

## Non-Irrigated and Irrigated Grain Sorghum Performance at the Northeast Research Station – St. Joseph

### Location Summary

Grain yields ranged from 3,941 to 5,785 lb/a in the non-irrigated trial with a trial average of 5,304 lb/a (Table 4). In the irrigated trial, grain yields ranged from 5,007 to 6,352 lb/a with a trial average of 5,809 lb/a (Table 5). May and especially June were very dry (see weather chart below). Rainfall was well distributed in July. There were three furrow irrigations, May 27, June 15, and June 29, for the irrigated trial. The non-irrigated trial was also furrow-irrigated on May 27 to activate the N fertilize. In the 2010 highest-yielding group, there were nine hybrids in the non-irrigated trial and ten hybrids in the irrigated trial. In the two-year highest-yielding group, there were no hybrids in the non-irrigated trial and five hybrids in the irrigated trial.

Soil Type.....Sharkey clay  
 Row Spacing.....40 inches  
 Seeding Rate.....6-7 seed/ft  
 Planting Date.....May 14  
 Previous Crop.....Soybeans  
 Fertilization.....  
     Sidedress: 30-0-0-2 @ 120 lb N/a (5/27)  
 Herbicides.....  
     Preemerg: Atrazine @ 2 qt/a, Dual  
     @ 1.5 pt/a;  
     Postemerg: Lorox @ 1 qt/a,  
                 Atrazine @ 1 pt/a;  
 Insecticides.....  
     Preemerg: Discipline @ 1.5 oz/a;  
     At flowering: Karate Z @ 1 oz/a;  
     Leverage @ 3 oz/a;  
     Heading: Discipline @ 3 oz/a;  
 Harvest Date.....August 30

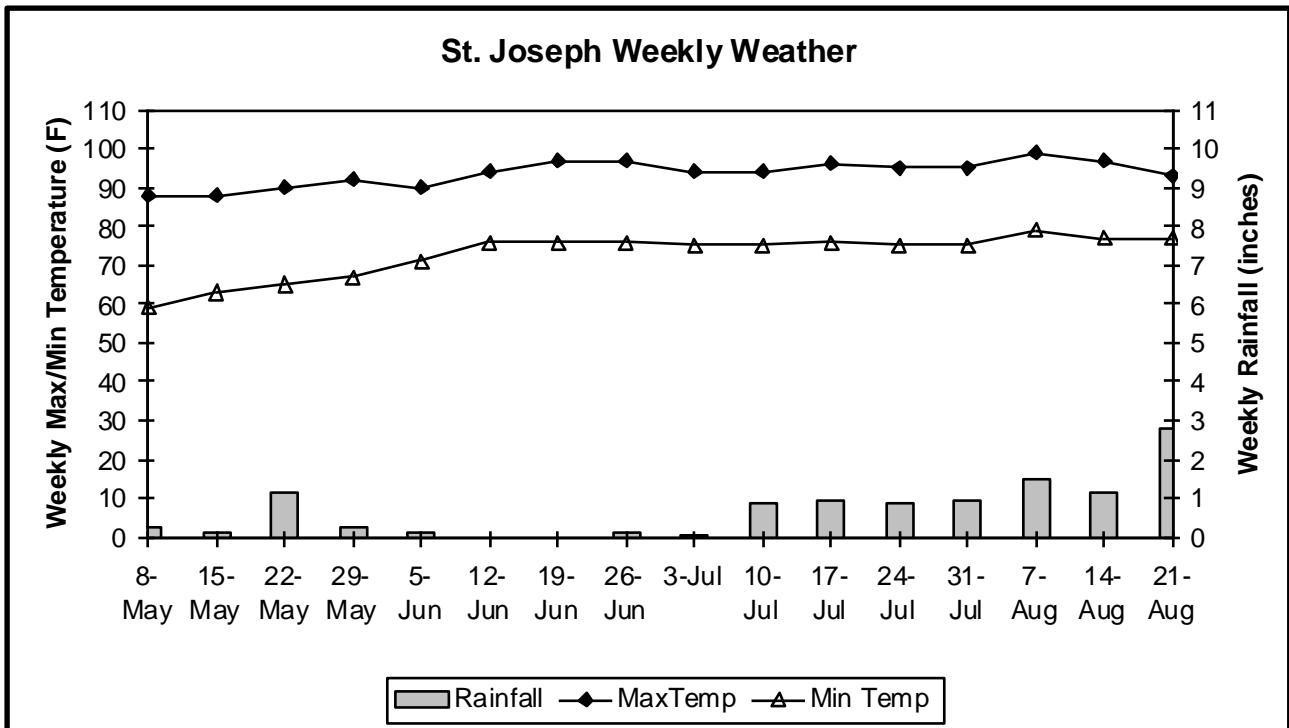


Table 4. Performance of non-irrigated grain sorghum hybrids at St. Joseph, 2010.

Brand/hybrid	2010 Yield <sup>1</sup> lb/a	2-Year avg lb/a	GrMo %	Mid- head DAP	Plant ht in	Head type 1-5	Head exert in
Syngenta 5556	<b>5,785</b>	-	14.4	53	53	3	7
Dyna-Gro 780B	<b>5,760</b>	4,593	13.7	55	55	2	8
Dekalb DKS53-67	<b>5,753</b>	4,433	14.3	52	56	3	12
Dyna-Gro 751B	<b>5,737</b>	4,587	13.4	53	52	3	9
Terral TV96H81	<b>5,667</b>	4,467	13.1	53	55	2	9
Terral TV9421	<b>5,603</b>	4,400	12.2	50	53	4	8
Terral TV96H91	<b>5,455</b>	4,147	14.0	52	53	4	7
Golden Acres 3566	<b>5,428</b>	-	15.3	51	52	3	7
Dekalb DKS49-45	<b>5,352</b>	-	13.4	53	53	3	10
Syngenta 5464	5,333	-	15.7	54	54	3	8
Pioneer 83P17	5,208	-	14.8	55	55	3	10
Dekalb DKS54-03	5,168	4,053	13.0	54	55	3	9
Terral TV96H95	5,149	4,190	13.2	51	56	3	10
Dyna-Gro 771B	5,111	4,262	13.2	50	53	3	6
Pioneer 84G62	4,938	4,178	13.6	52	56	4	8
Golden Acres 3696	4,903	4,248	13.3	50	54	3	10
Dekalb DKS54-00	3,941	3,684	14.7	58	52	3	5
<b>Average</b>	<b>5,304</b>	.	<b>13.8</b>	<b>53</b>	<b>54</b>	<b>3</b>	<b>8</b>
<b>CV, %</b>	<b>7</b>	.	<b>6</b>	<b>3</b>	<b>5</b>	<b>15</b>	<b>33</b>
<b>LSD (0.10)</b>	<b>450</b>	.	<b>1.4</b>	<b>2</b>	<b>NS</b>	<b>1</b>	<b>NS</b>

<sup>1</sup>Yields in bold denote hybrids that are in the highest-yielding group in 2010.

Table 5. Performance of irrigated grain sorghum hybrids at St. Joseph, 2010.

Brand/hybrid	2010 Yield <sup>1</sup> lb/a	2-Year avg <sup>2</sup> lb/a	GrMo %	Mid- head DAP	Plant ht in	Head type 1-5	Head exert in
<b>Terral TV96H81*</b>	<b>6,352</b>	5,087	14.4	52	51	2	10
Dekalb DKS49-45	<b>6,302</b>	-	15.1	53	49	3	9
Pioneer 83P17	<b>6,199</b>	-	17.9	52	49	3	9
<b>Dyna-Gro 780B*</b>	<b>6,132</b>	4,974	16.0	54	52	2	8
<b>Terral TV9421*</b>	<b>6,127</b>	4,921	14.9	50	49	3	10
Dekalb DKS54-03	<b>5,984</b>	4,756	16.2	54	51	3	8
<b>Dyna-Gro 751B*</b>	<b>5,913</b>	4,897	15.9	53	49	2	9
Syngenta 5556	<b>5,893</b>	-	15.9	53	50	4	9
Golden Acres 3566	<b>5,840</b>	-	16.6	52	48	4	9
<b>Dyna-Gro 771B*</b>	<b>5,803</b>	4,755	15.2	51	48	3	7
Golden Acres 3696	5,693	4,151	14.2	50	49	3	8
Pioneer 84G62	5,628	4,715	16.0	53	49	3	10
Terral TV96H95	5,608	4,988	16.3	51	49	3	8
Terral TV96H91	5,563	4,867	18.0	52	49	3	9
Dekalb DKS53-67	5,560	4,661	15.7	53	50	2	10
Syngenta 5464	5,183	-	17.6	54	48	4	10
Dekalb DKS54-00	5,007	4,430	16.5	57	51	2	11
<b>Average</b>	<b>5,809</b>	.	<b>16.0</b>	<b>52</b>	<b>49</b>	<b>3</b>	<b>9</b>
<b>CV, %</b>	<b>9</b>	.	<b>6</b>	<b>2</b>	<b>6</b>	<b>16</b>	<b>33</b>
<b>LSD (0.10)</b>	<b>651</b>	.	<b>1.7</b>	<b>1</b>	<b>NS</b>	<b>1</b>	<b>NS</b>

<sup>1</sup>Yields in bold denote hybrids that are in the highest-yielding group in 2010.

<sup>2</sup>Hybrids in bold with an asterisk (\*) were in the highest-yielding group in both years, 2009 and 2010.