

Table A. New Mexico 2011 Dryland Forage Sorghum Performance Test - Agricultural Science Center at Clovis

Investigators: M.A. Marsalis, R.E. Kirksey, B. Niece, and A. Scott

Test Description

Location:	Management Practices:	Growing Conditions:																																																																													
County/Area: Curry Longitude: -103.22 Latitude: 34.60 Elevation: 4435 ft. Soil Name: Olton Soil Texture: clay loam Soil Depth: >60 in.	Previous Crop: fallow Planting Date: 16-Jun Harvest Date: 6-Sep <hr/> Production Inputs <hr/> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Rate</th> <th style="text-align: center;">Date</th> </tr> </thead> <tbody> <tr> <td colspan="3">Fertilizer:</td> </tr> <tr> <td>Nitrogen</td> <td>30 lb/a</td> <td>carryover</td> </tr> <tr> <td>Nitrogen</td> <td>75 lb/a</td> <td>14-Jun</td> </tr> <tr> <td>P₂O₅</td> <td>40 lb/a</td> <td>14-Jun</td> </tr> <tr> <td>S</td> <td>11 lb/a</td> <td>14-Jun</td> </tr> <tr> <td>Zn</td> <td>1 lb/a</td> <td>14-Jun</td> </tr> </tbody> </table> Herbicides: Atrazine 2 pt/a 17-Jun Insecticides: None		Rate	Date	Fertilizer:			Nitrogen	30 lb/a	carryover	Nitrogen	75 lb/a	14-Jun	P ₂ O ₅	40 lb/a	14-Jun	S	11 lb/a	14-Jun	Zn	1 lb/a	14-Jun	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Average Temp. °F</th> <th style="text-align: center;">Precip. in.</th> <th style="text-align: center;">Irrigation[‡] in.</th> </tr> </thead> <tbody> <tr><td>January</td><td></td><td></td><td></td></tr> <tr><td>February</td><td></td><td></td><td></td></tr> <tr><td>March</td><td></td><td></td><td></td></tr> <tr><td>April</td><td></td><td></td><td></td></tr> <tr><td>May</td><td style="text-align: center;">64.0</td><td style="text-align: center;">0.00</td><td></td></tr> <tr><td>June</td><td style="text-align: center;">77.9</td><td style="text-align: center;">1.46</td><td style="text-align: center;">1.60*</td></tr> <tr><td>July</td><td style="text-align: center;">80.0</td><td style="text-align: center;">0.23</td><td></td></tr> <tr><td>August</td><td style="text-align: center;">80.0</td><td style="text-align: center;">1.96</td><td></td></tr> <tr><td>September†</td><td style="text-align: center;">71.8</td><td style="text-align: center;">0.21</td><td></td></tr> <tr><td>October</td><td></td><td></td><td></td></tr> <tr><td>November</td><td></td><td></td><td></td></tr> <tr><td>December</td><td></td><td></td><td></td></tr> </tbody> </table> <hr/> † Sept. 1-6 * Emergence and crust mellowing irrigations <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: right;">Seasonal Precipitation</td> <td style="text-align: right;">3.9 in.</td> </tr> <tr> <td style="text-align: right;">Total Irrigation</td> <td style="text-align: right;">1.6 in.</td> </tr> </table> Date of Last Spring Frost: 3-May Date of First Fall Frost: 19-Oct Frost Free Period: 169 days		Average Temp. °F	Precip. in.	Irrigation [‡] in.	January				February				March				April				May	64.0	0.00		June	77.9	1.46	1.60*	July	80.0	0.23		August	80.0	1.96		September†	71.8	0.21		October				November				December				Seasonal Precipitation	3.9 in.	Total Irrigation	1.6 in.
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Test Design: Replications: 3 Plot Length: 20 ft. Rows per Plot: 2 Row Spacing: 30 in. Seeding Rate: 60,000 seed/a																																																																															

Table B. New Mexico 2011 Dryland Forage Sorghum Performance Test - Agricultural Science Center at Clovis

Results

Brand/Company Name	Hybrid/Variety Name	Sorghum [†] Type	Moisture			CP	NDF	NDFD 48hr	Ash	TDN	NE ₁	Milk/Ton	Milk/Acre
			Dry Forage	Green Forage	at Harvest								
			t/a	t/a	%	%	%	%	%	%	Mcal/lb	lb/t	lb/a
Forage First	FS-5	Conv	2.1	7.7	73.2	11.1	49.9	69.9	7.1	64.7	0.663	3159	6488
B-H Genetics	BH 390 F	Conv	2.0	8.1	75.2	11.9	50.1	70.6	7.8	65.4	0.673	3208	6415
Pioneer HiBred	849 F	Conv	1.9	6.7	71.8	11.0	49.5	68.3	6.8	63.0	0.643	3018	5685
B-H Genetics	BH 380 F	Conv	1.9	6.7	71.8	11.5	48.0	68.2	7.2	63.5	0.653	3059	5724
Pioneer HiBred	841 F	Conv	1.7	5.8	70.8	11.9	48.9	69.2	8.0	64.1	0.657	3105	5193
Sorghum Partners	SS 405	Conv	1.6	6.2	73.7	11.9	47.8	70.1	8.0	64.2	0.657	3118	5055
Eastern Colorado Seeds	HP 95 BMR	BMR	1.5	5.3	71.6	11.5	47.9	71.8	7.2	64.8	0.667	3174	4766
Sorghum Partners	1990	Conv	1.5	5.2	71.2	12.3	48.6	69.3	8.0	63.8	0.653	3085	4581
Sorghum Partners	NK 300	Conv	1.5	4.9	69.9	11.1	46.8	70.5	7.3	63.8	0.653	3098	4603
Eastern Colorado Seeds	HP 1010 BMR	BMR	1.4	5.3	74.3	11.3	46.5	73.9	7.3	65.1	0.670	3216	4402
B-H Genetics	BH 304 FB	BMR	1.3	4.9	74.5	11.6	47.9	73.0	7.8	65.4	0.673	3225	4060
B-H Genetics	BH 312 FBD	BMR	1.2	4.1	71.6	11.6	45.4	73.8	7.5	65.0	0.667	3204	3714
Eastern Colorado Seeds	HP 120 BMR	BMR	1.1	3.6	70.0	12.0	47.1	72.1	8.2	64.8	0.667	3176	3388
Scott Seed Co.	BMR Gold	BMR	1.0	3.6	72.6	10.6	44.6	71.7	6.8	64.2	0.660	3132	3116
Scott Seed Co.	Great Scott	BMR	1.0	3.1	69.6	12.5	46.0	71.0	8.2	64.2	0.660	3128	2971
	Trial Mean		1.5	5.4	72.1	11.6	47.7	70.9	7.5	64.4	0.661	3140	4677
	LSD		0.5	1.9	2.0	0.7	2.8	2.2	0.7	1.1	0.014	88	1582
	LSD P >		0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	CV		19.9	20.6	1.7	3.8	3.5	1.8	5.6	1.0	1.3	1.7	20.2
	F Test		0.0004	<0.0001	<0.0001	0.0006	0.0110	<0.0001	0.0013	0.0035	0.0071	0.0008	0.0007

[†] Sorghum Type: Conv = Conventional, BMR = Brown Midrib