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EC91-106-A Nebraska Grain Sorghum Hybrid Tests

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NEBRASKA GRAIN SORGHUM HYBRID TESTS 1991

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University of Nebraska–Lincoln
Institute of Agriculture and Natural Resources
Agricultural Research Division
Cooperative Extension

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EXTENSION CIRCULAR 91-106

NEBRASKA GRAIN SORGHUM HYBRID TESTS

January 1992

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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 1991 season was the 34th year that private hybrids were included in these trials. Seed producers supported tests through fee payments.

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 the trials.

Conduct of experiments and publication of results is a joint effort of the Agricultural Research Division and the Cooperative Extension Service. Statistical calcuations were performed by the Biometrics and Information Systems Center at UN-L.

We want to acknowledge the State Climate Program at the University of Nebraska-Lincoln for providing the climate data used in this report. The reports of temperature and rainfall conditions at the various locations are found on pages 37 and 38.

We also wish to acknowledge the Nebraska Agricultural Statistics Service for data on crop acreages. Their data is included in the introduction on page 4.

We want to thank the people who provided technical support for this project, namely Glen Frickel, Patrick Tenopir, John A. Eis, Robert Hendrickson, George Hoffmeister, Don Thrailkill, Tom O'Hare, Scott Ferguson and Robert Skates.

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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 0.352

Kilogram/hectoliter = lb/bu x 1.287
Kilograms/hectare = bu/A x 62.78 (56# bu)

NEBRASKA GRAIN SORGHUM HYBRID TESTS

1991

Recent grain sorghum acreage and yields for Nebraska were as follows:

	1984	1985	1986	1987	1988	1989	1990	1991
Yield bu/A	64.0	80.0	89.0	90.0	76.0	62.0	77.0	65.0
Acres (000)	1,900	1,930	1,570	1,220	1,360	1,650	1,400	1,250

May 28, planting was 50% completed which was about average. Weather conditions provided excellent growing conditions for crops as well as weeds. Some producers were able to apply chemical weed control or cultivate between rains. On June 9, wet fields delayed weed control activities in many areas. Storms caused crop damage to the northeast, east central, central, south central and western districts from hail, high winds, and excessive rainfall. Replanting of sorghum is being planned where damaged by storms. On June 17, the crop is virtually all planted. Hot temperatures and limited rainfall during July and August caused severe stress on yield potentials. August 26, sorghum condition was rated at 6% very poor, 32% poor, 31% fair, 30% good, and 3% excellent. On September 19, a killing frost occurred but most grain sorghum was already mature and escaped serious damage. Some late planted, replanted, or drought-affected slow maturing crop was hurt by early frost. Harvest was two weeks ahead of normal by Oct.7. Chinch bugs, greenbugs, hot, dry weather caused some lodging in southeast Nebraska.

PROCEDURE

Locations of trials are shown on the map (page 36). Names of cooperators are shown in Table A. Entrants and entries are shown in Tables B and C, respectively.

Seed for testing was furnished by the entrant. In each trial, entries were seeded at equivalent seeding rates on a live-seed basis. Seeding rates varied with location as shown in Table D. Seeding was accomplished with cone or belt units mounted on commonly used row planters. Two-row plots, 20 to 30 feet long were used.

Data on one-half bloom were obtained by visiting plots on alternate days during the flowering period. Where included, grain moisture determinations were made at harvest at a time when differences between entries were relatively high. This gives an indication of relative grain drying rates.

Plant height and head exsertion readings were made at harvest. Lodging readings were taken at harvest. Reported yields are based on 56 pounds per bushel and 14 percent grain moisture.

Entries in data tables are listed in order of decreasing yield. There are variations in maturity among trials and over years. Maturity is listed as plant bloom days or days from planting to bloom. The maturity of a hybrid is an important consideration in its adaptation to a given location, etc. In making yield evaluations, hybrids should be compared with those having similar maturities.

Changes were made in the alignment of zones in 1990. The two tests in the Clay Center area (South Central zone) were separated from the two tests in the Southeast zone. This affects the over years averages since data prior to 1990 were combined with the Southeast zone.

Changes were also made in the West Central zone in 1990 by splitting it into a West Central and a Southwest zone. Over years averages from these tests prior to 1990 were combined with the Southwest zone.

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 1991 test location is shown in Table D. All tests were machine harvested this year. The maturity yield-correlation (r value) is an indication of the relationship between maturity (as measured by days from planting to bloom) and grain yield.

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

Southeast (Pages 12 - 18)

Fifty-seven entries were planted at two locations. Lancaster county were yields averaged for all entries 132 Bu/A dryland despite the drought. Maturity yield correlation was highly significant at the 1% level for this location. This correlation was positive meaning the later maturity gave higher yields. Lodging was not a problem.

Saline county with fifty-seven entries had a 50 bu/A average was under severe drought stress all summer including an infestation of greenbugs and an early frost reduced potential yields.

South Central (Pages 20-26)

Clay county had 60 entries which was irrigated with a 151 bu/A average. Webster county had 60 entries dryland with a 94 bu/A average yield. Grain yields at both locations were excellent considering the dry conditions that occurred after the first of June. Especially notable were the yields at the Webster county location in an area where most sorghum did not head out due to drought. The difference was due to cropping sequence. This field is in a fallow-wheat-sorghum rotation and was no-tilled. Although crop stands were reduced by heavy wheat residue in some areas (average planted stand = 62,000 seeds/acre; average harvested stand = 25,000 plants/acre), plants were able to compensate. All hybrids were headed out very well. Plant stands of some of the University's experimental lines (90P651 x TX850, N122A x TX8505, 90P594 x TX850 and RS626) were especially low (average = 18,135 plants/acre). Precipitation for the season (1 April to 22 September) was 76% of normal at South Central Research and Extension Center and 78% of normal at Holdrege (the Webster County site is beween but south of these two weather stations). Growing degree day accumulations were normal during the season at both weather stations. At South Central Research and Extension Center (the Clay County location) potential ET for the season was lower than the long-term average. Decreased potential ET results in a decrease in crop water use. Since growing degree days and average daily temperatures were not significantly different from normal, the lower ET can be attributed to 1) higher than normal humidity, 2) lower solar radiation, and 3) less then normal winds. These all occurred during the season at South Central Research and Extension Center. (This ET analysis is by Joel Cahoon, Extension Water Management Engineer.)

The growing season was abruptly terminated by an extremely early frost at both locations on 19 September. Temperatures were below freezing for six hours at South Central Research and Extension Center (a low of 25 degrees F) amd for five hours at Holdrege (a low of 32 degrees F). Sorghum hybrids were generally mature at this date.

Southwest (Pages 27-30)

A total of thirty eight entries were tested at two locations in this zone. Red Willow and Hayes county plots were planted in wheat stubble from the 1990 harvest. Hayes County had better yields 56 bu/A then Red Willow with 31 bu/A. The average performance of all entries included in trials over a five-year period are included for this zone.

West Central (Pages 32-33)

These trials were seeded into wheat stubble from 1990 crop. There were 19 entries tested at two locations. Yields averaged 88 bu/A at Lincoln county and Perkins county 55 bu/acre. The hot dry summer and early frost reduced the yields in Perkins county.

West (Pages 34-35)

Five entries were tested at two locations, both in Cheyenne County. One test was an ecofallow and the other was black fallow. Black fallow had a 20 month fallow following wheat while ecofallow had eight months following wheat. Negative values of correlation of yield and maturity indicate some late varieties were affected by frost. Planting on both plots was delayed due to wet weather. Hot dry summer enabled crop to mature faster then normal, although probably no hybrids were fully mature when killed by frost September 19.

Cultural Practices

Lancaster (dryland): No till on soybean stubble. Surface applied herbicide was 1 qt Dual 20 days before planting and early preplant 1 qt Atrazine. At planting time 1 pt. Dual and 60 lbs liquid N 28-0-0. No insecticide was used. Cultivated twice and hand hoed.

Saline (dryland): 1990 grain sorghum. Preplant 97 lbs of Anhydrous ammonia. At planting 6-20-0 one inch to the side of seed (5.3 gal of 10-34-0). Broadcast 6.25 lbs Ramrod / Atrazine DF. 8 ounces of Parathion (aerial application for greenbug). Extreme drought.

Clay (irrigated): No till following soybeans. Applied 50 lbs Nitrogen, 40 lbs Phosphate/acre broadcast. No insecticide was used.

Webster (dryland): This field was in a fallow-wheat-sorghum rotation and was no-tilled. Nitrogen 100 lbs, Phosphorus 20 lbs, Zn 2 lbs/A. P and Zn were placed below soil surface to be effective in no-till situations.

Red Willow (ecofallow): Previous crop was wheat. 85 lbs Nitrogen and 5 lbs Sulfur were applied per acre. Preplant 0.5 lbs Atrazine + 2 pt Dual + 0.5 pt 2,4-D (6 lb lo-vol) + 1.5 pt cyclone. Lorsban 15G (8 oz/1000 ft of row) was applied.

Hayes (ecofallow): No-tilled. Previous crops were 1990-winter wheat, 1989-fallow. Twenty lbs Nitrogen was applied preplant and at planting 17-24-0 was applied. On July 18, 1990, 2.5 lbs Atrazine, 1.5 pt Roundup, 2,4-D 0.5 pt of 6 lbs LVE. Spring-Bladex + Atrazine. Post-Banvel.

Lincoln (ecofallow): Crop history 1989-fallow, 1990-wheat. Herbicides: Atrazine and Paraquat were used on stubble and Landmaster preplant. Fertilizer: 60 lbs of N.

Perkins (ecofallow): Fallow-wheat-sorghum rotation and was no-tilled. 70 lbs of Nitrogen at planting. No insecticide was used. 0.5 lbs Atrazine preemergence. 1.5 lbs Atrazine in fall of 1990.

Cheyenne (black fallow): 1989-Wheat, 1990-Fallow. Herbicides: Atrazine + Ramrod (3/4 + 3 lb). Fertilizer: 7 lbs N and 23 lbs P at planting time.

Cheyenne (ecofallow): 1989-Fallow, 1990-Wheat. Herbicides: Atrazine + Ramrod (3/4 + 3 lb). Fertilizer: At planting 7 lbs N and 23 lbs P. Sidedress 30 lbs N.

Table A. Location and cooperators. Nebraska Grain Sorghum Performance Tests.

Location	Soil Type/Herbicide	Cooperator
Southeast		
Lancaster (dryland)	Sharpsburg Silty Clay Loam Dual + Atrazine	U of N Extension in Lancaster Lincoln
Saline (dryland)	Crete & Hastings Silty Clay Loam Ramrod + Atrazine	Larry Eigsti Friend
South Central		
Clay (irrigated)	Hastings Silt Loam Ramrod + Atrazine	South Central REC Clay Center
Webster (dryland)	Hastings Silty Loam Dual + Atrazine, Ramrod	Bob Walters Guide Rock
Southwest		
Red Willow (ecofallow)	Holdrege & Keith Silt Loam Atrazine+Dual+2,4–D+Cyclone	Ervin Schaffert Indianola
Hayes (ecofallow)	Kyma Silt Loam Banvel,Bladex+Atrazine; Atrazine,Roundup,2,4–D	Dennis Riener Palisade
West Central		
Lincoln (ecofallow)	Hall Silt Loam Atrazine+Landmaster+Paraquat	West Central REC North Platte
Perkins (ecofallow)	Keith Silt Loam Atrazine	Tom Kraus Madrid
West		
Cheyenne(black fallow)	Duroc Loam Ramrod + Atrazine	High Plains Ag. Lab. Sidney
Cheyenne (ecofallow)	Alliance Silt Loam Ramrod + Atrazine	High Plains Ag. Lab. Sidney

Table B. Entrants. Nebraska grain sorghum performance tests. 1991.

Brand	Entrant	Address
AgriPro Seeds	AgriPro Seeds	South Hwy 75, Box 237, Tekamah, NE 68061
Arrow Seed	Arrow Seed Company	Box 722, Broken Bow, NE 68822
Asgrow	Asgrow Seed Company	7000 Portage Rd., Kalamazoo, MI 49001
Cargill	Cargill Hybrid Seeds	Box 5645, Minneapolis, MN 55440
Dahlgren	Dahlgren and Company, Inc.	1220 Sunflower St., Crookston, MN 56716
DEKALB Plant Genetics	DEKALB Plant Genetics	Rt. 1, Box 225, Glenvil, NE 68941
Fontanelle	Fontanelle Hybrids	Rt. 1, Box 18, Nickerson, NE 68044
Funk's G Brand	CIBA–GEIGY Seed Division	P.O. Box 18300, Greensboro, NC 27419
Golden Harvest	J.C. Robinson Seed Co.	100 J.C. Robinson Blvd., Waterloo, NE 68069
GROWERS	GroAgri Seed Co.	Box 1656, Lubbock, Texas 79408
Hoegemeyer	Hoegemeyer Hybrids	Rt. 2, Hooper, NE 68031
Horizon	Horizon Seeds	P.O. Box 83002, Lincoln, NE 68501
Jacques	Jacques Seed Company	720 St. Croix St., Prescott, WI 54021
Northrup King	Northrup King Company	Box 959, Minneapolis, MN 55440
Ohlde	Ohlde Seed Farms	Rt.1, Box 63, Palmer, KS 66962
Oro Hybrids	Oro Hybrids–R.C.Young Seed Co.	624 27th St., Lubbock, TX 79404
Pioneer Hi–Bred Int'l., Inc.	Pioneer Hi–Bred Int'l., Inc.	Box 5307, Lincoln, NE 68505
Seed Source	Seed Source, Inc.	106 4th St., Leland, MS 38756
Stine	Stine Seeds Inc.	R. R. 3, Box 204, Adel, IA 50003
Triumph	Triumph Seed Co., Inc.	P. O. Box 1050, Ralls, TX 79357
Wilson	Wilson Hybrids, Inc.	P. O. Box 391, Harlan, IA 51537

Table B. Entrants. Nebraska grain sorghum performance tests. 1991.

Brand	Entrant	Address
AgriPro Seeds	AgriPro Seeds	South Hwy 75, Box 237, Tekamah, NE 68061
Arrow Seed	Arrow Seed Company	Box 722, Broken Bow, NE 68822
Asgrow	Asgrow Seed Company	7000 Portage Rd., Kalamazoo, MI 49001
Cargill	Cargill Hybrid Seeds	Box 5645, Minneapolis, MN 55440
Dahlgren	Dahlgren and Company, Inc.	1220 Sunflower St., Crookston, MN 56716
DEKALB Plant Genetics	DEKALB Plant Genetics	Rt. 1, Box 225, Glenvil, NE 68941
Fontanelle	Fontanelle Hybrids	Rt. 1, Box 18, Nickerson, NE 68044
Funk's G Brand	CIBA–GEIGY Seed Division	P.O. Box 18300, Greensboro, NC 27419
Golden Harvest	J.C. Robinson Seed Co.	100 J.C. Robinson Blvd., Waterloo, NE 68069
GROWERS	GroAgri Seed Co.	Box 1656, Lubbock, Texas 79408
Hoegemeyer	Hoegemeyer Hybrids	Rt. 2, Hooper, NE 68031
Horizon	Horizon Seeds	P.O. Box 83002, Lincoln, NE 68501
Jacques	Jacques Seed Company	720 St. Croix St., Prescott, WI 54021
Northrup King	Northrup King Company	Box 959, Minneapolis, MN 55440
Ohlde	Ohlde Seed Farms	Rt.1, Box 63, Palmer, KS 66962
Oro Hybrids	Oro Hybrids–R.C.Young Seed Co.	624 27th St., Lubbock, TX 79404
Pioneer Hi–Bred Int'l., Inc.	Pioneer Hi–Bred Int'l., Inc.	Box 5307, Lincoln, NE 68505
Seed Source	Seed Source, Inc.	106 4th St., Leland, MS 38756
Stine	Stine Seeds Inc.	R. R. 3, Box 204, Adel, IA 50003
Triumph	Triumph Seed Co., Inc.	P. O. Box 1050, Ralls, TX 79357
Wilson	Wilson Hybrids, Inc.	P. O. Box 391, Harlan, IA 51537

TABLE C. Grain sorghum entries and zone where tested. 1991.

Brand	Hybrid	Zone *	Brand	Hybrid	Zone*	Brand	Hybrid	Zone*
-----	NB505	. . B C D	DEKALB Plant Gen	DK-41y	. I . . .	NORTHRUP KING	KS 737	A I . . .
-----	RS626	A I B C .	DEKALB Plant Gen	DK-48	A	OHLDE	140W	A . . . .
-----	MARTIN	A I B C .	DEKALB Plant Gen	DK-56	A I . . .	OHLDE	246Y	A I . . .
UNL	N122A X TX2737	A I B C .	DEKALB Plant Gen	DK-28E	. . . . D	OHLDE	EX148	. I . . .
UNL	N122A X TX430	A I B C .	DEKALB Plant Gen	X-033	. . B C .	OHLDE	EX5715	A I . . .
UNL	N122A X TX8505	A I B C .	DEKALB Plant Gen	X-110	. . . . D	OHLDE	EX615	A I . . .
UNL	N123A X 840089	. . . C D	DEKALB Plant Gen	X-218	. . . . D	ORO HYBRIDS	AMIGO	A I . . .
UNL	N123A X TX2737	. . B C .	FONTANELLE	EX-88318	A I . . .	ORO HYBRIDS	BARON	A I . . .
UNL	90P594 X TX8505	A I B C .	FONTANELLE	G-5590	A I . . .	ORO HYBRIDS	HOMBRE	. I . . .
UNL	90P651 X TX8505	. I B C .	FONTANELLE	W-5000	A	PIONEER HI-BRED INT	8231Y	. I . . .
AGRIPRO SEEDS	AP9250	. I . . .	FUNK'S G BRAND	1460A	. . B C .	PIONEER HI-BRED INT	8358	A I . . .
AGRIPRO SEEDS	AP9830	A	FUNK'S G BRAND	1506	A I . . .	PIONEER HI-BRED INT	8379	A I . . .
AGRIPRO SEEDS	AP9850	A	FUNK'S G BRAND	1616	A I . . .	PIONEER HI-BRED INT	8500	A . . . .
AGRIPRO SEEDS	ST686	A	FUNK'S G BRAND	1655	. I . . .	PIONEER HI-BRED INT	8601	. . B . .
ARROW SEED	AS 313	. I B . .	GOLDEN HARVEST	H-361	. . B . .	PIONEER HI-BRED INT	8699	. . B . .
ARROW SEED	AS 423	. I . . .	GOLDEN HARVEST	H-388W	. . B . .	PIONEER HI-BRED INT	8771	. . B . .
ASGROW	A504	A I B . .	GOLDEN HARVEST	H-444W	. I . . .	SEED SOURCE	SBP 001	A . B . .
ASGROW	Osage	A I B . .	GOLDEN HARVEST	H-515E	. I . . .	SEED SOURCE	SBP 005	A . . . .
ASGROW	Seneca	A I B . .	GROWERS	GSC-1313	. I . . .	SEED SOURCE	SBP 011	. . B . .
ASGROW	Topaz	A I B . .	GROWERS	GSC-3150	A	STINE	SM68BR	A I B . .
CARGILL	575	A I B . .	HOEGEMEYER	6686	A I . . .	STINE	SM69	A I B C .
CARGILL	607E	A I B C .	HOEGEMEYER	6744	A I . . .	STINE	SM74	A . . . .
CARGILL	618Y	A I B C .	HORIZON	200Y	. . B . .	STINE	SM75R	A . . . .
CARGILL	630	A I B C .	HORIZON	213Y	A I . . .	TRIUMPH	TR50yG	. . B . .
CARGILL	837	A I B . .	HORIZON	216G	A I . . .	TRIUMPH	TR52 Y	. . B . .
CARGILL	857	A I . . .	HORIZON	45G	. . B . .	TRIUMPH	TR58Y	A . . . .
DAHLGREN	DG1699	. I . . .	JACQUES	211	. . . C .	TRIUMPH	TR60G	A . . . .
DAHLGREN	DG1707	. I . . .	JACQUES	377-W	. . . C .	TRIUMPH	TR65 G+	. I . . .
DAHLGREN	DG-40B	. I . . .	JACQUES	606E	A I . . .	TRIUMPH	Two 80-D	. I . . .
DEKALB Plant Gen	DK-39y	. . . C .	NORTHRUP KING	KS 383Y	A I B . .	WILSON	522W	. I . . .
DEKALB Plant Gen	DK-40	. . B . .	NORTHRUP KING	KS 555Y	A I B . .	WILSON	535Y	A I . . .
DEKALB Plant Gen	DK-40y	A I B . .	NORTHRUP KING	KS 710	A I . . .	WILSON	622E	A . . . .
			NORTHRUP KING	KS 714Y	A I . . .			

* Zone A=Southeast,Zone I= South Central,Zone B=Southwest,Zone C=West Central, Zone D=West

'Table D. Grain sorghum. Average performance at each test location. 1991.

Location	Planted	Harvested	Grain yield bu/A	Planting to bloom days	Plant height inches	Head exertion inches	Test weight lb/bu	Maturity yield correlation r [1]
Southeast (57 entries)								
Lancaster (dryland)	May 23	Sept. 23	131.8	95.7	45.9	3.8	61.8	0.24
Saline (dryland)	May 22	Sept. 19	50.4	99.5	32.6	1.3	59.7	−0.36**
Average 2 tests	------	------	91.1	97.6	39.3	2.6	60.8	−0.06
South Central (60 entries)								
Clay (irrigated)	June 4	Oct. 14	151.0	75.0	50.2	4.8	----	−0.01
Webster (dryland)	June 7	Oct. 11	94.1	----	45.6	3.8	----	----
Average 2 tests	------	------	122.6	75.0	47.9	4.3	----	−0.01
Southwest (38 entries)								
Red Willow (ecofallow)	June 4	Oct. 10	31.1	----	43.1	----	57.0	----
Hayes (ecofallow)	June 3	Nov. 12	55.5	----	44.7	----	56.5	----
Average 2 tests	-----	------	43.3	----	43.9	----	56.8	----
West Central (19 entries)								
Lincoln (ecofallow)	June 4	Nov. 12	87.6	85.0	41.8	----	57.3	−0.22
Perkins (ecofallow)	May 11	Oct. 11	55.2	----	43.8	----	54.1	----
Average 2 tests	-----	------	71.4	85.0	42.8	----	55.7	−0.22
West (5 entries)								
Cheyenne (blackfallow)	June 13	Oct. 1	55.0	83.4	38.1	----	48.1	−0.55
Cheyenne (ecofallow)	June 13	Oct. 1	37.4	87.1	38.6	----	46.4	−0.47
Average two tests	-----	------	46.2	85.3	38.4	----	47.3	−0.51

[1] 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. Sorghum performance. Average for common entries over years within tests. Five years. 1987–1991.

Test	Year	Grain yield bu/a	Planting to bloom days	Plant height inches	Head exsertion inches	Early–grain moisture %	Stalk lodging %	Test weight lbs/bu
Southeast (8 entries)								
	1987	126	63	46	5.0	33.6	----	59.9
	1988	98	73	44	2.0	----	8.0	33.1
	1989	110	75	48	4.7	----	21.3	58.3
	1990	90	81	48	5.8	16.0	8.7	60.4
	1991	88	98	39	2.9	12.0	0.6	60.6
South Central (30 entries)								
	1990	127	74	49	6.2	15.7	31.3	55.7
	1991	123	75	48	4.5	12.0	----	----
Southwest (4 entries)								
	1987	60	65	----	----	----	9.0	54.8
	1988	136	71	42	----	----	----	59.9
	1989	39	76	46	----	----	12.8	50.1
	1990	60	----	39	----	14.3	1.4	57.3
	1991	36	----	43	----	12.3	28.6	56.7
West Central (10 entries)								
	1990	36	73	45	----	10.3	12.0	52.9
	1991	74	83	44	----	12.9	15.0	55.7
West (1 entries)								
	1987	67	73	38	----	11.0	----	57.8
	1988	54	68	41	----	----	----	57.7
	1989	18	74	44	----	----	----	43.9
	1990	30	78	39	----	14.0	7.5	54.4
	1991	31	85	40	----	14.0	----	52.9

Lancaster County Sorghum Hybrid Test – 1991

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	TEST WEIGHT LB/BU	SEEDS PER POUND
STINE	SM75R	158	98	50	3	15	62.2	14200
FUNK'S	1506	152	95	54	5	15	61.8	13500
GROWERS	GSC–3150	152	96	48	3	15	61.7	16400
HORIZON	216G	150	96	45	3	14	60.7	16300
PIONEER	8379	148	95	42	3	15	62.5	15900
ORO	AMIGO	147	96	48	4	14	61.5	15900
AGRIPRO	AP9850	145	99	48	3	15	62.8	19000
FONTANELLE	G–5590	144	97	47	3	14	60.9	16100
WILSON	622E	144	96	48	4	14	62.4	16600
STINE	SM69	143	95	48	4	14	62.5	16800
CARGILL	837	143	97	49	5	15	62.2	16100
FUNK'S	1616	143	96	49	3	14	61.4	15500
STINE	SM74	141	98	48	3	15	61.1	15300
SEED SOURCE	SBP 001	141	99	49	3	15	60.7	16000
AGRIPRO	ST686	140	95	48	3	14	62.4	16100
JACQUES	606E	140	97	46	3	14	61.1	15100
PIONEER	8358	140	99	46	5	15	62.4	19200
CARGILL	857	138	99	46	3	15	62.1	18700
NORTHRUP KING	KS 737	138	95	46	4	14	62.8	16600
ASGROW	Topaz	138	97	48	5	15	62.0	15400
UNL	N122A X TX430	137	93	45	4	13	61.8	17000
WILSON	535Y	137	96	50	5	15	61.7	12800
OHLDE	EX615	136	96	43	4	14	61.8	17300
TRIUMPH	TR60G	135	94	46	4	13	62.6	17300
AGRIPRO	AP9830	134	99	50	5	14	61.6	14000
STINE	SM68BR	134	95	46	4	13	60.8	14800
HORIZON	213Y	133	97	45	4	14	62.2	15800
ASGROW	Osage	133	97	47	4	14	62.2	17600
HOEGEMEYER	6686 (6636)	133	94	46	5	14	62.0	17400
FONTANELLE	W–5000	133	97	45	5	14	62.5	17400
NORTHRUP KING	KS 710	133	93	42	4	14	62.3	18200
UNL	90P594 X TX850	132	86	45	4	17	60.3	18500
DEKALB Plant Gen	DK–48	132	96	45	4	14	62.6	17600
SEED SOURCE	SBP 005	132	100	49	4	16	59.9	15500
DEKALB Plant Gen	DK–56	132	98	52	5	14	62.5	15500
PIONEER	8500	131	93	47	5	13	62.4	18200
TRIUMPH	TR58Y	131	95	47	3	14	61.1	16200
UNL	N122A X TX2737	131	94	43	4	14	62.5	17200
NORTHRUP KING	KS 714Y	130	95	43	3	14	62.9	19700
NORTHRUP KING	KS 555Y	129	91	47	3	13	63.0	19200
HOEGEMEYER	6744	129	100	47	5	14	61.4	15300
OHLDE	140W	128	97	44	5	14	62.5	17100

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Lancaster County Sorghum Hybrid Test – 1991
Page 2

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	TEST WEIGHT LB/BU	SEEDS PER POUND
OHLDE	246Y	128	99	48	6	16	61.8	13300
ORO	BARON	127	97	46	3	14	62.3	15600
UNL	N122A X TX8505	125	99	45	5	14	62.3	17400
ASGROW	Seneca	124	93	40	4	13	62.3	17900
CARGILL	575	124	97	45	4	14	62.2	16900
ASGROW	A504	123	99	46	4	14	62.3	15600
FONTANELLE	EX-88318	123	101	53	5	17	61.4	14200
DEKALB Plant Gen	DK-40y	122	96	44	4	14	61.9	18500
CARGILL	630	121	94	43	3	14	62.3	18800
OHLDE	EX5715	116	95	42	3	14	62.2	17000
NORTHRUP KING	KS 383Y	112	93	40	3	13	61.9	18600
CARGILL	618Y	110	92	45	5	13	61.2	17000
-----	RS626	108	93	44	4	13	59.8	17800
CARGILL	607E	96	93	42	4	13	61.1	21900
-----	MARTIN	75	96	39	4	13	61.5	18800
AVERAGE ALL ENTRIES		132	96	46	4	14	61.8	16744
DIF. REQ. FOR SIG.	5%	15	4	2	1	1	0.6	1777
	25%	9	2	1	1	0	0.4	1035

Saline County Dryland Sorghum Test–1991

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	SEEDS PER POUND
GROWERS	GSC–3150	69	100	35	1	10	0	60.3	17700
TRIUMPH	TR60G	67	97	35	3	9	1	60.5	19200
FUNK'S	1506	67	101	36	2	12	0	61.3	14900
DEKALB Plant Gen	DK–48	66	100	33	2	9	0	59.6	23100
UNL	90P594 X TX850	65	101	36	1	11	0	59.9	21700
NORTHRUP KING	KS 555Y	64	94	35	1	11	3	61.7	20500
NORTHRUP KING	KS 383Y	63	95	30	1	10	1	60.5	22700
CARGILL	618Y	62	95	35	3	11	3	60.4	19200
CARGILL	575	61	99	35	2	11	0	60.3	17600
DEKALB Plant Gen	DK–56	61	102	34	2	12	0	59.2	22200
HORIZON	216G	61	100	33	1	10	0	58.5	19300
ASGROW	Seneca	60	95	31	2	11	0	62.3	19600
OHLDE	EX615	60	99	30	1	10	0	59.0	18600
ASGROW	Topaz	59	100	33	1	10	0	60.8	19300
PIONEER	8379	59	97	32	1	10	0	61.1	17800
AGRIPRO	AP9830	58	103	37	2	11	0	58.0	18800
CARGILL	630	57	97	31	1	10	1	61.1	20400
OHLDE	140W	57	99	35	2	12	0	60.2	20500
CARGILL	837	56	101	34	2	11	0	59.9	17800
FONTANELLE	W–5000	55	100	34	2	10	0	60.0	17900
NORTHRUP KING	KS 737	55	96	31	1	10	5	61.3	19200
WILSON	622E	54	99	32	1	10	0	60.4	20000
UNL	N122A x TX430	54	99	34	1	10	1	60.1	18700
DEKALB Plant Gen	DK–40y	54	98	34	1	11	0	61.5	19800
STINE	SM68BR	51	101	33	1	11	0	58.3	16200
STINE	SM69	51	99	32	2	11	1	60.2	19900
ASGROW	Osage	50	101	34	2	10	1	59.9	17700
NORTHRUP KING	KS 714Y	50	100	31	2	10	0	61.0	19500
ASGROW	A504	49	102	32	2	11	0	60.1	17300
UNL	N122A X TX8505	48	101	33	2	10	0	60.6	20300
HORIZON	213Y	47	99	33	1	10	0	59.9	18800
PIONEER	8358	47	101	33	1	10	0	60.0	23700
AGRIPRO	AP9850	47	103	35	1	11	0	59.3	22700
HOEGEMEYER	6744	46	101	36	2	9	0	58.5	22700
OHLDE	EX5715	46	98	32	1	9	0	60.5	20400
–––––	RS626	46	95	31	1	8	9	59.0	20400
STINE	SM74	46	102	32	1	12	0	57.8	17500
WILSON	535Y	46	101	33	1	11	0	60.8	13900
NORTHRUP KING	KS 710	46	95	32	1	10	0	61.7	17100
FONTANELLE	G–5590	45	103	33	1	10	0	58.3	21900
HOEGEMEYER	6686	45	98	31	3	10	0	59.5	20500
FUNK'S	1616	45	100	35	1	10	0	58.6	18200

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Saline County Dryland Sorghum Hybrid Test. 1991. Page 2

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	SEEDS PER POUND
CARGILL	607E	44	95	31	1	10	0	59.6	22500
ORO	AMIGO	44	102	32	1	9	0	58.3	21000
STINE	SM75R	43	101	34	1	9	0	60.2	17600
PIONEER	8500	42	98	31	2	9	0	60.5	19400
ORO	BARON	42	101	32	1	9	0	59.9	21200
UNL	N122A X TX2737	42	98	32	1	10	0	60.8	18900
AGRIPRO	ST686	41	100	30	1	9	0	60.6	20500
SEED SOURCE	SBP 005	40	104	35	1	12	0	55.6	17400
JACQUES	606E	40	102	32	1	9	0	59.2	19000
FONTANELLE	EX-88318	39	103	33	1	10	0	59.0	19300
OHLDE	246Y	37	103	31	2	11	0	58.1	15300
CARGILL	857	35	103	32	1	10	0	58.0	21500
TRIUMPH	TR58Y	34	101	30	2	10	0	57.4	18800
SEED SOURCE	SBP 001	29	104	31	1	10	0	55.6	19100
-----	MARTIN	29	98	26	2	9	0	58.1	21500
AVERAGE ALL ENTRIES		50	100	33	1	10	0.4	59.7	19412
DIF. REQ. FOR SIG	5%	NS	2.2	4.2	1.0	NS	NS	1.3	3107
	25%	15.0	1.3	2.5	0.6	1.3	1.9	0.8	1809

Southeast Dryland Sorghum Performance Tests. Lancaster and Saline Counties. 1991.

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	SEEDS PER POUND
GROWERS	GSC-3150	111	98	42	2	13	0	61.0	17100
FUNK'S	1506	110	98	45	4	14	0	61.6	14200
HORIZON	216G	106	98	39	2	12	0	59.6	17800
PIONEER	8379	104	96	37	2	13	0	61.8	16900
TRIUMPH	TR60G	101	96	41	4	11	1	61.6	18300
STINE	SM75R	101	100	42	2	12	0	61.2	15900
CARGILL	837	100	99	42	4	13	0	61.1	17000
ASGROW	Topaz	99	99	41	3	13	0	61.4	17400
UNL	90P594 X TX850	99	94	41	3	14	0	60.1	20100
DEKALB Plant Gen	DK-48	99	98	39	3	12	0	61.1	20400
WILSON	622E	99	98	40	3	12	0	61.4	18300
OHLDE	EX615	98	98	37	3	12	0	60.4	18000
DEKALB Plant Gen	DK-56	97	100	43	4	13	0	60.9	18900
NORTHRUP KING	KS 737	97	96	39	3	12	3	62.1	17900
NORTHRUP KING	KS 555Y	97	93	41	2	12	2	62.4	19900
STINE	SM69	97	97	40	3	13	1	61.4	18400
ORO	AMIGO	96	99	40	3	12	0	59.9	18500
UNL	N122A X TX430	96	96	40	3	12	1	61.0	17900
AGRIPRO	AP9850	96	101	42	2	13	0	61.1	20900
AGRIPRO	AP9830	96	101	44	4	13	0	59.8	16400
FONTANELLE	G-5590	95	100	40	2	12	0	59.6	19000
FUNK'S	1616	94	98	42	2	12	0	60.0	16900
PIONEER	8358	94	100	40	3	13	0	61.2	21500
STINE	SM74	94	100	40	2	14	0	59.5	16400
FONTANELLE	W-5000	94	99	40	4	12	0	61.3	17700
STINE	SM68BR	93	98	40	3	12	0	59.6	15500
OHLDE	140W	93	98	40	4	13	0	61.4	18800
CARGILL	575	93	98	40	3	13	0	61.3	17300
ASGROW	Osage	92	99	41	3	12	1	61.1	17700
ASGROW	Seneca	92	94	36	3	12	0	62.3	18800
WILSON	535Y	92	99	42	3	13	0	61.3	13400
AGRIPRO	ST686	91	98	39	2	12	0	61.5	18300
NORTHRUP KING	KS 714Y	90	98	37	3	12	0	62.0	19600
JACQUES	606E	90	100	39	2	12	0	60.2	17100
HORIZON	213Y	90	98	39	3	12	0	61.1	17300
NORTHRUP KING	KS 710	90	94	37	3	12	0	62.0	17700
HOEGEMEYER	6686	89	96	39	4	12	0	60.8	19000
CARGILL	630	89	96	37	2	12	1	61.7	19600
NORTHRUP KING	KS 383Y	88	94	35	2	12	1	61.2	20700
HOEGEMEYER	6744	88	101	42	4	12	0	60.0	19000
DEKALB Plant Gen	DK-40y	88	97	39	3	13	0	61.7	19200

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Southeast Dryland Sorghum Performance Tests. Lancaster and Saline Counties. 1991. Page 2.

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	SEEDS PER POUND
CARGILL	857	87	101	39	2	13	0	60.1	20100
UNL	N122A X TX2737	87	96	38	3	12	0	61.7	18100
PIONEER	8500	87	96	39	4	11	0	61.5	18800
UNL	N122A X TX8505	87	100	39	4	12	0	61.5	18900
CARGILL	618Y	86	94	40	4	12	2	60.8	18100
SEED SOURCE	SBP 005	86	102	42	3	14	0	57.8	16500
ASGROW	A504	86	101	39	3	13	0	61.2	16500
SEED SOURCE	SBP 001	85	102	40	2	13	0	58.2	17600
ORO	BARON	85	99	39	2	12	0	61.1	18400
TRIUMPH	TR58Y	83	98	39	3	12	0	59.3	17500
OHLDE	246Y	83	101	40	4	14	0	60.0	14300
FONTANELLE	EX-88318	81	102	43	3	14	0	60.2	16800
OHLDE	EX5715	81	97	37	2	12	0	61.4	18700
-----	RS626	77	94	38	3	11	5	59.4	19100
CARGILL	607E	70	94	37	3	12	0	60.4	22200
-----	MARTIN	52	97	33	3	11	0	59.8	20200
AVERAGE ALL ENTRIES		91	98	39	3	12	0	60.8	18059
DIF. REQ. FOR SIG.	0.05	NS	3	4	1	2	NS	1.5	2386
	0.25	13	2	2	1	1	NS	0.9	1398

Southeast Sorghum Performance Tests. 1987 – 1991.

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HEIGHT INCHES	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	SEEDS PER POUND
				2–YEAR AVERAGE					
FUNK'S	1616	101	91	47	3	15	1	60.0	14800
DEKALB Plant Gen	DK–56	100	93	48	5	16	3	61.1	17000
JACQUES	606E	98	90	44	4	15	2	60.4	15800
AGRIPRO	AP9830	97	91	48	5	15	2	59.9	15200
PIONEER	8379	97	88	41	3	15	1	61.5	14800
FONTANELLE	W–5000	97	90	45	5	14	0	60.8	15800
UNL	N122A X TX430	96	87	45	4	14	1	60.9	16500
ASGROW	Osage	96	90	46	5	14	12	60.9	15800
FONTANELLE	G–5590	95	90	44	3	14	7	60.0	16600
ASGROW	Topaz	95	90	45	5	15	5	61.5	15800
OHLDE	140W	95	90	45	5	15	1	61.1	16500
NORTHRUP KING	KS 555Y	93	86	45	4	14	6	61.9	17600
PIONEER	8358	93	91	44	4	15	0	61.3	17800
HORIZON	213Y	93	89	44	5	14	1	60.8	16100
PIONEER	8500	93	88	43	5	13	0	61.4	16500
CARGILL	575	93	89	45	5	15	1	61.0	16400
ORO	BARON	91	90	45	4	14	6	61.2	16600
CARGILL	630	91	87	42	4	14	1	61.1	16800
ASGROW	A504	90	91	44	5	15	1	61.0	15000
DEKALB Plant Gen	DK–48	89	90	43	4	15	5	60.9	18100
NORTHRUP KING	KS 714Y	89	89	43	4	14	1	61.4	18700
NORTHRUP KING	KS 737	88	87	44	4	14	20	61.3	18500
CARGILL	618Y	86	86	43	5	14	2	60.7	15900
NORTHRUP KING	KS 710	84	86	41	4	14	4	61.5	17600
-----	RS626	79	87	43	4	13	6	59.1	17100
CARGILL	607E	71	87	41	4	14	2	59.9	18900
-----	MARTIN	56	90	40	5	13	3	59.8	16900
AVERAGE ALL ENTRIES		91	89	44	4	14	3	60.8	16618
DIF. REQ. FOR SIG.	5%	5	0.7	0.6	0.3	0.3	NS	0.2	NS
	25%	3	0.4	0.3	0.1	0.1	NS	0.2	375

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HEIGHT INCHES	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	SEEDS PER POUND
				3–YEAR AVERAGE					
FUNK'S	1616	112	85	50	4	15	14	59.1	14800
PIONEER	8379	109	83	42	3	15	2	60.8	14800
ASGROW	Osage	106	85	47	4	14	21	60.0	15800
JACQUES	606E	105	86	46	3	15	4	59.4	15800
PIONEER	8500	105	82	44	5	13	1	60.8	16500
FONTANELLE	G–5590	104	86	47	3	14	13	59.1	16600
DEKALB Plant Gen	DK–48	102	84	44	4	15	6	60.4	18100
ORO	BARON	102	85	47	3	14	25	60.1	16600
ASGROW	Topaz	101	85	46	4	15	7	60.8	15800
FONTANELLE	W–5000	101	85	46	5	14	8	59.9	15800
PIONEER	8358	101	86	46	4	15	5	60.3	17800
NORTHRUP KING	KS 737	99	83	46	5	14	18	60.5	18500
NORTHRUP KING	KS 714Y	98	84	44	5	14	7	60.5	18700

Continued on page 2.

Southeast Sorghum Performance Tests. 1987 – 1991. Page 2.

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HEIGHT INCHES	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	SEEDS PER POUND
				3-YEAR AVERAGE (Continued)					
CARGILL	630	98	81	42	4	14	7	60.5	16800
OHLDE	140W	98	84	46	6	15	6	60.0	16500
NORTHRUP KING	KS 710	94	82	42	4	14	4	60.6	17600
CARGILL	575	91	84	46	5	15	8	60.0	16400
-----	RS626	84	81	43	4	13	12	58.3	17100
-----	MARTIN	62	85	41	6	13	10	59.4	16900
AVERAGE ALL ENTRIES		98	84	45	4	14	9	60.0	16663
DIF. REQ. FOR SIG.	5%	5	0.8	0.9	0.4	0.3	NS	6.5	NS
	25%	2	0.5	0.5	0.2	0.2	3.4	3.8	NS

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HEIGHT INCHES	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	SEEDS PER POUND
				4-YEAR AVERAGE					
FONTANELLE	G-5590	106	83	46	3	14	11	53.5	16600
ASGROW	Osage	106	82	47	4	14	18	53.7	15800
PIONEER	8500	105	79	45	4	13	2	54.2	16500
DEKALB Plant Gen	DK-48	104	82	44	3	15	5	54.2	18100
ORO	BARON	104	82	46	3	14	23	53.8	16600
FONTANELLE	W-5000	103	83	46	5	14	7	53.7	15800
ASGROW	Topaz	103	82	45	4	15	6	54.5	15800
PIONEER	8358	101	83	45	4	15	9	53.4	17800
CARGILL	630	96	78	43	3	14	12	53.7	16800
CARGILL	575	96	82	46	4	15	6	53.8	16400
-----	RS626	81	78	43	4	13	13	52.0	17100
-----	MARTIN	62	82	41	5	13	9	50.0	16900
AVERAGE ALL ENTRIES		97	81	45	4	14	10	53.3	16670
DIF. REQ. FOR SIG.	5%	4	1.1	1.0	0.5	0.3	NS	NS	NS
	25%	2	0.6	0.6	0.3	0.2	3.8	0.8	371

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HEIGHT INCHES	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	SEEDS PER POUND
				5-YEAR AVERAGE					
ASGROW	Osage	113	79	47	4	21	18	55.0	15800
ASGROW	Topaz	112	79	46	4	20	6	55.7	15800
FONTANELLE	W-5000	110	79	47	5	21	7	55.0	15800
FONTANELLE	G-5590	110	79	46	3	21	11	54.7	16600
DEKALB Plant Gen	DK-48	109	78	44	4	21	5	55.5	18100
PIONEER	8358	108	79	45	4	22	9	54.8	17800
-----	RS626	86	74	44	4	19	13	53.1	17100
-----	MARTIN	67	78	41	5	20	9	51.8	16900
AVERAGE ALL ENTRIES		102	78	45	4	21	10	54.5	16731
DIF. REQ. FOR SIG.	5%	5	1.2	1.3	0.5	NS	NS	NS	NS
	25%	3	0.7	0.8	0.3	0.8	3.7	1.0	428

Clay County Irrigated Grain Sorghum Test—1991

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT
PIONEER	8231Y	173	74	49	3	12
CARGILL	837	173	76	52	5	12
WILSON	535Y	165	75	55	7	12
UNL	N122A X TX430	164	73	51	5	12
NORTHRUP KING	KS 555Y	163	70	49	6	12
JACQUES	606E	162	78	51	3	12
PIONEER	8358	161	79	50	6	12
NORTHRUP KING	KS 737	161	73	50	5	12
STINE	SM68BR	161	74	49	6	11
NORTHRUP KING	KS 710	161	74	46	4	12
TRIUMPH	TR65 G+	160	73	52	5	12
ASGROW	Seneca	159	71	45	6	12
ORO	AMIGO	159	77	53	5	12
FUNK'S	1655	158	72	49	4	12
PIONEER	8379	157	75	49	4	12
ORO	HOMBRE	157	76	47	3	12
HORIZON	216G	156	75	47	2	11
DEKALB Plant Gen	DK–40y	156	71	49	6	12
FONTANELLE	G–5590	156	78	55	4	12
ASGROW	Osage	155	78	55	4	12
CARGILL	630	155	70	45	4	12
TRIUMPH	Two 80–D	155	78	51	4	12
FUNK'S	1506	155	75	58	7	12
CARGILL	607E	154	72	44	6	12
ASGROW	Topaz	154	74	51	5	12
NORTHRUP KING	KS 714Y	154	77	49	7	12
NORTHRUP KING	KS 383Y	154	70	43	5	12
DAHLGREN	DG–40B	153	74	48	5	12
GROWERS	GSC–1313	153	76	52	4	12
WILSON	522W	152	77	53	7	12
DAHLGREN	DG1707	151	76	52	5	12
OHLDE	EX5715	151	71	48	5	12
GOLDEN HARVEST	H–515E	151	78	54	3	12
GOLDEN HARVEST	H–444W	151	77	53	5	12
CARGILL	857	150	81	48	4	12
HOEGEMEYER	6744	150	79	55	5	12
ASGROW	A504	150	78	51	5	12
UNL	N122A X TX2737	149	72	50	6	12
OHLDE	EX148	149	77	52	3	12
ARROW SEED	AS 423	148	77	51	6	12
STINE	SM69	148	76	50	3	12
FUNK'S	1616	148	76	57	5	12

Continued on Page 2.

Clay County Irrigated Grain Sorghum Test–1991 PAGE 2

BRAND	HYBRID		GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT
DAHLGREN	DG1699		148	78	50	5	12
OHLDE	EX615		148	77	50	5	12
ORO	BARON		147	78	51	4	12
DEKALB Plant Gen	DK–56		147	80	56	7	12
HORIZON	213Y		146	77	51	5	12
ARROW SEED	AS 313		145	71	48	6	12
FONTANELLE	EX–88318		145	78	56	5	12
UNL	N122A X TX8505		144	79	52	6	12
HOEGEMEYER	6686		144	71	52	7	11
OHLDE	246Y		143	79	50	6	12
AGRIPRO	AP9250		143	72	43	5	12
UNL	90P651 X TX850		138	75	50	6	12
CARGILL	618Y		137	71	48	5	11
DEKALB Plant Gen	DK–41y		136	74	50	5	11
CARGILL	575		135	77	51	5	12
–––––	RS626		128	70	49	5	12
UNL	90P594 X TX850		119	81	52	4	12
–––––	MARTIN		101	71	47	8	12
AVERAGE ALL ENTRIES			151	75	50	5	12
DIF. REQ. FOR SIG.		5%	12.6	2.2	2.8	2.1	0
		25%	7.4	1.3	1.6	1.2	0

Webster County Dryland Sorghum Test – 1991

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT HT IN	HEAD EXSERT IN	PLANT STAND /30 FT	EARLY MOIST PCT
NORTHRUP KING	KS 737	107	46	5	75	11
UNL	N122A X TX430	107	46	5	73	12
NORTHRUP KING	KS 714Y	107	46	5	82	12
DAHLGREN	DG–40B	106	43	4	78	11
TRIUMPH	Two 80–D	106	46	2	72	12
ORO	HOMBRE	105	44	2	78	11
ASGROW	Osage	105	47	3	82	11
CARGILL	837	105	49	4	71	12
DEKALB Plant Gen	DK–56	103	48	6	70	11
JACQUES	606E	103	47	2	62	11
NORTHRUP KING	KS 710	103	44	4	74	11
GOLDEN HARVEST	H–444W	103	47	4	71	12
FUNK'S	1506	102	50	5	77	12
STINE	SM68BR	101	44	3	75	11
ASGROW	Seneca	99	42	6	75	12
DAHLGREN	DG1707	99	46	3	70	11
FONTANELLE	G–5590	99	48	1	74	11
WILSON	535Y	99	48	4	77	12
PIONEER	8231Y	99	49	2	71	13
CARGILL	630	98	43	4	72	12
OHLDE	246Y	98	46	6	79	11
NORTHRUP KING	KS 555Y	98	46	5	70	11
HORIZON	216G	97	44	3	67	12
CARGILL	618Y	97	44	5	78	12
HOEGEMEYER	6744	97	48	5	83	11
OHLDE	EX5715	97	42	3	73	12
AGRIPRO	AP9250	96	43	5	77	12
PIONEER	8379	96	43	3	82	11
FUNK'S	1616	96	50	3	69	12
HORIZON	213Y	96	47	5	78	12
DAHLGREN	DG1699	96	47	5	72	12
ASGROW	Topaz	95	45	4	81	11
CARGILL	575	95	47	4	72	12
ASGROW	A504	95	46	5	73	12
WILSON	522W	94	47	6	65	13
ORO	AMIGO	94	47	3	69	11
FUNK'S	1655	93	45	3	76	12
–––––	RS626	93	44	4	53	11
ORO	BARON	93	48	4	79	11
STINE	SM69	93	47	3	70	11
UNL	N122A X TX2737	92	46	6	65	11
GROWERS	GSC–1313	92	48	4	81	11

Continued on Page 2.

Webster County Dryland Sorghum Test – 1991
PAGE 2

BRAND	HYBRID		GRAIN YIELD BU/A	PLANT HT IN	HEAD EXSERT IN	PLANT STAND /30 FT	EARLY MOIST PCT
NORTHRUP KING	KS 383Y		91	39	3	73	11
ARROW SEED	AS 423		91	47	5	77	12
FONTANELLE	EX–88318		89	51	4	63	13
OHLDE	EX148		89	46	2	70	12
CARGILL	857		89	47	2	82	12
DEKALB Plant Gen	DK–41y		89	45	5	71	11
TRIUMPH	TR65 G+		89	46	5	71	11
DEKALB Plant Gen	DK–40y		87	46	4	64	12
OHLDE	EX615		87	44	5	70	12
ARROW SEED	AS 313		86	45	5	73	12
HOEGEMEYER	6686		86	48	3	57	11
PIONEER	8358		85	43	3	72	11
CARGILL	607E		85	43	4	76	11
GOLDEN HARVEST	H–515E		83	47	1	79	11
UNL	90P651 X TX850		77	47	5	58	11
UNL	N122A X TX8505		69	44	5	44	12
UNL	90P594 X TX850		66	44	2	47	12
–––––	MARTIN		57	42	5	73	11
AVERAGE ALL ENTRIES			94	46	4	72	12
DIF. REQ. FOR SIG.		5%	10	3	2	12	1
		25%	6	2	1	7	0

South Central Irrigated and Dryland Sorghum Hybrid Tests. Clay and Webster Counties. 1991.

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT
CARGILL	837	139	76	51	5	12
PIONEER	8231Y	136	74	49	3	13
UNL	N122A X TX430	136	73	49	5	12
NORTHRUP KING	KS 737	134	73	48	5	12
JACQUES	606E	133	78	49	3	12
WILSON	535Y	132	75	52	6	12
NORTHRUP KING	KS 710	132	74	45	4	12
ORO	HOMBRE	131	76	46	3	12
NORTHRUP KING	KS 714Y	131	77	48	6	12
TRIUMPH	Two 80-D	131	78	49	3	12
STINE	SM68BR	131	74	47	5	11
NORTHRUP KING	KS 555Y	131	70	48	6	12
ASGROW	Osage	130	78	51	4	12
DAHLGREN	DG-40B	130	74	46	5	12
FUNK'S	1506	129	75	54	6	12
ASGROW	Seneca	129	71	44	6	12
FONTANELLE	G-5590	128	78	52	3	12
CARGILL	630	127	70	44	4	12
HORIZON	216G	127	75	46	3	12
PIONEER	8379	127	75	46	4	12
GOLDEN HARVEST	H-444W	127	77	50	5	12
ORO	AMIGO	127	77	50	4	12
FUNK'S	1655	126	72	47	4	12
ASGROW	Topaz	125	74	48	5	12
DAHLGREN	DG1707	125	76	49	4	12
DEKALB Plant Gen	DK-56	125	80	52	7	12
TRIUMPH	TR65 G+	125	73	49	5	12
HOEGEMEYER	6744	124	79	52	5	12
OHLDE	EX5715	124	71	45	4	12
ASGROW	A504	123	78	49	5	12
PIONEER	8358	123	79	47	5	12
WILSON	522W	123	77	50	7	13
NORTHRUP KING	KS 383Y	123	70	41	4	12
GROWERS	GSC-1313	123	76	50	4	12
DAHLGREN	DG1699	122	78	49	5	12
DEKALB Plant Gen	DK-40y	122	71	48	5	12
FUNK'S	1616	122	76	54	4	12
OHLDE	246Y	121	79	48	6	12

Continued on page 2.

South Central Irrigated and Dryland Sorghum Tests. Clay and Webster Counties. 1991. Page 2

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HT IN	HEAD EXSERT IN	EARLY MOIST PCT
HORIZON	213Y	121	77	49	5	12
UNL	N122A X TX2737	121	72	48	6	12
STINE	SM69	121	76	49	3	12
ORO	BARON	120	78	50	4	12
CARGILL	607E	120	72	44	5	12
CARGILL	857	120	81	48	3	12
ARROW SEED	AS 423	120	77	49	6	12
AGRIPRO	AP9250	120	72	43	5	12
OHLDE	EX148	119	77	49	3	12
OHLDE	EX615	118	77	47	5	12
GOLDEN HARVEST	H-515E	117	78	51	2	12
FONTANELLE	EX-88318	117	78	54	5	12
CARGILL	618Y	117	71	46	5	12
ARROW SEED	AS 313	116	71	47	6	12
CARGILL	575	115	77	49	5	12
HOEGEMEYER	6686	115	71	50	5	11
DEKALB Plant Gen	DK-41y	113	74	48	5	11
-----	RS626	111	70	47	5	12
UNL	90P651 X TX850	108	75	49	6	12
UNL	N122A X TX8505	107	79	48	6	12
UNL	90P594 X TX850	93	81	48	3	12
-----	MARTIN	79	71	45	7	12
AVERAGE ALL ENTRIES		123	75	48	4	12
DIF. REQ. FOR SIG.	5%	12	NS	3	1	NS
	25%	7	NS	2	1	0

South Central Sorghum Tests. 1990–1991.

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HEIGHT IN	HEAD EXSERT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU
				2-YEAR AVERAGE				
JACQUES	606E	138	77	51	4	14	60	55.0
NORTHRUP KING	KS 737	137	73	49	6	14	36	54.9
DEKALB Plant Gen	DK-56	136	79	54	7	15	48	55.7
ASGROW	Osage	133	77	52	4	14	54	55.5
FUNK'S	1616	133	76	55	5	14	40	53.2
TRIUMPH	Two 80-D	132	77	50	4	15	60	54.4
NORTHRUP KING	KS 714Y	132	75	48	6	14	5	56.3
FONTANELLE	G-5590	131	77	51	4	14	64	54.7
GOLDEN HARVEST	H-444W	131	77	51	6	15	16	55.8
UNL	N122A X TX430	130	74	49	6	13	8	56.2
PIONEER	8379	130	75	45	5	14	4	56.6
NORTHRUP KING	KS 555Y	129	70	49	6	14	43	57.2
NORTHRUP KING	KS 710	129	73	45	5	14	11	55.8
PIONEER	8358	129	78	48	5	15	25	56.8
ASGROW	Topaz	127	75	49	5	14	56	56.2
DAHLGREN	DG1707	127	76	50	5	14	69	56.4
DAHLGREN	DG-40B	127	75	46	6	15	4	55.0
FUNK'S	1655	127	73	48	4	14	26	56.8
ORO	BARON	126	77	51	5	14	83	56.2
ASGROW	A504	125	77	49	7	14	40	55.9
CARGILL	630	124	69	45	5	14	19	56.8
DAHLGREN	DG1699	123	77	49	6	14	14	56.3
HORIZON	213Y	122	76	49	6	14	5	55.7
ARROW SEED	AS 423	121	76	50	7	14	9	56.3
CARGILL	575	120	77	49	6	14	9	55.8
CARGILL	607E	118	71	44	6	14	0	54.4
DEKALB Plant Gen	DK-41y	115	75	48	6	14	15	55.1
CARGILL	618Y	115	71	46	6	13	8	55.8
-----	RS626	111	69	48	5	13	71	54.1
-----	MARTIN	80	73	47	8	13	36	55.3
AVERAGE ALL ENTRIES		125	75	49	5	14	31	55.7
DIF. REQ. FOR SIG.	5%	3	1	1	0	NS	NS	NS
	25%	2	0	0	0	NS	NS	NS

Red Willow County Ecofallow Grain Sorghum Hybrid Test–1991

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT HT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU
ASGROW	Seneca	50	42	12	6	58.9
UNL	N122A X TX8505	47	44	13	0	59.1
SEED SOURCE	SBP 011	44	47	12	0	55.4
ASGROW	A504	43	45	13	0	58.4
CARGILL	575	41	45	12	0	59.2
UNL	N122A X TX430	41	44	11	12	57.4
UNL	90P594 X TX850	41	43	14	0	58.7
HORIZON	200Y	40	42	11	0	57.6
NORTHRUP KING	KS 383Y	39	37	12	0	56.8
PIONEER	8699	39	42	11	18	56.7
SEED SOURCE	SBP 001	39	46	13	0	56.4
STINE	SM68BR	38	43	11	16	54.1
ARROW SEED	AS 313	38	41	12	0	57.7
UNL	N122A X TX2737	38	44	12	8	57.4
GOLDEN HARVEST	H–361	37	40	11	12	57.5
DEKALB Plant Gen	DK–40y	35	43	12	6	59.0
FUNK'S	1460A	33	44	12	18	57.5
CARGILL	837	32	47	11	14	56.4
UNL	N123A X TX2737	32	42	11	8	57.1
DEKALB Plant Gen	DK–40	32	42	11	0	56.9
GOLDEN HARVEST	H–388W	32	43	11	2	58.4
PIONEER	8601	31	44	11	10	57.0
DEKALB Plant Gen	X–033	29	38	11	0	55.7
CARGILL	630	28	44	12	30	56.9
UNL	90P651 X TX850	26	45	11	10	57.8
TRIUMPH	TR50yG	26	40	11	38	57.8
ASGROW	Topaz	26	42	12	14	57.3
ASGROW	Osage	25	46	11	24	57.2
NORTHRUP KING	KS 555Y	23	43	12	18	57.3
-----	MARTIN	23	40	11	10	56.2
-----	RS626	20	42	11	48	54.8
STINE	SM69	19	44	11	24	56.4
TRIUMPH	TR52 Y	18	41	10	32	53.9
PIONEER	8771	17	42	11	32	54.7
CARGILL	607E	17	41	11	34	55.8
CARGILL	618Y	17	44	12	64	54.9
-----	NB505	17	43	13	44	60.1
HORIZON	45G	9	45	12	70	56.3
AVERAGE ALL ENTRIES		31	43	11.6	17.0	57.0
DIF. REQ. FOR SIG.	5%	12.3	2.2	0.9	15.6	2.6
	25%	7.2	1.3	0.5	9.2	1.5

Hayes County Ecofallow
Grain Sorghum Hybrid Test – 1991

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT HT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU
GOLDEN HARVEST	H–388W	84	44	13	6	58.2
STINE	SM69	75	46	13	27	56.6
CARGILL	607E	74	44	12	28	56.2
FUNK'S	1460A	71	48	13	20	58.5
SEED SOURCE	SBP 011	69	48	13	6	55.6
UNL	N122A X TX8505	69	47	13	2	57.1
ASGROW	A504	69	47	14	2	57.1
DEKALB Plant Gen	X–033	67	40	12	2	55.4
NORTHRUP KING	KS 383Y	66	41	11	3	55.8
UNL	N123A X TX2737	64	42	12	37	57.2
SEED SOURCE	SBP 001	63	46	14	31	56.5
TRIUMPH	TR52 Y	62	43	13	53	57.6
HORIZON	200Y	60	44	12	16	56.1
UNL	N122A X TX2737	59	46	12	24	56.9
STINE	SM68BR	59	43	11	16	54.5
TRIUMPH	TR50yG	59	44	12	32	56.9
-----	RS626	56	44	12	52	57.2
UNL	90P594 X TX850	55	44	15	1	57.4
-----	MARTIN	54	44	12	10	55.9
PIONEER	8771	54	44	11	37	56.1
ASGROW	Seneca	54	44	12	7	56.9
PIONEER	8601	54	46	12	26	56.8
ARROW SEED	AS 313	53	44	11	8	58.1
PIONEER	8699	53	43	11	36	56.3
CARGILL	618Y	52	45	13	28	57.2
GOLDEN HARVEST	H–361	52	42	11	16	57.0
ASGROW	Osage	51	45	12	23	54.9
DEKALB Plant Gen	DK–40	50	44	12	26	55.3
CARGILL	575	49	45	12	4	56.5
CARGILL	837	47	48	11	56	55.0
UNL	N122A X TX430	45	47	12	58	56.0
ASGROW	Topaz	43	44	12	44	56.7
DEKALB Plant Gen	DK–40y	42	45	12	33	55.7
HORIZON	45G	40	46	12	67	56.1
NORTHRUP KING	KS 555Y	40	47	12	66	56.8
CARGILL	630	40	45	12	60	56.2
-----	NB505	38	44	12	39	56.9
UNL	90P651 X TX850	38	43	11	51	57.2
AVERAGE ALL ENTRIES		56	45	12	28	56.5
DIR. REQ. FOR SIG.	5%	NS	3.6	1.1	28.9	NS
	25%	16.9	2.1	0.7	16.9	NS

Southwest Ecofallow Sorghum Performance Test. Red Willow and Hayes Counties. 1991.

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT HT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU
UNL	N122A X TX8505	58	46	13	1	58.1
GOLDEN HARVEST	H-388W	58	44	12	4	58.3
SEED SOURCE	SBP 011	57	48	13	3	55.5
ASGROW	A504	56	46	14	1	57.8
NORTHRUP KING	KS 383Y	53	39	12	2	56.3
ASGROW	Seneca	52	43	12	7	57.9
FUNK'S	1460A	52	46	13	19	58.0
SEED SOURCE	SBP 001	51	46	14	16	56.5
HORIZON	200Y	50	43	12	8	56.9
UNL	N122A X TX2737	49	45	12	16	57.2
STINE	SM68BR	49	43	11	16	54.3
DEKALB Plant Gen	X-033	48	39	12	1	55.6
UNL	90P594 X TX850	48	44	15	1	58.1
UNL	N123A X TX2737	48	42	12	23	57.2
STINE	SM69	47	45	12	26	56.5
CARGILL	607E	46	43	12	31	56.0
PIONEER	8699	46	43	11	27	56.5
ARROW SEED	AS 313	46	43	12	4	57.9
CARGILL	575	45	45	12	2	57.9
GOLDEN HARVEST	H-361	45	41	11	14	57.3
TRIUMPH	TR50yG	43	42	12	35	57.4
UNL	N122A X TX430	43	46	12	35	56.7
PIONEER	8601	43	45	12	18	56.9
DEKALB Plant Gen	DK-40	41	43	12	13	56.1
CARGILL	837	40	48	11	35	55.7
TRIUMPH	TR52 Y	40	42	12	43	55.8
-----	MARTIN	39	42	12	10	56.1
DEKALB Plant Gen	DK-40y	39	44	12	20	57.4
-----	RS626	38	43	12	50	56.0
ASGROW	Osage	38	46	12	24	56.1
PIONEER	8771	36	43	11	35	55.4
CARGILL	618Y	35	45	13	46	56.1
ASGROW	Topaz	35	43	12	29	57.0
CARGILL	630	34	45	12	45	56.6
UNL	90P651 X TX850	32	44	11	31	57.5
NORTHRUP KING	KS 555Y	32	45	12	42	57.1
-----	NB505	28	44	13	42	58.5
HORIZON	45G	25	46	12	69	56.2
AVERAGE ALL ENTRIES		44	44	12	22	56.8
DIF. REQ. FOR SIG.	5%	NS	2	1	24	1.9
	25%	11	1	1	14	1.1

Southwest Sorghum Performance Tests. 1987 – 1991.

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT HEIGHT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU
				2–YEAR AVERAGE		
ASGROW	Seneca	65	41	14	3	59.5
DEKALB Plant Gen	DK–40y	64	43	14	10	58.5
FUNK'S	1460A	64	42	14	10	59.1
GOLDEN HARVEST	H–388W	62	41	14	2	58.2
DEKALB Plant Gen	DK–40	61	41	13	7	56.5
NORTHRUP KING	KS 383Y	61	36	13	1	57.1
ASGROW	Osage	59	44	14	12	57.5
-----	RS626	59	41	13	25	56.9
PIONEER	8601	58	42	14	9	58.3
UNL	N122A X TX430	58	42	14	18	57.6
ASGROW	A504	58	43	16	1	57.3
NORTHRUP KING	KS 555Y	57	43	13	21	58.1
TRIUMPH	TR50yG	56	40	13	18	57.9
CARGILL	607E	56	40	13	16	56.1
ARROW SEED	AS 313	55	41	14	2	59.3
CARGILL	630	55	42	14	23	57.8
CARGILL	575	52	43	14	1	57.9
CARGILL	618Y	51	42	13	23	55.7
TRIUMPH	TR52 Y	50	40	13	21	56.5
ASGROW	Topaz	49	40	14	15	58.1
-----	MARTIN	41	40	13	5	56.9
HORIZON	45G	38	42	13	36	57.2
-----	NB505	33	43	14	24	57.8
AVERAGE ALL ENTRIES		55	41	13	13	57.6
DIF. REQ. FOR SIG.	5%	NS	1	NS	NS	0.6
	25%	3	0	0	NS	0.3

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT HEIGHT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	Plant Bloom Days
				3–YEAR AVERAGE			
FUNK'S	1460A	61	44	14	8	56.8	78
ASGROW	Seneca	56	42	14	2	56.1	78
CARGILL	630	55	43	14	17	55.4	78
-----	RS626	55	41	13	21	54.3	76

CONTINUED

Southwest Sorghum Performance Tests. 1987 – 1991. Page 2

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT HEIGHT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	Plant Bloom Days
				3–YEAR AVERAGE (Continued)			
DEKALB Plant Gen	DK–40	54	43	13	4	53.0	79
-----	NB505	38	44	14	27	56.6	71
-----	MARTIN	35	43	13	5	54.9	79
AVERAGE ALL ENTRIES		50	43	13	12	55.3	77
DIF. REQ. FOR SIG.	5%	NS	NS	NS	NS	NS	NS
	25%	6	NS	NS	6	0.9	NS
				4–YEAR AVERAGE			
FUNK'S	1460A	86	44	14	8	57.9	75
ASGROW	Seneca	81	42	14	2	57.6	75
DEKALB Plant Gen	DK–40	81	43	13	4	54.8	77
-----	RS626	79	42	13	21	55.7	74
CARGILL	630	78	43	14	17	56.7	75
-----	NB505	59	43	14	27	57.6	68
-----	MARTIN	52	43	13	5	56.0	77
AVERAGE ALL ENTRIES		74	43	13	12	56.6	74
DIF. REQ. FOR SIG.	5%	10	NS	NS	NS	NS	0
	25%	6	NS	NS	6	0.8	0

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT HEIGHT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	Plant Bloom Days
				5–YEAR AVERAGE			
DEKALB Plant Gen	DK–40	81	43	13	4	55.1	74
-----	RS626	77	42	13	18	54.9	70
-----	NB505	56	43	14	27	57.0	65
-----	MARTIN	51	43	13	4	56.1	74
AVERAGE ALL ENTRIES		66	42	13	13	55.8	71
DIF. REQ. FOR SIG.	5%	13	NS	NS	11	NS	1
	25%	7	NS	NS	6	NS	1

Lincoln County Grain Sorghum Test – 1991

BRAND	HYBRID	PLANT BLOOM DAYS	PLANT HT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
CARGILL	607E	82	43	14.1	7	58.0	105
FUNK'S	1460A	84	45	14.1	11	59.3	104
JACQUES	211	82	40	14.1	2	58.4	99
-----	RS626	84	42	14.1	23	54.0	96
JACQUES	377-W	84	44	14.1	29	58.5	96
UNL	N122A X TX2737	86	42	14.1	6	58.0	94
STINE	SM69	90	44	14.1	17	57.2	93
DEKALB Plant Gen	DK-39y	83	41	14.1	6	57.8	93
UNL	N122A X TX430	86	44	14.1	13	56.9	92
DEKALB Plant Gen	X-033	85	38	14.1	2	56.8	91
CARGILL	630	84	42	14.1	7	59.0	89
UNL	N122A X TX8505	94	42	14.1	3	54.9	83
UNL	N123A X TX2737	81	40	14.1	8	58.8	82
UNL	90P651 X TX850	91	42	14.1	26	56.2	79
CARGILL	618Y	83	43	14.1	8	56.5	78
UNL	N123A X 840089	79	38	14.1	26	57.5	74
-----	MARTIN	87	42	14.1	5	57.5	74
-----	NB505	76	43	14.1	26	58.8	69
UNL	90P594 X TX850	98	41	14.1	1	55.0	66
AVERAGE ALL ENTRIES		85	42	14.1	11.9	57.3	88
DIF. REQ. FOR SIG.	5%	1.4	2.2	NS	13.7	1.8	15.3
	25%	0.8	1.3	NS	8.0	1.0	8.9

Perkins County Grain Sorghum Test – 1991

BRAND	HYBRID	PLANT HT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU	GRAIN YIELD BU/A
UNL	N122A X TX2737	44	12	2	55.1	80
FUNK'S	1460A	48	11	2	55.9	76
DEKALB Plant Gen	DK-39y	43	12	2	54.7	67
UNL	N122A X TX430	48	11	18	54.6	65
JACQUES	211	40	11	2	54.8	64
CARGILL	630	44	11	18	55.2	63
UNL	N123A X TX2737	42	11	10	55.7	60
CARGILL	607E	42	11	6	53.7	60
CARGILL	618Y	45	11	12	53.4	59
-----	RS626	42	11	14	52.1	55
STINE	SM69	45	11	6	55.1	54
-----	MARTIN	43	11	6	55.3	51
UNL	N123A X 840089	38	11	14	54.6	49
JACQUES	377-W	49	12	30	54.0	48
UNL	90P651 X TX850	45	11	8	55.7	46
DEKALB Plant Gen	X-033	41	11	0	52.4	46
UNL	N122A X TX8505	47	12	0	54.0	44
-----	NB505	44	10	56	47.8	34
UNL	90P594 X TX850	42	13	0	53.8	28
AVERAGE ALL ENTRIES		44	11	11	54.1	55
DIF. REQ. FOR SIG.	5%	2.2	0.9	15.5	NS	21.4
	25%	1.3	0.5	9.0	NS	12.5

West Central Ecofallow Sorghum Hybrid Tests. Lincoln and Perkins Counties. 1991.

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU
FUNK'S	1460A	90	84	47	13	7	57.6
UNL	N122A X TX2737	87	86	43	13	4	56.6
CARGILL	607E	83	82	43	13	7	55.9
JACQUES	211	82	82	40	13	2	56.6
DEKALB Plant Gen	DK–39y	80	83	42	13	4	56.3
UNL	N122A X TX430	79	86	46	13	16	55.8
-----	RS626	76	84	42	13	19	53.1
CARGILL	630	76	84	43	13	13	57.1
STINE	SM69	74	90	45	13	12	56.2
JACQUES	377–W	72	84	47	13	30	56.3
UNL	N123A X TX2737	71	81	41	13	9	57.3
CARGILL	618Y	69	83	44	13	10	55.0
DEKALB Plant Gen	X–033	69	85	40	13	1	54.6
UNL	N122A X TX8505	64	94	45	13	2	54.5
UNL	90P651 X TX850	63	91	44	13	17	56.0
-----	MARTIN	63	87	43	13	6	56.4
UNL	N123A X 840089	62	79	38	13	20	56.1
-----	NB505	52	76	44	12	41	53.3
UNL	90P594 X TX850	47	98	42	14	1	54.4
AVERAGE ALL ENTRIES.		70	85	43	13	11	55.0
DIF. REQ. FOR SIG.	5%	13	NS	2	NS	14	NS
	25%	8	NS	1	NS	8	NS

West Central Sorghum Performance Test. 1990 – 1991

BRAND	HYBRID	GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HEIGHT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU
					2–YEAR AVERAGE		
FUNK'S	1460A	70	80	47	12	3	56.5
UNL	N122A X TX430	61	81	46	12	8	54.5
DEKALB Plant Gen	DK–39y	60	78	42	12	6	55.8
CARGILL	607E	58	78	43	12	3	55.0
CARGILL	630	57	78	44	12	10	54.9
-----	RS626	56	77	44	12	21	50.4
JACQUES	377–W	56	81	47	12	15	56.0
CARGILL	618Y	55	79	44	11	6	53.3
-----	MARTIN	46	82	45	12	5	55.4
-----	NB505	34	69	45	11	58	51.7
AVERAGE ALL ENTRIES		55	78	45	12	14	54.3
DIF. REQ. FOR SIG.	5%	3.9	1.6	NS	NS	11.0	1.0
	25%	2.1	0.9	0.7	NS	6.0	0.5

Cheyenne County Black Fallow Grain Sorghum Test – 1991.

BRAND	HYBRID		GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HT IN	EARLY MOIST PCT	TEST WEIGHT LB\BU
DEKALB Plant Gen	X–218		77	80	40	12.3	47.0
DEKALB Plant Gen	DK–28E		57	86	35	12.3	43.5
UNL	N123A X 840089		52	84	38	13.9	49.2
DEKALB Plant Gen	X–110		49	86	38	13.2	46.9
-----	NB505		40	82	40	13.2	53.9
AVERAGE ALL ENTRIES			55	83	38	13.0	48.1
DIF. REQ. FOR SIG.		5%	15.9	3.1	2.8	1.0	2.6
		25%	8.8	1.7	1.6	0.5	1.5

Cheyenne County Ecofallow Grain Sorghum Test – 1991.

BRAND	HYBRID		GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HT IN	EARLY MOIST PCT	TEST WEIGHT LB/BU
DEKALB Plant Gen	DK–28E		48	87	36	15.6	45.4
DEKALB Plant Gen	X–218		44	85	40	15.5	46.1
UNL	N123A X 840089		40	87	38	14.4	46.8
DEKALB Plant Gen	X–110		34	89	39	16.2	41.8
-----	NB505		21	88	40	15.5	51.9
AVERAGE ALL ENTRIES			37	87	39	15.4	46.4
DIF. REQ. FOR SIG.		5%	NS	NS	3.1	NS	4.8
		25%	11.1	1.3	1.7	NS	2.6

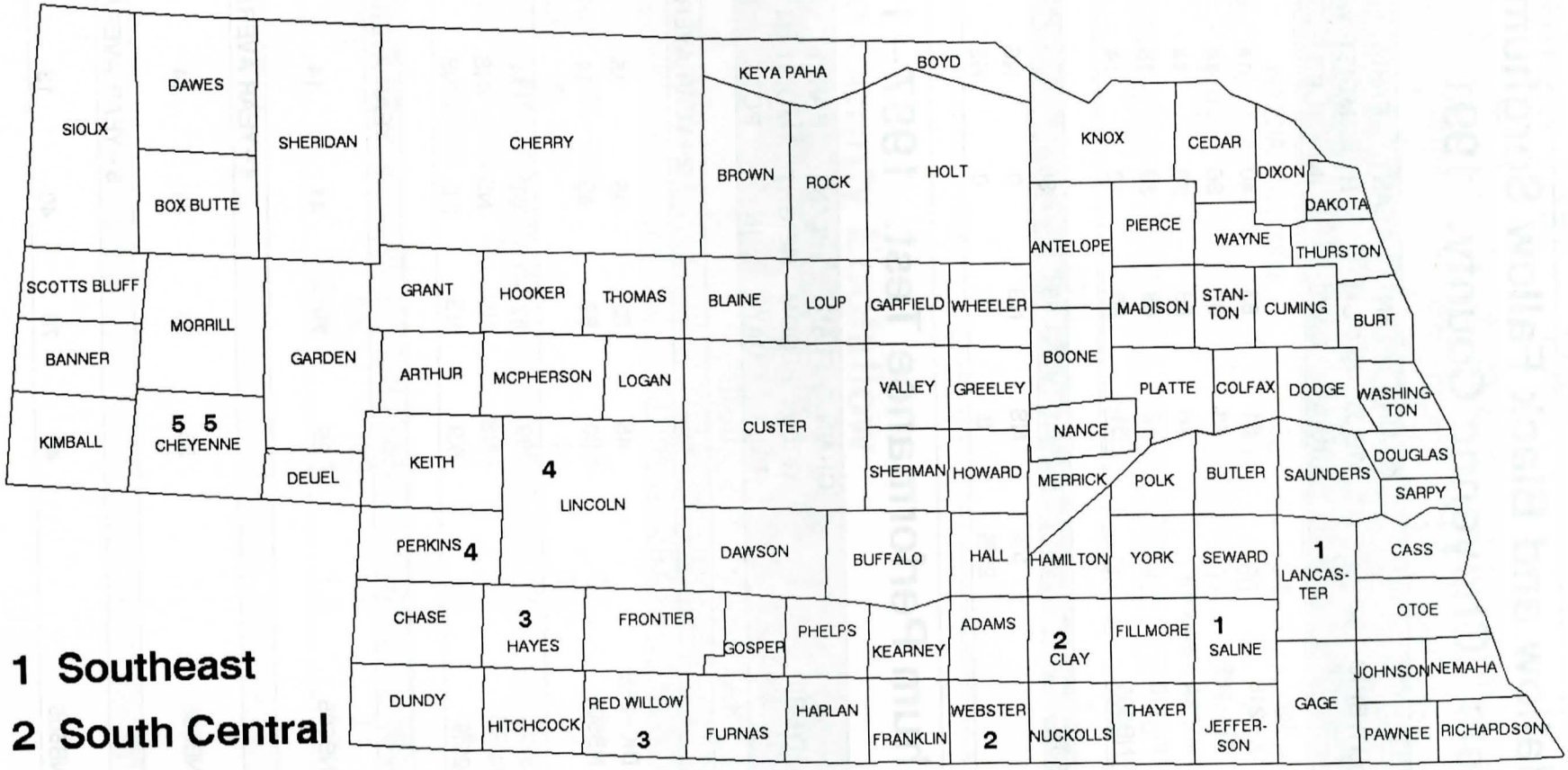
West Ecofallow and Black Fallow Sorghum Hybrid Tests. Cheyenne County. 1991.

BRAND	HYBRID		GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HT IN	EARLY MOIST PCT	TEST WEIGHT LB/BU
DEKALB Plant Gen	X-218		61	83	40	14	46.6
DEKALB Plant Gen	DK-28E		53	87	36	14	44.5
UNL	N123A X 840089		46	86	38	14	48.0
DEKALB Plant Gen	X-110		42	88	39	15	44.4
-----	NB505		31	85	40	14	52.9
AVERAGE ALL ENTRIES			46	85	38	14	47.2
DIF. REQ. FOR SIG.		5%	NS	NS	0	NS	3.7
		25%	8	1	0	NS	2.1

West Sorghum Performance Test. 1987-1991.

BRAND	HYBRID		GRAIN YIELD BU/A	PLANT BLOOM DAYS	PLANT HEIGHT IN	EARLY MOIST PCT	STALK LODGE PCT	TEST WEIGHT LB/BU
						2-YEAR AVERAGE		
DEKALB Plant Gen	DK-28E		48	82	35	15	10	49.2
-----	NB505		30	82	40	14	8	53.7
AVERAGE ALL ENTRIES			39	82	37	14	9	51.4
DIF. REQ. FOR SIG.		5%	NS	NS	NS	NS	NS	NS
		25%	8.9	NS	2.0	NS	NS	NS
						3-YEAR AVERAGE		
-----	NB505		26	79	41	14	8	50.4
						4-YEAR AVERAGE		
-----	NB505		33	76	41	14	8	52.2
						5-YEAR AVERAGE		
-----	NB505		40	76	40	13	8	53.3

Locations of 1991 Sorghum Tests



1 Southeast

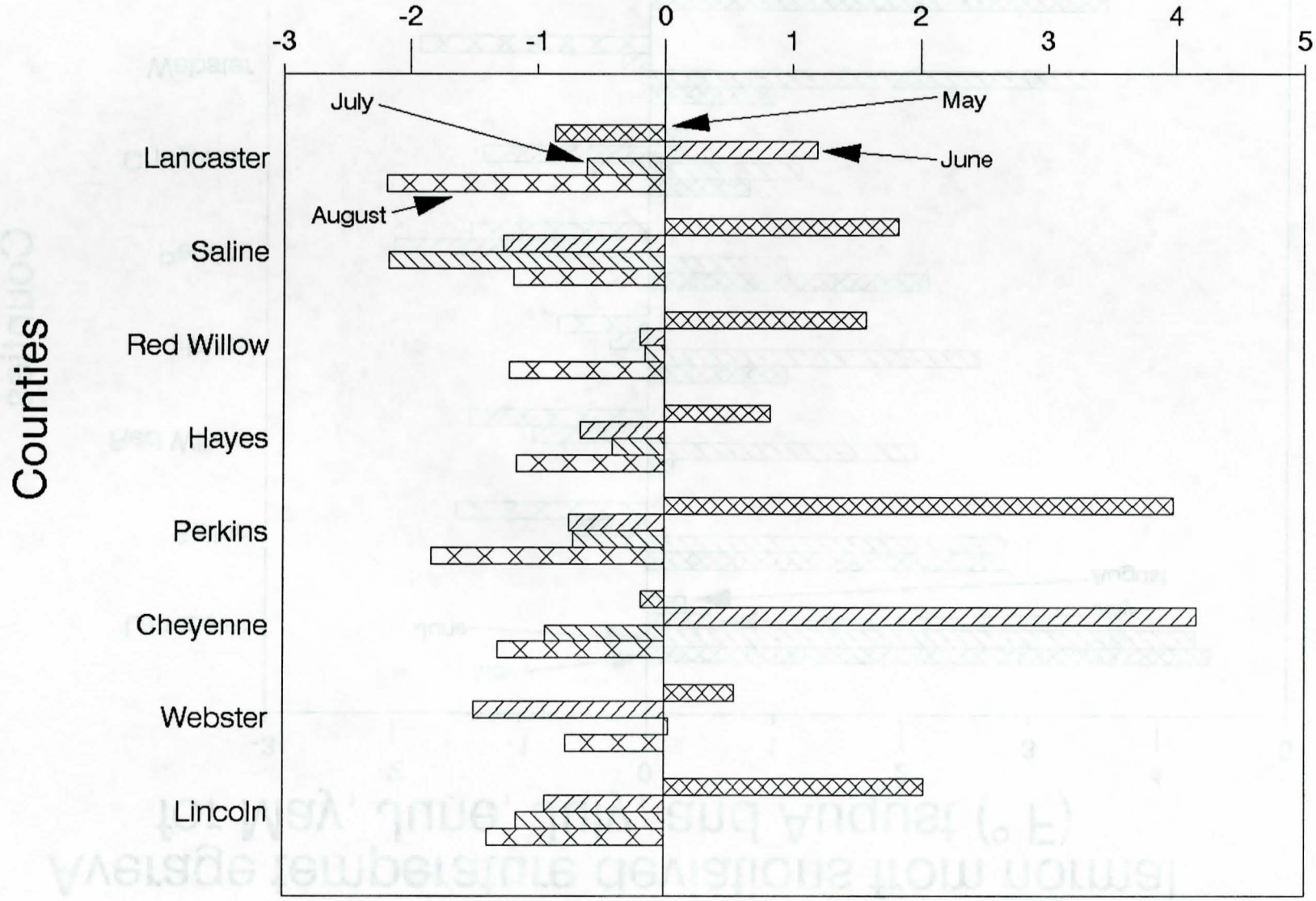
2 South Central

3 Southwest

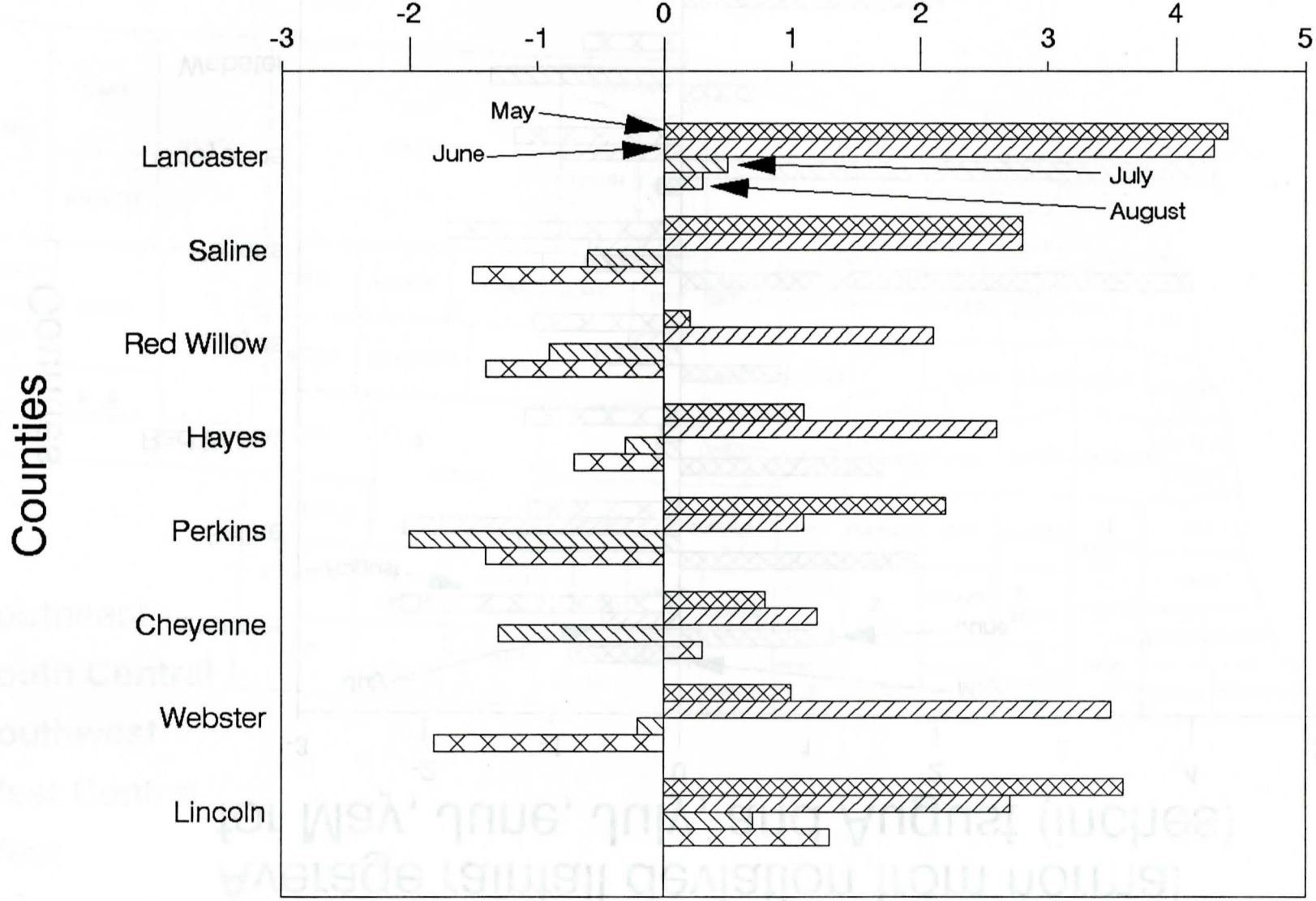
4 West Central

5 West

Average rainfall deviation from normal for May, June, July, and August (inches)



Average temperature deviations from normal for May, June, July, and August (° F)



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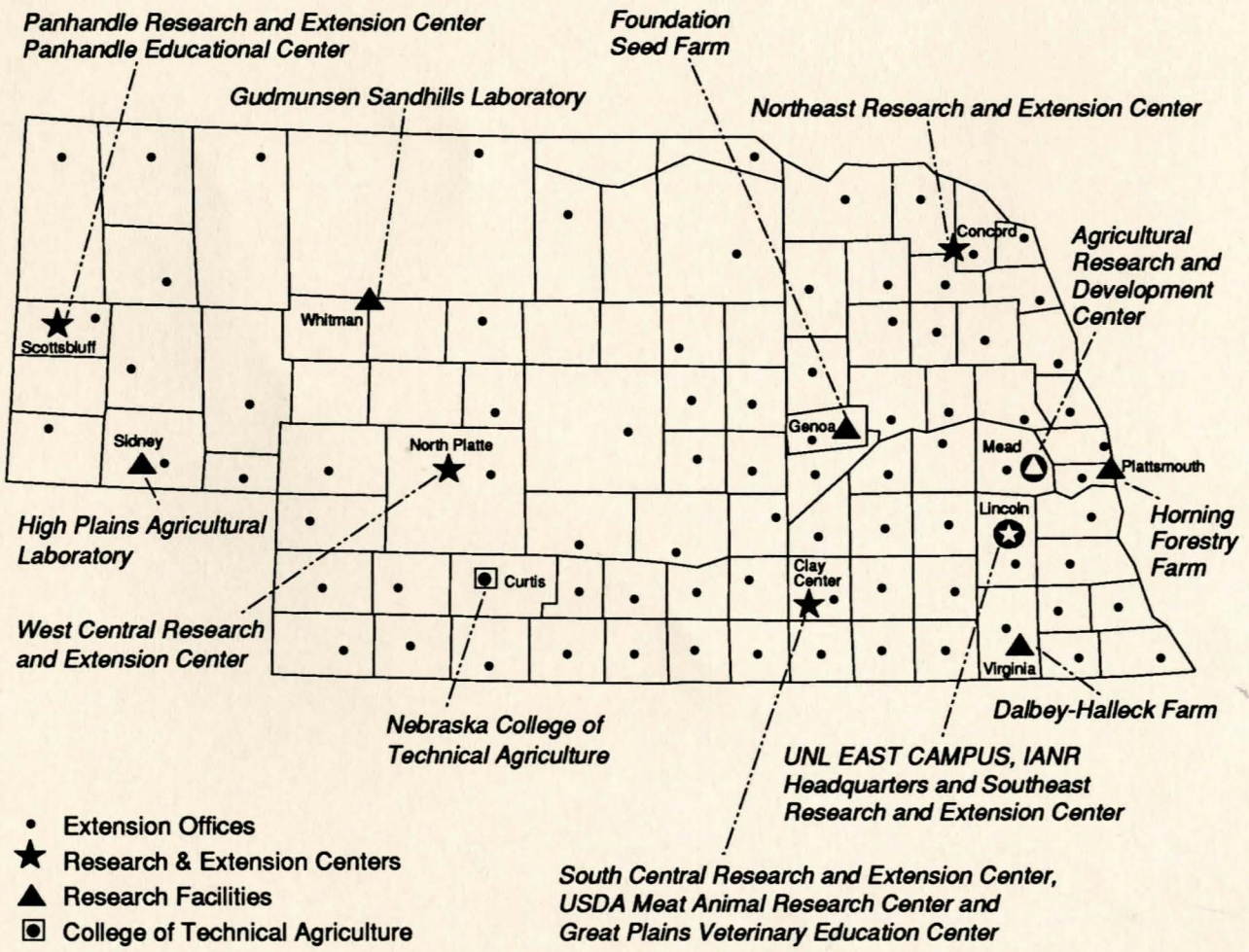

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