

New Mexico 2020 Dryland Forage Sorghum Performance Test - Agricultural Science Center at Clovis

Investigators: A. Mesbah, A. Scott, and B. Niece

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: 17-Jun Harvest Date: 21-Sep Production Inputs <table border="1"> <thead> <tr> <th></th> <th>Rate</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td colspan="3">Fertilizer:</td> </tr> <tr> <td>Nitrogen</td> <td>30 lb/ac</td> <td>carryover</td> </tr> <tr> <td>Nitrogen</td> <td>60 lb/ac</td> <td>1-May</td> </tr> <tr> <td>Phos</td> <td>30 lb/ac</td> <td>1-May</td> </tr> <tr> <td>S</td> <td>9 lb/ac</td> <td>1-May</td> </tr> <tr> <td>Chelated Zn</td> <td>2 qt/ac</td> <td>1-May</td> </tr> <tr> <td colspan="3">Herbicides:</td> </tr> <tr> <td>Atrazine</td> <td>2 pt/ac</td> <td>19-Jun</td> </tr> <tr> <td>Warrant</td> <td>2 qt/ac</td> <td>19-Jun</td> </tr> <tr> <td colspan="3">Insecticides:</td> </tr> </tbody> </table>		Rate	Date	Fertilizer:			Nitrogen	30 lb/ac	carryover	Nitrogen	60 lb/ac	1-May	Phos	30 lb/ac	1-May	S	9 lb/ac	1-May	Chelated Zn	2 qt/ac	1-May	Herbicides:			Atrazine	2 pt/ac	19-Jun	Warrant	2 qt/ac	19-Jun	Insecticides:			<table border="1"> <thead> <tr> <th></th> <th>Average Temp. °F</th> <th>Precip. in.</th> <th>Irrigation in.</th> </tr> </thead> <tbody> <tr><td>January</td><td>38.2</td><td></td><td></td></tr> <tr><td>February</td><td>38.0</td><td></td><td></td></tr> <tr><td>March</td><td>51.0</td><td></td><td></td></tr> <tr><td>April</td><td>52.4</td><td></td><td></td></tr> <tr><td>May</td><td>67.2</td><td>0.05</td><td></td></tr> <tr><td>June</td><td>75.8</td><td>1.16</td><td></td></tr> <tr><td>July</td><td>79.0</td><td>3.90</td><td></td></tr> <tr><td>August</td><td>79.0</td><td>0.55</td><td></td></tr> <tr><td>September 1-21</td><td>65.5</td><td>0.56</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> <tr> <td>Seasonal Precipitation:</td> <td></td> <td>6.2 in.</td> <td></td> </tr> <tr> <td>Total Irrigation:</td> <td></td> <td>0.0 in.</td> <td></td> </tr> <tr> <td>Date of Last Spring Frost:</td> <td></td> <td>18-Apr</td> <td></td> </tr> <tr> <td>Date of First Fall Frost:</td> <td></td> <td>16-Oct</td> <td></td> </tr> <tr> <td>Frost Free Period:</td> <td></td> <td>181 days</td> <td></td> </tr> </tbody> </table>		Average Temp. °F	Precip. in.	Irrigation in.	January	38.2			February	38.0			March	51.0			April	52.4			May	67.2	0.05		June	75.8	1.16		July	79.0	3.90		August	79.0	0.55		September 1-21	65.5	0.56		October				November				December				Seasonal Precipitation:		6.2 in.		Total Irrigation:		0.0 in.		Date of Last Spring Frost:		18-Apr		Date of First Fall Frost:		16-Oct		Frost Free Period:		181 days	
	Rate	Date																																																																																																									
Fertilizer:																																																																																																											
Nitrogen	30 lb/ac	carryover																																																																																																									
Nitrogen	60 lb/ac	1-May																																																																																																									
Phos	30 lb/ac	1-May																																																																																																									
S	9 lb/ac	1-May																																																																																																									
Chelated Zn	2 qt/ac	1-May																																																																																																									
Herbicides:																																																																																																											
Atrazine	2 pt/ac	19-Jun																																																																																																									
Warrant	2 qt/ac	19-Jun																																																																																																									
Insecticides:																																																																																																											
	Average Temp. °F	Precip. in.	Irrigation in.																																																																																																								
January	38.2																																																																																																										
February	38.0																																																																																																										
March	51.0																																																																																																										
April	52.4																																																																																																										
May	67.2	0.05																																																																																																									
June	75.8	1.16																																																																																																									
July	79.0	3.90																																																																																																									
August	79.0	0.55																																																																																																									
September 1-21	65.5	0.56																																																																																																									
October																																																																																																											
November																																																																																																											
December																																																																																																											
Seasonal Precipitation:		6.2 in.																																																																																																									
Total Irrigation:		0.0 in.																																																																																																									
Date of Last Spring Frost:		18-Apr																																																																																																									
Date of First Fall Frost:		16-Oct																																																																																																									
Frost Free Period:		181 days																																																																																																									
Test Design: Replications: 3 Plot Length: 20 ft. Rows per Plot: 2 Row Spacing: 30 in. Seeding Rate: 50,000 seed/a																																																																																																											

New Mexico 2020 Dryland Forage Sorghum Performance Test - Agricultural Science Center at Clovis

Results

Brand/Company Name	Hybrid/Variety Name	Sorghum Type	Maturity Group	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	
Dyna-Gro Seed	F70FS91 BMR	FS	E	3.6	11.9	69.3	9.3	48.1	75.6	5.6	65.7	0.676	3269	11736
Dyna-Gro Seed	Fullgraze II	SxS	MF	3.5	12.2	70.8	9.3	55.2	71.3	6.2	63.0	0.646	3044	10620
Dyna-Gro Seed	Super Sile 30	FS	ME	3.2	11.0	70.7	10.4	53.4	73.1	6.1	62.8	0.643	3043	9697
Dyna-Gro Seed	Fullgraze II BMR	SxS	MF	2.9	10.7	72.2	9.7	50.5	74.5	6.3	63.5	0.650	3099	9074
Dyna-Gro Seed	TopTon	FS	F	2.8	9.5	70.4	9.7	51.4	71.4	6.0	63.9	0.656	3109	8733
Dyna-Gro Seed	Dynagraze II	SxS	ME	2.8	7.3	61.4	8.1	51.9	69.1	5.1	64.7	0.663	3150	8811
Dyna-Gro Seed	F74FS23 BMR	FS	M	2.6	9.5	72.0	9.7	48.0	78.8	7.1	64.6	0.666	3212	8491
Dyna-Gro Seed	Danny Boy II BMR	SxS	PS	2.4	9.6	74.7	11.0	51.4	76.3	7.1	65.1	0.670	3232	7601
Dyna-Gro Seed	Super Sweet 10	SxS	ME	2.3	6.2	62.8	9.0	50.5	70.4	4.7	65.4	0.673	3208	7342
Dyna-Gro Seed	Super Sile 20	FS	MF	2.3	8.1	71.8	10.8	52.3	74.2	6.5	64.0	0.656	3138	7120
Dyna-Gro Seed	F71FS72 BMR	FS	E	2.2	6.8	67.1	9.5	46.7	77.3	6.4	65.2	0.670	3248	7258
Dyna-Gro Seed	F72FS05 (SCA)	FS	ME	2.2	7.3	70.0	10.3	52.4	72.3	6.1	62.9	0.643	3047	6633
Dyna-Gro Seed	First Graze	SxS	ME	2.1	6.4	67.5	9.2	50.5	70.0	5.4	63.6	0.653	3079	6449
Dyna-Gro Seed	F72FS25 BMR	FS	M	1.9	6.7	70.4	10.7	50.2	76.4	6.8	64.8	0.663	3208	6180
Browning Seed, Inc.	Browning 300	FS	M	1.4	4.0	65.1	10.0	48.5	69.3	5.1	64.9	0.666	3164	4356
Trial Mean				2.5	8.5	69.1	9.8	50.7	73.3	6.01	24.3	0.660	3150	8006
LSD				1.2	4.8	5.0	1.30	3.1	3.06	1.18	1.94	0.023	138	3799
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				28.8	33.6	4.3	8.0	3.6	2.5	11.8	1.8	2.160	2.6	28.4
F Test				0.1301	0.1676	0.7604	0.4916	0.7123	0.3378	0.8424	0.6399	0.5122	0.5199	0.1325