

2004

KANSAS PERFORMANCE TESTS WITH GRAIN SORGHUM HYBRIDS

REPORT OF PROGRESS 933

Kansas State University
Agricultural Experiment Station
and Cooperative Extension Service

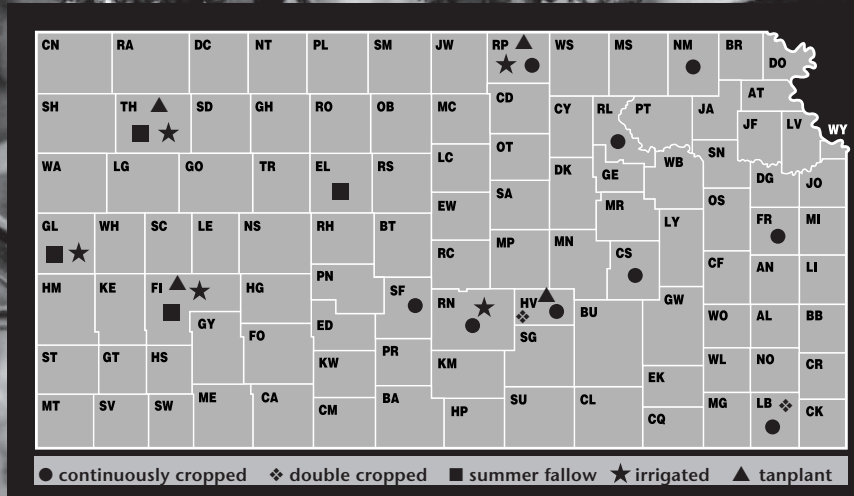
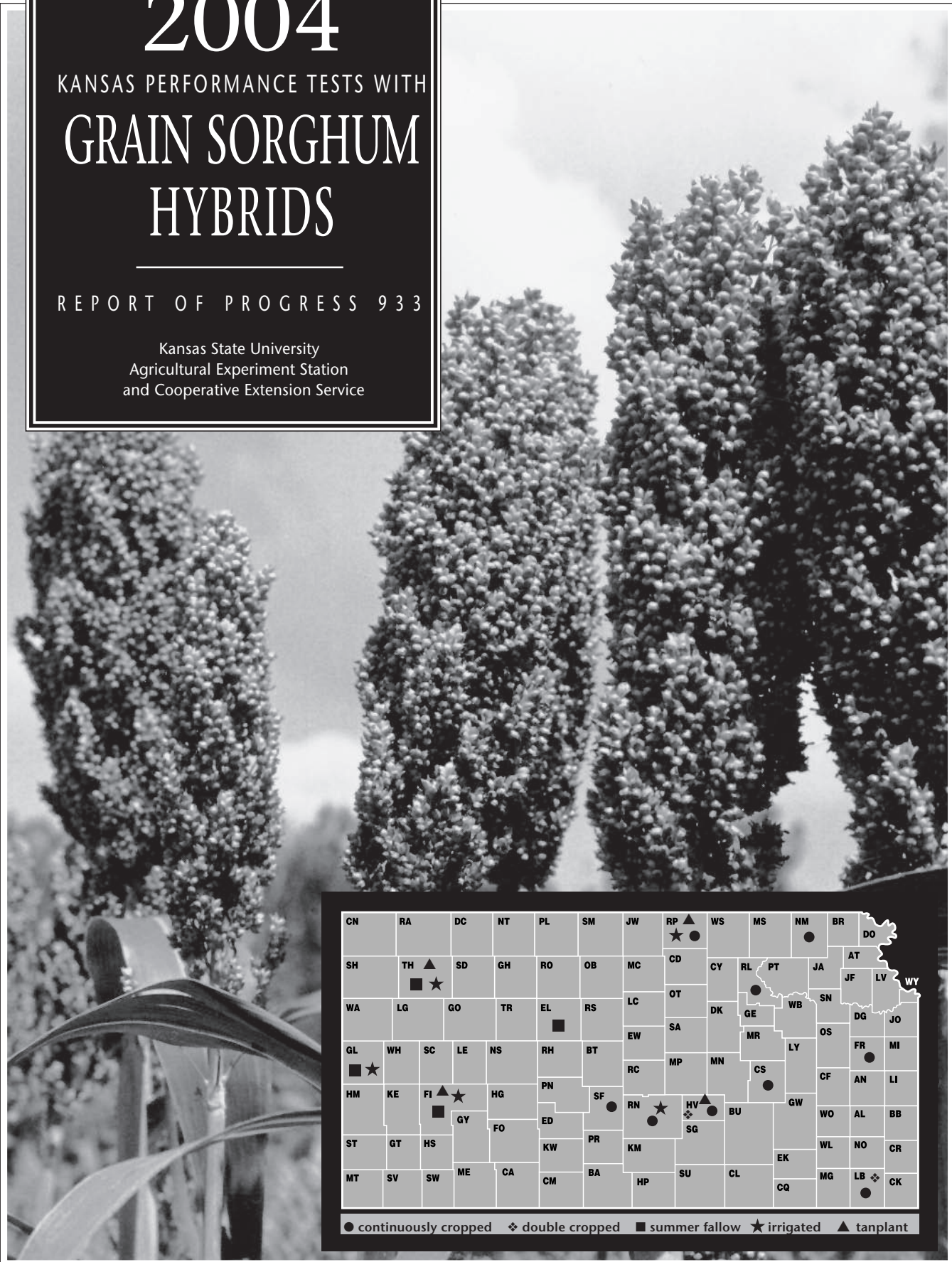


TABLE OF CONTENTS

2004 Grain Sorghum Crop Review

Statewide Growing Conditions, Diseases, Insects, Harvest Statistics.....	1
--	---

2004 Performance Tests

Objectives and Procedures	2	
Entrants in the 2004 Performance Tests Table 1	3	
Northeast		
Centralia, Nemaha County Table 2	4	
Manhattan, Riley County Table 3	5	
Belleville, Republic County Table 4	7	
2004 Yield Summary Table 5	9	
Multi-year Summary Figure 4	10	
Southeast		
Ottawa, Franklin County Table 6	11	
Strong City, Chase County Table 7	12	
Parsons, Labette County Table 8	13	
2004 Yield Summary Table 9	14	
Multi-year Summary Figure 5	15	
South Central		
Hesston, Harvey County Table 10	16	
Hutchinson, Reno County Table 11	18	
St. John, Stafford County Abandoned; crabgrass infestation		
2004 Yield Summary Table 12	20	
Multi-year Summary Figure 6	21	
West		
Hays, Ellis County Table 13	22	
Colby, Thomas County Table 14	24	
Tribune, Greeley County Table 15	26	
Garden City, Finney County Table 16	28	
2004 Yield Summary Table 17	30	
Multi-year Summary Figure 7	31	
Irrigated		
Scandia, Republic County Table 18	32	
Hutchinson, Reno County Table 19	34	
Colby, Thomas County Table 20	36	
Tribune, Greeley County Table 21	37	
Garden City, Finney County Table 22	39	
2004 Yield Summary Table 23	41	
Multi-year Summary Figure 8	42	
Double-crop		
Parsons, Labette County Table 24	43	
Hesston, Harvey County Table 25	43	
Combined Double-crop Table 26	44	
Tan-plant		
Hesston, Harvey County Table 27	44	
Scandia, Republic County, Irrigated Table 28	45	
Colby, Thomas County, Irrigated Table 29	45	
Garden City, Finney County, Irrigated Table 30	46	
Combined Tan-plant tests Table 31	46	
Entries in the 2004 Kansas Grain Sorghum Performance Tests Plus Descriptive Information and Iron Chlorosis Ratings Table 32		47
Electronic Access, University Research Policy, and Duplication Policy		back cover

2004 GRAIN SORGHUM CROP REVIEW

Statewide Growing Conditions

The 2004 growing season differed from the previous two years, with above-average precipitation in July and August rather than a prolonged dry period. In 2004, a relatively short dry period in May and early June was followed by heavy rains in late June and July that replenished topsoil moisture (Figure 1). Topsoil moisture became somewhat depleted in late August and September as much of the late-maturing sorghum was filling grain. Slow maturation and early-November rains delayed harvest.

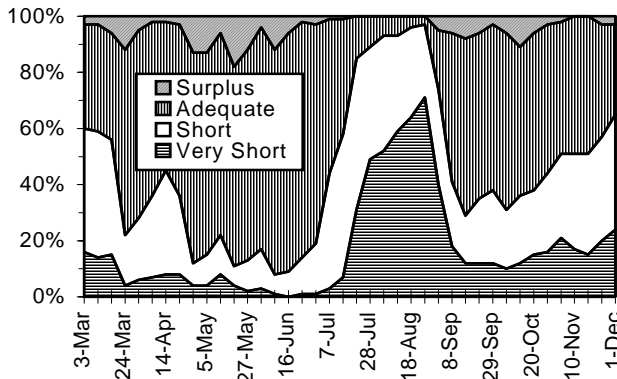


Figure 1. Statewide status of topsoil moisture.

Crop condition improved from early June until early August. Favorable precipitation and temperatures in June and July enabled 75% of the grain sorghum crop to be rated as good or excellent in early August (Figure 2). Unlike the previous two years, crop condition declined only slightly after the early-August peak, so that roughly 60% of the crop was still rated as good or excellent in early November. Cool August and September temperatures slowed crop growth and development, delaying harvest. Heading was actually ahead of that for 2003, but the rate of grain coloring and harvest in 2004 was similar to that of last year; both of which lagged the 5-year average by more than two weeks.

(Crop-Weather Reports, Kansas Agricultural Statistics, Topeka)

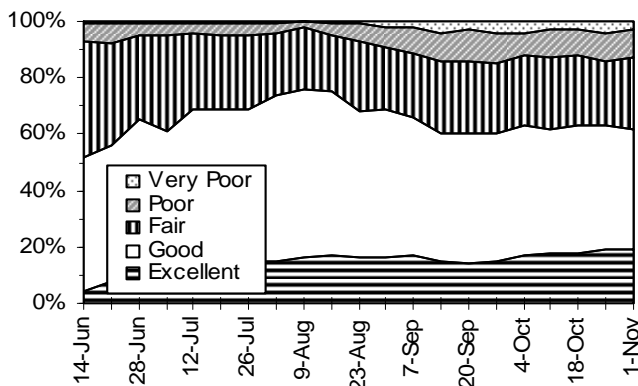


Figure 2. Condition of 2004 Kansas sorghum crop.

Diseases

Disease generally caused few problems in the 2004 Kansas grain sorghum crop. During wet periods early in the year, both *Pythium* and *Fusarium* seedling blight caused some stand losses. Where sorghum was planted into excessively wet, no-tilled soils, there were some problems with brace root development, resulting in significant early-season lodging in a number of fields.

Foliar disease problems were minimal, with only a few fields showing significant sooty stripe infestations. These fields characteristically were in long-term continuous sorghum with large amounts of debris from the previous crop.

Many fields were subject to late-season lodging. In some cases, the cause was *Fusarium* stalk rot, but in others the lodging was attributed to either excessively dry weather or, at least in one instance, sugarcane rootstock weevil.

Ergot was present late in the season as far north as Manhattan and as far west as Lewis in Edwards County. Although ergot does not cause significant yield losses, it creates many harvest headaches because the sticky honeydew it produces can bind up harvesting equipment and cause caking of the grain in trucks, grain carts, and storage bins.

(Doug Jardine, Kansas State University Department of Plant Pathology)

Insects

Overall, sorghum insect problems seemed to be less severe than in most years. Chinch bugs caused stand reductions or replanting in scattered fields throughout the eastern half of the state. Reports of early-season lodging caused by sugarcane rootstock weevil feeding were received, but good growing conditions reduced the impact of this pest. Sorghum “headworms,” especially corn earworms and sorghum webworms, were evident, but populations were low overall. Greenbugs were detected in some areas of the state, but no reports of economically important infestations were received.

(Jeff Whitworth, Kansas State University Department of Entomology)

Harvest Statistics

The Kansas Agricultural Statistics Office predicted a 223.3-million-bushel crop in their November 12 Crops Report, up 71% from last year (Figure 3). The number of acres harvested was unchanged from last year at 2.9 million. The average yield estimate of 77 bushels per acre was 32 bushels greater than the final estimate for 2003.

(Kansas Agricultural Statistics)

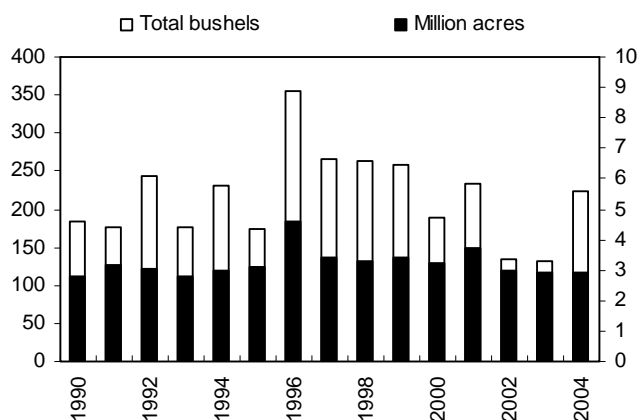


Figure 3. Historical Kansas grain sorghum production.

2004 PERFORMANCE TESTS

Objectives and Procedures

Grain Sorghum Performance Tests, conducted annually by the Kansas Agricultural Experiment Station, provide farmers, extension workers, and seed-industry personnel with unbiased agronomic information on many of the grain sorghum hybrids marketed in the state. Entry fees from private seed companies help finance the tests. Seed companies receive test announcements and entry forms in late January each year; deadlines for receipt of completed entry forms and seed are in mid-March. Because entry selection and location are voluntary, not all hybrids grown in the state are included in tests, and the same group of hybrids is not grown uniformly at all test locations.

Double-crop performance tests target hybrids for cropping systems that involve planting sorghum after harvest of the current-year wheat crop. These systems provide opportunities for additional production from fields that might otherwise lie unused until the fall or following spring.

A summary of growing-season weather data is given in individual test discussions. These data are from the nearest weather-reporting station and often are supplemented with information from the test site. Precipitation graphs include cumulative lines for 2004 and the 30-year normal, in addition to the daily rainfall amounts since last fall. Temperature graphs include daily maximum and minimum temperatures compared with normal. General trends in precipitation and temperature relative to normal are readily observed in the graphs. A table with monthly totals and averages for the growing season also is included.

The growth unit or growing-degree-day concept was developed to measure the amount of heat available for growth and maturation. To calculate the daily growing-degree-day accumulation, add the maximum temperature and the minimum temperature for each day, divide by 2, and subtract a base temperature of 35°F. Any temperature below 35°F was considered to be 35°F.

Explanatory information precedes data summaries for each test. Tables 2 through 31 contain results from the individual performance tests. Hybrids are listed in order of increasing days to half bloom and increasing grain moisture for the current year, so hybrids of similar maturity appear together.

Figures 4 through 8 graphically summarize yield and maturity information over the past 3 years for each region. In these figures, hybrid performance is standardized by using the average of two check hybrids present in every test. The number beside each bar shows the number of tests in which a given hybrid was compared with the check hybrids. In general, the greater the number of comparisons, the greater confidence one can place in the stated performance of that hybrid. Symbols beside each bar indicate if performance of a hybrid was significantly greater (+) or lower (-) than the average performance of the check hybrids. As with individual test results, small differences should not be overemphasized. Relative ranking and large differences are better indicators of performance.

Most tests were planted at a rate 25% to 30% greater than the desired population and thinned only to remove doubles. Planting to stand enables evaluation of product performance for the entire growing season.

Three or four plots (replications) of each hybrid were grown in a randomized complete-block design at each location. Each harvested plot consisted of two rows trimmed to a specific length ranging from 20 to 30 feet at the different locations. Tests were harvested with specialized plot combines equipped with automatic weighing and sampling devices.

Grain yields are reported as bushels per acre of shelled grain (56 lbs/bu) adjusted to a moisture content of 12.5%. Yields also are presented as a percentage of test average to speed recognition of highest-yielding hybrids. Hybrids yielding more than 100% of the test average year after year merit consideration. Adaptation to individual farms for appropriate maturity, stalk strength, and other factors also must be considered.

The percentage of lodged stalks is reported when appropriate. Both broken stalks and stalks leaning more than 45 degrees from vertical were considered lodged, although most were harvestable with modern machinery. Severely lodged stalks or dropped heads that could not be picked up by normal harvest procedures were not included in yield. Because harvest often is delayed until latest maturing entries are ripe, early and mid-season hybrids could lodge simply because they must wait well past their optimum harvest date.

Relative maturity is measured in terms of both number of days from planting to half bloom and grain moisture at harvest. Maturity can be critical when considering a sorghum hybrid for a specific cropping system.

Small differences in yield or other characteristics should not be overemphasized. Least significant differences (LSD) are shown at the bottom of each table. Unless two entries differ by at least the LSD shown, little confidence can be placed in one being superior to the other. The coefficient of variability (CV) can be used to estimate the degree of confidence one can have in published data from replicated tests. In this testing program, a CV of less than 10% generally indicates reliable, uniform data, whereas a CV of 10 to 15% is not uncommon and usually indicates that data are acceptable for the rough performance comparisons desired from these tests. Tests with a CV greater than 15% still may be useful, especially in situations with low yields.

Iron Chlorosis Screening

All entries were screened for susceptibility to iron chlorosis at Colby and Tribune. Replicated rows were planted in areas where sorghum had previously exhibited iron chlorosis symptoms. Each hybrid was visually rated at the seedling stage for plant color and vigor. Ratings from this year and averaged over the past three years can be found in Table 32.

Table 1. Entrants in the 2004 Kansas Grain Sorghum Performance Tests.

Channel Bio Corporation (Midwest Seed) Kentland, IN 800-369-8218 channelbio.com	Frontier Hybrids Abernathy, TX 800-872-0522 frontierhybrid.com	Mycogen Seeds Indianapolis, IN 1-800-MYCOGEN mycogen.com	Taylor Seed Farms White Cloud, KS 800-742-7473 taylorseedfarms.com
CroPlan Genetics St. Paul, MN 800-851-8810 croplangenetics.com	Garst Seed Company Slater, IA 800-831-6630 garstseed.com	NC+ Hybrids Lincoln, NE 800-279-7999 nc-plus.com	Triumph Seed Co., Inc. Ralls, TX 800-530-4789 triumphseed.com
Crosbyton Seed (Golden World) Crosbyton, TX 806-675-2308 crosbytonseed.com	Golden Acres Genetics Waco, TX 800-692-6848 gaseed.com	Pioneer, A DuPont Company Amarillo, TX 800-258-5604 pioneer.com	UAP-Pueblo (Dyna-Gro) Garden City, KS 620-275-6127 uap.com
DeLange Seed (Advanced Genetics) Girard, KS 620-724-6223 delangeseed.com	Kaystar Seed Huron, SD 800-288-8791 kaystarseed.com	Producers Hybrids Battle Creek, NE 402-675-2975 producershybrids.com	
Drussel Seed, Inc. Garden City, KS 620-275-2359	Midland Genetics Group Ottawa, KS 800-819-SEED midlandgenetics.com	Seed Resource Tulia, TX 800-724-4306 seedresource.com	
Fontanelle Hybrids Fontanelle, NE 800-279-4353 fontanelle.com	Monsanto Seed (Asgrow/DeKalb) St. Louis, MO 800-833-5252 monsanto.com	Sorghum Partners, Inc. New Deal, TX 806-746-5566 sorghum-partners.com	

NORTHEAST KANSAS GRAIN SORGHUM TEST ON SILTY CLAY LOAM SOIL

Private farm; Kraig Roozeboom, agronomist

Wymore silt loam; Alfalfa in 2003

130 - 30 - 0 lb/a N, P, K

Planted on 5/4/2004; Harvested on 10/6/2004

Target stand of 55,000 plants/acre; 3.8 in. spacing

No-till planted into recently killed alfalfa. Good soil moisture May to July. Excellent dryland yields.

Month	Precipitation		Average Temp.		GDU	
	2004	Norm.	2004	Norm.	2004	Norm.
Nov.-Mar	9.8	6.0	35	35		
April	1.3	2.7	55	54	613	575
May	5.1	4.5	65	65	952	918
June	5.9	5.1	70	74	1050	1158
July	5.9	3.9	74	79	1210	1369
August	2.2	3.5	72	77	1155	1317
Sept.	1.0	3.8	71	70	1090	1035
Oct.	0.3	2.9	58	57	753	713
Totals:	31.4	32.4	54	54	6,823	7,085

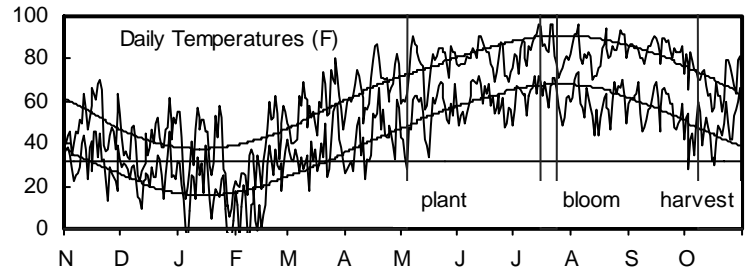
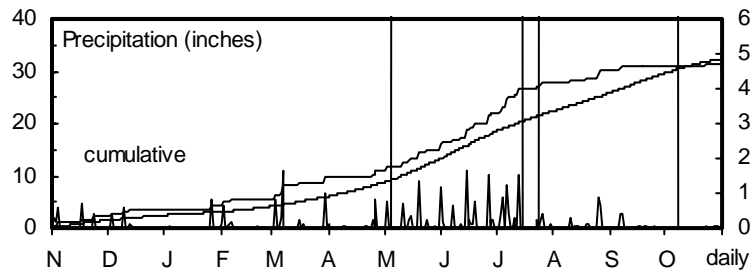


Table 2. Centralia Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS %										2003-2004		2004		Final Hds	
		ACRE YIELD, BUSHELS				YIELD AS % OF TEST				Days Grain to Blm	Days Grain to Moist.	Test Wt. lb/bu	Planting Ht. in.	Ldg %	Stand per Plnt		
		2004	2003	2002	2002	2004	2003	2002	2002								
GARST	5750	160	--	--	--	93	--	--	--	--	71	11	61	60	--	109	1.6
SORG. PARTNERS	NK5418	163	--	--	--	94	--	--	--	--	74	10	60	44	--	117	1.5
MATURITY CHECK	OK11xTX2741	153	--	--	--	89	--	--	--	--	74	11	60	49	--	98	1.5
MATURITY CHECK	TX3042xTX2737	172	--	--	--	100	--	--	--	--	74	11	61	62	--	93	1.7
SORG. PARTNERS	KS 585	175	--	--	--	101	--	--	--	--	74	11	63	52	--	104	1.7
DEKALB	DKS42-20	161	--	--	--	93	--	--	--	--	76	11	62	56	--	99	1.6
MIDWEST SEED	G 530	157	--	--	--	91	--	--	--	--	76	12	62	46	--	109	1.2
ASGROW	A459	166	--	--	--	96	--	--	--	--	77	11	61	55	--	100	1.4
DEKALB	DKS54-00	188	--	--	--	109	--	--	--	--	77	11	62	58	--	92	1.6
SORG. PARTNERS	NK6673	176	--	--	--	102	--	--	--	--	77	11	60	51	--	103	1.5
DEKALB	DKS44-41	163	--	--	--	94	--	--	--	--	78	11	62	48	--	75	1.7
SORG. PARTNERS	K73-J6	176	--	--	--	102	--	--	--	--	78	11	61	52	--	107	1.4
SORG. PARTNERS	NK7655	183	--	--	--	106	--	--	--	--	78	11	61	56	--	115	1.6
ASGROW	ORBIT	135	--	--	--	78	--	--	--	--	78	12	62	55	--	88	1.6
MATURITY CHECK	TX2752xTX430	190	--	--	--	110	--	--	--	--	79	11	62	56	--	101	1.6
MIDWEST SEED	G 567	171	--	--	--	99	--	--	--	--	79	11	61	51	--	97	1.5
SORG. PARTNERS	NK7633	173	--	--	--	100	--	--	--	--	79	11	61	47	--	104	1.3
ASGROW	A567	206	--	--	--	119	--	--	--	--	79	12	62	56	--	109	1.4
ASGROW	A571	184	--	--	--	107	--	--	--	--	80	11	61	56	--	94	1.4
DEKALB	DKS53-11	198	--	--	--	115	--	--	--	--	80	12	62	56	--	105	1.3
	AVERAGES	173	--	--	--	173	--	--	--	--	77	11	61	53	--	101	1.5
	CV(%)	5	--	--	--	5	--	--	--	--	1	3	1	4	--	7	9.8
	LSD(0.05)*	12	--	--	--	7	--	--	--	--	1	1	1	3	--	10	0.2

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

NORTHEAST KANSAS GRAIN SORGHUM TEST ON SILT LOAM SOIL

Agromony North Farm, Manhattan; Kraig Roozeboom, agronomist

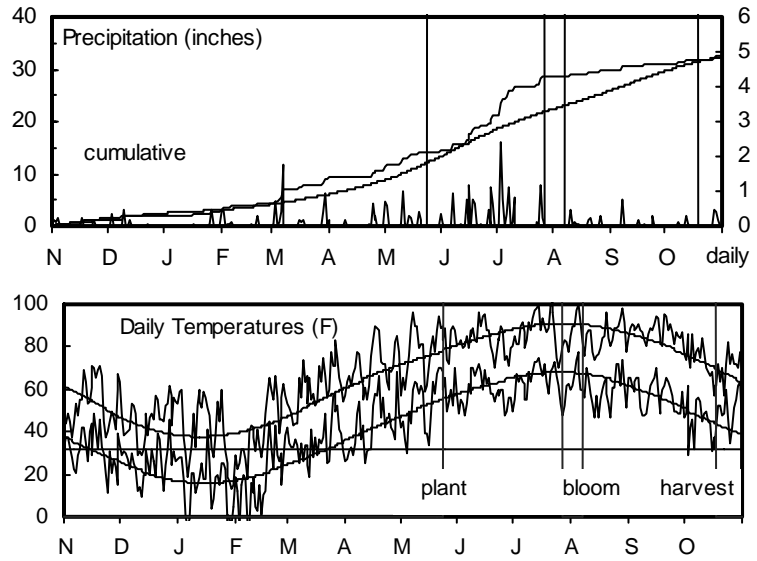
Reading silt loam; Soybean in 2003

130 - 30 - 0 lb/a N, P, K

Planted on 5/24/2004; Harvested on 10/16/2004

Target stand of 55,000 plants/acre; 3.8 in. spacing

Favorable moisture conditions in May, June, and July were followed by relatively dry conditions in August and September.



Month	Precipitation		Average Temp.		GDU	
	2004	Norm.	2004	Norm.	2004	Norm.
Nov.-Mar	9.3	6.0	37	35		
April	1.4	2.7	57	54	656	575
May	3.9	4.5	67	65	1013	918
June	6.7	5.1	71	74	1090	1158
July	7.2	3.9	76	79	1267	1369
August	1.4	3.5	74	77	1221	1317
Sept.	1.3	3.8	72	70	1130	1035
Oct.	1.5	2.9	60	57	800	713
Totals:	32.7	32.4	55	54	7,177	7,085

Table 3. Manhattan Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS % 2003-2004																
		ACRE YIELD, BUSHELS						OF TEST AVERAGE				2004						
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	2004	2003	2002	Days to Blm	Grain to Moist. %	Days to Blm	Grain to Moist. %	Test Wt. lb/bu	Plant Ht. in.	Ldg %	Stand per %	Hds per Plnt
MATURITY CHECK	TX3042xTX2737	144	119	73	132	112	93	107	85	65	15	63	14	60	62	--	97	1.2
SORG. PARTNERS	KS 585	130	114	72	122	105	84	102	84	66	14	63	15	62	53	--	93	1.2
SORG. PARTNERS	NK5418	131	106	--	119	--	85	95	--	65	14	64	14	60	47	--	111	1.1
MATURITY CHECK	OK11xTX2741	143	94	75	118	104	92	84	88	68	14	65	14	60	52	--	107	1.0
PIONEER	85G01	157	130	--	144	--	102	117	--	67	14	65	15	59	57	--	110	1.0
TAYLOR	T-37GS	137	--	--	--	--	88	--	--	--	--	66	14	60	48	--	83	1.2
DEKALB	DKS42-20	150	117	92	133	120	97	105	107	68	14	66	15	60	59	--	98	1.1
DYNA-GRO	DGX-1738	134	101	--	117	--	87	91	--	69	15	66	15	59	55	--	97	1.0
GARST	5360	156	--	--	--	--	101	--	--	--	--	66	16	60	51	--	101	1.0
PIONEER	84G50	166	129	--	147	--	107	115	--	68	15	66	16	59	63	--	109	1.0
SORG. PARTNERS	NK6641	140	--	--	--	--	90	--	--	--	--	67	15	60	52	--	109	1.0
SORG. PARTNERS	NK6673	152	--	--	--	--	98	--	--	--	--	67	16	59	54	--	101	1.1
ASGROW	A459	150	115	80	133	115	97	104	94	71	14	68	14	60	59	--	97	0.9
KAYSTAR	KS-505	158	--	--	--	--	102	--	--	--	--	68	15	59	54	--	108	1.1
GARST	5401	165	--	--	--	--	107	--	--	--	--	68	16	60	63	--	107	1.1
TAYLOR	T-36GS	162	--	--	--	--	105	--	--	--	--	69	15	60	55	--	98	1.0
SORG. PARTNERS	K73-J6	159	122	80	140	120	103	109	92	72	14	69	16	58	58	--	97	1.1
ASGROW	A571	165	113	85	139	121	107	102	99	72	14	70	15	59	54	--	84	1.1
GARST	5440	164	115	85	140	121	106	103	99	72	15	70	15	61	56	--	101	1.0
MATURITY CHECK	TX2752xTX430	172	116	85	144	124	111	104	99	72	15	70	15	59	59	--	96	1.2
PIONEER	84G62	180	129	108	154	139	116	116	125	73	14	70	15	60	56	--	103	1.1
ASGROW	ORBIT	132	--	--	--	--	85	--	--	--	--	70	16	61	61	--	80	1.1
DEKALB	DKS54-00	164	105	106	135	125	106	94	124	72	15	70	16	59	60	--	85	1.2

Table 3. Manhattan Grain Sorghum Performance Test, 2002-2004 - continued.

BRAND	NAME	YIELD AS %											2003-2004				2004			
		ACRE YIELD, BUSHELS					OF TEST			Days Grain		Days Grain		Test Plnt		Final Hds				
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE			to Blm	%	to Blm	%	lb/bu	in.	%	%	Plnt		
DYNA-GRO	DGX-1755	154	--	--	--	--	99	--	--	--	--	70	16	58	51	--	98	1.0		
DYNA-GRO	DGX-1763	155	110	--	132	--	100	99	--	72	15	70	16	59	57	--	103	1.0		
SORG. PARTNERS	NK7655	156	113	--	135	--	101	102	--	73	14	71	15	59	55	--	102	1.1		
ASGROW	A567	183	133	92	158	136	119	119	107	72	15	71	16	60	58	--	108	1.0		
DYNA-GRO	DGX-1753	160	101	--	131	--	104	91	--	74	14	72	15	57	53	--	106	1.0		
DEKALB	DKS44-41	144	106	83	125	111	93	95	97	73	14	72	16	60	50	--	67	1.1		
MIDWEST SEED	G 567	149	110	--	129	--	96	99	--	73	14	72	16	59	49	--	94	1.0		
TRIUMPH	TR 481	152	126	89	139	122	98	113	104	73	15	72	17	59	59	--	96	1.0		
DEKALB	DKS53-11	191	125	102	158	139	123	112	119	74	15	73	17	60	58	--	111	1.0		
DYNA-GRO	DGX-1765	150	87	--	118	--	97	78	--	75	13	74	16	58	50	--	84	1.1		
	AVERAGES	155	111	86	133	117	155	111	86	71	14	69	15	59	55	--	98	1.1		
	CV(%)	5	9	9	--	--	5	9	9	--	--	3	4	1	4	--	8	8.6		
	LSD(0.05)*	12	13	11	--	--	7	12	13	--	--	2	1	1	3	--	11	0.1		

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

NORTHEAST KANSAS GRAIN SORGHUM TEST ON SILT LOAM SOIL

North Central Kansas Exp. Field, Belleville; Barney Gordon, agronomist; Michael Larson and Allan Milner, technicians

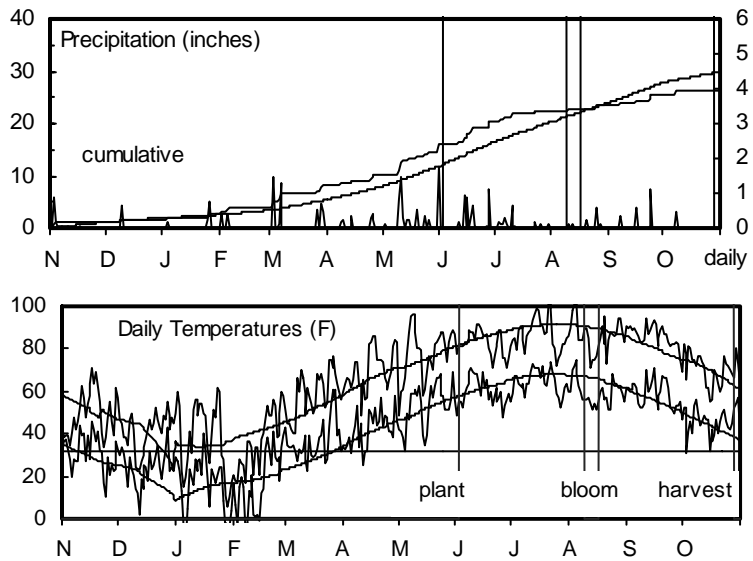
Crete silt loam; Soybean in 2003

150 - 30 - 0 lb/a N, P, K

Planted on 6/2/2004; Harvested on 10/26/2004

Target stand of 50,000 plants/acre; 4.2 in. spacing

Wet conditions delayed planting; excellent stands.
Favorable precipitation in June and July; dry August and September. Little disease; no lodging.



Month	Precipitation		Average Temp.		GDU	
	2004	Norm.	2004	Norm.	2004	Norm.
Nov.-Mar	8.4	5.0	35	33		
April	1.7	2.4	56	53	640	534
May	6.1	4.0	66	64	976	886
June	4.1	4.5	71	73	1092	1149
July	2.1	3.8	76	79	1284	1368
August	1.1	3.7	73	77	1192	1310
Sept.	2.1	3.9	72	68	1128	987
Oct.	0.5	2.3	58	56	736	677
Totals:	26.1	29.5	54	53	7,048	6,911

Table 4. Belleville Dryland Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS %																
		ACRE YIELD, BUSHELS						OF TEST AVERAGE			2003-2004		2004					
		2004	2003	2001	2-Yr. AVG.	3-Yr. AVG.	2004	2003	2002	Days to Blm	Grain to Moist. %	Days to Blm	Grain to Moist. %	Test Wt. lb/bu	Plant Ht. in.	Ldg %	Final Stand per Acre	Hds per Plnt
SORG. PARTNERS	KS 585	101	77	160	89	113	92	95	138	69	16	67	17	59	33	--	111	1.0
SORG. PARTNERS	NK5418	87	73	--	80	--	78	91	--	68	16	67	17	58	31	--	107	1.1
DEKALB	DKS42-20	122	94	--	108	--	110	115	--	69	16	68	17	59	34	--	104	1.1
DYNA-GRO	DGX-1738	93	82	--	87	--	84	101	--	70	16	68	17	58	32	--	106	1.1
FONTANELLE	GE-4532	129	--	--	--	--	117	--	--	--	--	68	17	59	34	--	105	1.1
GARST	5750	115	73	135	94	107	104	90	116	69	16	68	17	59	34	--	107	1.1
MATURITY CHECK	OK11xTX2741	86	92	67	89	82	77	113	58	70	16	68	17	58	34	--	108	1.1
MYCOGEN	627	116	--	--	--	--	104	--	--	--	--	68	17	57	34	--	107	1.1
PIONEER	84G50	95	75	--	85	--	86	92	--	71	16	68	17	59	35	--	109	1.1
PIONEER	85G01	127	93	--	110	--	115	115	--	69	16	68	17	58	34	--	106	1.1
ASGROW	A459	103	41	136	72	93	93	50	117	72	17	69	17	59	34	--	105	1.1
ASGROW	ORBIT	93	--	--	--	--	84	--	--	--	--	69	17	59	32	--	105	1.1
DEKALB	DKS44-41	118	109	--	114	--	107	135	--	72	16	69	17	59	33	--	106	1.1
FONTANELLE	GE-5615	127	--	--	--	--	115	--	--	--	--	69	17	58	35	--	109	1.1
KAYSTAR	KS-505	108	--	--	--	--	97	--	--	--	--	69	17	58	34	--	103	1.1
MATURITY CHECK	TX3042xTX2737	100	75	96	87	90	90	92	83	69	16	69	17	58	35	--	109	1.0
TAYLOR	T-37GS	114	--	--	--	--	103	--	--	--	--	69	17	58	34	--	109	1.1
ASGROW	A567	114	93	--	103	--	103	115	--	73	16	70	17	59	35	--	108	1.1
MATURITY CHECK	TX2752xTX430	107	91	125	99	108	97	113	108	72	17	70	17	58	35	--	106	1.1
MIDWEST SEED	G 530	98	67	--	83	--	89	83	--	70	16	70	17	59	34	--	107	1.1
MYCOGEN	1G600	120	88	--	104	--	109	109	--	70	16	70	17	58	35	--	107	1.1
SORG. PARTNERS	NK6673	101	--	--	--	--	91	--	--	--	--	70	17	59	36	--	107	1.1
DYNA-GRO	DGX-1763	110	76	--	93	--	99	94	--	72	16	71	17	58	34	--	107	1.0

Table 4. Belleville Dryland Grain Sorghum Performance Test, 2002-2004 - continued.

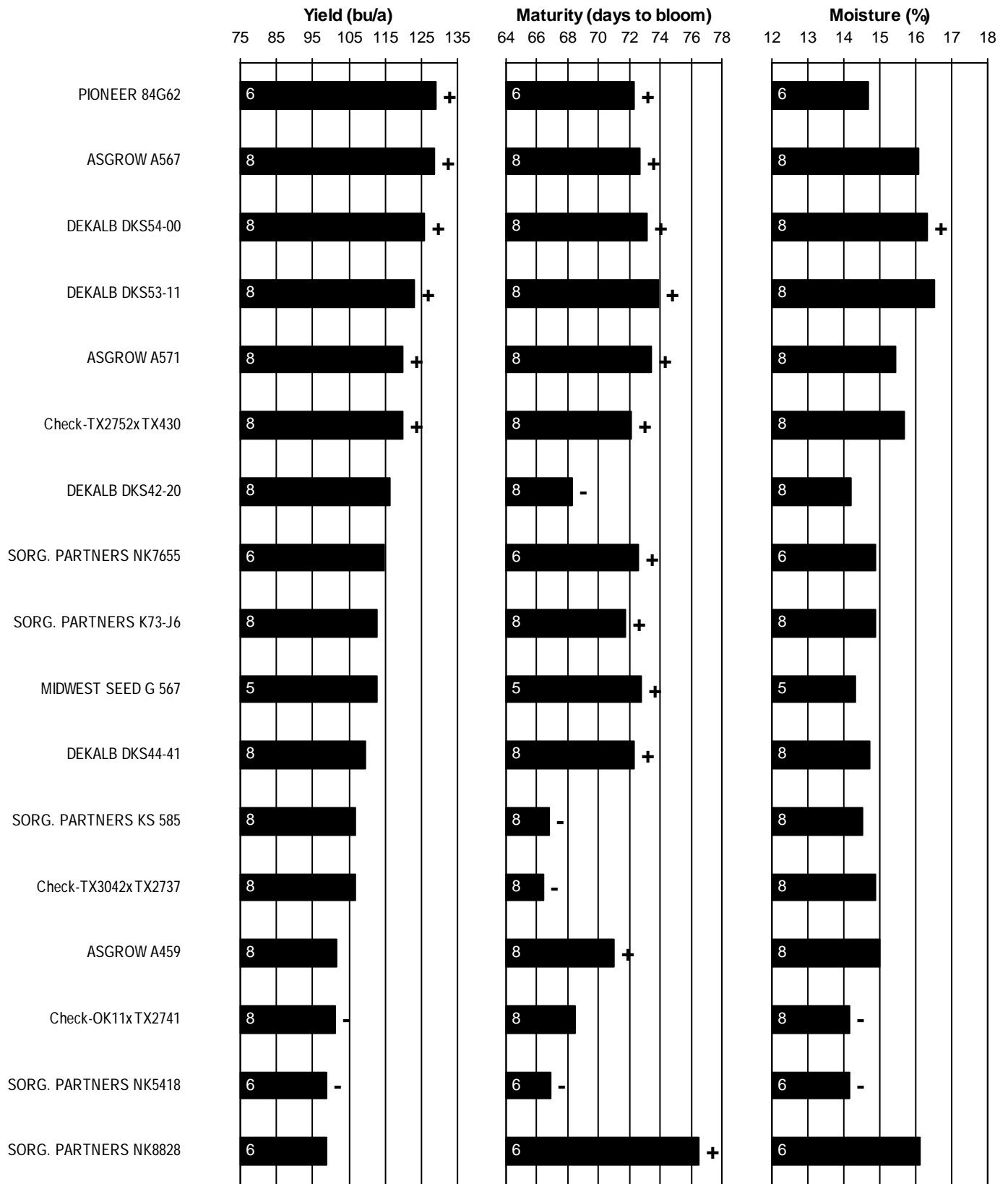
BRAND	NAME	YIELD AS %											2003-2004				2004			
		ACRE YIELD, BUSHELS					OF TEST			Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Final Stand %	Hds per Plnt		
		2004	2003	2001	2-Yr. AVG.	3-Yr. AVG.	2004	2003	2002										AVERAGE	
GARST	5401	136	--	--	--	--	123	--	--	--	--	71	17	59	35	--	109	1.1		
TAYLOR	T-36GS	113	--	--	--	--	103	--	--	--	--	71	17	59	35	--	109	1.1		
TRIUMPH	TR 481	131	--	135	--	--	119	--	116	--	--	71	17	58	35	--	105	1.1		
ASGROW	A571	112	101	152	106	122	101	124	131	74	17	72	17	58	35	--	106	1.1		
DEKALB	DKS54-00	122	110	141	116	124	110	136	122	73	17	72	17	58	35	--	103	1.1		
DYNA-GRO	DGX-1755	98	--	--	--	--	88	--	--	--	--	72	17	59	34	--	107	1.1		
SORG. PARTNERS	K73-J6	119	48	142	83	103	107	60	123	74	16	72	17	58	36	--	105	1.1		
SORG. PARTNERS	NK7655	122	74	--	98	--	110	91	--	73	17	72	17	58	35	--	108	1.1		
DEKALB	DKS53-11	94	81	--	87	--	85	100	--	73	16	73	17	59	35	--	107	1.1		
DYNA-GRO	DGX-1753	127	63	--	95	--	115	78	--	73	16	73	17	58	35	--	107	1.1		
DYNA-GRO	DGX-1765	114	66	--	90	--	103	82	--	75	16	73	17	57	35	--	106	1.1		
MIDWEST SEED	G 567	107	98	--	103	--	97	121	--	73	16	73	17	58	35	--	107	1.1		
PIONEER	84G62	125	77	150	101	117	113	95	129	73	16	73	17	58	35	--	108	1.1		
TRIUMPH	TR 465	115	--	--	--	--	104	--	--	--	--	73	17	59	34	--	107	1.1		
SORG. PARTNERS	NK8828	86	86	--	86	--	77	106	--	75	16	74	17	57	35	--	105	1.1		
	AVERAGES	111	81	116	96	103	111	81	116	71	16	70	17	58	34	--	107	1.1		
	CV(%)	8	8	7	--	--	8	8	7	--	--	1	1	0	2	--	3	2.6		
	LSD(0.05)*	14	8	12	--	--	13	10	11	--	--	1	0	0	1	--	5	0.0		

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

Table 5. NORTHEAST Kansas Grain Sorghum Hybrid Yield Summary (Percentage of Test Average), 2004.

BRAND/NAME	NMD*	RLD	RPD	AVG.	BRAND/NAME	BRD	RLD	RPD	AVG.
ASGROW					PIONEER				
A459	96	97	93	95	84G50	--	107	86	--
A567	119	119	103	114	84G62	--	116	113	--
A571	107	107	101	105	85G01	--	102	115	--
ORBIT	78	85	84	83	SORG. PARTNERS				
DEKALB					K73-J6	102	103	107	104
DKS42-20	93	97	110	100	KS 585	101	84	92	92
DKS44-41	94	93	107	98	NK5418	94	85	78	86
DKS53-11	115	123	85	108	NK6641	--	90	--	--
DKS54-00	109	106	110	108	NK6673	102	98	91	97
DYNA-GRO					NK7633	100	--	--	--
DGX-1738	--	87	84	--	NK7655	106	101	110	106
DGX-1753	--	104	115	--	NK8828	--	--	77	--
DGX-1755	--	99	88	--	TAYLOR				
DGX-1763	--	100	99	--	T-36GS	--	105	103	--
DGX-1765	--	97	103	--	T-37GS	--	88	103	--
FONTANELLE					TRIUMPH				
GE-4532	--	--	117	--	TR 465	--	--	104	--
GE-5615	--	--	115	--	TR 481	--	98	119	--
GARST					MATURITY CHECK				
5360	--	101	--	--	OK11xTX2741	89	92	77	86
5401	--	107	123	--	TX2752xTX430	110	111	97	106
5440	--	106	--	--	TX3042xTX2737	100	93	90	94
5750	93	--	104	--	AVERAGES (bu/a)				
KAYSTAR					AVERAGES (bu/a)	173	155	111	146
KS-505	--	102	97	--	CV(%)	5	5	8	--
MIDWEST SEED					LSD (0.05)	7	7	13	--
G 530	91	--	89	--	MYCOGEN				
G 567	99	96	97	97	1G600	--	--	109	--
MYCOGEN					627	--	--	104	--

* NMD = Nemaha Co., Centralia RLD = Riley Co., Manhattan RPD = Republic Co., Belleville



Values inside bars indicate the number of comparisons with checks. Symbols (+,-) indicate if statistically higher or lower than mean of checks.

Figure 4. NORTHEAST Kansas sorghum hybrid standardized performance summary, 2002-2004.

SOUTHEAST KANSAS GRAIN SORGHUM TEST ON SILT LOAM SOIL

East Central Kansas Experiment Field, Ottawa; Larry Maddux, agronomist; Jim Kimball, technician

Woodson silt loam; Soybean in 2003

110 - 30 - 0 lb/a N, P, K

Planted on 5/24/2004; Harvested on 10/25/2004

Target stand of 55,000 plants/acre; 3.8 in. spacing

Although June and July had above-average rainfall, late-August and September were very dry.

Month	Precipitation		Average Temp.		GDU	
	2004	Norm.	2004	Norm.	2004	Norm.
Nov.-Mar	12.1	6.4	39	37		
April	2.3	3.0	57	56	665	634
May	6.2	4.3	68	66	1020	953
June	6.3	4.8	72	75	1129	1186
July	7.4	4.1	76	80	1279	1401
August	4.5	3.1	73	79	1184	1362
Sept.	1.3	4.2	71	70	1077	1062
Oct.	3.9	2.9	59	59	771	771
Totals:	44.0	32.8	56	56	7,125	7,369

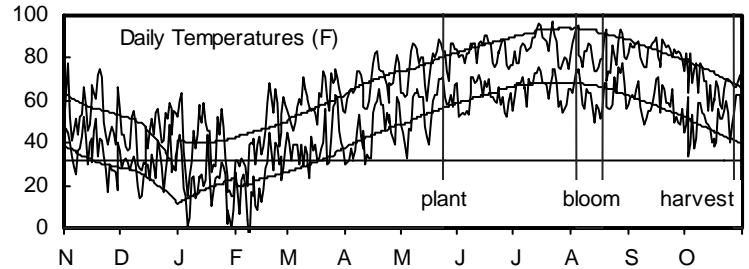
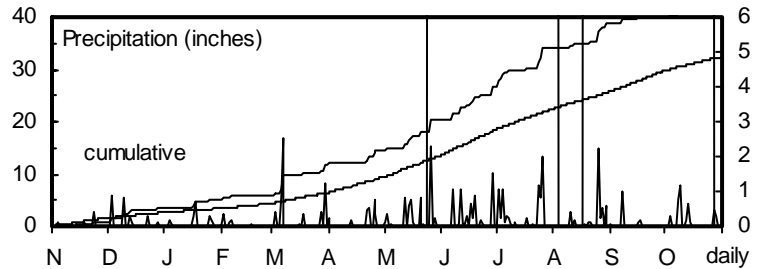


Table 6. Ottawa Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS % 2003-2004											2004					
		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			Days Grain to Moist.		Days Grain to Moist.		Test Plnt		Final Hds		
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	2004	2003	2002	Blm	%	Blm	%	Wt. lb/bu	Ht. in.	Ldg %	Stand per	Plnt
MATURITY CHECK	OK11xTX2741	103	51	56	77	70	109	91	92	65	13	70	15	58	46	--	119	1.1
PIONEER	85G01	92	55	--	74	--	97	100	--	65	15	70	16	58	47	--	125	1.0
SORG. PARTNERS	KS 585	96	71	56	83	74	101	128	91	65	15	71	16	59	47	--	84	1.3
MATURITY CHECK	TX3042xTX2737	89	45	43	67	59	94	81	71	66	16	71	17	58	52	--	88	1.1
DEKALB	DKS42-20	91	58	51	75	67	97	105	84	66	14	72	15	58	53	--	99	1.0
SORG. PARTNERS	NK5418	86	62	--	74	--	90	113	--	65	14	72	16	58	43	--	115	1.0
GARST	5750	84	58	69	71	70	88	106	113	65	16	72	17	56	51	--	101	1.2
SORG. PARTNERS	NK6641	77	--	--	--	--	82	--	--	--	--	73	15	58	47	--	116	1.0
PIONEER	84G50	93	46	--	70	--	99	83	--	67	17	73	16	60	54	--	120	1.0
SORG. PARTNERS	NK6673	99	--	--	--	--	104	--	--	--	--	73	16	56	49	--	105	1.1
GOLDEN ACRES	3827	99	--	--	--	--	104	--	--	--	--	73	17	60	51	--	100	1.1
ASGROW	ORBIT	73	--	--	--	--	77	--	--	--	--	74	16	58	47	--	74	1.1
ASGROW	A567	104	66	75	85	82	110	119	123	69	15	74	17	59	53	--	112	1.0
DEKALB	DKS54-00	96	56	68	76	73	101	101	112	69	15	74	17	57	54	--	82	1.0
SORG. PARTNERS	NK7655	107	64	--	86	--	113	116	--	69	14	75	15	58	50	--	112	1.0
MIDLAND	M-4772	110	--	--	--	--	116	--	--	--	--	75	16	57	52	--	95	1.0
PIONEER	84G62	113	53	63	83	76	119	96	103	70	15	75	16	59	48	--	122	1.0
ADVANCED GEN.	A 121	96	--	--	--	--	101	--	--	--	--	75	17	56	49	--	77	1.1
GOLDEN ACRES	3552	106	--	--	--	--	112	--	--	--	--	75	17	56	47	--	121	1.0
DEKALB	DKS44-41	90	54	60	72	68	95	98	98	69	14	76	15	58	44	--	70	1.0
MIDLAND	M-4758Y	88	61	63	75	71	93	110	104	69	14	76	16	57	54	--	83	1.1
MIDWEST SEED	G 567	94	47	--	70	--	99	85	--	70	15	76	17	57	43	--	98	1.0
ASGROW	A571	97	54	65	76	72	103	98	106	72	15	77	16	57	50	--	92	1.0
GOLDEN ACRES	X-2944	106	--	--	--	--	112	--	--	--	--	77	16	56	50	--	98	1.1
MATURITY CHECK	TX2752xTX430	102	51	61	76	71	107	92	101	72	14	77	16	57	48	--	106	1.0
SORG. PARTNERS	K73-J6	83	58	64	71	69	88	105	106	70	15	77	16	55	48	--	93	1.0
DEKALB	DKS53-11	95	61	59	78	72	101	110	96	71	16	78	17	58	51	--	108	1.0
DYNA-GRO	DGX-1781	89	--	--	--	--	94	--	--	--	--	78	17	58	46	--	118	1.0
ADVANCED GEN.	A 137	87	--	--	--	--	92	--	--	--	--	81	17	58	43	--	79	1.1
DYNA-GRO	71F90	93	--	--	--	--	99	--	--	--	--	84	18	55	57	--	97	0.9
	AVERAGES	95	55	61	75	70	95	55	61	69	15	75	16	58	49	--	100	1.1
	CV(%)	9	13	11	--	--	9	13	11	--	--	2	5	2	6	--	6	6.4
	LSD(0.05)*	12	10	9	--	--	13	18	15	--	--	3	1	2	4	--	9	0.1

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

SOUTHEAST KANSAS GRAIN SORGHUM TEST ON SILTY CLAY SOIL

ImMasche Research Center, Strong City; Kraig Roozeboom, agronomist; Gene Eidman, cooperor

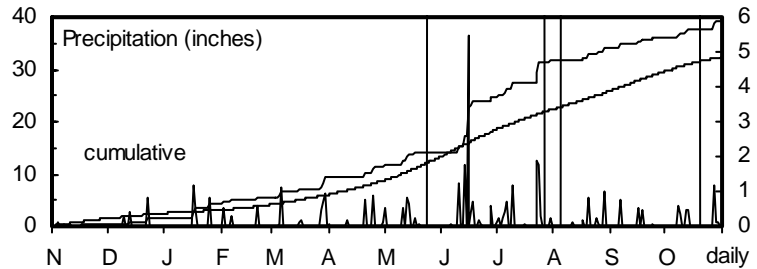
Osage silty clay; Soybean in 2003

130 - 30 - 0 lb/a N, P, K

Planted on 5/24/2004; Harvested on 10/18/2004

Target stand of 55,000 plants/acre; 3.8 in. spacing

May rains delayed planting slightly. Above-average rainfall in June and July was followed by relatively dry conditions in August and September. Cool temperatures slowed maturation and dry down.



Month	Precipitation		Average Temp.		GDU	
	2004	Norm.	2004	Norm.	2004	Norm.
Nov.-Mar	9.3	6.0	37	35		
April	2.0	2.7	55	54	616	575
May	2.8	4.5	67	65	985	918
June	10.5	5.1	71	74	1071	1158
July	7.1	3.9	75	79	1247	1369
August	2.4	3.5	72	77	1153	1317
Sept.	1.8	3.8	71	70	1089	1035
Oct.	3.2	2.9	59	57	773	713
Totals:	39.2	32.4	55	54	6,934	7,085

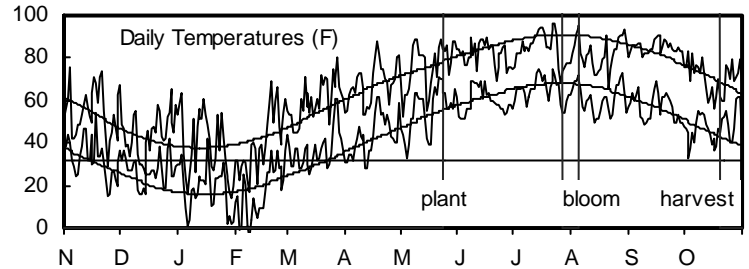


Table 7. Strong City Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS %														Final Hds		
		ACRE YIELD, BUSHELS						OF TEST AVERAGE			2003-2004		2004				Stand per Plnt	
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	2004	2003	2002	Days to Blm	Grain to Moist. %	Days to Blm	Grain to Moist. %	Test Wt. lb/bu	Planting Ht. in.			Ldg %
MATURITY CHECK	TX3042xTX2737	171	58	43	115	91	114	92	100	61	14	63	15	58	54	--	92	1.1
SORG. PARTNERS	NK5418	135	66	--	100	--	89	104	--	61	13	63	15	59	44	--	100	1.1
SORG. PARTNERS	KS 585	143	70	50	107	88	95	111	116	63	14	64	16	59	44	--	91	1.2
MATURITY CHECK	OK11xTX2741	116	58	34	87	69	77	91	79	64	14	65	16	58	44	--	97	1.0
SORG. PARTNERS	X420	128	--	--	--	--	85	--	--	--	--	65	16	58	44	--	80	1.3
PIONEER	84G50	162	57	--	110	--	108	90	--	65	17	66	17	57	57	--	103	0.9
PIONEER	85G01	160	75	--	117	--	106	118	--	63	15	66	17	56	50	--	104	1.0
DEKALB	DKS42-20	140	69	55	104	88	93	109	126	63	13	67	15	57	53	--	88	1.1
GOLDEN ACRES	3827	158	--	--	--	--	105	--	--	--	--	68	17	58	53	--	90	1.0
SORG. PARTNERS	K73-J6	161	63	33	112	86	107	100	75	67	13	69	15	57	58	--	94	1.1
DEKALB	DKS54-00	167	65	38	116	90	111	102	88	67	13	69	16	57	54	--	86	1.1
SORG. PARTNERS	NK6673	143	--	--	--	--	95	--	--	--	--	69	16	57	52	--	97	1.1
PIONEER	84G62	175	66	49	121	97	116	104	113	67	14	70	15	59	51	--	104	1.0
ADVANCED GEN.	A 121	147	--	--	--	--	98	--	--	--	--	70	16	58	47	--	92	1.0
ASGROW	A571	161	60	35	111	86	107	95	82	69	13	70	16	57	55	--	86	1.0
ASGROW	ORBIT	110	--	--	--	--	73	--	--	--	--	70	16	57	49	--	88	1.0
SORG. PARTNERS	NK7655	132	64	--	98	--	88	101	--	68	13	70	16	56	53	--	101	1.0
ASGROW	A567	161	71	53	116	95	107	112	123	67	15	70	17	58	56	--	101	1.1
GOLDEN ACRES	3552	147	--	--	--	--	98	--	--	--	--	70	17	56	51	--	88	0.9
MIDWEST SEED	G 567	144	--	--	--	--	96	--	--	--	--	70	17	57	48	--	94	0.9
DEKALB	DKS44-41	132	59	39	96	77	88	94	89	67	14	71	16	58	49	--	79	0.9
MATURITY CHECK	TX2752xTX430	156	57	43	106	85	104	90	99	69	13	71	16	55	56	--	91	0.9
DYNA-GRO	DGX-1781	148	--	--	--	--	98	--	--	--	--	71	17	57	51	--	90	0.9
GOLDEN ACRES	X-2944	174	--	--	--	--	116	--	--	--	--	72	15	55	53	--	86	1.2
ADVANCED GEN.	A 137	172	--	--	--	--	114	--	--	--	--	72	16	59	51	--	84	1.0
DEKALB	DKS53-11	167	71	48	119	95	111	111	111	68	16	72	18	59	57	--	106	0.9
	AVERAGES	150	63	43	107	86	150	63	43	66	14	69	16	57	51	--	93	1.0
	CV(%)	5	8	16	--	--	5	8	16	--	--	1	6	2	4	--	7	10.6
	LSD(0.05)*	10	7	10	--	--	7	11	23	--	--	1	1	2	3	--	10	0.2

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

SOUTHEAST KANSAS GRAIN SORGHUM TEST ON SILT LOAM SOIL

Southeast Agricultural Research Center, Parsons; James Long, agronomist; Kelly Kusel, technician

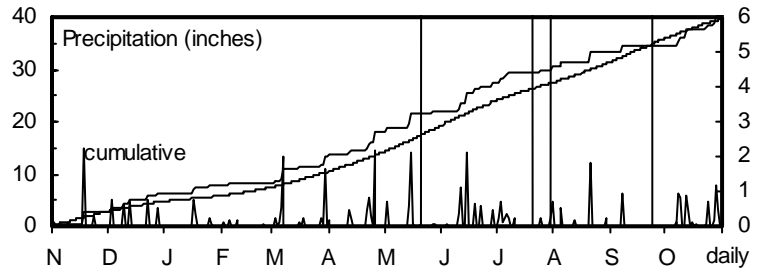
Parsons silt loam; Soybean in 2003

100 - 50 - 50 lb/a N, P, K

Planted on 5/21/2004; Harvested on 9/22/2004

Target stand of 45,000 plants/acre; 4.6 in. spacing

Favorable spring and early summer rainfall resulted in excellent yields.



Month	Precipitation		Average Temp.		GDU	
	2004	Norm.	2004	Norm.	2004	Norm.
Nov.-Mar	13.6	10.4	40	40		
April	4.5	3.7	55	57	619	672
May	3.7	5.0	68	66	1035	959
June	5.5	4.8	72	74	1118	1184
July	3.3	3.5	76	80	1265	1390
August	2.8	3.9	73	79	1199	1351
Sept.	0.9	4.5	71	71	1092	1088
Oct.	6.0	3.9	61	60	829	799
Totals:	40.4	39.6	57	57	7,157	7,443

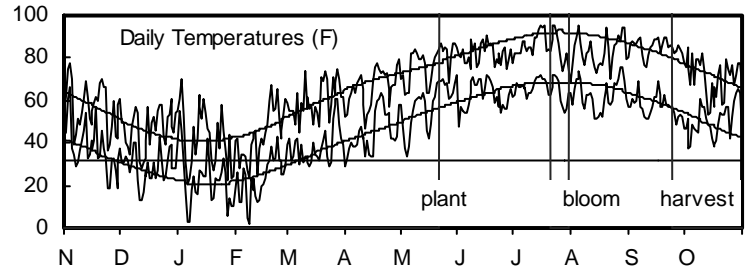


Table 8. Parsons Grain Sorghum Performance Test, 2002-2004.

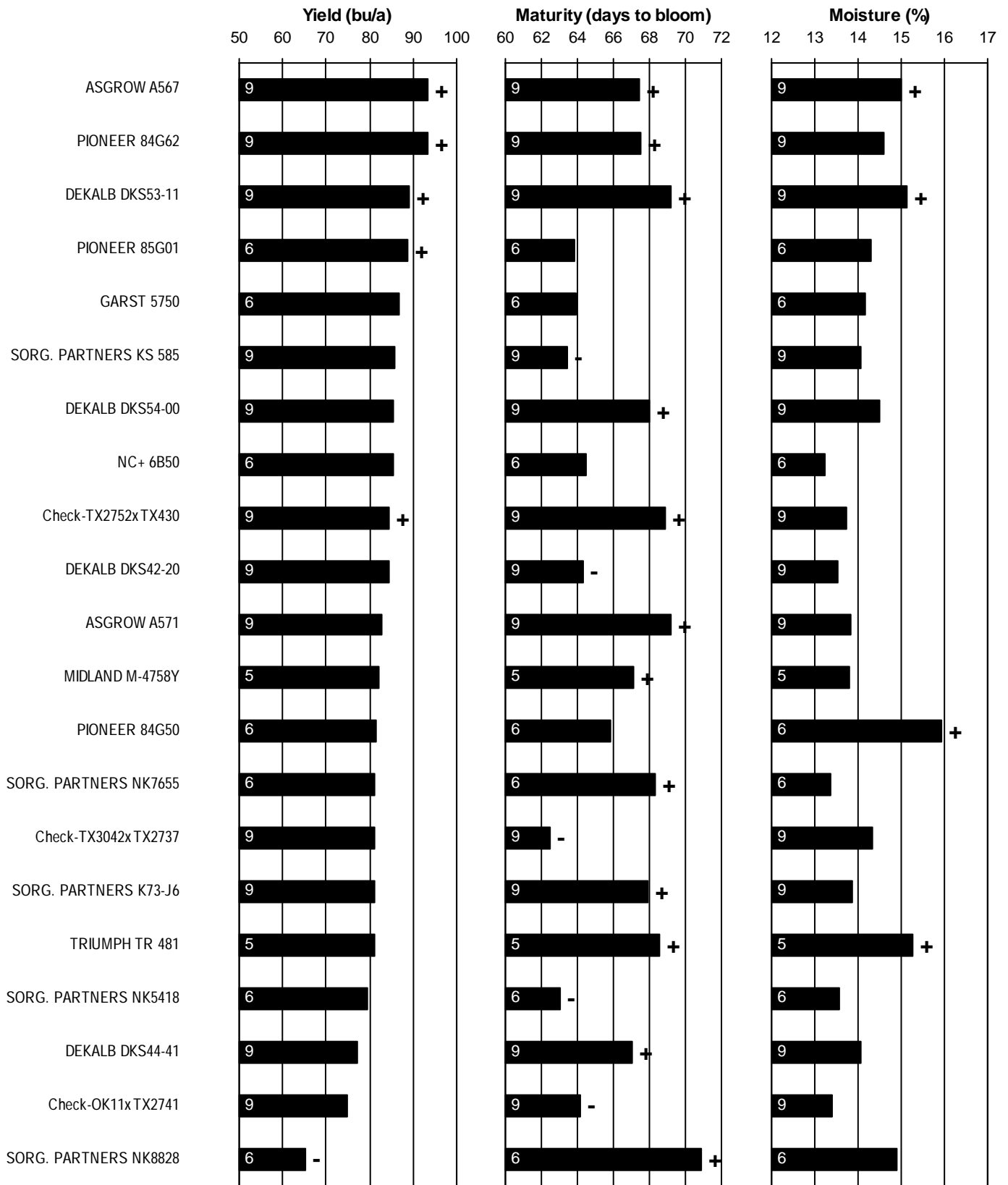
BRAND	NAME	YIELD AS % 2003-2004																
		ACRE YIELD, BUSHELS						OF TEST			Days Grain		Test Plnt		Final Hds			
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE	2004	2003	2002	to Moist.	%	Blm	%	Blm	Wt. lb/bu	Ht. in.	Ldg %
GARST	5750	128	101	75	115	101	102	111	126	58	13	59	13	60	59	--	114	1.3
MATURITY CHECK	OK11xTX2741	122	79	54	101	85	97	87	91	60	13	60	13	59	52	--	115	1.3
MATURITY CHECK	TX3042xTX2737	126	89	65	107	93	100	97	108	57	13	60	13	60	59	--	116	1.2
SORG. PARTNERS	KS 585	117	103	68	110	96	93	112	115	60	13	61	13	61	50	--	113	1.2
SORG. PARTNERS	NK5418	124	91	--	107	--	99	99	--	59	13	61	13	60	49	--	103	1.5
PIONEER	85G01	137	101	--	119	--	109	110	--	61	13	62	13	60	56	--	116	1.2
DEKALB	DKS42-20	126	101	68	113	98	100	111	114	60	14	62	14	60	60	--	115	1.4
NC+	6B50	118	92	70	105	93	94	101	117	61	14	63	14	58	51	--	120	1.3
PIONEER	84G50	135	81	--	108	--	108	88	--	62	14	63	14	60	60	--	105	1.3
SORG. PARTNERS	NK6641	120	--	--	--	--	95	--	--	--	--	63	15	59	50	--	108	1.2
GOLDEN ACRES	3827	120	--	--	--	--	95	--	--	--	--	64	14	60	57	--	105	1.2
MATURITY CHECK	TX2752xTX430	135	92	63	113	97	107	101	105	63	14	64	14	60	58	--	93	1.4
NC+	7R34	129	--	--	--	--	103	--	--	--	--	64	14	61	62	--	105	1.4
TRIUMPH	TR 442	111	--	--	--	--	88	--	--	--	--	64	14	60	52	--	111	1.2
PIONEER	84G62	148	106	66	127	107	117	116	111	62	15	64	15	61	58	--	115	1.4
SORG. PARTNERS	NK6673	131	--	--	--	--	104	--	--	--	--	64	16	59	57	--	111	1.3
ASGROW	A571	141	81	50	111	91	112	89	84	64	14	65	14	59	60	--	102	1.4
GOLDEN ACRES	X-2944	140	--	--	--	--	111	--	--	--	--	65	15	59	58	--	114	1.5
DEKALB	DKS44-41	113	91	55	102	86	90	99	92	63	14	66	14	60	49	--	97	1.3
DEKALB	DKS54-00	145	94	41	119	93	115	102	69	64	14	66	14	59	61	--	113	1.2
ASGROW	A567	143	102	64	122	103	113	112	108	64	15	66	15	60	60	--	111	1.2
ASGROW	ORBIT	104	--	--	--	--	82	--	--	--	--	66	15	60	57	--	94	1.2
GOLDEN ACRES	3552	121	--	--	--	--	97	--	--	--	--	66	16	59	54	--	108	1.2
SORG. PARTNERS	K73-J6	114	91	61	102	89	90	100	103	63	15	66	16	58	53	--	96	1.7
SORG. PARTNERS	NK7655	117	90	--	103	--	93	98	--	64	13	67	14	58	56	--	113	1.4
ADVANCED GEN.	A 121	115	--	--	--	--	91	--	--	--	--	67	15	59	50	--	84	1.2
ADVANCED GEN.	A 137	117	--	--	--	--	93	--	--	--	--	68	15	60	53	--	80	1.3
TRIUMPH	TR 481	123	90	48	106	87	97	99	81	65	15	68	16	60	59	--	111	1.1
DEKALB	DKS53-11	130	101	69	116	100	103	111	116	66	16	69	16	59	59	--	122	1.1
	AVERAGES	126	91	60	109	92	126	91	60	62	14	64	14	60	56	--	107	1.3
	CV(%)	8	8	13	--	--	8	8	13	--	--	3	5	1	4	--	16	22.2
	LSD(0.05)*	14	10	11	--	--	12	11	18	--	--	3	1	1	3	--	24	NS

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

Table 9. SOUTHEAST Kansas Grain Sorghum Hybrid Yield Summary (Percentage of Test Average), 2004.

BRAND/NAME	FRD * CHD	LBD	AVG.	BRAND/NAME	FRD	CHD	LBD	AVG.	
ADVANCED GEN.				NC+					
A 121	101	98	91	97	6B50	--	--	94	--
A 137	92	114	93	100	7R34	--	--	103	--
ASGROW				PIONEER					
A567	110	107	113	110	84G50	99	108	108	105
A571	103	107	112	107	84G62	119	116	117	118
ORBIT	77	73	82	78	85G01	97	106	109	104
DEKALB				SORG. PARTNERS					
DKS42-20	97	93	100	97	K73-J6	88	107	90	95
DKS44-41	95	88	90	91	KS 585	101	95	93	96
DKS53-11	101	111	103	105	NK5418	90	89	99	93
DKS54-00	101	111	115	109	NK6641	82	--	95	--
DYNA-GRO				TRIUMPH					
71F90	99	--	--	--	TR 442	--	--	88	--
DGX-1781	94	98	--	--	TR 481	--	--	97	--
GARST				MATURITY CHECK					
5750	88	--	102	--	OK11xTX2741	109	77	97	94
GOLDEN ACRES				AVERAGES (bu/a)					
3552	112	98	97	102	CV(%)	9	5	8	--
3827	104	105	95	101	LSD (0.05)	13	7	12	--
X-2944	112	116	111	113	MIDWEST SEED				
MIDLAND				G 567					
M-4758Y	93	--	--	--	99	96	--	--	--
M-4772	116	--	--	--					

* FRD = Franklin Co., Ottawa CHD = Chase Co., Strong City LBD = Labette Co., Parsons



Values inside bars indicate the number of comparisons with checks. Symbols (+,-) indicate if statistically higher or lower than mean of checks.

Figure 5. SOUTHEAST Kansas sorghum hybrid standardized performance summary, 2002-2004.

SOUTH CENTRAL KANSAS GRAIN SORGHUM TEST ON SILTY CLAY LOAM SOIL

Harvey County Experiment Field, Hesston; Mark Claassen, agronomist; Lowell Stucky and Kevin Duerksen, technicians

Ladysmith silty clay loam; Wheat in 2003

127 - 37 - 0 lb/a N, P, K

Planted on 6/23/2004; Harvested on 11/8/2004

Target stand of 35,000 plants/acre; 6.0 in. spacing

Good stands; favorable rainfall in June and July; dry August and September.

Month	Precipitation		Average Temp.		GDU	
	2004	Norm.	2004	Norm.	2004	Norm.
Nov.-Mar	9.3	5.9	38	37		
April	1.2	2.7	55	56	601	631
May	2.8	4.3	68	66	1017	952
June	5.3	4.8	72	76	1117	1216
July	5.8	3.8	75	81	1261	1431
August	2.4	3.1	74	80	1203	1381
Sept.	1.3	3.6	72	71	1122	1079
Oct.	3.0	2.6	59	59	778	782
Totals:	31.1	30.8	55	56	7,099	7,472

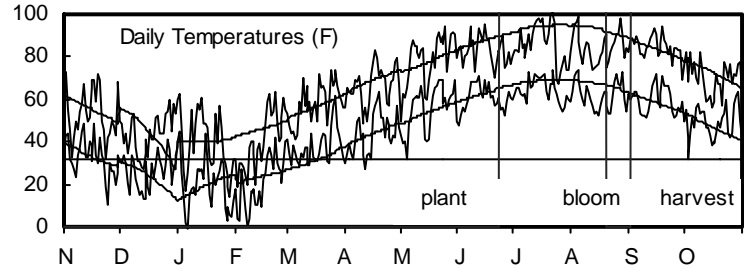
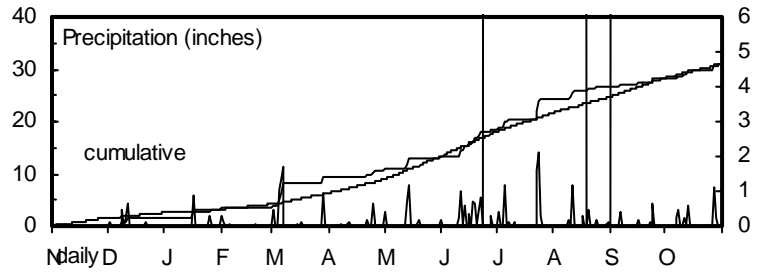


Table 10. Hesston Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS % 2003-2004											2004					
		ACRE YIELD, BUSHELS					OF TEST			Days Grain to Blm	Days Grain to Moist.	Test Wt. lb/bu	Plant Ht. in.	Final Ldg %	Hds Stand per Plnt			
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	2004	2003	2002									
FRONTIER	F-222E	85	--	--	--	--	86	--	--	--	--	56	15	55	49	2	106	1.2
GARST	5750	99	46	100	73	82	100	115	113	56	16	58	15	58	51	2	105	1.6
ASGROW	PULSAR	88	50	77	69	72	89	125	87	59	16	60	15	55	48	5	107	1.6
CROPLAN GEN.	414	106	--	--	--	--	106	--	--	--	--	60	15	58	48	3	110	1.5
DEKALB	DKS36-00	95	51	90	73	79	96	127	102	59	16	60	15	56	47	3	102	1.7
MATURITY CHECK	TX3042xTX2737	87	43	89	65	73	88	108	100	60	17	60	15	56	54	28	95	1.7
TRIUMPH	TR 442	83	--	--	--	--	84	--	--	--	--	61	14	56	53	17	105	1.4
DEKALB	DKS37-07	101	54	--	77	--	102	134	--	62	17	61	15	57	53	8	116	1.3
FRONTIER	F-303C	93	--	--	--	--	94	--	--	--	--	61	15	56	50	7	97	1.3
MATURITY CHECK	OK11xTX2741	97	49	55	73	67	97	122	63	62	16	61	15	57	50	9	114	1.2
SORG. PARTNERS	KS 585	108	50	109	79	89	109	125	123	63	17	61	15	58	49	5	103	1.6
SORG. PARTNERS	X420	73	--	--	--	--	73	--	--	--	--	61	15	55	49	51	93	1.7
DYNA-GRO	DGX-1738	89	--	--	--	--	90	--	--	--	--	62	15	57	53	11	99	1.4
DEKALB	DKS42-20	107	56	102	81	88	108	140	115	65	17	63	15	56	52	3	106	1.5
DYNA-GRO	DGX-1763	98	--	--	--	--	99	--	--	--	--	63	15	56	54	1	111	1.2
SORG. PARTNERS	NK5418	102	37	--	70	--	103	92	--	66	17	63	15	55	48	10	109	1.7
PIONEER	85G01	96	--	--	--	--	97	--	--	--	--	64	15	56	54	4	109	1.3
TRIUMPH	TR 438	89	49	92	69	77	89	122	105	64	16	64	15	57	53	3	111	1.3
FRONTIER	F-457E	82	--	--	--	--	83	--	--	--	--	64	16	58	53	37	104	1.3
ADVANCED GEN.	A 115C	100	51	89	76	80	101	128	101	68	17	65	15	58	49	3	109	1.2
ASGROW	ORBIT	98	--	--	--	--	98	--	--	--	--	65	15	56	52	0	101	1.7
DYNA-GRO	DGX-1753	105	--	--	--	--	106	--	--	--	--	65	15	53	51	7	116	1.2
DYNA-GRO	DGX-1755	108	--	--	--	--	109	--	--	--	--	65	15	56	50	0	108	1.1
GARST	5401	116	--	--	--	--	117	--	--	--	--	65	15	59	58	3	108	1.6

Table 10. Hesston Grain Sorghum Performance Test, 2002-2004 - continued.

BRAND	NAME	YIELD AS %																
		ACRE YIELD, BUSHELS					OF TEST			2003-2004				2004				
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE			Days to Blm	Grain to Moist. %	Days to Blm	Grain to Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Final Stand %	Hds per Plnt
GARST	5440	102	51	96	77	83	103	127	108	68	17	65	15	58	55	7	103	1.4
SORG. PARTNERS	K73-J6	100	42	103	71	82	101	105	117	69	17	65	15	54	53	0	100	1.6
ASGROW	A459	109	43	70	76	74	109	107	79	68	17	66	15	58	54	5	108	1.1
CROPLAN GEN.	514	104	--	89	--	--	105	--	101	--	--	66	15	57	55	17	104	1.2
MIDLAND	M-4665	107	34	95	71	79	108	86	107	72	18	66	15	55	48	6	96	1.5
MIDLAND	M-4748	118	--	--	--	--	119	--	--	--	--	66	15	57	52	2	111	1.2
MIDLAND	M-4758Y	103	24	--	64	--	104	60	--	72	18	66	15	56	53	1	95	1.6
SORG. PARTNERS	NK6673	89	--	--	--	--	89	--	--	--	--	66	15	54	51	17	98	1.6
ASGROW	A567	111	57	98	84	89	112	143	111	68	18	66	16	57	54	2	115	1.0
DEKALB	DKS44-41	97	34	77	65	69	97	86	87	69	17	67	15	57	50	0	77	1.5
GARST	5360	119	--	--	--	--	120	--	--	--	--	67	15	57	55	0	108	1.3
MATURITY CHECK	TX2752xTX430	93	34	79	63	68	94	84	89	71	17	67	15	57	50	16	96	1.5
MIDWEST SEED	O 256	120	28	117	74	88	121	70	132	73	18	67	15	55	57	1	104	1.5
MYCOGEN	627	100	46	--	73	--	101	114	--	71	17	67	15	56	50	0	103	1.3
MYCOGEN	697	91	--	84	--	--	92	--	95	--	--	67	15	55	50	0	110	1.2
PIONEER	84Y00	103	--	94	--	--	104	--	107	--	--	67	15	57	50	1	106	1.4
DYNA-GRO	DGX-1765	98	--	--	--	--	99	--	--	--	--	68	14	53	48	2	97	1.4
ADVANCED GEN.	A 121	85	--	--	--	--	85	--	--	--	--	68	15	55	48	1	85	1.4
ASGROW	A571	99	24	88	61	70	100	60	99	81	21	68	15	56	52	9	93	1.2
DEKALB	DKS53-11	116	42	97	79	85	117	105	109	71	17	68	15	58	54	2	116	1.1
MIDWEST SEED	G 567	86	54	--	70	--	86	136	--	70	17	68	15	55	49	1	93	1.4
PIONEER	84G62	109	20	112	65	80	110	50	126	76	18	68	15	57	50	3	113	1.2
SORG. PARTNERS	NK7633	94	52	--	73	--	94	131	--	71	17	68	15	56	51	1	104	1.3
ADVANCED GEN.	A 137	103	--	--	--	--	104	--	--	--	--	69	15	58	49	1	92	1.5
DEKALB	DKS54-00	97	19	100	58	72	98	47	113	83	17	69	15	54	52	1	104	1.2
	AVERAGES	99	40	88	70	76	99	40	88	68	17	65	15	56	51	6	103	1.4
	CV(%)	10	18	10	--	--	10	18	10	--	--	1	2	2	2	111	5	7.0
	LSD(0.05)*	16	10	14	--	--	16	24	16	--	--	1	0	2	2	12	8	0.2

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

SOUTH CENTRAL KANSAS GRAIN SORGHUM TEST ON SILT LOAM SOIL

South Central Kansas Experiment Field, Hutchinson; William Heer, agronomist

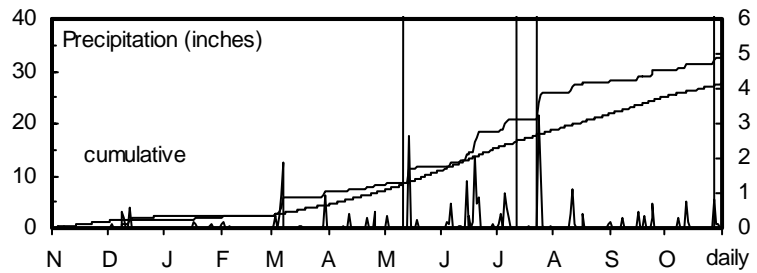
Ost loam; Wheat in 2003

120 - 40 - 0 lb/a N, P, K

Planted on 5/11/2004; Harvested on 10/25/2004

Target stand of 40,000 plants/acre; 5.2 in. spacing

Good seed bed and soil moisture, but driving rains after planting caused uneven emergence and reduced stands. Favorable rainfall and minimal stress the rest of the season resulted in excellent yields.



Month	Precipitation		Average Temp.		GDU	
	2004	Norm.	2004	Norm.	2004	Norm.
Nov.-Mar	7.0	4.2	38	37		
April	1.3	2.7	54	56	585	617
May	3.3	4.0	67	65	1000	927
June	6.8	4.2	72	75	1129	1196
July	7.4	3.4	76	81	1286	1416
August	2.2	3.1	72	79	1167	1361
Sept.	2.3	3.3	72	70	1110	1053
Oct.	2.3	2.6	59	58	783	748
Totals:	32.5	27.5	55	56	7,060	7,318

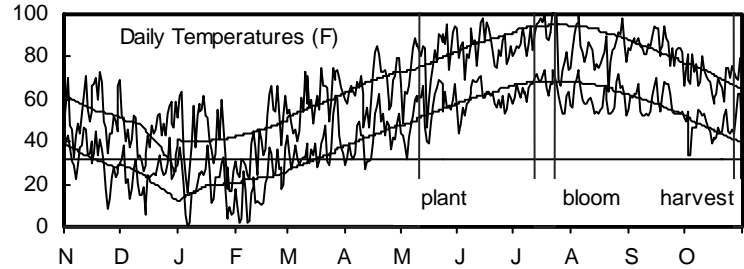


Table 11. Hutchinson Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS %										2003-2004				2004				
		ACRE YIELD, BUSHELS					OF TEST					Days to Blm	Grain %	Days to Blm	Grain %	Test Wt. lb/bu	Plant Ht. in.	Ldg %	Final Stand per Acre	Hds per Plant
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	2004	2003	2002	AVERAGE	AVERAGE									
GARST	5750	143	30	37	87	70	99	141	118	59	13	61	14	60	50	--	91	2.1		
CROPLAN GEN.	414	138	--	--	--	--	96	--	--	--	--	62	14	61	43	--	87	1.8		
MATURITY CHECK	TX3042xTX2737	139	27	19	83	61	97	125	61	61	14	62	15	59	50	--	77	1.9		
FRONTIER	F-222E	50	--	--	--	--	35	--	--	--	--	62	22	54	45	--	76	1.5		
SORG. PARTNERS	NK5418	131	26	--	78	--	91	119	--	62	13	63	14	60	43	--	98	1.9		
SORG. PARTNERS	X420	142	--	--	--	--	99	--	--	--	--	63	14	61	45	--	73	2.4		
ASGROW	PULSAR	131	24	27	77	60	91	109	88	62	13	64	14	61	46	--	65	2.2		
MIDLAND	M-4665	140	26	32	83	66	98	119	102	66	13	64	14	60	44	--	83	1.9		
PIONEER	85G01	156	25	--	91	--	109	116	--	65	13	64	14	59	48	--	98	1.7		
SORG. PARTNERS	KS 585	145	23	33	84	67	101	108	106	62	13	64	14	62	44	--	85	2.0		
DEKALB	DKS37-07	153	26	--	90	--	107	120	--	63	13	64	15	61	49	--	95	1.4		
DEKALB	DKS42-20	150	25	27	88	67	104	118	86	64	13	65	14	61	48	--	81	2.1		
MATURITY CHECK	OK11xTX2741	144	21	23	83	63	100	100	73	64	14	65	15	60	44	--	97	1.6		
DYNA-GRO	DGX-1738	140	23	--	81	--	98	106	--	66	13	66	14	60	47	--	78	2.0		
FRONTIER	F-303C	129	17	--	73	--	90	80	--	65	13	66	14	60	44	--	73	1.5		
DEKALB	DKS36-00	122	19	28	71	57	85	90	90	63	14	66	15	61	42	--	60	2.2		
ASGROW	A459	138	23	35	80	65	96	107	112	74	13	67	14	61	48	--	91	1.4		
MIDLAND	M-4758Y	142	29	--	85	--	99	135	--	69	13	67	14	60	49	--	79	1.9		
TRIUMPH	TR 460	144	24	19	84	62	100	113	60	69	13	67	14	62	44	--	86	1.9		
ADVANCED GEN.	A 115C	136	20	30	78	62	95	95	96	65	13	67	15	60	44	--	95	1.4		
DYNA-GRO	DGX-1753	151	23	--	87	--	105	106	--	74	13	68	14	60	47	--	91	1.7		

Table 11. Hutchinson Grain Sorghum Performance Test, 2002-2004 - continued.

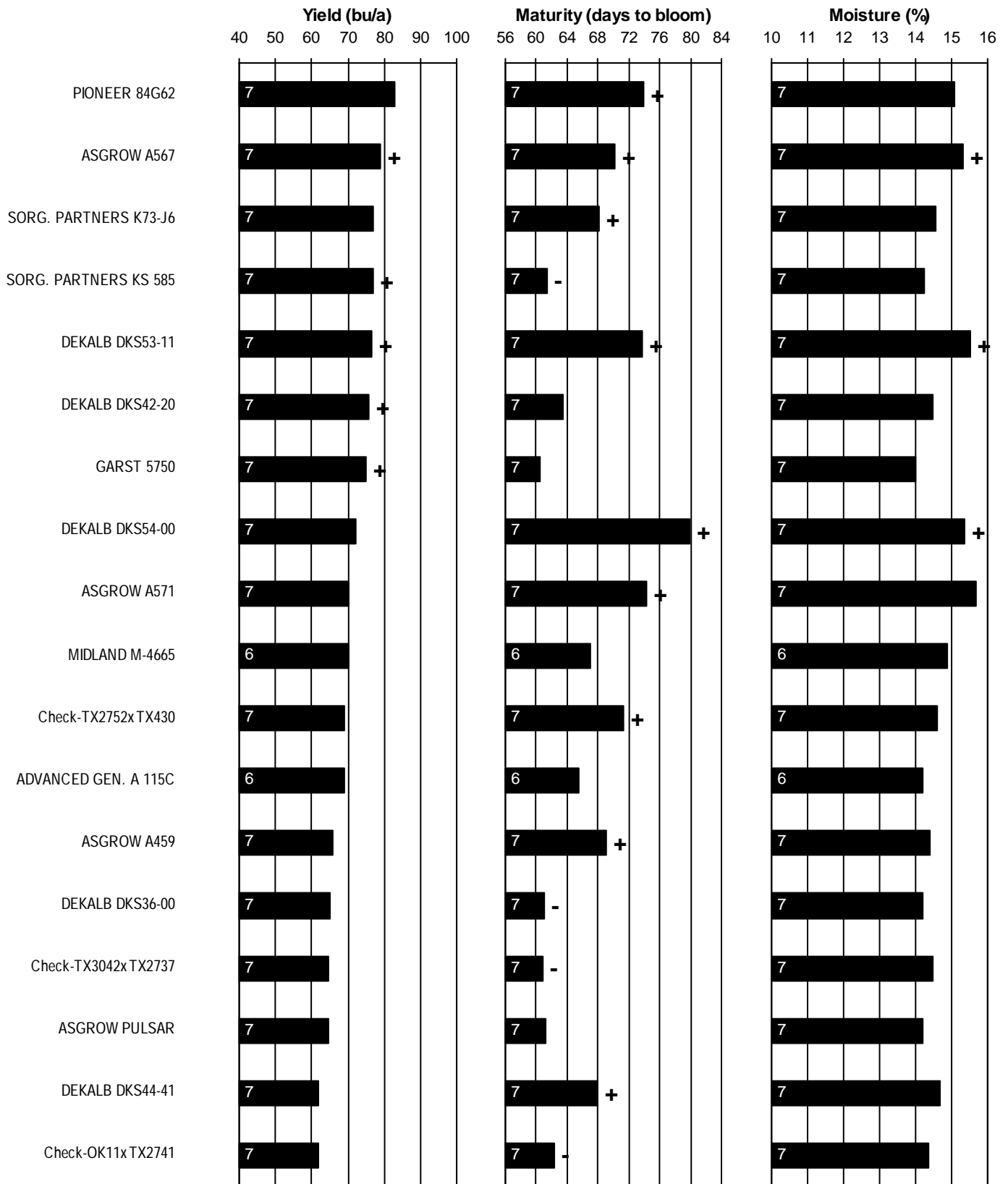
BRAND	NAME	YIELD AS %																
		ACRE YIELD, BUSHELS					OF TEST			2003-2004				2004				
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE			Days to Blm	Grain to Moist. %	Days to Blm	Grain to Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Final Stand %	Hds per Plnt
DYNA-GRO	DGX-1763	155	23	--	89	--	108	105	--	71	13	68	14	60	50	--	90	1.7
FRONTIER	F-457E	155	18	--	87	--	108	82	--	73	13	68	14	61	48	--	90	1.6
GARST	5440	153	23	--	88	--	107	105	--	70	13	68	14	61	47	--	84	1.7
SORG. PARTNERS	NK6641	138	--	--	--	--	96	--	--	--	--	68	14	59	45	--	99	1.4
GARST	5360	140	--	--	--	--	97	--	--	--	--	68	15	61	46	--	89	1.4
DEKALB	DKS44-41	129	14	22	71	55	90	63	69	70	13	69	14	59	45	--	55	1.9
MIDLAND	M-4748	145	--	--	--	--	101	--	--	--	--	69	14	60	47	--	98	1.5
DYNA-GRO	DGX-1755	147	--	--	--	--	102	--	--	--	--	69	15	59	47	--	92	1.4
MIDWEST SEED	G 567	149	29	--	89	--	104	137	--	70	14	69	15	61	44	--	79	1.6
TRIUMPH	TR 459	148	--	--	--	--	103	--	--	--	--	69	15	62	42	--	90	1.6
ADVANCED GEN.	A 121	148	--	--	--	--	103	--	--	--	--	70	14	61	45	--	74	1.6
CROPLAN GEN.	514	161	--	33	--	--	112	--	106	--	--	70	14	62	50	--	85	1.6
MATURITY CHECK	TX2752xTX430	150	24	38	87	71	105	112	121	78	13	70	14	59	47	--	88	1.8
PIONEER	84G62	178	27	43	102	82	124	126	138	81	13	70	14	61	47	--	95	1.8
ASGROW	A567	160	23	41	91	75	112	105	131	76	14	70	15	61	48	--	96	1.4
ASGROW	ORBIT	119	--	--	--	--	83	--	--	--	--	70	15	60	47	--	64	1.8
DEKALB	DKS54-00	161	12	50	87	75	112	56	163	88	15	70	15	60	50	--	80	1.9
SORG. PARTNERS	NK7655	146	23	--	85	--	102	107	--	75	13	71	13	59	46	--	93	1.7
GARST	5401	159	--	--	--	--	111	--	--	--	--	71	14	61	55	--	95	1.9
SORG. PARTNERS	K73-J6	143	27	43	85	71	100	124	139	72	13	71	14	60	47	--	89	1.7
ASGROW	A571	152	17	37	84	69	106	79	120	80	13	72	14	59	48	--	77	1.6
DYNA-GRO	DGX-1765	147	21	--	84	--	102	99	--	81	13	72	14	59	46	--	86	1.7
PIONEER	84Y00	150	--	36	--	--	104	--	117	--	--	72	14	61	45	--	83	1.8
DEKALB	DKS53-11	161	16	41	88	72	112	74	131	82	14	72	16	59	52	--	85	1.4
	AVERAGES	144	22	31	83	65	144	22	31	70	14	67	15	60	47	--	85	1.7
	CV(%)	6	24	17	--	--	6	24	17	--	--	3	6	1	4	--	8	13.1
	LSD(0.05)*	13	6	7	--	--	9	28	24	--	--	3	1	1	3	--	10	0.3

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

Table 12. SOUTH CENTRAL Kansas Sorghum Hybrid Yield Summary (Percentage of Test Average), 2004.

BRAND/NAME	HVD*	RND	STD	AVG.	BRAND/NAME	HVD	RND	STD	AVG.
ADVANCED GEN.					MIDWEST SEED				
A 115C	101	95	--	98	G 567	86	104	--	95
A 121	85	103	--	94	O 256	121	--	--	--
A 137	104	--	--	--	<hr/>				
ASGROW					MYCOGEN				
A459	109	96	--	103	627	101	--	--	--
A567	112	112	--	112	697	92	--	--	--
A571	100	106	--	103	<hr/>				
ORBIT	98	83	--	91	PIONEER				
PULSAR	89	91	--	90	84G62	110	124	--	117
<hr/>					84Y00	104	104	--	104
CROPLAN GEN.					85G01	97	109	--	103
414	106	96	--	101	<hr/>				
514	105	112	--	108	SORG. PARTNERS				
<hr/>					K73-J6	101	100	--	100
DEKALB					KS 585	109	101	--	105
DKS36-00	96	85	--	91	NK5418	103	91	--	97
DKS37-07	102	107	--	105	NK6641	--	96	--	--
DKS42-20	108	104	--	106	NK6673	89	--	--	--
DKS44-41	97	90	--	94	NK7633	94	--	--	--
DKS53-11	117	112	--	115	NK7655	--	102	--	--
DKS54-00	98	112	--	105	X420	73	99	--	86
<hr/>					<hr/>				
DYNA-GRO					TRIUMPH				
DGX-1738	90	98	--	94	TR 438	89	--	--	--
DGX-1753	106	105	--	106	TR 442	84	--	--	--
DGX-1755	109	102	--	106	TR 459	--	103	--	--
DGX-1763	99	108	--	104	TR 460	--	100	--	--
DGX-1765	99	102	--	101	<hr/>				
<hr/>					MATURITY CHECK				
FRONTIER					OK11xTX2741	97	100	--	99
F-222E	86	35	--	60	TX2752xTX430	94	105	--	99
F-303C	94	90	--	92	TX3042xTX2737	88	97	--	92
F-457E	83	108	--	95	<hr/>				
<hr/>					AVERAGES (bu/a)	99	144	--	121
GARST					CV(%)	10	6	--	--
5360	120	97	--	109	LSD (0.05)	16	9	--	--
5401	117	111	--	114	<hr/>				
5440	103	107	--	105	<hr/>				
5750	100	99	--	100	<hr/>				
<hr/>					<hr/>				
MIDLAND					<hr/>				
M-4665	108	98	--	103	<hr/>				
M-4748	119	101	--	110	<hr/>				
M-4758Y	104	99	--	101	<hr/>				

* HVD = Harvey Co., Hesston RND = Reno Co., Hutchinson STD = Stafford Co., St. John (lost to crabgrass infestation)



Values inside bars indicate the number of comparisons with checks. Symbols (+,-) indicate if statistically higher or lower than mean of checks.

Figure 6. SOUTH CENTRAL Kansas sorghum hybrid standardized performance summary, 2002-2004.

WEST KANSAS GRAIN SORGHUM TEST ON SILT LOAM SOIL

Agricultural Research Center, Hays; Kenneth Kofoid, agronomist

Harney silt loam; Soybean in 2003

60 - 0 - 0 lb/a N, P, K

Planted on 5/24/2004; Harvested on 10/29/2004

Target stand of 35,000 plants/acre; 6.0 in. spacing

A dry seedbed resulted in poor initial stands. Subsequent rains allowed remaining seeds to germinate 3 weeks later. Tillering was abundant. Favorable rainfall and temperatures in July and most of August. Late August and September were dry, inducing post-flowering moisture stress that caused lodging in some entries.

Month	Precipitation		Average Temp.		GDU	
	2004	Norm.	2004	Norm.	2004	Norm.
Nov.-Mar	3.6	3.5	35	33		
April	1.3	1.8	54	51	581	478
May	1.8	3.1	66	62	984	833
June	4.3	3.8	72	72	1101	1109
July	7.5	3.4	75	78	1245	1344
August	1.8	2.8	74	76	1219	1286
Sept.	2.0	2.2	72	68	1128	984
Oct.	1.8	1.5	57	55	707	638
Totals:	23.9	22.0	54	52	6,965	6,672

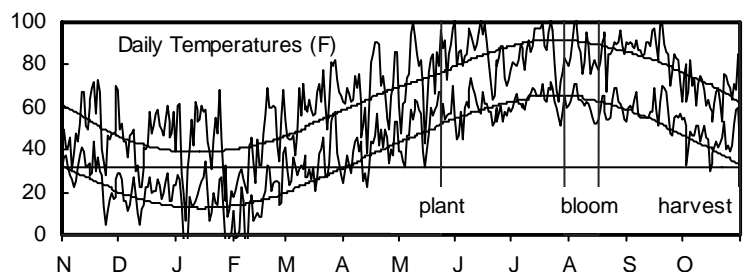
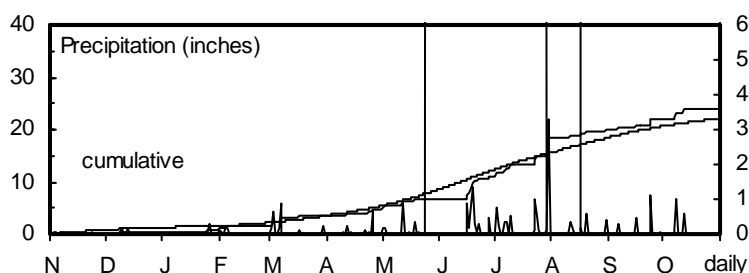


Table 13. Hays Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS %											2003-2004			2004		
		ACRE YIELD, BUSHELS					OF TEST AVERAGE			Days Grain	Days Grain	Test Plnt	Final Hds	Ldg	Stand	per Plnt		
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	2004	2003	2002	to Moist. Blm	to Moist. Blm	Wt. lb/bu	Ht. in.				%	%
PIONEER	87G57	118	46	37	82	67	98	100	73	63	17	65	16	59	37	0	--	--
CROPLAN GEN.	340	102	--	--	--	--	85	--	--	--	--	65	17	58	38	0	--	--
DYNA-GRO	DGX-1737	97	--	--	--	--	80	--	--	--	--	65	17	56	30	0	--	--
DYNA-GRO	DGX-1721	108	--	--	--	--	90	--	--	--	--	66	15	60	33	0	--	--
SORG. PARTNERS	KS 310	112	--	--	--	--	93	--	--	--	--	66	16	59	36	0	--	--
FONTANELLE	GE-3245	98	--	--	--	--	82	--	--	--	--	67	16	59	33	7	--	--
GARST	5750	128	54	53	91	78	106	117	105	70	16	67	17	61	40	0	--	--
MATURITY CHECK	TX3042xTX2737	126	51	55	89	78	105	112	109	70	17	67	17	60	41	0	--	--
DEKALB	DKS36-00	115	51	31	83	66	96	111	62	67	16	68	17	61	40	0	--	--
PIONEER	86G08	132	--	--	--	--	110	--	--	--	--	68	17	61	40	0	--	--
SORG. PARTNERS	KS 585	118	52	53	85	74	98	114	104	71	16	68	17	61	38	0	--	--
SORG. PARTNERS	NK5418	109	43	--	76	--	91	95	--	71	16	68	17	58	35	15	--	--
SORG. PARTNERS	X420	107	--	--	--	--	89	--	--	--	--	68	18	59	38	18	--	--
MIDWEST SEED	G 530	112	57	--	85	--	94	125	--	74	15	69	17	60	37	0	--	--
TRIUMPH	TR 438	128	52	--	90	--	107	114	--	70	16	69	17	59	43	0	--	--
ASGROW	PULSAR	125	41	22	83	63	104	90	43	67	16	69	18	60	41	7	--	--
PIONEER	85G01	142	49	--	96	--	119	108	--	70	20	70	17	60	43	2	--	--
DEKALB	DKS37-07	130	57	--	93	--	108	123	--	68	17	70	18	59	45	2	--	--
SORG. PARTNERS	NK6673	121	--	--	--	--	101	--	--	--	--	70	18	56	42	19	--	--
TRIUMPH	TR 459	118	62	30	90	70	99	134	60	73	18	70	19	60	39	0	--	--

Table 13. Hays Grain Sorghum Performance Test, 2002-2004 - continued.

BRAND	NAME	YIELD AS %																
		ACRE YIELD, BUSHELS					OF TEST			2003-2004				2004				
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE			Days to Blm	Grain to Moist. %	Days to Blm	Grain to Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Final Stand %	Hds per Plnt
ASGROW	ORBIT	107	--	20	--	--	89	--	40	--	--	71	17	60	45	0	--	--
FONTANELLE	GE-4532	129	--	--	--	--	107	--	--	--	--	71	18	61	43	0	--	--
DYNA-GRO	DGX-1733	110	--	--	--	--	92	--	--	--	--	72	17	61	38	1	--	--
MATURITY CHECK	OK11xTX2741	112	40	35	76	63	93	88	70	75	17	72	17	60	38	2	--	--
MYCOGEN	1G600	137	--	--	--	--	114	--	--	--	--	72	17	58	41	0	--	--
CROPLAN GEN.	494	131	--	--	--	--	110	--	--	--	--	72	18	61	42	0	--	--
TRIUMPH	TR 442	116	--	--	--	--	97	--	--	--	--	73	17	58	44	1	--	--
MYCOGEN	627	114	54	69	84	79	95	118	136	72	17	73	18	58	39	0	--	--
SORG. PARTNERS	NK7633	135	58	--	97	--	113	127	--	75	16	74	17	60	41	0	--	--
FONTANELLE	GE-5615	129	54	--	92	--	108	118	--	76	20	74	18	59	43	10	--	--
DYNA-GRO	DGX-1763	126	52	--	89	--	105	114	--	76	16	75	17	60	43	0	--	--
DYNA-GRO	DGX-1738	129	49	--	89	--	108	107	--	77	16	76	17	59	43	0	--	--
MIDWEST SEED	G 567	117	67	--	92	--	97	146	--	77	16	77	17	59	42	0	--	--
GARST	5401	132	--	--	--	--	110	--	--	--	--	78	17	61	51	0	--	--
DYNA-GRO	DGX-1755	129	--	--	--	--	107	--	--	--	--	79	17	61	41	0	--	--
MATURITY CHECK	TX2752xTX430	130	48	64	89	81	108	104	126	83	17	80	17	56	45	14	--	--
DYNA-GRO	DGX-1765	109	--	--	--	--	91	--	--	--	--	83	17	56	45	0	--	--
	AVERAGES	120	46	51	83	72	120	46	51	73	17	71	17	59	40	3	--	--
	CV(%)	10	16	16	--	--	10	16	16	--	--	2	3	3	4	269	--	--
	LSD(0.05)*	19	10	13	--	--	16	22	27	--	--	2	1	3	3	12	--	--

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

WEST KANSAS FALLOW GRAIN SORGHUM TEST ON SILT LOAM SOIL

Northwest Research-Extension Center, Colby; Patrick Evans, agronomist

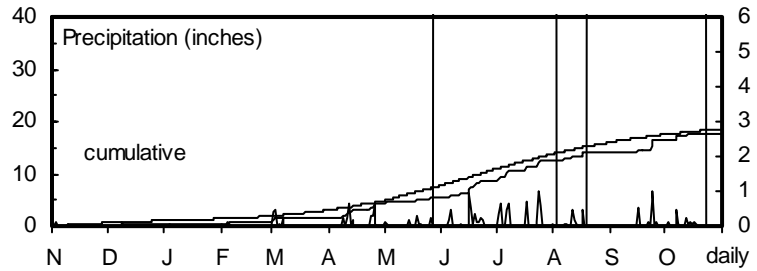
Keith silt loam; Fallow in 2003

60 - 0 - 0 lb/a N, P, K

Planted on 5/27/2004; Harvested on 10/21/2004

Target stand of 25,000 plants/acre; 8.4 in. spacing

June rains enabled good stand establishment and combined with cool temperatures to stimulate abundant tillering. Cool summer temperatures delayed maturity. Dry conditions in late summer and minimal subsoil moisture limited yield.



Month	Precipitation		Average Temp.		GDU	
	2004	Norm.	2004	Norm.	2004	Norm.
Nov.-Mar	1.8	3.0	35	32		
April	2.6	1.8	51	49	500	421
May	1.1	3.1	63	60	865	762
June	3.2	3.0	68	70	997	1054
July	4.6	3.1	73	76	1200	1285
August	1.2	2.2	71	74	1111	1216
Sept.	2.6	1.5	69	65	1017	910
Oct.	1.2	1.0	54	53	620	566
Totals:	18.2	18.6	52	51	6,310	6,214

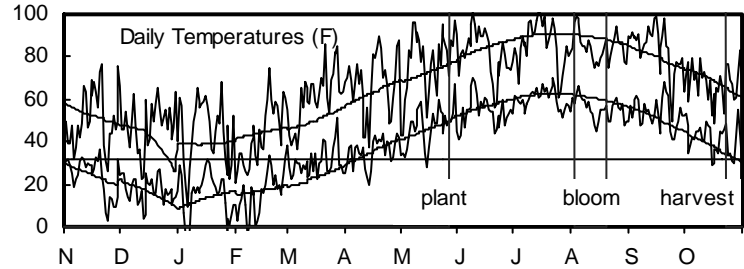


Table 14. Colby Fallow Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS %										2003-2004				2004			
		ACRE YIELD, BUSHELS					OF TEST					Days Grain to Blm	Days Grain to Moist.	Test Wt. lb/bu	Plant Ht. in.	Ldg %	Final Stand per Acre	Hds per Plant	
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	2004	2003	2002	AVERAGE	2004								2003
SORG. PARTNERS	KS 310	62	--	--	--	--	124	--	--	--	--	--	66	17	50	38	26	102	2.0
CROPLAN GEN.	340	55	--	--	--	--	110	--	--	--	--	--	66	19	47	40	75	106	1.8
DYNA-GRO	DGX-1721	51	--	--	--	--	103	--	--	--	--	--	67	17	45	38	11	90	2.2
DYNA-GRO	DGX-1737	53	20	--	37	--	107	174	--	70	--	68	15	47	35	9	102	1.8	
PIONEER	87G57	51	23	68	37	47	102	201	100	70	--	68	15	47	40	56	96	2.0	
FONTANELLE	GE-3245	50	--	--	--	--	100	--	--	--	--	68	16	49	38	54	88	1.9	
SORG. PARTNERS	K35-Y5	45	--	--	--	--	91	--	--	--	--	69	18	47	40	41	96	2.2	
GARST	5750	62	12	68	37	47	125	102	101	74	--	70	17	56	41	3	103	1.7	
SORG. PARTNERS	NK5418	47	13	--	30	--	95	111	--	74	--	70	17	50	38	29	101	1.9	
SORG. PARTNERS	X420	52	--	--	--	--	105	--	--	--	--	70	17	51	40	37	97	2.1	
TRIUMPH	TR 434	52	17	--	34	--	104	149	--	72	--	70	17	52	41	10	103	1.5	
MATURITY CHECK	TX3042xTX2737	46	21	82	33	49	92	184	120	73	--	70	18	51	42	39	85	2.1	
ASGROW	PULSAR	54	17	62	35	44	108	151	91	73	--	71	17	49	39	7	99	1.8	
DEKALB	DKS36-00	58	16	73	37	49	116	144	107	73	--	71	18	47	38	10	88	2.4	
SORG. PARTNERS	KS 585	52	8	65	30	42	104	68	96	76	--	71	18	53	39	4	91	2.0	
DEKALB	DKS37-07	62	12	--	37	--	123	108	--	74	--	72	17	49	42	8	113	1.5	
SEED RESOURCE	SR 251	53	--	--	--	--	107	--	--	--	--	72	17	53	39	0	104	1.6	
MYCOGEN	627	47	14	68	30	43	94	120	100	75	--	72	18	50	40	16	102	1.4	
PIONEER	86G08	46	--	--	--	--	92	--	--	--	--	72	19	50	40	11	87	1.9	
TRIUMPH	TR 459	52	11	70	32	45	105	99	104	76	--	73	17	53	39	9	112	1.3	
SEED RESOURCE	SR 255c	44	--	74	--	--	89	--	109	--	--	74	18	51	40	7	92	1.6	

Table 14. Colby Fallow Grain Sorghum Performance Test, 2002-2004 - continued.

BRAND	NAME	YIELD AS %																
		ACRE YIELD, BUSHELS					OF TEST			2003-2004				2004				
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE			Days to Blm	Grain to Moist. %	Days to Blm	Grain to Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Final Ldg %	Hds Stand %	Hds per Plnt
MATURITY CHECK	OK11xTX2741	52	5	67	29	41	105	44	99	78	--	74	19	49	40	5	107	1.6
MYCOGEN	M3838	52	13	71	33	45	104	119	104	77	--	74	20	51	40	4	107	1.4
PIONEER	85G01	54	5	--	29	--	108	43	--	77	--	75	18	53	39	16	100	1.5
SORG. PARTNERS	NK6641	48	--	--	--	--	97	--	--	--	--	75	18	50	41	10	106	1.5
ASGROW	ORBIT	49	--	72	--	--	98	--	106	--	--	76	18	49	41	0	90	1.7
PRODUCERS	PH67	49	--	--	--	--	99	--	--	--	--	76	18	47	39	3	109	1.4
CROPLAN GEN.	494	45	--	--	--	--	89	--	--	--	--	76	19	52	39	5	107	1.3
FONTANELLE	GE-4532	50	--	--	--	--	100	--	--	--	--	76	19	51	39	3	101	1.3
DYNA-GRO	DGX-1733	44	--	--	--	--	89	--	--	--	--	77	19	48	38	1	94	1.5
MIDWEST SEED	G 567	44	7	--	26	--	88	66	--	82	--	81	22	50	41	0	98	1.2
FONTANELLE	GE-5615	33	--	--	--	--	66	--	--	--	--	82	22	51	40	1	96	1.2
MATURITY CHECK	TX2752xTX430	31	1	68	16	33	63	8	100	84	--	83	22	49	41	9	93	0.9
	AVERAGES	50	11	68	31	43	50	11	68	76	--	73	18	50	39	16	99	1.7
	CV(%)	13	44	14	--	--	13	44	14	--	--	2	9	3	5	69	9	19.9
	LSD(0.05)*	9	7	13	--	--	19	62	20	--	--	2	2	2	3	15	13	0.5

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

WEST KANSAS FALLOW GRAIN SORGHUM TEST ON SILT LOAM SOIL

Southwest Research-Extension Center, Tribune; Alan Schlegel, agronomist

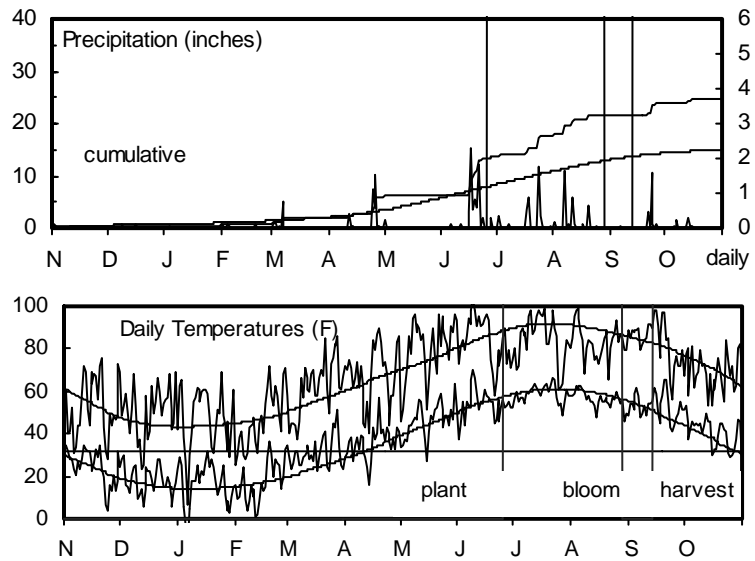
Ulysses silt loam; Wheat in 2003

80 - 0 - 0 lb/a N, P, K

Planted on 6/25/2004; Harvested on 11/9/2004

Target stand of 25,000 plants/acre; 8.4 in. spacing

Stands were lower than anticipated, but tillering was extensive. Late planting and cool summer temperatures reduced yields.



Month	Precipitation		Average Temp.		GDU	
	2004	Norm.	2004	Norm.	2004	Norm.
Nov.-Mar	2.0	2.1	37	34		
April	3.9	1.3	52	49	514	430
May	0.2	2.3	64	60	895	772
June	7.4	2.6	69	70	1019	1063
July	4.1	2.5	72	77	1157	1287
August	3.8	2.2	70	74	1090	1209
Sept.	2.3	1.3	68	66	1009	934
Oct.	0.8	0.7	54	54	629	599
Totals:	24.6	15.0	53	52	6,313	6,294

Table 15. Tribune Fallow Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS % 2003-2004																
		ACRE YIELD, BUSHELS						OF TEST AVERAGE				2004						
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	2004	2003	2002	Days to Blm	Grain to Moist. %	Days to Blm	Grain to Moist. %	Test Wt. lb/bu	Plant Ht. in.	Ldg %	Final Stand per Acre	
DYNA-GRO	DGX-1737	69	58	--	63	--	116	122	--	62	11	62	14	56	41	--	86	2.9
PIONEER	87G57	64	62	--	63	--	108	130	--	64	12	66	15	55	46	--	84	3.1
DYNA-GRO	DGX-1721	50	--	--	--	--	85	--	--	--	--	67	14	55	40	--	80	2.6
DRUSSEL SEED	DSS B60	63	51	--	57	--	106	108	--	67	11	68	14	52	43	--	78	3.1
FONTANELLE	GE-3245	61	--	--	--	--	103	--	--	--	--	68	14	52	43	--	74	2.9
SORG. PARTNERS	KS 310	67	--	--	--	--	114	--	--	--	--	68	14	56	49	--	83	2.5
CROPLAN GEN.	340	66	--	--	--	--	112	--	--	--	--	68	15	54	51	--	84	3.0
SORG. PARTNERS	K35-Y5	58	--	--	--	--	99	--	--	--	--	68	15	54	46	--	84	3.7
DEKALB	DKS36-00	54	52	--	53	--	91	110	--	69	12	69	16	52	47	--	71	3.3
PIONEER	86G08	71	--	--	--	--	120	--	--	--	--	70	15	54	47	--	79	3.1
ASGROW	PULSAR	59	51	--	55	--	99	107	--	69	13	70	16	51	50	--	73	3.0
MATURITY CHECK	TX3042xTX2737	66	56	--	61	--	111	119	--	65	12	70	16	53	53	--	72	3.3
DEKALB	DKS37-07	67	52	--	60	--	114	111	--	70	13	71	16	53	50	--	82	2.7
SORG. PARTNERS	X420	59	--	--	--	--	100	--	--	--	--	72	15	54	49	--	76	3.1
DRUSSEL SEED	DSS B64	78	53	--	65	--	131	112	--	73	14	72	16	53	48	--	85	2.8
MYCOGEN	627	62	--	--	--	--	104	--	--	--	--	72	16	52	47	--	85	2.4
DYNA-GRO	DGX-1733	53	--	--	--	--	89	--	--	--	--	73	16	48	45	--	88	2.4
PIONEER	85G01	76	70	--	73	--	128	148	--	72	13	73	16	54	51	--	87	2.6
PRODUCERS	PH67	54	--	--	--	--	91	--	--	--	--	73	16	50	45	--	87	2.4
MATURITY CHECK	OK11xTX2741	60	53	--	56	--	101	112	--	76	13	74	16	50	46	--	91	2.3
SEED RESOURCE	SR 251	57	--	--	--	--	97	--	--	--	--	74	16	50	49	--	85	2.7
SEED RESOURCE	SR 255c	62	--	--	--	--	105	--	--	--	--	74	16	51	47	--	81	2.5
SORG. PARTNERS	1486	63	--	--	--	--	106	--	--	--	--	74	16	49	44	--	80	2.6

Table 15. Tribune Fallow Grain Sorghum Performance Test, 2002-2004 - continued.

BRAND	NAME	YIELD AS %																
		ACRE YIELD, BUSHELS					OF TEST			2003-2004				2004				
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE			Days to Blm	Grain to Moist. %	Days to Blm	Grain to Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Final Stand %	Hds per Plnt
MYCOGEN	M3838	55	41	--	48	--	93	87	--	74	14	74	17	50	45	--	83	2.4
TRIUMPH	TR 438	76	53	--	65	--	129	113	--	74	13	74	17	51	50	--	82	3.1
FONTANELLE	GE-4532	62	--	--	--	--	105	--	--	--	--	76	16	52	51	--	82	2.6
SORG. PARTNERS	KS 585	60	46	--	53	--	102	96	--	75	15	76	17	52	51	--	71	3.4
TRIUMPH	TR 460	39	42	--	40	--	66	88	--	77	15	76	18	48	45	--	85	2.6
ASGROW	ORBIT	30	--	--	--	--	51	--	--	--	--	76	19	46	47	--	75	2.1
CROPLAN GEN.	494	67	--	--	--	--	114	--	--	--	--	78	17	50	52	--	88	2.5
FONTANELLE	GE-5615	51	--	--	--	--	87	--	--	--	--	78	19	46	51	--	86	2.3
MATURITY CHECK	TX2752xTX430	35	36	--	36	--	59	76	--	79	19	79	20	44	51	--	79	2.7
MIDWEST SEED	G 567	37	--	--	--	--	63	--	--	--	--	79	20	45	46	--	77	2.5
	AVERAGES	59	47	--	53	--	59	47	--	73	14	72	16	51	47	--	81	2.8
	CV(%)	10	25	--	--	--	10	25	--	--	--	2	5	3	5	--	8	13.4
	LSD(0.05)*	8	14	--	--	--	14	29	--	--	--	2	1	2	3	--	10	0.5

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

WEST KANSAS FALLOW GRAIN SORGHUM TEST ON SILT LOAM SOIL

Southwest Research-Extension Center, Garden City; Merle Witt, agronomist

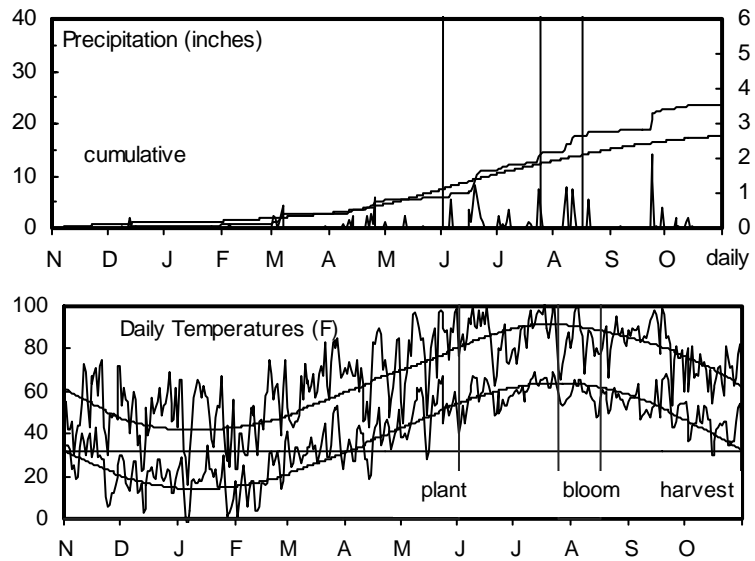
Keith silt loam; Fallow in 2003

100 - 0 - 0 lb/a N, P, K

Planted on 6/1/2004; Harvested on 12/7/2004

Target stand of 35,000 plants/acre; 6.0 in. spacing

Favorable rainfall enabled most of the planted seed to emerge. Cool summer temperatures minimized stress but also delayed grain fill and drydown. November rains delayed harvest. The delayed harvest, lodging, and October frost all increased test variability. LSD for this test is reported at the 0.20 level.



Month	Precipitation		Average Temp.		GDU	
	2004	Norm.	2004	Norm.	2004	Norm.
Nov.-Mar	2.6	2.8	38	34		
April	2.5	1.6	53	51	541	472
May	0.6	2.9	66	62	980	831
June	5.5	3.0	71	72	1077	1115
July	3.2	2.5	75	78	1235	1321
August	4.3	2.2	72	76	1145	1260
Sept.	4.2	1.6	70	67	1050	973
Oct.	0.9	1.1	56	55	689	632
Totals:	23.7	17.7	54	53	6,717	6,604

Table 16. Garden City Fallow Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS % 2003-2004											2004					
		ACRE YIELD, BUSHELS						OF TEST AVERAGE			Days Grain to Moist.		Days Grain to Moist.		Test Plnt		Final Hds	
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	2004	2003	2002	Blm	%	Blm	%	lb/bu	in.	%	%	Plnt
PIONEER	87G57	76	52	--	64	--	89	85	--	56	14	53	17	58	44	5	116	1.6
SORG. PARTNERS	KS 310	82	--	--	--	--	97	--	--	--	--	55	16	59	45	0	118	1.3
FONTANELLE	GE-3245	78	--	--	--	--	92	--	--	--	--	56	15	58	42	12	106	1.3
DRUSSEL SEED	DSS B60	70	42	--	56	--	82	69	--	58	13	56	16	57	42	15	105	1.4
PIONEER	86G08	128	--	--	--	--	151	--	--	--	--	57	15	58	48	12	109	1.5
DRUSSEL SEED	DSS B64	74	66	--	70	--	87	107	--	62	14	57	17	58	45	35	124	1.3
GARST	5750	68	75	58	72	67	80	123	86	62	14	57	17	59	47	2	122	1.4
SORG. PARTNERS	K35-Y5	103	--	--	--	--	122	--	--	--	--	58	15	58	41	15	123	1.7
DEKALB	DKS36-00	63	59	57	61	60	74	96	84	61	14	58	17	58	44	33	86	1.5
MATURITY CHECK	TX3042xTX2737	60	65	65	62	63	70	105	96	60	15	58	18	57	47	43	101	1.4
CROPLAN GEN.	340	91	--	--	--	--	108	--	--	--	--	59	15	59	48	2	127	1.3
MYCOGEN	M3838	101	75	--	88	--	120	122	--	63	13	59	15	59	45	8	124	1.2
SEED RESOURCE	SR 251	113	--	--	--	--	133	--	--	--	--	59	16	59	44	3	118	1.3
ASGROW	ORBIT	84	--	51	--	--	99	--	75	--	--	60	15	59	48	3	129	1.2
SORG. PARTNERS	NK5418	61	53	--	57	--	72	87	--	65	14	60	16	58	41	35	124	1.5
SORG. PARTNERS	X420	89	--	--	--	--	105	--	--	--	--	60	16	59	47	22	106	1.5
DEKALB	DKS37-07	114	57	--	86	--	135	93	--	62	14	60	17	59	47	8	133	1.2
DYNA-GRO	DGX-1763	70	48	--	59	--	83	78	--	64	14	60	17	58	46	17	116	1.3
MYCOGEN	627	67	52	--	60	--	80	84	--	63	14	60	17	57	43	22	118	1.3
GARST	5515	59	62	78	60	66	70	101	115	65	14	61	16	58	48	8	105	1.3

Table 16. Garden City Fallow Grain Sorghum Performance Test, 2002-2004 - continued.

BRAND	NAME	YIELD AS %																
		ACRE YIELD, BUSHELS					OF TEST AVERAGE			2003-2004		2004						
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	2004	2003	2002	Days to Blm	Grain to Moist. %	Days to Blm	Grain to Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Final Stand %	Hds per Plnt
GOLDEN WORLD	GWX3067	72	--	--	--	--	84	--	--	--	--	61	16	58	48	7	108	1.2
FONTANELLE	GE-4532	82	--	--	--	--	97	--	--	--	--	61	17	58	46	22	115	1.4
PIONEER	85G01	92	59	--	75	--	108	96	--	66	14	62	16	58	45	7	124	1.3
SEED RESOURCE	SR 255c	89	--	65	--	--	104	--	95	--	--	62	16	58	45	27	117	1.2
SORG. PARTNERS	NK6673	126	--	--	--	--	148	--	--	--	--	62	16	58	49	20	115	1.3
CROPLAN GEN.	494	55	--	--	--	--	64	--	--	--	--	62	17	58	45	27	123	1.3
TRIUMPH	TR 460	89	61	--	75	--	105	99	--	65	14	62	17	58	43	33	102	1.5
DYNA-GRO	DGX-1738	118	56	--	87	--	139	92	--	68	14	63	16	58	46	7	143	1.1
FONTANELLE	GE-5615	87	66	--	77	--	103	108	--	67	14	63	16	59	47	15	113	1.2
MATURITY CHECK	OK11xTX2741	38	61	65	50	55	45	99	96	67	13	63	16	58	44	30	111	1.2
ASGROW	PULSAR	91	46	69	69	69	108	74	101	64	14	63	17	58	48	12	113	1.3
DYNA-GRO	DGX-1755	44	--	--	--	--	52	--	--	--	--	63	17	57	42	28	117	1.1
GOLDEN WORLD	GW X5964	99	69	--	84	--	116	113	--	69	13	65	15	59	47	2	124	1.1
MIDWEST SEED	G 567	66	--	--	--	--	78	--	--	--	--	66	16	58	45	20	99	1.3
SORG. PARTNERS	K73-J6	105	79	60	92	81	123	128	88	69	13	66	16	58	49	0	101	1.3
GOLDEN WORLD	GW X7464	106	67	--	87	--	125	110	--	73	13	67	15	58	47	20	109	1.4
GOLDEN WORLD	GWX9067	66	--	--	--	--	78	--	--	--	--	67	17	58	47	27	142	1.1
MATURITY CHECK	TX2752xTX430	95	52	83	74	77	112	85	123	71	14	67	17	58	45	32	101	1.5
GARST	5401	69	--	--	--	--	82	--	--	--	--	68	17	58	51	12	122	1.2
GOLDEN WORLD	GW 1489	86	80	73	83	80	102	131	108	73	14	69	16	57	49	13	104	1.3
GOLDEN WORLD	GWX1467	100	--	--	--	--	118	--	--	--	--	69	16	58	48	3	117	1.1
DYNA-GRO	DGX-1753	103	--	--	--	--	121	--	--	--	--	72	16	58	45	2	118	1.2
DYNA-GRO	DGX-1765	115	56	--	85	--	135	91	--	77	14	75	16	57	50	3	111	1.3
	AVERAGES	85	61	68	73	71	85	61	68	66	14	62	16	58	46	16	115	1.3
	CV(%)	39	16	11	--	--	39	16	11	--	--	5	6	1	6	99	13	9.3
	LSD(0.20)*	35	13	12	--	--	41	22	17	--	--	3	1	1	3	16	15	0.1

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

Table 17. WEST Kansas Grain Sorghum Hybrid Yield Summary (Percentage of Test Average), 2004.

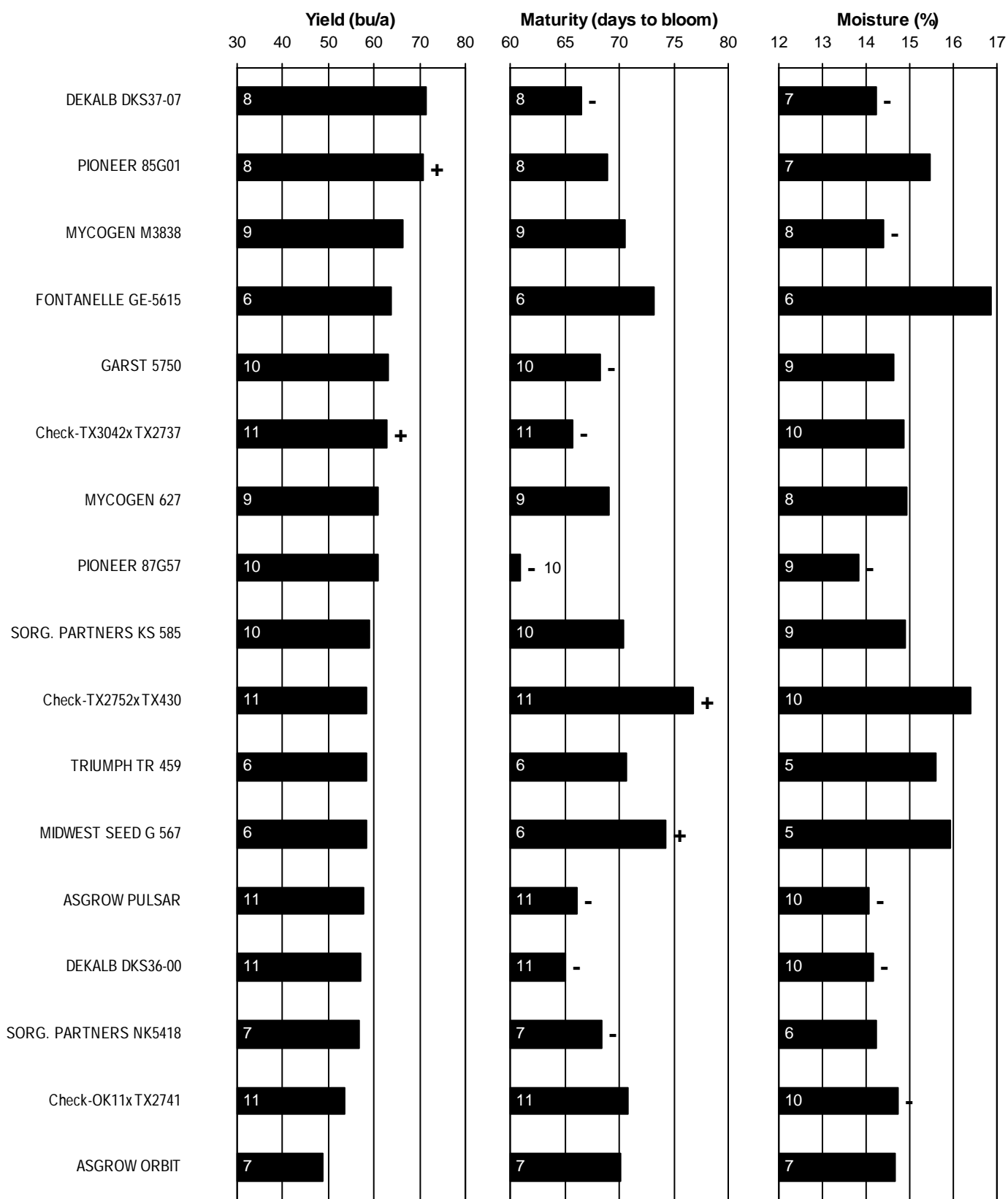
BRAND/NAME	ELD*	THD	GRD	FND	AVG.	BRAND/NAME	ELD	THD	GRD	FND	AVG.
ASGROW						MYCOGEN					
ORBIT	89	98	51	99	84	1G600	114	--	--	--	--
PULSAR	104	108	99	108	105	627	95	94	104	80	93
CROPLAN GEN.						PIONEER					
340	85	110	112	108	104	M3838	--	104	93	120	--
494	110	89	114	64	94	85G01	119	108	128	108	116
DEKALB						PRODUCERS					
DKS36-00	96	116	91	74	94	PH67	--	99	91	--	--
DKS37-07	108	123	114	135	120	SEED RESOURCE					
DRUSSEL SEED						SR 251	--	107	97	133	--
DSS B60	--	--	106	82	--	SR 255c	--	89	105	104	--
DSS B64	--	--	131	87	--	SORG. PARTNERS					
DYNA-GRO						1486	--	--	106	--	--
DGX-1721	90	103	85	--	--	K35-Y5	--	91	99	122	--
DGX-1733	92	89	89	--	--	K73-J6	--	--	--	123	--
DGX-1737	80	107	116	--	--	KS 310	93	124	114	97	107
DGX-1738	108	--	--	139	--	KS 585	98	104	102	--	--
DGX-1753	--	--	--	121	--	NK5418	91	95	--	72	--
DGX-1755	107	--	--	52	--	NK6641	--	97	--	--	--
DGX-1763	105	--	--	83	--	NK6673	101	--	--	148	--
DGX-1765	91	--	--	135	--	NK7633	113	--	--	--	--
FONTANELLE						X420	89	105	100	105	100
GE-3245	82	100	103	92	94	TRIUMPH					
GE-4532	107	100	105	97	102	TR 434	--	104	--	--	--
GE-5615	108	66	87	103	91	TR 438	107	--	129	--	--
GARST						TR 442	97	--	--	--	--
5401	110	--	--	82	--	TR 459	99	105	--	--	--
5515	--	--	--	70	--	TR 460	--	--	66	105	--
5750	106	125	--	80	--	MATURITY CHECK					
GOLDEN WORLD						OK11xTX2741	93	105	101	45	86
GW 1489	--	--	--	102	--	TX2752xTX430	108	63	59	112	86
GW X5964	--	--	--	116	--	TX3042xTX2737	105	92	111	70	95
GW X7464	--	--	--	125	--	AVERAGES (bu/a)					
GWX1467	--	--	--	118	--		120	50	59	85	78
GWX3067	--	--	--	84	--	CV(%)					
GWX9067	--	--	--	78	--		10	13	10	39	--
MIDWEST SEED						LSD (0.05)					
G 530	94	--	--	--	--		16	19	14	41	--
G 567	97	88	63	78	82						

* ELD = Ellis Co., Hays

THD = Thomas Co., Colby

GRD = Greeley Co., Tribune

FND = Finney Co., Garden City



Values inside bars indicate the number of comparisons with checks. Symbols (+,-) indicate if statistically higher or lower than mean of checks.

Figure 7. WEST Kansas sorghum hybrid standardized performance summary, 2002-2004.

NORTH CENTRAL KANSAS IRRIGATED GRAIN SORGHUM TEST ON SILT LOAM SOIL

Irrigation Experiment Field, Scandia; Barney Gordon, agronomist; Michael Larson and Allan Milner, technicians

Crete silt loam; Soybean in 2003

200 - 30 - 0 lb/a N, P, K

Planted on 5/25/2004; Harvested on 10/22/2004

Target stand of 82,200 plants/acre; 2.5 in. spacing

Favorable conditions resulted in excellent yields.
Mild temperatures slowed maturation.

Month	Precipitation		Average Temp.		GDU	
	2004	Norm.	2004	Norm.	2004	Norm.
Nov.-Mar	8.1	5.0	34	33		
April	0.4	2.4	53	53	557	534
May	4.8	4.0	65	64	938	886
June	4.8	4.5	70	73	1054	1149
July	3.5	3.8	74	79	1230	1368
August	1.5	3.7	72	77	1139	1310
Sept.	2.2	3.9	71	68	1089	987
Oct.	0.6	2.3	56	56	677	677
Totals:	25.8	29.5	53	53	6,684	6,911

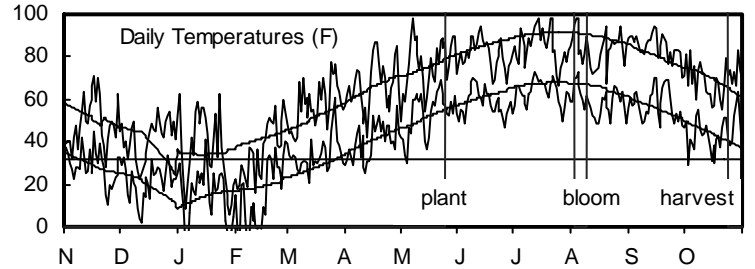
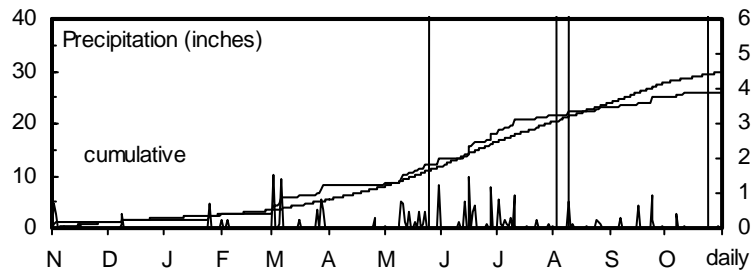


Table 18. Scandia Irrigated Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS % 2003-2004																
		ACRE YIELD, BUSHELS						YIELD AS % OF TEST			2003				2004			
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE	2004	2003	2002	Days to Blm	Grain to Moist. %	Days to Blm	Grain to Moist. %	Test Wt. lb/bu	Planting Ht. in.	Final Ldg %	Hds Stand per Plnt
MIDWEST SEED	G 530	149	--	--	--	--	87	--	--	--	--	68	15	61	46	--	98	1.0
CROPLAN GEN.	494	171	--	--	--	--	100	--	--	--	--	69	15	61	50	--	99	1.0
FONTANELLE	GE-6715	172	145	--	159	--	101	95	--	74	16	69	15	60	48	--	99	1.0
MATURITY CHECK	OK11xTX2741	160	146	133	153	146	94	95	78	73	15	69	15	60	47	--	98	1.0
SORG. PARTNERS	KS 585	174	144	139	159	153	102	94	82	70	16	69	15	61	47	--	97	1.1
TAYLOR	T-37GS	156	--	--	--	--	91	--	--	--	--	69	15	61	48	--	99	1.0
GARST	5360	171	--	--	--	--	100	--	--	--	--	70	15	61	46	--	101	1.0
SORG. PARTNERS	X420	157	--	--	--	--	92	--	--	--	--	70	15	61	49	--	99	1.0
ASGROW	A567	178	168	--	173	--	104	110	--	73	16	71	15	61	49	--	100	1.0
FONTANELLE	GE-5615	181	157	--	169	--	106	102	--	73	16	71	15	61	51	--	101	1.0
FRONTIER	F-457E	166	153	--	159	--	97	100	--	73	16	71	15	60	50	--	98	1.1
GARST	5401	163	--	--	--	--	96	--	--	--	--	71	15	61	52	--	98	1.0
GOLDEN WORLD	GW 1489	169	155	176	162	167	99	102	103	74	16	71	15	61	54	--	101	1.0
MATURITY CHECK	TX3042xTX2737	160	133	160	146	151	94	87	94	71	16	71	15	61	54	--	97	1.1
PIONEER	84G62	182	179	220	181	194	107	117	129	74	16	71	15	60	48	--	99	1.1
SORG. PARTNERS	NK6673	177	--	--	--	--	104	--	--	--	--	71	15	61	51	--	98	1.0
TRIUMPH	TR 481	174	156	171	165	167	102	102	100	73	16	71	15	61	49	--	98	1.1
GOLDEN WORLD	GWX9064	173	--	--	--	--	101	--	--	--	--	71	16	61	50	--	97	1.1
ASGROW	A571	160	150	180	155	163	94	98	106	73	16	72	15	60	50	--	97	1.1
CROPLAN GEN.	514	176	160	147	168	161	103	104	86	75	16	72	15	61	51	--	99	1.0
DEKALB	DKS53-11	184	177	--	181	--	108	116	--	75	16	72	15	61	53	--	102	1.0
FRONTIER	F-700E	185	158	149	172	164	109	103	87	73	16	72	15	61	50	--	99	1.0
PIONEER	84Y00	174	--	202	--	--	102	--	119	--	--	72	15	60	49	--	98	1.0
SORG. PARTNERS	NK7655	165	147	--	156	--	97	96	--	75	15	72	15	61	50	--	102	1.0

Table 18. Scandia Irrigated Grain Sorghum Performance Test, 2002-2004 - continued.

BRAND	NAME	YIELD AS %											2003-2004				2004			
		ACRE YIELD, BUSHELS					OF TEST			Days Grain		Days Grain		Test Plnt		Final Hds				
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE			to Blm	%	to Blm	%	lb/bu	Ht. in.	Ldg %	Stand %	per Plnt		
TAYLOR	T-36GS	182	--	--	--	--	107	--	--	--	--	72	15	61	47	--	98	1.0		
MYCOGEN	1G858	177	178	--	178	--	104	117	--	74	16	72	16	61	53	--	101	1.0		
DEKALB	DKS54-00	169	151	159	160	160	99	99	94	75	16	73	15	60	53	--	97	1.1		
MYCOGEN	697	159	--	--	--	--	93	--	--	--	--	73	15	60	48	--	99	1.0		
SORG. PARTNERS	K73-J6	176	146	193	161	171	103	95	113	75	16	73	15	61	50	--	97	1.0		
MIDWEST SEED	G 567	158	161	--	160	--	93	105	--	73	15	74	15	61	48	--	102	1.0		
SORG. PARTNERS	NK8828	174	158	181	166	171	102	103	106	76	16	74	15	60	52	--	100	1.0		
MATURITY CHECK	TX2752xTX430	180	147	184	164	171	106	96	108	75	16	74	16	61	50	--	97	1.2		
FONTANELLE	W-1000	181	--	--	--	--	106	--	--	--	--	75	16	60	54	--	97	1.0		
	AVERAGES	171	153	170	162	165	171	153	170	73	16	71	15	61	50	--	99	1.0		
	CV(%)	3	5	4	--	--	3	5	4	--	--	1	1	0	1	--	2	5.0		
	LSD(0.05)*	8	10	10	--	--	4	7	6	--	--	1	0	0	1	--	4	0.1		

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

SOUTH CENTRAL KANSAS IRRIGATED GRAIN SORGHUM TEST ON SILT LOAM SOIL

South Central Kansas Experiment Field, Hutchinson; William Heer, agronomist; Cameron Peirce, cooperater

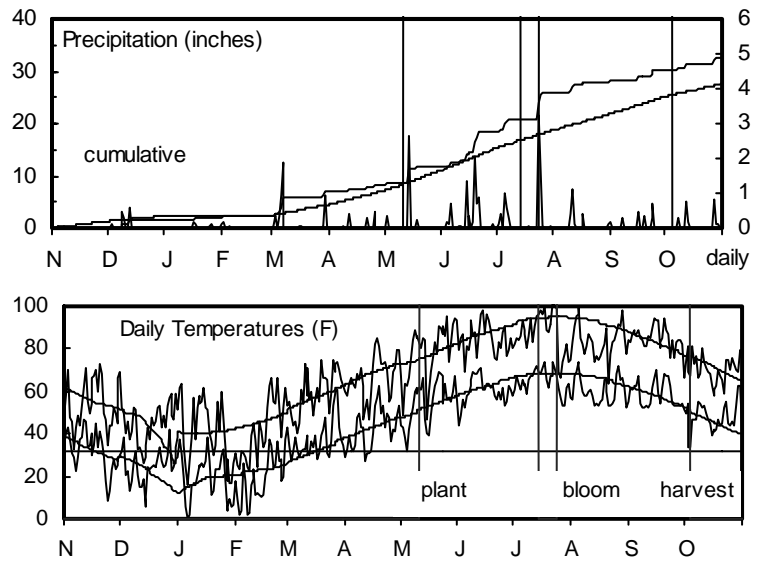
Ost loam; Wheat in 2003

175 - 30 - 0 lb/a N, P, K

Planted on 5/11/2004; Harvested on 10/2/2004

Target stand of 90,000 plants/acre; 2.3 in. spacing

No-till planted into heavy stubble. Half of nitrogen was deep banded in the previous fall. Minimal heat stress resulted in excellent yields.



Month	Precipitation		Average Temp.		GDU	
	2004	Norm.	2004	Norm.	2004	Norm.
Nov.-Mar	7.0	4.2	38	37		
April	1.3	2.7	54	56	585	617
May	3.3	4.0	67	65	1000	927
June	6.8	4.2	72	75	1129	1196
July	7.4	3.4	76	81	1286	1416
August	2.2	3.1	72	79	1167	1361
Sept.	2.3	3.3	72	70	1110	1053
Oct.	2.3	2.6	59	58	783	748
Totals:	32.5	27.5	55	56	7,060	7,318

Table 19. Hutchinson Irrigated Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS %										2003-2004				2004				
		ACRE YIELD, BUSHELS					OF TEST AVERAGE					Days to Blm	Grain to Moist. %	Days to Blm	Grain to Moist. %	Test Wt. lb/bu	Plant Ht. in.	Ldg %	Stand %	Hds per Plnt
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	2004	2003	2002											
MATURITY CHECK	TX3042xTX2737	182	--	--	--	--	94	--	--	--	--	--	63	14	61	64	--	70	1.5	
MATURITY CHECK	OK11xTX2741	174	--	--	--	--	89	--	--	--	--	--	64	14	60	51	--	99	1.1	
SORG. PARTNERS	KS 585	170	--	--	--	--	87	--	--	--	--	--	64	14	62	54	--	68	1.6	
SORG. PARTNERS	NK5418	169	--	--	--	--	87	--	--	--	--	--	64	14	61	48	--	94	1.3	
MIDLAND	M-4665	180	--	--	--	--	93	--	--	--	--	--	65	14	61	51	--	92	1.2	
SORG. PARTNERS	X420	177	--	--	--	--	91	--	--	--	--	--	65	15	61	58	--	72	1.6	
CROPLAN GEN.	494	187	--	--	--	--	96	--	--	--	--	--	66	14	61	60	--	84	1.3	
PIONEER	85G01	208	--	--	--	--	107	--	--	--	--	--	66	14	61	56	--	99	1.1	
GARST	5360	195	--	--	--	--	100	--	--	--	--	--	66	15	61	53	--	88	1.1	
MIDLAND	M-4748	189	--	--	--	--	97	--	--	--	--	--	66	15	61	59	--	95	1.3	
SORG. PARTNERS	NK6673	184	--	--	--	--	95	--	--	--	--	--	67	16	60	57	--	83	1.4	
MATURITY CHECK	TX2752xTX430	214	--	--	--	--	110	--	--	--	--	--	68	14	61	61	--	86	1.3	
SORG. PARTNERS	NK7655	200	--	--	--	--	103	--	--	--	--	--	68	14	61	61	--	88	1.3	
ASGROW	A567	212	--	--	--	--	109	--	--	--	--	--	68	15	61	62	--	85	1.2	
CROPLAN GEN.	514	202	--	--	--	--	104	--	--	--	--	--	68	15	61	63	--	78	1.2	
FONTANELLE	GE-5615	208	--	--	--	--	107	--	--	--	--	--	68	15	61	60	--	94	1.1	
FRONTIER	F-457E	195	--	--	--	--	100	--	--	--	--	--	68	15	61	60	--	81	1.2	
GARST	5440	207	--	--	--	--	107	--	--	--	--	--	68	15	61	61	--	83	1.3	
MYCOGEN	697	178	--	--	--	--	92	--	--	--	--	--	68	15	60	56	--	88	1.1	
MIDLAND	M-4758Y	185	--	--	--	--	95	--	--	--	--	--	68	16	61	64	--	72	1.4	
SORG. PARTNERS	K73-J6	184	--	--	--	--	95	--	--	--	--	--	68	16	60	57	--	82	1.2	
DYNA-GRO	DGX-1781	189	--	--	--	--	97	--	--	--	--	--	69	15	61	57	--	95	1.1	
DEKALB	DKS53-11	207	--	--	--	--	106	--	--	--	--	--	70	15	61	61	--	88	1.2	

Table 19. Hutchinson Irrigated Grain Sorghum Performance Test, 2002-2004 - continued.

BRAND	NAME	YIELD AS %																
		ACRE YIELD, BUSHELS					OF TEST			2003-2004				2004				
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE			Days to Blm	Grain % Moist.	Days to Blm	Grain % Moist.	Test Wt. lb/bu	Plnt Ht. in.	Final Ldg %	Hds Stand per Plnt	
DEKALB	DKS54-00	195	--	--	--	--	100	--	--	--	--	70	15	61	65	--	75	1.3
PIONEER	84G62	208	--	--	--	--	107	--	--	--	--	70	15	61	55	--	97	1.1
TRIUMPH	TR 481	201	--	--	--	--	103	--	--	--	--	70	16	61	64	--	83	1.4
ASGROW	A571	195	--	--	--	--	100	--	--	--	--	71	15	60	61	--	69	1.4
MYCOGEN	1G858	210	--	--	--	--	108	--	--	--	--	71	15	62	64	--	95	1.2
FRONTIER	F-700E	208	--	--	--	--	107	--	--	--	--	72	15	61	62	--	75	1.3
DYNA-GRO	71F90	210	--	--	--	--	108	--	--	--	--	72	16	60	70	--	72	1.2
MIDLAND	M-902W	205	--	--	--	--	105	--	--	--	--	72	16	60	69	--	64	1.3
	AVERAGES	195	--	--	--	--	195	--	--	--	--	68	15	61	59	--	84	1.3
	CV(%)	6	--	--	--	--	6	--	--	--	--	2	3	1	3	--	12	13.8
	LSD(0.05)*	15	--	--	--	--	8	--	--	--	--	2	1	0	3	--	14	0.2

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

WEST KANSAS IRRIGATED GRAIN SORGHUM TEST ON SILT LOAM SOIL

Northwest Research-Extension Center, Colby; Patrick Evans, agronomist

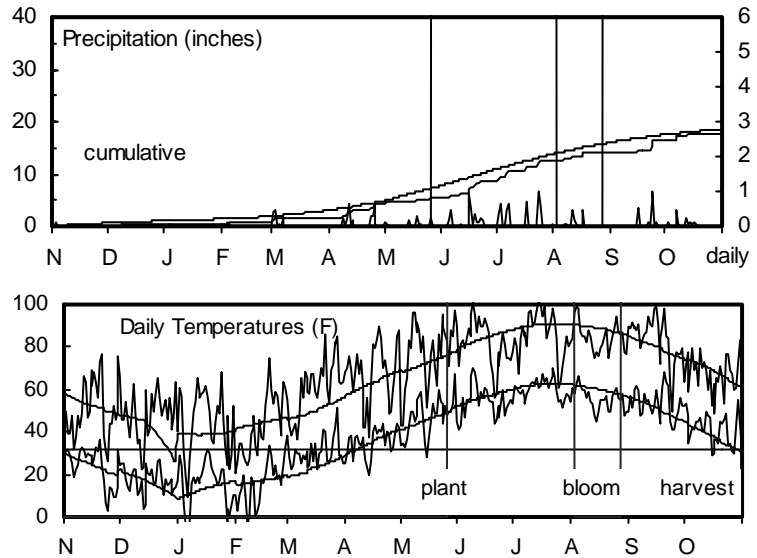
Keith silt loam; Soybean in 2003

140 - 45 - 0 lb/a N, P, K

Planted on 5/26/2004; Harvested on 11/5/2004

Target stand of 90,000 plants/acre; 2.3 in. spacing

Uneven emergence, poor stands. Cool temperatures delayed heading and maturation. Grain continued to fill until an early-November frost.



Month	Precipitation		Average Temp.		GDU	
	2004	Norm.	2004	Norm.	2004	Norm.
Nov.-Mar	1.8	3.0	35	32		
April	2.6	1.8	51	49	500	421
May	1.1	3.1	63	60	865	762
June	3.2	3.0	68	70	997	1054
July	4.6	3.1	73	76	1200	1285
August	1.2	2.2	71	74	1111	1216
Sept.	2.6	1.5	69	65	1017	910
Oct.	1.2	1.0	54	53	620	566
Totals:	18.2	18.6	52	51	6,310	6,214

Table 20. Colby Irrigated Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS %										2003-2004				2004					
		ACRE YIELD, BUSHELS					OF TEST					Days Grain		Days Grain		Test Pnt		Final Hds			
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	2004	2003	2002	AVERAGE	2004	2003	2002	to Blm	% Moist.	to Blm	% Moist.	Wt. lb/bu	Ht. in.	Ldg %	Stand %
SORG. PARTNERS	KS 310	133	--	--	--	--	87	--	--	--	--	--	--	--	67	12	55	46	--	83	1.1
MATURITY CHECK	TX3042xTX2737	152	150	158	151	153	99	92	90	69	12	71	14	59	52	--	82	1.1			
SORG. PARTNERS	X420	158	--	--	--	--	103	--	--	--	--	--	--	--	72	12	56	49	--	80	1.2
FONTANELLE	GE-5615	159	--	--	--	--	103	--	--	--	--	--	--	--	77	13	55	51	--	86	1.1
SORG. PARTNERS	NK6673	149	--	--	--	--	97	--	--	--	--	--	--	--	78	13	52	51	--	81	1.1
MATURITY CHECK	OK11xTX2741	151	151	146	151	149	98	93	83	74	12	78	14	57	48	--	84	1.1			
CROPLAN GEN.	514	175	176	174	175	175	113	108	99	76	11	79	13	55	52	--	80	1.1			
TRIUMPH	TR 481	152	--	--	--	--	99	--	--	--	--	--	--	--	79	15	55	52	--	81	1.1
SORG. PARTNERS	NK6641	146	--	--	--	--	95	--	--	--	--	--	--	--	80	15	55	47	--	83	1.1
MYCOGEN	697	146	159	167	153	157	95	98	95	78	12	81	14	52	48	--	88	1.1			
GOLDEN WORLD	GW 1489	164	--	--	--	--	107	--	--	--	--	--	--	--	82	14	53	53	--	82	1.0
SORG. PARTNERS	NK7655	148	--	--	--	--	96	--	--	--	--	--	--	--	83	12	52	50	--	80	1.2
MATURITY CHECK	TX2752xTX430	165	161	189	163	172	107	99	107	79	11	83	13	52	50	--	82	1.1			
CROPLAN GEN.	494	155	--	--	--	--	101	--	--	--	--	--	--	--	83	14	55	51	--	91	1.0
PIONEER	84G62	165	182	201	174	183	107	112	114	79	13	83	15	55	50	--	80	1.2			
SEED RESOURCE	SR 510	172	--	--	--	--	112	--	--	--	--	--	--	--	83	15	54	53	--	85	1.0
PIONEER	85G01	169	--	--	--	--	110	--	--	--	--	--	--	--	83	17	57	51	--	92	1.0
DEKALB	DKS54-00	154	168	204	161	176	100	103	116	80	12	84	14	51	53	--	64	1.2			
FRONTIER	F-457E	147	171	--	159	--	95	105	--	78	12	84	14	53	49	--	79	1.0			
MIDWEST SEED	G 567	135	157	--	146	--	88	97	--	79	12	84	15	51	50	--	77	1.1			
PRODUCERS	PH70	148	--	--	--	--	96	--	--	--	--	85	14	55	48	--	71	1.2			
SEED RESOURCE	SR 506	142	--	--	--	--	92	--	--	--	--	85	14	54	51	--	63	1.2			
GOLDEN WORLD	GWX9064	156	--	--	--	--	101	--	--	--	--	86	12	49	49	--	58	1.4			
FRONTIER	F-700E	146	176	174	161	166	95	108	99	80	13	86	15	55	51	--	88	1.0			
ASGROW	A567	166	176	--	171	--	108	108	--	79	14	86	18	56	53	--	84	1.0			
SORG. PARTNERS	K73-J6	158	--	--	--	--	103	--	--	--	--	87	14	49	52	--	81	1.1			
MYCOGEN	1G858	150	--	--	--	--	97	--	--	--	--	87	18	56	50	--	90	1.0			
DEKALB	DKS53-11	161	173	--	167	--	104	106	--	80	15	87	19	56	55	--	78	1.0			
ASGROW	A571	146	177	188	161	170	95	109	107	85	12	92	16	48	53	--	70	1.1			
	AVERAGES	154	163	176	158	164	154	163	176	77	12	82	14	54	50	--	80	1.1			
	CV(%)	9	6	5	--	--	9	6	5	--	--	6	15	3	3	--	13	10.2			
	LSD(0.05)*	18	14	12	--	--	12	8	7	--	--	7	3	2	2	--	14	0.2			

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

WEST KANSAS IRRIGATED GRAIN SORGHUM TEST ON SILT LOAM SOIL

Southwest Research-Extension Center, Tribune; Alan Schlegel, agronomist

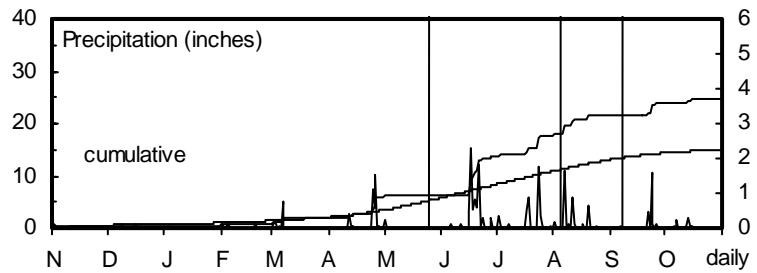
Ulysses silt loam; Wheat in 2003

120 - 0 - 0 lb/a N, P, K

Planted on 5/25/2004; Harvested on 12/2/2004

Target stand of 70,000 plants/acre; 3.0 in. spacing

The relatively late planting date and cool summer temperatures delayed blooming, maturation, and harvest. November rains delayed harvest even more.



Month	Precipitation		Average Temp.		GDU	
	2004	Norm.	2004	Norm.	2004	Norm.
Nov.-Mar	2.0	2.1	37	34		
April	3.9	1.3	52	49	514	430
May	0.2	2.3	64	60	895	772
June	7.4	2.6	69	70	1019	1063
July	4.1	2.5	72	77	1157	1287
August	3.8	2.2	70	74	1090	1209
Sept.	2.3	1.3	68	66	1009	934
Oct.	0.8	0.7	54	54	629	599
Totals:	24.6	15.0	53	52	6,313	6,294

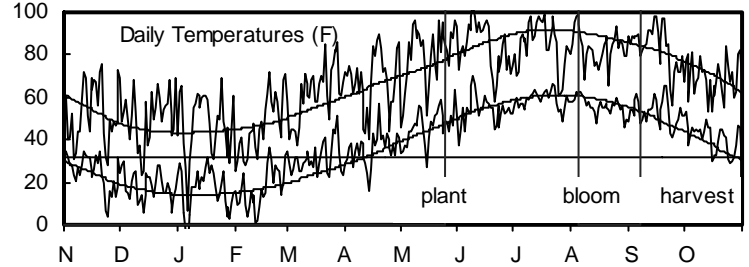


Table 21. Tribune Irrigated Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS % 2003-2004										2004								
		ACRE YIELD, BUSHELS					OF TEST AVERAGE					Days to Blm	Grain to Moist. %	Days to Blm	Grain to Moist. %	Test Wt. lb/bu	Plant Ht. in.	Ldg %	Final Stand %	Hds per Pint
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	2004	2003	2002											
CROPLAN GEN.	340	87	--	--	--	--	80	--	--	--	--	--	70	16	58	43	--	109	--	
SORG. PARTNERS	KS 310	118	--	--	--	--	108	--	--	--	--	--	71	16	58	47	--	102	--	
MATURITY CHECK	TX3042xTX2737	118	119	--	118	--	108	100	--	74	12	76	16	57	47	--	87	--		
CROPLAN GEN.	484	139	118	--	129	--	128	99	--	77	13	76	17	56	44	--	101	--		
DRUSSEL SEED	DSS B64	122	131	--	126	--	112	110	--	78	13	78	17	56	45	--	103	--		
SORG. PARTNERS	K35-Y5	94	--	--	--	--	86	--	--	--	--	81	16	55	43	--	89	--		
PIONEER	85G01	120	113	--	116	--	110	94	--	79	13	83	17	57	49	--	105	--		
CROPLAN GEN.	494	116	--	--	--	--	107	--	--	--	--	84	17	57	52	--	106	--		
SORG. PARTNERS	NK5418	115	129	--	122	--	105	108	--	82	12	86	16	54	47	--	105	--		
MYCOGEN	M3838	116	143	--	130	--	107	120	--	82	12	87	16	56	47	--	106	--		
FONTANELLE	GE-5615	132	120	--	126	--	122	100	--	84	14	88	17	56	54	--	100	--		
SORG. PARTNERS	NK6673	120	--	--	--	--	110	--	--	--	--	88	17	56	50	--	96	--		
SORG. PARTNERS	X420	111	--	--	--	--	102	--	--	--	--	88	17	56	48	--	79	--		
TRIUMPH	TR 460	98	129	--	113	--	90	108	--	84	14	88	17	56	46	--	90	--		
DEKALB	DKS54-00	128	141	--	134	--	118	118	--	85	14	89	17	55	56	--	79	--		
DRUSSEL SEED	DSS R66	94	103	--	98	--	86	86	--	87	14	89	17	53	47	--	99	--		
MYCOGEN	1G600	134	--	--	--	--	123	--	--	--	--	90	17	55	48	--	103	--		
SEED RESOURCE	SR 506	124	--	--	--	--	114	--	--	--	--	90	17	55	55	--	82	--		
SORG. PARTNERS	KS 585	106	114	--	110	--	98	95	--	87	13	91	17	55	47	--	85	--		
MATURITY CHECK	OK11xTX2741	102	99	--	101	--	94	83	--	87	13	92	16	54	49	--	98	--		
PRODUCERS	PH68	99	--	--	--	--	91	--	--	--	--	92	16	54	48	--	104	--		
TRIUMPH	TR 461	111	125	--	118	--	102	105	--	86	13	92	17	55	51	--	102	--		

Table 21. Tribune Irrigated Grain Sorghum Performance Test, 2002-2004 - continued.

BRAND	NAME	YIELD AS %																
		ACRE YIELD, BUSHELS						OF TEST			2003-2004				2004			
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	2004	2003	2002	Days to Blm	Grain to Moist. %	Days to Blm	Grain to Moist. %	Test Wt. lb/bu	Planting Ht. in.	Ldg %	Final Stand %	Hds per Acre
ASGROW	A567	121	152	--	137	--	112	127	--	85	14	94	18	55	55	--	96	--
DEKALB	DKS53-11	117	152	--	135	--	108	127	--	87	14	95	18	54	58	--	98	--
PIONEER	84G62	112	127	--	120	--	103	106	--	89	13	96	17	54	49	--	103	--
MATURITY CHECK	TX2752xTX430	97	94	--	95	--	89	79	--	91	14	98	18	51	53	--	85	--
MIDWEST SEED	G 567	95	--	--	--	--	87	--	--	--	--	98	19	50	52	--	87	--
SEED RESOURCE	SR 510	95	--	--	--	--	88	--	--	--	--	99	18	51	53	--	98	--
FRONTIER	F-700E	70	--	--	--	--	64	--	--	--	--	102	18	48	51	--	89	--
FRONTIER	F-457E	70	--	--	--	--	64	--	--	--	--	103	18	50	50	--	91	--
ASGROW	A571	91	122	--	106	--	83	102	--	95	14	104	18	47	54	--	87	--
	AVERAGES	109	119	--	114	--	109	119	--	85	14	89	17	54	49	--	96	--
	CV(%)	11	16	--	--	--	11	16	--	--	--	2	1	2	4	--	4	--
	LSD(0.05)*	17	26	--	--	--	15	22	--	--	--	3	0	2	3	--	6	--

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

WEST KANSAS IRRIGATED GRAIN SORGHUM TEST ON SILT LOAM SOIL

Southwest Research-Extension Center, Garden City; Merle Witt, agronomist

Keith silt loam; Fallow in 2003

100 - 0 - 0 lb/a N, P, K

Planted on 6/1/2004; Harvested on 12/17/2004

Target stand of 70,000 plants/acre; 3.0 in. spacing

Cool summer temperatures slowed grain fill and drydown. November rains delayed harvest.

Month	Precipitation		Average Temp.		GDU	
	2004	Norm.	2004	Norm.	2004	Norm.
Nov.-Mar	2.6	2.8	38	34		
April	2.5	1.6	53	51	541	472
May	0.6	2.9	66	62	980	831
June	5.5	3.0	71	72	1077	1115
July	3.2	2.5	75	78	1235	1321
August	4.3	2.2	72	76	1145	1260
Sept.	4.2	1.6	70	67	1050	973
Oct.	0.9	1.1	56	55	689	632
Totals:	23.7	17.7	54	53	6,717	6,604

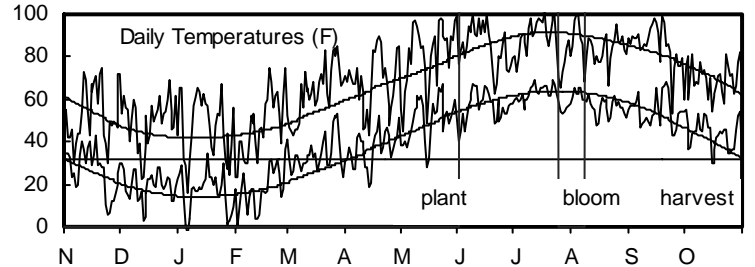
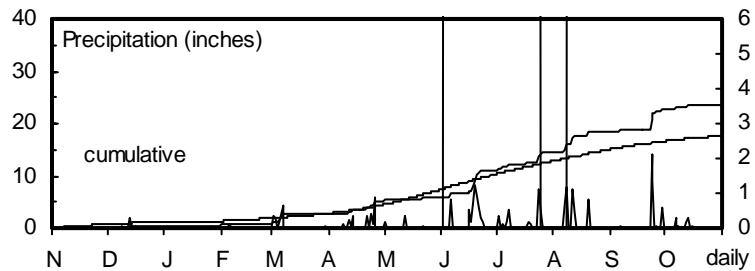


Table 22. Garden City Irrigated Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS % 2003-2004																
		ACRE YIELD, BUSHELS						OF TEST			Days Grain to Moist.		Days Grain to Moist.		Test Pnt		Final Hds	
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	2004	2003	2002	Blm	%	Blm	%	Wt. lb/bu	Ht. in.	Ldg %	Stand %	Plnt
MATURITY CHECK	TX3042xTX2737	93	83	128	88	101	79	82	97	59	12	53	13	60	50	1	102	1.1
DRUSSEL SEED	DSS B64	100	78	--	89	--	85	78	--	60	12	54	13	60	46	3	122	1.0
CROPLAN GEN.	494	110	--	--	--	--	93	--	--	--	--	56	13	60	48	1	104	1.1
MIDWEST SEED	G 567	136	110	--	123	--	115	109	--	64	12	57	13	60	48	0	95	1.0
PIONEER	85G01	122	--	--	--	--	103	--	--	--	--	57	13	60	50	3	111	1.0
FONTANELLE	GE-5615	134	85	--	110	--	114	84	--	63	13	57	14	60	50	1	108	1.1
SORG. PARTNERS	X420	115	--	--	--	--	97	--	--	--	--	57	14	60	47	6	100	1.2
SEED RESOURCE	SR 506	103	--	--	--	--	87	--	--	--	--	58	13	60	49	3	92	1.1
GOLDEN WORLD	GWX3067	93	--	--	--	--	79	--	--	--	--	58	14	60	48	3	101	1.1
SORG. PARTNERS	NK5418	112	84	--	98	--	95	84	--	63	13	58	14	60	44	6	108	1.3
GOLDEN WORLD	GW X5964	105	103	--	104	--	89	102	--	66	12	59	13	60	47	2	103	1.1
MATURITY CHECK	OK11xTX2741	114	91	111	102	105	96	90	85	64	12	59	13	60	47	1	102	1.1
SORG. PARTNERS	KS 585	117	92	106	104	105	99	91	81	65	12	59	13	61	44	0	113	1.1
ASGROW	A567	114	98	--	106	--	96	97	--	64	13	59	14	60	52	3	98	1.0
DEKALB	DKS53-11	127	82	--	105	--	108	81	--	65	13	59	14	60	53	3	121	1.0
SORG. PARTNERS	NK7633	138	117	--	127	--	117	115	--	65	12	60	13	60	46	0	107	1.1
DEKALB	DKS54-00	143	105	132	124	127	121	104	101	68	13	60	14	60	54	1	91	1.1
SEED RESOURCE	SR 510	120	--	--	--	--	102	--	--	--	--	60	14	60	55	12	114	1.0
DRUSSEL SEED	DSS R66	110	96	--	103	--	93	95	--	69	12	61	13	59	48	0	113	1.1
TRIUMPH	TRX44631	121	--	--	--	--	102	--	--	--	--	61	13	60	52	1	97	1.0
CROPLAN GEN.	514	140	--	135	--	--	119	--	103	--	--	61	14	60	52	2	92	1.1
PIONEER	84G62	118	119	146	118	127	100	118	111	67	13	61	14	60	48	0	117	1.0
GARST	5440	123	91	134	107	116	104	91	102	67	12	62	13	60	49	2	99	1.1
MATURITY CHECK	TX2752xTX430	147	116	130	132	131	125	115	99	68	12	62	13	60	52	0	102	1.1

Table 22. Garden City Irrigated Grain Sorghum Performance Test, 2002-2004 - continued.

BRAND	NAME	YIELD AS %																
		ACRE YIELD, BUSHELS					OF TEST			2003-2004				2004				
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE			Days to Blm	Grain % Moist.	Days to Blm	Grain % Moist.	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Final Stand %	Hds per Acre
MYCOGEN	697	136	--	125	--	--	115	--	95	--	--	62	13	60	48	1	110	1.0
SORG. PARTNERS	K73-J6	124	116	140	120	126	105	115	106	67	12	62	13	60	50	1	101	1.1
FONTANELLE	GE-6715	125	98	--	112	--	105	98	--	73	13	63	13	60	49	1	115	1.0
GARST	5360	118	--	--	--	--	100	--	--	--	--	63	13	60	48	2	102	1.0
GOLDEN WORLD	GW X1464	127	119	137	123	128	107	118	105	70	13	63	13	59	50	0	110	1.0
GOLDEN WORLD	GWX1467	114	--	--	--	--	96	--	--	--	--	63	13	60	47	0	101	1.0
FRONTIER	F-457E	108	117	147	113	124	92	116	112	68	13	63	14	60	52	3	101	1.0
GOLDEN WORLD	GW 1489	113	102	141	107	119	95	101	107	68	13	63	14	60	54	5	97	1.0
FONTANELLE	W-1000	111	--	--	--	--	94	--	--	--	--	64	13	60	56	1	86	1.1
FRONTIER	F-700E	116	101	131	109	116	98	100	100	68	12	64	13	60	53	2	104	1.0
GOLDEN WORLD	GWX9067	129	--	--	--	--	109	--	--	--	--	64	13	61	48	0	96	1.1
MYCOGEN	1G858	115	137	--	126	--	97	136	--	69	13	64	13	61	53	1	111	1.0
SORG. PARTNERS	NK7655	111	128	--	119	--	94	126	--	69	12	64	13	59	51	6	103	1.1
DYNA-GRO	DGX-1781	116	--	--	--	--	98	--	--	--	--	65	13	60	48	0	95	1.0
GOLDEN WORLD	GW X7464	112	102	--	107	--	94	101	--	71	13	66	13	59	48	0	88	1.1
ASGROW	A571	128	116	141	122	129	108	115	108	71	13	66	14	59	52	2	98	0.9
DYNA-GRO	71F90	107	--	--	--	--	91	--	--	--	--	66	14	60	56	3	87	1.0
GOLDEN WORLD	GWX9064	103	--	--	--	--	87	--	--	--	--	67	14	60	48	12	86	1.1
	AVERAGES	118	101	131	110	117	118	101	131	67	12	61	13	60	50	2	102	1.1
	CV(%)	12	11	5	--	--	12	11	5	--	--	3	3	0	4	172	7	7.9
	LSD(0.05)*	24	16	11	--	--	20	15	8	--	--	3	1	0	3	6	12	0.1

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

Table 23. Kansas IRRIGATED Grain Sorghum Hybrid Yield Summary (Percentage of Test Average), 2004.

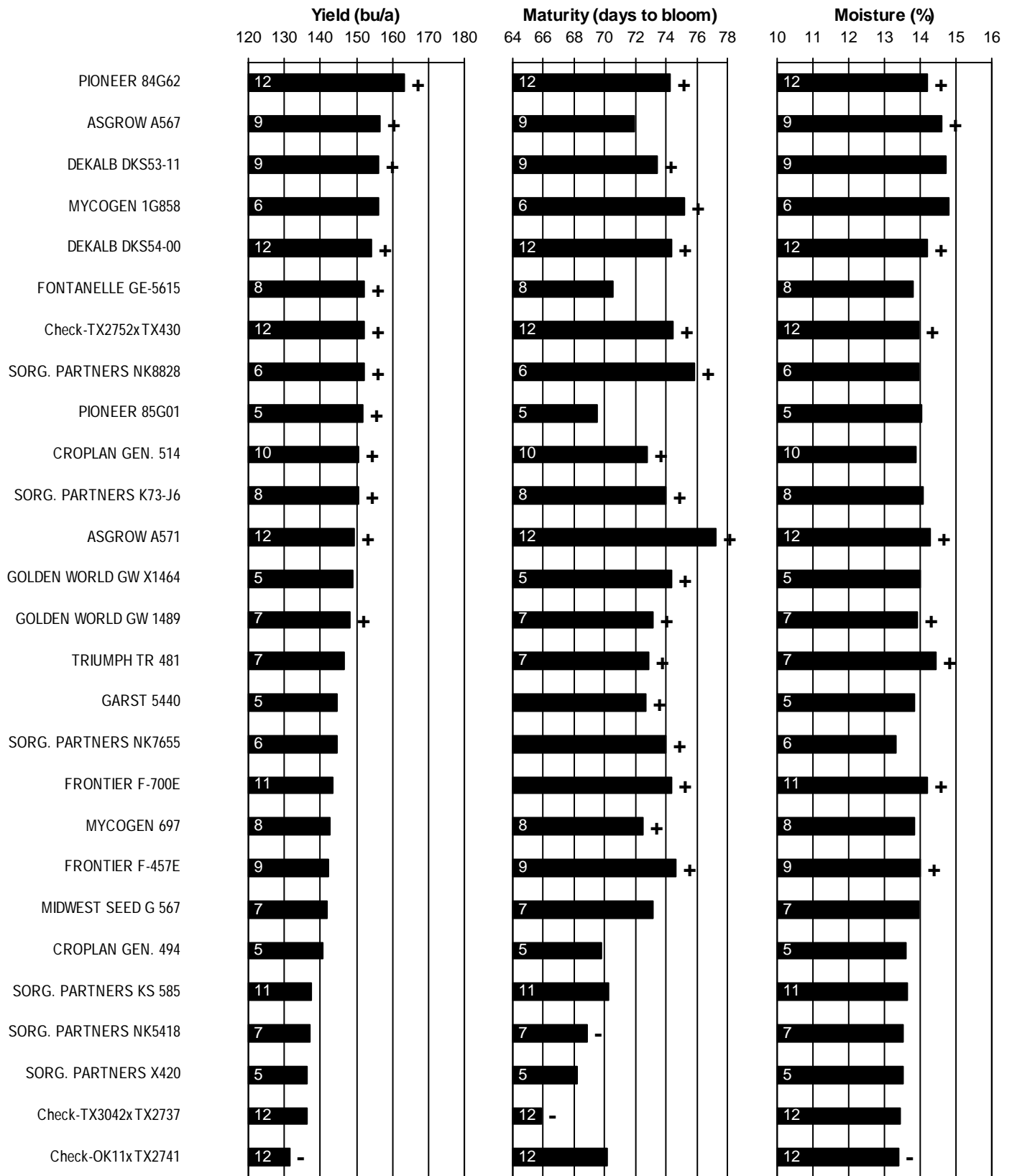
BRAND/NAME	RPI*	THI	GRI	FNI	AVG.	BRAND/NAME	RPI	THI	GRI	FNI	AVG.
ASGROW						MYCOGEN					
A567	104	108	112	96	105	1G600	--	--	123	--	--
A571	94	95	83	108	95	1G858	104	97	--	97	--
CROPLAN GEN.						PIONEER					
340	--	--	80	--	--	697	93	95	--	115	--
484	--	--	128	--	--	M3838	--	--	107	--	--
494	100	101	107	93	100	PRODUCERS					
514	103	113	--	119	--	PH68	--	--	91	--	--
DEKALB						SEED RESOURCE					
DKS53-11	108	104	108	108	107	SR 506	--	92	114	87	--
DKS54-00	99	100	118	121	109	SR 510	--	112	88	102	--
DRUSSEL SEED						SORG. PARTNERS					
DSS B64	--	--	112	85	--	K35-Y5	--	--	86	--	--
DSS R66	--	--	86	93	--	K73-J6	103	103	--	105	--
DYNA-GRO						TAYLOR					
71F90	--	--	--	91	--	T-36GS	107	--	--	--	--
DGX-1781	--	--	--	98	--	T-37GS	91	--	--	--	--
FONTANELLE						TRIUMPH					
GE-5615	106	103	122	114	111	TR 460	--	--	90	--	--
GE-6715	101	--	--	105	--	TR 461	--	--	102	--	--
W-1000	106	--	--	94	--	TR 481	102	99	--	--	--
FRONTIER						TRX44631					
F-457E	97	95	64	92	87	TRX44631	--	--	--	102	--
F-700E	109	95	64	98	92	MATURITY CHECK					
GARST						OK11xTX2741					
5360	100	--	--	100	--	TX2752xTX430	106	107	89	125	107
5401	96	--	--	--	--	TX3042xTX2737	94	99	108	79	95
5440	--	--	--	104	--	AVERAGES (bu/a)					
GOLDEN WORLD						171					
GW 1489	99	107	--	95	--	CV(%)					
GW X1464	--	--	--	107	--	3					
GW X5964	--	--	--	89	--	LSD (0.05)					
GW X7464	--	--	--	94	--	4					
GWX1467	--	--	--	96	--	154					
GWX3067	--	--	--	79	--	109					
GWX9064	101	101	--	87	--	118					
GWX9067	--	--	--	109	--	118					
MIDLAND						138					
M-4665	--	--	--	--	--	15					
M-4748	--	--	--	--	--	12					
M-4758Y	--	--	--	--	--	20					
M-902W	--	--	--	--	--	--					
MIDWEST SEED											
G 530	87	--	--	--	--						
G 567	93	88	87	115	96						

* RPI=Republic Co., Scandia

THI=Thomas Co., Colb

GRI=Greeley Co., Tribune

FNI=Finney Co., Garden City



Values inside bars indicate the number of comparisons with checks. Symbols (+,-) indicate if statistically higher or lower than mean of checks.

Figure 8. Kansas IRRIGATED sorghum hybrid standardized performance summary, 2002-2004.

DOUBLE-CROP GRAIN SORGHUM TEST

Southeast Agricultural Research Center, Parsons; James Long, agronomist; Kelly Kusel, technician

Parsons silt loam; Wheat in 2003

70 - 0 - 0 lb/a N, P, K

Planted on 6/17/2004; Harvested on 9/30/2004

Favorable conditions in July gave way to dry conditions in August

and September. Yields were averaged over three replications. The fourth replication was abandoned due to bird damage.

Table 24. Parsons Double-crop Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS %																
		ACRE YIELD, BUSHELS					OF TEST			2003-2004		2004		Final Hds				
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE			Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %		Test Wt. lb/bu	Planting Hts. in.	Ldg %	Stand per %
SORG. PARTNERS	KS 310	56	55	77	56	63	107	85	121	53	14	54	13	58	32	--	104	1.0
ASGROW	REWARD	76	76	--	76	--	144	116	--	54	15	55	15	57	31	--	112	1.0
SORG. PARTNERS	251	52	42	59	47	51	98	64	94	53	14	56	12	58	31	--	120	0.9
DEKALB	DKS29-28	70	72	72	71	71	133	109	113	55	16	59	17	57	30	--	121	0.9
SORG. PARTNERS	K35-Y5	61	59	73	60	64	115	90	115	56	16	60	17	58	32	--	108	1.0
SORG. PARTNERS	KS 585	37	77	55	57	56	71	117	86	58	20	61	21	56	31	--	103	1.0
GOLDEN WORLD	GW 3406	36	54	--	45	--	69	83	--	57	15	62	14	56	28	--	100	0.9
ADVANCED GEN.	A 110	61	--	--	--	--	116	--	--	--	--	62	19	56	33	--	104	0.9
MATURITY CHECK	TX3042xTX2737	49	74	69	62	64	94	112	109	58	18	62	20	56	32	--	90	1.0
SORG. PARTNERS	NK5418	56	76	--	66	--	107	116	--	59	20	62	21	55	31	--	107	0.9
SORG. PARTNERS	X420	60	--	--	--	--	114	--	--	--	--	62	21	57	31	--	102	1.0
MATURITY CHECK	OK11xTX2741	61	79	54	70	65	116	120	85	59	18	63	19	57	33	--	110	0.9
SORG. PARTNERS	1486	27	58	--	42	--	51	88	--	61	17	64	18	56	27	--	101	0.6
ADVANCED GEN.	A 115C	34	78	48	56	53	65	119	75	61	22	64	26	51	31	--	106	1.0
	AVERAGES	53	66	63	59	61	53	66	63	57	17	60	18	56	31	--	106	0.9
	CV(%)	17	8	21	--	--	17	13	21	--	--	1	8	1	5	--	5	6.7
	LSD(0.05)*	15	8	19	--	--	28	12	30	--	--	1	2	1	2	--	9	0.1

Harvey County Experiment Field, Hesston; Mark Claassen, agronomist; Lowell Stucky and Kevin Duerksen, technicians

Ladysmith silty clay loam; Wheat in 2003

60 - 0 - 0 lb/a N, P, K

Planted on 7/12/2004; Harvested on 12/14/2004

Rains delayed planting and caused uneven emergence. Cool

summer temperatures. A light frost on October 2 followed a dry

August and September. November rains delayed harvest.

Table 25. Hesston Double-crop Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS %																
		ACRE YIELD, BUSHELS					OF TEST			2003-2004		2004		Final Hds				
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE			Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %		Test Wt. lb/bu	Planting Hts. in.	Ldg %	Stand per %
SORG. PARTNERS	251	57	--	51	--	--	110	--	76	--	--	58	15	54	39	1	94	1.3
ASGROW	REWARD	63	--	--	--	--	121	--	--	--	--	59	15	53	39	1	82	1.7
SORG. PARTNERS	KS 310	63	--	68	--	--	122	--	100	--	--	60	15	54	41	4	80	1.4
DEKALB	DKS29-28	56	--	69	--	--	107	--	102	--	--	61	15	52	38	2	97	1.3
GOLDEN WORLD	GW 3406	37	--	--	--	--	71	--	--	--	--	63	16	49	37	2	66	1.7
SORG. PARTNERS	KS 585	61	--	75	--	--	118	--	111	--	--	64	16	54	44	2	73	1.8
SORG. PARTNERS	1486	54	--	--	--	--	104	--	--	--	--	65	15	52	41	0	73	1.6
SORG. PARTNERS	K35-Y5	47	--	72	--	--	90	--	107	--	--	65	15	50	42	6	78	1.9
ADVANCED GEN.	A 110	48	--	--	--	--	93	--	--	--	--	66	16	49	44	2	72	1.5
SORG. PARTNERS	NK5418	56	--	--	--	--	108	--	--	--	--	66	16	51	43	3	95	1.5
SORG. PARTNERS	X420	40	--	--	--	--	77	--	--	--	--	66	16	51	42	14	73	1.8
MATURITY CHECK	OK11xTX2741	46	--	60	--	--	89	--	89	--	--	67	16	51	42	7	82	1.2
MATURITY CHECK	TX3042xTX2737	50	--	69	--	--	96	--	103	--	--	67	16	52	47	20	63	1.7
ADVANCED GEN.	A 115C	49	--	75	--	--	94	--	111	--	--	68	16	52	43	0	83	1.1
	AVERAGES	52	--	67	--	--	52	--	67	--	--	64	16	52	42	5	79	1.5
	CV(%)	14	--	8	--	--	14	--	8	--	--	2	2	2	3	100	7	4.5
	LSD(0.05)*	12	--	9	--	--	23	--	13	--	--	2	1	2	2	8	9	0.1

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

Table 26. Combined Analysis of Double-crop Grain Sorghum Performance Test, 2002-2004.

BRAND	NAME	YIELD AS %											2003-2004				2004			
		ACRE YIELD, BUSHELS					OF TEST			Days to Blm	Grain to Moist. %	Days to Blm	Grain to Moist. %	Test Plnt		Ldg %	Final Stand %	Hds per Plnt		
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE							2004	2003				2002	Wt. lb/bu
SORG. PARTNERS	251	54	42	55	48	51	104	64	86	53	15	57	14	56	35	--	107	1.1		
SORG. PARTNERS	KS 310	60	55	72	58	62	114	85	112	54	15	57	14	56	37	--	92	1.2		
ASGROW	REWARD	69	76	--	72	--	132	116	--	55	15	57	15	55	35	--	97	1.4		
DEKALB	DKS29-28	63	72	70	67	68	120	109	108	56	16	60	16	55	34	--	109	1.1		
GOLDEN WORLD	GW 3406	37	54	--	45	--	70	83	--	57	15	62	15	52	33	--	83	1.3		
SORG. PARTNERS	K35-Y5	54	59	72	56	62	103	90	112	57	16	62	16	54	37	--	93	1.5		
SORG. PARTNERS	KS 585	49	77	63	63	63	94	117	97	58	19	62	19	55	38	--	88	1.4		
ADVANCED GEN.	A 110	55	--	--	--	--	105	--	--	--	--	64	18	52	39	--	88	1.2		
MATURITY CHECK	TX3042xTX2737	50	74	69	62	64	95	112	107	59	17	64	18	54	40	--	76	1.3		
SORG. PARTNERS	NK5418	56	76	--	66	--	108	116	--	60	18	64	18	53	37	--	101	1.2		
SORG. PARTNERS	X420	50	--	--	--	--	96	--	--	--	--	64	18	54	36	--	88	1.4		
MATURITY CHECK	OK11xTX2741	54	79	56	66	63	103	120	87	60	17	65	17	54	38	--	96	1.1		
SORG. PARTNERS	1486	40	58	--	49	--	77	88	--	62	16	65	17	54	34	--	87	1.1		
ADVANCED GEN.	A 115C	41	78	59	60	59	79	119	91	62	20	66	21	52	37	--	95	1.0		
	AVERAGES	52	66	64	59	61	52	66	64	58	17	62	17	54	36	--	93	1.2		
	CV(%)	15	8	16	--	--	15	13	16	--	--	2	6	2	3	--	6	5.3		
	LSD(0.05)*	9	8	11	--	--	18	12	18	--	--	1	1	1	1	--	6	0.1		

SOUTH CENTRAL KANSAS TAN-PLANT GRAIN SORGHUM TEST

Harvey County Experiment Field, Hesston; Mark Claassen, agronomist; Kevin Duerksen and Lowell Stucky, technicians
 Ladysmith silty clay loam; Soybean in 2003 Rains delayed planting; cool, wet June and July; dry in late August and September during pollination and grain fill; light frost on October 2.
 90 - 30 - 0 lb/a N, P, K
 Planted on 6/23/2004; Harvested on 11/8/2004

Table 27. Hesston Tan-plant Performance Test, 2002-2004.

BRAND	NAME	YIELD AS %											2003-2004				2004			
		ACRE YIELD, BUSHELS					OF TEST			Days to Blm	Grain to Moist. %	Days to Blm	Grain to Moist. %	Test Plnt		Ldg %	Final Stand %	Hds per Plnt		
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE							2004	2003				2002	Wt. lb/bu
MATURITY CHECK	TX3042xTX2737	89	44	--	67	--	91	118	--	60	15	61	15	55	53	20	98	1.5		
CHECK	ATX2928*RTX437	86	34	--	60	--	88	92	--	65	15	65	15	54	55	18	98	1.3		
MONSANTO	X213	102	33	--	67	--	104	88	--	67	15	66	14	54	48	0	95	1.7		
DEKALB	DK-52	107	--	--	--	--	110	--	--	--	--	66	15	53	48	1	101	1.6		
ASGROW	ORBIT	96	--	70	--	--	98	--	129	--	--	67	15	53	51	0	94	1.9		
DEKALB	DKS44-41	107	38	57	73	67	110	103	106	67	15	67	15	56	49	0	98	1.2		
MATURITY CHECK	TX2752xTX430	104	--	54	--	--	107	--	99	--	--	67	15	56	50	17	103	1.3		
CHECK	ATX631*RTX2917	104	33	--	69	--	106	89	--	70	15	70	15	52	56	2	71	1.6		
MMR GENETICS	JOWAR I	94	39	63	66	65	96	103	116	70	15	70	15	55	57	3	103	1.1		
PIONEER	84G62	114	--	--	--	--	117	--	--	--	--	70	15	56	48	1	100	1.4		
TX EXP	ATXARG1xRTX2907	85	--	--	--	--	87	--	--	--	--	71	14	52	46	0	94	1.2		
CHECK	ATX631xTX436	96	40	63	68	66	98	108	116	73	16	73	15	54	55	1	78	1.5		
NC+	7W92	103	42	53	73	66	106	113	97	73	16	74	15	56	54	5	70	1.7		
CHECK	ATX635xTX436	78	21	72	50	57	80	56	134	84	16	76	15	54	61	2	83	1.5		
	AVERAGES	97	37	54	67	63	97	37	54	69	16	69	15	54	52	5	92	1.5		
	CV(%)	11	11	14	--	--	11	11	14	--	--	1	2	3	2	84	6	7.9		
	LSD(0.05)*	17	6	13	--	--	18	15	23	--	--	2	1	3	2	7	9	0.2		

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

NORTH CENTRAL KANSAS IRR. TAN-PLANT GRAIN SORGHUM TEST ON SILT LOAM SOIL

Irrigation Experiment Field, Scandia; Barney Gordon, agronomist; Michael Larson and Allan Milner, technicians
 Crete silt loam; Soybean in 2003 Favorable conditions resulted in excellent yields. Cool temperatures delayed maturation.
 200 - 30 - 0 lb/a N, P, K
 Planted on 5/25/2004; Harvested on 10/22/2004

Table 28. Scandia Irrigated Tan-plant Performance Test, 2002-2004.

BRAND	NAME	YIELD AS %										2003-2004						2004					
		ACRE YIELD, BUSHELS					OF TEST					Days Grain		Days Grain		Test Plnt		Final Hds					
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE			to Blm	%	to Blm	%	Wt. lb/bu	Ht. in.	Ldg %	Stand %	per Plnt					
MATURITY CHECK	TX3042xTX2737	154	114	--	134	--	102	87	--	71	15	70	15	60	50	--	95	1.0					
CHECK	ATX2928*RTX437	158	141	--	150	--	105	108	--	73	16	70	16	60	50	--	100	1.0					
DEKALB	DKS44-41	168	149	170	159	162	112	115	108	71	16	70	16	60	48	--	95	1.0					
ASGROW	ORBIT	131	--	137	--	--	87	--	87	--	--	71	16	59	45	--	93	1.0					
DEKALB	DK-52	144	--	--	--	--	95	--	--	--	--	72	16	60	53	--	97	1.2					
PIONEER	84G62	164	--	--	--	--	109	--	--	--	--	72	16	60	50	--	98	1.0					
CHECK	ATX631*RTx2917	154	136	--	145	--	102	105	--	76	16	73	16	59	54	--	94	1.0					
MMR GENETICS	JOWAR I	161	157	180	159	166	107	120	114	76	16	73	16	60	54	--	96	1.0					
MONSANTO	X213	150	135	--	143	--	100	104	--	73	16	73	16	60	50	--	94	1.0					
TX EXP	ATXARG1xRTX2907	135	--	--	--	--	90	--	--	--	--	74	16	60	49	--	95	1.0					
MATURITY CHECK	TX2752xTX430	137	--	153	--	--	91	--	97	--	--	74	17	60	53	--	98	1.0					
CHECK	ATX631xTX436	147	151	176	149	158	97	116	112	76	17	74	18	60	54	--	96	1.0					
CHECK	ATX635xTX436	145	173	178	159	165	96	133	113	76	15	75	15	60	56	--	94	1.0					
NC+	7W92	161	158	179	160	166	107	121	114	77	16	75	16	59	56	--	94	1.0					
	AVERAGES	151	130	157	140	146	151	130	157	74	16	73	16	60	52	--	96	1.0					
	CV(%)	3	6	5	--	--	3	6	5	--	--	1	1	0	2	--	4	6.8					
	LSD(0.05)*	8	11	13	--	--	5	8	8	--	--	1	0	0	1	--	6	0.1					

WEST KANSAS IRRIGATED TAN-PLANT GRAIN SORGHUM TEST ON SILT LOAM SOIL

Northwest Research-Extension Center, Colby; Patrick Evans, agronomist
 Keith silt loam; Soybean in 2003 Emergence was uneven and stands were lower than anticipated.
 140 - 45 - 0 lb/a N, P, K Cool summer temperatures delayed heading and maturation, but the grain was able to fill until a frost in early November.
 Planted on 5/26/2004; Harvested on 11/5/2004

Table 29. Colby Irrigated Tan-plant Performance Test, 2002-2004.

BRAND	NAME	YIELD AS %										2003-2004						2004					
		ACRE YIELD, BUSHELS					OF TEST					Days Grain		Days Grain		Test Plnt		Final Hds					
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE			to Blm	%	to Blm	%	Wt. lb/bu	Ht. in.	Ldg %	Stand %	per Plnt					
CHECK	ATX2928*RTX437	153	182	--	168	--	117	118	--	72	9	75	10	53	49	--	77	1.0					
DEKALB	DKS44-41	156	171	145	164	157	119	111	90	75	12	79	14	55	48	--	77	1.1					
DEKALB	DK-52	160	--	--	--	--	122	--	--	--	--	80	12	52	53	--	80	1.2					
MONSANTO	X213	120	152	--	136	--	92	98	--	75	12	80	15	54	47	--	52	1.3					
MATURITY CHECK	TX3042xTX2737	146	156	--	151	--	112	101	--	73	12	81	15	55	51	--	71	1.1					
ASGROW	ORBIT	127	--	138	--	--	96	--	86	--	--	82	13	53	48	--	65	1.1					
TX EXP	ATXARG1xRTX2907	94	--	--	--	--	71	--	--	--	--	82	14	53	44	--	54	1.1					
MATURITY CHECK	TX2752xTX430	168	--	198	--	--	128	--	123	--	--	85	13	51	51	--	78	1.2					
CHECK	ATX631*RTx2917	132	147	--	140	--	101	95	--	80	12	85	15	53	57	--	50	1.2					
PIONEER	84G62	139	--	--	--	--	106	--	--	--	--	89	17	54	50	--	76	1.1					
CHECK	ATX631xTX436	119	171	166	145	152	91	111	103	85	15	94	18	48	61	--	55	1.1					
MMR GENETICS	JOWAR I	89	170	183	129	147	67	110	113	85	15	95	19	45	57	--	44	1.1					
CHECK	ATX635xTX436	128	177	194	152	166	97	114	121	87	16	95	21	47	63	--	63	1.1					
NC+	7W92	107	164	159	136	143	81	106	99	86	14	96	18	44	56	--	46	1.2					
	AVERAGES	131	159	161	145	150	131	159	161	79	12	86	15	51	53	--	63	1.1					
	CV(%)	14	7	8	--	--	14	7	8	--	--	6	12	4	4	--	17	14.2					
	LSD(0.05)*	31	14	22	--	--	23	9	13	--	--	8	3	3	3	--	18	0.3					

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

WEST KANSAS IRRIGATED TAN-PLANT GRAIN SORGHUM TEST ON SILT LOAM SOIL

Southwest Research-Extension Center, Garden City; Merle Witt, agronomist

Keith silt loam; Fallow in 2003

Cool summer temperatures slowed grain fill and drydown.

100 - 0 - 0 lb/a N, P, K

November rains delayed harvest.

Planted on 6/1/2004; Harvested on 12/8/2004

Table 30. Garden City Irrigated Tan-plant Performance Test, 2002-2004.

BRAND	NAME	YIELD AS %																
		ACRE YIELD, BUSHEL					OF TEST			2003-2004				2004				
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE			Days to Blm	Grain % Moist.	Days to Blm	Grain % Moist.	Test Wt. lb/bu	Plant Ht. in.	Ldg %	Final Stand %	Hds per Plnt
MATURITY CHECK	TX3042xTX2737	102	90	--	96	--	96	103	--	58	13	53	15	60	49	0	78	1.6
MONSANTO	X213	86	76	--	81	--	81	86	--	61	12	55	14	59	45	0	81	1.3
ASGROW	ORBIT	84	--	94	--	--	79	--	88	--	--	55	15	59	53	0	81	1.3
CHECK	ATX2928*RTX437	114	88	--	101	--	108	101	--	61	13	55	15	59	50	2	87	1.4
DEKALB	DKS44-41	112	92	100	102	101	106	104	94	61	12	56	14	59	47	0	102	1.2
TX EXP	ATXARG1xRTX2907	89	--	--	--	--	85	--	--	--	--	58	15	58	44	2	87	1.1
DEKALB	DK-52	100	--	--	--	--	95	--	--	--	--	59	14	59	51	2	102	1.2
CHECK	ATX631*RTx2917	81	103	--	92	--	76	117	--	66	13	61	15	58	55	10	72	1.1
MATURITY CHECK	TX2752xTX430	116	--	111	--	--	110	--	104	--	--	61	15	59	49	0	95	1.2
MMR GENETICS	JOWAR I	119	119	113	119	117	113	135	106	68	13	61	15	59	53	0	100	1.1
PIONEER	84G62	130	--	--	--	--	123	--	--	--	--	61	15	59	47	0	92	1.2
CHECK	ATX631xTX436	119	83	112	101	105	113	94	105	68	13	63	15	59	58	2	69	1.2
CHECK	ATX635xTX436	103	107	88	105	99	98	122	82	69	13	64	15	59	64	33	72	1.2
NC+	7W92	122	106	108	114	112	116	121	101	70	13	66	15	59	54	8	68	1.2
	AVERAGES	106	88	107	97	100	106	88	107	64	13	59	15	59	51	4	85	1.2
	CV(%)	18	15	11	--	--	18	15	11	--	--	3	2	1	4	153	15	15.2
	LSD(0.05)*	31	18	20	--	--	30	21	19	--	--	3	1	1	3	11	21	0.3

Table 31. Combined Analysis of Tan-plant Grain Sorghum Performance Tests, 2002-2004.

BRAND	NAME	YIELD AS %																
		ACRE YIELD, BUSHEL					OF TEST			2003-2004				2004				
		2004	2003	2002	2-Yr. AVG.	3-Yr. AVG.	AVERAGE			Days to Blm	Grain % Moist.	Days to Blm	Grain % Moist.	Test Wt. lb/bu	Plant Ht. in.	Ldg %	Final Stand %	Hds per Plnt
CHECK	ATX2928*RTX437	128	112	--	120	--	105	105	--	68	13	66	14	57	51	--	90	1.2
MATURITY CHECK	TX3042xTX2737	123	101	--	112	--	101	102	--	65	14	66	15	58	51	--	86	1.3
DEKALB	DKS44-41	136	113	108	124	119	112	108	100	69	14	68	15	58	48	--	93	1.1
ASGROW	ORBIT	109	--	101	--	--	90	--	93	--	--	69	14	56	49	--	83	1.3
DEKALB	DK-52	128	--	--	--	--	105	--	--	--	--	69	14	56	51	--	95	1.3
MONSANTO	X213	114	99	--	107	--	94	94	--	69	14	69	15	57	47	--	80	1.3
TX EXP	ATXARG1xRTX2907	101	--	--	--	--	83	--	--	--	--	71	15	56	46	--	83	1.1
CHECK	ATX631*RTx2917	118	105	--	111	--	97	102	--	73	14	72	15	56	55	--	71	1.2
MATURITY CHECK	TX2752xTX430	132	--	118	--	--	109	--	109	--	--	72	15	56	51	--	93	1.2
PIONEER	84G62	137	--	--	--	--	113	--	--	--	--	73	16	57	49	--	91	1.2
MMR GENETICS	JOWAR I	116	121	122	118	120	96	117	113	75	15	75	16	55	56	--	86	1.1
CHECK	ATX631xTX436	120	111	116	116	116	99	107	107	75	15	76	16	55	57	--	74	1.2
CHECK	ATX635xTX436	114	119	120	116	118	94	106	111	79	15	78	16	55	61	--	78	1.2
NC+	7W92	123	118	109	120	117	102	115	100	76	15	78	16	55	55	--	69	1.3
	AVERAGES	121	103	108	112	111	121	103	108	72	14	72	15	56	52	--	84	1.2
	CV(%)	12	9	9	--	--	12	9	9	--	--	4	6	2	3	--	10	11.6
	LSD(0.05)*	12	6	7	--	--	10	6	7	--	--	2	1	1	1	--	7	0.1

*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

Table 32. Entries in the 2004 Kansas Grain Sorghum Performance Tests*

BRAND	GC	EC	PC	Mat.	Days	GB	Fe chlor. ratings				BRAND	GC	EC	PC	Mat.	Days	GB	Fe chlor. ratings					
							Col.	Trib.	04	2Yr								3Yr	Col.	Trib.	04	2Yr	3Yr
ADVANCED GEN.											FONTANELLE												
A 110	B	HY	P	E	62	-	3.1	1.2	2.2	-	-	GE-3245	B	-	-	E	56	G	3.1	2.4	2.7	-	-
A 115C	C	HY	P	ME	68	CE	2.8	2.4	2.6	2.5	2.6	GE-4532	B	-	-	ME	63	CE	3.6	1.5	2.6	-	-
A 121	R	W	P	M	70	CEIK	3.5	1.5	2.5	-	-	GE-5615	B	-	-	M	65	CE	3.4	1.7	2.5	2.3	-
A 137	R	W	P	ML	73	CE	2.7	1.4	2.0	-	-	GE-6715	R	-	-	L	68	CE	3.1	2.7	2.9	2.7	-
ASGROW											W-1000 W - T ML 68 - 2.8 1.6 2.2 - -												
REWARD	B	HY	P	E	56	-	2.9	1.7	2.3	2.2	-	FRONTIER											
PULSAR	B	HY	P	E	68	CEI	3.3	2.1	2.7	2.5	2.7	F-222E	R	Y	P	E	52	E	3.6	2.2	2.9	-	-
A459	B	HY	P	M	70	CE	2.9	1.4	2.1	2.2	2.3	F-303C	C	HY	P	M	58	E	3.2	2.2	2.7	2.8	2.7
ORBIT	Y	Y	T	M	70	CE	2.9	1.5	2.2	-	-	F-457E	B	Y	P	M	60	E	3.4	2.0	2.7	2.5	2.7
A571	B	HY	P	L	71	-	2.9	1.5	2.2	2.3	2.3	F-700E	R	HY	P	L	65	E	3.6	2.0	2.8	2.5	2.6
A567	B	HY	P	L	73	CE	3.0	1.3	2.1	1.9	2.2	GARST											
CROPLAN GEN.											5750 B HY P ME 63 CE 3.5 1.7 2.6 2.3 2.5												
340	C	HY	P	ME	58	-	3.6	1.8	2.7	-	-	5515	B	HY	P	M	68	-	3.3	2.3	2.8	2.7	3.0
414	B	HY	P	ME	62	C	3.2	2.1	2.7	2.6	2.8	5401	-	HY	P	ML	69	-	3.0	1.3	2.1	-	-
484	B	HY	P	M	67	CE	3.6	2.6	3.1	2.5	-	5360	-	HY	P	ML	70	-	3.4	1.6	2.5	-	-
494	B	HY	P	M	67	-	3.5	1.7	2.6	-	-	5440	R	HY	P	M	70	CE	3.0	1.0	2.0	2.0	2.2
514	R	HY	P	ML	67	CE	3.2	1.9	2.5	2.4	2.4	GOLDEN ACRES											
DEKALB											3552 B Y P M 66 CE 2.9 1.0 2.0 - -												
DKS29-28	B	HY	P	E	56	CE	2.8	1.6	2.2	2.2	-	X-2944	B	Y	P	M	68	CE	3.8	1.6	2.7	-	-
DKS37-07	B	HY	P	E	67	CEI	3.1	2.2	2.7	2.3	-	3827	B	Y	P	L	72	CE	2.8	1.4	2.1	-	-
DKS36-00	B	HY	P	E	68	CEI	2.9	1.7	2.3	2.3	2.4	GOLDEN WORLD											
DKS42-20	B	HY	P	M	70	CE	2.8	2.2	2.5	2.5	2.5	GW 3406	R	W	P	E	54	E	3.1	1.7	2.4	2.3	-
DKS44-41	Y	Y	T	M	71	CE	3.4	1.6	2.5	2.3	2.3	GW X5964	B	HY	P	M	65	E	3.2	1.8	2.5	2.4	-
DKS53-11	B	HY	P	L	74	CEI	2.8	1.6	2.2	2.1	2.2	GWX1467	R	W	P	M	65	-	2.8	1.5	2.1	-	-
DKS54-00	B	HY	P	L	75	CEI	3.0	1.5	2.3	2.0	2.1	GWX3067	R	W	P	M	65	-	2.5	1.2	1.8	-	-
DRUSSEL SEED											GW 1489 R W P ML 68 E 3.3 2.0 2.6 2.6 2.7												
DSS B60	B	W	R	E	60	C	3.5	1.6	2.6	2.4	-	GW X1464	B	HY	P	ML	68	E	3.7	2.4	3.0	2.7	2.6
DSS B64	B	W	R	ME	64	C	2.9	1.9	2.4	2.2	-	GW X7464	C	HY	P	ML	68	E	3.6	1.9	2.8	2.4	-
DSS R66	R	W	R	ML	66	C	3.8	1.7	2.7	2.7	-	GWX9064	B	HY	P	ML	68	E	3.5	1.5	2.5	-	-
DYNA-GRO											GWX9067 R W P ML 68 C 2.9 1.0 1.9 - -												
DGX-1721	B	HY	-	E	52	E	3.1	2.4	2.8	-	-	KAYSTAR											
DGX-1737	R	W	-	E	54	E	2.3	2.0	2.2	2.0	-	KS-505	R	Y	P	M	70	CE	2.9	1.9	2.4	2.4	2.7
DGX-1733	C	HY	-	E	56	C	4.1	2.7	3.4	-	-	MIDLAND											
DGX-1738	B	HY	-	M	60	E	3.5	2.3	2.9	2.5	-	M-4665	B	W	P	ME	63	C	3.3	2.4	2.9	2.5	2.5
DGX-1755	R	W	-	M	60	-	3.2	1.4	2.3	-	-	M-4758Y	Y	HY	P	M	64	O	3.4	2.1	2.8	2.4	2.4
DGX-1763	B	HY	-	M	60	E	3.2	2.4	2.8	2.4	-	M-4748	B	-	P	ME	65	CDE	3.9	1.4	2.6	-	-
DGX-1753	B	HY	-	M	62	E	3.0	1.6	2.3	2.2	-	M-4772	B	-	P	M	68	CE	3.4	1.2	2.3	-	-
DGX-1765	C	HY	-	ML	64	E	3.3	1.9	2.6	2.5	-	M-902W	W	-	T	ML	70	-	3.1	1.7	2.4	-	-
DGX-1781	R	W	-	L	64	E	3.3	1.6	2.5	-	-												
71F90	W	W	-	L	70	-	2.6	1.5	2.0	-	-												

* Information provided by entrants:
 GC = grain color: bronze, cream, red, yellow, white
 EC = endosperm color: white, yellow, hetero-yellow
 PC = plant color: purple, tan
 Mat. = relative maturity: early, medium, late
 Days = days to half bloom
 G-bug = resistance to specific greenbug biotypes: C, E, I, K, etc.

From iron chlorosis screening tests:
 Fe chlor. ratings = visual rating of plant color and vigor
 1 = green, no chlorosis; 5 = all leaves yellow (chlorotic), stunted
 Col. = Colby, Trib. = Tribune
 04 = average of 2004 ratings
 2Yr = average of ratings made in 2004 and 2003 (4 tests)
 3Yr = average of ratings made in 2004, 2003, and 2002 (6 tests)

Table 32. Entries in the 2004 Kansas Grain Sorghum Performance Tests - continued*

BRAND	GC	EC	PC	Mat.	Days	GB	Fe chlor. ratings				BRAND	GC	EC	PC	Mat.	Days	GB	Fe chlor. ratings					
							Col.	Trib.	04	2Yr								3Yr	Col.	Trib.	04	2Yr	3Yr
MIDWEST SEED											SORG. PARTNERS												
G 530	C	Y	P	M	63	CE	3.7	1.7	2.7	2.5	-	251	R	W	P	E	52	-	3.6	1.9	2.7	2.5	-
G 567	B	Y	P	M	66	CEIK	2.7	1.5	2.1	2.0	-	KS 310	B	HY	P	E	57	CE	2.7	1.3	2.0	2.0	-
O 256	B	Y	P	L	69	CE	4.2	2.4	3.3	2.8	2.9	K35-Y5	C	HY	P	ME	59	CE	2.9	2.3	2.6	2.6	-
MYCOGEN											X420	B	HY	P	M	62	C	3.4	2.5	2.9	-	-	
1G600	B	HY	P	ME	64	-	3.7	1.3	2.5	2.2	-	1486	Y	HY	T	ME	63	CEI	3.1	1.9	2.5	2.3	-
627	B	W	P	ME	68	CEIK	2.9	1.0	2.0	1.9	1.9	NK5418	B	HY	P	M	66	CE	2.3	1.5	1.9	1.8	-
M3838	C	HY	P	ME	69	CE	3.4	1.9	2.7	2.3	2.5	KS 585	B	HY	P	M	67	CE	2.8	2.8	2.8	2.5	2.5
697	B	W	P	M	70	CEIK	3.3	1.6	2.5	2.4	2.6	NK6641	R	W	P	M	67	C	3.5	1.5	2.5	-	-
1G858	R	W	P	ML	74	-	2.9	1.1	2.0	2.1	-	NK6673	B	HY	P	M	67	C	3.7	2.4	3.1	-	-
NC+											K73-J6	B	HY	P	ML	73	CE	3.3	2.1	2.7	2.6	2.6	
6B50	B	W	P	ME	62	-	3.4	1.7	2.6	2.4	2.4	NK7633	B	HY	P	ML	73	C	3.4	1.1	2.3	2.1	-
7R34	R	W	P	M	70	-	3.2	1.1	2.1	-	-	NK7655	C	Y	P	ML	73	C	3.4	2.1	2.7	2.5	-
PIONEER											NK8828	C	Y	T	L	76	C	4.0	3.1	3.6	3.1	3.1	
87G57	B	Y	P	E	63	E	3.6	1.9	2.7	2.5	2.4	TAYLOR											
86G08	R	W	P	E	65	E	2.7	1.1	1.9	-	-	T-37GS	B	-	-	M	65	CED	3.0	2.1	2.6	-	-
85G01	R	W	P	M	69	E	3.2	1.3	2.2	2.3	-	T-36GS	B	-	-	M	67	CED	2.7	1.3	2.0	-	-
84G50	B	Y	P	M	70	-	2.7	1.3	2.0	2.2	-	TRIUMPH											
84G62	B	Y	P	ML	72	E	3.2	1.4	2.3	2.4	2.3	TR 434	R	W	P	E	58	CE	3.7	2.0	2.9	2.4	-
84Y00	W	Y	P	ML	72	-	3.3	1.5	2.4	-	-	TR 438	B	W	P	E	60	CE	3.4	1.6	2.5	2.2	2.4
PRODUCERS											TR 442	B	W	P	ME	61	CE	2.8	2.0	2.4	-	-	
PH67	C	W	P	M	60	C	4.0	2.1	3.1	2.9	-	TR 460	Y	W	P	M	62	CEI	2.2	1.2	1.7	1.8	2.0
PH68	C	W	P	M	60	CD	3.2	2.5	2.8	-	-	TR 461	R	W	P	M	62	CE	3.3	1.8	2.6	2.2	2.3
PH70	B	Y	P	M	62	C	3.0	1.7	2.3	-	-	TR 465	B	W	P	M	62	CEI	3.3	1.5	2.4	-	-
SEED RESOURCE											TRX44631	R	W	P	M	62	CE	3.5	1.0	2.2	-	-	
SR 251	B	HY	P	ME	60	CE	3.8	2.6	3.2	-	-	TR 459	B	W	P	ME	64	CE	4.0	2.7	3.3	2.8	2.9
SR 255c	C	W	P	ME	60	C	3.7	2.0	2.9	-	-	TR 481	R	W	P	ML	72	CE	3.6	2.6	3.1	2.6	2.6
SR 506	B	HY	P	ML	68	CE	2.5	1.6	2.0	-	-	MATURITY CHECK											
SR 510	R	HY	P	ML	68	E	3.4	1.7	2.5	-	-	TX3042xTX2737	B	W	P	E	65	-	3.2	2.2	2.7	2.7	2.6
											OK11xTX2741	W	W	P	M	69	-	3.6	3.1	3.4	3.0	3.1	
											TX2752xTX430	B	W	P	L	73	-	2.7	1.9	2.3	2.3	2.4	
											AVERAGES	-	-	-	-	-	-	3.2	1.8	2.5	-	-	
											CV(%)	-	-	-	-	-	-	16.3	32.4	22.8	-	-	
											LSD(0.05)*	-	-	-	-	-	-	0.7	0.9	0.9	-	-	

* Information provided by entrants:
 GC = grain color: bronze, cream, red, yellow, white
 EC = endosperm color: white, yellow, hetero-yellow
 PC = plant color: purple, tan
 Mat. = relative maturity: early, medium, late
 Days = days to half bloom
 G-bug = resistance to specific greenbug biotypes: C, E, I, K, etc.

From iron chlorosis screening tests:
 Fe chlor. ratings = visual rating of plant color and vigor
 1 = green, no chlorosis; 5 = all leaves yellow (chlorotic), stunted
 Col. = Colby, Trib. = Tribune
 04 = average of 2004 ratings
 2Yr = average of ratings made in 2004 and 2003 (4 tests)
 3Yr = average of ratings made in 2004, 2003, and 2002 (6 tests)

For those interested in accessing crop performance testing information electronically, visit our World Wide Web site. Most of the information contained in this publication is available for viewing or downloading.

The URL is <http://www.ksu.edu/kscpt>.

Excerpts from the UNIVERSITY RESEARCH POLICY AGREEMENT
WITH COOPERATING SEED COMPANIES*

Permission is hereby given to Kansas State University to test varieties and/or hybrids designated on the attached entry forms in the manner indicated in the test announcements. I certify that seed submitted for testing is a true sample of the seed being offered for sale.

I understand that all results from Kansas Crop Performance Tests belong to the University and the public and shall be controlled by the University so as to produce the greatest benefit to the public. Performance data may be used in the following ways: 1) Tables may be reproduced in their entirety provided the source is referenced and data are not manipulated or reinterpreted; 2) Advertising statements by an individual company about the performance of its entries may be made as long as they are accurate statements about the data as published, with no reference to other companies' names or cultivars. In both cases, the following must be included with the reprint or ad citing the appropriate publication number and title: "See the official Kansas State University Agricultural Experiment Station and Cooperative Extension Service Report of Progress 933, '2004 Kansas Performance Tests with Grain Sorghum Hybrids,' or the Kansas Crop Performance Test Web site, www.ksu.edu/kscpt, for details. Endorsement or recommendation by Kansas State University is not implied."

These materials may be freely reproduced for educational purposes. All other rights reserved. In each case, give credit to the author(s), name of work, Kansas State University, and the date the work was published.

Special thanks to J.B. Pearl Sales and Service Inc., St Marys, Kan.,
for providing starter fertilizer for several of the tests.

CONTRIBUTORS

MAIN STATION, MANHATTAN

Kraig Roozeboom, Agronomist (Senior Author)
Doug Jardine, Extension Plant Pathologist
Jeff Whitworth, Extension Entomologist
Mary Knapp, KSU State Climatologist

James R. Cochrane, Assistant Scientist
Edward O. Quigley, Agricultural Technician
Richaaard Wilkes, Student

EXPERIMENT FIELDS

Mark Claassen, Hesston
W. Barney Gordon, Scandia
William Heer, Hutchinson
Larry Maddux, Ottawa and Topeka
Victor Martin, St. John

RESEARCH CENTERS

Patrick Evans, Colby
Ken Kofoid, Hays
James Long, Parsons
Alan Schlegel, Tribune
Merle Witt, Garden City

*NOTE: Trade names are used to identify products.
No endorsement is intended, nor is any criticism implied of similar products not named.*

**This Report of Progress was edited, designed, and printed by the Department of Communications
at Kansas State University**

Kansas State University Agricultural Experiment Station and Cooperative Extension Service, Manhattan 66506