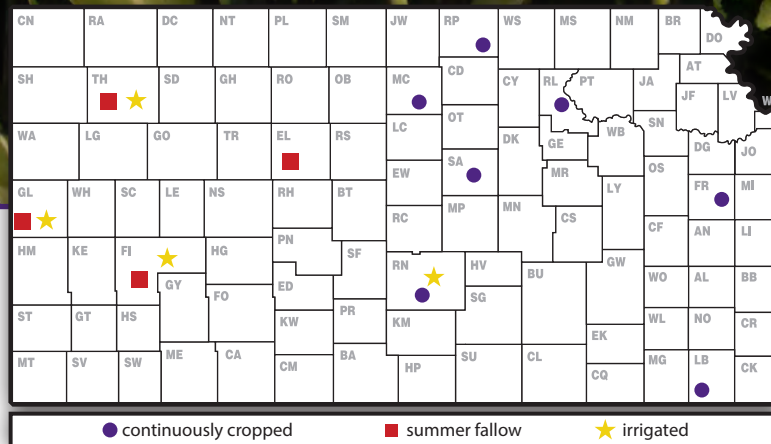


2015 Kansas Performance Tests with

Grain Sorghum Hybrids



Report of Progress 1122



Kansas State University Agricultural Experiment Station and Cooperative Extension Service

TABLE OF CONTENTS

2015 Grain Sorghum Crop Review

Statewide Growing Conditions, Diseases, and Insects.....	1
--	---

2015 Performance Tests

Harvest Statistics, Objectives and Procedures.....	2
--	---

Entrants in the 2015 Performance Tests Table 1.....	3
--	---

Northeast

Manhattan, Riley County Table 2	4
--	---

Belleville, Republic County Table 3.....	5
---	---

Mankato, Mitchell County Table 4	6
---	---

2015 Yield Summary Table 5.....	7
--------------------------------------	---

Southeast

Ottawa, Franklin County Table 6.....	8
---	---

Parsons, Labette County Table 7.....	9
---	---

2015 Yield Summary Table 8.....	10
--------------------------------------	----

Central

Assaria, Saline County Table 9.....	11
--	----

Hutchinson, Reno County Table 10.....	12
--	----

2015 Yield Summary Table 11.....	13
---------------------------------------	----

Western

Colby, Thomas County Table 12.....	14
---	----

Tribune, Greeley County Table 13.....	15
--	----

Garden City, Finney County Table 14.....	16
---	----

2015 Yield Summary Table 15.....	17
---------------------------------------	----

Irrigated

Colby, Thomas County Table 16.....	18
---	----

Tribune, Greeley County Table 17.....	19
--	----

Garden City, Finney County Table 18.....	20
---	----

2015 Yield Summary Table 19	21
--	----

Entries in the 2015 Kansas Grain Sorghum Performance Tests

Table 20.....	22
---------------	----

Electronic Access, University Research Policy, and Duplication Policy	23
---	----

2015 GRAIN SORGHUM CROP REVIEW

Statewide Growing Conditions

The 2015 grain sorghum growing season in Kansas was generally very productive. The wet conditions that plagued corn planting in the spring did not adversely delay sorghum planting (Figure 1), and set up the crop to enjoy early growth and establishment. Milder than normal nighttime temperatures during the summer months reduced stress at flowering and maintained the good health of the grain sorghum. Frequent rains in the fall, combined with later planting, did extend the time of grain drydown and left the crop in the field longer in some parts of the state. These areas reported more losses to lodging and bird feeding; however, generally sorghum producers benefitted from above average yields.

The quality of the grain sorghum crop reflected the productive growing season, and the majority of the crop remained in good to excellent condition throughout the season (Figure 2).

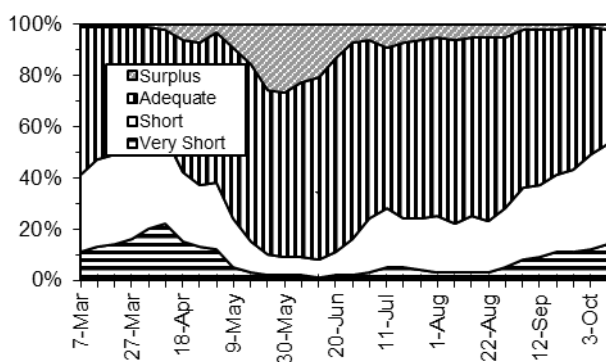


Figure 1. Statewide status of topsoil moisture

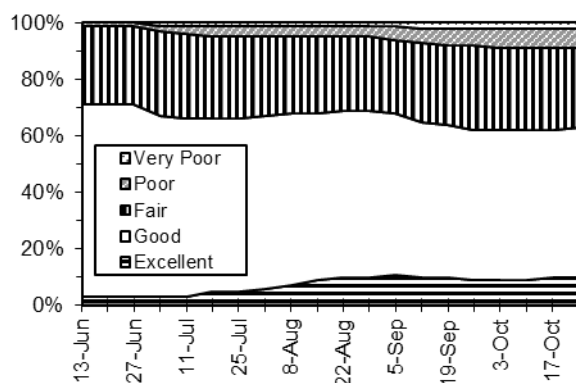


Figure 2. Condition of 2015 Kansas sorghum crop

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

Diseases

The 2015 Kansas sorghum crop was a bumper crop in many areas of the state that received timely rains during the growing season. Some problems were reported throughout the growing season, but most were minor in severity with the exception of late season stalk rots. As in 2014, a few fields suffered damage from seedling blights, primarily *Pythium* and *Fusarium* seedling blight.

During the growing season, there were minimal problems, but an occasional field could be found with sooty stripe and later in the season sorghum rust. The best control for sooty stripe is hybrid resistance. Normally rust comes in too late to be a yield loss issue, but with late planting in north central Kansas due to a very wet May and June, some fields had levels of rust that likely caused economic yield loss. A few fields suffered from physiological problems rather than disease. Certain sorghum hybrids contain a gene that causes the plant to respond with symptoms similar to herbicide injury or maize dwarf mosaic virus when extremely hot conditions (<100 °F) are encountered. A few cases of this heat stress reaction were reported in 2015.

The most significant disease problems occurred late in the season when *Fusarium* stalk rot developed across many areas of the state but especially the central, north central and northwest growing districts. By late September, many fields contained large areas of lodged plants, making harvest more difficult in those fields. In affected areas, it was a good year to compare hybrid resistance to lodging. Hybrids that lodged significantly should be weaned from the line-up and replaced with high yielding varieties that remained standing, even though stalk rot may have still been present in the field. (Doug Jardine, Kansas State University Department of Plant Pathology)

Insects

Sorghum seemed to have more insect problems in 2015 than usual. Early season chinch bugs caused some stand losses in south central and north central parts of the state when they migrated to fields planted adjacent to maturing wheat fields. Then 'headworms', mostly corn earworms, caused considerable acreage to be treated as they were feeding directly on the kernels.

The new, invasive white sugarcane aphid migrated into the state in June and rapidly increased to destructive levels, especially in south central Kansas. Insecticide applications seemed to work well if applied in a timely manner, but some fields required multiple applications. The large amounts of honeydew produced by these aphids did not seem to be problematic during harvest. Beneficial insects, i.e. green lacewings, lady beetles, parasitic wasps, and etc., helped

control these aphids in most fields. (Holly Schwarting, Kansas State University Department of Entomology)

Harvest Statistics

The Kansas Agricultural Statistics Service predicted a 238 million-bushel crop in the September 11, 2015 Crops Report, up 19% from last year (Figure 3). The number of acres harvested was up 7% from 2014 at 2.9 million. The average yield estimate of 82 bushels per acre is 8 bushels higher than last year's yield. (Kansas Agricultural Statistics Service, Topeka)

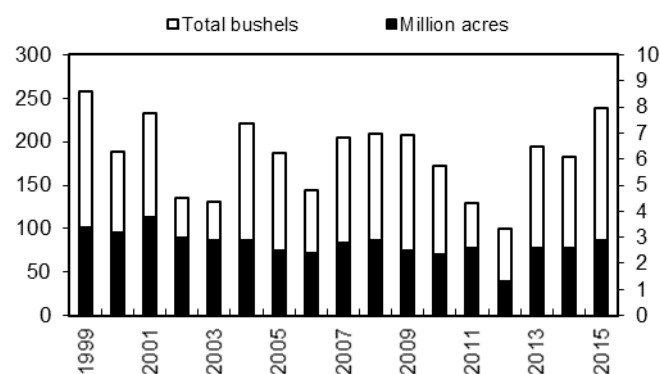


Figure 3. Historical Kansas grain sorghum production

2015 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. 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 2015 and the 30-year normal in addition to daily rainfall amounts since 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.

Explanatory information precedes data summaries for each test. Tables 2 through 19 contain results from the individual performance tests. Hybrids are listed in order of increasing days to half bloom when that information is available, so hybrids of similar maturity appear together.

As with individual test results, small differences should not be overemphasized. Relative ranking and large differences are better indicators of performance.

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.

Grain yields are reported as bushels per acre of shelled grain (56 lb/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 must also be considered.

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.

Table 1. Entrants in the 2015 Kansas Grain Sorghum Performance Tests

AgVenture
Minden, NE
308-832-1050

Browning Seed Inc.
Plainview, TX
806-293-5271
browningseed.com

Golden Acres Genetics
Waco, TX
254-761-9838
gaseed.com

NuTech Seed, LLC
Ames, IA
515-232-1997
yieldleader.com

Alta Seeds
Amarillo, TX
806-340-2031
altaseeds.com

DeKalb
Monsanto Seed
St. Louis, MO
800-335-2676
dekalb.com

Heartland Genetics LLC
Beloit, KS
785-738-5134

Polansky Seed, Inc.
Belleville, KS
785-527-2271
polanskyseed.com

B-H Genetics
Ganado, TX
361-771-2755
bhgenetics.com

Gayland Ward Seed
Hereford, TX
806-258-7394
gaylandwardseed.com

Mycogen Seeds
Indianapolis, IN
317-337-3892
dow.com

NORTHEAST KANSAS DRYLAND GRAIN SORGHUM TEST

Agronomy North Farm, Manhattan; Jane Lingenfelter, agronomist

Reading silt loam; soybean in 2014

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

Planted on 6/11/2015; Harvested on 11/10/2015

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

Test was delayed by weather and planted into wet conditions. Sugarcane aphids were an issue in late summer.

Month	Precipitation		Average Temp.		GDU	
	2015	Norm.	2015	Norm.	2015	Norm.
Nov.-Mar	3.1	6.0	36	35		
April	3.0	2.6	57	53	743	575
May	10.8	4.5	64	64	911	918
June	5.4	5.1	77	73	1188	1158
July	5.5	4.0	79	79	1296	1369
August	3.8	3.5	75	78	1213	1317
Sept.	3.2	3.8	74	70	1135	1035
Oct.	0.7	1.4	60	60	854	387
Totals:	35.5	30.9	56	54	7,338	6,759

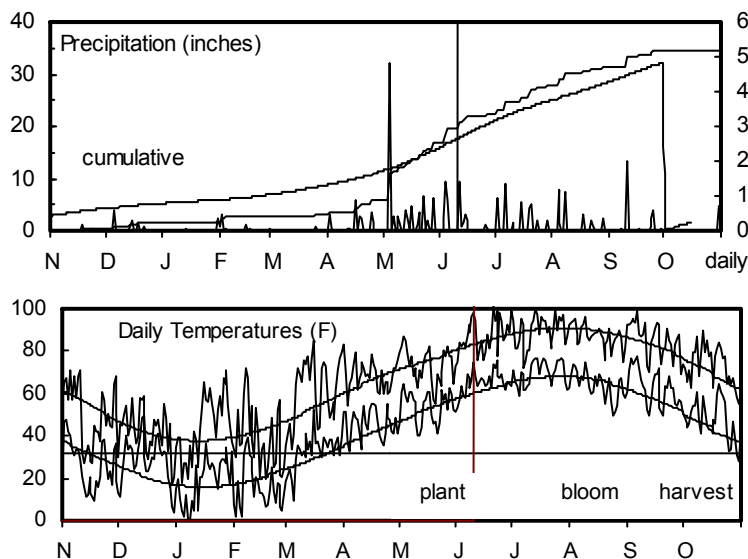


Table 2. Riley County Dryland Grain Sorghum Performance Test, 2013-2015

		YIELD AS %								2014-2015								
		ACRE YIELD, BUSHEL					OF TEST			Days Grain		Days Grain		Test	Plnt	Ldg	Pop.	
		2-yr.		3-yr.		AVERAGE			to	moist.	to	moist.	wt.	ht.		1000		
BRAND	NAME	2015	2014	2013	AVG.	AVG.	2015	2014	2013	blm	%	blm	%	lb/bu	in.	%	ppa	
ALTA	AG1203	97	112	--	105	--	111	106	--	71	14	--	15	62	56	--	34	
ALTA	AG2103	95	109	133	102	112	108	103	99	71	17	--	15	62	52	--	31	
ALTA	AG2105	90	112	--	101	--	102	106	--	69	14	--	15	61	46	--	30	
ALTA	AG2115	75	97	132	86	101	86	92	99	66	15	--	14	60	48	--	34	
ALTA	AG3101	89	--	--	--	--	101	--	--	--	--	--	15	61	54	--	41	
ALTA	AG3201	97	--	--	--	--	110	--	--	--	--	--	15	62	53	--	32	
ALTA	XG02008	80	--	--	--	--	91	--	--	--	--	--	15	61	50	--	33	
ALTA	XG30001	76	--	--	--	--	87	--	--	--	--	--	15	61	55	--	30	
ALTA	XG30002	90	--	--	--	--	102	--	--	--	--	--	15	60	61	--	32	
ALTA	XG30003	93	--	--	--	--	105	--	--	--	--	--	15	61	46	--	32	
DEKALB	DKS38-88	78	109	129	94	105	89	104	97	66	16	--	15	62	52	--	35	
DEKALB	DKS51-01	92	108	130	100	110	104	102	97	71	17	--	15	61	52	--	35	
DEKALB	DKS51-50	90	--	--	--	--	103	--	--	--	--	--	15	60	54	--	37	
DEKALB	DKS53-53	100	107	--	103	--	114	101	--	68	15	--	15	62	50	--	31	
DEKALB	DKS54-00	83	116	--	99	--	94	110	--	71	14	--	15	61	51	--	35	
GAYLAND WARD	GW-1160	86	--	--	--	--	98	--	--	--	--	--	15	61	66	--	35	
GAYLAND WARD	GW-9417	77	--	--	--	--	87	--	--	--	--	--	16	62	55	--	35	
HEARTLAND GENETICS	HG 52-B	93	123	--	108	--	106	117	--	70	14	--	14	61	58	--	35	
HEARTLAND GENETICS	HG45-C	93	--	--	--	--	106	--	--	--	--	--	14	60	52	--	33	
HEARTLAND GENETICS	HG48-B	81	101	--	91	--	93	96	--	67	13	--	15	60	59	--	35	
MATURITY CHECK	EARLY	83	--	--	--	--	95	--	--	--	--	--	15	61	50	--	36	
MATURITY CHECK	LATE	101	--	--	--	--	115	--	--	--	--	--	16	62	52	--	35	
MATURITY CHECK	MED	87	--	--	--	--	99	--	--	--	--	--	16	62	49	--	28	
MYCOGEN	1G557	80	100	--	90	--	91	95	--	75	14	--	15	59	47	--	28	
MYCOGEN	IG741	87	--	--	--	--	99	--	--	--	--	--	15	62	50	--	27	
POLANSKY	GS665W	77	110	--	94	--	88	104	--	72	14	--	15	61	47	--	38	
POLANSKY	GS761	104	112	--	108	--	119	107	--	70	14	--	15	61	52	--	31	
	Average	88	105	134	96	109	100	100	100	--	--	--	15	61	52	--	33	
	CV (%)	9	10	8	--	--	9	10	8	--	--	--	5	3	5	--	0	
	LSD (0.05)	12	14	16	--	--	13	13	12	--	--	--	1	2	4	--	0	

*Yields in bold are not statistically different than the highest-yielding hybrid.

NORTHEAST KANSAS DRYLAND GRAIN SORGHUM TEST

North Central Kansas Exp. Field, Belleville; Andrew Esser, agronomist; Michael Larson and Doug Stensaas, technicians

Crete silt loam; wheat in 2014

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

Planted on 6/23/2015; Harvested on 11/4/2015

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

Planting was delayed by frequent rains and caused drydown to be extended into fall.

Month	Precipitation		Average Temp.		GDU	
	2015	Norm.	2015	Norm.	2015	Norm.
Nov.-Mar	2.4	4.8	33	32		
April	3.3	2.3	54	52	694	534
May	5.8	3.7	61	63	839	886
June	5.8	4.6	74	73	1131	1149
July	4.6	3.4	77	78	1234	1368
August	3.9	3.4	74	77	1171	1310
Sept.	0.8	3.5	73	68	1097	987
Oct.	1.3	0.8	58	59	801	375
Totals:	27.9	26.5	53	52	6,966	6,609

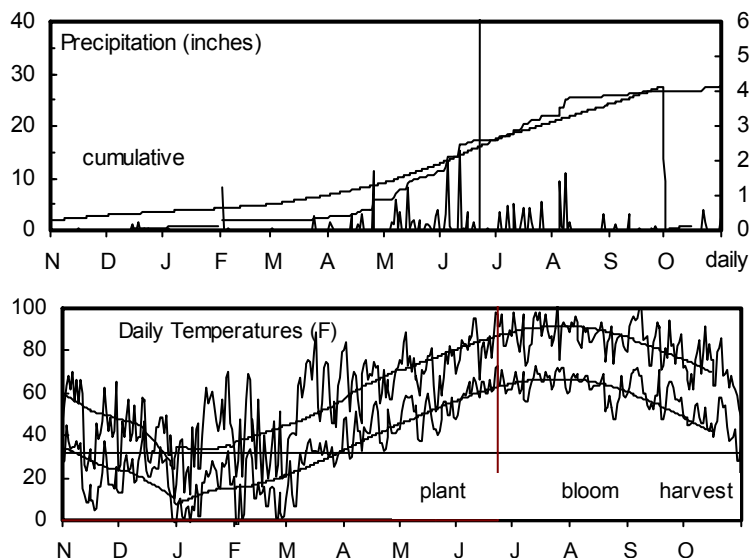


Table 3. Republic County Dryland Grain Sorghum Performance Test, 2013-2015

							YIELD AS %			2014-2015								
BRAND	NAME	ACRE YIELD, BUSHELS					OF TEST			Days	Grain	Days	Grain	Test	Plnt		Pop.	
		2015	2014	2013	2-yr.	3-yr.	AVERAGE			to	moist.	to	moist.	wt.	ht.	Ldg	1000	
					AVG.	AVG.	2015	2014	2013	blm	%	blm	%	lb/bu	in.	%	ppa	
ALTA	AG1203	121	130	--	125	--	99	117	--	--	14	--	14	60	--	--	--	
ALTA	AG2103	106	113	124	110	114	87	102	110	--	15	--	14	60	--	--	--	
ALTA	AG2105	117	91	--	104	--	96	82	--	--	14	--	14	61	--	--	--	
ALTA	AG2115	106	115	106	110	109	86	104	94	--	14	--	14	60	--	--	--	
ALTA	AG3101	145	--	--	--	--	118	--	--	--	--	--	14	62	--	--	--	
ALTA	AG3201	134	--	--	--	--	110	--	--	--	--	--	15	60	--	--	--	
ALTA	XG02008	110	--	--	--	--	90	--	--	--	--	--	16	59	--	--	--	
ALTA	XG30001	109	--	--	--	--	89	--	--	--	--	--	14	60	--	--	--	
ALTA	XG30002	104	--	--	--	--	85	--	--	--	--	--	14	60	--	--	--	
ALTA	XG30003	114	--	--	--	--	93	--	--	--	--	--	15	61	--	--	--	
DEKALB	DKS49-45	136	--	--	--	--	111	--	--	--	--	--	14	61	--	--	--	
DEKALB	DKS51-01	129	150	121	139	133	105	135	107	--	14	--	14	60	--	--	--	
DEKALB	DKS51-50	134	--	--	--	--	110	--	--	--	--	--	14	61	--	--	--	
DEKALB	DKS53-53	132	133	--	133	--	108	120	--	--	15	--	15	60	--	--	--	
DEKALB	DKS54-00	139	145	--	142	--	114	131	--	--	14	--	14	60	--	--	--	
GAYLAND WARD	GW-1160	106	--	--	--	--	86	--	--	--	--	--	14	60	--	--	--	
GAYLAND WARD	GW-9417	133	--	--	--	--	109	--	--	--	--	--	14	60	--	--	--	
HEARTLAND GENETICS	HG45-C	113	--	--	--	--	93	--	--	--	--	--	14	60	--	--	--	
HEARTLAND GENETICS	HG48-B	125	121	--	123	--	102	109	--	--	13	--	14	61	--	--	--	
HEARTLAND GENETICS	HG52-B	136	118	--	127	--	111	106	--	--	14	--	14	61	--	--	--	
MATURITY CHECK	EARLY	122	--	--	--	--	99	--	--	--	--	--	14	61	--	--	--	
MATURITY CHECK	LATE	137	--	--	--	--	112	--	--	--	--	--	14	61	--	--	--	
MATURITY CHECK	MED	130	--	--	--	--	106	--	--	--	--	--	14	61	--	--	--	
MYCOGEN	1G557	74	109	--	91	--	60	99	--	--	15	--	14	60	--	--	--	
MYCOGEN	1G741	143	--	--	--	--	116	--	--	--	--	--	14	60	--	--	--	
POLANSKY	GS 679	117	111	--	114	--	95	100	--	--	15	--	15	60	--	--	--	
POLANSKY	GS718	134	--	--	--	--	110	--	--	--	--	--	14	61	--	--	--	
	Average	123	111	113	117	116	100	100	100	--	15	--	14	60	--	--	--	
	CV (%)	8	9	8	--	--	8	9	8	--	--	--	4	1	--	--	--	
	LSD (0.05)	16	17	15	--	--	13	15	13	--	--	--	1	1	--	--	--	

* Yields in bold are not statistically different than the highest-yielding hybrid.

NORTH CENTRAL DRYLAND GRAIN SORGHUM TEST

Calvin Bohnert Farm, Mankato; Andrew Esser, agronomist; Michael Larson and Doug Stensaas, technicians

Harney silt loam; soybean in 2014

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

Planted on 7/1/2015; Harvested on 12/10/2015

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

Test was delayed by weather and planted into less-than-ideal conditions.

Month	Precipitation		Average Temp.		GDU	
	2015	Norm.	2015	Norm.	2015	Norm.
Nov.-Mar	2.0	5.4	35	37		
April	2.3	2.5	55	56	715	424
May	6.0	4.2	62	65	859	835
June	4.7	3.8	75	75	1162	1197
July	5.5	4.4	79	81	1283	1369
August	3.8	3.1	75	80	1206	1242
Sept.	0.2	2.6	74	71	1122	971
Oct.	1.2	2.0	59	53	824	400
Totals:	25.5	27.9	55	56	7,169	6,438

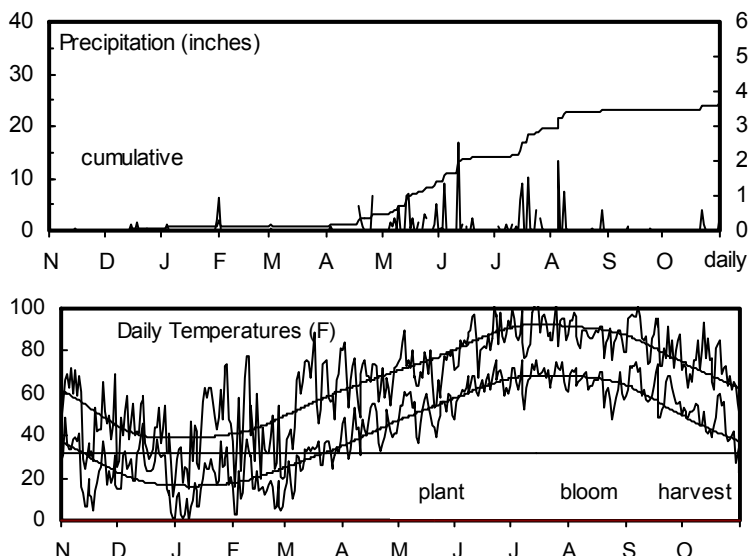


Table 4. Mitchell County Dryland Grain Sorghum Performance Test, 2013-2015

BRAND	NAME	ACRE YIELD, BUSHEL					YIELD AS %			2014-2015		Days Grain to moist.	Days Grain to moist.	Test wt. lb/bu	Plnt ht. in.	Ldg %	Pop. 1000 ppa
		2015	2014	2013	2-yr. AVG.	3-yr. AVG.	OF TEST										
							AVERAGE										
							2015	2014	2013								
ALTA	AG1203	96	--	--	--	--	108	--	--	--	--	--	14	61	--	25	--
ALTA	AG2103	93	--	--	--	--	104	--	--	--	--	--	13	50	--	90	--
ALTA	AG2105	83	--	--	--	--	93	--	--	--	--	--	12	51	--	55	--
ALTA	AG2115	73	--	--	--	--	82	--	--	--	--	--	14	63	--	35	--
ALTA	AG3101	86	--	--	--	--	97	--	--	--	--	--	14	62	--	0	--
ALTA	AG3201	106	--	--	--	--	119	--	--	--	--	--	14	62	--	0	--
ALTA	XG02008	108	--	--	--	--	122	--	--	--	--	--	14	62	--	25	--
ALTA	XG30001	105	--	--	--	--	118	--	--	--	--	--	14	63	--	38	--
ALTA	XG30002	89	--	--	--	--	100	--	--	--	--	--	14	62	--	0	--
ALTA	XG30003	84	--	--	--	--	94	--	--	--	--	--	14	62	--	0	--
DEKALB	DKS49-45	100	--	--	--	--	113	--	--	--	--	--	14	61	--	85	--
DEKALB	DKS51-01	99	--	109	--	104	111	--	105	--	--	--	14	62	--	40	--
DEKALB	DKS51-50	95	--	--	--	--	106	--	--	--	--	--	14	62	--	30	--
DEKALB	DKS53-53	75	--	--	--	--	84	--	--	--	--	--	14	62	--	0	--
DEKALB	DKS54-00	60	--	--	--	--	68	--	--	--	--	--	14	62	--	30	--
GAYLAND WARD	GW-1160	76	--	--	--	--	86	--	--	--	--	--	13	62	--	0	--
GAYLAND WARD	GW-9417	84	--	--	--	--	95	--	--	--	--	--	13	62	--	0	--
HEARTLAND GENETICS	HG 52-B	90	--	--	--	--	101	--	--	--	--	--	14	62	--	25	--
HEARTLAND GENETICS	HG45-C	87	--	--	--	--	98	--	--	--	--	--	14	62	--	40	--
HEARTLAND GENETICS	HG48-B	75	--	--	--	--	85	--	--	--	--	--	13	59	--	35	--
MATURITY CHECK	EARLY	71	--	--	--	--	80	--	--	--	--	--	14	63	--	25	--
MATURITY CHECK	LATE	83	--	--	--	--	93	--	--	--	--	--	13	52	--	90	--
MATURITY CHECK	MED	101	--	--	--	--	114	--	--	--	--	--	14	62	--	25	--
MYCOGEN	1G557	104	--	--	--	--	117	--	--	--	--	--	14	62	--	50	--
MYCOGEN	1G741	106	--	--	--	--	119	--	--	--	--	--	14	62	--	60	--
POLANSKY	GS524	81	--	--	--	--	91	--	--	--	--	--	14	62	--	0	--
POLANSKY	GS665W	89	--	--	--	--	101	--	--	--	--	--	14	62	--	0	--
	Average	89	--	104	--	97	100	--	100	--	--	--	14	61	--	45	--
	CV (%)	7	--	13	--	--	7	--	13	--	--	--	8	13	--	28	--
	LSD (0.05)	9	--	22	--	--	10	--	21	--	--	--	2	11	--	12	--

*Yields in bold are not statistically different than the highest-yielding hybrid.

Table 5. NORTHEAST Kansas Grain Sorghum Hybrid Yield Summary (% of test avg.), 2015

BRAND/NAME	RLD	RPD	MTD	AVG.	BRAND/NAME	RLD	RPD	MTD	AVG.
ALTA					MATURITY CHECK				
AG1203	111	99	108	106	EARLY	95	99	80	91
AG2103	108	87	104	99	LATE	115	112	93	107
AG2105	102	96	93	97	MED	99	106	114	106
AG2115	86	86	82	85					
AG3101	101	118	97	106	AVERAGES (bu/a)	88	123	89	100
AG3201	110	110	119	113	CV (%)	9	8	7	--
XG02008	91	90	122	101	LSD (0.05)	13	13	10	--
XG30001	87	89	118	98					
XG30002	102	85	100	96					
XG30003	105	93	94	97					
DEKALB									
DKS38-88	89	--	--	--					
DKS49-45	--	111	113	--					
DKS51-01	104	105	111	107					
DKS51-50	103	110	106	106					
DKS53-53	114	108	84	102					
DKS54-00	94	114	68	92					
GAYLAND WARD SEED									
GW-1160	98	86	86	90					
GW9417	87	109	95	97					
HEARTLAND GENETICS									
HG45-C	106	93	98	99					
HG48-B	93	102	85	93					
HG52-B	106	111	101	106					
MYCOGEN									
1G557	91	60	117	90					
IG741	99	116	119	111					
POLANSKY									
GS 679	--	95	--	--					
GS524	--	--	91	--					
GS665W	88	--	101	--					
GS718	--	110	--	--					
GS761	119	--	--	--					

SOUTHEAST KANSAS DRYLAND GRAIN SORGHUM TEST

East Central Kansas Experiment Field, Ottawa; Eric Adee, agronomist; Jim Kimball, technician

Woodson silt loam; corn in 2014

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

Planted on 6/10/2015; Harvested on 10/13/2015

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

Some stand establishment problems caused by wet conditions in the spring. Timely rains the rest of the growing season.

Month	Precipitation		Average Temp.		GDU	
	2015	Norm.	2015	Norm.	2015	Norm.
Nov.-Mar	4.7	6.4	36	37		0
April	3.5	2.9	57	56	737	634
May	10.7	4.1	64	65	918	953
June	4.4	4.9	77	74	1207	1186
July	3.3	4.0	79	80	1281	1401
August	2.3	3.2	74	79	1187	1362
Sept.	2.8	4.0	72	71	1100	1062
Oct.	0.8	1.2	58	62	812	416
Totals:	32.4	30.8	55	56	7,241	7,014

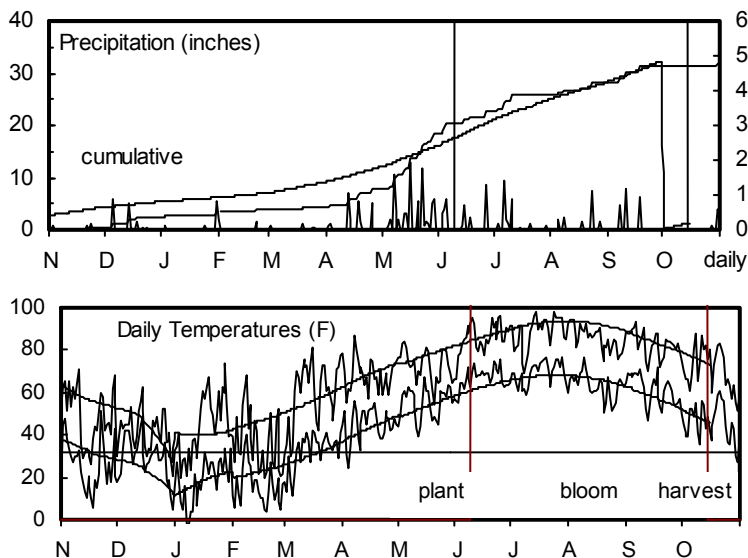


Table 6. Franklin County Dryland Grain Sorghum Performance Test, 2013-2015

BRAND	NAME	ACRE YIELD, BUSHEL		YIELD AS %		2014-2015		Days Grain to blm	Grain % moist.	Days Grain to blm	Grain % moist.	Test wt. lb/bu	Plnt ht. in.	Ldg %	Pop. 1000 ppa
		2015	2014	2013	2-yr. AVG.	3-yr. AVG.	AVERAGE								
MYCOGEN	1G557	99	102	--	100	--	86 88	--	56	16	54	15	65	--	--
MATURITY CHECK	EARLY	125	--	--	--	--	109	--	--	--	55	16	66	--	--
ALTA	AG2103	119	--	--	--	--	104	--	--	--	56	15	88	--	--
ALTA	AG2115	122	--	--	--	--	106	--	--	--	56	15	65	--	--
ALTA	AG2105	120	--	--	--	--	105	--	--	--	56	15	66	--	--
ALTA	XG30001	117	--	--	--	--	103	--	--	--	56	16	66	--	--
ALTA	XG30002	102	--	--	--	--	89	--	--	--	56	16	65	--	--
DEKALB	DKS44-20	111	124	153	118	129	97 107 103	61	17	57	16	66	--	--	--
MYCOGEN	IG741	118	--	--	--	--	103	--	--	--	57	16	65	--	--
DEKALB	DKS51-50	104	--	--	--	--	91	--	--	--	57	16	66	--	--
MATURITY CHECK	MED	110	--	--	--	--	96	--	--	--	58	16	66	--	--
ALTA	XG02008	125	--	--	--	--	109	--	--	--	58	16	66	--	--
ALTA	AG1203	110	--	--	--	--	96	--	--	--	59	16	67	--	--
MATURITY CHECK	LATE	116	--	--	--	--	101	--	--	--	59	15	66	--	--
DEKALB	DKS51-01	130	--	--	--	--	113	--	--	--	59	16	67	--	--
ALTA	AG3201	124	--	--	--	--	109	--	--	--	59	16	65	--	--
DEKALB	DKS54-00	104	127	--	115	--	91 110	--	65	17	60	15	63	--	--
ALTA	AG3101	110	--	--	--	--	96	--	--	--	60	16	66	--	--
DEKALB	DKS53-53	121	128	--	125	--	106 110	--	64	19	61	18	65	--	--
ALTA	XG30003	104	--	--	--	--	91	--	--	--	61	17	66	--	--
	Average	115	116	149	115	127	100 100 100	63	17	58	16	67	--	--	--
	CV (%)	7	6	6	--	--	7 6 6	--	--	--	1	2	15	--	--
	LSD (0.05)	12	10	13	--	--	11 8 9	--	--	--	1	0	14	--	--

*Yields in bold are not statistically different than the highest-yielding hybrid.

SOUTHEAST KANSAS DRYLAND GRAIN SORGHUM TEST

Southeast Agricultural Research Center, Parsons; Lonnie Mengarelli, technician

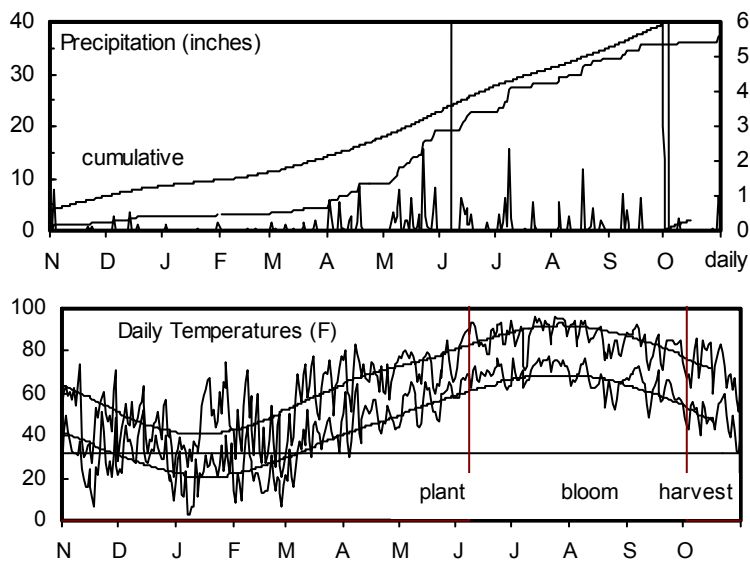
Parsons silt loam; soybean in 2014

120 - 20 - 0 lb/a N, P, K

Planted on 6/8/2015; Harvested on 10/2/2015

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

Wet after planting and had poor stands in some replications. Timely summer rains and mostly mild temperatures; sprayed for head worms.



Month	Precipitation		Average Temp.		GDU	
	2015	Norm.	2015	Norm.	2015	Norm.
Nov.-Mar	4.6	10.3	39	39		
April	4.5	3.7	59	57	769	668
May	10.1	5.0	65	65	941	952
June	3.8	4.8	77	74	1232	1178
July	5.5	3.6	81	80	1338	1385
August	4.5	3.8	75	79	1215	1345
Sept.	2.8	4.5	73	71	1129	1075
Oct.	1.6	1.9	60	63	830	421
Totals:	37.4	37.5	57	57	7,454	7,022

Table 7. Labette County Dryland Grain Sorghum Performance Test, 2013-2015

		YIELD AS %									2014-2015							
		ACRE YIELD, BUSHEL					OF TEST				Days	Grain	Days	Grain	Test	Plnt		Pop.
				2-yr.		3-yr.	AVERAGE			to	moist.	to	moist.	wt.	ht.	Ldg	1000	
BRAND	NAME	2015	2014	2013	AVG.	AVG.	2015	2014	2013	blm	%	blm	%	lb/bu	in.	%	ppa	
MYCOGEN	1G557	42	82	--	62	--	108	75	--	55	14	57	16	47	42	3	41	
MATURITY CHECK	EARLY	31	--	--	--	--	78	--	--	--	--	59	15	55	48	30	52	
ALTA	XG30001	43	--	--	--	--	110	--	--	--	--	60	16	56	49	7	28	
GAYLAND WARD	GW-1160	44	--	--	--	--	113	--	--	--	--	61	16	57	52	0	33	
ALTA	AG3201	30	--	--	--	--	77	--	--	--	--	61	15	54	53	44	40	
ALTA	AG2115	52	114	126	83	97	132	104	100	60	15	61	15	53	51	5	34	
ALTA	AG2105	52	48	--	50	--	133	44	--	61	15	61	15	52	55	7	32	
DEKALB	DKS38-88	36	146	135	91	106	92	133	107	59	15	62	15	52	55	8	40	
ALTA	AG2103	40	--	--	--	--	102	--	--	--	--	62	15	54	49	1	38	
MATURITY CHECK	MED	73	--	--	--	--	187	--	--	--	--	62	16	59	57	1	44	
MYCOGEN	1G741	23	--	--	--	--	58	--	--	--	--	62	14	40	53	49	34	
DEKALB	DKS51-01	46	140	--	93	--	118	128	--	63	15	62	16	57	58	6	46	
DEKALB	DKS51-50	19	--	--	--	--	49	--	--	--	--	62	15	39	55	63	41	
ALTA	AG3101	13	--	--	--	--	32	--	--	--	--	63	14	31	56	66	37	
ALTA	AG1203	79	107	--	93	--	202	98	--	61	16	63	19	57	53	0	29	
ALTA	XG02008	23	--	--	--	--	59	--	--	--	--	63	12	37	50	51	30	
DEKALB	DKS53-53	25	128	--	77	--	65	117	--	63	15	64	15	50	51	24	38	
DEKALB	DKS53-67	33	146	148	89	109	84	134	117	64	15	64	15	51	52	6	43	
ALTA	XG30002	44	--	--	--	--	113	--	--	--	--	64	18	56	50	0	30	
ALTA	XG30003	35	130	--	82	--	88	119	--	62	16	64	17	47	50	0	26	
	Average	39	110	126	75	92	100	100	100	61	15	62	15	50	52	18	37	
	CV (%)	10	11	8	--	--	10	11	8	--	--	3	13	19	4	--	--	
	LSD (0.05)	6	17	14	--	--	14	16	11	--	--	2	3	13	3	28	1	

*Yields in bold are not statistically different than the highest-yielding hybrid.

Table 8. SOUTHEAST Kansas Grain Sorghum Hybrid Yield Summary (% of test avg.), 2015

BRAND/NAME	FRD	LBD	AVG.		FRD	LBD	AVG.
ALTA				MATURITY CHECK			
AG1203	96	202	149	EARLY	109	78	93
AG2103	104	102	103	LATE	101	--	--
AG2105	105	133	119	MED	96	187	142
AG2115	106	132	119	AVERAGES (bu/a)	115	39	77
AG3101	96	32	64	CV (%)	7	10	--
AG3201	109	77	93	LSD (0.05)	11	14	--
XG02008	109	59	84				
XG30001	103	110	106				
XG30002	89	113	101				
XG30003	91	88	89				
DEKALB							
DKS38-88	--	92	--				
DKS44-20	97	--	--				
DKS51-01	113	118	116				
DKS51-50	91	49	70				
DKS53-53	106	65	85				
DKS53-67	--	84	--				
DKS54-00	91	--	--				
GAYLAND WARD							
GW-1160	--	113	--				
MYCOGEN							
1G557	86	108	97				
IG741	103	58	81				

CENTRAL KANSAS DRYLAND GRAIN SORGHUM TEST

Clayton Short farm, Assaria; Jane Lingenfelter, agronomist

Hord silt loam; soybean in 2014

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

Planted on 6/10/2015; Harvested on 11/9/2015

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

Test was delayed by weather and planted into wet conditions. Bird damage was extensive for early hybrids.

Month	Precipitation		Average Temp.		GDU	
	2015	Norm.	2015	Norm.	2015	Norm.
Nov.-Mar	3.4	6.9	38	37		
April	1.8	3.0	58	55	773	593
May	8.3	5.1	64	65	924	923
June	4.5	4.2	79	75	1231	1211
July	3.9	4.3	82	81	1341	1431
August	3.9	3.5	77	80	1235	1394
Sept.	1.7	2.5	77	71	1181	1072
Oct.	0.7	1.3	61	62	873	407
Totals:	28.1	30.9	57	56	7,556	7,031

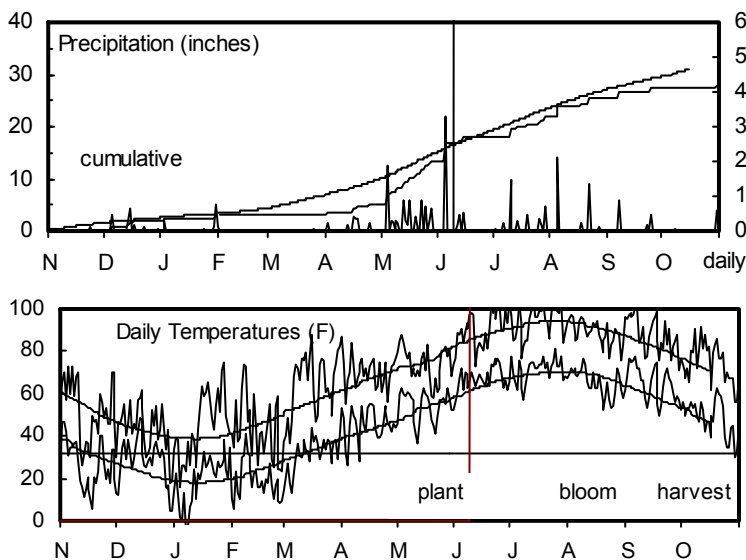


Table 9. Saline County Dryland Grain Sorghum Performance Test, 2013-2015

BRAND	NAME	ACRE YIELD, BUSHEL					YIELD AS %			2014-2015		Test	Plnt	Ldg	Pop.		
		2015	2014	2013	2-yr. AVG.	3-yr. AVG.	OF TEST			Days to blm	Grain moist. %						
							2015	2014	2013								
																AVERAGE	Days to blm
ALTA	AG1203	92	--	--	--	--	118	--	--	--	--	--	13	58	--	--	44
ALTA	AG1301	76	--	--	--	--	97	--	--	--	--	--	13	56	--	--	51
ALTA	AG1401	74	--	--	--	--	95	--	--	--	--	--	12	55	--	--	49
ALTA	AG2103	68	--	--	--	--	87	--	--	--	--	--	13	58	--	--	42
ALTA	AG2105	71	--	--	--	--	91	--	--	--	--	--	14	56	--	--	47
ALTA	AG2115	78	--	--	--	--	100	--	--	--	--	--	13	56	--	--	52
ALTA	AG3101	69	--	--	--	--	88	--	--	--	--	--	14	58	--	--	44
ALTA	AG3201	94	--	--	--	--	120	--	--	--	--	--	14	58	--	--	51
ALTA	XG02008	85	--	--	--	--	109	--	--	--	--	--	13	56	--	--	48
ALTA	XG30001	67	--	--	--	--	85	--	--	--	--	--	14	53	--	--	48
ALTA	XG30002	86	--	--	--	--	111	--	--	--	--	--	14	54	--	--	37
ALTA	XG30003	79	--	--	--	--	101	--	--	--	--	--	12	55	--	--	43
DEKALB	DKS38-88	76	113	114	95	101	97	107	92	--	16	--	14	57	--	--	45
DEKALB	DKS49-45	95	--	--	--	--	121	--	--	--	--	--	12	55	--	--	46
DEKALB	DKS51-01	94	111	--	102	--	120	105	--	--	16	--	14	59	--	--	51
DEKALB	DKS51-50	69	--	--	--	--	88	--	--	--	--	--	13	58	--	--	57
DEKALB	DKS53-53	96	114	--	105	--	123	107	--	--	15	--	14	58	--	--	38
GAYLAND WARD	GW-1160	53	--	--	--	--	67	--	--	--	--	--	11	52	--	--	46
HEARTLAND GENETICS	HG45-C	78	--	--	--	--	100	--	--	--	--	--	11	51	--	--	47
HEARTLAND GENETICS	HG48-B	73	118	--	96	--	94	111	--	--	14	--	13	58	--	--	53
HEARTLAND GENETICS	HG52-B	98	122	--	110	--	125	115	--	--	13	--	12	54	--	--	48
MATURITY CHECK	EARLY	98	--	--	--	--	126	--	--	--	--	--	14	59	--	--	45
MATURITY CHECK	LATE	64	--	--	--	--	82	--	--	--	--	--	14	57	--	--	49
MATURITY CHECK	MED	68	--	--	--	--	87	--	--	--	--	--	14	58	--	--	62
MYCOGEN	1G557	39	101	--	70	--	50	95	--	--	11	--	10	52	--	--	46
MYCOGEN	1G741	103	--	--	--	--	131	--	--	--	--	--	14	59	--	--	45
POLANSKY	GS 679	71	--	--	--	--	91	--	--	--	--	--	14	59	--	--	47
POLANSKY	GS718	73	111	--	92	--	93	104	--	--	15	--	14	59	--	--	49
	Average	78	106	124	92	103	100	100	100	--	14	--	13	56	--	--	48
	CV (%)	8	9	6	--	--	8	9	6	--	--	--	10	3	--	--	0
	LSD (0.05)	9	14	11	--	--	11	13	9	--	--	--	2	2	--	--	0

*Yields in bold are not statistically different than the highest-yielding hybrid.

CENTRAL KANSAS DRYLAND GRAIN SORGHUM TEST

South Central Kansas Experiment Field, Hutchinson; Gary Cramer, agronomist; Keith Thompson, technician

Ost loam; wheat in 2014

140 - 25 - 0 lb/a N, P, K

Planted on 6/19/2015; Harvested on 10/21/2015

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

Some lodging caused by strong winds in the early fall.

Month	Precipitation		Average Temp.		GDU	
	2015	Norm.	2015	Norm.	2015	Norm.
Nov.-Mar	2.9	4.4	37	37		
April	2.0	2.6	57	55	762	617
May	6.6	3.8	62	65	881	927
June	2.4	4.3	78	75	1206	1196
July	3.4	3.5	81	81	1306	1416
August	2.1	3.1	76	79	1210	1361
Sept.	2.7	3.3	75	70	1139	1053
Oct.	1.0	1.1	60	62	853	407
Totals:	23.1	26.1	56	56	7,357	6,977

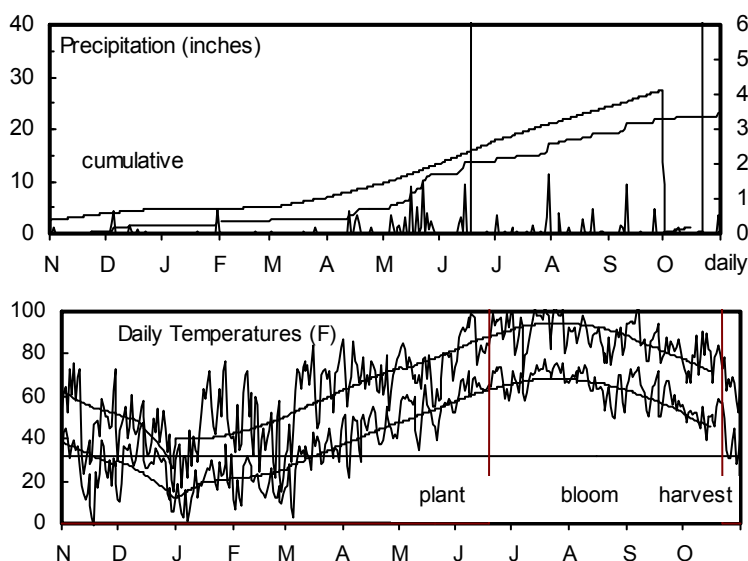


Table 10. Reno County Dryland Grain Sorghum Performance Test, 2013-2015

YIELD AS %																		2014-2015					
		ACRE YIELD, BUSHEL					OF TEST			Days	Grain	Days	Grain	Test	Plnt		Pop.						
		2-yr.		3-yr.		AVERAGE			to	moist.	to	moist.	wt.	ht.	Ldg	1000							
BRAND	NAME	2015	2014	2013	AVG.	AVG.	2015	2014	2013	blm	%	blm	%	lb/bu	in.	%	ppa						
ALTA	AG1301	82	--	--	--	--	83	--	--	--	--	57	11	57	46	16	--						
NUTECH	GS 605	79	--	--	--	--	80	--	--	--	--	57	12	57	44	13	--						
HEARTLAND GENETICS	HG48-B	84	100	--	92	--	85	128	--	57	14	57	13	56	49	14	--						
NUTECH	GS 725	92	--	--	--	--	93	--	--	--	--	58	12	57	48	8	--						
ALTA	XG30003	86	--	--	--	--	87	--	--	--	--	58	13	55	44	4	--						
MYCOGEN	737	98	--	--	--	--	99	--	--	--	--	58	14	57	50	33	--						
MYCOGEN	697	97	--	--	--	--	98	--	--	--	--	58	12	58	49	5	--						
MYCOGEN	1G557	89	--	--	--	--	90	--	--	--	--	58	9	57	44	16	--						
DEKALB	DKS53-67	102	66	119	84	96	103	84	123	59	16	59	14	57	48	9	--						
MATURITY CHECK	MED	84	--	--	--	--	85	--	--	--	--	59	14	57	51	18	--						
ALTA	AG2115	92	93	94	93	93	93	118	98	59	15	59	13	56	50	6	--						
MYCOGEN	1G600	101	--	--	--	--	102	--	--	--	--	59	14	57	48	10	--						
ALTA	XG30002	114	--	--	--	--	115	--	--	--	--	59	14	56	45	9	--						
ALTA	AG1401	92	--	--	--	--	93	--	--	--	--	59	13	56	47	15	--						
ALTA	AG1203	113	56	--	84	--	114	71	--	59	15	59	10	58	50	13	--						
MATURITY CHECK	EARLY	110	--	--	--	--	112	--	--	--	--	59	13	57	51	10	--						
DEKALB	DKS51-01	114	81	--	97	--	115	103	--	59	15	59	10	57	48	6	--						
DEKALB	DKS38-88	91	72	100	82	88	92	92	103	59	16	59	15	55	51	18	--						
NUTECH	GS 715	97	--	--	--	--	98	--	--	--	--	59	13	59	49	18	--						
NUTECH	GS 693	92	--	--	--	--	93	--	--	--	--	60	10	58	49	15	--						
DEKALB	DKS51-50	109	--	--	--	--	110	--	--	--	--	60	15	56	53	10	--						
MATURITY CHECK	LATE	97	--	--	--	--	98	--	--	--	--	60	13	57	47	14	--						
ALTA	AG3201	101	109	--	105	--	102	139	--	60	15	60	13	57	49	3	--						
HEARTLAND GENETICS	HG52-B	115	75	--	95	--	116	96	--	60	14	60	12	57	50	6	--						
ALTA	AG2105	91	84	--	87	--	92	106	--	60	15	60	14	55	48	3	--						
ALTA	XG02008	92	--	--	--	--	93	--	--	--	--	60	16	55	50	9	--						
POLANSKY	GS761	123	97	--	110	--	124	123	--	61	13	61	10	58	47	9	--						
ALTA	XG30001	109	--	--	--	--	110	--	--	--	--	61	13	56	49	6	--						
MYCOGEN	IG741	105	--	--	--	--	107	--	--	--	--	62	12	56	50	6	--						
MYCOGEN	IG688	98	--	--	--	--	99	--	--	--	--	62	14	56	51	5	--						
ALTA	AG3101	108	87	--	97	--	109	111	--	62	14	62	12	57	47	6	--						
NUTECH	GS 623	99	--	--	--	--	100	--	--	--	--	62	10	57	47	24	--						
GAYLAND WARD	GW-1160	90	--	--	--	--	91	--	--	--	--	62	16	56	47	34	--						
POLANSKY	GS 651 Y	114	--	--	--	--	115	--	--	--	--	62	15	57	52	24	--						
ALTA	AG2103	105	92	97	98	98	106	117	100	63	15	63	13	58	51	11	--						
HEARTLAND GENETICS	HG45-C	104	--	--	--	--	105	--	--	--	--	65	13	55	48	6	--						
DEKALB	DKS53-53	90	79	--	84	--	91	101	--	65	16	65	15	56	50	6	--						
	Average	99	79	97	89	92	100	100	100	60	15	60	13	57	48	12	--						
	CV (%)	12	12	11	--	--	12	12	11	--	--	7	26	4	8	--	--						
	LSD (0.05)	17	13	15	--	--	17	17	15	--	--	5	5	3	6	--	--						

*Yields in bold are not statistically different than the highest-yielding hybrid.

Table 11. CENTRAL Kansas Sorghum Hybrid Yield Summary (% of test avg.), 2015

BRAND/NAME	SAD	RND	AVG.	BRAND/NAME	SAD	RND	AVG.
ALTA				POLANSKY			
AG1203	118	114	116	GS 651 Y	--	115	--
AG1301	97	83	90	GS 679	91	--	--
AG1401	95	93	94	GS718	93	--	--
AG2103	87	106	97	GS761	--	124	--
AG2105	91	92	92	MATURITY CHECK			
AG2115	100	93	97	EARLY	126	112	119
AG3101	88	109	99	LATE	82	98	90
AG3201	120	102	111	MED	87	85	86
XG02008	109	93	101	AVERAGES (bu/a)	78	99	88
XG30001	85	110	98	CV (%)	8	12	--
XG30002	111	115	113	LSD (0.05)	11	17	--
XG30003	101	87	94				
DEKALB							
DKS38-88	97	92	95				
DKS49-45	121	--	--				
DKS51-01	120	115	118				
DKS51-50	88	110	99				
DKS53-53	123	91	107				
DKS53-67	--	103	--				
GAYLAND WARD SEED							
GW-1160	67	91	79				
HEARTLAND GENETICS							
HG45-C	100	105	102				
HG48-B	94	85	90				
HG52-B	125	116	121				
MYCOGEN							
1G557	50	90	70				
1G600	--	102	--				
697	--	98	--				
737	--	99	--				
IG688	--	99	--				
IG741	131	107	119				
NUTECH							
GS 605	--	80	--				
GS 623	--	100	--				
GS 693	--	93	--				
GS 715	--	98	--				
GS 725	--	93	--				

SAD = Saline Co., Assaria

RND = Reno Co., Hutchinson

WESTERN KANSAS FALLOW GRAIN SORGHUM TEST

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

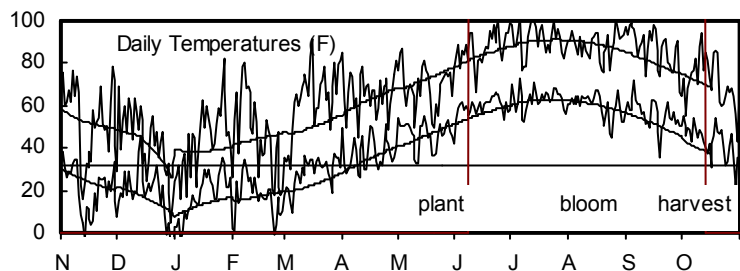
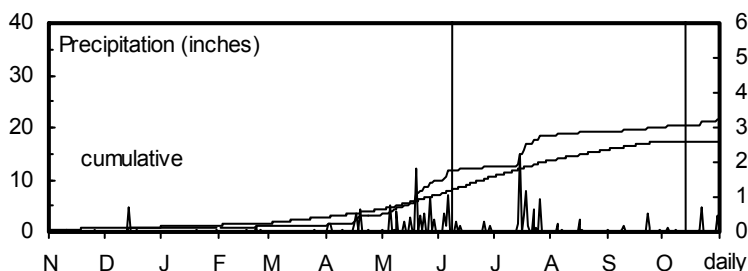
Keith silt loam; fallow in 2014

50 - 15 - 0 lb/a N, P, K

Planted on 6/9/2015; Harvested on 10/12/2015

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

Fairly good stands were established in all plots. Good moisture through July, but it turned very dry in August and September. Severe lodging in the early hybrids.



Month	Precipitation		Average Temp.		GDU	
	2015	Norm.	2015	Norm.	2015	Norm.
Nov.-Mar	1.2	2.4	35	32		
April	2.1	1.4	52	49	696	421
May	6.5	2.9	58	59	769	762
June	2.7	3.4	74	70	1109	1054
July	6.0	3.1	77	76	1208	1285
August	0.7	2.1	74	74	1155	1216
Sept.	1.0	1.6	71	66	1033	910
Oct.	1.4	0.2	57	56	793	324
Totals:	21.6	17.2	53	51	6,761	5,972

Table 12. Thomas County Dryland Grain Sorghum Performance Test, 2013-2015

										YIELD AS %			2014-2015												
										ACRE YIELD, BUSHEL					OF TEST			Days	Grain	Days	Grain	Test	Plnt	Ldg	Pop.
										2-yr.	3-yr.	AVERAGE	2015	2014	2013	blm	%	to	moist.	to	moist.	lb/bu	in.		
BRAND	NAME	2015	2014	2013	AVG.	AVG.	2015	2014	2013	blm	%	blm	%	lb/bu	in.	%	ppa								
B-H GENETICS	BH 3400	44	95	--	70	--	72	90	--	55	13	51	12	52	41	--	20								
B-H GENETICS	BH 3600	47	86	--	67	--	76	82	--	60	14	56	13	56	38	--	20								
ALTA	AG1101	35	--	--	--	--	56	--	--	--	--	57	12	53	37	--	23								
MYCOGEN	1G557	101	96	--	98	--	163	92	--	60	13	58	12	52	39	--	23								
DEKALB	DKS28-05	52	105	50	79	69	85	100	128	64	12	59	11	52	43	--	20								
NUTECH	GS 623	50	--	--	--	--	81	--	--	--	--	63	12	52	43	--	22								
MATURITY CHECK	EARLY	81	--	--	--	--	131	--	--	--	--	63	15	56	43	--	23								
ALTA	AG1201	56	86	43	71	62	90	82	110	67	12	64	11	50	36	--	21								
NUTECH	GS 605	42	--	--	--	--	69	--	--	--	--	64	13	53	38	--	22								
ALTA	AG1401	55	94	37	75	62	90	89	95	70	13	65	12	54	41	--	20								
B-H GENETICS	BH 3808	86	109	--	98	--	139	104	--	70	15	67	14	57	43	--	22								
HEARTLAND GENETICS	HG48-B	70	--	--	--	--	113	--	--	--	--	68	14	56	41	--	26								
B-H GENETICS	XPS 4250W	74	--	--	--	--	119	--	--	--	--	68	13	57	44	--	19								
DEKALB	DKS51-50	73	--	--	--	--	118	--	--	--	--	68	13	53	45	--	22								
ALTA	XG30001	53	--	--	--	--	86	--	--	--	--	68	15	54	41	--	19								
DEKALB	DKS37-07	58	--	--	--	--	94	--	--	--	--	68	12	50	42	--	23								
B-H GENETICS	BH 5224	77	117	--	97	--	124	111	--	70	17	68	16	55	41	--	24								
GOLDEN ACRES	GA5556	66	--	--	--	--	107	--	--	--	--	69	13	53	41	--	19								
POLANSKY	GS524	52	120	--	86	--	85	114	--	70	16	69	15	56	45	--	24								
GAYLAND WARD	GW-1160	54	--	--	--	--	88	--	--	--	--	69	16	56	46	--	25								
GOLDEN ACRES	GAH390W	62	--	--	--	--	100	--	--	--	--	69	13	53	40	--	24								
DEKALB	DKS38-88	76	122	46	99	81	123	115	118	71	15	69	14	51	44	--	24								
ALTA	AG1301	87	--	--	--	--	140	--	--	--	--	70	13	49	42	--	27								
DEKALB	DKS44-20	83	108	44	96	78	135	103	114	72	14	71	14	54	42	--	22								
ALTA	AG2115	63	106	30	85	66	102	101	77	75	15	71	14	55	42	--	20								
ALTA	AG2105	47	97	--	72	--	75	92	--	72	16	71	14	53	43	--	21								
ALTA	AG1203	64	130	--	97	--	103	123	--	75	16	73	14	52	43	--	19								
GOLDEN ACRES	GA2990C	57	--	--	--	--	93	--	--	--	--	73	15	51	43	--	15								
ALTA	XG30002	50	--	--	--	--	82	--	--	--	--	73	17	48	40	--	19								
NUTECH	GS 693	63	--	--	--	--	102	--	--	--	--	74	13	55	41	--	24								
ALTA	XG02008	51	115	--	83	--	83	109	--	77	18	75	17	53	42	--	19								
MATURITY CHECK	LATE	28	--	--	--	--	45	--	--	--	--	75	15	56	44	--	18								
HEARTLAND GENETICS	HG45-C	52	--	--	--	--	85	--	--	--	--	75	13	48	44	--	21								
MATURITY CHECK	MED	69	--	--	--	--	112	--	--	--	--	76	14	55	42	--	27								
MYCOGEN	IG741	71	--	--	--	--	115	--	--	--	--	77	17	55	40	--	26								
POLANSKY	GS665W	48	--	--	--	--	78	--	--	--	--	78	17	54	42	--	20								
ALTA	XG30003	56	--	--	--	--	91	--	--	--	--	78	19	54	40	--	19								
	Average	62	105	39	83	69	100	100	100	69	14	69	14	53	41	--	22								
	CV (%)	11	11	12	--	--	11	11	12	--	--	3	9	5	4	--	12								
	LSD (0.05)	9	16	17	--	--	15	15	17	--	--	2	2	4	2	--	4								

*Yields in bold are not statistically different than the highest-yielding hybrid.

WESTERN KANSAS FALLOW GRAIN SORGHUM TEST

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

Ulysses silt loam; wheat in 2014

70 - 40 - 0 lb/a N, P, K

Planted on 6/2/2015; Harvested on 10/18/2015

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

Productive growing season.

Month	Precipitation		Average Temp.		GDU	
	2015	Norm.	2015	Norm.	2015	Norm.
Nov.-Mar	1.1	2.1	36	34		
April	2.1	1.3	53	49	728	430
May	6.6	2.3	58	59	783	772
June	1.0	2.5	74	70	1108	1063
July	3.8	2.6	77	76	1200	1287
August	2.1	2.3	75	74	1155	1209
Sept.	0.3	1.3	72	66	1042	934
Oct.	2.6	0.3	57	57	795	340
Totals:	19.6	14.7	54	52	6,812	6,035

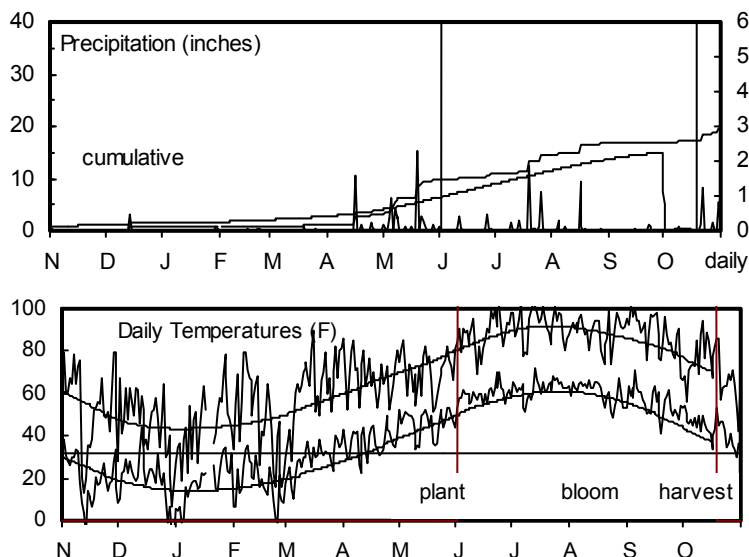


Table 13. Greeley County Dryland Grain Sorghum Performance Test, 2013-2015

		YIELD AS %								2014-2015							
		ACRE YIELD, BUSHEL					OF TEST			Days	Grain	Days	Grain	Test	Plnt		Pop.
		2-yr.		3-yr.			AVERAGE			to	moist.	to	moist.	wt.	ht.	Ldg	1000
BRAND	NAME	2015	2014	2013	AVG.	AVG.	2015	2014	2013	blm	%	blm	%	lb/bu	in.	%	ppa
B-H GENETICS	BH 3400	115	--	--	--	--	82	--	--	--	--	48	11	59	44	0	--
ALTA	AG1101	103	--	--	--	--	74	--	--	--	--	50	13	58	38	15	--
DEKALB	DKS28-05	144	129	118	137	130	103	123	94	59	11	53	11	58	50	1	--
B-H GENETICS	BH 3600	110	--	--	--	--	79	--	--	--	--	53	12	57	37	1	--
NUTECH	GS 623	146	--	--	--	--	105	--	--	--	--	53	12	60	50	3	--
MYCOGEN	1G557	132	105	--	118	--	95	100	--	60	11	55	11	59	42	0	--
MATURITY CHECK	EARLY	155	--	--	--	--	111	--	--	--	--	60	13	59	52	0	--
ALTA	AG1201	120	--	--	--	--	86	--	--	--	--	60	14	58	42	0	--
NUTECH	GS 605	133	--	--	--	--	96	--	--	--	--	61	11	59	41	10	--
DEKALB	DKS37-07	152	113	136	132	134	109	107	109	66	13	62	13	60	51	1	--
GAYLAND WARD	GW-1160	127	--	--	--	--	91	--	--	--	--	62	17	57	55	0	--
B-H GENETICS	BH 4200C	137	--	--	--	--	98	--	--	--	--	63	12	59	50	0	--
DEKALB	DKS44-20	168	108	125	138	134	120	103	100	70	13	63	12	61	53	0	--
ALTA	AG1401	124	--	--	--	--	89	--	--	--	--	63	11	59	47	0	--
DEKALB	DKS38-88	170	117	145	144	144	122	111	116	70	13	64	13	60	57	1	--
B-H GENETICS	XPS 4250W	151	--	--	--	--	108	--	--	--	--	64	11	59	52	0	--
DEKALB	DKS51-50	140	--	--	--	--	100	--	--	--	--	64	12	61	61	0	--
B-H GENETICS	BH 5224	158	--	--	--	--	113	--	--	--	--	65	14	60	51	0	--
NUTECH	GS 693	155	--	--	--	--	111	--	--	--	--	65	12	60	52	3	--
ALTA	XG30001	134	--	--	--	--	96	--	--	--	--	65	17	59	50	0	--
ALTA	AG1301	136	--	--	--	--	98	--	--	--	--	65	13	59	47	0	--
GOLDEN ACRES	GA5556	147	--	--	--	--	105	--	--	--	--	66	12	60	50	18	--
GOLDEN ACRES	GAH390W	139	--	--	--	--	99	--	--	--	--	66	15	59	46	0	--
ALTA	AG2105	133	--	--	--	--	96	--	--	--	--	66	13	59	56	10	--
ALTA	AG1203	152	--	--	--	--	109	--	--	--	--	67	15	60	54	0	--
ALTA	AG2115	135	--	--	--	--	97	--	--	--	--	67	11	59	50	0	--
MATURITY CHECK	MED	170	--	--	--	--	122	--	--	--	--	68	13	60	52	0	--
ALTA	XG02008	162	--	--	--	--	117	--	--	--	--	68	17	57	53	0	--
ALTA	XG30002	112	--	--	--	--	80	--	--	--	--	69	15	59	48	0	--
MYCOGEN	IG741	152	--	--	--	--	109	--	--	--	--	70	15	59	53	1	--
MATURITY CHECK	LATE	118	--	--	--	--	84	--	--	--	--	71	18	60	55	43	--
GOLDEN ACRES	GA2990C	131	--	--	--	--	94	--	--	--	--	72	17	58	52	0	--
ALTA	XG30003	139	--	--	--	--	100	--	--	--	--	76	21	58	49	0	--
	Average	139	105	125	122	123	100	100	100	65	12	63	13	59	50	3	--
	CV (%)	9	6	8	--	--	9	6	8	--	--	3	14	1	4	--	--
	LSD (0.05)	17	9	13	--	--	13	9	11	--	--	3	3	1	3	16	--

*Yields in bold are not statistically different than the highest-yielding hybrid.

WESTERN KANSAS FALLOW GRAIN SORGHUM TEST

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

Keith silt loam; wheat in 2014

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

Planted on 6/5/2015; Harvested on 10/19/2015

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

Good emergence. Some plots effected by chlorosis in soil. Wet late spring and in the summer months humid with little breeze.

Month	Precipitation		Average Temp.		GDU	
	2015	Norm.	2015	Norm.	2015	Norm.
Nov.-Mar	1.4	2.8	38	34		
April	0.4	1.6	55	50	744	472
May	6.3	2.9	60	61	818	831
June	1.4	3.0	77	72	1168	1115
July	4.9	2.5	78	78	1240	1321
August	2.9	2.2	75	75	1189	1260
Sept.	0.0	1.6	73	68	1090	973
Oct.	2.5	0.5	58	58	796	356
Totals:	19.7	17.1	55	53	7,045	6,328

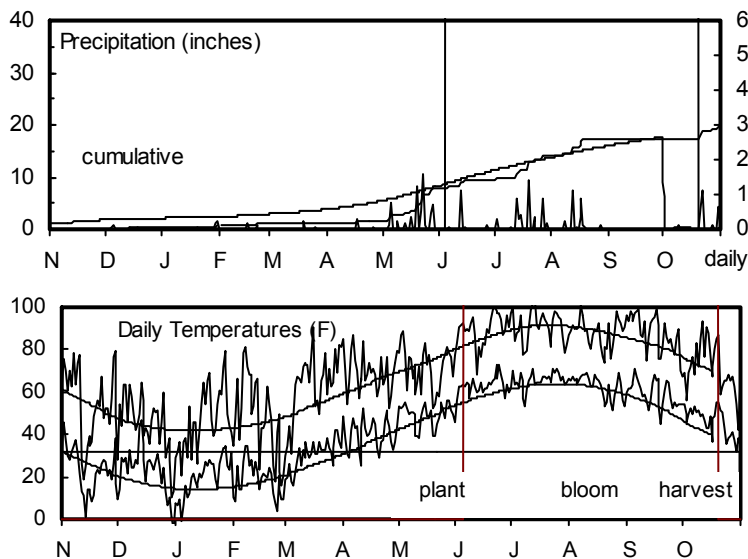


Table 14. Finney County Dryland Grain Sorghum Performance Test, 2013-2015

										YIELD AS %		2014-2015							
		ACRE YIELD, BUSHEL					OF TEST			Days	Grain	Days	Grain	Test	Plnt		Pop.		
				2-yr.	3-yr.		AVERAGE			to	moist.	to	moist.	wt.	ht.	Ldg	1000		
BRAND	NAME	2015	2014	2013	AVG.	AVG.	2015	2014	2013	blm	%	blm	%	lb/bu	in.	%	ppa		
ALTA	AG1101	86	--	--	--	--	69	--	--	--	--	57	14	57	38	--	27		
MYCOGEN	1G557	107	--	--	--	--	86	--	--	--	--	57	12	59	40	--	30		
DEKALB	DKS28-05	127	--	57	--	92	102	--	78	57	12	57	12	58	49	--	26		
NUTECH	GS 623	168	--	--	--	--	136	--	--	--	--	58	13	59	45	--	31		
MATURITY CHECK	EARLY	181	--	--	--	--	145	--	--	--	--	60	15	59	48	--	27		
ALTA	AG1401	126	--	--	--	--	101	--	--	--	--	61	13	58	47	--	25		
NUTECH	GS 605	134	--	--	--	--	108	--	--	--	--	61	13	58	41	--	28		
ALTA	AG1201	75	--	--	--	--	60	--	--	--	--	62	14	57	40	--	19		
DEKALB	DKS37-07	112	--	77	--	94	90	--	105	62	13	62	13	59	47	--	26		
GOLDEN ACRES	GA5556	173	--	--	--	--	139	--	--	--	--	62	13	59	47	--	25		
ALTA	XG30001	132	--	--	--	--	106	--	--	--	--	62	15	57	48	--	22		
DEKALB	DKS51-50	125	--	--	--	--	101	--	--	--	--	63	14	59	53	--	24		
MATURITY CHECK	MED	160	--	--	--	--	129	--	--	--	--	63	13	59	52	--	27		
ALTA	AG2105	146	--	--	--	--	118	--	--	--	--	64	14	59	50	--	24		
DEKALB	DKS38-88	122	--	72	--	97	98	--	97	64	13	64	13	55	48	--	29		
ALTA	AG1203	116	--	--	--	--	93	--	--	--	--	65	13	59	48	--	22		
DEKALB	DKS44-20	138	--	75	--	107	111	--	101	65	13	65	13	59	46	--	26		
NUTECH	GS 693	123	--	--	--	--	99	--	--	--	--	65	12	59	49	--	32		
ALTA	AG1301	122	--	--	--	--	98	--	--	--	--	66	14	57	45	--	27		
GOLDEN ACRES	GAH390W	86	--	--	--	--	69	--	--	--	--	66	15	56	45	--	27		
ALTA	XG30002	116	--	--	--	--	93	--	--	--	--	66	15	58	47	--	21		
GOLDEN ACRES	GA2990C	108	--	--	--	--	87	--	--	--	--	66	14	58	48	--	23		
MYCOGEN	IG741	160	--	--	--	--	129	--	--	--	--	66	14	58	49	--	26		
GAYLAND WARD	GW-1160	60	--	--	--	--	48	--	--	--	--	67	14	57	45	--	36		
ALTA	XG02008	151	--	--	--	--	122	--	--	--	--	68	16	56	49	--	25		
ALTA	AG2115	109	--	--	--	--	88	--	--	--	--	68	13	57	48	--	24		
MATURITY CHECK	LATE	112	--	--	--	--	90	--	--	--	--	69	15	59	51	--	21		
ALTA	XG30003	106	--	--	--	--	85	--	--	--	--	69	18	57	48	--	20		
	Average	124	--	74	--	99	100	--	100	62	13	63	14	58	47	--	26		
	CV (%)	7	--	11	--	--	7	--	11	--	--	3	10	3	5	--	9		
	LSD (0.05)	12	--	11	--	--	10	--	15	--	--	3	2	2	4	--	3		

*Yields in bold are not statistically different than the highest-yielding hybrid.

Table 15. WESTERN Kansas Grain Sorghum Hybrid Yield Summary (% of test avg.), 2015

BRAND/NAME	ELD	THD	GRD	FND	AVG.	BRAND/NAME	ELD	THD	GRD	FND	AVG.
ALTA						NUTECH					
AG1101	--	56	74	69	67	GS 605	--	69	96	108	91
AG1201	--	90	86	60	79	GS 623	--	81	105	136	107
AG1203	--	103	109	93	102	GS 693	--	102	111	99	104
AG1301	--	140	98	98	112	POLANSKY					
AG1401	--	90	89	101	93	GS524	--	85	--	--	--
AG2105	--	75	96	118	96	GS665W	--	78	--	--	--
AG2115	--	102	97	88	96	MATURITY CHECK					
XG02008	--	83	117	122	107	EARLY	--	131	111	145	129
XG30001	--	86	96	106	96	LATE	--	45	84	90	73
XG30002	--	82	80	93	85	MED	--	112	122	129	121
XG30003	--	91	100	85	92	AVERAGES (bu/a)	--	62	139	124	108
B-H GENETICS						CV (%)	--	11	9	7	--
BH 3400	--	72	82	--	--	LSD (0.05)	--	15	13	10	--
BH 3600	--	76	79	--	--						
BH 3808	--	139	--	--	--						
BH 4200C	--	--	98	--	--						
BH 5224	--	124	113	--	--						
XPS 4250W	--	119	108	--	--						
DEKALB											
DKS28-05	--	85	103	102	97						
DKS37-07	--	94	109	90	98						
DKS38-88	--	123	122	98	114						
DKS44-20	--	135	120	111	122						
DKS51-50	--	118	100	101	106						
GAYLAND WARD SEED											
GW-1160	--	88	91	48	76						
GOLDEN ACRES											
GA2990C	--	93	94	87	91						
GA5556	--	107	105	139	117						
GAH390W	--	100	99	69	90						
HEARTLAND GENETICS											
HG45-C	--	85	--	--	--						
HG48-B	--	113	--	--	--						
MYCOGEN											
1G557	--	163	95	86	115						
IG741	--	115	109	129	117						

ELD = Ellis Co., Hays; abandoned THD = Thomas Co., Colby GRD = Greeley Co., Tribune FND = Finney Co., Garden City

WESTERN KANSAS IRRIGATED GRAIN SORGHUM TEST

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

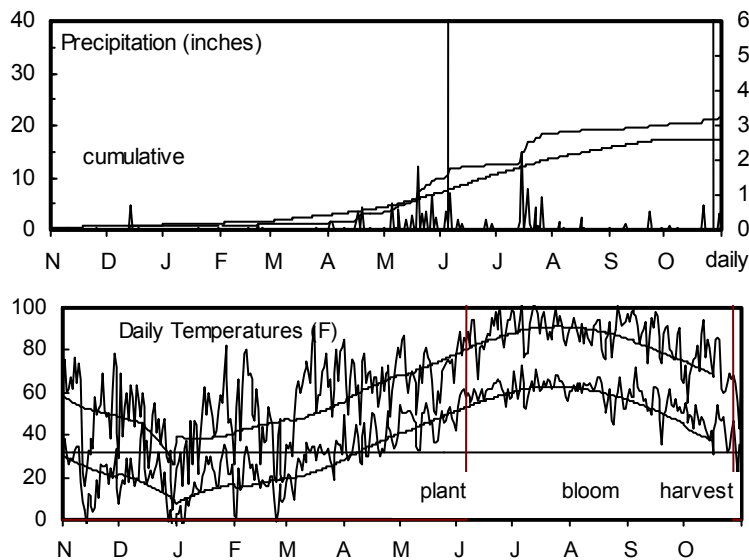
Keith silt loam; sunflower in 2014

170 - 40 - 0 lb/a N, P, K

Planted on 6/6/2015; Harvested on 10/26/2015

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

Very good stand establishment. Summer was a little cooler and wetter than normal. Small hail in July caused some leaf shredding.



Month	Precipitation		Average Temp.		GDU	
	2015	Norm.	2015	Norm.	2015	Norm.
Nov.-Mar	1.2	2.4	35	32		0
April	2.1	1.4	52	49	696	421
May	6.5	2.9	58	59	769	762
June	2.7	3.4	74	70	1109	1054
July	6.0	3.1	77	76	1208	1285
August	0.7	2.1	74	74	1155	1216
Sept.	1.0	1.6	71	66	1033	910
Oct.	1.4	0.2	57	56	793	324
Totals:	21.6	17.2	53	51	6,761	5,972

Table 16. Thomas County Irrigated Grain Sorghum Performance Test, 2013-2015

		YIELD AS %								2014-2015									Pop.
		ACRE YIELD, BUSHEL					OF TEST			Days	Grain	Days	Grain	Test	Plnt				
				2-yr.	3-yr.	AVERAGE			to	moist.	to	moist.	wt.	ht.	Ldg	1000			
BRAND	NAME	2015	2014	2013	AVG.	AVG.	2015	2014	2013	b/m	%	b/m	%	lb/bu	in.	%	ppa		
MYCOGEN	1G557	111	139	--	125	--	69	75	--	58	13	54	12	57	41	--	81		
NUTECH	GS 623	143	--	--	--	--	89	--	--	--	--	54	13	60	47	--	81		
MATURITY CHECK	EARLY	181	--	--	--	--	112	--	--	--	--	57	14	60	49	--	78		
NUTECH	GS 605	120	--	--	--	--	75	--	--	--	--	57	13	56	40	--	79		
AGVENTURE	AV6R41	165	--	--	--	--	102	--	--	--	--	58	14	59	45	--	82		
B-H GENETICS	XPS 4250W	119	--	--	--	--	74	--	--	--	--	59	13	59	49	--	63		
ALTA	AG2103	158	--	--	--	--	98	--	--	--	--	59	14	60	47	--	71		
GOLDEN ACRES	GA5613	153	204	--	179	--	95	111	--	65	15	59	14	59	51	--	80		
ALTA	XG30001	146	--	--	--	--	91	--	--	--	--	59	16	59	49	--	57		
B-H GENETICS	BH 3808	141	169	--	155	--	88	92	--	64	14	60	13	58	47	--	73		
B-H GENETICS	BH 5224	161	206	--	183	--	100	112	--	65	15	60	14	59	51	--	73		
ALTA	AG2105	137	--	--	--	--	85	--	--	--	--	60	14	60	51	--	60		
MYCOGEN	1G600	153	--	--	--	--	95	--	--	--	--	60	13	58	48	--	78		
ALTA	AG1203	168	--	--	--	--	104	--	--	--	--	60	14	61	49	--	68		
DEKALB	DKS51-50	149	--	--	--	--	93	--	--	--	--	60	14	60	55	--	73		
B-H GENETICS	BH 4100	180	189	--	184	--	112	103	--	66	15	61	14	61	48	--	70		
GOLDEN ACRES	GA4980B	127	--	--	--	--	79	--	--	--	--	61	14	58	51	--	56		
NUTECH	GS 693	173	--	--	--	--	108	--	--	--	--	61	13	60	50	--	77		
DEKALB	DKS49-45	165	--	--	--	--	103	--	--	--	--	61	14	60	53	--	79		
HEARTLAND GENETICS	HG48-B	147	184	--	166	--	91	100	--	68	15	61	14	60	47	--	76		
AGVENTURE	AV7R01	171	--	--	--	--	106	--	--	--	--	61	13	60	50	--	77		
ALTA	XG30002	157	--	--	--	--	98	--	--	--	--	61	17	59	47	--	59		
AGVENTURE	AV7R21	170	--	--	--	--	106	--	--	--	--	62	14	60	49	--	57		
GOLDEN ACRES	GA3545	178	181	168	180	176	111	99	100	68	15	62	14	60	50	--	77		
DEKALB	DKS51-01	159	190	172	175	174	99	104	103	68	16	62	14	61	53	--	78		
B-H GENETICS	BH 3822	157	--	--	--	--	98	--	--	--	--	62	15	60	51	--	76		
MATURITY CHECK	MED	179	--	--	--	--	112	--	--	--	--	62	15	60	50	--	84		
MYCOGEN	737	160	185	161	173	169	100	101	96	67	15	62	14	58	47	--	79		
DEKALB	DKS53-53	199	226	--	213	--	124	123	--	68	17	63	15	59	51	--	72		
DEKALB	DKS53-67	184	201	183	192	189	114	110	109	69	17	63	15	61	49	--	73		
DEKALB	DKS54-00	165	212	--	189	--	103	115	--	72	16	64	14	58	53	--	71		
AGVENTURE	AV6R71	161	--	--	--	--	100	--	--	--	--	64	14	59	53	--	82		
ALTA	XG02008	160	--	--	--	--	100	--	--	--	--	64	15	58	50	--	49		
MYCOGEN	697	168	--	--	--	--	104	--	--	--	--	64	15	59	49	--	77		
MYCOGEN	IG741	177	213	--	195	--	110	116	--	70	16	65	14	59	50	--	82		
ALTA	AG3201	185	--	--	--	--	115	--	--	--	--	65	14	58	50	--	75		
MATURITY CHECK	LATE	152	--	--	--	--	94	--	--	--	--	65	14	60	47	--	59		
ALTA	AG3101	196	--	--	--	--	122	--	--	--	--	65	15	61	57	--	77		
HEARTLAND GENETICS	HG52-B	171	170	--	170	--	106	93	--	69	17	65	14	58	51	--	77		
GOLDEN ACRES	GA3637	166	190	--	178	--	103	104	--	70	17	66	14	58	51	--	79		
GAYLAND WARD	GW-9417	165	--	--	--	--	103	--	--	--	--	66	14	60	55	--	82		
MYCOGEN	IG688	164	190	--	177	--	102	103	--	70	18	66	15	58	49	--	86		
HEARTLAND GENETICS	HG49-C	166	--	--	--	--	103	--	--	--	--	66	14	59	53	--	71		
ALTA	XG30003	171	--	--	--	--	107	--	--	--	--	67	18	60	48	--	60		
	Average	161	184	168	172	171	100	100	100	67	16	62	14	59	49	--	73		
	CV (%)	7	9	7	--	--	7	9	7	--	--	1	2	1	2	--	7		
	LSD (0.05)	15	24	15	--	--	9	13	9	--	--	1	0	1	2	--	7		

*Yields in bold are not statistically different than the highest-yielding hybrid.

WESTERN KANSAS IRRIGATED GRAIN SORGHUM TEST

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

Ulysses silt loam; fallow in 2014

240 - 40 - 0 lb/a N, P, K

Planted on 6/5/2015; Harvested on 11/9/2015

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

Irrigation equaled 15.4 inches.

Month	Precipitation		Average Temp.		GDU	
	2015	Norm.	2015	Norm.	2015	Norm.
Nov.-Mar	1.1	2.1	36	34		0
April	2.1	1.3	53	49	728	430
May	6.6	2.3	58	59	783	772
June	1.0	2.5	74	70	1108	1063
July	3.8	2.6	77	76	1200	1287
August	2.1	2.3	75	74	1155	1209
Sept.	0.3	1.3	72	66	1042	934
Oct.	2.6	0.3	57	57	795	340
Totals:	19.6	14.7	54	52	6,812	6,035

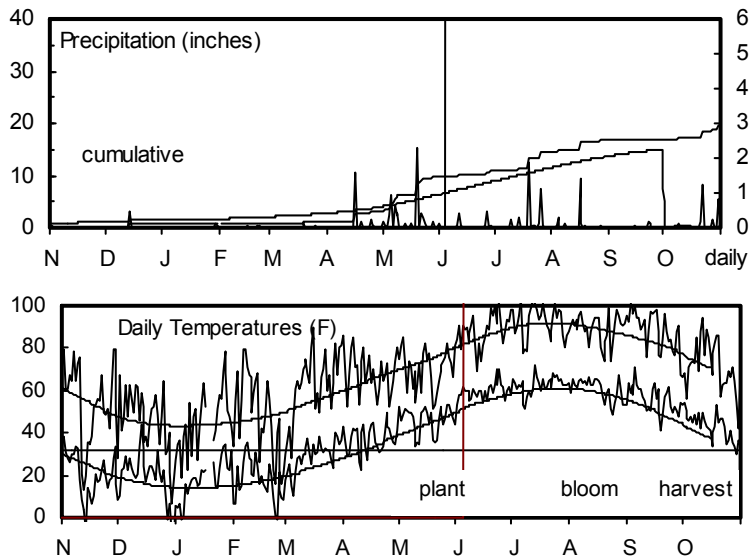


Table 17. Greeley County Irrigated Grain Sorghum Performance Test, 2013-2015

		YIELD AS %									2014-2015								
		ACRE YIELD, BUSHEL					OF TEST				Days Grain		Days	Grain	Test	Plnt		Pop.	
		2-yr. 3-yr.					AVERAGE			to	moist.	to	moist.	wt.	ht.	Ldg	1000		
BRAND	NAME	2015	2014	2013	AVG.	AVG.	2015	2014	2013	blm	%	blm	%	lb/bu	in.	%	ppa		
MYCOGEN	1G557	229	101	--	165	--	116	62	--	60	12	56	14	59	46	--	--		
NUTECH	GS 623	198	--	--	--	--	100	--	--	--	--	56	16	58	51	--	--		
NUTECH	GS 605	205	--	--	--	--	104	--	--	--	--	58	15	58	46	--	--		
MATURITY CHECK	EARLY	211	--	--	--	--	106	--	--	--	--	59	16	59	58	--	--		
MYCOGEN	627	205	143	--	174	--	103	88	--	69	12	60	15	59	54	--	--		
ALTA	AG2103	198	--	--	--	--	100	--	--	--	--	60	15	59	53	--	--		
MYCOGEN	IG588	182	151	--	167	--	92	93	--	68	11	60	17	58	53	--	--		
GOLDEN ACRES	GA4980B	197	--	--	--	--	100	--	--	--	--	61	17	58	56	--	--		
ALTA	XG30001	191	--	--	--	--	97	--	--	--	--	61	17	58	53	--	--		
ALTA	AG2105	158	--	--	--	--	80	--	--	--	--	62	14	58	60	--	--		
MYCOGEN	M3838	175	142	--	159	--	88	87	--	74	13	62	15	58	50	--	--		
DEKALB	DKS51-50	217	--	--	--	--	109	--	--	--	--	62	15	60	65	--	--		
GOLDEN ACRES	GA5613	196	--	--	--	--	99	--	--	--	--	63	15	59	60	--	--		
B-H GENETICS	BH 5224	190	--	--	--	--	96	--	--	--	--	63	15	59	57	--	--		
ALTA	AG1203	199	--	--	--	--	101	--	--	--	--	63	19	59	55	--	--		
ALTA	XG30002	193	--	--	--	--	97	--	--	--	--	63	19	58	54	--	--		
DEKALB	DKS51-01	198	167	139	183	168	100	103	104	75	15	63	18	58	65	--	--		
B-H GENETICS	BH 4100	196	--	--	--	--	99	--	--	--	--	63	16	58	58	--	--		
NUTECH	GS 693	193	--	--	--	--	98	--	--	--	--	63	16	57	58	--	--		
DEKALB	DKS49-45	208	179	139	194	175	105	110	104	70	12	63	15	59	62	--	--		
GOLDEN ACRES	GA3545	212	--	--	--	--	107	--	--	--	--	63	15	58	58	--	--		
DEKALB	DKS54-00	202	169	--	186	--	102	103	--	75	12	64	14	58	62	--	--		
MATURITY CHECK	MED	214	--	--	--	--	108	--	--	--	--	64	17	57	58	--	--		
DEKALB	DKS53-67	188	--	--	--	--	95	--	--	--	--	65	15	60	57	--	--		
ALTA	XG02008	193	--	--	--	--	97	--	--	--	--	65	15	57	57	--	--		
B-H GENETICS	BH 3822	191	--	--	--	--	97	--	--	--	--	65	18	59	59	--	--		
MATURITY CHECK	LATE	199	--	--	--	--	100	--	--	--	--	65	19	58	57	--	--		
DEKALB	DKS53-53	203	209	--	206	--	103	128	--	75	12	65	14	59	59	--	--		
GOLDEN ACRES	GA3637	207	--	--	--	--	105	--	--	--	--	65	14	59	61	--	--		
MYCOGEN	IG741	201	--	--	--	--	102	--	--	--	--	66	16	58	59	--	--		
ALTA	AG3201	196	--	--	--	--	99	--	--	--	--	66	15	59	58	--	--		
ALTA	AG3101	197	--	--	--	--	99	--	--	--	--	67	15	59	67	--	--		
GAYLAND WARD	GW-9417	203	--	--	--	--	102	--	--	--	--	67	16	58	66	--	--		
B-H GENETICS	BH 5350	204	--	--	--	--	103	--	--	--	--	67	13	58	52	--	--		
MYCOGEN	IG688	189	179	--	184	--	95	110	--	75	14	68	16	59	56	--	--		
ALTA	XG30003	192	--	--	--	--	97	--	--	--	--	69	18	59	54	--	--		
	Average	198	163	132	181	164	100	100	100	71	12	63	16	58	57	--	--		
	CV (%)	8	9	12	--	--	8	9	12	--	--	2	14	3	4	--	--		
	LSD (0.05)	23	20	27	--	--	12	12	20	--	--	2	3	2	4	--	--		

*Yields in bold are not statistically different than the highest-yielding hybrid.

WESTERN KANSAS IRRIGATED GRAIN SORGHUM TEST

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

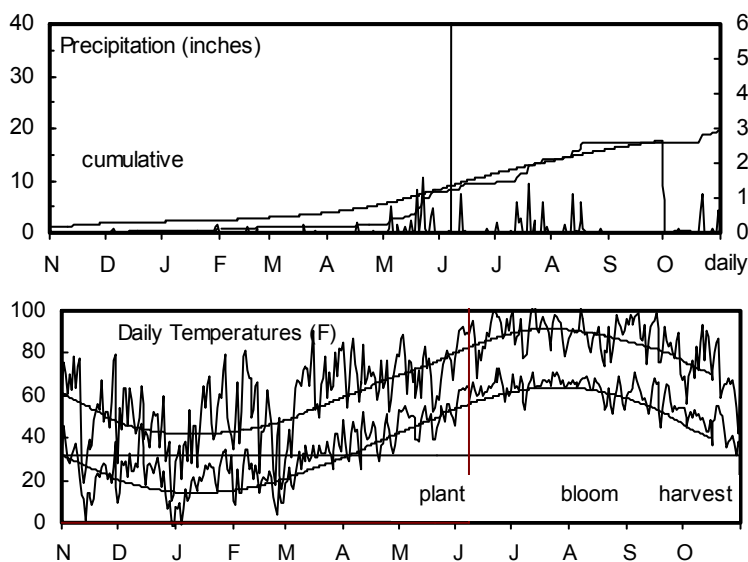
Keith silt loam; wheat in 2014

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

Planted on 6/8/2015; Harvested on

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

Good emergence. Some plots effected by chlorosis in soil. Wet late spring and in the summer months humid with little breeze.



Month	Precipitation		Average Temp.		GDU	
	2015	Norm.	2015	Norm.	2015	Norm.
Nov.-Mar	1.4	2.8	38	34	0	
April	0.4	1.6	55	50	744	472
May	6.3	2.9	60	61	818	831
June	1.4	3.0	77	72	1168	1115
July	4.9	2.5	78	78	1240	1321
August	2.9	2.2	75	75	1189	1260
Sept.	0.0	1.6	73	68	1090	973
Oct.	2.5	0.5	58	58	796	356
Totals:	19.7	17.1	55	53	7,045	6,328

Table 18. Finney County Irrigated Grain Sorghum Performance Test, 2013-2015

BRAND	NAME	YIELD AS %										2014-2015						
		ACRE YIELD, BUSHELS					OF TEST					Days	Grain	Days	Grain	Test	Plnt	Pop.
		2-yr. 3-yr.					AVERAGE					to	moist.	to	moist.	wt.	ht.	Ldg
		2015	2014	2013	AVG.	AVG.	2015	2014	2013			blm	%	blm	%	lb/bu	in.	%
NUTECH	GS 623	155	--	--	--	--	87	--	--		--	--		50	13	59	53	--
MYCOGEN	1G557	123	120	--	122	--	69	82	--		59	13		53	14	56	49	--
NUTECH	GS 605	136	--	--	--	--	76	--	--		--	--		54	14	57	52	--
MATURITY CHECK	EARLY	226	--	--	--	--	127	--	--		--	--		56	14	59	52	--
ALTA	AG2105	177	123	--	150	--	99	84	--		65	14		57	14	59	58	--
ALTA	AG2103	167	146	110	157	141	94	100	103		65	14		57	14	59	51	--
DEKALB	DKS51-50	182	--	--	--	--	102	--	--		--	--		57	14	59	55	--
MYCOGEN	737	172	168	106	170	149	96	116	99		67	14		57	14	58	50	--
GOLDEN ACRES	GA4980B	158	--	--	--	--	89	--	--		--	--		58	14	58	54	--
NUTECH	GS 693	164	--	--	--	--	92	--	--		--	--		58	13	60	53	--
AGVENTURE	AV6R41	184	--	--	--	--	103	--	--		--	--		58	14	59	51	--
ALTA	AG1203	183	--	--	--	--	103	--	--		--	--		58	14	59	52	--
MATURITY CHECK	MED	211	--	--	--	--	118	--	--		--	--		59	14	59	53	--
MYCOGEN	1G600	178	--	--	--	--	100	--	--		--	--		59	14	56	52	--
AGVENTURE	AV7R01	187	--	--	--	--	104	--	--		--	--		59	14	60	52	--
AGVENTURE	AV7R21	227	--	--	--	--	127	--	--		--	--		59	14	60	52	--
ALTA	AG3201	193	161	128	177	161	108	110	120		65	15		59	14	59	52	--
GOLDEN ACRES	GA5613	181	152	103	166	145	101	104	97		64	14		59	14	58	51	--
GOLDEN ACRES	GA3545	183	151	103	167	146	102	104	96		65	15		59	14	59	52	--
HEARTLAND GENETICS	HG52-B	202	154	--	178	--	113	106	--		72	14		60	14	57	53	--
HEARTLAND GENETICS	HG48-B	170	146	--	158	--	95	100	--		68	14		60	14	59	57	--
AGVENTURE	AV6R71	189	--	--	--	--	106	--	--		--	--		60	14	59	54	--
GOLDEN ACRES	GA3637	187	157	--	172	--	105	108	--		70	14		60	14	57	57	--
DEKALB	DKS49-45	177	148	116	163	147	99	102	109		65	15		60	14	59	55	--
MYCOGEN	697	188	--	--	--	--	105	--	--		--	--		60	14	59	43	--
ALTA	XG30002	150	--	--	--	--	84	--	--		--	--		61	17	57	49	--
MYCOGEN	IG741	174	162	--	168	--	97	111	--		67	14		61	14	58	43	--
DEKALB	DKS51-01	192	--	--	--	--	107	--	--		--	--		61	14	60	55	--
BROWNING	775W	165	--	--	--	--	92	--	--		--	--		61	14	58	49	--
DEKALB	DKS53-67	216	--	--	--	--	121	--	--		--	--		61	14	59	53	--
DEKALB	DKS54-00	194	156	108	175	153	109	107	102		68	15		62	14	57	54	--
ALTA	XG30003	175	--	--	--	--	98	--	--		--	--		62	17	59	53	--
MATURITY CHECK	LATE	163	--	--	--	--	92	--	--		--	--		62	14	59	56	--
BROWNING	CHALLENGER BMX	149	--	--	--	--	83	--	--		--	--		62	14	57	52	--
ALTA	XG02008	141	150	--	146	--	79	103	--		70	16		63	16	57	53	--
MYCOGEN	IG688	197	140	--	169	--	111	96	--		75	15		63	15	57	50	--
ALTA	XG30001	180	--	--	--	--	101	--	--		--	--		64	17	58	48	--
DEKALB	DKS53-53	215	193	--	204	--	120	132	--		75	15		64	14	58	55	--
BROWNING	BMX-II	182	--	--	--	--	102	--	--		--	--		65	14	56	56	--
ALTA	AG3101	182	141	123	162	149	102	97	115		74	15		66	15	60	55	--
GAYLAND WARD	GW-9417	148	--	--	--	--	83	--	--		--	--		67	16	56	50	--
	Average	179	146	107	162	144	100	100	100		68	15		60	14	58	52	--
	CV (%)	9	9	7	--	--	9	9	7		--	--		5	6	1	0	--
	LSD (0.05)	21	18	11	--	--	12	12	10		--	--		4	1	1	0	--

*Yields in bold are not statistically different than the highest-yielding hybrid.

Table 19. Kansas IRRIGATED Grain Sorghum Hybrid Yield Summary (% of test avg.), 2015

BRAND/NAME	RNI	THI	GRI	FNI	AVG.	RNI	THI	GRI	FNI	AVG.
AGVENTURE						GAYLAND WARD SEED				
AV6R41	--	102	--	103	--	GW9417	--	103	102	83 96
AV6R71	--	100	--	106	--	GOLDEN ACRES				
AV7R01	--	106	--	104	--	GA3545	--	111	107	102 107
AV7R21	--	106	--	127	--	GA3637	--	103	105	105 104
ALTA						GA4980B	--	79	100	89 89
AG1203	--	104	101	103	102	GA5613	--	95	99	101 98
AG2103	--	98	100	94	97	HEARTLAND				
AG2105	--	85	80	99	88	HG48-B	--	91	--	95 --
AG3101	--	122	99	102	108	HG49-C	--	103	--	-- --
AG3201	--	115	99	108	107	HG52-B	--	106	--	113 --
XG02008	--	100	97	79	92	MYCOGEN				
XG30001	--	91	97	101	96	1G557	--	69	116	69 84
XG30002	--	98	97	84	93	1G600	--	95	--	100 --
XG30003	--	107	97	98	100	627	--	--	103	-- --
B-H GENETICS						697	--	104	--	105 --
BH 3808	--	88	--	--	--	737	--	100	--	96 --
BH 3822	--	98	97	--	--	IG588	--	--	92	-- --
BH 4100	--	112	99	--	--	IG688	--	102	95	111 103
BH 5224	--	100	96	--	--	IG741	--	110	102	97 103
BH 5350	--	--	103	--	--	M3838	--	--	88	-- --
XPS 4250W	--	74	--	--	--	NUTECH				
BROWNING						GS 605	--	75	104	76 85
775W	--	--	--	92	--	GS 623	--	89	100	87 92
BMX-II	--	--	--	102	--	GS 693	--	108	98	92 99
CHALLENGER BMX	--	--	--	83	--	MATURITY CHECK				
DEKALB						EARLY	--	112	106	127 115
DKS49-45	--	103	105	99	102	LATE	--	94	100	92 95
DKS51-01	--	99	100	107	102	MED	--	112	108	118 113
DKS51-50	--	93	109	102	101	AVERAGES (bu/a)				
DKS53-53	--	124	103	120	116	CV (%)	--	7	8	9 --
DKS53-67	--	114	95	121	110	LSD (0.05)	--	9	12	12 --
DKS54-00	--	103	102	109	104					

RNI=Reno Co., Hutchinson;
not available at time of publishing.

THI=Thomas Co., Colby

GRI=Greeley Co., Tribune

FNI=Finney Co., Garden City

Table 20. Entries in the 2015 Kansas Grain Sorghum Performance Tests

BRAND	GC	EC	PC	Mat.	Days	GB	BRAND	GC	EC	PC	Mat.	Days	GB
AGVENTURE							GAYLAND WARD SEED						
AV6R41	B	Y	-	70	-	-	GW-1160	-	-	-	-	-	-
AV6R71	R	W	-	73	-	-	GW9417	R	HY	P	M	69	C+E
AV7R01	R	W	-	75	-	-	GOLDEN ACRES						
AV7R21	R	Y	-	76	-	-	GA2990C	C	HY	P	ME	54	C,E
ALTA							GA5556	R	HY	P	E	62	C,E
AG1201	B	-	P	E	-	-	GAH390W	W	W	P	E	62	C,E
AG1203	B	-	P	ME	-	-	GA3545	B	Y	P	M	66	CE
AG1401	W	-	T	ME	-	-	GA5613	B	Y	P	M	66	C,E
AG2105	R	-	P	M	-	-	GA3637	B	Y	P	M	67	C,E
AG2115	R	-	P	M	-	-	GA4980B	B	HY	P	ML	68	C,E
AG3201	B	-	P	ML	-	-	HEARTLAND GENETICS						
XG02008	R	-	P	M	-	-	HG45-C	C	HY	P	M	66	C,E,I
XG30003	R	-	P	M	-	-	HG48-B	B	HY	P	M	67	C,E
AG1101	R	-	R	E	55	-	HG49-C	C	HY	P	M	69	C,E
AG1301	C	-	R	ME	63	-	HG52-B	B	HY	P	ML	73	C,E
XG30001	R	-	-	ME	63	-	MYCOGEN						
AG2103	R	-	P	M	65	-	1G557	B	-	-	E	-	-
AG3101	R	-	P	L	68	-	1G600	-	-	-	-	-	-
XG30002	R	-	-	M	68	-	IG688	R	W	P	L	47	E
B-H GENETICS							IG741	B	HY	P	L	48	-
BH 3400	B	-	-	VE	-	-	IG588	B	-	P	E	58	-
BH 3600	B	-	-	E	-	C	627	B	W	P	ME	64	-
BH 3808	R	-	-	ME	-	C	697	B	W	P	M	64	CEIK
BH 3822	B	-	-	M	-	C,E	M3838	C	-	P	ME	68	-
BH 4100	B	-	-	M	-	-	737	B	W	P	M	69	-
BH 4200C	C	-	-	ME	-	C	NUTECH						
BH 5224	B	-	-	M	-	C,D,E	GS 605	R	W	P	E	60	C,E
BH 5350	R	-	-	M	-	-	GS 623	R	W	P	M	62	C,E
XPS 4250W	C	-	-	M	-	-	GS 693	R	W	P	M	69	C,E
BROWNING							GS 715	R	W	P	L	70	C,E
775W	C	HY	P	M	63	N	GS 725	R	W	P	L	71	C,E
CHALLENGER	B	HY	P	M	67	N	POLANSKY						
BMX	B	HY	P	ML	73	C,E	GS524	B	-	P	ME	60	C
DEKALB							GS 651 Y	Y	-	-	M	65	-
DKS51-50	-	-	-	-	-	-	GS 679	B	-	P	M	65	-
DKS28-05	B	HY	P	E	58	-	GS665W	C	-	P	M	65	C
DKS38-88	B	HY	P	E	64	I	GS761	R	HY	P	M	65	C,E
DKS37-07	B	HY	P	E	67	CEI	GS718	R	HY	P	ML	70	C,E
DKS44-20	B	HY	P	M	67	-	MATURITY CHECK						
DKS49-45	B	HY	P	M	70	E,I	LATE	-	-	-	-	-	-
DKS51-01	B	HY	P	M	70	E,I	MED	R	W	P	M	69	-
DKS53-67	B	HY	P	L	71	CEI	EARLY	B	Y	P	L	72	E
DKS53-53	B	HY	P	L	72	I							
DKS54-00	B	HY	P	L	75	CEI							

Information provided by entrants:

GC = grain color: bronze, cream, red, yellow, white

EC = endosperm color: white, yellow, hetero-yellow

PC = plant color: purple, tan

Mat. = relative maturity: early, medium, late

Days = days to half bloom

G-bug = resistance to specific greenbug biotypes: C, E, I, K, and etc.

To access crop performance testing information electronically, visit our website. The information contained in this publication, plus more, is available for viewing or downloading at:

www.agronomy.k-state.edu/services/crop-performance-tests/index.html

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Permission is hereby given to Kansas State University (KSU) 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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