

New Mexico 2015 Dryland Grain Sorghum Performance Test - Agricultural Science Center at Clovis

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

Test Description

Location:	Management Practices:	Growing Conditions:																																																																																																							
<p>County/Area: Curry Longitude: -103.22 Latitude: 34.60 Elevation: 4435 ft. Soil Name: Olton Soil Texture: clay loam Soil Depth: >60 in.</p> <p>Test Design: Replications: 3 Plot Length: 20 ft. Rows per Plot: 2 Row Spacing: 30 in. Seeding Rate: 29,000 seed/a</p>	<p>Previous Crop: fallow Planting Date: 17-Jun Harvest Date: 4-Nov</p> <hr/> <p>Production Inputs</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 20%; text-align: center;">Rate</th> <th style="width: 20%; text-align: center;">Date</th> </tr> </thead> <tbody> <tr> <td colspan="3">Fertilizer:</td> </tr> <tr> <td>Nitrogen</td> <td>36 lb/a</td> <td>carryover</td> </tr> <tr> <td>P₂O₅</td> <td>30 lb/a*</td> <td>17-Mar</td> </tr> <tr> <td>S</td> <td>1.3 lb/a*</td> <td>17-Mar</td> </tr> <tr> <td>Nitrogen</td> <td>16 lb/a*</td> <td>17-Mar</td> </tr> <tr> <td>Nitrogen</td> <td>46 lb/a</td> <td>17-Jun</td> </tr> <tr> <td>S</td> <td>8.3 lb/a</td> <td>17-Jun</td> </tr> <tr> <td colspan="3">Herbicides:</td> </tr> <tr> <td>Glyphosate</td> <td>48 oz/ac</td> <td>preplant</td> </tr> <tr> <td>Sharpen</td> <td>1.5 oz/ac</td> <td>preplant</td> </tr> <tr> <td>Atrazine</td> <td>8 oz/ac</td> <td>preplant</td> </tr> <tr> <td>Atrazine</td> <td>1 pt/ac</td> <td>17-Jun</td> </tr> <tr> <td>Brawl</td> <td>1.25 pt/ac</td> <td>17-Jun</td> </tr> <tr> <td colspan="3">Insecticides:</td> </tr> <tr> <td>Sivanto</td> <td>6 oz/ac</td> <td>27-Aug</td> </tr> <tr> <td>Prevathon</td> <td>8 oz/ac</td> <td>27-Aug</td> </tr> </tbody> </table>		Rate	Date	Fertilizer:			Nitrogen	36 lb/a	carryover	P ₂ O ₅	30 lb/a*	17-Mar	S	1.3 lb/a*	17-Mar	Nitrogen	16 lb/a*	17-Mar	Nitrogen	46 lb/a	17-Jun	S	8.3 lb/a	17-Jun	Herbicides:			Glyphosate	48 oz/ac	preplant	Sharpen	1.5 oz/ac	preplant	Atrazine	8 oz/ac	preplant	Atrazine	1 pt/ac	17-Jun	Brawl	1.25 pt/ac	17-Jun	Insecticides:			Sivanto	6 oz/ac	27-Aug	Prevathon	8 oz/ac	27-Aug	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 20%; text-align: center;">Average Temp. °F</th> <th style="width: 20%; text-align: center;">Precip. in.</th> <th style="width: 20%; text-align: center;">Irrigation in.</th> </tr> </thead> <tbody> <tr><td>January</td><td>31.1</td><td></td><td></td></tr> <tr><td>February</td><td>38.5</td><td></td><td></td></tr> <tr><td>March</td><td>45.9</td><td></td><td></td></tr> <tr><td>April</td><td>54.1</td><td></td><td></td></tr> <tr><td>May</td><td>59.3</td><td></td><td></td></tr> <tr><td>June</td><td>72.1</td><td>1.77</td><td></td></tr> <tr><td>July</td><td>75.5</td><td>3.40</td><td></td></tr> <tr><td>August</td><td>74.5</td><td>4.00</td><td></td></tr> <tr><td>September</td><td>73.0</td><td>2.54</td><td></td></tr> <tr><td>October</td><td>58.5</td><td>8.20</td><td></td></tr> <tr><td>November</td><td>48.5</td><td></td><td></td></tr> <tr><td>December</td><td></td><td></td><td></td></tr> </tbody> </table> <p style="text-align: right; margin-right: 20px;">Seasonal Precipitation: 19.91 in.</p> <p style="text-align: right; margin-right: 20px;">Date of Last Spring Frost: 21-Apr Date of First Fall Frost: 6-Nov Frost Free Period: 195 days</p>		Average Temp. °F	Precip. in.	Irrigation in.	January	31.1			February	38.5			March	45.9			April	54.1			May	59.3			June	72.1	1.77		July	75.5	3.40		August	74.5	4.00		September	73.0	2.54		October	58.5	8.20		November	48.5			December			
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Brand/Company Name	Hybrid/Variety Name	Grain Yield bu/a	Grain Yield lb/a	Moisture		Plant Height in	Head Exertion in	Lodging %	Heading Date
				at Harvest %	Test Weight lb/bu				
Mycogen Seeds	1G741	126.8	7100	15.6	55.3	26.9	3.4	0	12-Aug
NuTech Seed, LLC	GS 725	119.0	6664	19.5	52.3	24.4	4.3	0	11-Aug
NuTech Seed, LLC	GS 715	116.3	6511	20.8	49.1	27.8	0.9	0	11-Aug
Chromatin, Inc.	NK 7633	114.2	6396	16.5	54.3	23.0	4.1	0	14-Aug
Monsanto company	DKS 37-07	113.0	6329	15.5	54.9	23.4	3.5	0	10-Aug
Monsanto company	DKS 44-20	108.3	6062	14.9	56.0	26.1	5.1	0	12-Aug
DuPont Pioneer	85P05	107.9	6039	16.0	55.2	25.2	3.9	13	12-Aug
DuPont Pioneer	84P72	104.7	5864	16.6	55.3	25.7	3.8	2	15-Aug
Mycogen Seeds	1G688	102.4	5732	21.7	49.2	26.8	3.4	0	15-Aug
Chromatin, Inc.	NK 5418	101.1	5662	11.9	53.8	22.5	5.4	0	9-Aug
Texas A&M AgrLife Research	ATx2752xRTx430	99.9	5593	17.0	53.8	26.6	1.2	0	12-Aug
NuTech Seed, LLC	GS 623	99.7	5583	13.7	53.3	22.2	4.2	0	7-Aug
Advanta US, Inc	Alta AG 1101	97.5	5458	14.4	51.9	17.7	2.1	33	8-Aug
Terral Seed, Inc.	REV 9562	94.9	5315	15.5	55.2	24.7	4.7	0	14-Aug
Chromatin, Inc.	SP 3425	94.6	5300	13.1	50.5	21.3	3.9	0	8-Aug
Texas A&M AgrLife Research	ATx399xRTx430	94.4	5286	15.7	52.0	24.9	3.3	0	16-Aug
Advanta US, Inc.	Alta AG 2115	94.2	5274	14.2	53.2	20.6	4.2	0	12-Aug
Monsanto company	DKS 41-50	93.2	5220	17.9	54.0	23.1	7.4	5	14-Aug
Advanta, US Inc.	Alta AG 2105	92.4	5172	14.9	56.1	22.2	6.6	0	10-Aug
Monsanto company	DKS 29-28	91.6	5130	11.0	52.2	20.2	3.5	0	7-Aug
Terral Seed, Inc.	REV 9782	88.4	4951	15.2	55.3	24.0	4.8	8	13-Aug
Advanta US, Inc.	Alta AG 1301	87.6	4903	14.4	54.5	21.1	4.0	0	13-Aug
Chromatin, Inc.	SP 6929	87.5	4899	16.3	55.3	23.7	4.5	0	13-Aug
Advanta US, Inc.	Alta AG 1201	86.3	4834	13.2	49.6	20.2	3.9	7	10-Aug
Monsanto company	DKS 28-05	83.3	4665	10.9	52.1	24.4	3.9	0	8-Aug
NuTech Seed, LLC	GS 693	83.1	4654	16.4	53.2	24.7	4.4	0	14-Aug
Texas A&M AgrLife Research	ATx378xRTx430	79.2	4432	20.7	51.4	27.0	1.6	13	13-Aug
Advanta US, Inc.	Alta AG 1203	55.8	3125	15.4	53.5	23.0	3.9	0	14-Aug
	Trial Mean	97.0	5434	15.6	53.3	23.6	3.9	3.2	12-Aug
	LSD (P > 0.05)	22.0	1233.0	2.0	2.9	3.9	2.3	15.4	2.6
	CV	13.8	13.8	7.7	3.3	9.9	36.8	291.9	0.7
	F Test	<.0001	<.0001	<.0001	<.0001	<.0001	0.0008	0.0399	<.0001

* Plant height is measured from the ground to the top of the leaf canopy.