted September 23rd and harvested June 28th. This test averaged 53 bushels per acre and was fallow in 1999.

Eight dryland trials were conducted in the west district. They were Cheyenne, Deuel, Kimball, Scotts Bluff, Dawes, Box Butte, Morrill and the Cheyenne February planted. The Cheyenne County test was planted September 15th and had good fall and spring moisture. This test was harvested July 13th and averaged 49 bushels per acre. The Deuel County test was planted September 14th and was fallow in 1999. Very dry conditions led to low yields and small kernel size. This test was harvested June 30th and averaged 22 bushels per acre. The Scotts Bluff County test was planted September 15th and was located 13 miles west of Scotts Bluff just into Wyoming. This test averaged 27 bushels per acre. The Dawes County test was planted September 13th with good moisture in the fall and spring. This plot was harvested July 12th and averaged 62 bushels per acre. The Box Butte County test was located 2 miles North of Alliance and was planted September 14th. This plot was fallow in 1999 and averaged 51 bushels per acre. The Kimball County test was planted October 4th and was no-tilled into proso millet stubble. Good fall rain helped this test get off to a good start but a dry and hot spring reduced yields. This test was harvested July 21st and averaged 21 bushels per acre. The Morrill County test was planted September 12th and was fallow in 1999. A May hail storm pounded the wheat down to the ground. This test was harvested July 11th and averaged 30 bushels per acre. The Cheyenne February planted plot was no-tilled into proso millet stubble on February 23rd. Early heat and dry weather prevented the plot from growing well. This test was harvested August 10th with very poor yields.

The Cheyenne County irrigated test was planted September 24th into bean stubble. This test suffered some yield loss in June due to the heat. The plot averaged 89 bushels per acre and was harvested July 19th. There was also an irrigated test planted at Albin Wyoming on September 29th. This test averaged 101 bushels per acre.

Protein and seed size data were collected from two replicates of each location. The seed size data are reported as thousands of seeds per pound. Thus, a larger number represents smaller seed size. The protein data were combined within each district and reported in the district tables. They are also summarized on page XX. Protein was determined from whole grain using a Near Infrared Spectrometer. The protein analysis was done by the Soil and Plant Analysis Lab at the University of Nebraska.

Table A. Nebraska winter wheat variety tests 2000.

County	Cooperator	Planted	Harvested
Jefferson	Verl Schoenrock, Fairbury	Oct. 1	June 30
Saunders	Agricultural Res & Dev Center	Sept. 28	July 10
Clay	South Central Res & Ext Center	Sept. 21	July 14
Webster	Meredith Engelhardt, Blue Hill	Oct. 4	June 30
Keith	Jim Welsh & Larry Chandler, Brule	Sept. 10	June 29
Perkins	Tom Kraus, Madrid	Oct. 27	July 11
Red Willow	Bernie Walz, Indianola	Sept. 21	June 23
Furnas	Dennis Gardner, Edison	Sept. 22	June 27
Lincoln Ns	West Central Res & Ext Center	Sept. 23	June 28
Cheyenne	High Plains Ag Lab	Sept. 15	July 13
Kimball	Chris Bogert, Dix	Oct. 4	July 21
Scotts Bluff	Louis Hubbs, Hawk Springs, WY	Sept. 15	NA
Deuel	Milt Peterson, Chappell	Sept. 14	June 30
Box Butte	Diamond Hill Farms, Alliance	Sept. 14	July 22
Dawes	Al Rasmussen, Chadron	Sept. 13	July 12
Morrill	Don Lease, Bridgeport	Sept. 12	July 11
Cheyenne Irr	Tim Maas, Potter	Sept. 18	July 24
Albin, WY	Theron Anderson, Albin	Sept. 29	NA
Cheyenne Feb. Planted	High Plains Ag Lab	Feb. 17	July 26

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:

AgriPro Seeds Inc. 12115 Tully Hill Rd Junction City, KS 66441	Hondo, Thunderbolt
HybriTech U.S. P.O. 1320 806N 2nd Berthoud, CO 80513	7588, XH9806, XH7463, XH3207, AP7510, 7406, XH9801, XH9815,
Novartis Seed Treatment #29 Rolling Hills Rd Kearney, NE 68847	Alliance-nontreated,Alliance-MaximXL, Alliance-RTU Vitavax, Alliance-DividendXL
General Mills Operations Inc. P.O. Box 5022 Great Falls, MT 59403	Nuwest, GM1001, GM1002, GM1003

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

Table B. Soil series, previous crop, and fertilizers applied. Nebraska Winter Wheat Variety Tests - 2000.

County	Soil Type	1999 Crop	pH	Nitrate lbs/a	P ppm	Organic matter %	N+P2O5+K lbs/a
Jefferson	Crete silt loam	Wheat	5.4	60.0	21.0	1.9	81-52-0
Saunders	Sharpsburg silty clay loam	Soybeans	---	---	---	---	40-0-0
Clay	Crete silt loam	Fallow	---	---	---	---	62-58-0
Webster	Holdrege silt loam	Corn	---	---	---	---	100-30-0
Keith	Duroc silt loam	Wheat	5.9	114.0	30.0	1.5	0-0-0
Perkins	Keith silt loam	Popcorn	6.5	63.0	56.0	2.5	57-31-0
Red Willow	Keith silt loam	Fallow	5.9	232.0	31.0	1.3	0-0-0
Furnas	Holdrege silt loam	Corn	5.6	22.0	49.0	1.8	80-0-0
Lincoln Nursery	Hall silt loam	Fallow	5.4	94.0	34.0	1.6	60-30-0
Cheyenne	Duroc loam	Fallow	6.9	390.0	42.0	2.9	53-28-0
Deuel	Keith silt loam	Fallow	5.4	247.0	35.5	1.2	58-28-0
Kimball	Altvan loam	Millet	6.7	16.0	9.5	1.1	58-28-0
Dawes	Tripp silt loam	Fallow	6.5	117.0	17.3	1.2	58-28-0
Morrill	Mitchell sandy loam	Fallow	7.6	94.0	24.2	1.4	48-28-0
Box Butte	Keith silt loam	Fallow	6.6	106.0	23.8	0.9	50-20-0
Cheyenne Feb.	Duroc loam	Millet	6.4	35.0	23.3	1.5	58-28-0
Cheyenne Irr.	Kuma loam	Beans	6.5	125.0	33.7	1.4	218-28-0

Table C. Winter Wheat Characteristics

Variety / Hybrid	Origin [3]	Family Most Closely Related To:	Agronomic Characteristics[1]							Reactions[2]				
			Maturity	Winter Hardiness	Straw Strength	Plant Height	Col-optile Length	Bushel Weight	Protein Content	Hessian Fly	Leaf Rust	Stem Rust	Soil Borne Mosaic	Wheat Streak Mosaic
2137	KS	2163	early	fair-good	very good	med short	short	good	good	R	MS-MR	MS-MR	R	MT
Hondo	AP	16679	med early	good (?)	very good	med short	medium	good	good	MR	R	MR-MS	R	MT
Thunderbolt	AP	Abilene	med early	fair-good	fair-good	med short	medium	fair to good	fair to good		R		S	MT
Akron	CO	Tam 107	med early	fair	fair-good	medium	medium	good	good	S	S	MR-MS	S	S
Alliance	NE	Chisholm	med early	fair	fair	medium	short	good	good	MR	S	MR	S	LT
Arapahoe	NE	Brule	medium	good	fair	medium	medium	good	very good	MR-MS	MR-MS	R	S	S
Betty*	KS	Jagger	med early	fair	fair-good	med short		good	very good	S	MS	MS-MR	R	MS-MR
Cougar	NE	Thunderbird	medium	good	very good	medium	long	very good	very good	S	MS	MR	MS	S
Culver	NE	Arapahoe	medium	fair-good	fair-good	medium	medium	good	good	S	MS-MR	R	S	S
GM1001*	G Mills	Private			(good)	(med tall)					(R)	(R)		(MR)
GM1003*	G Mills	Private		(good)	(good)						(R)	(R)		(R) ?
GM1002*	G Mills	Private		(excellent)	(excellent)	(medium)					(R)	(R)		(MR)
Nuwest*	G Mills	Private	med late	good	fair-good	medium	short	fair	fair to good					
Halt[A]	CO	Tam 107	early	fair-good	good	short	moderately	fair to good	fair to good	S	S	MS	R	S
Heyne*	KS	Plainsman V	med early	poor	fair-good	short	short	good	good	S	MR	R	R	NT
Jagger	KS	Karl	very early	poor	good	short	med long	fair to good	very good	S	MR-MS	MR	R	MT
Jules	CO	(Scout)	med late	fair	good	medium	short	fair	fair	S	MS-MR	MR	S	MS
Millennium	NE	Abilene/Arapahoe	medium	fair-good	med-good	medium	27943	good	good	R	MS	MR	S	S
NE94654	NE	Arapahoe	medium	good	med-good	medium		fair to good	fair to good	R	MS	MR	S	S
NE95473	NE	Arapahoe	medium	good	med-good	medium		good	good	H	MS	(MR)		
Niobrara	NE	Tam 107, Brule	medium	fair-good	fair-good	medium	medium	fair to good	fair to good	S	MS	MR	S	LT
Nuplains*	ARS	Abilene	medium	fair-good	good	medium				S	MS-S	R	S	MS-S
NW97S154*	ARS	NE89529								S	S	R Sr 6		S
NW97S182*	ARS	Arapahoe									MR	MR	S	
NW97S218*	ARS	Karl92			fair	medium				S	S	MR	R	S
NW97S278*	ARS	Arlin Pronghorn				medium	short				S	R	S	S
NW97S312*	ARS	Arlin			fair	medium sh				S	MS	R	S	S
NW97S343*	ARS	Arlin	early							S	MS	R SR17	S	S
Prairie Red[A]	CO	TAM 107	early	fair	good	short	medium	good	good	S	S	MR	S	S
Pronghorn	NE	Colt	med early	good	fair	tall	long	very good	good	S	MS	MR	S	S
Prowers[A]	CO	Lamar	medium	fair-good	fair	tall	long	good	good	S	MS-MR	MS-MR	S	VS

Quantum 7406	Hybrid	med early	very good	very good	medium shor	short	fair to good	good	S	MS-MR	MR	R	S	
Quantum 7588	Hybrid	med early	good	good	medium		good	good	S	MS-MR	R-MR	MR		
Quantum AP 7510	Hybrid	early	good	excellent	short	medium	good	good	S	MR-MS	MR-MS	R	LT	
Quantum XH3207	Hybrid													
Quantum XH7463	Hybrid													
Quantum XH9806	Hybrid	med early	good	very good	moderately s		good	good	S	MR-MS	R	MR		
Scout 66	NE	Scout	med early	fair	fair	tall	long	good	good	S	MS	MR-MS	S	MS
Trego*	KS	Rio Blanco	early	fair to good	good	moderately		very good	good	R	MR-MS	MR	MR	MT
Turkey			late	good	fair	tall	long	fair to good	good	S	MS	MS	S	MT
NE95510	NE	Abilene/Arapahoe	medium	good	fair to good	mod tall		fair to good	very good	R	MR-MS	MR	MR	S
Wesley	ARS	Colt/Cody	medium	good	very good	short	short	good	good	S	MS	R	R	S
Vista	NE	Brule	med early	fair-good	fair-good	short	short	good	good	R	MS-MR	MR-MS	S	MT
Windstar	NE	Siouxland	medium	good	good	medium	short	fair to good	good	S	MS-S	MR	S	MS-S

* = Designates which are hard white wheat line and varieties.

A = Designates which varieties have resistance to Russian wheat aphid.

1 = Actual height, bushel weight and protein content will vary widely with season, location, and production conditions.

General Bushel Weight Ratings: very good = 62 lb/bu, good = 60 lb/bu, fair = 68 lb/bu.

General Height Ratings (in optimum moisture) = short = 30-35", medium = 35-40", tall = 40-45"

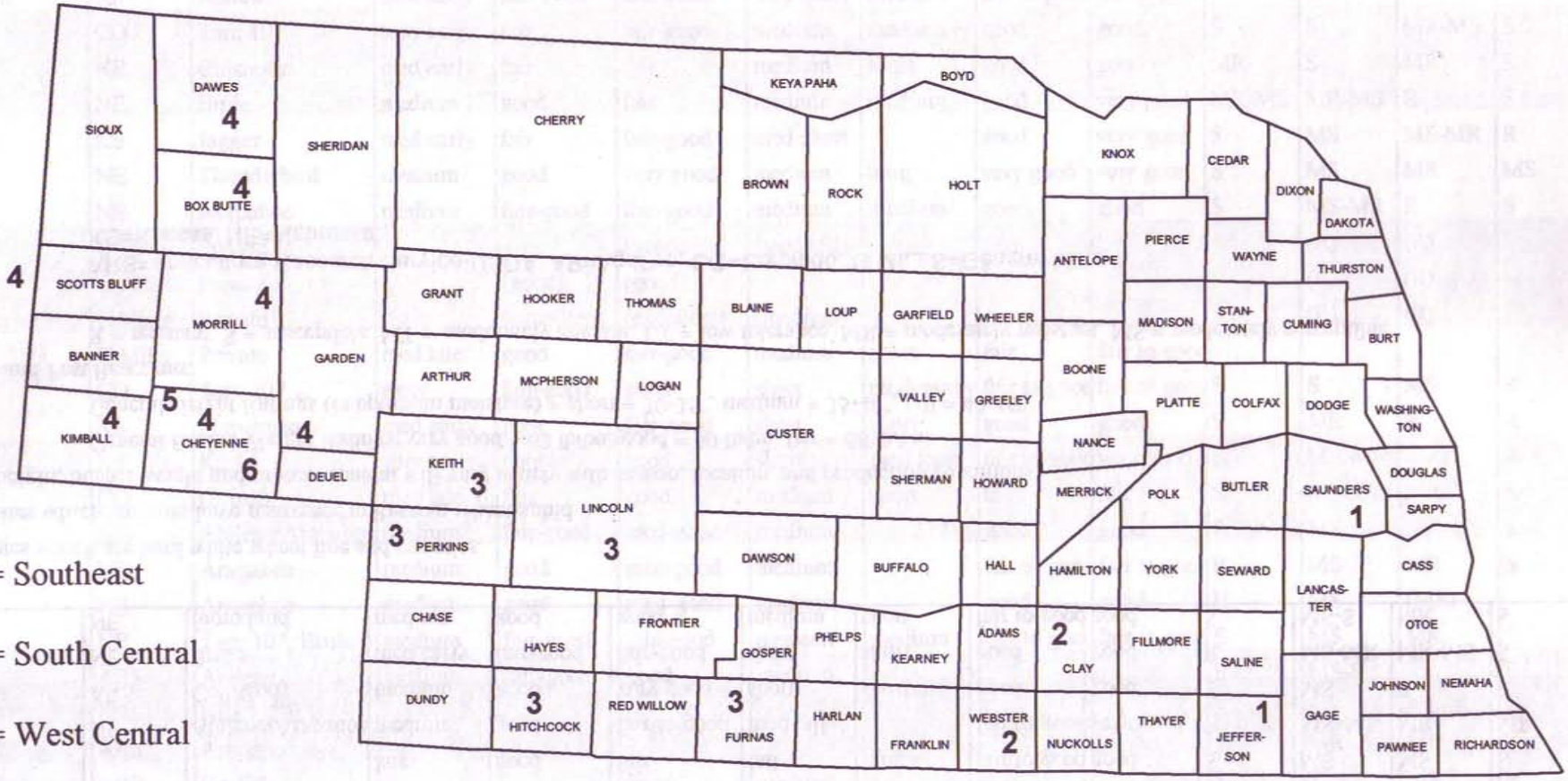
2 = Disease and Pest Reactions:

R = resistant, S = susceptible, MT = moderately tolerant, LT = low tolerance, MR = moderately resistant, MS = moderately susceptible

3 = Origin:

ARS=Agriculture Research Service-USDA, AP=AgriPro, CO=Colorado, G MILLS=General Mills, KS=Kansas, NE=Nebraska.

Location of 2000 Winter Wheat Tests in Nebraska



1= Southeast

2= South Central

3= West Central

4= Panhandle dryland

5= Panhandle irrigated

6= February planting

Numbers refer to zone

Southeast Winter Wheat Variety Tests - 2000
Jefferson and Saunders Counties

BRAND	VARIETY	Average Yield Bu/A	Jefferson Yield Bu/A	Saunders Yield Bu/A	Bushel Weight lb/bu	Plant Height inches	Kernel Weight 000/lb	Grain Protein pct
-----	NE94654	61.0	51.0	70.0	56.5	35.0	15.1	11.1
-----	Trego (W)	60.0	54.0	66.0	58.7	32.0	13.2	10.7
AgriPro	Hondo	58.0	49.0	66.0	59.1	34.0	13.3	11.9
-----	NW97S343 (W)	58.0	53.0	62.0	58.2	31.0	13.7	10.9
-----	Culver	58.0	53.0	63.0	57.6	34.0	13.4	11.1
-----	Millennium	57.0	50.0	64.0	58.1	35.0	13.7	11.3
-----	NE97465	56.0	44.0	67.0	59.1	38.0	14.0	11.7
-----	Nuplains (W)	56.0	43.0	69.0	58.7	31.0	14.4	11.4
-----	Wesley	56.0	47.0	65.0	56.5	32.0	13.6	11.5
-----	NW97S154 (W)	55.0	43.0	67.0	55.9	32.0	12.9	11.0
-----	NE95473	55.0	45.0	64.0	57.6	33.0	14.3	11.5
-----	Betty (W)	55.0	49.0	60.0	57.5	33.0	14.8	11.7
-----	NW97S278 (W)	55.0	50.0	59.0	56.8	32.0	14.2	11.1
-----	NE95510	54.0	48.0	60.0	58.5	35.0	15.6	11.8
-----	NW97S182 (W)	54.0	47.0	60.0	57.0	35.0	13.9	11.6
-----	NW97S312 (W)	54.0	46.0	61.0	55.8	31.0	15.6	11.6
-----	Alliance	54.0	50.0	57.0	56.9	33.0	14.9	10.7
-----	Heyne (W)	53.0	47.0	58.0	58.0	31.0	14.2	11.9
-----	Arapahoe	53.0	49.0	57.0	57.2	34.0	14.4	11.7
-----	2137	53.0	47.0	59.0	57.2	31.0	13.5	10.3
-----	Cougar	52.0	46.0	57.0	59.1	36.0	12.7	12.4
-----	NW97S218 (W)	52.0	44.0	60.0	56.7	32.0	15.3	11.8
-----	Jagger	47.0	47.0	46.0	58.4	34.0	14.1	11.5
-----	Scout66	45.0	39.0	50.0	58.6	39.0	12.7	11.5
-----	Turkey	41.0	29.0	53.0	58.1	42.0	14.0	12.0
Average all entries		54.1	46.8	60.8	57.7	33.8	14.1	11.4
Dif. req for sig. 5%		8.8	6.6	5.2	1.6	2.0	1.3	0.7

(W) indicates white wheat

SOUTHEAST WHEAT VARIETY TESTS 1996 - 2000

BRAND	VARIETY	Grain Yield Bu/A	Seed Weight 000/lb	Grain Protein pct	Bushel Weight lb/bu	Plant Height inches
			Two year averages			
-----	NE94654	58.50	14.75	11.00	56.40	37.00
-----	Millennium	56.50	12.85	11.30	58.30	38.00
-----	Trego (W)	56.50	12.60	10.70	58.40	34.00
-----	Culver	56.25	13.20	11.00	57.30	36.00
-----	Wesley	56.25	14.00	11.30	57.00	33.00
AgriPro	Hondo	55.00	14.00	11.90	59.50	36.00
-----	NE95473	54.25	14.45	11.40	57.70	35.00
-----	Nuplains (W)	53.75	13.80	11.40	58.30	34.00
-----	Betty (W)	53.50	14.90	11.70	57.20	35.00
-----	2137	53.25	13.35	10.40	57.20	34.00
-----	Alliance	52.50	14.15	10.50	56.90	35.00
-----	Arapahoe	51.25	14.65	11.40	57.40	37.00
-----	Cougar	50.50	12.55	12.10	59.00	38.00
-----	Heyne (W)	50.00	14.25	11.80	58.00	32.00
-----	Jagger	45.00	14.90	11.90	57.90	34.00
-----	Scout66	43.75	13.45	11.50	58.30	42.00
-----	Turkey	39.50	14.65	12.00	57.80	44.00
Average all entries		52.13	13.91	11.37	57.80	36.12
Dif. req for sig. 5%		2.90	N.S.	0.44	0.80	2.20
			Three year averages			
-----	Wesley	57.67	14.23	11.30	57.00	32.00
-----	Millennium	56.67	13.37	11.20	58.30	36.00
-----	2137	56.17	13.60	10.50	57.40	32.00
-----	Culver	56.17	13.90	11.00	57.30	34.00
AgriPro	Hondo	54.83	14.13	11.70	59.40	34.00
-----	Nuplains (W)	53.33	14.63	11.30	58.60	32.00
-----	Alliance	53.17	14.60	10.60	56.80	33.00
-----	Cougar	52.83	12.80	12.00	59.10	37.00
-----	Arapahoe	52.00	15.03	11.30	57.40	36.00
-----	Jagger	48.00	14.73	11.70	57.80	33.00
-----	Scout66	45.33	13.57	11.40	58.40	40.00
-----	Turkey	41.50	14.87	11.80	58.20	42.00
Average all entries		52.31	14.12	11.32	57.98	35.08
Dif. req for sig. 5%		3.70	1.20	0.40	0.70	1.80
			Four year averages			
-----	2137	54.88	14.25	11.20	57.60	31.00
-----	Culver	54.00	14.33	11.70	57.50	33.00
-----	Alliance	51.63	15.48	11.20	56.80	32.00
-----	Arapahoe	51.13	15.60	12.00	57.60	35.00
-----	Jagger	48.13	15.25	12.30	57.60	32.00
-----	Scout66	44.25	14.03	12.10	58.60	39.00
-----	Turkey	40.38	15.60	12.40	58.00	41.00
Average all entries		49.20	14.93	11.84	57.67	34.71
Dif. req for sig. 5%		3.20	1.00	0.40	0.70	1.50
			Five year averages			
-----	2137	53.10	14.32	11.40	57.80	32.00
-----	Alliance	50.60	15.76	11.40	56.80	33.00
-----	Arapahoe	49.00	16.24	12.10	57.50	35.00
-----	Scout66	42.50	14.48	12.20	58.50	39.00
-----	Turkey	40.00	15.96	12.40	58.10	41.00
Average all entries		47.04	15.35	11.9	57.74	36.00
Dif. req for sig. 5%		2.60	0.90	0.40	0.60	0.80

South Central Winter Wheat Variety Tests - 2000
Clay and Webster Counties

BRAND	VARIETY	Average Yield Bu/A	Clay Yield Bu/A	Webster Yield Bu/A	Bushel Weight lb/bu	Plant Height inches	Kernel Weight 000/lb	Plant lodging score [1]	Grain Protein pct
-----	Niobrara	64.0	82.0	45.0	57.8	35.0	17.1	3.0	12.2
-----	Culver	63.0	76.0	49.0	57.6	34.0	16.3	4.0	12.4
Farm Entry #1	Ogallala	62.0	78.0	46.0	59.8	30.0	18.8	3.0	12.6
-----	NW97S343 (W)	61.0	72.0	50.0	57.2	32.0	17.2	3.0	12.0
-----	Trego (W)	61.0	74.0	47.0	59.7	32.0	16.9	3.0	12.3
-----	Nuplains (W)	61.0	77.0	44.0	59.8	31.0	16.3	3.0	12.6
-----	NE94654	61.0	71.0	51.0	56.9	34.0	17.3	4.0	12.5
-----	Wesley	60.0	70.0	49.0	57.0	32.0	16.7	3.0	12.6
-----	2137	59.0	71.0	46.0	56.5	32.0	17.0	3.0	12.3
-----	NW97S154 (W)	59.0	73.0	45.0	56.2	32.0	16.6	3.0	12.3
AgriPro	Hondo	58.0	68.0	48.0	59.8	34.0	16.4	3.0	12.2
Farm Entry #2	Wilson T834	57.0	67.0	46.0	56.4	33.0	16.2	4.0	12.3
-----	Millennium	57.0	64.0	49.0	58.4	35.0	17.5	4.0	12.6
-----	Betty (W)	56.0	70.0	42.0	58.5	34.0	17.9	3.0	13.4
-----	Alliance	55.0	64.0	45.0	55.8	32.0	18.5	3.0	12.1
-----	NW97S278 (W)	55.0	65.0	44.0	56.7	30.0	19.7	3.0	12.5
-----	Arapahoe	55.0	61.0	48.0	57.5	33.0	17.3	4.0	12.8
-----	NW97S312 (W)	54.0	66.0	41.0	56.5	30.0	19.7	3.0	12.6
-----	NW97S182 (W)	53.0	63.0	42.0	57.9	37.0	16.9	3.0	13.0
-----	NE95473	53.0	60.0	46.0	58.1	34.0	18.0	4.0	12.7
-----	Heyne (W)	53.0	61.0	45.0	58.1	30.0	17.4	3.0	13.4
-----	Cougar	53.0	62.0	44.0	59.2	36.0	15.3	2.0	13.4
-----	Windstar	53.0	68.0	38.0	56.7	34.0	18.9	4.0	12.8
-----	NE95510	53.0	60.0	45.0	58.9	34.0	18.5	3.0	13.2
-----	Jagger	52.0	55.0	49.0	57.4	32.0	18.9	3.0	12.6
-----	NW97S218 (W)	47.0	49.0	45.0	57.0	33.0	18.8	3.0	12.9
-----	Scout66	42.0	41.0	42.0	59.5	36.0	16.3	3.0	12.5
-----	Turkey	37.0	38.0	36.0	57.9	38.0	17.8	3.0	13.6
Average all entries		55.5	65.2	45.3	57.8	33.2	17.5	3.2	12.7
Dif. req for sig. 5%		N.S.	8.4	5.6	1.5	2.2	1.4	0.7	0.7

[1] Lodging from Clay County only

SOUTH CENTRAL WHEAT VARIETY TESTS 1996 - 2000

BRAND	VARIETY	Grain Yield Bu/A	Seed Weight 000/lb	Grain Protein pct	Plant Height inches
			Two year averages		
-----	Culver	60.75	15.50	12.20	35.00
-----	Millennium	59.25	16.35	12.50	36.00
-----	Niobrara	59.25	15.95	12.00	38.00
-----	Trego (W)	59.25	16.10	12.20	33.00
-----	Wesley	58.75	15.75	12.10	32.00
-----	2137	58.25	15.80	12.00	33.00
-----	NE94654	58.00	16.05	12.30	35.00
-----	Nuplains (W)	57.75	15.45	12.40	34.00
AgriPro	Hondo	57.50	15.60	12.50	34.00
-----	Betty (W)	56.50	15.95	12.70	34.00
-----	NE95473	55.50	16.25	12.70	36.00
-----	Jagger	53.00	16.35	12.40	32.00
-----	Windstar	51.50	16.55	12.40	35.00
-----	Heyne (W)	51.00	16.25	13.20	31.00
-----	Arapahoe	50.75	15.95	12.90	36.00
-----	Cougar	50.00	15.50	13.10	37.00
-----	Alliance	48.75	17.30	11.70	34.00
-----	Scout66	36.75	15.80	12.70	38.00
-----	Turkey	31.00	16.25	13.70	39.00
Average all entries		53.34	16.04	12.51	34.84
Dif. req for sig. 5%		6.80	N.S.	0.70	2.80
			Three year averages		
-----	2137	65.50	15.50	11.40	34.00
-----	Culver	65.33	15.47	11.90	36.00
-----	Wesley	64.67	15.50	11.50	33.00
-----	Niobrara	62.00	15.77	11.70	38.00
-----	Nuplains (W)	61.67	15.80	11.90	33.00
-----	Millennium	61.00	15.93	11.90	37.00
AgriPro	Hondo	60.17	15.57	12.10	34.00
-----	Jagger	59.67	15.93	11.90	33.00
-----	Windstar	57.50	16.73	12.00	36.00
-----	Arapahoe	57.33	16.43	12.40	37.00
-----	Alliance	57.17	17.10	11.30	35.00
-----	Cougar	53.83	15.10	12.60	38.00
-----	Scout66	42.67	15.63	12.40	40.00
-----	Turkey	37.33	16.33	13.10	41.00
Average all entries		57.56	15.91	12.01	36.07
Dif. req for sig. 5%		6.90	N.S.	1.00	2.50

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SOUTH CENTRAL WHEAT VARIETY TESTS 1996 - 2000 Page 2

BRAND	VARIETY	Grain Yield Bu/A	Seed Weight 000/lb	Grain Protein pct	Plant Height inches
			Four year averages		
-----	Culver	65.25	15.10	12.40	35.00
-----	2137	63.75	15.30	11.80	33.00
-----	Jagger	60.75	15.70	12.50	32.00
-----	Niobrara	59.38	15.60	11.90	37.00
-----	Alliance	57.88	16.63	11.40	34.00
-----	Arapahoe	57.38	16.20	12.80	36.00
-----	Windstar	57.38	16.55	12.30	35.00
-----	Scout66	43.75	15.43	12.70	39.00
-----	Turkey	37.75	16.40	13.30	40.00
Average all entries		55.92	15.88	12.34	35.67
Dif. req for sig. 5%		5.60	1.00	0.50	1.80
			Five year averages		
-----	2137	60.30	15.42	12.10	33.00
-----	Arapahoe	55.60	16.82	12.90	37.00
-----	Niobrara	55.50	16.24	12.20	38.00
-----	Alliance	55.00	17.30	11.80	35.00
-----	Jagger	54.80	16.50	12.80	32.00
-----	Windstar	54.30	16.88	12.40	36.00
-----	Scout66	42.10	15.74	12.90	40.00
-----	Turkey	36.60	16.94	13.30	41.00
Average all entries		51.775	16.48	12.55	36.5
Dif. req for sig. 5%		6.30	1.40	1.00	2.20

West Central Fallow Winter Wheat Variety Tests - 2000
Keith, Red Willow, and Lincoln Counties

BRAND	VARIETY	Average Yield Bu/A	Keith Yield Bu/A	Red Willow Yield Bu/A	Lincoln Yield Bu/A	Bushel Weight lb/bu	Plant Height inches	Kernel Weight 000/lb	Grain Protein pct
Quantum	XH7463	59.0	59.0	56.0	61.0	57.2	29.0	17.2	11.0
Quantum	7588	59.0	64.0	54.0	60.0	57.0	30.0	16.7	10.5
Quantum	AP 7510	57.0	57.0	54.0	60.0	58.5	27.0	17.2	11.3
-----	Alliance	57.0	63.0	51.0	58.0	58.4	29.0	16.0	10.3
-----	Jagger	57.0	52.0	59.0	60.0	57.8	28.0	17.0	11.5
-----	Prairie Red	56.0	57.0	56.0	55.0	57.9	27.0	16.0	10.9
-----	Niobrara	56.0	61.0	49.0	58.0	57.4	31.0	16.3	10.9
Quantum	XH9806	56.0	55.0	55.0	59.0	57.3	28.0	17.8	10.7
Quantum	7406	56.0	60.0	51.0	56.0	57.1	29.0	17.3	10.1
-----	Trego (W)	56.0	51.0	55.0	61.0	58.6	27.0	16.6	10.8
AgriPro	Thunderbolt	55.0	57.0	49.0	59.0	58.6	29.0	16.3	11.5
-----	2137	54.0	51.0	51.0	60.0	57.4	29.0	16.9	11.0
-----	Culver	54.0	53.0	53.0	55.0	57.1	29.0	15.6	11.3
-----	Nuplains (W)	54.0	54.0	50.0	57.0	58.9	27.0	16.4	10.9
-----	Millennium	53.0	56.0	48.0	56.0	57.1	32.0	16.5	11.8
-----	Halt	53.0	55.0	50.0	53.0	57.1	27.0	17.2	11.0
Quantum	XH3207	53.0	54.0	50.0	55.0	57.9	27.0	17.4	11.2
-----	NE94654	53.0	53.0	51.0	55.0	55.8	28.0	17.9	10.7
-----	NW97S278 (W)	53.0	59.0	48.0	53.0	56.9	28.0	17.2	10.5
-----	NW97S343 (W)	52.0	57.0	46.0	54.0	57.3	28.0	15.8	10.4
-----	Pronghorn	52.0	55.0	47.0	53.0	58.0	33.0	16.9	11.3
Gen Mills	GM1001 (W)	52.0	50.0	53.0	52.0	57.7	30.0	17.2	10.9
-----	Wesley	52.0	54.0	49.0	53.0	56.5	27.0	16.4	11.6
-----	NW97S154 (W)	52.0	54.0	49.0	54.0	56.1	28.0	15.9	10.9
-----	Vista	52.0	54.0	50.0	53.0	56.0	26.0	17.3	11.3
-----	Windstar	51.0	58.0	44.0	51.0	55.7	30.0	17.9	11.2
-----	NW97S182 (W)	50.0	52.0	45.0	53.0	56.9	31.0	15.0	11.4
-----	NE95473	50.0	49.0	46.0	55.0	56.5	29.0	17.4	11.2
Gen Mills	GM1002 (W)	50.0	53.0	45.0	52.0	58.5	26.0	17.9	11.0
-----	Akron	50.0	49.0	51.0	51.0	57.4	29.0	18.3	10.8
-----	Scout66	50.0	52.0	48.0	51.0	58.1	34.0	15.3	10.9
-----	Arapahoe	49.0	51.0	43.0	53.0	56.6	29.0	18.5	11.1
-----	NW97S218 (W)	49.0	51.0	48.0	48.0	56.5	27.0	17.9	11.0
Gen Mills	GM1003 (W)	48.0	48.0	47.0	50.0	54.8	28.0	18.2	11.2
-----	NW97S312 (W)	48.0	50.0	42.0	52.0	55.0	26.0	19.6	11.6
-----	NE95510	47.0	43.0	44.0	55.0	56.4	28.0	18.3	12.1
AgriPro	Hondo	46.0	44.0	43.0	51.0	57.3	27.0	17.0	11.8
-----	Prowers	45.0	49.0	40.0	45.0	57.4	32.0	17.0	11.4
-----	Cougar	45.0	46.0	41.0	47.0	57.9	30.0	15.7	11.7
-----	Heyne (W)	44.0	38.0	47.0	47.0	57.3	26.0	16.9	11.9
-----	Jules	44.0	50.0	35.0	47.0	55.5	26.0	17.7	11.0
-----	Betty (W)	43.0	46.0	44.0	40.0	55.8	29.0	19.1	11.6
-----	Turkey	41.0	42.0	36.0	45.0	56.2	33.0	17.5	11.6
Gen Mills	Nuwest (W)	36.0	35.0	37.0	36.0	53.8	29.0	18.6	11.7
Average all entries		51.1	52.3	48.0	53.2	57.0	28.7	17.1	11.1
Dif. req for sig. 5%		6.4	4.0	5.0	4.0	1.8	2.0	2.1	0.9

(W) indicates white wheat

WEST CENTRAL WHEAT VARIETY TESTS 1996 - 2000

BRAND	VARIETY	Grain Yield Bu/A	Seed Weight 000/lb	Grain Protein pct	Bushel Weight lb/bu	Plant Height inches
		Two year averages				
Quantum	XH9806	70.15	16.65	10.90	58.90	31.00
Quantum	AP 7510	68.15	16.75	11.50	59.60	30.00
Quantum	7406	67.85	16.20	10.50	58.30	33.00
-----	Alliance	65.15	15.55	10.70	59.00	32.00
-----	Prairie Red	65.00	14.80	11.20	58.40	31.00
-----	2137	64.90	15.50	11.00	59.20	32.00
-----	Trego (W)	64.75	15.15	10.80	59.30	31.00
-----	Wesley	64.65	15.30	11.50	57.60	30.00
-----	Jagger	64.50	15.95	11.40	58.10	31.00
-----	Niobrara	63.90	15.50	11.00	58.10	34.00
-----	NE94654	63.90	16.35	10.80	57.60	32.00
-----	Halt	63.35	16.40	11.30	58.40	30.00
-----	Millennium	63.30	15.45	11.60	58.70	34.00
-----	Culver	63.10	14.90	11.40	58.10	33.00
-----	Vista	61.90	16.00	11.40	57.20	29.00
-----	NE95473	61.65	16.25	11.30	58.20	32.00
AgriPro	Thunderbolt	61.25	14.90	11.70	60.10	32.00
-----	Nuplains (W)	61.10	15.60	11.40	59.90	31.00
-----	Windstar	60.15	16.85	11.30	57.80	33.00
-----	Akron	59.90	16.70	10.90	57.70	33.00
-----	Pronghorn	58.10	15.60	11.40	59.10	37.00
-----	Arapahoe	57.50	16.90	11.30	57.20	32.00
-----	Heyne (W)	56.90	15.65	12.00	58.70	30.00
-----	Jules	56.50	16.60	11.00	57.10	30.00
-----	Cougar	56.25	14.35	11.80	59.60	34.00
-----	Scout66	54.90	14.80	11.30	59.40	39.00
-----	Betty (W)	54.15	17.40	11.70	58.30	33.00
-----	Prowers	53.00	15.75	11.80	58.90	36.00
-----	Turkey	47.15	16.40	12.00	58.20	39.00
Gen Mills	Nuwest (W)	46.50	18.15	11.50	55.60	33.00
Average all entries		60.65	15.95	11.31	58.41	32.57
Dif req for sig 5%		6.39	1.00	0.51	1.50	1.77
		Three year averages				
Quantum	7406	71.50	15.70	10.50	59.00	32.00
Quantum	AP 7510	69.83	16.10	11.60	60.00	30.00
-----	Wesley	68.17	14.93	11.50	58.50	30.00
-----	2137	67.77	15.20	11.10	59.70	32.00
-----	Jagger	67.57	15.70	11.60	58.60	31.00
-----	Alliance	66.60	15.13	10.80	59.30	32.00
-----	Culver	66.50	14.60	11.40	58.60	33.00
-----	Niobrara	66.17	15.17	11.20	58.50	34.00
-----	Millennium	65.93	15.20	11.60	59.10	34.00
-----	Halt	65.90	15.97	11.60	59.30	30.00
-----	Vista	64.70	15.37	11.60	58.00	29.00
-----	Akron	64.53	15.90	10.90	58.60	33.00
-----	Nuplains (W)	63.97	15.17	11.50	60.30	30.00
-----	Windstar	63.67	16.17	11.30	58.50	33.00
-----	Jules	61.93	16.13	10.80	57.90	30.00
-----	Arapahoe	61.83	16.47	11.50	58.40	33.00
-----	Cougar	58.83	14.10	12.00	60.20	34.00
-----	Pronghorn	58.83	15.10	11.40	59.80	36.00
-----	Scout66	54.33	14.60	11.50	59.60	38.00
-----	Turkey	47.50	15.90	11.90	58.90	38.00
Average all entries		63.80	15.43	11.37	59.04	32.60
Dif req for sig 5%		5.49	0.73	0.44	1.08	1.31

WEST CENTRAL WHEAT VARIETY TESTS 1996 - 2000 Page 2

BRAND	VARIETY	Grain Yield Bu/A	Seed Weight 000/lb	Grain Protein pct	Bushel Weight lb/bu	Plant Height inches
		Four year averages				
Quantum	7406	69.08	15.18	10.90	59.40	32.00
Quantum	AP 7510	65.93	15.63	12.00	60.30	29.00
-----	2137	64.38	14.75	11.30	59.80	31.00
-----	Jagger	63.88	15.10	12.00	59.10	31.00
-----	Culver	63.58	14.20	11.70	58.80	32.00
-----	Alliance	63.53	15.00	11.00	59.00	31.00
-----	Niobrara	62.88	14.85	11.40	58.60	33.00
-----	Halt	61.73	15.68	11.80	58.90	29.00
-----	Windstar	61.63	15.60	11.50	58.80	33.00
-----	Akron	61.08	15.38	11.20	59.20	32.00
-----	Jules	60.90	15.78	10.90	58.30	30.00
-----	Vista	60.85	15.00	11.80	58.20	29.00
-----	Arapahoe	59.38	16.03	11.80	58.60	32.00
-----	Pronghorn	57.93	14.78	11.60	60.00	36.00
-----	Cougar	57.00	13.80	12.20	60.40	34.00
-----	Scout66	52.33	14.33	11.80	59.90	37.00
-----	Turkey	46.70	15.63	12.10	59.10	38.00
Average all entries		60.75	15.10	11.59	59.20	32.29
Dif req for sig 5%		5.08	0.65	0.37	1.01	1.19
		Five year averages				
-----	2137	65.14	14.40	11.50	60.20	31.00
-----	Alliance	64.22	14.82	11.30	59.40	31.00
Quantum	AP 7510	63.94	15.66	12.20	60.50	29.00
-----	Niobrara	62.18	14.68	11.60	58.90	33.00
-----	Windstar	61.54	15.52	11.70	59.00	33.00
-----	Jagger	61.38	14.84	12.30	59.30	30.00
-----	Halt	61.10	15.50	12.20	59.00	29.00
-----	Vista	60.44	14.70	12.00	58.70	28.00
-----	Jules	59.96	15.66	11.00	58.40	30.00
-----	Arapahoe	59.78	15.86	12.10	59.00	33.00
-----	Akron	59.06	15.16	11.50	59.30	32.00
-----	Pronghorn	57.70	14.54	11.90	60.30	35.00
-----	Scout66	52.38	14.08	12.00	60.20	37.00
-----	Turkey	47.36	15.44	12.40	59.30	38.00
Average all entries		59.73	15.06	11.84	59.39	32.07
Dif req for sig 5%		5.12	0.59	0.36	0.92	1.16

West Central No-Till Winter Wheat Variety Tests - 2000
Perkins and Furnas Counties

BRAND	VARIETY	Average Yield Bu/A	Perkins Yield Bu/A	Furnas Yield Bu/A	Bushel Weight lb/bu	Plant Height inches	Kernel Weight 000/lb	Plant[1] lodging pct	Grain Protein pct
Quantum	XH9806	41.0	49.0	33.0	56.2	27.0	16.7	0.0	12.4
AgriPro	Thunderbolt	41.0	48.0	33.0	57.2	29.0	16.2	0.0	12.5
Quantum	7406	40.0	42.0	37.0	56.4	28.0	17.2	0.0	12.1
Quantum	XH7463	40.0	47.0	33.0	55.3	27.0	16.8	0.0	11.6
Quantum	7588	39.0	45.0	32.0	55.7	28.0	16.5	0.0	12.1
-----	Prairie Red	38.0	46.0	29.0	56.0	27.0	15.2	0.0	12.0
Quantum	XH3207	38.0	43.0	33.0	57.0	27.0	17.2	0.0	12.2
-----	Trego (W)	38.0	49.0	27.0	56.9	27.0	17.1	0.0	11.9
Quantum	AP 7510	37.0	45.0	29.0	56.4	25.0	16.5	0.0	12.2
-----	2137	36.0	44.0	28.0	55.8	27.0	16.1	0.0	11.9
-----	Halt	36.0	43.0	29.0	55.5	26.0	17.4	0.0	12.7
Gen Mills	GM1002 (W)	35.0	43.0	26.0	56.3	26.0	18.0	0.0	11.9
AgriPro	Hondo	35.0	40.0	29.0	56.7	28.0	18.1	0.0	12.6
-----	Millennium	34.0	42.0	25.0	55.6	29.0	16.1	2.0	12.6
-----	NE94654	34.0	40.0	27.0	55.0	29.0	17.5	1.0	12.7
Gen Mills	GM1003 (W)	34.0	41.0	27.0	54.3	26.0	17.2	0.0	11.9
-----	NW97S154 (W)	33.0	38.0	27.0	55.1	27.0	16.3	0.0	12.2
-----	Akron	33.0	39.0	27.0	55.1	28.0	16.8	0.0	12.0
-----	Niobrara	33.0	38.0	28.0	55.3	29.0	17.1	0.0	12.1
-----	Wesley	33.0	39.0	26.0	54.9	25.0	15.8	0.0	12.7
-----	Pronghorn	33.0	38.0	27.0	56.0	32.0	17.2	1.0	12.7
-----	Alliance	32.0	34.0	30.0	55.7	28.0	15.9	0.0	11.9
-----	Betty (W)	32.0	41.0	23.0	55.2	28.0	17.9	0.0	13.2
-----	Heyne (W)	31.0	37.0	25.0	56.4	26.0	16.5	0.0	13.2
-----	NW97S343 (W)	31.0	36.0	25.0	55.4	27.0	17.4	0.0	12.1
-----	Nuplains (W)	31.0	37.0	24.0	55.7	27.0	17.9	0.0	12.4
-----	Scout66	31.0	34.0	27.0	55.8	32.0	16.2	11.0	12.3
Gen Mills	GM1001 (W)	31.0	36.0	25.0	55.1	28.0	20.7	0.0	12.4
-----	NE95473	31.0	38.0	24.0	54.9	28.0	18.6	0.0	12.6
-----	Arapahoe	31.0	37.0	24.0	54.1	27.0	17.5	0.0	12.9
-----	Prowers	30.0	36.0	24.0	56.0	30.0	18.3	0.0	12.8
-----	NW97S278 (W)	30.0	37.0	23.0	55.0	27.0	18.9	0.0	12.3
-----	Jagger	30.0	39.0	21.0	54.8	25.0	17.0	0.0	12.5
-----	NE95510	29.0	38.0	20.0	55.5	28.0	17.1	1.0	13.4
-----	Vista	29.0	31.0	27.0	55.2	25.0	16.3	0.0	12.5
-----	Jules	29.0	31.0	27.0	53.9	27.0	18.1	0.0	12.3
-----	NW97S218 (W)	28.0	33.0	23.0	55.4	27.0	17.8	0.0	12.9
-----	NW97S312 (W)	28.0	30.0	26.0	54.4	26.0	18.4	0.0	13.1
-----	Culver	28.0	31.0	25.0	55.3	27.0	16.7	0.0	12.3
-----	Cougar	28.0	30.0	26.0	55.2	29.0	17.1	0.0	13.4
-----	NW97S182 (W)	27.0	32.0	21.0	54.8	30.0	16.9	0.0	13.3
-----	Turkey	26.0	30.0	22.0	55.1	33.0	16.9	14.0	13.1
-----	Windstar	20.0	18.0	22.0	54.1	26.0	16.7	0.0	12.9
Gen Mills	Nuwest (W)	16.0	18.0	13.0	53.1	26.0	18.7	0.0	12.9
Average all entries		32.3	37.8	26.3	55.4	27.6	17.2	0.7	12.5
Dif. req for sig. 5%		7.2	3.9	3.2	1.6	2.2	2.2	1.4	0.6

[1] Lodging data from Perkins location only

(W) indicates white wheat

Panhandle Dryland Winter Wheat Variety Tests - 2000

Cheyenne, Deuel, Scotts Bluff, Dawes, Box Butte, Kimball and Morrill Counties

BRAND	VARIETY	Average Yield Bu/A	Cheyenne Yield Bu/A	Deuel Yield Bu/A	Scotts Bluff Yield Bu/A	Dawes Yield Bu/A	Box Butte Yield Bu/A	Kimball Yield Bu/A	Morrill Yield Bu/A	Grain bushel weight	Plant height inches	Kernel Weight 000/lb	Plant[1] lodging pct	Grain Protein pct
-----	Vista	45.0	56.0	29.0	32.0	71.0	57.0	22.0	36.2	58.7	25.0	17.0	1.0	12.0
Quantum	XH9806	45.0	54.0	24.0	29.0	76.0	61.0	24.0	40.2	59.8	26.0	18.6	1.0	12.1
Quantum	7406	44.0	58.0	25.0	28.0	75.0	53.0	22.0	31.1	60.0	27.0	16.8	0.0	12.0
-----	Prairie Red	44.0	58.0	27.0	29.0	65.0	61.0	23.0	38.1	59.6	25.0	15.7	0.0	11.9
Quantum	XH7463	44.0	56.0	19.0	31.0	72.0	60.0	24.0	34.7	60.1	26.0	17.2	1.0	11.7
-----	NE97689	44.0	56.0	23.0	30.0	74.0	60.0	22.0	32.1	56.9	27.0	17.4	0.0	11.7
Quantum	XH3207	44.0	57.0	22.0	28.0	72.0	59.0	23.0	32.8	60.4	24.0	17.0	0.0	12.2
-----	Alliance	43.0	50.0	27.0	29.0	71.0	59.0	22.0	35.0	58.8	27.0	17.1	1.0	11.5
Quantum	AP 7510	43.0	56.0	24.0	28.0	74.0	49.0	25.0	35.8	59.9	25.0	17.8	1.0	12.0
Quantum	7588	43.0	54.0	28.0	29.0	75.0	48.0	26.0	34.2	59.3	27.0	16.9	0.0	11.8
-----	Halt	42.0	55.0	21.0	30.0	66.0	60.0	22.0	33.0	58.6	26.0	17.5	0.0	12.1
-----	NE94654	42.0	53.0	24.0	27.0	70.0	56.0	22.0	31.5	58.2	27.0	17.5	0.0	12.0
-----	Niobrara	41.0	54.0	24.0	28.0	68.0	50.0	21.0	36.2	59.2	28.0	16.4	0.0	11.9
-----	NW97S154 (W)	41.0	50.0	19.0	24.0	75.0	55.0	21.0	24.3	57.9	26.0	16.1	0.0	11.7
-----	Nuplains (W)	40.0	48.0	21.0	28.0	63.0	57.0	21.0	29.9	61.7	25.0	17.0	0.0	12.3
-----	Millennium	40.0	49.0	22.0	30.0	60.0	56.0	22.0	34.0	59.3	29.0	16.7	0.0	12.1
-----	NW97S182 (W)	40.0	50.0	25.0	23.0	65.0	53.0	22.0	33.7	59.8	30.0	16.2	0.0	12.5
-----	NW97S278 (W)	40.0	51.0	23.0	27.0	62.0	56.0	20.0	26.9	58.9	26.0	17.3	5.0	11.6
-----	Culver	40.0	51.0	27.0	26.0	67.0	50.0	19.0	28.1	59.2	27.0	15.5	0.0	12.0
-----	NW97S343 (W)	39.0	48.0	24.0	26.0	63.0	55.0	18.0	34.6	59.2	25.0	16.5	2.0	11.4
-----	NE95473	39.0	56.0	23.0	25.0	57.0	52.0	23.0	30.6	59.3	27.0	17.4	0.0	12.2
-----	2137	39.0	48.0	28.0	23.0	65.0	47.0	22.0	33.7	59.5	27.0	16.1	1.0	12.0
-----	Trego (W)	39.0	57.0	28.0	25.0	56.0	44.0	21.0	32.8	61.2	25.0	15.9	0.0	12.2
Gen Mills	GM1001 (W)	39.0	53.0	21.0	29.0	65.0	48.0	20.0	30.6	59.7	28.0	18.7	0.0	11.8
-----	Akron	39.0	53.0	21.0	28.0	58.0	51.0	21.0	38.8	59.3	27.0	17.6	0.0	11.6
-----	NE95510	37.0	43.0	18.0	23.0	65.0	53.0	19.0	23.5	59.5	28.0	19.4	4.0	12.5
-----	Arapahoe	37.0	48.0	23.0	25.0	60.0	47.0	20.0	30.0	58.9	28.0	18.1	1.0	12.6
-----	Pronghorn	37.0	39.0	21.0	28.0	57.0	54.0	21.0	31.5	59.7	31.0	17.3	3.0	12.2
Gen Mills	GM1003 (W)	37.0	45.0	16.0	27.0	60.0	51.0	20.0	29.8	57.0	26.0	18.5	1.0	11.8
-----	Windstar	37.0	49.0	22.0	26.0	60.0	46.0	21.0	27.3	57.8	28.0	18.0	1.0	12.0
-----	Wesley	37.0	49.0	23.0	23.0	59.0	51.0	19.0	31.5	58.1	24.0	17.1	1.0	12.3
-----	NW97S218 (W)	36.0	46.0	20.0	24.0	56.0	51.0	21.0	24.0	58.2	25.0	18.1	0.0	12.6
-----	NW97S312 (W)	36.0	43.0	17.0	22.0	63.0	50.0	20.0	22.7	57.6	25.0	19.6	2.0	12.6
-----	Betty (W)	35.0	44.0	23.0	23.0	55.0	43.0	21.0	28.3	59.0	27.0	19.3	0.0	12.8
Gen Mills	GM1002 (W)	35.0	51.0	20.0	27.0	54.0	35.0	20.0	28.4	60.7	24.0	17.7	0.0	11.8
-----	Jules	35.0	36.0	17.0	29.0	57.0	51.0	17.0	25.7	58.1	26.0	18.4	1.0	11.7
-----	Heyne (W)	35.0	49.0	20.0	22.0	48.0	46.0	23.0	27.4	59.3	25.0	17.9	0.0	13.1
-----	Scout66	34.0	39.0	20.0	25.0	53.0	47.0	18.0	22.8	60.6	31.0	15.6	57.0	11.9
-----	SD93267	33.0	44.0	18.0	27.0	51.0	39.0	21.0	21.7	59.5	31.0	18.2	12.0	12.5
-----	Prowers	33.0	40.0	17.0	29.0	48.0	44.0	20.0	29.5	61.3	31.0	16.6	0.0	12.2
-----	Cougar	31.0	36.0	20.0	22.0	56.0	34.0	19.0	25.6	59.5	29.0	16.2	0.0	12.6
-----	Turkey	30.0	37.0	18.0	26.0	40.0	41.0	19.0	25.8	59.0	32.0	17.4	9.0	12.8
Gen Mills	Nuwest (W)	28.0	33.0	11.0	26.0	50.0	30.0	17.0	16.9	57.9	27.0	20.4	1.0	12.3
Average all entries		38.7	48.9	21.9	26.7	62.3	50.5	21.0	30.3	59.2	27.0	17.4	2.5	12.1
Dif. req for sig. 5%		4.4	6.3	5.4	2.5	7.3	12.3	2.1	5.9	1.2	1.7	1.2	8.0	0.5

(W) indicates white wheat

[1] Lodging data from Cheyenne County only

PANHANDLE DRYLAND WHEAT VARIETY TESTS 1996 - 2000

BRAND	VARIETY	Grain Yield Bu/A	Plant Lodging pct	Seed Weight 000/lb	Grain Protein pct	Bushel Weight lb/bu	Plant Height inches
		Two year averages					
Quantum	XH9806	51.15	4.00	17.75	11.60	59.40	29.00
-----	Vista	48.90	9.00	16.50	11.80	58.20	27.00
Quantum	7406	48.75	5.00	16.45	11.20	59.40	30.00
Quantum	AP 7510	48.60	1.00	17.45	11.80	59.60	27.00
-----	2137	48.55	10.00	15.80	11.50	59.40	29.00
-----	Prairie Red	48.50	4.00	15.15	11.70	58.90	28.00
-----	Halt	47.90	7.00	17.25	11.90	58.10	28.00
-----	Alliance	47.85	13.00	16.25	11.00	59.00	29.00
-----	NW97S182 (W)	46.35	9.00	15.20	12.00	59.40	32.00
-----	Niobrara	46.20	16.00	15.80	11.40	58.80	31.00
-----	Akron	46.00	8.00	16.80	11.30	58.70	30.00
-----	NE94654	45.95	15.00	16.65	11.40	57.40	29.00
-----	Millennium	45.50	8.00	16.05	11.70	58.80	31.00
-----	Wesley	45.35	8.00	16.20	11.80	58.00	26.00
-----	Nuplains (W)	44.90	8.00	16.20	12.00	61.00	28.00
-----	NE95473	44.45	7.00	17.00	11.90	58.80	30.00
-----	Windstar	44.35	16.00	17.50	11.50	58.10	31.00
-----	Culver	43.80	14.00	15.25	11.50	58.50	30.00
-----	Trego (W)	43.25	15.00	15.20	11.50	60.40	28.00
-----	Betty (W)	42.60	6.00	17.80	12.50	59.30	29.00
-----	Arapahoe	42.55	13.00	17.45	12.00	58.10	30.00
-----	Jules	41.55	8.00	17.15	11.00	57.70	28.00
-----	Lamar	41.50	0.00	13.50	8.80	64.10	25.00
-----	Pronghorn	40.95	25.00	16.15	11.90	59.30	34.00
-----	NE94482	40.15	22.00	14.55	10.20	60.00	25.00
-----	Buckskin	40.10	14.00	15.80	11.90	59.70	35.00
-----	Heyne (W)	39.05	3.00	16.85	12.70	59.00	27.00
-----	Prowers	38.45	19.00	15.80	12.20	60.60	33.00
-----	Cougar	38.45	2.00	14.80	12.50	59.80	32.00
-----	SD93267	37.50	25.00	17.00	12.20	59.30	34.00
-----	Rampart	36.00	0.00	15.55	9.20	62.60	24.00
-----	MTW9441 (W)	36.00	0.00	17.25	9.00	60.80	23.00
-----	Scout66	34.45	51.00	15.35	11.80	59.60	34.00
-----	MT 59719	33.50	0.00	15.95	9.40	61.20	24.00
-----	Turkey	31.95	31.00	16.65	12.50	58.50	34.00
Average all entries		42.89	11.31	16.23	11.44	59.41	29.26
Dif req for sig 5%		6.86	17.80	1.36	1.18	1.37	6.30
		Three year averages					
-----	Alliance	53.47	9.00	15.87	11.40	59.20	29.00
Quantum	7406	52.93	3.00	16.00	11.40	59.60	29.00
-----	2137	51.80	7.00	15.13	11.70	59.60	29.00
-----	Halt	51.70	4.00	16.57	12.20	58.50	28.00
-----	Prairie Red	51.23	3.00	14.70	12.00	59.00	27.00
Quantum	AP 7510	51.07	0.00	16.83	12.20	59.90	27.00
-----	Vista	51.03	6.00	15.67	12.10	58.40	27.00
-----	Niobrara	50.90	10.00	15.20	11.70	58.90	30.00
-----	Akron	50.67	5.00	16.00	11.40	59.10	30.00
-----	Millennium	50.43	5.00	15.43	11.90	59.10	31.00
-----	Windstar	49.73	11.00	16.63	11.80	58.20	30.00
-----	Culver	49.27	9.00	14.70	11.70	58.80	30.00
-----	Wesley	48.97	5.00	15.37	12.10	58.40	26.00

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PANHANDLE DRYLAND WHEAT VARIETY TESTS 1996 - 2000 Page 2

BRAND	VARIETY	Grain Yield Bu/A	Plant Lodging pct	Seed Weight 000/lb	Grain Protein pct	Bushel Weight lb/bu	Plant Height inches
-----	Nuplains (W)	48.87	5.00	15.80	12.20	61.40	27.00
-----	Arapahoe	47.70	8.00	16.83	12.40	58.50	31.00
-----	Pronghorn	46.90	18.00	15.70	12.10	59.50	34.00
-----	Jules	46.80	5.00	16.43	11.10	58.10	28.00
-----	NE94482	46.17	11.00	14.63	11.00	59.90	27.00
-----	Buckskin	45.73	10.00	15.50	12.40	59.90	34.00
-----	Prowers	44.40	15.00	15.03	12.40	60.80	33.00
-----	SD93267	43.73	17.00	16.20	12.50	59.70	34.00
-----	Cougar	43.30	1.00	14.30	12.50	60.00	31.00
-----	Scout66	39.73	43.00	14.77	12.10	59.70	34.00
-----	Turkey	36.70	27.00	16.20	12.70	58.80	35.00
Average all entries		48.05	9.88	15.65	11.96	59.29	30.04
Dif req for sig 5%		4.93	12.00	1.00	0.74	0.78	2.21
				Four year averages			
-----	Alliance	49.80	7.00	15.73	11.50	59.10	29.00
-----	2137	48.85	5.00	15.30	11.60	59.50	28.00
Quantum	7406	48.83	2.00	16.38	11.60	59.20	29.00
-----	Akron	47.58	4.00	16.03	11.50	59.00	29.00
-----	Niobrara	47.50	8.00	15.35	11.70	58.80	30.00
-----	Vista	47.40	5.00	15.78	12.00	58.40	26.00
-----	Halt	47.28	3.00	16.68	12.00	58.30	27.00
Quantum	AP 7510	47.00	0.00	16.88	12.20	59.80	27.00
-----	Windstar	46.55	8.00	16.65	11.80	58.10	30.00
-----	Culver	45.65	7.00	15.05	11.90	58.50	30.00
-----	Arapahoe	45.10	6.00	16.73	12.20	58.60	30.00
-----	Jules	44.23	4.00	16.48	11.20	58.10	28.00
-----	Pronghorn	44.18	15.00	15.60	12.10	59.50	33.00
-----	Buckskin	43.88	9.00	15.58	12.30	59.90	34.00
-----	Prowers	42.00	12.00	15.03	12.30	60.60	33.00
-----	Scout66	38.55	40.00	14.78	12.10	59.80	34.00
-----	Turkey	35.28	27.00	16.23	12.50	58.90	34.00
Average all entries		45.27	9.53	15.90	11.91	59.06	30.06
Dif req for sig 5%		4.18	9.80	0.62	0.11	0.58	0.96
				Five year averages			
-----	Alliance	50.80	7.00	15.36	11.70	59.30	29.00
-----	2137	49.18	5.00	14.86	11.80	59.80	28.00
-----	Akron	48.52	4.00	15.74	11.80	59.10	29.00
-----	Niobrara	48.50	8.00	15.08	12.00	59.00	30.00
-----	Vista	48.48	5.00	15.32	12.30	58.80	26.00
-----	Halt	47.88	3.00	16.40	12.40	58.50	27.00
-----	Windstar	47.40	8.00	16.44	11.90	58.30	30.00
-----	Arapahoe	46.28	6.00	16.42	12.40	58.90	31.00
-----	Jules	45.84	4.00	16.20	11.30	58.40	28.00
-----	Pronghorn	45.44	15.00	15.30	12.30	59.80	33.00
-----	Buckskin	45.20	9.00	15.22	12.40	60.10	35.00
-----	Scout66	40.44	40.00	14.50	12.40	60.10	34.00
-----	Turkey	37.12	27.00	15.94	12.80	59.20	35.00
Average all entries		46.24	10.85	15.60	12.12	59.18	30.38
Dif req for sig 5%		3.56	NA	0.49	0.33	0.49	1.2

West Irrigated Winter Wheat Variety Tests - 2000
Cheyenne Co and Albin Wyoming

BRAND	VARIETY	Average Yield Bu/A	Cheyenne Yield Bu/A	Albin Yield Bu/A	Bushel Weight lb/bu	Plant[1] Height inches	Kernel Weight 000/lb	Plant[1] lodging pct	Grain Protein pct
Quantum	XH9801	108	109	107	61.9	37	15.8	3	11.8
Quantum	AP 7510	107	107	107	60.6	36	16.6	3	11.7
Quantum	XH3207	107	107	106	60.2	35	16.0	1	12.2
Quantum	XH7463	105	97	113	60.1	39	15.9	13	11.3
Quantum	XH9815	105	103	106	60.4	38	15.1	6	12.0
Gen Mills	GM1002 (W)	104	97	110	62.1	35	14.8	3	11.2
Quantum	7406	104	92	115	59.5	39	16.4	18	11.4
Quantum	7588	103	94	111	60.0	41	15.3	43	11.3
-----	NW97S278 (W)	102	99	105	61.7	37	14.0	14	11.2
Quantum	XH9806	102	98	105	61.0	37	16.8	0	11.6
-----	Prairie Red	101	102	100	59.9	38	14.6	16	11.8
-----	Wesley	99	105	93	59.6	34	14.8	7	12.1
-----	NW97S154 (W)	99	98	100	59.4	37	14.2	3	11.7
-----	Nuplains (W)	98	96	100	61.6	36	15.8	32	12.2
-----	2137	98	99	97	60.9	39	15.2	0	11.3
Gen Mills	GM1001 (W)	98	90	105	61.3	40	17.3	44	12.1
-----	Yumar	97	90	103	59.8	38	16.0	34	11.8
-----	NE95473	97	93	100	61.1	41	16.5	6	12.1
-----	Akron	96	85	107	58.7	40	16.8	32	11.6
-----	Betty (W)	95	98	92	60.8	40	16.4	12	12.8
-----	NW97S343 (W)	95	86	103	60.3	36	14.1	29	11.1
-----	Heyne (W)	95	96	94	61.8	36	15.8	21	12.4
Gen Mills	GM1003 (W)	95	92	98	57.9	38	17.7	3	12.1
-----	Halt	95	88	102	59.9	37	16.5	58	11.8
-----	NW97S312 (W)	94	78	110	57.9	34	17.5	22	12.3
-----	Millennium	94	88	100	60.3	41	15.9	23	11.9
-----	Jagger	92	90	94	60.2	35	17.7	72	12.5
-----	NE94654	89	77	100	58.0	39	17.5	29	12.5
-----	NW97S218 (W)	87	82	91	60.5	35	16.9	36	12.5
-----	Trego (W)	87	76	98	61.0	38	16.6	58	12.0
-----	NW97S182 (W)	86	75	97	58.7	41	15.6	29	12.2
-----	Culver	85	78	91	58.0	37	15.8	68	11.8
-----	Alliance	85	71	99	59.3	37	16.6	79	11.5
-----	Cougar	82	77	86	61.2	42	13.5	20	13.0
-----	Jules	82	64	99	56.0	38	17.5	31	11.1
-----	NE95510	82	65	98	60.4	39	18.3	63	12.2
Gen Mills	Nuwest (W)	81	71	91	59.1	39	18.3	7	12.1
-----	Arapahoe	75	63	87	57.1	40	17.5	69	13.1
Average all entries		95	89	101	60.0	38	16.1	26	11.9
Dif. req for sig. 5%		16	9	9	2.4	1	1.8	22	0.9

(W) indicates white wheat

[1] Plant height and lodging are from Cheyenne County

PANHANDLE IRRIGATED WHEAT VARIETY TESTS 1996 - 2000

BRAND	VARIETY	Grain Yield Bu/A	Plant Lodging pct	Seed Weight 000/lb	Grain Protein pct	Bushel Weight lb/bu	Plant Height inches
				Two year averages			
Quantum	XH9806	94.25	0.00	16.20	11.90	59.90	33.00
-----	2137	92.00	0.00	14.75	11.40	59.80	35.00
-----	Betty (W)	91.50	6.00	16.05	12.70	60.00	36.00
-----	NE95473	91.00	3.00	15.95	12.30	60.50	36.00
-----	Millennium	89.75	13.00	14.95	11.80	59.50	36.00
Quantum	AP 7510	89.25	2.00	16.85	12.30	59.60	31.00
-----	Jagger	87.50	37.00	16.60	12.90	59.00	32.00
-----	Yumar	87.00	17.00	16.15	11.80	58.60	34.00
Quantum	7406	86.25	9.00	15.75	11.70	58.60	35.00
-----	Wesley	85.75	4.00	15.00	12.50	58.60	30.00
-----	Heyne (W)	85.50	11.00	15.45	12.70	60.40	32.00
-----	Halt	85.25	29.00	16.75	12.70	58.50	33.00
-----	Nuplains (W)	84.75	16.00	15.70	12.50	60.80	32.00
-----	Akron	83.00	16.00	16.30	11.90	57.40	35.00
-----	NE94654	82.50	15.00	16.30	12.50	56.50	35.00
-----	Trego (W)	82.50	33.00	15.75	11.90	60.30	34.00
-----	Culver	78.00	36.00	15.10	11.80	57.70	34.00
-----	Alliance	78.00	41.00	15.80	11.70	58.00	33.00
-----	Cougar	76.00	10.00	13.45	13.00	60.30	37.00
-----	Arapahoe	74.50	39.00	16.60	12.80	57.00	36.00
-----	Jules	69.75	16.00	16.25	11.30	54.70	34.00
Average all entries		84.48	16.76	15.80	12.20	58.84	33.95
Dif req for sig 5%		N.S.	N.S.	1.60	0.75	1.02	1.50
				Three year averages			
Quantum	AP 7510	101.17	2.00	16.20	12.30	59.10	33.00
-----	2137	93.33	4.00	14.70	11.20	58.80	36.00
-----	Millennium	93.17	18.00	14.93	11.90	58.80	39.00
-----	Jagger	92.67	33.00	16.37	12.90	57.70	34.00
Quantum	7406	90.83	13.00	15.63	11.70	57.90	36.00
-----	Yumar	89.67	16.00	15.47	11.90	58.20	35.00
-----	Wesley	89.50	3.00	14.80	12.40	57.90	33.00
-----	Halt	87.83	31.00	17.10	12.80	56.70	35.00
-----	Nuplains (W)	85.17	20.00	16.30	12.80	59.70	34.00
-----	Cougar	82.33	7.00	12.97	13.00	60.40	38.00
-----	Akron	82.33	22.00	16.00	12.10	56.60	37.00
-----	Culver	81.00	39.00	14.70	12.00	57.40	36.00
-----	Arapahoe	76.33	44.00	16.27	12.90	56.60	38.00
-----	Alliance	76.00	44.00	15.83	11.70	56.90	36.00
-----	Jules	71.83	17.00	16.80	11.50	54.60	36.00
Average all entries		86.21	20.87	15.60	12.21	57.82	35.73
Dif req for sig 5%		12.30	22.30	1.70	0.59	1.57	1.52

Continued on page 2

PANHANDLE IRRIGATED WHEAT VARIETY TESTS 1996 - 2000 Page 2

BRAND	VARIETY	Grain Yield Bu/A	Plant Lodging pct	Seed Weight 000/lb	Grain Protein pct	Bushel Weight lb/bu	Plant Height inches
				Four year averages			
Quantum	AP 7510	100.38	2.00	16.80	12.40	59.10	34.00
-----	Jagger	93.00	27.00	16.55	12.90	57.50	35.00
-----	2137	92.00	3.00	15.10	11.30	58.80	37.00
Quantum	7406	88.63	12.00	16.50	11.80	57.40	37.00
-----	Halt	83.38	32.00	18.10	12.90	55.80	35.00
-----	Akron	78.50	22.00	16.78	12.10	56.10	37.00
-----	Culver	78.25	36.00	15.28	12.00	57.00	37.00
-----	Arapahoe	73.25	48.00	17.23	12.80	56.60	39.00
-----	Alliance	72.75	42.00	16.55	11.70	56.70	36.00
-----	Jules	69.88	23.00	16.30	11.60	54.80	37.00
Average all entries		83.00	24.70	16.52	12.15	56.98	36.40
Dif req for sig 5%		10.80	19.60	1.57	0.49	1.48	1.33
				Five year averages			
Quantum	AP 7510	94.70	2.00	17.04	12.40	58.70	34.00
-----	2137	90.00	3.00	15.14	11.40	58.50	37.00
-----	Halt	81.30	32.00	18.00	12.90	55.70	35.00
-----	Akron	77.20	22.00	17.12	12.10	56.10	38.00
-----	Alliance	71.60	42.00	16.94	11.80	56.60	37.00
-----	Arapahoe	71.20	48.00	17.72	12.80	56.20	39.00
-----	Jules	66.30	23.00	17.06	11.70	54.00	37.00
Average all entries		78.90	24.57	17.00	12.16	56.54	36.71
Dif req for sig 5%		10.10	NA	1.60	0.43	1.42	1.15

Wheat Yields (bu/a) of varieties at all locations - 2000

		Jefferson	Saunders	Clay	Webster	Keith	Red Wil.	Lincoln	Perkins	Furnas	Chey.	Deuel	S. B.	Dawes	Box Bu.	Kimball	Morrill	Chey Irr.	Albin	Ave.
----	Rampart												24.8							24.8
----	SD93267										44.0	18.4	26.9	51.0	38.5	20.7	21.8			31.6
----	Scout66	39.5	50.1	40.5	41.8	51.8	47.7	50.6	33.5	26.90	38.8	20.3	25.1	53.4	47.0	18.2	22.8			38.7
----	Trego (W)	54.4	66.1	74.1	46.6	50.9	54.7	60.9	49.3	27.40	57.2	27.8	24.7	56.0	43.9	20.8	32.8	75.8	98.1	52.6
----	Turkey	29.0	52.9	38.1	36.0	42.2	36.1	44.8	30.5	21.80	36.7	17.7	26.5	40.1	40.9	19.2	25.8			34.4
----	Vista					54.1	50.0	52.9	31.5	26.80	55.6	28.8	31.8	70.8	57.5	22.5	36.2			44.7
----	Wesley	46.9	64.7	70.1	48.9	53.8	49.2	52.8	39.3	26.20	48.6	22.6	22.7	59.0	51.2	18.9	31.5	105.0	93.4	51.7
----	Windstar			68.2	37.8	58.1	43.7	51.1	17.8	22.20	49.2	21.9	25.8	60.1	45.6	20.8	27.3			40.6
----	Yumar																	89.7	103.2	96.5
AgriPro	Hondo	49.1	65.5	67.8	48.4	43.6	43.2	51.2	39.5	29.20										51.0
AgriPro	Thunderbolt					56.6	49.5	59.1	48.1	33.20										53.3
Alliance	Dividend XL						54.3		41.4		52.5				61.0					52.3
Alliance	Maxim XL						55.0		44.1		51.2				60.2					52.6
Alliance	RTU Vitavax						53.4		42.6		51.8				52.8					50.2
Alliance	untreated						52.2		40.8		49.9				57.2					50.0
Gen Mills	GM1001 (W)					49.7	52.6	52.5	35.8	25.20	52.6	20.6	28.7	65.2	47.8	20.5	30.6	90.0	104.9	50.1
Gen Mills	GM1002 (W)					52.7	45.0	52.0	43.4	25.60	51.1	20.1	26.6	54.1	35.4	19.9	28.4	97.3	110.1	48.9
Gen Mills	GM1003 (W)					48.2	46.8	50.4	41.1	26.80	45.4	16.3	26.9	60.2	50.6	20.0	29.8	92.3	98.4	48.2
Gen Mills	Nuwest (W)					35.1	36.7	35.7	17.8	13.40	33.1	11.4	26.0	50.3	29.6	17.3	16.9	70.5	90.7	36.2
Quantum	7406					60.1	51.0	56.1	41.7	36.90	58.3	25.0	28.5	75.4	52.6	22.2	31.1	92.4	114.7	54.5
Quantum	7588					64.1	54.3	60.4	45.2	32.00	53.9	28.2	29.1	75.0	47.6	26.1	34.2	94.2	111.3	55.7
Quantum	AP 7510					56.8	54.4	59.9	44.7	29.30	55.9	24.2	28.3	74.1	49.2	25.1	35.8	107.1	106.8	55.6
Quantum	XH3207					53.8	50.0	55.3	43.0	32.70	56.6	22.1	27.7	72.3	59.0	23.2	32.8	106.5	106.4	54.5
Quantum	XH7463					59.4	55.7	60.6	46.5	32.60	56.2	19.2	31.0	71.9	60.1	23.9	34.7	96.7	113.2	56.1
Quantum	XH9801																	109.2	106.7	108.0
Quantum	XH9806					55.0	55.0	59.0	48.5	33.10	54.1	24.4	28.6	75.6	61.4	23.7	40.2	98.0	105.2	56.1
Quantum	XH9815																	102.6	106.2	104.4
Location average		46.8	60.8	65.2	45.2	52.2	48.4	53.2	38.1	26.4	48.9	21.9	26.7	62.1	51.0	21.0	30.3	88.8	100.6	
LSD .05		6.6	5.2	8.4	5.6	4.0	4.9	4.0	3.8	3.1	6.3	5.4	2.5	7.3	12.3	2.1	5.8	9.0	8.5	

Wheat Yields (bu/a) of varieties at all locations - 2000

		Jefferson	Saunders	Clay	Webster	Keith	Red Wil.	Lincoln	Perkins	Furnas	Chey.	Deuel	S. B.	Dawes	Box Bu.	Kimball	Morrill	Chey Irr.	Albin	Ave.
----	2137	47.2	58.9	71.5	46.1	50.6	50.5	60.2	43.8	28.30	47.6	28.1	23.4	65.0	47.4	22.4	33.7	99.0	97.2	52.5
----	Akron					49.0	50.7	51.4	38.5	26.50	52.6	21.1	27.8	58.0	50.9	21.1	38.8	84.9	107.1	50.1
----	Alliance	49.7	57.2	64.3	44.7	63.4	50.8	58.2	33.9	30.20	50.4	27.0	29.1	71.5	59.1	21.6	35.0	71.0	99.2	52.1
----	Arapahoe	48.9	57.2	61.0	47.8	51.3	43.3	52.6	36.6	24.20	48.1	22.8	25.0	60.1	46.7	20.1	30.0	63.2	87.5	47.2
----	Betty (W)	48.6	59.7	69.7	41.7	45.8	44.0	40.1	41.0	23.10	43.9	22.6	23.2	54.8	43.2	21.0	28.3	97.6	91.5	48.0
----	Buckskin										42.8	18.4	27.1	54.5		20.5	32.5			32.6
----	Cougar	45.8	57.5	61.6	43.8	45.8	40.5	46.7	29.6	26.10	35.8	20.2	22.3	55.6	33.6	19.3	25.6	77.5	86.2	44.0
----	Culver	52.7	63.2	76.5	49.4	52.5	52.6	55.3	31.1	25.00	50.6	27.5	25.9	66.5	49.6	19.2	28.1	77.7	91.4	51.2
----	Halt					55.2	49.7	52.7	42.7	29.00	55.0	21.2	30.5	65.7	59.8	22.4	33.1	87.6	101.7	52.1
----	Heyne (W)	46.5	57.6	60.8	45.2	37.8	47.1	47.2	36.8	24.90	49.5	19.9	22.5	48.2	45.6	22.6	27.4	96.4	93.7	47.3
----	Jagger	47.5	46.5	54.6	48.7	52.1	58.7	59.7	39.1	21.30								90.2	94.4	59.2
----	Jules					50.2	35.4	46.6	31.1	26.70	35.6	17.1	29.5	56.6	50.9	16.7	25.7	64.0	98.6	42.9
----	Lamar												29.4							29.4
----	MT 59719												23.0							23.0
----	MTW9441 (W)												25.5							25.5
----	Millennium	50.1	63.5	64.5	49.2	55.6	48.0	55.5	42.2	25.20	48.8	21.8	29.9	59.5	56.3	22.1	34.0	88.2	100.0	52.3
----	NE94482												27.4							27.4
----	NE94654	50.9	70.0	71.4	51.4	53.4	51.2	55.2	39.7	27.40	52.8	24.0	27.3	69.9	55.8	22.1	31.5	76.8	100.3	53.2
----	NE95473	45.4	63.9	59.8	45.7	48.6	45.9	55.4	38.1	24.20	55.8	23.0	25.3	56.8	52.0	23.0	30.6	93.1	100.4	50.8
----	NE95510	47.9	60.2	60.5	45.4	43.0	43.7	55.1	37.5	19.90	42.8	18.1	22.5	64.8	52.8	19.2	23.5	65.2	98.4	47.1
----	NE97465	43.7	67.3																	55.5
----	NE97689										55.6	22.8	30.0	73.5	59.6	22.3	32.1			42.3
----	NW97S154 (W)	43.1	67.1	72.7	44.6	53.6	48.7	54.4	38.4	26.80	49.9	19.0	24.0	74.6	55.0	21.2	24.3	98.3	99.9	52.3
----	NW97S182 (W)	47.2	60.2	63.3	41.9	51.9	45.4	52.8	31.8	21.40	50.4	25.0	23.5	64.5	52.5	22.0	33.7	74.9	97.4	49.3
----	NW97S218 (W)	43.6	60.4	48.9	45.5	50.6	47.6	48.2	33.4	23.10	46.4	20.4	24.2	55.9	51.0	20.6	24.0	81.9	91.4	46.7
----	NW97S278 (W)	50.2	58.8	64.9	44.3	59.5	48.0	53.2	37.4	23.30	51.1	23.3	27.2	62.3	56.2	20.0	26.9	99.1	104.6	52.2
----	NW97S312 (W)	46.2	61.5	66.1	41.1	49.8	42.3	51.7	30.5	25.70	43.2	16.8	21.9	62.7	49.6	19.7	22.7	78.5	109.6	47.9
----	NW97S343 (W)	52.7	62.0	71.5	49.6	57.2	46.2	53.9	36.0	25.30	47.8	24.3	26.5	63.2	55.0	18.2	34.6	86.0	103.1	52.2
----	Niobrara			81.8	44.7	60.7	49.0	58.4	37.5	28.20	53.7	23.9	27.7	68.2	50.4	20.8	36.2			47.2
----	Nuplains (W)	43.4	69.4	76.8	43.8	53.7	50.4	57.0	36.8	24.30	47.9	20.5	27.7	63.3	56.8	21.4	29.9	95.8	100.2	52.6
----	Prairie Red					56.7	56.0	54.9	46.1	29.10	58.0	26.6	28.5	65.4	61.0	22.8	38.1	101.6	100.3	55.1
----	Pronghorn					55.3	47.3	52.8	37.9	26.80	39.0	21.4	28.1	57.4	53.9	20.9	31.5			40.5
----	Prowers					49.1	40.3	45.0	36.2	24.30	39.7	17.1	28.9	48.1	44.4	20.2	29.5			36.2

Wheat Yields (% of Alliance, Arapahoe, and Millennium) of varieties at all locations - 2000

	Jefferson	Saunders	Clay	Webster	Keith	Red Wil.	Lincoln	Perkins	Furnas	Chey.	Deuel	S. B.	Dawes	Box Bu.	Kimball	Morrill	Chey Irr.	Albin	Ave.
2137	95.2	99.3	113.0	97.6	89.1	106.6	108.6	116.6	106.7	96.9	117.7	83.6	102.0	87.7	105.3	102.1	133.5	101.7	103.9
Akron	NA	NA	NA	NA	86.3	107.0	92.7	102.5	99.9	107.1	88.4	99.3	91.1	94.2	99.2	117.6	114.5	112.1	99.1
Alliance	100.3	96.5	101.6	94.6	111.7	107.2	105.0	90.2	113.8	102.6	113.1	103.9	112.2	109.4	101.6	106.1	95.8	103.8	103.1
Arapahoe	98.7	96.5	96.4	101.2	90.4	91.4	94.9	97.4	91.2	98.0	95.5	89.3	94.3	86.4	94.5	90.9	85.3	91.6	93.4
Betty (W)	98.0	100.7	110.2	88.3	80.7	92.9	72.3	109.1	87.1	89.4	94.7	82.9	86.0	80.0	98.7	85.8	131.7	95.7	95.0
Buckskin	NA	NA	NA	NA	NA	NA	NA	NA	NA	87.2	77.1	96.8	85.6	NA	96.4	98.5	NA	NA	64.5
Cougar	92.4	97.0	97.4	92.7	80.7	85.5	84.2	78.8	98.4	72.9	84.6	79.6	87.3	62.2	90.8	77.6	104.5	90.2	87.1
Culver	106.3	106.6	120.9	104.6	92.5	111.0	99.8	82.8	94.2	103.1	115.2	92.5	104.4	91.8	90.3	85.2	104.8	95.6	101.3
Halt	NA	NA	NA	NA	97.2	104.9	95.1	113.7	109.3	112.0	88.8	108.9	103.1	110.7	105.3	100.3	118.2	106.4	103.1
Heyne (W)	93.8	97.1	96.1	95.7	66.6	99.4	85.1	98.0	93.8	100.8	83.4	80.4	75.7	84.4	106.3	83.0	130.0	98.0	93.6
Jagger	95.8	78.4	86.3	103.1	91.8	123.9	107.7	104.1	80.3	NA	NA	NA	NA	NA	NA	NA	121.7	98.8	117.2
Jules	NA	NA	NA	NA	88.4	74.7	84.1	82.8	100.6	72.5	71.6	105.4	88.9	94.2	78.5	77.9	86.3	103.2	84.9
Lamar	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	105.0	NA	NA	NA	NA	NA	NA	58.2
MT 59719	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	82.1	NA	NA	NA	NA	NA	NA	45.5
MTW9441 (W)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	91.1	NA	NA	NA	NA	NA	NA	50.5
Millennium	101.1	107.1	101.9	104.2	97.9	101.3	100.1	112.3	95.0	99.4	91.3	106.8	93.4	104.2	103.9	103.0	119.0	104.6	103.5
NE94482	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	97.9	NA	NA	NA	NA	NA	NA	54.2
NE94654	102.7	118.0	112.9	108.8	94.1	108.1	99.6	105.7	103.3	107.5	100.6	97.5	109.7	103.3	103.9	95.5	103.6	105.0	105.3
NE95473	91.6	107.8	94.5	96.8	85.6	96.9	99.9	101.4	91.2	113.6	96.4	90.4	89.2	96.2	108.2	92.7	125.6	105.1	100.5
NE95510	96.6	101.5	95.6	96.1	75.7	92.3	99.4	99.8	75.0	87.2	75.8	80.4	101.7	97.7	90.3	71.2	87.9	103.0	93.2
NE97465	88.2	113.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	109.8
NE97689	NA	NA	NA	NA	NA	NA	NA	NA	NA	113.2	95.5	107.1	115.4	110.3	104.9	97.3	NA	NA	83.7
NW97S154 (W)	87.0	113.2	114.9	94.4	94.4	102.8	98.1	102.2	101.0	101.6	79.6	85.7	117.1	101.8	99.7	73.6	132.6	104.5	103.5
NW97S182 (W)	95.2	101.5	100.1	88.7	91.4	95.8	95.2	84.6	80.7	102.6	104.7	83.9	101.3	97.2	103.4	102.1	101.0	101.9	97.6
NW97S218 (W)	88.0	101.9	77.3	96.3	89.1	100.5	87.0	88.9	87.1	94.5	85.5	86.4	87.8	94.4	96.9	72.7	110.5	95.6	92.4
NW97S278 (W)	101.3	99.2	102.6	93.8	104.8	101.3	96.0	99.6	87.8	104.1	97.6	97.1	97.8	104.0	94.0	81.5	133.7	109.5	103.3
NW97S312 (W)	93.2	103.7	104.5	87.0	87.7	89.3	93.3	81.2	96.9	88.0	70.4	78.2	98.4	91.8	92.6	68.8	105.9	114.7	94.8
NW97S343 (W)	106.3	104.6	113.0	105.0	100.8	97.5	97.2	95.8	95.4	97.4	101.8	94.6	99.2	101.8	85.6	104.8	116.0	107.9	103.3
Niobrara	NA	NA	129.3	94.6	106.9	103.4	105.4	99.8	106.3	109.4	100.1	98.9	107.1	93.3	97.8	109.7	NA	NA	93.4
Nuplains (W)	87.6	117.0	121.4	92.7	94.6	106.4	102.8	98.0	91.6	97.6	85.9	98.9	99.4	105.1	100.6	90.6	129.2	104.8	104.1
Prairie Red	NA	NA	NA	NA	99.9	118.2	99.0	122.7	109.7	118.1	111.5	101.8	102.7	112.9	107.2	115.5	137.1	105.0	109.0
Pronghorn	NA	NA	NA	NA	97.4	99.9	95.2	100.9	101.0	79.4	89.7	100.4	90.1	99.8	98.3	95.5	NA	NA	80.1
Prowers	NA	NA	NA	NA	86.5	85.1	81.2	96.4	91.6	80.9	71.6	103.2	75.5	82.2	95.0	89.4	NA	NA	71.6

Wheat Yields (% of Alliance, Arapahoe, and Millennium) of varieties at all locations - 2000

		Jefferson	Saunders	Clay	Webster	Keith	Red Wil.	Lincoln	Perkins	Furnas	Chey.	Deuel	S. B.	Dawes	Box Bu.	Kimball	Morrill	Chey Irr.	Albin	Ave.
----	Rampart	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	88.6	NA	NA	NA	NA	NA	NA	49.1
----	SD93267	NA	NA	NA	NA	NA	NA	NA	NA	NA	89.6	77.1	96.1	80.1	71.3	97.3	66.1	NA	NA	62.5
----	Scout66	79.7	84.5	64.0	88.5	91.3	100.7	91.3	89.2	101.4	79.0	85.1	89.6	83.8	87.0	85.6	69.1	NA	NA	76.6
----	Trego (W)	109.8	111.5	117.1	98.7	89.7	115.5	109.9	131.2	103.3	116.5	116.5	88.2	87.9	81.2	97.8	99.4	102.2	102.7	104.1
----	Turkey	58.5	89.2	60.2	76.2	74.3	76.2	80.8	81.2	82.2	74.7	74.2	94.6	63.0	75.7	90.3	78.2	NA	NA	68.1
----	Vista	NA	NA	NA	NA	95.3	105.6	95.4	83.9	101.0	113.2	120.7	113.6	111.1	106.4	105.8	109.7	NA	NA	88.5
----	Wesley	94.6	109.1	110.8	103.5	94.8	103.9	95.2	104.6	98.7	99.0	94.7	81.1	92.6	94.8	88.9	95.5	141.6	97.7	102.3
----	Windstar	NA	NA	107.8	80.0	102.3	92.3	92.2	47.4	83.7	100.2	91.8	92.1	94.3	84.4	97.8	82.7	NA	NA	80.3
----	Yumar	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	121.0	108.0	191.0
AgriPro	Hondo	99.1	110.5	107.2	102.5	76.8	91.2	92.4	105.1	110.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	100.9
AgriPro	Thunderbolt	NA	NA	NA	NA	99.7	104.5	106.6	128.0	125.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	105.5
Alliance	Dividend XL	NA	NA	NA	NA	NA	114.6	NA	110.2	NA	106.9	NA	NA	NA	112.9	NA	NA	NA	NA	103.5
Alliance	Maxim XL	NA	NA	NA	NA	NA	116.1	NA	117.4	NA	104.3	NA	NA	NA	111.4	NA	NA	NA	NA	104.1
Alliance	RTU Vitavax	NA	NA	NA	NA	NA	112.7	NA	113.4	NA	105.5	NA	NA	NA	97.7	NA	NA	NA	NA	99.3
Alliance	untreated	NA	NA	NA	NA	NA	110.2	NA	108.6	NA	101.6	NA	NA	NA	105.9	NA	NA	NA	NA	98.9
Gen Mills	GM1001 (W)	NA	NA	NA	NA	87.6	111.0	94.7	95.3	95.0	107.1	86.3	102.5	102.4	88.5	96.4	92.7	121.4	109.8	99.1
Gen Mills	GM1002 (W)	NA	NA	NA	NA	92.8	95.0	93.8	115.5	96.5	104.1	84.2	95.0	84.9	65.5	93.6	86.1	131.3	115.2	96.8
Gen Mills	GM1003 (W)	NA	NA	NA	NA	84.9	98.8	90.9	109.4	101.0	92.5	68.3	96.1	94.5	93.6	94.0	90.3	124.5	103.0	95.4
Gen Mills	Nuwest (W)	NA	NA	NA	NA	61.8	77.5	64.4	47.4	50.5	67.4	47.8	92.9	79.0	54.8	81.3	51.2	95.1	94.9	71.6
Quantum	7406	NA	NA	NA	NA	105.9	107.7	101.2	111.0	139.1	118.7	104.7	101.8	118.4	97.3	104.4	94.2	124.6	120.0	107.8
Quantum	7588	NA	NA	NA	NA	112.9	114.6	109.0	120.3	120.6	109.8	118.2	103.9	117.7	88.1	122.7	103.6	127.1	116.5	110.2
Quantum	AP 7510	NA	NA	NA	NA	100.1	114.8	108.1	119.0	110.4	113.8	101.4	101.1	116.3	91.1	118.0	108.5	144.5	111.8	110.0
Quantum	XH3207	NA	NA	NA	NA	94.8	105.6	99.8	114.5	123.2	115.3	92.6	98.9	113.5	109.2	109.1	99.4	143.7	111.3	107.8
Quantum	XH7463	NA	NA	NA	NA	104.6	117.6	109.3	123.8	122.9	114.5	80.4	110.7	112.9	111.2	112.4	105.2	130.4	118.5	111.0
Quantum	XH9801	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	147.3	111.6	213.7
Quantum	XH9806	NA	NA	NA	NA	96.9	116.1	106.4	129.1	124.7	110.2	102.2	102.1	118.7	113.6	111.4	121.8	132.2	110.1	111.0
Quantum	XH9815	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	138.4	111.1	206.6

Bushel weight of wheat varieties at all locations

		Jefferson	Saunders	Clay	Webster	Keith	Red Willow	Lincoln	Perkins	Furnas
-----	2137	57.9	56.5	55.9	57.1	59.1	55.1	57.9	54.5	57.0
-----	Akron					57.5	56.1	58.6	53.0	57.2
-----	Alliance	58.0	55.7	55.5	56.0	59.0	57.2	58.9	53.4	57.9
-----	Arapahoe	57.7	56.6	55.7	59.2	55.9	56.0	57.9	52.0	56.2
-----	Betty (W)	59.0	55.9	57.3	59.6	56.6	55.4	55.5	53.9	56.4
-----	Buckskin									
-----	Cougar	59.7	58.5	58.7	59.7	59.3	58.0	56.3	53.0	57.3
-----	Culver	58.4	56.7	57.3	57.9	57.4	56.7	57.1	53.7	56.9
-----	Halt					56.9	56.6	57.7	53.6	57.3
-----	Heyne (W)	58.9	57.1	56.9	59.2	55.9	56.1	59.8	55.5	57.3
-----	Jagger	59.4	57.3	56.4	58.3	57.3	58.1	57.9	52.6	57.0
-----	Jules					56.2	55.0	55.2	50.9	56.8
-----	Lamar									
-----	MT 59719									
-----	MTW9441 (W)									
-----	Millennium	59.2	56.9	57.4	59.4	57.6	56.3	57.3	53.8	57.3
-----	NE94482									
-----	NE94654	57.4	55.5	55.8	57.9	56.5	56.1	54.7	52.9	57.0
-----	NE95473	58.1	57.0	56.9	59.2	55.9	56.7	57.0	53.5	56.3
-----	NE95510	59.1	57.8	57.6	60.2	56.5	56.6	56.1	54.2	56.8
-----	NE97465	60.2	58.0							
-----	NE97689									
-----	NW97S154 (W)	57.4	54.4	56.4	55.9	57.1	56.3	54.8	53.1	57.1
-----	NW97S182 (W)	58.2	55.8	56.3	59.5	56.7	56.9	57.1	53.5	56.0
-----	NW97S218 (W)	57.9	55.5	55.4	58.5	56.5	56.5	56.6	52.2	58.5
-----	NW97S278 (W)	58.7	54.9	55.5	57.8	58.4	57.1	55.3	52.7	57.3
-----	NW97S312 (W)	57.0	54.5	55.1	57.8	56.2	54.3	54.4	52.2	56.6
-----	NW97S343 (W)	59.5	56.8	56.9	57.4	58.6	57.6	55.7	53.3	57.5
-----	Niobrara			57.2	58.4	58.4	56.9	57.0	54.0	56.5
-----	Nuplains (W)	61.6	55.7	57.9	61.6	59.4	58.7	58.6	53.7	57.6
-----	Prairie Red					58.5	58.3	56.8	54.7	57.3
-----	Pronghorn					58.3	57.4	58.4	54.2	57.7
-----	Prowers					57.7	56.6	58.0	54.4	57.5
-----	Rampart									
-----	SD93267									
-----	Scout66	60.3	56.8	58.7	60.2	58.7	58.2	57.3	54.3	57.3
-----	Trego (W)	60.6	56.8	59.0	60.3	59.1	58.0	58.6	54.7	59.0
-----	Turkey	58.4	57.7	57.6	58.1	57.7	55.0	56.0	53.4	56.7
-----	Vista					56.2	56.4	55.5	54.8	55.5
-----	Wesley	56.9	56.1	55.9	58.1	56.1	56.0	57.4	53.5	56.3
-----	Windstar			55.2	58.2	56.8	55.9	54.3	51.4	56.7
-----	Yumar									
AgriPro	Hondo	59.9	58.3	59.4	60.2	58.8	55.9	57.3	54.2	59.2
AgriPro	Thunderbolt					59.1	58.6	58.2	55.0	59.4
Alliance	Dividend XL						57.5		54.2	
Alliance	Maxim XL						58.5		54.5	
Alliance	RTU Vitavax						58.0		55.1	
Alliance	untreated						58.1		54.3	
Gen Mills	GM1001 (W)					58.3	57.6	57.2	52.7	57.5
Gen Mills	GM1002 (W)					58.8	58.3	58.3	54.7	57.8
Gen Mills	GM1003 (W)					54.8	54.8	54.9	52.1	56.4
Gen Mills	Nuwest (W)					53.2	55.1	53.2	50.6	55.6
Quantum	7406					58.9	55.8	56.7	54.0	58.8
Quantum	7588					58.4	56.1	56.6	52.8	58.6
Quantum	AP 7510					59.2	58.6	57.8	54.1	58.6
Quantum	XH3207					58.7	56.3	58.7	55.4	58.6
Quantum	XH7463					58.2	56.2	57.3	52.9	57.7
Quantum	XH9801									
Quantum	XH9806					58.2	56.2	57.4	53.6	58.8
Quantum	XH9815									

Bushel weight of wheat varieties at all locations

Cheyenne	Scotts Bluff	Dawes	Box Butte	Kimball	Morrill	Cheyenne Irr.	Albin	Average
56.2	62.5	61.2	57.5	57.7	61.9	59.4	62.4	58.3
57.0	61.6	61.2	58.0	56.5	61.3	56.1	61.2	58.2
56.0	60.4	60.4	58.3	55.7	61.9	56.3	62.3	57.8
58.0	60.6	60.2	57.3	56.1	60.9	55.4	58.8	57.4
56.9	62.5	59.7	57.4	56.6	60.7	59.9	61.6	58.0
59.0	62.5	61.8		57.9	62.3			60.7
57.7	62.0	61.4	57.9	57.7	60.3	60.2	62.2	58.9
56.3	61.2	61.8	58.1	57.2	60.7	55.3	60.7	57.9
54.7	61.1	61.3	57.3	56.2	61.1	56.7	63.0	58.0
56.6	63.5	60.3	57.8	56.4	61.1	59.7	63.9	58.7
						56.9	63.5	57.8
53.5	61.8	59.2	57.4	55.8	61.1	51.4	60.5	56.5
	64.0							64.0
	60.5							60.5
	60.6							60.6
57.2	61.7	61.2	58.4	56.3	60.9	58.1	62.4	58.4
	61.6							61.6
55.6	60.5	59.2	57.9	55.6	60.5	54.6	61.3	57.0
57.7	61.9	60.5	57.9	56.1	61.6	59.8	62.4	58.3
57.5	61.6	60.3	58.6	57.5	61.2	58.7	62.0	58.5
								59.1
53.8	59.2	58.1	56.2	54.1	60.2			56.9
55.8	60.4	60.6	57.3	53.2	60.2	57.1	61.6	57.0
58.0	62.4	60.6	58.9	56.9	61.8	56.0	61.3	58.1
56.1	61.7	59.2	57.6	55.8	58.7	58.8	62.1	57.4
57.5	62.1	60.6	57.1	55.2	60.8	60.0	63.3	57.9
55.1	61.7	58.9	56.1	53.9	59.9	53.9	61.9	56.4
55.6	61.6	61.4	58.3	56.2	62.0	57.2	63.4	58.2
56.3	60.3	62.3	58.5	55.9	61.6			58.1
58.9	64.3	62.0	61.6	59.4	63.7	58.4	64.7	60.0
57.0	61.7	61.6	58.3	57.4	61.6	57.7	62.0	58.8
59.1	61.4	61.3	58.3	56.2	61.9			58.7
58.8	64.3	61.8	60.5	59.3	62.9			59.4
	62.0							62.0
58.1	62.1	60.8	57.2	56.9	61.7			59.5
58.5	61.9	62.6	60.4	58.1	62.3			59.2
58.7	63.9	61.5	60.3	59.4	63.2	59.0	63.0	59.8
57.7	62.2	59.0	57.0	57.2	60.6			57.7
55.4	60.3	60.8	57.6	56.7	61.5			57.5
55.1	61.1	59.0	57.7	55.1	60.4	56.8	62.3	57.3
53.9	61.6	59.5	56.7	54.3	60.7			56.5
						56.4	63.2	59.8
								58.0
								57.7
56.6			58.9					56.8
57.8			57.7					57.1
56.9			57.9					57.0
57.0			58.6					57.0
57.3	62.1	61.9	58.1	56.8	61.8	59.2	63.3	58.9
58.8	62.6	63.2	58.4	58.5	62.7	60.3	63.9	59.9
53.4	60.4	58.6	56.3	53.5	59.5	54.2	61.6	56.2
55.4	60.7	57.8	57.1	56.8	59.6	56.6	61.5	56.5
58.3	61.9	61.2	57.3	58.7	62.6	55.9	63.0	58.7
56.8	61.0	61.4	57.7	57.8	61.3	57.7	62.3	58.3
57.6	63.2	61.6	58.4	57.2	61.6	58.8	62.4	59.2
58.1	63.3	63.1	59.7	57.1	61.2	58.8	61.6	59.3
58.0	62.4	62.9	59.6	57.0	60.9	57.5	62.6	58.8
						60.3	63.4	61.9
56.3	62.6	61.6	59.9	56.7	61.7	58.4	63.6	58.9
						57.5	63.2	60.4

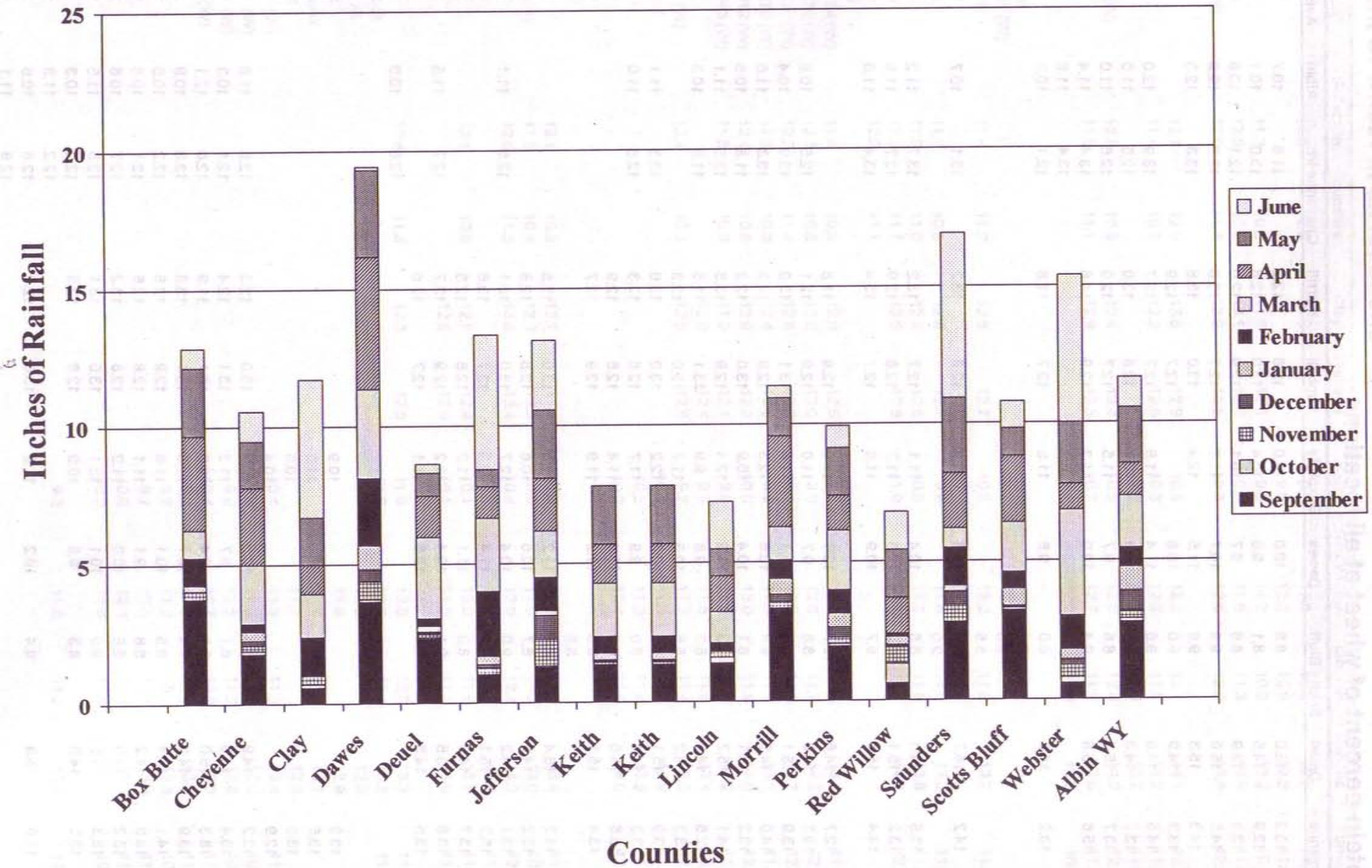
Protein percent of wheat at all locations

		Jefferson	Saunders	Clay	Webster	Keith	Red Willow	Lincoln	Perkins	Furnas
-----	2137	10.5	10.0	11.9	12.7	9.6	11.8	11.5	12.7	11.1
-----	Akron					9.6	12.0	10.9	12.9	11.0
-----	Alliance	11.3	10.0	11.8	12.3	9.6	11.2	10.2	13.2	10.5
-----	Arapahoe	12.5	10.8	13.1	12.4	10.5	11.6	11.3	13.9	11.8
-----	Betty (W)	12.0	11.4	13.2	13.5	10.3	12.6	12.0	13.9	12.5
-----	Buckskin									
-----	Cougar	12.7	12.0	13.8	12.9	10.8	12.2	12.1	14.1	12.7
-----	Culver	11.4	10.8	12.2	12.6	10.3	12.2	11.5	13.2	11.4
-----	Halt					9.6	11.7	11.6	13.7	11.6
-----	Heyne (W)	12.8	10.9	13.4	13.4	10.5	12.9	12.4	14.2	12.1
-----	Jagger	11.9	11.1	12.9	12.3	10.7	12.7	11.1	13.6	11.4
-----	Jules					9.5	12.2	11.3	13.8	10.7
-----	Lamar									
-----	MT 59719									
-----	MTW9441 (W)									
-----	Millennium	11.4	11.2	12.5	12.7	10.5	13.2	11.8	13.7	11.4
-----	NE94482									
-----	NE94654	11.7	10.5	12.8	12.1	9.6	11.6	11.0	13.8	11.6
-----	NE95473	11.9	11.0	12.8	12.5	10.3	11.5	11.9	13.8	11.3
-----	NE95510	12.5	11.1	13.5	12.8	11.0	13.1	12.1	14.3	12.4
-----	NE97465	12.2	11.1							
-----	NE97689									
-----	NW97S154 (W)	11.4	10.5	12.0	12.5	9.5	12.3	10.9	13.4	11.0
-----	NW97S182 (W)	12.3	10.8	13.0	13.0	9.8	12.6	11.7	14.3	12.3
-----	NW97S218 (W)	12.2	11.4	12.8	13.0	10.1	11.0	11.9	13.7	12.0
-----	NW97S278 (W)	11.3	10.9	12.4	12.6	8.9	11.5	11.0	13.1	11.4
-----	NW97S312 (W)	12.4	10.8	12.9	12.3	10.0	13.0	11.9	14.0	12.1
-----	NW97S343 (W)	11.5	10.3	11.9	12.1	9.0	11.6	10.6	13.2	11.0
-----	Niobrara			12.0	12.4	9.5	11.8	11.5	13.4	10.8
-----	Nuplains (W)	12.4	10.3	12.5	12.6	9.7	11.7	11.4	13.6	11.1
-----	Prairie Red					10.1	11.4	11.3	12.9	11.0
-----	Pronghorn					10.5	11.9	11.4	13.9	11.5
-----	Prowers					10.2	12.4	11.5	14.0	11.5
-----	Rampart									
-----	SD93267									
-----	Scout66	12.1	10.8	13.1	11.8	9.8	11.2	11.6	13.4	11.1
-----	Trego (W)	11.0	10.4	12.3	12.3	10.0	11.6	10.9	13.0	10.7
-----	Turkey	12.5	11.5	13.8	13.4	10.4	12.0	12.4	14.2	12.0
-----	Vista					10.5	10.9	12.4	13.6	11.3
-----	Wesley	12.1	10.8	12.8	12.4	10.1	13.0	11.6	13.9	11.5
-----	Windstar			12.6	12.9	10.1	11.5	11.9	14.0	11.7
-----	Yumar									
AgriPro	Hondo	12.4	11.3	12.3	12.0	11.0	12.5	12.0	13.3	11.9
AgriPro	Thunderbolt					10.0	13.0	11.4	13.8	11.1
Alliance	Dividend XL						12.3		12.9	
Alliance	Maxim XL						11.9		12.9	
Alliance	RTU Vitavax						11.6		13.1	
Alliance	untreated						11.3		12.8	
Gen Mills	GM1001 (W)					10.1	11.3	11.2	13.4	11.4
Gen Mills	GM1002 (W)					9.6	12.2	11.2	13.0	10.7
Gen Mills	GM1003 (W)					9.9	12.5	11.3	12.8	10.9
Gen Mills	Nuwest (W)					10.4	12.7	12.0	13.9	11.8
Quantum	7406					9.2	10.9	10.3	13.2	11.0
Quantum	7588					9.7	11.2	10.7	13.8	10.4
Quantum	AP 7510					9.7	13.0	11.1	13.4	11.0
Quantum	XH3207					10.5	12.4	10.8	13.4	11.0
Quantum	XH7463					10.0	11.4	11.5	13.0	10.2
Quantum	XH9801									
Quantum	XH9806					9.3	11.5	11.2	13.4	11.3
Quantum	XH9815									

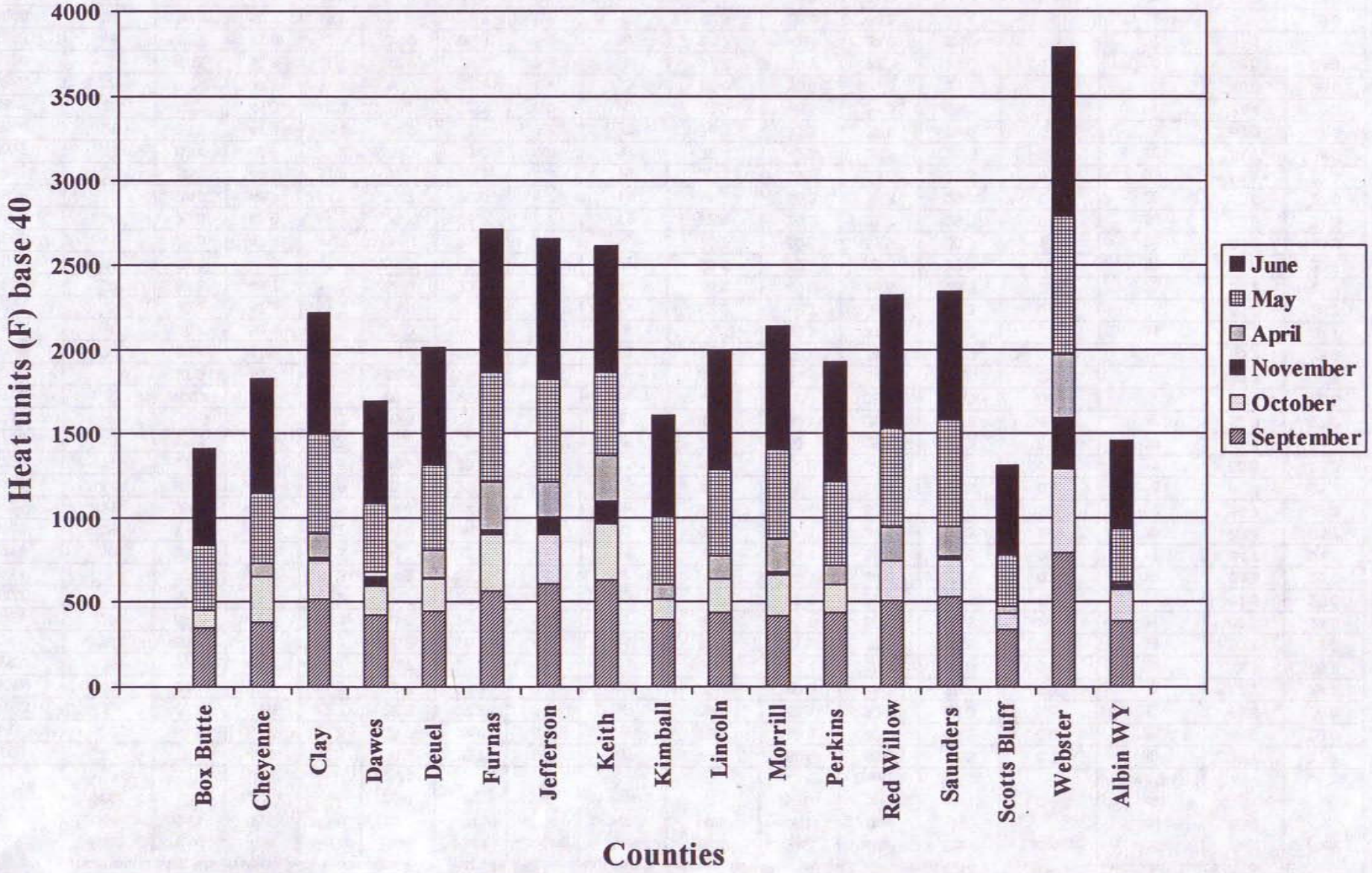
Protein percent of wheat at all locations

Cheyenne	Deuel	Scotts Bluff	Dawes	Boxbutte	Kimball	Morrill	Cheyenne Irr.	Albin	Average
13.2	15.0	8.9	10.0	12.0	12.8	12.2	11.8	10.7	11.6
12.9	14.5	8.1	9.8	10.4	13.0	12.6	13.0	10.1	11.5
13.3	13.9	8.6	9.7	10.1	12.9	12.0	12.1	10.9	11.4
14.5	15.0	9.9	10.7	11.7	12.7	13.6	13.3	12.9	12.4
14.3	15.3	9.6	11.5	12.4	13.0	13.8	13.3	12.3	12.6
13.3	14.9	9.0	10.6		12.7	12.9			12.2
14.6	14.8	9.6	11.4	11.6	12.7	13.7	13.9	12.0	12.6
13.2	14.3	9.3	10.3	10.8	12.8	13.0	12.5	11.0	11.8
13.7	15.3	8.8	9.7	11.5	12.7	12.9	12.6	11.0	11.9
15.6	15.6	9.4	12.0	11.3	12.9	14.6	13.4	11.4	12.7
							13.4	11.6	12.1
13.2	14.6	8.0	9.8	11.5	12.7	11.8	12.1	10.0	11.6
		8.2							8.2
		9.0							9.0
		8.5							8.5
14.2	14.7	9.0	10.4	10.3	12.8	13.2	13.1	10.7	12.1
		9.0							9.0
13.5	14.3	8.5	10.4	11.1	12.7	13.2	13.7	11.2	11.9
13.2	15.1	9.2	10.8	11.7	12.8	12.9	12.7	11.5	12.1
14.4	15.1	9.7	10.9	11.6	12.7	13.4	13.4	11.0	12.5
									11.7
12.7	14.6	8.7	10.1	11.0	12.9	11.8			11.7
13.1	14.0	8.8	9.7	11.0	12.9	12.1	12.5	10.8	11.6
13.9	15.1	9.5	11.1	11.6	13.1	13.0	13.9	10.4	12.3
14.0	14.5	9.8	10.6	12.3	12.9	14.1	13.3	11.6	12.3
12.2	14.1	8.1	10.4	10.9	13.0	12.2	11.8	10.5	11.5
14.1	15.7	8.3	11.2	12.4	12.9	13.5	13.5	11.1	12.4
12.8	14.3	8.3	9.8	9.9	13.1	11.6	11.9	10.3	11.3
13.3	14.2	8.5	10.3	11.7	13.0	12.3			11.8
13.9	15.1	8.8	10.3	12.2	13.0	13.0	13.3	11.1	12.1
13.3	14.1	9.0	9.9	11.7	12.8	12.3	12.6	11.0	11.7
13.6	15.0	8.0	11.4	11.4	12.8	12.9			12.1
13.4	15.1	8.5	11.2	11.9	12.9	12.7			12.2
		8.8							8.8
14.2	15.4	8.6	11.2	11.3	13.0	13.5			12.5
13.2	14.9	8.7	10.6	10.6	12.8	12.5			11.8
13.1	14.2	9.0	10.4	12.7	13.0	13.1	12.9	11.1	11.8
15.2	15.1	9.4	11.4	12.3	12.7	13.6			12.7
13.7	14.5	8.3	11.1	11.2	12.8	12.5			12.0
13.6	15.5	9.1	10.4	11.2	12.9	13.7	12.7	11.5	12.2
13.5	14.5	8.8	10.5	11.1	12.7	12.6			12.1
							12.6	10.9	11.8
									12.1
									12.1
13.3				10.9					12.4
13.5				11.2					12.4
13.5				10.5					12.2
12.9				10.4					11.9
13.2	14.9	8.4	10.5	10.3	13.0	12.3	12.6	11.6	11.8
13.4	14.6	8.1	9.7	11.2	13.1	12.4	12.1	10.3	11.6
13.3	15.0	8.2	9.4	12.0	13.1	11.9	12.0	12.1	11.8
13.9	14.9	8.4	10.7	11.6	13.1	13.3	13.3	10.9	12.2
14.1	14.4	8.5	10.1	11.6	12.9	12.5	12.2	10.5	11.6
13.9	14.2	8.8	9.1	11.1	12.8	12.5	12.1	10.5	11.6
13.2	14.9	8.8	10.0	11.2	12.8	13.2	12.7	10.6	11.9
13.3	14.5	9.0	10.1	12.1	13.0	13.1	12.8	11.5	12.0
13.0	14.8	8.3	9.8	10.9	12.8	12.5	12.2	10.3	11.6
							12.2	11.3	11.8
13.8	15.3	8.4	10.2	11.2	13.0	12.9	12.6	10.6	11.8
							12.8	11.1	12.0

Rainfall (inches) for test sites



Heat units (40 F) at test locations



1999-2000 Winter Barley Variety Trial

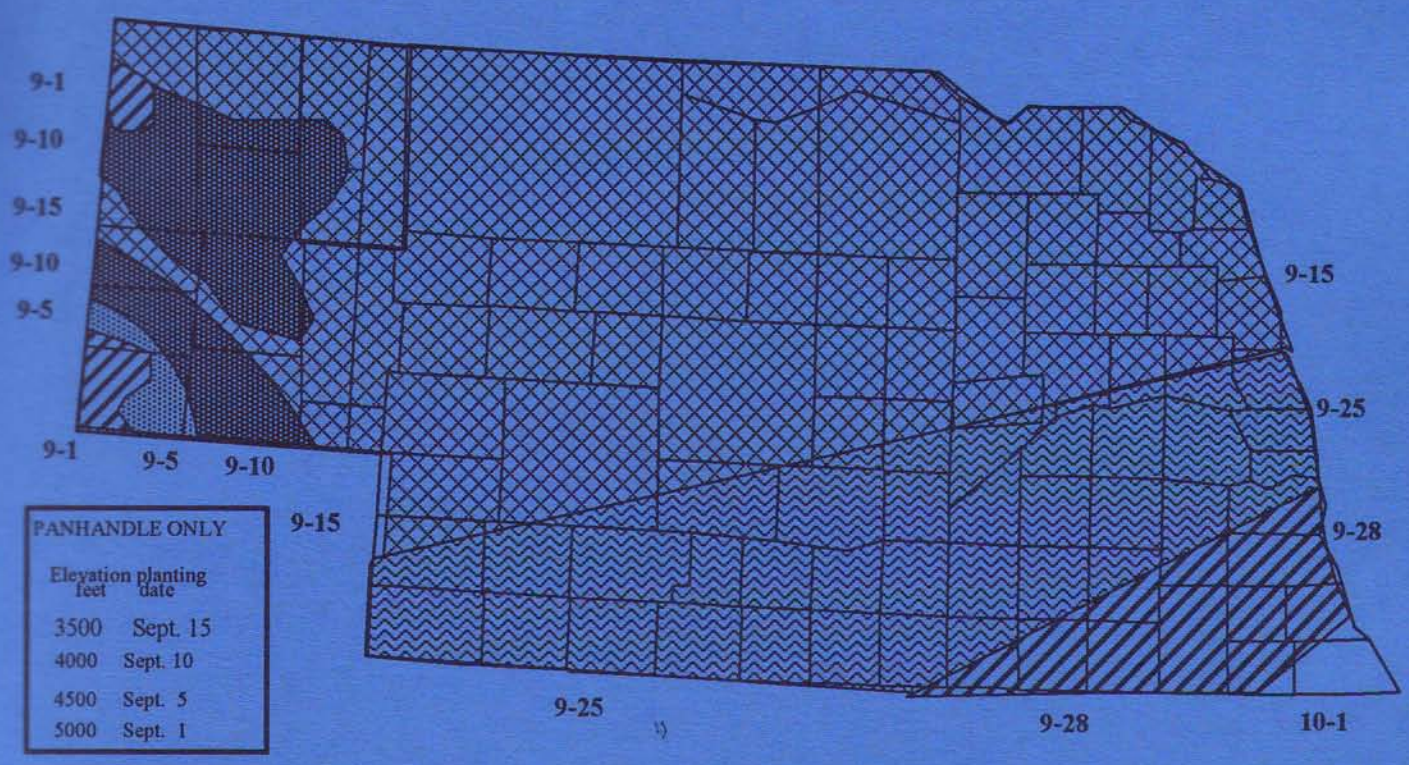
Variety	Location: Colby, KS Planted 9-29, Harvested 6-13 (Fert. 65-0-0)							Location: Lincoln, NE Planted 9-29, Harvested 6-14						Location: North Platte, NE		
	Rank based on yield	Yield bu/a	Test Wt lbs/bu	Grain Moist. %	Head day post 01-Apr	Plant ht in	Lodging 0-9	Rank based on yield	Yield bu/a	Test Wt lbs/bu	Head day post 01-Apr	Plant ht in	Lodging 0-9	Rank based on yield Planted 9-17, H	Yield bu/a	Plant ht in
KARL92	40	71.6	44.2	22.1	38.3	25.7	0.0	40	47.0	60.9	38.0	27.5	0.0	40	26.7	17.7
HITCHCOCK	30	84.1	45.7	11.8	38.7	24.7	0.0	39	70.5	49.8	40.0	25.5	0.0	35	48.0	26.0
PERKINS	6	98.9	50.6	12.7	37.3	27.7	3.3	20	89.7	50.1	35.8	29.0	0.0	5	69.5	30.0
WESKAN	13	94.1	45.4	11.8	38.7	24.3	8.3	34	79.4	49.0	38.3	28.3	0.5	25	57.2	24.3
KANBY	35	81.3	43.8	12.1	36.7	24.7	6.7	33	80.5	48.4	38.3	29.0	0.5	24	58.3	26.7
DUNDY	37	80.1	48.1	12.0	35.0	26.7	6.7	21	89.5	51.5	32.3	30.3	0.0	33	50.1	26.7
NE86954	29	84.3	47.9	12.3	35.0	24.0	0.0	17	91.5	50.0	35.5	27.5	1.8	21	60.7	24.0
NE90721	27	85.6	46.6	11.9	36.7	23.7	0.0	23	87.7	49.2	36.8	26.0	0.0	14	61.9	25.0
NE92711	7	98.1	45.6	11.5	34.3	23.7	0.0	4	103.4	49.1	34.0	27.5	0.0	12	63.3	25.0
NE92714	10	95.9	46.4	11.6	34.7	23.3	0.0	15	92.0	50.4	35.0	26.0	0.0	11	64.7	24.3
NE93760	39	74.6	45.4	11.2	34.0	24.7	0.0	32	80.6	49.1	34.0	29.0	0.0	37	45.4	24.7
NE94725	21	90.1	49.0	11.5	34.7	24.0	1.7	28	83.3	49.8	34.3	27.0	0.0	26	55.7	27.3
NE94737	14	93.4	48.4	11.9	35.3	23.0	0.0	25	86.2	50.4	35.5	24.8	0.0	16	61.4	25.3
NE94738	17	92.5	48.6	11.8	34.7	25.3	5.0	27	83.5	50.8	34.8	28.3	0.0	19	60.8	28.0
NE94753	36	80.6	47.5	11.7	30.7	22.7	8.3	35	78.3	50.8	29.3	28.3	0.0	38	43.7	24.7
NE95711	4	100.9	46.1	11.2	35.0	24.3	0.0	5	102.5	50.1	35.8	29.8	0.0	6	69.3	27.0
NE95713	5	100.4	46.5	11.3	35.0	25.0	1.7	14	92.3	50.1	33.8	28.5	0.0	3	73.9	26.3
NE95714	8	97.9	46.7	11.4	33.3	25.0	1.7	6	100.4	50.4	34.3	30.5	0.0	7	68.8	27.3
NE95716	20	90.4	47.9	11.5	33.3	25.7	0.0	12	92.7	50.4	34.0	29.0	0.0	13	63.3	28.0
NE97829	9	97.7	50.4	11.9	32.0	24.3	3.3	3	106.2	52.3	31.0	29.8	0.5	31	50.3	24.7
NE97891	15	93.3	47.3	11.7	34.0	22.7	5.0	11	92.9	49.7	34.0	26.3	0.0	10	65.2	26.3
NE97896	24	87.5	48.7	11.8	35.0	23.3	5.0	36	76.9	49.9	35.8	28.3	0.0	23	59.2	23.7
NE97971	31	83.6	49.5	11.9	30.7	26.0	5.0	22	88.5	52.3	31.5	33.8	0.0	36	46.8	30.7
NE97988	11	95.0	47.4	11.7	34.0	25.3	3.3	18	90.7	50.5	33.5	30.3	1.0	20	60.8	30.0
NE98803	38	79.3	49.0	11.9	30.7	23.0	1.7	13	92.4	50.2	31.0	29.3	0.0	39	43.3	27.0
NE98805	12	94.3	46.7	14.9	33.7	26.0	1.7	16	91.7	50.3	34.3	29.8	0.5	28	53.0	27.0
NE98813	33	82.1	49.1	11.9	35.3	27.7	3.3	19	90.1	51.9	33.8	31.5	0.0	22	60.1	27.3
NE98823	32	83.4	46.6	11.6	36.0	23.0	0.0	38	72.4	48.5	37.3	25.3	0.0	15	61.7	24.0
NE98884	28	85.5	47.8	10.9	34.0	25.7	1.7	37	76.3	48.5	32.5	29.0	0.0	18	61.0	27.3
NE98885	23	88.2	46.3	10.7	31.7	23.3	0.0	29	82.0	48.1	31.3	28.0	0.0	4	72.4	26.3
NE98888	2	105.0	47.5	11.8	36.0	28.3	6.7	10	93.0	50.7	35.3	31.8	1.8	1	76.8	30.0
NE98890	3	103.0	46.8	11.3	32.0	26.0	3.3	7	97.3	50.2	29.3	29.0	0.0	30	51.5	27.3
NE98893	18	92.5	47.8	11.7	36.0	25.0	5.0	31	80.7	49.4	37.0	26.0	0.0	8	67.5	29.3
NE98899	22	89.0	50.3	12.3	31.3	27.7	6.7	8	96.8	52.1	30.5	33.8	0.0	29	52.9	30.0
NE98914	26	85.9	49.1	11.8	33.0	24.0	0.0	30	81.5	50.3	31.8	27.3	0.0	17	61.2	27.7
NE98915	34	81.7	49.2	11.9	34.0	24.3	0.0	26	85.0	50.5	33.8	27.0	0.0	34	48.3	26.7
NE98918	16	92.8	47.3	11.4	32.0	20.7	0.0	24	87.0	49.8	30.5	26.3	0.0	32	50.2	20.7
NE98919	25	86.0	44.7	11.9	33.3	24.3	0.0	2	106.6	48.5	28.8	31.0	0.0	27	54.6	28.0
NE98934	1	105.9	49.1	12.4	36.7	26.0	0.0	1	106.9	51.7	36.0	30.8	0.5	2	76.6	30.0
NE98936	19	91.8	45.7	11.6	35.0	25.7	0.0	9	93.3	49.1	34.0	28.5	0.0	9	65.8	26.7
	Mean	90.0	47.4	12.1	34.4	24.8	2.4	Mean	88.0	50.4	34.0	28.6	0.2	Mean	58.5	26.5
	CV%	6.8	1.6	8.8	2.3	3.6	85.6	CV%	12.9	1.8	3.8	7.6	N/A	CV%	15.5	5.8
	LSD(0.05)	8.3	1.0	1.4	1.1	1.2	2.8	LSD(0.05)	13.3	1.1	1.5	2.6	N/A	LSD(0.05)	12.3	2.1

The planting date of winter wheat varies substantially as we move across the state. Research to show the best planting date began many years ago. Each year producers verify these dates through observation of fields planted earlier or later than the ideal date. Some years an earlier planting may have an advantage and some years a later date may have an advantage. In the long term, however, the suggested seeding dates will give the highest average yield.

We also recognize that as the number of acres increase, the length of time to plant increases. More of the wheat planting is both before and after the suggested seeding date because of increased planting time. As a starting point, you should try to have half the wheat seeded by the ideal date. You can improve on the average by planting the higher elevation fields and those containing sandy soil first. Leave the lower fields and those with higher clay content until last.

The dates listed on the map below weigh several factors. In the Panhandle, the dates depend on elevation. Using this method, producers can find the ideal date for each field by knowing the elevation. Using a starting point of September 15 for 3500 feet, add one day for each 100 feet lower and subtract one day for each 100 feet higher in elevation. For the rest of the state, the dates September 25 and later are set to avoid Hessian fly infestation. The date is after flies lay their eggs. Other reasons for delaying planting include avoidance of wheat streak mosaic virus, Russian Wheat Aphid, crown and root rot, and too much fall growth. Excessive fall growth causes excessive moisture use and stress. There are several other reasons for planting early. One is to get adequate ground cover to avoid erosion from wind or water. Another is to get adequate plant growth to assure winter hardiness. A third reason is to quicken maturity the following summer and avoid excessive heat stress.

The following map is a guide rather than an absolute deadline. Each producer should make changes to ensure the planting dates fit the conditions of his or her farm.



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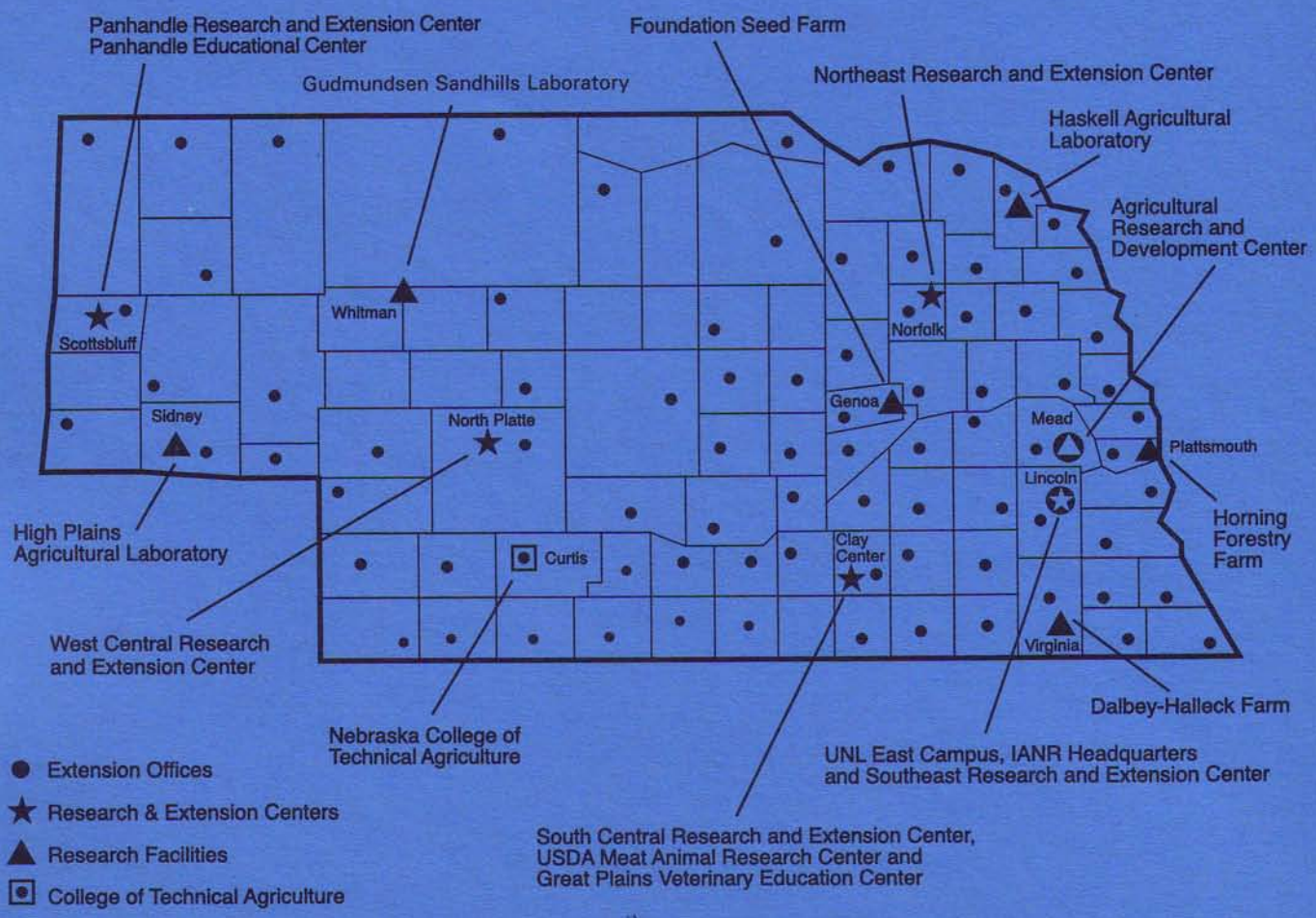
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