

1987

EC87-106 Nebraska Grain Sorghum Hybrid Tests 1987

A. F. Dreier

Roger Wesley Elmore

University of Nebraska-Lincoln, roger.elmore@unl.edu

P. T. Nordquist

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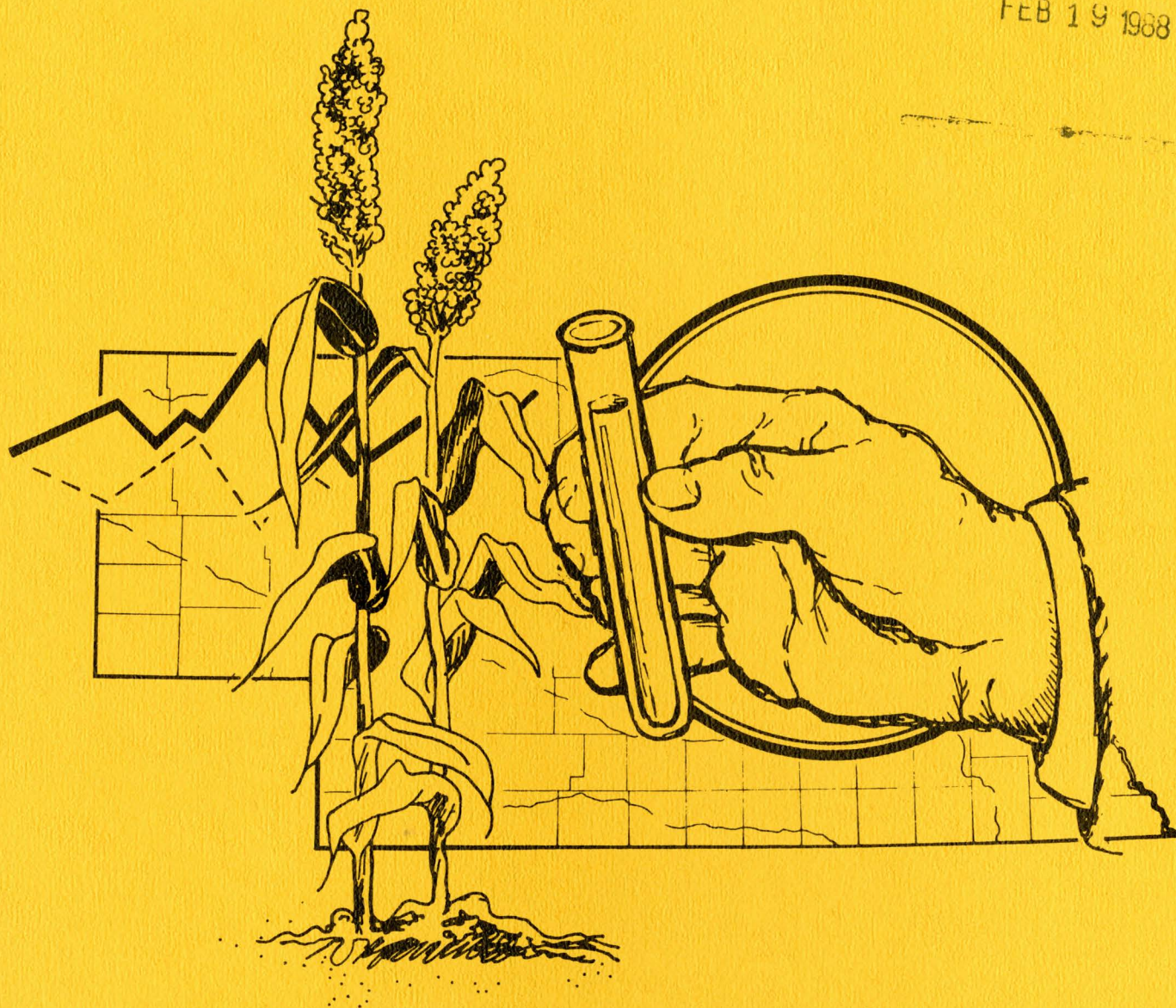
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NEBRASKA GRAIN SORGHUM HYBRID TESTS

1987

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EXTENSION CIRCULAR 87-106
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AUTHORS

A. F. Dreier	Department of Agronomy, Lincoln
R. W. Elmore	South Central Research and Extension Center, Clay Center
P. T. Nordquist	West Central Research and Extension Center, North Platte
L. A. Nelson	Panhandle Research and Extension Center, Scottsbluff

ACKNOWLEDGMENTS

This circular is a progress report of grain sorghum trials conducted to obtain yield and other information for some of the hybrids being marketed. The 1987 season was the 30th that private hybrids were included in extensive trials. Seed producers supported tests through payment of fees.

Cooperating were the Agronomy Department and the South Central, West Central and Panhandle Research and Extension Centers. Acknowledgment is made to Extension Agents and others who assisted in these tests. Special acknowledgment is made to farmers who furnished land for trials. Conduct of experiments and publication of results is a joint effort of the Agricultural Research Division and the Cooperative Extension Service.

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Table B. Entrants. Nebraska grain sorghum performance tests. 1987.

Brand	Entrant	Address
-----	Agricultural Research Div., UNL	Lincoln, Ne 68583
Agrigene	Agrigene Seed Company	Lynnvile, IA 50153
AgriPro	AgriPro	Mission, KS 66201
Asgrow	Asgrow Seed Company	Plainview, TX 79072
Cargill	Cargill Seeds	Minneapolis, MN 55440
Conti-Seeds	Conti-Seeds	Huron, SD 57350
Dahlgren	Dahlgren and Company	Crookston, MN 56716
DeKalb-Pfizer	DeKalb-Pfizer Genetics	Glenvil, NE 68941
Fontanelle	Fontanelle Hybrids	Nickerson, NE 68044
Golden Acres	Taylor-Evans Seed Co.	Tulia, TX 79088
Horizon	Horizon Seeds, Inc.	Lincoln, NE 68501
Jacques	Jacques Seed Co.	Prescott, WI 54021
Lynks Seeds	Lynks Seeds	Marshalltown, IA 50158
McCurdy	McCurdy Seed Company	Fremont, IA 52561
Northrup King	Northrup King Co.	Norfolk, NE 68701
Ohlde	Ohlde Seed Farms	Palmer, KS 66962
Oro	R. C. Young Seed & Grain Co.	Lubbock, TX 79404
Pioneer	Pioneer Hibred Int'l., Inc.	Lincoln, NE 68505
SeedTec/WAC	SeedTec International	Hereford, TX 79045
Siler	Siler Seed	Weston, MO 64098
Stauffer Seeds	Stauffer Seeds	Phillips, NE 68865
Super Crost	Edw. J. Funk & Sons, Inc.	Kentland, IN 47951
Triumph	Triumph Seed Company	Ralls, TX 79357
Warner	George Warner Seed Co.	Hereford, TX 79045

Table C. Grain sorghum entries and zone where tested. 1987.

Brand	Hybrid	Zone	Brand	Hybrid	Zone	Brand	Hybrid	Zone	Brand	Hybrid	Zone
-----	Martin	AB	Dahlgren	DG-37B	AB	Horizon	76 G	AB	SeedTec/WAC	3101	BC
-----	NB 505	BC	DeKalb-Pfizer	DK-18	C	Jacques	Exp. 4311	B	SeedTec/WAC	3502	A
-----	RS 626	AB	DeKalb-Pfizer	DK-39Y	B	Jacques	377-W	AB	SeedTec/WAC	652G	B
Agrigene	AG 2110	B	DeKalb-Pfizer	DK-40	B	Jacques	411	AB	Siler	SG-640	A
Agrigene	AG 2500	A	DeKalb-Pfizer	DK-41Y	B	Jacques	477-W	A	Stauffer Seeds	S9525	A
Agrigene	AG 2720	A	DeKalb-Pfizer	DK-59E	A	Jacques	606	A	Stauffer Seeds	S9750	A
AgriPro	AP 940G	AB	DeKalb-Pfizer	DK-66	A	Lynks Seeds	LX 553 GBT	AB	Super Crost	SC 28	A
AgriPro	AP 965G	AB	DeKalb-Pfizer	P-757	B	Lynks Seeds	LX 597	A	Super Crost	SC 43	A
AgriPro	TEK 1094R	AB	DeKalb-Pfizer	X-744	B	Lynks Seeds	LX 600 GBT	A	Triumph	TR 46	C
AgriPro	EX 1000Y	AB	DeKalb-Pfizer	X-758	A	McCurdy	M410	B	Triumph	TR 50YG	C
AgriPro	EX 1001	AB	Fontanelle	2233	C	McCurdy	M450	AB	Triumph	TR 56YG	B
Asgrow	GS 712	A	Fontanelle	4455	B	McCurdy	M689	AB	Triumph	TR 60-G	AB
Asgrow	Mustang	AB	Fontanelle	W5000	A	McCurdy	M700W	A	Triumph	TR 74CR	AB
Asgrow	Osage	AB	Fontanelle	5546	A	McCurdy	M737	AB	Triumph	TRX 4001	B
Asgrow	Topaz	AB	Fontanelle	5550	A	McCurdy	M745	A	Triumph	TWO 48YG	C
Cargill	DR 1125	A	Fontanelle	5590	A	McCurdy	M747	A	Triumph	TWO 70-D	AB
Cargill	1022	ABC	Golden Acres	T-E Dinero	A	Northrup King	NK 2656	A	Triumph	TWO 80-D	A
Cargill	1096Y	A	Golden Acres	T-E Tuff	B	Northrup King	NK 2665	A	Warner Seeds	W-501-T	C
Cargill	22	BC	Golden Acres	T-E X-8717	B	Ohlde	125	AB	Warner Seeds	W-545-T	C
Cargill	2285	BC	Golden Acres	T-E X-8718	B	Ohlde	134	A	Warner Seeds	W-655-T	B
Cargill	3385	BC	Golden Acres	T-E Y101-G	A	Ohlde	138	A	Warner Seeds	W-695-E	B
Cargill	40	ABC	Golden Acres	T-E Y-45-G	B	Ohlde	139	A	Warner Seeds	W-839 DR	A
Cargill	4462	A	Golden Acres	T-E Y-50	B	Oro	G XTRA	A	Warner Seeds	W-842 DR	A
Cargill	5572	A	Golden Acres	T-E Y-60	AB	Oro	Jayhawker	AB	Warner Seeds	W-844-E	A
Cargill	70	A	Golden Acres	T-E Y-75	A	Pioneer	8333	A	Warner Seeds	W-876 DR	A
Conti-Seeds	Tophand II	A	Golden Acres	T-E Y-77	A	Pioneer	8358	A			
Conti-Seeds	Rawhide	A	Horizon	101 G	A	Pioneer	8493	A			
Conti-Seeds	Rustler	A	Horizon	103 G	A	Pioneer	8686	B			
Dahlgren	DG-27B	C	Horizon	114 G	A	Pioneer	8728	B			
Dahlgren	DG-33B	AB	Horizon	46G	B	SeedTec/WAC	D701G	A			

Variations in soil fertility, moisture conditions and other factors are found in each test area. This makes it impossible to measure yielding ability of hybrids with absolute accuracy. For this reason, small yield differences have little meaning. A statistical measure of differences required for significance is given in each table. These differences were computed at the 5 percent and 25 percent levels of significance. At the 5 percent level a difference of that magnitude would be expected once in twenty trials through chance alone. At the 25 percent level, a difference as large or larger would be expected by chance alone in one of four trials.

RESULTS

The average performance of all entries at each 1987 test location is shown in Table D. The Lincoln County trial was hand harvested. Others were machine harvested. The maturity yield correlation (r value) is an indication of the relationship between maturity (as measured by days to bloom) and grain yield. In two Zone A trials, later maturity was correlated with higher yield. This relationship, even though highly significant, did not indicate that maturity was the major factor in hybrid yield differences. In Zone B (North Platte) there was no relationship between maturity and yield. In Zone C earlier entries were higher in yield.

The average performance of hybrids included in trials over a five-year period is shown in Table E. These data indicate the effect of seasonal growing conditions on the characters measured. Stalk lodging data are included only for experiments where differentials among hybrids were observed.

Zone A (Tables 1A, 1B, 1C, 1D, 1E, 1F, 1G)

Eighty entries were planted at three locations in Zone A. In Saunders County, heavy rains after planting caused washing and loss of stand. No grain yield data were obtained. Days to bloom and early grain moisture data were taken.

The Fillmore County test was planted no-till into soybean residue. Good yields were produced. An infection of Downy Mildew was observed in this plot. Entries were scored on a 1 to 5 basis where 1 = none and 5 = most infection. This disease usually is not common in Nebraska but has previously been observed. The Clay County trial was hailed in early July. High yields were produced.

In 16 of the last 19 years of Zone A trials, later maturity was correlated with higher yield. In 1971 and 1985, there was no relationship. Only in 1976, a very drouthy year with cooler than normal temperatures in August and September, was later maturity correlated with lower grain yield.

Zone B (Tables 2A, 2B, 2C)

A total of 92 entries were tested at this location. Thirty-nine of these are listed by pedigree rather than released hybrid numbers. These are products of the breeding program to produce greenbug resistant hybrids.

This trial was planted into wheat stubble from the 1986 crop. Conditions early in the season were good. Hot dry weather in midsummer did not favor the crop. Weather was favorable in late summer but early entries were infected with stalk rot and later entries did not have time to mature properly. There was no correlation between maturity and yield in 1987.

In 19 years of trials in southwest Nebraska, later maturity was correlated with higher grain yield in 7 seasons, earlier maturity was correlated with lower grain yield in 5 seasons and there was little relationship in 7 seasons. This is an area of wide year-to-year variations in climatic conditions. Yields at North Platte under ecofallow have been high.

Zone C (Tables 3A, 3B, 3C)

Fifteen entries were planted on black and ecofallow in Cheyenne County. The black fallow area was heavily damaged by birds and was abandoned.

Summer conditions generally were good in Cheyenne County. September drouth and cool weather slowed maturity. Plants were mostly dry by killing frost in early October.

In tests since 1977, earlier maturity was correlated with higher grain yield in 1978, 1979, 1983, 1984, 1985 and 1986. There was no close relationship in 1977, 1980, 1981, and 1986. Maturity is very important in selection of hybrids for this area of cool summer nights. Flowering of late entries may be delayed until the grain fill period is too short for production of good yields.

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 0.352

$$\text{Kilogram/hectoliter (kg/hl)} = \text{lb/bu} \times 1.287$$

$$\text{Kilogram/hectare (kg/ha)} = \text{bu/A} \times 62.78 \text{ (56\# bushel)}$$

Table D. Grain sorghum. Average performance at each test location. 1987.

Location	Planted	Seed spacing inches	Planting to bloom days	Plant height inches	Head exertion inches	Test weight lb/bu	Grain yield bu/A	Maturity yield correlation r^2
Zone A (80 entries)								
Saunders	June 6	3.0	62.1	----	---	----	-----	----
Fillmore	June 5	2.9	----	44.3	2.5	59.2	121.6	0.26*
Clay (irrigated)	May 30	2.2	65.2	49.2	5.8	60.0	141.7	0.81**
Average 3 tests	-----	---	64.0	47.0	4.5	59.6	131.9	0.70**
Zone B (92 entries)								
Lincoln	June 3	4.0	68.0	----	---	55.5	66.2	0.05
Zone C (15 entries)								
Cheyenne (wheat)	May 19	4.8	81.4	34.8	---	52.4	59.1	-0.79**

¹ Live seed basis. All row spacings 30 inches.

² Correlation of average days to bloom for zone with acre grain yield. Higher r values indicate closer agreement. * significant (5% level). ** highly significant (1% level). Negative values indicate that later flowering was accompanied by lower yield.

Table E. Average performance by years. Entries common over years by zones. Five years.

Zone and year	Planting bloom days	Plant height inches	Head exsertion inches	Early-grain moisture %	Stalk lodging %	Test weight bu/A	Grain yield
Zone A (18 entries)							
1983	73.4	44.5	3.4	----	0.7	56.0	112.6
1984	73.7	46.8	4.2	27.9	64.3	56.4	132.8
1985	76.1	48.3	4.6	33.1	19.2	54.6	108.1
1986	68.6	48.5	3.7	20.6	3.3	58.0	146.6
1987	64.4	46.6	4.0	36.8	----	59.6	130.7
Five-year average	71.2	46.8	4.0	29.9	22.0	56.9	126.1
Zone B (4 entries)							
1983	73.0	41.3	---	----	1.3	58.9	105.3
1984	74.8	----	---	----	12.0	58.0	56.5
1985	79.3	----	---	----	3.8	53.9	68.8
1986	67.8	44.0	---	16.0	0.3	57.0	101.2
1987	66.5	----	---	----	3.8	55.1	59.8
Five-year average	72.5	42.8	---	----	4.5	56.6	78.3
Zone C (4 entries)							
1983	74.8	40.3	---	----	1.0	53.4	77.8
1984	81.0	40.0	---	18.0	----	51.9	54.5
1985	88.5	34.0	---	----	29.5	44.6	25.8
1986	78.3	38.3	---	18.5	8.5	52.6	57.0
1987	79.8	33.8	---	13.0	----	52.7	64.3
Five-year average	80.5	37.3	---	16.8	13.0	51.0	56.0

TABLE 1A. SUMMARY. SAUNDERS, FILLMORE AND CLAY (IRR.) CO. 1987.

BRAND	HYBRID	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
AVERAGE THREE LOCATIONS								
MC CURDY	M450	57	46	6	21	.	59.5	109
STAUFFER SEEDS	S9525	57	46	5	23	.	57.3	108
DAHLGREN	DG-33B	58	45	5	25	.	59.7	107
DAHLGREN	DG-37B	58	49	8	29	.	59.6	121
-----	RS 626	59	45	5	30	.	57.6	106
AGRIPRO	AP 940G	59	48	6	26	.	60.1	123
CARGILL	1022	59	44	3	31	.	60.7	129
LYNKS SEEDS	LX 553 GBT	59	46	6	29	.	60.1	116
OHLDE	125	59	45	5	25	.	59.7	113
GOLDEN ACRES	T-E Y-60	60	50	5	29	.	60.5	123
JACQUES	377-W	60	49	6	31	.	60.4	128
CARGILL	40	61	43	5	32	.	60.8	125
DEKALB-PFIZER	X-758	61	45	5	33	.	60.8	132
PIONEER	8493	61	41	4	31	.	59.6	127
-----	MARTIN	62	43	7	33	.	59.3	85
ORO	JAYHAWKER	62	38	5	32	.	58.5	122
TRIUMPH	TR 74CR	62	49	4	31	.	60.7	126
WARNER SEEDS	W-842DR	62	50	6	32	.	60.3	124
ASGROW	MUSTANG	63	46	6	34	.	60.3	141
FONTANELLE	5546	63	44	4	38	.	60.4	124
FONTANELLE	5590	63	43	5	36	.	59.9	127
JACQUES	411	63	44	4	37	.	59.9	131
MC CURDY	M700W	63	51	5	32	.	61.1	141
NORTHROP KING	NK 2656	63	44	4	37	.	59.8	132
OHLDE	134	63	49	5	34	.	60.6	138
TRIUMPH	TR 60-G	63	46	4	29	.	60.4	132
AGRIPRO	TEK 1094R	64	44	4	36	.	59.8	127
AGRIGENE	AG 2500	64	44	5	36	.	59.9	128
ASGROW	TOPAZ	64	49	6	30	.	61.0	148
CARGILL	4462	64	49	4	33	.	60.3	123
CARGILL	70	64	42	5	37	.	60.6	126
FONTANELLE	W5000	64	49	6	36	.	59.9	135
GOLDEN ACRES	T-E DINERO	64	45	4	34	.	58.9	137
GOLDEN ACRES	T-E Y101-G	64	43	4	35	.	60.2	127
HORIZON	101 G	64	45	5	35	.	60.0	132
HORIZON	103 G	64	50	4	40	.	59.3	142
HORIZON	114 G	64	48	5	38	.	61.0	135
HORIZON	76 G	64	46	3	39	.	59.1	127
MC CURDY	M689	64	45	5	33	.	60.2	136
MC CURDY	M737	64	45	5	39	.	60.0	134
MC CURDY	M747	64	47	4	32	.	59.0	141
SILER	SG-640	64	47	5	38	.	58.9	137
SUPER CROST	SC 28	64	45	5	36	.	59.9	135
TRIUMPH	TWO 70-D	64	47	4	35	.	59.0	133
WARNER SEEDS	W-839 DR	64	46	4	38	.	58.7	131

CONTINUED

TABLE 1A. SUMMARY. CONCLUDED. 1987.

BRAND	HYBRID	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
AVERAGE THREE LOCATIONS								
AGRIPRO	AP 965G	65	47	3	37	.	58.9	140
AGRIPRO	EX 1000Y	65	48	6	36	.	60.4	136
CARGILL	DR 1125	65	48	3	38	.	58.4	128
CARGILL	5572	65	47	3	41	.	59.4	144
CONTI-SEEDS	RAWHIDE	65	45	5	36	.	58.0	126
GOLDEN ACRES	T-E Y-75	65	49	4	36	.	60.5	151
JACQUES	477-W	65	48	6	41	.	60.4	134
MC CURDY	M745	65	47	4	36	.	60.3	136
OHLDE	138	65	45	5	36	.	59.6	125
OHLDE	139	65	46	4	37	.	59.0	140
SEEDTEC/WAC	3502	65	48	6	38	.	60.0	122
SUPER CROST	SC 43	65	46	4	43	.	58.9	136
WARNER SEEDS	W-844-E	65	48	4	41	.	59.9	136
WARNER SEEDS	W-876DR	65	50	3	34	.	59.8	139
AGRIPRO	EX 1001	66	46	4	38	.	57.9	131
ASGROW	OSAGE	66	49	4	36	.	60.2	143
CONTI-SEEDS	TOPHAND II	66	48	4	39	.	58.8	142
FONTANELLE	5550	66	49	4	47	.	59.5	148
LYNKS SEEDS	LX 597	66	48	6	38	.	60.2	130
LYNKS SEEDS	LX 600 GBT	66	51	3	36	.	58.8	144
NORTHROP KING	NK 2665	66	45	2	39	.	59.7	135
PIONEER	8358	66	48	5	35	.	60.5	135
AGRIGENE	AG 2720	67	49	3	39	.	59.5	138
GOLDEN ACRES	T-E Y-77	67	50	3	47	.	59.6	144
JACQUES	606	67	50	3	41	.	59.4	153
ORO	G XTRA	67	50	3	40	.	59.5	141
PIONEER	8333	67	46	4	43	.	60.3	130
SEEDTEC/WAC	D701G	67	47	3	38	.	59.9	142
ASGROW	GS 712	68	49	3	39	.	59.3	140
CARGILL	1096Y	68	54	4	40	.	58.3	138
CONTI-SEEDS	RUSTLER	68	50	3	40	.	59.1	142
DEKALB-PFIZER	DK-59E	68	47	4	49	.	57.6	133
STAUFFER SEEDS	S9750	68	50	3	45	.	59.4	135
TRIUMPH	TWO 80-D	68	50	3	47	.	59.5	145
DEKALB-PFIZER	DK-66	72	59	5	57	.	57.9	147
AVERAGE ALL ENTRIES		64.0	47.0	4.5	36.0		59.6	131.9
DIF. REQ. FOR SIG.	5%	2.1	3.0	2.2	6.2		1.8	21.0
	25%	1.3	1.7	1.3	3.7		1.0	12.2

Plant bloom days: Saunders, Clay.
 Head exsert: Fillmore, Clay
 Early moist: Saunders.

Test weight: Fillmore, Clay.
 Grain yield: Fillmore, Clay.

TABLE 1B. ZONE A. SAUNDERS COUNTY. 1987.

BRAND	HYBRID	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
MC CURDY	M450	54	.	.	21	.	.	.
STAUFFER SEEDS	S9525	54	.	.	23	.	.	.
DAHLGREN	DG-37B	55	.	.	29	.	.	.
AGRIPRO	AP 940G	57	.	.	26	.	.	.
DAHLGREN	DG-33B	55	.	.	25	.	.	.
-----	RS 626	56	.	.	30	.	.	.
OHLDE	125	56	.	.	25	.	.	.
CARGILL	1022	57	.	.	31	.	.	.
LYNKS SEEDS	LX 553 GBT	57	.	.	29	.	.	.
GOLDEN ACRES	T-E Y-60	57	.	.	29	.	.	.
JACQUES	377-W	57	.	.	31	.	.	.
CARGILL	40	57	.	.	32	.	.	.
PIONEER	8493	59	.	.	31	.	.	.
-----	MARTIN	60	.	.	33	.	.	.
DEKALB-PFIZER	X-758	58	.	.	33	.	.	.
TRIUMPH	TR 74CR	60	.	.	31	.	.	.
WARNER SEEDS	W-842DR	60	.	.	32	.	.	.
ORO	JAYHAWKER	59	.	.	32	.	.	.
TRIUMPH	TR 60-G	61	.	.	29	.	.	.
FONTANELLE	5546	60	.	.	38	.	.	.
MC CURDY	M700W	60	.	.	32	.	.	.
ASGROW	MUSTANG	61	.	.	34	.	.	.
CARGILL	70	63	.	.	37	.	.	.
FONTANELLE	5590	61	.	.	36	.	.	.
GOLDEN ACRES	T-E Y101-G	63	.	.	35	.	.	.
JACQUES	411	61	.	.	37	.	.	.
NORTHROP KING	NK 2656	61	.	.	37	.	.	.
OHLDE	134	61	.	.	34	.	.	.
AGRIGENE	AG 2500	62	.	.	36	.	.	.
CARGILL	4462	62	.	.	33	.	.	.
HORIZON	101 G	62	.	.	35	.	.	.
HORIZON	103 G	62	.	.	40	.	.	.
HORIZON	114 G	62	.	.	38	.	.	.
MC CURDY	M737	62	.	.	39	.	.	.
SUPER CROST	SC 28	62	.	.	36	.	.	.
AGRIPRO	TEK 1094R	63	.	.	36	.	.	.
ASGROW	TOPAZ	61	.	.	30	.	.	.
FONTANELLE	W5000	63	.	.	36	.	.	.
MC CURDY	M689	61	.	.	33	.	.	.
MC CURDY	M747	61	.	.	32	.	.	.
TRIUMPH	TWO 70-D	63	.	.	35	.	.	.
WARNER SEEDS	W-839 DR	63	.	.	38	.	.	.
GOLDEN ACRES	T-E DINERO	62	.	.	34	.	.	.
HORIZON	76 G	62	.	.	39	.	.	.
SILER	SG-640	62	.	.	38	.	.	.

CONTINUED

TABLE 1B. SAUNDERS. CONCLUDED.

BRAND	HYBRID	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
AGRIPRO	AP 965G	63	.	.	37	.	.	.
CARGILL	5572	63	.	.	41	.	.	.
CONTI-SEEDS	RAWHIDE	63	.	.	36	.	.	.
OHLDE	138	63	.	.	36	.	.	.
OHLDE	139	63	.	.	37	.	.	.
SUPER CROST	SC 43	65	.	.	43	.	.	.
WARNER SEEDS	W-844-E	63	.	.	41	.	.	.
AGRIPRO	EX 1000Y	64	.	.	36	.	.	.
CARGILL	DR 1125	64	.	.	38	.	.	.
CONTI-SEEDS	TOPHAND II	66	.	.	39	.	.	.
JACQUES	477-W	64	.	.	41	.	.	.
MC CURDY	M745	64	.	.	36	.	.	.
SEEDTEC/WAC	3502	64	.	.	38	.	.	.
WARNER SEEDS	W-876DR	62	.	.	34	.	.	.
AGRIPRO	EX 1001	65	.	.	38	.	.	.
GOLDEN ACRES	T-E Y-75	63	.	.	36	.	.	.
LYNKS SEEDS	LX 597	65	.	.	38	.	.	.
FONTANELLE	5550	66	.	.	47	.	.	.
ASGROW	OSAGE	65	.	.	36	.	.	.
LYNKS SEEDS	LX 600 GBT	65	.	.	36	.	.	.
NORTHROP KING	NK 2665	63	.	.	39	.	.	.
PIONEER	8333	67	.	.	43	.	.	.
PIONEER	8358	63	.	.	35	.	.	.
SEEDTEC/WAC	D701G	66	.	.	38	.	.	.
ORO	G XTRA	65	.	.	40	.	.	.
AGRIGENE	AG 2720	66	.	.	39	.	.	.
GOLDEN ACRES	T-E Y-77	66	.	.	47	.	.	.
JACQUES	606	66	.	.	41	.	.	.
ASGROW	GS 712	67	.	.	39	.	.	.
STAUFFER SEEDS	S9750	67	.	.	45	.	.	.
TRIUMPH	TWO 80-D	69	.	.	47	.	.	.
CARGILL	1096Y	68	.	.	40	.	.	.
DEKALB-PFIZER	DK-59E	66	.	.	49	.	.	.
CONTI-SEEDS	RUSTLER	67	.	.	40	.	.	.
DEKALB-PFIZER	DK-66	70	.	.	57	.	.	.
AVERAGE ALL ENTRIES		62.1			36.0			
DIF. REQ. FOR SIG.	5%	2.6			6.2			
	25%	1.5			3.7			

Planted June 6, early grain moisture Sept. 24-25.
Uneven stands -- no yield data.

CONTINUED

TABLE 1C. ZONE A. FILLMORE COUNTY. 1987.

BRAND	HYBRID	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	DOWNY MILDEW SCORE	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
MC CURDY	M450	59	44	3	2	.	59.9	114
STAUFFER SEEDS	S9525	59	45	4	4	.	57.6	105
DAHLGREN	DG-37B	60	46	5	4	.	60.3	128
AGRIPRO	AP 940G	60	45	3	4	.	60.7	127
DAHLGREN	DG-33B	61	41	3	2	.	59.8	104
-----	RS 626	61	43	3	3	.	58.0	107
OHLDE	125	61	41	1	4	.	60.3	113
CARGILL	1022	61	42	1	2	.	60.8	123
LYNKS SEEDS	LX 553 GBT	61	42	2	4	.	60.8	118
GOLDEN ACRES	T-E Y-60	62	46	2	4	.	60.7	123
JACQUES	377-W	62	46	3	3	.	60.7	127
CARGILL	40	64	41	3	4	.	60.9	127
PIONEER	8493	63	38	1	4	.	59.9	114
-----	MARTIN	63	40	5	4	.	59.6	81
DEKALB-PFIZER	X-758	64	41	2	4	.	60.2	117
TRIUMPH	TR 74CR	63	44	2	3	.	60.7	121
WARNER SEEDS	W-842DR	64	47	3	2	.	60.3	120
ORO	JAYHAWKER	65	35	2	4	.	59.3	119
TRIUMPH	TR 60-G	64	42	2	2	.	60.4	112
FONTANELLE	5546	65	40	2	4	.	59.9	109
MC CURDY	M700W	65	47	3	2	.	60.9	135
ASGROW	MUSTANG	65	46	5	3	.	60.1	138
CARGILL	70	64	40	2	3	.	60.6	119
FONTANELLE	5590	65	39	2	4	.	59.6	113
GOLDEN ACRES	T-E Y101-G	64	39	1	3	.	60.5	125
JACQUES	411	65	40	2	2	.	59.6	127
NORTHROP KING	NK 2656	65	42	2	2	.	60.1	116
OHLDE	134	65	45	2	2	.	59.8	123
AGRIGENE	AG 2500	65	41	2	4	.	59.2	119
CARGILL	4462	65	46	2	2	.	60.2	109
HORIZON	101 G	65	44	3	3	.	59.9	128
HORIZON	103 G	65	46	2	2	.	58.5	124
HORIZON	114 G	65	44	2	3	.	60.7	128
MC CURDY	M737	65	43	2	4	.	59.7	129
SUPER CROST	SC 28	65	43	3	4	.	59.6	129
AGRIPRO	TEK 1094R	65	41	2	4	.	59.7	120
ASGROW	TOPAZ	66	47	3	2	.	60.4	139
FONTANELLE	W5000	65	47	4	4	.	59.3	125
MC CURDY	M689	66	42	3	2	.	60.0	133
MC CURDY	M747	66	46	3	2	.	58.5	133
TRIUMPH	TWO 70-D	65	45	3	2	.	59.0	118
WARNER SEEDS	W-839 DR	65	42	1	2	.	59.1	108
GOLDEN ACRES	T-E DINERO	66	43	3	1	.	58.9	122
HORIZON	76 G	66	43	1	2	.	58.7	108
SILER	SG-640	66	45	2	2	.	58.2	123

CONTINUED

TABLE 1C. FILLMORE. CONCLUDED.

BRAND	HYBRID	PLANT BLOOM DAYS	PLANT HT IN	EAD EXSERT IN	DOWNY MILDEW SCORE	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
AGRIPRO	AP 965G	66	45	1	2	.	58.4	129
CARGILL	5572	66	43	1	2	.	58.5	125
CONTI-SEEDS	RAWHIDE	66	42	4	4	.	57.5	120
OHLDE	138	66	44	3	4	.	58.8	117
OHLDE	139	66	45	3	2	.	58.8	133
SUPER CROST	SC 43	65	42	2	2	.	59.0	122
WARNER SEEDS	W-844-E	66	45	2	2	.	59.3	120
AGRIPRO	EX 1000Y	66	46	4	4	.	59.9	127
CARGILL	DR 1125	66	45	2	2	.	57.5	111
CONTI-SEEDS	TOPHAND II	65	47	3	2	.	58.2	138
JACQUES	477-W	66	44	2	4	.	59.8	126
MC CURDY	M745	66	45	3	2	.	60.1	116
SEEDTEC/WAC	3502	66	45	4	4	.	59.0	108
WARNER SEEDS	W-876DR	67	47	1	2	.	59.0	120
AGRIPRO	EX 1001	66	44	3	1	.	56.9	118
GOLDEN ACRES	T-E Y-75	67	47	3	2	.	60.3	141
LYNKS SEEDS	LX 597	66	46	4	4	.	59.3	116
FONTANELLE	5550	66	47	2	2	.	58.2	132
ASGROW	OSAGE	67	46	2	2	.	60.2	129
LYNKS SEEDS	LX 600 GBT	67	49	2	2	.	57.0	129
NORTHROP KING	NK 2665	68	43	1	2	.	58.4	129
PIONEER	8333	66	43	1	2	.	59.6	120
PIONEER	8358	68	47	5	2	.	60.1	124
SEEDTEC/WAC	D701G	67	44	1	2	.	59.2	121
ORO	G XTRA	68	49	3	2	.	58.4	132
AGRIGENE	AG 2720	68	47	2	2	.	58.4	124
GOLDEN ACRES	T-E Y-77	68	47	2	2	.	58.5	133
JACQUES	606	68	48	2	2	.	58.2	144
ASGROW	GS 712	68	45	2	2	.	57.9	113
STAUFFER SEEDS	S9750	68	46	1	2	.	58.1	111
TRIUMPH	TWO 80-D	67	47	2	2	.	58.2	124
CARGILL	1096Y	68	50	3	2	.	56.7	116
DEKALB-PFIZER	DK-59E	69	46	3	2	.	55.1	109
CONTI-SEEDS	RUSTLER	69	46	2	2	.	57.5	122
DEKALB-PFIZER	DK-66	73	56	4	2	.	55.6	131
AVERAGE ALL ENTRIES		65.2	44.3	2.5	2.7		59.2	121.6
DIF. REQ. FOR SIG.	5%	1.5	4.5	1.8	0.6		1.5	NS
	25%	0.9	2.6	1.1	0.4		0.9	14.3

Planted June 5, harvested Oct. 20.
Plant bloom days from Clay County.

TABLE 1D. ZONE A. CLAY COUNTY IRRIGATED. 1987.

BRAND	HYBRID	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
MC CURDY	M450	59	47	8	.	.	59.0	104
STAUFFER SEEDS	S9525	59	47	6	.	.	57.0	110
DAHLGREN	DG-37B	60	51	10	.	.	58.9	113
AGRI PRO	AP 940G	60	51	8	.	.	59.4	118
DAHLGREN	DG-33B	61	48	6	.	.	59.6	110
-----	RS 626	61	46	6	.	.	57.2	105
OHLDE	125	61	49	8	.	.	59.0	112
CARGILL	1022	61	46	4	.	.	60.6	134
LYNKS SEEDS	LX 553 GBT	61	49	9	.	.	59.3	114
GOLDEN ACRES	T-E Y-60	62	54	8	.	.	60.3	122
JACQUES	377-W	62	52	8	.	.	60.1	129
CARGILL	40	64	44	6	.	.	60.6	122
PIONEER	8493	63	43	6	.	.	59.3	139
-----	MARTIN	63	46	8	.	.	59.0	89
DEKALB-PFIZER	X-758	64	48	7	.	.	61.3	146
TRIUMPH	TR 74CR	63	53	5	.	.	60.7	131
WARNER SEEDS	W-842DR	64	53	9	.	.	60.3	127
ORO	JAYHAWKER	65	41	7	.	.	57.7	125
TRIUMPH	TR 60-G	64	49	6	.	.	60.3	152
FONTANELLE	5546	65	48	6	.	.	60.9	138
MC CURDY	M700W	65	54	7	.	.	61.3	147
ASGROW	MUSTANG	65	46	7	.	.	60.4	143
CARGILL	70	64	44	7	.	.	60.5	132
FONTANELLE	5590	65	46	7	.	.	60.1	140
GOLDEN ACRES	T-E Y101-G	64	47	6	.	.	59.9	128
JACQUES	411	65	47	6	.	.	60.2	134
NORTHROP KING	NK 2656	65	45	5	.	.	59.4	148
OHLDE	134	65	52	7	.	.	61.4	152
AGRIGENE	AG 2500	65	46	7	.	.	60.6	137
CARGILL	4462	65	51	5	.	.	60.4	137
HORIZON	101 G	65	45	6	.	.	60.1	136
HORIZON	103 G	65	53	5	.	.	60.0	159
HORIZON	114 G	65	51	8	.	.	61.3	142
MC CURDY	M737	65	46	7	.	.	60.3	138
SUPER CROST	SC 28	65	46	7	.	.	60.2	141
AGRI PRO	TEK 1094R	65	46	6	.	.	59.9	134
ASGROW	TOPAZ	66	51	8	.	.	61.5	156
FONTANELLE	W5000	65	50	8	.	.	60.5	145
MC CURDY	M689	66	47	6	.	.	60.4	139
MC CURDY	M747	66	48	5	.	.	59.5	149
TRIUMPH	TWO 70-D	65	48	5	.	.	58.9	148
WARNER SEEDS	W-839 DR	65	49	6	.	.	58.2	153
GOLDEN ACRES	T-E DINERO	66	47	5	.	.	58.9	151
HORIZON	76 G	66	49	5	.	.	59.5	145
SILER	SG-640	66	48	7	.	.	59.5	150

CONTINUED

TABLE 1D. CLAY. CONCLUDED.

BRAND	HYBRID	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
AGRIPRO	AP 965G	66	48	5	.	.	59.3	150
CARGILL	5572	66	51	5	.	.	60.3	162
CONTI-SEEDS	RAWHIDE	66	47	5	.	.	58.4	132
OHLDE	138	66	45	6	.	.	60.4	133
OHLDE	139	66	47	5	.	.	59.2	147
SUPER CROST	SC 43	65	49	6	.	.	58.7	150
WARNER SEEDS	W-844-E	66	51	6	.	.	60.5	151
AGRIPRO	EX 1000Y	66	50	7	.	.	60.9	145
CARGILL	DR 1125	66	50	4	.	.	59.3	144
CONTI-SEEDS	TOPHAND II	65	48	5	.	.	59.3	146
JACQUES	477-W	66	52	9	.	.	61.0	141
MC CURDY	M745	66	49	4	.	.	60.4	155
SEEDTEC/WAC	3502	66	51	7	.	.	61.0	136
WARNER SEEDS	W-876DR	67	53	4	.	.	60.5	158
AGRIPRO	EX 1001	66	48	4	.	.	58.9	143
GOLDEN ACRES	T-E Y-75	67	50	5	.	.	60.6	161
LYNKS SEEDS	LX 597	66	49	7	.	.	61.0	144
FONTANELLE	5550	66	51	5	.	.	60.7	164
ASGROW	OSAGE	67	52	5	.	.	60.2	156
LYNKS SEEDS	LX 600 GBT	67	52	3	.	.	60.6	159
NORTHROP KING	NK 2665	68	46	3	.	.	60.9	140
PIONEER	8333	66	48	6	.	.	60.9	139
PIONEER	8358	68	49	5	.	.	60.9	146
SEEDTEC/WAC	D701G	67	50	4	.	.	60.6	163
ORO	G XTRA	68	50	3	.	.	60.5	149
AGRIGENE	AG 2720	68	50	3	.	.	60.5	152
GOLDEN ACRES	T-E Y-77	68	52	4	.	.	60.7	154
JACQUES	606	68	52	4	.	.	60.6	161
ASGROW	GS 712	68	52	4	.	.	60.7	166
STAUFFER SEEDS	S9750	68	53	4	.	.	60.6	158
TRIUMPH	TWO 80-D	67	52	4	.	.	60.7	166
CARGILL	1096Y	68	58	4	.	.	59.8	159
DEKALB-PFIZER	DK-59E	69	48	4	.	.	60.0	157
CONTI-SEEDS	RUSTLER	69	53	4	.	.	60.6	161
DEKALB-PFIZER	DK-66	73	61	5	.	.	60.2	163
AVERAGE ALL ENTRIES		65.2	49.2	5.8			60.0	141.7
DIF. REQ. FOR SIG.	5%	1.5	2.6	2.1			0.6	12.8
	25%	0.9	1.6	1.2			0.3	7.5

Planted May 30, harvested Oct. 30.

TABLE 1E. ZONE A. 1986-87.

BRAND	HYBRID	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
2-YEAR AVERAGE								
-----	RS 626	62	46	4	25	20	56.6	106
AGRIPRO	AP 940G	62	50	6	23	8	59.4	133
LYNKS SEEDS	LX 553 GBT	62	48	5	24	10	59.4	127
CARGILL	40	63	44	4	27	7	59.5	129
GOLDEN ACRES	T-E Y-60	63	51	5	24	1	59.5	134
JACQUES	377-W	63	51	5	27	3	59.4	137
-----	MARTIN	65	44	6	25	14	58.4	94
FONTANELLE	5546	65	47	4	29	2	60.1	139
MC CURDY	M700W	65	49	5	26	0	60.0	145
TRIUMPH	TR 74CR	65	50	4	27	0	60.1	138
ASGROW	MUSTANG	66	46	6	27	0	59.3	142
CARGILL	4462	66	51	4	26	0	59.6	137
CARGILL	70	66	44	4	29	0	59.5	136
GOLDEN ACRES	T-E Y101-G	66	44	4	27	0	58.9	134
HORIZON	103 G	66	52	4	31	8	58.6	148
HORIZON	114 G	66	50	5	29	0	60.4	147
MC CURDY	M737	66	45	4	30	2	58.8	136
NORTHROP KING	NK 2656	66	45	4	29	3	59.0	141
OHLDE	134	66	51	4	28	4	60.0	150
AGRIPRO	AP 965G	67	49	3	30	0	57.7	146
AGRIPRO	TEK 1094R	67	45	4	28	0	59.1	136
ASGROW	TOPAZ	67	50	5	26	3	60.3	152
CARGILL	DR 1125	67	49	3	29	0	57.8	141
CARGILL	5572	67	49	3	32	3	58.8	153
FONTANELLE	W5000	67	50	6	28	0	59.2	144
FONTANELLE	5550	67	48	4	35	0	58.7	148
GOLDEN ACRES	T-E DINERO	67	47	4	28	1	57.9	144
HORIZON	101 G	67	45	4	28	5	58.9	137
HORIZON	76 G	67	48	4	30	1	57.8	138
MC CURDY	M747	67	48	4	26	0	57.8	145
OHLDE	138	67	46	4	28	1	58.8	135
SILER	SG-640	67	49	4	30	1	57.9	145
SUPER CROST	SC 43	67	49	4	32	0	57.8	145
TRIUMPH	TWO 70-D	67	49	4	29	0	58.1	140
WARNER SEEDS	W-839 DR	67	48	4	30	0	57.8	141
WARNER SEEDS	W-876DR	67	52	3	29	0	59.2	152
ASGROW	OSAGE	68	50	4	29	2	59.8	150
GOLDEN ACRES	T-E Y-75	68	50	4	29	6	59.7	148
JACQUES	477-W	68	50	6	31	1	59.1	145
MC CURDY	M689	68	48	4	27	8	59.6	140
WARNER SEEDS	W-844-E	68	50	4	31	0	59.5	143
CARGILL	1096Y	69	54	3	30	5	57.8	145
GOLDEN ACRES	T-E Y-77	69	51	3	34	3	59.2	153
JACQUES	606	69	51	3	32	3	59.1	159
LYNKS SEEDS	LX 600 GBT	69	52	2	30	3	58.8	150
NORTHROP KING	NK 2665	69	46	2	32	3	59.1	142
ORO	G XTRA	69	51	3	33	0	59.2	152
SEEDTEC/WAC	D701G	69	50	3	30	3	59.4	154
ASGROW	GS 712	70	51	3	32	3	58.9	153
DEKALB-PFIZER	DK-59E	70	48	3	35	0	57.2	142
STAUFFER SEEDS	S9750	70	51	2	35	5	59.0	146
TRIUMPH	TWO 80-D	70	51	3	34	8	59.0	151
AVERAGE ALL ENTRIES		66.8	48.7	4.0	29.1	2.9	58.9	141.7
DIF. REQ. FOR SIG. 5%		1.7	2.4	0.9	6.6	7.6	0.9	11.0
25%		1.0	1.4	0.5	3.9	4.5	0.5	6.4

Stalk lodge: 1986.

TABLE 1F. ZONE A. 1985-87.

BRAND	HYBRID	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
3-YEAR AVERAGE								
-----	RS 626	64	45	4	25	26	55.9	102
AGRIPRO	AP 940G	64	50	6	26	14	58.2	125
CARGILL	40	66	44	5	27	4	58.2	122
-----	MARTIN	67	44	6	25	22	57.4	90
CARGILL	4462	68	50	4	27	4	58.4	130
NORTHROP KING	NK 2656	68	45	4	30	2	57.9	132
ASGROW	MUSTANG	69	46	6	29	1	57.6	129
FONTANELLE	5546	69	47	4	31	4	58.4	129
HORIZON	114 G	69	50	5	30	16	58.5	135
AGRIPRO	AP 965G	70	48	4	31	3	56.4	136
AGRIPRO	TEK 1094R	70	45	5	30	2	57.3	125
ASGROW	TOPAZ	70	49	5	28	6	58.9	139
CARGILL	DR 1125	70	49	4	32	3	56.5	131
CARGILL	5572	70	50	3	34	10	57.2	141
CARGILL	70	70	45	4	30	1	57.6	125
GOLDEN ACRES	T-E DINERO	70	47	4	30	3	56.5	132
GOLDEN ACRES	T-E Y-75	70	50	4	30	17	58.3	137
GOLDEN ACRES	T-E Y101-G	70	45	4	29	1	57.1	123
HORIZON	101 G	70	46	4	30	3	57.3	126
MC CURDY	M737	70	45	4	32	1	57.0	124
MC CURDY	M747	70	48	4	28	3	56.6	134
TRIUMPH	TWO 70-D	70	49	4	31	3	56.8	130
WARNER SEEDS	W-839 DR	70	48	4	30	4	56.6	132
WARNER SEEDS	W-876DR	70	51	4	30	35	57.9	140
ASGROW	OSAGE	71	50	4	29	10	58.5	141
NORTHROP KING	NK 2665	71	46	2	32	5	57.8	133
ASGROW	GS 712	72	51	3	34	23	57.6	142
GOLDEN ACRES	T-E Y-77	72	51	3	35	22	57.8	143
JACQUES	606	72	51	3	33	25	57.8	145
ORO	G XTRA	72	51	3	33	16	57.8	142
SEEDTEC/WAC	D701G	72	50	3	32	27	57.9	139
STAUFFER SEEDS	S9750	72	51	3	36	25	57.7	138
TRIUMPH	TWO 80-D	72	51	3	35	31	57.3	140
DEKALB-PFIZER	DK-59E	73	49	3	35	6	55.7	132
AVERAGE ALL ENTRIES		69.8	48.1	4.0	30.6	11.1	57.5	131.3
DIF. REQ. FOR SIG. 5%		1.6	1.6	0.8	4.3	26.4	0.9	9.9
25%		1.0	0.9	0.5	2.5	15.1	0.5	5.7

Stalk lodge: 1985-86.

TABLE 1G. ZONE A. 1983-87.

BRAND	HYBRID	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
4-YEAR AVERAGE								
-----	RS 626	65	46	4	25	45	55.6	104
CARGILL	40	67	44	6	26	19	58.0	122
-----	MARTIN	68	44	7	24	32	57.3	91
CARGILL	4462	69	50	4	28	29	58.1	132
ASGROW	MUSTANG	70	46	6	29	13	57.3	131
CARGILL	70	70	44	4	29	4	57.3	128
HORIZON	114 G	70	50	5	30	43	58.2	135
ASGROW	TOPAZ	71	49	5	28	32	58.6	138
GOLDEN ACRES	T-E DINERO	71	47	4	30	21	56.5	134
GOLDEN ACRES	T-E Y101-G	71	45	4	29	4	57.1	125
HORIZON	101 G	71	45	4	29	9	57.2	128
MC CURDY	M737	71	45	4	30	3	57.0	126
MC CURDY	M747	71	48	4	29	28	56.4	136
TRIUMPH	TWO 70-D	71	49	4	30	34	56.5	131
WARNER SEEDS	W-839 DR	71	48	4	30	33	56.5	134
ASGROW	OSAGE	72	50	4	29	39	58.4	139
CARGILL	DR 1125	72	48	4	32	28	56.3	132
WARNER SEEDS	W-876DR	72	51	4	31	56	57.6	140
GOLDEN ACRES	T-E Y-77	73	51	3	35	48	57.4	144
JACQUES	606	73	51	3	33	49	57.5	143
ORO	G XTRA	73	51	3	33	43	57.5	142
SEEDTEC/WAC	D701G	73	50	3	32	49	57.6	138
STAUFFER SEEDS	S9750	73	51	3	35	49	57.5	142
DEKALB-PFIZER	DK-59E	74	49	3	35	27	55.3	133
TRIUMPH	TWO 80-D	74	51	3	35	53	57.3	141
AVERAGE ALL ENTRIES		71.0	48.1	4.1	30.2	31.6	57.2	131.6
DIF. REQ. FOR SIG. 5%		1.4	1.4	0.9	3.2	30.1	0.7	8.2
25%		0.8	0.8	0.5	2.1	17.5	0.4	4.8
5-YEAR AVERAGE								
-----	RS 626	66	45	4	25	34	55.1	102
CARGILL	40	68	44	5	26	14	57.7	119
-----	MARTIN	69	44	7	24	24	57.0	87
CARGILL	4462	69	50	4	28	24	57.6	127
ASGROW	MUSTANG	71	45	5	29	10	57.0	127
ASGROW	TOPAZ	71	48	5	28	24	58.4	137
CARGILL	70	71	44	4	29	3	57.0	125
GOLDEN ACRES	T-E Y101-G	71	44	4	29	3	56.9	123
MC CURDY	M737	71	44	4	30	3	56.8	124
WARNER SEEDS	W-839 DR	71	48	4	30	25	56.1	130
CARGILL	DR 1125	72	47	4	32	21	56.0	131
HORIZON	101 G	72	44	4	29	7	57.2	126
WARNER SEEDS	W-876DR	72	50	4	31	42	57.5	137
GOLDEN ACRES	T-E Y-77	73	50	3	35	36	57.3	139
JACQUES	606	73	49	3	33	37	57.4	136
DEKALB-PFIZER	DK-59E	74	48	3	35	20	55.0	130
ORO	G XTRA	74	50	2	33	32	57.4	136
SEEDTEC/WAC	D701G	74	49	3	32	37	57.4	134
AVERAGE ALL ENTRIES		71.2	46.8	4.0	29.9	22.0	56.9	126.1
DIF. REQ. FOR SIG. 5%		1.2	1.6	0.8	3.6	25.4	0.8	8.4
25%		0.7	0.9	0.5	2.1	14.7	0.5	4.7

Early moisture: no 1983 data.
No lodging in 1987.

TABLE 2A. SOUTHWEST. LINCOLN COUNTY. 1987.

BRAND	HYBRID	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
-----	NB 505	59	.	.	.	26	54.7	43
-----	455 X TX432	60	.	.	.	6	55.4	61
CARGILL	22	60	.	.	.	10	53.0	48
MC CURDY	M410	60	.	.	.	24	53.0	57
SEEDTEC/WAC	3101	60	.	.	.	19	52.7	63
-----	455 X TX2737	61	.	.	.	13	52.8	46
PIONEER	8728	61	.	.	.	2	55.4	60
-----	KS57 X TX432	62	.	.	.	1	57.9	73
-----	MS51 X TX432	62	.	.	.	22	56.4	62
-----	TX3042 X TX432	62	.	.	.	13	57.5	68
MC CURDY	M450	62	.	.	.	14	52.9	53
-----	CK60 X TX432	63	.	.	.	16	58.0	85
-----	MARTIN X TX432	63	.	.	.	5	56.4	61
-----	TX3042 X TX2737	63	.	.	.	14	54.6	56
HORIZON	46 G	63	.	.	.	2	55.4	62
WARNER SEEDS	W-655-T	63	.	.	.	7	56.4	76
-----	MS51 X TX2737	64	.	.	.	9	54.8	58
-----	RS 626	64	.	.	.	8	51.9	67
-----	TX554 X TX2737	64	.	.	.	6	53.2	44
-----	TX554 X TX432	64	.	.	.	4	57.4	70
AGRIGENE	AG 2110	64	.	.	.	11	56.2	65
CARGILL	2285	64	.	.	.	1	55.2	59
DAHLGREN	DG-37B	64	.	.	.	11	56.2	69
FONTANELLE	4455	64	.	.	.	5	55.7	60
GOLDEN ACRES	T-E Y-60	64	.	.	.	18	57.2	67
SEEDTEC/WAC	652G	64	.	.	.	10	55.7	66
-----	CK60 X TX2737	65	.	.	.	16	57.3	78
-----	455 X TX430	65	.	.	.	11	53.7	72
-----	TX629 X TX2737	65	.	.	.	33	57.7	65
AGRIPRO	AP 940G	65	.	.	.	12	55.5	54
DAHLGREN	DG-33B	65	.	.	.	0	55.8	67
DEKALB-PFIZER	DK-39Y	65	.	.	.	0	57.3	85
GOLDEN ACRES	T-E Y-45-G	65	.	.	.	14	56.3	67
JACQUES	377-W	65	.	.	.	24	56.8	72
PIONEER	8686	65	.	.	.	0	55.7	55
-----	MARTIN X TX273	66	.	.	.	9	56.2	58
-----	TX623 X TX2737	66	.	.	.	21	56.8	58
CARGILL	1022	66	.	.	.	6	56.7	69
GOLDEN ACRES	T-E X-8717	66	.	.	.	0	54.7	59
JACQUES	EXP. 4311	66	.	.	.	5	56.3	70
LYNKS SEEDS	LX 553 GBT	66	.	.	.	6	55.8	57
OHLE	125	66	.	.	.	2	55.5	65
TRIUMPH	TR 56YG	66	.	.	.	5	54.8	64
-----	CK60 X TX430	67	.	.	.	4	56.5	90
-----	KS57 X TX2737	67	.	.	.	0	55.9	70
-----	MS51 X TX430	67	.	.	.	6	55.4	78
-----	TX3042 X TX430	67	.	.	.	7	54.4	67
DEKALB-PFIZER	P-757	67	.	.	.	8	57.7	85
-----	MARTIN X TX430	68	.	.	.	3	56.8	75
-----	TX554 X TX430	68	.	.	.	2	56.5	86

CONTINUED

TABLE 2A. SOUTHWEST. CONCLUDED.

BRAND	HYBRID	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
-----	TX623 X TX430	68	.	.	.	9	55.7	74
CARGILL	40	68	.	.	.	1	56.5	66
DEKALB-PFIZER	DK-40	68	.	.	.	1	56.3	85
-----	KS57 X TX430	69	.	.	.	2	56.3	67
-----	TX623 X TX432	69	.	.	.	0	57.4	70
DEKALB-PFIZER	DK-41Y	69	.	.	.	0	55.8	94
TRIUMPH	TR 74CR	69	.	.	.	5	57.2	72
TRIUMPH	TRX 4001	69	.	.	.	3	55.9	71
WARNER SEEDS	W-695-E	69	.	.	.	4	57.3	90
-----	MARTIN	70	.	.	.	1	56.4	46
-----	WHEAT X TX432	70	.	.	.	0	55.4	63
CARGILL	3385	70	.	.	.	0	55.5	80
GOLDEN ACRES	T-E Y-50	70	.	.	.	0	56.2	73
TRIUMPH	TR 60-G	71	.	.	.	0	54.7	82
-----	OK11 X TX432	72	.	.	.	0	55.9	75
-----	REDLAN X TX432	72	.	.	.	0	56.7	71
-----	TX629 X TX430	72	.	.	.	2	54.7	67
DEKALB-PFIZER	X-744	72	.	.	.	0	55.5	91
-----	REDLAN X TX2737	73	.	.	.	0	55.0	52
-----	TX2752 X TX432	73	.	.	.	0	56.8	78
-----	WHEAT X TX2737	73	.	.	.	0	56.0	67
AGRIPRO	EX 1000Y	73	.	.	.	0	53.6	65
GOLDEN ACRES	T-E TUFF	73	.	.	.	1	54.8	68
GOLDEN ACRES	T-E X-8718	73	.	.	.	1	53.4	63
ORO	JAYHAWKER	73	.	.	.	0	53.3	70
AGRIPRO	AP 965G	74	.	.	.	0	53.6	67
HORIZON	76 G	74	.	.	.	1	53.9	58
MC CURDY	M689	74	.	.	.	0	56.4	57
TRIUMPH	TWO 70-D	74	.	.	.	0	55.7	79
-----	OK11 X TX2737	75	.	.	.	0	55.6	60
-----	OK11 X TX430	75	.	.	.	0	53.8	50
-----	TX2752 X TX430	75	.	.	.	0	54.1	57
AGRIPRO	TEK 1094R	75	.	.	.	0	53.3	55
ASGROW	TOPAZ	75	.	.	.	0	56.5	64
JACQUES	411	75	.	.	.	1	54.9	71
-----	REDLAN X TX430	76	.	.	.	0	53.7	75
-----	WHEAT X TX430	76	.	.	.	0	52.3	62
AGRIPRO	EX 1001	76	.	.	.	0	54.7	53
ASGROW	MUSTANG	76	.	.	.	0	56.0	47
ASGROW	OSAGE	76	.	.	.	0	55.3	64
MC CURDY	M737	76	.	.	.	0	54.1	54
-----	TX2752 X TX2737	77	.	.	.	0	54.8	51
AVERAGE ALL ENTRIES		68.0				5.5	55.5	66.2
DIF. REQ. FOR SIG. 5%		2.1				11.3	1.7	19.2
25%		1.2				6.7	1.0	11.3

Planted June 3, harvested Nov. 2-3.

TABLE 2B. ZONE B. 1986-87.

BRAND	HYBRID	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
2-YEAR AVERAGE								
-----	NB 505	59	43	.	12	14	56.3	64
SEEDTEC/WAC	3101	61	45	.	12	10	54.2	88
MC CURDY	M450	63	44	.	13	8	55.5	82
-----	KS57 X TX432	64	46	.	16	1	58.7	96
HORIZON	46 G	64	44	.	14	2	56.4	82
-----	CK60 X TX432	65	53	.	16	8	57.7	100
-----	MARTIN X TX432	65	47	.	14	3	57.5	77
FONTANELLE	4455	65	47	.	15	3	56.5	83
GOLDEN ACRES	T-E Y-45-G	65	47	.	13	7	57.2	90
SEEDTEC/WAC	652G	65	47	.	15	5	55.4	91
-----	RS 626	66	44	.	17	4	53.9	86
AGRI PRO	AP 940G	66	47	.	15	6	56.2	84
GOLDEN ACRES	T-E Y-60	66	46	.	17	9	56.9	86
LYNKS SEEDS	LX 553 GBT	66	44	.	15	3	56.6	84
DEKALB-PFIZER	DK-39Y	67	43	.	16	0	55.8	91
JACQUES	EXP. 4311	67	44	.	16	3	56.4	90
JACQUES	377-W	67	47	.	18	12	56.4	97
TRIUMPH	TR 56YG	67	44	.	17	3	56.2	87
CARGILL	1022	68	41	.	18	3	56.9	90
CARGILL	40	68	43	.	17	1	56.9	90
DEKALB-PFIZER	DK-40	69	44	.	16	1	55.6	96
WARNER SEEDS	W-695-E	69	45	.	17	2	56.9	106
-----	MARTIN	70	42	.	15	1	57.0	64
-----	TX 623 X TX432	70	47	.	20	0	56.3	86
DEKALB-PFIZER	DK-41Y	70	44	.	19	0	54.5	96
TRIUMPH	TR 60-G	70	42	.	17	0	54.9	96
TRIUMPH	TR 74CR	70	46	.	22	3	55.1	89
-----	WHEAT X TX432	71	46	.	18	0	55.0	79
GOLDEN ACRES	T-E TUFF	73	38	.	20	1	53.2	93
AGRI PRO	TEK 1094R	74	42	.	22	0	52.3	81
TRIUMPH	TWO 70-D	74	45	.	22	0	52.9	98
AGRI PRO	AP 965G	75	43	.	24	0	50.2	81
HORIZON	76 G	75	44	.	23	1	51.2	88
AVERAGE ALL ENTRIES		67.7	44.7		17.0	3.5	55.5	87.6
DIF. REQ. FOR SIG. 5%		2.3	2.8		2.3	NS	4.1	18.4
25%		1.3	1.6		1.4	NS	2.3	10.5

Early moisture: 1986.

Plant height: 1986.

TABLE 2C. ZONE B. 1983-87.

BRAND	HYBRID	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
3-YEAR AVERAGE								
MC CURDY	M450	66	44	.	13	7	56.0	76
-----	RS 626	69	44	.	17	6	53.7	80
SEEDTEC/WAC	652G	69	47	.	15	3	55.4	83
AGRIPRO	AP 940G	70	47	.	15	5	55.4	81
DEKALB-PFIZER	DK-39Y	70	43	.	16	0	55.4	88
FONTANELLE	4455	70	47	.	15	2	55.9	80
GOLDEN ACRES	T-E Y-45-G	70	47	.	13	6	56.0	83
CARGILL	1022	71	41	.	18	2	56.3	89
-----	MARTIN	73	42	.	15	1	56.5	60
CARGILL	40	73	43	.	17	1	55.2	86
DEKALB-PFIZER	DK-41Y	75	44	.	19	0	52.5	86
TRIUMPH	TR 74CR	75	46	.	22	5	53.7	83
GOLDEN ACRES	T-E TUFF	76	38	.	20	1	52.5	84
TRIUMPH	TWO 70-D	78	45	.	22	0	51.5	85
AGRIPRO	AP 965G	79	43	.	24	0	50.0	73
AGRIPRO	TEK 1094R	80	42	.	22	0	50.4	67
AVERAGE ALL ENTRIES		72.8	48.9		17.7	2.4	54.2	80.3
DIF. REQ. FOR SIG. 5%		3.1	2.8		2.3	NS	3.5	NS
25%		1.8	1.6		1.4	3.2	2.0	9.6
4-YEAR AVERAGE								
-----	RS 626	70	44	.	17	7	54.5	74
FONTANELLE	4455	71	47	.	15	9	56.7	76
CARGILL	1022	72	41	.	18	3	56.6	81
-----	MARTIN	74	42	.	15	2	56.9	58
CARGILL	40	74	43	.	17	2	55.9	79
DEKALB-PFIZER	DK-41Y	75	44	.	19	1	53.6	80
TRIUMPH	TWO 70-D	79	45	.	22	0	52.2	77
AVERAGE ALL ENTRIES		73.6	43.7		17.6	3.4	55.2	75.0
DIF. REQ. FOR SIG. 5%		2.5	2.8		2.3	8.0	2.5	13.9
25%		1.4	1.6		1.4	4.5	1.4	7.9
5-YEAR AVERAGE								
-----	RS 626	71	42	.	17	6	55.1	81
FONTANELLE	4455	71	46	.	15	8	57.1	83
-----	MARTIN	74	41	.	15	2	57.4	62
CARGILL	40	74	42	.	17	2	56.7	87
AVERAGE ALL ENTRIES		72.5	42.8		16.0	4.5	56.6	78.3
DIF. REQ. FOR SIG. 5%		2.4	2.2		NS	NS	1.4	7.2
25%		1.3	1.0		1.4	NS	0.8	4.0

Early moisture: moisture at harvest, 1986.
 Plant height: 1983, 1986.

TABLE 3A. WEST ECOFALLOW. CHEYENNE COUNTY. 1987.

BRAND	HYBRID	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
DEKALB-PFIZER	DK-18	72	34	.	11	.	58.4	83
-----	NB 505	73	38	.	11	.	57.8	67
CARGILL	22	75	32	.	11	.	56.8	68
DAHLGREN	DG-27B	76	35	.	12	.	56.5	78
SEEDTEC/WAC	3101	77	36	.	15	.	50.2	51
TRIUMPH	TWO 48YG	79	33	.	13	.	54.3	60
FONTANELLE	2233	80	32	.	13	.	54.7	74
WARNER SEEDS	W-501-T	82	34	.	13	.	52.9	59
TRIUMPH	TR 46	83	35	.	14	.	52.1	63
WARNER SEEDS	W-545-T	83	34	.	14	.	54.7	57
CARGILL	2285	84	33	.	13	.	53.1	50
TRIUMPH	TR 50YG	86	35	.	14	.	54.2	71
CARGILL	1022	87	37	.	17	.	51.1	47
CARGILL	3385	92	37	.	25	.	38.5	27
CARGILL	40	92	37	.	17	.	40.8	32
AVERAGE ALL ENTRIES		81.4	34.8		14.2		52.4	59.2
DIF. REQ. FOR SIG.	5%	3.8	2.1		2.0		3.7	14.3
	25%	2.2	1.2		1.1		2.2	8.3

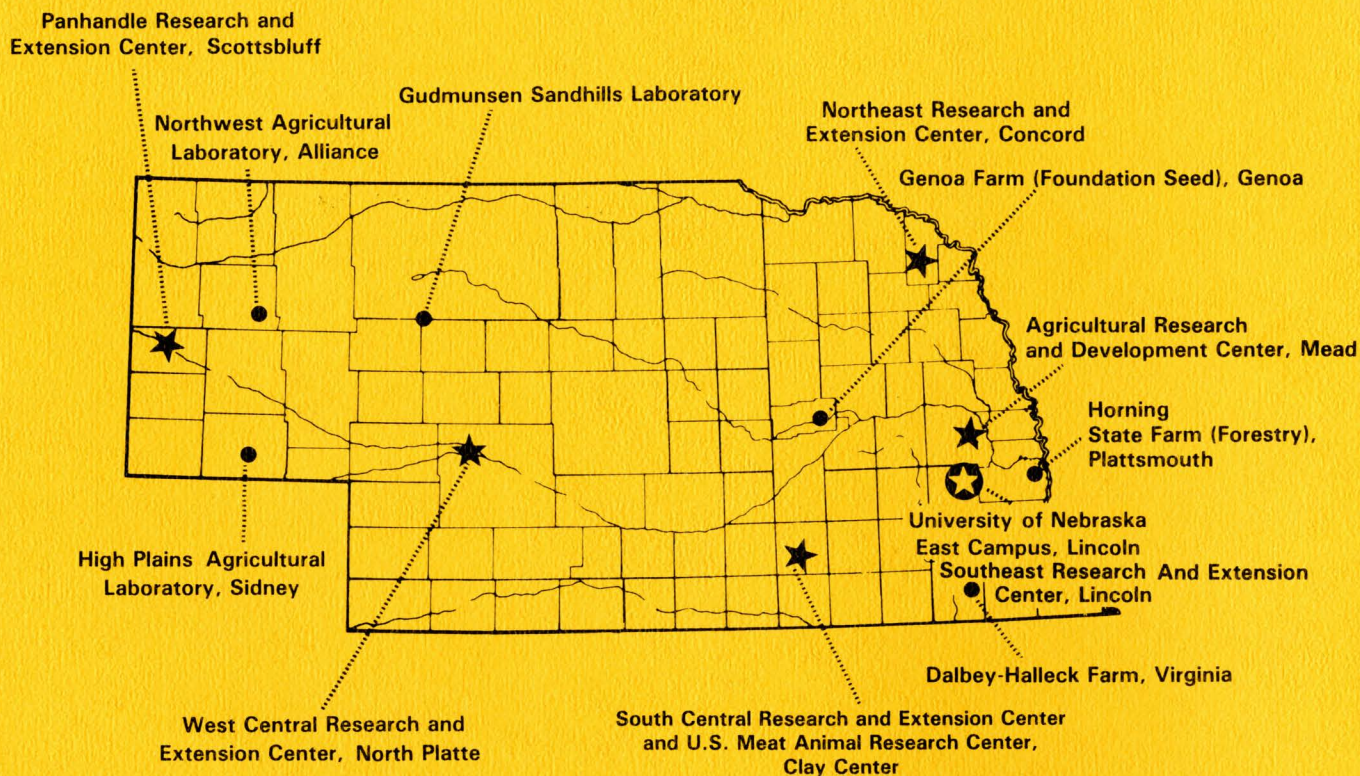
Planted May 19, harvested Oct. 12.
Early moisture is moisture at harvest.

TABLE 3B. ZONE C. WEST. 1983-1987.

BRAND	HYBRID	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
2-YEAR AVERAGE								
DEKALB-PFIZER	DK-18	71	37	.	14	20	55.4	72
-----	NB 505	74	40	.	14	12	55.5	57
CARGILL	22	77	35	.	14	8	55.5	59
FONTANELLE	2233	79	34	.	16	6	53.8	65
TRIUMPH	TWO 48YG	79	34	.	16	0	53.7	51
TRIUMPH	TR 46	81	39	.	16	10	52.1	69
WARNER SEEDS	W-501-T	81	35	.	15	2	52.5	60
TRIUMPH	TR 50YG	84	37	.	17	0	53.8	69
CARGILL	40	90	38	.	20	0	46.0	47
AVERAGE ALL ENTRIES		79.6	36.6		15.8	6.4	53.1	61.0
DIF. REQ. FOR SIG.	5%	5.0	3.7		1.8	9.8	NS	NS
	25%	2.7	2.0		1.0	5.7	4.1	NS
3-YEAR AVERAGE								
DEKALB-PFIZER	DK-18	74	37	.	14	43	53.4	57
FONTANELLE	2233	80	34	.	16	7	51.5	57
CARGILL	22	81	35	.	14	26	53.8	48
TRIUMPH	TWO 48YG	82	34	.	16	3	51.1	42
WARNER SEEDS	W-501-T	84	34	.	15	4	49.9	50
TRIUMPH	TR 50YG	87	36	.	17	4	52.0	55
CARGILL	40	94	36	.	20	0	41.2	34
AVERAGE ALL ENTRIES		83.1	35.1		16.0	12.4	50.4	49.0
DIF. REQ. FOR SIG.	5%	3.4	2.9		1.4	NS	5.7	NS
	25%	1.9	1.5		0.7	16.6	3.1	10.2
4-YEAR AVERAGE								
DEKALB-PFIZER	DK-18	74	38	.	15	43	53.1	57
CARGILL	22	80	36	.	15	26	54.2	50
FONTANELLE	2233	80	35	.	17	7	52.0	58
TRIUMPH	TWO 48YG	81	35	.	17	3	51.7	49
CARGILL	40	94	37	.	20	0	42.5	38
AVERAGE ALL ENTRIES		81.8	36.2		16.8	15.8	50.7	50.4
DIF. REQ. FOR SIG.	5%	3.2	2.2		1.4	NS	5.2	NS
	25%	1.8	1.2		0.8	20.3	1.8	9.9
5-YEAR AVERAGE								
DEKALB-PFIZER	DK-18	73	39	.	15	30	53.2	63
FONTANELLE	2233	78	35	.	17	5	52.5	64
CARGILL	22	79	37	.	15	17	54.6	55
CARGILL	40	92	38	.	20	0	43.8	42
AVERAGE ALL ENTRIES		80.5	37.3		16.8	13.0	51.0	56.0
DIF. REQ. FOR SIG.	5%	2.7	2.0		1.6	NS	4.8	14.0
	25%	1.5	1.1		0.8	16.2	2.7	7.8

Early moisture: moisture at harvest 1985, 1986, 1987.
 Stalk lodge: 1983, 1985, 1986.

AGRICULTURAL RESEARCH AND EXTENSION FOR ALL OF NEBRASKA



The Agricultural Research Division of the Institute of Agriculture and Natural Resources is responsible for studies to broaden our basis of knowledge for agricultural production. Research centers and field laboratories provide applied information for development of Nebraska's largest industry — agriculture.

The Cooperative Extension Service transmits data and provides interpretation to users through Extension Agents and Specialists. Extension Agents may be contacted through 85 local Extension offices for additional information and more specific recommendations.

Nebraska is a large state and has great variation due to topography and the continental type of climate. The elevation ranges from 1,000 feet to near a mile high in the northwest portion of the state, rainfall varies from less than 15 to more than 35 inches per year, and the soil types vary from sands to heavy clays. The research and extension programs thus are broad in subject matter and geography, resulting in the need for various centers, satellite locations, and local offices.