Summary of Six Years of Forage Sorghum Variety Trials

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A summary of six years of forage sorghum variety trials is presented in Tables 1 and 2. Trials were conducted from 2000 to 2005 at the Texas Agricultural Experiment Station Bush Farm, located approximately 8 miles west of Amarillo. Only those varieties that were entered in the trials for at least three years are included. A summary of the results along with the procedures used in conducting the trials for any given year can be found at http://amarillo.tamu.edu.

Each year all varieties were planted on 30-inch raised beds at a seeding rate of 120,000 seed/acre. Nitrogen and phosphorus application rates varied each year depending on soil tests results. The trials were considered fully irrigated with approximately 13 inches of total water applied during the growing season by furrow. Beginning in August, each variety was checked weekly for maturity. Once a variety reached the soft dough stage, the variety was marked for harvest that week. Harvest of early maturing varieties usually began in late August or the first of September. Late maturing varieties, including the photoperiod sensitive varieties, were usually harvested in mid-October. All forage (silage) yields are reported at 65% moisture. Nutrient analyses were conducted by Dairy One, in Ithaca, NY. Grain yield was collected from all grain producing varieties once plots reached physiological maturity.

Results and Interpretation

The summary of six years of evaluations is shown in Tables 1 and 2. In both tables the first four columns provide identical information, including the number of years a variety has been tested, variety name, company that sells it, and description characteristics of the variety.

More confidence should be placed in those varieties that have been tested for more years. Those varieties that are male-sterile were pollinated in the field by adjacent varieties. Most companies will provide enough pollinator seed in the seed bag for sufficient pollination to occur to produce grain if requested.

Table 1 presents plant height, moisture, and lodging scores at silage harvest, along with yield and nutrient analyses. The data presented are averages across years.

Table 2 refers to data for each variety that has been **indexed** to corn. This was done by comparing each variety to corn (NC+ 7117) that was grown adjacent to the sorghum plots each year. In years 2000 - 2003 the corn was fully irrigated, using significantly more water than was required to produce the sorghum. In years 2004 - 2005 the corn was irrigated exactly like the sorghum. This resulted in a corn yield that averaged 18.2 ton/ac compared to the 24 ton/ac

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average in 2000 - 2003. Because of this discrepancy in how the corn was produced, an average of the corn yield for 2000 - 2003 was used for comparison to sorghum yields in 2004 and 2005. Below is an example of how the calculations were made:

		Years of Evaluation											
	2002	2003	2004										
Variety B yield, ton/Ac	20	22	24										
Corn yield, ton/Ac	22	26	24*										
			* avg. yield 00-03										

Variety B yield (as a percentage of Corn production):

2002: 20/22 * 100 = 92% 2003: 22/26 * 100 = 85% 2004: 24/24 * 100 = 100%

Average yield of variety B as a percentage of corn production over 3 years: 92.3%

This calculation was repeated for % crude protein, % ADF, % NDF, and % IVTD. The lower the % ADF (acid detergent fiber) and % NDF (nutrient detergent fiber) the better the forage is considered from an energy standpoint. Interpretation of the % IVTD (in vitro true digestibility) is just the opposite, with a higher number being desirable.

Indexing each sorghum variety to corn silage is appropriate since corn is considered the standard for the dairy industry. A variety with a %IVTD index value of 100% should be equal to corn silage as an energy source.

In the last three columns of Table 2 the data was summarized based on selected performance criteria. In the first column those varieties with an average yield of at least 90% of fully irrigated corn or marked. The second column is used to indicate those varieties with a % IVTD of 95% of corn silage. The third column shows those varieties that have an average % lodging score of 10% or less. Keep in mind that several factors will influence the degree of lodging that might occur with any particular variety. Lodging can be minimized by:

- Lowering seeding rate. Using a seeding rate of 60,000, rather than the 120,000 seeding rate used in this trial, should lower the potential for lodging.
- Do not over fertilize with N. Abundance of N will increase the potential for lodging.
- Harvest the silage as soon as the plants reach a moisture level of 68%. With most varieties this will be when the grain reaches the soft dough stage. However, if it is observed that the lower leaves are drying out before the grain has reached soft dough stage, a sample should be collected and tested for moisture.

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Table 1. Actual averages across years of agronomic and nutrient analyses of forage sorghum varieties. TCE and TAES, Amarillo, TX.

							Actual Averages Across Years								
Num						Male	Height,	Plant Moist.	%	Silage, Ton/Ac @ 65%	Grain Yield,	Crude Protein,	ADF,	NDF,	IVTD,
Yrs	Variety	Company	Туре	Maturity	BMR	Sterile	ft.	@ Harv.	Lodging	Moist.	lbs/Ac	%	%	%	%
3	2-Way F-103	Warner Seeds, Inc.	Forage Sorghum	М	N	N	5.7	61	15	21.5	5227	7.6	28.9	49.1	73.4
3	4 Ever Green BMR	Walter Moss Seed	Forage Sorghum	PS	Υ	N	9.4	74	3	20.7	0	5.9	34.2	58.7	79.4
3	7R83 (check)	NC+ Hybrids	Grain Sorghum	М	N	N	4.1	55	0	18.2	7304	8.3	22.7	38.4	81.5
3	800HS	NC+ Hybrids	Sorghum/Sudan	PS	N	N	10.6	71	0	30.0	31	5.8	41.3	66.3	67.2
3	BMR 106	Seed Resource	Forage Sorghum	ME	Υ	N	7.4	68	6	19.1	5119	7.4	27.7	46.9	80.7
3	Bonus-R BMR	Drussel Seed	Sorghum/Sudan	PS	Υ	N	9.5	70	2	20.2	864	6.4	33.8	56.5	74.4
3	Century BMR	Walter Moss Seed	Sorghum/Sudan	L	Υ	N	8.2	64	4	17.8	1433	7.5	28.6	48.9	75.0
3	Grazex BMR 727	Sharp Brothers Seed	Sorghum/Sudan	ME	Υ	N	7.2	64	9	19.2	1429	7.9	29.5	50.2	76.7
3	GW 8228	Crosbyton Seed	Forage Sorghum	М	Υ	N	6.9	64	7	20.7	4947	8.5	25.1	42.6	82.3
3	GW 9530F	Crosbyton Seed	Forage Sorghum	ML	N	Υ	7.3	68	2	24.7	5783	8.1	26.7	43.4	78.7
3	Nutri-Ton	NC+ Hybrids	Forage Sorghum	М	N	N	7.3	57	23	29.8	5059	6.9	28.9	48.4	77.1
3	Nutri-Ton II	NC+ Hybrids	Forage Sorghum	ML	N	Ν	7.0	63	21	22.2	4605	6.7	31.2	52.4	72.2
3	Pacesetter	Richardson Seeds	Sorghum/Sudan	PS	N	Ν	10.3	74	2	30.6	0	6.0	41.5	64.4	65.8
3	PaceSetter BMR	Richardson Seeds	Forage Sorghum	PS	Υ	Ν	9.4	73	1	21.3	0	5.9	33.7	58.7	76.7
3	SI-GRO H-45	Golden Harvest	Forage Sorghum	М	N	Ν	6.3	59	16	24.3	6694	7.4	30.5	48.5	74.7
3	Si-Gro H-47	Golden Harvest	Forage Sorghum	М	Υ	Ν	7.6	66	5	24.0	3530	8.2	26.0	43.6	83.7
3	Silmaker 6000	Frontier Seed Co.	Forage Sorghum	М	N	Ν	5.2	66	11	18.1	6668	7.5	27.5	47.0	76.1
3	Silmaker 6500	Frontier Seed Co.	Forage Sorghum	М	N	N	5.4	59	0	19.2	7112	7.4	26.5	44.9	75.9
3	Silo Master D	Richardson Seeds	Forage Sorghum	L	N	N	8.4	63	39	29.9	3881	6.8	29.3	49.0	74.9
3	Silo N Feed	Crosbyton Seed	Forage Sorghum	ML	N	N	7.7	62	54	33.3	4202	7.4	28.6	48.3	74.9
3	Sordan Headless	Sorghum Partners	Sorghum/Sudan	PS	N	Ν	10.0	70	0	23.3	0	5.6	35.4	59.4	69.0
3	Sucrosse 5-R BMR	Warner Seeds, Inc.	Sorghum/Sudan	ME	Υ	N	7.2	62	3	17.7	1116	7.8	28.0	48.9	76.9
3	Sucrosse 9-R PS	Warner Seeds, Inc.	Sorghum/Sudan	PS	N	NA	10.1	72	1	21.7	0	5.6	35.4	59.3	68.4
3	Sugar Graze 2000	Coffey Seed	Sorghum/Sudan	L	N	N	10.0	69	0	24.9	338	6.3	36.7	56.7	70.2
3	Sweet Bee	Warner Seeds, Inc.	Forage Sorghum	М	N	N	7.4	71	12	20.7	2800	7.8	24.8	43.2	77.7
3	Sweet Bee Sterile II	Warner Seeds, Inc.	Forage Sorghum	ME	Υ	Υ	6.6	66	1	21.3	4437	7.7	26.5	44.4	77.7
3	Sweet Choice	AR-B Seed	Forage Sorghum	ML	Υ	Υ	6.7	68	3	23.9	3218	8.1	26.0	44.6	81.2
3	Sweet King	AR-B Seed	Sorghum/Sudan	ML	Υ	N	7.5	69	22	18.7	1945	8.1	30.0	48.1	75.9
3	Trudan Headless	Sorghum Partners	Sudangrass	PS	N	N	9.5	68	0	21.8	141	5.7	35.7	58.7	68.9
4	2-Way	Warner Seeds, Inc.	Forage Sorghum	ML	N	N	8.5	66	13	23.6	4048	6.4	30.7	50.4	74.1
4	2-Way 199PS	Warner Seeds, Inc.	Forage Sorghum	PS	N	NA	10.1	74	7	28.9	0	6.2	39.3	63.4	68.2
4	2-Way BMR	Warner Seeds, Inc.	Forage Sorghum	М	Υ	N	7.8	69	6	19.9	2977	7.3	27.4	46.2	81.1
4	8R18	NC+ Hybrids	Grain Sorghum	ML	N	N	7.4	68	6	20.8	7216	9.1	21.6	36.8	82.3
4	BMR 100	Seed Resource	Forage Sorghum	М	Υ	N	7.3	70	36	23.2	4378	8.3	28.2	46.2	78.1
4	Bundle King BMR	Richardson Seeds	Forage Sorghum	L	Υ	Υ	9.2	69	11	21.1	1966	5.8	33.4	56.2	76.3
4	Canex BMR 310	Sharp Brothers Seed	Forage Sorghum	ME	Υ	N	6.8	67	2	16.5	4802	8.3	24.8	43.8	82.4

Table 1. Actual averages across years of agronomic and nutrient analyses of forage sorghum varieties. TCE and TAES, Amarillo, TX.

		•					Actual Averages Across Years								
							Silage,								
								Plant		Ton/Ac	Grain	Crude			
Num						Male	Height,	Moist.	%	@ 65%	Yield,	Protein,	ADF,	NDF,	IVTD,
Yrs	Variety	Company	Type	Maturity	BMR	Sterile	ft.	@ Harv.	Lodging	Moist.	lbs/Ac	%	%	%	%
4	Dividend	Drussel Seed	Forage Sorghum	ML	Υ	N	7.5	70	43	20.8	3353	8.0	29.1	48.1	77.9
4	FAME	Seed Resource	Forage Sorghum	ME	N	N	6.6	65	14	18.5	6012	8.3	24.5	39.8	80.2
4	FS 555	Seed Resource	Forage Sorghum	L	N	N	9.4	67	40	24.5	3800	6.2	30.9	50.5	75.6
4	Garst 325	Garst Seed	Forage Sorghum	L	N	N	5.6	62	1	26.7	6078	6.7	28.4	48.5	74.5
4	Garst 348 BMR	Garst Seed	Forage Sorghum	ML	Υ	Ν	8.2	68	8	20.0	2826	7.5	26.9	44.8	84.0
4	Mega Green	Walter Moss Seed	Sorghum/Sudan	PS	N	Ν	10.0	73	2	26.0	0	6.1	39.6	64.2	66.4
4	Silo 600D	Richardson Seeds	Forage Sorghum	М	N	N	6.0	64	0	20.5	7037	8.6	25.5	43.1	79.2
4	Sordan 79	Sorghum Partners	Sorghum/Sudan	М	N	N	8.3	65	34	20.5	857	7.0	32.0	52.4	72.2
4	Sug-R-Cane	Seed Resource	Forage Sorghum	М	N	Υ	6.9	69	17	21.4	5996	7.7	26.0	43.9	79.8
4	Trudan 8	Sorghum Partners	Sudangrass	М	N	N	7.4	62	27	16.8	1037	7.8	30.3	48.9	73.7
5	1990	Sorghum Partners	Forage Sorghum	PS	N	Ν	9.9	71	4	29.3	0	5.9	37.8	62.4	69.4
5	Canex	Sharp Brothers Seed	Forage Sorghum	ME	Υ	Υ	6.7	69	1	19.1	3447	7.9	27.0	45.1	81.0
5	DKS 59-09	Monsanto	Forage Sorghum	М	N	Ν	5.8	70	2	19.8	7424	8.5	24.7	41.2	82.1
5	HIKANE II	Sorghum Partners	Forage Sorghum	Е	N	Ν	7.6	70	7	22.9	4123	7.3	27.4	45.7	78.5
5	NK 300	Sorghum Partners	Forage Sorghum	М	N	Ν	5.7	62	23	22.5	6553	7.4	25.6	43.5	77.9
5	Nutri Plus BMR	Production Plus	Sorghum/Sudan	ML	Υ	Ν	8.0	69	30	17.7	2529	8.9	28.8	48.1	74.6
5	Nutri-Cane II	NC+ Hybrids	Forage Sorghum	М	N	Υ	7.2	66	1	23.7	5382	7.5	26.3	43.5	78.3
5	Silo 700D	Richardson Seeds	Forage Sorghum	ML	N	Ν	6.3	63	2	25.1	7108	7.4	28.4	47.1	77.8
5	Silo Plus BMR	Production Plus	Forage Sorghum	ML	Υ	Ν	6.9	63	18	18.9	2760	8.3	26.1	43.6	81.6
5	SS 405	Sorghum Partners	Forage Sorghum	L	N	Ν	9.9	65	9	26.6	1897	5.5	34.2	58.4	69.0
5	SS 506	Sorghum Partners	Forage Sorghum	L	N	Ν	10.6	68	4	25.3	1155	5.8	36.5	59.6	67.7
5	Sugar Graze Ultra	Coffey Seed	Sorghum/Sudan	PS	N	Ν	10.2	72	2	30.6	0	6.1	38.9	62.8	67.7
6	979	Pioneer Hi-Bred Int.	Sorghum/Sudan	ML	N	Υ	7.2	66	10	21.4	975	8.5	29.5	47.6	76.9
6	2-Way SRS	Warner Seeds, Inc.	Forage Sorghum	ML	N	Ν	8.6	65	36	26.1	3711	6.8	30.4	50.6	72.5
6	4 Ever Green	Walter Moss Seed	Forage Sorghum	PS	N	Ν	10.0	75	8	29.8	0	6.1	38.4	63.3	69.8
6	811F	Pioneer Hi-Bred Int.	Forage Sorghum	PS	N	Ν	9.0	72	2	27.9	0	6.3	38.9	64.6	68.6
6	A571 (check)	Monsanto	Grain Sorghum	М	N	N	4.3	58	0	19.9	7288	8.3	26.8	43.6	80.1
6	Canex BMR 208	Sharp Brothers Seed	Forage Sorghum	ME	Υ	Ν	7.1	66	7	20.3	4467	8.3	24.7	42.3	82.2
6	Dairy Master BMR	Richardson Seeds	Forage Sorghum	ML	Υ	N	7.8	67	8	21.8	2374	7.5	26.3	44.5	82.6
6	FS-25E	Monsanto	Forage Sorghum	L	N	N	8.4	67	16	29.8	4563	6.5	31.8	52.9	73.4
6	FS-5	Monsanto	Forage Sorghum	М	N	Ν	7.9	67	1	25.7	4320	7.3	28.4	46.9	77.0
6	Maxi Gain	Coffey Seed	Sorghum/Sudan	PS	N	N	10.0	71	0	30.1	0	6.2	37.5	60.1	68.5
6	Millennium	Walter Moss Seed	Forage Sorghum	L	Υ	N	7.9	69	8	21.7	2319	7.7	26.0	43.9	83.5
6	Nutri-Choice II	NC+ Hybrids	Forage Sorghum	ML	N	N	5.9	62	19	25.4	6718	7.2	29.5	49.5	75.6
6	P84G62 (check)	Pioneer Hi-Bred Int. Inc.	Grain Sorghum	ML	N	N	4.0	59	1	18.3	7235	7.9	26.9	44.4	79.6
6	RedTop Plus BMR	Production Plus	Forage Sorghum	ML	Υ	Ν	7.0	68	6	20.4	3040	8.2	26.4	44.7	80.8

Table 2. Comparison of forage sorghum varieties when indexed to corn. TCE and TAES, Amarillo, TX.

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	ı	T				ı	As a % of Corn							1		
													Yield,	o/ D/TD	400/	
Niuma						Molo	Cilogo	Grain Yield,	Crude Protein,	ADF,	NDE	IVTD,	90% of Full Irr.	% IVTD, 95% of	10% or	
Num Yrs	Variety	Company	Type	Maturity	BMR	Male Sterile	Silage (Ton/Ac)	bu/Ac	%	АDГ, %	NDF, %	1V1D, %	Corn	Corn	Less Lodging	
3	2-Way F-103	Warner Seeds, Inc.	Forage Sorghum	M	N	N	87.1	57.4	95.3	114.2	115.6	90.1	Com	Com	Louging	
3	4 Ever Green BMR	Walter Moss Seed	Forage Sorghum	PS	Y	N	83.9	0.0	74.2	135.4	139.0	97.4		Х	Х	
3	7R83 (check)	NC+ Hybrids	Grain Sorghum	M	N	N	74.5	76.5	108.4	88.4	89.8	99.3		X	X	
3	800HS	NC+ Hybrids	Sorghum/Sudan	PS	N	N	124.7	0.3	72.1	149.2	144.8	83.5	Х	^	X	
3	BMR 106	Seed Resource	Forage Sorghum	ME	Y	N	78.5	53.9	96.4	108.4	110.3	98.3	^	Х	X	
3	Bonus-R BMR	Drussel Seed	Sorghum/Sudan	PS	Y	N	81.9	9.5	79.5	134.0	134.2	91.3		^	X	
3	Century BMR	Walter Moss Seed	Sorghum/Sudan	L	Y	N	72.3	15.8	95.4	111.7	114.8	91.9			X	
3	Grazex BMR 727	Sharp Brothers Seed	Sorghum/Sudan	ME	Y	N	78.5	15.8	91.4	101.4	104.6	97.1		Х	X	
3	GW 8228	Crosbyton Seed	Forage Sorghum	M	Y	N	86.4	60.7	92.7	86.3	88.5	104.8		X	X	
3	GW 9530F	Crosbyton Seed	Forage Sorghum	ML	N	Y	104.1	68.4	100.3	104.3	101.7	96.4	Х	X	X	
3	Nutri-Ton	NC+ Hybrids	Forage Sorghum	M	N	N	125.7	58.0	80.2	98.9	100.4	97.6	X	X		
3	Nutri-Ton II	NC+ Hybrids	Forage Sorghum	ML	N	N	89.8	50.6	85.2	122.5	123.3	88.6	X	^		
3	Pacesetter	Richardson Seeds	Sorghum/Sudan	PS	N	N	129.3	0.0	68.1	142.8	134.3	83.4	X		Х	
3	PaceSetter BMR	Richardson Seeds	Forage Sorghum	PS	Y	N	86.6	0.0	74.2	132.9	134.3	94.1			X	
3	SI-GRO H-45	Golden Harvest	Forage Sorghum	M	N	N	102.2	77.0	84.5	103.5	100.1	94.1	Х			
3	Si-Gro H-47	Golden Harvest	Forage Sorghum	M	Y	N	102.2	42.3	93.1	89.3	90.6	106.1	X	Х	Х	
3	Silmaker 6000	Frontier Seed Co.	Forage Sorghum	M	N	N	74.0	73.2	94.5	107.8	110.5	93.2		^		
3	Silmaker 6500	Frontier Seed Co.	Forage Sorghum	M	N	N	78.0	78.2	93.4	104.6	105.6	93.1			Х	
3	Silo Master D	Richardson Seeds	Forage Sorghum	L	N	N	126.0	43.0	78.2	100.5	101.7	94.8	Х	Х		
3	Silo N Feed	Crosbyton Seed	Forage Sorghum	ML	N	N	140.5	46.6	84.9	99.1	101.7	94.8	X	X		
3	Sordan Headless	Sorghum Partners	Sorghum/Sudan	PS	N	N	94.7	0.0	69.6	140.3	140.5	84.6	X		Х	
3	Sucrosse 5-R BMR	Warner Seeds, Inc.	Sorghum/Sudan	ME	Y	N	72.0	12.3	98.4	110.8	115.6	94.3			X	
3	Sucrosse 9-R PS	Warner Seeds, Inc.	Sorghum/Sudan	PS	N	NA	88.2	0.0	71.3	139.4	139.9	83.9			X	
3	Sugar Graze 2000	Coffey Seed	Sorghum/Sudan	L	N	N	102.1	3.6	82.3	143.1	133.2	85.6	Х		X	
3	Sweet Bee	Warner Seeds, Inc.	Forage Sorghum	M	N	N	84.2	30.9	98.5	97.5	101.4	95.1		Х		
3	Sweet Bee Sterile II	Warner Seeds, Inc.	Forage Sorghum	ME	Y	Y	86.4	48.7	98.3	103.8	104.0	95.1		X	Х	
3	Sweet Choice	AR-B Seed	Forage Sorghum	ML	Y	Y	98.2	33.8	105.8	102.3	105.3	99.0	Х	X	X	
3	Sweet King	AR-B Seed	Sorghum/Sudan	ML	Y	N	76.4	20.7	106.2	116.8	113.1	92.4				
3	Trudan Headless	Sorghum Partners	Sudangrass	PS	N	N	88.4	1.6	72.3	140.8	138.1	84.4			Х	
4	2-Way	Warner Seeds, Inc.	Forage Sorghum	ML	N	N	96.6	43.4	81.8	118.7	116.8	90.8	Х			
4	2-Way 199PS	Warner Seeds, Inc.	Forage Sorghum	PS	N	NA	118.8	0.0	79.5	150.8	146.4	83.6	X		Х	
4	2-Way BMR	Warner Seeds, Inc.	Forage Sorghum	M	Y	N	82.0	31.9	94.0	104.5	105.8	99.4			X	
4	8R18	NC+ Hybrids	Grain Sorghum	ML	N	N	87.4	83.4	105.1	75.3	77.5	103.8		Х	X	
4	BMR 100	Seed Resource	Forage Sorghum	M	Y	N	97.3	50.6	102.4	108.2	106.4	96.2	Х	X		
4	Bundle King BMR	Richardson Seeds	Forage Sorghum	L	Y	Y	86.4	21.0	74.8	128.4	129.9	93.5			 	
4	Canex BMR 310	Sharp Brothers Seed	Forage Sorghum	ME	Y	N	69.1	55.0	102.4	96.0	101.6	101.5		Х	Х	

Table 2. Comparison of forage sorghum varieties when indexed to corn. TCE and TAES, Amarillo, TX.

1 0.1010		Totage Sorgitum varie	otioo wiion iiidoxo	<u>u 10 0011</u>	•		7120,71		As a % o						
			1						A3 a 70 U	1 00111			Yield,		
								Grain	Crude				90% of	% IVTD,	10% or
Num						Male	Silage	Yield,	Protein,	ADF,	NDF,	IVTD,	Full Irr.	95% of	Less
Yrs	Variety	Company	Туре	Maturity	BMR	Sterile	(Ton/Ac)	bu/Ac	%	%	%	%	Corn	Corn	Lodging
4	Dividend	Drussel Seed	Forage Sorghum	ML	Υ	N	85.3	35.8	102.0	111.9	111.1	95.5		Х	
4	FAME	Seed Resource	Forage Sorghum	ME	N	N	77.2	69.5	100.7	93.3	91.4	98.8		Х	
4	FS 555	Seed Resource	Forage Sorghum	L	N	N	102.1	44.6	76.3	119.7	117.3	93.1	Х		
4	Garst 325	Garst Seed	Forage Sorghum	L	N	N	108.1	66.3	80.9	105.8	108.2	92.7	Х		Х
4	Garst 348 BMR	Garst Seed	Forage Sorghum	ML	Υ	N	82.7	32.7	88.2	100.1	99.9	105.0		Χ	Χ
4	Mega Green	Walter Moss Seed	Sorghum/Sudan	PS	N	N	109.9	0.0	72.4	143.5	140.3	82.9	Χ		Χ
4	Silo 600D	Richardson Seeds	Forage Sorghum	М	N	Ν	85.6	80.4	98.5	89.1	91.1	100.0		Χ	Χ
4	Sordan 79	Sorghum Partners	Sorghum/Sudan	М	N	Ν	84.4	9.4	90.7	122.8	120.8	88.6			
4	Sug-R-Cane	Seed Resource	Forage Sorghum	М	N	Υ	89.4	68.3	95.0	100.0	101.0	98.2		Χ	
4	Trudan 8	Sorghum Partners	Sudangrass	М	N	Ν	69.2	11.4	99.4	116.5	112.8	90.4			
5	1990	Sorghum Partners	Forage Sorghum	PS	N	Ν	120.2	0.0	73.5	139.7	139.2	86.1	Χ		Χ
5	Canex	Sharp Brothers Seed	Forage Sorghum	ME	Υ	Υ	78.8	39.3	94.4	100.0	100.1	100.9		Χ	Χ
5	DKS 59-09	Monsanto	Forage Sorghum	М	N	N	82.6	84.8	103.6	93.3	93.4	101.3		Χ	Χ
5	HIKANE II	Sorghum Partners	Forage Sorghum	Е	N	N	93.4	44.3	90.9	101.1	101.7	97.4	Х	Χ	Χ
5	NK 300	Sorghum Partners	Forage Sorghum	М	N	N	92.0	69.6	91.1	94.6	96.5	96.6	Х	Χ	
5	Nutri Plus BMR	Production Plus	Sorghum/Sudan	ML	Υ	N	73.8	28.3	108.8	109.4	109.6	92.2			
5	Nutri-Cane II	NC+ Hybrids	Forage Sorghum	М	N	Υ	98.7	60.7	90.6	96.9	96.5	97.5	Х	Χ	Χ
5	Silo 700D	Richardson Seeds	Forage Sorghum	ML	N	N	105.1	80.3	90.0	109.4	108.7	96.2	Х	Χ	Х
5	Silo Plus BMR	Production Plus	Forage Sorghum	ML	Υ	N	78.2	31.9	99.5	97.6	97.8	101.6		Χ	
5	SS 405	Sorghum Partners	Forage Sorghum	L	N	N	108.8	20.1	69.0	125.2	129.2	85.5	Х		Х
5	SS 506	Sorghum Partners	Forage Sorghum	L	N	N	103.7	12.4	72.5	134.6	132.8	84.0	Х		Х
5	Sugar Graze Ultra	Coffey Seed	Sorghum/Sudan	PS	N	N	128.0	0.0	74.2	147.6	143.5	83.6	Х		Х
6	979	Pioneer Hi-Bred Int.	Sorghum/Sudan	ML	N	Υ	89.0	10.9	103.0	107.3	104.8	95.7		Χ	Χ
6	2-Way SRS	Warner Seeds, Inc.	Forage Sorghum	ML	N	N	108.1	41.6	82.1	111.4	111.7	90.3	Х		
6	4 Ever Green	Walter Moss Seed	Forage Sorghum	PS	N	N	124.0	0.0	72.9	141.4	140.7	86.9	Х		Х
6	811F	Pioneer Hi-Bred Int.	Forage Sorghum	PS	N	N	115.5	0.0	74.9	143.2	143.4	85.5	Х		Х
6	A571 (check)	Monsanto	Grain Sorghum	М	N	N	82.8	82.3	103.1	97.8	96.2	99.4		Х	Χ
6	Canex BMR 208	Sharp Brothers Seed	Forage Sorghum	ME	Υ	Ν	84.3	50.7	98.9	91.1	94.0	102.4		Х	Χ
6	Dairy Master BMR	Richardson Seeds	Forage Sorghum	ML	Υ	N	90.8	27.1	90.5	95.8	98.0	102.9	Х	Х	Х
6	FS-25E	Monsanto	Forage Sorghum	L	N	Ν	123.6	50.9	78.0	118.0	117.9	91.5	X		
6	FS-5	Monsanto	Forage Sorghum	М	N	N	106.4	49.1	88.1	104.7	104.2	95.9	Χ	Χ	X
6	Maxi Gain	Coffey Seed	Sorghum/Sudan	PS	N	N	125.4	0.0	74.0	137.6	133.0	85.3	Х		Х
6	Millennium	Walter Moss Seed	Forage Sorghum	L	Υ	N	90.1	26.4	92.5	95.5	96.9	104.0	Х	Х	Х
6	Nutri-Choice II	NC+ Hybrids	Forage Sorghum	ML	N	N	105.6	74.5	86.5	109.3	110.5	94.2	Х		
6	P84G62 (check)	Pioneer Hi-Bred Int. Inc.	Grain Sorghum	ML	N	N	76.0	82.2	98.3	98.4	98.1	98.8		Χ	Χ
6	RedTop Plus BMR	Production Plus	Forage Sorghum	ML	Υ	N	84.8	34.6	98.8	97.6	98.9	100.6		Χ	Χ