

Performance of Grain Sorghum Hybrids in Louisiana, 2002

H.J. “Rick” Mascagni, Jr., Robert Bell, Pat Bollich, Millie Deloach, Warner Hall, Jose Liscano, Steve Moore, Jim Rabb, Curt Riche’, and Gerardo Romero

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 results on performance of commercial grain sorghum hybrids submitted for evaluation by private agencies. The data generated in these trials are used by the LCES for recommending hybrids.

The cooperating LAES units in 2002 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.

MATERIALS AND METHODS

In 2002, 32 commercial grain sorghum hybrids were entered in the LAES yield trials by participating seed companies. Although there was a range of maturity among hybrids, all entries were combined in one trial at each location. Entries were evaluated at Alexandria, Baton Rouge, Bossier City, Crowley, St. Joseph, and Winnsboro in randomized complete block designs. In each trial, hybrids were replicated four times. Cultural practices used and soil types are listed on page adjacent to yield data for each location. A location summary and weather graphs are also listed. Trials were not irrigated, except at St. Joseph, where both irrigated and non-irrigated trials were conducted. All seed were treated with Concept and Gaucho. All recommended cultural practices were followed at each location.

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 an LSD was calculated only if differences among hybrids existed at the 90% confidence level. If differences were significant at that level, we computed an LSD at the 10% probability level. For example, if the LSD (0.10) for yield in a trial is 7.0 bu/acre, there is a 10% chance that two hybrids with a reported yield difference of 7.0 bu/acre are genetically equal and a 90% probability they have differences in genetic potential in that particular environment. LSD values are influenced by the degree of precision that soil, fertility, stand establishment, plot length, harvest efficiency, and by the number of replications. The

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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 in different 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 in 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	Plant ht	Plant height from ground to base 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, %
Bird damage	Bird	Bird damage ratings are an estimate of head damage, %

RESULTS

Yield data and other agronomic data for each location are presented in Tables 2-8. A location summary, cultural practices, soil types, and weather information are listed on page adjacent to yield data for each location. Yield summary across Louisiana for 2002 is presented in Table 9 and participating seed companies are listed in Table 10.

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. Pat Bollich, Rice Research Station, Crowley, Ph: 337-788-7531, Fax: 337-788-7553, e-mail: pbollich@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; Jimmy Rabb, Red River Research Station, Bossier City; Ph: 318-741-7430, Fax 318-741-7433, e-mail: jrabb@agcenter.lsu.edu).

Grain Sorghum Performance at the Dean Lee Research Station – Alexandria

Location Summary

Although rainfall in mid-April to late June was low (see graph below), yields were excellent at Alexandria in 2002. Yields ranged from 6145 lb/acre for Seed Resource SR565FG to 7589 lb/acre for Pioneer brand 84G62, with a trial average of 6984 lb/acre (Table 2). Sixteen hybrids had yields greater than 7,000 lb/acre and 2-yr. average yields for thirteen hybrids were greater than 6,000 lb/acre. Bird damage was less than 5%.

Soil Type.....	Norwood silt loam
Row Spacing.....	38 inch
Seeding Rate.....	8 seed/ft
Fertilization.....	150 lbs N/a
Herbicides.....	Pre:Atrazine 1lb ai/a
Insecticides	
	Karate 0.02lb ai/a
	(3 Applications for sorghum midge)
Previous	
Crop.....	Soybeans
Planting Date.....	April 18
Harvest Date.....	August 21

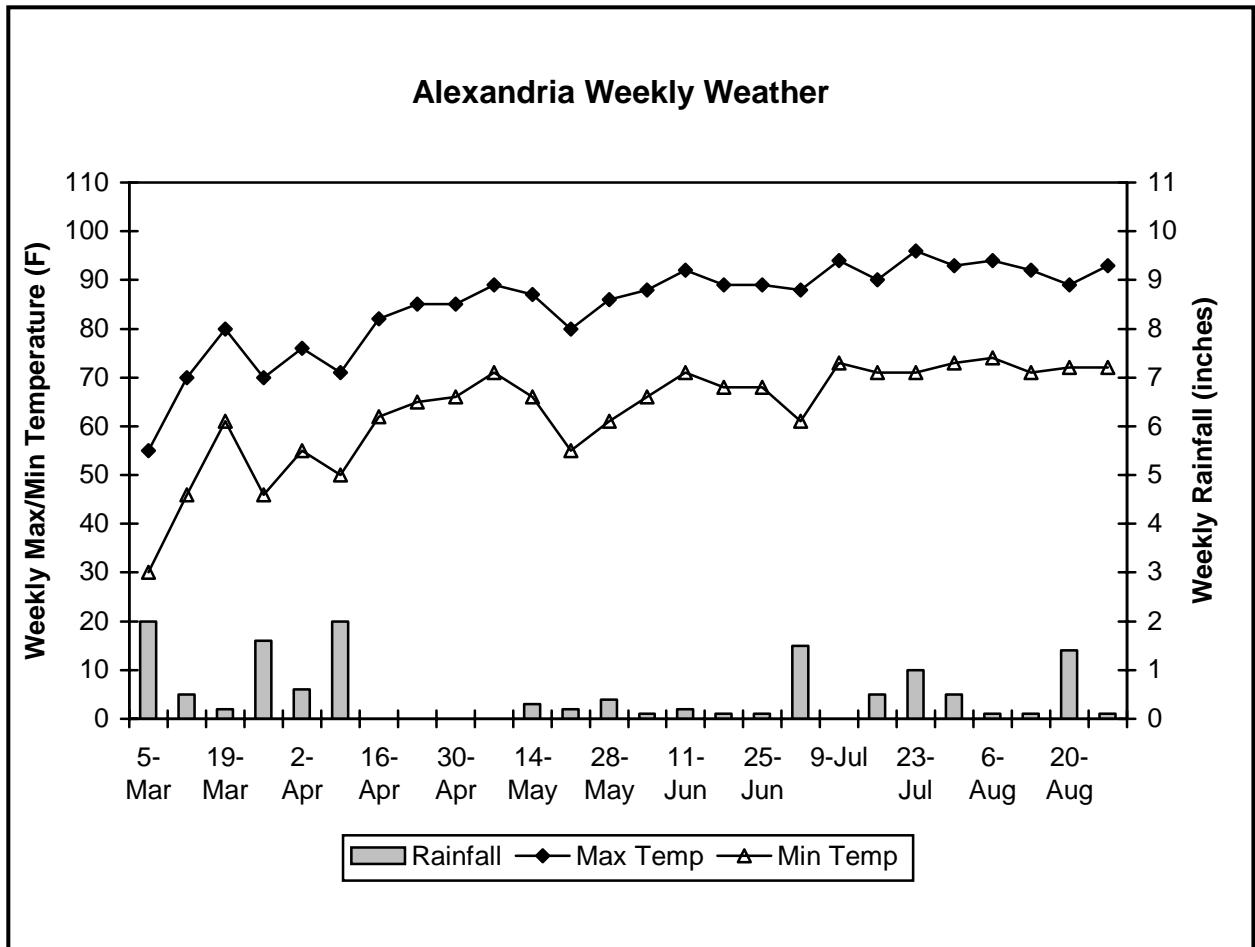


Table 2. Performance of grain sorghum hybrids at Dean Lee Research Station, Alexandria, LA, 2002.

Brand/hybrid	Yield			Gr mo	Test wt	Mid- head	Plant ht	Head exer	Head type	Bird
	2002	2001	2-Yr avg							
	-----lb/acre-----			%	lb/bu	DAP	in	in		%
Pioneer brand 84G62	7589	4792	6191	14.5	58.7	66	59	6	5	2
Terral TV9421	7588	4961	6275	13.9	56.2	62	59	8	5	2
Dekalb DK52	7456	5034	6245	14.3	55	66	62	7	3	2
Golden Acres 444E	7380	5232	6306	14.1	54.6	62	59	6	5	4
Asgrow Missile	7378	5052	6215	14.6	56.9	68	57	3	4	3
Terral TV96H81	7300	-	-	16.9	58.3	62	62	5	2	1
DynaGrow 762B	7297	4888	6093	15.6	55.9	61	62	7	3	2
Golden Acres 3694	7279	4945	6112	14.5	57.7	68	59	5	5	1
Asgrow A571	7241	5157	6199	14	55.8	66	57	6	3	1
Triumph TR82-G	7209	-	-	14.8	60.4	68	59	8	1	1
Dekalb DK53	7140	5256	6198	16.2	59.1	68	61	6	2	3
DynaGrow 780B	7137	4569	5853	16.5	59.5	64	61	4	3	1
Dekalb DKS54-00	7095	5102	6099	14.2	58.3	68	64	10	2	2
Terral TVX93S203	7066	-	-	16.1	58.4	62	61	7	2	1
Garst 5382	7035	-	-	15.2	59.1	66	54	6	1	1
Terral TV93S72	7026	-	-	14.6	56.3	63	58	12	2	1
Garst 5440	6992	5070	6031	14.9	58.1	63	59	4	3	1
Terral TVX95S201	6941	-	-	13.3	56.8	66	55	7	5	3
Southern States SS650	6935	5461	6198	16.5	59.3	66	60	4	1	2
Pioneer brand 83G66	6921	4938	5930	13.7	57	66	59	5	3	2
Pioneer brand 8282	6881	5060	5971	16.8	56.6	61	61	5	4	2
Southern States SS800	6823	4524	5674	14.1	54.9	66	58	7	2	3
Dyna Grow 751B	6815	5730	6273	16.1	58.1	68	60	6	2	1
Terral TV1050	6801	4668	5735	13.7	56.6	68	63	3	2	1
Dyna Grow 732B	6727	-	-	16.5	58	60	57	6	1	2
Seed Resource SR522	6709	-	-	13.6	57	65	52	6	5	1
Garst N0479	6705	-	-	13.6	56.2	68	52	7	5	3
DynaGrow 752B	6538	-	-	14	55.2	63	57	5	5	4
Garst 5515	6503	4849	5676	14.7	56.1	62	56	6	5	2
Terral TVX96H202	6499	-	-	13.6	56.6	66	52	7	5	2
Seed Resource SR544	6340	-	-	16.7	-	68	58	7	3	1
Seed Resource SR565FG	6145	-	-	15.1	55.7	-	62	8	3	2
Average	6984	-	-	14.9	57.2	65	58	6	3	2
CV,%	4.4	-	-	7.1	1.6	3.2	2.4	33.8	23.7	71.9
LSD (0.10)	362	-	-	1.3	1.6	4	2	3	1	NS

Grain Sorghum Performance at the Central Research Station – Baton Rouge

Location Summary

Rainfall in mid-April to late June was below normal (see graph below). Yields ranged from 3094 lb/acre for Garst 5515 to 5425 lb/acre for Terral TV96H81, with a trial average of 4090 lb/acre (Table 3). Test weights were low, ranging from 50.4 lb/bu for Asgrow A571 to 57.1 lb/bu for Triumph TR82-G.

Soil Type.....Commerce silty clay loam
 Row Spacing.....30 inch
 Seeding Rate.....5 seed/ft
 Fertilization
 Pre..... 0-60-60
 Sidedress.. 120-0-18
 Herbicides.....Bicep 2.5 qt/acre
 Previous Crop.....Soybeans
 Planting Date.....April 17
 Harvest Date.....August 19

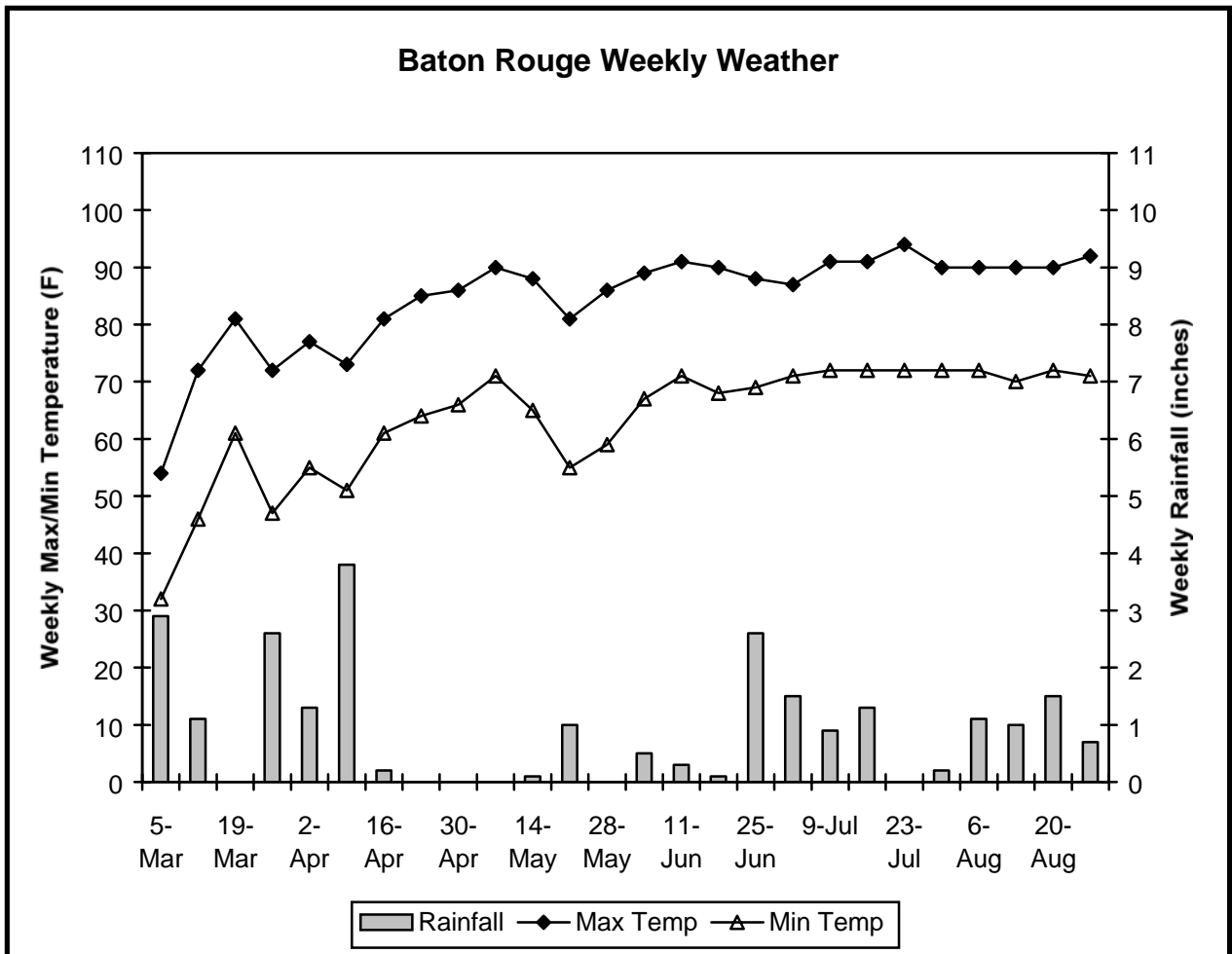


Table 3. Performance of grain sorghum hybrids at Central Research Station, Baton Rouge, LA, 2002.

Brand/hybrid	Yield	Gr mo	Test Wt	Mid-head	Plant ht	Head type
	lb/acre	%	lb/bu	DAP	in	
Terral TV96H81	5425	14.8	55.7	64	51	1.5
Terral TVX96H202	4991	13.5	53	65	51	3
Southern States SS800	4651	13.2	51.9	62	54	2
Golden Acres 444E	4609	13.8	52.3	63	51	3
Terral TV9421	4595	13.7	51.2	63	46	3
DynaGrow 780B	4492	14.2	56.8	69	55	1
DynaGrow 751B	4440	14.1	51.5	65	53	3
Asgrow Missle	4322	14.3	54	68	52	3.5
Triumph TR82-G	4292	13.9	57.1	67	50	1.5
Southern States SS650	4281	14	55.6	64	49	2
DynaGrow 762B	4275	13.4	52.5	62	49	2
Dekalb DK53	4244	15.2	57	64	52	3
Seed Resource SR565FG	4207	14.2	52.3	68	56	4
Seed Resource SR544	4203	13.8	55.3	69	51	3
Garst 5440	4148	14.1	55.1	63	51	3
Seed Resource SR522	4096	13.7	51.4	66	48	5
Terral TVX95S201	4035	13.4	52	65	46	4.5
DynaGrow 752B	4029	13.5	50.9	63	52	2
Terral TVX93S203	3994	14	55.9	61	53	2
Garst N0479	3967	13.6	51.8	65	53	5
Pioneer brand 83G66	3921	14.2	55	63	52	3
DynaGrow 732B	3913	13.8	55.9	61	51	2.5
Asgrow A571	3912	13.4	50.4	64	51	3
Pioneer brand 84G62	3891	14.9	56.7	64	52	3
Garst 5382	3876	14.6	54.3	68	46	1
Pioneer brand 8282	3842	15.5	54.7	63	50	3
Dekalb DK52	3778	13.9	53.8	62	49	3.5
Terral TV93S72	3777	14	52.7	67	46	2.5
Golden Acres 3694	3637	14.1	52.1	63	51	2
Terral TV1050	3352	14.6	53.1	62	51	2
Dekalb DKS54-00	3265	15.1	52.5	67	52	3
Garst 5515	3094	13.4	51.9	62	52	3
Average	4090	14.1	53.6	56	51	3
CV, %	12.7	4.9	3.2	2.0	5.7	9.1
LSD (0.10)	611	0.8	2.0	2	NS	1.5

Grain Sorghum Performance at the Red River Research Station- Bossier City

Location Summary

Rainfall was relatively low in 2002; however it was well distributed across the growing season (see graph below). Yields ranged from 1997 lb/bu for DynaGrow 732B to 3968 lb/acre for Southern States SS650, with a test average of 3320 lb/acre (Table 4). Although N fertilizer was accidentally omitted, plants showed no N deficiency symptoms through the season.

Soil Type.....	Latanier silty clay loam
Row spacing.....	40 inch
Seeding Rate.....	8 seed/ft
Fertilization.....	none
Herbicides	Pre: Atrazine 1.25 qt./acre Dual 1.5 pt./acre
Previous Crop.....	Soybean
Planting Date.....	April 23
Harvest Date.....	August 5

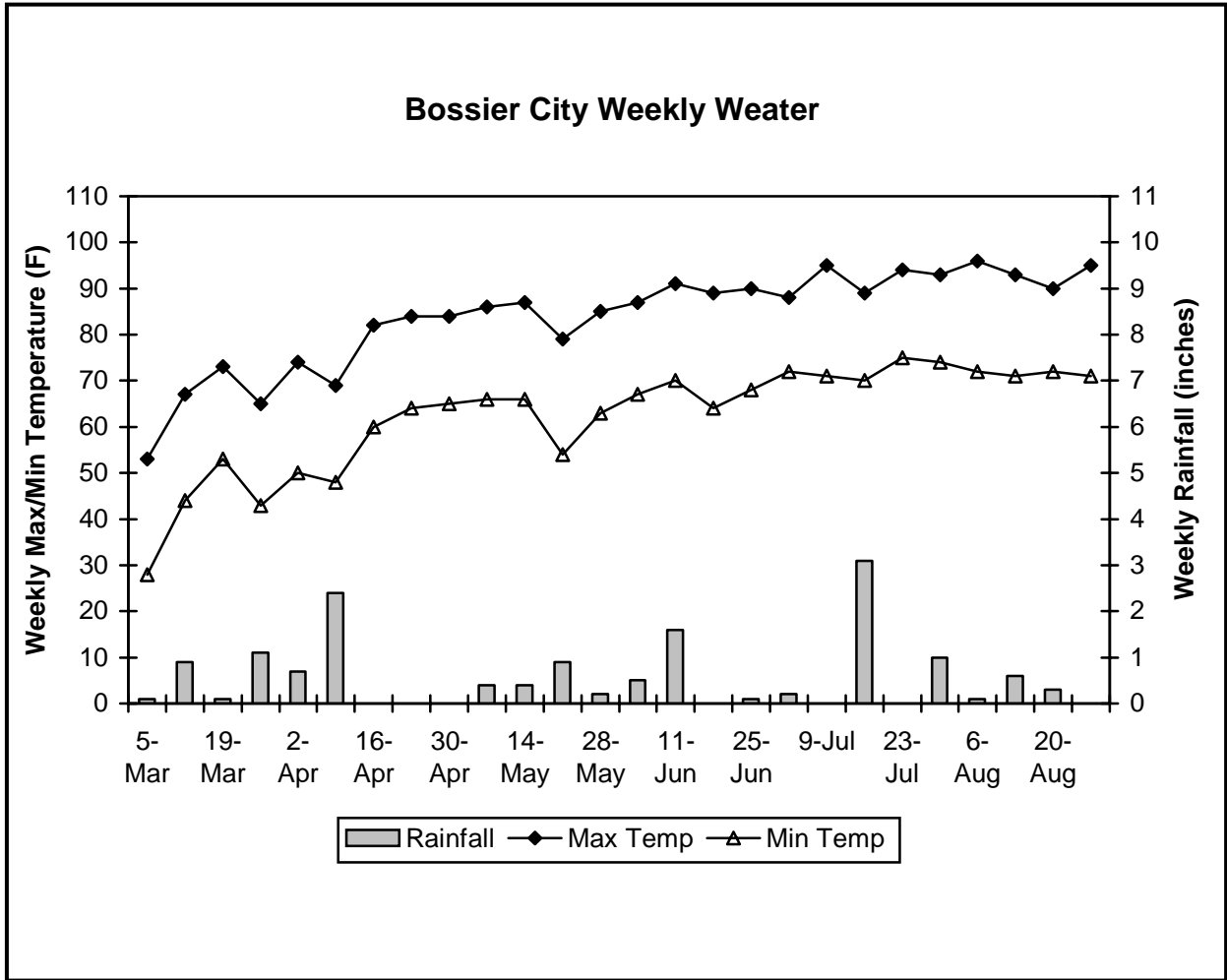


Table 4. Performance of grain sorghum hybrids at Red River Research Station, Bossier City, LA, 2002.

Brand/hybrid	Yield			Gr mo	Test wt	Mid- head	Plant ht	Head exer	Head type	Bird
	2002	2001	2-Yr avg							
	-----lb/acre-----			%	lb/bu	DAP	in	in		%
Southern States SS650	3968	4745	4357	15.3	59.3	57	53	4	2	15
Golden Acres 444E	3818	4417	4118	16.2	57.8	55	50	7	4	10
Pioneer brand 84G62	3808	5813	4811	17.3	58.5	58	49	3	4	0
Terral TVX96H202	3801	-	-	16.7	57.2	59	49	5	4	0
Garst N0479	3765	-	-	15.6	57.9	60	48	5	5	0
Asgrow Missile	3735	5483	4609	18.5	57.9	57	47	3	3	10
Seed Resource SR522	3709	-	-	14.6	58.6	58	46	5	5	0
Triumph TR82-G	3702	-	-	15.1	59.8	58	52	4	1.5	10
Garst 5515	3656	3347	3502	14.4	57.1	55	50	6	4	10
Southern States SS800	3533	4426	3980	14.5	56.9	55	49	7	3	30
Terral TV93S72	3508	-	-	16.7	56.3	57	50	8	2.5	10
Terral TVX95S201	3467	-	-	15.4	57.6	59	47	5	5	0
Seed Resource SR544	3426	-	-	14.9	59.2	61	51	3	3	0
DynaGrow 752B	3408	-	-	15.5	56.9	55	47	4	2.5	20
Asgrow A571	3377	5243	4310	15.3	56.8	56	51	7	2.5	10
Dekalb DK52	3346	4392	3869	16.5	57.9	57	52	7	3.5	5
Dekalb DK53	3341	5477	4409	18.1	58.1	58	51	4	3	5
Garst 5382	3333	-	-	18.1	58.8	57	48	6	2	15
Pioneer brand 8282	3287	5342	4315	16.8	58	56	51	5	4.5	15
Golden Acres 3694	3277	3938	3608	15.5	58.5	56	50	5	3.5	10
Terral TV9421	3233	4909	4071	16.9	57.2	56	48	6	3.5	20
DynaGrow 762B	3226	-	-	15.1	58	55	51	6	2.5	15
Terral TV96H81	3179	-	-	14.1	59.2	56	53	6	2	25
Garst 5440	3143	4891	4017	14.7	58.9	55	49	6	3.5	10
Pioneer brand 83G66	3127	5508	4318	16.5	58.3	56	52	3	3	10
DynaGrow 751B	3108	4785	3947	15.2	59.3	57	51	3	2.5	25
Terral TV1050	3106	5084	4095	18	56.7	58	51	4	2	5
Dekalb DKS 54-00	2875	5313	4094	17.3	57.7	58	53	8	3	5
DynaGrow 780B	2792	5452	4122	15	59.4	58	50	2	2	5
Terral TVX93S203	2762	-	-	15.1	59.1	55	48	7	2.5	20
Seed Resource SR565FG	2443	-	-	15.7	57.6	61	55	6	3	5
DynaGrow 732B	1997	-	-	14.6	58.9	53	51	12	3	35
Average	3320	-	-	15.9	58.1	57	50	5	3	10
CV,%	17.7	-	-	7.5	1.2	1.8	4.4	30.8	17.7	69.4
LSD (0.10)	692	-	-	1.4	0.8	2	3	2	0.5	10

Grain Sorghum Performance at the Rice Research Station- Crowley

Location Summary

Rainfall was low, but well distributed in late May and June (see graph below). Yields ranged from 3543 lb/acre for DynaGrow 732B to 4970 lb/acre for Seed Resource SR522, with a trial average of 4328 lb/acre (Table 5). Bird damage was severe in this trial, ranging from 10 to 45%, with a trial average of 24%.

Soil Type.....Crowley silt loam
 Row spacing.....30 inch
 Seeding Rate.....5 seed/ft
 Fertilization
 Pre..... 24-72-72
 Sidedress... 80-0-0
 Herbicides
 After emerg.: Atrazine 1.5 qt./acre
 Dual 1.5 pt./acre, 1% crop oil
 Post: Permit 0.67 oz./acre
 Previous
 Crop.....Fallow
 Planting Date.....April 25
 Harvest Date.....September 13

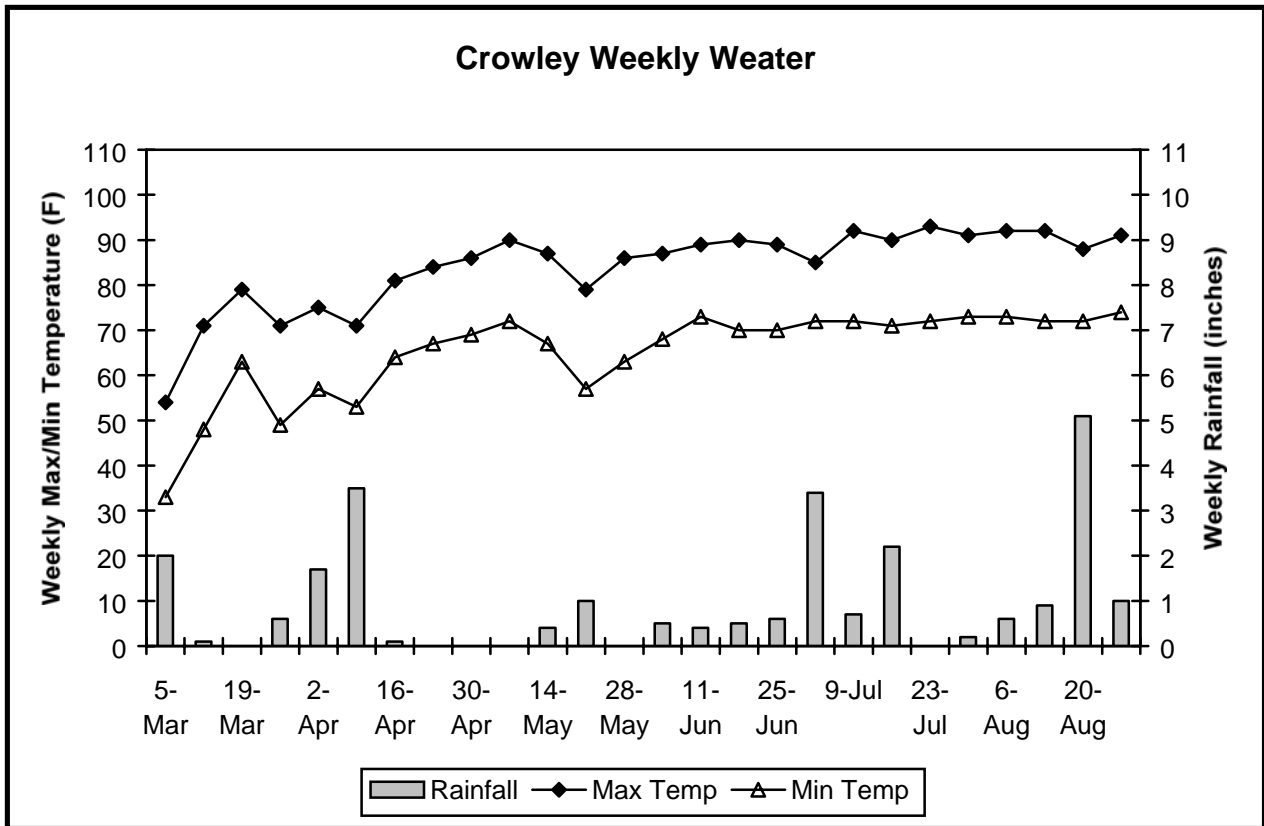


Table 5. Performance of grain sorghum hybrids at Rice Research Station, Crowley, LA, 2002.

Brand/hybrid	Yield	Gr	Mid-	Plant	Head	Head	Lodging	Bird
	lb/acre	mo	Head	ht	exer	type ¹	%	%
		%	DAP	in	in			
Seed Resource SR522	4970	12.6	68	51	8	5	5	15
Garst N0479	4956	12.4	70	50	7	5	5	10
Dekalb DKS54-00	4800	13.4	69	52	7	1	5	35
Pioneer brand 84G62	4790	12	67	47	5	3	5	10
Terral TVX95S201	4777	12.3	74	53	7	5	0	10
Asgrow Missle	4776	12.6	68	48	4	2	5	20
Pioneer brand 83G66	4688	14.2	66	56	7	3	0	15
Terral TV1050	4563	12.6	65	49	2	1	0	30
Southern States SS800	4461	12.1	58	48	8	2	10	40
Pioneer brand 8282	4454	13.4	68	54	6	5	5	20
Triumph TR82-G	4444	13.2	70	54	4	2	5	35
Seed Resource SR544	4430	12.9	71	54	5	4	0	30
Terral TVX93S203	4400	13.3	63	51	9	2	5	35
DynaGrow 752B	4396	12.5	61	51	10	2	0	45
Garst 5382	4362	13.1	72	53	6	2	5	45
Terral TV93S72	4325	12.6	61	47	7	4	0	15
Garst 5440	4308	13	66	50	5	3	5	15
Terral TVX96H202	4265	12.3	73	50	5	4	5	15
DynaGrow 762B	4196	12.5	59	54	7	3	5	40
Terral TV9421	4192	12.4	60	48	5	3	5	25
Golden Acres 3694	4177	12.6	66	52	5	4	5	20
Dekalb DK52	4166	12.9	58	51	11	5	0	15
Asgrow A571	4146	12.3	66	52	8	2	5	15
DynaGrow 751B	4099	13.4	67	50	4	2	10	20
Golden Acres 444E	4076	12.7	61	52	8	3	0	45
Dekalb DK53	4072	13.7	70	53	5	3	0	40
DynaGrow 780B	4011	13.3	70	56	7	2	10	35
Garst 5515	3992	12	58	49	7	5	15	15
Terral TV96H81	3943	12.8	65	54	5	2	5	35
Seed Resource SR565FG	3929	13.2	72	59	4	2	0	10
Southern States SS650	3790	13.3	64	54	5	2	5	30
DynaGrow 732B	3543	11.9	55	48	12	1	65	10
Average	4328	12.8	66	51	6	-	4.5	24
CV, %	12.9	1.8	4.5	4.6	31.76	-	71.5	44.5
LSD (0.10)	588	0.2	3	3	3	-	5	20

¹Readings taken from only one rep.

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

Location Summary

Rainfall was well distributed in May and June (see graph below), resulting in yields ranging from 4323 lb/acre for DynaGrow 780B to 8238 lb/acre for Pioneer brand 84G62, with a trial average of 6700 lb/acre (Table 6). Fourteen hybrids had one-year yields and thirteen hybrids had two-year average yields over 7000 lb/acre.

Soil Type.....Sharkey clay
 Row Spacing.....40 inch
 Seeding Rate.....8 seed/ft
 Fertilization
 Sidedress..... 120 lb N/a
 Herbicides
 After emergence: Atrazine 1.5 qt./acre,
 Basagram 0.75 lb/acre, 1% crop oil
 Insecticides
 Karate 2 oz/acre
 (3 Applications for sorghum midge)
 Previous Crop.....Grain Sorghum
 Planting Date.....April 24

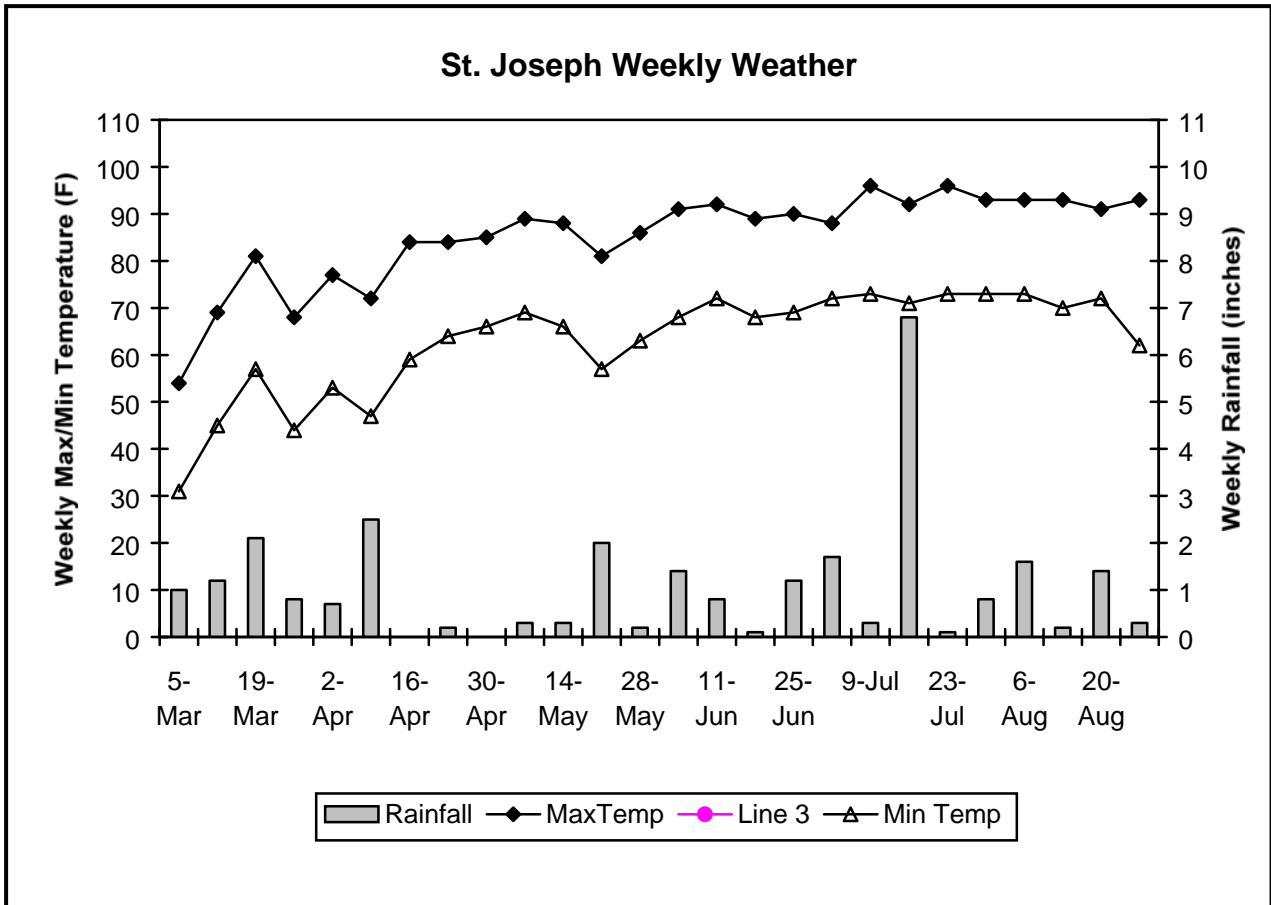


Table 6 . Performance of non-irrigated grain sorghum hybrids at Northeast Research Station, St. Joseph, LA, 2002.

Brand/hybrid	Yield			Gr mo	Mid- head	Plant ht	Head exer	Head type
	2002	2001	2-Yr Avg					
	-----lb/acre-----			%	DAP	in	in	
Pioneer brand 84G62	8238	7786	8012	14.6	57	55.5	3	3.5
Pioneer brand 83G66	7766	7706	7736	15.9	54	58	5	3
Pioneer brand 8282	7634	7395	7515	15.4	55	58.5	3.5	4.5
Dekalb DKS54-00	7617	8172	7895	15.7	58	58	6.5	3
Dekalb DK53	7608	8039	7824	15.3	57	60	3	2.5
Dekalb DK52	7355	7845	7600	14.1	54	57.5	7.5	3.5
Seed Resource SR565FG	7228	-	-	13.9	59	68	5	3
Asgrow Missile	7111	7568	7340	14.7	58	56.5	4.5	3
DynaGrow 732B	7109	-	-	14.3	52	53	9.5	3
Southern States SS800	7092	7820	7456	12.9	54	57.5	7	2.5
Terral TVX93S203	7041	-	-	14.7	53	58.5	6.5	2.5
DynaGrow 762B	7016	6929	6973	14.1	55	60.5	6.5	2.5
Terral TV9421	7013	7093	7053	13	53	59.5	7.5	3.5
Terral TV1050	7005	7626	7316	13.6	57	60	3.5	2
Golden Acres 444E	6991	7107	7049	13.4	54	58	8.5	3.5
Terral TV93S72	6956	-	-	13.5	55	55	9.5	2.5
Golden Acres 3694	6860	7086	6973	13.7	56	55.5	4.5	2.5
Garst 5382	6835	-	-	14.2	58	51	3	2
Dyna Grow 751B	6829	7464	7147	13.8	57	58	1	2
Asgrow A571	6807	7299	7053	13.4	57	56.5	5.5	3
Garst 5515	6694	6785	6740	13.9	53	54.5	6.5	4
Terral TV96H81	6294	-	-	14.4	56	59	3.5	2
DynaGrow 752B	6285	-	-	13	56	57.5	6	4
Terral TVX96H202	6154	-	-	13.4	57	54.5	7.5	4
Triumph TR82-G	6132	-	-	14	58	56.5	2.5	2
Seed Resource SR544	6117	-	-	13.1	58	58	2	3.5
Garst 5440	6006	7107	6557	13.5	55	56.5	5.5	3
Terral TVX95S201	5759	-	-	13.1	56	54	7	4.5
Garst N0479	5571	-	-	12.7	57	55	5.5	5
Seed Resource SR522	5544	-	-	12.7	57	55	6.5	5
Southern States SS650	5543	7904	6724	14.3	58	57	1.5	2.5
DynaGrow 780B	4323	7489	5906	14.3	58	57	0.5	2
Average	6700	-	-	13.9	56	57	5	3
CV,%	11.6	-	-	4.6	2.0	2.6	23.4	9.1
LSD (0.10)	913	-	-	0.8	2	2.5	2	0.5

Irrigated Grain Sorghum Performance Trial at the Northeast Research Station - St. Joseph

Location Summary

This trial was furrow-irrigated using the 'Arkansas Irrigation Scheduler' for timing irrigations. A 2-inch soil moisture deficit was used, with two water applications on June 7 and 19. Yields ranged from 5710 lb/acre for Seed Resource SR522 to 7809 lb/acre for Pioneer brand 84G62, with a trial average of 6689 lb/acre (Table 7). Nine hybrids had yields greater than 7000 lb/acre.

Soil Type.....Sharkey clay
 Row Spacing.....40 inch
 Seeding Rate.....8 seed/ft
 Fertilization
 Sidedress..... 120 lb N/a
 Herbicides
 After emergence: Atrazine 1.5 qt./acre,
 Basagram 0.75 lb/acre, 1% crop oil
 Insecticides
 Karate 2 oz/acre
 (3 Applications for sorghum midge)
 Previous Crop.....Grain Sorghum
 Planting Date.....April 24
 Harvest Date.....August 2

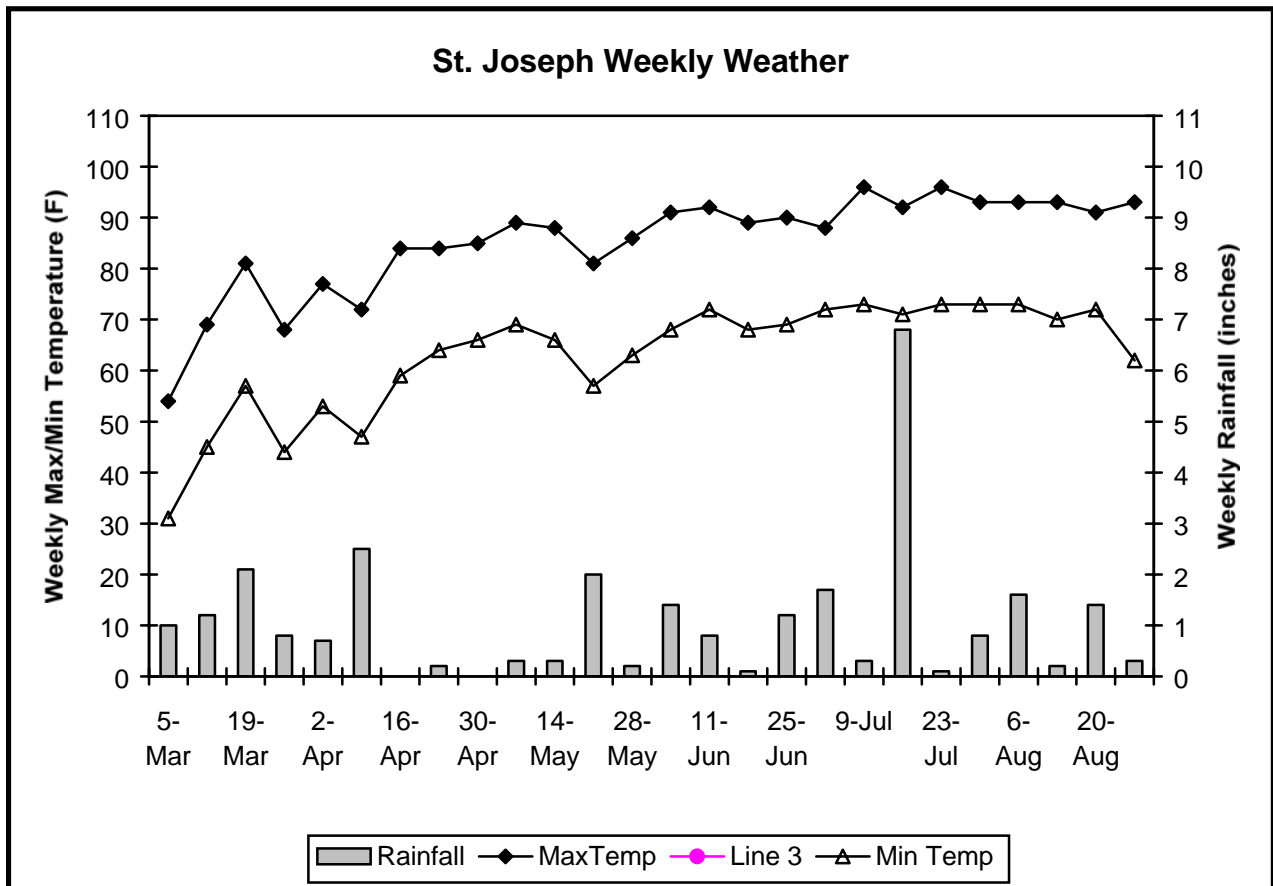


Table 7. Performance of irrigated grain sorghum hybrids at Northeast Research Station, St. Joseph, LA, 2002.

Brand/hybrid	Yield	Gr	Mid-Head	Plant	Head	Head
	lb/acre	mo	DAP	ht	exer	type
		%		in	in	
Pioneer brand 84G62	7809	14.2	58	58.5	4	4
Pioneer brand 83G66	7516	14.6	55	59.5	6	3
Pioneer brand 8282	7510	15	56	60	5	4
Dekalb DKS54-00	7233	15	58	60	8	3
Terral TV9421	7199	12.5	55	61	9.5	3.5
Terral TV1050	7154	13.3	57	60.5	5.5	2
Golden Acres 444E	7125	12.5	54	60.5	8.5	3
Seed Resource SR565FG	7035	13.4	60	67	6	3
Terral TV93S72	7010	13.1	57	54.5	7.5	3
Terral TV96H81	6923	13.5	57	62	4	2.5
Southern States SS650	6895	13.4	57	60.5	3	2.5
Dekalb DK53	6774	15.2	60	60	4.5	2.5
Asgrow A571	6768	13.1	57	59.5	8	3
Dekalb DK52	6691	13.9	56	58.5	8.5	3
DynaGrow 762B	6614	14	56	60.5	6	2.5
Southern States SS800	6609	13.2	56	58.5	5	3
DynaGrow 732B	6608	13.3	54	54.5	10	3.5
Terral TVX93S203	6600	14.5	54	59	6.5	2.5
Asgrow Missile	6562	14.5	58	57	4	3
DynaGrow 751B	6553	13.8	59	60.5	4	2
Garst 5382	6524	13.8	58	52.5	5.5	1.5
Seed Resource SR544	6481	13.2	60	57	5	3
DynaGrow 752B	6445	12.8	57	57	6.5	2.5
Golden Acres 3694	6399	13.4	59	57	5.5	2.5
Terral TVX96H202	6347	13	58	55	9	4
Garst 5440	6344	13.8	56	59.5	7.5	3
DynaGrow 780B	6295	13.8	58	58.5	2	1.5
Triumph TR82-G	6258	16.8	58	60.5	2	2
Terral TVX95S201	6161	12.8	58	56	7	4.5
Garst 5515	6102	13.3	55	56	6	3.5
Garst N0479	5805	12.8	58	54	8.5	5
Seed Resource SR522	5710	12.4	58	57	7.5	5
Average	6689	13.7	57	58	6.0	3.0
CV, %	11.6	7.8	2.2	2.6	22.4	7.8
LSD (0.10)	909	1.3	2	2.5	2.5	0.5

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

Location Summary

Rainfall was limited, but well distributed in late May and June (see graph below). Early July rains were probably beneficial. Yields ranged from 3191 lb/acre for Terral TV9421 to 5506 lb/acre for Asgrow Missile, with a trial average of 4369 lb/acre (Table 8). Although heads for many hybrids did not emerge above the canopy, yields were better than expected. Kernels were larger than normal probably benefiting from the July rains.

Soil Type.....Gigger silt loam
 Row spacing.....40 inch
 Seeding Rate.....8 seed/ft
 Fertilization
 Sidedress....80 lb N/acre
 Herbicides
 After emergence: Atrazine 1 qt./acre,
 Dual Magnum II 1 pt./acre
 Insecticides
 Baythroid 2 oz./acre
 (3 Applications for sorghum midge)
 Previous Crop.....Cotton
 Planting Date.....April 29
 Harvest Date.....August 17

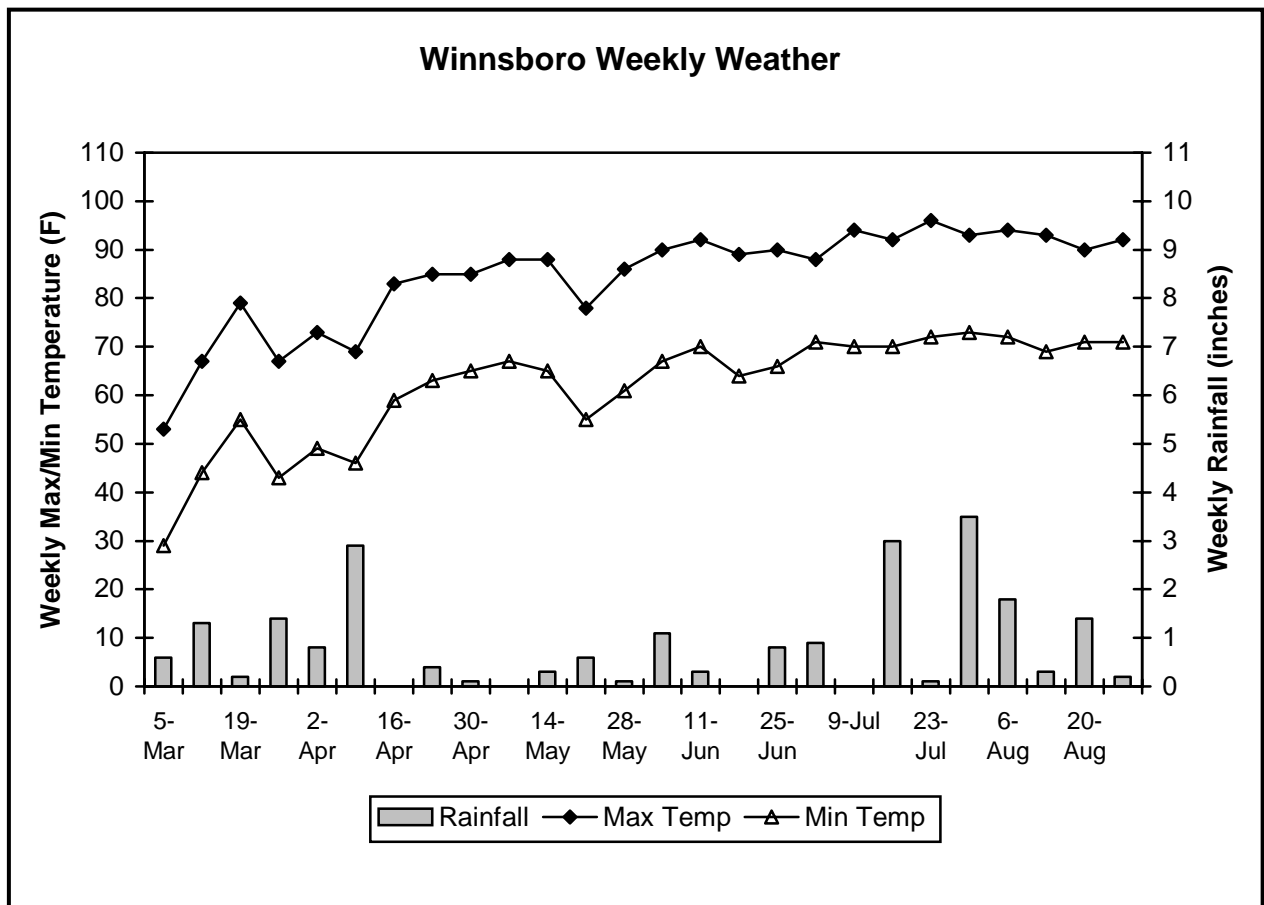


Table 8. Performance of grain sorghum hybrids at Macon Ridge Research Station, Winnsboro, LA, 2002.

Brand/hybrid	Yield			Gr mo	Mid- head	Plant ht	Head exer	Head type
	2002	2001	2-Yr avg					
	-----lb/acre-----			%	DAP	in	in	
Asgrow Missile	5506	4543	5025	15	62	49	2	2.5
Pioneer brand 84G62	5231	4348	4790	14.8	63	39	0.5	2
Pioneer brand 8282	5145	3708	4427	14	58	41	3	3
Triumph TR82-G	5019	-	-	14.5	64	46.5	2	1
DynaGrow 780B	4986	1664	3325	13.8	63	46	3.5	1
DynaGrow 751B	4930	1534	3232	13.9	61	43.5	1.5	1.5
Pioneer brand 83G66	4924	3669	4297	13.8	61	41.5	3	2
Southern States SS650	4832	1960	3396	13.9	63	42.5	1.5	1.5
Seed Resource SR544	4777	-	-	14.3	65	46	3.5	2
Garst 5440	4774	2473	3624	13	59	41	3	2
Garst 5382	4761	-	-	14.2	61	40.5	3.5	1
Terral TV96H81	4645	-	-	13.7	60	43	3.5	1
Terral TV1050	4575	3642	4109	12.8	61	43	2	2
Seed Resource SR565FG	4396	-	-	14.2	63	46	1	2
DynaGrow 762B	4392	3915	4154	12.6	57	39.5	1	2.5
Asgrow A571	4386	3842	4114	14.3	62	41.5	5	1.5
Dekalb DK52	4352	3920	4136	13	60	40.5	3.5	2.5
Golden Acres 3694	4285	3828	4057	13.6	60	39.5	1.5	2.5
Dekalb DKS54-00	4233	3721	3977	14.2	64	45.5	3	2
Dekalb DK53	4167	4573	4370	15.1	64	47	1.5	2
DynaGrow 732B	4104	-	-	14.7	52	36.5	1	2.5
Garst 5515	4073	2956	3515	13.5	55	37.5	2	2.5
Southern States SS800	3995	3450	3723	13.9	58	40.5	3	2
Garst N0479	3959	-	-	12.9	62	35	1.5	3
DynaGrow 752B	3949	-	-	13.1	59	39	2	2.5
Terral TV93S72	3945	-	-	14	57	38.5	1	2
Seed Resource SR522	3749	-	-	12.8	61	38	4.5	2.5
Golden Acres 444E	3652	3579	3616	12.4	56	37	1	3
Terral TVX95S201	3646	-	-	13.1	62	35.5	1.5	2.5
Terral TVX96H202	3635	-	-	13.5	63	33	3	2.5
Terral TVX93S203	3588	-	-	13.6	59	37	2	2
Terral TV9421	3191	4061	3626	13.4	58	35	2	2.5
Average	4369	-	-	13.7	60	41	2.5	2
CV, %	13.6	-	-	4.9	2.2	4.8	56.8	18.7
LSD (0.10)	622	-	-	1.1	2	3.5	NS	0.5

Table 9. Summary of yield performance of grain sorghum hybrids entered in the 2002 LAES hybrid performance trials at six locations.

Brand/hybrid	St. Joseph ²						Winns
	Alex.	Baton Rouge	Bossier City ¹	Crowley	Non-Irr	Irr	
	-----lb/acre-----						
Asgrow Missile	7378	4322	3735	4776	7111	6562	5506
Asgrow A571	7241	3912	3377	4146	6807	6768	4386
Dekalb DK52	7456	3778	3346	4166	7355	6691	4352
Dekalb DK53	7140	4244	3341	4072	7608	6774	4167
Dekalb DKS 54-00	7095	3265	2875	4800	7617	7233	4233
DynaGrow 732B	6727	3913	1997	3543	7109	6608	4104
DynaGrow 751B	6815	4440	3108	4099	6829	6553	4930
DynaGrow 752B	6538	4029	3408	4396	6285	6445	3949
DynaGrow 762B	7297	4275	3226	4196	7016	6614	4392
DynaGrow 780B	7137	4492	2792	4011	4323	6295	4986
Garst 5515	6503	3094	3656	3992	6694	6102	4073
Garst 5440	6992	4148	3143	4308	6006	6344	4774
Garst 5382	7035	3876	3333	4362	6835	6524	4761
Garst N0479	6705	3967	3765	4956	5571	5805	3959
Golden Acres 3694	7279	3637	3277	4177	6860	6399	4285
Golden Acres 444E	7380	4609	3818	4076	6991	7125	3652
Pioneer brand 8282	6881	3842	3287	4454	7634	7510	5145
Pioneer brand 83G66	6921	3921	3127	4688	7766	7516	4924
Pioneer brand 84G62	7589	3891	3808	4790	8238	7809	5231
Seed Resource SR522	6709	4096	3709	4970	5544	5710	3749
Seed Resource SR544	6340	4203	3426	4430	6117	6481	4777
Seed Resource SR565FG	6145	4207	2443	3929	7228	7035	4396
Southern States SS650	6935	4281	3968	3790	5543	6895	4832
Southern States SS800	6823	4651	3533	4461	7092	6609	3995
Terral TV9421	7588	4595	3233	4192	7013	7199	3191
Terral TV1050	6801	3352	3106	4563	7005	7154	4575
Terral TV93S72	7026	3777	3508	4325	6956	7010	3945
Terral TV96H81	7300	5425	3179	3943	6294	6923	4645
Terral TVX93S203	7066	3994	2762	4400	7041	6600	3588
Terral TVX95S201	6941	4035	3467	4777	5759	6161	3646
Terral TVX96H202	6499	4991	3801	4265	6154	6347	3635
Triumph TR82-G	7209	4292	3702	4444	6132	6258	5019
Average	6984	4090	3320	4328	6700	6689	4369

¹This trial was inadvertently not fertilized; however, nitrogen deficiency symptoms were not visible during the growing season.

²Conducted both irrigated (Irr.) and non-irrigated (Non-Irr) hybrid performance tests at St. Joseph.

Table 10. List of participating seed companies and hybrids tested in the LAES 2002 grain sorghum hybrid trials.

Company	Brand/hybrids
Garst/Agripro Seed Company 761 Walnut Knoll Lane, Suite 200 Cordova, TN 38018	Garst: 5382, 5440, 5515, N0479
Golden Acres Genetics P.O. Box 579 Buchanan Dam, TX 78609	Golden Acres: 444E, 3694
Monsanto Company Route 2 P.O. Box 373 Bishop, TX 78343	Asgrow: Missile, A571 Dekalb: DK52, DK53, DKS54-00
Pioneer Hi-Bred Int., Inc. 6767 Old Madison Pike, Suite 110 Huntsville, AL 35806	Pioneer brand: 8282, 83G66, 84G62
Seed Resource P.O. Box 326 Tulia, TX 79088	Seed Resource: SR522, SR544, SR565FG
Southern States Cooperative 6606 W. Broa St. P.O. Box 26234 Richmond, VA 23260	Southern States: SS650, SS800
Terral Seed, Inc. 604 Blount St. Lake Providence, LA 71254	Terral: TV1050, TV93S72, TV9421, TV96H81, TVX93S203, TVX95S201, TVX96H202
Triumph Seed Co., Inc. Hwy. 62 Bypass P.O. Box 1050 Ralls, TX 79357	Triumph: TR82-G
UAP Mid-South 57 Germantown Court, Suite 200 Cordova, TN 38018	DynaGrow: 732B, 751B, 752B, 762B, 780B