



# Current Report

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## Grain Sorghum Performance Trials in Oklahoma, 2014

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### Trial Objectives and Procedures

Each year performance trials for hybrid grain sorghum are conducted by the Oklahoma Cooperative Extension Service. These trials provide producers, extension educators, industry representatives, and researchers with information for grain sorghums hybrids marketed in Oklahoma.

Performance trials are conducted at twelve locations in Oklahoma: Apache, Alva, Blackwell, Cherokee, Enid, Goodwell, Homestead, Keyes, Gate, Morris, Seiling, and Tipton. All sites are dry-land with the exception of Goodwell, which received limited irrigation. The Cherokee, Homestead, and Gate trials are uniquely designed to evaluate certain hybrids (generally early and medium maturity) for planting in late April. Double crop trials were not planted in 2014 due to excessive rainfall in June and early July. This led to soils being too wet to plant the trial in a timely manner.

Grain sorghum hybrids entered (Table 1) were assigned by companies to their respective maturity groups (early less than 60 days to mid-bloom, medium 61 – 69 days to mid-bloom, and late 70 days and greater to mid-bloom) and trial locations; therefore, all hybrids were not entered at all locations. Hybrids tested at the Cherokee, Homestead, Enid, Alva, Seiling, and Gate locations were determined by Oklahoma State University. Companies submitted all hybrid characteristics presented in Table 1. This information was not determined or verified by Oklahoma State University. Company participation was voluntary, and some hybrids marketed in Oklahoma were not included in the test. Each maturity group was tested in a randomized complete block design with four replications. Plots were two 30-inch rows by 25 feet for the body of the state and the limited irrigated trials. Plots were trimmed to 20 feet prior to harvest. Dry-land trials in the panhandle were 35 feet and trimmed to 30 feet for harvest. Tractor powered cone planters were used to plant all trials with seeding rates adjusted for trial location. Trials were harvested with a Kincaid model, 8XP plot combine.

### Highlights

The Blackwell location was the star of the dry-land trials in 2014, with grain yield for 16 hybrids averaging 140 bu/ac or higher and the 172 bu/ac at this site is the highest obtained within our program in the last 16 years. For the first time in four years a trial was harvested at Tipton with grain yield more than 100 bu/ac. A new location in Morris was added in 2014. After only being found near the Red river south of Durant in 2013, sugar cane aphid was found in 17 counties.

Target populations, cooperating producers, fertilization, cultural practices, soil series, and herbicide use on all trials are listed individually in the results tables. Rainfall data from the nearest Mesonet sites are also listed. Some trials are long distances from the nearest Mesonet site; therefore rainfall could be greater or less than reported.

### Growing Conditions

Some producers delayed planting until late May due to inadequate soil moisture in late April and early May (Figure 1). This was due to one of the driest winter and early springs on record (Table 1). Producers that were able to plant in late April encountered weed escapes later in the year due to lack of activating rainfall for pre-emergent herbicides; however most weeds were controlled with post emergent products and did not lead to yield loss or harvest problems. Trial results and producer reports indicated sorghum which emerged in late April or early May produced some of the highest grain yields ever obtained in Oklahoma. This was due to rainfall that started in late May and continued through June and July, with both months above the long-term average (Figure 2 and 3). This above normal rainfall led to the Blackwell location having the highest dry-land grain yield observed in the last 16 years of testing. The only trials not harvested in 2014 were at Gate and the OPREC dry-land trial. The gate location appeared to

have been affected by wild hogs, while the OPREC dryland trial had herbicide injury due to 1.78 inches of rainfall received the three days following planting. The results for the medium maturity hybrids from Tipton were harvest but not reported due to a high degree of variation in yield within maturity.

## Insects

2014 will be known as the year of the sugar cane aphid. The aphid was found in 17 counties of Oklahoma compared to just one (Bryan) in 2013. For April planted sorghum producers either sprayed with insecticide or glyphosate depending up crop maturity. Later planted and double crop grain sorghum was typically treated with an insecticide. In our trials, sugarcane aphid was only found at two trial locations; Apache and Tipton. Although sugar cane aphid was found at these two locations neither was sprayed with an insecticide. At the Apache location aphid numbers were low and it was sprayed with glyphosate to facilitate harvest, which eliminated the aphids food source. At the Tipton location aphids were found on three plots the day of harvest and posed no harvest problems. For more information on the sugar cane aphid go to: <http://www.agrilifebookstore.org/Sugarcane-Aphid-in-Sorghum-p/ento-035.htm> **Sugar Cane Aphid: A New Pest in Sorghum. ENTO-035 Texas A&M Agrilife Extension.**

## Results

Grain yields are reported in bushel per acre of threshed grain, adjusted to a moisture content of 14.0 percent (Tables 3 through 10). Test weight, plant population, and the number of heads per acre at harvest are reported.

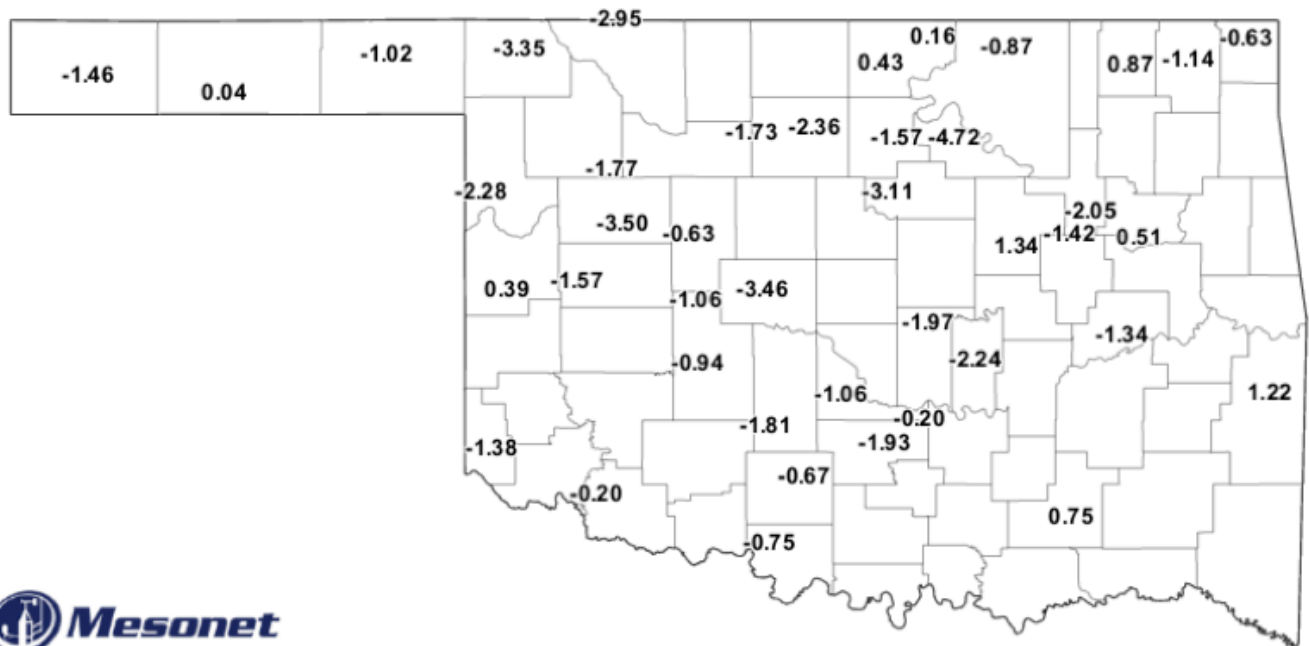
Bird damage and lodging are also reported when present at a location. Different plant populations at each location prevent accurate comparison between locations. Also,

comparisons across maturity groups were not conducted. Producers should note that late maturing hybrids will generally yield more than early and medium maturity hybrids. The availability of moisture at critical crop development periods, however often influences yield more than the yield differences associated with maturity groups. When choosing a maturity group, the type of cropping system, planting date, planting rate and potential moisture should be taken into consideration. For more information consult Fact Sheet PSS-2034 *Grain Sorghum Planting Rates and Dates*, and Fact Sheet PSS-2113 *Grain Sorghum Production Calendar*.

Least Significant Difference (L.S.D.) is a statistical test of yield differences and is shown at the bottom of each table. Unless two hybrids differ by at least the L.S.D. shown, little confidence can be placed in one hybrid being superior to another and the difference is probably not real.

The coefficient of variation (C.V.) is provided as an estimate of the precision of the data with respect to the mean for that location and maturity group. To provide some indication of yield stability, 2-year and 3-year means for yield and test weight are provided where trials have been conducted for more than one year with more than three entries per maturity group. Producers interested in comparing hybrids for consistency of yield in a specific area should consult these tables.

*The following people have contributed to this report by assisting in crop production, data collection, and publication: Donna George, Camron Murley, Rocky Thacker, Camron Nisly, Jeff Bedwell, Corbin DeWitt, Tommy Puffinbarger, David Nowlin, Bill and Louise Rigdon, Russell Spurgeon, Doug Maxey, Brian Pugh, and . Their efforts are greatly appreciated. Also would like to thank the **Oklahoma Grain Sorghum Commission** and **The United Sorghum Checkoff Program** for their financial support.*

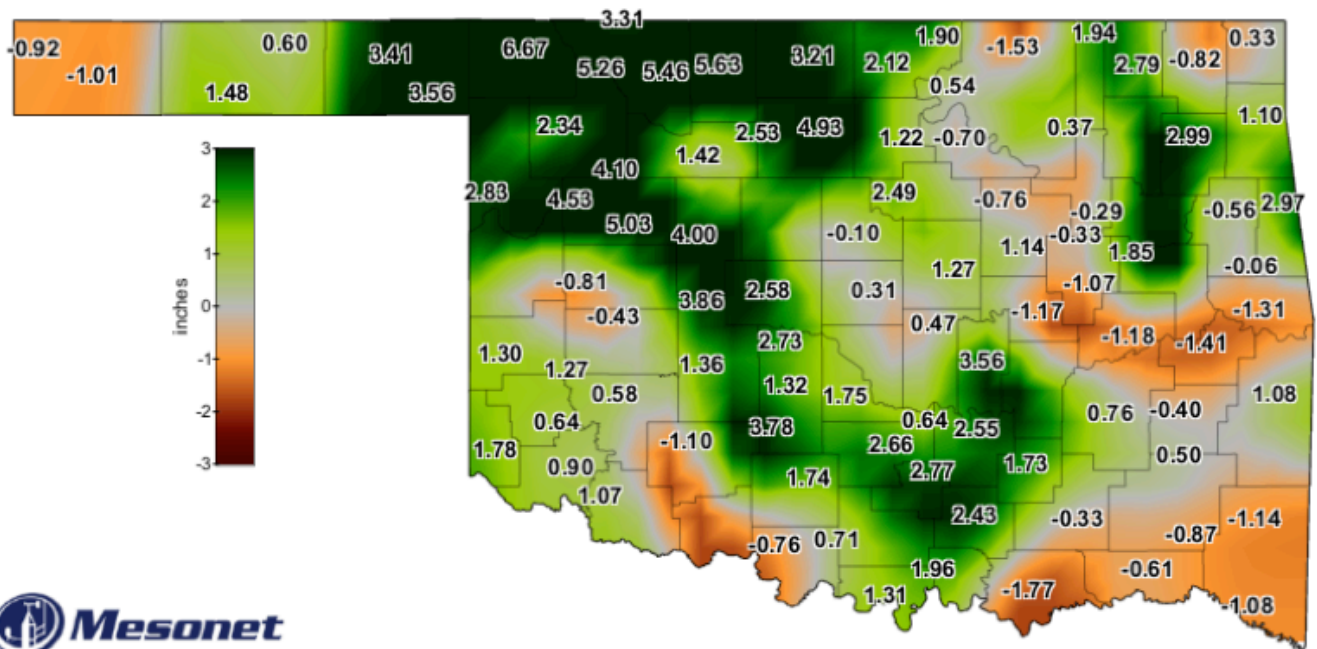


**Average Plant Available Water in Top 32 inches**

Departure from Average, May 2014

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Figure 1. Departure from average for plant available water for May 2014.

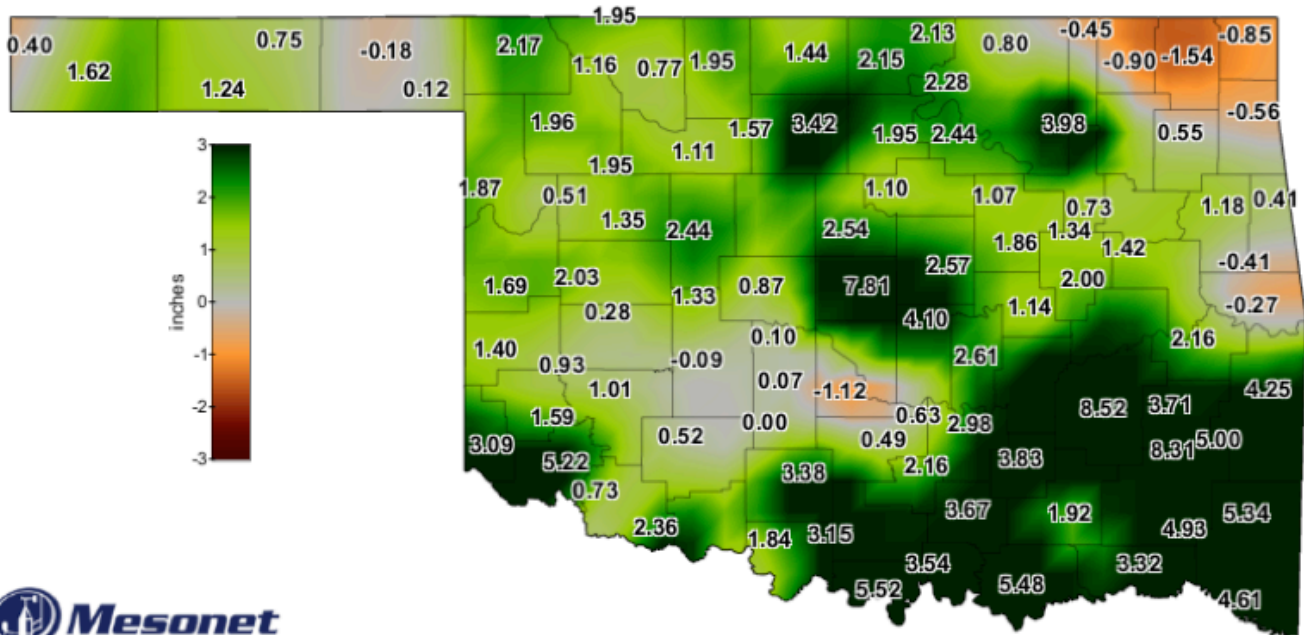


**Total Rainfall**

Departure from Average, June 2014

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Figure 2. Departure from average rainfall or June 2014.



**Total Rainfall**

Departure from Average, July 2014

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Figure 3. Departure from average rainfall or July 2014.

Table 1. Oklahoma precipitation for November 1, 2013 through March 31, 2014.

<i>Climate Division</i>	<i>Total Rainfall</i>	<i>Departure from Normal</i>	<i>Percent of Normal</i>	<i>Rank since 1921 (93 periods)</i>	<i>Driest on Record</i>
Panhandle	1.42"	-2.95"	32%	7th driest	0.78" (1954-55)
N. Central	2.68"	-5.16"	34%	5th driest	1.81" (1955-56)
Northeast	6.14"	-6.72"	48%	6th driest	3.21" (1955-56)
W. Central	2.66"	-4.41"	38%	10th driest	1.64" (1955-56)
Central	4.66"	-6.11"	43%	6th driest	2.70" (1955-56)
E. Central	9.73"	-6.15"	61%	16th driest	6.58" (1955-56)
Southwest	3.64"	-4.37"	45%	13th driest	1.79" (1955-56)
S. Central	8.18"	-4.99"	62%	19th driest	4.47" (1966-67)
Southeast	13.89"	-5.66"	71%	23rd driest	9.28" (1966-67)
Statewide	5.76"	-5.22"	52%	8th driest	3.77" (1955-56)

**Table 2. Seed source and hybrid characteristics of grain sorghums in the Oklahoma Grain Sorghum Performance Trials, 2014. All hybrids are susceptible to birds and are single cross.**

<i>Company Brand Name</i>	<i>Hybrid</i>	<i>Seed Color</i>	<i>Endosperm</i>	<i>Days to Mid-bloom</i>	<i>Greenbug Resistance</i>	<i>Trial Location</i>
Sorghum Partners LLC	SP3425	Bz	HY	60	C,E	1
Sorghum Partners LLC	K35-Y5	Y	HY	59-63	C,E	1
DeKalb Brand	DKS 28-05	Bz	HY	58	----	1
NuTech Seed, LLC	GS583	R	W	58	C,E	1
DeKalb Brand	DKS 37-07	Bz	HY	60	C,E,I	1
Richardson Seeds Ltd.	11043	R	----	53-57	C,E	1
Richardson Seeds Ltd.	99773	R	----	52-57	C,E	1
Richardson Seeds Ltd.	49473	R	----	57-62	----	1
Johnston Seed Co.	JSG-55DC	Bz	HY	55	C,E	1
Johnston Seed Co.	JSG-58DC	Bz	HY	58	C,E	1
DeKalb Brand	DKS38-88	Bz	HY	63	I	1
DeKalb Brand	DKS41-50	Bz	Hy	67	E,I	1
Sorghum Partners LLC	KS 585	Bz	HY	67	C, E	1
Sorghum Partners LLC	X445	Bz	Hy	68-72	C, E	1
Sorghum Partners LLC	X446	Bz	Hy	68-72	----	1
Sorghum Partners LLC	SP5113	Bz	NA	66-70	E	1
Sorghum Partners LLC	NK5418	Bz	HY	67	C,E	1
Alta Seeds	AG 2103	R	W	64-68	----	1
Alta Seeds	AG 2104	R	W	64-66	----	1
Alta Seeds	AG 3101	R	W	67-70	----	1
Alta Seeds	AG 2115	R	W	64-69	----	1
Alta Seeds	AG2101	R	W	62-64	----	1
Alta Seeds	AG1203	Bz	HY	64-67	----	1
Alta Seeds	XG30003	R	W	64-67	----	3
Pioneer Hi-Bred Int.	85G03	R	W	69	----	1
Pioneer Hi-Bred Int.	86G32	R	W	65	----	1
Pioneer Hi-Bred Int.	85P05	Bz	Y	68	----	1
Pioneer Hi-Bred Int.	87P06	R	W	63	----	1
Richardson Seeds Ltd.	92123	R	----	60-62	C,E	1
Johnston Seed Co.	JSG-65D	Bz	Hy	65	C,E	1
Johnston Seed Co.	JSG-65	Bz	Hy	65	C,E	1
Hoegemeyer	H6037	R	W	63	----	1
Hoegemeyer	H6020	R	W	62	----	1
Hoegemeyer	H6098	Bz	Y	69	----	1
Hoegemeyer	H6064	Bz	Y	66	----	1
NuTech Seed, LLC	GS623	R	W	62	C,E	1
NuTech Seed, LLC	GS663	Bz	Y	66	C,E	1
NuTech Seed, LLC	BS693	R	W	69	C,E	1
Mycogen Seeds	1G688	R	W	63-73	----	1
Mycogen Seeds	737	Bz	W	63-73	----	1
Sorghum Partners LLC	SPX3678	Y	HY	68-72	C,E	1
Sorghum Partners LLC	SPX3550	Y	HY	67-71	C,E	1
Pioneer Hi-Bred Int.	84P80	R	W	70	----	1
Sorghum Partners LLC	NK7633	Bz	Hy	73	C	1
DeKalb Brand	DKS 53-67	Bz	HY	71	C,E,I	4
Pioneer Hi-Bred Int.	84G62	Bz	Y	72	----	1
Mycogen Seeds	1G741	Bz	W	69-79	----	1
Mycogen Seeds	E33573	Bz	HY	75-85	----	1
Richardson Seeds Ltd.	96173	R	W	73-78	C,E	1
Richardson Seeds Ltd.	06173	R	W	78-80	C,E	4
Richardson Seeds Ltd.	68653	W	W	74-78	C,E	4
Sorghum Partners LLC	SPX3680	Bz	HY	74-78	C	1
Sorghum Partners LLC	SPX3675	Bz	HY	74-78	C	1
Sorghum Partners LLC	K73-J6	Bz	HY	71-75	C,E	1

Trial locations: 1 – all; 2 – panhandle only; 3 – (Altus, Tipton, Blackwell); 4 – irrigated only (OPREC)

Seed Color: Br – Brown; W – White; Y – Yellow; Bz – Bronze; R – Red; C – Cream

Endosperm: HW – heterowaxy; W – waxy; HY – Heteroyellow; Y – Yellow; N – Non-waxy

Greenbug Resistance: Biotype hybrid is resistance too

**Table 3. Results from Apache grain sorghum performance trial, 2014.**

<i>Company Brand Name</i>	<i>Hybrid</i>	<i>Grain Yield bu/ac</i>	<i>Test weight lb/bu</i>	<i>Plant Population plants/ac</i>	<i>Heads/ Plant</i>
<i>Early maturity 60 days or less to mid-bloom</i>					
DeKalb Brand	DKS 37-07	124	60	33,200	1.64
Richardson Seeds Ltd.	11043	122	57	30,900	1.90
DeKalb Brand	DKS 28-05	105	52	34,000	1.80
Sorghum Partners LLC	SP3425	99	59	24,500	2.42
Sorghum Partners LLC	K35-Y5	95	56	21,900	2.69
Johnston Seed Co.	JSG-58DC	91	58	26,500	2.04
Richardson Seeds Ltd.	99773	87	53	34,100	1.59
Johnston Seed Co.	JSG-55DC	84	55	27,000	1.79
Richardson Seeds Ltd.	49473	81	54	24,400	2.06
<b>Note: Plot was sprayed with 40 oz. glyphosate on August 21</b>	Mean	100	56	28,700	1.99
	CV %	11.4	2.5	12.8	11.2
	L.S.D.	16	2	5,300	0.32

<i>Company Brand Name</i>	<i>Hybrid</i>	<i>Grain Yield bu/ac</i>	<i>Test weight lb/bu</i>	<i>Plant Population plants/ac</i>	<i>Heads/ Plant</i>	<i>Lodging %</i>
<i>Full season 70 days or greater to mid-bloom</i>						
Pioneer Hi-Bred Int.	84G62	155	58	35,500	1.77	0
Pioneer Hi-Bred Int.	84P80	152	58	36,400	1.59	0
Sorghum Partners LLC	K73-J6	129	57	28,200	1.76	0
Mycogen Seeds	E33573	125	59	34,200	1.78	0
Sorghum Partners LLC	SPX3680	114	57	21,900	1.90	0
Sorghum Partners LLC	NK7633	111	58	23,400	1.87	0
Mycogen Seeds	1G741	110	57	30,400	1.55	40
Richardson Seeds Ltd.	96173	110	59	23,500	1.68	0
Sorghum Partners LLC	SPX3675	92	48	24,100	1.68	23
<b>Note: Plot was sprayed with 40 oz. glyphosate on August 21</b>	Mean	122	57	28,600	1.73	----
	CV %	10.9	2.6	13.2	14.1	----
	L.S.D.	19	2	5,500	NS	----

Cooperator: Alan Mindemann  
 N0-till broken out of Bermuda pasture in 2013  
 Fertilizer: N: 118 lbs/ac P: 0 K: 0  
 Seeding rate: 56,000 seeds/ac  
 Planting Date: April 11, 2014  
 Herbicide: 2.7 qt/ac Lumax EZ Pre-emergence + 1 qt glyphosate

Soil Series: Pond Creek Fine Sandy Loam  
 Soil Test: N: 46 P: 102 K: 554 pH: 5.1  
 5 gallon 10-34-0 at planting  
 Target population 45,000 plants/ac  
 Harvest Date: September 2, 2014

Monthly Rainfall (in.)	Apr.	May	June	July	Aug	Total
2014:	0.57	3.73	7.60	2.64	1.39	<b>15.93</b>
Long term mean:	2.99	4.79	4.13	2.51	2.84	<b>17.26</b>

**Table 3. Results from Apache grain sorghum performance trial, 2014 (cont'd).**

Company Brand Name	Hybrid	Grain Yield		Test weight		Plants/ Acre	Heads/ Plant	Lodging %
		bu/ac		lb/bu				
		2014	2-year	2014	2-year			
<i>Medium 61- 69 days to mid-bloom</i>								
Alta Seeds	AG 3101	130	132	60	59	29,400	1.56	10
DeKalb Brand	DKS38-88	140	127	61	59	30,800	1.66	0
Pioneer Hi-Bred Int.	85G03	117	116	58	57	21,100	2.38	0
Hoegemeyer	H6098	118	115	60	59	26,500	1.73	0
Alta Seeds	AG 2115	102	108	57	56	29,200	1.42	5
Sorghum Partners LLC	NK5418	98	104	56	55	23,700	2.14	8
Pioneer Hi-Bred Int.	86G32	109	102	57	56	21,700	2.52	0
Alta Seeds	AG 2103	105	101	59	58	24,900	1.91	0
Richardson Seeds Ltd.	92123	99	98	58	57	26,000	1.55	0
Sorghum Partners LLC	KS 585	114	98	60	57	21,700	2.73	0
Hoegemeyer	H6064	98	96	58	56	24,400	1.85	5
Alta Seeds	AG 2104	92	93	57	55	21,400	1.71	0
Mycogen Seeds	1G688	141	----	59	----	31,200	1.53	0
Alta Seeds	AG2101	129	----	57	----	27,200	1.74	0
Mycogen Seeds	737	124	----	57	----	22,900	1.74	0
NuTech Seed, LLC	BS693	120	----	59	----	31,100	1.68	0
Pioneer Hi-Bred Int.	85P05	113	----	59	----	24,700	1.88	5
NuTech Seed, LLC	GS663	113	----	58	----	26,400	1.85	13
Alta Seeds	XG30003	111	----	60	----	24,100	1.7	0
Johnston Seed Co.	JSG-65	106	----	60	----	27,700	1.83	8
Johnston Seed Co.	JSG-65D	103	----	58	----	25,800	2.37	7
DeKalb Brand	DKS41-50	101	----	60	----	22,200	2.03	0
Sorghum Partners LLC	SPX3678	96	----	55	----	17,300	1.78	0
Sorghum Partners LLC	SPX3550	92	----	57	----	21,800	1.85	0
Sorghum Partners LLC	SP5113	89	----	59	----	19,600	1.64	13
Alta Seeds	AG1203	88	----	58	----	19,900	1.86	0
Sorghum Partners LLC	X445	88	----	58	----	20,300	1.95	0
Hoegemeyer	H6020	85	----	58	----	26,100	2.06	13
Pioneer Hi-Bred Int.	87P06	84	----	56	----	24,300	2.19	10
NuTech Seed, LLC	GS623	80	----	57	----	27,100	1.63	38
Sorghum Partners LLC	X446	69	----	57	----	17,100	1.71	0
Hoegemeyer	H6037	63	----	57	----	26,000	1.14	53
<b>Note: Plot was sprayed with 40 oz. glyphosate on August 21</b>	Mean	104	107	58	57	24,500	1.85	
	CV %	14.8	16.1	1.7	2.5	19.0	20.7	
	L.S.D.	22	18	1	1	6,600	0.54	

2013 Apache trial was a double crop trial.

**Table 4. Results from Blackwell grain sorghum performance trial, 2014.**

<i>Company Brand Name</i>	<i>Hybrid</i>	<i>Grain Yield bu/ac</i>	<i>Test weight lb/bu</i>	<i>Plant Population plants/ac</i>	<i>Heads/ Plant</i>
<i>Early maturity 60 days or less to mid-bloom</i>					
DeKalb Brand	DKS 37-07	149	60	39,500	1.27
DeKalb Brand	DKS 28-05	136	54	35,700	1.64
Richardson Seeds Ltd.	11043	125	58	33,800	1.51
Sorghum Partners LLC	SP3425	113	58	30,200	1.78
Sorghum Partners LLC	K35-Y5	113	56	31,800	1.84
Richardson Seeds Ltd.	99773	110	55	37,900	1.43
Johnston Seed Co.	JSG-55DC	109	55	37,400	1.32
Johnston Seed Co.	JSG-58DC	108	59	28,400	1.82
Richardson Seeds Ltd.	49473	99	55	29,000	1.59
<b>Note: Plot was sprayed with 32 oz. glyphosate on August 27</b>	Mean	118	57	33,700	1.59
	CV %	8.9	1.5	13.3	10.5
	L.S.D.	15	1	6,600	0.24

<i>Company Brand Name</i>	<i>Hybrid</i>	<i>Grain Yield bu/ac</i>	<i>Test weight lb/bu</i>	<i>Plant Population plants/ac</i>	<i>Heads/ Plant</i>	<i>Lodging %</i>
<i>Full season 70 days or greater to mid-bloom</i>						
Pioneer Hi-Bred Int.	84P80	172	60	42,100	1.21	
Pioneer Hi-Bred Int.	84G62	158	61	41,800	1.12	
Mycogen Seeds	E33573	141	59	36,200	1.33	
Mycogen Seeds	1G741	140	58	43,500	1.15	
Sorghum Partners LLC	K73-J6	139	55	36,500	1.24	
Richardson Seeds Ltd.	96173	138	59	27,000	1.42	
Sorghum Partners LLC	SPX3680	132	56	25,400	1.42	
Sorghum Partners LLC	SPX3675	115	52	23,300	1.41	
Sorghum Partners LLC	NK7633	110	56	26,800	1.25	
<b>Note: Plot was sprayed with 32 oz. glyphosate on August 27</b>	Mean	139	57	33,600	1.28	
	CV %	9.8	1.8	9.1	9.7	
	L.S.D.	20	1	4,500	0.18	

Cooperator: Bill and Louise Rigdon  
 No-till following double crop soybean in 2013  
 Fertilizer: N: 118 lbs/ac P: 0 K: 0  
 Seeding rate: 56,000 seeds/ac  
 Planting Date: April 23, 2014  
 Herbicide: 2.qt/ac Cinch ATZ Lite Pre-emergence + 1 qt glyphosate

Soil Series: Kirkland Silt Loam  
 Soil Test: N: 16 P: 69 K: 416 pH: 5.7  
 5 gallon 10-34-0 at planting  
 Target population 45,000 plants/ac  
 Harvest Date: September 9, 2014

Monthly Rainfall (in.)	Apr.	May	June	July	Aug	Total
2014:	0.51	5.95	8.17	5.04	3.11	<b>22.78</b>
Long term mean:	3.28	5.23	4.05	2.68	3.19	<b>18.43</b>



**Table 4. Results from Blackwell grain sorghum performance trial, 2014 (cont'd).**

Company Brand Name	Hybrid	Grain Yield		Test weight		Plants/ Acre	Heads/ Plant	Lodging %
		bu/ac		lb/bu				
		2014	2-year	2014	2-year			
<i>Medium 61- 69 days to mid-bloom</i>								
Hoegemeyer	H6098	157	151	60	60	42,500	1.26	
Pioneer Hi-Bred Int.	85G03	156	140	61	60	31,800	1.77	
Alta Seeds	AG 3101	142	139	60	60	36,800	1.21	
DeKalb Brand	DKS38-88	150	139	59	59	41,400	1.19	
Pioneer Hi-Bred Int.	86G32	150	131	58	57	41,700	1.44	
Hoegemeyer	H6064	136	123	59	58	36,200	1.25	
Alta Seeds	AG 2115	133	122	57	57	39,900	1.14	
Alta Seeds	AG 2103	134	119	59	59	39,400	1.26	
Sorghum Partners LLC	KS 585	134	119	60	59	37,700	1.47	
Hoegemeyer	H6020	133	115	58	57	38,600	1.53	
Hoegemeyer	H6037	133	114	59	58	35,600	1.52	
Sorghum Partners LLC	NK5418	114	112	53	55	33,800	1.56	
Alta Seeds	AG 2104	120	111	55	56	37,200	1.22	
NuTech Seed, LLC	GS663	158	----	59	----	39,200	1.39	
NuTech Seed, LLC	BS693	152	----	60	----	41,200	1.26	
DeKalb Brand	DKS41-50	151	----	60	----	35,300	1.32	
Mycogen Seeds	1G688	149	----	58	----	37,200	1.53	
Mycogen Seeds	737	147	----	58	----	34,700	1.27	
Alta Seeds	AG1203	143	----	58	----	38,900	1.23	
Johnston Seed Co.	JSG-65	139	----	60	----	37,400	1.44	
NuTech Seed, LLC	GS623	138	----	58	----	40,000	1.53	
Pioneer Hi-Bred Int.	85P05	137	----	57	----	34,400	1.52	
Pioneer Hi-Bred Int.	87P06	137	----	58	----	40,900	1.45	
Richardson Seeds Ltd.	92123	135	----	59	----	33,200	1.36	
Johnston Seed Co.	JSG-65D	132	----	56	----	36,900	1.63	
Alta Seeds	AG2101	130	----	55	----	38,200	1.15	
Alta Seeds	XG30003	127	----	59	----	34,200	1.26	
Sorghum Partners LLC	SP5113	127	----	58	----	28,700	1.42	
Sorghum Partners LLC	SPX3678	126	----	54	----	20,100	1.64	
Sorghum Partners LLC	SPX3550	123	----	57	----	30,700	1.54	
Sorghum Partners LLC	X445	114	----	58	----	30,400	1.33	
Sorghum Partners LLC	X446	101	----	59	----	21,500	1.69	
<b>Note: Plot was sprayed with 32 oz. glyphosate on August 27</b>	Mean	136	126	58	58	35,800	1.39	
	CV %	7.7	8.9	3.5	3.2	10.2	9.7	
	L.S.D.	15	11	3	2	5,100	0.19	

**Table 5. Results from Cherokee grain sorghum performance trial, 2014.**

<i>Company Brand Name</i>	<i>Hybrid</i>	<i>Grain Yield bu/ac</i>	<i>Test weight lb/bu</i>	<i>Stand Rating</i>	<i>Lodging %</i>
Pioneer Hi-Bred Int.	86G32	123	56	9.5	0
Sorghum Partners LLC	KS 585	117	59	10	0
Mycogen Seeds	737	115	56	8.5	0
DeKalb Brand	DKS 28-05	114	54	9.5	5
Pioneer Hi-Bred Int.	87P06	112	57	9.5	0
Richardson Seeds Ltd.	11043	110	56	9.5	5
Johnston Seed Co.	JSG-65D	110	56	9.8	0
DeKalb Brand	DKS 37-07	109	58	9.3	0
Richardson Seeds Ltd.	92123	108	57	8.5	0
Johnston Seed Co.	JSG-65	106	58	9.8	5
Mycogen Seeds	1G688	103	56	9.3	0
Alta Seeds	AG2101	102	57	9.0	0
Alta Seeds	XG30003	101	57	8.8	0
Sorghum Partners LLC	SP3425	100	57	10	0
Hoegemeyer	H6037	100	57	7.8	8
NuTech Seed, LLC	GS663	99	57	10	5
Hoegemeyer	H6064	98	55	9.5	0
Sorghum Partners LLC	SP5113	95	58	9.3	8
Sorghum Partners LLC	SPX3550	94	57	9.5	0
Richardson Seeds Ltd.	49473	93	56	8.3	0
DeKalb Brand	DKS38-88	89	55	9.8	8
Alta Seeds	AG 3101	86	57	8.8	30
<b>Note: Plot was sprayed with 32 oz. glyphosate on September 2</b>	Mean	104	57	9.3	----
	CV %	12.0	2.0	8.4	----
	L.S.D.	18	2	1.1	----

Cooperator: Doug McMurtrey

No-till following wheat double crop soybean in 2011

Fertilizer: N: 80 lbs N + 5 gal/ac 10-34-0 with planter

Seeding rate 56,000 seeds/ac

Planting Date: April 22, 2014

Soil Series: Pond Creek Silt Loam

Soil Test: N: 55 P: 50 K: 629 pH: 5.9

Herbicide: Cinch ATZ Lite 2 qts/ac (Preemergence)

Target Population: 45,000 plants/ac

Harvest Date: September 9, 2014

Monthly Rainfall (in.)	Apr	May	June	July	Aug	Total
2014:	0.29	1.28	9.99	4.30	2.79	<b>18.65</b>
Long term mean:	2.80	4.50	3.90	3.10	3.30	<b>17.60</b>

**Table 6. Results from Homestead grain sorghum performance trial, 2014.**

Company Brand Name	Hybrid	Grain Yield bu/ac			Test weight lb/bu			Stand	Bird Damage (%)
		2014	2-year	3-year	2014	2-year	3-year		
Sorghum Partners LLC	KS 585	66	64	65	59	58	57	8.8	13
DeKalb Brand	DKS 37-07	45	55	58	54	56	54	9.5	18
Pioneer Hi-Bred Int.	86G32	50	51	58	55	54	52	9.5	25
DeKalb Brand	DKS 28-05	53	53	57	55	50	51	9.3	18
Hoegemeyer	H6037	37	49	51	56	54	53	8.8	14
Hoegemeyer	H6064	74	70	-----	58	56	-----	9.3	16
Sorghum Partners LLC	SP3425	52	52	-----	58	57	-----	8.3	30
Richardson Seeds Ltd.	92123	54	49	-----	57	55	-----	8.5	15
NuTech Seed, LLC	GS663	76	-----	-----	58	-----	-----	8.5	8
Sorghum Partners LLC	SPX3550	73	-----	-----	58	-----	-----	8.0	10
Johnston Seed Co.	JSG-65D	70	-----	-----	57	-----	-----	9.3	8
Johnston Seed Co.	JSG-65	67	-----	-----	60	-----	-----	8.3	8
Sorghum Partners LLC	SP5113	64	-----	-----	58	-----	-----	7.3	18
DeKalb Brand	DKS38-88	61	-----	-----	57	-----	-----	8.8	15
Mycogen Seeds	1G688	60	-----	-----	57	-----	-----	8.5	28
Alta Seeds	AG 3101	59	-----	-----	56	-----	-----	8.5	28
Alta Seeds	AG2101	58	-----	-----	57	-----	-----	7.3	5
Richardson Seeds Ltd.	11043	57	-----	-----	56	-----	-----	9.8	13
Alta Seeds	XG30003	56	-----	-----	57	-----	-----	7.3	18
Mycogen Seeds	737	54	-----	-----	58	-----	-----	6.5	9
Pioneer Hi-Bred Int.	87P06	46	-----	-----	56	-----	-----	9.0	16
<b>Note: Plot was sprayed with 32 oz. glyphosate on September 15</b>		Mean	59	55	58	57	55	8.5	----
		CV %	17.4	18.8	16.8	1.9	3.8	11.4	----
		L.S.D.	14	10	8	2	2	1.4	----

Cooperator: Brook Strader  
 Soil Test: N: 15 P: 195 K: 302 pH: 5.9  
 Seeding rate: 56,000 seeds/ac  
 Harvest Date: September 5, 2013

Soil Series: Canadian Fine Sandy Loam  
 Fertilizer: N: 120 lbs N + 5 gal/ac 10-34-0 with planter  
 Target Population: 45,000 plants/ac

No-till following burned down wheat  
 Herbicide: Cinch ATZ Lite 2 qts/ac (Preemergence)  
 Planting Date: April 29, 2013

Monthly Rainfall (in.)	April	May	June	July	Aug	<b>Total</b>
2014:	1.10	1.61	5.12	3.52	0.00	<b>11.35</b>
Long-term mean:	2.67	4.24	4.42	2.66	3.16	<b>17.15</b>

**Table 7. Results from Keyes grain sorghum performance trial, 2014.**

<i>Company Brand Name</i>	<i>Hybrid</i>	<i>Grain Yield bu/ac</i>	<i>Test weight lb/bu</i>	<i>Harvest Moisture</i>	<i>Plants/ Acre</i>	<i>Heads/ Plant</i>	<i>Lodging %</i>
<i>Early maturity 60 days or less to mid-bloom</i>							
DeKalb Brand	DKS 37-07	113	58	15.4	21,600	2.20	0
Johnston Seed Co.	JSG-55DC	85	57	14.8	20,200	2.22	10
Sorghum Partners LLC	K35-Y5	82	58	15.2	14,400	3.67	8
Richardson Seeds Ltd.	11043	81	56	16.5	16,000	2.84	0
Sorghum Partners LLC	SP3425	77	58	14.1	17,400	2.51	0
Johnston Seed Co.	JSG-58DC	70	58	13.6	15,200	2.91	0
NuTech Seed, LLC	GS583	67	55	14.8	14,000	2.79	8
Richardson Seeds Ltd.	49473	67	55	17.1	15,900	2.65	15
DeKalb Brand	DKS 28-05	67	55	15.4	16,600	2.42	22
Richardson Seeds Ltd.	99773	65	56	15.9	14,400	3.14	18
	Mean	77	56.5	15.3	16,600	2.74	----
	CV %	16.1	2	13.4	7.5	15.7	----
	L.S.D.	18	2	NS	1,800	0.62	----

<i>Company Brand Name</i>	<i>Hybrid</i>	<i>Grain Yield bu/ac</i>	<i>Test weight lb/bu</i>	<i>Harvest Moisture</i>	<i>Plants/ Acre</i>	<i>Heads/ Plant</i>
<i>Full season 70 days or greater to mid-bloom</i>						
Pioneer Hi-Bred Int.	84P80	94	56	14.8	17,800	1.82
Mycogen Seeds	E33573	93	57	16.2	18,300	2.09
Sorghum Partners LLC	NK7633	85	55	16.4	16,500	1.80
Pioneer Hi-Bred Int.	84G62	84	55	15.4	19,800	1.66
Mycogen Seeds	1G741	83	54	17.6	18,700	1.92
Sorghum Partners LLC	SPX3680	83	53	16.1	14,200	1.92
Richardson Seeds Ltd.	96173	72	52	17.7	15,500	1.54
Sorghum Partners LLC	SPX3675	71	51	15.4	13,000	2.07
Sorghum Partners LLC	K73-J6	66	54	17.8	20,100	1.52
	Mean	81	54	16.4	17,100	1.82
	CV %	14.8	3.5	10.8	8.5	8.7
	L.S.D.	18	3	NS	2,100	0.23

Cooperator: Ken Rose  
 No-till following wheat in 2011  
 Fertilizer: N: 130 lbs N + 5 gal/ac 10-34-0 with planter  
 Seeding rate 31,000 seeds/ac  
 Planting Date: June 16, 2014

Soil Series: Sherm Clay Loam  
 Soil Test: N: NA P: NA K: NA pH: NA  
 Herbicide: Cinch ATZ Lite 2 qts/ac (Preemergence)  
 Target Population: 25,000 plants/ac  
 Harvest Date: November 6, 2014

Monthly Rainfall (in.)	May	June	July	Aug	Sept	Total
2014:	1.51	2.88	2.15	2.69	2.54	<b>11.77</b>
Long-term mean:	2.76	2.92	2.85	2.55	1.97	<b>13.05</b>

**Table 7. Results from Keyes grain sorghum performance trial, 2014 (cont'd).**

<i>Company Brand Name</i>	<i>Hybrid</i>	<i>Grain Yield bu/ac</i>	<i>Test weight lb/bu</i>	<i>Harvest Moisture</i>	<i>Plants/ Acre</i>	<i>Heads/ Plant</i>	<i>Lodging %</i>
<i>Medium 61- 69 days to mid-bloom</i>							
Pioneer Hi-Bred Int.	85G03	120	58	15.9	20,300	2.31	0
Sorghum Partners LLC	X445	110	56	15.1	15,800	2.20	0
Johnston Seed Co.	JSG-65	106	60	14.0	21,500	1.83	0
Sorghum Partners LLC	SPX3678	99	49	16.1	11,800	2.95	0
Sorghum Partners LLC	KS 585	99	59	14.7	17,600	2.29	0
Sorghum Partners LLC	SPX3550	96	59	14.8	18,400	2.14	0
Alta Seeds	AG 2103	96	57	18.8	19,600	1.91	0
Richardson Seeds Ltd.	92123	96	57	15.7	16,500	2.09	0
Alta Seeds	AG2101	94	55	18.8	19,100	1.63	0
Hoegemeyer	H6064	94	56	16.5	16,800	2.46	0
Mycogen Seeds	737	93	56	15.8	16,700	2.18	0
Pioneer Hi-Bred Int.	85P05	91	58	19.4	18,200	2.29	0
Pioneer Hi-Bred Int.	87P06	91	58	14.8	19,700	2.13	0
Hoegemeyer	H6098	91	55	19.0	18,200	2.10	8
Alta Seeds	AG1203	90	57	17.3	18,900	2.16	18
Sorghum Partners LLC	NK266	88	57	17.6	17,900	2.05	0
NuTech Seed, LLC	BS693	88	57	17.2	18,500	2.15	0
Mycogen Seeds	1G688	86	52	20.0	17,900	1.90	0
DeKalb Brand	DKS41-50	85	55	19.2	19,800	1.97	0
Johnston Seed Co.	JSG-65D	83	58	15.3	17,800	2.41	0
Hoegemeyer	H6020	83	57	14.9	19,300	2.10	15
NuTech Seed, LLC	GS663	83	57	17.2	18,900	2.16	15
Alta Seeds	AG 3101	82	55	21.3	20,500	1.64	0
Sorghum Partners LLC	NK5418	82	58	14.9	18,700	2.16	0
DeKalb Brand	DKS38-88	79	55	16.3	18,400	2.49	0
NuTech Seed, LLC	GS623	79	57	15.8	18,100	2.11	24
Alta Seeds	AG 2104	73	57	16.4	19,900	1.54	0
Pioneer Hi-Bred Int.	86G32	73	55	20.5	17,900	2.04	30
Alta Seeds	AG 2115	71	56	16.9	17,600	1.65	0
Sorghum Partners LLC	X446	65	55	15.0	14,000	2.26	0
Hoegemeyer	H6037	60	56	19.4	19,600	1.61	40
	Mean	88	56	16.9	18,200	2.09	----
	CV %	17	2.3	13.4	11.3	16.7	----
	L.S.D.	21	2	3.2	2,900	0.49	----

**Table 8. Results from Morris grain sorghum performance trial, 2014.**

<i>Company Brand Name</i>	<i>Hybrid</i>	<i>Grain Yield bu/ac</i>	<i>Test weight lb/bu</i>	<i>Harvest moisture</i>	<i>Stand Rating</i>	<i>Bird Damage %</i>
Johnston Seed Co.	JSG-65D	77	57	12.8	10.0	8
DeKalb Brand	DKS 37-07	73	58	14.1	9.5	0
Alta Seeds	AG 3101	72	59	15.4	9.3	10
Richardson Seeds Ltd.	11043	71	58	13.3	9.3	0
Pioneer Hi-Bred Int.	86G32	70	57	14.2	9.8	10
Mycogen Seeds	737	67	58	12.9	8.3	19
Sorghum Partners LLC	SP3425	65	59	12.7	9.0	0
Richardson Seeds Ltd.	92123	65	57	13.6	8.8	19
DeKalb Brand	DKS 28-05	64	57	13.8	9.0	0
DeKalb Brand	DKS38-88	64	57	15.1	9.3	13
Hoegemeyer	H6064	61	59	13.9	9.5	0
NuTech Seed, LLC	GS663	61	58	13.8	9.5	5
Mycogen Seeds	1G688	61	55	16.3	9.5	13
Hoegemeyer	H6037	58	56	13.3	9.5	10
Alta Seeds	AG2101	57	55	13.8	9.0	11
Sorghum Partners LLC	SPX3550	56	58	12.9	9.0	16
Johnston Seed Co.	JSG-65	52	60	13.4	10.0	8
Sorghum Partners LLC	SP5113	52	56	16.1	8.8	28
Alta Seeds	XG30003	49	56	17.4	8.5	13
Richardson Seeds Ltd.	49473	48	54	13.7	9.0	0
Sorghum Partners LLC	KS 585	47	57	13.2	9.3	5
Pioneer Hi-Bred Int.	87P06	40	51	14.5	10.0	0
	Mean	61	57	14	9.3	----
	CV %	13.0	3.3	7.7	9.3	----
	L.S.D.	11	3	2.7	NS	----

Cooperator: Russell Spurgeon

Soil Series: Dennis Silt Loam

Bermuda grass pasture broke out in fall of 2013

Soil Test: N: 4 P: 5 K: 200 pH: 5.9

Fertilizer: N: 135 lbs N + 5 gal/ac 10-34-0 with planter

Herbicide: Cinch ATZ Lite 2 qts/ac (Preemergence) + 32 oz glyphosate

Seeding rate 56,000 seeds/ac

Target Population: 45,000 plants/ac

Planting Date: April 28, 2014

Harvest Date: September 23, 2014

Monthly Rainfall (in.)

	Apr.	May	June	July	Aug	Total
2014:	2.49	4.17	4.20	4.47	0.44	15.77
Long term mean:	4.09	5.68	5.09	3.22	3.12	21.20

**Table 9. Results from OPREC limited irrigation grain sorghum performance trial, 2014.**

<i>Company Brand Name</i>	<i>Hybrid</i>	<i>Grain Yield bu/ac</i>	<i>Test weight lb/bu</i>	<i>Harvest Moisture</i>	<i>Plants/ Acre</i>	<i>Heads/ Plant</i>	<i>Bird Damage</i>
<i>Early maturity 60 days or less to mid-bloom</i>							
DeKalb Brand	DKS 37-07	142	57	12.4	52,300	1.29	14
Sorghum Partners LLC	K35-Y5	135	56	11.8	46,600	1.64	23
Johnston Seed Co.	JSG-58DC	135	56	13.1	48,000	1.42	0
Sorghum Partners LLC	SP3425	134	56	13.6	45,300	1.58	10
DeKalb Brand	DKS 28-05	127	54	11.8	51,300	1.53	21
Richardson Seeds Ltd.	11043	120	55	12.7	50,300	1.42	13
Johnston Seed Co.	JSG-55DC	97	54	14.3	52,200	1.33	50
NuTech Seed, LLC	GS583	86	51	13.8	26,800	1.87	15
Richardson Seeds Ltd.	99773	83	53	13.6	44,900	1.97	55
Richardson Seeds Ltd.	49473	73	52	15.6	48,400	2.02	65
	Mean	113	54	13.3	46,600	1.6	----
	CV %	9.2	1.6	5.1	8	11.1	----
	L.S.D.	15	1	1	5,400	0.26	----

<i>Company Brand Name</i>	<i>Hybrid</i>	<i>Grain Yield bu/ac</i>		<i>Test weight lb/bu</i>		<i>Harvest Moisture</i>	<i>Plants/ Acre</i>	<i>Heads/ Plant</i>
		<i>2014</i>	<i>2-year</i>	<i>2014</i>	<i>2-year</i>			
<i>Full season 70 days or greater to mid-bloom</i>								
DeKalb Brand	DKS 53-67	177	171	61	58	12.6	54,100	1.21
Pioneer Hi-Bred Int.	84P80	171	161	60	58	11.7	54,400	1.15
Pioneer Hi-Bred Int.	84G62	178	161	60	57	11.9	55,800	1.12
Sorghum Partners LLC	NK7633	169	158	60	57	12.2	48,600	1.25
Richardson Seeds Ltd.	68653	162	158	56	54	12.2	39,700	1.05
Sorghum Partners LLC	KS 735	142	144	57	56	12.0	59,800	1.02
Richardson Seeds Ltd.	96173	137	141	59	57	12.3	45,500	1.14
Richardson Seeds Ltd.	06173	128	138	59	57	12.0	47,800	1.04
Mycogen Seeds	1G741	174	----	59	----	12.0	57,000	1.14
Sorghum Partners LLC	SPX3680	161	----	60	----	12.8	37,500	1.45
Sorghum Partners LLC	K73-J6	158	----	59	----	11.7	55,200	1.18
Mycogen Seeds	E33573	156	----	59	----	11.7	52,100	1.35
Sorghum Partners LLC	SPX3675	152	----	55	----	11.2	35,600	1.40
	Mean	159	154	59	57	12.0	49,500	1.19
	CV %	5.3	8.2	1.2	1.8	4.8	8.2	9.5
	L.S.D.	12	13	1	1	NS	5,800	0.16

Cooperator: OPREC

Strip-till following sunflowers in 2013

Herbicide: Lumax EZ 2.7 qts/ac (Preemergence)

Fertilizer: N: 200 lbs N and 50 lbs P2O5 with strip-till + 5 gal/ac 10-34-0 with planter

Seeding rate 64,500 seeds/ac

Planting Date: June 4, 2014

Soil Series: Gruver Clay Loam (formerly Richfield)

Soil Test: N: 12 P: 18 K: 838 pH: 7.8

Target Population: 50,000 plants/ac

Harvest Date: October 30, 2014

Monthly Rainfall (in.)	May	June	July	Aug	Sept	Total
Long-term mean:	3.25	2.86	2.58	2.28	1.77	<b>12.74</b>
2014:	3.42	3.73	2.90	0.97	1.63	<b>12.65</b>
Irrigation:	0.00	1.25	1.25	3.75	0.00	<b>8.75</b>

**Table 9. Results from OPREC limited irrigation grain sorghum performance trial, 2014 (cont'd)**

Company Brand Name	Hybrid	Grain Yield bu/ac			Test weight lb/bu			Plants/ Acre	Harvest Moisture	Heads/ Plant	Bird Damage
		2014	2-year	3-year	2014	2-year	3-year				
<i>Medium 61 - 69 days to mid-bloom</i>											
Pioneer Hi-Bred Int.	85G03	143	145	155	59	58	58	53,800	13.2	1.27	9
Sorghum Partners LLC	KS 585	147	147	151	57	57	58	52,100	11.6	1.27	0
Pioneer Hi-Bred Int.	86G32	126	133	146	57	56	56	43,700	12.0	1.53	13
Sorghum Partners LLC	NK5418	134	129	133	55	54	55	49,300	11.1	1.38	8
Pioneer Hi-Bred Int.	87P06	97	118	126	55	56	56	53,800	12.0	1.37	38
Hoegemeyer	H6037	101	103	119	55	52	54	47,400	11.8	1.35	28
DeKalb Brand	DKS38-88	143	147	----	57	56	----	51,900	12.3	1.20	11
Hoegemeyer	H6064	143	145	----	58	57	----	51,600	11.9	1.11	11
Alta Seeds	AG 3101	124	140	----	59	58	----	55,800	12.0	1.01	14
Alta Seeds	AG 2103	125	135	----	57	55	----	54,000	11.8	1.15	10
Alta Seeds	AG 2115	119	131	----	57	57	----	37,400	12.2	1.39	8
Richardson Seeds Ltd.	92123	115	131	----	57	56	----	54,600	12.0	1.12	10
Hoegemeyer	H6098	111	125	----	58	58	----	53,000	12.5	1.20	50
Alta Seeds	AG 2104	114	124	----	56	56	----	50,200	11.8	1.14	0
Hoegemeyer	H6020	98	113	----	55	54	----	56,700	13.4	1.40	55
Mycogen Seeds	737	153	----	----	57	----	----	51,300	11.1	1.20	0
Sorghum Partners LLC	NK266	152	----	----	59	----	----	49,800	12.4	1.28	14
NuTech Seed, LLC	GS663	143	----	----	58	----	----	57,600	12.0	1.16	9
Johnston Seed Co.	JSG-65	141	----	----	57	----	----	51,600	11.5	1.22	0
Sorghum Partners LLC	SPX3550	139	----	----	57	----	----	49,700	11.5	1.27	0
Pioneer Hi-Bred Int.	85P05	139	----	----	59	----	----	50,600	13.4	1.26	26
Sorghum Partners LLC	SPX3678	138	----	----	56	----	----	32,300	11.5	1.47	0
Sorghum Partners LLC	JSG-65D	138	----	----	55	----	----	50,300	11.4	1.33	0
Johnston Seed Co.	AG2101	133	----	----	56	----	----	50,500	12.2	1.10	10
Alta Seeds	1G688	132	----	----	57	----	----	49,300	12.7	1.11	8
Mycogen Seeds	AG1203	126	----	----	59	----	----	49,900	11.7	1.22	0
Alta Seeds	X445	124	----	----	57	----	----	46,400	11.9	1.21	9
Sorghum Partners LLC	DKS41-50	119	----	----	57	----	----	51,300	13.1	1.13	20
DeKalb Brand	BS693	114	----	----	58	----	----	57,700	12.3	1.09	21
NuTech Seed, LLC	X446	113	----	----	57	----	----	36,200	12.7	1.35	15
Sorghum Partners LLC	GS623	99	----	----	55	----	----	54,700	12.7	1.41	45
Mean		127	131	138	57	56	56	50,100	12.1	1.25	----
CV %		8.7	9.0	10.0	1.8	4.0	4.7	13.5	6.2	9.6	----
L.S.D.		16	12	11	1	2	2	9,500	1.1	0.17	----



**Table 10. Results from Tipton grain sorghum performance trial, 2014.**

<i>Company</i> <i>Brand Name</i>	<i>Hybrid</i>	<i>Grain Yield</i> <i>bu/ac</i> <i>2014</i>	<i>Test weight</i> <i>lb/bu</i> <i>2014</i>	<i>Harvest</i> <i>Moisture</i>	<i>Plant</i> <i>Population</i> <i>%</i>	<i>Lodging</i> <i>plants/ac</i>
<i>Early maturity 60 days or less to mid-bloom</i>						
Richardson Seeds Ltd.	11043	82	53	8.2	36,500	45
DeKalb Brand	DKS 28-05	80	50	7.2	43,900	55
Sorghum Partners LLC	K35-Y5	79	52	7.8	36,000	16
Johnston Seed Co.	JSG-55DC	74	52	8.0	40,700	25
Sorghum Partners LLC	SP3425	71	52	7.5	38,200	0
Johnston Seed Co.	JSG-58DC	70	50	7.6	39,300	5
Richardson Seeds Ltd.	99773	68	49	8.0	41,900	23
Richardson Seeds Ltd.	49473	61	51	10.6	37,800	38
DeKalb Brand	DKS 37-07	53	52	10.2	46,000	13
	Mean	73	51	7.3	38,800	-----
	CV %	22.6	4	16.1	11.8	-----
	L.S.D.	24	NS	1.9	6,700	-----

<i>Company</i> <i>Brand Name</i>	<i>Hybrid</i>	<i>Grain Yield</i> <i>bu/ac</i> <i>2014</i>	<i>Test weight</i> <i>lb/bu</i> <i>2014</i>	<i>Harvest</i> <i>Moisture</i>	<i>Plant</i> <i>Population</i> <i>plants/ac</i>	<i>Lodging</i> <i>%</i>
<i>Full season 70 days or greater to mid-bloom</i>						
Mycogen Seeds	1G741	113	56	8.4	28,600	5
Pioneer Hi-Bred Int.	84G62	113	55	9.8	42,900	0
Sorghum Partners LLC	NK7633	111	57	7.9	35,900	0
Mycogen Seeds	E33573	110	56	8.3	36,000	5
Pioneer Hi-Bred Int.	84P80	108	56	8.7	39,300	0
Sorghum Partners LLC	K73-J6	98	54	7.2	40,100	0
Sorghum Partners LLC	SPX3675	93	49	7.0	24,000	15
Richardson Seeds Ltd.	96173	90	56	8.1	29,700	0
Sorghum Partners LLC	SPX3680	86	52	9.3	26,500	0
	Mean	102	54	8.3	33,700	-----
	CV %	10.3	2.8	18.9	11.1	-----
	L.S.D.	15	2.2	NS	5,500	-----

Cooperator: Tipton Valley Research Center  
 Conventional Tillage Practices: Sorghum-fallow-sorghum rotation  
 Fertilizer: N: 70 lbs/ac P: 0 K: 0  
 Seeding rate: 56,000 seeds/ac  
 Planting Date: April 11, 2014  
 Herbicide: 2.7 qt/ac Lumax EZ Preemergence

Soil Series: Tipton Silt Loam  
 Soil Test: N: 76 P: 101 K: 700 pH: 6.0  
 5 gallon 10-34-0 at planting  
 Target population 45,000 plants/ac  
 Harvest Date: August 18, 2014

Monthly Rainfall (in.)	Apr.	May	June	July	Total
2014:	0.53	4.23	4.35	3.06	<b>12.17</b>
Long term mean:	2.30	4.30	3.45	2.08	<b>12.13</b>

## The Oklahoma Cooperative Extension Service

### *Bringing the University to You!*

The Cooperative Extension Service is the largest, most successful informal educational organization in the world. It is a nationwide system funded and guided by a partnership of federal, state, and local governments that delivers information to help people help themselves through the land-grant university system.

Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of the Cooperative Extension system are:

- The federal, state, and local governments cooperatively share in its financial support and program direction.
- It is administered by the land-grant university as designated by the state legislature through an Extension director.
- Extension programs are nonpolitical, objective, and research-based information.
- It provides practical, problem-oriented education for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.
- It utilizes research from university, government, and other sources to help people make their own decisions.
- More than a million volunteers help multiply the impact of the Extension professional staff.
- It dispenses no funds to the public.
- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
- Local programs are developed and carried out in full recognition of national problems and goals.
- The Extension staff educates people through personal contacts, meetings, demonstrations, and the mass media.
- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs. Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.

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