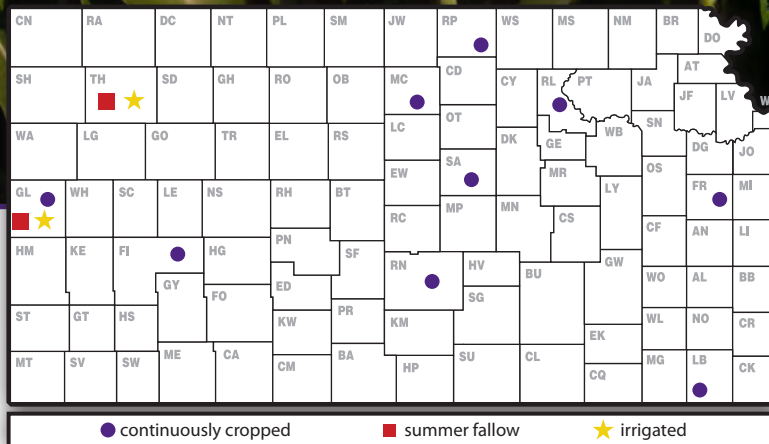


2018 Kansas Performance Tests with

Grain Sorghum Hybrids



Report of Progress 1147



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2018 GRAIN SORGHUM CROP REVIEW

Statewide Growing Conditions

The 2018 sorghum season presented an overall fair weather pattern, with more than 50% of the crop condition rated as good and excellent at harvest. Wet conditions in the spring delayed planting in specific locations; however, overall planting progress was near or slightly delayed from last year but close to the average as relative to the last 5-yr average (2013-2017). Early season (June) warm temperatures sped up the vegetative progress, compensating for the delay caused by the early wet conditions or delayed planting.

Sorghum heading was concentrated during early-August (50% state-level) and early-September (close to 100% state-level). Conditions during vegetative-phase and pollination remained wet with near-average temperatures, favoring the pollination time and early-reproductive period.

Hail was a problem across the state. There were 526 reports of large hail throughout the season. Of those events, 223 were reported in May. Hail has a larger impact when it occurs later during the grain filling period (September and early October), when the plant depends on the leaves, potentially affecting seed set (both seed number and weight).

As related to the precipitation conditions, all divisions averaged above normal for the period of April 1 through October 15 (Table 1). The greatest departure was in the southwest, where the divisional average was 23.87 inches or 154% of normal. Unfortunately, the rains weren't evenly distributed across the region or across the season. At the St. John station, rainfall was below normal until mid-August. A wet end to August was followed by even wetter conditions in September and October, which complicated harvest.

Temperatures weren't as much of a factor. The warmest readings were seen in mid-July, with the highest read of 112°F reported on July 21 at Ashland, Clark County.

The biggest factor was the rapid switch from much colder than average temperatures to warmer temperatures. State-wide average temperatures in April were the coldest since 1895, while state-wide average temperatures in June were the warmest on record. The first autumn freezes were near average, with Colby dropping to 27°F on the 14th of October, and Concordia reaching 27°F on the 15th. As related to grain filling, this period started with good or above-average moisture content and moved to saturated conditions as the crop was approaching harvest time. Temperatures also went from near normal to below normal average temperatures, delaying maturity. By the end of October, sorghum harvest was only 32% complete, reflecting the delay due to weather challenges (e.g., precipitations, snow).

The sugarcane aphid (*Melanaphis sacchari*) appeared in more concentrated areas (small-pockets) impacting sorghum primarily from the mid-vegetative to late reproductive stages. Still fewer reports were documented during 2018 compared to the 2016 growing season, but with a similar geographical distribution relative to 2017 season.

Harvest progress for sorghum across the state was delayed, primarily occurring during late October and late November. Overall, harvest progress is similar relative to last year but 10% behind the 5-year average.

Despite the previously mentioned challenges, U.S. Department of Agriculture forecasted in November a sorghum yield of 86 bushels per acre for the state of Kansas for the 2018 season, above the 82 bushels per acre from the 2017 season. Production at the state-level increased by 27 million bushels relative to last year's production (Ignacio A. Ciampitti, Kansas State University Cropping Systems Specialist, and Mary Knapp, Kansas State University Climatologist).

Table 1. 2018 temperatures by crop production district

Division	Extreme Tmax (°F)	Date	Avg Tmax (°F)	Avg Tmin (°F)	Avg Tmean (°F)	Extreme Tmin (°F)	Date
Northwest	104	16-Jun	79.2	51.7	65.5	4	7-Apr
North central	105	29-Jun	78.8	53.4	65.9	4	7-Apr
Northeast	106	28-Jun	79.0	55.7	67.4	12	7-Apr
West central	107	16-Jun	82.0	53.6	67.8	11	8-Apr
Central	107	28-Jun	82.2	57.1	69.6	8	8-Apr
East central	104	29-Jun	81.2	59.0	70.1	15	8-Apr
Southwest	112	21-Jul	83.0	54.8	68.9	14	7-Apr
South central	103	1-Sep	82.1	57.6	69.8	13	7-Apr
Southeast	103	20-Jul	80.7	59.1	69.9	17	16-Apr

Diseases

The 2018 Kansas sorghum crop was healthier than any in recent memory. Sooty stripe levels were high in some south-central Kansas fields, but generally less than in 2017. Late season rains caused an increase in head molds, but overall, incidence was relatively low.

The most significant disease in 2018 as usual, was Fusarium stalk rot. Fusarium thrives in wet spring, followed by a dry summer, and then more rain as harvest approaches, which is what occurred in many areas of the state in 2018. However, reports of late season lodging were few. (Doug Jardine, Kansas State University Department of Plant Pathology)

Insects

The hot and dry weather from May-August was conducive to chinch bug development, which occurred in large numbers. Chinch bug feeding, coupled with adverse weather conditions, caused considerable early lodging and continued through the soft dough stage, which significantly reduced yields in many areas around the state.

Then "headworms", a combination of fall armyworms and corn earworms, started attacking the heads that were between flowering and soft dough, reducing yields if not treated.

Sugarcane aphids were continually migrating into the state from late July through early September. Fortunately, aphid natural enemies- i.e. parasitic wasps, lady beetles, green lacewings, syrphid flies, etc.- were plentiful and kept sugarcane aphid populations under control.

Adverse weather, coupled with insect infestations from the seedling to the soft dough stage, resulted in considerably smaller kernels, "blasted" heads, and reduced yields throughout much of the state. (Holly Davis and Jeff Whitworth, Kansas State University Department of Entomology.)

2018 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 2018 from April to October. General trends in precipitation are readily observed in the graphs.

Explanatory information precedes data summaries for each test. Tables 3 through 18 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 should 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 2. Entrants in the 2018 Kansas Grain Sorghum Performance Tests

Advanta Seeds
Irving, TX
806-340-2031
advantaseeds.com

**Chromatin/Sorghum
Partners, Inc.**
Lubbock, TX
806-300-0593
chromatininc.com

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

USDA (Texas)
Lubbock, TX
806-787-9798
ars.usda.gov

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

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

MOJO Seed Enterprises
Hereford, TX
806-445-6442

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

Dyna-Gro Seed
Goddard, KS
800-950-2231
cpsagu.com

S&W Seed Company
Nampa, ID
208-965-3565
swseed.com

NORTHEAST KANSAS DRYLAND GRAIN SORGHUM TEST

Manhattan, Riley County
 Agronomy North Farm
 Planted: 6/7/2018
 Harvested: 10/24/2018
 180-0-0 lb/a N, P, K
 Reading silt loam
 Previous crop: wheat

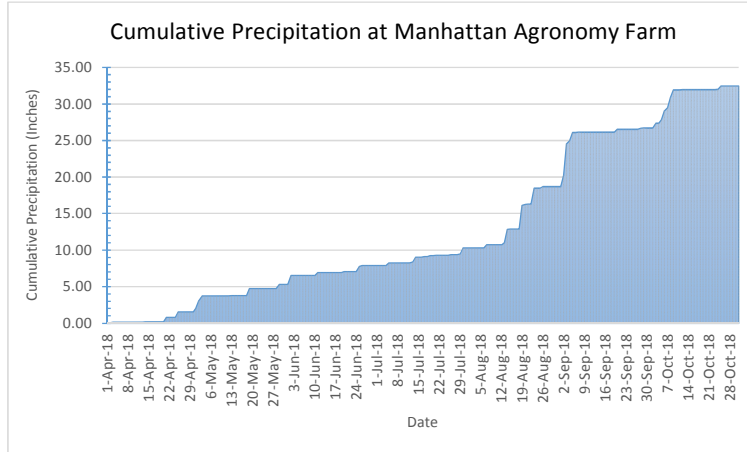


Table 3. Riley County Dryland Grain Sorghum Performance Test, 2016-2018

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			Days to blm	Grain moist. %	Test wt. lb/bu	Plnt ht. in.	Ldg %	Pop. 1000 ppa
		2018	2017	2016	2-yr. AVG.	3-yr. AVG.	2018	2017	2016						
ALTA	ADV G2106	95	--	--	--	--	93	--	--	--	13	57	49	--	44
ALTA	ADV G2275	89	--	--	--	--	87	--	--	--	18	57	55	--	24
ALTA	ADV XG093	110	--	--	--	--	108	--	--	--	16	58	58	--	46
ALTA	AG1203	98	--	--	--	--	96	--	--	--	15	57	57	--	40
CHECK	EARLY	118	152	120	135	130	115	102	110	--	16	58	51	--	33
CHECK	LATE	90	145	131	117	122	88	97	120	--	13	56	41	--	29
CHECK	MED	100	132	125	116	119	98	89	115	--	14	55	53	--	31
DEKALB	DKS33-07	110	155	--	133	--	108	104	--	--	14	57	51	--	42
DEKALB	DKS38-16	118	137	126	128	127	116	91	116	--	15	58	55	--	21
DEKALB	DKS45-23	113	144	103	128	120	111	97	95	--	14	57	55	--	17
DEKALB	DKS47-07	132	--	--	--	--	129	--	--	--	16	56	62	--	30
DEKALB	DKS53-53	122	144	125	133	130	120	97	115	--	16	57	54	--	31
DYNA-GRO	GX16921	103	--	--	--	--	100	--	--	--	16	56	59	--	36
DYNA-GRO	GX17379	98	--	--	--	--	96	--	--	--	16	57	52	--	19
DYNA-GRO	GX17912	98	--	--	--	--	96	--	--	--	13	54	49	--	29
DYNA-GRO	GX17948	126	--	--	--	--	123	--	--	--	18	57	56	--	35
DYNA-GRO	GX17962	122	--	--	--	--	120	--	--	--	14	58	57	--	40
DYNA-GRO	GX18919	81	--	--	--	--	79	--	--	--	12	55	48	--	18
DYNA-GRO	M60GB31	99	152	128	125	126	97	102	117	--	15	56	50	--	16
DYNA-GRO	M60GB88	94	--	--	--	--	92	--	--	--	14	56	50	--	32
DYNA-GRO	M68GB18	111	--	--	--	--	109	--	--	--	15	58	57	--	27
DYNA-GRO	M69GB38	86	--	--	--	--	85	--	--	--	15	57	54	--	26
DYNA-GRO	M69GR88	83	--	--	--	--	81	--	--	--	16	56	48	--	40
DYNA-GRO	M71GR04	122	--	--	--	--	119	--	--	--	15	59	57	--	29
DYNA-GRO	M73GR55	97	143	--	120	--	95	96	--	--	15	57	61	--	24
DYNA-GRO	M74GB17	100	154	--	127	--	97	103	--	--	16	58	53	--	19
GOLDEN ACRES	2840B	109	--	--	--	--	107	--	--	--	14	57	48	--	41
GOLDEN ACRES	3960B	75	155	--	115	--	73	104	--	--	14	57	48	--	12
MATURITY CHECK	DEKALB EARLY	101	158	107	129	122	98	106	99	--	13	52	48	--	33
MATURITY CHECK	DEKALB LATE	124	142	139	133	135	122	95	128	--	15	60	58	--	34
MATURITY CHECK	DEKALB MED	123	137	126	130	129	120	91	116	--	15	58	57	--	43
S&W SEED	SG11268	115	--	--	--	--	112	--	--	--	16	56	56	--	37
S&W SEED	SG11668	101	--	--	--	--	99	--	--	--	15	57	51	--	30
S&W SEED	SG11670	78	--	--	--	--	76	--	--	--	15	57	49	--	27
	Average	102	149	109	126	120	100	100	100	--	15	57	53	--	30
	CV (%)	11	9	10	--	--	11	9	10	--	8	3	0	--	--
	LSD (0.05)	16	20	15	--	--	15	20	15	--	2	2	0	--	--

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

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

NORTHEAST KANSAS DRYLAND GRAIN SORGHUM TEST

Belleville, Republic County
 North Central Experiment Field
 Planted: 6/11/2018
 Harvested: 11/14/2018
 150-0-0 lb/a N, P, K
 Crete silt loam
 Previous crop: wheat

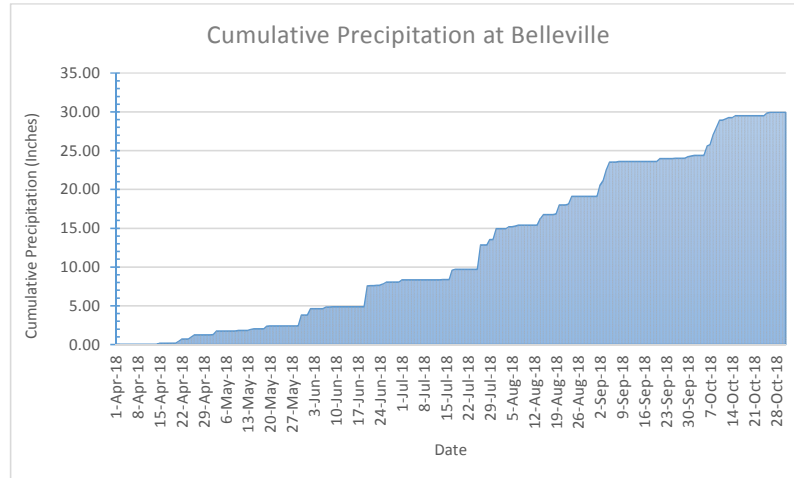


Table 4. Republic County Dryland Grain Sorghum Performance Test, 2016-2018

BRAND	NAME	YIELD AS %													
		ACRE YIELD, BUSHEL					OF TEST			Days to blm	Grain moist. %	Test wt. lb/bu	Plnt ht. in.	Ldg %	Pop. 1000 ppa
		2018	2017	2016	2-yr. AVG.	3-yr. AVG.	2018	2017	2016						
ALTA	ADV G2106	112	--	--	--	--	102	--	--	--	15	59	--	--	--
ALTA	ADV G2275	121	--	--	--	--	110	--	--	--	24	59	--	--	--
ALTA	ADV XG093	123	--	--	--	--	112	--	--	--	17	59	--	--	--
ALTA	AG1203	115	--	--	--	--	104	--	--	--	17	58	--	--	--
CHECK	EARLY	118	114	103	116	112	107	105	135	--	17	57	--	--	--
CHECK	LATE	93	85	81	89	86	85	78	108	--	13	58	--	--	--
CHECK	MED	118	118	83	118	106	107	108	108	--	15	57	--	--	--
DEKALB	DKS33-07	110	--	--	--	--	100	--	--	--	15	58	--	--	--
DEKALB	DKS38-16	128	122	79	125	110	116	112	103	--	15	58	--	--	--
DEKALB	DKS45-23	143	148	109	145	133	129	136	142	--	16	58	--	--	--
DEKALB	DKS47-07	130	--	--	--	--	118	--	--	--	17	58	--	--	--
DEKALB	DKS53-53	114	133	105	123	117	103	122	138	--	20	58	--	--	--
DYNA-GRO	GX16921	106	--	--	--	--	96	--	--	--	20	59	--	--	--
DYNA-GRO	GX17379	87	--	--	--	--	79	--	--	--	20	57	--	--	--
DYNA-GRO	GX17912	104	--	--	--	--	94	--	--	--	14	57	--	--	--
DYNA-GRO	GX17948	132	--	--	--	--	120	--	--	--	20	60	--	--	--
DYNA-GRO	GX17962	127	--	--	--	--	115	--	--	--	16	60	--	--	--
DYNA-GRO	GX18919	80	--	--	--	--	73	--	--	--	16	57	--	--	--
DYNA-GRO	M60GB31	125	128	73	126	109	113	118	96	--	15	57	--	--	--
DYNA-GRO	M60GB88	93	--	--	--	--	84	--	--	--	13	57	--	--	--
DYNA-GRO	M68GB18	95	--	--	--	--	87	--	--	--	23	58	--	--	--
DYNA-GRO	M69GB38	129	--	--	--	--	117	--	--	--	19	59	--	--	--
DYNA-GRO	M69GR88	105	--	--	--	--	96	--	--	--	21	58	--	--	--
DYNA-GRO	M71GR04	112	--	--	--	--	102	--	--	--	20	59	--	--	--
DYNA-GRO	M73GR55	101	89	--	95	--	91	81	--	--	21	58	--	--	--
DYNA-GRO	M74GB17	101	98	--	100	--	92	90	--	--	20	58	--	--	--
GOLDEN ACRES	2620C	107	--	--	--	--	97	--	--	--	14	57	--	--	--
GOLDEN ACRES	2730B	115	--	--	--	--	105	--	--	--	15	57	--	--	--
GOLDEN ACRES	2840B	108	--	--	--	--	98	--	--	--	15	60	--	--	--
MATURITY CHECK	DEKALB EARLY	106	93	61	100	87	96	85	80	--	13	62	--	--	--
MATURITY CHECK	DEKALB LATE	120	120	87	120	109	109	110	114	--	18	59	--	--	--
MATURITY CHECK	DEKALB MED	124	122	79	123	108	113	112	103	--	14	60	--	--	--
	Average	110	109	76	110	98	100	100	100	--	17	59	--	--	--
	CV (%)	7	8	10	--	--	7	8	10	--	18	5	--	--	--
	LSD (0.05)	13	15	12	--	--	12	14	16	--	5	5	--	--	--

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

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

NORTHEAST KANSAS DRYLAND GRAIN SORGHUM TEST

Beloit, Mitchell County
 Tom Deneke Farm
 Planted: 6/15/2018
 Harvested: 11/14/2018
 100-0-0 lb/a N, P, K
 Harney silt loam
 Previous crop: wheat

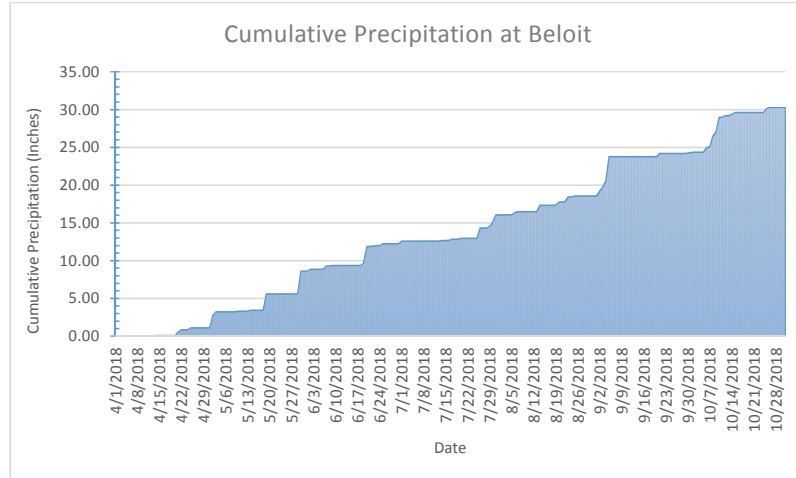


Table 5. Mitchell County Dryland Grain Sorghum Performance Test, 2016-2018

BRAND	NAME	YIELD AS %													
		ACRE YIELD, BUSHEL					OF TEST AVERAGE			Days to blm	Grain moist. %	Test wt. lb/bu	Plnt ht. in.	Ldg %	Pop. 1000 ppa
		2018	2017	2016	2-yr. AVG.	3-yr. AVG.	2018	2017	2016						
ALTA	ADV G2106	114	--	--	--	--	110	--	--	--	14	56	52	--	--
ALTA	ADV G2275	94	--	--	--	--	91	--	--	--	16	56	55	--	--
ALTA	ADV XG093	106	--	--	--	--	103	--	--	--	15	56	58	--	--
ALTA	AG1203	101	--	--	--	--	98	--	--	--	13	52	56	--	--
CHECK	EARLY	109	70	144	90	108	106	76	107	--	14	56	50	--	--
CHECK	LATE	90	99	152	95	114	87	107	113	--	13	56	51	--	--
CHECK	MED	102	79	151	90	111	99	85	113	--	15	57	53	--	--
DEKALB	DKS33-07	100	--	--	--	--	97	--	--	--	15	57	49	--	--
DEKALB	DKS38-16	115	93	153	104	120	112	100	114	--	14	57	56	--	--
DEKALB	DKS45-23	115	75	159	95	116	112	80	119	--	14	54	62	--	--
DEKALB	DKS47-07	119	--	--	--	--	116	--	--	--	14	53	63	--	--
DEKALB	DKS53-53	110	100	164	105	125	106	107	122	--	15	55	57	--	--
DYNA-GRO	GX16921	91	--	--	--	--	88	--	--	--	14	50	58	--	--
DYNA-GRO	GX17379	94	--	--	--	--	91	--	--	--	15	54	54	--	--
DYNA-GRO	GX17912	102	--	--	--	--	99	--	--	--	13	53	55	--	--
DYNA-GRO	GX17948	120	--	--	--	--	116	--	--	--	15	59	59	--	--
DYNA-GRO	GX17962	109	--	--	--	--	106	--	--	--	14	57	56	--	--
DYNA-GRO	GX18919	86	--	--	--	--	83	--	--	--	12	51	51	--	--
DYNA-GRO	M60GB31	96	80	140	88	105	93	86	104	--	15	53	54	--	--
DYNA-GRO	M60GB88	94	--	--	--	--	91	--	--	--	14	55	54	--	--
DYNA-GRO	M68GB18	94	--	--	--	--	91	--	--	--	14	55	56	--	--
DYNA-GRO	M69GB38	106	--	--	--	--	103	--	--	--	16	55	61	--	--
DYNA-GRO	M69GR88	101	--	--	--	--	98	--	--	--	14	54	53	--	--
DYNA-GRO	M71GR04	108	--	--	--	--	105	--	--	--	14	56	57	--	--
DYNA-GRO	M73GR55	116	108	--	112	--	113	116	--	--	13	52	56	--	--
DYNA-GRO	M74GB17	96	100	--	98	--	93	108	--	--	14	55	55	--	--
GOLDEN ACRES	2620C	95	--	--	--	--	92	--	--	--	13	53	53	--	--
GOLDEN ACRES	2730B	107	--	--	--	--	103	--	--	--	14	56	57	--	--
GOLDEN ACRES	2840B	108	--	--	--	--	104	--	--	--	15	58	55	--	--
MATURITY CHECK	DEKALB EARLY	89	111	83	100	94	86	119	62	--	12	52	53	--	--
MATURITY CHECK	DEKALB LATE	112	77	150	94	113	108	82	111	--	13	54	62	--	--
MATURITY CHECK	DEKALB MED	105	93	153	99	117	102	100	114	--	15	57	59	--	--
	Average	103	93	89	98	95	100	100	100	--	14	55	56	--	--
	CV (%)	9	9	7	--	--	9	9	7	--	8	3	0	--	--
	LSD (0.05)	13	14	9	--	--	13	14	16	--	2	3	0	--	--

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

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

Table 6. NORTHEAST Kansas Grain Sorghum Hybrid Yield Summary (% of test avg.), 2018

BRAND/NAME	RLD	RPD	MTD	AVG.	BRAND/NAME	RLD	RPD	MTD	AVG.
ALTA					S&W SEED				
ADV G2106	93	102	110	102	SG11268	112	--	--	--
ADV G2275	87	110	91	96	SG11668	99	--	--	--
ADV XG093	108	112	103	107	SG11670	76	--	--	--
AG1203	96	104	98	99					
CHECK					MATURITY CHECK				
EARLY	115	107	106	110	DEKALB EARLY	98	96	86	94
LATE	88	85	87	87	DEKALB LATE	122	109	108	113
MED	98	107	99	101	DEKALB MED	120	113	102	111
DEKALB					AVERAGES (bu/a)				
DKS33-07	108	100	97	102	CV (%)	11	7	9	--
DKS38-16	116	116	112	114	LSD (0.05)	15	12	13	--
DKS45-23	111	129	112	117					
DKS47-07	129	118	116	121					
DKS53-53	120	103	106	110					
DYNA-GRO									
GX16921	100	96	88	95					
GX17379	96	79	91	89					
GX17912	96	94	99	96					
GX17948	123	120	116	120					
GX17962	120	115	106	114					
GX18919	79	73	83	78					
M60GB31	97	113	93	101					
M60GB88	92	84	91	89					
M68GB18	109	87	91	95					
M69GB38	85	117	103	102					
M69GR88	81	96	98	91					
M71GR04	119	102	105	109					
M73GR55	95	91	113	99					
M74GB17	97	92	93	94					
GOLDEN ACRES									
2620C	--	97	92	--					
2730B	--	105	103	--					
2840B	107	98	104	103					
3960B	73	--	--	--					

* RLD = Riley Co., Manhattan RPD = Republic Co., Belleville MTD = Mitchell Co., Beloit

SOUTHEAST KANSAS DRYLAND GRAIN SORGHUM TEST

Ottawa, Franklin County
 East Central Experiment Field
 Planted: 5/16/2018
 Harvested: 10/1/2018
 140-40-15 lb/a N, P, K
 Woodson silt loam
 Previous crop: soybean

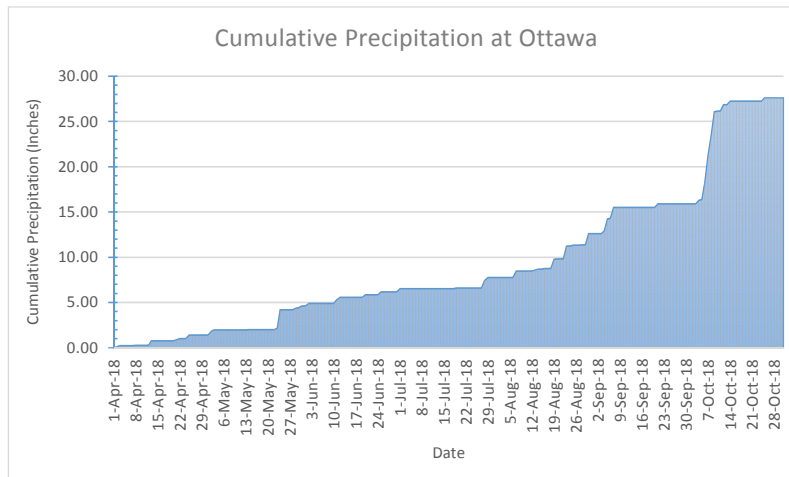


Table 7. Franklin County Dryland Grain Sorghum Performance Test, 2016-2018

BRAND	NAME	YIELD AS %													
		ACRE YIELD, BUSHEL					OF TEST			Days to blm	Grain moist. %	Test wt. lb/bu	Pint ht. in.	Ldg %	Pop. 1000 ppa
		2018	2017	2016	2-yr. AVG.	3-yr. AVG.	AVERAGE								
ALTA	ADV G2106	98	--	--	--	--	84	--	--	57	16	53	--	--	48
ALTA	ADV G2275	99	--	--	--	--	85	--	--	62	17	60	--	--	51
ALTA	ADV XG093	103	--	--	--	--	88	--	--	66	17	60	--	--	55
ALTA	AG1203	105	--	--	--	--	90	--	--	62	15	56	--	--	49
CHECK	EARLY	124	176	72	150	124	106	100	126	57	16	60	--	--	48
CHECK	LATE	96	169	68	133	111	82	96	119	65	15	55	--	--	52
CHECK	MED	116	163	53	140	111	100	93	93	57	15	56	--	--	49
DEKALB	DKS33-07	106	--	--	--	--	91	--	--	60	15	56	--	--	52
DEKALB	DKS38-16	135	171	67	153	124	116	97	117	61	16	60	--	--	50
DEKALB	DKS45-23	135	175	60	155	123	116	99	--	65	17	58	--	--	52
DEKALB	DKS47-07	125	--	--	--	--	107	--	--	64	17	57	--	--	51
DEKALB	DKS53-53	132	184	75	158	130	113	104	132	68	17	60	--	--	49
DYNA-GRO	GX16921	113	--	--	--	--	97	--	--	75	16	58	--	--	49
DYNA-GRO	GX17379	103	--	--	--	--	89	--	--	68	17	58	--	--	53
DYNA-GRO	GX17912	89	--	--	--	--	76	--	--	59	14	52	--	--	51
DYNA-GRO	GX17948	135	--	--	--	--	116	--	--	65	17	59	--	--	50
DYNA-GRO	GX17962	106	--	--	--	--	91	--	--	63	16	59	--	--	50
DYNA-GRO	M60GB31	106	183	--	144	--	91	104	--	62	16	57	--	--	44
DYNA-GRO	M60GB88	109	--	--	--	--	94	--	--	62	15	59	--	--	47
DYNA-GRO	M68GB18	123	--	--	--	--	106	--	--	70	18	60	--	--	38
DYNA-GRO	M69GB38	143	--	--	--	--	123	--	--	66	16	61	--	--	49
DYNA-GRO	M69GR88	109	--	--	--	--	93	--	--	67	17	58	--	--	55
DYNA-GRO	M71GR04	122	--	--	--	--	105	--	--	67	17	58	--	--	48
DYNA-GRO	M73GR55	137	203	--	170	--	118	115	--	71	17	60	--	--	49
DYNA-GRO	M74GB17	117	186	--	152	--	101	105	--	67	17	59	--	--	42
GOLDEN ACRES	2840B	119	--	--	--	--	102	--	--	61	16	59	--	--	52
GOLDEN ACRES	3960B	121	175	--	--	--	104	99	--	63	16	58	--	--	47
MATURITY CHECK	DEKALB EARLY	93	168	73	130	111	80	95	128	57	15	52	--	--	51
MATURITY CHECK	DEKALB LATE	133	169	75	151	126	114	96	131	63	16	59	--	--	55
MATURITY CHECK	DEKALB MED	136	171	67	153	125	117	97	117	62	16	60	--	--	48
SORGHUM PARTNERS	SP7715	124	--	--	--	--	106	--	--	70	16	59	--	--	52
	Average	117	176	57	146	117	100	100	100	64	16	58	--	--	49
	CV (%)	11	5	12	--	--	11	5	12	1	3	2	--	--	5
	LSD (0.05)	18	13	9	--	--	15	13	9	1	1	1	--	--	3

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

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

SOUTHEAST KANSAS DRYLAND GRAIN SORGHUM TEST

Parsons, Labette County
 Southeast Agricultural Research Center
 Planted: 5/14/2018
 Harvested: 10/3/2018
 150-46-60 lb/a N, P, K
 Parsons silt loam
 Previous crop: soybean

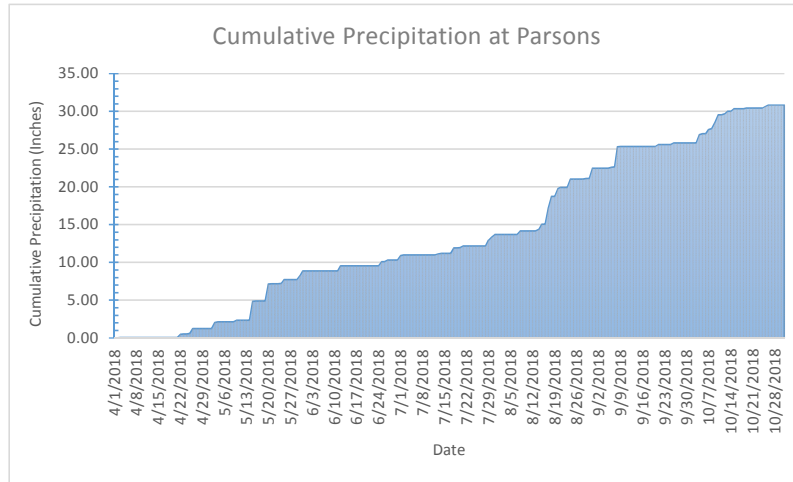


Table 8. Labette County Dryland Grain Sorghum Performance Test, 2016-2018

BRAND	NAME	ACRE YIELD, BUSHEL					YIELD AS %			Days to blm	Grain moist. %	Test wt. lb/bu	Plnt ht. in.	Ldg %	Pop. 1000 ppa
		2018	2017	2016	2-yr. 3-yr.		OF TEST AVERAGE								
					AVG.	AVG.	2018	2017	2016						
ALTA	ADV G2106	47	--	--	--	--	69	--	--	54	15	52	40	--	--
ALTA	ADV G2275	78	--	--	--	--	113	--	--	57	15	57	42	--	--
ALTA	AG1203	62	--	--	--	--	90	--	--	59	13	54	40	--	--
CHECK	EARLY	45	181	81	113	102	66	133	96	50	13	54	35	--	--
CHECK	LATE	61	91	91	76	81	88	67	107	60	14	55	40	--	--
CHECK	MED	45	126	98	85	90	65	93	116	54	14	52	42	--	--
DEKALB	DKS33-07	60	--	--	--	--	88	--	--	56	14	55	38	--	--
DEKALB	DKS38-16	79	167	92	123	113	115	124	110	59	14	57	39	--	--
DEKALB	DKS45-23	98	172	107	135	126	143	127	126	61	14	61	42	--	--
DEKALB	DKS47-07	85	--	--	--	--	123	--	--	61	15	54	44	--	--
DEKALB	DKS53-53	95	186	113	140	131	138	137	134	59	14	58	42	--	--
DYNA-GRO	GX16921	59	--	--	--	--	85	--	--	65	14	54	42	--	--
DYNA-GRO	GX17379	68	--	--	--	--	98	--	--	60	15	55	42	--	--
DYNA-GRO	GX17912	57	--	--	--	--	83	--	--	55	15	51	39	--	--
DYNA-GRO	GX17948	95	--	--	--	--	138	--	--	59	14	57	43	--	--
DYNA-GRO	GX17962	86	--	--	--	--	125	--	--	61	14	56	41	--	--
DYNA-GRO	M60GB31	50	142	--	96	--	73	105	--	56	13	55	42	--	--
DYNA-GRO	M60GB88	62	--	--	--	--	90	--	--	57	14	53	42	--	--
DYNA-GRO	M68GB18	79	--	--	--	--	115	--	--	60	15	56	42	--	--
DYNA-GRO	M69GB38	84	--	--	--	--	122	--	--	61	14	57	44	--	--
DYNA-GRO	M69GR88	64	--	--	--	--	94	--	--	60	15	54	40	--	--
DYNA-GRO	M71GR04	62	--	--	--	--	90	--	--	61	14	56	45	--	--
DYNA-GRO	M73GR55	84	117	--	100	--	122	86	--	66	15	55	43	--	--
DYNA-GRO	M74GB17	53	149	--	101	--	77	110	--	59	14	56	43	--	--
GOLDEN ACRES	2840B	62	--	--	--	--	91	--	--	55	14	56	39	--	--
GOLDEN ACRES	3960B	52	164	--	--	--	75	121	--	59	14	55	40	--	--
MATURITY CHECK	DEKALB EARLY	56	94	55	75	68	82	69	65	50	14	52	38	--	--
MATURITY CHECK	DEKALB LATE	93	172	66	133	110	136	127	79	61	14	56	42	--	--
MATURITY CHECK	DEKALB MED	75	167	92	121	111	108	124	110	59	14	57	41	--	--
	Average	69	135	84	102	96	100	100	100	58	14	55	41	--	--
	CV (%)	8	9	7	--	--	8	9	7	--	3	4	--	--	--
	LSD (0.05)	8	17	8	--	--	11	17	8	--	1	3	--	--	--

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

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

Table 9. SOUTHEAST Kansas Grain Sorghum Hybrid Yield Summary (% of test avg.), 2018

BRAND/NAME	FRD	LBD	AVG.	BRAND/NAME	FRD	LBD	AVG.
ALTA				DYNA-GRO			
ADV G2106	84	69	76	GX16921	97	85	91
ADV G2275	85	113	99	GX17379	89	98	94
ADV XG093	88	--	--	GX17912	76	83	80
AG1203	90	90	90	GX17948	116	138	127
CHECK				GX17962	91	125	108
EARLY	106	88	97	M60GB31	91	73	82
LATE	82	66	74	M60GB88	94	90	92
MED	100	65	82	M68GB18	106	115	110
DEKALB				M69GB38	123	122	123
DKS33-07	91	88	89	M69GR88	93	94	94
DKS38-16	116	115	115	M71GR04	105	90	97
DKS45-23	116	143	130	M73GR55	118	122	120
DKS47-07	107	123	115	M74GB17	101	77	89
DKS53-53	113	138	125	GOLDEN ACRES			
				2840B	102	91	97
				3960B	104	75	89
				SORGHUM PARTNERS			
				SP7715	106	--	--
				MATURITY CHECK			
				DEKALB EARLY	80	82	81
				DEKALB LATE	114	136	125
				DEKALB MED	117	108	113
				AVERAGES (bu/a)	117	69	93
				CV (%)	11	8	--
				LSD (0.05)	15	11	--

FRD = Franklin Co., Ottawa LBD = Labette Co., Parsons

CENTRAL KANSAS DRYLAND GRAIN SORGHUM TEST

Assaria, Saline County
 Clayton Short Farm
 Planted: 6/12/2018
 Harvested: 11/19/2018
 180-0-0 lb/a N, P, K
 Reading silt loam
 Previous crop: wheat

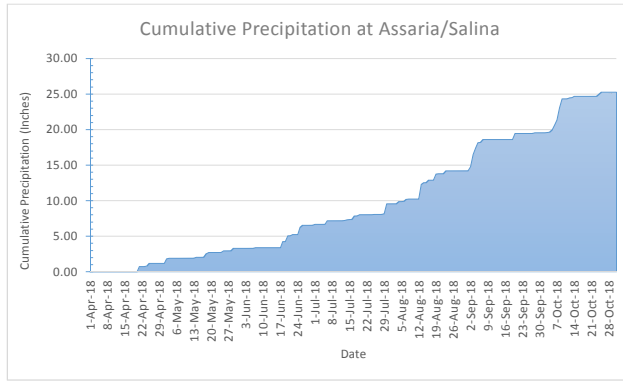


Table 10. Saline County Dryland Grain Sorghum Performance Test, 2016-2018

BRAND	NAME	YIELD AS %											Days to blm	Grain moist. %	Test wt. lb/bu	Plnt ht. in.	Ldg %	Pop. 1000 ppa
		ACRE YIELD, BUSHEL					OF TEST AVERAGE			2018	2017	2016						
		2018	2017	2016	2-yr. AVG.	3-yr. AVG.	2018	2017	2016									
ALTA	ADV G1150	66	--	--	--	--	92	--	--	--	--	--	17	59	--	--	--	
ALTA	ADV G2106	61	--	--	--	--	85	--	--	--	--	--	17	57	--	--	--	
ALTA	ADV G2275	70	--	--	--	--	97	--	--	--	--	--	16	57	--	--	--	
ALTA	ADV XG602	57	--	--	--	--	79	--	--	--	--	--	16	56	--	--	--	
ALTA	AG1201	82	--	--	--	--	114	--	--	--	--	--	16	58	--	--	--	
ALTA	AG1301	62	--	--	--	--	86	--	--	--	--	--	15	57	--	--	--	
CHECK	EARLY	83	58	--	70	--	115	135	--	--	--	--	17	59	--	--	--	
CHECK	LATE	63	55	--	59	--	87	128	--	--	--	--	16	58	--	--	--	
CHECK	MED	91	34	--	63	--	127	80	--	--	--	--	17	59	--	--	--	
DEKALB	DKS33-07	61	--	--	--	--	84	--	--	--	--	--	15	57	--	--	--	
DEKALB	DKS38-16	109	49	--	79	--	150	113	--	--	--	--	17	59	--	--	--	
DEKALB	DKS45-23	69	44	--	57	--	96	102	--	--	--	--	15	57	--	--	--	
DEKALB	DKS47-07	60	--	--	--	--	83	--	--	--	--	--	16	56	--	--	--	
DEKALB	DKS53-53	64	50	--	57	--	89	116	--	--	--	--	16	57	--	--	--	
DYNA-GRO	GX16921	56	--	--	--	--	78	--	--	--	--	--	15	52	--	--	--	
DYNA-GRO	GX17379	79	--	--	--	--	109	--	--	--	--	--	16	58	--	--	--	
DYNA-GRO	GX17912	69	--	--	--	--	95	--	--	--	--	--	17	60	--	--	--	
DYNA-GRO	GX17948	66	--	--	--	--	92	--	--	--	--	--	16	58	--	--	--	
DYNA-GRO	GX17962	81	--	--	--	--	112	--	--	--	--	--	16	56	--	--	--	
DYNA-GRO	GX18919	102	--	--	--	--	142	--	--	--	--	--	17	59	--	--	--	
DYNA-GRO	M60GB31	90	40	--	65	--	125	92	--	--	--	--	15	57	--	--	--	
DYNA-GRO	M60GB88	61	--	--	--	--	85	--	--	--	--	--	17	58	--	--	--	
DYNA-GRO	M68GB18	57	--	--	--	--	79	--	--	--	--	--	14	55	--	--	--	
DYNA-GRO	M69GB38	64	--	--	--	--	89	--	--	--	--	--	16	56	--	--	--	
DYNA-GRO	M69GR88	83	--	--	--	--	114	--	--	--	--	--	16	56	--	--	--	
DYNA-GRO	M71GR04	81	--	--	--	--	112	--	--	--	--	--	16	57	--	--	--	
DYNA-GRO	M73GR55	80	42	--	61	--	111	98	--	--	--	--	17	58	--	--	--	
DYNA-GRO	M74GB17	61	35	--	48	--	84	82	--	--	--	--	17	57	--	--	--	
GOLDEN ACRES	2840B	66	--	--	--	--	91	--	--	--	--	--	16	57	--	--	--	
GOLDEN ACRES	3960B	70	32	--	51	--	97	74	--	--	--	--	17	56	--	--	--	
MATURITY CHECK	DEKALB EARLY	88	48	--	68	--	122	112	--	--	--	--	17	59	--	--	--	
MATURITY CHECK	DEKALB LATE	66	33	--	49	--	91	78	--	--	--	--	17	58	--	--	--	
MATURITY CHECK	DEKALB MED	60	49	--	54	--	83	113	--	--	--	--	17	59	--	--	--	
TEXAS	A.10004.R.LBK1	70	--	--	--	--	96	--	--	--	--	--	16	58	--	--	--	
TEXAS	A.KS116/AD5319	80	--	--	--	--	111	--	--	--	--	--	17	59	--	--	--	
TEXAS	A.KS116/R.13022	98	--	--	--	--	136	--	--	--	--	--	16	55	--	--	--	
TEXAS	A.KS116/R.LBK1	105	--	--	--	--	145	--	--	--	--	--	15	57	--	--	--	
TEXAS	A.TX2752/AD5319	56	--	--	--	--	78	--	--	--	--	--	14	55	--	--	--	
TEXAS	A.TX2752/R.11018	71	--	--	--	--	98	--	--	--	--	--	17	59	--	--	--	
TEXAS	A.TX2752/R.13022	55	--	--	--	--	76	--	--	--	--	--	16	56	--	--	--	
TEXAS	A.TX644/R.LBK1	60	--	--	--	--	84	--	--	--	--	--	16	58	--	--	--	
TEXAS	ADLO357/R.11018	62	--	--	--	--	86	--	--	--	--	--	15	56	--	--	--	
TEXAS	ADLO357/R.LBK1	60	--	--	--	--	83	--	--	--	--	--	16	58	--	--	--	
TEXAS	ADLO357/R.LBK2	75	--	--	--	--	104	--	--	--	--	--	18	59	--	--	--	
TEXAS	AOK11/R.LBK1	60	--	--	--	--	83	--	--	--	--	--	15	54	--	--	--	
TEXAS	PHA432/R.11018	79	--	--	--	--	110	--	--	--	--	--	16	59	--	--	--	
TEXAS	PHA432/R/LBK2	84	--	--	--	--	117	--	--	--	--	--	17	58	--	--	--	
	Average	72	43	--	58	--	100	100	--	--	--	--	16	57	--	--	--	
	CV (%)	9	11	--	--	--	9	11	--	--	--	--	13	6	--	--	--	
	LSD (0.05)	9	7	--	--	--	9	16	--	--	--	--	--	--	--	--	--	

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

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

CENTRAL KANSAS DRYLAND GRAIN SORGHUM TEST

Hutchinson, Reno County
 South Central Experiment Field
 Planted: 6/14/2018
 Harvested: 11/19/2018
 150-0-0 lb/a N, P, K
 Ulysses silt loam
 Previous crop: soybean

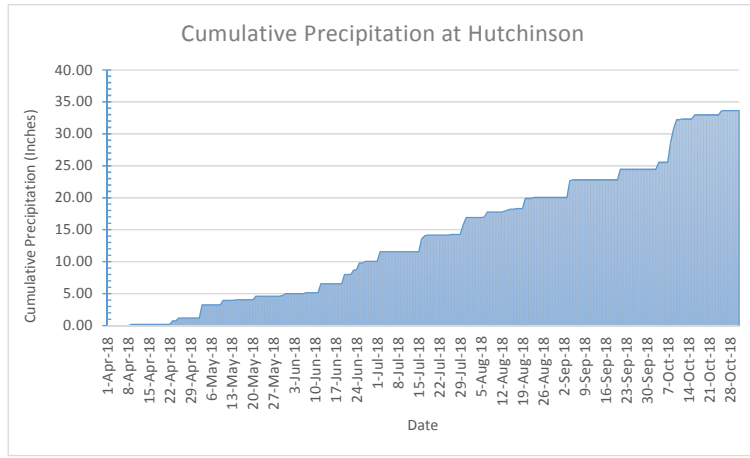


Table 11. Reno County Dryland Grain Sorghum Performance Test, 2016-2018

BRAND	NAME	ACRE YIELD, BUSHELS					YIELD AS % OF TEST AVERAGE			Days to blm	Grain moist. %	Test wt. lb/bu	Plnt ht. in.	Ldg %	Pop. 1000 ppa
		2018	2017	2016	2-yr. AVG.	3-yr. AVG.	2018	2017	2016						
ALTA	ADV G1150	114	--	--	--	--	92	--	--	--	14	55	--	--	--
ALTA	ADV G2106	129	--	--	--	--	104	--	--	--	15	57	--	--	--
ALTA	ADV G2275	121	--	--	--	--	97	--	--	--	15	59	--	--	--
ALTA	ADV XG602	115	--	--	--	--	92	--	--	--	15	56	--	--	--
ALTA	AG1201	111	--	--	--	--	89	--	--	--	14	54	--	--	--
ALTA	AG1301	114	--	76	--	95	92	--	115	--	15	54	--	--	--
CHECK	EARLY	100	--	51	--	76	80	--	78	--	13	60	--	--	--
CHECK	LATE	127	--	60	--	94	102	--	91	--	15	56	--	--	--
CHECK	MED	141	--	66	--	103	113	--	101	--	15	56	--	--	--
CHROMATIN	CHR0395	148	--	--	--	--	119	--	--	--	15	56	--	--	--
DEKALB	DKS33-07	118	--	--	--	--	95	--	--	--	14	57	--	--	--
DEKALB	DKS38-16	133	--	50	--	91	107	--	76	--	15	57	--	--	--
DEKALB	DKS45-23	157	--	37	--	97	126	--	56	--	15	58	--	--	--
DEKALB	DKS47-07	144	--	--	--	--	116	--	--	--	15	57	--	--	--
DEKALB	DKS53-53	123	--	46	--	85	99	--	70	--	15	56	--	--	--
DYNA-GRO	GX16921	107	--	--	--	--	86	--	--	--	15	56	--	--	--
DYNA-GRO	GX17210	129	--	--	--	--	104	--	--	--	15	55	--	--	--
DYNA-GRO	GX17379	104	--	--	--	--	84	--	--	--	15	57	--	--	--
DYNA-GRO	GX17912	120	--	--	--	--	97	--	--	--	14	53	--	--	--
DYNA-GRO	GX17914	124	--	--	--	--	100	--	--	--	15	54	--	--	--
DYNA-GRO	GX17917	123	--	--	--	--	99	--	--	--	15	55	--	--	--
DYNA-GRO	GX17948	109	--	--	--	--	88	--	--	--	15	57	--	--	--
DYNA-GRO	GX17962	146	--	--	--	--	117	--	--	--	15	56	--	--	--
DYNA-GRO	GX18919	111	--	--	--	--	90	--	--	--	15	54	--	--	--
DYNA-GRO	M59GB57	96	--	--	--	--	78	--	--	--	15	53	--	--	--
DYNA-GRO	M60GB31	135	--	124	--	130	109	--	188	--	15	57	--	--	--
DYNA-GRO	M60GB88	122	--	--	--	--	98	--	--	--	14	59	--	--	--
DYNA-GRO	M68GB18	147	--	--	--	--	118	--	--	--	15	57	--	--	--
DYNA-GRO	M69GB38	149	--	--	--	--	120	--	--	--	16	56	--	--	--
DYNA-GRO	M69GR88	130	--	--	--	--	104	--	--	--	15	56	--	--	--
DYNA-GRO	M71GR04	144	--	--	--	--	116	--	--	--	15	58	--	--	--
DYNA-GRO	M73GR55	91	--	--	--	--	73	--	--	--	15	57	--	--	--
DYNA-GRO	M74GB17	105	--	--	--	--	85	--	--	--	15	56	--	--	--
GOLDEN ACRES	2840B	104	--	--	--	--	84	--	--	--	15	58	--	--	--
GOLDEN ACRES	3960B	134	--	--	--	--	108	--	--	--	15	56	--	--	--
MATURITY CHECK	DEKALB EARLY	123	--	--	--	--	99	--	--	--	13	57	--	--	--
MATURITY CHECK	DEKALB LATE	140	--	46	--	93	113	--	69	--	15	58	--	--	--
MATURITY CHECK	DEKALB MED	143	--	50	--	96	115	--	76	--	15	58	--	--	--
SORGHUM PARTNERS	SP 68M57	112	--	--	--	--	90	--	--	--	15	56	--	--	--
SORGHUM PARTNERS	SP 73B12	136	--	--	--	--	109	--	--	--	14	59	--	--	--
SORGHUM PARTNERS	SP7715	119	--	--	--	--	95	--	--	--	15	57	--	--	--
	Average	124	--	66	--	95	100	--	100	--	15	56	--	--	--
	CV (%)	10	--	12	--	--	10	--	12	--	6	4	--	--	--
	LSD (0.05)	18	--	11	--	--	14	--	17	--	1	3	--	--	--

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

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

Table 12. CENTRAL Kansas Sorghum Hybrid Yield Summary (% of test avg.), 2018

BRAND/NAME	SAD	RND	AVG.	BRAND/NAME	SAD	RND	AVG.
ALTA				GOLDEN ACRES			
ADV G1150	92	92	92	2840B	91	84	87
ADV G2106	85	104	94	3960B	97	108	102
ADV G2275	97	97	97	SORGHUM PARTNERS			
ADV XG602	79	92	86	SP 68M57	--	90	--
AG1201	114	89	101	SP 73B12	--	109	--
AG1301	86	92	89	SP7715	--	95	--
CHECK				TEXAS			
EARLY	115	80	98	A.10004.R.LBK1	96	--	--
LATE	87	102	95	A.KS116/AD5319	111	--	--
MED	127	113	120	A.KS116/R.13022	136	--	--
CHROMATIN				A.KS116/R.LBK1	145	--	--
CHR0395	--	119	--	A.TX2752/AD5319	78	--	--
DEKALB				A.TX2752/R.11018	98	--	--
DKS33-07	84	95	89	A.TX2752/R.13022	76	--	--
DKS38-16	150	107	128	A.TX644/R.LBK1	84	--	--
DKS45-23	96	126	111	ADLO357/R.11018	86	--	--
DKS47-07	83	116	99	ADLO357/R.LBK1	83	--	--
DKS53-53	89	99	94	ADLO357/R.LBK2	104	--	--
DYNA-GRO				AOK11/R.LBK1	83	--	--
GX16921	78	86	82	PHA432/R.11018	110	--	--
GX17210	--	104	--	PHA432/R/LBK2	117	--	--
GX17379	109	84	97	MATURITY CHECK			
GX17912	95	97	96	DEKALB EARLY	122	99	111
GX17914	--	100	--	DEKALB LATE	91	113	102
GX17917	--	99	--	DEKALB MED	83	115	99
GX17948	92	88	90	AVERAGES (bu/a)	72	124	98
GX17962	112	117	115	CV (%)	9	10	--
GX18919	142	90	116	LSD (0.05)	9	14	--
M59GB57	--	78	--				
M60GB31	125	109	117				
M60GB88	85	98	92				
M68GB18	79	118	99				
M69GB38	89	120	104				
M69GR88	114	104	109				
M71GR04	112	116	114				
M73GR55	111	73	92				
M74GB17	84	85	84				

SAD = Saline Co., Assaria

RND = Reno Co., Hutchinson.

WESTERN KANSAS DRYLAND GRAIN SORGHUM TEST

Colby, Thomas County
 K-State Northwest Research Center
 Planted: 6/6/2018
 Harvested: 10/30/2018
 80-0-0 lb/a N, P, K
 Keith silt loam
 Previous crop: fallow

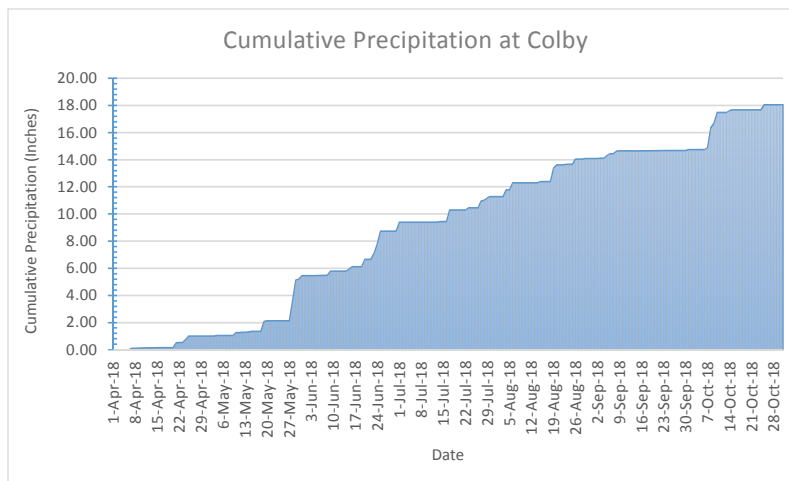


Table 13. Thomas County Dryland Grain Sorghum Performance Test, 2016-2018

BRAND	NAME	ACRE YIELD, BUSHEL					YIELD AS %			Days to blm	Grain moist. %	Test wt. lb/bu	Plnt ht. in.	Ldg %	Pop. 1000 ppa
		2018	2017	2016	2-yr. AVG.	3-yr. AVG.	OF TEST AVERAGE								
		2018	2017	2016	2018	2017	2016								
ALTA	ADV G1150	101	122	--	112	--	89	100	--	71	15	51	47	--	--
ALTA	ADV G2106	101	--	--	--	--	89	--	--	69	16	48	50	--	--
ALTA	ADV G2275	105	--	--	--	--	92	--	--	70	17	52	55	--	--
ALTA	ADV XG602	77	--	--	--	--	68	--	--	76	15	42	48	--	--
ALTA	ADV XG629	66	--	--	--	--	58	--	--	71	14	48	39	--	--
ALTA	AG1201	94	--	--	--	--	83	--	--	67	14	50	43	--	--
ALTA	AG1301	114	103	110	109	109	100	85	116	71	14	51	46	--	--
B-H GENETICS	BH 3400	104	124	59	114	96	92	102	62	59	13	46	49	--	--
B-H GENETICS	BH 3616	127	104	--	115	--	112	86	--	63	14	54	44	--	--
B-H GENETICS	BH 4433C	114	113	--	113	--	100	93	--	67	16	53	48	--	--
B-H GENETICS	XPS 1712C	88	--	--	--	--	78	--	--	67	13	46	49	--	--
CHECK	EARLY	144	123	106	134	124	127	101	112	60	14	56	47	--	--
CHECK	LATE	123	136	100	129	120	108	112	105	75	17	50	50	--	--
CHECK	MED	140	141	106	141	129	123	116	111	64	15	56	54	--	--
DEKALB	DKS28-05	143	142	107	143	131	126	117	113	65	15	49	50	--	--
DEKALB	DKS29-07	149	--	--	--	--	131	--	--	63	14	53	51	--	--
DEKALB	DKS33-07	59	--	--	--	--	52	--	--	69	17	49	47	--	--
DEKALB	DKS37-07	144	115	89	129	116	126	95	94	71	15	46	49	--	--
DEKALB	DKS38-16	121	140	120	130	127	106	115	126	68	17	51	52	--	--
DEKALB	DKS45-23	111	121	--	116	--	98	100	--	73	17	50	53	--	--
DYNA-GRO	GX17210	101	--	--	--	--	89	--	--	70	17	50	50	--	--
DYNA-GRO	GX17912	72	--	--	--	--	63	--	--	68	13	41	44	--	--
DYNA-GRO	GX17914	104	--	--	--	--	92	--	--	68	15	46	52	--	--
DYNA-GRO	GX17917	102	--	--	--	--	90	--	--	64	15	50	45	--	--
DYNA-GRO	GX18919	115	--	--	--	--	101	--	--	61	14	50	53	--	--
DYNA-GRO	M59GB57	117	101	--	109	--	103	83	--	61	14	51	45	--	--
DYNA-GRO	M60GB31	72	132	108	102	--	63	109	114	72	15	46	50	--	--
DYNA-GRO	M60GB88	119	134	--	127	--	105	110	--	68	14	51	50	--	--
GOLDEN ACRES	2620C	160	--	--	--	--	141	--	--	62	13	51	51	--	--
GOLDEN ACRES	2730B	167	--	--	--	--	147	--	--	63	15	51	57	--	--
GOLDEN ACRES	2840B	108	--	--	--	--	95	--	--	66	17	57	54	--	--
MATURITY CHECK	DEKALB EARLY	119	142	107	130	123	104	117	113	62	14	48	51	--	--
MATURITY CHECK	DEKALB LATE	100	113	86	107	100	88	93	91	72	15	50	58	--	--
MATURITY CHECK	DEKALB MED	169	140	120	155	143	149	115	126	66	17	57	58	--	--
SORGHUM PARTNERS	SP 25C10	107	--	--	--	--	94	--	--	57	12	46	46	--	--
SORGHUM PARTNERS	SP 31A15	144	--	--	--	--	127	--	--	62	13	49	48	--	--
SORGHUM PARTNERS	SP 68M57	104	--	--	--	--	91	--	--	66	16	51	51	--	--
	Average	114	121	95	117	110	100	100	100	67	15	50	49	--	--
	CV (%)	8	8	11	--	--	8	8	11	6	9	9	7	--	--
	LSD (0.05)	13	14	15	--	--	12	12	15	5	2	6	5	--	--

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

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

WESTERN KANSAS DRYLAND GRAIN SORGHUM TEST

Tribune, Greeley County
 K-State Northwest Research Center
 Planted: 5/30/2018
 Harvested: 11/21/2018
 110-40-0 lb/a N, P, K
 Ulysess silt loam
 Previous crop: wheat

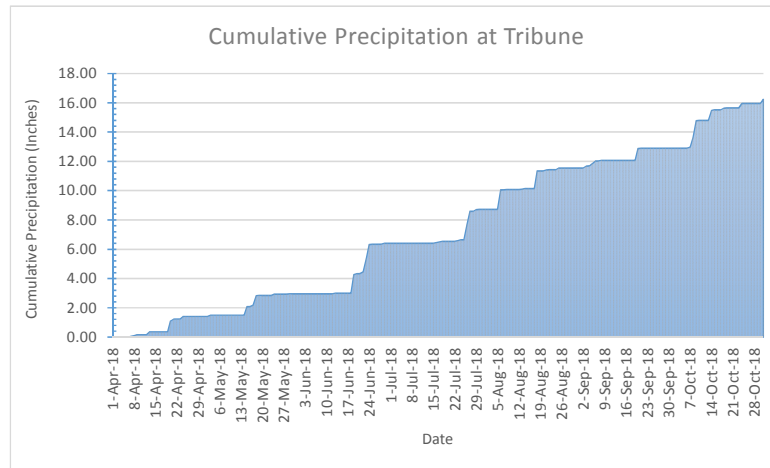


Table 14. Greeley County Dryland Grain Sorghum Performance Test, 2016-2018

BRAND	NAME	ACRE YIELD, BUSHEL					YIELD AS %			Days to blm	Grain moist. %	Test wt. lb/bu	Plnt ht. in.	Ldg %	Pop. 1000 ppa
		2018	2017	2016	2-yr. AVG.	3-yr. AVG.	OF TEST AVERAGE								
		2018	2017	2016	2018	2017	2016								
ALTA	ADV G1150	140	117	--	129	--	104	96	--	78	14	54	49	--	17
ALTA	ADV G2106	154	--	--	--	--	114	--	--	70	14	55	49	--	24
ALTA	ADV G2275	119	--	--	--	--	89	--	--	74	14	56	54	--	26
ALTA	ADV XG602	133	--	--	--	--	99	--	--	80	14	53	51	--	22
ALTA	ADV XG629	117	--	--	--	--	87	--	--	68	14	55	40	--	26
ALTA	AG1201	111	--	--	--	--	82	--	--	66	14	54	42	--	22
ALTA	AG1301	143	104	136	124	128	106	85	101	72	14	56	47	--	28
B-H GENETICS	BH 3616	102	106	--	104	--	76	87	--	67	14	54	41	--	23
B-H GENETICS	BH 4100	140	128	167	134	145	104	105	124	73	14	57	53	--	22
B-H GENETICS	XPS 1712C	138	--	--	--	--	103	--	--	67	14	52	51	--	25
B-H GENETICS	XPS 1813	141	--	--	--	--	105	--	--	69	14	57	54	--	26
CHECK	EARLY	129	122	160	126	137	96	101	119	61	14	57	45	--	27
CHECK	LATE	159	128	129	144	139	118	105	96	78	14	56	52	--	24
CHECK	MED	135	129	161	132	142	100	106	120	66	14	56	49	--	24
DEKALB	DKS28-05	145	141	120	143	135	108	116	90	64	14	53	48	--	27
DEKALB	DKS29-07	120	--	--	--	--	89	--	--	67	14	56	50	--	27
DEKALB	DKS33-07	142	--	--	--	--	105	--	--	70	14	56	49	--	31
DEKALB	DKS37-07	144	118	133	131	132	107	97	99	69	14	57	52	--	24
DEKALB	DKS38-16	142	128	141	135	137	106	106	105	71	14	58	54	--	20
DEKALB	DKS45-23	164	134	--	149	--	122	110	--	79	14	56	58	--	27
DYNA-GRO	GX17210	136	--	--	--	--	101	--	--	73	14	55	47	--	24
DYNA-GRO	GX17912	154	--	--	--	--	114	--	--	66	14	51	51	--	25
DYNA-GRO	GX17914	150	--	--	--	--	111	--	--	68	14	54	53	--	26
DYNA-GRO	GX17917	130	--	--	--	--	97	--	--	61	14	54	48	--	23
DYNA-GRO	GX18919	121	--	--	--	--	90	--	--	59	14	54	47	--	25
DYNA-GRO	M59GB57	122	117	--	120	--	91	96	--	62	14	56	43	--	26
DYNA-GRO	M60GB31	151	129	155	140	145	112	106	115	71	14	57	53	--	23
DYNA-GRO	M60GB88	135	129	--	132	--	100	106	--	72	14	55	51	--	20
GOLDEN ACRES	2620C	144	--	--	--	--	107	--	--	66	14	52	52	--	27
GOLDEN ACRES	2730B	149	--	--	--	--	110	--	--	68	14	54	53	--	27
GOLDEN ACRES	2840B	138	--	--	--	--	103	--	--	67	14	59	53	--	26
GOLDEN ACRES	H-390W	134	110	--	122	--	99	90	--	74	14	55	47	--	22
MATURITY CHECK	DEKALB EARLY	149	141	120	145	137	110	116	90	63	14	53	47	--	27
MATURITY CHECK	DEKALB LATE	138	126	134	132	133	102	104	99	75	14	57	58	--	26
MATURITY CHECK	DEKALB MED	146	128	141	137	138	108	106	105	70	14	58	53	--	20
SORGHUM PARTNERS	SP 25C10	103	--	--	--	--	77	--	--	58	14	53	42	--	23
SORGHUM PARTNERS	SP 31A15	129	--	--	--	--	96	--	--	65	14	52	46	--	30
SORGHUM PARTNERS	SP 68M57	143	--	--	--	--	106	--	--	69	14	56	52	--	27
	Average	135	122	135	128	131	100	100	100	69	14	55	49	--	25
	CV (%)	7	6	6	--	--	7	6	9	2	0	2	2	--	7
	LSD (0.05)	13	10	11	--	--	10	9	13	2	0	1	2	--	2

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

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

WESTERN KANSAS DRYLAND GRAIN SORGHUM TEST

Garden City, Finney County
 K-State Southwest Research Center
 Planted: 6/7/2018
 Harvested: 11/11/2018
 100-0-0 lb/a N, P, K
 Keith silt loam
 Previous crop: wheat

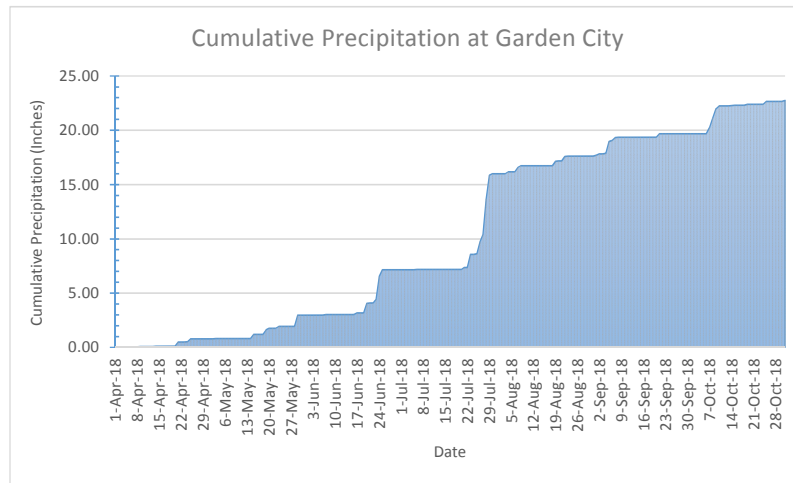


Table 15. Finney County Dryland Grain Sorghum Performance Test, 2016-2018

BRAND	NAME	ACRE YIELD, BUSHEL					YIELD AS % OF TEST AVERAGE			Days to blm	Grain moist. %	Test wt. lb/bu	Plnt ht. in.	Ldg %	Pop. 1000 ppa
		2018	2017	2016	2-yr. AVG.	3-yr. AVG.	2018	2017	2016						
		ALTA	ADV G1150	50	91	--	71	--	86						
ALTA	ADV G2106	50	--	--	--	--	85	--	--	--	16	53	--	--	--
ALTA	ADV G2275	66	--	--	--	--	112	--	--	--	15	53	--	--	--
ALTA	ADV XG602	68	--	--	--	--	116	--	--	--	16	53	--	--	--
ALTA	ADV XG629	55	--	--	--	--	94	--	--	--	15	54	--	--	--
ALTA	AG1201	60	--	--	--	--	103	--	--	--	15	54	--	--	--
ALTA	AG1301	53	127	--	90	--	91	132	--	--	16	52	--	--	--
CHECK	EARLY	65	80	102	72	82	111	83	106	--	15	53	--	--	--
CHECK	LATE	49	103	90	76	81	83	107	94	--	15	53	--	--	--
CHECK	MED	59	100	74	80	78	101	104	76	--	16	53	--	--	--
DEKALB	DKS28-05	52	110	109	81	90	89	114	113	--	15	53	--	--	--
DEKALB	DKS29-07	61	--	--	--	--	105	--	--	--	15	54	--	--	--
DEKALB	DKS33-07	44	--	--	--	--	75	--	--	--	16	52	--	--	--
DEKALB	DKS37-07	54	93	101	74	83	92	97	105	--	15	53	--	--	--
DEKALB	DKS38-16	52	109	112	80	91	89	113	116	--	15	54	--	--	--
DEKALB	DKS45-23	78	106	--	92	--	134	111	--	--	15	55	--	--	--
DYNA-GRO	GX16921	67	--	--	--	--	114	--	--	--	16	53	--	--	--
DYNA-GRO	GX17210	66	--	--	--	--	113	--	--	--	15	54	--	--	--
DYNA-GRO	GX17912	64	--	--	--	--	109	--	--	--	15	53	--	--	--
DYNA-GRO	GX17914	55	--	--	--	--	94	--	--	--	15	55	--	--	--
DYNA-GRO	GX17917	65	--	--	--	--	110	--	--	--	15	54	--	--	--
DYNA-GRO	GX17948	71	--	--	--	--	121	--	--	--	15	53	--	--	--
DYNA-GRO	GX18919	44	--	--	--	--	75	--	--	--	16	52	--	--	--
DYNA-GRO	M59GB57	65	72	--	69	--	112	75	--	--	15	55	--	--	--
DYNA-GRO	M60GB31	61	107	89	84	86	104	111	92	--	15	54	--	--	--
DYNA-GRO	M60GB88	44	94	--	69	--	76	98	--	--	15	52	--	--	--
DYNA-GRO	M68GB18	72	--	--	--	--	123	--	--	--	15	54	--	--	--
DYNA-GRO	M69GR88	59	--	--	--	--	100	--	--	--	15	53	--	--	--
GOLDEN ACRES	2620C	54	--	--	--	--	92	--	--	--	15	53	--	--	--
GOLDEN ACRES	2730B	52	--	--	--	--	89	--	--	--	15	53	--	--	--
GOLDEN ACRES	2840B	59	--	--	--	--	100	--	--	--	16	53	--	--	--
GOLDEN ACRES	H-390W	65	120	--	93	--	112	125	--	--	15	54	--	--	--
MATURITY CHECK	DEKALB EARLY	79	110	109	94	99	134	114	113	--	15	55	--	--	--
MATURITY CHECK	DEKALB LATE	43	100	101	71	81	73	104	105	--	16	52	--	--	--
MATURITY CHECK	DEKALB MED	50	109	112	79	90	85	113	116	--	16	52	--	--	--
MOJO	EXP-36	54	--	--	--	--	92	--	--	--	15	55	--	--	--
SORGHUM PARTNERS	SP 25C10	56	--	--	--	--	95	--	--	--	15	53	--	--	--
SORGHUM PARTNERS	SP 31A15	50	--	--	--	--	86	--	--	--	14	53	--	--	--
SORGHUM PARTNERS	SP 68M57	72	--	--	--	--	122	--	--	--	15	55	--	--	--
	Average	58	96	96	77	83	100	100	100	--	15	53	--	--	--
	CV (%)	9	9	8	--	--	9	9	8	--	6	4	--	--	--
	LSD (0.05)	9	12	11	--	--	15	13	12	--	2	3	--	--	--

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

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

Table 16. WESTERN Kansas Grain Sorghum Hybrid Yield Summary (% of test avg.), 2018

BRAND/NAME	ELD	THD	GRD	FND	AVG.	BRAND/NAME	ELD	THD	GRD	FND	AVG.
ALTA						DYNA-GRO					
ADV G1150	--	89	104	86	93	GX16921	--	--	--	114	--
ADV G2106	--	89	114	85	96	GX17210	--	89	101	113	101
ADV G2275	--	92	89	112	98	GX17912	--	63	114	109	95
ADV XG602	--	68	99	116	94	GX17914	--	92	111	94	99
ADV XG629	--	58	87	94	80	GX17917	--	90	97	110	99
AG1201	--	83	82	103	90	GX17948	--	--	--	121	--
AG1301	--	100	106	91	99	GX18919	--	101	90	75	88
B-H GENETICS						M59GB57					
BH 3400	--	92	--	--	--	M60GB31	--	63	112	104	93
BH 3616	--	112	76	--	--	M60GB88	--	105	100	76	94
BH 4100	--	--	104	--	--	M68GB18	--	--	--	123	--
BH 4433C	--	100	--	--	--	M69GR88	--	--	--	100	--
XPS 1712C	--	78	103	--	--	GOLDEN ACRES					
XPS 1813	--	--	105	--	--	2620C	--	141	107	92	113
CHECK						2730B					
EARLY	--	108	118	111	112	2840B	--	95	103	100	99
LATE	--	127	96	83	102	H-390W	--	--	99	112	--
MED	--	123	100	101	108	MOJO					
DEKALB						EXP-36					
DKS28-05	--	126	108	89	108	SORGHUM PARTNERS					
DKS29-07	--	131	89	105	108	SP 25C10	--	94	77	95	89
DKS33-07	--	52	105	75	77	SP 31A15	--	127	96	86	103
DKS37-07	--	126	107	92	108	SP 68M57	--	91	106	122	107
DKS38-16	--	106	106	89	100	MATURITY CHECK					
DKS45-23	--	98	122	134	118	DEKALB EARLY	--	104	110	134	116
						DEKALB LATE	--	88	102	73	88
						DEKALB MED	--	149	108	85	114
						AVERAGES (bu/a)	--	114	135	58	102
						CV (%)	--	8	7	9	--
						LSD (0.05)	--	12	10	15	--

ELD = Ellis Co., Hays.
Abandoned.

THD = Thomas Co., Colby

GRD = Greeley Co., Tribune

FND = Finney Co., Garden City

WESTERN KANSAS IRRIGATED GRAIN SORGHUM TEST

Colby, Thomas County
 K-State Northwest Research Center
 Planted: 5/25/2018
 Harvested: 10/30/2018
 100-30-0 lb/a N, P, K
 Keith silt loam
 Previous crop: fallow
 Irrigation: 8.7 inches

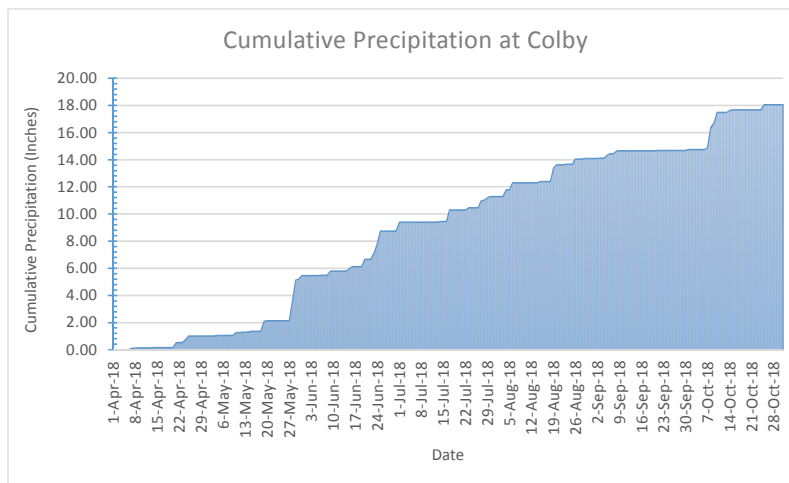


Table 17. Thomas County Irrigated Grain Sorghum Performance Test, 2016-2018

BRAND	NAME	ACRE YIELD, BUSHEL					YIELD AS %			Days to blm	Grain moist. %	Test wt. lb/bu	Plnt ht. in.	Ldg %	Pop. 1000 ppa
		2018	2017	2016	OF TEST		2018	2017	2016						
					2-yr. AVG.	3-yr. AVG.									
ALTA	ADV G2106	148	--	--	--	--	102	--	--	64	15	57	48	--	134
ALTA	ADV G2275	108	--	--	--	--	75	--	--	69	18	58	54	--	139
ALTA	ADV G3247	153	--	--	--	--	106	--	--	72	15	60	56	--	145
ALTA	ADV XG016	166	--	--	--	--	115	--	--	74	17	58	62	--	142
ALTA	ADV XG093	157	--	--	--	--	109	--	--	73	18	58	56	--	145
ALTA	AG1301	151	--	--	--	--	105	--	--	67	16	56	45	--	146
B-H GENETICS	BH 4100	166	175	156	170	166	115	106	104	67	15	60	50	--	124
B-H GENETICS	BH 5677	153	--	--	--	--	106	--	--	71	16	59	53	--	132
B-H GENETICS	XPS 1813	164	--	--	--	--	114	--	--	66	15	59	53	--	125
CHECK	EARLY	130	167	172	149	156	90	102	114	61	15	59	46	--	137
CHECK	LATE	166	172	147	169	162	115	105	98	73	16	59	54	--	127
CHECK	MED	108	182	158	145	149	75	111	105	62	15	59	49	--	130
DEKALB	DKS33-07	141	--	--	--	--	97	--	--	66	15	58	45	--	137
DEKALB	DKS38-16	146	186	159	166	164	101	113	106	68	16	60	52	--	131
DEKALB	DKS45-23	140	180	176	160	165	97	110	117	70	17	57	55	--	138
DEKALB	DKS47-07	117	--	--	--	--	81	--	--	71	18	53	59	--	131
DEKALB	DKS53-53	176	172	170	174	173	122	105	113	74	16	58	54	--	127
DYNA-GRO	GX16921	148	--	--	--	--	103	--	--	76	15	56	64	--	116
DYNA-GRO	GX17210	147	--	--	--	--	102	--	--	67	15	57	48	--	121
DYNA-GRO	GX17912	123	--	--	--	--	85	--	--	62	15	52	52	--	134
DYNA-GRO	GX17914	154	--	--	--	--	107	--	--	61	15	57	51	--	139
DYNA-GRO	GX17917	120	--	--	--	--	83	--	--	59	15	55	47	--	129
DYNA-GRO	GX18919	111	--	--	--	--	77	--	--	59	15	55	47	--	137
DYNA-GRO	M59GB57	121	134	--	128	--	84	82	--	60	15	56	42	--	139
DYNA-GRO	M60GB31	170	166	155	168	164	118	101	103	66	15	59	50	--	131
DYNA-GRO	M60GB88	148	155	--	152	--	103	95	--	66	15	57	51	--	125
GOLDEN ACRES	2840B	147	--	--	--	--	102	--	--	63	16	52	53	--	129
GOLDEN ACRES	3960B	170	164	153	167	162	118	100	102	67	15	60	49	--	127
MATURITY CHECK	DEKALB EARLY	114	149	117	132	127	79	91	78	59	15	56	47	--	130
MATURITY CHECK	DEKALB LATE	144	172	162	158	159	100	105	107	71	15	59	59	--	134
MATURITY CHECK	DEKALB MED	163	186	159	175	169	113	113	106	67	16	60	52	--	134
S&W SEED	SG11268	133	--	--	--	--	92	--	--	67	16	57	53	--	114
S&W SEED	SG11668	146	--	--	--	--	101	--	--	69	15	55	51	--	119
S&W SEED	SG11670	154	--	--	--	--	107	--	--	67	16	57	46	--	103
SORGHUM PARTNERS	SP31A15	139	--	--	--	--	97	--	--	61	15	53	46	--	126
SORGHUM PARTNERS	SP68M57	140	--	--	--	--	97	--	--	65	15	59	50	--	141
SORGHUM PARTNERS	SP73B12	141	--	--	--	--	98	--	--	69	17	58	51	--	136
SORGHUM PARTNERS	SP7715	157	--	--	--	--	109	--	--	75	16	60	55	--	141
	Average	144	164	150	154	153	100	100	100	67	16	57	51	--	131
	CV (%)	8	8	7	--	--	8	8	7	2	4	5	4	--	6
	LSD (0.05)	16	18	16	--	--	11	11	10	2	1	4	3	--	1

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

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

WESTERN KANSAS IRRIGATED GRAIN SORGHUM TEST

Tribune, Greeley County
 K-State Northwest Research Center
 Planted: 6/1/2018
 Harvested: 12/3/2018
 120-40-0 lb/a N, P, K
 Ulysess silt loam
 Previous crop: fallow

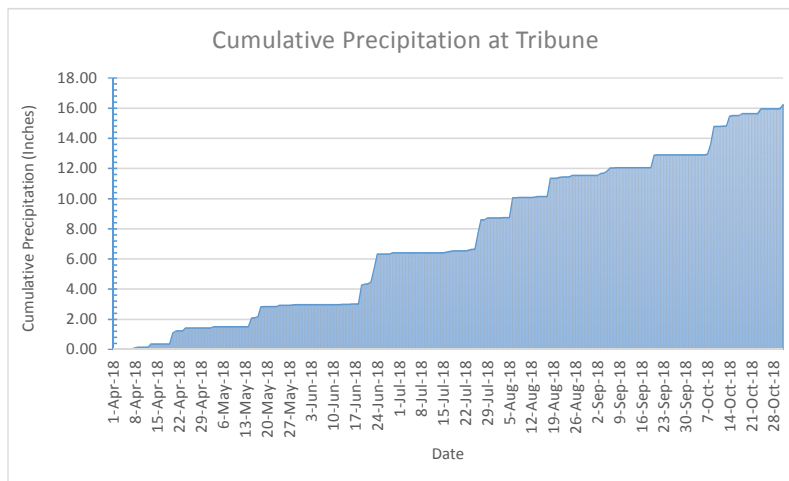


Table 18. Greeley County Irrigated Grain Sorghum Performance Test, 2016-2018

BRAND	NAME	ACRE YIELD, BUSHEL					YIELD AS % OF TEST AVERAGE			Days to blm	Grain moist. %	Test wt. lb/bu	Plnt ht. in.	Ldg %	Pop. 1000 ppa
		2018	2017	2016	2-yr. AVG.	3-yr. AVG.	2018	2017	2016						
ALTA	ADV G2106	132	--	--	--	--	117	--	--	60	14	59	50	96	--
ALTA	ADV G2275	92	--	--	--	--	81	--	--	68	15	60	58	100	--
ALTA	ADV G3247	119	--	--	--	--	105	--	--	68	14	59	58	100	--
ALTA	ADV XG016	145	--	--	--	--	128	--	--	72	14	60	64	100	--
ALTA	ADV XG093	112	--	--	--	--	99	--	--	69	15	60	57	98	--
ALTA	AG1301	97	--	--	--	--	86	--	--	66	14	58	49	61	--
B-H GENETICS	BH 4100	106	147	166	127	140	94	107	109	68	14	60	52	96	--
B-H GENETICS	BH 4433C	101	145	--	123	--	90	106	--	66	14	58	49	24	--
B-H GENETICS	BH 5677	107	140	--	123	--	95	103	--	69	14	59	57	95	--
CHECK	EARLY	110	148	151	129	136	98	109	99	57	13	59	48	54	--
CHECK	LATE	141	110	183	125	145	125	81	120	71	14	59	54	96	--
CHECK	MED	121	126	166	124	138	107	93	109	60	14	58	53	99	--
DEKALB	DKS33-07	92	--	--	--	--	82	--	--	66	14	59	50	86	--
DEKALB	DKS38-16	126	140	160	133	142	111	103	105	65	14	61	58	81	--
DEKALB	DKS45-23	144	152	174	148	157	128	111	114	69	14	60	61	95	--
DEKALB	DKS47-07	131	--	--	--	--	116	--	--	68	14	59	61	100	--
DEKALB	DKS53-53	140	169	190	155	166	125	124	125	71	14	59	59	98	--
DYNA-GRO	GX16921	132	--	--	--	--	117	--	--	75	14	57	63	86	--
DYNA-GRO	GX17210	122	--	--	--	--	108	--	--	64	14	58	51	79	--
DYNA-GRO	GX17912	124	--	--	--	--	110	--	--	57	13	58	52	84	--
DYNA-GRO	GX17914	100	--	--	--	--	88	--	--	58	14	59	57	99	--
DYNA-GRO	GX17917	107	--	--	--	--	95	--	--	56	13	59	49	98	--
DYNA-GRO	GX18919	99	--	--	--	--	88	--	--	56	12	57	51	91	--
DYNA-GRO	M59GB57	97	96	--	97	--	86	70	--	55	13	59	42	25	--
DYNA-GRO	M60GB31	98	150	160	124	136	87	110	105	67	14	59	53	94	--
DYNA-GRO	M60GB88	93	--	--	--	--	82	--	--	64	13	58	52	89	--
GOLDEN ACRES	2840B	136	--	--	--	--	120	--	--	60	14	61	58	100	--
GOLDEN ACRES	3960B	105	139	173	122	139	93	102	114	67	14	60	53	91	--
MATURITY CHECK	DEKALB EARLY	101	118	123	110	114	90	86	81	55	13	58	49	98	--
MATURITY CHECK	DEKALB LATE	113	138	171	125	141	100	101	113	68	14	60	59	94	--
MATURITY CHECK	DEKALB MED	116	140	160	128	139	103	103	105	65	14	61	60	89	--
TEXAS	A.KS116/AD5319	95	--	--	--	--	84	--	--	68	14	60	51	74	--
TEXAS	ADLO357/R.11018	106	--	--	--	--	94	--	--	70	14	59	58	78	--
TEXAS	ADLO357/R.LBK1	129	--	--	--	--	114	--	--	70	14	60	61	95	--
TEXAS	AOK11/R/LBK1	115	--	--	--	--	102	--	--	71	13	58	61	86	--
	Average	113	136	152	124	134	100	100	100	65	14	59	54	84	--
	CV (%)	10	7	5	--	--	10	7	5	3	2	1	4	18	--
	LSD (0.05)	16	14	11	--	--	15	10	8	2	0	1	3	21	--

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

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

Table 19. Kansas IRRIGATED Grain Sorghum Hybrid Yield Summary (% of test avg.), 2018

BRAND/NAME	RNI	THI	GRI	FNI	AVG.	RNI	THI	GRI	FNI	AVG.	
ALTA						GOLDEN ACRES					
ADV G2106	--	102	117	--	110	2840B	--	102	120	--	111
ADV G2275	--	75	81	--	78	3960B	--	118	93	--	106
ADV G3247	--	106	105	--	105	S&W SEED					
ADV XG016	--	115	128	--	122	SG11268	--	92	--	--	--
ADV XG093	--	109	99	--	104	SG11668	--	101	--	--	--
AG1301	--	105	86	--	95	SG11670	--	107	--	--	--
B-H GENETICS						SORGHUM PARTNERS					
BH 4100	--	115	94	--	104	SP 31A15	--	97	--	--	--
BH 4433C	--	--	90	--	--	SP 68M57	--	97	--	--	--
BH 5677	--	106	95	--	100	SP 73B12	--	98	--	--	--
XPS 1813	--	114	--	--	--	SP7715	--	109	--	--	--
CHECK						TEXAS					
EARLY	--	115	125	--	120	A.KS116/AD5319	--	--	84	--	--
LATE	--	90	98	--	94	ADLO357/R.11018	--	--	94	--	--
MED	--	75	107	--	91	ADLO357/R.LBK1	--	--	114	--	--
DEKALB						MATURITY CHECK					
DKS33-07	--	97	82	--	90	DEKALB EARLY	--	79	90	--	85
DKS38-16	--	101	111	--	106	DEKALB LATE	--	100	100	--	100
DKS45-23	--	97	128	--	113	DEKALB MED	--	113	103	--	108
DKS47-07	--	81	116	--	98	AVERAGES (bu/a)					
DKS53-53	--	122	125	--	123	CV (%)	--	8	10	--	--
DYNA-GRO						LSD (0.05)					
GX16921	--	103	117	--	110	--	--	11	15	--	--
GX17210	--	102	108	--	105						
GX17912	--	85	110	--	98						
GX17914	--	107	88	--	98						
GX17917	--	83	95	--	89						
GX18919	--	77	88	--	82						
M59GB57	--	84	86	--	85						
M60GB31	--	118	87	--	102						
M60GB88	--	103	82	--	92						

RNI=Reno Co., Hutchinson
Abandoned.

THI=Thomas Co., Colby

GRI=Greeley Co., Tribune

FNI=Finney Co., Garden City
Abandoned.

Table 20. Entries in the 2018 Kansas Grain Sorghum Performance Tests

BRAND	GC	EC	PC	Mat.	Days	GB	SCA	BRAND	GC	EC	PC	Mat.	Days	GB	SCA
ALTA								DEKALB							
ADV G1150	R	--	R	ME	63	--	--	DKS45-23	B	HY	P	M	68	--	--
ADV G2106	R	--	P	M	66	--	--	DKS47-07	B	--	P	M	68	--	R
ADV G2275	B	--	R	M	66	--	--	DKS53-53	B	HY	P	L	72	I	--
ADV G3247	B	--	R	ML	70	--	R	DYNA-GRO							
ADV XG016	R	--	--	ML	68	--	--	GX16921	R	HY	P	E	57	C,E	--
ADV XG093	B	--	--	ML	68	--	--	GX17210	R	HY	P	E	57	C,E	--
ADV XG602	R	--	--	M	66	--	--	GX17379	B	HY	P	MF	76	C,E,G	R
ADV XG629	C	--	--	E	58	--	--	GX17912	C	HY	P	ME	60	C,E	--
AG1201	B	--	R	E	60	--	R	GX17914	B	HY	P	E	58	C,E	--
AG1203	B	--	R	ME	63	--	R	GX17917	R	HY	P	E	58	C,E	--
AG1301	C	--	R	ME	63	--	R	GX17948	B	HY	P	M	69	C,E	--
B-H GENETICS								GX17962	B	HY	P	MF	70	C,E	--
BH 3400	B	--	P	E	--	--	--	GX18919							
BH 3616	B	--	P	E	--	--	--	M59GB57	B	HY	P	E	59	C,E	--
BH 4100	B	--	P	M	--	--	--	M60GB31	B	HY	T	ME	60	C,E	R
BH 4433C	C	--	P	M	--	--	--	M60GB88	B	HY	T	ME	60	C,E	--
BH 5677	B	--	P	ML	--	--	--	M68GB18	B	HY	P	M	67	C,E	--
XPS 1712C	B	--	P	E	--	--	--	M69GB38	B	HY	P	MF	70	C,E	--
XPS 1813	B	--	P	ME	--	--	--	M69GR88	R	HY	P	MF	69	C,E	--
BROWNING								M71GR04	R	HY	T	ML	70	C,E	--
775W	C	HY	P	M	63	--	--	M73GR55	R	HY	T	ML	73	C,E	--
APOLLO	C	Y	P	M	69	--	--	M74GB17	B	HY	T	ML	74	C,E,G	R
BLAZE	B	Y	P	M	69	--	--	GOLDEN ACRES							
CHALLENGER BMX	B	HY	P	M	67	--	--	2620C	C	--	P	ME	59	--	--
CIMARRON	B	Y	P	ME	64	--	--	2730B	B	--	P	ME	59	--	--
GRAINGER	R	Y	P	ML	70	--	R	2840B	B	--	P	ME	61	--	R
MAVERICK	R	Y	P	M	68	--	R	3960B	B	HY	P	M	68	C,E	R
PHOENIX	B	Y	P	ME	59	--	--	H-390W	W	W	P	E	62	C,E	R
WINFIELD	B	Y	P	M	69	--	--	MATURITY CHECK							
CHECK								DEKALB EARLY	B	HY	P	E	57	--	--
EARLY	--	--	--	--	--	--	--	DEKALB LATE							
LATE	--	--	--	--	--	--	--	DEKALB MED	B	HY	P	ME	62	--	--
MED	--	--	--	--	--	--	--	MOJO							
CHROMATIN								EXP-36	W	W	R	ME	64	--	--
CHR0395	B	--	P	M	65	--	--	S&W SEED							
DEKALB								SG11268	R	--	P	M	--	--	--
DKS28-05	B	HY	P	E	57	--	--	SG11668	R	--	P	ME	--	--	--
DKS29-07	C	--	P	E	59	--	R	SG11670	R	--	P	ME	--	--	--
DKS33-07	B	--	P	ME	61	--	R	SORGHUM PARTNERS							
DKS37-07	B	HY	P	E	62	C,E,I	R	SP 25C10	W		P	VE	52	--	--
DKS38-16	B	HY	P	E	62	--	--	SP 31A15	B		P	E	58	--	--

Table 20. Entries in the 2018 Kansas Grain Sorghum Performance Tests

BRAND	GC	EC	PC	Mat.	Days	GB	SCA
SORGHUM PARTNERS							
SP 68M57	B	--	P	M	68	--	R
SP 73B12	B	--	P	ML	71	--	R
SP7715	B	--	P	ME	73	--	R
TEXAS							
A.10004.R.LBK1	--	--	--	--	--	--	R
A.KS116/AD5319	--	--	--	--	--	--	--
A.KS116/R.13022	--	--	--	--	--	--	--
A.KS116/R.LBK1	--	--	--	--	--	--	R
A.TX2752/AD5319	--	--	--	--	--	--	--
A.TX2752/R.11018	--	--	--	--	--	--	--
A.TX2752/R.13022	--	--	--	--	--	--	--
A.TX644/R.LBK1	--	--	--	--	--	--	R
ADLO357/R.11018	--	--	--	--	--	--	--
ADLO357/R.LBK1	--	--	--	--	--	--	R
ADLO357/R.LBK2	--	--	--	--	--	--	R
AOK11/R.LBK1	--	--	--	--	--	--	R
PHA432/R.11018	--	--	--	--	--	--	--
PHA432/R/LBK2	--	--	--	--	--	--	--

Information provided by entrants:

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

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

PC = plant color: purple, tan

Mat. = relative maturity: early, medium, late

Days = days to half bloom

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

SCA = resistance to Sugarcane Aphids

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

Excerpts from the University Research Policy Agreement with Cooperating Seed Companies

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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