

2 0 1 6

2016 Grain Sorghum Performance Tests in Texas



Department of Soil and Crop Sciences

Ronnie Schnell - Assistant Professor & Extension Specialist Dennis Pietsch - Director, Crop Testing Katrina Horn - Agricultural Research Assistant Jonathan Moreno - Agricultural Research Assistant Seth Hirst - Agricultrual Research Assistant W. L. Rooney - Professor, Plant Breeding and Genetics Gary Peterson - Professor, Grain Sorghum Breeding and Genetics

2016 GRAIN SORGHUM PERFORMANCE TESTS IN TEXAS

by

Ronnie Schnell, Dennis Pietsch, Katrina Horn, Jonathan Moreno, Seth Hirst, W. L. Rooney, and Gary Peterson

SCS-2016-29

Respectively, Assistant Professor & Extension Specialist; Director, Crop Testing; Agricultural Research Assistant; Agricultural Research Assistant; Agricultural Research Assistant; Professor, Plant Breeding and Genetics, Department of Soil and Crop Sciences, Texas A&M AgriLife Research, The Texas A&M University System, College Station, Texas; Professor, Grain Sorghum Breeding and Genetics, Texas A&M AgriLife Research, Lubbock, Texas.

TABLE OF CONTENTS

Introduction	1
Selecting Hybrids & Varieties	1
Field-Plot Techniques	3
Data Analysis & Reporting	4
Agronomic Data as Designated by Company	4
Measured Agronomic Data	5
Rainfall	5
Maps: Figure 1. Grain Sorghum Performance Trial Locations & Production Regions	3
Figure 2. 2016 Texas Water Year Total Rainfall	6
2016 Grain Sorghum Hybrid Characteristics	7
Grain Sorghum Company Contact Information	10
Monte Alto Full	11
Monte Alto Limited	15
Gregory	17
Danevang	20
Medina County	23
College Station	27
Thrall	30
Hill County	34
Greenville	38
Lubbock	40
Hereford	42
Perryton	46
Literature Cited and Acknowledgements	50

2016 GRAIN SORGHUM PERFORMANCE TRIALS IN TEXAS

Ronnie Schnell, Dennis Pietsch, Katrina Horn, Jonathan Moreno, Seth Hirst, W. L. Rooney, and Gary Peterson

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 2016 test sites are shown in Figure 1. A total of 327 entries were evaluated across 12 locations representing 55 unique hybrids from 13 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: <u>http://varietytesting.tamu.edu/grainsorghum/</u>.

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 (www.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. 2016 Grain Sorghum Performance Trials: Locations and Production Regions

Field-Plot Techniques

Performance trials are conducted at each location using a randomized complete block design with four replications of each entry (hybrid). Seeds for each hybrid are packaged to obtain a final plant population appropriate for each production region and cropping system. Plots are generally 2

rows wide with row spacing ranging from 30 to 40 inches depending on location. Seeds are packaged to deliver 30 feet of planted row per plot. Seed is planted using a belt cone planter with John Deere MaxEmerge XP planter units at all sites. Following emergence, two feet of row are trimmed on each side resulting in 26 ft plots and 4 ft alleys at most sites. 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. All 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 2016 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 are found in the list below and include items such as plant color, grain color and maturity class. 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), and 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: is 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 - moisture(%)/86) * yield (lb/acre)].

In addition to individual site performance, information on multi-year performance for each site and regional performance 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 exist in Texas moving east to west. Often, it is useful to look at rainfall amounts for a given region based on the water-year. The water-year corresponds with hydrological cycles and runs from October 1 through September 30. In contrast to annual rainfall amounts, water-year analysis includes periods of time when soil profile moisture recharge can occur. The observed water-year totals are provided in Figure 2.



Figure 2. 2016 water year (October 1, 2015 –September 30, 2016)

2016 Grain Sorghum Hybrid Characteristics



Company	Brand	Hybrid	Grain Color	Plant Color	Maturitry
Advanta Seeds	Alta Seeds	AG2103	Red	Purple	Medium
Advanta Seeds	Alta Seeds	AG3101	Red	Purple	Medium-Late
Advanta Seeds	Alta Seeds	AG3201	Bronze	Purple	Medium-Late
Advanta Seeds	Alta Seeds	AG1203	Bronze	Red	Medium-Early
Advanta Seeds	Alta Seeds	AG2105	Red	Red	Medium
Advanta Seeds	Alta Seeds	AG2115	Red	Red	Medium
Browning Seed Inc.	Browning	CHALLENGER BMX	Bronze	Purple	Medium
Browning Seed Inc.	Browning	Challenger BMX II	Bronze	Purple	Medium-Late
Chromatin Inc.	Chromatin	Chr0L0012	Bronze	Purple	Medium-Late
Chromatin Inc.	Sorghum Partners	SP7715	Bronze	Purple	Medium-Late
Chromatin Inc.	Sorghum Partners	SP70B17	Red	Purple	Medium-Late
Chromatin Inc.	Sorghum Partners	SP68M57	Bronze	Purple	Medium
Chromatin Inc.	Sorghum Partners	SP73B12	Bronze	Purple	Medium-Late
Chromatin Inc.	Sorghum Partners	SP34A19	Bronze	Purple	Medium-Early
Chromatin Inc.	Chromatin	Chr13GS0072	Bronze	Purple	Medium
Chromatin Inc.	Chromatin	Chr0L0029	Red	Purple	Medium-Late
Chromatin Inc.	Chromatin	Chr13GS0073	Bronze	Purple	Medium
Chromatin Inc.	Chromatin	Chr13GS0070	Bronze	Purple	Medium-Late
Chromatin Inc.	Chromatin	Chr13GS0039	Bronze	Purple	Early
Chromatin Inc.	Chromatin	Chr0L0163			Medium-Early
Chromatin Inc.	Sorghum Partners	K\$585	Bronze	Purple	Medium
Chromatin Inc.	Sorghum Partners	K73-J6	Bronze	Purple	Medium-Late

2016 Grain Sorghum Hybrid Characteristics



Company	Brand	Hybrid	Grain Color	Plant Color	Maturitry
		01.01.02.42			
Chromatin Inc.	Chromatin	Chr0L0242	Bronze	Purple	Medium-Late
Gayland Ward Seed	Gayland Ward	EXP 8016			N/A
Gayland Ward Seed	Gayland Ward	9320			N/A
Gayland Ward Seed	Gayland Ward	9417			N/A
Gayland Ward Seed	Gayland Ward	EXP 9059			N/A
Gayland Ward Seed	Gayland Ward	EXP 9092			N/A
Gayland Ward Seed	Gayland Ward	EXP 9127			N/A
Gayland Ward Seed	Gayland Ward	EXP 9123			N/A
Gayland Ward Seed	Gayland Ward	EXP 8017			N/A
Golden Acres Genetics	Golden Acres	3960B	Bronze	Purple	Medium
Golden Acres Genetics	Golden Acres	3970R	Red	Purple	Medium
Golden Acres Genetics	Golden Acres	X2576			N/A
Golden Acres Genetics	Golden Acres	3545	Bronze	Purple	Medium
Golden Acres Genetics	Golden Acres	4980B	Bronze	Purple	Medium-Late
Monsanto	DEKALB	DKS 51-01	Bronze	Purple	Medium-Late
Monsanto	DEKALB	DKS 53-53	Bronze	Purple	Medium-Late
Monsanto	DEKALB	DKS 38-16	Bronze	Purple	Medium-Early
Monsanto	DEKALB	DKS 53-67	Bronze	Purple	Medium-Late
Monsanto	DEKALB	DKS 45-23	Bronze	Purple	Medium
NuTech Seed, LLC	NuTech	GS663	Red	Purple	Medium
NuTech Seed, LLC	NuTech	GS676	Bronze	Purple	Medium-Late
NuTech Seed, LLC	NuTech	GS725	Red	Purple	Medium-Late

2016 Grain Sorghum Hybrid Characteristics



Company	Brand	Hybrid	Grain Color	Plant Color	Maturitry
NuTech Seed, LLC	NuTech	GS693	Red	Purple	Medium-Late
Terral Seed, Inc.	REV	9562	Red	Purple	Medium-Early
Terral Seed, Inc.	REV	9782	Red	Purple	Medium-Late
Terral Seed, Inc.	REV	9924	Red	Purple	Late
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx378xRTx430	Bronze	Purple	Medium-Late
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx399xRTx430	Bronze	Purple	Medium-Late
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx2752xRTx430	Bronze	Purple	Medium-Late
Wilbur-Ellis Company	Integra	G3630	Red	Red	Medium
Wilbur-Ellis Company	Integra	G3660	Red	Purple	Medium
Wilbur-Ellis Company	Integra	G3670	Bronze	Purple	Medium-Late
Wilbur-Ellis Company	Integra	G3701	Red	Red	Medium-Late

Hybrid characteristics are provided by representatives of each company. For additional information contact your local seed dealer or:

Dennis Pietsch

Dennis Pietsch

croptest@tamu.edu

979-845-8505

Grain Sorghum Company Contacts

TEXAS A&M GRILIFE RESEARCH

Company	Brand	Contact Information	Phone	Email
Advanta Seeds	Alta Seeds	Travis Kidd	806-340-2031	travis.kidd@advantaseeds.com
		201 E. John Carpenter FWY #660		
		Irving, TX 75062		
Advanta Seeds	Advanta Research	Travis Kidd	806-340-2031	travis.kidd@advantaseeds.com
		201 E. John Carpenter FWY #660		
		Irving, TX 75062		
Browning Seed Inc.		Rodney Smith	806-293-5271	rodney@browningseed.com
		3101 S. I-27		
		Plainview, TX 79072		
Chromatin Inc.		Alfredo Pineda	806-790-6542	apineda@chromatininc.com
		8509 Venita Avenue		
		Lubbock, TX 79424		
Gayland Ward Seed		Carson Ward	806-676-1123	carson@gaylandwardseed.com
		4395 US Hwy 60		
		Hereford, TX 79045		
Golden Acres Genetics		Dr. James Allison	512-793-5205	aggie.allison@gmail.com
		PO Box 579		
		Buchanan Dam, TX 78609		
Monsanto		Michael Lenz	316-445-2290	michael.c.lenz@monsanto.com
		7159 N 247th W		
		Mt. Hope, KS 67108		
NuTech Seed, LLC		Steve Sick	402-661-4700	steve.sick@nutechseed.com
		2321 N Loop Dr, Suite 230		
		Ames, IA 50010		
Terral Seed, Inc.		Marty Hale	318-341-8814	mhale@terralseed.com
		111 Ellington		
		Rayville, LA 71269		
Texas A&M AgriLife		Bill Rooney	979-845-2151	wlr@tamu.edu
		2474 TAMU		
		College Station, TX 77843		
Wilbur-Ellis Company		Ramon Medrano	214-608-5305	rmedrano@wilburellis.com
		2305 Winthrop Hill Rd		
		Argyle, TX 76226		

Monte Alto - Full Irrigated 2016 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)	
Alta Seeds	AG1203	63	47	6	0	12.4	56.1	6,009	
Gayland Ward	EXP 8016	63	56	6	1	14.4	55.8	5,737	
Sorghum Partners	SP68M57	62	49	7	4	12.4	55.2	5,423	
Alta Seeds	AG2105	62	54	9	4	13.0	55.8	5,403	
Sorghum Partners	SP7715	62	56	9	3	12.4	56.4	5,217	
Sorghum Partners	K73-J6	61	52	8	3	13.5	56.1	5,111	
DEKALB	DKS 45-23	62	53	8	1	13.3	55.4	4,946	
Alta Seeds	AG3201	60	51	8	2	13.4	53.3	4,942	
Gayland Ward	EXP 9123	62	56	7	2	12.7	54.6	4,903	
DEKALB	DKS 51-01	64	56	7	1	14.7	53.8	4,899	
REV	9924	63	55	6	4	12.5	53.9	4,782	
Gayland Ward	9320	62	54	6	7	14.4	56.5	4,765	
Gayland Ward	EXP 8017	64	52	7	4	15.1	54.1	4,759	
Gayland Ward	9417	62	56	8	4	14.5	55.0	4,554	
Alta Seeds	AG2115	61	50	9	2	12.3	53.1	4,320	
Gayland Ward	EXP 9092	61	54	7	8	12.3	54.5	4,283	
DEKALB	DKS 53-53	63	53	8	9	12.8	53.4	4,212	
Texas A&M AgriLife Research	ATx399xRTx430	60	50	9	3	13.2	52.6	4,209	
Texas A&M AgriLife Research	ATx2752xRTx430	60	51	8	6	12.4	55.3	4,035	
Alta Seeds	AG3101	61	58	8	15	12.7	55.7	4,034	
Gayland Ward	EXP 9127	61	53	10	4	12.5	54.5	3,945	
Alta Seeds	AG2103	61	45	7	9	13.5	54.9	3,896	
Gayland Ward	EXP 9059	61	51	9	9	15.0	53.7	3,833	
REV	9562	61	51	8	9	13.8	54.1	3,503	

Monte Alto - Full Irrigated 2016 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)
Texas A&M AgriLife Research	ATx378xRTx430	61	57	7	13	14.5	53.8	3,268
Sorghum Partners	SP70B17	61	50	8	10	12.8	53.0	3,243
REV	9782	61	49	7	16	12.3	55.0	3,047

Monte Alto - Full Irrigated 2016 Grain Sorghum Performance Trial



Brand	Hybrid		Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)
Agronomic inf	formation	Mear	62	52	8	5.6	13.3	54.6	4,492
Plant Date	2/18/2016	C.V. % P>f (hybrid)	1.6 0.000	3.3 0.000	15.7 0.001	98.3	8.1 0.001	1.7 0.000	13.6 0.000
Harvest Date	6/27/2016	L.S.D	. 1.4	2.4	1.7		1.7	1.3	939.7
Irrigated	Yes	Trial Notes							
Row Spacing (in)	30	*Fertilizer was a	*Fertilizer was applied as follows:					nc	
Number of Rows	2	2/2/16: 18 gal/A 3/8/16: Sidedres	Four replicat	ions of each hy	brid are planted	in a brid blk			
Seeds per Acre	80,000	3/30/16: Broadcast sprayed 2.3 pt/A of FOLIGRO (2-17-			SAS 9.4 was used for statistical analysis. LSD provided			provided	
N (lb/ac)		17) & 2 pt/A of N	17) & 2 pt/A of Nitrozin (17-0-0-5(Zn))				when hybrid significant at $p < 0.05$. Yields highlighte yellow are not statistically different from the top rar		
P2O5 (lb/ac)		*Test was irrigat	ed twice	insecticides w	ere applied	hybrid. Plots were planted using Almaco meter units on a JD Max-Emerge II units. Plots were harvested with a JD			
K2O (lb/ac)		*Appreciation is	expressed to A	ndy Scott, Jua	n Garza, and	3300 plot con GrainGage Sy	nbine fitted wi	th a Harvest Mas	ter
Precipitation (in)	23.15	Eddie Hernander maintaining the	z for their assist test block	tance in monit	oring and	January 1 through the harvest date.			
Irrigation (in)	7.5					Dennis Pietso	:h	ontaet.	
Herbicide		Soil Type	Hidalgo sandy c	lay loam		croptest@ta 979-845-850	mu.edu 5		
1 qt/A of Outlook pro	e-emerge	Tillage	Conventional ti beds	llage, planted	on raised				
		Previous Crop	Soybeans - Fall	2015					

Monte Alto (Full Irrigated) Grain Sorghum Multi-Year Summary



Company	Brand	Hybrid	2 yr AVG Yield (lbs/acre)	3 yr AVG Yield (lbs/acre)
Monsanto	DEKALB	DKS 51-01	5,262	6,025
Advanta Seeds	Alta Seeds	AG2105	5,035	5,571
Advanta Seeds	Alta Seeds	AG3201	4,901	5,626
Monsanto	DEKALB	DKS 53-53	4,748	5,698
Gayland Ward Seed	Gayland Ward	9320	4,641	5,310
Terral Seed, Inc.	REV	9924	4,635	5,427
Advanta Seeds	Alta Seeds	AG1203	4,345	5,267
Advanta Seeds	Alta Seeds	AG2115	4,319	4,987
Gayland Ward Seed	Gayland Ward	9417	4,257	4,778
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx2752xRTx430	4,224	4,868
Advanta Seeds	Alta Seeds	AG2103	4,192	5,230
Advanta Seeds	Alta Seeds	AG3101	4,156	4,651
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx399xRTx430	4,058	
Terral Seed, Inc.	REV	9562	3,912	4,650
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx378xRTx430	3,637	4,216
Gayland Ward Seed	Gayland Ward	EXP 9059	3,633	
Terral Seed, Inc.	REV	9782	3,276	4,520

Monte Alto - Limited Irrigated 2016 Grain Sorghum Performance Trial



Brand	Hybrid		Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)	
Agronomic inf	formation	Mean	60	48	7	12.9	12.7	55.3	3,156	
Plant Date	2/18/2016	C.V. % P>f (hybrid)	1.8 0.000	3.6 0.000	18.3 0.000	108.2	8.2 0.014	2.3 0.000	21.2	
Harvest Date	6/23/2016	L.S.D.	1.5	2.4	1.8		1.5	2.2		
Irrigated	Yes									
Row Spacing (in)	30	*Additional nutri	*Additional nutrients:							
Number of Rows	2	3/30/16: Broadcast sprayed 2.3 pt/A of FOLIGRO (2-17-17) & 2 pt/A of Nitrozin (17-0-0-5(7p))				Four replicati	ons of each hy	brid are planted	in a	
Seeds per Acre	55,000	*Test was irrigated once				SAS 9.4 was used for statistical analysis. LSD provid			provided	
N (lb/ac)	133	*Aphids were ob	*Aphids were observed, but no insecticides were applied				when hybrid significant at $p < 0.05$. Yields highlighted in yellow are not statistically different from the top ranked			
P2O5 (lb/ac)	59	*It has been our	policy not to pu	ublish results i in several low	f the test CV	hybrid. Plots were planted using Almaco meter units on a JD Max-Emerge II units. Plots were harvested with a JD				
K2O (lb/ac)	0	hybrids contribut	ted to a higher	CV.	performing	3300 plot con GrainGage Sy	nbine fitted wi stem. Precipita	th a Harvest Mas Ition data was re	ter corded from	
Precipitation (in)	23.15					January 1 through the harvest date.				
Irrigation (in)	3.5					Dennis Pietsc	h	ontact.		
Herbicide		Soil Type	Hidalgo sandy c	lay loam		croptest@tar 979-845-8505	nu.edu			
1 qt/A of Outlook pr	e-emerge	Tillage C	Tillage Conventional tillage, planted on raised beds							
		Previous Crop	Soybeans - Fall	2015						

Monte Alto (Limited Irrigated) Grain Sorghum Multi-Year Summary



Company	Brand	Hybrid	2 yr AVG Yield (lbs/acre)	3 yr AVG Yield (lbs/acre)
Monsanto	DEKALB	DKS 51-01	5,409	5,944
Advanta Seeds	Alta Seeds	AG3201	4,686	5,445
Advanta Seeds	Alta Seeds	AG2105	4,592	5,458
Gayland Ward Seed	Gayland Ward	9320	4,588	5,331
Advanta Seeds	Alta Seeds	AG1203	4,520	5,289
Monsanto	DEKALB	DKS 53-53	4,346	5,418
Wilbur-Ellis Company	Integra	G3670	4,214	5,174
Terral Seed, Inc.	REV	9924	4,050	5,088
Terral Seed, Inc.	REV	9562	3,886	4,853
Wilbur-Ellis Company	Integra	G3660	3,792	4,859
Gayland Ward Seed	Gayland Ward	9417	3,719	4,786
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx2752xRTx430	3,651	4,466
Advanta Seeds	Alta Seeds	AG2115	3,622	4,564
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx399xRTx430	3,458	
Advanta Seeds	Alta Seeds	AG3101	3,444	4,597
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx378xRTx430	3,341	4,028
Terral Seed, Inc.	REV	9782	3,146	4,399
Gayland Ward Seed	Gayland Ward	EXP 9059	2,761	

Gregory 2016 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)	
DEKALB	DKS 51-01	78	55	8	0	14.7	57.0	4,364	
REV	9924	78	52	8	0	14.6	56.6	4,028	
Alta Seeds	AG3201	74	49	8	0	14.9	56.3	4,005	
Texas A&M AgriLife Research	ATx378xRTx430	76	55	9	0	14.5	56.8	3,987	
DEKALB	DKS 38-16	77	53	8	0	15.4	58.6	3,773	
Integra	G3670	74	50	9	0	15.1	57.5	3,771	
REV	9782	76	46	7	0	14.6	57.6	3,688	
Integra	G3701	77	51	5	0	15.3	57.4	3,514	
REV	9562	77	51	8	0	15.2	56.2	3,506	
Alta Seeds	AG2103	76	47	9	0	14.7	57.0	3,425	
DEKALB	DKS 45-23	78	51	7	0	15.1	57.8	3,405	
Texas A&M AgriLife Research	ATx399xRTx430	75	48	8	0	14.7	57.3	3,367	
Integra	G3660	76	46	8	0	15.0	57.5	3,318	
Sorghum Partners	K73-J6	75	49	9	0	15.1	57.0	3,290	
Integra	G3630	76	46	7	0	14.3	57.8	3,228	
Texas A&M AgriLife Research	ATx2752xRTx430	76	49	7	0	15.1	56.8	3,136	
Alta Seeds	AG1203	76	47	7	0	14.7	57.7	3,034	
Alta Seeds	AG2115	75	47	7	0	15.2	56.7	3,016	
Sorghum Partners	SP70B17	77	50	7	0	14.9	56.7	2,878	
Alta Seeds	AG2105	77	51	10	0	15.1	57.0	2,841	
Sorghum Partners	SP68M57	76	47	6	0	15.4	58.0	2,558	

Gregory 2016 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 info	ormation	Mea	n 76	49	8	0.0	14.9	57.2	3,435
Plant Data	2/25/2016	C.V. 9	1.0	3.5	15.1		3.5	1.7	10.8
Plant Date	2/25/2010	P>f (hybric	0.000	0.000	0.000		0.181	0.102	0.000
Harvest Date	7/14/2016	L.S.D	1.0	2.4	1.6				531.3
Irrigated	No		Trial No	otes					
Row Spacing (in)	38	*Large rain even	nts in mid-Marc	h hampered e	arly plant	Cooperate	or: Allan Hunt		
Number of Rows	2	growth and dev	elopment. An a	ndditional 22"	of rain from	Four replication	tions of each hy	brid are planted	in a
Seeds per Acre	60,000					SAS 9.4 was	used for statist	ical analysis. LSD	provided
N (lb/ac)	80					yellow are n	ot statistically o	lifferent from the	top ranked
P2O5 (lb/ac)	0	*Rain events du Grain mold was	iring anthesis re observed, alon	sulted in parti g with Crazy To	al seed set.	hybrid. Plots JD Max-Eme	s were planted erge II units. Plo	using Almaco me ts were harvestee	ter units on a d with a JD
K2O (lb/ac)	0	these factors re	duced potential	yields.	- I- · · · · · ·	3300 plot co GrainGage S	ombine fitted w	ith a Harvest Mas ation data was re	ster
Precipitation (in)	28.33	*The test block Besiege was spr	was not sprayed a control	d for aphids; h headworms	owever,	January 1 th	rough the harve	est date. contact:	
Irrigation (in)						Dennis Piets	ch		
Herbicide		Soil Type	Raymondville c	lay loam		croptest@ta 979-845-850	amu.edu)5		
8 oz/A of Outlook + 0 Atrazine. Applied and prior to planting	.75 lb/A of d incorporated	Tillage	Full tillage, disk planted flat	ed, field cultiv	ated &				
		Previous Crop	Grain Sorghum						

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

Gregory Grain Sorghum Multi-Year Summary



Company	Brand	Hybrid	2 yr AVG Yield (lbs/acre)	3 yr AVG Yield (lbs/acre)
Terral Seed, Inc.	REV	9924	2,965	3,521
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx378xRTx430	2,874	2,742
Advanta Seeds	Alta Seeds	AG3201	2,862	3,270
Terral Seed, Inc.	REV	9782	2,609	2,983
Terral Seed, Inc.	REV	9562	2,516	2,894
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx2752xRTx430	2,464	2,513
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx399xRTx430	2,448	
Advanta Seeds	Alta Seeds	AG2115	2,441	2,867
Advanta Seeds	Alta Seeds	AG2105	2,274	2,660
Advanta Seeds	Alta Seeds	AG1203	2,176	2,774

Danevang 2016 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)	
DEKALB	DKS 51-01	75	57	10	6	11.8	60.3	6,659	
Integra	G3701	73	57	8	4	12.7	62.4	6,412	
Alta Seeds	AG3101	72	58	12	3	11.5	61.5	6,375	
REV	9924	75	54	8	8	11.6	59.4	6,317	
DEKALB	DKS 53-53	76	53	9	11	12.5	61.2	6,305	Γ
REV	9562	73	53	9	0	11.7	60.2	6,236	
Alta Seeds	AG2105	72	57	10	1	11.5	60.8	6,215	
DEKALB	DKS 45-23	76	53	8	8	12.4	61.6	6,214	Γ
Integra	G3630	73	49	9	0	11.4	60.8	6,059	Γ
Alta Seeds	AG1203	72	49	9	3	11.4	60.1	6,009	
Integra	G3660	72	49	9	5	11.9	60.9	5,744	
Golden Acres	3960B	72	49	9	1	12.5	61.2	5,725	
Alta Seeds	AG2103	72	49	9	4	11.9	60.2	5,721	
Sorghum Partners	SP68M57	72	51	9	0	12.7	60.9	5,707	
Texas A&M AgriLife Research	ATx2752xRTx430	72	55	9	0	12.5	60.6	5,698	
Sorghum Partners	SP70B17	72	54	9	3	11.5	59.7	5,660	
Integra	G3670	72	55	9	9	12.1	59.4	5,513	
Alta Seeds	AG3201	71	55	9	8	12.0	59.1	5,474	
Sorghum Partners	K73-J6	73	53	10	13	11.9	60.2	5,174	
Texas A&M AgriLife Research	ATx378xRTx430	72	60	10	25	12.8	60.3	5,048	
REV	9782	73	51	8	39	12.7	60.9	4,346	
Texas A&M AgriLife Research	ATx399xRTx430	72	53	9	14	12.5	60.1	4,338	

Danevang 2016 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 inf	ormation	Mea	n 73	53	9	7.3	12.1	60.5	5,771
Plant Data	2/20/2016	C.V. 9	% 1.0	2.8	12.0	97.7	9.3	0.9	7.6
Plant Date	2/29/2010	P>f (hybric	0.000 (k	0.000	0.002		0.738	0.000	0.000
Harvest Date	7/13/2016	L.S.D	1.0	2.1	1.5			0.8	616.9
Irrigated	No		Trial No	otes					
Row Spacing (in)	40	*Glyphosate wa	as applied as a h	arvest aid on (5/25/16.	Cooperato	or: Dean Hans	en	
Number of Rows	2	Due to ongoing	combine issues,	, test was harv	vested 10 an be	Four replicat	tions of each hy	brid are planted	in a
Seeds per Acre	80,000	attributed to th	e delay of harve	est		SAS 9.4 was	used for statist	ical analysis. LSD	provided
N (lb/ac)	94					yellow are n	ot statistically of	lifferent from the	e top ranked
P2O5 (lb/ac)	32	*Beneficial rain contributed to c	s throughout the	e growing seas ds.	son	hybrid. Plots JD Max-Eme	were planted rge II units. Plo	using Almaco met ts were harvested	ter units on a d with a JD
K2O (lb/ac)	14	*Smut was obse	erved in test. Co	ounts were ma	ide prior to	3300 plot co	mbine fitted wi	th a Harvest Mas ation data was re	ster
Precipitation (in)	27.59	harvest from all upon request.	replications. Sr	mut counts are	e avaliable	January 1 th	rough the harve al information (est date. contact:	
Irrigation (in)						Dennis Piets	ch		
Herbicide		Soil Type	Lake Charles cla	ау		croptest@ta 979-845-850	mu.edu 15		
Applied at planting 1: Verdict + 24 oz/A of 1 0.5 oz/A of Aim	2 oz/A of Fouchdown +	Tillage	Conventional ti raised beds.	llage. Test pla	nted on				
		Previous Crop	Cotton						

Danevang Grain Sorghum Multi-Year Summary



Company	Brand	Hybrid	2 yr AVG Yield (lbs/acre)	3 yr AVG Yield (lbs/acre)
Advanta Seeds	Alta Seeds	AG3101	5,960	5,475
Terral Seed, Inc.	REV	9924	5,850	5,893
Monsanto	DEKALB	DKS 53-53	5,829	
Terral Seed, Inc.	REV	9562	5,795	6,088
Advanta Seeds	Alta Seeds	AG2105	5,793	5,257
Wilbur-Ellis Company	Integra	G3670	5,550	5,319
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx2752xRTx430	5,483	5,163
Advanta Seeds	Alta Seeds	AG3201	5,442	5,313
Wilbur-Ellis Company	Integra	G3660	5,255	5,425
Advanta Seeds	Alta Seeds	AG1203	5,157	5,428
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx378xRTx430	4,948	4,650
Terral Seed, Inc.	REV	9782	4,726	5,243
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx399xRTx430	4,495	

Medina County 2016 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)	
Alta Seeds	AG2105	68	50	9	N/A	12.5	57.9	3,594	
 DEKALB	DKS 45-23	69	51	8	N/A	12.2	58.2	3,487	
 Alta Seeds	AG3101	68	58	10	N/A	12.3	58.5	3,400	
 NuTech	GS693	69	49	8	N/A	12.0	57.0	3,290	
 Golden Acres	3545	68	49	7	N/A	12.3	58.3	3,282	
NuTech	GS676	71	43	8	N/A	12.1	57.0	3,250	
 REV	9924	72	53	7	N/A	12.3	57.7	3,245	
 Sorghum Partners	K73-J6	70	51	9	N/A	13.1	59.0	3,240	
 NuTech	G\$725	69	54	9	N/A	12.5	58.3	3,144	
 Alta Seeds	AG2103	68	45	7	N/A	11.9	56.6	3,019	
Chromatin	Chr0L0012	67	48	9	N/A	12.5	58.3	2,975	
Texas A&M AgriLife Research	ATx2752xRTx430	70	46	6	N/A	12.3	58.7	2,946	
 Alta Seeds	AG3201	68	48	7	N/A	12.7	58.0	2,938	
 REV	9562	68	48	9	N/A	12.4	57.4	2,912	
 Golden Acres	3970R	68	45	8	N/A	12.2	57.7	2,909	
 DEKALB	DKS 53-53	71	48	7	N/A	13.1	59.5	2,840	
 Integra	G3660	67	45	7	N/A	12.0	56.8	2,826	
 DEKALB	DKS 51-01	71	52	9	N/A	12.4	57.9	2,802	
REV	9782	69	48	7	N/A	12.2	57.8	2,673	
 Texas A&M AgriLife Research	ATx399xRTx430	70	45	7	N/A	12.2	57.4	2,620	
 Golden Acres	3960B	68	48	9	N/A	12.5	58.3	2,611	
Alta Seeds	AG1203	69	48	9	N/A	12.0	57.5	2,607	
 Texas A&M AgriLife Research	ATx378xRTx430	69	58	7	N/A	12.7	58.0	2,558	
Integra	G3701	71	51	6	N/A	12.5	58.4	2,531	

Medina County 2016 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)
Sorghum Partners	SP70B17	71	50	8	N/A	11.9	56.0	2,510
Integra	G3670	70	46	7	N/A	12.7	57.3	2,413
NuTech	GS663	68	42	6	N/A	12.7	56.3	1,898

Medina County 2016 Grain Sorghum Performance Trial



Brand	Hybrid		Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)
Agronomic inf	formation	Mean	69	49	8		12.4	57.8	2,908
Plant Date	4/7/2016	C.V. %	2.9	5.1	16.9		3.7	1.3	20.2
Harvest Date	8/8/2016	P>t (hybrid) L.S.D.	2.9	3.5	2.0		0.232	0.001	
naivest Date	8/8/2010								
Irrigated	No		Trial No	otes					
Row Spacing (in)	38	*Originally design	ed to be an iri	rigated test bu	t was	Cooperato	or: Michael Ha	iby	
Number of Rows	2	conducted under	rainfed scenar	rio. Nimum plantir	a data	Four replicat	ions of each hy	brid are planted	in a
Seeds per Acre		*Test block appea	red to have fe	ertility issues o	n south side	SAS 9.4 was	used for statisti	cal analysis. LSD	provided
N (lb/ac)		which probably in	npacted final y	vields		when hybrid yellow are no	significant at p ot statistically d	< 0.05. Yields hig	shlighted in top ranked
P2O5 (lb/ac)		*Appreciation is e	xpressed to N	Ir. Wayne Scho	oltz, retired	hybrid. Plots JD Max-Eme	were planted u rge II units. Plot	ising Almaco met s were harvested	er units on a with a JD
K2O (lb/ac)		monitoring test bl	ock	ng nowening m	otes &	3300 plot co GrainGage Sy	mbine fitted wi /stem. Precipita	th a Harvest Mas ation data was re	ter corded from
Precipitation (in)	27.58					January 1 th	ough the harve	est date.	
Irrigation (in)						Dennis Pietso	ch		
Herbicide		Soil Type				croptest@ta 979-845-850	mu.edu 5		
		Tillage							
		Previous Crop							

Medina County Grain Sorghum Multi-Year Summary



Company	Brand	Hybrid	2 yr AVG Yield (lbs/acre)	3 yr AVG Yield (lbs/acre)
Terral Seed, Inc.	REV	9924	4,683	6,513
Monsanto	DEKALB	DKS 53-53	4,651	6,268
Golden Acres Genetics	Golden Acres	3545	4,589	5,796
Advanta Seeds	Alta Seeds	AG2105	4,563	5,829
NuTech Seed, LLC	NuTech	G\$725	4,559	
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx2752xRTx430	4,491	5,811
Advanta Seeds	Alta Seeds	AG3101	4,419	5,971
Monsanto	DEKALB	DKS 51-01	4,337	6,089
NuTech Seed, LLC	NuTech	GS693	4,335	
Terral Seed, Inc.	REV	9782	4,294	5,723
Terral Seed, Inc.	REV	9562	4,232	5,808
Advanta Seeds	Alta Seeds	AG2103	4,159	5,427
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx378xRTx430	4,097	5,982
Advanta Seeds	Alta Seeds	AG3201	4,087	5,416
Wilbur-Ellis Company	Integra	G3660	3,981	5,190
Wilbur-Ellis Company	Integra	G3670	3,723	5,460
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx399xRTx430	3,625	
Advanta Seeds	Alta Seeds	AG1203	3,370	4,987

College Station 2016 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)	
DEKALB	DKS 51-01	77	56	8	0	12.1	61.9	6,787	
Golden Acres	3970R	73	48	7	0	12.0	61.2	6,337	
Texas A&M AgriLife Research	ATx399xRTx430	74	49	8	0	11.2	60.7	6,242	
Alta Seeds	AG2105	74	53	7	0	10.7	62.1	6,141	
Sorghum Partners	SP68M57	74	48	7	0	12.8	60.8	6,077	
REV	9782	74	51	7	0	12.0	62.1	6,067	
Texas A&M AgriLife Research	ATx2752xRTx430	74	51	7	3	12.8	61.0	6,065	
NuTech	GS693	72	50	8	0	12.1	60.8	6,059	
REV	9924	75	54	7	0	11.9	61.2	5,949	
NuTech	G\$725	73	56	9	3	11.7	62.4	5,949	
DEKALB	DKS 38-16	73	58	8	3	12.1	62.1	5,890	
Alta Seeds	AG3101	72	57	10	5	12.6	62.5	5,889	
Alta Seeds	AG3201	72	52	8	0	11.3	61.4	5,850	
REV	9562	75	49	7	0	11.2	61.8	5,746	
Golden Acres	4980B	73	48	6	0	11.8	61.0	5,690	
Sorghum Partners	K73-J6	74	53	8	0	12.4	61.6	5,637	
Golden Acres	3545	76	52	8	0	13.1	61.3	5,492	
Alta Seeds	AG1203	72	47	6	0	12.0	61.1	5,367	
Texas A&M AgriLife Research	ATx378xRTx430	75	57	7	0	11.5	59.8	5,361	
NuTech	GS676	77	48	8	0	11.4	61.6	5,214	
NuTech	GS663	71	46	5	3	12.0	60.3	5,055	
Alta Seeds	AG2103	73	49	8	0	12.1	61.7	4,982	
Golden Acres	3960B	73	47	6	0	11.4	61.9	4,912	

College Station 2016 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 inf	ormation	Mean	74	51	7	0.7	11.9	61.4	5,772
Plant Date	3/23/2016	C.V. % P>f (hybrid)	2.1	3.6 0.000	23.8	354.2	11.0 0.842	1.2 0.000	14.3 0.462
Harvest Date	7/25/2016	L.S.D.	2.2	2.6				1.1	
Irrigated	Yes		Trial No	otes					
Row Spacing (in)	30					Cooperato	r: Texas A&M	AgriLife Resea	arch
Number of Rows	2					Four replicati	ons of each hy	orid are planted	in a
Seeds per Acre	80,000					SAS 9.4 was u	sed for statistic	odel : yleid = 'ny cal analysis. LSD	provided
N (lb/ac)						when hybrid yellow are no	significant at p t statistically di	< 0.05. Yields hi ifferent from the	ghlighted in e top ranked
P2O5 (lb/ac)						hybrid. Plots JD Max-Emer	were planted u ge II units. Plots	sing Almaco me s were harveste	ter units on a d with a JD
K2O (lb/ac)						3300 plot con GrainGage Sv	nbine fitted wit	h a Harvest Mas	ster
Precipitation (in)	0					January 1 thr	ough the harve	st date.	
Irrigation (in)						Dennis Pietsc	h	Unidet.	
Herbicide		Soil Type				croptest@tar 979-845-8505	nu.edu		
		Tillage							
		Previous Crop							

College Station Grain Sorghum Multi-Year Summary



Company	Brand	Hybrid	2 yr AVG Yield (lbs/acre)	3 yr AVG Yield (lbs/acre)
Monsanto	DEKALB	DKS 51-01	7,090	7,470
NuTech Seed, LLC	NuTech	GS725	6,782	
NuTech Seed, LLC	NuTech	GS693	6,388	
Advanta Seeds	Alta Seeds	AG3101	6,351	7,063
Terral Seed, Inc.	REV	9924	6,245	6,804
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx378xRTx430	6,002	6,751
Advanta Seeds	Alta Seeds	AG2105	5,953	6,696
Golden Acres Genetics	Golden Acres	3545	5,947	6,444
Terral Seed, Inc.	REV	9782	5,933	6,649
Advanta Seeds	Alta Seeds	AG3201	5,924	6,782
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx2752xRTx430	5,895	7,088
Terral Seed, Inc.	REV	9562	5,766	6,413
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx399xRTx430	5,710	
Advanta Seeds	Alta Seeds	AG1203	5,054	6,035

Thrall 2016 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)	
REV	9924	82	54	4	N/A	15.3	56.5	6,072	
Alta Seeds	AG3201	76	52	6	N/A	14.4	56.8	5,807	
Integra	G3670	77	52	6	N/A	14.8	56.6	5,784	
DEKALB	DKS 51-01	81	58	7	N/A	15.0	56.8	5,700	
DEKALB	DKS 38-16	78	59	7	N/A	14.5	58.9	5,532	
Integra	G3701	82	57	5	N/A	14.7	58.3	5,395	
Sorghum Partners	SP7715	80	53	7	N/A	15.5	57.7	5,287	
NuTech	GS676	76	51	9	N/A	15.2	57.2	5,241	
Texas A&M AgriLife Research	ATx2752xRTx430	80	51	4	N/A	14.4	57.3	5,131	
NuTech	GS663	75	51	6	N/A	14.2	56.6	5,121	
Sorghum Partners	SP70B17	81	52	7	N/A	14.6	56.4	5,068	
Integra	G3660	75	50	7	N/A	14.2	56.7	5,057	
DEKALB	DKS 45-23	80	55	6	N/A	14.7	57.6	5,055	
Texas A&M AgriLife Research	ATx399xRTx430	79	49	6	N/A	14.2	56.5	5,030	
REV	9562	79	50	7	N/A	14.0	57.9	5,003	
Alta Seeds	AG2105	77	55	8	N/A	14.2	56.8	4,994	
Alta Seeds	AG1203	78	50	6	N/A	14.2	57.4	4,956	
Golden Acres	3960B	76	51	6	N/A	14.3	57.0	4,925	
Golden Acres	3545	80	51	6	N/A	14.2	57.5	4,849	
Texas A&M AgriLife Research	ATx378xRTx430	81	57	6	N/A	14.2	56.6	4,840	
Sorghum Partners	SP68M57	76	50	7	N/A	15.3	57.5	4,799	
NuTech	G\$725	77	61	11	N/A	14.9	58.6	4,734	
Alta Seeds	AG2103	74	49	7	N/A	14.3	56.9	4,732	
Sorghum Partners	К73-Јб	80	52	8	N/A	15.9	56.1	4,727	

Thrall 2016 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)
Integra	G3630	76	49	6	N/A	13.9	56.9	4,690
NuTech	GS693	78	56	8	N/A	14.8	57.9	4,686
Golden Acres	3970R	75	51	9	N/A	15.7	55.5	4,413
REV	9782	79	50	6	N/A	14.0	57.4	4,263

Thrall 2016 Grain Sorghum Performance Trial



Brand	Hybrid		Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)
Agronomic inf	ormation	Mean	78	53	7		14.6	57.1	5,068
Plant Date	3/21/2016	C.V. %	1.8	3.5	16.2		5.2	1.0	8.8
Harvest Date	7/29/2016	L.S.D.	1.9	2.6	1.5		1.1	0.000	626.3
Irrigated	No								
Row Spacing (in)	38		Irial No	otes		Cooperato	r: Stiles Farm	Foundation	
Number of Rows	2					Four replicati	ons of each hy	orid are planted	in a
Seeds per Acre	65,000					randomized k SAS 9.4 was ເ	block design. M Ised for statistic	odel : yield = hy cal analysis. LSD	/brid blk.) provided
N (lb/ac)						when hybrid yellow are no	significant at p ot statistically di	< 0.05. Yields hi ifferent from the	ghlighted in e top ranked
P2O5 (lb/ac)						hybrid. Plots	were planted u	sing Almaco me s were harvester	ter units on a d with a JD
K2O (lb/ac)						3300 plot cor	nbine fitted wit	h a Harvest Mas	ster
Precipitation (in)	26.51					January 1 thr	ough the harve	st date.	
Irrigation (in)						Dennis Pietso	h	ontact:	
Herbicide		Soil Type				croptest@tar 979-845-850	nu.edu 5		
		Tillage							
		Previous Crop							

Thrall Grain Sorghum Multi-Year Summary



Company	Brand	Hybrid	2 yr AVG Yield (lbs/acre)	3 yr AVG Yield (lbs/acre)
Terral Seed, Inc.	REV	9924	6,417	6,572
Monsanto	DEKALB	DKS 51-01	6,416	6,830
Wilbur-Ellis Company	Integra	G3670	5,794	6,005
Terral Seed, Inc.	REV	9562	5,732	6,053
Advanta Seeds	Alta Seeds	AG2105	5,612	5,806
Advanta Seeds	Alta Seeds	AG3201	5,587	5,808
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx2752xRTx430	5,463	5,805
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx378xRTx430	5,376	5,704
NuTech Seed, LLC	NuTech	GS725	5,375	
NuTech Seed, LLC	NuTech	GS693	5,370	
Golden Acres Genetics	Golden Acres	3545	5,137	5,639
Wilbur-Ellis Company	Integra	G3660	4,965	5,269
Terral Seed, Inc.	REV	9782	4,886	5,561
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx399xRTx430	4,770	
Advanta Seeds	Alta Seeds	AG1203	4,536	5,117

Hill County 2016 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)	
Integra	G3670	N/A	50	8	N/A	11.0	60.0	3,841	
DEKALB	DKS 38-16	N/A	55	8	N/A	11.4	61.3	3,837	
DEKALB	DKS 45-23	N/A	54	8	N/A	11.3	61.0	3,731	
NuTech	G\$725	N/A	58	10	N/A	11.4	61.9	3,728	
Texas A&M AgriLife Research	ATx2752xRTx430	N/A	53	7	N/A	11.0	60.3	3,705	
NuTech	GS693	N/A	52	8	N/A	11.0	60.5	3,657	
Chromatin	Chr0L0242	N/A	53	8	N/A	13.5	60.3	3,626	
DEKALB	DKS 51-01	N/A	56	8	N/A	11.3	60.5	3,592	
Texas A&M AgriLife Research	ATx378xRTx430	N/A	58	7	N/A	11.0	59.4	3,560	
REV	9782	N/A	48	6	N/A	11.3	61.2	3,460	
Chromatin	Chr0L0029	N/A	50	7	N/A	12.6	60.3	3,438	
Alta Seeds	AG3201	N/A	51	9	N/A	12.1	61.1	3,392	
Chromatin	Chr13GS0073	N/A	53	11	N/A	11.6	60.2	3,383	
Alta Seeds	AG2105	N/A	53	9	N/A	11.0	60.0	3,343	
REV	9562	N/A	52	8	N/A	11.1	61.0	3,327	
Chromatin	Chr13GS0072	N/A	47	10	N/A	11.9	61.3	3,311	
Sorghum Partners	SP68M57	N/A	48	9	N/A	11.9	60.8	3,285	
Texas A&M AgriLife Research	ATx399xRTx430	N/A	49	8	N/A	11.1	60.2	3,249	
Sorghum Partners	K73-J6	N/A	50	9	N/A	12.5	60.5	3,174	
Integra	G3660	N/A	47	9	N/A	10.5	59.7	3,093	
Integra	G3701	N/A	54	7	N/A	11.7	61.9	3,092	
Alta Seeds	AG2103	N/A	47	8	N/A	11.5	61.2	3,080	
Golden Acres	3970R	N/A	51	9	N/A	11.5	59.9	3,008	
Alta Seeds	AG1203	N/A	46	7	N/A	12.2	60.9	2,915	

Hill County 2016 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)
REV	9924	N/A	54	8	N/A	11.6	60.0	2,878
Sorghum Partners	SP70B17	N/A	52	8	N/A	11.7	60.9	2,744
NuTech	GS663	N/A	45	7	N/A	11.2	60.2	2,595
Chromatin	Chr13GS0039	N/A	39	9	N/A	11.4	60.3	2,540
Chromatin	Chr13GS0070	N/A	48	8	N/A	14.7	61.4	2,533
Chromatin	Chr0L0012	N/A	46	9	N/A	11.7	60.6	2,473
Golden Acres	3960B	N/A	46	8	N/A	12.8	61.0	2,454
Chromatin	Chr0L0163	N/A	42	5	N/A	11.6	61.5	2,324
Integra	G3630	N/A	44	7	N/A	12.5	61.8	2,259
NuTech	GS676	N/A	44	9	N/A	12.8	60.9	2,137

Hill County 2016 Grain Sorghum Performance Trial



Brand	Hybrid		Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)	
Agronomic info	ormation	Mean		50	8		11.8	60.7	3,140	
Plant Date	4/8/2016	C.V. % P>f (hybrid)		3.4	17.1 0.000		4.8	1.5 0.011	14.7 0.000	
Harvest Date	8/12/2016	L.S.D.		2.4	1.9		0.8	1.3	677.5	
Irrigated	No		Trial No	tes						
Row Spacing (in)	38	*5 gal/A of 11-3	7-0 was applied	in furrow at p	lanting. 150	Cooperato	r: Chad Radke			
Number of Rows	2	Ib/A of anhydrou	is ammonia wa events hamper	s applied in Jai	nuary.	Four replications of each hybrid are planted in a				
Seeds per Acre	65,000	development.	events namper		growthand	SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at $n < 0.05$. Violds highlighted in				
N (lb/ac)	129					when hybrid yellow are no	significant at p ot statistically di	< 0.05. Yields hig fferent from the	top ranked	
P2O5 (lb/ac)	22	*Test block was	not sprayed for	aphids.		hybrid. Plots JD Max-Emer	were planted u ge II units. Plots	sing Almaco me s were harvestee	ter units on a d with a JD	
K2O (lb/ac)	0	nowening note	s were not reco	nueu.		3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded fr				
Precipitation (in)	29.76					January 1 thr	ough the harve	st date.		
Irrigation (in)						Dennis Pietso	h	Shtuct.		
Herbicide		Soil Type	Houston black o	clay		croptest@tar 979-845-850	nu.edu 5			
3 pt/A of Sequence at	t planting	Tillage	Disced & field c ammonia was a	ultivated wher pplied	n anhydrous	575 645 656.	5			
		Previous Crop	Corn							

Hill County Grain Sorghum Multi-Year Summary



Company	Brand	Hybrid	2 yr AVG Yield (lbs/acre)	3 yr AVG Yield (lbs/acre)
Wilbur-Ellis Company	Integra	G3670	3,809	4,388
Monsanto	DEKALB	DKS 51-01	3,792	4,357
NuTech Seed, LLC	NuTech	G\$725	3,790	
NuTech Seed, LLC	NuTech	GS693	3,730	
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx378xRTx430	3,697	3,998
Terral Seed, Inc.	REV	9782	3,638	4,179
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx2752xRTx430	3,622	3,926
Terral Seed, Inc.	REV	9562	3,524	4,184
Advanta Seeds	Alta Seeds	AG3201	3,507	4,104
Advanta Seeds	Alta Seeds	AG2105	3,470	3,595
Terral Seed, Inc.	REV	9924	3,310	4,139
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx399xRTx430	3,298	
Wilbur-Ellis Company	Integra	G3660	3,240	4,011
Advanta Seeds	Alta Seeds	AG1203	2,861	3,600

Greenville 2016 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)	
DEKALB	DKS 38-16	79	57	8	N/A	15.3	58.6	5,546	
Alta Seeds	AG3201	81	51	7	N/A	14.8	56.3	5,496	
DEKALB	DKS 51-01	83	56	9	N/A	15.2	58.2	5,435	
Alta Seeds	AG2105	82	52	8	N/A	15.6	56.9	5,372	
NuTech	GS693	81	50	9	N/A	15.5	57.9	5,350	
REV	9562	82	51	10	N/A	15.4	57.9	5,224	Γ
DEKALB	DKS 45-23	82	54	8	N/A	14.8	59.0	5,206	
NuTech	G\$725	81	58	9	N/A	15.2	58.5	5,173	
Sorghum Partners	SP68M57	80	47	7	N/A	15.2	57.2	5,122	
Texas A&M AgriLife Research	ATx399xRTx430	83	49	7	N/A	12.7	55.2	5,031	
Texas A&M AgriLife Research	ATx2752xRTx430	83	54	7	N/A	15.1	56.0	5,029	
REV	9924	83	54	6	N/A	14.5	57.3	5,023	
Alta Seeds	AG2103	81	48	8	N/A	15.5	56.7	5,018	
REV	9782	81	49	7	N/A	14.7	56.9	4,975	
NuTech	GS663	79	49	7	N/A	15.2	55.3	4,856	
Sorghum Partners	SP70B17	82	50	7	N/A	14.8	56.5	4,855	
Texas A&M AgriLife Research	ATx378xRTx430	83	58	8	N/A	14.5	55.4	4,629	
NuTech	GS676	84	47	7	N/A	15.5	56.5	4,626	
Golden Acres	3960B	82	50	7	N/A	13.9	58.8	4,614	
Golden Acres	3970R	83	49	10	N/A	16.0	54.8	4,446	
Alta Seeds	AG1203	82	48	8	N/A	14.4	58.3	4,438	
Sorghum Partners	K73-J6	82	51	7	N/A	15.3	57.2	4,393	

Greenville 2016 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 in	formation	Mea	n 82	51	8		15.0	57.1	4,994	
Plant Date	3/29/2016	۲.۷. ۶ P>f (hybrid	6 <u>1.0</u>) <u>0.000</u>	3.1 0.000	20.0		6.0 0.004	1.2 0.000	7.0 0.000	
Harvest Date	8/25/2016	L.S.D	1.2	2.2			1.3	1.0	495.6	
Irrigated	No		Trial No	otes						
Row Spacing (in)	30	*Appreciation is	expressed to D	or. Curtis Jones	, Assistant	Cooperato	or: Texas A&N	1 AgriLife Resea	ırch	
Number of Rows	2	Professor, Texas	A&M Commer	ce & Mr. Russ xas A&M Agril	ell Sutton, ife	Four replications of each hybrid are planted in a				
Seeds per Acre	65,000	Research, Comn	nerce, Texas for	r maintaining &	2	SAS 9.4 was	used for statist	ical analysis. LSD	provided	
N (lb/ac)	154	monitoring test	block			when hybrid yellow are n	l significant at p ot statistically c	< 0.05. Yields hight from the second	ghlighted in top ranked	
P2O5 (lb/ac)	13	*At planting app of CornGrow TO	lied in-furrow 5 (micronutrient	5 gal/A of 6-22	-0 + 1 qt/A	hybrid. Plots were planted using Almaco meter units on a JD Max-Emerge II units. Plots were harvested with a JD				
K2O (lb/ac)	0	*Knifed in 150 ll	p/A of N as 32-0)-0 between ro	ows	3300 plot co	mbine fitted wi	th a Harvest Mas	ster	
Precipitation (in)	34.4	*Test block was	not sprayed for	r aphids		January 1 th	rough the harve	est date.		
Irrigation (in)						Dennis Piets	ch	Jontaet.	I	
Herbicide		Soil Type	Houston black	clay		croptest@ta 979-845-850	imu.edu)5		I	
Applied 1 qt/A of Ro of Atrazine for burne December '15. Appl Roundup + 1 qt/A Du	undup + 1qt/A down, ied 1 qt/A uall II Magnum	Tillage	Disced + field c Planted flat	ultivated in Oc	tober '15.		-			
011 3/29/16		Previous crop	FallOW							

Lubbock 2016 Grain Sorghum Performance Trial



Brand	Hybrid		Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)	
Agronomic inf	ormation	Mea	n 56	41	2		12.3	59.1	2,512	
Plant Date	5/27/2016	۲.۷. ۶ P>f (hybrid	6 4.5) 0.000	12.1 0.078	54.8		2.8 0.000	2.0 0.020	27.5	
Harvest Date	10/3/2016	L.S.D	4.4				0.5	1.7		
Irrigated	Yes		Trial No	otes						
Row Spacing (in)	40	*A pre-plant irri	gation applied i	n early May		Cooperate	or: Texas A&N	AgriLife Resea	irch	
Number of Rows	2	*Applied 1.5 oz/	A of Transform	on 7/6 for SC	A control	Four replications of each hybrid are planted in a				
Seeds per Acre	52,000	to be applied at	30 and 60 days	after planting		SAS 9.4 was	SAS 9.4 was used for statistical analysis. LSD provided when hybrid significant at $p < 0.05$. Yields highlighted in			
N (lb/ac)	80					when hybrid yellow are n	l significant at p ot statistically d	< 0.05. Yields hig ifferent from the	shlighted in etop ranked	
P2O5 (lb/ac)	0	*Flash tape & so deterrents, but	are eye balloor control was ver	ns were used a y poor	s bird	hybrid. Plots were planted using Almaco meter units on JD Max-Emerge II units. Plots were harvested with a JD				
K2O (lb/ac)	0	*Test was hand-	harvested (1/5	00 acre) & thr	eshed with a	3300 plot combine fitted with a Harvest Master GrainGage System. Precipitation data was recorded fro January 1 through the harvest date.				
Precipitation (in)	11.47	Vogel thresher *It has been our	policy not to p	ublish results i	f the test CV					
Irrigation (in)	9	is over 20%.				Dennis Piets	ch	011101011		
Herbicide		Soil Type	Amarillo loam			croptest@ta 979-845-850	imu.edu)5			
Applied 14 oz/A of H Atrazine, post-plant a Dual on 6/24	uskie + 1 pt applied 1 pt/A	Tillage	Chiseled, diske	d, bedded						
		Previous Crop	Fallow							

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

Lubbock Grain Sorghum Multi-Year Summary



Company	Brand	Hybrid	2 yr AVG Yield (lbs/acre)	3 yr AVG Yield (lbs/acre)
Monsanto	DEKALB	DKS 51-01	3,307	3,842
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx2752xRTx430	3,283	3,668
Advanta Seeds	Alta Seeds	AG3201	3,265	4,105
Browning Seed Inc.	Browning	Challenger BMX II	3,086	
Browning Seed Inc.	Browning	CHALLENGER BMX	3,049	3,757
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx399xRTx430	2,811	
Terral Seed, Inc.	REV	9782	2,809	3,279
Advanta Seeds	Alta Seeds	AG2115	2,605	2,736
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx378xRTx430	2,515	3,033
Advanta Seeds	Alta Seeds	AG1203	2,321	2,902
Terral Seed, Inc.	REV	9562	2,232	3,044
Advanta Seeds	Alta Seeds	AG2103	2,174	3,010
Advanta Seeds	Alta Seeds	AG3101	2,087	3,099
Advanta Seeds	Alta Seeds	AG2105	1,994	2,659

Hereford 2016 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)	
NuTech	G\$725	71	42	5	0	11.7	57.7	6,683	
Texas A&M AgriLife Research	ATx2752xRTx430	68	39	2	0	12.7	55.4	6,472	
Alta Seeds	AG2115	65	37	4	0	12.4	54.7	6,219	
Alta Seeds	AG3101	74	40	4	0	11.9	55.8	6,119	
DEKALB	DKS 51-01	65	39	4	0	12.9	56.7	6,111	
Golden Acres	3970R	76	39	4	0	11.9	54.0	6,080	
Alta Seeds	AG3201	65	37	2	0	12.7	57.4	5,944	
Alta Seeds	AG1203	62	35	3	0	12.5	56.0	5,880	
Sorghum Partners	K73-J6	68	40	5	0	12.6	57.1	5,869	
DEKALB	DKS 53-53	71	39	3	0	13.0	57.4	5,799	
Alta Seeds	AG2105	69	38	6	0	12.4	55.9	5,788	
DEKALB	DKS 45-23	70	39	4	0	11.8	56.6	5,761	
REV	9562	64	37	3	0	12.4	55.7	5,717	
Alta Seeds	AG2103	65	36	4	0	11.8	54.9	5,617	
Texas A&M AgriLife Research	ATx399xRTx430	69	35	2	0	12.2	53.0	5,604	
NuTech	GS693	65	36	4	0	12.1	56.6	5,580	
REV	9782	64	34	1	0	13.1	54.8	5,318	
NuTech	GS676	71	38	5	0	13.3	57.1	5,304	
Golden Acres	3960B	68	35	4	0	13.5	56.5	5,093	
Texas A&M AgriLife Research	ATx378xRTx430	68	40	3	0	12.5	52.8	5,068	
Sorghum Partners	KS585	64	31	2	0	12.9	54.6	4,559	
NuTech	GS663	62	33	0	0	13.4	56.0	4,270	
Sorghum Partners	SP73B12	70	36	2	0	14.3	57.0	4,084	
Sorghum Partners	SP68M57	60	32	0	0	13.7	55.0	3,493	

Hereford 2016 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)
Sorghum Partners	SP34A19	57	34	0	0	12.7	48.3	3,011

Hereford 2016 Grain Sorghum Performance Trial



Brand	Hybrid		Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)	
Agronomic inf	ormation	Mean	67	37	3	0.0	12.6	55.5	5,418	
Plant Date	6/8/2016	C.V. % P>f (hybrid)	5.5 0.000	5.7 0.000	38.6		9.3 0.230	3.7 0.000	11.7 0.000	
Harvest Date	11/2/2016	L.S.D.	5.2	3.0				2.9	899.3	
Irrigated	Yes		Trial No	otes						
Row Spacing (in)	30	*Test conducted	under center p	pivot		Cooperato	r: Greg Urbar	nczyk		
Number of Rows	2	*Lack of timely m	noisture reduce	ed plant heigh	t, head	Four replications of each hybrid are planted in a				
Seeds per Acre	70,000	*Sivanto was app	SAS 9.4 was used for statistical analysis. LSD provided							
N (lb/ac)	100					when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked hybrid. Plots were planted using Almaco meter units on a JD Max-Emerge II 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: Dennis Pietsch				
P2O5 (lb/ac)	0	*Plots were harv	ested by Adva	nta Seed Com	pany with a					
K2O (lb/ac)	0	*Appreciation is	expressed to N	/Ir. Rick Aucke	rman, Deaf					
Precipitation (in)	13.75	Smith CEA, for co monitoring test s	illecting flowei ite	ring data, maii	ntaining and					
Irrigation (in)	7									
Herbicide Soil Type			Pullman clay loam			croptest@tamu.edu 979-845-8505				
Applied 1.5 lb/A of Atrazine + 1.2 pt/A Dual; pre-emerge		Tillage C	Conventional				~			
		Previous Crop	Corn							

Hereford Grain Sorghum Multi-Year Summary



Company	Brand	Hybrid	2 yr AVG Yield (lbs/acre)	3 yr AVG Yield (lbs/acre)
Advanta Seeds	Alta Seeds	AG3101	7,351	7,226
Monsanto	DEKALB	DKS 51-01	7,279	7,621
Terral Seed, Inc.	REV	9562	6,932	7,314
Advanta Seeds	Alta Seeds	AG3201	6,696	6,946
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx2752xRTx430	6,427	6,652
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx378xRTx430	6,122	5,908
Terral Seed, Inc.	REV	9782	6,111	6,539
Advanta Seeds	Alta Seeds	AG2103	5,967	6,182
Advanta Seeds	Alta Seeds	AG2105	5,600	6,212
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx399xRTx430	5,547	
Advanta Seeds	Alta Seeds	AG2115	5,117	5,768
Advanta Seeds	Alta Seeds	AG1203	4,304	5,495

Perryton 2016 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)	
DEKALB	DKS 53-53	74	47	2	0	11.3	56.8	8,019	
Chromatin	Chr0L0242	73	49	3	0	11.1	57.4	7,724	
Chromatin	Chr0L0029	77	51	1	0	11.6	59.0	7,634	
Alta Seeds	AG3101	74	51	3	0	11.3	59.3	7,628	
Texas A&M AgriLife Research	ATx378xRTx430	74	52	2	0	10.9	53.5	7,573	
Texas A&M AgriLife Research	ATx2752xRTx430	75	48	1	0	11.2	53.5	7,416	
DEKALB	DKS 45-23	74	48	2	0	11.1	56.5	7,407	
Alta Seeds	AG3201	73	49	2	0	11.4	54.1	7,342	
Sorghum Partners	SP73B12	74	48	2	0	11.2	59.2	7,333	
Chromatin	Chr0L0012	72	47	4	0	11.3	55.2	7,232	
NuTech	G\$725	74	50	3	0	10.8	58.2	7,201	
Golden Acres	3970R	75	44	4	0	11.3	56.0	7,177	
Chromatin	Chr13GS0070	73	47	1	0	13.5	61.0	7,143	
Alta Seeds	AG2103	71	45	3	0	11.2	57.2	7,068	
NuTech	GS693	72	47	4	0	11.0	57.3	7,045	
DEKALB	DKS 51-01	73	51	4	0	11.8	57.7	7,016	
REV	9562	72	47	2	0	11.7	56.6	6,995	
NuTech	GS676	77	45	5	0	11.2	58.2	6,974	
REV	9782	73	47	4	0	11.7	57.3	6,875	
Sorghum Partners	K73-J6	73	49	2	0	11.3	54.2	6,768	
NuTech	GS663	71	45	1	0	11.5	56.8	6,761	
Chromatin	Chr13GS0073	72	50	5	0	10.8	56.9	6,751	
Chromatin	Chr13GS0072	72	44	6	0	12.0	57.9	6,677	
Alta Seeds	AG2105	71	49	6	0	11.7	55.6	6,616	

Perryton 2016 Grain Sorghum Performance Trial



Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)
DEKALB	DKS 53-67	76	47	1	0	11.2	58.8	6,422
Golden Acres	3960B	72	48	2	0	11.7	57.1	6,057
Sorghum Partners	SP68M57	70	44	4	0	11.4	56.9	6,031
Texas A&M AgriLife Research	ATx399xRTx430	74	43	1	0	11.5	49.9	5,905
Alta Seeds	AG1203	72	48	2	0	11.7	55.9	5,893
Alta Seeds	AG2115	71	47	5	0	10.9	55.1	5,425
Sorghum Partners	K\$585	67	41	2	0	11.5	55.0	4,077
Sorghum Partners	SP34A19	66	41	4	0	12.3	49.1	4,025
Chromatin	Chr0L0163	67	41	2	0	12.2	43.2	3,584
Chromatin	Chr13GS0039	59	37	4	0	11.4	44.2	2,619

Perryton 2016 Grain Sorghum Performance Trial



Brand	Hybrid		Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (Ibs/bu)	Yield * (lbs/acre)	
Agronomic inf	ormation	Mear	72	47	3	0.0	11.5	55.6	6,542	
Plant Date	5/11/2016	۲.۷. ۶ P>f (hybrid	6 <u>1.7</u>) 0.000	4.8	42.1		7.1 0.137	7.5 0.000	11.9 0.000	
Harvest Date	10/26/2016	L.S.D	. 1.7	3.2				6.7	1,212.2	
Irrigated	Yes		Trial No	otes						
Row Spacing (in)	30	*Potential yields	were reduced	due to severa	issues.	Cooperato	r: Monte Wri	ght		
Number of Rows	2	Herbicide drift f	rom a neighbor	's field hamper	red early	Four replications of each hybrid are planted in a				
Seeds per Acre	60,000	sprouting in som	observed,	SAS 9.4 was used for statistical analysis. LSD provided						
N (lb/ac)	112	especially in ear	ly maturing hyb	orids		when hybrid significant at p < 0.05. Yields highlighted in yellow are not statistically different from the top ranked				
P2O5 (lb/ac)	20	*Applied Transfe	orm @ boot sta trol	ge & Sivanto d	luring grain	hybrid. Plots were planted using Almaco meter units on a JD Max-Emerge II 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.				
K2O (lb/ac)	0	*Appreciation is	expressed to N	/Ir. Scott Straw	n for					
Precipitation (in)	23.12	monitoring test *Appreciation is	& taking notes. expressed to A	dvanta Seed C	o. for					
Irrigation (in)	8	harvesting test b	olock w/ MF8XF	combine		Dennis Pietso	h	ontact.		
Herbicide Soil Type		Pullman clay	Pullman clay			nu.edu 5				
32 oz/A of Charger MAX + 16 oz/A of Atrazine		Tillage	Conventional, disked twice, bedded on 60" beds							
		Previous Crop	Wheat							

Perryton Grain Sorghum Multi-Year Summary



Company	Brand	Hybrid	2 yr AVG Yield (lbs/acre)	3 yr AVG Yield (lbs/acre)
Monsanto	DEKALB	DKS 53-53	8,433	9,224
Advanta Seeds	Alta Seeds	AG3201	8,172	8,391
Terral Seed, Inc.	REV	9562	8,106	8,533
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx2752xRTx430	8,036	8,622
Monsanto	DEKALB	DKS 51-01	8,006	8,738
Monsanto	DEKALB	DKS 53-67	7,915	8,828
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx399xRTx430	7,879	
Texas A&M AgriLife	Texas A&M AgriLife Research	ATx378xRTx430	7,759	8,361
Advanta Seeds	Alta Seeds	AG2103	7,470	8,243
Advanta Seeds	Alta Seeds	AG3101	7,445	8,187
Terral Seed, Inc.	REV	9782	7,201	8,120
Advanta Seeds	Alta Seeds	AG1203	7,164	7,867
Advanta Seeds	Alta Seeds	AG2115	6,878	7,517
Advanta Seeds	Alta Seeds	AG2105	6,773	7,471

ACKNOWLEDGMENTS

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

Farmers: Michael Haby (Hondo) Dean Hansen (Danevang), Allan Hunt (Gregory), Chad Radke (Hill County), Greg Urbanczyck (Hereford), and Monty Wright (Perryton),

Texas A&M AgriLife Research Personnel: Delroy Collins, Stephen Labar, Dr. Bill Rooney, Dr. Gary Peterson, Mark Stelter, and Russell Sutton.

Texas A&M AgriLife Extension Personnel: Rick Auckerman, Ryan Collett, Zach Davis, Bob McCool, Xandra Morris, Andrew Sprague, J.R. Sprague, and Scott Strawn.

Other contributers: Personnel at Rio Farms near Monte Alto, Texas: Andy Scott, Eddie Hernandez, and Juan Garza. Wayne Scholtz, Retired CEA, Medina County.

Appreciation is also expressed to Monsanto Company for providing the herbicide Roundup, that was used to maintain alleyways at the test sites.

Appreciation is also expressed to student workers David Bryant, Jonah Hutchison, Brayden Stockton, and Mike Valenti for their assitance in conducting the tests.

LITERATURE CITED

1. National Weather Service, Advanced Hydrological Prediction Service http://water.weather.gov/precip/index.php

Mention of a trademark or a proprietary product does not constitute a guarantee or a warranty of the product by Texas A&M AgriLife Research and Texas A&M AgriLife Extension, and does not imply its approval to the exclusion of other products that also may be suitable.

Produced by the Department of Soil and Crop Sciences Texas A&M AgriLife Research and AgriLife Extension Service

soilcrop.tamu.edu

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Texas A&M AgriLife Research and AgiLife Extension Service is implied.

Texas A&M AgriLife Research and AgriLife Extension are equal opportunity employers and program providers.