

2021 Texas Grain Sorghum Performance Variety Trials



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Introduction

Texas A&M AgriLife Research conducts the grain sorghum performance tests each year to provide growers in Texas with accurate and unbiased information on hybrid performance at locations across the state. Selection of superior hybrids that are well adapted for a given region is essential for maximizing yield and profit.

This year, six irrigated and six non-irrigated test sites were planted in the major production regions of Texas. Major grain sorghum production regions include the Western Gulf Coastal Plain, Southern Texas Plains, East Central Texas Plains, Texas Blackland Prairies and High Plains. Approximate locations of the 2021 test sites are shown in Figure 1. A total of 202 entries were evaluated across 12 locations representing 26 unique hybrids from 6 commercial seed companies. Commercial seed companies enter hybrids into each trial location at their own discretion.

Performance trials are conducted by personnel from the Crop Testing Program, Texas A&M AgriLife Research, and financed by fees collected from participating commercial seed companies. Test sites are on privately owned farms or at Texas A&M University AgriLife Research Centers. All entries are randomized and replicated four times at each location. All test sites are managed according to practices common to each production region. Field maps and planting plans can be found at the link below shortly after planting. Following harvest, results are statistically analyzed and made available at: <http://varietytesting.tamu.edu/grainsorghum/>.

Suggestions for Selecting Hybrids and Varieties

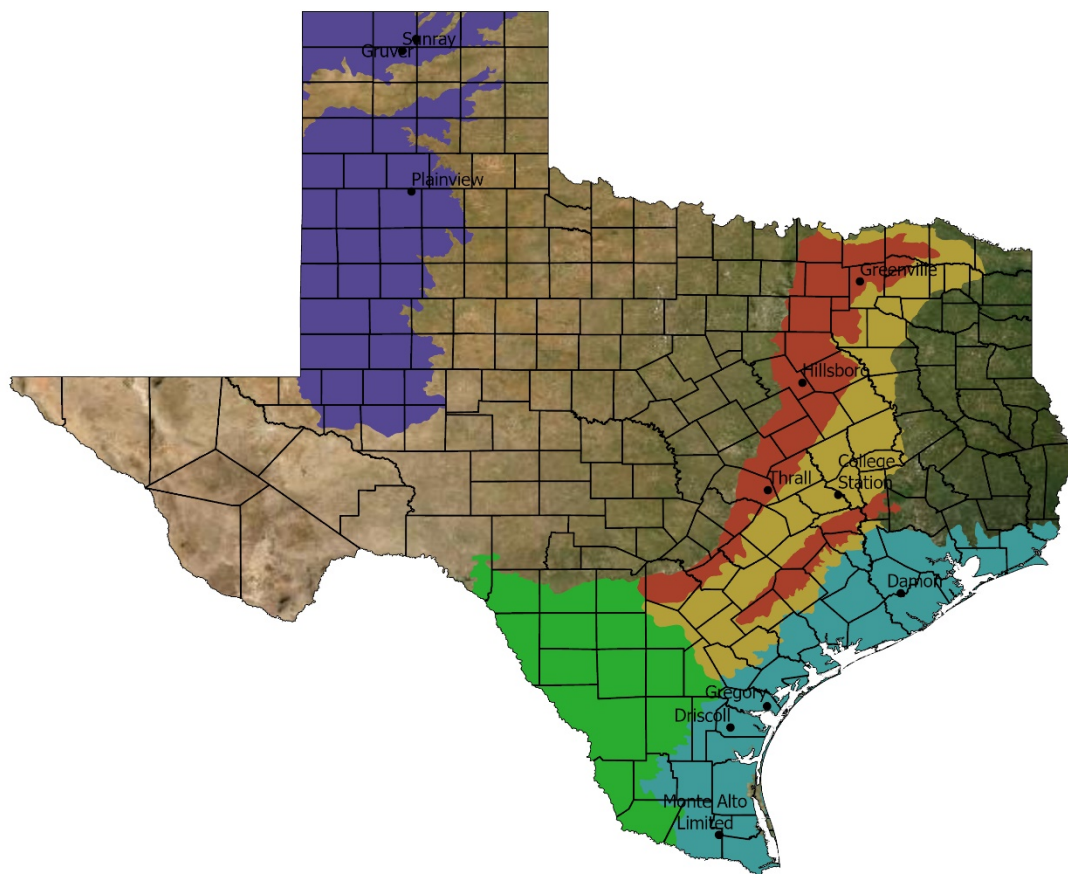
Variety or hybrid selection is often the first decision a grower must make each crop year. The goal is to identify hybrids with superior performance (top yielding) for your environment. Many environments exist in Texas with significant variation within regions and across years, mostly due to variation in weather. Documented, consistent yield performance within a region is essential for selecting hybrids that will perform well on your farming operation. This means that evaluation of hybrids over multiple locations and years (when possible) is the best way to predict future performance. Exercise caution when using single location data to compare hybrid performance.

Following yield performance, other characteristics may be useful for selecting the best hybrid. Maturity or days to flowering may be important for selecting hybrids that are appropriate for your growing season/conditions. Typically mid- and full-season hybrids will respond favorably to additional moisture while early or short season hybrids are designed for dryland production with lower moisture requirements. Selecting the wrong maturity hybrid can result in poor yields in dry environments or the inability of a hybrid to produce higher yields if the moisture profile is favorable.

As water becomes more limited, drought tolerance becomes a critical component for production. Most sorghum hybrids possess good levels of pre-flowering drought tolerance, but there is a wide variation for post-flowering drought tolerance, and in most years post flowering drought is more common in Texas. Therefore, producers should ask seed companies for the relative level of post-flowering drought tolerance (or staygreen) their hybrids possess. Producers should realize that plant height and grain yield are correlated and while there are exceptions, taller hybrids generally have higher yield potential. Likewise taller hybrids require greater management, but if they possess good post-flowering drought tolerance (or staygreen) they should have good standability.

Finally, variation for grain quality exists in grain sorghum and there are several hybrids that are now used in food grain markets. A list of these hybrids is provided by the National Grain Sorghum Producers (<https://sorghumgrowers.com/>). These hybrids have white or cream-colored grain and straw colored glumes with tan plant color. While these hybrids are not suitable in all regions, in certain environments these hybrids yield comparably to traditional hybrids and may provide additional marketing opportunities.

Figure 1. 2021 Grain Sorghum Performance Trials: Locations and Production Regions



Earthstar Geographics



Field-Plot Techniques

Performance trials are conducted at each location using a randomized complete block design with four replications of each entry (hybrid). Plots are generally 2 rows wide with row spacing ranging from 30 to 40 inches depending on location. Population is determined based on the appropriate seeding rate for each production region and cropping system. Seeds are packaged to deliver 30 feet of planted row per plot. Seed is planted using a SRES Advanced research air planter with Monosem units at all sites. Following emergence, alleys are trimmed if necessary for a final plot length of 30 feet with a 4 foot alley. Alleys are maintained free of weeds throughout the growing season through mechanical or chemical control measures.

Cultural and agronomic practices adapted for each region are used as determined by the cooperator. Field data such as plant height, head exertion, and days to 50% flower are recorded at the appropriate times. Additional agronomic information is provided when available. Locations are harvested with a John Deere 3300 plot combine equipped with the HarvestMaster Grain Gauge that measures plot weight, test weight, and grain moisture. Field and harvest notes are compiled for each location and results analyzed.

Data Analysis and Reporting

Data from each location is analyzed statistically using SAS. Mean values for yield and additional agronomic data are presented in tables for each location. Mean values are derived from the average of all replications for each entry in each trial. Least Significant Difference (LSD) is a statistical test used that determines the minimum difference between two entries required to be considered having different levels of performance. Differences between entries (yield, plant height, etc.) less than the LSD value represents variation measurements due to factors other than hybrid performance, such as variation in soil type, soil moisture, fertility, insect or disease pressure, planting or harvesting procedures. Although numeric differences in yield or other measurements may exist, if two entries are within the LSD value, they should be considered to have equal performance. The Coefficient of Variation (CV) is used to determine the amount of variability in the data set relative to the mean and can be used to determine if the results are reliable. Generally, CV's greater than 20% indicate that the data is unreliable and is not reported. However, each data set is evaluated individually to determine if results will be reported.

In the 2021 Grain Sorghum Characteristics table, you will find agronomic data submitted by each company for their entries. Agronomic information provided by the companies about their hybrids is found in the list below and include items such as cob color, grain color and genetic traits. Agronomic data measured and collected by the Crop Testing program is described in the section below.

Agronomic Data as designated by each company:

Grain Color: Y = Yellow, W = White, Cm = Cream, R = Red, Bz = Bronze

Plant Color: T = Tan, R = Red, P = Purple.

Maturity Class: Early (E), medium-early (ME), medium (M), medium-late (ML), late (L).

Measured Agronomic Data:

Days to 50% Flowering: the average number of days from planting to the date when 50 percent of the plants within the plot are in some stage of flowering.

Plant Height: the average height in inches from ground to tip of the panicle.

Head Exertion: the average length in inches from the flag leaf to the base of the panicle.

Grain Moisture: the average moisture at harvest as a percent (%).

Test Weight: a measure of bulk grain density and is determined by the seed weight per unit of volume. This is measured at harvest and expressed as pounds per bushel.

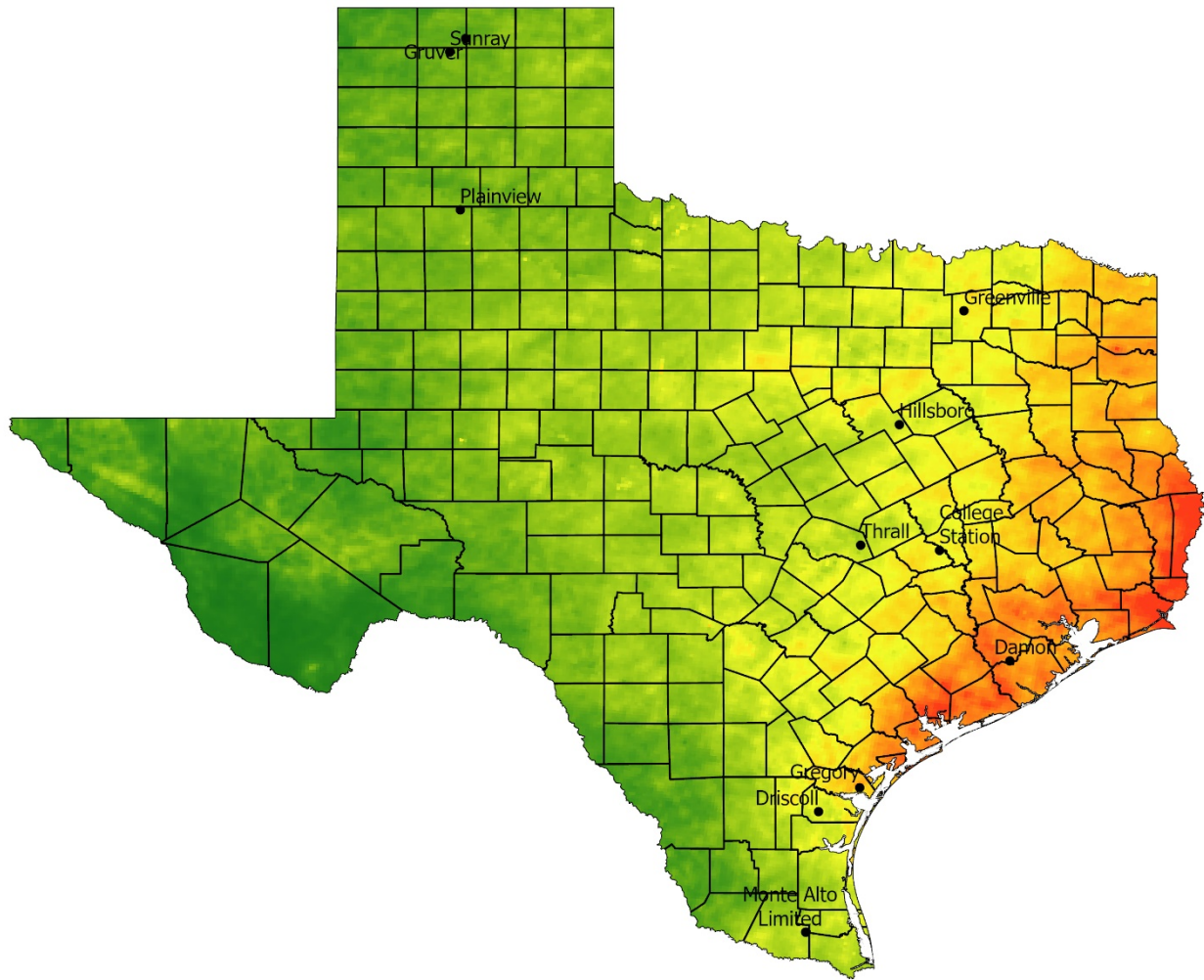
Yield: Standardized to 14% moisture: expressed in pounds per acre (lb/acre) and calculated using $(((100 - \text{moisture} (\%)) / 86) * \text{yield} (\text{lb/acre}))$.

In addition to individual site performance, information on multi-year performance for each site is provided. Multi-year tables are presented as 2 and 3-year summaries of yield performance data. The entries are ranked according to hybrid performance in the current year.

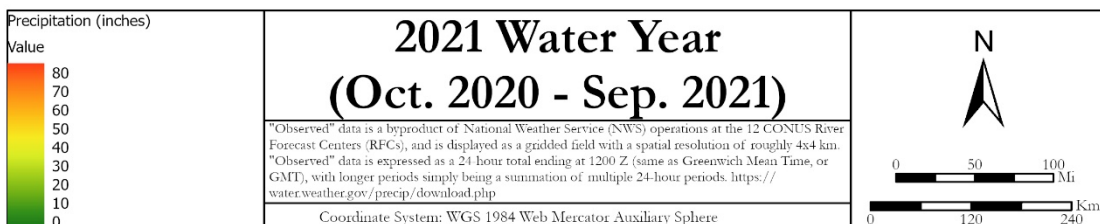
Rainfall

Available soil moisture during the growing season is often a limiting factor for sorghum production in Texas. Available moisture will influence decisions on hybrid selection related to maturity and for selection of appropriate seeding rates. Variation in rainfall patterns can be substantial within a production region and from year to year. A significant gradient in annual rainfall exists in Texas moving east to west.

Figure 2. 2021 Precipitation (October 1, 2020 –September 30, 2021) precipitation in inches



Earthstar Geographics



2021 Grain Sorghum Hybrid Characteristics



Company	Brand	Hybrid	Grain Color	Plant Color	Maturity
Advanta Seeds	Alta Seeds	ADV G2275	Bronze	Purple	Medium
Bayer	DEKALB	DKS 54-07	Red	Purple	Medium-Late
Bayer	DEKALB	DKS 36-07	Bronze	Purple	Medium-Early
Bayer	DEKALB	DKS 44-07	Red	Purple	Medium
Bayer	DEKALB	DKS 50-07	Red	Purple	Medium-Late
Bayer	DEKALB	DKS 40-76	Bronze	Purple	Medium-Early
Bayer	DEKALB	DKS 45-60	Bronze	Purple	Medium
Corteva	Pioneer	82P83	Red	Purple	Medium-Late
Corteva	Pioneer	83P11	Red	Purple	Medium-Late
Golden Acres	Golden Acres	4880R	Red	Purple	Medium-Late
Golden Acres	Golden Acres	3180B	Bronze	Purple	Medium
Nutrien Ag	Dyna-Gro	GX20973	Bronze	Purple	Medium
Nutrien Ag	Dyna-Gro	M59GB94	Bronze	Purple	Early
Nutrien Ag	Dyna-Gro	M63GB78	Bronze	Purple	Medium
Nutrien Ag	Dyna-Gro	M67GB87	Bronze	Purple	Medium
Nutrien Ag	Dyna-Gro	GX21965	Bronze	Purple	Medium-Late
Nutrien Ag	Dyna-Gro	GX20970	Bronze	Purple	Medium-Late
Nutrien Ag	Dyna-Gro	M71GR91	Red	Purple	Medium-Late
Nutrien Ag	Dyna-Gro	GX20998	Bronze	Purple	Medium
Nutrien Ag	Dyna-Gro	M60GB31	Bronze	Purple	Medium-Early
Nutrien Ag	Dyna-Gro	M72GB71	Bronze	Purple	Medium-Late
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx631xRTx436	White	Tan	Medium-Late

2021 Grain Sorghum Hybrid Characteristics



Company	Brand	Hybrid	Grain Color	Plant Color	Maturity
Wilbur-Ellis Company	Integra	G3711	Red	Purple	Medium-Late
Wilbur-Ellis Company	Integra	G3620	Bronze	Purple	Medium
Wilbur-Ellis Company	Integra	G3590	Bronze	Purple	Medium-Early
Wilbur-Ellis Company	Integra	G3665	Bronze	Purple	Medium

Hybrid characteristics are provided by representatives of each company.
 For additional information contact your local seed dealer or:
 Katrina Horn
katrina.horn@agnet.tamu.edu
 979-845-8505

Grain Sorghum

Company Contacts



Company	Brand	Contact Information	Phone	Email
Advanta Seeds	Alta Seeds	Zach Eder 8600 Freeport Pkwy, Suite 220 Irving, TX 75063	979-332-5138	zach.eder@advantaseeds.com
Bayer	DEKALB	Scott Stanislav 800 N. Lindbergh St. Louis, MO 63141	573-253-4962	scott.stanislav@bayer.com
Corteva	Pioneer	Cleve Franks 12762 CR 1394 Sinton, TX 78387	806-292-2327	cleve.franks@pioneer.com
Golden Acres	Golden Acres	Chris Sheppard 1122 E. 169th St Westfield, IN 46074	254-313-8720	chris.sheppard@lgseeds.com
Nutrien Ag	Dyna-Gro	Cord Willms 1024 Willms Road Columbus, TX 78934	361-960-4399	james.willms@nutrien.com
Wilbur-Ellis Company	Integra	David Ferrell 1111 IH-35 North, Suite 206 Round Rock, TX 78664	512-258-1834	dferrell@wilburellis.com

Monte Alto Full 2021 Grain Sorghum Performance Trial

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)
DEKALB	DKS 44-07	66	49	7	0	14.4	59.1	6,607
DEKALB	DKS 50-07	66	49	5	0	15.8	59.5	6,441
Integra	G3665	64	48	6	0	12.6	55.7	6,359
DEKALB	DKS 45-60	65	51	11	0	14.6	58.9	6,270
Dyna-Gro	GX21965	66	49	5	0	13.9	58.8	6,199
DEKALB	DKS 54-07	68	53	5	0	16.2	58.5	6,100
Dyna-Gro	GX20970	67	50	7	0	15.9	57.4	5,967
Alta Seeds	ADV G2275	67	46	7	0	19.4	57.5	5,937
Dyna-Gro	M67GB87	65	48	6	0	14.1	56.5	5,930
Dyna-Gro	M72GB71	66	50	6	0	13.7	58.5	5,811
Dyna-Gro	M63GB78	64	48	7	0	13.2	56.9	5,644
Dyna-Gro	GX20998	64	49	8	0	13.5	57.6	5,628
DEKALB	DKS 40-76	64	46	9	0	13.9	57.0	5,610
Dyna-Gro	M71GR91	68	53	4	0	15.1	58.9	5,451
DEKALB	DKS 36-07	62	46	8	0	12.9	56.6	5,339
Integra	G3711	68	50	5	0	16.0	57.9	5,208
Texas A&M AgriLife Research	ATx631xRTx436	66	53	6	0	13.2	56.8	4,456

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.

Monte Alto Full 2021 Grain Sorghum Performance Trial

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)																																
Agronomic information		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #f2f2f2;">Mean</td> <td style="text-align: center;">65</td> <td style="text-align: center;">49</td> <td style="text-align: center;">6</td> <td style="text-align: center;">0.0</td> <td style="text-align: center;">14.6</td> <td style="text-align: center;">57.7</td> <td style="text-align: center;">5,821</td> </tr> <tr> <td style="background-color: #f2f2f2;">C.V. %</td> <td style="text-align: center;">0.8</td> <td style="text-align: center;">4.0</td> <td style="text-align: center;">13.8</td> <td></td> <td style="text-align: center;">3.5</td> <td style="text-align: center;">1.3</td> <td style="text-align: center;">9.6</td> </tr> <tr> <td style="background-color: #f2f2f2;">P>f (hybrid)</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">0.000</td> <td></td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">0.000</td> </tr> <tr> <td style="background-color: #f2f2f2;">L.S.D.</td> <td style="text-align: center;">0.7</td> <td style="text-align: center;">2.8</td> <td style="text-align: center;">1.3</td> <td></td> <td style="text-align: center;">0.7</td> <td style="text-align: center;">1.0</td> <td style="text-align: center;">796.1</td> </tr> </table>							Mean	65	49	6	0.0	14.6	57.7	5,821	C.V. %	0.8	4.0	13.8		3.5	1.3	9.6	P>f (hybrid)	0.000	0.000	0.000		0.000	0.000	0.000	L.S.D.	0.7	2.8	1.3		0.7	1.0	796.1
Mean	65	49	6	0.0	14.6	57.7	5,821																																	
C.V. %	0.8	4.0	13.8		3.5	1.3	9.6																																	
P>f (hybrid)	0.000	0.000	0.000		0.000	0.000	0.000																																	
L.S.D.	0.7	2.8	1.3		0.7	1.0	796.1																																	
Plant Date	3/5/2021	<div style="background-color: #f2f2f2; padding: 5px; text-align: center;">Trial Notes</div> <div style="border: 1px solid gray; height: 100px; margin-top: 5px;"></div>																																						
Harvest Date	7/4/2021																																							
Irrigated	Yes																																							
Row Spacing (in)	30																																							
Number of Rows	2																																							
Target Seeds per Acre	80,000																																							
Precipitation (in)	13.8																																							
Irrigation (in)	12																																							
Herbicide	3/11: Atrazine + Dual																																							
Soil Type	Raymondville clay loam																																							
Tillage	Conventional																																							
Previous Crop	Cotton																																							
		Fertilizer Applied			Soil Analysis Report**																																			
		N (lb/ac)	171	NO3-N (ppm)		pH																																		
		P2O5 (lb/ac)	56	P (ppm)*		Conductivity (umho/cm)																																		
		K2O (lb/ac)	0	K (ppm)*		Ca (ppm)*																																		
		S (lb/ac)	0	S (ppm)*		Mg (ppm)*																																		
		Zn (lb/ac)	0			Na (ppm)*																																		

Cooperator: Texas AgriScience

Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact:

Dr. Ronnie Schnell / Katrina Horn
ronnie.schnell@agnet.tamu.edu / katrina.horn@agnet.tamu.edu
979-845-2935 / 979-845-8505

* Mehlich 3 by ICP, soiltesting.tamu.edu
** Samples collected at planting, some locations may have applied fertilizer

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.

Grain Sorghum

Monte Alto Full

Multi-Year Summary



Company	Brand	Hybrid	2 YR AVG Yield lb/Acre	3 YR AVG Yield lb/Acre
Bayer	DEKALB	DKS 44-07	6,700	
Bayer	DEKALB	DKS 54-07	6,472	
Nutrien Ag	Dyna-Gro	M72GB71	6,282	
Bayer	DEKALB	DKS 45-60	6,260	
Nutrien Ag	Dyna-Gro	M71GR91	6,211	
Bayer	DEKALB	DKS 36-07	5,651	
Advanta Seeds	Alta Seeds	ADV G2275	5,632	
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx631xRTx436	3,736	

Evaluation of yield across years and/or locations will provide the best indication of consistent hybrid performance. Only hybrids with two years data at each location are displayed.

Monte Alto Limited 2021 Grain Sorghum Performance Trial

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)
DEKALB	DKS 54-07	70	51	6	0	14.4	59.0	6,348
DEKALB	DKS 50-07	68	47	6	0	13.6	59.4	6,334
Dyna-Gro	M71GR91	70	51	5	0	14.0	59.3	6,201
DEKALB	DKS 44-07	67	45	5	0	12.4	58.5	6,080
Integra	G3711	70	48	5	0	14.2	58.2	6,068
Golden Acres	4880R	70	51	6	0	14.0	59.0	5,916
Integra	G3665	66	43	5	0	11.8	55.7	5,794
Golden Acres	3180B	67	47	5	0	11.5	55.3	5,695
Dyna-Gro	M67GB87	67	47	5	0	12.2	55.5	5,565
Dyna-Gro	GX20970	69	48	7	0	13.9	56.1	5,530
Dyna-Gro	GX21965	67	44	4	0	12.7	57.7	5,410
Dyna-Gro	M72GB71	68	44	5	0	12.8	58.2	5,246
DEKALB	DKS 36-07	63	43	7	0	11.7	57.0	5,202
DEKALB	DKS 45-60	68	44	7	0	13.9	58.7	5,079
Dyna-Gro	GX20998	65	43	6	0	12.2	58.2	4,984
DEKALB	DKS 40-76	65	42	6	0	12.6	57.8	4,865
Alta Seeds	ADV G2275	69	46	7	0	17.6	56.6	4,803
Texas A&M AgriLife Research	ATx631xRTx436	68	50	7	0	11.3	56.7	4,788
Dyna-Gro	M63GB78	66	46	7	0	11.8	55.5	4,515

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.

Monte Alto Limited 2021 Grain Sorghum Performance Trial

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)	
Agronomic information		Mean	67	46	6	0.0	13.1	57.5	5,496
Plant Date	3/4/2021	C.V. %	1.3	5.5	19.8		4.2	1.1	6.1
Harvest Date	7/4/2021	P>f (hybrid)	0.000	0.000	0.000		0.000	0.000	0.000
Irrigated	Yes	L.S.D.	1.2	3.6	1.6		0.8	0.9	474.3
Row Spacing (in)	30	Trial Notes							Cooperator: Texas AgriScience
Number of Rows	2	<p>Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact:</p> <p>Dr. Ronnie Schnell / Katrina Horn ronnie.schnell@agnet.tamu.edu / katrina.horn@agnet.tamu.edu 979-845-2935 / 979-845-8505</p>							
Target Seeds per Acre	60,000								
Precipitation (in)	13.8								
Irrigation (in)	6								
Herbicide	3/11: Atrazine + Dual	<p>* Mehlich 3 by ICP, soiltesting.tamu.edu ** Samples collected at planting, some locations may have applied fertilizer</p>							
Soil Type	Mercedes clay	Fertilizer Applied		Soil Analysis Report**					
Tillage	Conventional	N (lb/ac)	94	NO3-N (ppm)		pH			
Previous Crop	Cotton	P2O5 (lb/ac)	56	P (ppm)*		Conductivity (umho/cm)			
		K2O (lb/ac)	0	K (ppm)*		Ca (ppm)*			
		S (lb/ac)	0	S (ppm)*		Mg (ppm)*			
		Zn (lb/ac)	0			Na (ppm)*			

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.

Grain Sorghum

Monte Alto Limited

Multi-Year Summary



Company	Brand	Hybrid	2 YR AVG Yield lb/Acre	3 YR AVG Yield lb/Acre
Bayer	DEKALB	DKS 44-07	5,103	
Bayer	DEKALB	DKS 54-07	4,979	
Wilbur-Ellis Company	Integra	G3665	4,905	
Wilbur-Ellis Company	Integra	G3711	4,846	
Nutrien Ag	Dyna-Gro	M71GR91	4,814	
Golden Acres	Golden Acres	4880R	4,765	
Bayer	DEKALB	DKS 45-60	4,543	
Nutrien Ag	Dyna-Gro	M72GB71	4,350	
Bayer	DEKALB	DKS 36-07	4,082	
Advanta Seeds	Alta Seeds	ADV G2275	3,991	
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx631xRTx436	3,337	

Evaluation of yield across years and/or locations will provide the best indication of consistent hybrid performance. Only hybrids with two years data at each location are displayed.

Driscoll

2021 Grain Sorghum Performance Trial

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)
Dyna-Gro	M71GR91	73	51	5	0	12.5	57.5	5,248
Integra	G3665	70	47	9	0	13.1	53.9	5,037
Integra	G3711	74	52	5	0	13.3	59.1	5,030
Dyna-Gro	GX20998	70	48	11	0	12.7	57.5	4,932
Pioneer	82P83	72	49	7	0	11.5	53.7	4,896
DEKALB	DKS 44-07	73	49	6	0	13.0	54.9	4,837
Alta Seeds	ADV G2275	72	47	7	0	13.0	58.4	4,781
DEKALB	DKS 36-07	70	47	9	0	11.9	58.0	4,646
DEKALB	DKS 40-76	71	47	9	0	13.3	55.4	4,629
DEKALB	DKS 50-07	74	51	7	0	13.4	58.7	4,513
Pioneer	83P11	72	47	7	0	11.5	56.0	4,395
DEKALB	DKS 54-07	74	53	5	0	13.9	55.2	4,349
Dyna-Gro	GX20970	74	48	6	0	12.7	54.5	4,340
Dyna-Gro	M67GB87	72	48	6	0	12.3	57.3	4,226
DEKALB	DKS 45-60	73	52	12	0	12.9	58.3	4,131
Texas A&M AgriLife Research	ATx631xRTx436	72	53	7	0	12.8	56.3	4,041
Dyna-Gro	M63GB78	70	48	10	0	12.8	55.0	3,967
Golden Acres	3180B	71	46	5	0	12.8	53.9	3,770
Dyna-Gro	M72GB71	73	48	4	0	12.8	57.4	3,490
Integra	G3620	70	48	10	0	12.9	55.1	3,349
Dyna-Gro	GX21965	74	47	3	0	14.5	54.8	2,590

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.

Driscoll

2021 Grain Sorghum Performance Trial

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)
Agronomic information		Mean	72	49	7	0.0	56.2	4,343
Plant Date	3/2/2021	C.V. %	1.1	4.1	25.3	12.8	2.8	16.9
Harvest Date	7/19/2021	P>f (hybrid)	0.000	0.000		0.388	0.000	0.002
Irrigated	No	L.S.D.	1.1	2.9			2.6	1,136.8
Row Spacing (in)	30	Trial Notes						
Number of Rows	2	<p>*5+ inches of rain in early July delayed harvest and contributed to grain weathering.</p>						
Target Seeds per Acre	60,000							
Precipitation (in)	22.7	<p>Cooperator: McNair Farms</p> <p>Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact:</p> <p>Dr. Ronnie Schnell / Katrina Horn ronnie.schnell@agnet.tamu.edu / katrina.horn@agnet.tamu.edu 979-845-2935 / 979-845-8505</p>						
Irrigation (in)		<p>* Mehlich 3 by ICP, soiltesting.tamu.edu ** Samples collected at planting, some locations may have applied fertilizer</p>						
Herbicide		Fertilizer Applied		Soil Analysis Report**				
11 oz/ac Outlook		N (lb/ac)	78	NO3-N (ppm)	47	pH	7.6	
Soil Type	Victoria clay	P2O5 (lb/ac)	26	P (ppm)*	33	Conductivity (umho/cm)	334	
Tillage	Conventional, cultivated 4/1	K2O (lb/ac)	0	K (ppm)*	646	Ca (ppm)*	10,593	
Previous Crop	Cotton	S (lb/ac)	10	S (ppm)*	16	Mg (ppm)*	461	
		Zn (lb/ac)	0			Na (ppm)*	68	

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.

Driscoll

2021 Grain Sorghum Performance Trial

Brand	Hybrid	Plant Population per Acre	Heads per Acre	Plant Stand %	Mean Tiller # per Plant	Lodging (%)	Head Size lb/head	Weathering Rating (0-9)	Iron Chlorosis Rating
Texas A&M AgriLife Research	ATx631xRTx436	31,363	35,719	52	0.14	0.0	0.12	2.0	
Pioneer	82P83	40,729	51,183	68	0.26	0.0	0.10	2.3	
Pioneer	83P11	37,679	48,569	63	0.39	0.0	0.09	3.0	
Integra	G3620	29,403	42,035	49	0.43	0.0	0.08	3.0	
Integra	G3665	31,799	50,747	53	0.80	0.0	0.10	2.5	
Integra	G3711	42,689	54,014	71	0.27	0.0	0.09	2.3	
Golden Acres	3180B	18,513	35,501	31	1.04	0.0	0.11	2.8	
Dyna-Gro	GX20970	23,522	37,244	39	0.74	0.0	0.12	3.3	
Dyna-Gro	GX20998	37,897	55,321	63	0.47	0.0	0.09	3.5	
Dyna-Gro	GX21965	9,801	15,246	16	0.52	0.0	0.21	5.8	
Dyna-Gro	M63GB78	28,967	44,431	48	0.73	0.0	0.10	4.8	
Dyna-Gro	M67GB87	22,216	38,768	37	0.74	0.0	0.11	2.3	
Dyna-Gro	M71GR91	36,155	48,134	60	0.34	0.0	0.11	1.5	
Dyna-Gro	M72GB71	26,789	31,581	45	0.40	0.0	0.12	2.3	
DEKALB	DKS 36-07	29,839	45,085	50	0.50	0.0	0.10	5.0	
DEKALB	DKS 40-76	38,551	43,342	64	0.15	0.0	0.11	4.0	
DEKALB	DKS 44-07	35,501	46,391	59	0.38	0.0	0.12	2.3	
DEKALB	DKS 45-60	23,522	38,333	39	0.74	0.0	0.11	2.8	
DEKALB	DKS 50-07	30,274	42,471	50	0.41	0.0	0.11	1.5	
DEKALB	DKS 54-07	24,394	38,986	41	0.67	0.0	0.12	2.5	
Alta Seeds	ADV G2275	40,511	42,689	68	0.07	0.0	0.12	1.5	



Driscoll

2021 Grain Sorghum Performance Trial



Brand	Hybrid	Plant Population per Acre	Heads per Acre	Plant Stand %	Mean Tiller # per Plant	Lodging (%)	Head Size lb/head	Weathering Rating (0-9)	Iron Chlorosis Rating
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Mean	30,482	42,181	51	0.49	0.0	0.11	2.9	
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Agronomic information

Plant Date

Harvest Date

Irrigated

Row Spacing (in)

Number of Rows

Target Seeds per Acre

Precipitation (in)

Irrigation (in)

Herbicide

Soil Type

Tillage

Previous Crop

Trial Notes

*5+ inches of rain in early July delayed harvest and contributed to grain weathering.

Cooperator:

Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact:

Dr. Ronnie Schnell / Katrina Horn
ronnie.schnell@agnet.tamu.edu / katrina.horn@agnet.tamu.edu
979-845-2935 / 979-845-8505

* Mehlich 3 by ICP, soiltesting.tamu.edu
** Samples collected at planting, some locations may have applied fertilizer

Fertilizer Applied		Soil Analysis Report**			
N (lb/ac)	78	NO3-N (ppm)	47	pH	7.6
P2O5 (lb/ac)	26	P (ppm)*	33	Conductivity (umho/cm)	334
K2O (lb/ac)	0	K (ppm)*	646	Ca (ppm)*	10,593
S (lb/ac)	10	S (ppm)*	16	Mg (ppm)*	461
Zn (lb/ac)	0			Na (ppm)*	68

Grain Sorghum

Driscoll

Multi-Year Summary



Company	Brand	Hybrid	2 YR AVG Yield lb/Acre	3 YR AVG Yield lb/Acre
Bayer	DEKALB	DKS 44-07	4,776	
Wilbur-Ellis Company	Integra	G3665	4,714	5,480
Corteva	Pioneer	82P83	4,709	
Nutrien Ag	Dyna-Gro	M71GR91	4,665	5,172
Wilbur-Ellis Company	Integra	G3711	4,584	
Bayer	DEKALB	DKS 36-07	4,552	
Corteva	Pioneer	83P11	4,303	
Advanta Seeds	Alta Seeds	ADV G2275	4,291	5,033
Bayer	DEKALB	DKS 45-60	4,173	
Bayer	DEKALB	DKS 54-07	4,141	5,026
Nutrien Ag	Dyna-Gro	M72GB71	4,036	
Golden Acres	Golden Acres	3180B	4,034	
Wilbur-Ellis Company	Integra	G3620	3,829	
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx631xRTx436	3,145	4,054

Evaluation of yield across years and/or locations will provide the best indication of consistent hybrid performance. Only hybrids with two years data at each location are displayed.

Gregory 2021 Grain Sorghum Performance Trial

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)
Pioneer	83P11	70	49	10	0	13.2	53.8	6,337
Dyna-Gro	GX20970	72	52	11	0	13.7	56.0	6,149
DEKALB	DKS 54-07	73	54	8	0	14.5	58.0	6,142
DEKALB	DKS 44-07	71	50	10	0	14.6	58.4	6,077
Integra	G3711	72	53	8	0	14.6	58.9	5,952
DEKALB	DKS 45-60	69	52	13	0	14.6	58.7	5,796
DEKALB	DKS 50-07	72	52	7	0	14.6	58.9	5,734
Dyna-Gro	M71GR91	73	54	5	0	14.2	58.3	5,548
Dyna-Gro	M63GB78	69	48	10	0	13.1	55.5	5,538
DEKALB	DKS 40-76	69	49	11	0	13.6	56.5	5,505
DEKALB	DKS 36-07	69	51	12	0	13.1	56.9	5,490
Dyna-Gro	M72GB71	72	53	9	0	14.6	58.2	5,479
Integra	G3620	69	50	11	0	14.1	56.4	5,425
Integra	G3665	70	51	11	0	13.5	55.7	5,350
Golden Acres	3180B	71	51	10	0	13.4	55.8	5,326
Dyna-Gro	GX21965	72	49	7	0	13.3	55.1	5,249
Dyna-Gro	GX20998	70	50	10	0	13.7	56.8	5,143
Dyna-Gro	M67GB87	72	52	7	0	13.8	57.1	4,899
Pioneer	82P83	72	52	10	0	11.8	53.5	4,617
Alta Seeds	ADV G2275	70	48	12	0	14.9	57.3	4,537
Texas A&M AgriLife Research	ATx631xRTx436	72	58	7	0	13.1	54.7	4,456

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.

Gregory

2021 Grain Sorghum Performance Trial

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)
Agronomic information		Mean	71	51	9	0.0	56.7	5,464
Plant Date	3/4/2021	C.V. %	1.5	2.9	18.0	4.1	8.5	10.1
Harvest Date	7/27/2021	P>f (hybrid)	0.000	0.000	0.000	0.000	0.322	0.000
Irrigated	No	L.S.D.	1.5	2.1	2.4	0.8		792.9
Row Spacing (in)	30	Trial Notes						
Number of Rows	2	*Extended periods of rain in July (~ 10" from 7/1-7/27) delayed harvest and contributed to grain weathering.						
Target Seeds per Acre	60,000							
Precipitation (in)	30.1	Cooperator: Joel Hoskinson						
Irrigation (in)								
Herbicide		Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact: Dr. Ronnie Schnell / Katrina Horn ronnie.schnell@agnet.tamu.edu / katrina.horn@agnet.tamu.edu 979-845-2935 / 979-845-8505						
Soil Type	Raymondville clay loam							
Tillage	Conventional	Fertilizer Applied		Soil Analysis Report**				
Previous Crop	Cotton	N (lb/ac)		NO3-N (ppm)	42	pH	7.7	
		P2O5 (lb/ac)		P (ppm)*	24	Conductivity (umho/cm)	425	
		K2O (lb/ac)		K (ppm)*	343	Ca (ppm)*	7,462	
		S (lb/ac)		S (ppm)*	9	Mg (ppm)*	378	
		Zn (lb/ac)				Na (ppm)*	105	

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.

Gregory 2021 Grain Sorghum Performance Trial

Brand	Hybrid	Plant Population per Acre	Heads per Acre	Plant Stand %	Mean Tiller # per Plant	Lodging (%)	Head Size lb/head	Weathering Rating (0-9)	Iron Chlorosis Rating
Texas A&M AgriLife Research	ATx631xRTx436	41,818	48,352	70	0.16	0.0	0.09	2.3	
Pioneer	82P83	52,272	62,509	87	0.20	0.0	0.07	3.3	
Pioneer	83P11	53,143	65,122	89	0.23	0.0	0.10	2.3	
Integra	G3620	48,787	64,904	81	0.34	0.0	0.08	1.8	
Integra	G3665	49,441	69,260	82	0.40	0.0	0.08	1.8	
Integra	G3711	43,560	55,539	73	0.30	0.0	0.11	1.0	
Golden Acres	3180B	49,223	71,438	82	0.46	0.0	0.07	1.8	
Dyna-Gro	GX20970	43,996	64,251	73	0.48	0.0	0.10	1.8	
Dyna-Gro	GX20998	50,094	65,122	83	0.30	0.0	0.08	1.5	
Dyna-Gro	GX21965	50,530	50,965	84	0.02	0.0	0.10	2.3	
Dyna-Gro	M63GB78	44,649	61,420	74	0.39	0.0	0.09	3.0	
Dyna-Gro	M67GB87	45,085	61,420	75	0.36	0.0	0.08	2.5	
Dyna-Gro	M71GR91	43,342	58,153	72	0.38	0.0	0.10	2.0	
Dyna-Gro	M72GB71	48,569	52,272	81	0.08	0.0	0.10	1.3	
DEKALB	DKS 36-07	52,490	69,043	87	0.32	0.0	0.08	3.0	
DEKALB	DKS 40-76	47,916	60,331	80	0.26	0.0	0.09	3.0	
DEKALB	DKS 44-07	50,312	68,389	84	0.36	0.0	0.09	1.8	
DEKALB	DKS 45-60	49,658	61,202	83	0.23	0.0	0.09	2.0	
DEKALB	DKS 50-07	45,520	57,064	76	0.28	0.0	0.10	1.5	
DEKALB	DKS 54-07	43,560	56,628	73	0.32	0.0	0.11	0.8	
Alta Seeds	ADV G2275	46,827	55,975	78	0.20	0.0	0.08	2.8	



Gregory 2021 Grain Sorghum Performance Trial



Brand	Hybrid	Plant Population per Acre	Heads per Acre	Plant Stand %	Mean Tiller # per Plant	Lodging (%)	Head Size lb/head	Weathering Rating (0-9)	Iron Chlorosis Rating
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Mean	47,657	60,922	79	0.29	0.0	0.09	2.0	
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Agronomic information	
Plant Date	3/4/2021
Harvest Date	7/27/2021
Irrigated	No
Row Spacing (in)	30
Number of Rows	2
Target Seeds per Acre	60,000
Precipitation (in)	30.1
Irrigation (in)	
Herbicide	
Soil Type	Raymondville clay loam
Tillage	Conventional
Previous Crop	Cotton

Trial Notes

*Extended periods of rain in July (~ 10" from 7/1-7/27) delayed harvest and contributed to grain weathering.

* Mehlich 3 by ICP, soiltesting.tamu.edu
** Samples collected at planting, some locations may have applied fertilizer

Cooperator: Joel Hoskinson

Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact:

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ronnie.schnell@agnet.tamu.edu / katrina.horn@agnet.tamu.edu
979-845-2935 / 979-845-8505

Fertilizer Applied		Soil Analysis Report**			
N (lb/ac)		NO3-N (ppm)	42	pH	7.7
P2O5 (lb/ac)		P (ppm)*	24	Conductivity (umho/cm)	425
K2O (lb/ac)		K (ppm)*	343	Ca (ppm)*	7,462
S (lb/ac)		S (ppm)*	9	Mg (ppm)*	378
Zn (lb/ac)				Na (ppm)*	105

Grain Sorghum

Gregory

Multi-Year Summary



Company	Brand	Hybrid	2 YR AVG Yield lb/Acre	3 YR AVG Yield lb/Acre
Bayer	DEKALB	DKS 44-07	6,271	
Corteva	Pioneer	83P11	6,242	
Bayer	DEKALB	DKS 54-07	6,160	6,201
Nutrien Ag	Dyna-Gro	M71GR91	6,079	6,052
Wilbur-Ellis Company	Integra	G3711	5,875	
Nutrien Ag	Dyna-Gro	M72GB71	5,779	
Bayer	DEKALB	DKS 45-60	5,690	
Bayer	DEKALB	DKS 36-07	5,627	
Wilbur-Ellis Company	Integra	G3665	5,607	5,745
Corteva	Pioneer	82P83	5,396	
Advanta Seeds	Alta Seeds	ADV G2275	4,952	5,158
Wilbur-Ellis Company	Integra	G3620	4,917	
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx631xRTx436	3,826	4,505

Evaluation of yield across years and/or locations will provide the best indication of consistent hybrid performance. Only hybrids with two years data at each location are displayed.

Damon

2021 Grain Sorghum Performance Trial

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)
DEKALB	DKS 54-07	72	57	6	0	13.6	55.9	6,172
DEKALB	DKS 45-60	67	55	9	0	13.9	56.8	6,116
Dyna-Gro	GX20998	68	53	9	0	11.7	54.6	5,882
Dyna-Gro	GX20970	70	54	8	0	13.2	54.5	5,775
DEKALB	DKS 44-07	68	50	5	0	13.3	55.3	5,681
Dyna-Gro	M72GB71	72	56	6	0	13.7	54.2	5,537
Dyna-Gro	M71GR91	70	56	7	0	13.1	55.9	5,342
DEKALB	DKS 40-76	67	52	8	0	12.1	52.4	5,319
DEKALB	DKS 36-07	66	52	8	0	11.5	54.1	5,198
Texas A&M AgriLife Research	ATx631xRTx436	71	62	7	0	12.9	53.1	5,122
Dyna-Gro	M63GB78	67	49	7	0	12.7	52.7	5,007
Pioneer	82P83	71	54	8	0	13.6	51.4	5,003
Golden Acres	3180B	67	52	5	0	12.8	53.7	4,949
DEKALB	DKS 50-07	69	56	7	0	13.5	56.2	4,862
Dyna-Gro	M67GB87	68	55	7	0	13.3	54.8	4,801
Alta Seeds	ADV G2275	67	51	7	0	14.4	56.9	4,796
Pioneer	83P11	67	54	7	0	12.2	52.9	4,790
Dyna-Gro	GX21965	68	52	6	0	12.6	54.7	4,665

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.

Damon

2021 Grain Sorghum Performance Trial

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)	
Agronomic information		Mean	69	54	7	0.0	13.0	54.4	5,279
Plant Date	3/22/2021	C.V. %	1.3	2.8	22.3		7.4	2.3	4.6
Harvest Date	7/29/2021	P>f (hybrid)	0.000	0.000			0.004	0.000	0.000
Irrigated	No	L.S.D.	1.2	2.1			1.4	1.8	346.7
Row Spacing (in)	40	Trial Notes							
Number of Rows	2								
Target Seeds per Acre	65,000								
Precipitation (in)	35.9								
Irrigation (in)		<p>Cooperator: Mikel Brothers</p> <p>Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact:</p> <p>Dr. Ronnie Schnell / Katrina Horn ronnie.schnell@agnet.tamu.edu / katrina.horn@agnet.tamu.edu 979-845-2935 / 979-845-8505</p>							
Herbicide									
Soil Type	Lake Charles clay	Fertilizer Applied		Soil Analysis Report**					
Tillage	Conventional, planted on beds	N (lb/ac)		NO3-N (ppm)	30	pH		5.3	
Previous Crop	Cotton	P2O5 (lb/ac)		P (ppm)*	55	Conductivity (umho/cm)		404	
		K2O (lb/ac)		K (ppm)*	286	Ca (ppm)*		3,416	
		S (lb/ac)		S (ppm)*	13	Mg (ppm)*		1,030	
		Zn (lb/ac)				Na (ppm)*		76	

* Mehlich 3 by ICP, soiltesting.tamu.edu
** Samples collected at planting, some locations may have applied fertilizer

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.

Damon

2021 Grain Sorghum Performance Trial

Brand	Hybrid	Plant Population per Acre	Heads per Acre	Plant Stand %	Mean Tiller # per Plant	Lodging (%)	Head Size lb/head	Weathering Rating (0-9)	Iron Chlorosis Rating
Texas A&M AgriLife Research	ATx631xRTx436	52,109	57,499	80	0.11	0.0	0.09	2.5	
Pioneer	82P83		58,479	93	0.01	0.0	0.09	5.5	
Pioneer	83P11		61,093	95	0.02	0.0	0.08	5.5	
Golden Acres	3180B		59,949	94	0.00	0.0	0.08	4.0	
Dyna-Gro	GX20970	57,499	60,440	88	0.06	0.0	0.10	3.8	
Dyna-Gro	GX20998		58,969	93	0.00	0.0	0.10	4.0	
Dyna-Gro	GX21965		57,826	89	0.03	0.0	0.08	6.5	
Dyna-Gro	M63GB78	53,415	56,846	82	0.07	0.0	0.09	5.3	
Dyna-Gro	M67GB87	52,109	57,499	80	0.10	0.0	0.08	3.3	
Dyna-Gro	M71GR91	49,332	57,663	76	0.17	0.0	0.09	2.5	
Dyna-Gro	M72GB71	56,519	61,910	87	0.10	0.0	0.09	2.3	
DEKALB	DKS 36-07		57,663	99	0.00	0.0	0.09	6.5	
DEKALB	DKS 40-76	58,969	61,746	91	0.05	0.0	0.09	4.8	
DEKALB	DKS 44-07		58,479	95	0.00	0.0	0.10	2.8	
DEKALB	DKS 45-60	60,113	62,236	92	0.04	0.0	0.10	2.5	
DEKALB	DKS 50-07		58,153	93	0.00	0.0	0.08	2.3	
DEKALB	DKS 54-07		59,133	97	0.01	0.0	0.10	1.8	
Alta Seeds	ADV G2275	50,965	59,623	78	0.18	0.0	0.08	3.0	



Damon

2021 Grain Sorghum Performance Trial



Brand	Hybrid	Plant Population per Acre	Heads per Acre	Plant Stand %	Mean Tiller # per Plant	Lodging (%)	Head Size lb/head	Weathering Rating (0-9)	Iron Chlorosis Rating
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Mean	57,953	59,178	89	0.05	0.0	0.09	3.8	
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Agronomic information	
Plant Date	3/22/2021
Harvest Date	7/29/2021
Irrigated	No
Row Spacing (in)	40
Number of Rows	2
Target Seeds per Acre	65,000
Precipitation (in)	35.9
Irrigation (in)	
Herbicide	
Soil Type	Lake Charles clay
Tillage	Conventional, planted on beds
Previous Crop	Cotton

Trial Notes

Cooperator: Mikel Brothers

Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact:

Dr. Ronnie Schnell / Katrina Horn
ronnie.schnell@agnet.tamu.edu / katrina.horn@agnet.tamu.edu
979-845-2935 / 979-845-8505

* Mehlich 3 by ICP, soiltesting.tamu.edu
** Samples collected at planting, some locations may have applied fertilizer

Fertilizer Applied		Soil Analysis Report**	
N (lb/ac)		NO3-N (ppm)	30
P2O5 (lb/ac)		P (ppm)*	55
K2O (lb/ac)		K (ppm)*	286
S (lb/ac)		S (ppm)*	13
Zn (lb/ac)			
		pH	5.3
		Conductivity (umho/cm)	404
		Ca (ppm)*	3,416
		Mg (ppm)*	1,030
		Na (ppm)*	76

Grain Sorghum

Damon

Multi-Year Summary



Company	Brand	Hybrid	2 YR AVG Yield lb/Acre	3 YR AVG Yield lb/Acre
Bayer	DEKALB	DKS 44-07	7,062	
Bayer	DEKALB	DKS 54-07	7,049	7,106
Nutrien Ag	Dyna-Gro	M71GR91	6,816	6,826
Bayer	DEKALB	DKS 45-60	6,786	
Corteva	Pioneer	82P83	6,405	
Nutrien Ag	Dyna-Gro	M72GB71	6,387	
Corteva	Pioneer	83P11	6,056	
Bayer	DEKALB	DKS 36-07	5,591	
Advanta Seeds	Alta Seeds	ADV G2275	5,494	5,344
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx631xRTx436	4,821	5,173

Evaluation of yield across years and/or locations will provide the best indication of consistent hybrid performance. Only hybrids with two years data at each location are displayed.

College Station 2021 Grain Sorghum Performance Trial

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)
DEKALB	DKS 50-07	80	56	6	0	16.5	59.1	6,482
Golden Acres	3180B	78	55	7	0	15.5	55.2	6,360
Dyna-Gro	GX21965	80	52	6	0	16.1	56.8	6,298
Golden Acres	4880R	80	58	6	0	17.0	58.2	6,264
Integra	G3665	77	56	7	0	15.9	54.8	6,259
DEKALB	DKS 44-07	79	54	7	0	16.7	57.0	6,210
Dyna-Gro	M67GB87	78	56	6	0	16.6	56.6	6,179
Dyna-Gro	M71GR91	80	57	5	0	16.7	57.4	6,155
Dyna-Gro	GX20970	80	54	9	0	16.1	55.3	5,822
Dyna-Gro	GX20998	77	53	10	0	15.6	55.8	5,455
Dyna-Gro	M72GB71	82	56	6	0	16.7	56.2	5,404
Texas A&M AgriLife Research	ATx631xRTx436	81	64	8	0	15.8	55.6	5,332
Alta Seeds	ADV G2275	76	52	9	0	17.0	55.7	5,320
Integra	G3711	82	56	3	0	16.6	57.9	5,172
DEKALB	DKS 54-07	83	58	6	0	16.2	56.8	4,957
DEKALB	DKS 36-07	76	56	8	0	16.0	56.0	4,851
Dyna-Gro	M63GB78	76	50	6	0	15.5	55.0	4,844

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.

College Station

2021 Grain Sorghum Performance Trial

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)																																				
Agronomic information		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #f2f2f2;">Mean</td> <td style="text-align: center;">79</td> <td style="text-align: center;">55</td> <td style="text-align: center;">7</td> <td style="text-align: center;">0.0</td> <td style="text-align: center;">16.2</td> <td style="text-align: center;">56.4</td> <td style="text-align: center;">5,727</td> </tr> <tr> <td style="background-color: #f2f2f2;">C.V. %</td> <td style="text-align: center;">1.5</td> <td style="text-align: center;">3.0</td> <td style="text-align: center;">17.7</td> <td></td> <td style="text-align: center;">3.4</td> <td style="text-align: center;">1.5</td> <td style="text-align: center;">10.3</td> </tr> <tr> <td style="background-color: #f2f2f2;">P>f (hybrid)</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">0.000</td> <td></td> <td style="text-align: center;">0.001</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">0.000</td> </tr> <tr> <td style="background-color: #f2f2f2;">L.S.D.</td> <td style="text-align: center;">1.7</td> <td style="text-align: center;">2.4</td> <td style="text-align: center;">1.7</td> <td></td> <td style="text-align: center;">0.8</td> <td style="text-align: center;">1.2</td> <td style="text-align: center;">842.3</td> </tr> </table>							Mean	79	55	7	0.0	16.2	56.4	5,727	C.V. %	1.5	3.0	17.7		3.4	1.5	10.3	P>f (hybrid)	0.000	0.000	0.000		0.001	0.000	0.000	L.S.D.	1.7	2.4	1.7		0.8	1.2	842.3				
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Harvest Date	8/6/2021																																											
Irrigated	Yes																																											
Row Spacing (in)	30																																											
Number of Rows	2																																											
Target Seeds per Acre	80,000																																											
Precipitation (in)	29.1																																											
Irrigation (in)	0																																											
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Soil Type	Weswood silty clay loam																																											
Tillage	Conventional, planted on beds, field cultivated twice																																											
Previous Crop	Corn																																											

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.

College Station 2021 Grain Sorghum Performance Trial

Brand	Hybrid	Plant Population per Acre	Heads per Acre	Plant Stand %	Mean Tiller # per Plant	Lodging (%)	Head Size lb/head	Weathering Rating (0-9)	Iron Chlorosis Rating
Texas A&M AgriLife Research	ATx631xRTx436		49,005	65	0.03	0.0	0.11		
Integra	G3665	60,331	61,637	75	0.06	0.0	0.10		
Integra	G3711	33,759	38,986	42	0.17	0.0	0.14		
Golden Acres	3180B		64,904	85	0.00	0.0	0.10		
Golden Acres	4880R		59,024	75	0.04	0.0	0.11		
Dyna-Gro	GX20970	54,232	58,370	68	0.12	0.0	0.10		
Dyna-Gro	GX20998	64,904	64,904	81	0.03	0.0	0.08		
Dyna-Gro	GX21965	59,024	60,113	74	0.02	0.0	0.10		
Dyna-Gro	M63GB78	50,094	52,925	63	0.09	0.0	0.09		
Dyna-Gro	M67GB87	47,698	56,628	60	0.19	0.0	0.11		
Dyna-Gro	M71GR91	48,787	50,239	61	0.05	0.0	0.12		
Dyna-Gro	M72GB71		60,331	76	0.01	0.0	0.09		
DEKALB	DKS 36-07	60,548	65,340	76	0.08	0.0	0.07		
DEKALB	DKS 44-07	58,588	60,331	73	0.06	0.0	0.10		
DEKALB	DKS 50-07	52,490	54,668	66	0.04	0.0	0.12		
DEKALB	DKS 54-07	56,846	58,370	71	0.03	0.0	0.09		
Alta Seeds	ADV G2275	55,539	56,628	69	0.06	0.0	0.09		



College Station 2021 Grain Sorghum Performance Trial



Brand	Hybrid	Plant Population per Acre	Heads per Acre	Plant Stand %	Mean Tiller # per Plant	Lodging (%)	Head Size lb/head	Weathering Rating (0-9)	Iron Chlorosis Rating
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Mean	55,488	57,200	69	0.06	0.0	0.10		
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Agronomic information	
Plant Date	3/19/2021
Harvest Date	8/6/2021
Irrigated	Yes
Row Spacing (in)	30
Number of Rows	2
Target Seeds per Acre	80,000
Precipitation (in)	29.1
Irrigation (in)	0
Herbicide	
*Pre-emerge: 14 oz/ac Outlook *5/7: 1.33 pt/ac Dual + 1 qt/ac Atrazine	

Trial Notes

Cooperator: Texas A&M AgriLife Research

Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact:

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* Mehlich 3 by ICP, soiltesting.tamu.edu
 ** Samples collected at planting, some locations may have applied fertilizer

Fertilizer Applied		Soil Analysis Report**	
N (lb/ac)	150	NO3-N (ppm)	28
P2O5 (lb/ac)	35	P (ppm)*	70
K2O (lb/ac)	0	K (ppm)*	218
S (lb/ac)	20	S (ppm)*	13
Zn (lb/ac)	0		
		pH	7.7
		Conductivity (umho/cm)	165
		Ca (ppm)*	6,542
		Mg (ppm)*	235
		Na (ppm)*	29

Soil Type	Weswood silty clay loam
Tillage	Conventional, planted on beds, field cultivated twice
Previous Crop	Corn

Grain Sorghum College Station Multi-Year Summary



Company	Brand	Hybrid	2 YR AVG Yield lb/Acre	3 YR AVG Yield lb/Acre
Nutrien Ag	Dyna-Gro	M71GR91	7,180	7,147
Golden Acres	Golden Acres	4880R	7,159	7,192
Wilbur-Ellis Company	Integra	G3711	6,768	
Bayer	DEKALB	DKS 44-07	6,653	
Wilbur-Ellis Company	Integra	G3665	6,473	6,635
Advanta Seeds	Alta Seeds	ADV G2275	6,107	6,022
Bayer	DEKALB	DKS 54-07	6,017	6,631
Nutrien Ag	Dyna-Gro	M72GB71	5,901	
Bayer	DEKALB	DKS 36-07	5,279	
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx631xRTx436	3,911	4,437

Evaluation of yield across years and/or locations will provide the best indication of consistent hybrid performance. Only hybrids with two years data at each location are displayed.

Thrall

2021 Grain Sorghum Performance Trial

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)
DEKALB	DKS 44-07	81	53	6	0	15.0	58.8	6,966
Integra	G3665	78	53	6	0	14.6	56.9	6,465
Dyna-Gro	GX21965	81	50	5	0	15.2	57.5	6,206
Dyna-Gro	GX20998	79	53	8	0	16.1	57.9	6,099
Golden Acres	3180B	79	53	7	0	14.2	56.4	6,008
Dyna-Gro	M63GB78	77	48	6	0	14.9	57.1	5,948
DEKALB	DKS 50-07	83	54	6	0	15.8	59.3	5,824
Dyna-Gro	M72GB71	81	55	8	0	15.3	57.8	5,691
Dyna-Gro	GX20970	83	51	7	0	15.0	57.7	5,669
Dyna-Gro	M67GB87	80	53	7	0	14.9	58.1	5,605
Alta Seeds	ADV G2275	79	49	8	0	16.2	58.0	5,513
DEKALB	DKS 54-07	85	57	6	0	16.3	59.1	5,188
Integra	G3620	79	53	10	0	15.5	57.7	5,172
DEKALB	DKS 36-07	76	49	8	0	14.4	54.9	5,020
Texas A&M AgriLife Research	ATx631xRTx436	85	62	7	0	15.2	57.7	4,759
Dyna-Gro	M71GR91	85	55	7	0	16.4	59.0	4,558
Integra	G3711	86	52	7	0	16.3	58.8	4,144

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.



Thrall

2021 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)	
Agronomic information		Mean	81	53	7	0.0	15.4	57.8	5,579
Plant Date	3/16/2021	C.V. %	1.3	2.8	19.3		4.5	2.2	12.4
Harvest Date	7/30/2021	P>f (hybrid)	0.000	0.000	0.016		0.000	0.002	0.000
Irrigated	No	L.S.D.	1.5	2.1	1.9		1.0	1.8	981.7
Row Spacing (in)	30	Trial Notes		<p>Cooperator: Stiles Farm Foundation</p> <p>Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact:</p> <p>Dr. Ronnie Schnell / Katrina Horn ronnie.schnell@agnet.tamu.edu / katrina.horn@agnet.tamu.edu 979-845-2935 / 979-845-8505</p>					
Number of Rows	2								
Target Seeds per Acre	65,000								
Precipitation (in)	19								
Irrigation (in)									
Herbicide									
*Pre-emerge: 1 qt/ac Roundup + 14oz/ac Outlook *4/21: 1.33 pt/ac Dual + 1 qt/ac Atrazine		* Mehlich 3 by ICP, soiltesting.tamu.edu ** Samples collected at planting, some locations may have applied fertilizer							
Soil Type	Burleson clay	Fertilizer Applied		Soil Analysis Report**					
Tillage	Conventional, cultivated on 4/21	N (lb/ac)	100	NO3-N (ppm)	9	pH	6.0		
Previous Crop	Corn	P2O5 (lb/ac)	65	P (ppm)*	104	Conductivity (umho/cm)	379		
		K2O (lb/ac)	55	K (ppm)*	207	Ca (ppm)*	5,348		
		S (lb/ac)	15	S (ppm)*	45	Mg (ppm)*	564		
		Zn (lb/ac)	0			Na (ppm)*	31		

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.

Thrall

2021 Grain Sorghum Performance Trial

Brand	Hybrid	Plant Population per Acre	Heads per Acre	Plant Stand %	Mean Tiller # per Plant	Lodging (%)	Head Size lb/head	Weathering Rating (0-9)	Iron Chlorosis Rating
Texas A&M AgriLife Research	ATx631xRTx436	33,323	53,579	51	0.66	0.0	0.09		
Integra	G3620	50,747	51,619	78	0.04	0.0	0.10		
Integra	G3665	52,054	54,014	80	0.05	0.0	0.12		
Integra	G3711	24,611	53,797	38	1.24	0.0	0.08		
Golden Acres	3180B		54,668	86	0.03	0.0	0.11		
Dyna-Gro	GX20970	44,649	52,490	69	0.19	0.0	0.11		
Dyna-Gro	GX20998	50,530	51,183	78	0.04	0.0	0.12		
Dyna-Gro	GX21965	51,401	51,401	79	0.02	0.0	0.12		
Dyna-Gro	M63GB78	46,174	51,401	71	0.13	0.0	0.12		
Dyna-Gro	M67GB87	43,560	51,836	67	0.20	0.0	0.11		
Dyna-Gro	M71GR91	35,284	52,272	54	0.51	0.0	0.09		
Dyna-Gro	M72GB71	45,956	52,054	71	0.14	0.0	0.11		
DEKALB	DKS 36-07	54,668	54,886	84	0.04	0.0	0.09		
DEKALB	DKS 44-07	52,490	53,797	81	0.03	0.0	0.13		
DEKALB	DKS 50-07	44,213	52,708	68	0.19	0.0	0.11		
DEKALB	DKS 54-07	45,085	54,450	69	0.21	0.0	0.10		
Alta Seeds	ADV G2275	40,075	53,361	62	0.24	0.0	0.10		



Thrall

2021 Grain Sorghum Performance Trial



Brand	Hybrid	Plant Population per Acre	Heads per Acre	Plant Stand %	Mean Tiller # per Plant	Lodging (%)	Head Size lb/head	Weathering Rating (0-9)	Iron Chlorosis Rating
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Mean	45,341	52,913	70	0.23	0.0	0.11		
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Agronomic information	
Plant Date	3/16/2021
Harvest Date	7/30/2021
Irrigated	No
Row Spacing (in)	30
Number of Rows	2
Target Seeds per Acre	65,000
Precipitation (in)	19
Irrigation (in)	
Herbicide	
*Pre-emerge: 1 qt/ac Roundup + 14oz/ac Outlook	
*4/21: 1.33 pt/ac Dual + 1 qt/ac Atrazine	

Trial Notes

Cooperator: Stiles Farm Foundation

Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact:

Dr. Ronnie Schnell / Katrina Horn
ronnie.schnell@agnet.tamu.edu / katrina.horn@agnet.tamu.edu
979-845-2935 / 979-845-8505

* Mehlich 3 by ICP, soiltesting.tamu.edu
** Samples collected at planting, some locations may have applied fertilizer

Fertilizer Applied		Soil Analysis Report**	
N (lb/ac)	100	NO3-N (ppm)	9
P2O5 (lb/ac)	65	P (ppm)*	104
K2O (lb/ac)	55	K (ppm)*	207
S (lb/ac)	15	S (ppm)*	45
Zn (lb/ac)	0		
		pH	6.0
		Conductivity (umho/cm)	379
		Ca (ppm)*	5,348
		Mg (ppm)*	564
		Na (ppm)*	31

Soil Type	Burleson clay
Tillage	Conventional, cultivated on 4/21
Previous Crop	Corn

Grain Sorghum

Thrall

Multi-Year Summary



Company	Brand	Hybrid	2 YR AVG Yield lb/Acre	3 YR AVG Yield lb/Acre
Bayer	DEKALB	DKS 44-07	6,295	
Golden Acres	Golden Acres	3180B	6,222	
Wilbur-Ellis Company	Integra	G3665	6,134	6,612
Nutrien Ag	Dyna-Gro	M72GB71	5,546	
Advanta Seeds	Alta Seeds	ADV G2275	5,513	5,365
Nutrien Ag	Dyna-Gro	M71GR91	5,449	5,318
Bayer	DEKALB	DKS 36-07	5,313	
Bayer	DEKALB	DKS 54-07	5,120	5,721
Wilbur-Ellis Company	Integra	G3620	4,991	
Wilbur-Ellis Company	Integra	G3711	4,532	
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx631xRTx436	3,574	3,759

Evaluation of yield across years and/or locations will provide the best indication of consistent hybrid performance. Only hybrids with two years data at each location are displayed.

Hillsboro

2021 Grain Sorghum Performance Trial

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)
DEKALB	DKS 44-07	N/A	47	8	0	11.9	56.9	2,621
Dyna-Gro	GX21965	N/A	42	6	0	12.5	58.7	2,615
Integra	G3665	N/A	48	9	0	11.8	56.7	2,612
Golden Acres	3180B	N/A	47	10	0	12.8	57.3	2,587
Dyna-Gro	M67GB87	N/A	47	7	0	11.5	56.1	2,446
Dyna-Gro	GX20970	N/A	46	10	0	12.8	57.8	2,424
Dyna-Gro	GX20998	N/A	47	12	0	13.0	57.7	2,412
DEKALB	DKS 50-07	N/A	48	8	0	11.6	59.4	2,345
Golden Acres	4880R	N/A	49	7	0	12.2	58.4	2,308
Dyna-Gro	M72GB71	N/A	45	7	0	12.7	57.5	2,192
DEKALB	DKS 36-07	N/A	43	9	0	11.0	56.4	2,161
Dyna-Gro	M71GR91	N/A	49	7	0	12.6	57.8	2,065
Dyna-Gro	GX20973	N/A	46	7	0	12.8	59.4	2,064
Integra	G3620	N/A	46	9	0	11.9	58.6	2,024
DEKALB	DKS 54-07	N/A	49	9	0	12.8	58.3	1,981
Alta Seeds	ADV G2275	N/A	42	8	0	13.0	58.0	1,872
Integra	G3711	N/A	47	8	0	12.1	56.9	1,793
Texas A&M AgriLife Research	ATx631xRTx436	N/A	50	8	0	11.9	54.9	1,665
Dyna-Gro	M63GB78	N/A	41	7	0	10.4	54.2	1,659

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.



Hillsboro

2021 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)
Agronomic information		Mean	46	8	0.0	12.2	57.4	2,203
Plant Date	3/19/2021	C.V. %	2.9	12.8		7.4	2.1	11.8
Harvest Date	8/31/2021	P>f (hybrid)	0.000	0.000		0.005	0.000	0.000
Irrigated	No	L.S.D.	1.9	1.5		1.3	1.9	367.2
Row Spacing (in)	30	Trial Notes						
Number of Rows	2	*Saturated soils persisted from late April through mid July with total rainfall for this period nearing 20". This resulted in plant stress and contributed to lower than normal yields.						
Target Seeds per Acre	65,000	*Applied by air on 7/2: 4 oz/ac Mustang Max + 8 oz/ac dimethoate						
Precipitation (in)	25.4	* Mehlich 3 by ICP, soiltesting.tamu.edu						
Irrigation (in)		** Samples collected at planting, some locations may have applied fertilizer						
Herbicide		Fertilizer Applied		Soil Analysis Report**				
24 oz/ac Callisto Extra + 16 oz/ac Outlook + 1 qt/ac Roundup at planting		N (lb/ac)	120	NO3-N (ppm)	27	pH	7.5	
Soil Type	Branyon clay	P2O5 (lb/ac)	16	P (ppm)*	18	Conductivity (umho/cm)	408	
Tillage	Conventional	K2O (lb/ac)	0	K (ppm)*	351	Ca (ppm)*	10,737	
Previous Crop	Corn	S (lb/ac)	1	S (ppm)*	10	Mg (ppm)*	268	
		Zn (lb/ac)				Na (ppm)*	117	

Cooperator: Josh Birdwell

Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact:

Dr. Ronnie Schnell / Katrina Horn
ronnie.schnell@agnet.tamu.edu / katrina.horn@agnet.tamu.edu
979-845-2935 / 979-845-8505

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.

Hillsboro

2021 Grain Sorghum Performance Trial

Brand	Hybrid	Plant Population per Acre	Heads per Acre	Plant Stand %	Mean Tiller # per Plant	Lodging (%)	Head Size lb/head	Weathering Rating (0-9)	Iron Chlorosis Rating
Texas A&M AgriLife Research	ATx631xRTx436	39,640	60,331	61	0.53	0.0	0.03		
Integra	G3620	54,232	70,785	83	0.31	0.0	0.03		
Integra	G3665	53,143	59,459	82	0.14	0.0	0.04		
Integra	G3711	36,155	69,260	56	0.92	0.0	0.03		
Golden Acres	3180B	57,717	62,944	89	0.09	0.0	0.04		
Golden Acres	4880R	47,698	78,190	73	0.66	0.0	0.03		
Dyna-Gro	GX20970	44,867	54,668	69	0.22	0.0	0.04		
Dyna-Gro	GX20973	48,569	62,726	75	0.29	0.0	0.03		
Dyna-Gro	GX20998	49,223	61,855	76	0.27	0.0	0.04		
Dyna-Gro	GX21965	45,302	52,272	70	0.16	0.0	0.05		
Dyna-Gro	M63GB78	35,066	60,331	54	0.72	0.0	0.03		
Dyna-Gro	M67GB87	40,075	67,736	62	0.71	0.0	0.04		
Dyna-Gro	M71GR91	37,897	77,319	58	1.04	0.0	0.03		
Dyna-Gro	M72GB71	48,352	64,469	74	0.34	0.0	0.03		
DEKALB	DKS 36-07	49,658	74,488	76	0.50	0.0	0.03		
DEKALB	DKS 44-07	45,956	63,162	71	0.38	0.0	0.04		
DEKALB	DKS 50-07	47,916	70,567	74	0.48	0.0	0.03		
DEKALB	DKS 54-07	44,649	69,043	69	0.55	0.0	0.03		
Alta Seeds	ADV G2275	45,302	71,438	70	0.57	0.0	0.03		



Hillsboro

2021 Grain Sorghum Performance Trial



Brand	Hybrid	Plant Population per Acre	Heads per Acre	Plant Stand %	Mean Tiller # per Plant	Lodging (%)	Head Size lb/head	Weathering Rating (0-9)	Iron Chlorosis Rating
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Mean	45,864	65,844	71	0.47	0.0	0.03		
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Agronomic information	
Plant Date	3/19/2021
Harvest Date	8/31/2021
Irrigated	No
Row Spacing (in)	30
Number of Rows	2
Target Seeds per Acre	65,000
Precipitation (in)	25.4
Irrigation (in)	
Herbicide	24 oz/ac Callisto Extra + 16 oz/ac Outlook + 1 qt/ac Roundup at planting
Soil Type	Branyon clay
Tillage	Conventional
Previous Crop	Corn

Trial Notes

*Saturated soils persisted from late April through mid July with total rainfall for this period nearing 20". This resulted in plant stress and contributed to lower than normal yields.

*Applied by air on 7/2: 4 oz/ac Mustang Max + 8 oz/ac dimethoate

* Mehlich 3 by ICP, soiltesting.tamu.edu
** Samples collected at planting, some locations may have applied fertilizer

Cooperator: Josh Birdwell

Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact:

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979-845-2935 / 979-845-8505

Fertilizer Applied		Soil Analysis Report**			
N (lb/ac)	120	NO3-N (ppm)	27	pH	7.5
P2O5 (lb/ac)	16	P (ppm)*	18	Conductivity (umho/cm)	408
K2O (lb/ac)	0	K (ppm)*	351	Ca (ppm)*	10,737
S (lb/ac)	1	S (ppm)*	10	Mg (ppm)*	268
Zn (lb/ac)				Na (ppm)*	117

Grain Sorghum Hillsboro Multi-Year Summary



Company	Brand	Hybrid	2 YR AVG Yield lb/Acre	3 YR AVG Yield lb/Acre
Bayer	DEKALB	DKS 44-07	4,130	
Nutrien Ag	Dyna-Gro	M72GB71	4,126	
Wilbur-Ellis Company	Integra	G3665	4,031	4,544
Nutrien Ag	Dyna-Gro	M71GR91	3,707	4,273
Advanta Seeds	Alta Seeds	ADV G2275	3,484	3,881
Bayer	DEKALB	DKS 54-07	3,364	4,311
Bayer	DEKALB	DKS 36-07	3,246	
Golden Acres	Golden Acres	4880R	3,217	3,929
Wilbur-Ellis Company	Integra	G3711	3,166	
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx631xRTx436	1,664	2,684

Evaluation of yield across years and/or locations will provide the best indication of consistent hybrid performance. Only hybrids with two years data at each location are displayed.

Plainview 2021 Grain Sorghum Performance Trial

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)
DEKALB	DKS 50-07	N/A	49	2	0	16.2	59.7	7,589
DEKALB	DKS 44-07	N/A	47	1	0	17.5	58.3	7,107
Integra	G3711	N/A	52	1	0	16.4	58.6	7,061
Golden Acres	4880R	N/A	50	3	0	16.6	55.8	6,933
Integra	G3665	N/A	49	5	0	16.0	54.7	6,826
Golden Acres	3180B	N/A	47	2	0	15.8	56.0	6,674
Texas A&M AgriLife Research	ATx631xRTx436	N/A	58	6	0	15.6	57.7	6,455
Dyna-Gro	M60GB31	N/A	46	4	0	17.4	56.9	6,342
DEKALB	DKS 45-60	N/A	52	7	0	18.4	55.8	6,178
Dyna-Gro	GX20998	N/A	49	6	0	17.7	54.9	6,028
DEKALB	DKS 40-76	N/A	50	5	0	18.5	55.5	6,002
Alta Seeds	ADV G2275	N/A	46	4	0	20.4	55.9	5,677
Dyna-Gro	M67GB87	N/A	53	4	0	19.7	54.2	5,615
Dyna-Gro	M63GB78	N/A	48	4	0	18.1	56.3	5,500
DEKALB	DKS 36-07	N/A	47	4	0	17.2	56.4	5,412
Integra	G3590	N/A	47	5	0	16.0	57.7	5,348
Integra	G3620	N/A	51	8	0	18.1	52.8	5,328
Dyna-Gro	M59GB94	N/A	47	8	0	18.1	53.6	4,833
Dyna-Gro	GX20973	N/A	43	3	0	16.7	55.1	4,259

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.



Plainview 2021 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)
Agronomic information		Mean	49	4	0.0	17.4	56.1	6,061
Plant Date	5/24/2021	C.V. %	4.3	40.8		8.6	3.7	11.9
Harvest Date	9/30/2021	P>f (hybrid)	0.000			0.011	0.040	0.000
Irrigated	Yes	L.S.D.	3.5			2.5	3.5	1,236.8
Row Spacing (in)	40	Trial Notes						
Number of Rows	2	<p>Cooperator: Don Macha</p> <p>Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact:</p> <p>Dr. Ronnie Schnell / Katrina Horn ronnie.schnell@agnet.tamu.edu / katrina.horn@agnet.tamu.edu 979-845-2935 / 979-845-8505</p>						
Target Seeds per Acre	55,000							
Precipitation (in)	18.1							
Irrigation (in)	9							
Herbicide	Sprayed post-emerge with Huskie and Atrazine	<p>* Mehlich 3 by ICP, soiltesting.tamu.edu ** Samples collected at planting, some locations may have applied fertilizer</p>						
Soil Type	Pullman clay loam	Fertilizer Applied		Soil Analysis Report**				
Tillage	Conventional, planted on beds	N (lb/ac)	100	NO3-N (ppm)	20	pH	7.4	
Previous Crop	Sorghum	P2O5 (lb/ac)	30	P (ppm)*	55	Conductivity (umho/cm)	197	
		K2O (lb/ac)	0	K (ppm)*	486	Ca (ppm)*	2,163	
		S (lb/ac)	15	S (ppm)*	7	Mg (ppm)*	779	
		Zn (lb/ac)	0			Na (ppm)*	37	

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.

Plainview 2021 Grain Sorghum Performance Trial

Brand	Hybrid	Plant Population per Acre	Heads per Acre	Plant Stand %	Mean Tiller # per Plant	Lodging (%)	Head Size lb/head	Weathering Rating (0-9)	Iron Chlorosis Rating
Texas A&M AgriLife Research	ATx631xRTx436	35,719	42,035	65	0.14	0.0	0.15		
Integra	G3590	48,678	54,886	89	0.06	0.0	0.10		
Integra	G3620	47,372	51,945	86	0.05	0.0	0.10		
Integra	G3665	48,352	54,396	88	0.18	0.0	0.13		
Integra	G3711	40,729	47,698	74	0.13	0.0	0.15		
Golden Acres	3180B	52,054	53,797	95	0.04	0.0	0.12		
Golden Acres	4880R	43,778	48,188	80	0.10	0.0	0.14		
Dyna-Gro	GX20973	38,877	53,252	71	0.18	0.0	0.08		
Dyna-Gro	GX20998	44,867	51,183	82	0.11	0.0	0.12		
Dyna-Gro	M59GB94	42,689	59,242	78	0.29	0.0	0.08		
Dyna-Gro	M60GB31	34,630	46,391	63	0.17	0.0	0.14		
Dyna-Gro	M63GB78	44,595	49,822	81	0.12	0.0	0.11		
Dyna-Gro	M67GB87	38,877	53,906	71	0.19	0.0	0.10		
DEKALB	DKS 36-07	45,411	50,475	83	0.11	0.0	0.11		
DEKALB	DKS 40-76	44,649	50,965	81	0.11	0.0	0.12		
DEKALB	DKS 44-07	50,148	55,212	91	0.10	0.0	0.13		
DEKALB	DKS 45-60	43,614	48,025	79	0.10	0.0	0.13		
DEKALB	DKS 50-07	42,907	48,569	78	0.10	0.0	0.16		
Alta Seeds	ADV G2275	35,284	43,941	64	0.26	0.0	0.13		



Plainview 2021 Grain Sorghum Performance Trial



Brand	Hybrid	Plant Population per Acre	Heads per Acre	Plant Stand %	Mean Tiller # per Plant	Lodging (%)	Head Size lb/head	Weathering Rating (0-9)	Iron Chlorosis Rating
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Mean	43,328	50,733	79	0.14	0.0	0.12		
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Agronomic information	
Plant Date	5/24/2021
Harvest Date	9/30/2021
Irrigated	Yes
Row Spacing (in)	40
Number of Rows	2
Target Seeds per Acre	55,000
Precipitation (in)	18.1
Irrigation (in)	9
Herbicide	Sprayed post-emerge with Huskie and Atrazine
Soil Type	Pullman clay loam
Tillage	Conventional, planted on beds
Previous Crop	Sorghum

Trial Notes

Cooperator: Don Macha
Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact: Dr. Ronnie Schnell / Katrina Horn ronnie.schnell@agnet.tamu.edu / katrina.horn@agnet.tamu.edu 979-845-2935 / 979-845-8505

* Mehlich 3 by ICP, soiltesting.tamu.edu
** Samples collected at planting, some locations may have applied fertilizer

Fertilizer Applied		Soil Analysis Report**			
N (lb/ac)	100	NO3-N (ppm)	20	pH	7.4
P2O5 (lb/ac)	30	P (ppm)*	55	Conductivity (umho/cm)	197
K2O (lb/ac)	0	K (ppm)*	486	Ca (ppm)*	2,163
S (lb/ac)	15	S (ppm)*	7	Mg (ppm)*	779
Zn (lb/ac)	0			Na (ppm)*	37

Grain Sorghum

Plainview

Multi-Year Summary



Company	Brand	Hybrid	2 YR AVG Yield lb/Acre	3 YR AVG Yield lb/Acre
Bayer	DEKALB	DKS 44-07	6,709	
Golden Acres	Golden Acres	3180B	6,422	
Golden Acres	Golden Acres	4880R	6,312	6,836
Bayer	DEKALB	DKS 45-60	6,246	
Nutrien Ag	Dyna-Gro	M60GB31	5,930	6,024
Bayer	DEKALB	DKS 36-07	5,675	
Advanta Seeds	Alta Seeds	ADV G2275	5,505	5,990
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx631xRTx436	4,047	4,807

Evaluation of yield across years and/or locations will provide the best indication of consistent hybrid performance. Only hybrids with two years data at each location are displayed.

Gruver 2021 Grain Sorghum Performance Trial

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)
Dyna-Gro	GX20998	N/A	45	5	0	12.0	55.6	6,860
DEKALB	DKS 44-07	N/A	44	1	0	13.3	57.0	6,842
Integra	G3590	N/A	43	4	0	13.0	54.8	6,499
Integra	G3665	N/A	43	1	0	13.0	54.8	6,418
Golden Acres	3180B	N/A	45	2	0	12.7	56.4	6,417
DEKALB	DKS 50-07	N/A	50	5	0	13.1	58.0	6,405
DEKALB	DKS 45-60	N/A	47	6	0	14.6	56.6	6,349
Integra	G3620	N/A	43	3	0	13.2	58.1	6,262
Dyna-Gro	M67GB87	N/A	48	4	0	12.7	54.7	6,259
Golden Acres	4880R	N/A	51	4	0	14.8	58.9	6,233
DEKALB	DKS 40-76	N/A	46	4	0	13.6	57.3	6,183
Dyna-Gro	GX20973	N/A	43	1	0	11.6	54.1	6,037
DEKALB	DKS 36-07	N/A	41	4	0	11.8	54.9	5,844
Dyna-Gro	M63GB78	N/A	45	3	0	12.7	54.2	5,785
Dyna-Gro	M59GB94	N/A	42	3	0	12.9	55.4	5,238
Integra	G3711	N/A	50	4	0	14.8	57.4	5,165
Alta Seeds	ADV G2275	N/A	46	4	0	13.1	54.8	4,924
Dyna-Gro	M60GB31	N/A	42	2	0	14.5	57.0	4,492
Texas A&M AgriLife Research	ATx631xRTx436	N/A	48	3	0	11.8	52.9	4,105

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.



Gruver

2021 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)
Agronomic information		Mean	45	3	0.0	13.1	55.9	5,911
Plant Date	5/25/2021	C.V. %	6.1	48.1		13.0	4.3	10.8
Harvest Date	10/18/2021	P>f (hybrid)	0.000			0.324	0.218	0.000
Irrigated	Yes	L.S.D.	3.9					1,037.4
Row Spacing (in)	30	Trial Notes						
Number of Rows	2	*Applied Sivanto for aphids						
Target Seeds per Acre	60,000							
Precipitation (in)	15.2	Cooperator: Dustin Borden Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact: Dr. Ronnie Schnell / Katrina Horn ronnie.schnell@agnet.tamu.edu / katrina.horn@agnet.tamu.edu 979-845-2935 / 979-845-8505						
Irrigation (in)	12							
Herbicide	Atrazine, Dual, Sharpen applied pre-plant. Husky and atrazine applied over top 40 days after planting							
Soil Type	Sherm clay loam	Fertilizer Applied		Soil Analysis Report**				
Tillage	Conventional, planted on beds	N (lb/ac)	100	NO3-N (ppm)	27	pH	7.4	
Previous Crop	Sorghum with wheat cover	P2O5 (lb/ac)		P (ppm)*	117	Conductivity (umho/cm)	239	
		K2O (lb/ac)		K (ppm)*	835	Ca (ppm)*	2,888	
		S (lb/ac)		S (ppm)*	8	Mg (ppm)*	763	
		Zn (lb/ac)				Na (ppm)*	21	

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.

Gruver

2021 Grain Sorghum Performance Trial

Brand	Hybrid	Plant Population per Acre	Heads per Acre	Plant Stand %	Mean Tiller # per Plant	Lodging (%)	Head Size lb/head	Weathering Rating (0-9)	Iron Chlorosis Rating
Texas A&M AgriLife Research	ATx631xRTx436	19,820	31,363	33	0.56	0.0	0.13		
Integra	G3590	32,452	54,232	54	0.68	0.0	0.12		
Integra	G3620	28,532	39,640	48	0.41	0.0	0.14		
Integra	G3665	25,700	43,124	43	0.73	0.0	0.13		
Integra	G3711	16,771	38,333	28	1.61	0.0	0.15		
Golden Acres	3180B	43,996	50,965	73	0.18	0.0	0.12		
Golden Acres	4880R	27,007	43,560	45	0.63	0.0	0.14		
Dyna-Gro	GX20973	31,363	48,352	52	0.57	0.0	0.13		
Dyna-Gro	GX20998	30,710	49,223	51	0.61	0.0	0.16		
Dyna-Gro	M59GB94	23,958	43,342	40	0.88	0.0	0.12		
Dyna-Gro	M60GB31	21,127	41,164	35	1.07	0.0	0.12		
Dyna-Gro	M63GB78	31,363	41,382	52	0.36	0.0	0.14		
Dyna-Gro	M67GB87	27,225	45,520	45	0.68	0.0	0.14		
DEKALB	DKS 36-07	31,799	41,164	53	0.33	0.0	0.14		
DEKALB	DKS 40-76	35,284	46,827	59	0.35	0.0	0.13		
DEKALB	DKS 44-07	38,115	46,174	64	0.21	0.0	0.13		
DEKALB	DKS 45-60	38,333	46,391	64	0.24	0.0	0.14		
DEKALB	DKS 50-07	35,501	50,965	59	0.44	0.0	0.12		
Alta Seeds	ADV G2275	19,384	35,719	32	0.86	0.0	0.14		



Gruver

2021 Grain Sorghum Performance Trial



Brand	Hybrid	Plant Population per Acre	Heads per Acre	Plant Stand %	Mean Tiller # per Plant	Lodging (%)	Head Size lb/head	Weathering Rating (0-9)	Iron Chlorosis Rating
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Mean	29,392	44,076	49	0.60	0.0	0.13		
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Agronomic information	
Plant Date	5/25/2021
Harvest Date	10/18/2021
Irrigated	Yes
Row Spacing (in)	30
Number of Rows	2
Target Seeds per Acre	60,000
Precipitation (in)	15.2
Irrigation (in)	12
Herbicide	Atrazine, Dual, Sharpen applied pre-plant. Husky and atrazine applied over top 40 days after planting

Trial Notes
*Applied Sivanto for aphids

Cooperator: Dustin Borden
Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact:
Dr. Ronnie Schnell / Katrina Horn ronnie.schnell@agnet.tamu.edu / katrina.horn@agnet.tamu.edu 979-845-2935 / 979-845-8505

* Mehlich 3 by ICP, soiltesting.tamu.edu
** Samples collected at planting, some locations may have applied fertilizer

Fertilizer Applied		Soil Analysis Report**			
N (lb/ac)	100	NO3-N (ppm)	27	pH	7.4
P2O5 (lb/ac)		P (ppm)*	117	Conductivity (umho/cm)	239
K2O (lb/ac)		K (ppm)*	835	Ca (ppm)*	2,888
S (lb/ac)		S (ppm)*	8	Mg (ppm)*	763
Zn (lb/ac)				Na (ppm)*	21

Grain Sorghum Gruver Multi-Year Summary



Company	Brand	Hybrid	2 YR AVG Yield lb/Acre	3 YR AVG Yield lb/Acre
Bayer	DEKALB	DKS 44-07	8,083	
Golden Acres	Golden Acres	3180B	7,599	
Bayer	DEKALB	DKS 36-07	6,972	
Wilbur-Ellis Company	Integra	G3590	6,936	
Wilbur-Ellis Company	Integra	G3620	6,867	
Bayer	DEKALB	DKS 45-60	6,729	
Golden Acres	Golden Acres	4880R	6,517	
Advanta Seeds	Alta Seeds	ADV G2275	6,412	
Nutrien Ag	Dyna-Gro	M59GB94	6,330	
Nutrien Ag	Dyna-Gro	M60GB31	5,585	
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx631xRTx436	4,407	

Evaluation of yield across years and/or locations will provide the best indication of consistent hybrid performance. Only hybrids with two years data at each location are displayed.

Sunray

2021 Grain Sorghum Performance Trial

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)
Integra	G3665	N/A	46	3	0	11.5	55.7	8,843
Golden Acres	3180B	N/A	45	2	0	11.1	54.6	8,615
DEKALB	DKS 50-07	N/A	48	3	0	13.9	59.9	8,548
DEKALB	DKS 36-07	N/A	45	3	0	12.4	56.3	8,449
DEKALB	DKS 40-76	N/A	46	4	0	13.5	56.6	8,247
DEKALB	DKS 45-60	N/A	46	4	0	14.3	59.2	8,211
Dyna-Gro	GX20998	N/A	46	4	0	13.2	59.2	8,101
DEKALB	DKS 44-07	N/A	45	2	0	13.6	58.4	8,075
Golden Acres	4880R	N/A	49	3	0	14.3	59.4	8,068
Dyna-Gro	M67GB87	N/A	47	3	0	13.3	58.2	8,039
Integra	G3711	N/A	48	2	0	13.8	59.0	7,855
Dyna-Gro	M59GB94	N/A	42	3	0	12.5	56.8	7,811
Integra	G3620	N/A	47	3	0	13.7	59.1	7,805
Dyna-Gro	GX20973	N/A	44	1	0	13.1	58.8	7,693
Integra	G3590	N/A	42	4	0	12.8	57.1	7,532
Dyna-Gro	M63GB78	N/A	44	3	0	13.8	56.6	7,220
Alta Seeds	ADV G2275	N/A	44	4	0	15.8	58.8	6,577
Dyna-Gro	M60GB31	N/A	43	1	0	13.5	58.5	6,164
Texas A&M AgriLife Research	ATx631xRTx436	N/A	47	3	0	14.2	55.9	5,190

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.

Sunray

2021 Grain Sorghum Performance Trial

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)																				
Agronomic information		Mean	45	3	0.0	13.4	57.8	7,739																				
Plant Date	6/8/2021	C.V. %	4.2	38.2		6.5	3.1	9.0																				
Harvest Date	10/26/2021	P>f (hybrid)	0.000			0.000	0.002	0.000																				
Irrigated	Yes	L.S.D.	2.8			1.2	2.6	983.4																				
Row Spacing (in)	30	Trial Notes																										
Number of Rows	2	<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>Cooperator: Lone Star Family Farms</p> <p>Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact:</p> <p>Dr. Ronnie Schnell / Katrina Horn ronnie.schnell@agnet.tamu.edu / katrina.horn@agnet.tamu.edu 979-845-2935 / 979-845-8505</p> </div> <div style="width: 35%; border: 1px solid #ccc; padding: 5px;"> <p>* Mehlich 3 by ICP, soiltesting.tamu.edu</p> <p>** Samples collected at planting, some locations may have applied fertilizer</p> </div> </div>																										
Target Seeds per Acre	40,000																											
Precipitation (in)	17.2	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Fertilizer Applied</th> <th style="width: 50%;">Soil Analysis Report**</th> </tr> </thead> <tbody> <tr> <td>N (lb/ac) 125</td> <td>NO3-N (ppm) 51</td> </tr> <tr> <td>P2O5 (lb/ac)</td> <td>P (ppm)* 98</td> </tr> <tr> <td>K2O (lb/ac)</td> <td>K (ppm)* 736</td> </tr> <tr> <td>S (lb/ac)</td> <td>S (ppm)* 8</td> </tr> <tr> <td>Zn (lb/ac)</td> <td>pH 7.5</td> </tr> <tr> <td></td> <td>Conductivity (umho/cm) 351</td> </tr> <tr> <td></td> <td>Ca (ppm)* 3,355</td> </tr> <tr> <td></td> <td>Mg (ppm)* 997</td> </tr> <tr> <td></td> <td>Na (ppm)* 42</td> </tr> </tbody> </table>							Fertilizer Applied	Soil Analysis Report**	N (lb/ac) 125	NO3-N (ppm) 51	P2O5 (lb/ac)	P (ppm)* 98	K2O (lb/ac)	K (ppm)* 736	S (lb/ac)	S (ppm)* 8	Zn (lb/ac)	pH 7.5		Conductivity (umho/cm) 351		Ca (ppm)* 3,355		Mg (ppm)* 997		Na (ppm)* 42
Fertilizer Applied	Soil Analysis Report**																											
N (lb/ac) 125	NO3-N (ppm) 51																											
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	Conductivity (umho/cm) 351																											
	Ca (ppm)* 3,355																											
	Mg (ppm)* 997																											
	Na (ppm)* 42																											
Irrigation (in)		<p>At planting: 1.25 qt/ac FulTimeNXT + 12 oz/ac 2,4-D + 12 oz/ac BanvelHQ. Post-emerge: 1.25 qt/ac FulTimeNXT + 48 oz/ac Abundit Edge. 7/15: 1pt/ac Atrazine4L + 16 oz/ac Huskie + 5.3 oz/ac Staredown</p>																										
Herbicide																												
Soil Type	Sherm silty clay loam	<p>Soil Type</p>																										
Tillage	No-till																											
Previous Crop	Corn	<p>Previous Crop</p>																										

*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid.

Sunray

2021 Grain Sorghum Performance Trial

Brand	Hybrid	Plant Population per Acre	Heads per Acre	Plant Stand %	Mean Tiller # per Plant	Lodging (%)	Head Size lb/head	Weathering Rating (0-9)	Iron Chlorosis Rating
Texas A&M AgriLife Research	ATx631xRTx436	26,572	33,759	66	0.29	0.0	0.15		
Integra	G3590	33,323	62,073	83	0.87	0.0	0.12		
Integra	G3620	33,323	46,609	83	0.41	0.0	0.17		
Integra	G3665	35,719	49,441	89	0.39	0.0	0.18		
Integra	G3711	30,928	49,223	77	0.61	0.0	0.16		
Golden Acres	3180B	38,986	53,143	97	0.38	0.0	0.16		
Golden Acres	4880R	36,155	50,530	90	0.39	0.0	0.16		
Dyna-Gro	GX20973	35,719	55,466	89	0.43	0.0	0.13		
Dyna-Gro	GX20998	35,501	52,054	89	0.47	0.0	0.16		
Dyna-Gro	M59GB94	33,323	52,054	83	0.58	0.0	0.15		
Dyna-Gro	M60GB31	26,789	45,302	67	0.37	0.0	0.14		
Dyna-Gro	M63GB78	32,234	60,331	81	0.88	0.0	0.12		
Dyna-Gro	M67GB87	31,799	56,192	79	0.80	0.0	0.15		
DEKALB	DKS 36-07	37,026	56,846	93	0.54	0.0	0.15		
DEKALB	DKS 40-76	35,066	53,579	88	0.53	0.0	0.15		
DEKALB	DKS 44-07	35,066	54,232	88	0.56	0.0	0.15		
DEKALB	DKS 45-60	35,066	51,401	88	0.47	0.0	0.16		
DEKALB	DKS 50-07	35,284	55,757	88	0.45	0.0	0.15		
Alta Seeds	ADV G2275	30,056	45,520	75	0.55	0.0	0.15		



Sunray

2021 Grain Sorghum Performance Trial



Brand	Hybrid	Plant Population per Acre	Heads per Acre	Plant Stand %	Mean Tiller # per Plant	Lodging (%)	Head Size lb/head	Weathering Rating (0-9)	Iron Chlorosis Rating
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Mean	33,576	51,764	84	0.52	0.0	0.15		
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Agronomic information	
Plant Date	6/8/2021
Harvest Date	10/26/2021
Irrigated	Yes
Row Spacing (in)	30
Number of Rows	2
Target Seeds per Acre	40,000
Precipitation (in)	17.2
Irrigation (in)	
Herbicide	
At planting: 1.25 qt/ac FultimeNXT + 12 oz/ac 2,4-D + 12 oz/ac BanvelHQ. Post-emerge: 1.25 qt/ac FultimeNXT + 48 oz/ac Abundit Edge. 7/15: 1pt/ac Atrazine4L + 16 oz/ac Huskie + 5.3 oz/ac Staredown	
Soil Type	Sherm silty clay loam
Tillage	No-till
Previous Crop	Corn

Trial Notes

Cooperator: Lone Star Family Farms
Four replications of each hybrid are planted in a randomized block design. Model : yield = hybrid blk. SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using a SRES Advanced planter with Monosem units. Plots were harvested with a JD 3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded from January 1 through the harvest date. For additional information contact: Dr. Ronnie Schnell / Katrina Horn ronnie.schnell@agnet.tamu.edu / katrina.horn@agnet.tamu.edu 979-845-2935 / 979-845-8505

* Mehlich 3 by ICP, soiltesting.tamu.edu
** Samples collected at planting, some locations may have applied fertilizer

Fertilizer Applied		Soil Analysis Report**	
N (lb/ac)	125	NO3-N (ppm)	51
P2O5 (lb/ac)		P (ppm)*	98
K2O (lb/ac)		K (ppm)*	736
S (lb/ac)		S (ppm)*	8
Zn (lb/ac)		pH	7.5
		Conductivity (umho/cm)	351
		Ca (ppm)*	3,355
		Mg (ppm)*	997
		Na (ppm)*	42

Grain Sorghum

Sunray

Multi-Year Summary



Company	Brand	Hybrid	2 YR AVG Yield lb/Acre	3 YR AVG Yield lb/Acre
Bayer	DEKALB	DKS 44-07	7,500	
Golden Acres	Golden Acres	3180B	7,385	
Golden Acres	Golden Acres	4880R	7,271	7,200
Bayer	DEKALB	DKS 45-60	6,128	
Bayer	DEKALB	DKS 36-07	5,743	
Wilbur-Ellis Company	Integra	G3620	5,716	
Wilbur-Ellis Company	Integra	G3590	5,025	
Advanta Seeds	Alta Seeds	ADV G2275	4,726	5,371
Nutrien Ag	Dyna-Gro	M59GB94	4,556	
Nutrien Ag	Dyna-Gro	M60GB31	4,061	5,186

Evaluation of yield across years and/or locations will provide the best indication of consistent hybrid performance. Only hybrids with two years data at each location are displayed.

ACKNOWLEDGMENTS

Appreciation for assistance and cooperation in conducting these tests is expressed to the following:

<u>Cooperator</u>	<u>Trial Location</u>	<u>County</u>	<u>Region</u>
Texas AgriScience	Monte Alto	Hidalgo	Rio Grande Valley
McNair Farms	Driscoll	Nueces	Coastal Bend
Joel Hoskinson	Gregory	San Patricio	Coastal Bend
Mikel Brothers	Damon	Brazoria	Upper Gulf Coast
Texas A&M AgriLife Research	College Station	Burleson	Brazos Valley
Stiles Farm Foundation	Thrall	Williamson	Blacklands
Josh Birdwell	Hill County	Hill	Blacklands
Don Macha	Plainview	Hale	High Plains
Dustin Borden	Gruver	Hansford	High Plains
Lone Star Family Farms	Sunray	Moore	High Plains

Texas A&M AgriLife Personnel:

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Others: Brent Bean, United Sorghum Checkoff

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