

2016 Texas Panhandle Forage Sorghum Silage Trial

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The 2016 Texas Panhandle Forage Sorghum Silage trial consisted of 99 forage sorghum entries, 2 grain sorghum checks and 2 corn hybrids. Corn hybrids were included as a silage standard for comparative purposes. Three forage sorghum entries were removed due to seed contamination. The 2016 trial results were strongly influenced by sugarcane aphid (SCA) pressure that was first identified in small colonies throughout the entire trial on August 1, 2016. SCAs were sprayed aerially (3 GPA) on August 9, 2016 with Transform (2 oz/ac) and on August 26, 2016 with Sivanto (6 oz/ac). SCA damage ratings were made on October 5, 2016 using the Texas A&M AgriLife SCA rating scale of Porter and Bynum.

The trial was located with a cooperating producer (Mr. Michael Menke) under center pivot irrigation within a forage sorghum circle. Seed companies submitted forage sorghum hybrids on a per fee basis with the exception of the grain sorghum checks and corn hybrids. Each plot was harvested for forage yield when grain reached soft dough. Hybrids that had not reached soft-dough were all harvested on the last sampling date (October 25, 2016). Yield was determined from a 25 ft² area (1 row by 10 ft.) within each plot, and a uniform sub-sample was chopped for nutritional composition. If possible, plants were harvested from a non-lodged portion of the plot to preserve forage quality. Lodging and plant height were recorded at harvest. A portion of the chopped forage was dried at 221°F (105°C) to determine harvest moisture. The remaining portion of the chopped forage was dried at 140°F (60°C) and submitted to Dairyland Laboratories, Arcadia, WI for forage analyses using near infrared reflectance spectroscopy (NIR) for all samples. Forage constituents are reported on a dry matter (DM) basis. Grain yields were collected in November following forage harvest for select hybrids upon seed company request at the time of entry. Grain yields were reported to the USDA-Risk Management Agency to update the Loan Deficiency Payment Tables for forage sorghum hybrids.

Cultural Practices:

Location: Bushland, Texas (35.205836, -102.041460)

Cooperator: Mr. Michael Menke

Previous Crop: Fallow

Soil Type: Pullman clay loam, pH 7.8

Planting Date: June 8, 2016

Planting Rate: 80,000 Seeds/Ac

Irrigation: 10.8 inches (6/8/2016 - 9/6/2016)

In-season Precipitation: 7.25 (6/8/2016 – 10/25/2016)

Fertility: 107 lbs N/ac

Herbicides: pre-plant application Atrazine (1.5 lbs a.i./ac) + glyphosate (16 oz/ac)

Insecticide Applications (aerial at 3 gal/ac):

8/9/2016 Transform 2 oz/ac

8/26/2016 Sivanto 6 oz/ac

Plot Size: Four, 30 inch rows by 25 ft.

Replications: 3; Study Design: Randomized Complete Block

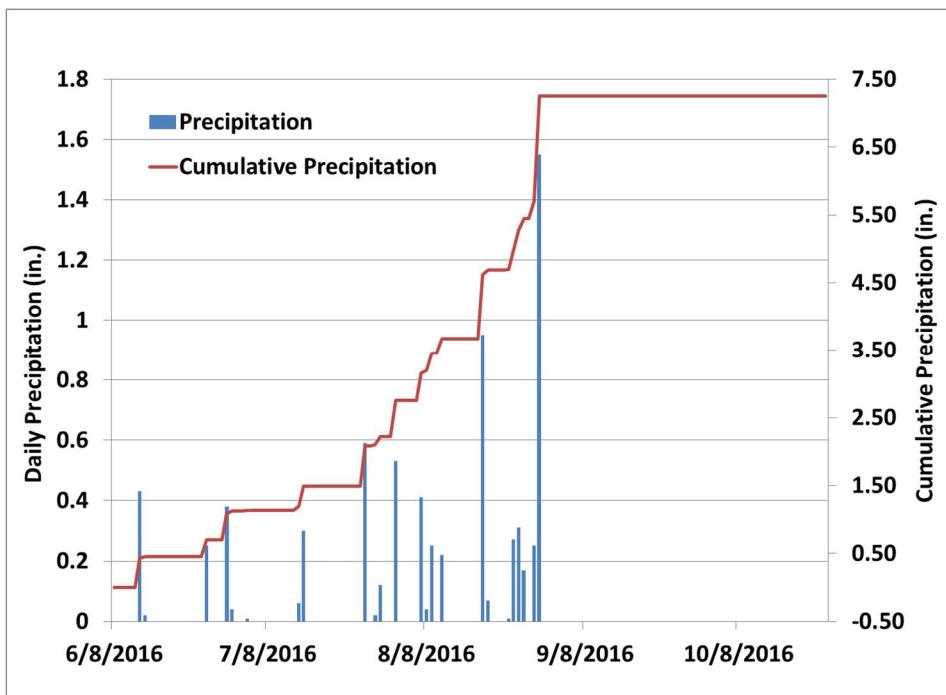


Figure 1. Daily and cumulative in-season precipitation.

The average yield of sorghum hybrids for forage was 23.0 tons/acre (Standard Dev 4.5; CV 20%) with photosensitive, non-BMR hybrids being greatest (Table 1). Yields ranged from 33.0 to 14.6 tons/acre for the individual hybrids (Table 3); however, when evaluating the performance of the top yielding hybrids there were no statistical differences between the top 44 hybrids with yields ranging from 23.4 to 33.0 tons/ac at the 0.05 probability level due to variation between plots (Table 3). While early season precipitation and optimal temperatures in addition to supplemental precipitation contributed to optimal yields, SCA infestation resulted in increased variability between plots. Due to the influence of SCAs on the forage yield potential, plots with a SCA rating greater than 6.5 and damage that was yield limiting were not included in the hybrid average. If possible, producers should evaluate hybrids based on several years of production data from multiple trial locations to capture differences in the growing season conditions.

Forage characteristics contributing to nutritive and feeding values are shown in Tables 1-6. From the broad averages for different forage types shown in Table 1, the photoperiod sensitive types contain greater ADF and aNDF, while the BMR types on average contained lower digestible fractions. The BMR trait reduces lignin concentration in forage and, on average, lignin concentration was lower in BMRs than non-BMRs. BMR-PS forages had lower lignin values than the non-BMR PS forages (Table 1). Increased lignin reduces the fiber digestibility and energy density of forage. Differences in lignin concentration were reflected in the uNDFom240 (undigested NDF after fermentation for 240 hours; Table 1). Average starch content was lower for the PS hybrids because they do not produce grain. Corn plots were immature when harvested as reflected by the high harvest moisture (75% moisture) or low dry matter. All corn plots were harvested when grain was at the $\frac{1}{2}$ milk line (R5 growth stage). Early harvest terminated grain-fill resulting in reduced starch levels in corn silage.

Statistical analyses were completed using SAS 9.4. Adjusted least significant differences for multiple comparisons were determined using Tukey's HSD. Effects and comparisons were determined significant at the 0.05 probability level. The discussion above addresses broad averages for types of forage sorghums, grain sorghums evaluated as silage, and sorghum/sudangrass hybrids evaluated in the 2016 test. We recommended individual hybrids not be selected or disregarded based on the sorghum type nor based on the relative comparison among types. There is overlap among hybrids in these type categories. Evaluate the data based on the individual hybrid, not the forage type category.

Texas A&M AgriLife Sugarcane Aphid Rating Scale:

- 0: no aphids or honey dew found
- 1: 10% of leaf area infested or damaged, colonies establishing on lower leaves or some honey dew visible on 2 or less leaves
- 2: 11-20% of leaf area infested or damaged
- 3: 21-30% of leaf area infested, damaged or dead
- 4: 31-40% of leaf area infested, damaged or dead
- 5: 41-50% of leaf area infested, damaged or dead
- 6: 51-60% of leaf area infested, damaged or dead
- 7: 61-70% of leaf area infested, damaged or dead
- 8: 71-80% of leaf area infested, damaged or dead
- 9: 81-90% of leaf area infested, damaged or dead
- 10: 91% of leaf area damaged to dead

Forage Analyses defined:

CP:	Crude Protein
ADF:	Acid Detergent Fiber; a fraction of the cell wall includes cellulose and lignin, which is inversely related to energy availability
aNDF:	Neutral Detergent Fiber; cell wall fraction of the forage
IVTDMD:	In Vitro Dry Matter Digestibility; estimate of forage disappearance in the digestive tract
NDFD:	NDF digestibility; estimated fiber digestibility after the specified length of time (48 hrs.)
uNDFom:	Undigested NDF after fermentation for the specified length of time (240 hrs.) expressed on an organic matter basis (om) in order to account for the ash
TDN:	Total Digestible Nutrients (by Weiss equation) an index of energy concentration.
RFQ:	Relative Forage Quality - an index for comparing forages, not just alfalfa. RFQ is based on the same scoring system as RFV with an average score of 100; higher scores indicate better feeding value
Milk/ton:	An index based on several variables that influence intake and nutritive value. These are applied to a standard dairy cow to project milk produced per ton of forage.

Acknowledgements: We greatly appreciate Mr. Michael Menke for his cooperation. Furthermore, we greatly appreciate the assistance Katrina Horn and Jonathan Moreno with seed preparation and planting, and Aislynn Walton, Cameron Bigelow and Daniel Tyner for field notes, harvest assistance and sample processing.

Table 1. 2016 summary of key characteristics by sorghum type. *The number in parentheses represents the number of hybrids that make up each sorghum type. BMR= Brown Midrib, PS = Photoperiod Sensitive

Sorghum Type*	% Moisture at Harvest	Avg Yield (tons/ac, 65% Moist.)	% Lodging	% CP	% ADF	% ANDF	% Lignin	% Starch	% NDFD48	% uNDFom240	% IVTDMD48	Relative Feed Quality (RFQ)	Milk lbs/ton
BMR (53)	21.7	21.7	16.8	7.1	33.9	52.4	5.0	15.6	49.8	25.2	72.8	107	3100
Non-BMR (43)	24.5	24.5	11.4	6.1	37.4	56.6	5.9	12.5	44.4	30.3	67.3	86	2863
Test Average‡	19.2	23.0	14.4	6.6	35.5	54.3	5.5	14.1	47.4	27.6	70.3	98	2992
by Photoperiod Response*													
Non-BMR non-PS (38)	67.5	24.1	11.4	6.4	36.3	54.8	5.8	14.1	44.8	29.3	68.4	91	2937
Non-BMR PS (5)	69.4	27.7	10.7	4.1	45.3	69.5	6.8	0.5	42.2	38.1	58.9	50	2311
BMR Non-PS (48)	68.5	21.4	17.4	7.3	33.4	51.4	5.0	16.5	49.9	24.7	73.3	110	3133
BMR PS (5)	70.0	24.8	10.7	4.8	38.9	62.6	5.2	6.2	48.9	30.2	67.4	82	2784
by Brachytic Trait*													
Non-Brachytic (83)	68.2	23.1	12.7	6.4	35.9	55.1	5.5	13.3	46.7	28.2	69.5	94.6	2966
Brachytic (13)	68.9	22.0	25.0	6.6	32.4	49.1	4.8	20.3	51.9	22.8	75.4	119	3174
Grain Sorghum Checks and Corn Entries													
Grain Sorghum Checks (2)	19.2	19.2	0.0	9.0	26.0	37.6	4.8	31.0	51.4	12.5	80.3	174	3751
Corn (2) With Ear	19.5	19.5	0.0	7.6	27.8	44.9	4.0	13.8	52.5	13.2	77.1	137	3486
Corn (2) Without Ear†	23.0	----		8.2	34.4	53.9	5.0	2.2	47.5	15.0	69.7	95	2972

‡The test average is the average of forage entries not including the grain sorghum checks or corn.

† Corn samples were processed from all replicates with and without the ear for both hybrids.

Table 2. 2016 comparison of agronomic characteristics, yield and lodging. †Hybrid information was provided by seed companies. Male sterile entries were pollinated by other hybrids. FS=Forage Sorghum, SS=Sorghum Sudan, SU=Sudangrass, GS=Grain Sorghum. Means followed by the same letter do not significantly differ using LSD (0.05).

Hybrid Information†								Mean SCA Rating, Days to Half-Bloom, Lodging, Harvest Date, Height, Moisture and Yield						
Entry	Hybrid	Hybrid	Sorghum Type	Maturity	Brown Midrib	Brachytic	Male Sterile	Days to HB	Average SCA Rating 10/5/2016	% Lodging at Harvest	Harvest Date	Height at Harvest (in.)	%Moisture at Harvest	Yield (tons/ac)
1*	AF7101	Alta Seeds	FS	E	Y	N	N	61	4.7	42	9/19/2016	73	60	19.7 c-q
2*	AF7102	Alta Seeds	FS	E	Y	Y	N	60	3.3	0	9/8/2016	59	72	18.0 h-q
3	AF7201	Alta Seeds	FS	ME	Y	N	N	61	1.7	37	9/13/2016	71	68	17.5 c-q
4	AF7301	Alta Seeds	FS	M	Y	N	Y	81	1.3	0	9/15/2016	77	71	22.1 b-q
5	AF7401	Alta Seeds	FS	L	Y	Y	N	100	0.5	0	9/30/2016	61	75	21.2 c-q
6*	AF8301	Alta Seeds	FS	M	N	N	N	95	5.2	0	9/30/2016	74	69	29.4 a-i
7	AS6402	Alta Seeds	SS	L	Y	Y	N	95	1.5	0	10/3/2016	69	64	19.0 h-q
8	AS6401	Alta Seeds	SS	L	Y	N	N	71	0.8	0	9/28/2016	92	68	23.3 b-p
9	Brighton	American Hybrids	SS	ML	N	N	N	62	0.0	0	8/19/2016	93	68	17.2 opq
10	Liberty	American Hybrids	SS	ML	N	N	N	65	0.3	8	9/10/2016	103	64	20.9 c-q
11	Lincoln	American Hybrids	SS	ML	Y	N	N	73	0.7	32	9/4/2016	77	74	15.8 opq
12	Rushmore	American Hybrids	SS	ME	N	N	N	65	0.0	30	9/2/2016	92	66	18.9 c-q
13*	Nighthawk	Blue River Hybrids	SS	L	Y	Y	N	90	3.2	12	9/23/2016	75	65	23.4 a-p
14*	Seahawk	Blue River Hybrids	SS	ME	Y	N	N	65	4.5	15	9/10/2016	94	61	20.4 d-q
15	Blackhawk	Blue River Hybrids	SS	ML	Y	N	N	81	2.3	15	9/16/2016	88	67	18.9 i-q
16	Cadan 99B	Browning Seed Inc	SS	M	N	N	N	73	0.0	0	9/28/2016	101	65	18.3 j-q
17	Tridan	Browning Seed Inc	SS	M	N	N	N	69	0.0	13	9/8/2016	107	62	22.4 b-p
18	Sweet Sioux WMR	Browning Seed Inc	SS	M	N	N	N	70	0.5	7	9/3/2016	103	63	23.9 a-p
19	Sweet Sioux BMR	Browning Seed Inc	SS	M	Y	N	N	64	0.3	17	8/31/2016	79	71	20.5 d-q
20	Bundle King	Browning Seed Inc	FS	ME	N	N	Y	65	0.8	7	9/5/2016	75	67	26.1 a-o
21	Silage Master	Browning Seed Inc	FS	ML	N	N	N	100	2.0	28	10/14/2016	128	71	27.5 a-j
22	Wondergreen	Browning Seed Inc	SS	ME	N	N	N	62	0.8	0	8/19/2016	94	70	16.9 nopq
23	Apache	Browning Seed Inc	FS	ML	N	N	N	106	1.0	0	10/17/2016	135	61	31.0 abc
24	B-52	Browning Seed Inc	SS	PS	N	N	N		0.0	0	10/25/2016	129	70	29.3 a-e
25	F4C204	Ceres, Inc	FS	E	N	N	N	59	0.7	0	8/28/2016	81	74	19.1 h-q
26*	F4C207	Ceres, Inc	FS	M	N	N	N	86	4.2	0	9/20/2016	73	71	25.1 a-o
27	F4C208	Ceres, Inc	FS	M	N	N	N	80	3.2	25	9/15/2016	70	74	22.6 b-p
28	EJ7281	Ceres, Inc	FS	L	N	N	N	109	1.3	35	10/14/2016	107	70	33.0 a
29	Super Sugar DM	Gayland Ward Seed	SS	ML	N	N	N	102	0.3	0	10/19/2016	116	67	27.2 a-n
30	Sweet Forever BMR	Gayland Ward Seed	SS	PS	Y	N	N	98	0.0	12	10/23/2016	118	70	23.8 a-p
31	Sweet Six BMR	Gayland Ward Seed	SS	ME	Y	N	N	59	1.5	0	8/27/2016	91	69	18.0 k-q
32	Nutri King BMR	Gayland Ward Seed	SS	ME	Y	N	N	57	0.7	0	8/19/2016	84	74	16.3 opq
35	Silo Pro BMR	Gayland Ward Seed	FS	ML	Y	Y	N	105	2.7	23	10/16/2016	72	68	24.6 a-o
36	GW 600 BMR	Gayland Ward Seed	FS	M	Y	N	N	70	1.7	15	9/12/2016	98	68	21.6 b-q
37	GW 400 BMR	Gayland Ward Seed	FS	ME	Y	N	Y	67	1.7	7	9/4/2016	73	70	24.3 a-p
38	GW 2120	Gayland Ward Seed	FS	M	N	N	Y	72	1.7	0	9/13/2016	72	70	20.3 d-q

* A plot with a sugarcane aphid rating greater than 6.5 and damage that was yield limiting was not included in the hybrid average.

Table 2 continued. 2016 comparison of agronomic characteristics, yield and lodging. †Hybrid information was provided by seed companies. Male sterile entries were pollinated by other hybrids. FS=Forage Sorghum, SS=Sorghum Sudan, SU=Sudangrass, GS=Grain Sorghum. Means followed by the same letter do not significantly differ using LSD (0.05).

Entry	Hybrid Information†							Mean SCA Rating, Days to Half-Bloom, Lodging, Harvest Date, Height, Moisture and Yield						
	Hybrid	Hybrid	Sorghum Type	Maturity	Brown Midrib	Brachytic	Male Sterile	Days to HB	Average SCA Rating 10/5/2016	% Lodging at Harvest	Harvest Date	Height at Harvest (in.)	%Moisture at Harvest	Yield (tons/ac) 65% Moitsure
39	GW475BMR	Gayland Ward Seed	FS	E	Y	N	Y	67	2.7	0	9/12/2016	76	67	19.5 d-q
40	EXP 10218	Gayland Ward Seed	FS	M	N	N	N	108	2.8	47	10/20/2016	91	66	25.2 a-p
41	EXP 10221 BMR	Gayland Ward Seed	FS	M	Y	Y	Y	81	2.7	53	9/22/2016	67	69	23.7 a-p
42	EXP 10222 BMR	Gayland Ward Seed	FS	M	Y	Y	N	86	1.7	20	9/19/2016	74	67	25.0 a-p
43	ST6	Monsanto	SS	M	N	N	Y	77	0.3	15	9/13/2016	98	67	19.7 f-q
44	BMR455	Monsanto	SS	M	Y	N	Y	66	0.0	5	9/4/2016	79	68	20.4 d-q
45	Nutrichoice II	Monsanto	FS	ML	N	N	N	98	3.3	57	10/15/2016	71	63	28.4 a-h
46	Nutricane II	Monsanto	FS	M	N	N	Y	70	2.3	0	9/14/2016	79	71	20.1 e-q
47	Sweetleaf II	Monsanto	SS	M	N	N	N	64	0.0	0	9/6/2016	93	67	18.7 j-q
48	FS300	NuTech Seed	FS	ML	N	N	N	95	5.0	10	10/1/2016	70	71	23.9 a-p
49	FSB310	NuTech Seed	FS	L	Y	Y	N	105	1.7	10	10/9/2016	56	68	25.1 a-o
50	849F	DuPont Pioneer	FS	M	N	N	N	67	1.0	0	9/15/2016	78	60	30.2 abc
51	841F	DuPont Pioneer	FS	ML	N	N	N	70	4.3	0	9/22/2016	56	63	23.6 a-p
52*	Silo 700D	Richardson Seeds, Ltd	FS	ML	N	N	N	96	5.7	13	10/21/2016	77	64	25.9 a-o
53	Silo 700D BMR	Richardson Seeds, Ltd	FS	ML	Y	N	N	105	1.7	63	10/18/2016	89	62	23.2 b-p
54	Pacesetter BMR	Richardson Seeds, Ltd	FS	PS	Y	N	N		0.0	20	10/25/2016	120	72	23.5 a-p
55	Bundle King BMR	Richardson Seeds, Ltd	FS	L	Y	N	Y	109	1.3	35	10/15/2016	122	67	30.9 abc
56	Sweeter N Honey BMR	Richardson Seeds, Ltd	SS	ME	Y	N	N	81	1.0	5	9/15/2016	85	73	20.3 d-q
57	Sweeter N Honey II BMR	Richardson Seeds, Ltd	SS	L	Y	N	N	103	0.0	0	10/22/2016	109	69	21.5 b-q
58	9500W	Richardson Seeds, Ltd	FS	M	N	N	N	74	2.7	0	9/18/2016	57	62	23.4 b-p
59	X105414	Richardson Seeds, Ltd	FS	ML	Y	N	N	105	4.3	45	10/19/2016	79	68	19.2 h-q
60	X82414	Richardson Seeds, Ltd	SS	L	Y	N	N	103	0.3	0	10/21/2016	116	68	23.8 a-p
61	Sweeter N Honey II	Richardson Seeds, Ltd	SS	L	N	N	N	105	0.0	0	10/11/2016	115	66	27.2 a-l
62	X506X44	Scott Seed Co.	FS	PS	Y	N	Y		1.2	0	10/25/2016	101	70	27.1 a-m
63	GREAT SCOTT BMR-R	Scott Seed Co.	FS	L	Y	Y	N	102	3.2	47	10/19/2016	38	68	21.4 c-q
64*	GREAT SCOTT BMR-W	Scott Seed Co.	FS	L	Y	Y	N	107	3.8	0	10/15/2016	72	69	23.6 a-p
65	BMR GOLD X-W	Scott Seed Co.	FS	M	Y	N	Y	59	1.5	0	9/5/2016	78	70	22.1 b-q
66*	BMR GOLD X-R	Scott Seed Co.	FS	M	Y	N	Y	64	3.7	10	9/11/2016	76	73	19.2 e-q
67	X51423	Scott Seed Co.	FS	M	Y	N	N	105	2.0	0	10/10/2016	105	69	24.0 a-p
68	GS9	Scott Seed Co.	FS	L	N	N	N	105	1.0	70	10/13/2016	116	68	27.5 a-k
69	Canex BMR 210	Sharp Bros. Seed Co.	FS	M	Y	N	N	77	0.7	7	9/15/2016	84	67	24.0 a-p
70	Canex BMR 600	Sharp Bros. Seed Co.	FS	ML	Y	N	Y	103	0.7	20	10/18/2016	127	67	25.9 a-n
71	Canex BMR 540	Sharp Bros. Seed Co.	FS	ML	Y	Y	N	100	0.7	58	10/10/2016	85	70	23.4 b-p
72*	Canex BMR 550	Sharp Bros. Seed Co.	FS	ML	Y	Y	N	102	3.7	33	9/18/2016	67	68	19.8 c-q
73	Canex	Sharp Bros. Seed Co.	FS	ME	N	N	Y	62	1.5	0	9/8/2016	74	72	20.9 c-q
74	Silex BMR 503	Sharp Bros. Seed Co.	FS	ML	Y	Y	N	104	2.2	68	10/17/2016	62	69	19.7 f-q

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75	Grazex BMR 301	Sharp Bros. Seed Co.	SS	M	Y	N	N	67	0.7	0	9/12/2016	85	69	19.5 g-q
76	Grazex BMR 801	Sharp Bros. Seed Co.	SS	M	Y	N	N	77	2.0	10	9/23/2016	93	71	14.6 pq
77	SP2774 BMR	Sorghum Partners, LLC	FS	ME	Y	N	N	74	1.5	8	9/15/2016	87	66	23.8 a-p
78*	Red Top + BMR	Sorghum Partners, LLC	FS	M	Y	N	N	86	4.3	0	9/20/2016	75	72	21.2 b-q
79	Hikane II	Sorghum Partners, LLC	FS	M	N	N	N	61	1.7	0	8/27/2016	81	76	17.9 l-q
80	SP3903BD	Sorghum Partners, LLC	FS	ML	N	N	N	103	2.3	30	10/12/2016	56	67	23.1 b-p
81	SP3902 BD	Sorghum Partners, LLC	FS	ML	N	N	N	107	2.3	8	10/12/2016	69	67	25.8 a-n
82	SS405	Sorghum Partners, LLC	FS	L	N	N	N	105	0.0	0	10/15/2016	141	63	28.3 a-i
83*	NK300	Sorghum Partners, LLC	FS	L	N	N	N	92	5.2	8	9/26/2016	74	70	30.3 a-f
84*	SP2876BMR	Sorghum Partners, LLC	FS	ML	Y	N	N	63	2.5	13	9/27/2016	83	71	20.2 c-q
85	SP1880	Sorghum Partners, LLC	FS	L	N	N	N	106	0.3	10	10/23/2016	135	68	28.4 a-i
86	SS304	Sorghum Partners, LLC	FS	ML	N	N	N	98	0.8	15	10/4/2016	120	73	28.7 a-g
87	SP4105	Sorghum Partners, LLC	SXSu	PS	N	N	N		1.3	10	10/25/2016	98	70	22.4 b-p
89	Sordan Headless	Sorghum Partners, LLC	SXS	PS	N	N	N		0.2	0	10/25/2016	124	69	27.1 a-m
90	CHR14FB0240	Sorghum Partners, LLC	FS	PS	Y	N	N	74	0.8	8	9/18/2016	82	64	26.8 a-m
91	CHR12FS0012	Sorghum Partners, LLC	FS	ME	N	N	N	67	1.7	0	9/10/2016	81	72	21.7 b-q
92	XMossBMR	Moss Seed Co.	FS	PS	Y	N	Y		0.8	13	10/25/2016	95	74	22.7 a-q
93	4Ever Green	Walter Moss Seed Co.	FS	PS	N	N	N		0.0	43	10/25/2016	115	71	31.0 abcd
94	Mega Green	Walter Moss Seed Co.	SS	PS	N	N	N		0.8	0	10/25/2016	123	67	28.7 a-g
95	BMR 3631	Winfield	FS	L	Y	N	N	103	2.3	15	10/12/2016	70	70	23.4 a-p
96	BMR 331	Winfield	FS	ML	Y	N	N	107	2.3	12	10/14/2016	59	65	22.9 b-p
97*	EXP 1601	Winfield	FS	E	Y	N	N	70	3.7	23	9/16/2016	86	68	24.1 a-p
98	BMR 3411	Winfield	FS	E	Y	N	N	95	3.3	18	10/8/2016	111	71	19.3 g-q
99	BMR 3561	Winfield	FS	ME	Y	N	Y	77	2.2	0	9/19/2016	79	71	21.5 b-q
100	Check 1 (84G62)		GS					67	4.0	0	9/13/2016	37	64	19.5 g-q
101	Check 2 (DKS37-07)		GS					62	2.5	0	9/10/2016	34	65	18.9 h-q
102	P1151		Corn							0	8/24/2016	75	74	20.8 c-q
103	55VP77		Corn							0	8/24/2016	66	74	18.2 j-q

* A plot with a sugarcane aphid rating greater than 6.5 and damage that was yield limiting was not included in the hybrid average.

Table 3. 2016 comparison of agronomic characteristics by max yield. †Hybrid information was provided by seed companies. Male sterile entries were pollinated by other hybrids. FS=Forage Sorghum, SS=Sorghum Sudan, SU=Sudangrass, GS=Grain Sorghum. Means followed by the same letter do not significantly differ using LSD (0.05).

Hybrid Information†								Mean SCA Rating, Days to Half-Bloom, Lodging, Harvest Date, Height, Moisture and Yield						
Entry	Hybrid	Hybrid	Sorghum Type	Maturity	Brown Midrib	Brachytic	Male Sterile	Days to HB	Average SCA Rating 10/5/2016	% Lodging at Harvest	Harvest Date	Height at Harvest (in.)	%Moisture at Harvest	Yield (tons/ac) 65% Moisuture
28	EJ7281	Ceres, Inc	FS	L	N	N	N	109.0	1.3	35	10/14/2016	107	70	33.0 a
23	Apache	Browning Seed Inc	FS	ML	N	N	N	106.0	1.0	0	10/17/2016	135	61	31.0 abc
55	Bundle King BMR	Richardson Seeds, Ltd	FS	L	Y	N	Y	109.0	1.3	35	10/15/2016	122	67	30.9 abc
93	4Ever Green	Walter Moss Seed Co.	FS	PS	N	N	N		0.0	43	10/25/2016	115	71	31.0 abcd
83*	NK300	Sorghum Partners, LLC	FS	L	N	N	N	92.0	5.2	8	9/26/2016	74	70	30.3 a-f
50	849F	DuPont Pioneer	FS	M	N	N	N	67.0	1.0	0	9/15/2016	78	60	30.2 abc
6*	AF8301	Alta Seeds	FS	M	N	N	N	95.0	5.2	0	9/30/2016	74	69	29.4 a-i
24	B-52	Browning Seed Inc	SS	PS	N	N	N		0.0	0	10/25/2016	129	70	29.3 a-e
94	Mega Green	Walter Moss Seed Co.	SS	PS	N	N	N		0.8	0	10/25/2016	123	67	28.7 a-g
86	SS304	Sorghum Partners, LLC	FS	ML	N	N	N	97.7	0.8	15	10/4/2016	120	73	28.7 a-g
45	Nutrichoice II	Monsanto	FS	ML	N	N	N	98.0	3.3	47	10/15/2016	71	63	28.4 a-h
85	SP1880	Sorghum Partners, LLC	FS	L	N	N	N	106.0	0.3	10	10/23/2016	135	68	28.4 a-i
82	SS405	Sorghum Partners, LLC	FS	L	N	N	N	105.0	0.0	0	10/15/2016	141	63	28.3 a-i
21	Silage Master	Browning Seed Inc	FS	ML	N	N	N	100.3	2.0	28	10/14/2016	128	71	27.5 a-j
68	GS9	Scott Seed Co.	FS	L	N	N	N	105.0	1.0	70	10/13/2016	116	68	27.5 a-k
61	Sweeter N Honey II	Richardson Seeds, Ltd	SS	L	N	N	N	105.0	0.0	0	10/11/2016	115	66	27.2 a-l
62	X506X44	Scott Seed Co.	FS	PS	Y	N	Y		1.2	0	10/25/2016	101	70	27.1 a-m
89	Sordan Headless	Sorghum Partners, LLC	SXS	PS	N	N	N		0.2	0	10/25/2016	124	69	27.1 a-m
90	CHR14FB0240	Sorghum Partners, LLC	FS	PS	Y	N	N	74.0	0.8	8	9/18/2016	82	64	26.8 a-m
20	Bundle King	Browning Seed Inc	FS	ME	N	N	Y	65.3	0.8	7	9/5/2016	75	67	26.1 a-o
70	Canex BMR 600	Sharp Bros. Seed Co.	FS	ML	Y	N	Y	103.0	0.7	20	10/18/2016	127	67	25.9 a-n
52*	Silo 700D	Richardson Seeds, Ltd	FS	ML	N	N	N	95.7	5.7	10	10/21/2016	77	62	25.9 a-o
81	SP3902 BD	Sorghum Partners, LLC	FS	ML	N	N	N	107.0	2.3	8	10/12/2016	69	67	25.8 a-n
29	Super Sugar DM	Gayland Ward Seed	SS	ML	N	N	N	102.3	0.3	0	10/19/2016	116	67	25.8 a-n
40	EXP 10218	Gayland Ward Seed	FS	M	N	N	N	107.7	2.8	47	10/20/2016	91	66	25.2 a-p
26*	F4C207	Ceres, Inc	FS	M	N	N	N	86.3	4.2	0	9/20/2016	73	71	25.1 a-o
49	FSB310	NuTech Seed	FS	L	Y	Y	N	105.0	1.7	10	10/9/2016	56	68	25.1 a-o
42	EXP 10222 BMR	Gayland Ward Seed	FS	M	Y	Y	N	85.7	1.7	20	9/19/2016	74	67	25.0 a-p
35	Silo Pro BMR	Gayland Ward Seed	FS	ML	Y	Y	N	105.0	2.7	23	10/16/2016	72	68	24.6 a-o
37	GW 400 BMR	Gayland Ward Seed	FS	ME	Y	N	Y	67.0	1.7	7	9/4/2016	73	70	24.3 a-p
97*	EXP 1601	Winfield	FS	E	Y	N	N	70.3	3.7	23	9/16/2016	86	68	24.1 a-p
67	X51423	Scott Seed Co.	FS	M	Y	N	N	104.7	2.0	0	10/10/2016	105	69	24.0 a-p
69	Canex BMR 210	Sharp Bros. Seed Co.	FS	M	Y	N	N	76.7	0.7	7	9/15/2016	84	67	24.0 a-p
18	Sweet Sioux WMR	Browning Seed Inc	SS	M	N	N	N	70.3	0.5	7	9/3/2016	103	63	23.9 a-p
48	FS300	NuTech Seed	FS	ML	N	N	N	95.0	5.0	10	10/1/2016	70	71	23.9 a-p
77	SP2774 BMR	Sorghum Partners, LLC	FS	ME	Y	N	N	74.0	1.5	8	9/15/2016	87	66	23.8 a-p

* A plot with a sugarcane aphid rating greater than 6.5 and damage that was yield limiting was not included in the hybrid average.

Table 3 continued. 2016 comparison of agronomic characteristics by max yield. †Hybrid information was provided by seed companies. Male sterile entries were pollinated by other hybrids. FS=Forage Sorghum, SS=Sorghum Sudan, SU=Sudangrass, GS=Grain Sorghum. Means followed by the same letter do not significantly differ using LSD (0.05).

Hybrid Information†								Mean SCA Rating, Days to Half-Bloom, Lodging, Harvest Date, Height, Moisture and Yield							
Entry	Hybrid	Hybrid	Sorghum Type	Maturity	Brown Midrib	Brachytic	Male Sterile	Days to HB	Average SCA Rating 10/5/2016	% Lodging at Harvest	Harvest Date	Height at Harvest (in.)	%Moisture at Harvest	Yield (tons/ac)	65% Moisture
60	X82414	Richardson Seeds, Ltd	SS	L	Y	N	N	103.0	0.3	0	10/21/2016	116	68	23.8	a-p
30	Sweet Forever BMR	Gayland Ward Seed	SS	PS	Y	N	N	98.3	0.0	12	10/23/2016	118	70	23.8	a-p
41	EXP 10221 BMR	Gayland Ward Seed	FS	M	Y	Y	Y	81.3	2.7	53	9/22/2016	67	69	23.7	a-p
51	841F	DuPont Pioneer	FS	ML	N	N	N	70.3	4.3	0	9/22/2016	56	63	23.6	a-p
64*	GREAT SCOTT BMR-W	Scott Seed Co.	FS	L	Y	Y	N	106.7	3.8	0	10/15/2016	72	69	23.6	a-p
54	Pacesetter BMR	Richardson Seeds, Ltd	FS	PS	Y	N	N		0.0	20	10/25/2016	120	72	23.5	a-p
95	BMR 3631	Winfield	FS	L	Y	N	N	103.0	2.3	15	10/12/2016	70	70	20.7	a-p
13*	Nighthawk	Blue River Hybrids	SS	L	Y	Y	N	90.3	3.2	12	9/23/2016	75	65	23.4	a-p
58	9500W	Richardson Seeds, Ltd	FS	M	N	N	N	74.0	2.7	0	9/18/2016	57	62	23.4	b-p
71	Canex BMR 540	Sharp Bros. Seed Co.	FS	ML	Y	Y	N	99.7	0.7	58	10/10/2016	85	70	23.4	b-p
8	AS6401	Alta Seeds	SS	L	Y	N	N	70.7	0.8	0	9/28/2016	92	68	23.3	b-p
53	Silo 700D BMR	Richardson Seeds, Ltd	FS	ML	Y	N	N	104.7	1.7	63	10/18/2016	89	62	23.2	b-p
80	SP3903BD	Sorghum Partners, LLC	FS	ML	N	N	N	103.0	2.3	30	10/12/2016	56	67	23.1	b-p
96	BMR 331	Winfield	FS	ML	Y	N	N	107.0	2.3	37	10/14/2016	59	65	22.9	b-p
92	XMossBMR	Moss Seed Co.	FS	PS	Y	N	Y	20.0	0.8	13	10/25/2016	95	74	22.7	a-q
27	F4C208	Ceres, Inc	FS	M	N	N	N	80.0	3.2	25	9/15/2016	70	74	22.6	b-p
17	Tridan	Browning Seed Inc	SS	M	N	N	N	69.0	0.0	13	9/8/2016	107	62	22.4	b-p
87	SP4105	Sorghum Partners, LLC	SXSu	PS	N	N	N		1.3	10	10/25/2016	98	70	22.4	b-p
65	BMR GOLD X-W	Scott Seed Co.	FS	M	Y	N	Y	59.0	1.5	0	9/5/2016	78	70	22.1	b-q
4	AF7301	Alta Seeds	FS	M	Y	N	Y	81.0	1.3	0	9/15/2016	77	71	22.1	b-q
91	CHR12FS0012	Sorghum Partners, LLC	FS	ME	N	N	N	67.0	1.7	0	9/10/2016	81	72	21.7	b-q
36	GW 600 BMR	Gayland Ward Seed	FS	M	Y	N	N	70.3	1.7	15	9/12/2016	98	68	21.6	b-q
57	Sweeter N Honey II BMR	Richardson Seeds, Ltd	SS	L	Y	N	N	103.0	0.0	0	10/22/2016	109	69	21.5	b-q
99	BMR 3561	Winfield	FS	ME	Y	N	Y	76.7	2.2	0	9/19/2016	79	71	21.5	b-q
63	GREAT SCOTT BMR-R	Scott Seed Co.	FS	L	Y	Y	N	102.0	3.2	47	10/19/2016	38	68	21.4	c-q
78*	Red Top + BMR	Sorghum Partners, LLC	FS	M	Y	N	N	85.7	4.3	8	9/20/2016	74	72	21.2	b-q
5	AF7401	Alta Seeds	FS	L	Y	Y	N	99.7	0.5	0	9/30/2016	61	75	21.2	c-q
10	Liberty	American Hybrids	SS	ML	N	N	N	65.3	0.3	8	9/10/2016	103	64	20.9	c-q
73	Canex	Sharp Bros. Seed Co.	FS	ME	N	N	Y	62.0	1.5	0	9/8/2016	74	72	20.9	c-q
102	P1151		Corn							0	8/24/2016	75	74	20.8	c-q
19	Sweet Sioux BMR	Browning Seed Inc	SS	M	Y	N	N	63.7	0.3	17	8/31/2016	79	71	20.5	d-q
44	BMR455	Monsanto	SS	M	Y	N	Y	66.3	0.0	7	9/4/2016	79	68	20.4	d-q
14*	Seahawk	Blue River Hybrids	SS	ME	Y	N	N	64.7	4.5	15	9/10/2016	94	61	20.4	d-q
56	Sweeter N Honey BMR	Richardson Seeds, Ltd	SS	ME	Y	N	N	81.0	1.0	7	9/15/2016	85	73	20.3	d-q
38	GW 2120	Gayland Ward Seed	FS	M	N	N	Y	71.5	1.7	0	9/13/2016	72	70	20.3	d-q

* A plot with a sugarcane aphid rating greater than 6.5 and damage that was yield limiting was not included in the hybrid average.

Table 3 continued. 2016 comparison of agronomic characteristics by max yield. †Hybrid information was provided by seed companies. Male sterile entries were pollinated by other hybrids. FS=Forage Sorghum, SS=Sorghum Sudan, SU=Sudangrass, GS=Grain Sorghum. Means followed by the same letter do not significantly differ using LSD (0.05).

Hybrid Information†								Mean SCA Rating, Days to Half-Bloom, Lodging, Harvest Date, Height, Moisture and Yield							
Entry	Hybrid	Hybrid	Sorghum Type	Maturity	Brown Midrib	Brachytic	Male Sterile	Days to HB	Average SCA Rating 10/5/2016	% Lodging at Harvest	Harvest Date	Height at Harvest (in.)	%Moisture at Harvest	Yield (tons/ac)	65% Moiszure
84*	SP2876BMR	Sorghum Partners, LLC	FS	ML	Y	N	N	63.3	2.5	13	9/27/2016	83	71	20.2	c-q
46	Nutricane II	Monsanto	FS	M	N	N	Y	69.7	2.3	0	9/14/2016	79	71	20.1	e-q
12	Rushmore	American Hybrids	SS	ME	N	N	N	65.0	0.0	30	9/2/2016	92	66	20.0	c-q
72*	Canex BMR 550	Sharp Bros. Seed Co.	FS	ML	Y	Y	N	101.7	3.7	50	9/18/2016	71	68	19.8	c-q
1*	AF7101	Alta Seeds	FS	E	Y	N	N	60.7	4.7	23	9/19/2016	75	63	19.7	c-q
74	Silex BMR 503	Sharp Bros. Seed Co.	FS	ML	Y	Y	N	104.0	2.2	68	10/17/2016	62	69	19.7	f-q
43	ST6	Monsanto	SS	M	N	N	Y	76.7	0.3	22	9/13/2016	98	67	19.7	f-q
3	AF7201	Alta Seeds	FS	ME	Y	N	N	60.7	1.7	37	9/13/2016	71	68	19.5	c-q
75	Grazex BMR 301	Sharp Bros. Seed Co.	SS	M	Y	N	N	67.0	0.7	0	9/12/2016	85	69	19.5	g-q
39	GW475BMR	Gayland Ward Seed	FS	E	Y	N	Y	66.7	2.7	0	9/12/2016	76	67	19.5	d-q
100	Check 1 (84G62)		GS					67.0	4.0	0	9/13/2016	37	64	19.5	g-q
98	BMR 3411	Winfield	FS	E	Y	N	N	95.0	3.3	18	10/8/2016	111	71	19.3	g-q
66*	BMR GOLD X-R	Scott Seed Co.	FS	M	Y	N	Y	64.3	3.7	13	9/11/2016	78	73	19.2	e-q
59	X105414	Richardson Seeds, Ltd	FS	ML	Y	N	N	105.0	4.3	45	10/19/2016	79	68	19.2	h-q
25	F4C204	Ceres, Inc	FS	E	N	N	N	59.0	0.7	0	8/28/2016	81	74	19.1	h-q
7	AS6402	Alta Seeds	SS	L	Y	Y	N	95.0	1.5	0	10/3/2016	69	64	19.0	h-q
101	Check 2 (DKS37-07)		GS					62.0	2.5	0	9/10/2016	34	65	18.9	h-q
15	Blackhawk	Blue River Hybrids	SS	ML	Y	N	N	81.0	2.3	15	9/16/2016	88	67	18.9	i-q
47	Sweetleaf II	Monsanto	SS	M	N	N	N	63.7	0.0	0	9/6/2016	93	67	18.7	j-q
16	Cadan 99B	Browning Seed Inc	SS	M	N	N	N	73.0	0.0	0	9/28/2016	101	65	18.3	j-q
103	55VP77		Corn							0	8/24/2016	66	74	18.2	j-q
2*	AF7102	Alta Seeds	FS	E	Y	Y	N	60.0	3.3	0	9/8/2016	56	73	18.0	h-q
31	Sweet Six BMR	Gayland Ward Seed	SS	ME	Y	N	N	59.0	1.5	0	8/27/2016	91	69	18.0	k-q
79	Hikane II	Sorghum Partners, LLC	FS	M	N	N	N	60.7	1.7	0	8/27/2016	81	76	17.9	l-q
22	Wondergreen	Browning Seed Inc	SS	ME	N	N	N	62.3	0.8	0	8/19/2016	94	70	16.9	nopq
9	Brighton	American Hybrids	SS	ML	N	N	N	62.3	0.0	0	8/19/2016	93	68	16.3	opq
32	Nutri King BMR	Gayland Ward Seed	SS	ME	Y	N	N	57.3	0.7	0	8/19/2016	84	74	16.3	opq
11	Lincoln	American Hybrids	SS	ML	Y	N	N	73.0	0.7	32	9/4/2016	77	74	15.8	opq
76	Grazex BMR 801	Sharp Bros. Seed Co.	SS	M	Y	N	N	77.3	2.0	10	9/23/2016	93	71	14.6	pq

* A plot with a sugarcane aphid rating greater than 6.5 and damage that was yield limiting was not included in the hybrid average.

Table 4. 2016 summary of nutritional composition.*Hybrid information was provided by seed companies. Male sterile entries were pollinated by other hybrids. FS=Forage Sorghum, SS=Sorghum Sudan, SU=Sudangrass, GS=Grain Sorghum.

Entry	Hybrid	Hybrid Information*						Nutrient Composition and Calculations								
		Company	Sorghum Type	Maturity	Brown Midrib	Brachytic	Average SCA Rating 10/5/2016	%CP	%ADF	%aNDF	%Lignin	%Starch	%NDFD48	%uNDFom240	%IVTDMD48	
1*	AF7101	Alta Seeds	FS	E	Y	N	4.7	8.9	30.0	43.6	4.5	22.5	53.5	13.7	78.1	
2*	AF7102	Alta Seeds	FS	E	Y	Y	3.3	9.2	29.0	43.8	4.5	20.6	52.3	14.1	78.1	
3	AF7201	Alta Seeds	FS	ME	Y	N	1.7	10.3	27.0	39.4	4.9	28.7	47.9	16.7	79.0	
4	AF7301	Alta Seeds	FS	M	Y	N	1.3	8.3	33.9	51.6	5.2	17.2	51.7	17.5	74.2	
5	AF7401	Alta Seeds	FS	L	Y	Y	0.5	8.1	33.5	50.3	5.4	20.0	48.9	14.4	72.6	
6*	AF8301	Alta Seeds	FS	M	N	N	5.2	6.3	36.5	55.7	5.5	18.2	49.5	20.3	70.8	
7	AS6402	Alta Seeds	SS	L	Y	Y	1.5	8.3	32.3	51.0	4.6	17.6	52.4	15.7	75.7	
8	AS6401	Alta Seeds	SS	L	Y	N	0.8	8.0	37.0	56.6	5.5	10.2	46.4	17.4	69.7	
9	Brighton	American Hybrids	SS	ML	N	N	0.0	6.7	40.6	62.7	6.5	6.9	40.0	23.9	60.8	
10	Liberty	American Hybrids	SS	ML	N	N	0.3	6.9	36.3	54.7	6.0	16.3	44.9	22.1	68.6	
11	Lincoln	American Hybrids	SS	ML	Y	N	0.7	7.1	34.3	53.7	5.2	16.7	46.3	17.4	71.4	
12	Rushmore	American Hybrids	SS	ME	N	N	0.0	9.3	35.0	50.9	6.8	19.9	37.7	23.4	67.2	
13*	Nighthawk	Blue River Hybrids	SS	L	Y	Y	3.2	9.0	30.4	46.6	4.6	24.2	52.5	15.4	77.7	
14*	Seahawk	Blue River Hybrids	SS	ME	Y	N	4.5	7.6	34.9	53.7	5.5	16.6	45.5	20.5	70.0	
15	Blackhawk	Blue River Hybrids	SS	ML	Y	N	2.3	6.3	34.9	53.2	5.7	18.0	47.8	22.1	71.3	
16	Cadan 99B	Browning Seed Inc	SS	M	N	N	0.0	5.3	46.2	69.3	7.7	6.1	38.1	29.2	56.4	
17	Tridan	Browning Seed Inc	SS	M	N	N	0.0	4.9	43.5	65.7	7.2	7.4	40.2	27.0	60.1	
18	Sweet Sioux WMR	Browning Seed Inc	SS	M	N	N	0.5	7.0	42.2	61.4	7.2	9.5	38.2	25.3	60.3	
19	Sweet Sioux BMR	Browning Seed Inc	SS	M	Y	N	0.3	7.8	35.8	53.8	5.8	14.4	42.2	21.0	68.9	
20	Bundle King	Browning Seed Inc	FS	ME	N	N	0.8	7.7	33.9	51.8	5.6	16.3	42.9	20.1	69.8	
21	Silage Master	Browning Seed Inc	FS	ML	N	N	2.0	4.7	39.7	59.9	6.3	7.9	40.9	24.2	62.8	
22	Wondergreen	Browning Seed Inc	SS	ME	N	N	0.8	7.9	37.4	58.8	6.0	8.5	43.0	21.3	65.5	
23	Apache	Browning Seed Inc	FS	ML	N	N	1.0	4.8	43.2	65.9	6.8	2.9	41.2	25.6	59.9	
24	B-52	Browning Seed Inc	SS	PS	N	N	0.0	4.1	45.9	68.9	7.3	0.6	40.5	26.5	57.7	
25	F4C204	Ceres, Inc	FS	E	N	N	0.7	5.9	29.4	48.4	4.1	12.3	51.8	16.2	75.9	
26*	F4C207	Ceres, Inc	FS	M	N	N	4.2	6.0	32.3	49.0	4.1	10.3	53.0	13.1	75.2	
27	F4C208	Ceres, Inc	FS	M	N	N	3.2	7.1	32.4	48.6	5.0	23.1	50.6	19.8	75.0	
28	EJ7281	Ceres, Inc	FS	L	N	N	1.3	4.4	37.8	59.5	5.2	2.4	46.0	19.2	67.3	
29	Super Sugar DM	Gayland Ward Seed	SS	ML	N	N	0.3	4.5	41.5	61.5	6.9	4.9	41.0	23.3	62.6	
30	Sweet Forever BMR	Gayland Ward Seed	SS	PS	Y	N	0.0	4.1	41.3	66.5	5.8	0.5	46.9	21.2	63.4	
31	Sweet Six BMR	Gayland Ward Seed	SS	ME	Y	N	1.5	8.1	32.8	51.8	5.0	15.7	47.5	17.1	73.1	
32	Nutri King BMR	Gayland Ward Seed	SS	ME	Y	N	0.7	8.5	32.8	52.8	4.5	9.6	49.3	14.8	72.6	
35	Silo Pro BMR	Gayland Ward Seed	FS	ML	Y	Y	2.7	6.8	30.0	47.6	4.1	20.5	55.2	14.7	78.2	
36	GW 600 BMR	Gayland Ward Seed	FS	M	Y	N	1.7	8.3	30.3	45.8	4.9	23.2	51.2	16.9	77.0	
37	GW 400 BMR	Gayland Ward Seed	FS	ME	Y	N	1.7	7.1	30.2	48.2	4.2	13.8	51.9	14.3	76.8	
38	GW 2120	Gayland Ward Seed	FS	M	N	N	1.7	8.8	31.0	44.6	5.6	25.6	41.4	21.6	72.9	

* A plot with a sugarcane aphid rating greater than 6.5 and damage that was yield limiting was not included in the hybrid average.

Table 4 continued. 2016 summary of nutritional composition.*Hybrid information was provided by seed companies. Male sterile entries were pollinated by other hybrids. FS=Forage Sorghum, SS=Sorghum Sudan, SU=Sudangrass, GS=Grain Sorghum.

Entry	Hybrid	Hybrid Information*							Nutrient Composition and Calculations								
		Company	Sorghum Type	Maturity	Brown Midrib	Brown Midrib	Average SCA Rating 10/5/2016	%CP	%ADF	%aNDF	%Lignin	%Starch	%NDFD48	%uNDFom240	%IVTDMD48		
39	GW475BMR	Gayland Ward Seed	FS	E	Y	N	2.7	7.6	31.3	44.8	4.6	18.9	52.2	16.0	76.9		
40	EXP 10218	Gayland Ward Seed	FS	M	N	N	2.8	5.8	37.1	57.4	5.2	12.1	49.2	19.3	69.5		
41	EXP 10221 BMR	Gayland Ward Seed	FS	M	Y	Y	2.7	8.8	30.4	43.2	4.4	25.4	50.9	12.1	77.1		
42	EXP 10222 BMR	Gayland Ward Seed	FS	M	Y	Y	1.7	9.2	31.2	46.9	4.8	21.1	52.9	15.7	77.3		
43	ST6	Monsanto	SS	M	N	N	0.3	6.0	39.2	59.6	6.6	13.4	41.7	25.8	65.0		
44	BMR455	Monsanto	SS	M	Y	N	0.0	8.0	32.1	49.9	5.2	17.0	49.1	18.0	73.6		
45	Nutrichoice II	Monsanto	FS	ML	N	N	3.3	4.4	40.6	62.0	5.7	10.0	48.2	20.6	67.5		
46	Nutricane II	Monsanto	FS	M	N	N	2.3	8.7	28.3	40.8	5.1	27.4	43.2	19.4	75.8		
47	Sweetleaf II	Monsanto	SS	M	N	N	0.0	7.0	39.7	60.2	6.7	12.2	41.7	25.3	63.9		
48	FS300	NuTech Seed	FS	ML	N	N	5.0	6.1	36.5	54.3	5.6	18.4	46.8	21.2	70.1		
49	FSB310	NuTech Seed	FS	L	Y	Y	1.7	8.9	33.7	49.9	5.5	21.5	47.1	15.8	73.3		
50	849F	DuPont Pioneer	FS	M	N	N	1.0	7.8	28.8	43.5	5.3	24.6	42.2	20.4	73.8		
51	841F	DuPont Pioneer	FS	ML	N	N	4.3	8.4	29.4	43.9	5.1	29.1	45.8	19.3	75.7		
52*	Silo 700D	Richardson Seeds, Ltd	FS	ML	N	N	5.7	5.3	36.6	53.9	4.9	11.5	54.8	15.6	73.9		
53	Silo 700D BMR	Richardson Seeds, Ltd	FS	ML	Y	N	1.7	5.5	35.2	53.7	5.5	16.5	49.2	18.7	71.1		
54	Pacesetter BMR	Richardson Seeds, Ltd	FS	PS	Y	N	0.0	4.1	41.1	69.3	4.8	0.6	52.0	15.5	65.4		
55	Bundle King BMR	Richardson Seeds, Ltd	FS	L	Y	N	1.3	5.5	36.4	57.4	5.4	8.5	47.3	18.6	68.3		
56	Sweeter N Honey BMR	Richardson Seeds, Ltd	SS	ME	Y	N	1.0	7.0	28.7	45.3	4.4	25.6	54.7	15.0	78.8		
57	Sweeter N Honey II BMR	Richardson Seeds, Ltd	SS	L	Y	N	0.0	5.3	40.8	63.1	6.1	4.5	44.9	19.4	63.8		
58	9500W	Richardson Seeds, Ltd	FS	M	N	N	2.7	7.3	27.5	40.5	4.6	30.8	51.1	13.4	78.8		
59	X105414	Richardson Seeds, Ltd	FS	ML	Y	N	4.3	5.3	34.3	54.6	5.0	13.9	53.6	17.4	73.5		
60	X82414	Richardson Seeds, Ltd	SS	L	Y	N	0.3	4.8	41.8	64.6	6.3	2.5	42.7	20.2	61.3		
61	Sweeter N Honey II	Richardson Seeds, Ltd	SS	L	N	N	0.0	4.8	40.3	59.5	6.7	5.4	39.1	22.8	62.6		
62	X506X44	Scott Seed Co.	FS	PS	Y	N	1.2	4.4	42.4	67.7	5.2	0.5	50.0	16.2	65.8		
63	GREAT SCOTT BMR-R	Scott Seed Co.	FS	L	Y	Y	3.2	7.9	32.8	48.1	4.7	19.7	53.7	13.9	76.4		
64*	GREAT SCOTT BMR-W	Scott Seed Co.	FS	L	Y	Y	3.8	5.7	32.4	51.0	4.0	13.4	55.2	14.1	75.3		
65	BMR GOLD X-W	Scott Seed Co.	FS	M	Y	N	1.5	8.3	29.1	44.5	4.5	14.7	51.1	14.3	77.3		
66*	BMR GOLD X-R	Scott Seed Co.	FS	M	Y	N	3.7	10.3	26.6	39.5	4.9	26.3	43.2	17.2	77.3		
67	X51423	Scott Seed Co.	FS	M	Y	N	2.0	5.4	35.7	55.8	5.1	10.3	48.0	17.2	70.3		
68	GS9	Scott Seed Co.	FS	L	N	N	1.0	4.7	39.6	59.9	6.3	7.8	41.4	22.1	63.4		
69	Canex BMR 210	Sharp Bros. Seed Co.	FS	M	Y	N	0.7	6.6	30.3	48.4	4.8	18.5	51.6	17.5	75.4		
70	Canex BMR 600	Sharp Bros. Seed Co.	FS	ML	Y	N	0.7	4.4	39.6	62.6	5.7	5.7	45.9	20.0	64.6		
71	Canex BMR 540	Sharp Bros. Seed Co.	FS	ML	Y	Y	0.7	6.4	34.6	54.3	5.6	20.0	49.9	18.8	71.9		
72*	Canex BMR 550	Sharp Bros. Seed Co.	FS	ML	Y	Y	3.7	9.1	32.1	48.1	4.8	20.6	52.6	15.4	76.4		
73	Canex	Sharp Bros. Seed Co.	FS	ME	N	N	1.5	8.1	25.4	37.5	4.3	22.4	51.0	12.8	80.2		
74	Silex BMR 503	Sharp Bros. Seed Co.	FS	ML	Y	Y	2.2	6.6	36.4	55.4	4.9	16.0	52.9	16.6	72.5		

* A plot with a sugarcane aphid rating greater than 6.5 and damage that was yield limiting was not included in the hybrid average.

Table 4 continued. 2016 summary of nutritional composition.*Hybrid information was provided by seed companies. Male sterile entries were pollinated by other hybrids. FS=Forage Sorghum, SS=Sorghum Sudan, SU=Sudangrass, GS=Grain Sorghum.

Entry	Hybrid	Hybrid Information*							Nutrient Composition and Calculations								
		Company	Sorghum Type	Maturity	Brown Midrib	Brown Midrib	Average SCA Rating 10/5/2016	%CP	%ADF	%aNDF	%Lignin	%Starch	%NDFD48	%uNDFom240	%IVTDMD48		
75	Grazex BMR 301	Sharp Bros. Seed Co.	SS	M	Y	N	0.7	7.4	36.6	54.6	6.5	16.3	40.8	23.3	66.3		
76	Grazex BMR 801	Sharp Bros. Seed Co.	SS	M	Y	N	2.0	6.3	38.1	57.2	6.3	13.2	44.7	22.4	67.2		
77	SP2774 BMR	Sorghum Partners, LLC	FS	ME	Y	N	1.5	7.3	33.1	50.9	5.3	18.6	49.4	18.5	73.0		
78*	Red Top + BMR	Sorghum Partners, LLC	FS	M	Y	N	4.3	8.6	29.1	45.6	4.2	17.9	56.3	13.2	80.3		
79	Hikane II	Sorghum Partners, LLC	FS	M	N	N	1.7	7.0	32.6	50.1	4.9	12.4	48.1	17.5	73.1		
80	SP3903BD	Sorghum Partners, LLC	FS	ML	N	N	2.3	7.4	34.8	55.4	4.6	18.1	56.3	13.9	75.8		
81	SP3902 BD	Sorghum Partners, LLC	FS	ML	N	N	2.3	7.8	32.1	51.7	4.3	16.5	57.8	14.0	77.9		
82	SS405	Sorghum Partners, LLC	FS	L	N	N	0.0	3.9	46.8	68.7	7.7	6.4	35.9	29.3	53.6		
83*	NK300	Sorghum Partners, LLC	FS	L	N	N	5.2	6.6	34.8	52.5	5.8	23.0	48.1	21.3	71.9		
84*	SP2876BMR	Sorghum Partners, LLC	FS	ML	Y	N	2.5	7.1	32.9	49.6	5.6	20.5	46.7	20.2	72.7		
85	SP1880	Sorghum Partners, LLC	FS	L	N	N	0.3	3.8	43.5	64.1	6.9	3.4	38.3	24.8	58.6		
86	SS304	Sorghum Partners, LLC	FS	ML	N	N	0.8	4.8	36.9	54.9	5.9	10.5	42.9	22.3	67.2		
87	SP4105	Sorghum Partners, LLC	SXSu	PS	N	N	1.3	4.5	42.9	67.8	5.5	0.4	48.7	17.3	65.0		
89	Sordan Headless	Sorghum Partners, LLC	SXS	PS	N	N	0.2	4.1	47.2	71.4	7.4	0.4	38.9	27.5	55.4		
90	CHR14FB0240	Sorghum Partners, LLC	FS	PS	Y	N	0.8	6.5	27.0	41.7	4.5	27.0	47.1	18.1	77.3		
91	CHR12FS0012	Sorghum Partners, LLC	FS	ME	N	N	1.7	8.1	30.3	44.6	5.5	25.0	42.7	20.4	73.7		
92	XMossBMR	Moss Seed Co.	FS	PS	Y	N	0.8	4.7	44.5	70.2	5.7	0.4	48.5	19.0	63.7		
93	4Ever Green	Walter Moss Seed Co.	FS	PS	N	N	0.0	4.2	44.5	69.5	6.6	0.6	43.1	25.9	59.4		
94	Mega Green	Walter Moss Seed Co.	SS	PS	N	N	0.8	3.9	46.1	69.9	7.4	0.4	39.6	27.1	56.7		
95	BMR 3631	Winfield	FS	L	Y	N	2.3	7.4	31.4	50.6	4.2	15.8	56.8	14.1	77.8		
96	BMR 331	Winfield	FS	ML	Y	N	2.3	6.0	35.9	56.6	4.5	15.7	56.0	14.3	74.7		
97*	EXP 1601	Winfield	FS	E	Y	N	3.7	7.1	30.2	45.9	4.8	22.1	50.4	17.4	76.3		
98	BMR 3411	Winfield	FS	E	Y	N	3.3	5.8	34.6	56.2	4.4	6.3	53.3	14.6	73.0		
99	BMR 3561	Winfield	FS	ME	Y	N	2.2	6.8	28.4	46.1	3.8	15.2	57.1	13.3	80.4		
100	Check 1 (84G62)		GS				4.0	9.5	27.3	38.9	5.1	29.4	49.8	13.0	78.9		
101	Check 2 (DKS37-07)		GS				2.5	8.5	24.8	36.3	4.5	32.5	53.0	12.1	81.7		
102	P1151 with ear†	Corn						6.9	29.0	47.4	3.8	9.0	53.8	12.9	76.4		
103	55VP77 with ear†	Corn						8.4	28.9	45.8	4.4	12.3	50.3	13.3	75.4		
102-2	P1151 without ear†	Corn						7.6	31.9	51.5	4.6	7.9	49.7	15.7	72.2		
103-2	55VP77 without ear†	Corn						8.8	34.4	53.1	5.3	3.0	46.1	14.5	69.4		

* A plot with a sugarcane aphid rating greater than 6.5 and damage that was yield limiting was not included in the hybrid average.

† Corn samples were processed for nutritional quality for all replications with and without the ear for both hybrids.

Table 5. 2016 summary of calculated nutritional quality with forage yield.*Hybrid information was provided by seed companies. Male sterile entries were pollinated by other hybrids. FS=Forage Sorghum, SS=Sorghum Sudan, SU=Sudangrass, GS=Grain Sorghum.

Entry	Hybrid	Hybrid Information*				Nutritional Quality Calculations			Yield (tons/ac) 65% Moisture
		Company	Sorghum Type	Maturity	Brown Midrib	Brachytic	RFQ	TDN	
1*	AF7101	Alta Seeds	FS	E	Y	N	140	61	3380 19.7 c-q
2*	AF7102	Alta Seeds	FS	E	Y	Y	139	61	3386 18.0 h-q
3	AF7201	Alta Seeds	FS	ME	Y	N	154	64	3625 17.5 c-q
4	AF7301	Alta Seeds	FS	M	Y	N	114	57	3139 22.1 b-q
5	AF7401	Alta Seeds	FS	L	Y	Y	101	54	2975 21.2 c-q
6*	AF8301	Alta Seeds	FS	M	N	N	92	53	2935 29.4 a-i
7	AS6402	Alta Seeds	SS	L	Y	Y	114	58	3238 19.0 h-q
8	AS6401	Alta Seeds	SS	L	Y	N	82	52	2813 23.3 b-p
9	Brighton	American Hybrids	SS	ML	N	N	59	46	2568 17.2 opq
10	Liberty	American Hybrids	SS	ML	N	N	90	53	2981 20.9 c-q
11	Lincoln	American Hybrids	SS	ML	Y	N	91	54	2947 15.8 opq
12	Rushmore	American Hybrids	SS	ME	N	N	84	53	2938 18.9 c-q
13*	Nighthawk	Blue River Hybrids	SS	L	Y	Y	130	61	3426 23.4 a-p
14*	Seahawk	Blue River Hybrids	SS	L	Y	Y	91	54	3005 20.4 d-q
15	Blackhawk	Blue River Hybrids	SS	ME	Y	N	98	55	3103 18.9 i-q
16	Cadan 99B	Browning Seed Inc	SS	M	N	N	46	41	2305 18.3 j-q
17	Tridan	Browning Seed Inc	SS	M	N	N	54	45	2497 22.4 b-p
18	Sweet Sioux WMR	Browning Seed Inc	SS	M	N	N	59	45	2474 23.9 a-p
19	Sweet Sioux BMR	Browning Seed Inc	SS	M	Y	N	83	52	2849 20.5 d-q
20	Bundle King	Browning Seed Inc	FS	ME	N	N	93	55	3106 26.1 a-o
21	Silage Master	Browning Seed Inc	FS	ML	N	N	67	48	2699 27.5 a-j
22	Wondergreen	Browning Seed Inc	SS	ME	N	N	73	50	2772 16.9 nopq
23	Apache	Browning Seed Inc	FS	ML	N	N	56	45	2510 31.0 abc
24	B-52	Browning Seed Inc	SS	PS	N	N	48	41	2274 29.3 a-e
25	F4C204	Ceres, Inc	FS	E	N	N	127	61	3424 19.1 h-q
26*	F4C207	Ceres, Inc	FS	M	N	N	116	57	3173 25.1 a-o
27	F4C208	Ceres, Inc	FS	M	N	N	118	58	3225 22.6 b-p
28	EJ7281	Ceres, Inc	FS	L	N	N	77	51	2834 33.0 a
29	Super Sugar DM	Gayland Ward Seed	SS	ML	N	N	62	46	2564 27.2 a-n
30	Sweet Forever BMR	Gayland Ward Seed	SS	PS	Y	N	66	48	2716 23.8 a-p
31	Sweet Six BMR	Gayland Ward Seed	SS	ME	Y	N	102	56	3086 18.0 k-q
32	Nutri King BMR	Gayland Ward Seed	SS	ME	Y	N	100	55	3033 16.3 opq
35	Silo Pro BMR	Gayland Ward Seed	FS	ML	Y	Y	134	60	3353 24.6 a-o
36	GW 500 BMR	Gayland Ward Seed	FS	M	Y	N	128	60	3328 21.6 b-q
37	GW 400 BMR	Gayland Ward Seed	FS	ME	Y	N	123	60	3346 24.3 a-p
38	GW 2120	Gayland Ward Seed	FS	M	N	N	115	58	3226 20.3 d-q

* A plot with a sugarcane aphid rating greater than 6.5 and damage that was yield limiting was not included in the hybrid average.

Table 5 continued. 2016 summary of calculated nutritional quality with forage yield.*Hybrid information was provided by seed companies. Male sterile entries were pollinated by other hybrids. FS=Forage Sorghum, SS=Sorghum Sudan, SU=Sudangrass, GS=Grain Sorghum.

Entry	Hybrid	Company	Hybrid Information*			Nutritional Quality Calculations			Yield (tons/ac) 65% Moisture
			Sorghum Type	Maturity	Brown Midrib	Brown Midrib	RFQ	TDN	
39	GW475BMR	Gayland Ward Seed	FS	E	Y	N	133	132	3338 19.5 d-q
40	EXP 10218	Gayland Ward Seed	FS	M	N	N	98	90	2939 25.2 a-p
41	EXP 10221 BMR	Gayland Ward Seed	FS	M	Y	Y	155	155	3385 23.7 a-p
42	EXP 10222 BMR	Gayland Ward Seed	FS	M	Y	Y	128	128	3307 25.0 a-p
43	ST6	Monsanto	SS	M	N	N	91	69	2774 19.7 f-q
44	BMR455	Monsanto	SS	M	Y	N	120	111	3213 20.4 d-q
45	Nutrichoice II	Monsanto	FS	ML	N	N	87	73	2572 28.4 a-h
46	Nutricane II	Monsanto	FS	M	N	N	154	138	3515 20.1 e-q
47	Sweetleaf II	Monsanto	SS	M	N	N	90	68	2750 18.7 j-q
48	FS300	NuTech Seed	FS	ML	N	N	104	91	2920 23.9 a-p
49	FSB310	NuTech Seed	FS	L	Y	Y	120	105	3028 25.1 a-o
50	849F	DuPont Pioneer	FS	M	N	N	142	123	3467 30.2 abc
51	841F	DuPont Pioneer	FS	ML	N	N	143	129	3382 23.6 a-p
52*	Silo 700D	Richardson Seeds, Ltd	FS	ML	N	N	104	104	2854 25.9 a-o
53	Silo 700D BMR	Richardson Seeds, Ltd	FS	ML	Y	N	110	103	3071 23.2 b-p
54	Pacesetter BMR	Richardson Seeds, Ltd	FS	PS	Y	N	77	72	2723 23.5 a-p
55	Bundle King BMR	Richardson Seeds, Ltd	FS	L	Y	N	98	86	2984 30.9 abc
56	Sweeter N Honey BMR	Richardson Seeds, Ltd	SS	ME	Y	N	138	142	3536 20.3 d-q
57	Sweeter N Honey II BMR	Richardson Seeds, Ltd	SS	L	Y	N	84	67	2653 21.5 b-q
58	9500W	Richardson Seeds, Ltd	FS	M	N	N	155	156	3667 23.4 b-p
59	X105414	Richardson Seeds, Ltd	FS	ML	Y	N	108	109	3164 19.2 h-q
60	X82414	Richardson Seeds, Ltd	SS	L	Y	N	81	61	2584 23.8 a-p
61	Sweeter N Honey II	Richardson Seeds, Ltd	SS	L	N	N	90	63	2617 27.2 a-l
62	X506X44	Scott Seed Co.	FS	PS	Y	N	77	65	2427 27.1 a-m
63	GREAT SCOTT BMR-R	Scott Seed Co.	FS	L	Y	Y	119	116	3069 21.4 c-q
64*	GREAT SCOTT BMR-W	Scott Seed Co.	FS	L	Y	Y	112	112	3075 23.6 a-p
65	BMR GOLD X-W	Scott Seed Co.	FS	M	Y	N	141	138	3464 22.1 b-q
66*	BMR GOLD X-R	Scott Seed Co.	FS	M	Y	N	161	142	3528 19.2 e-q
67	X51423	Scott Seed Co.	FS	M	Y	N	102	89	2928 24.0 a-p
68	GS9	Scott Seed Co.	FS	L	N	N	90	67	2681 25.5 a-k
69	Canex BMR 210	Sharp Bros. Seed Co.	FS	M	Y	N	128	127	3490 24.0 a-p
70	Canex BMR 600	Sharp Bros. Seed Co.	FS	ML	Y	N	86	72	2803 25.9 a-n
71	Canex BMR 540	Sharp Bros. Seed Co.	FS	ML	Y	Y	106	98	3034 23.4 b-p
72*	Canex BMR 550	Sharp Bros. Seed Co.	FS	ML	Y	Y	124	122	3216 19.8 c-q
73	Canex	Sharp Bros. Seed Co.	FS	ME	N	N	178	183	3884 20.9 c-q
74	Silex BMR 503	Sharp Bros. Seed Co.	FS	ML	Y	Y	104	101	2874 19.7 f-q

* A plot with a sugarcane aphid rating greater than 6.5 and damage that was yield limiting was not included in the hybrid average.

Table 5 continued. 2016 summary of calculated nutritional quality with forage yield.*Hybrid information was provided by seed companies. Male sterile entries were pollinated by other hybrids. FS=Forage Sorghum, SS=Sorghum Sudan, SU=Sudangrass, GS=Grain Sorghum.

Entry	Hybrid	Company	Hybrid Information*			Nutritional Quality Calculations			Yield (tons/ac) 65% Moisture
			Sorghum Type	Maturity	Brown Midrib	Brown Midrib	RFQ	TDN	
75	Grazex BMR 301	Sharp Bros. Seed Co.	SS	M	Y	N	103	80	2915 19.5 g-q
76	Grazex BMR 801	Sharp Bros. Seed Co.	SS	M	Y	N	97	79	2834 14.6 pq
77	SP2774 BMR	Sorghum Partners, LLC	FS	ME	Y	N	115	108	3199 23.8 a-p
78*	Red Top + BMR	Sorghum Partners, LLC	FS	M	Y	N	136	142	3520 21.2 b-q
79	Hikane II	Sorghum Partners, LLC	FS	M	N	N	118	108	3198 17.9 l-q
80	SP3903BD	Sorghum Partners, LLC	FS	MIL	N	N	105	106	2971 23.1 b-p
81	SP3902 BD	Sorghum Partners, LLC	FS	MIL	N	N	115	122	3247 25.8 a-n
82	SS405	Sorghum Partners, LLC	FS	L	N	N	72	43	2183 28.3 a-i
83*	NK300	Sorghum Partners, LLC	FS	L	N	N	109	99	3049 30.3 a-f
84*	SP2876BMR	Sorghum Partners, LLC	FS	MIL	Y	N	119	106	3211 20.2 c-q
85	SP1880	Sorghum Partners, LLC	FS	L	N	N	81	54	2476 28.4 a-i
86	SS304	Sorghum Partners, LLC	FS	MIL	N	N	102	83	2921 28.7 a-g
87	SP4105	Sorghum Partners, LLC	SXSu	PS	N	N	76	62	2387 22.4 b-p
89	Sordan Headless	Sorghum Partners, LLC	SXS	PS	N	N	68	42	2173 27.1 a-m
90	CHR14FB0240	Sorghum Partners, LLC	FS	PS	Y	N	153	142	3585 26.8 a-m
91	CHR12FS0012	Sorghum Partners, LLC	FS	ME	N	N	137	118	3320 21.7 b-q
92	XMossBMR	Moss Seed Co.	FS	PS	Y	N	72	58	2312 22.7 a-q
93	4Ever Green	Walter Moss Seed Co.	FS	PS	N	N	73	53	2421 31.0 abcd
94	Mega Green	Walter Moss Seed Co.	SS	PS	N	N	71	46	2301 28.7 a-g
95	BMR 3631	Winfield	FS	L	Y	N	119	123	3250 20.7 a-p
96	BMR 331	Winfield	FS	MIL	Y	N	100	101	2894 22.9 b-p
97*	EXP 1601	Winfield	FS	E	Y	N	133	129	3410 24.1 a-p
98	BMR 3411	Winfield	FS	E	Y	N	104	101	3038 19.3 g-q
99	BMR 3561	Winfield	FS	ME	Y	N	135	142	3533 21.5 b-q
100	Check 1 (84G62)		GS				162	159	3611 19.5 g-q
101	Check 2 (DKS37-07)		GS				181	189	3891 18.9 h-q
102	P1151 with eart†		Corn				131	132	3413 20.8 c-q
103	55VP77 with eart†		Corn				133	126	3366 18.2 j-q
102-2	P1151 without eart†		Corn				122	114	3178
103-2	55VP77 without eart†		Corn				110	93	2959

* A plot with a sugarcane aphid rating greater than 6.5 and damage that was yield limiting was not included in the hybrid average.

† Corn samples were processed for nutritional quality for all replicates with and without the ear for both hybrids.

Table 6. 2016 grain yields reported for FSA to update Loan Deficiency Payment Tables as requested at the time of entry to the trial. Grain yields for all hybrids evaluated as a percent of the trial's long term grain sorghum check Pioneer 84G62. (2016 84G62 yield: 7762 lbs/acre; 7 year avg: 8144 lbs/acre).

Entry	Hybrid	Company	Sorghum Type	Maturity	Male Sterile	Grain Yield, lb/ac	Days to HB	SCA Rating	Yield as a % of the 2016 Grain Sorghum Check (84G62)	Yield as a % of the Grain Sorghum Check (84G62) 7-year average
5	AF7401	Alta Seeds	FS	L	N	9878	100	0.5	1.27	1.21
58	9500W	Richardson Seeds, Ltd	FS	M	N	8741	74	2.7	1.13	1.07
101	Check 2 (DKS37-07)					8546	62	2.5	1.10	1.05
6	AF8301	Alta Seeds	FS	M	N	8173	95	5.2	1.05	1.00
40	EXP 10218	Gayland Ward Seed	FS	M	N	7940	108	2.8	1.02	0.97
80	SP3903BD	Sorghum Partners, LLC	FS	ML	N	7813	103	2.3	1.01	0.96
100	Check 1 (84G62)					7762	67	4.0	1.00	0.95
51	841F	DuPont Pioneer	FS	ML	N	7358	70	4.3	0.95	0.90
64	GREAT SCOTT BMR-W	Scott Seed Co.	FS	L	N	7261	107	3.8	0.94	0.89
42	EXP 10222 BMR	Gayland Ward Seed	FS	M	N	7008	86	1.7	0.90	0.86
48	FS300	NuTech Seed	FS	ML	N	6727	95	5.0	0.87	0.83
35	Silo Pro BMR	Gayland Ward Seed	FS	ML	N	6671	105	2.7	0.86	0.82
72	Canex BMR 550	Sharp Bros. Seed Co.	FS	ML	N	6624	102	3.7	0.85	0.81
63	GREAT SCOTT BMR-R	Scott Seed Co.	FS	L	N	6612	102	3.2	0.85	0.81
49	FSB310	NuTech Seed	FS	L	N	6420	105	1.7	0.83	0.79
74	Silex BMR 503	Sharp Bros. Seed Co.	FS	ML	N	6255	104	2.2	0.81	0.77
91	CHR12FS0012	Sorghum Partners, LLC	FS	ME	N	6245	67	1.7	0.80	0.77
50	849F	DuPont Pioneer	FS	M	N	6125	67	1.0	0.79	0.75
79	Hikane II	Sorghum Partners, LLC	FS	M	N	5946	61	1.7	0.77	0.73
83	NK300	Sorghum Partners, LLC	FS	L	N	5804	92	5.2	0.75	0.71
53	Silo 700D BMR	Richardson Seeds, Ltd	FS	ML	N	5580	105	1.7	0.72	0.69
81	SP3902 BD	Sorghum Partners, LLC	FS	ML	N	5522	107	2.3	0.71	0.68
2	AF7102	Alta Seeds	FS	E	N	5355	60	3.3	0.69	0.66
1	AF7101	Alta Seeds	FS	E	N	4821	61	4.7	0.62	0.59
71	Canex BMR 540	Sharp Bros. Seed Co.	FS	ML	N	4668	100	0.7	0.60	0.57
69	Canex BMR 210	Sharp Bros. Seed Co.	FS	M	N	4649	77	0.7	0.60	0.57
52	Silo 700D	Richardson Seeds, Ltd	FS	ML	N	4265	96	5.7	0.55	0.52
66	BMR GOLD X-R	Scott Seed Co.	FS	M	Y	3843	64	3.7	0.50	0.47
67	X51423	Scott Seed Co.	FS	M	N	3765	105	2.0	0.48	0.46
84	SP2876BMR	Sorghum Partners, LLC	FS	ML	N	3736	63	2.5	0.48	0.46
78	Red Top + BMR	Sorghum Partners, LLC	FS	M	N	3727	86	4.3	0.48	0.46
90	CHR14FB0240	Sorghum Partners, LLC	FS	PS	N	3548	74	0.8	0.46	0.44
3	AF7201	Alta Seeds	FS	ME	N	3461	61	1.7	0.45	0.43
68	GS9	Scott Seed Co.	FS	L	N	3371	105	1.0	0.43	0.41
82	SS405	Sorghum Partners, LLC	FS	L	N	3236	105	0.0	0.42	0.40
59	X105414	Richardson Seeds, Ltd	FS	ML	N	3230	105	4.3	0.42	0.40
86	SS304	Sorghum Partners, LLC	FS	ML	N	3162	98	0.8	0.41	0.39
36	GW 600 BMR	Gayland Ward Seed	FS	M	N	2980	70	1.7	0.38	0.37
65	BMR GOLD X-W	Scott Seed Co.	FS	M	Y	2853	59	1.5	0.37	0.35
56	Sweeter N Honey BMR	Richardson Seeds, Ltd	SS	ME	N	2822	81	1.0	0.36	0.35
21	Silage Master	Browning Seed Inc	FS	ML	N	1692	100	2.0	0.22	0.21
23	Apache	Browning Seed Inc	FS	ML	N	1535	106	1.0	0.20	0.19
77	SP2774 BMR	Sorghum Partners, LLC	FS	ME	N	1531	74	1.5	0.20	0.19
89	Sordan Headless	Sorghum Partners, LLC	SXS	PS	N	54		0.2	0.01	0.01