

Performance of Grain Sorghum Hybrids in Louisiana, 2006

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Performance of grain sorghum hybrids is annually evaluated by Louisiana Agricultural Experiment Station (LAES) researchers. The purpose of these trials is to provide to Louisiana growers, seedsmen, county agents of the Louisiana Cooperative Extension Service (LCES) and other interested individuals and organizations with unbiased performance data for commercial grain sorghum hybrids submitted for evaluation by private agencies. Results from these trials are used by the LCES for recommending hybrids.

The cooperating LAES units in 2006 were: Dean Lee Research Station, Alexandria; Central Research Station, Baton Rouge; Red River Research Station, Bossier City; Rice Research Station, Crowley; Northeast Research Station, St. Joseph; and Northeast Research Station-Macon Ridge Branch, Winnsboro. Data from the trial at the Red River Research Station in Bossier City was dropped because of glyphosate drift resulting in large variability among treatments.

Procedures

In 2006, 22 grain sorghum hybrids were entered in the LAES yield trials. Soil type, cultural practices, location summaries and weather graphs are listed prior to data tables for each location. In weather graphs, maximum and minimum temperatures are weekly averages and rainfall weekly totals. Trials were not irrigated, except at St. Joseph, where both irrigated and non-irrigated trials were conducted. Seed were treated with Concept and Gaucho and recommended LSU AgCenter cultural practices were followed at each location.

The experimental design at each location was a randomized complete block design with four replications. Traits measured and rating scales are listed in Table 1. Analysis of variance and least significant differences (LSD) were computed using SAS (Statistical Analysis System). We used the protected F-test, which means LSD's were calculated only if differences among hybrids existed at the 90% confidence level. If differences were

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significant, an LSD at the 10% probability level was calculated. For example, if the LSD (0.10) for yield in a trial is 400 lb/acre, there is a 10% chance that two hybrids with a reported yield difference of 400 lb/acre are genetically equal and a 90% probability they have differences in genetic potential in that particular environment. LSD values are influenced by how well soil fertility, stand establishment, plot length, harvest efficiency and other variables are controlled and by number of replications for each hybrid or treatment. The letters NS are used in the text and tables to indicate lack of significance (**not significantly different**) at the 10% probability level. The coefficient of variation (CV) reflects the magnitude of experimental error (random variation not accounted for by hybrids and replications) in relation to the trial mean. A high CV means that relative differences among hybrids were not consistent among replications, which reduces the precision of a test.

Table 1. Traits and rating scales for LAES grain sorghum performance trials.

Trait	Abbreviation	Description
Yield	Yield	Grain yield, lb/acre
Grain moisture	Gr mo	Grain moisture at harvest, %
Test weight	Test wt	Volume weight of grain, lb/bu
Heading date	Mid-head	Date of head emergence in 50% of plants, days after planting (DAP)
Plant height	Pl ht	Plant height from ground to top of head, inches (in)
Head exertion	Head exer	Distance between flag leaf and base of head, inches (in)
Head type	Head type	Head type is a measure of head architecture, with ratings of 1-5; 1-compact, 3-intermediate, and 5-open
Lodging	Lo	Lodging is an estimate of plants lodged that could not be harvested, %
Anthracnose Blight	Anth. Blight	Rating of anthracnose symptoms on foliage and stems; where a '0' indicates none and a '9' indicates severe symptoms.
Head Blight	Head Blight	Rating of Fusarium Head Blight symptoms; where '0' indicates no disease and a '9' indicates severe symptoms.
Foliar diseases	Foliar dis	Anthracnose and Aerial Blight disease ratings were percent (%) of leaf coverage.
Midge damage	Midge	Average percent (%) of head damaged.
Borer damage	Borer	Borer damage was the percent (%) of fallen heads (not harvestable).

Results

Yield data and other agronomic data for each location are presented in Tables 2-7. A location summary, soil type, cultural practices and weather information are listed prior to data tables for each location. Yield summary across Louisiana for 2006 is presented in Table 8 and participating seed companies are listed in Table 9.

For additional information on grain sorghum trials, please contact Dr. Rick Mascagni, Northeast Research Station, P.O. Box 438, St. Joseph, LA 71366 (Ph: 318-766-3769; Fax: 318-766-4278; e-mail: hmascagni@agcenter.lsu.edu); or the coordinator at a specific location (Dr. Dustin Harrell, Rice Research Station, Crowley, Ph: 337-788-7531, Fax: 337-788-7553, e-mail: dharrell@agcenter.lsu.edu; Dr. Steve Moore, Dean Lee Research Station, Alexandria; Ph: 318-473-6524, Fax: 318-473-6535, e-mail: smoore@agcenter.lsu.edu; Mr. David Caldwell, Red River Research Station, Bossier City; Ph: 318-741-7430, Fax 318-741-7433, e-mail: wcaldwell@agcenter.lsu.edu ; Dr. Steve Harrison, Central Station, Baton Rouge; Ph:225-578-1308, Fax 225-578-1403, e-mail:sharrison@agcenter.lsu.edu)

Grain Sorghum Performance at the Dean Lee Research Station – Alexandria

Location Summary

Grain yields were excellent at Alexandria in 2006, ranging from 6,461 lb/a for Terral TV1050 to 8,195 lb/a for Pioneer brand 84G62 (Table 2). Sixteen hybrids had two-year averages, with an average grain yield of 6,609 lb/a. Test weights were excellent, ranging from 58.2 to 62.6 lb/bu. Although total rainfall throughout the growing season was not high, rain occurred at timely intervals over the growing season (see below). There was only four weeks that did not receive any rainfall.

Soil Type.....	Norwood silt loam
Row Spacing.....	38 inch
Seeding Rate.....	8 seed/ft
Fertilization.....	150 lb N/a
Herbicides.....	Guardsman Max @ 32 pts/acre
Insecticides.....	Karate @ 2 oz/a (4/4/06)
Previous Crop.....	Corn
Planting Date.....	April 3
Harvest Date.....	July 31

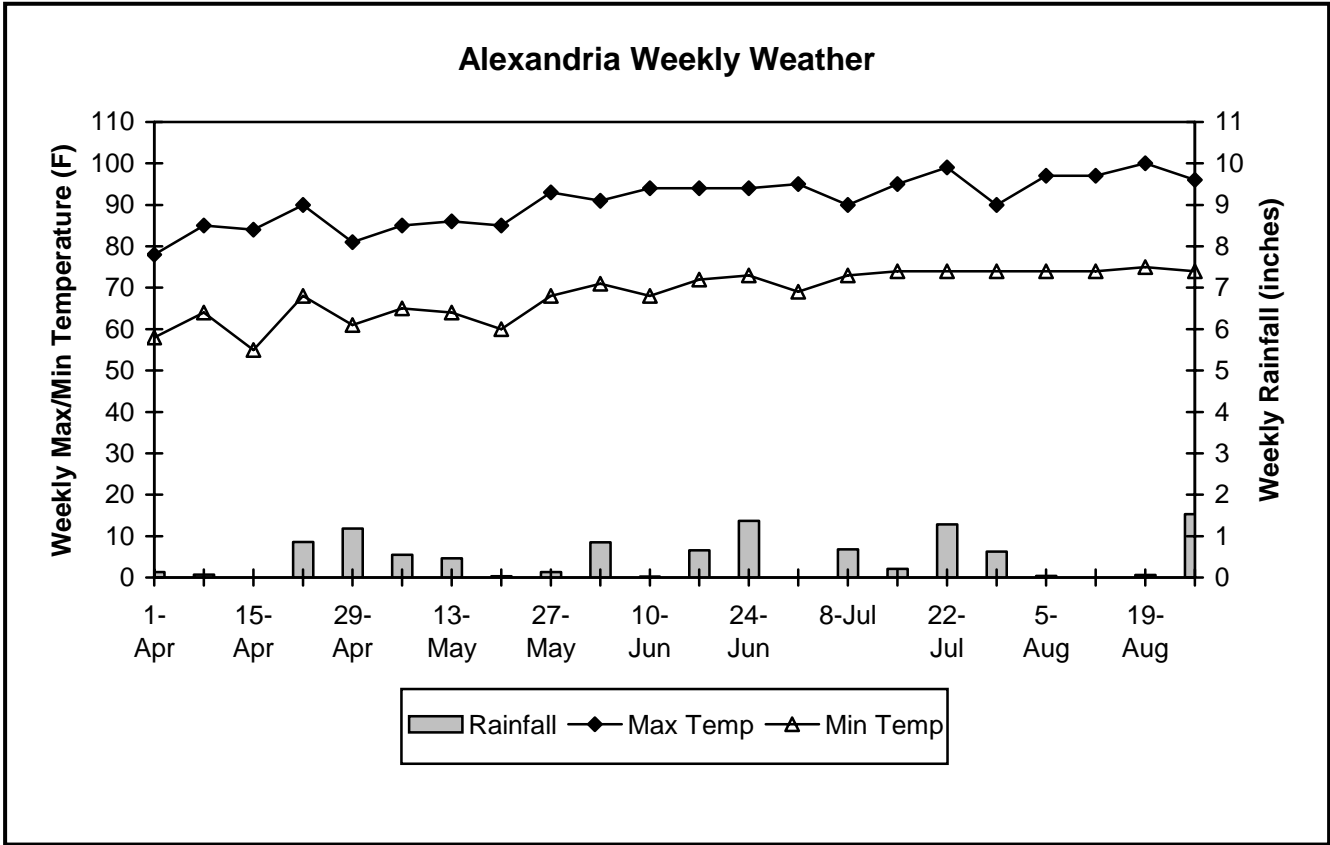


Table 2. Performance of hybrids in grain sorghum hybrid performance trial at Dean Lee Research Station at Alexandria, La., 2006.

Brand/hybrid	Yield		Gr mo %	Test wt lb/bu	Mid- head DAP	Pl ht in	Head type 0-5
	2006 -----lb/acre----	2-yr avg					
Pioneer brand 84G62	8,195	7,308	14.4	61.6	64	41	4
Dekalb DKS54-00	8,085	7,197	15.1	59.5	63	45	4
Monsanto MSC432	8,078	-	15.8	58.6	63	49	4
Golden Acres Genetics GA444E	7,411	6,651	13.8	58.8	63	36	5
Dekalb DKS37-07	7,357	-	14.5	62.6	61	39	5
Garst 5401	7,327	6,715	14.9	61.9	63	47	3
NC+ 7R83	7,284	6,737	14.3	58.8	64	39	3
Terral TV96H81	7,268	6,600	14.3	61.3	64	44	1
Asgrow A571	7,267	6,448	13.7	59.8	63	37	4
Dyna-Gro DG751B	7,265	6,613	14.8	61.5	64	43	1
Terral TVX96H91	7,233	6,702	14.5	61.1	63	41	5
Terral TV9421	7,230	6,711	13.6	59.5	61	36	5
Golden Acres Genetics GA3827	7,096	6,779	14.7	61.5	64	40	3
Monsanto MSD477	7,059	-	14.4	61.6	61	41	5
Garst 5360	6,981	-	14.8	61	63	36	4
NC+ 7B51	6,906	-	13.6	58.5	61	36	4
Dyna-Gro DG780B	7,118	6,348	15.3	61.9	65	47	1
Terral TV93S72	6,875	6,191	14.1	59.5	64	35	3
Monsanto MSD472	6,808	-	13.6	59.3	61	38	5
Dyna-Gro DG762B	6,853	6,353	14.2	59.5	64	40	4
Garst 5515	6,698	6,137	14.0	59.8	61	38	5
Terral TV1050	6,461	6,255	14.6	58.2	66	42	2
Average	7,172	6,609	14.4	60.3	63	40	4
CV, %	5	-	2	1	2	5	27
LSD (0.10)	460	-	0.3	1.0	2	4	2

Grain Sorghum Performance at the Central Research Station - Baton Rouge

Location Summary

Grain yields were good considering the very late planting date due to a wet April and May. Grain yields ranged from 2,938 lb/a for Dekalb DKS54-00 to 5,502 lb/a for Garst 5401, with a trial average of 4,686 lb/a (Table 3). Sixteen hybrids had two-year averages, with an average grain yield of 5,555 lb/a. Maximum temperatures ranged between 90 and 95° F and timely rainfall occurred throughout the growing season (see below). Moderate levels of anthracnose blight and head blight was present on most hybrids, which was probably due, in part, to the late planting date.

Soil Type.....Commerce silt loam
 Row Spacing.....30 inches
 Seeding Rate.....5 seed/ft
 Fertilization.....100/15/15
 Herbicides..... Pre: 1.5 qt Atrazine/a
 Insecticides.....10 lb Lorsban/a (preplant)
 Warrior @ 2 oz/a (2 applns at heading)
 Sevin @ 2 pts/a after heading
 Previous Crop.....Soybeans
 Planting Date.....June 11
 Harvest Date.....August 17

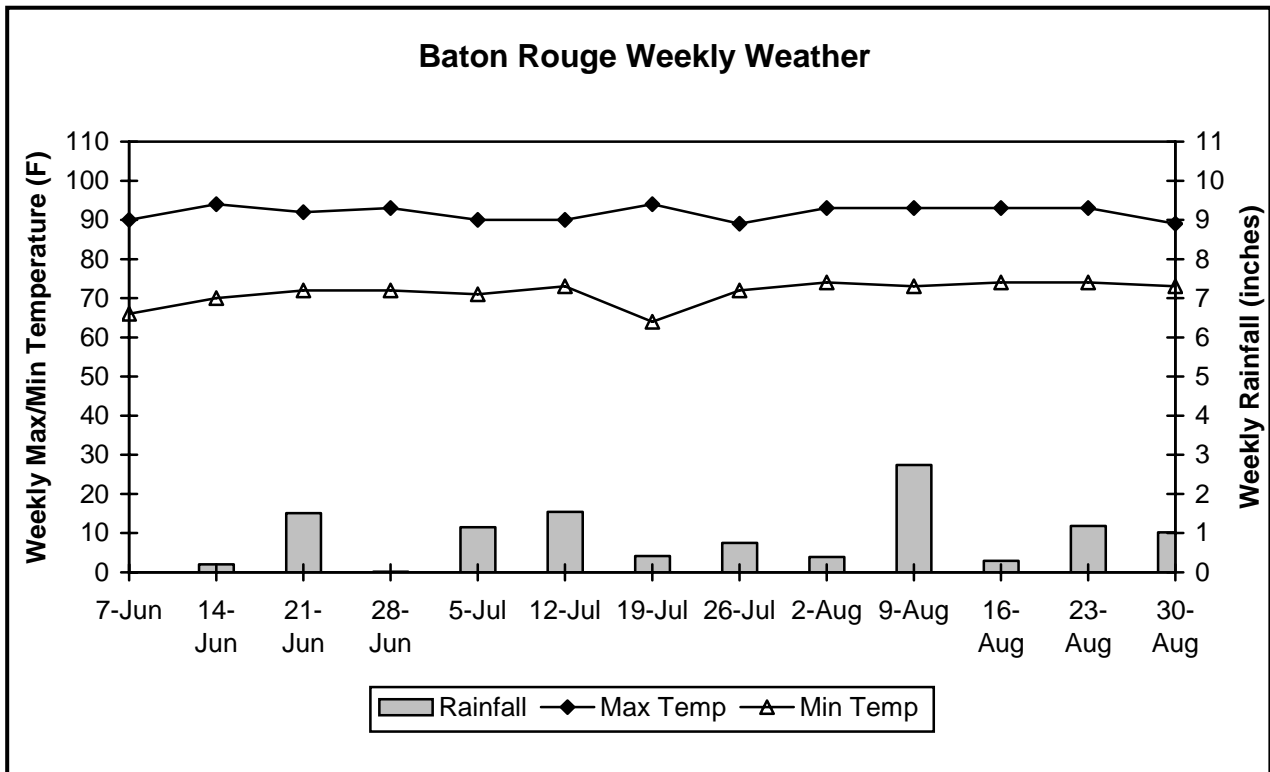


Table 3. Performance of hybrids in grain sorghum hybrid performance trial at the Central Station at Baton Rouge, La.,2006.

Brand/hybrid	Yield		Gr mo %	Test wt lb/bu	Mid- head DAP	Pl ht in	Head exer in	Head type 0-5	Anth. blight 0-9	Head blight 0-9
	2006	2-yr avg								
	-----lb/acre---									
Garst 5401	5,502	5,895	17.9	57.7	30	56	8	1	5	5
Terral TV96H81	5,267	5,909	17.8	56.0	33	52	4	1	7	4
NC+ 7B51	5,256	-	17.4	55.0	30	49	3	3	7	6
Terral TV93S72	5,103	5,653	19.6	52.0	32	48	6	3	6	5
Golden Acres GA444E	5,082	5,771	19.0	54.1	32	49	5	3	5	6
Terral TV9421	4,976	5,786	18.1	54.1	31	47	4	4	6	6
Terral TVX96H91	4,952	5,711	17.6	57.8	31	53	5	4	4	5
Dyna-Gro DG780B	4,861	5,617	19.8	56.4	36	57	7	1	6	3
Monsanto MSD477	4,856	-	16.6	57.2	27	53	9	3	2	5
Dyna-Gro DG751B	4,854	5,726	18.6	55.2	34	54	6	1	7	4
Dyna-Gro DG762B	4,840	5,576	17.5	54.9	30	52	6	2	6	6
Golden Acres GA3827	4,784	5,633	17.9	56.9	33	52	6	4	4	5
Terral TV1050	4,777	5,386	20.4	54.4	33	52	6	1	5	5
Garst 5515	4,670	5,484	16.6	54.2	31	52	6	2	7	5
Dekalb DKS37-07	4,593	-	19.6	53.7	29	52	5	3	5	5
Pioneer brand 84G62	4,584	5,662	18.3	56.3	35	50	3	3	6	5
Monsanto MSD472	4,518	-	15.7	52.7	29	45	7	3	6	7
Asgrow A571	4,463	5,364	21.7	51.7	34	53	7	1	5	4
NC+ 7R83	4,332	5,315	22.9	51.7	36	52	4	1	5	5
Garst 5360	4,322	-	23.5	52.8	35	55	5	1	7	3
Monsanto MSC432	3,565	-	22.7	49.6	39	63	7	2	4	5
Dekalb DKS54-00	2,938	4,395	20.8	49.0	39	57	9	3	3	6
Average	4,686	5,555	19.1	54.2	33	52	6	2	5	5
CV, %	8	-	8	2	5	4	33	-	14	15
LSD (0.10)	420	-	1.7	1.3	2	4	NS	-	1	1

Grain Sorghum Performance at the Rice Research Station- Crowley

Location Summary

Grain yields ranged from 2,633 lb/a for Monsanto MSD472 to 4,562 lb/a for Pioneer brand 84G62 (Table 4). There was over 10 inches of rain in July, which may have accounted for, at least in part, the moderate levels of foliar diseases (anthracnose and aerial blight). Borer damage was also significant, ranging from 9 to 31% of heads within plots that were not harvestable.

Soil Type.....	Crowley silt loam
Row Spacing.....	30 inches
Seeding Rate.....	5 seed/ft
Fertilization.....	
Preplant	0-66-66
Topdress (May 24).....	25-0-0
(June 12).....	80-0-0
Herbicides.....	
Dual II Magnum @ 1.3 pt/a +	
Atrazine @ 3.5 pt/a (5/29/06)	
Insecticides...Mustang Max @ 4 oz/a (6/12/06)	
Previous Crop.....	Fallow
Planting Date.....	May 17
Harvest Date.....	August 31

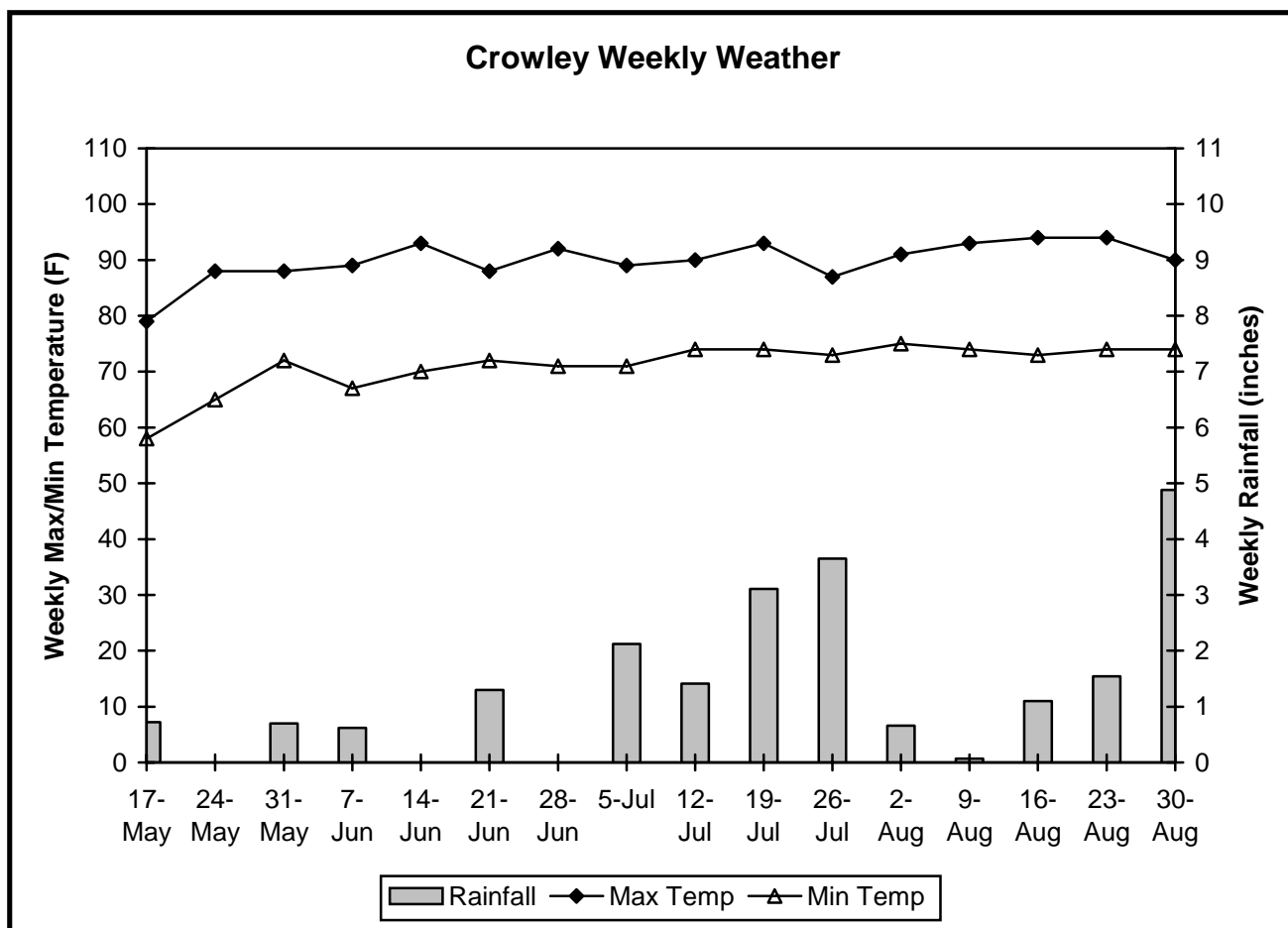


Table 4. Performance of hybrids in the grain sorghum hybrid performance trial at Rice Research Station at Crowley, La., 2006.

Brand/hybrid	Yield		Gr mo	Test wt	Mid- head	Pl ht	Head exer	Head type	Foliar dis ¹	Midge	Borer
	2006	2-yr Avg									
	-----lb/acre-----		%	lb/bu	DAP	in	in	0-5	%	%	%
Pioneer brand 84G62	4,562	4,473	14.7	54.2	59	50	4	2	40	10	12
Garst 5401	4,270	4,379	14.6	52.6	55	56	8	2	35	10	17
Golden Acres Gen. GA3827	4,252	4,571	16.1	52.1	57	52	8	3	25	10	14
NC+ 7B51	4,245	-	14.3	48.5	56	46	4	3	40	15	9
Dekalb DKS54-00	4,197	4,507	16.1	53.5	61	58	9	3	10	5	19
Terral TVX96H91	4,036	4,240	15.3	53.9	58	52	6	3	20	10	14
Terral TV96H81	3,942	4,169	14.7	50.4	58	52	5	2	40	5	14
Dekalb DKS37-07	3,800	-	15.2	50.6	54	49	6	3	15	10	27
Dyna-Gro DG780B	3,648	3,688	15.7	53.5	61	53	4	1	20	5	9
Asgrow A571	3,613	4,146	14.7	47.9	57	49	7	2	45	10	15
NC+ 7R83	3,567	4,247	15.1	48.2	57	48	6	2	30	5	9
Garst 5515	3,556	3,731	14.8	50.1	56	47	6	3	45	5	18
Monsanto MSC432	3,531	-	17.3	45.6	62	59	10	2	10	10	11
Golden Acres Gen. GA444E	3,469	3,911	14.2	47.5	56	47	6	3	60	15	10
Terral TV9421	3,370	3,921	14.6	46.2	55	51	9	3	50	20	16
Dyna-Gro DG751B	3,344	3,472	15.5	51.7	59	54	5	2	35	5	18
Terral TV1050	3,321	4,129	15.3	49.8	59	47	3	2	25	15	13
Terral TV93S72	3,275	3,729	14.3	51.1	56	48	9	3	35	5	22
Monsanto MSD477	3,170	-	14.9	52.8	54	52	10	3	20	10	31
Garst 5360	3,075	-	16.0	48.1	56	49	8	2	45	5	13
Dyna-Gro DG762B	2,994	3,871	15.9	48.1	55	50	6	2	40	10	30
Monsanto MSD472	2,633	-	15.4	48.0	54	44	7	3	50	15	18
Average	3,630	4,074	15.2	50.2	57	50	7	2	30	10	15
CV, %	9		4	4	1	5	25	16	22	47	59
LSD (0.10)	380		0.8	3.4	2	3	2	1	10	5	11

¹ Anthracnose and aerial blight (see text for rating details)

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

Location Summary

In the non-irrigated trial, grain yields ranged from 5,249 lb/a for Monsanto MSD477 to 6,952 lb/a for Pioneer brand 84G62, with a trial average of 6,131 lb/a (Table 5). Sixteen hybrids had two-year averages, with an average grain yield of 6,064 lb/a. In the irrigated trial, grain yields ranged from 5,810 lb/a for Monsanto MSD472 to 7,329 lb/a for Dekalb DKS54-00 (Table 6). Sixteen hybrids had two-year averages, with an average grain yield of 6,557 lb/a. Rainfall was only 0.38 inches in June and 4.6 inches in July (see below). There were four furrow irrigations, June 8, June 23, July 14 and August 2, applied in the irrigated trial.

Soil Type.....	Sharkey clay
Row Spacing.....	40 inches
Seeding Rate.....	8 seed/ft
Fertilization.....	
Sidedress.....	120 lb N/a
Herbicides.....	
Atrazine @ 1 qt/a + Dual @ 1 pt/a	
on 5/22	
Insecticides.....	
Karate EC @ 4 oz/a (two applns. @	
heading)	
Previous Crop.....	Soybean
Planting Date.....	May 18
Harvest Date.....	August 30

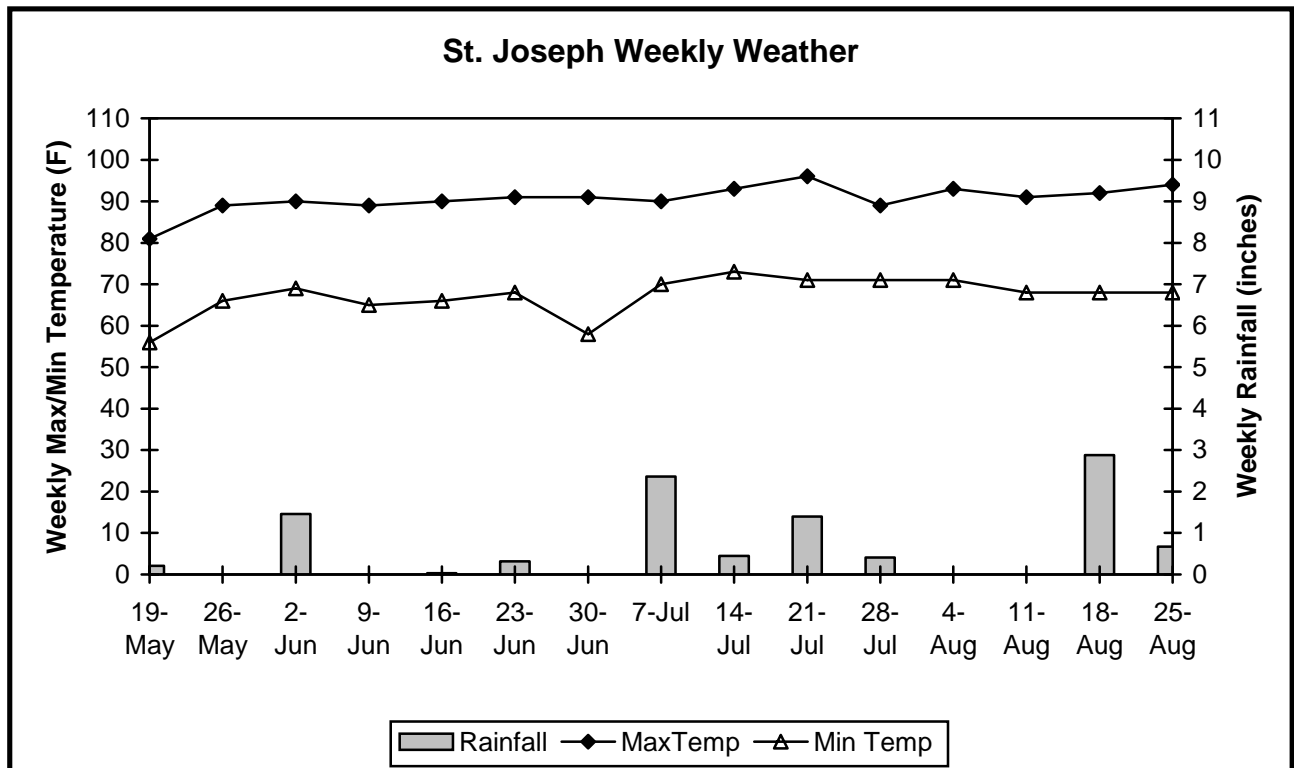


Table 5 . Performance of hybrids in the non-irrigated grain sorghum hybrid performance trial at the Northeast Research Station at St. Joseph, La., 2006.

Brand/hybrid	Yield		Gr mo	Test wt	Mid-head	Pt ht	Head type	Head exer
	2006	2-yr avg						
	-----lb/acre-----		%	lb/bu	DAP	in	0-5	in
Pioneer brand 84G62	6,952	6,779	17.3	57.3	54	52	3.0	4
Monsanto MSC432	6,855	-	17.1	50.9	54	54	3.0	6
Dekalb DKS54-00	6,733	6,892	17.6	54.8	56	54	3.0	7
Terral TV96H81	6,676	5,802	15.8	55.8	53	53	2.0	3
Golden Acres Genetics GA3827	6,595	6,648	16.4	56.7	52	53	3.5	6
Dyna-Gro DG780B	6,379	5,160	16.0	57.4	56	54	2.0	4
NC+ 7B51	6,308	-	14.5	55.4	51	51	3.0	4
Dekalb DKS37-07	6,300	-	15.9	55.2	51	51	3.0	5
Asgrow A571	6,285	6,537	17.1	50.5	53	55	2.5	7
NC+ 7R83	6,263	6,450	15.9	52.1	54	51	2.5	7
Terral TV9421	6,148	6,246	16.3	53.7	51	54	4.0	7
Dyna-Gro DG751B	6,062	5,344	15.8	53.5	53	54	2.0	4
Terral TV 1050	6,029	6,054	15.3	53.1	55	51	2.0	3
Garst 5515	5,994	6,018	14.9	53.8	51	46	3.5	6
Golden Acres Genetics GA444E	5,966	6,247	15.8	53.8	52	54	3.5	6
Garst 5401	5,823	5,530	16.0	53.9	52	58	3.0	6
Monsanto MSD472	5,810	-	15.6	53.6	50	46	3.5	5
Terral TV 93S72	5,732	5,992	16.8	52.9	52	51	3.0	8
Terral TVX96H91	5,729	5,971	17.6	55.0	52	56	3.5	7
Garst 5360	5,728	-	15.8	55.2	52	50	2.0	8
Dyna-Gro DG762B	5,261	5,356	15.8	50.5	50	53	3.0	4
Monsanto MSD477	5,249	-	15.7	56.3	50	54	4.0	8
Average	6,131	6,064	16.1	54.1	52	52	3.0	5
CV, %	8	-	5	4	2	5	15	32
LSD (0.10)	598	-	1.3	3.2	1	4	1.0	3

Table 6. Performance of hybrids in irrigated grain sorghum hybrid performance trial at the Northeast Research Station at St. Joseph, La., 2006.

Brand/hybrid	Yield		Gr mo %	Test wt lb/bu	Mid- head DAP	Pl ht in	Head type 0-5	Head exer in
	2006 -----lb/acre----	2-yr avg						
Dekalb DKS54-00	7,329	7,389	15.3	53.1	54	56	3.0	6
Dyna-Gro DG751B	6,956	6,268	14.2	56.0	54	55	2.5	3
Monsanto MSC432	6,863	-	14.6	54.8	56	60	3.0	7
Garst 5360	6,847	-	15.1	54.4	52	55	2.5	5
Terral TV 9421	6,841	6,729	13.6	54.9	52	55	4.0	5
Golden Acres Genetics GA444E	6,791	6,870	13.8	54.8	51	55	3.5	6
Golden Acres Genetics GA3827	6,664	6,900	14.6	57.5	51	57	3.5	7
NC+ 7R83	6,633	6,725	14.8	52.5	52	55	3.0	4
Terral TV93S72	6,580	6,577	14.2	52.9	52	51	3.0	6
Asgrow A571	6,571	6,885	13.9	53.6	53	54	3.0	6
Dyna-Gro DG780B	6,547	5,641	14.6	58.4	56	57	1.5	1
Terral TV96H81	6,529	6,164	14.8	56.1	53	58	2.0	2
Garst 5401	6,496	6,339	14.2	58.5	53	57	3.0	6
NC+ 7B51	6,490	-	13.4	54.3	50	53	4.0	5
Terral TVX96H91	6,488	6,816	14.8	59.0	51	56	3.5	6
Pioneer brand 84G62	6,282	6,613	13.8	59.4	54	51	3.0	1
Monsanto MSD477	6,212	-	14.4	58.3	50	58	3.5	8
Dekalb DKS37-07	6,197	-	14.6	57.4	50	52	3.5	5
Dyna-Gro DG762B	6,188	6,350	14.2	54.5	51	59	3.5	7
Terral TV1050	6,186	6,589	13.2	55.8	54	55	2.5	1
Garst 5515	6,019	6,064	13.2	55.3	50	51	3.5	5
Monsanto MSD472	5,810	-	13.4	53.0	49	49	3.5	4
Average	6,523	6,557	14.2	55.6	52	55	3.0	5
CV, %	5	-	4	3	2	5	11	282
LSD (0.10)	371	-	0.9	2.5	1	4	0.5	2

Grain Sorghum Performance at the Macon Ridge Branch of the Northeast Research Station – Winnsboro

Location Summary

Grain yields ranged from 3,444 lb/a for Monsanto MSD477 to 4,843 lb/a for Terral TVX96H91 (Table 7). There were sixteen hybrids with two-year averages, with an average grain yield of 3,489 lb/a. There was an obvious drought stress during the early grain fill period. Rainfall was high in early May but dropped off in late May, with only 1.8 inches of rain in June. Head exertion was low, ranging from 0 to 7 inches, indicating moisture stress during grain development. Even though grain sorghum is relatively tolerant to drought stress, the shallow Macon Ridge soils are drought-prone, and yields are reduced in some years due to lack of adequate soil moisture during critical growth stages.

Soil Type.....Gigger silt loam
 Row Spacing.....40 inches
 Seeding Rate.....8 seed/ft
 Fertilization
 Sidedress.....80 lb N/acre
 Herbicides.....
 Pre: Atrazine @ 1 qt/a + Dual @ 1 pt/a
 Insecticides.....
 Baythroid@ 2 oz/a (three applns@ heading)
 Previous Crop.....Cotton
 Planting Date.....April 27
 Harvest Date.....August 28

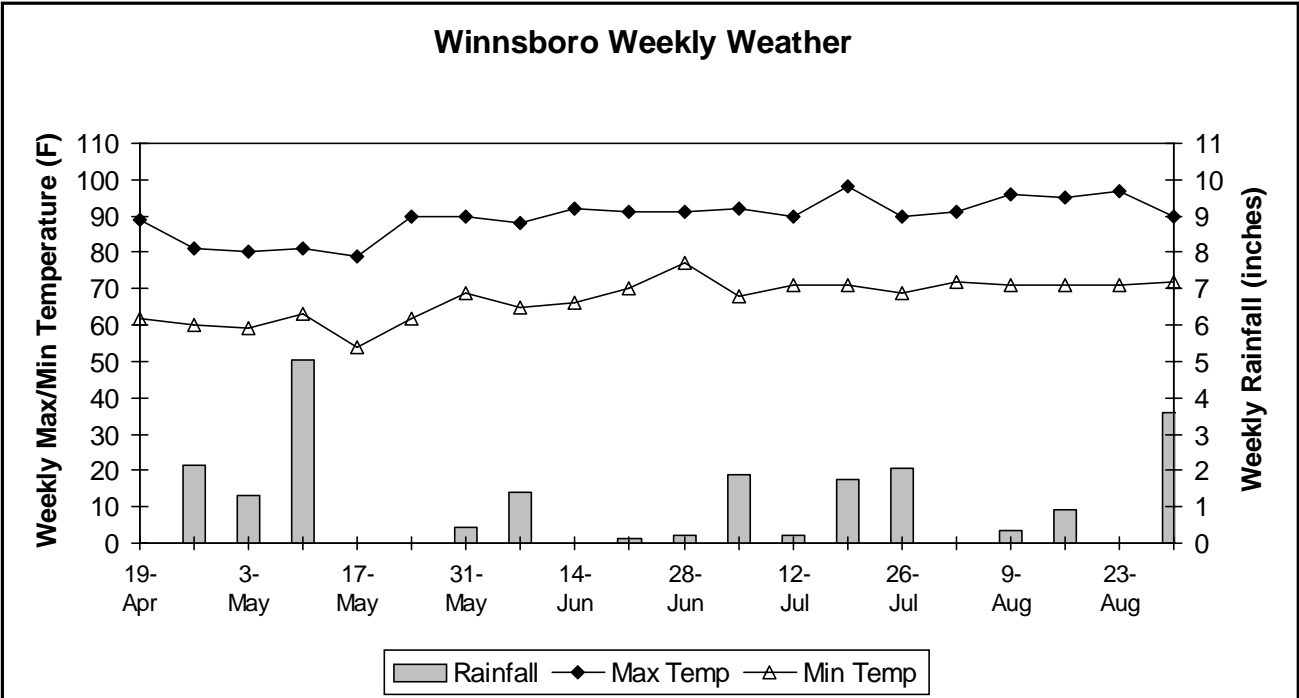


Table 7. Performance of hybrids in grain sorghum hybrid performance trial at Macon Ridge Research Station at Winnsboro, La., 2006.

Brand/hybrid	Yield		Gr mo	Test wt	Mid-head	Pl ht	Head type	Head exert
	2006	2-yr avg						
	-----lb/acre----		%	lb/bu	DAP	in	0-5	in
Terral TVX96H91	4,843	4,368	17.0	57.1	70	43	4.0	6
Golden Acres Genetics GA3827	4,594	4,289	18.3	56.6	71	42	4.5	7
Dekalb DKS37-07	4,429	-	16.6	53.6	68	36	3.0	4
Pioneer brand 84G62	4,348	3,718	17.1	53.7	70	38	3.5	0
Asgrow A571	4,320	3,749	18.1	54.1	69	38	3.0	4
Dekalb DKS 54-00	4,287	3,513	18.7	50.7	77	44	3.0	4
NC+ 7R83	4,273	3,650	18.6	49.9	70	37	3.0	4
Garst 5515	4,256	3,420	16.4	55.3	69	38	4.0	4
NC+ 7B51	4,091	-	15.8	51.5	68	38	3.0	3
Terral TV96H81	3,988	3,357	17.2	54.9	71	40	2.0	3
Terral TV93S72	3,983	3,324	19.1	51.6	69	34	3.0	4
Dyna-Gro DG780B	3,922	3,118	16.8	57.5	73	43	1.0	3
Terral TV1050	3,864	3,237	17.0	54.0	72	40	2.5	4
Monsanto MSD472	3,768	-	16.8	52.9	68	33	2.5	1
Garst 5401	3,723	3,260	16.7	57.7	69	41	3.0	6
Terral TV9421	3,720	3,294	17.1	51.8	69	35	3.5	2
Monsanto MSC432	3,699	-	17.4	55.3	77	47	3.0	3
Dyna-Gro DG762B	3,647	3,159	17.4	51.3	69	37	2.5	3
Dyna-Gro DG751B	3,637	3,237	18.1	53.3	73	41	2.5	3
Garst 5360	3,571	-	19.1	52.4	71	35	2.5	4
Golden Acres GA444E	3,501	3,135	18.4	51.5	69	36	3.5	3
Monsanto MSD477	3,444	-	17.6	54.6	68	39	3.5	4
Average	3,996	3,489	17.5	53.7	70	39	3.0	3
CV, %	12	-	5	3	2	3	12	39
LSD (0.10)	641	-	1.6	3.0	1	2	0.5	2

Table 8. Summary of yield performance of grain sorghum hybrids at five locations entered in the 2006 LAES hybrid performance trials.

Brand/hybrid	Alex	BR	Crow	St. Joseph			Avg
				Non- irr	Irr	Winns	
-----lb/a-----							
Asgrow A571	7,267	4,463	3,613	6,285	6,571	4,320	5,420
Dekalb DKS37-07	7,357	4,593	3,780	6,300	6,197	4,429	5,443
Dekalb DKS54-00	8,085	2,938	4,197	6,733	7,329	4,287	5,595
DynaGro DG751B	7,265	4,854	3,344	6,062	6,956	3,637	5,353
DynaGro DG762B	6,853	4,840	2,994	5,261	6,188	3,647	4,964
DynaGro DG780B	7,118	4,861	3,645	6,379	6,547	3,922	5,412
Garst 5360	6,981	4,322	3,075	5,728	6,847	3,571	5,087
Garst 5401	7,327	5,502	4,270	5,823	6,496	3,723	5,524
Garst 5515	6,698	4,670	3,556	5,994	6,019	4,256	5,199
Golden Acres 3827	7,096	4,784	4,252	6,595	6,664	4,594	5,664
Golden Acres 444E	7,411	5,082	3,469	5,966	6,791	3,501	5,370
Monsanto MSC432	8,078	3,565	3,531	6,855	6,863	3,699	5,432
Monsanto MSD472	6,808	4,518	2,633	5,810	5,810	3,768	4,891
Monsanto MSD477	7,059	4,856	3,170	5,249	6,212	3,444	4,998
NC+ 7B51	6,906	5,256	4,245	6,308	6,490	4,091	5,549
NC+ 7R83	7,284	4,332	3,567	6,263	6,633	4,273	5,392
Pioneer brand 84G62	8,195	4,584	4,562	6,952	6,282	4,348	5,821
Terral TV1050	6,461	4,777	3,321	6,029	6,186	3,864	5,106
Terral TV93S72	6,875	5,103	3,275	5,732	6,580	3,983	5,258
Terral TV9421	7,230	4,976	3,370	6,148	6,841	3,720	5,381
Terral TV96H81	7,268	5,267	3,942	6,677	6,529	3,988	5,612
Terral TVX96H91	7,233	4,952	4,036	5,729	6,488	4,843	5,547
Average	7,235	4,686	3,630	6,131	6,523	3,996	

Table 9. List of participating seed companies and hybrids tested in the LAES 2006 grain sorghum hybrid performance trials.

Company/Institution	Brand/hybrid
Garst Seed Company 2369 330 th Street P.O. Box 500 Slater, Iowa 50244	Garst: 5360, 5401, 5515
Golden Acres Genetics P.O. Box 579 Buchanan Dam, TX 78609	Golden Acres: 3827, 444E
Monsanto Company 982 U.S. Hwy. 77 Bishop, TX 78343	Asgrow: A571 Dekalb: DKS37-07, DKS54-00 Monsanto: MSC432, MSD472, MSD477
NC+ Hybrids 10207 East Hillcrest Drive Mount Hope, KS 67108	7B51, 7R83
Pioneer Hi-Bred International 7501 Memorial Pkwy SW, Suite 205 Huntsville, AL 35802	Pioneer brand: 84G62
Terral Seed, Inc. 604 Blount St. Lake Providence, LA 71254	Terral: TV1050, TV93S72, TV9421, TV96H81, TVX96H91
UAP Distribution, Inc. 7251 West 4 th Street Greely, CO 80634	DynaGrow: DG751B, DG762B, DG780B

