



















**New Mexico 2004 Sorghum-Sudan Variety Trial Results - Dona Ana County, Charley Tharp**

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**Trial Description**

Year of Harvest (yyyy) **2004** Country **United States** State/Province **NM** Study Design (number of replications):  
 Special Test (Describe) **Grazing and production trial with sorghum-sudans, non-brown** County/Area **Dona Ana** Replicated Within Site **3**  
 Soil Name & Texture **clay loam** Soil Depth (inches) \_\_\_\_\_ Longitude \_\_\_\_\_ Replicated Across Sites \_\_\_\_\_  
 Latitude \_\_\_\_\_  
 Planting (mm/dd/yy) **6/1/2004** Harvest Date(s) (mm/dd/yy) **8/20/2004** \_\_\_\_\_  
 Herbicides/Insecticides \_\_\_\_\_  
 Fertilizer Applied (lb/a): Nitrogen \_\_\_\_\_ (P2O5) \_\_\_\_\_ (K2O) \_\_\_\_\_ Other (specify) \_\_\_\_\_ type lb/a type lb/a  
 Temperature (deg F) January February March April May June July August September October November December  
 Rain (inches) \_\_\_\_\_  
 Irrigation (inches) \_\_\_\_\_  
 Population (number or pounds per acre) **25#/A** Row Spacing (inches - enter '0' for broadcast) **7 inches** Total Rain **3.7**  
 Unusual Conditions (or 'none') **Only one cutting after heading and stalk drying, non-BMR.** Total Irrigation \_\_\_\_\_

**Results**

Hybrid/Variety Name	CP, % of DM	ADF, % of DM (optional)	NDF, % of DM	dNDF Dig. 48h, % of NDF	Ash, % of DM	Ether Extract, % of DM	NFC, % of DM	TDN, % of DM	NEI Mcals/lb	NRC 48 h Digestibility	Old DMI lbs/d	Base Forage DMI, lbs/d	Adjusted Total DMI lbs/d	Adjusted Forage DMI, lbs/d	Forage, % of Total DMI	from forage (lbs)	Milk per Ton lbs/ton
<b>Trial Mean</b>	8.0	44.6	70.6	65.0	8.3	1.0	15.9	50.5	0.508	48.743	51.750	16.456	56.384	0.4	0.374	22.649	2146
Local brand Hegari	8.1	45.1	69.8	64.4	7.7	0.85	17.5	51.0	0.513	48.300	51.750	16.640	56.163	21.054	0.375	22.917	2177
Local brand Hegari	7.6	43.5	69.9	66.6	8.9	1.1	16.4	51.2	0.515	49.913	51.750	16.612	56.967	21.829	0.383	24.083	2207
Local brand Hegari	8.3	45.0	72.0	64.0	8.3	1.1	14.0	49.3	0.495	48.015	51.750	16.116	56.021	20.387	0.364	20.948	2055

**New Mexico 2004 Sorghum-Sudan Variety Trial Results - Union County, Daren Brown**

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**Trial Description**

Year of Harvest (yyyy) 2004 Country United States State/Province NM Study Design (number of replications):  
 Special Test (Describe) Grazing/production trial with sorghum-sudans. County/Area Union Replicated Within Site 3  
 Soil Name & Texture clay loam Soil Depth (inches) Longitude Replicated Across Sites  
 Latitude  
 Planting (mm/dd/yy) 6/3/2004 Harvest Date(s) (mm/dd/yy) 6/27/2004 7/16/2004  
 Herbicides/Insecticides  
 Fertilizer Applied (lb/a): Nitrogen (P2O5) (K2O) Other (specify) type lb/a type lb/a  
 Temperature (deg F) January February March April May June July August September October November December  
 Rain (inches)  
 Irrigation (inches)  
 Plant Population (number or pounds per acre) 20#/A Row Spacing (inches - enter '0' for broadcast) 10 inches Total Rain 5.8  
 Unusual Conditions (or 'none') Ample rainfall toward the end of the season produced supplemental hay. Total Irrigation

**Results**

Brand/Company Name	Hybrid/Variety Name	CP, % of DM	ADF, % of DM (optional)	NDF, % of DM	dNDF Dig. 48h, % of NDF	Ash, % of DM	Ether Extract, % of DM	NFC, % of DM	TDN, % of DM	NEI Mcals/lb	NRC 48 h Digestibility	Old DMI lbs/d	Base Forage DMI, lbs/d	Adjusted Total DMI lbs/d	Adjusted Forage DMI, lbs/d	Forage, % of Total DMI
	<b>Trial Mean</b>	16.7	35.4	54.7	71.9	9.2	2.2	20.9	61.3	0.628	53.899	51.750	21.251	58.955	28.5	0.483
Buffalo Brand	Grazex BMR	20.1	33.2	52.1	72.5	10.0	2.6	19.1	62.1	0.637	54.360	51.750	22.297	59.185	29.732	0.502
Seed Resource	SS200 BMR	19.5	33.8	53.1	71.5	10.4	2.8	18.1	61.1	0.626	53.610	51.750	21.877	58.811	28.938	0.492
Sorghum Partners, Inc.	Sordan 79	17.1	35.6	55.9	70.9	10.4	2.9	17.6	59.9	0.612	53.168	51.750	20.773	58.590	27.613	0.471
Buffalo Brand	Grazex BMR	14.0	37.2	56.8	72.0	8.6	1.9	22.5	60.7	0.622	54.008	51.750	20.455	59.009	27.714	0.470
Seed Resource	SS200 BMR	13.9	36.4	55.8	70.7	7.8	1.7	24.6	61.2	0.627	53.055	51.750	20.792	58.534	27.576	0.471
Sorghum Partners, Inc.	Sordan 79	15.9	36.0	54.5	73.6	8.0	1.7	23.8	62.7	0.643	55.193	51.750	21.314	59.600	29.165	0.489

Brand/Company Hybrid/Variety Name	Milk/d from forage (lbs)	Milk per Ton lbs/ton
<b>Trial Mean</b>	42.296	2971
Buffalo Brand Grazex BMR	45.106	3034
Seed Resource SS200 BMR	42.790	2957
Sorghum Partners, Inc. Sordan 79	39.550	2865
Buffalo Brand Grazex BMR	40.641	2933
Seed Resource SS200 BMR	40.748	2955
Sorghum Partners, Inc. Sordan 79	44.941	3082

**New Mexico 2004 Sorghum-Sudan Variety Trial Results - Guadalupe County, Eddy Cordova**

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**Trial Description**

Year of Harvest (yyyy) 2004 Country United States State/Province NM Study Design (number of replications):  
 Special Test (Describe) Grazing/production trial with sorghum-sudans. County/Area Grant Replicated Within Site 4  
 Soil Name & Texture clay loam Soil Depth (inches) Longitude Replicated Across Sites  
 Latitude  
 Planting (mm/dd/yy) 6/11/2004 Harvest Date(s) (mm/dd/yy) 7/26/2004 8/27/2004  
 Herbicides/Insecticides  
 Fertilizer Applied (lb/a): Nitrogen (P2O5) (K2O) Other (specify) type lb/a type lb/a  
 Temperature (deg F) January February March April May June July August eptemb October November December  
 Rain (inches) 71.8 73.5  
 0.0 1.5  
 Irrigation (inches)  
 ant Population (number or pounds per acre) 15#/A Row Spacing (inches - enter '0' for broadcast) 10 inches Total Rain 1.5  
 Unusual Conditions (or 'none') Limited irrigation. Total Irrigation

**Results**

Brand/Company Name	Hybrid/Variety Name	CP, % of DM	ADF, % of DM (optional)	NDF, % of DM	dNDF Dig. 48h, % of NDF	Ash, % of DM	Ether Extract, % of DM	DM % per A	NFC, % of DM	TDN, % of DM	NEI Mcals/lb	NRC 48 h Digestibility
	<b>Trial Mean</b>	12.0	37.9	58.7	70.6	10.1	2.2	14.5	20.8	58.2	0.593	52.916
Sorghum Partners, Inc.	Sordan Headless	10.1	37.6	57.5	71.9	8.8	2.7		24.7	61.3	0.628	53.918
Seed Resource	SS200 BMR	9.7	38.7	60.2	71.1	7.3	2.4		24.2	60.8	0.623	53.333
Seed Resource	Forage King	10.2	37.4	57.3	72.7	8.0	2.4		26.0	62.2	0.638	54.533
Seed Resource	SS200 BMR	13.8	37.1	57.9	69.0	11.3	1.9	15.5	19.0	56.2	0.572	51.720
Sorghum Partners, Inc.	Sordan Headless	11.0	41.3	64.0	67.6	12.2	1.6	12.8	15.0	51.7	0.521	50.715
Seed Resource	Forage King	17.0	35.5	55.2	71.0	13.2	2.2	15.1	16.1	56.7	0.577	53.280
		Bales	% of A	Bales/A	65#/bale	Tons/A						
Yield as of 8/13/2004 (actual yield)	Sordan Headless	18.00	0.0661	272.31	17700.2	8.9						
	SS200 BMR	16.00	0.0661	242.06	15733.9	7.9						
	Forage King	35.00	0.0496	705.65	45867.3	22.9						

Brand/Company Name	Hybrid/Variety Name	Old DMI lbs/d	Base Forage DMI, lbs/d	Adjusted Total DMI lbs/d	Adjusted Forage DMI, lbs/d	Forage, % of Total DMI	Milk/d from forage (lbs)	Milk per Ton lbs/ton	Milk per Acre lbs/acre	Estimated ton/acre
	Trial Mean	51.750	19.823	58.465	26.5	0.454	36.486	2738	36263	
Sorghum Partners, Inc.	Sordan Headless	51.750	20.177	58.964	27.392	0.465	40.718	2973		
Seed Resource	SS200 BMR	51.750	19.276	58.673	26.199	0.447	38.439	2934		
Seed Resource	Forage King	51.750	20.265	59.271	27.786	0.469	42.294	3044		
Seed Resource	SS200 BMR	51.750	20.059	57.869	26.177	0.452	33.870	2588	40114	15.5
Sorghum Partners, Inc.	Sordan Headless	51.750	18.138	57.367	23.755	0.414	26.753	2252	28826	12.8
Seed Resource	Forage King	51.750	21.025	58.647	27.922	0.476	36.843	2639	39849	15.1

**New Mexico 2004 Sorghum-Sudan Variety Trial Results - Guadalupe County, County Manager**

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**Trial Description**

Year of Harvest (yyyy) 2004 Country United States State/Province NM Study Design (number of replications):  
 Special Test (Describe) Grazing trial with sorghum-sudans County/Area Grant Replicated Within Site 4  
 Soil Name & Texture clay loam Soil Depth (inches) Longitude Replicated Across Sites  
 Latitude  
 Planting (mm/dd/yy) 6/11/2004 Harvest Date(s) (mm/dd/yy) 8/27/2004  
 Herbicides/Insecticides type lb/a type lb/a  
 Fertilizer Applied (lb/a): Nitrogen (P2O5) (K2O) Other (specify)  
 Temperature (deg F) January February March April May June July August September October November December  
 Rain (inches) 71.8 73.5 0.0 1.5  
 Irrigation (inches)  
 Plant Population (number or pounds per acre) 15#/A Row Spacing (inches - enter '0' for broadcast) 7 inches Total Rain 1.5  
 Unusual Conditions (or 'none') Very little moisture and no supplemental irrigation. Total Irrigation

**Results**

Brand/Company Name Hybrid/Variety Name	CP, % of DM	ADF, % of DM (optional)	NDF, % of DM	dNDF Dig. 48h, % of NDF	Ash, % of DM	Ether Extract, % of DM	%DM	NFC, % of DM	TDN, % of DM	NEI Mcals/lb	NRC 48 h Digestibility
Trial Mean	7.3	41.0	67.6	64.4	7.7	1.6	56.9	19.6	53.0	0.536	48.300
Dyna-Gro Danny Boy	8.2	40.5	66.5	67.0	7.7	1.7	73.0	19.7	54.9	0.557	50.258
Barkley Seed, Inc. Grassroots 1230	7.3	41.4	68.4	62.5	7.3	1.9	52.1	18.9	52.3	0.528	46.890
Sorghum Partners, Inc. Sordan79	7.3	41.4	67.7	61.4	7.6	1.5	38.8	19.7	51.3	0.516	46.020
Dyna-Gro Danny Boy	8.6	40.7	66.8	64.5	8.2	1.6	68.9	18.6	52.8	0.534	48.353
Barkley Seed, Inc. Grassroots 5150	6.2	41.7	68.9	67.1	8.5	1.7	75.1	18.4	53.1	0.537	50.310
Barkley Seed, Inc. Grassroots 5150	7.6	40.4	67.0	67.0	8.1	1.5	67.5	19.6	54.1	0.548	50.258
Barkley Seed, Inc. Grassroots 1230	6.1	42.7	70.3	63.2	6.6	1.7	40.7	19.2	52.3	0.527	47.415
Barkley Seed, Inc. Grassroots 1230	8.1	40.3	66.3	66.3	8.4	1.8	35.9	19.2	54.2	0.549	49.748
Dyna-Gro Danny Boy	6.6	40.6	67.1	66.4	8.3	1.5	71.0	20.3	53.5	0.541	49.808
Sorghum Partners, Inc. Sordan79	7.0	40.6	66.9	59.6	7.5	1.6	42.2	20.7	51.1	0.515	44.700
Sorghum Partners, Inc. Sordan79	6.6	42.4	69.1	61.2	6.5	1.5	43.5	20.1	51.8	0.522	45.923
Barkley Seed, Inc. Grassroots 5150	8.0	39.9	65.8	66.6	8.0	1.8	73.6	20.2	54.8	0.556	49.920

Brand/Company Name	Hybrid/Variety Name	Old DMI	Base Forage DMI	Adjusted Total DMI	Adjusted Forage DMI	Forage	Milk/d	Milk per Ton	Milk per Acre	Estimated
		lbs/d	lbs/d	lbs/d	lbs/d	% of Total DMI	from forage (lbs)	lbs/ton	lbs/acre	ton/acre
	Trial Mean	51.75	17.189	56.163	21.602	0.384	25.147	2322.75	13315.16	5.7
Dyna-Gro	Danny Boy	51.75	17.459	57.139	22.848	0.400	28.322	2479.21	18098.23	7.3
Barkley Seed, Inc.	Grassroots 1230	51.75	16.969	55.460	20.679	0.373	23.326	2256.01	11753.83	5.2
Sorghum Partners, Inc.	Sordan79	51.75	17.147	55.026	20.423	0.371	22.212	2175.23	8439.89	3.9
Dyna-Gro	Danny Boy	51.75	17.383	56.189	21.822	0.388	25.214	2310.84	15921.70	6.9
Barkley Seed, Inc.	Grassroots 5150	51.75	16.841	57.166	22.256	0.389	26.138	2348.81	17639.57	7.5
Barkley Seed, Inc.	Grassroots 5150	51.75	17.323	57.139	22.713	0.397	27.494	2421.04	16342.05	6.8
Barkley Seed, Inc.	Grassroots 1230	51.75	16.506	55.722	20.477	0.367	23.148	2260.87	9201.75	4.1
Barkley Seed, Inc.	Grassroots 1230	51.75	17.517	56.885	22.652	0.398	27.429	2421.82	8694.33	3.6
Dyna-Gro	Danny Boy	51.75	17.310	56.915	22.475	0.395	26.660	2372.40	16844.04	7.1
Sorghum Partners, Inc.	Sordan79	51.75	17.349	54.368	19.967	0.367	21.457	2149.23	9069.73	4.2
Sorghum Partners, Inc.	Sordan79	51.75	16.807	54.978	20.034	0.364	22.131	2209.34	9610.64	4.4
Barkley Seed, Inc.	Grassroots 5150	51.75	17.658	56.971	22.879	0.402	28.235	2468.23	18166.14	7.4

## Sorghum-sudan Variety Trials 2004 for Farmer Strip Trials

Contact: D. McWilliams, 505-646-3455, cell 505-649-4083, fax 505-646-8085, demcwill@nmsu.edu

Locations include: Clayton, Clovis, Santa Rosa, Grant, Las Cruces

<b>Entry</b>	<b>Variety</b>	<b>Company</b>	<b>Type</b>	<b>Maturity Group</b>	<b>Location 2004</b>
1	SS200 BMR	Seed Resource	HFS	Medium	Santa Rosa, Clayton
2	Danny Boy	Dyna-Gro	SS	PS	Santa Rosa, Las Cruces
3	Sordan Headless	Sorghum Partners, Inc.	SS	PS	Clovis, Santa Rosa
4	Sordan 79/98	Sorghum Partners, Inc.	SS	Medium	Santa Rosa, Clayton
5	PS210 BMR	Seed Resource	HFS	Long	Clovis, Las Cruces
6	Forage King	Seed Resource	SS	Long	Santa Rosa, Las Cruces
7	753 BMR	Garst Seed Company	SS	Long	Clovis, Las Cruces
8	SS100 (Dixie Lee, BMR100)	Dyna-Gro	HFS	Medium-Long, 100 days to soft dough	Las Cruces
9	Grassroots BMR 5150	Barkley Seed, Inc.	HFS	Medium	Santa Rosa, Las Cruces
10	Grassroots BMR 1230	Barkley Seed, Inc.	SS	Long	Santa Rosa, Las Cruces
11	Grassroots 500 BMR	Barkley Seed, Inc.	SS	Long	Las Cruces, Grant

Planting Rate Drilled/rowed	Planting Rate Broadcast	Seeds per pound	Soil Temp for Planting
15-20#/A	20-25#/A		60F (May-June)
15-20#/A	20-25#/A		60F, daylight hours are 12 or more (June)
irrigated is 25-50#/A; dryland is 15-25#/A	irrigated is 30-50#/A; dryland is 20-30#/A		60F, daylight hours are 12 or more (June)
irrigated at 26-32 inches, 25-50#/A; dryland or low irrigation	irrigated at 26-32 inches, 30-50#/A; dryland or low irrigation, 25-30#/A		60F (May-June)
15-20#/A	20-25#/A		60F, daylight hours are 12 or more (June)
irrigated is 25-50#/A; dryland is 15-25#/A	irrigated is 30-50#/A; dryland is 20-30#/A		60F (May-June)
15-20#/A	20-25#/A		60F (May-June)
irrigated, 6#/A, 3-7 seed/ft; dryland, 4-6#/A, 2-4 seed/ft	Irrigated, 7#/A, 3-7 seed/ft; dryland, 4-6#/A, 2-4 seed/ft	16,000; bu wt is 56#	60F (May-June)
15-20#/A	20-25#/A		60F (May-June)
15-20#/A	20-25#/A		60F (May-June)
15-20#/A	20-25#/A		60F (May-June)



**Day Length Min. Plant Characteristics**

**Harvest Recommendations**

	NPS, BMR	Harvest at soft dough stage--later, protein will decline but energy will increase upon heading
Yes	PS, BMR	Harvest at 50 or 70 days, same value through summer, will head out when daylight hours are 12 hours and 20 mi
Yes	PS, not bmr	Harvest at 50 or 70 days, same value through summer, will head out when daylight hours are 12 hours and 20 mi
	NPS, not bmr	Harvest at soft dough stage--later, protein will decline but energy will increase upon heading
Yes	PS, BMR	Harvest at 50 or 70 days, same value through summer, will head out when daylight hours are 12 hours and 20 mi
	NPS, not bmr	Harvest at soft dough stage--later, protein will decline but energy will increase upon heading
	NPS, BMR	Harvest at soft dough stage--later, protein will decline but energy will increase upon heading
	NPS, BMR, resistant to downy mildew, min. pH is 6	Harvest at soft dough stage--later, protein will decline but energy will increase upon heading
	MS, hybrid forage sorghum, BMR	Harvest at 50 or 70 days, same value through summer, will head out when daylight hours are 12 hours and 20 mi
	NPS, BMR	Harvest at soft dough stage--later, protein will decline but energy will increase upon heading
	NPS, BMR	Harvest at soft dough stage--later, protein will decline but energy will increase upon heading

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