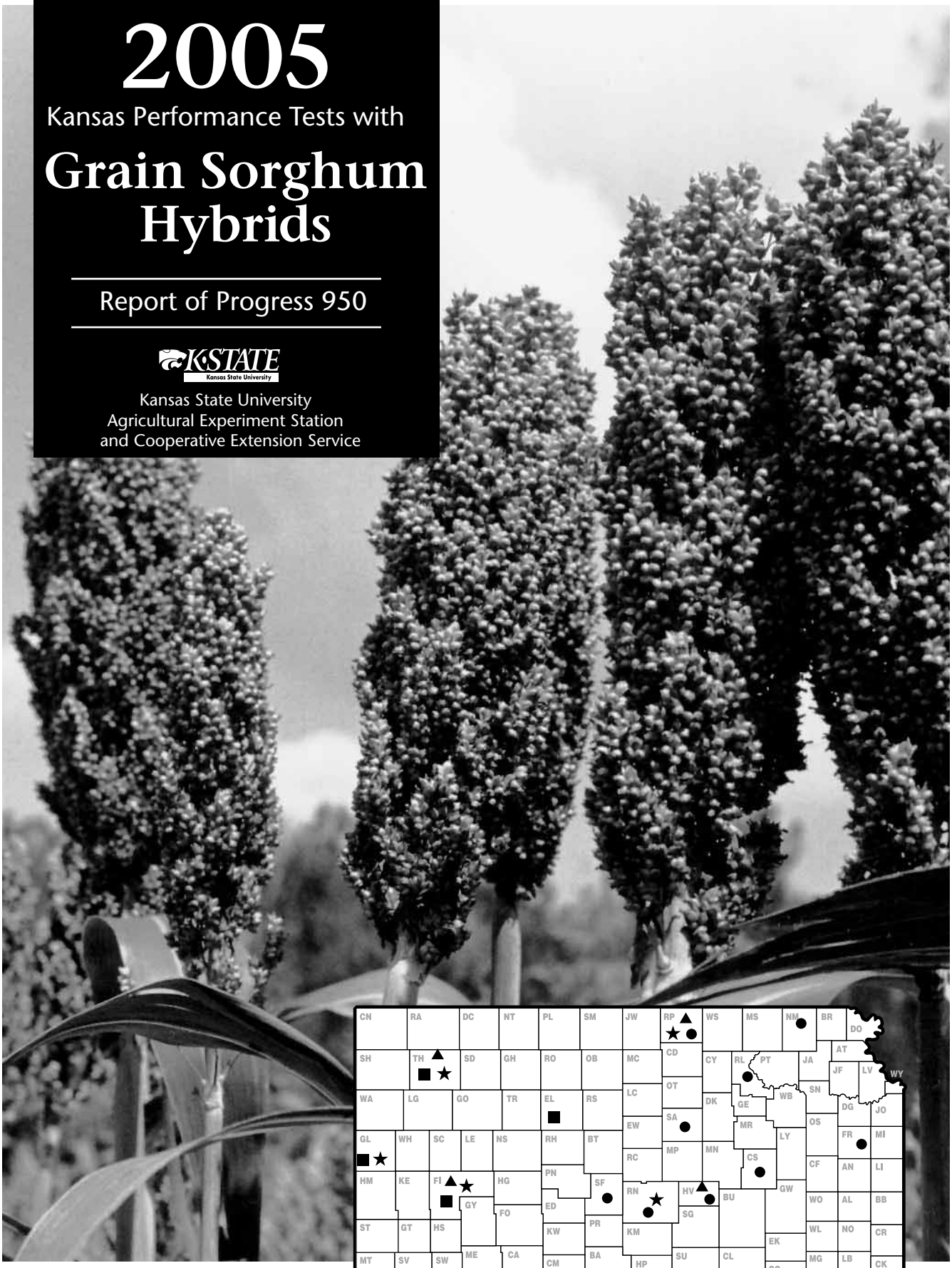
2005

Kansas Performance Tests with

Grain Sorghum Hybrids

Report of Progress 950

Kansas State University
Agricultural Experiment Station
and Cooperative Extension Service



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Contribution No. 06-127-S from the Kansas Agricultural Experiment Station.

2005 GRAIN SORGHUM CROP REVIEW

Statewide Growing Conditions

The 2005 growing season was more typical than last year, with a prolonged dry period in July and August (Figure 1). A dry period in May was followed by heavy rains in early June and July that replenished topsoil moisture across most of the state. Topsoil moisture was depleted during July and early August. Late-August rains arrived in time to benefit grain filling in eastern Kansas and flowering in western Kansas or for later plantings.

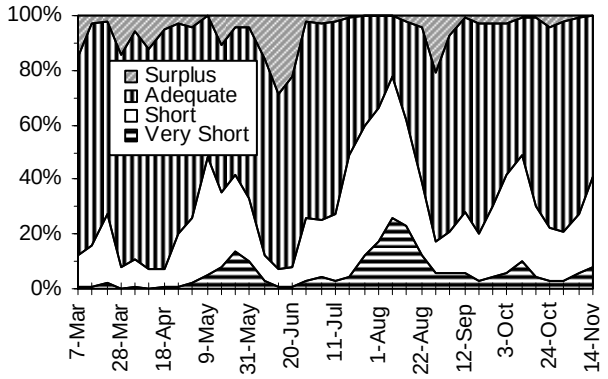


Figure 1. Statewide status of topsoil moisture.

Crop condition declined from early July until the middle of August (Figure 2). In early July, 70% of the grain sorghum crop was rated as good or excellent. By August 15, that percentage had dropped to less than 40%. Crop condition increased slightly during September and October so that close to 50% was rated as good or excellent as harvest got under way.

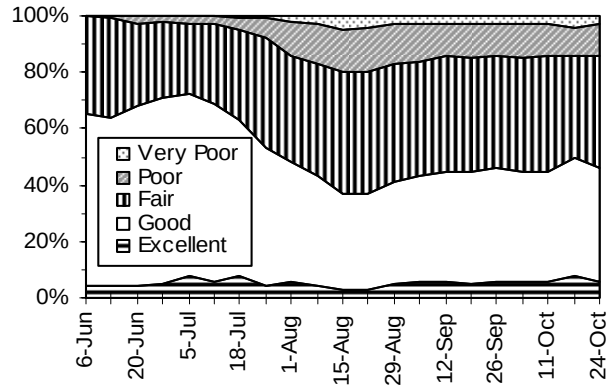


Figure 2. Condition of 2004 Kansas sorghum crop.

Early planting and emergence were delayed by cool temperatures in early May. Heavy rains in early June caused additional delays during the period when much of the sorghum crop typically is planted. Heading and coloring were not far from the 5-year average, well ahead of the 2005 rate. Harvest started behind the 5-year average in late September, but finished close to the average pace by the end of October.

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

Diseases

For the second consecutive year, disease problems were minimal in the Kansas grain sorghum crop. Some seedling blighting occurred early in the 2005 season, but the incidence was well below long-term averages.

Several foliar diseases could be found to a limited extent in some fields from mid- to late-summer, particularly where sorghum is grown continuously in a no-till system. These included sooty stripe and northern corn leaf blight. A few fields in southwestern Kansas had large amounts of bacterial stripe, but this disease is not known to be yield limiting. As is typical, some sorghum rust appeared after Labor Day in fields planted very late.

Where sorghum may have been drought stressed during grain fill or where heavy rains occurred near or after maturity, stalk rots developed, primarily *Fusarium* stalk rot. There was also a scattering of grain molds where rainfall made timely harvesting of sorghum difficult.

Although late-season conditions were favorable for the development of ergot, none was reported. Some producers used glyphosate to kill late-season tillers and limit the possibility of ergot developing.

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

Insects

Very few early-season insect problems were noted throughout the state. Chinch bug populations generally seemed to be much smaller than average, and for the first time in the last three years no reports of sugarcane rootstock weevil problems were received. There were scattered reports from southern Kansas about sorghum midge infestations. This small, gnat-like fly is normally confined to southeastern Kansas but was noted all across the southern half of the state this year. The larvae feed in the developing seed and are often not discovered until the damage is done and the sorghum head has a "blasted" appearance. Also, reports of "headworm" infestations were received from around the state, which were a combination of fall armyworms and corn earworms. These pests are present every year, and populations this year seemed about average. No other major insect problems were noted.

(Jeff Whitworth, Kansas State University Department of Entomology)

Harvest Statistics

The Kansas Agricultural Statistics Office predicted a 187.5-million-bushel crop in their November 10 Crops Report, down 15% from last year (Figure 3). The number of acres harvested was down 400,000 acres from last year, at 2.5

million. The average yield estimate of 75 bushels per acre was 1 bushel less than the final estimate for 2004.

(Kansas Agricultural Statistics)

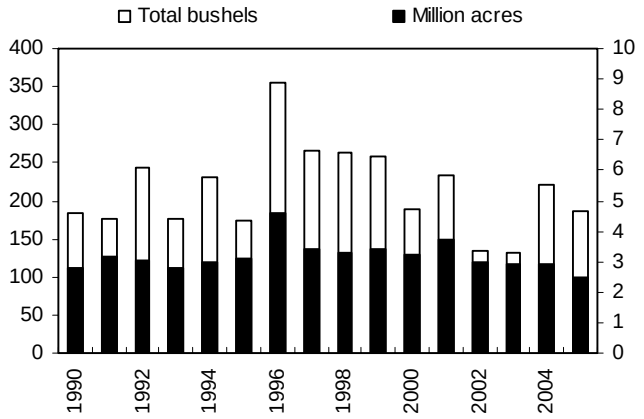


Figure 3. Historical Kansas grain sorghum production.

2005 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 at all test locations.

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 2005 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 28 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.

2,4-D Screening

All entries in the 2005 performance tests were screened for their reaction to an early-season application of 2,4-D, in cooperation with KSU Extension weed specialist, Dave Regehr. Many producers are searching for additional, economical options to control broadleaf weeds in sorghum. The tendency of 2,4-D to cause brittle stalks and other plant reactions is well documented. This has caused a movement away from this herbicide in recent years. With the limited number of effective herbicides and the onset of ALS-resistant amaranth, 2,4-D has received renewed interest. The question of primary interest is whether current hybrids differ in their response to applications of 2,4-D. All hybrids were arranged in paired plots, with and without 2,4-D, in a planting near Manhattan in 2005. Table 29 contains ratings and response differences that reveal the effect of 2,4-D on a number of growth parameters, including yield. Values in bold are not different from zero, indicating no effect of the 2,4-D application.

Table 1. Entrants in the 2005 Kansas Grain Sorghum Performance Tests.

CroPlan Genetics
Spearman, TX
800-851-8810
croplangenetics.com

Crosbyton Seed (Golden World)
Crosbyton, TX
806-675-2308
crosbytonseed.com

DeLange Seed (Advanced Genetics)
Girard, KS
620-724-6223
delangeseed.com

Drussel Seed, Inc.
Garden City, KS
620-275-2359

Fontanelle Hybrids
Fontanelle, NE
800-279-4353
fontanelle.com

Garst Seed Company
Slater, IA
800-831-6630
garstseed.com

Golden Acres Genetics
Waco, TX
800-692-6848
gaseed.com

Midland Genetics
Ottawa, KS
800-819-SEED
midlandgenetics.com

Monsanto Seed (Asgrow/DeKalb)
St. Louis, MO
800-833-5252
monsanto.com

Mycogen Seeds
Indianapolis, IN
1-800-MYCOGEN
mycogen.com

NC+ Hybrids
Lincoln, NE
800-279-7999
nc-plus.com

Ohlde Seed Farms
Palmer, KS
785-692-4555
phillipsseed.com.com

Phillips Seed Farms
Hope, KS
785-949-2204
producershybrids.com

Pioneer, A DuPont Company
Amarillo, TX
800-258-5604
pioneer.com

Sorghum Partners, Inc.
New Deal, TX
806-746-5566
sorghum-partners.com

Taylor Seed Farms
White Cloud, KS
800-742-7473
taylorseedfarms.com

Triumph Seed Co., Inc.
Ralls, TX
800-530-4789
triumphseed.com

UAP-Pueblo (Dyna-Gro)
Garden City, KS
620-275-4271
uap.com

NORTHEAST KANSAS GRAIN SORGHUM TEST ON SILTY CLAY LOAM SOIL

Keith Flentie farm; Kraig Roozeboom, agronomist

Wymore silt loam; Soybean in 2004

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

Planted on 5/24/2005; Harvested on 9/26/2005

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

Rainfall was favorable for most of the growing season. Diseases, insects, and lodging were minimal.

	Precipitation		Average Temp.		GDU	
Month	2005	Norm.	2005	Norm.	2005	Norm.
Nov.-Mar	6.5	6.0	37	35		
April	2.3	2.7	56	54	635	575
May	5.4	4.5	63	65	877	918
June	6.7	5.1	73	74	1159	1158
July	3.2	3.9	77	79	1295	1369
August	6.1	3.5	75	77	1255	1317
Sept.	1.8	3.8	70	70	1047	1035
Oct.	3.8	2.8	55	58	629	698
Totals:	35.7	32.4	55	54	6,897	7,070

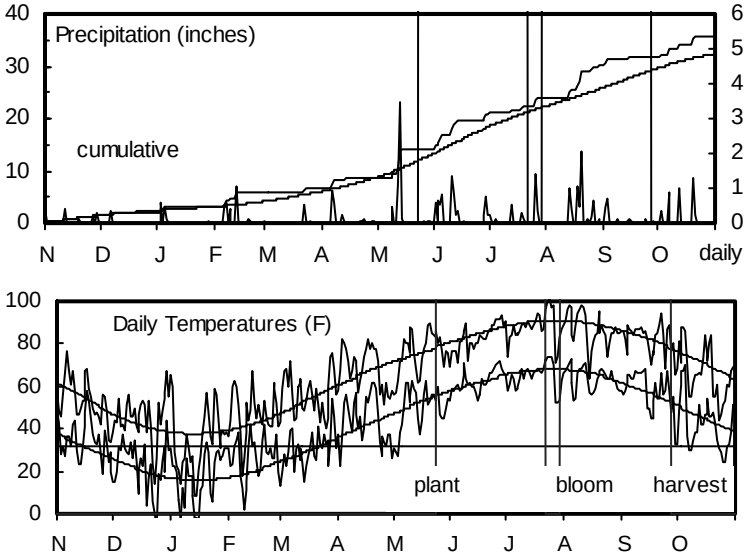


Table 2. Centralia Grain Sorghum Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005					
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
MATURITY CHECK	TX3042xTX2737	119	172	--	145	--	88	100	--	66	13	58	15	57	50	--	62.2	1.0
PIONEER	85G01	129	--	--	--	--	95	--	--	--	--	59	17	55	48	--	66.4	1.0
DEKALB	DKS42-20	117	161	--	139	--	86	93	--	68	13	60	14	56	51	--	67.7	1.0
MATURITY CHECK	OK11xTX2741	103	153	--	128	--	76	89	--	67	12	60	14	58	48	--	70.7	0.9
DEKALB	DKS54-00	126	188	--	157	--	93	109	--	70	13	62	15	58	51	--	71.6	1.0
ASGROW	A567	141	**206**	--	173	--	104	119	--	70	14	62	16	60	52	--	69.5	1.0
GOLDEN ACRES	3545	130	--	--	--	--	96	--	--	--	--	62	16	59	48	--	59.7	1.1
GOLDEN ACRES	3827	**143**	--	--	--	--	105	--	--	--	--	62	16	60	49	--	70.6	1.0
PIONEER	84G50	**157**	--	--	--	--	116	--	--	--	--	62	16	59	55	--	71.1	1.0
TAYLOR	T-35GS	128	--	--	--	--	94	--	--	--	--	62	17	58	50	--	65.8	1.0
GOLDEN ACRES	3443	**148**	--	--	--	--	110	--	--	--	--	63	14	60	50	--	61.4	0.9
PIONEER	84G62	**146**	--	--	--	--	108	--	--	--	--	63	15	59	50	--	62.6	1.0
DEKALB	DKS53-11	135	**198**	--	167	--	100	115	--	71	14	63	16	59	51	--	67.9	1.0
SORG. PARTNERS	K73-J6	127	176	--	152	--	94	102	--	71	13	64	15	58	52	--	68.1	1.0
DYNA-GRO	DG-751B	**157**	--	--	--	--	116	--	--	--	--	65	15	59	56	--	62.1	1.0
SORG. PARTNERS	NK7655	132	183	--	158	--	97	106	--	72	13	65	15	58	50	--	73.6	1.0
GOLDEN ACRES	3552	**143**	--	--	--	--	105	--	--	--	--	65	17	58	52	--	60.5	1.0
ASGROW	A571	**144**	184	--	164	--	106	107	--	73	12	66	14	58	55	--	70.6	0.9
MATURITY CHECK	TX2752xTX430	**147**	190	--	169	--	109	110	--	72	14	66	16	58	53	--	62.9	1.0
	AVERAGES	135	173	--	154	--	135	173	--	70	13	63	15	58	51	--	66.6	1.0
	CV(%)	8	5	--	--	--	8	5	--	--	--	1	6	2	6	--	4.8	5.1
	LSD(0.05)*	15	12	--	--	--	11	7	--	--	--	1	1	1	4	--	4.6	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

Agronomy North Farm, Manhattan; Kraig Roozeboom, agronomist

Reading silt loam; Soybean in 2004

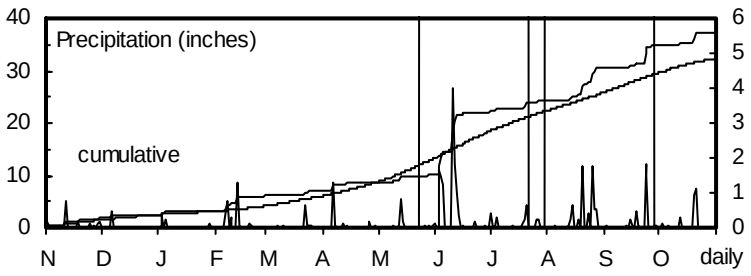
130 - 30 - 0 lb/a N, P, K

Planted on 5/24/2005; Harvested on 9/27/2005

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

Planted no-till into heavy soybean residue; stands were generally good. Good early growth, but a dry period in late July and early August caused some stress during pollination and early grain fill.

	Precipitation		Average Temp.		GDU	
Month	2005	Norm.	2005	Norm.	2005	Norm.
Nov.-Mar	6.9	6.0	39	35		
April	1.8	2.7	58	54	683	575
May	1.5	4.5	65	65	949	918
June	11.8	5.1	76	74	1239	1158
July	2.3	3.9	79	79	1386	1369
August	6.2	3.5	78	77	1344	1317
Sept.	4.4	3.8	73	70	1133	1035
Oct.	2.5	2.8	58	58	729	698
Totals:	37.4	32.4	57	54	7,463	7,070



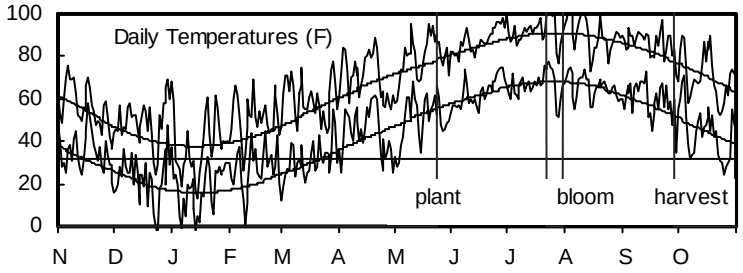


Table 3. Manhattan Grain Sorghum Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
MATURITY CHECK	TX3042xTX2737	95	144	119	120	119	86	93	107	61	14	58	13	56	49	--	62.1	1.1
DEKALB	DKS42-20	101	150	117	125	123	91	97	105	63	14	60	13	57	47	--	67.2	1.1
MATURITY CHECK	OK11xTX2741	91	143	94	117	109	82	92	84	63	14	60	13	57	44	--	71.4	1.0
PIONEER	85G01	113	157	**130**	135	134	102	102	117	63	14	60	14	56	47	--	67.2	1.0
PIONEER	84G50	**120**	166	**129**	143	138	108	107	115	64	16	61	15	59	53	--	70.3	1.0
DYNA-GRO	DG-752B	92	--	--	--	--	83	--	--	--	--	62	12	54	47	--	58.9	1.1
FONTANELLE	GE-4532	107	--	--	--	--	96	--	--	--	--	62	14	57	50	--	68.5	1.0
GARST	5401	113	165	--	139	--	102	107	--	65	15	62	15	59	56	--	63.3	1.0
NC+	7R34	**126**	--	--	--	--	113	--	--	--	--	62	15	59	53	--	63.7	1.1
SORG. PARTNERS	NK7655	107	156	113	132	126	97	101	102	67	14	63	13	57	49	--	69.1	1.0
GOLDEN ACRES	3827	114	--	--	--	--	103	--	--	--	--	63	15	60	52	--	69.8	1.0
FONTANELLE	GE-5615	**117**	--	--	--	--	105	--	--	--	--	64	14	59	50	--	68.1	1.1
GOLDEN ACRES	3443	111	--	--	--	--	100	--	--	--	--	64	14	59	51	--	63.4	1.0
MATURITY CHECK	TX2752xTX430	109	172	116	141	132	98	111	104	67	15	64	14	56	50	--	63.5	1.0
SORG. PARTNERS	K73-J6	108	159	**122**	133	129	97	103	109	67	15	64	14	56	52	--	69.2	1.0
TAYLOR	T-35GS	113	--	--	--	--	102	--	--	--	--	64	15	59	48	--	67.4	1.0
GOLDEN ACRES	3552	109	--	--	--	--	98	--	--	--	--	65	14	56	47	--	59.3	1.0
PIONEER	84G62	**126**	**180**	**129**	153	145	113	116	116	67	15	65	15	59	47	--	58.9	1.0
NC+	7R83	115	--	--	--	--	103	--	--	--	--	66	13	56	51	--	69.9	1.0
ASGROW	A571	110	165	113	137	129	99	107	102	68	14	66	14	56	49	--	71.2	1.0
ASGROW	A567	114	**183**	**133**	149	143	103	119	119	69	16	66	15	60	48	--	69.4	1.0
DEKALB	DKS54-00	**122**	164	105	143	130	110	106	94	68	16	66	15	58	54	--	69.1	1.0
GARST	5360	110	156	--	133	--	100	101	--	66	16	66	15	59	47	--	70.1	1.0
GOLDEN ACRES	3545	**118**	--	--	--	--	106	--	--	--	--	66	15	59	48	--	61.3	1.1
PHILLIPS	775	114	--	--	--	--	103	--	--	--	--	67	15	59	50	--	63.0	1.0
TRIUMPH	TR 481	111	152	**126**	131	129	100	98	113	69	17	67	17	58	54	--	59.7	1.0
DEKALB	DKS53-11	111	**191**	**125**	151	142	100	123	112	70	16	68	16	59	50	--	66.7	1.0
	AVERAGES	111	155	111	133	126	111	155	111	66	15	64	14	58	50	--	66.0	1.0
	CV(%)	6	5	9	--	--	6	5	9	--	--	2	6	2	5	--	5.3	3.6
	LSD(0.05)*	9	12	13	--	--	9	7	12	--	--	2	1	1	3	--	5.0	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 2004

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

Planted on 5/18/2005; Harvested on 10/13/2005

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

Conditions were favorable from planting through mid-June, resulting in good stands and early growth. A dry period in late June and early July was followed by nearly ideal rainfall from mid-July through August.

	Precipitation		Average Temp.		GDU	
Month	2005	Norm.	2005	Norm.	2005	Norm.
Nov.-Mar	6.3	5.1	37	33		
April	4.0	2.4	56	53	643	534
May	1.3	4.0	64	64	916	886
June	4.9	4.5	76	73	1243	1149
July	5.5	3.8	80	79	1405	1368
August	8.0	3.7	77	77	1305	1310
Sept.	2.9	3.9	73	68	1149	987
Oct.	2.2	2.2	57	56	676	663
Totals:	35.1	29.5	56	53	7,337	6,897

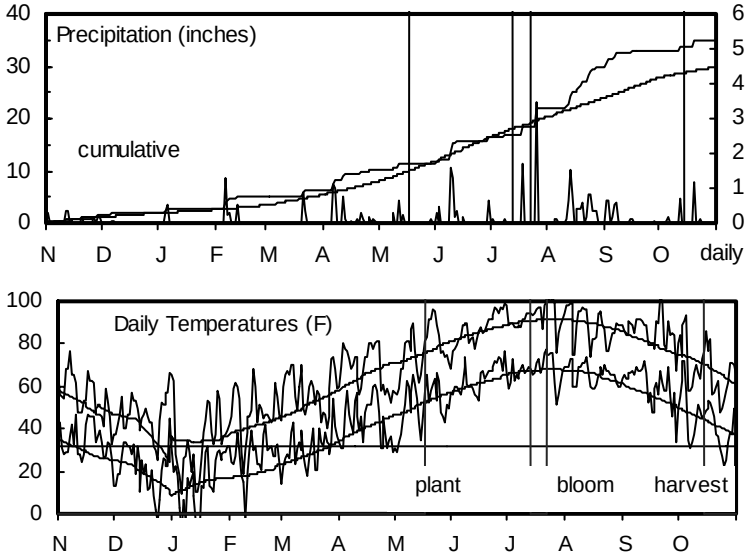


Table 4. Belleville Dryland Grain Sorghum Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
GOLDEN ACRES	3552	131	--	--	--	--	94	--	--	--	--	60	15	60	42	--	64.8	1.1
MATURITY CHECK	OK11xTX2741	113	86	92	99	97	81	77	113	64	16	60	15	60	40	--	66.6	1.1
SORG. PARTNERS	NK4420	117	--	--	--	--	84	--	--	--	--	60	15	60	40	--	68.7	1.0
FONTANELLE	GE-4532	143	129	--	136	--	103	117	--	64	17	60	16	60	39	--	66.6	1.1
GOLDEN ACRES	3443	151	--	--	--	--	109	--	--	--	--	61	14	59	47	--	66.7	1.1
MATURITY CHECK	TX3042xTX2737	118	100	75	109	98	85	90	92	65	16	61	14	60	43	--	66.1	1.1
NC+	7C22	150	--	**103**	--	--	108	--	127	--	--	61	14	60	46	--	66.6	1.1
OHLDE	O-530	121	--	--	--	--	87	--	--	--	--	61	14	60	40	--	67.8	1.0
ASGROW	A567	155	114	93	134	120	111	103	115	66	16	61	15	61	44	--	68.4	1.1
DEKALB	DKS42-20	144	122	94	133	120	104	110	115	65	16	61	15	60	40	--	68.8	1.0
FONTANELLE	GE-5615	148	127	--	138	--	107	115	--	65	16	61	15	60	43	--	65.9	1.1
GOLDEN ACRES	3545	151	--	--	--	--	108	--	--	--	--	61	15	60	40	--	67.1	1.0
NC+	7R34	135	--	--	--	--	97	--	--	--	--	61	15	60	46	--	68.0	1.1
OHLDE	O-525	134	--	--	--	--	97	--	--	--	--	61	15	60	40	--	65.2	1.1
PHILLIPS	665	120	--	--	--	--	86	--	--	--	--	61	15	60	41	--	64.6	1.1
PIONEER	85G01	147	127	93	137	122	105	115	115	65	16	61	15	60	44	--	65.5	1.1
SORG. PARTNERS	NK7655	146	122	74	134	114	105	110	91	67	16	62	14	60	38	--	64.8	1.1
GOLDEN ACRES	3827	137	--	--	--	--	99	--	--	--	--	63	14	61	46	--	66.2	1.0
PIONEER	84G50	143	95	75	119	104	103	86	92	65	16	63	14	60	46	--	68.4	1.0
PIONEER	84G62	**179**	125	77	152	127	129	113	95	68	16	63	14	60	43	--	65.0	1.0
GARST	5360	121	--	--	--	--	87	--	--	--	--	63	15	60	44	--	64.5	1.1
TRIUMPH	TR 481	144	131	--	138	--	104	119	--	67	16	63	15	60	49	--	63.3	1.1

(continued)

Table 4. Belleville Dryland Grain Sorghum Performance Test, 2003-2005 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
		2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
OHLDE	O-567	133	--	--	--	--	96	--	--	--	--	63	17	56	44	--	66.2	1.1
ASGROW	A571	154	112	101	133	122	111	101	124	68	16	64	14	60	44	--	66.8	1.0
GARST	5401	160	136	--	148	--	115	123	--	68	16	64	14	60	48	--	65.4	1.0
TAYLOR	T-35GS	141	--	--	--	--	101	--	--	--	--	64	14	60	45	--	67.3	1.1
DEKALB	DKS53-11	144	94	81	119	106	104	85	100	69	16	65	14	60	45	--	67.8	1.1
DEKALB	DKS54-00	173	122	**110**	148	135	125	110	136	69	16	65	15	60	42	--	70.2	1.0
MATURITY CHECK	TX2752xTX430	129	107	91	118	109	93	97	113	68	16	66	15	60	43	--	67.4	1.0
	AVERAGES	139	111	81	125	110	139	111	81	66	16	62	15	60	43	--	66.7	1.0
	CV(%)	2	8	8	--	--	2	8	8	--	--	1	2	0	1	--	3.0	2.7
	LSD(0.05)*	4	14	8	--	--	3	13	10	--	--	1	0	0	1	--	3.3	0.0

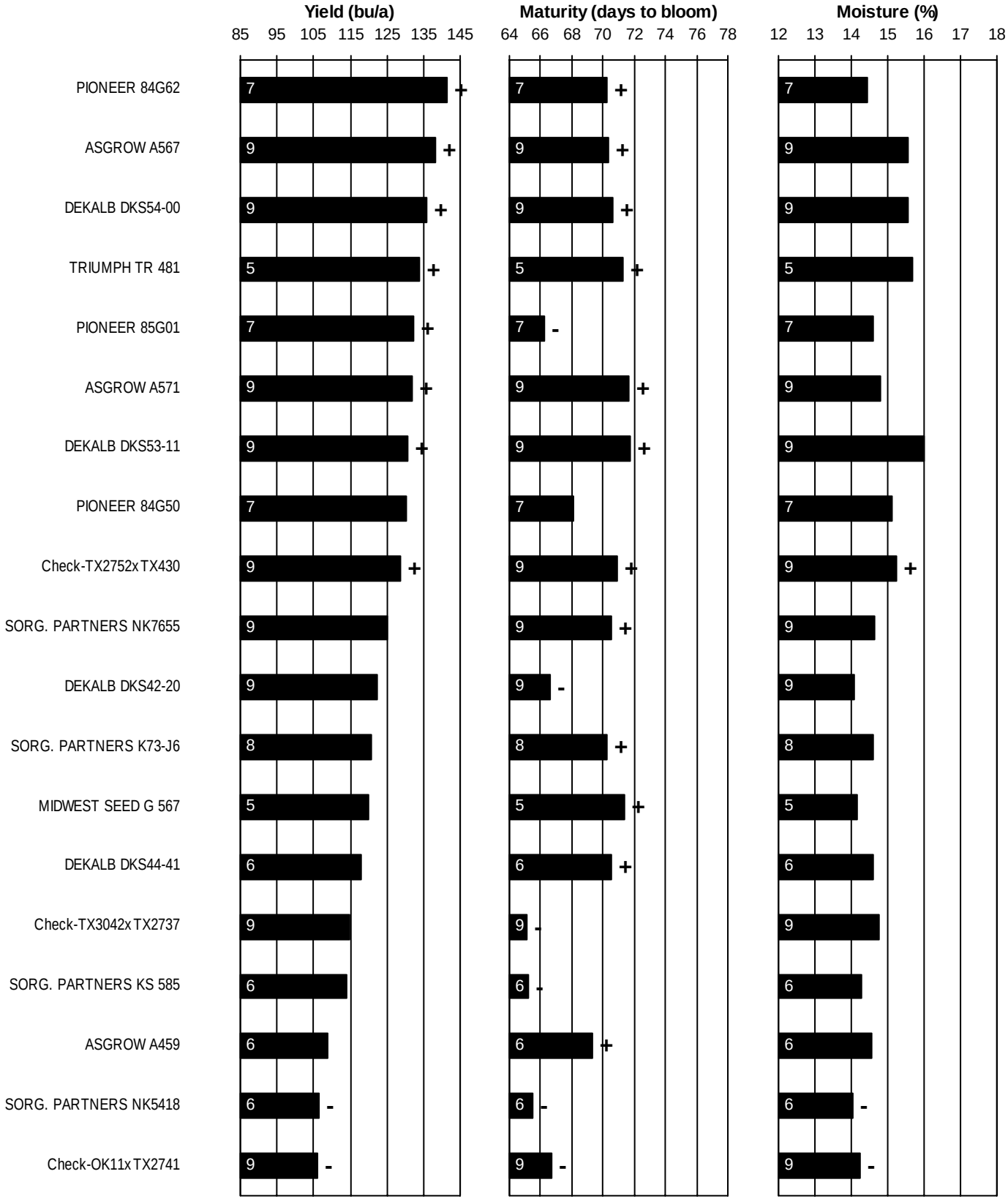
*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

Table 5. NORTHEAST Kansas Grain Sorghum Hybrid Yield Summary (% of test avg.), 2005.

BRAND/NAME	NMD*	RLD	RPD	AVG.
ASGROW				
A567	104	103	111	106
A571	106	99	111	105
DEKALB				
DKS42-20	86	91	104	94
DKS53-11	100	100	104	101
DKS54-00	93	110	125	109
DYNA-GRO				
DG-751B	116	--	--	--
DG-752B	--	83	--	--
FONTANELLE				
GE-4532	--	96	103	--
GE-5615	--	105	107	--
GARST				
5360	--	100	87	--
5401	--	102	115	--
GOLDEN ACRES				
3443	110	100	109	106
3545	96	106	108	104
3552	105	98	94	99
3827	105	103	99	102
NC+				
7C22	--	--	108	--
7R34	--	113	97	--
7R83	--	103	--	--
OHLDE				
O-525	--	--	97	--
O-530	--	--	87	--
O-567	--	--	96	--

BRAND/NAME	BRD	RLD	RPD	AVG.
PHILLIPS				
665	--	--	86	--
775	--	103	--	--
PIONEER				
84G50	116	108	103	109
84G62	108	113	129	117
85G01	95	102	105	101
SORG. PARTNERS				
K73-J6	94	97	--	--
NK4420	--	--	84	--
NK7655	97	97	105	100
TAYLOR				
T-35GS	94	102	101	99
TRIUMPH				
TR 481	--	100	104	--
MATURITY CHECK				
OK11xTX2741	76	82	81	80
TX2752xTX430	109	98	93	100
TX3042xTX2737	88	86	85	86
AVERAGES (bu/a)	135	111	139	128
CV(%)	8	6	2	--
LSD (0.05)	11	9	3	--

* 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, 2003-2005.

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 2004

96 - 24 - 12 lb/a N, P, K

Planted on 5/11/2005; Harvested on 9/22/2005

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

Fertilizer, including 4 pounds of sulfer/acre, was applied below the row with strip tillage in early March. A strong storm in early July caused little damage.

	Precipitation		Average Temp.		GDU	
Month	2005	Norm.	2005	Norm.	2005	Norm.
Nov.-Mar	13.4	6.5	40	37		
April	1.3	3.0	58	56	698	634
May	5.8	4.3	63	66	885	953
June	11.5	4.8	75	75	1207	1186
July	6.4	4.1	78	80	1354	1401
August	9.6	3.1	77	79	1308	1362
Sept.	4.9	4.2	73	70	1135	1062
Oct.	2.8	2.8	58	59	736	754
Totals:	55.6	32.7	57	56	7,323	7,352

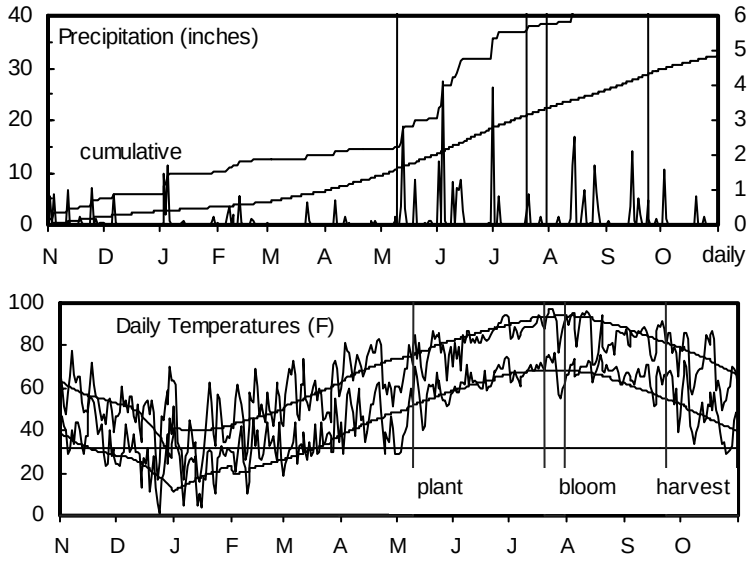


Table 6. Ottawa Grain Sorghum Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
MATURITY CHECK	TX3042xTX2737	**103**	89	45	96	79	101	94	81	70	14	69	12	55	56	--	57.2	1.1
DEKALB	DKS42-20	**101**	91	58	96	83	99	97	105	71	15	71	14	54	55	--	61.4	1.1
PIONEER	85G01	96	92	55	94	81	95	97	100	70	15	71	14	55	51	--	73.8	0.9
MATURITY CHECK	OK11xTX2741	98	**103**	51	101	84	97	109	91	71	14	72	12	56	47	--	73.5	1.0
SORG. PARTNERS	NK6673	99	99	--	99	--	97	104	--	73	14	72	13	54	53	--	65.1	1.0
GOLDEN ACRES	3827	**101**	99	--	100	--	100	104	--	72	15	72	14	57	55	--	73.4	1.0
MIDLAND	MG4758Y	92	88	61	90	80	90	93	110	74	15	72	14	55	58	--	52.7	1.0
DEKALB	DKS54-00	**104**	96	56	100	85	103	101	101	73	15	73	13	56	55	--	68.6	1.0
PIONEER	84G50	**109**	93	46	101	83	107	99	83	73	16	73	15	58	58	--	71.4	1.0
GARST	5401	**105**	--	--	--	--	104	--	--	--	--	74	14	58	62	--	63.2	1.0
GOLDEN ACRES	3443	**108**	--	--	--	--	106	--	--	--	--	74	15	58	54	--	60.4	1.0
GOLDEN ACRES	3545	**102**	--	--	--	--	100	--	--	--	--	74	15	57	56	--	65.7	1.0
GOLDEN ACRES	3552	**103**	**106**	--	105	--	101	112	--	75	16	74	15	56	53	--	62.1	1.1
MIDLAND	MG4772	**100**	**110**	--	105	--	99	116	--	75	16	74	15	56	57	--	63.8	1.0
PIONEER	84G62	**107**	**113**	53	110	91	105	119	96	74	16	74	15	58	51	--	57.1	1.2
ADVANCED GEN.	A 121	**101**	96	--	98	--	99	101	--	75	17	75	16	56	50	--	53.0	1.0
ASGROW	A567	**108**	**104**	**66**	106	93	106	110	119	74	17	75	16	58	54	--	68.5	1.0
ASGROW	A571	97	97	54	97	83	96	103	98	77	14	76	13	54	56	--	64.3	1.0
GARST	5360	99	--	--	--	--	98	--	--	--	--	76	15	57	54	--	72.5	1.0
SORG. PARTNERS	NK7633	98	--	49	--	--	97	--	89	--	--	76	15	56	53	--	69.9	1.0
ADVANCED GEN.	A 137	**102**	87	--	95	--	100	92	--	80	17	78	16	60	56	--	74.3	0.9
DEKALB	DKS53-11	**101**	95	**61**	98	86	99	101	110	78	17	78	16	57	57	--	48.8	1.0
MATURITY CHECK	TX2752xTX430	**102**	**102**	51	102	85	100	107	92	79	15	80	15	56	58	--	59.6	1.0
	AVERAGES	**101**	95	55	98	84	101	95	55	74	15	74	14	56	55	--	64.4	1.0
	CV(%)	6	9	13	--	--	6	9	13	--	--	2	6	1	4	--	7.6	9.3
	LSD(0.05)*	9	12	10	--	--	9	13	18	--	--	2	1	1	3	--	6.9	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, cooperator

Osage silty clay; Soybean in 2004

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

Planted on 5/11/2005; Harvested on 9/22/2005

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

The plot area was flooded for three days in mid-June and again for two days in late August. Although the plants were not killed, development was inhibited and yields were reduced.

	Precipitation		Average Temp.		GDU	
Month	2005	Norm.	2005	Norm.	2005	Norm.
Nov.-Mar	10.3	6.0	38	35		
April	1.1	2.7	56	54	649	563
May	6.4	4.5	65	65	928	909
June	8.7	5.1	75	74	1207	1147
July	4.3	3.9	78	79	1334	1358
August	9.8	3.5	78	77	1336	1315
Sept.	2.1	3.8	72	70	1131	1027
Oct.	0.0	2.8	58	58	716	693
Totals:	42.7	32.4	56	54	7,301	7,010

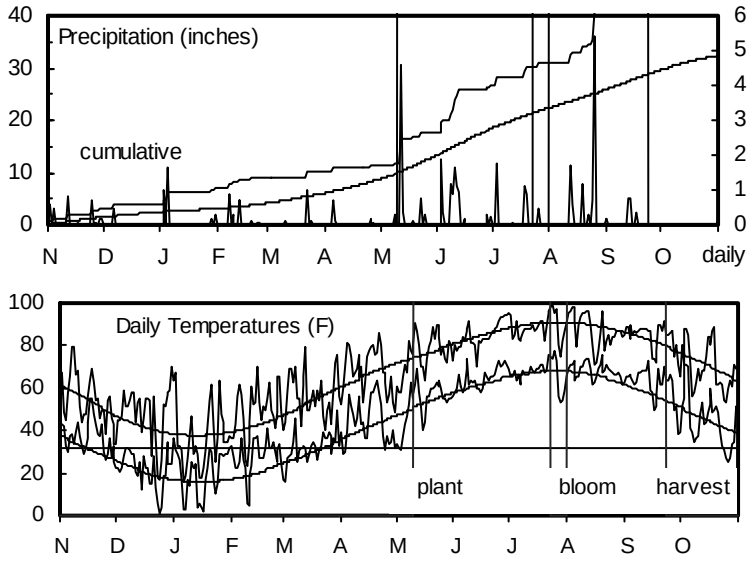


Table 7. Strong City Grain Sorghum Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
SORG. PARTNERS	KS 585	66	143	**70**	104	93	94	95	111	68	15	73	14	58	44	--	56.6	1.0
PIONEER	85G01	73	160	**75**	116	103	105	106	118	70	14	74	12	56	46	--	65.1	1.0
MATURITY CHECK	TX3042xTX2737	62	**171**	58	116	97	89	114	92	69	14	74	13	54	53	--	52.3	1.1
MATURITY CHECK	OK11xTX2741	70	116	58	93	81	101	77	91	71	13	76	11	56	43	--	66.0	1.0
DEKALB	DKS42-20	68	140	**69**	104	92	98	93	109	72	14	77	13	55	47	--	57.8	1.0
GARST	5401	66	--	--	--	--	95	--	--	--	--	78	14	59	50	--	63.8	1.0
PIONEER	84G50	73	162	57	117	97	104	108	90	72	16	78	15	58	49	--	65.5	1.0
GOLDEN ACRES	3443	71	--	--	--	--	101	--	--	--	--	79	13	57	47	--	60.6	1.0
PHILLIPS	775	74	--	--	--	--	107	--	--	--	--	79	13	59	48	--	57.7	1.0
SORG. PARTNERS	NK6673	67	143	--	105	--	96	95	--	74	14	79	13	56	44	--	58.6	1.0
GOLDEN ACRES	3827	67	158	--	112	--	96	105	--	74	16	79	15	58	48	--	63.4	1.0
GOLDEN ACRES	3552	67	147	--	107	--	97	98	--	75	15	80	14	57	44	--	58.6	1.0
MATURITY CHECK	TX2752xTX430	73	156	57	115	95	105	104	90	76	15	80	14	57	47	--	63.0	1.0
ASGROW	A567	78	161	**71**	120	103	112	107	112	75	17	80	16	55	47	--	57.3	1.0
ADVANCED GEN.	A 121	75	147	--	111	--	108	98	--	75	15	81	14	56	43	--	49.3	1.0
ADVANCED GEN.	A 137	73	**172**	--	122	--	104	114	--	76	15	81	14	61	47	--	64.7	1.0
PHILLIPS	758Y	55	--	--	--	--	79	--	--	--	--	81	14	57	47	--	47.8	1.0
PIONEER	84G62	**88**	**175**	66	131	110	126	116	104	76	15	81	14	60	43	--	57.5	1.0
DEKALB	DKS54-00	73	**167**	65	120	102	105	111	102	75	16	81	16	57	49	--	59.8	1.0
ASGROW	A571	67	161	60	114	96	96	107	95	76	14	82	13	56	47	--	61.9	1.0
GOLDEN ACRES	3545	63	--	--	--	--	91	--	--	--	--	82	15	56	47	--	58.9	1.0
GARST	5360	64	--	--	--	--	92	--	--	--	--	82	16	56	42	--	67.0	0.9
DEKALB	DKS53-11	68	**167**	**71**	117	102	98	111	111	77	17	82	17	57	50	--	57.1	1.0
	AVERAGES	70	150	63	110	94	70	150	63	74	15	79	14	57	47	--	59.6	1.0
	CV(%)	6	5	8	--	--	6	5	8	--	--	2	10	3	5	--	7.0	5.0
	LSD(0.05)*	6	10	7	--	--	9	7	11	--	--	2	2	2	3	--	5.9	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 SILT LOAM SOIL

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

Parsons silt loam; Soybean in 2004

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

Planted on 5/3/2005; Harvested on 9/20/2005

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

Spring and early summer conditions were favorable for crop growth and development. July and August were hot and dry.

	Precipitation		Average Temp.		GDU	
Month	2005	Norm.	2005	Norm.	2005	Norm.
Nov.-Mar	14.6	10.5	41	40		
April	2.2	3.7	56	57	645	668
May	5.6	5.0	64	66	913	952
June	6.7	4.8	75	74	1212	1178
July	3.8	3.5	78	80	1348	1385
August	4.5	3.9	79	79	1370	1345
Sept.	1.6	4.5	75	71	1187	1075
Oct.	2.4	3.8	59	60	750	772
Totals:	41.4	39.6	58	57	7,425	7,373

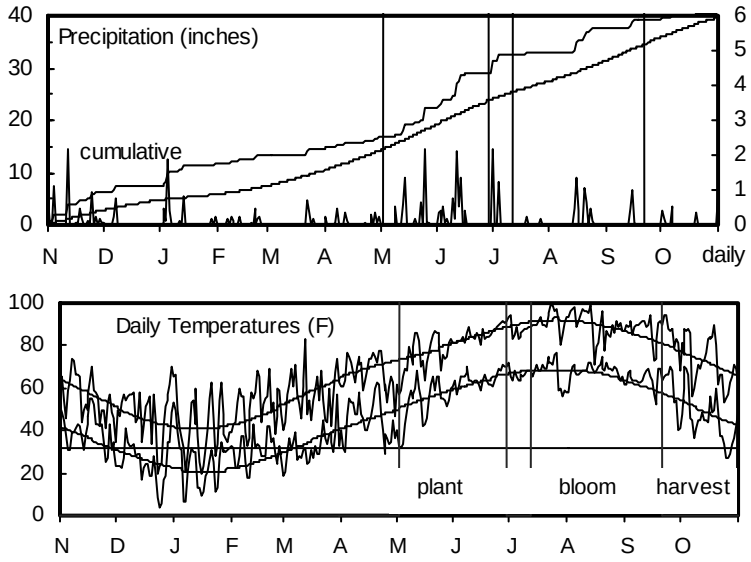


Table 8. Parsons Grain Sorghum Performance Test, 2003-2005.

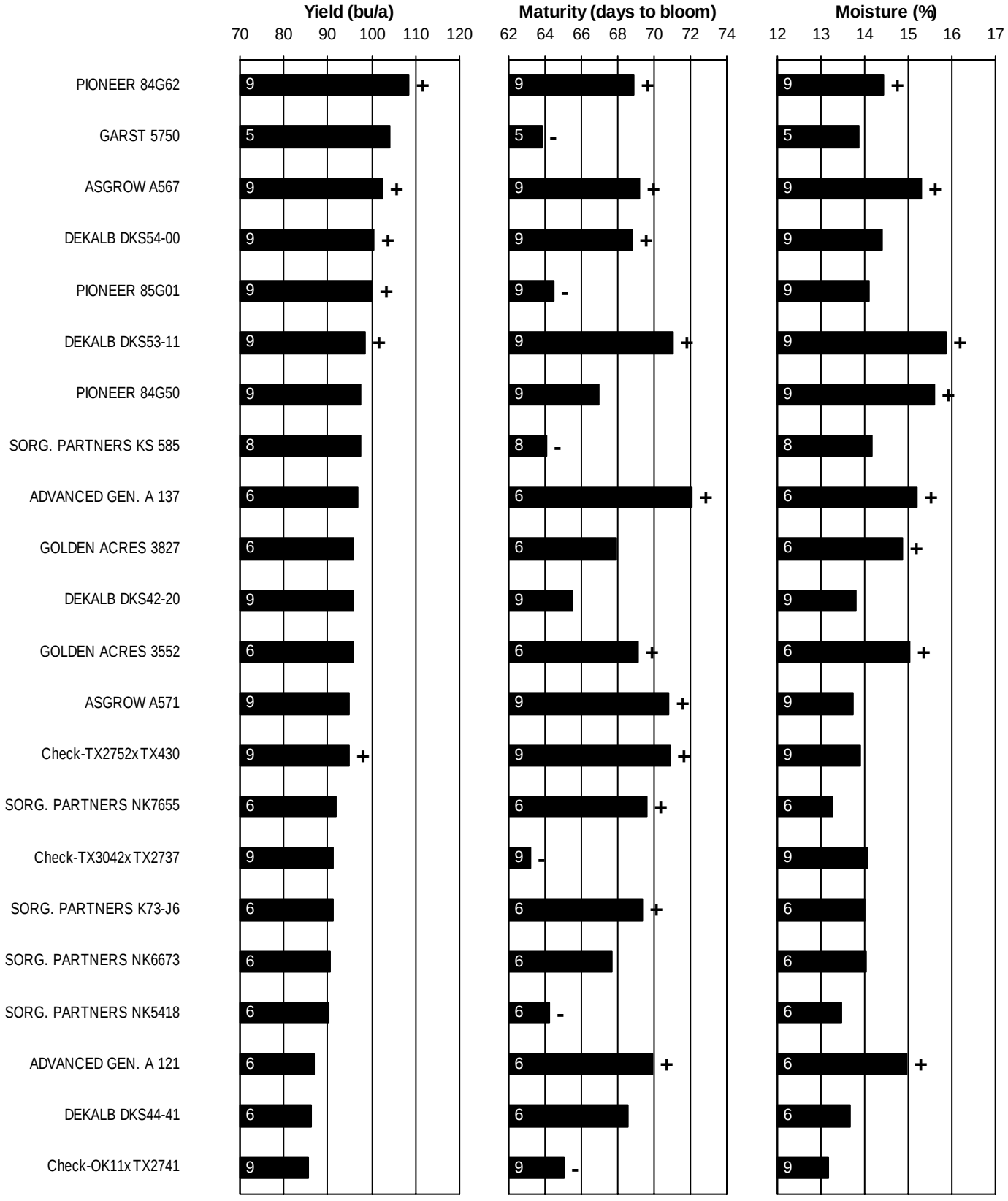
		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
SORG. PARTNERS	KS 310	117	--	--	--	--	114	--	--	--	--	56	14	57	46	0	65.0	1.2
MATURITY CHECK	TX3042xTX2737	80	126	89	103	98	78	100	97	59	14	59	14	58	56	68	50.4	1.3
SORG. PARTNERS	KS 585	105	117	**103**	111	108	102	93	112	60	14	59	14	60	55	34	52.7	1.3
GARST	5750	**138**	128	**101**	133	123	135	102	111	60	13	60	14	59	58	2	64.4	1.2
PIONEER	85G01	112	**137**	**101**	124	116	109	109	110	61	14	60	15	58	57	19	63.4	1.1
MATURITY CHECK	OK11xTX2741	75	122	79	98	92	73	97	87	61	14	61	15	56	53	45	58.5	1.1
GOLDEN ACRES	3443	95	--	--	--	--	92	--	--	--	--	62	15	57	57	51	48.7	1.2
DEKALB	DKS42-20	109	126	**101**	117	112	106	100	111	62	14	63	14	58	61	27	55.8	1.3
PIONEER	84G50	123	**135**	81	129	113	120	108	88	63	14	64	14	60	63	29	59.0	1.3
SORG. PARTNERS	NK6673	84	131	--	107	--	82	104	--	64	15	64	14	56	58	52	56.2	1.2
GOLDEN ACRES	3552	109	121	--	115	--	106	97	--	66	15	66	14	58	59	6	55.6	1.1
NC+	7B47	104	--	**101**	--	--	101	--	111	--	--	66	14	58	54	12	51.4	1.4
DEKALB	DKS54-00	104	**145**	94	125	114	101	115	102	66	15	66	15	58	62	14	60.6	1.1
ADVANCED GEN.	A 121	66	115	--	90	--	64	91	--	67	15	67	15	56	52	28	46.7	1.2
GOLDEN ACRES	3827	110	120	--	115	--	107	95	--	66	15	67	15	60	59	7	56.1	1.2
GOLDEN ACRES	3545	103	--	--	--	--	101	--	--	--	--	68	15	58	60	26	55.1	1.2
NC+	7R34	117	129	--	123	--	114	103	--	66	15	68	15	59	64	3	51.3	1.5
PIONEER	84G62	119	**148**	**106**	133	124	116	117	116	66	15	68	15	58	59	19	54.2	1.2
ASGROW	A571	96	**141**	81	119	106	93	112	89	67	14	69	14	56	62	39	62.8	1.0
GARST	5401	124	--	--	--	--	120	--	--	--	--	69	14	60	65	1	59.8	1.3
MATURITY CHECK	TX2752xTX430	87	**135**	92	111	105	85	107	101	67	14	69	14	58	59	67	46.8	1.4
ASGROW	A567	89	**143**	**102**	116	111	87	113	112	68	15	69	15	59	60	10	51.7	1.1
ADVANCED GEN.	A 137	108	117	--	113	--	105	93	--	69	15	70	15	59	57	6	48.6	1.4
DEKALB	DKS53-11	92	130	**101**	111	108	90	103	111	70	15	70	15	58	59	3	44.9	1.3
	AVERAGES	103	126	91	114	107	103	126	91	65	15	65	15	58	58	24	55.0	1.2
	CV(%)	9	8	8	--	--	9	8	8	--	--	2	3	1	5	77	8.7	10.1
	LSD(0.05)*	13	14	10	--	--	13	12	11	--	--	2	1	1	4	26	6.8	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.

Table 9. SOUTHEAST Kansas Grain Sorghum Hybrid Yield Summary (% of test avg.), 2005.

BRAND/NAME	FRD *	CHD	LBD	AVG.
ADVANCED GEN.				
A 121	99	108	64	91
A 137	100	104	105	103
ASGROW				
A567	106	112	87	102
A571	96	96	93	95
DEKALB				
DKS42-20	99	98	106	101
DKS53-11	99	98	90	95
DKS54-00	103	105	101	103
GARST				
5360	98	92	--	--
5401	104	95	120	106
5750	--	--	135	--
GOLDEN ACRES				
3443	106	101	92	100
3545	100	91	101	97
3552	101	97	106	101
3827	100	96	107	101
MIDLAND				
MG4758Y	90	--	--	--
MG4772	99	--	--	--
NC+				
7B47	--	--	101	--
7R34	--	--	114	--
PHILLIPS				
758Y	--	79	--	--
775	--	107	--	--
PIONEER				
84G50	107	104	120	110
84G62	105	126	116	116
85G01	95	105	109	103
SORG. PARTNERS				
KS 310	--	--	114	--
KS 585	--	94	102	--
NK6673	97	96	82	92
NK7633	97	--	--	--
MATURITY CHECK				
OK11xTX2741	97	101	73	90
TX2752xTX430	100	105	85	97
TX3042xTX2737	101	89	78	89
AVERAGES (bu/a)	101	70	103	91
CV(%)	6	6	9	--
LSD (0.05)	9	9	13	--

* 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, 2003-2005.

CENTRAL KANSAS DRYLAND GRAIN SORGHUM TEST ON SANDY LOAM SOIL

Clayton Short farm; Kraig Roozeboom, agronomist

Hord silt loam; Soybean in 2004

90 - 35 - 0 lb/a N, P, K

Planted on 5/9/2005; Harvested on 9/21/2005

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

Hot, dry conditions in July and early August during heading and early grain fill caused extensive stress-related lodging in most entries.

	Precipitation		Average Temp.		GDU	
Month	2005	Norm.	2005	Norm.	2005	Norm.
Nov.-Mar	10.0	6.9	37	37		
April	2.9	3.0	54	55	578	593
May	2.4	5.1	63	65	891	923
June	5.6	4.2	76	75	1230	1211
July	1.8	4.3	80	81	1387	1431
August	5.8	3.5	79	80	1359	1394
Sept.	1.3	2.5	73	71	1143	1072
Oct.	1.4	2.6	58	58	719	727
Totals:	31.3	32.1	56	56	7,307	7,351

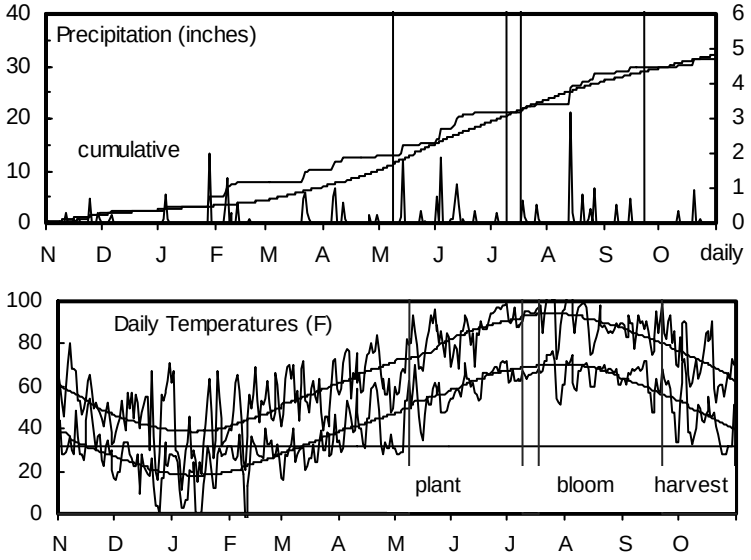


Table 10. Assaria Dryland Grain Sorghum Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
PIONEER	85G46	91	--	--	--	--	98	--	--	--	--	61	14	55	46	30	70.8	1.2
TRIUMPH	TR 438	**108**	--	--	--	--	117	--	--	--	--	62	11	58	46	15	74.7	1.2
PHILLIPS	665	76	--	--	--	--	82	--	--	--	--	62	12	54	45	63	58.6	1.4
MATURITY CHECK	OK11xTX2741	76	--	--	--	--	82	--	--	--	--	62	13	53	42	15	80.2	1.0
GARST	5750	**98**	--	--	--	--	106	--	--	--	--	64	12	55	49	25	69.5	1.3
DEKALB	DKS35-70	**96**	--	--	--	--	103	--	--	--	--	64	13	54	43	3	69.4	1.0
MATURITY CHECK	TX3042xTX2737	92	--	--	--	--	100	--	--	--	--	64	13	53	56	35	67.1	1.1
PIONEER	85G01	91	--	--	--	--	98	--	--	--	--	64	14	53	49	10	69.5	1.2
ASGROW	PULSAR	**99**	--	--	--	--	107	--	--	--	--	64	15	53	48	5	61.8	1.4
DEKALB	DKS42-20	90	--	--	--	--	98	--	--	--	--	64	15	49	53	3	74.2	1.0
SORG. PARTNERS	NK4420	61	--	--	--	--	65	--	--	--	--	64	15	51	46	60	73.7	1.2
DEKALB	DKS37-07	79	--	--	--	--	85	--	--	--	--	64	16	54	51	15	60.8	1.2
OHLDE	O-530	89	--	--	--	--	96	--	--	--	--	65	12	55	46	18	74.7	1.0
OHLDE	O-525	**107**	--	--	--	--	116	--	--	--	--	66	9	58	43	20	66.6	1.1
PHILLIPS	775	**97**	--	--	--	--	104	--	--	--	--	66	11	54	46	20	73.4	1.0
DYNA-GRO	DG-752B	76	--	--	--	--	82	--	--	--	--	66	12	52	48	20	60.7	1.2
GARST	5401	92	--	--	--	--	99	--	--	--	--	66	13	57	52	20	64.7	1.2
SORG. PARTNERS	NK6673	76	--	--	--	--	82	--	--	--	--	66	13	49	49	30	72.6	1.2
DEKALB	DKS54-00	**122**	--	--	--	--	132	--	--	--	--	66	16	52	56	0	78.1	1.0
TRIUMPH	TRX44735	94	--	--	--	--	101	--	--	--	--	66	16	53	47	0	50.3	1.3
PHILLIPS	758Y	90	--	--	--	--	98	--	--	--	--	67	14	54	51	0	58.2	1.1
ASGROW	A567	**97**	--	--	--	--	104	--	--	--	--	67	16	55	50	3	68.7	1.0
TRIUMPH	TR 463	**105**	--	--	--	--	113	--	--	--	--	68	10	55	49	3	72.9	1.0

(continued)

Table 10. Assaria Dryland Grain Sorghum Performance Test, 2003-2005 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
		2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
TRIUMPH	TR 481	95	--	--	--	--	102	--	--	--	--	68	11	56	52	13	64.2	1.0
OHLDE	O-567	84	--	--	--	--	91	--	--	--	--	68	12	53	46	0	71.0	1.0
PIONEER	84G62	**105**	--	--	--	--	113	--	--	--	--	68	12	57	51	3	68.9	1.0
DYNA-GRO	DG-780B	**104**	--	--	--	--	113	--	--	--	--	68	14	56	52	40	71.3	1.1
MATURITY CHECK	TX2752xTX430	87	--	--	--	--	94	--	--	--	--	68	14	53	50	30	78.2	1.0
DEKALB	DKS53-11	**104**	--	--	--	--	112	--	--	--	--	68	16	55	44	0	64.2	1.0
ASGROW	A571	**100**	--	--	--	--	108	--	--	--	--	69	12	53	52	3	74.2	1.0
	AVERAGES	93	--	--	--	--	93	--	--	--	--	66	13	54	49	17	68.8	1.1
	CV(%)	14	--	--	--	--	14	--	--	--	--	2	17	3	6	137	10.4	12.2
	LSD(0.05)*	27	--	--	--	--	30	--	--	--	--	2	5	4	6	46	14.7	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.

CENTRAL KANSAS GRAIN SORGHUM TEST ON SILTY CLAY LOAM SOIL

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

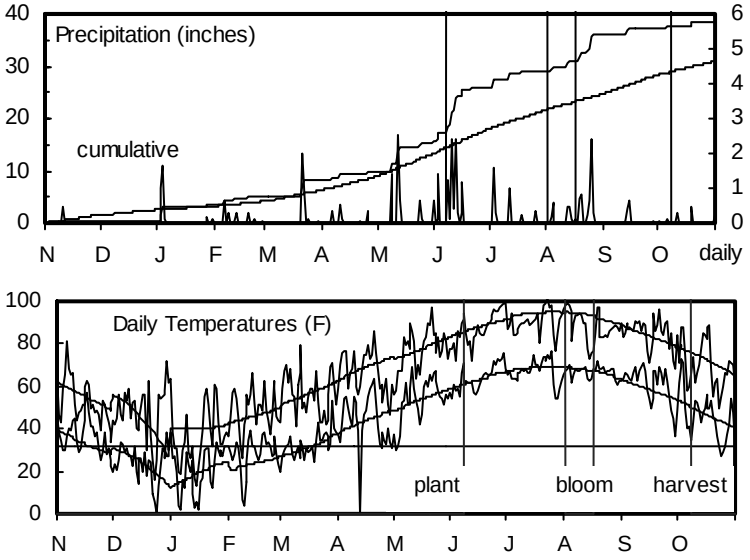
Ladysmith silty clay loam; Soybean in 2004

90 - 37 - 0 lb/a N, P, K

Planted on 6/8/2005; Harvested on 10/7/2005

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

Emergence was reduced for some hybrids due to heavy rains immediately after planting (8.35" in 8 days). July and August temperatures were slightly below normal, but September was slightly warmer than normal. Limited drought stress occurred in July and early August and again in September, but rainfall during the rest of the season was favorable. Neck rot caused lodging in some plots.



	Precipitation		Average Temp.		GDU	
Month	2005	Norm.	2005	Norm.	2005	Norm.
Nov.-Mar	8.3	6.0	38	37		
April	1.5	2.7	55	56	599	631
May	6.0	4.3	66	66	955	952
June	9.9	4.8	76	76	1231	1216
July	3.5	3.8	79	81	1355	1431
August	7.0	3.1	77	80	1310	1381
Sept.	1.2	3.6	73	71	1144	1079
Oct.	1.2	2.5	59	60	729	765
Totals:	38.5	30.7	56	56	7,323	7,455

Table 11. Hesston Grain Sorghum Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
SORG. PARTNERS	KS 310	80	--	--	--	--	76	--	--	--	--	53	14	54	41	0	32.5	1.2
GARST	5750	85	99	46	92	77	81	100	115	57	15	55	14	54	43	0	30.2	1.6
DEKALB	DKS37-07	101	101	**54**	101	85	96	102	134	59	15	56	14	57	44	0	32.1	1.5
ASGROW	PULSAR	86	88	**50**	87	75	82	89	125	59	14	57	14	55	39	1	23.6	1.9
PIONEER	85G46	107	--	--	--	--	102	--	--	--	--	59	13	55	46	0	31.8	1.4
DEKALB	DKS42-20	114	107	**56**	110	92	109	108	140	61	14	59	14	57	44	0	32.4	1.6
DEKALB	DKS35-70	106	--	--	--	--	101	--	--	--	--	60	14	56	40	0	26.7	1.8
MATURITY CHECK	OK11xTX2741	87	97	**49**	92	77	83	97	122	61	14	60	14	56	42	0	33.6	1.1
MATURITY CHECK	TX3042xTX2737	82	87	43	85	71	78	88	108	60	14	60	14	55	47	2	16.8	2.0
OHLDE	O-567	105	--	--	--	--	100	--	--	--	--	60	14	55	44	0	35.0	1.2
SORG. PARTNERS	KS 585	105	108	**50**	106	88	100	109	125	61	15	60	14	57	42	0	28.7	1.8
GARST	N2512	**124**	--	--	--	--	118	--	--	--	--	61	14	57	48	0	35.7	1.2
MIDLAND	MG4748	**120**	118	--	119	--	114	119	--	63	15	61	14	56	48	0	37.8	1.1
OHLDE	O-530	109	--	--	--	--	104	--	--	--	--	61	14	56	45	1	33.8	1.2
ADVANCED GEN.	A 115C	108	100	**51**	104	86	102	101	128	64	14	62	14	57	45	1	28.8	1.3
GARST	5401	114	116	--	115	--	109	117	--	64	15	62	14	58	50	0	30.2	1.7
MIDLAND	MG4665	**118**	107	34	113	86	112	108	86	64	15	62	14	55	47	0	36.5	1.3
PHILLIPS	665	114	--	--	--	--	109	--	--	--	--	62	14	56	47	0	33.4	1.4
CROPLAN GEN.	494	**119**	--	--	--	--	114	--	--	--	--	62	15	57	47	1	33.7	1.2

(continued)

Table 11. Hesston Grain Sorghum Performance Test, 2003-2005 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
		2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
DYNA-GRO	DGX-1755	93	108	--	100	--	88	109	--	64	14	63	14	56	45	0	34.9	1.1
FONTANELLE	GE-4532	**116**	--	--	--	--	111	--	--	--	--	63	14	57	48	0	31.7	1.2
PIONEER	85G01	98	96	--	97	--	94	97	--	64	14	63	14	54	46	0	32.0	1.3
SORG. PARTNERS	NK6673	108	89	--	99	--	103	89	--	64	15	63	15	55	45	1	30.1	1.6
ADVANCED GEN.	A 121	81	85	--	83	--	78	85	--	66	14	64	14	55	43	8	18.3	1.5
DYNA-GRO	DG-752B	105	--	--	--	--	101	--	--	--	--	64	14	56	43	1	25.6	1.6
MIDLAND	MG4772	113	--	--	--	--	108	--	--	--	--	64	14	57	48	1	26.2	1.4
SORG. PARTNERS	NK7655	106	--	33	--	--	101	--	83	--	--	64	14	56	44	1	32.0	1.4
TRIUMPH	TR 438	107	89	**49**	98	82	102	89	122	64	14	64	14	57	45	0	25.2	1.5
CROPLAN GEN.	575	115	--	--	--	--	110	--	--	--	--	64	15	56	46	1	28.0	1.4
FONTANELLE	GE-5615	**124**	--	--	--	--	118	--	--	--	--	64	15	57	46	0	30.6	1.3
SORG. PARTNERS	NK7633	87	94	**52**	90	78	83	94	131	66	15	64	15	57	43	0	32.1	1.3
ASGROW	A571	**118**	99	24	108	80	112	100	60	67	15	65	14	56	47	1	34.2	1.1
DEKALB	DKS53-11	112	116	42	114	90	107	117	105	67	15	65	14	56	47	0	29.2	1.1
PIONEER	84G62	113	109	20	111	81	108	110	50	67	14	65	14	56	47	0	26.5	1.6
ADVANCED GEN.	A 137	109	103	--	106	--	104	104	--	67	15	66	14	58	46	0	36.3	1.2
ASGROW	A567	90	111	**57**	101	86	86	112	143	66	15	66	15	56	47	2	20.5	1.5
DEKALB	DKS54-00	**130**	97	19	113	82	123	98	47	68	15	66	15	56	50	0	36.8	1.2
GARST	5360	85	119	--	102	--	81	120	--	66	15	66	15	55	46	0	31.5	1.2
MATURITY CHECK	TX2752xTX430	95	93	34	94	74	91	94	84	68	15	69	14	56	44	3	27.2	1.4
	AVERAGES	105	99	40	102	81	105	99	40	63	14	62	14	56	45	1	30.3	1.4
	CV(%)	8	10	18	--	--	8	10	18	--	--	2	2	2	3	285	11.7	12.3
	LSD(0.05)*	14	16	10	--	--	13	16	24	--	--	2	1	2	2	3	5.8	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.

CENTRAL KANSAS GRAIN SORGHUM TEST ON SILT LOAM SOIL

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

Ost loam; Wheat in 2004

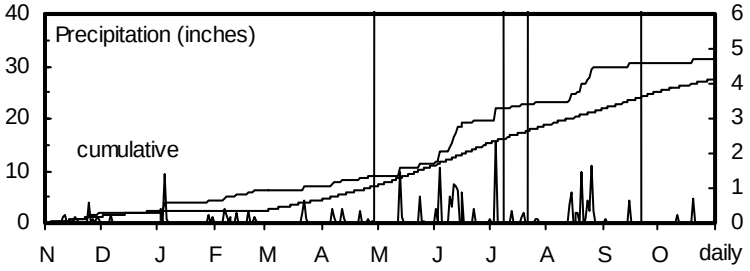
120 - 40 - 0 lb/a N, P, K

Planted on 4/30/2005; Harvested on 9/20/2005

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

Planted no-till into heavy wheat stubble under dry soil conditions. Stands were somewhat variable. Hail and wind on July 3 caused minimal lasting damage. August precipitation was above normal. Bird feeding likely lowered yields of all hybrids.

	Precipitation		Average Temp.		GDU	
Month	2005	Norm.	2005	Norm.	2005	Norm.
Nov.-Mar	7.2	4.2	38	37		
April	1.8	2.7	54	56	590	617
May	2.5	4.0	66	65	959	927
June	8.1	4.2	75	75	1206	1196
July	3.6	3.4	78	81	1335	1416
August	6.6	3.1	78	79	1320	1361
Sept.	0.8	3.3	72	70	1118	1053
Oct.	1.1	2.5	58	59	723	732
Totals:	31.6	27.4	56	56	7,251	7,302



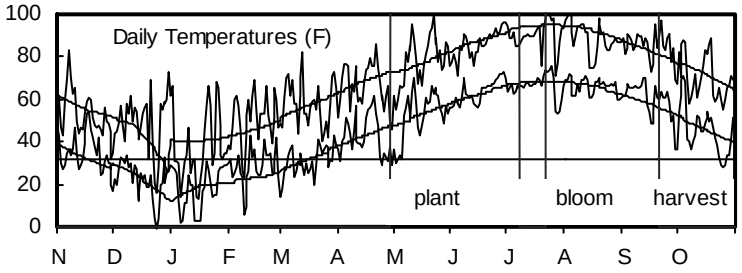


Table 12. Hutchinson Grain Sorghum Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
GARST	5750	**60**	143	**30**	101	78	118	99	141	61	13	60	13	57	50	53	42.9	1.4
MATURITY CHECK	TX3042xTX2737	35	139	**27**	87	67	70	97	125	61	14	60	14	56	49	91	37.5	1.5
PIONEER	85G46	49	--	--	--	--	97	--	--	--	--	60	14	57	44	51	48.7	1.2
SORG. PARTNERS	NK4420	31	142	--	87	--	62	99	--	63	14	63	13	57	47	75	50.2	1.1
DEKALB	DKS35-70	42	--	--	--	--	84	--	--	--	--	63	14	56	45	43	36.1	1.4
ADVANCED GEN.	A 115C	47	136	20	92	68	93	95	95	65	14	64	13	57	42	40	44.3	1.2
ASGROW	PULSAR	39	131	24	85	64	77	91	109	64	14	64	14	57	46	59	39.3	1.5
DEKALB	DKS37-07	35	153	26	94	71	68	107	120	64	14	64	14	56	47	78	38.9	1.4
MIDLAND	MG4665	46	140	26	93	71	90	98	119	64	14	64	14	57	44	50	41.1	1.2
TRIUMPH	TR 434	32	--	--	--	--	64	--	--	--	--	64	14	56	48	59	42.1	1.2
DEKALB	DKS54-00	47	161	12	104	74	94	112	56	68	13	65	12	57	52	83	47.8	1.3
FONTANELLE	GE-4532	43	--	--	--	--	84	--	--	--	--	65	13	57	50	60	40.6	1.2
MYCOGEN	M3838	45	--	21	--	--	89	--	99	--	--	65	13	58	43	22	45.3	1.1
DEKALB	DKS42-20	**56**	150	25	103	77	110	104	118	66	14	66	14	57	52	38	40.8	1.4
MIDLAND	MG4748	52	145	--	98	--	102	101	--	67	14	66	14	57	47	48	45.5	1.1
MATURITY CHECK	OK11xTX2741	46	144	21	95	71	92	100	100	66	14	67	13	56	42	32	46.7	1.0
CROPLAN GEN.	575	50	--	--	--	--	99	--	--	--	--	68	14	58	48	49	43.5	1.2
GARST	5401	**71**	159	--	115	--	140	111	--	69	14	68	14	58	54	34	42.8	1.4
OHLDE	O-530	45	--	--	--	--	88	--	--	--	--	68	14	57	43	25	43.7	1.1
TRIUMPH	TRX44735	50	--	--	--	--	98	--	--	--	--	68	14	56	46	20	32.4	1.5
ASGROW	A567	42	160	23	101	75	84	112	105	69	15	68	15	58	49	41	41.5	1.1

(continued)

Table 12. Hutchinson Grain Sorghum Performance Test, 2003-2005 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
		2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
PIONEER	85G01	53	156	25	105	78	104	109	116	67	15	69	15	57	46	40	44.0	1.2
CROPLAN GEN.	514	**57**	161	--	109	--	113	112	--	70	14	70	14	58	51	44	37.0	1.5
MIDLAND	MG4772	49	--	--	--	--	96	--	--	--	--	70	14	57	46	53	41.0	1.2
MYCOGEN	1G600	**61**	--	--	--	--	119	--	--	--	--	70	15	56	46	30	47.5	1.3
PIONEER	84G62	**57**	**178**	**27**	117	87	113	124	126	70	15	70	15	57	47	20	41.0	1.3
MATURITY CHECK	TX2752xTX430	45	150	24	98	73	89	105	112	71	15	71	15	57	51	56	40.7	1.3
MYCOGEN	697	**66**	--	--	--	--	130	--	--	--	--	71	15	57	47	16	52.5	1.1
DEKALB	DKS53-11	**58**	161	16	110	78	115	112	74	71	16	71	16	58	50	20	38.4	1.4
MYCOGEN	737	**63**	--	--	--	--	124	--	--	--	--	72	14	56	43	37	41.4	1.2
SORG. PARTNERS	NK7655	55	146	23	101	75	109	102	107	72	14	72	14	57	48	22	39.2	1.4
ADVANCED GEN.	A 121	**58**	148	--	103	--	114	103	--	71	15	72	15	56	45	14	34.4	1.2
ASGROW	A571	**64**	152	17	108	77	125	106	79	72	15	72	15	56	51	19	45.5	1.2
TRIUMPH	TR 463	**62**	--	--	--	--	122	--	--	--	--	72	15	56	47	27	41.5	1.3
OHLDE	O-567	**63**	--	--	--	--	124	--	--	--	--	72	16	56	47	25	45.3	1.2
FONTANELLE	GE-5615	47	--	--	--	--	94	--	--	--	--	73	17	57	46	35	37.4	1.3
ADVANCED GEN.	A 137	55	--	--	--	--	109	--	--	--	--	74	16	57	48	27	43.8	1.2
	AVERAGES	51	144	22	97	72	51	144	22	68	14	68	14	57	47	41	42.2	1.3
	CV(%)	22	6	24	--	--	22	6	24	--	--	5	10	2	6	53	10.6	15.2
	LSD(0.05)*	16	13	6	--	--	31	9	28	--	--	5	2	1	4	31	6.3	0.3

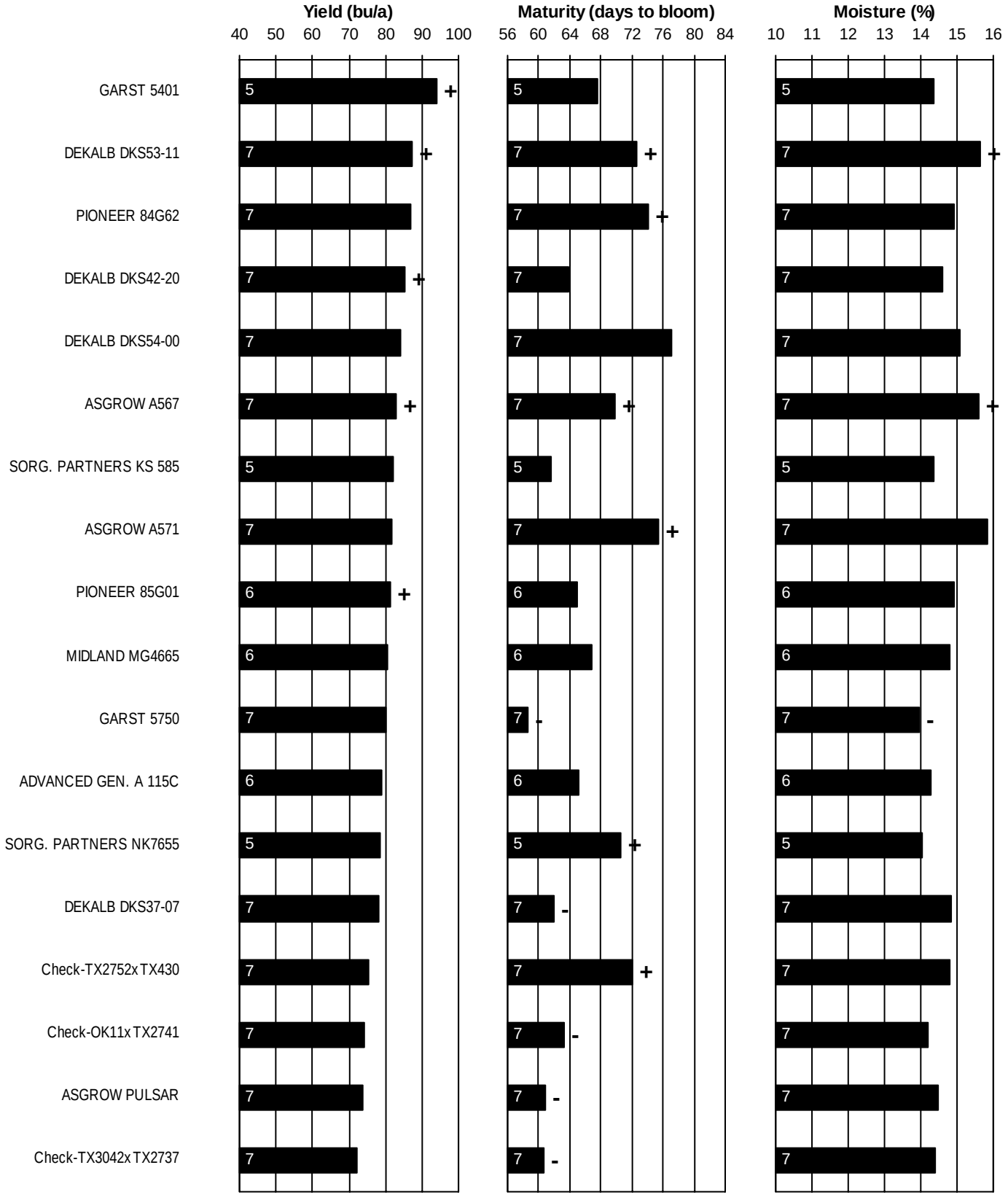
*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

Table 13. CENTRAL Kansas Sorghum Hybrid Yield Summary (% of test avg.), 2005.

BRAND/NAME	SAD*	HVD	RND	AVG.
ADVANCED GEN.				
A 115C	--	102	93	--
A 121	--	78	114	--
A 137	--	104	109	--
ASGROW				
A567	104	86	84	91
A571	108	112	125	115
PULSAR	107	82	77	89
CROPLAN GEN.				
494	--	114	--	--
514	--	--	113	--
575	--	110	99	--
DEKALB				
DKS35-70	103	101	84	96
DKS37-07	85	96	68	83
DKS42-20	98	109	110	105
DKS53-11	112	107	115	112
DKS54-00	132	123	94	116
DYNA-GRO				
DG-752B	82	101	--	--
DG-780B	113	--	--	--
DGX-1755	--	88	--	--
FONTANELLE				
GE-4532	--	111	84	--
GE-5615	--	118	94	--
GARST				
5360	--	81	--	--
5401	99	109	140	116
5750	106	81	118	101
N2512	--	118	--	--
MIDLAND				
MG4665	--	112	90	--
MG4748	--	114	102	--
MG4772	--	108	96	--
MYCOGEN				
1G600	--	--	119	--
697	--	--	130	--
737	--	--	124	--
M3838	--	--	89	--

BRAND/NAME	SAD	HVD	RND	AVG.
OHLDE				
O-525	116	--	--	--
O-530	96	104	88	96
O-567	91	100	124	105
PHILLIPS				
665	82	109	--	--
758Y	98	--	--	--
775	104	--	--	--
PIONEER				
84G62	113	108	113	111
85G01	98	94	104	99
85G46	98	102	97	99
SORG. PARTNERS				
KS 310	--	76	--	--
KS 585	--	100	--	--
NK4420	65	--	62	--
NK6673	82	103	--	--
NK7633	--	83	--	--
NK7655	--	101	109	--
TRIUMPH				
TR 434	--	--	64	--
TR 438	117	102	--	--
TR 463	113	--	122	--
TR 481	102	--	--	--
TRX44735	101	--	98	--
MATURITY CHECK				
OK11xTX2741	82	83	92	85
TX2752xTX430	94	91	89	91
TX3042xTX2737	100	78	70	83
AVERAGES (bu/a)	93	105	51	83
CV(%)	14	8	22	--
LSD (0.05)	30	13	31	--

* SAD = Saline Co., Assaria HVD = Harvey Co., Hesston RND = Reno Co., Hutchinson



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

Figure 6. CENTRAL Kansas sorghum hybrid standardized performance summary, 2003-2005.

WEST KANSAS GRAIN SORGHUM TEST ON SILT LOAM SOIL

Agricultural Research Center, Hays; Kenneth Kofoid, agronomist

Harney silt loam; Soybean in 2004

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

Planted on 5/27/2005; Harvested on 10/31/2005

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

Good emergence and early growth. Late June and July were warm and dry. Mid-August rains stimulated tillering, especially in the later hybrids.

	Precipitation		Average Temp.		GDU	
Month	2005	Norm.	2005	Norm.	2005	Norm.
Nov.-Mar	6.5	3.5	37	33		
April	2.3	1.8	54	51	564	478
May	1.6	3.1	64	62	906	833
June	3.0	3.8	75	72	1202	1109
July	2.3	3.4	80	78	1394	1344
August	4.3	2.8	78	76	1330	1286
Sept.	1.8	2.2	72	68	1106	984
Oct.	2.7	1.4	57	55	697	625
Totals:	24.5	22.0	55	52	7,199	6,659

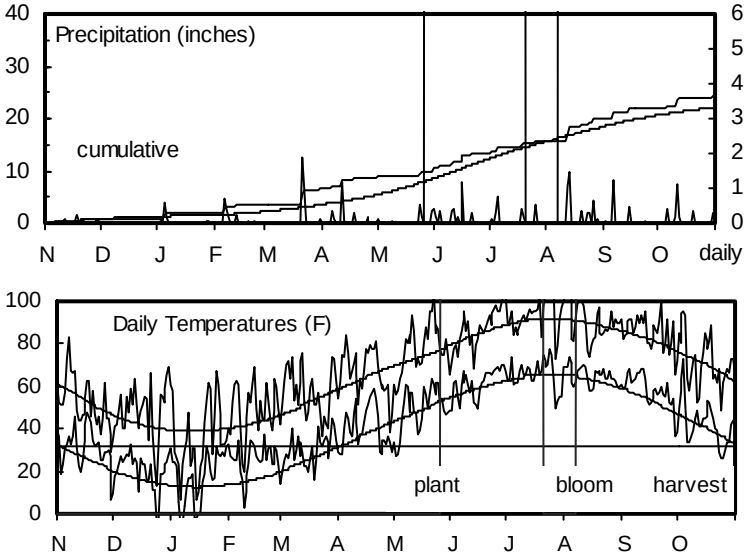


Table 14. Hays Grain Sorghum Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
DEKALB	DKS29-28	59	--	--	--	--	84	--	--	--	--	54	12	55	29	--	54.9	0.8
GARST	5750	63	128	54	95	81	90	106	117	63	15	58	13	61	32	--	45.3	0.9
MATURITY CHECK	TX3042xTX2737	68	126	51	97	82	97	105	112	63	15	58	13	59	32	--	42.1	1.0
NC+	5B89	68	--	52	--	--	97	--	113	--	--	58	13	60	32	--	51.1	1.0
PIONEER	86G08	**75**	132	--	103	--	106	110	--	64	15	59	13	60	32	--	40.7	1.0
ASGROW	PULSAR	60	125	41	92	75	85	104	90	65	15	60	13	59	28	--	41.0	1.0
DEKALB	DKS37-07	71	130	57	100	86	101	108	123	65	15	60	13	60	32	--	45.3	0.9
OHLDE	O-525	**76**	--	--	--	--	109	--	--	--	--	61	13	58	31	--	42.5	0.9
MATURITY CHECK	OK11xTX2741	69	112	40	90	74	98	93	88	67	15	61	14	57	32	--	50.3	0.8
DEKALB	DKS35-70	**80**	--	--	--	--	114	--	--	--	--	61	15	61	30	--	43.1	1.1
ADVANCED GEN.	A 110	**76**	--	--	--	--	109	--	--	--	--	62	12	58	34	--	41.6	0.9
MYCOGEN	1G600	**75**	137	--	106	--	107	114	--	67	15	62	13	58	32	--	52.3	0.7
NC+	Y363	68	--	40	--	--	97	--	87	--	--	62	13	60	33	--	42.6	1.0
SORG. PARTNERS	KS 585	68	118	52	93	79	97	98	114	65	15	62	13	62	30	--	44.8	0.9
TRIUMPH	TR 434	67	--	--	--	--	95	--	--	--	--	62	13	58	31	--	46.6	0.8
TRIUMPH	TR 438	69	128	52	99	83	99	107	114	66	16	62	14	60	32	--	51.1	0.8
PIONEER	85G46	**84**	--	--	--	--	120	--	--	--	--	63	15	61	33	--	50.5	0.8
ADVANCED GEN.	A 115C	**76**	--	--	--	--	109	--	--	--	--	64	13	60	30	--	43.6	0.8
CROPLAN GEN.	494	67	131	--	99	--	95	110	--	68	16	64	14	59	34	--	50.5	0.8
PHILLIPS	672	70	--	--	--	--	100	--	--	--	--	64	14	61	32	--	50.3	0.8
PIONEER	85G01	**80**	142	49	111	90	113	119	108	67	16	64	15	56	33	--	51.8	0.8
OHLDE	O-530	**81**	--	--	--	--	115	--	--	--	--	65	13	60	31	--	40.5	1.0
CROPLAN GEN.	484	72	--	--	--	--	103	--	--	--	--	65	14	56	28	--	45.9	1.0

(continued)

Table 14. Hays Grain Sorghum Performance Test, 2003-2005 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
		2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
PHILLIPS	725	62	--	--	--	--	88	--	--	--	--	66	12	59	32	--	46.6	0.9
FONTANELLE	GE-4532	72	129	--	100	--	102	107	--	68	15	66	13	59	33	--	42.6	0.9
MYCOGEN	M3838	73	--	53	--	--	104	--	115	--	--	66	14	62	30	--	43.4	0.9
MYCOGEN	627	**78**	114	54	96	82	111	95	118	70	15	67	13	61	30	--	46.1	0.9
OHLDE	O-567	**79**	--	--	--	--	112	--	--	--	--	67	13	59	31	--	41.0	1.0
PHILLIPS	758Y	59	--	--	--	--	84	--	--	--	--	67	13	57	30	--	35.7	1.0
GARST	5401	74	132	--	103	--	106	110	--	73	17	67	16	63	36	--	42.8	1.1
DYNA-GRO	DGX-1755	58	129	--	93	--	82	107	--	73	15	68	14	56	33	--	47.7	0.8
SORG. PARTNERS	NK7633	**75**	135	**58**	105	90	107	113	127	71	17	68	16	57	32	--	51.7	0.8
TRIUMPH	TR 459	65	118	**62**	91	82	92	99	134	69	17	68	16	62	32	--	46.3	0.9
MATURITY CHECK	TX2752xTX430	57	130	48	93	78	81	108	104	75	15	70	12	54	30	--	36.4	1.1
FONTANELLE	GE-5615	62	129	54	96	82	88	108	118	73	16	72	13	57	32	--	38.5	1.0
	AVERAGES	70	120	46	95	79	70	120	46	67	15	64	13	59	32	--	45.3	0.9
	CV(%)	9	10	16	--	--	9	10	16	--	--	2	6	2	5	--	7.3	11.1
	LSD(0.05)*	10	19	10	--	--	14	16	22	--	--	2	1	2	3	--	5.4	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 FALLOW GRAIN SORGHUM TEST ON SILT LOAM SOIL

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

Keith silt loam; Fallow in 2004

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

Planted on 5/20/2005; Harvested on 10/4/2005

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

Heavy rains after planting (3" in 2 weeks) crusted the soil and reduced stands of all hybrids. The rest of the growing season was favorable, with no insect or disease problems.

	Precipitation		Average Temp.		GDU	
Month	2005	Norm.	2005	Norm.	2005	Norm.
Nov.-Mar	3.8	3.0	36	32		
April	3.6	1.8	50	49	447	421
May	3.8	3.1	61	60	808	762
June	3.1	3.0	71	70	1102	1054
July	2.4	3.1	77	76	1309	1285
August	3.2	2.2	74	74	1226	1216
Sept.	0.1	1.5	69	65	1028	910
Oct.	2.0	1.0	53	53	570	556
Totals:	21.9	18.6	53	51	6,490	6,204

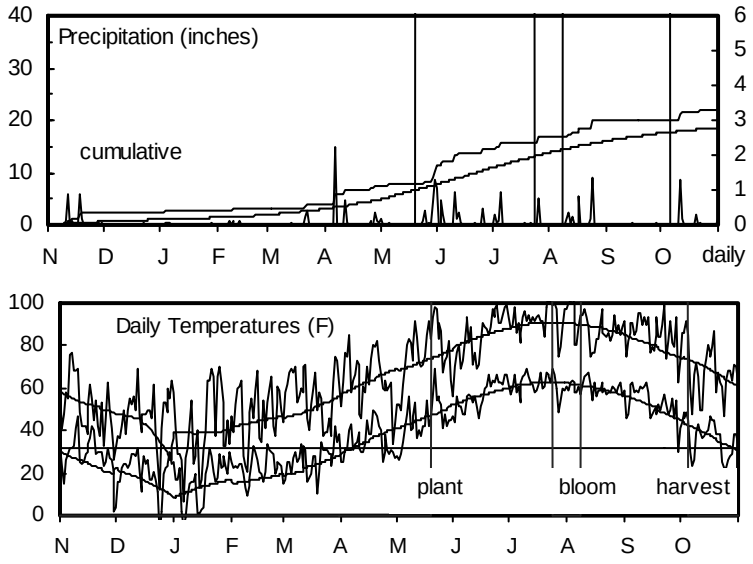


Table 15. Colby Fallow Grain Sorghum Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
SORG. PARTNERS	KS 310	**78**	**62**	--	70	--	107	124	--	65	15	64	12	58	35	0	27.1	1.3
DYNA-GRO	DG-720B	65	--	--	--	--	89	--	--	--	--	65	11	57	31	0	25.2	1.6
DEKALB	DKS29-28	**80**	--	--	--	--	109	--	--	--	--	65	12	60	32	0	27.8	1.7
CROPLAN GEN.	340	**80**	**55**	--	68	--	110	110	--	66	16	66	12	60	38	1	26.9	1.5
NC+	5B89	**88**	--	**20**	--	--	121	--	173	--	--	68	12	60	37	1	26.6	1.7
MATURITY CHECK	TX3042xTX2737	**81**	46	**21**	63	49	111	92	184	70	15	70	11	59	39	3	22.1	1.6
PIONEER	86G08	**85**	46	--	66	--	117	92	--	71	15	70	11	58	37	3	22.4	1.7
ASGROW	PULSAR	**77**	**54**	**17**	65	49	105	108	151	71	15	70	12	58	35	0	20.6	2.0
GARST	5750	67	**62**	12	65	47	92	125	102	70	14	70	12	61	36	0	23.4	1.4
DEKALB	DKS35-70	**78**	--	--	--	--	107	--	--	--	--	71	11	58	35	0	21.5	1.9
SORG. PARTNERS	NK4420	**78**	52	--	65	--	107	105	--	71	14	72	11	60	36	4	25.5	1.5
DEKALB	DKS37-07	74	**62**	12	68	49	102	123	108	72	14	72	12	59	37	0	21.5	1.6
PIONEER	85G46	**89**	--	--	--	--	122	--	--	--	--	73	11	61	38	2	27.8	1.4
NC+	Y363	66	--	10	--	--	90	--	87	--	--	73	12	60	37	0	22.4	1.4
ADVANCED GEN.	A 110	74	--	--	--	--	101	--	--	--	--	74	11	56	36	1	22.5	1.3
ADVANCED GEN.	A 115C	72	--	--	--	--	99	--	--	--	--	74	12	59	37	5	21.8	1.4
PIONEER	85G01	74	**54**	5	64	44	101	108	43	74	15	74	12	60	37	0	26.6	1.2
TRIUMPH	TR 459	65	52	11	59	43	90	105	99	74	15	74	13	60	36	0	23.7	1.2
MATURITY CHECK	OK11xTX2741	70	52	5	61	43	96	105	44	75	15	75	12	58	37	1	25.8	1.3
PHILLIPS	672	75	--	--	--	--	103	--	--	--	--	75	13	59	38	0	25.7	1.3
CROPLAN GEN.	484	67	--	--	--	--	92	--	--	--	--	76	13	59	36	0	21.7	1.4
PHILLIPS	758Y	68	--	--	--	--	94	--	--	--	--	76	13	58	39	0	19.4	1.7
PHILLIPS	725	56	--	--	--	--	77	--	--	--	--	80	13	57	38	0	26.8	1.1
MATURITY CHECK	TX2752xTX430	41	31	1	36	25	57	63	8	82	19	81	16	53	37	1	15.1	1.6
	AVERAGES	73	50	11	61	45	73	50	11	72	15	72	12	59	36	1	23.7	1.5
	CV(%)	13	13	**44**	--	--	13	13	44	--	--	1	8	2	3	174	8.9	12.0
	LSD(0.05)*	14	9	7	--	--	19	19	62	--	--	1	1	2	2	2	3.0	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 FALLOW GRAIN SORGHUM TEST ON SILT LOAM SOIL

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

Ulysses silt loam; Wheat in 2004

108 - 27 - 0 lb/a N, P, K

Planted on 5/27/2005; Harvested on 10/20/2005

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

Planted to-till into good moisture. Good initial growth. Hot, dry conditions in July and August stretched out bloom dates.

	Precipitation		Average Temp.		GDU	
Month	2005	Norm.	2005	Norm.	2005	Norm.
Nov.-Mar	3.9	2.1	37	34		
April	1.8	1.3	50	49	454	430
May	1.6	2.3	61	60	805	772
June	4.5	2.6	71	70	1092	1063
July	1.4	2.5	78	77	1327	1287
August	3.9	2.2	74	74	1225	1209
Sept.	0.3	1.3	70	66	1056	934
Oct.	3.6	0.7	56	54	649	588
Totals:	21.0	15.0	54	52	6,608	6,283

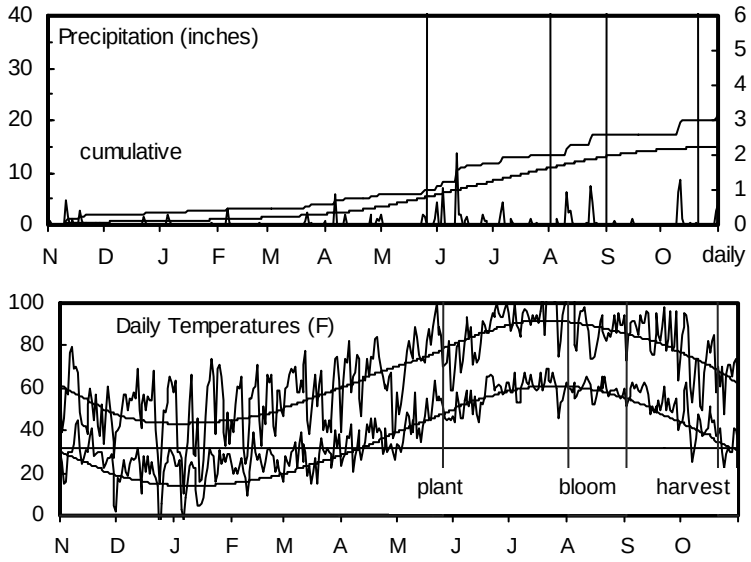


Table 16. Tribune Fallow Grain Sorghum Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
DYNA-GRO	DG-720B	56	--	--	--	--	74	--	--	--	--	66	13	58	33	--	20.1	2.3
DEKALB	DKS29-28	68	--	--	--	--	89	--	--	--	--	66	14	60	33	--	21.6	2.4
PIONEER	85G46	**106**	--	--	--	--	139	--	--	--	--	68	14	60	38	--	23.1	2.4
NC+	5B89	68	--	--	--	--	89	--	--	--	--	69	14	59	35	--	21.1	2.6
GARST	9135	66	--	39	--	--	87	--	82	--	--	70	14	59	36	--	19.8	2.4
PIONEER	86G08	**86**	**71**	--	79	--	113	120	--	70	14	70	14	59	35	--	19.9	2.8
SORG. PARTNERS	KS 310	65	67	--	66	--	85	114	--	69	14	70	14	59	35	--	23.9	2.3
ASGROW	PULSAR	59	59	51	59	56	77	99	107	70	15	70	15	60	35	--	15.6	2.9
DEKALB	DKS37-07	67	67	52	67	62	88	114	111	71	15	71	15	61	38	--	18.4	2.5
MATURITY CHECK	TX3042xTX2737	**88**	66	56	77	70	116	111	119	72	16	74	15	59	40	--	16.9	2.8
DEKALB	DKS35-70	70	--	--	--	--	92	--	--	--	--	75	15	60	35	--	18.9	2.6
TRIUMPH	TR 438	82	**76**	53	79	71	107	129	113	75	16	75	15	59	40	--	23.6	2.0
GARST	5750	85	--	**58**	--	--	111	--	123	--	--	76	15	59	39	--	21.7	2.5
PIONEER	85G01	**94**	**76**	**70**	85	80	123	128	148	74	16	76	15	59	42	--	23.0	2.4
SORG. PARTNERS	NK5418	83	--	56	--	--	109	--	118	--	--	76	15	60	37	--	22.1	2.8
ADVANCED GEN.	A 115C	75	--	--	--	--	98	--	--	--	--	78	14	60	38	--	18.5	2.3
CROPLAN GEN.	494	**96**	67	--	81	--	125	114	--	79	16	80	15	60	43	--	23.6	1.9
DRUSSEL SEED	DSS B64	81	**78**	53	79	71	106	131	112	76	16	80	16	59	38	--	19.7	2.4
CROPLAN GEN.	484	65	--	--	--	--	85	--	--	--	--	81	16	59	40	--	20.7	2.4
DYNA-GRO	DG-740C	78	--	--	--	--	102	--	--	--	--	81	16	58	40	--	23.1	2.4
MATURITY CHECK	OK11xTX2741	71	60	53	65	61	93	101	112	78	15	83	15	58	40	--	21.9	2.2
ADVANCED GEN.	A 110	64	--	--	--	--	84	--	--	--	--	90	16	57	42	--	16.9	2.3
DYNA-GRO	DG-752B	80	--	--	--	--	105	--	--	--	--	92	16	57	41	--	18.8	2.4
MATURITY CHECK	TX2752xTX430	77	35	36	56	50	101	59	76	88	18	97	16	57	46	--	18.6	2.0
	AVERAGES	76	59	47	68	61	76	59	47	74	16	76	15	59	38	--	20.5	2.4
	CV(%)	19	10	25	--	--	19	10	25	--	--	3	2	1	4	--	8.7	11.2
	LSD(0.05)*	20	8	14	--	--	26	14	29	--	--	3	0	1	2	--	2.5	0.4

*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; Monty Spangler, technician

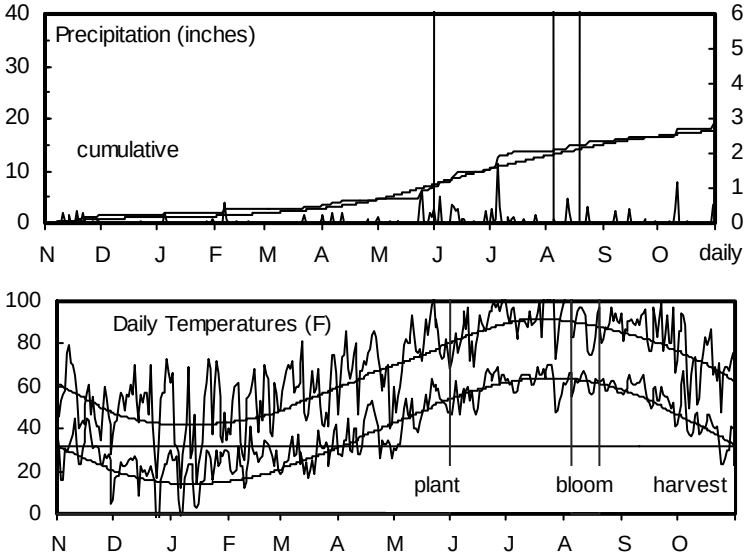
Keith silt loam; Fallow in 2004

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

Planted on 6/1/2005; Harvested on 11/8/2005

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

Good moisture at planting facilitated good stands. Favorable rainfall through early July. Hail on July 4, when the sorghum was at the 6-leaf stage, shredded leaves, but caused little loss of stand. Dry in late July and August.



	Precipitation		Average Temp.		GDU	
Month	2005	Norm.	2005	Norm.	2005	Norm.
Nov.-Mar	3.3	2.8	38	34		
April	1.0	1.6	52	51	531	472
May	2.8	2.9	63	62	888	831
June	3.1	3.0	74	72	1168	1115
July	3.5	2.5	78	78	1331	1321
August	1.7	2.2	76	76	1263	1260
Sept.	1.0	1.6	72	67	1097	973
Oct.	2.8	1.0	57	55	674	620
Totals:	19.3	17.7	55	53	6,952	6,592

Table 17. Garden City Fallow Grain Sorghum Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
PIONEER	86G08	55	**128**	--	92	--	105	151	--	60	14	63	13	60	37	1	42.0	1.5
CROPLAN GEN.	340	30	91	--	61	--	57	108	--	61	14	64	13	60	37	0	42.5	1.4
DEKALB	DKS29-28	21	--	--	--	--	41	--	--	--	--	64	13	61	33	0	43.6	1.4
MATURITY CHECK	TX3042xTX2737	**83**	60	65	72	69	159	70	105	63	15	67	13	61	38	1	44.5	1.4
TRIUMPH	TR 438	41	--	--	--	--	77	--	--	--	--	67	13	61	38	1	46.5	1.2
PHILLIPS	672	43	--	--	--	--	82	--	--	--	--	68	13	61	38	1	42.9	1.4
ASGROW	PULSAR	47	91	46	69	61	89	108	74	66	16	68	14	60	35	1	39.3	1.6
ADVANCED GEN.	A 110	43	--	--	--	--	81	--	--	--	--	69	13	61	36	1	41.2	1.3
DEKALB	DKS35-70	54	--	--	--	--	103	--	--	--	--	69	13	61	36	1	39.4	1.6
DEKALB	DKS37-07	40	**114**	57	77	70	75	135	93	65	15	69	13	61	37	1	40.2	1.4
MATURITY CHECK	OK11xTX2741	53	38	61	46	51	101	45	99	66	15	69	13	60	37	1	48.5	1.2
MIDLAND	MG4748	51	--	--	--	--	97	--	--	--	--	69	13	61	39	1	45.9	1.3
ADVANCED GEN.	A 115C	46	--	--	--	--	87	--	--	--	--	70	13	61	35	1	45.9	1.2
GARST	5750	66	68	**75**	67	70	125	80	123	64	15	70	13	60	37	0	39.1	1.5
MYCOGEN	1G600	57	--	--	--	--	109	--	--	--	--	70	13	60	37	1	42.6	1.2
MYCOGEN	M3838	42	**101**	**75**	72	73	81	120	122	65	14	71	13	61	36	0	42.9	1.3
MYCOGEN	627	48	67	52	58	56	91	80	84	66	15	73	13	60	39	1	33.5	1.5
PIONEER	85G01	**89**	92	59	91	80	170	108	96	67	14	73	13	60	36	1	45.2	1.3
PIONEER	85G46	58	--	--	--	--	111	--	--	--	--	73	13	61	38	2	40.8	1.3
GARST	5401	49	69	--	59	--	93	82	--	71	15	74	13	61	42	1	46.2	1.3
MIDLAND	MG4772	64	--	--	--	--	121	--	--	--	--	74	13	61	39	2	34.8	1.4

(continued)

Table 17. Garden City Fallow Grain Sorghum Performance Test, 2003-2005 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
		2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
SORG. PARTNERS	NK6673	48	**126**	--	87	--	90	148	--	68	15	74	14	60	38	2	39.0	1.4
MATURITY CHECK	TX2752xTX430	65	**95**	52	80	71	124	112	85	71	15	75	13	60	40	1	47.8	1.3
PHILLIPS	758Y	61	--	--	--	--	116	--	--	--	--	75	13	60	38	2	35.0	1.3
MIDLAND	MG4665	60	--	--	--	--	113	--	--	--	--	75	14	60	36	1	38.2	1.4
DRUSSEL SEED	DSS B64	72	74	66	73	70	137	87	107	67	15	76	13	60	37	1	35.8	1.4
CROPLAN GEN.	484	40	--	--	--	--	77	--	--	--	--	76	14	60	37	2	38.0	1.3
GARST	5624	42	--	--	--	--	81	--	--	--	--	78	13	60	36	1	39.1	1.2
PHILLIPS	725	56	--	--	--	--	106	--	--	--	--	79	13	60	39	1	43.6	1.3
SORG. PARTNERS	NK7655	53	--	**77**	--	--	101	--	126	--	--	79	13	60	39	2	39.7	1.4
	AVERAGES	53	85	61	69	66	53	85	61	66	15	71	13	60	37	1	41.5	1.3
	CV(%)	16	39	16	--	--	16	39	16	--	--	3	2	1	4	93	9.5	8.8
	LSD(0.20)*	14	35	13	--	--	26	41	22	--	--	4	0	1	2	2	6.4	0.2

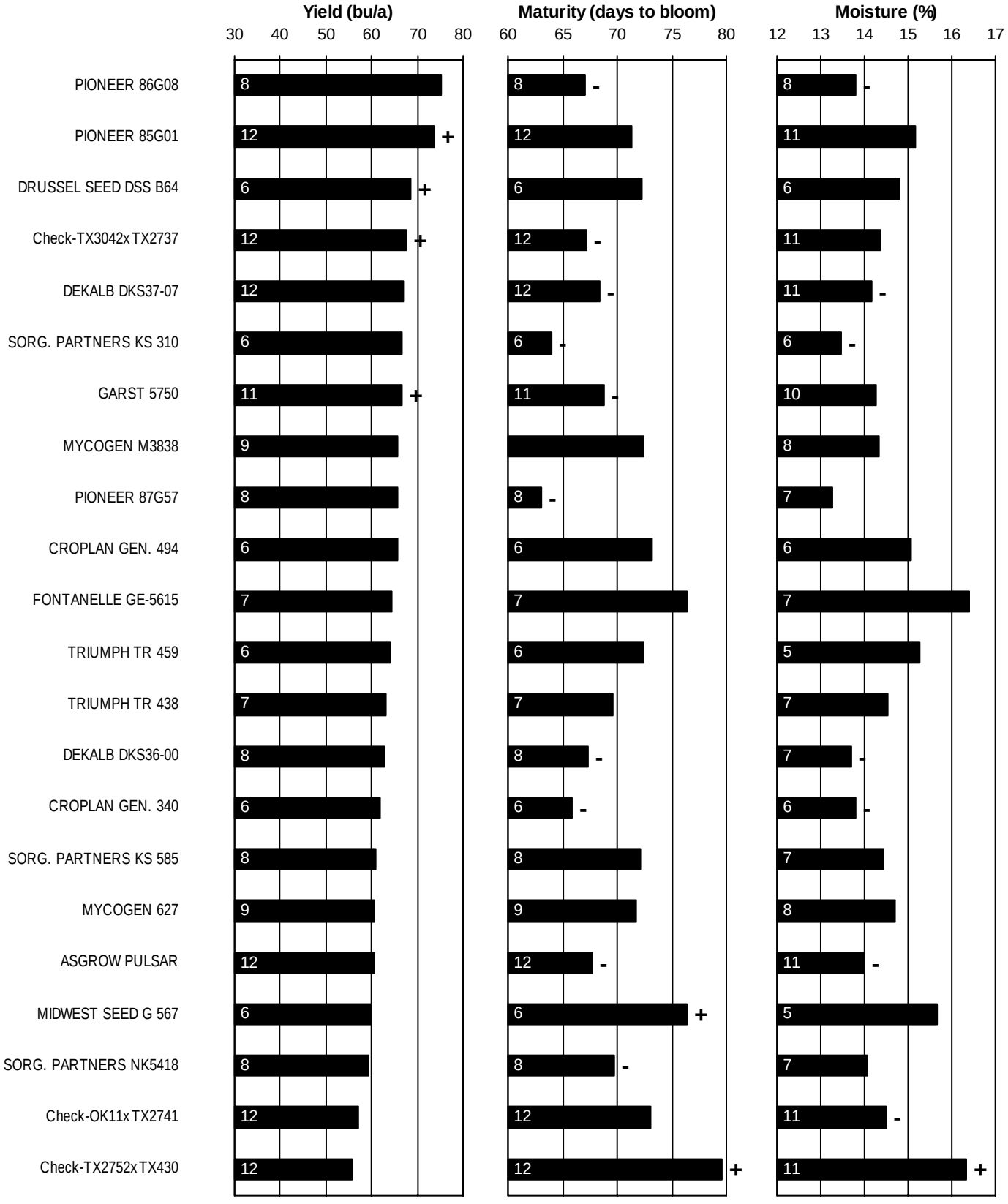
*Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other. Top LSD group in bold.

Table 18. WEST Kansas Grain Sorghum Hybrid Yield Summary (% of test avg.), 2005.

BRAND/NAME	ELD*	THD	GRD	FND	AVG.
ADVANCED GEN.					
A 110	109	101	84	81	94
A 115C	109	99	98	87	98
ASGROW					
PULSAR	85	105	77	89	89
CROPLAN GEN.					
340	--	110	--	57	--
484	103	92	85	77	89
494	95	--	125	--	--
DEKALB					
DKS29-28	84	109	89	41	81
DKS35-70	114	107	92	103	104
DKS37-07	101	102	88	75	91
DRUSSEL SEED					
DSS B64	--	--	106	137	--
DYNA-GRO					
DG-720B	--	89	74	--	--
DG-740C	--	--	102	--	--
DG-752B	--	--	105	--	--
DGX-1755	82	--	--	--	--
FONTANELLE					
GE-4532	102	--	--	--	--
GE-5615	88	--	--	--	--
GARST					
5401	106	--	--	93	--
5624	--	--	--	81	--
5750	90	92	111	125	105
9135	--	--	87	--	--
MIDLAND					
MG4665	--	--	--	113	--
MG4748	--	--	--	97	--
MG4772	--	--	--	121	--
MYCOGEN					
1G600	107	--	--	109	--
627	111	--	--	91	--
M3838	104	--	--	81	--

BRAND/NAME	ELD	THD	GRD	FND	AVG.
NC+					
5B89	97	121	89	--	--
Y363	97	90	--	--	--
OHLDE					
O-525	109	--	--	--	--
O-530	115	--	--	--	--
O-567	112	--	--	--	--
PHILLIPS					
672	100	103	--	82	--
725	88	77	--	106	--
758Y	84	94	--	116	--
PIONEER					
85G01	113	101	123	170	127
85G46	120	122	139	111	123
86G08	106	117	113	105	110
SORG. PARTNERS					
KS 310	--	107	85	--	--
KS 585	97	--	--	--	--
NK4420	--	107	--	--	--
NK5418	--	--	109	--	--
NK6673	--	--	--	90	--
NK7633	107	--	--	--	--
NK7655	--	--	--	101	--
TRIUMPH					
TR 434	95	--	--	--	--
TR 438	99	--	107	77	--
TR 459	92	90	--	--	--
MATURITY CHECK					
OK11xTX2741	98	96	93	101	97
TX2752xTX430	81	57	101	124	91
TX3042xTX2737	97	111	116	159	121
AVERAGES (bu/a)	70	73	76	53	68
CV(%)	9	13	19	16	--
LSD (0.05)	14	19	26	26	--

* 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, 2003-2005.

NORTH CENTRAL KANSAS IRRIGATED GRAIN SORGHUM TEST ON SILT LOAM SOIL

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

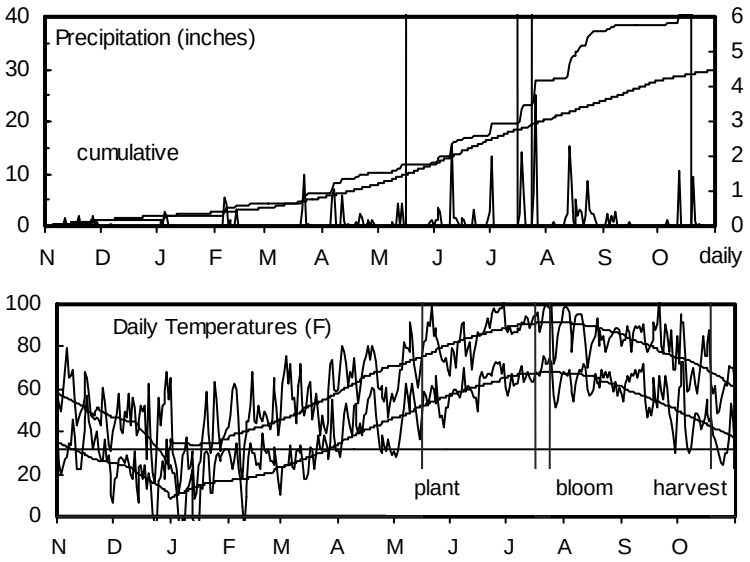
Crete silt loam; Soybean in 2004

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

Planted on 5/17/2005; Harvested on 10/18/2005

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

Favorable conditions through mid-June resulted in good stands and early growth. A dry period in late June and early July was followed by nearly ideal rainfall from mid-July through August. Bird feeding reduced yields for all hybrids.



Month	Precipitation 2005	Precipitation Norm.	Average Temp. 2005	Average Temp. Norm.	GDU 2005	GDU Norm.
Nov.-Mar	6.1	5.1	36	33		
April	4.2	2.4	54	53	577	534
May	1.8	4.0	63	64	877	886
June	5.3	4.5	75	73	1211	1149
July	10.5	3.8	78	79	1343	1368
August	9.4	3.7	75	77	1239	1310
Sept.	1.3	3.9	71	68	1091	987
Oct.	3.3	2.2	56	56	651	663
Totals:	41.9	29.5	54	53	6,989	6,897

Table 19. Scandia Irrigated Grain Sorghum Performance Test, 2003-2005.

BRAND	NAME	ACRE YIELD, BUSHELS 2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	YIELD AS % OF TEST AVERAGE 2005	2004	2003	2004-2005 Days to Blm	2004-2005 Grain Moist. %	2005 Days to Blm	2005 Grain Moist. %	2005 Test Wt. lb/bu	2005 Plnt Ht. in.	2005 Ldg %	2005 Pop. 1000 ppa	2005 Hds per Plnt
GOLDEN WORLD	GW 3406	138	--	--	--	--	79	--	--	--	--	59	14	59	42	--	75.0	1.0
GOLDEN WORLD	GWX1466	169	--	--	--	--	97	--	--	--	--	60	15	58	45	--	76.6	1.0
GOLDEN WORLD	GW 5964	170	--	145	--	--	98	--	95	--	--	62	15	59	47	--	81.4	1.0
MATURITY CHECK	OK11xTX2741	148	160	146	154	151	85	94	95	65	15	62	15	58	43	--	80.4	1.0
MATURITY CHECK	TX3042xTX2737	157	160	133	159	150	90	94	87	67	15	62	15	59	51	--	76.1	1.1
PIONEER	85G01	165	--	--	--	--	95	--	--	--	--	62	15	59	48	--	82.2	1.0
SORG. PARTNERS	NK6673	170	177	--	174	--	98	104	--	67	15	62	15	58	48	--	79.3	1.0
GOLDEN WORLD	GW 1489	**192**	169	155	180	172	110	99	102	67	14	63	14	59	50	--	80.7	1.0
DYNA-GRO	DG-751B	**195**	--	--	--	--	112	--	--	--	--	63	15	58	52	--	78.7	1.0
SORG. PARTNERS	NK8831	156	--	--	--	--	89	--	--	--	--	63	15	58	45	--	81.8	1.0
ASGROW	A567	**198**	178	168	188	181	113	104	110	68	14	64	14	58	51	--	79.8	1.0
GOLDEN WORLD	GWX1467	180	--	--	--	--	103	--	--	--	--	64	14	58	48	--	81.8	1.0
FONTANELLE	GE-5615	**194**	**181**	157	188	177	111	106	102	68	15	64	15	59	50	--	79.9	1.0
GARST	5360	169	171	--	170	--	97	100	--	67	15	64	15	58	48	--	80.7	1.0
GOLDEN WORLD	GWX3066	184	--	--	--	--	106	--	--	--	--	64	15	58	48	--	76.8	1.0
NC+	8R18	**193**	--	--	--	--	111	--	--	--	--	64	15	59	55	--	82.3	1.0
FONTANELLE	W-1000	172	**181**	--	176	--	99	106	--	70	15	65	15	59	55	--	77.1	1.0
GARST	5401	170	163	--	166	--	97	96	--	68	15	65	15	59	58	--	77.9	1.1
PIONEER	84G62	**196**	**182**	**179**	189	186	113	107	117	68	15	65	15	58	50	--	77.5	1.0
GOLDEN WORLD	GWX3167	172	--	--	--	--	98	--	--	--	--	65	16	58	54	--	81.8	1.0
DEKALB	DKS53-11	182	**184**	**177**	183	181	104	108	116	69	15	66	15	58	55	--	80.6	1.0
DEKALB	DKS54-00	188	169	151	179	170	108	99	99	69	15	66	15	58	51	--	83.0	1.0
GOLDEN WORLD	GWX8264	137	--	--	--	--	78	--	--	--	--	66	15	59	50	--	73.5	1.1
MATURITY CHECK	TX2752xTX430	183	**180**	147	182	170	105	106	96	70	15	66	15	59	51	--	81.3	1.0
NC+	7R83	168	--	146	--	--	96	--	95	--	--	66	15	59	50	--	81.6	1.0
GOLDEN WORLD	GWX8067	178	--	--	--	--	102	--	--	--	--	66	16	58	56	--	82.8	1.0
TRIUMPH	TR 481	185	174	156	180	172	106	102	102	70	15	68	15	58	53	--	75.3	1.1
	AVERAGES	174	171	153	173	166	174	171	153	68	15	64	15	58	50	--	79.5	1.0
	CV(%)	2	3	5	--	--	2	3	5	--	--	1	1	1	2	--	6.2	2.6
	LSD(0.05)*	7	8	10	--	--	4	4	7	--	--	1	0	1	2	--	8.1	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.

SOUTH CENTRAL KANSAS IRRIGATED GRAIN SORGHUM TEST ON SILT LOAM SOIL

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

Ost loam; Wheat in 2004

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

Planted on 5/9/2005; Harvested on 9/20/2005

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

Planted into strip-tilled soybean stubble. Hail and wind on July 3 caused minimal lasting damage. Head blight was evident in some plots. Bird feeding likely reduced yields of all hybrids.

	Precipitation		Average Temp.		GDU	
Month	2005	Norm.	2005	Norm.	2005	Norm.
Nov.-Mar	7.2	4.2	38	37		
April	1.8	2.7	54	56	590	617
May	2.5	4.0	66	65	959	927
June	8.1	4.2	75	75	1206	1196
July	3.6	3.4	78	81	1335	1416
August	6.6	3.1	78	79	1320	1361
Sept.	0.8	3.3	72	70	1118	1053
Oct.	1.1	2.5	58	59	723	732
Totals:	31.6	27.4	56	56	7,251	7,302

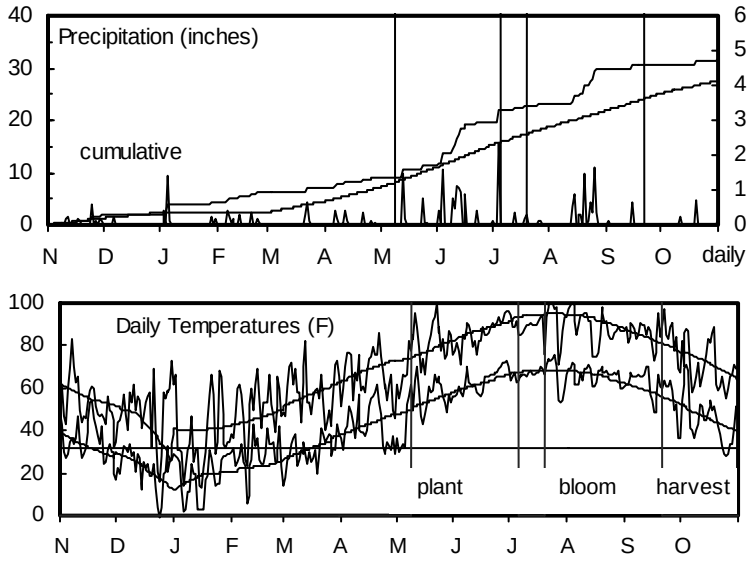


Table 20. Hutchinson Irrigated Grain Sorghum Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
MATURITY CHECK	TX3042xTX2737	72	182	--	127	--	80	94	--	64	14	66	14	58	54	--	79.8	1.4
MIDLAND	MG4665	74	180	--	127	--	83	93	--	65	14	66	14	58	47	--	87.6	1.1
GARST	5750	70	--	--	--	--	78	--	--	--	--	66	15	57	56	--	90.5	1.4
MATURITY CHECK	OK11xTX2741	89	174	--	131	--	99	89	--	66	13	67	13	57	52	--	95.1	1.4
MIDLAND	MG4748	77	189	--	133	--	86	97	--	66	14	67	14	57	57	--	97.1	1.3
PIONEER	85G01	80	**208**	--	144	--	89	107	--	67	14	67	14	57	50	--	87.3	1.3
GARST	5360	95	195	--	145	--	106	100	--	68	15	69	14	58	55	--	96.7	1.3
SORG. PARTNERS	NK6673	80	184	--	132	--	90	95	--	68	15	69	14	57	53	--	91.6	1.3
DEKALB	DKS54-00	76	195	--	135	--	85	100	--	70	15	69	15	57	57	--	93.2	1.4
TRIUMPH	TR 481	76	**201**	--	139	--	85	103	--	70	16	69	15	58	59	--	85.3	1.2
DYNA-GRO	DG-751B	**108**	--	--	--	--	121	--	--	--	--	70	14	58	57	--	86.2	1.2
ASGROW	A567	**103**	**212**	--	158	--	115	109	--	69	15	70	15	58	57	--	93.9	1.3
GARST	N5480	89	--	--	--	--	99	--	--	--	--	70	15	58	56	--	84.2	1.6
MIDLAND	MG4772	84	--	--	--	--	94	--	--	--	--	71	14	58	57	--	81.2	1.3
SORG. PARTNERS	NK7655	**101**	**200**	--	151	--	113	103	--	69	14	71	14	57	57	--	99.6	1.3
FONTANELLE	GE-5615	91	**208**	--	150	--	102	107	--	69	15	71	15	58	57	--	84.6	1.3
GARST	5401	**99**	--	--	--	--	111	--	--	--	--	71	15	58	62	--	84.1	1.4
PIONEER	84G62	**108**	**208**	--	158	--	120	107	--	71	15	71	15	58	54	--	87.8	1.3
MATURITY CHECK	TX2752xTX430	**107**	**214**	--	161	--	120	110	--	70	14	72	14	57	59	--	84.9	1.2
DEKALB	DKS53-11	**104**	**207**	--	156	--	117	106	--	71	15	72	15	58	58	--	82.9	1.1
FONTANELLE	W-1000	95	--	--	--	--	106	--	--	--	--	80	15	58	64	--	72.0	1.2
	AVERAGES	90	195	--	142	--	90	195	--	69	14	70	14	58	56	--	87.9	1.3
	CV(%)	8	6	--	--	--	8	6	--	--	--	2	3	1	6	--	10.7	10.8
	LSD(0.05)*	10	15	--	--	--	11	8	--	--	--	2	1	1	5	--	13.3	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 2004

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

Planted on 5/20/2005; Harvested on 10/5/2005

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

Heavy rains after planting (3" in 2 weeks) crusted the soil and reduced stands of all hybrids. The rest of the growing season was favorable, with no insect or disease problems.

	Precipitation		Average Temp.		GDU	
Month	2005	Norm.	2005	Norm.	2005	Norm.
Nov.-Mar	3.8	3.0	36	32		
April	3.6	1.8	50	49	447	421
May	3.8	3.1	61	60	808	762
June	3.1	3.0	71	70	1102	1054
July	2.4	3.1	77	76	1309	1285
August	3.2	2.2	74	74	1226	1216
Sept.	0.1	1.5	69	65	1028	910
Oct.	2.0	1.0	53	53	570	556
Totals:	21.9	18.6	53	51	6,490	6,204

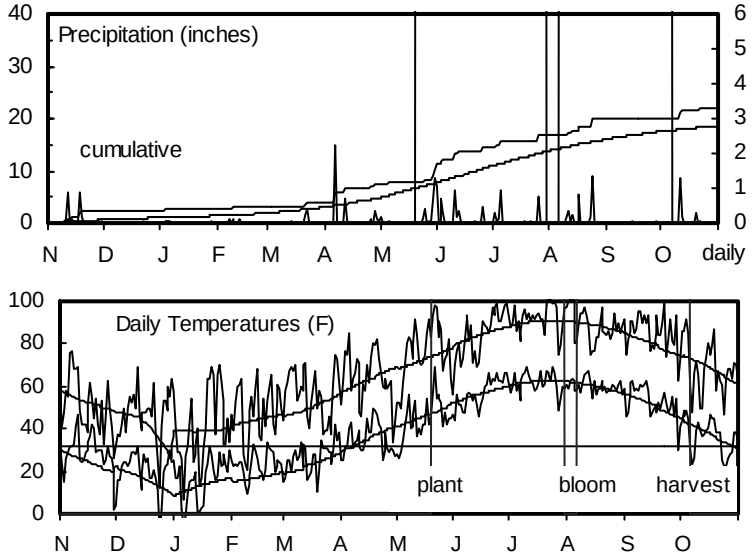


Table 21. Colby Irrigated Grain Sorghum Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
MATURITY CHECK	OK11xTX2741	152	151	151	152	151	90	98	93	74	13	71	13	60	45	--	79.3	1.0
MATURITY CHECK	TX3042xTX2737	158	152	150	155	153	93	99	92	71	14	71	13	59	49	--	61.7	1.2
PIONEER	85G46	166	--	--	--	--	97	--	--	--	--	71	14	61	47	--	79.9	1.0
DYNA-GRO	DG-732B	145	--	--	--	--	85	--	--	--	--	72	12	58	47	--	57.5	1.1
ASGROW	A567	176	**166**	**176**	171	173	104	108	108	81	17	75	17	59	50	--	65.4	1.1
SORG. PARTNERS	NK8831	156	--	--	--	--	92	--	--	--	--	76	16	59	45	--	60.0	1.0
DEKALB	DKS53-11	177	**161**	**173**	169	170	104	104	106	82	18	76	17	58	51	--	56.5	1.1
DEKALB	DKS54-00	184	154	168	169	169	108	100	103	80	15	76	17	57	52	--	73.9	1.1
SORG. PARTNERS	K73-J6	164	**158**	--	161	--	96	103	--	81	16	76	18	57	50	--	72.0	1.0
MATURITY CHECK	TX2752xTX430	189	**165**	161	177	172	111	107	99	80	16	78	19	57	51	--	51.0	1.3
PIONEER	84G62	**203**	**165**	**182**	184	184	119	107	112	81	17	78	19	59	50	--	63.8	1.2
	AVERAGES	170	154	163	162	162	170	154	163	78	15	75	16	59	49	--	65.6	1.1
	CV(%)	5	9	6	--	--	5	9	6	--	--	2	7	2	2	--	8.2	7.5
	LSD(0.05)*	13	18	14	--	--	7	12	8	--	--	2	2	1	2	--	7.7	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.

WEST KANSAS IRRIGATED GRAIN SORGHUM TEST ON SILT LOAM SOIL

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

Ulysses silt loam; Wheat in 2004

128 - 27 - 0 lb/a N, P, K

Planted on 5/23/2005; Harvested on 10/25/2005

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

Stands were a bit variable, but there seemed to be little impact on yield. July was hot and dry. An August 19 hail storm damaged all entries.

	Precipitation		Average Temp.		GDU	
Month	2005	Norm.	2005	Norm.	2005	Norm.
Nov.-Mar	3.9	2.1	37	34		
April	3.1	1.3	50	49	454	430
May	1.0	2.3	61	60	805	772
June	4.8	2.6	71	70	1092	1063
July	0.8	2.5	78	77	1327	1287
August	4.6	2.2	74	74	1225	1209
Sept.	1.6	1.3	70	66	1056	934
Oct.	3.2	0.7	56	54	649	588
Totals:	22.9	15.0	54	52	6,608	6,283

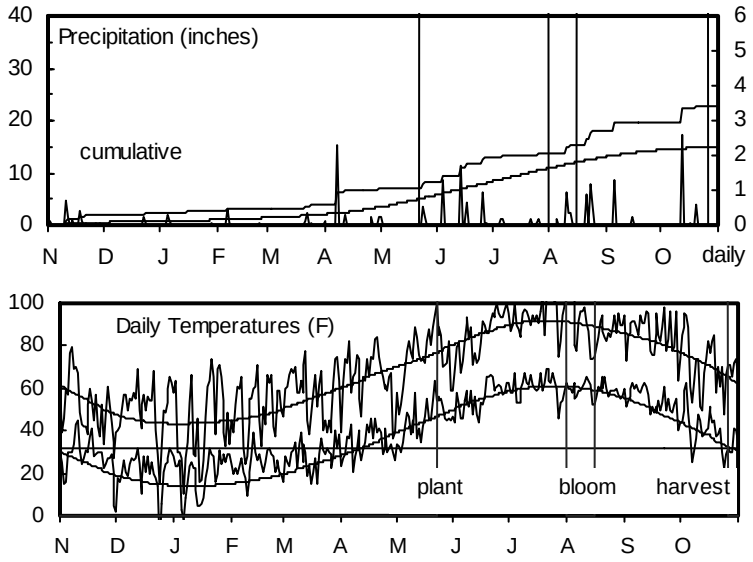


Table 22. Tribune Irrigated Grain Sorghum Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
MATURITY CHECK	TX3042xTX2737	93	118	119	105	110	90	108	100	73	15	69	14	59	48	--	47.8	1.4
PIONEER	85G46	95	--	--	--	--	92	--	--	--	--	70	14	61	46	--	62.8	1.1
SORG. PARTNERS	NK5418	100	115	**129**	107	114	97	105	108	79	15	71	14	60	41	--	62.9	1.2
SORG. PARTNERS	NK6673	99	120	--	109	--	96	110	--	80	15	72	14	60	46	--	57.6	1.2
CROPLAN GEN.	484	96	**139**	118	117	118	93	128	99	75	15	73	14	60	47	--	59.8	1.1
DRUSSEL SEED	DSS B64	95	122	**131**	108	116	93	112	110	76	15	73	14	60	47	--	52.2	1.3
DEKALB	DKS54-00	**109**	**128**	**141**	118	126	106	118	118	82	16	74	15	60	53	--	64.5	1.1
MATURITY CHECK	OK11xTX2741	**107**	102	99	105	103	104	94	83	83	15	75	14	60	47	--	61.1	1.1
TRIUMPH	TR 442	**103**	--	--	--	--	101	--	--	--	--	76	14	61	52	--	62.5	1.1
ASGROW	A567	**111**	121	**152**	116	128	108	112	127	85	16	76	15	60	51	--	59.5	1.1
PIONEER	84G62	**111**	112	**127**	112	117	108	103	106	87	15	77	14	60	51	--	50.6	1.3
CROPLAN GEN.	494	89	116	--	103	--	87	107	--	81	15	78	14	60	50	--	65.2	1.1
DEKALB	DKS53-11	100	117	**152**	109	123	98	108	127	87	16	78	15	60	52	--	48.6	1.2
MATURITY CHECK	TX2752xTX430	**116**	97	94	106	102	113	89	79	91	16	83	15	60	55	--	52.4	1.2
NC+	7R83	**115**	--	104	--	--	112	--	87	--	--	84	15	59	54	--	66.8	1.0
	AVERAGES	**103**	109	119	106	110	103	109	119	82	16	75	14	60	49	--	58.3	1.2
	CV(%)	9	11	16	--	--	9	11	16	--	--	2	1	0	6	--	8.1	8.4
	LSD(0.05)*	14	17	26	--	--	13	15	22	--	--	2	0	0	5	--	6.7	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.

WEST KANSAS IRRIGATED GRAIN SORGHUM TEST ON SILT LOAM SOIL

Southwest Research-Extension Center, Garden City; Monty Spangler, technician

Keith silt loam; Fallow in 2004

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

Planted on 6/1/2005; Harvested on 11/10/2005

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

Good moisture at planting facilitated good stands. Favorable rainfall through early July. Hail on July 4, when the sorghum was at the 6-leaf stage, shredded leaves, but caused little loss of stand. Dry in late July and August.

	Precipitation		Average Temp.		GDU	
Month	2005	Norm.	2005	Norm.	2005	Norm.
Nov.-Mar	3.3	2.8	38	34		
April	1.0	1.6	52	51	531	472
May	2.8	2.9	63	62	888	831
June	3.1	3.0	74	72	1168	1115
July	3.5	2.5	78	78	1331	1321
August	1.7	2.2	76	76	1263	1260
Sept.	1.0	1.6	72	67	1097	973
Oct.	2.8	1.0	57	55	674	620
Totals:	19.3	17.7	55	53	6,952	6,592

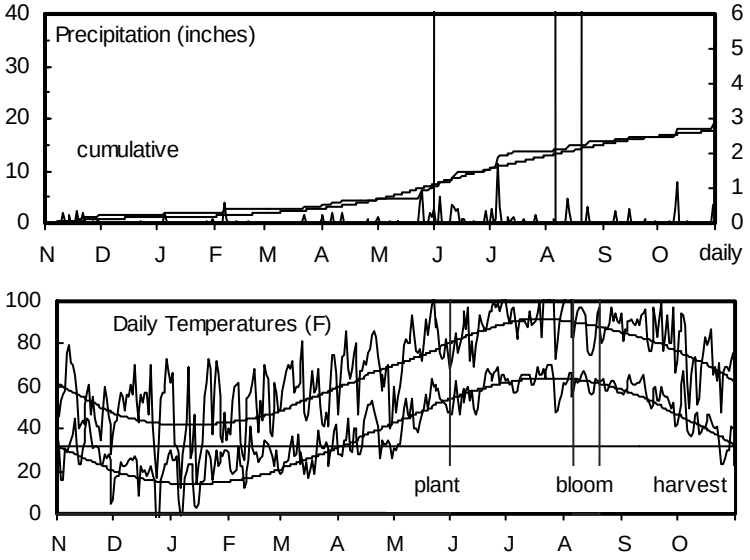


Table 23. Garden City Irrigated Grain Sorghum Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
MATURITY CHECK	TX3042xTX2737	89	93	83	91	88	95	79	82	59	13	65	13	61	53	0	72.3	1.1
MIDLAND	MG4748	102	--	--	--	--	109	--	--	--	--	67	13	61	51	0	77.3	1.1
MIDLAND	MG4665	77	--	--	--	--	83	--	--	--	--	69	13	60	48	0	70.2	1.1
MIDLAND	MG4772	**127**	--	--	--	--	135	--	--	--	--	69	13	61	51	0	70.2	1.1
PIONEER	85G46	**107**	--	--	--	--	114	--	--	--	--	69	13	61	48	0	81.0	1.0
MATURITY CHECK	OK11xTX2741	68	114	91	91	91	73	96	90	65	13	70	12	61	48	0	75.1	1.0
DRUSSEL SEED	DSS B64	87	100	78	94	89	93	85	78	62	13	70	13	60	48	0	68.7	1.1
GARST	N5480	**126**	--	--	--	--	135	--	--	--	--	70	13	61	54	0	72.2	1.0
GOLDEN WORLD	GWX3066	60	--	--	--	--	65	--	--	--	--	70	13	61	48	0	64.4	1.1
GARST	5401	80	--	--	--	--	86	--	--	--	--	71	12	61	54	0	69.4	1.1
CROPLAN GEN.	575	104	--	--	--	--	111	--	--	--	--	71	13	61	51	0	71.5	1.1
GOLDEN WORLD	GW 5964	93	105	103	99	100	99	89	102	66	13	72	12	60	49	0	75.4	1.0
GOLDEN WORLD	GWX1467	87	114	--	100	--	93	96	--	67	13	72	13	61	51	0	80.6	0.9
GOLDEN WORLD	GWX3167	72	--	--	--	--	77	--	--	--	--	72	13	61	52	0	73.8	0.9
GOLDEN WORLD	GWX8264	81	--	--	--	--	87	--	--	--	--	72	13	59	50	0	53.9	1.4
SORG. PARTNERS	NK7633	91	**138**	117	115	115	98	117	115	66	13	72	13	61	49	0	73.8	1.0
ASGROW	A567	92	114	98	103	101	99	96	97	66	13	73	13	61	51	0	72.2	1.0
DEKALB	DKS53-11	103	**127**	82	115	104	110	108	81	66	13	73	13	61	52	0	64.7	1.0
GOLDEN WORLD	GWX8067	96	--	--	--	--	102	--	--	--	--	73	13	61	55	0	71.5	1.0
PIONEER	84G62	**111**	118	119	114	116	118	100	118	67	13	73	13	61	50	0	72.9	1.0
DEKALB	DKS54-00	**111**	**143**	105	127	120	118	121	104	67	13	74	13	61	54	0	74.3	1.1

(continued)

Table 23. Garden City Irrigated Grain Sorghum Performance Test, 2003-2005 - continued.

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
		2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
NC+	7R83	**107**	--	**127**	--	--	115	--	125	--	--	74	13	60	54	0	77.7	0.9
DYNA-GRO	DG-751B	95	--	--	--	--	101	--	--	--	--	75	13	61	54	0	72.9	0.9
GOLDEN WORLD	GWX1466	**107**	--	--	--	--	114	--	--	--	--	75	13	60	49	0	68.0	1.1
MATURITY CHECK	TX2752xTX430	95	**147**	116	121	120	101	125	115	69	13	75	13	61	53	0	69.7	1.1
SORG. PARTNERS	NK7655	83	111	**128**	97	107	89	94	126	69	13	75	13	60	50	0	73.0	1.0
CROPLAN GEN.	514	82	**140**	--	111	--	88	119	--	69	14	76	13	61	52	0	72.9	0.9
GOLDEN WORLD	GW 1489	98	113	102	105	104	105	95	101	70	13	76	13	61	52	0	73.7	0.9
GARST	5360	91	118	--	105	--	97	100	--	71	13	78	13	61	51	0	83.2	0.8
DYNA-GRO	DG-780B	86	--	--	--	--	92	--	--	--	--	80	13	61	54	0	66.9	1.0
	AVERAGES	94	118	101	106	104	94	118	101	67	13	72	13	61	51	0	72.1	1.0
	CV(%)	14	12	11	--	--	14	12	11	--	--	3	2	1	2	357	6.3	5.9
	LSD(0.05)*	21	24	16	--	--	23	20	15	--	--	4	1	1	2	0	7.4	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.

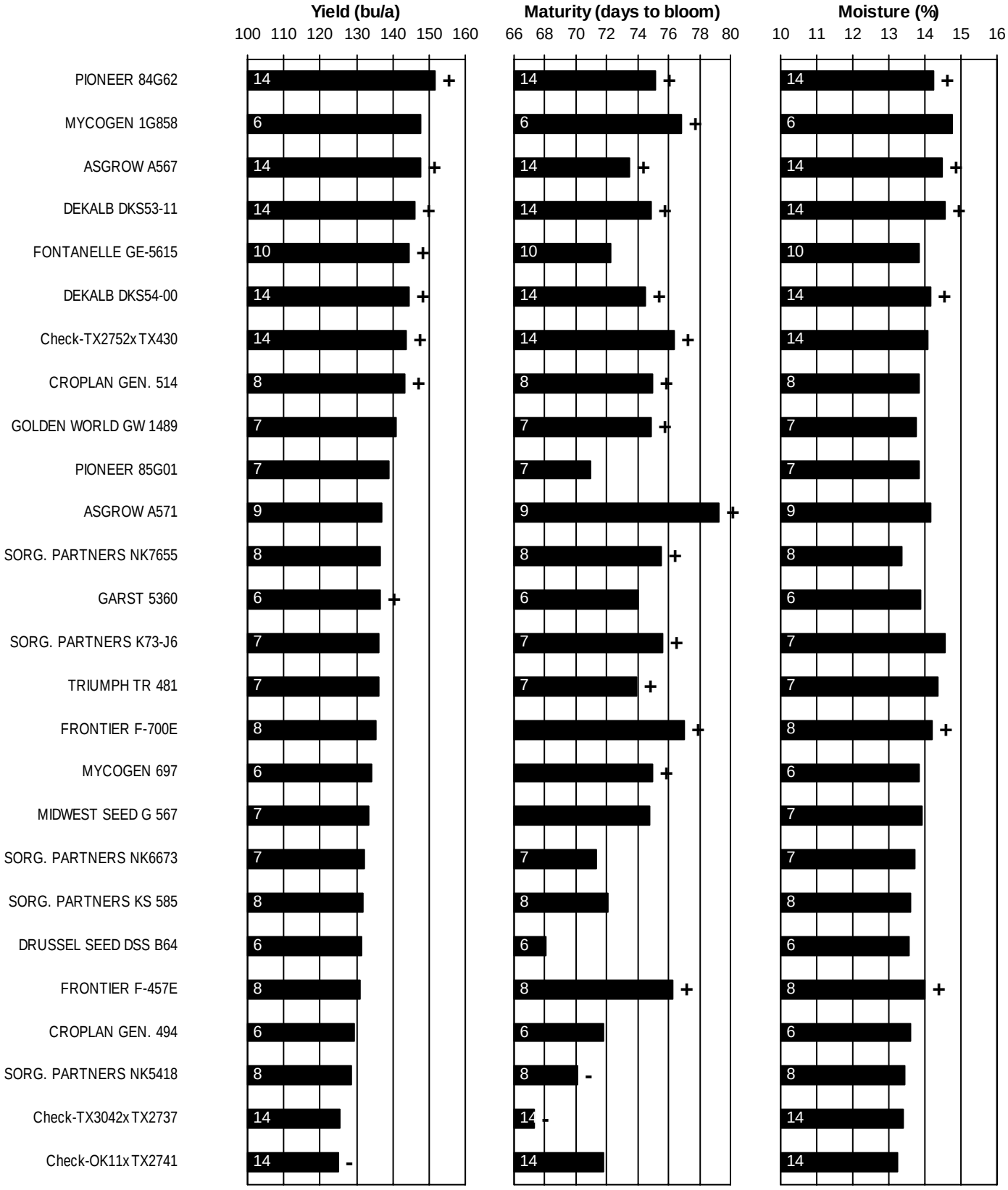
Table 24. Kansas IRRIGATED Grain Sorghum Hybrid Yield Summary (% of test avg.), 2005.

BRAND/NAME	RPI*	RNI	THI	GRI	FNI	AVG.
ASGROW						
A567	113	115	104	108	99	108
CROPLAN GEN.						
484	--	--	--	93	--	--
494	--	--	--	87	--	--
514	--	--	--	--	88	--
575	--	--	--	--	111	--
DEKALB						
DKS53-11	104	117	104	98	110	107
DKS54-00	108	85	108	106	118	105
DRUSSEL SEED						
DSS B64	--	--	--	93	93	--
DYNA-GRO						
DG-732B	--	--	85	--	--	--
DG-751B	112	121	--	--	101	--
DG-780B	--	--	--	--	92	--
FONTANELLE						
GE-5615	111	102	--	--	--	--
W-1000	99	106	--	--	--	--
GARST						
5360	97	106	--	--	97	--
5401	97	111	--	--	86	--
5750	--	78	--	--	--	--
N5480	--	99	--	--	135	--
GOLDEN WORLD						
GW 1489	110	--	--	--	105	--
GW 3406	79	--	--	--	--	--
GW 5964	98	--	--	--	99	--
GWX1466	97	--	--	--	114	--
GWX1467	103	--	--	--	93	--
GWX3066	106	--	--	--	65	--
GWX3167	98	--	--	--	77	--
GWX8067	102	--	--	--	102	--
GWX8264	78	--	--	--	87	--

BRAND/NAME	RPI	RNI	THI	GRI	FNI	AVG.
MIDLAND						
MG4665	--	83	--	--	83	--
MG4748	--	86	--	--	109	--
MG4772	--	94	--	--	135	--
NC+						
7R83	96	--	--	112	115	--
8R18	111	--	--	--	--	--
PIONEER						
84G62	113	120	119	108	118	116
85G01	95	89	--	--	--	--
85G46	--	--	97	92	114	--
SORG. PARTNERS						
K73-J6	--	--	96	--	--	--
NK5418	--	--	--	97	--	--
NK6673	98	90	--	96	--	--
NK7633	--	--	--	--	98	--
NK7655	--	113	--	--	89	--
NK8831	89	--	92	--	--	--
TRIUMPH						
TR 442	--	--	--	101	--	--
TR 481	106	85	--	--	--	--
MATURITY CHECK						
OK11xTX2741	85	99	90	104	73	90
TX2752xTX430	105	120	111	113	101	110
TX3042xTX2737	90	80	93	90	95	90
AVERAGES (bu/a)	174	90	170	103	94	126
CV(%)	2	8	5	9	14	--
LSD (0.05)	4	11	7	13	23	--

***** RPI=Republic Co., Scandia RNI=Reno Co., Hutchinson THI=Thomas Co., Colby

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, 2003-2005.

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 2004

90 - 30 - 0 lb/a N, P, K

Planted on 6/8/2005; Harvested on 10/28/2005

Emergence was reduced for some hybrids due to heavy rains immediately after planting. Limited drought stress occurred in July and early August and again in September, but rainfall during the rest of the season was favorable.

Table 25. Hesston Tan-plant Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
MATURITY CHECK	OK11xTX2741(P)	85	--	--	--	--	97	--	--	--	--	58	14	54	42	0	34.3	1.2
MATURITY CHECK	TX3042xTX2737(P)	85	89	44	87	73	97	91	118	60	14	59	14	54	46	0	20.0	1.9
ASGROW	ORBIT	76	96	--	86	--	86	98	--	64	14	61	14	55	43	1	25.2	1.4
CHECK	ATX631*RTX437	**101**	--	45	--	--	115	--	120	--	--	63	14	56	52	0	22.7	1.5
DEKALB	DKS44-41	64	**107**	38	86	70	73	110	103	65	15	63	15	53	42	20	19.7	1.6
SORG. PARTNERS	1486	70	--	18	--	--	80	--	49	--	--	64	14	53	39	1	24.0	1.6
TX Exp	ATX2928/RTX2917	**108**	--	--	--	--	122	--	--	--	--	65	14	54	47	0	29.3	1.3
PIONEER	84G62(P)	**114**	**114**	--	114	--	129	117	--	68	14	66	14	55	47	2	33.2	1.3
CHECK	ATX631xTX436	**99**	96	40	98	79	113	98	108	70	14	67	14	55	48	0	28.8	1.3
TX Exp	ATX2928/RTX436	**102**	--	--	--	--	116	--	--	--	--	67	14	55	46	0	28.9	1.4
MMR GENETICS	JOWAR I	**109**	94	39	101	80	123	96	103	69	14	68	14	55	51	0	34.2	1.1
FONTANELLE	W-1000	80	--	--	--	--	91	--	--	--	--	69	16	55	49	5	18.3	1.5
SORG. PARTNERS	NK8828	78	--	25	--	--	88	--	66	--	--	72	14	53	47	1	25.8	1.0
WARNER	902W	66	--	44	--	--	75	--	117	--	--	72	15	54	51	0	15.1	1.7
CHECK	ATX635xTX436	83	78	21	80	61	94	80	56	75	15	73	16	55	56	0	30.5	1.4
	AVERAGES	88	**97**	37	93	74	88	97	37	67	15	66	15	54	47	2	26.0	1.4
	CV(%)	10	11	11	--	--	10	11	11	--	--	2	5	2	3	377	12.4	12.8
	LSD(0.05)*	15	17	6	--	--	17	18	15	--	--	3	1	2	2	13	5.4	0.3

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 2004

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

Planted on 5/17/2005; Harvested on 10/18/2005

Favorable conditions through mid-June resulted in good stands and early growth. A dry period in late June and early July was followed by nearly ideal rainfall from mid-July through August.

Table 26. Scandia Irrigated Tan-plant Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
MATURITY CHECK	OK11xTX2741(P)	143	--	--	--	--	92	--	--	--	--	61	14	57	46	--	79.3	1.0
ASGROW	ORBIT	147	131	--	139	--	95	87	--	67	15	62	14	59	49	--	73.0	1.0
SORG. PARTNERS	1486	113	--	71	--	--	73	--	55	--	--	62	14	57	45	--	78.9	1.0
TX Exp	ATX2928/RTX2917	139	--	--	--	--	89	--	--	--	--	62	14	57	47	--	77.1	1.0
MATURITY CHECK	TX3042xTX2737(P)	146	154	114	150	138	94	102	87	66	15	62	15	57	54	--	73.4	1.1
CHECK	ATX631*RTX437	183	--	149	--	--	118	--	115	--	--	63	14	59	57	--	76.9	1.0
DEKALB	DKS44-41	137	**168**	149	153	152	88	112	115	67	15	63	14	58	48	--	77.8	1.0
TX Exp	ATX2928/RTX436	151	--	--	--	--	97	--	--	--	--	63	14	57	48	--	80.4	1.0
CHECK	ATX631xTX436	163	147	151	155	153	105	97	116	69	16	65	14	58	51	--	73.9	1.0
PIONEER	84G62(P)	163	**164**	--	164	--	105	109	--	69	15	66	14	58	46	--	79.9	1.0
MMR GENETICS	JOWAR I	156	**161**	157	159	158	100	107	120	70	15	67	14	59	55	--	76.6	1.0
WARNER	902W	168	--	**166**	--	--	108	--	127	--	--	67	14	59	54	--	73.5	1.0
FONTANELLE	W-1000	163	--	--	--	--	105	--	--	--	--	68	14	58	53	--	75.1	1.0
SORG. PARTNERS	NK8828	163	--	129	--	--	105	--	99	--	--	68	14	56	49	--	81.7	1.0
CHECK	ATX635xTX436	**194**	145	**173**	169	171	125	96	133	72	15	68	15	59	57	--	79.8	1.0
	AVERAGES	155	151	130	153	145	155	151	130	68	15	64	14	58	51	--	77.2	1.0
	CV(%)	3	3	6	--	--	3	3	6	--	--	1	1	0	3	--	4.0	1.8
	LSD(0.05)*	9	8	11	--	--	6	5	8	--	--	1	0	0	2	--	5.1	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.
(P) - purple plant color.

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

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

Keith silt loam; Soybean in 2004
140 - 45 - 0 lb/a N, P, K
Planted on 5/20/2005; Harvested on 10/6/2005

Heavy rains after planting (3" in 2 weeks) crusted the soil and reduced stands of all hybrids. The rest of the growing season was favorable, with no insect or disease problems.

Table 27. Colby Irrigated Tan-plant Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
MATURITY CHECK	TX3042xTX2737(P)	158	**146**	156	152	154	95	112	101	75	15	69	14	60	49	--	63.3	1.2
MATURITY CHECK	OK11xTX2741(P)	155	--	--	--	--	93	--	--	--	--	71	13	59	45	--	73.8	1.1
SORG. PARTNERS	1486	142	--	122	--	--	85	--	79	--	--	72	13	58	42	--	62.1	1.2
ASGROW	ORBIT	134	127	--	130	--	80	96	--	77	14	72	14	60	45	--	40.2	1.5
DEKALB	DKS44-41	150	**156**	**171**	153	159	89	119	111	76	14	73	14	57	44	--	49.4	1.2
CHECK	ATX631*RTX437	172	--	165	--	--	103	--	107	--	--	74	14	57	57	--	43.6	1.3
PIONEER	84G62(P)	**201**	**139**	--	170	--	120	106	--	82	16	75	16	60	50	--	71.1	1.1
TX Exp	ATX2928/RTX2917	170	--	--	--	--	102	--	--	--	--	76	16	57	52	--	61.7	1.1
CHECK	ATX631xTX436	186	119	**171**	153	159	111	91	111	85	18	76	18	58	56	--	45.9	1.4
WARNER	902W	170	--	**171**	--	--	101	--	111	--	--	77	19	57	57	--	36.2	1.4
TX Exp	ATX2928/RTX436	178	--	--	--	--	106	--	--	--	--	78	17	56	53	--	55.6	1.2
MMR GENETICS	JOWAR I	165	89	**170**	127	141	99	67	110	86	18	78	18	57	55	--	55.5	1.0
FONTANELLE	W-1000	181	--	--	--	--	108	--	--	--	--	78	19	57	54	--	54.5	1.1
SORG. PARTNERS	NK8828	162	--	162	--	--	97	--	105	--	--	79	16	59	52	--	60.3	1.0
CHECK	ATX635xTX436	**188**	128	**177**	158	164	112	97	114	88	21	81	20	57	63	--	53.1	1.2
	AVERAGES	168	131	159	149	152	168	131	159	80	16	75	16	58	52	--	55.1	1.2
	CV(%)	5	14	7	--	--	5	14	7	--	--	1	5	2	3	--	17.4	11.4
	LSD(0.05)*	14	31	14	--	--	8	23	9	--	--	2	1	2	3	--	16.1	0.2

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

Southwest Research-Extension Center, Garden City; Monty Spangler, technician

Keith silt loam; Fallow in 2004
100 - 0 - 0 lb/a N, P, K
Planted on 6/1/2005; Harvested on 11/9/2005

Good moisture at planting facilitated good stands. Hail on July 4, when the sorghum was at the 6-leaf stage, shredded leaves, but caused little loss of stand.

Table 28. Garden City Irrigated Tan-plant Performance Test, 2003-2005.

		ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			2004-2005		2005						
BRAND	NAME	2005	2004	2003	2-Yr. AVG.	3-Yr. AVG.	2005	2004	2003	Days to Blm	Grain Moist. %	Days to Blm	Grain Moist. %	Test Wt. lb/bu	Plnt Ht. in.	Ldg %	Pop. 1000 ppa	Hds per Plnt
MATURITY CHECK	TX3042xTX2737(P)	84	**102**	90	93	92	98	96	103	59	13	65	12	61	55	0	70.2	1.2
ASGROW	ORBIT	72	84	--	78	--	85	79	--	61	13	67	12	61	50	1	70.5	1.2
CHECK	ATX631*RTX437	**104**	--	79	--	--	122	--	90	--	--	68	12	60	57	1	63.2	1.2
DEKALB	DKS44-41	81	**112**	92	96	95	95	106	104	63	14	69	13	61	47	0	66.8	1.1
MATURITY CHECK	OK11xTX2741(P)	61	--	--	--	--	72	--	--	--	--	69	13	60	46	0	79.1	1.0
SORG. PARTNERS	1486	73	--	79	--	--	86	--	90	--	--	72	12	60	45	0	74.0	1.1
MMR GENETICS	JOWAR I	88	**119**	**119**	104	109	103	113	135	67	13	73	12	60	54	0	71.8	1.0
PIONEER	84G62(P)	**108**	**130**	--	119	--	126	123	--	67	13	73	12	61	50	1	70.8	1.1
FONTANELLE	W-1000	91	--	--	--	--	107	--	--	--	--	74	13	61	56	1	57.3	1.2
TX Exp	ATX2928/RTX2917	86	--	--	--	--	101	--	--	--	--	74	13	60	52	0	69.1	1.0
TX Exp	ATX2928/RTX436	79	--	--	--	--	92	--	--	--	--	74	13	61	52	0	71.4	0.9
CHECK	ATX631xTX436	78	**119**	83	98	93	91	113	94	69	13	75	12	61	56	1	61.3	1.1
CHECK	ATX635xTX436	85	**103**	**107**	94	98	100	98	122	70	14	76	13	61	63	1	73.3	1.0
WARNER	902W	**113**	--	**106**	--	--	132	--	120	--	--	76	13	61	57	0	56.8	1.1
SORG. PARTNERS	NK8828	77	--	**101**	--	--	91	--	115	--	--	77	12	60	49	1	75.8	0.8
	AVERAGES	85	**106**	88	95	93	85	106	88	66	13	72	12	61	53	1	68.8	1.1
	CV(%)	13	18	15	--	--	13	18	15	--	--	2	3	0	3	129	8.6	6.2
	LSD(0.05)*	18	31	18	--	--	21	30	21	--	--	3	1	0	2	1	9.9	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.
(P) - purple plant color.

Table 29. Entries in the 2005 Kansas Grain Sorghum Performance Tests

BRAND NAME	hybrid traits*						Response to 2,4-D**								
							ratings					difference = treated - untreated			
							July 3	July 9	July 16 0=none, 4=severe						
	GC	EC	PC	Mat.	Days	GB	% injury	% injury	Stunt.	Root	Tiller	Days to bloom	Plant height (in)	Yield (bu/a)	Moist-ure (%)	Test weight (lb/bu)
ADVANCED GEN.																
A 110	B	HY	P	E	62	-	23	22	2.3	2.7	3.0	2.0	**-2.4**	**0.3**	**0.4**	**0.5**
A 115C	C	HY	P	ME	68	CE	27	28	2.7	2.7	2.3	2.3	**-2.8**	13.5	**1.1**	**-0.3**
A 121	R	W	P	M	70	CEIK	22	25	1.7	2.0	2.3	2.0	-4.8	**-8.0**	**1.7**	-1.7
A 137	R	W	P	M	73	CE	33	32	3.0	2.7	3.3	3.0	-4.0	-9.9	**0.6**	**0.2**
ASGROW																
PULSAR	B	HY	P	E	68	CEI	28	25	3.0	2.7	2.7	2.3	**-2.4**	**2.3**	**1.3**	**0.5**
A571	B	HY	P	L	71	-	18	17	**0.7**	2.7	2.0	1.7	**-2.0**	**1.4**	**1.2**	**1.0**
A567	B	HY	P	L	73	CE	18	20	1.7	2.7	2.0	2.7	**-1.6**	**5.2**	**0.2**	**-0.3**
CROPLAN GEN.																
340	C	HY	P	E	58	-	15	17	1.3	2.7	2.0	1.3	-5.2	**7.0**	-2.5	**1.2**
484	R	HY	P	M	67	CE	22	22	1.7	2.0	2.3	1.7	**-1.2**	**-3.3**	**1.3**	**0.5**
514	R	HY	P	ML	67	CE	27	28	2.7	3.3	3.0	4.0	-3.6	**-3.5**	**-0.6**	2.8
494	R	HY	P	M	68	-	23	20	1.3	2.0	1.3	1.7	**0.8**	**-4.3**	**1.8**	**1.1**
575	B	HY	P	ML	70	CE	22	22	1.3	2.0	1.7	2.0	**-0.8**	**3.0**	**1.2**	**-0.2**
DEKALB																
DKS29-28	B	HY	P	E	56	CE	17	20	2.0	2.7	2.7	1.7	**-1.2**	-17.5	**-0.1**	**0.4**
DKS37-07	B	HY	P	E	67	CEI	20	30	1.7	2.0	2.3	1.0	-5.2	**-0.4**	**-1.4**	**1.5**
DKS35-70	B	HY	P	M	69	CEI	17	23	2.0	2.0	2.3	2.3	-3.6	**-7.5**	**0.0**	**0.9**
DKS42-20	B	HY	P	M	70	CE	23	22	2.0	2.7	2.3	1.3	**-1.2**	**-7.6**	**-0.1**	**0.3**
DKS53-11	B	HY	P	L	74	CEI	22	23	1.7	2.3	2.3	2.7	-3.6	-12.2	**1.7**	**-1.0**
DKS54-00	B	HY	P	L	75	CEI	12	**8**	**0.3**	2.3	1.7	1.7	**-1.2**	**-0.1**	**0.7**	**0.1**
DRUSSEL SEED																
DSS B64	B	W	R	ME	64	C	15	15	**1.0**	1.3	1.7	1.0	**-1.6**	**-1.6**	**-0.4**	**0.7**
DYNA-GRO																
DG-720B	B	W	P	E	62	E	12	13	**0.3**	1.3	1.7	1.0	**-0.8**	**-4.0**	2.5	-1.7
DG-732B	B	W	P	E	64	E	33	37	3.3	3.0	3.3	2.0	**-2.0**	-15.4	**0.9**	**0.6**
DG-740C	C	HY	P	ME	66	C	18	15	**1.0**	2.3	2.3	1.7	**-2.4**	**-5.9**	**0.6**	**0.6**
DGX-1755	R	W	P	ME	67	CE	33	32	2.0	3.0	3.7	3.0	-3.2	**-2.3**	**1.2**	**1.4**
DG-752B	B	HY	P	M	68	-	40	40	2.7	2.3	4.0	3.0	-5.2	**-6.3**	**0.6**	**0.5**
DG-751B	B	W	P	ML	70	CE	30	37	3.3	3.7	3.7	3.7	-4.4	**-9.0**	**0.3**	**0.9**
DG-780B	B	W	P	L	72	CE	28	25	2.3	3.0	2.7	2.7	**-2.0**	**-6.5**	**1.3**	**-0.1**
FONTANELLE																
GE-4532	B	Y	P	ME	62	CE	18	18	**1.0**	2.0	1.7	1.3	**-1.2**	**-3.9**	**1.6**	**0.1**
GE-5615	B	Y	P	M	67	CE	32	23	**1.0**	2.0	1.3	1.3	**-1.6**	**-3.3**	**1.2**	**-1.1**
W-1000	W	W	T	L	72	-	35	38	3.0	2.3	3.3	2.7	-7.6	-22.3	**1.1**	**-1.3**
GARST																
9135	B	HY	P	E	58	-	13	15	**0.7**	1.3	1.7	1.0	-3.2	**-4.5**	**0.9**	**-1.1**
5624	B	HY	P	ME	63	-	13	17	1.3	2.3	2.0	1.7	**-0.8**	**-0.7**	**-0.5**	**0.5**
5750	B	HY	P	ME	63	CE	17	10	**0.3**	2.3	2.3	1.7	**-2.0**	**6.7**	**-0.6**	2.4
N2512	B	HY	P	M	67	-	25	22	**1.0**	2.0	2.0	2.0	**-0.8**	**4.7**	**-1.4**	**1.5**
5401	R	HY	P	ML	68	E	30	33	2.7	3.7	2.7	3.3	**-2.8**	**-9.0**	**0.4**	**1.2**
5360	R	HY	P	ML	69	-	20	18	**0.3**	2.7	2.7	2.3	-3.6	**4.0**	**-0.6**	**0.8**
N5480	-	HY	P	ML	71	-	33	33	2.0	3.0	3.0	3.3	-3.2	**-2.0**	**0.9**	**0.0**

(continued)

Table 29. Entries in the 2005 Kansas Grain Sorghum Performance Tests - continued

BRAND NAME	hybrid traits*						Response to 2,4-D**								
							ratings					difference = treated - untreated			
							July 3	July 9	July 16 0=none, 4=severe			Days	Plant		
	GC	EC	PC	Mat.	Days	GB	% injury	% injury	Stunt.	Root	Tiller	to bloom	height (in)	Yield (bu/a)	Moist-ure (%)	Test weight (lb/bu)
GOLDEN ACRES																
3545	B	Y	P	M	66	CE	20	18	**1.0**	1.7	1.7	2.0	**-0.8**	**-2.1**	**1.4**	**-0.6**
3552	B	Y	P	M	66	CE	32	30	2.7	3.0	3.3	3.3	-4.0	**-8.7**	**1.3**	**1.1**
3443	B	Y	P	M	68	CE	27	23	1.3	2.7	2.3	2.0	**-2.8**	**-5.6**	**1.5**	**-1.1**
3827	B	Y	P	L	72	CE	35	32	2.7	2.3	2.7	2.7	**-0.8**	-9.2	3.2	**-0.3**
GOLDEN WORLD																
GW 3406	R	W	P	E	54	E	20	18	**1.0**	1.7	1.7	1.0	**-0.8**	**-2.3**	**-0.6**	**-1.0**
GW 5964	B	HY	P	M	64	E	30	37	3.7	2.7	3.3	3.3	-4.4	-13.0	**1.0**	**0.6**
GWX3066	R	W	P	M	64	-	15	17	**0.3**	2.3	1.7	1.0	**-1.2**	**-3.8**	**-0.3**	**1.2**
GWX8264	B	HY	P	M	64	E	28	22	1.7	1.3	2.3	1.3	**-2.4**	**-4.4**	**0.9**	**-1.4**
GWX1466	R	W	P	M	65	-	30	25	1.7	2.7	2.7	3.0	-4.8	**-4.9**	**0.5**	**0.4**
GWX1467	R	W	P	M	65	-	33	37	2.7	3.0	3.0	3.7	-3.2	**-7.3**	**1.0**	**1.0**
GWX3167	R	W	P	M	65	-	18	18	**1.0**	3.0	2.3	1.7	**-0.4**	**3.0**	**0.8**	**1.3**
GW 1489	R	W	P	ML	68	E	28	30	2.7	3.7	3.7	3.7	**0.0**	**-6.8**	**0.9**	**1.0**
GWX8067	R	W	P	ML	68	-	28	23	1.7	3.0	3.0	2.0	-4.4	**0.6**	**-0.3**	**0.2**
MIDLAND																
MG4665	B	W	P	ME	63	C	15	18	1.3	1.7	2.0	**0.7**	**-1.6**	-9.4	**-1.1**	**1.1**
MG4758Y	Y	HY	P	M	64	-	40	38	2.3	2.7	3.0	2.0	**-2.0**	**-4.1**	**-0.9**	1.6
MG4748	B	-	P	ME	65	CDE	13	18	**1.0**	2.3	2.0	1.7	**-2.8**	**3.9**	**0.1**	**0.7**
MG4772	B	-	P	M	68	CE	32	28	2.3	2.3	2.7	2.0	-3.6	**-7.1**	**0.3**	**-0.6**
MYCOGEN																
1G600	B	HY	P	ME	64	-	12	20	**0.7**	3.0	2.3	1.3	**-0.4**	**-1.8**	**0.1**	**1.2**
737	B	W	P	M	67	C	32	38	2.3	2.7	2.7	2.7	**-1.6**	**-7.2**	**1.4**	**0.9**
627	B	W	P	ME	68	CEIK	18	17	**0.7**	1.3	1.3	1.0	-5.6	**-4.5**	-2.7	2.1
M3838	C	HY	P	ME	69	CE	30	30	2.7	2.3	2.0	2.3	**-2.4**	**-4.9**	**2.0**	**-0.7**
697	B	W	P	M	70	CEIK	17	20	**0.7**	2.0	2.0	2.3	**-2.4**	**4.8**	**1.1**	**0.2**
NC+																
5B89	B	HY	P	E	61	C	12	18	1.3	2.7	2.7	2.0	-4.8	**2.8**	**-2.1**	**1.2**
Y363	Y	Y	P	ME	64	C	17	18	1.3	2.3	2.3	1.3	**-2.0**	-10.3	**1.6**	**-0.4**
7C22	Cr	HY	P	M	69	C	27	22	2.3	2.7	2.7	1.3	-4.4	**-5.2**	**0.5**	**-0.5**
7B47	B	HY	P	M	70	CE	32	35	2.3	2.7	3.7	2.7	-5.2	**-7.8**	**1.4**	**0.5**
7R34	R	W	P	M	70	-	35	37	2.7	2.3	2.7	2.3	-3.2	**-8.3**	**0.5**	**0.7**
7R83	R	W	P	M	72	-	18	18	**1.0**	3.0	2.7	2.0	-3.2	**-0.8**	**0.1**	**0.9**
8R18	R	W	P	ML	75	-	22	22	1.3	3.0	2.7	2.3	**0.0**	**-2.2**	**1.1**	**0.5**
OHLDE																
O-525	B	-	P	ME	64	-	22	23	1.7	2.3	2.7	2.0	**0.0**	**-0.1**	**0.0**	1.8
O-530	C	-	P	M	67	CE	28	32	3.0	2.7	2.7	2.3	-3.2	-9.4	**0.6**	**0.6**
O-567	B	-	P	ML	70	CEIK	18	17	**1.0**	1.3	1.7	2.0	**-2.4**	**-1.5**	**0.3**	**0.9**
PHILLIPS																
665	B	W	P	M	63	C	15	13	**0.7**	2.3	2.0	1.0	-4.0	-11.9	**0.6**	**0.4**
725	C	W	P	M	64	C	12	**5**	**0.7**	2.7	2.0	2.7	**-2.0**	**4.7**	**0.1**	**-0.6**
758Y	Y	HY	P	M	64	C	37	35	2.7	2.0	3.3	2.0	**-2.4**	**-4.9**	**-0.2**	**0.8**
672	B	W	P	M	65	CDE	18	18	**1.0**	2.0	2.0	1.3	**-2.8**	**-0.9**	**0.6**	**-0.1**
775	B	W	P	M	67	CE	30	27	2.0	1.7	2.0	2.7	**-2.8**	-9.2	3.2	**-1.2**

(continued)

Table 29. Entries in the 2005 Kansas Grain Sorghum Performance Tests - continued

BRAND NAME	hybrid traits*						Response to 2,4-D**									
							ratings					difference = treated - untreated				
							July 3	July 9	July 16 0=none, 4=severe							
	GC	EC	PC	Mat.	Days	GB	% injury	% injury	Stunt.	Root	Tiller	Days to bloom	Plant height (in)	Yield (bu/a)	Moist-ure (%)	Test weight (lb/bu)
PIONEER																
86G08	R	W	P	E	65	E	28	23	1.3	3.0	3.3	2.0	**-0.8**	**-2.5**	**0.6**	**0.8**
85G46	R	W	P	M	68	E	12	15	**1.0**	2.3	2.3	1.7	**-2.4**	-12.9	**-0.7**	**1.2**
85G01	R	W	P	M	69	E	10	**8**	**0.3**	1.7	1.0	**0.7**	**-0.8**	**-8.7**	**-0.1**	**0.6**
84G50	B	Y	P	M	70	-	18	13	**0.3**	2.7	2.0	2.3	-3.6	**3.3**	**-1.9**	1.7
84G62	B	Y	P	L	72	E	20	12	1.3	2.3	2.7	2.0	**-2.0**	**-4.2**	**1.0**	**0.4**
SORG. PARTNERS																
KS 310	B	HY	P	E	57	CE	23	25	2.3	3.3	2.3	3.0	**-0.8**	-12.2	**0.3**	**-0.7**
NK4420	B	HY	P	M	62	C	17	17	**1.0**	2.3	2.0	2.0	**-2.8**	**3.5**	**0.6**	1.7
NK5418	B	HY	P	M	66	CE	15	20	1.3	1.7	2.0	2.7	**-2.0**	-13.0	**1.2**	**0.6**
KS 585	B	HY	P	M	67	CE	30	32	1.7	2.7	3.0	2.3	**-2.0**	**-1.5**	**0.6**	**1.4**
NK6673	B	HY	P	M	67	C	48	43	2.7	2.7	3.7	3.7	**-2.4**	-16.6	4.6	**-1.3**
K73-J6	B	HY	P	ML	73	CE	27	25	1.7	2.0	2.3	2.3	-4.4	**8.9**	**0.6**	**0.6**
NK7633	B	HY	P	ML	73	C	32	28	2.7	2.7	2.7	2.7	**-2.4**	**-6.8**	**0.5**	**-1.2**
NK7655	C	Y	P	ML	73	C	23	18	**1.0**	2.0	3.0	3.0	**-2.4**	**-0.7**	**1.5**	**-0.1**
NK8831	B	HY	P	L	74	-	30	32	2.3	2.3	2.3	3.0	**-1.6**	**-6.1**	**1.0**	**0.6**
TAYLOR																
T-35GS	B	-	P	M	67	CED	32	25	2.3	2.0	1.7	1.7	**1.6**	**-2.3**	**0.0**	**-0.1**
TRIUMPH																
TR 434	R	W	P	E	58	CE	17	17	**0.7**	2.3	2.0	2.0	-3.6	-9.5	**0.4**	**0.2**
TR 438	B	W	P	E	60	CE	10	**6**	**0.0**	1.0	1.0	1.0	**-0.8**	-11.3	**-0.2**	**0.8**
TR 442	B	W	P	ME	61	CE	22	18	**0.3**	1.7	2.0	1.3	**-1.2**	**3.7**	**0.9**	**0.5**
TR 463	R	W	P	M	62	CE	13	12	**0.0**	1.3	1.0	2.0	-4.4	**-3.0**	**-0.9**	**0.3**
TRX44735	R	W	P	M	63	CE	15	18	1.3	1.7	3.0	2.0	**-2.4**	**4.9**	**-0.5**	**-0.4**
TR 459	B	W	P	ME	64	CE	25	23	2.3	3.0	2.0	2.0	-4.4	**-0.6**	**0.4**	**0.0**
TR 481	R	W	P	ML	72	CE	27	27	2.0	2.7	2.3	2.3	**-2.4**	**-1.1**	**-1.0**	**1.0**
MATURITY CHECK																
TX3042xTX2737	B	W	P	E	65	-	25	15	1.7	2.7	2.3	1.3	**0.0**	**-0.7**	**1.5**	**-0.4**
OK11xTX2741	W	W	P	M	69	-	22	18	1.3	2.3	2.3	1.3	**-2.0**	9.8	**1.0**	**0.7**
TX2752xTX430	B	W	P	L	73	-	33	28	2.7	2.7	3.0	1.7	-3.2	**-5.7**	**1.2**	**-0.4**
AVERAGES	-	-	-	-	-	-	24	23	1.6	2.4	2.4	2.1	**-2.5**	**-3.8**	**0.5**	**0.4**
LSD(0.05)*	-	-	-	-	-	-	**9**	**9**	**1.1**	**0.8**	**0.8**	1.2	NS	13.3	NS	2.1

* 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
GB = resistance to specific greenbug biotypes: C, E, I, K, etc.

**From 2,4-D screening at Manhattan. All hybrids were planted on May 31 in paired, 2-row plots, half of which were sprayed with 1.5 pints/acre of 2,4-D Amine-4 in 15 gal/acre at 20 psi on June 25 when plants were in the V-3 to V-5 stage (roughly 8" to 10" tall). Plots were maintained weed-free with a pre-emergence application of Bicep II Magnum and hand weeding. The test experienced no strong winds or storms, and lodging at harvest was minimal in all plots. Plots were harvested on October 10 and 13.
July 3 and 9 ratings were a visual estimate of the % injury caused by the 2,4-D. The July 16 ratings were visual estimates of the degree of stunting, brace root malformation, and stem and tiller lodging and goosenecking.
For all parameters, values in bold indicate no significant effect of 2,4-D for that hybrid. Average actual values were: 63.5 days to bloom, 49 in. height, 120 bu/a, 16.5 % moisture, 56.7 lb/bu.

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 ***www.ksu.edu/kscpt***.

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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.

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