

**New Mexico 2008 Limited Irrigated Grain Sorghum Performance Test - Agricultural Science Center at Clovis**

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

**Test Description**

<p><b>Location:</b>                  County/Area: Curry                  Longitude: -103.22                  Latitude: 34.60                  Elevation: 4435 ft.                  Soil Name: Olton                  Soil Texture: clay loam                  Soil Depth: &gt;60 in.</p> <p><b>Test Design:</b>                  Replications: 4                  Plot Length: 20 ft.                  Rows per Plot: 2                  Row Spacing: 30 in.                  Seeding Rate: 80,000 seed/a</p>	<p><b>Management Practices:</b>                  Previous Crop: Cotton                  Planting Date: 16-Jun                  Harvest Date: 7-Nov</p> <p><b>Production Inputs</b></p> <table border="1"> <thead> <tr> <th></th> <th>Rate</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td colspan="3"><b>Fertilizer:</b></td> </tr> <tr> <td>Nitrogen</td> <td>110 lb/a</td> <td>29-Feb</td> </tr> <tr> <td>P<sub>2</sub>O<sub>5</sub></td> <td>50 lb/a</td> <td>29-Feb</td> </tr> <tr> <td>S</td> <td>17 lb/a</td> <td>29-Feb</td> </tr> <tr> <td>Zn</td> <td>2 qt/a</td> <td>29-Feb</td> </tr> <tr> <td colspan="3"><b>Herbicides:</b></td> </tr> <tr> <td>Atrazine</td> <td>3 pt/a</td> <td>18-Jun</td> </tr> <tr> <td colspan="3"><b>Insecticides:</b></td> </tr> <tr> <td>Intrepid 2F</td> <td>8 oz/a</td> <td>9-Aug</td> </tr> </tbody> </table>		Rate	Date	<b>Fertilizer:</b>			Nitrogen	110 lb/a	29-Feb	P <sub>2</sub> O <sub>5</sub>	50 lb/a	29-Feb	S	17 lb/a	29-Feb	Zn	2 qt/a	29-Feb	<b>Herbicides:</b>			Atrazine	3 pt/a	18-Jun	<b>Insecticides:</b>			Intrepid 2F	8 oz/a	9-Aug	<p><b>Growing Conditions:</b></p> <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>34.0</td><td>0.0</td><td></td></tr> <tr><td>February</td><td>41.0</td><td>0.2</td><td></td></tr> <tr><td>March</td><td>47.0</td><td>0.1</td><td></td></tr> <tr><td>April</td><td>53.0</td><td>0.7</td><td></td></tr> <tr><td>May</td><td>62.0</td><td>1.8</td><td></td></tr> <tr><td>June</td><td>75.0</td><td>4.0</td><td>3.1</td></tr> <tr><td>July</td><td>73.0</td><td>4.7</td><td>-</td></tr> <tr><td>August</td><td>73.0</td><td>3.6</td><td>3.5</td></tr> <tr><td>September</td><td>65.0</td><td>1.0</td><td>2.8</td></tr> <tr><td>October</td><td>56.0</td><td>4.5</td><td></td></tr> <tr><td>November</td><td>47.0</td><td>0.1</td><td></td></tr> <tr><td>December</td><td>38.0</td><td>0.0</td><td></td></tr> <tr> <td>Seasonal Precipitation:</td> <td></td> <td>20.7 in.</td> <td></td> </tr> <tr> <td>Total Irrigation:</td> <td></td> <td>9.4 in.</td> <td></td> </tr> <tr> <td>Date of Last Spring Frost:</td> <td colspan="3">11-May</td> </tr> <tr> <td>Date of First Fall Frost:</td> <td colspan="3">23-Oct</td> </tr> <tr> <td>Frost Free Period:</td> <td colspan="3">165 days</td> </tr> </tbody> </table>		Average Temp. °F	Precip. in.	Irrigation in.	January	34.0	0.0		February	41.0	0.2		March	47.0	0.1		April	53.0	0.7		May	62.0	1.8		June	75.0	4.0	3.1	July	73.0	4.7	-	August	73.0	3.6	3.5	September	65.0	1.0	2.8	October	56.0	4.5		November	47.0	0.1		December	38.0	0.0		Seasonal Precipitation:		20.7 in.		Total Irrigation:		9.4 in.		Date of Last Spring Frost:	11-May			Date of First Fall Frost:	23-Oct			Frost Free Period:	165 days		
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Brand/Company Name	Hybrid/Variety Name	Grain Yield bu/a	Grain Yield lb/a	Moisture	Test Weight lb/bu	Plant Height in	Head Exertion in	Heading Date
				at Harvest %				
Sorghum Partners, Inc.	X 510	62.0	3472	12.4 ***	55.7	35.5 *	2.3	23-Aug
Dyna-Gro/UAP	DG 752B	58.9	3296	11.9	54.7	35.5 *	2.5	25-Aug *
Sorghum Partners, Inc.	NK 7633	57.2	3200	12.2 *	55.1	33.4	3.0	23-Aug
Sorghum Partners, Inc.	NK 5418	56.9	3187	11.5	55.6	33.4	3.8	19-Aug
Dyna-Gro/UAP	DG 762B	52.6	2944	11.5	54.9	35.4	3.3	19-Aug
Dyna-Gro/UAP	DG 772B	47.1	2635	12.3 *	55.0	36.8 *	2.9	21-Aug
Sorghum Partners, Inc.	NK 7655	39.3	2201	11.9	53.6	37.5 ***	1.6	26-Aug ***
Trial Mean		53.4	2991	11.9	54.9	35.4	2.7	22-Aug
LSD (P > 0.05)		17.1	956.5	0.4	1.9	2.0	1.4	2.3
CV		21.5	21.5	2.5	2.4	3.8	35.1	0.7
F Test		ns	ns	0.0013	ns	0.0026	ns	<0.0001

\*\*\* Highest numerical value in the column.

\* Not significantly different from the highest numerical value in the column based on the 5% LSD.