

2016 TEXAS A&M AGRILIFE EXTENSION UNIFORM GRAIN SORGHUM HYBRID TRIALS



**2016 TEXAS A&M AGRILIFE EXTENSION
UNIFORM GRAIN SORGHUM HYBRID TRIALS**

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Introduction

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

This year, 13 non-irrigated and 3 irrigated test sites were planted in the Rio Grande Valley, Gulf Coast, Brazos Bottom and Blackland Prairie Regions. Excessive rainfall prevented planting at several locations. Four official entries were entered in the Coastal Bend and Upper Gulf Coast region and five official entries in the Rio Grande Valley and Blackland Region. Additional hybrids may have been included at any given location at the discretion of the cooperator. Only official entries are included in regional summaries. Commercial seed companies enter one hybrid at their discretion into each trial by region and the hybrid must be entered at all locations within the region.

Performance trials are conducted by cooperative arrangements between growers, company representatives and Texas A&M AgriLife Extension personnel. Commercial farm equipment is typically used to plant and harvest. Test sites are on privately owned farms or at Texas A&M University AgriLife Research Centers. All entries are randomized and replicated three times at each location. All test sites are managed according to practices common to each production region. If replications are not available, statistical analysis cannot be performed and hybrid performance should be considered equal across hybrids for that site, despite numeric differences in yield or other agronomic traits.

Suggestions for Hybrid Selection

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. Hybrids that possess stay green traits or tolerance of various pests or disease may be important for your environment. While consistent yield will be the most important factor affecting hybrid selection, additional plant characteristics or traits could be used to select from hybrids with similar yield performance.

Field-Plot Techniques

Hybrid performance trials are conducted at each location using a randomized complete block design with three replications of each entry (hybrid). Seeds for each hybrid are delivered to centralized distribution points in each sub-region. Plots are generally between 4 and 12 rows wide with row spacing ranging from 30 to 40 inches depending on location. All plots are planted using commercial farm equipment provided by growers or cooperators at each location.

Cultural and agronomic practices adapted for each region are used as determined by the cooperator. Most locations are harvested using commercial farm equipment and yield measured by weighing each plot using “weigh wagons”. Some locations may use hand harvesting of predetermined row lengths followed by mechanical threshing and weighing. Grain moisture and test weight are determined from grab samples and measured using instruments such as the Mini GAC plus or similar instruments.

Data Analysis and Reporting

Data from each location is analyzed statistically using SAS 9.3. 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, moisture, etc.) less than the LSD value represents variation in 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 addition to individual location data, summaries for regional performance are provided. Regional summaries provide least square means for grain yield. Least square means are an estimate of yield from a linear model for each region. The model (PROC MIXED) accounts for fixed and random variables. Replications are considered random, hybrid and location are considered fixed. When hybrid is significant and no interaction (hybrid*location) is present, means separation is provided using Tukeys adjustment ($p < 0.05$).

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. 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 is provided in Figure 1.

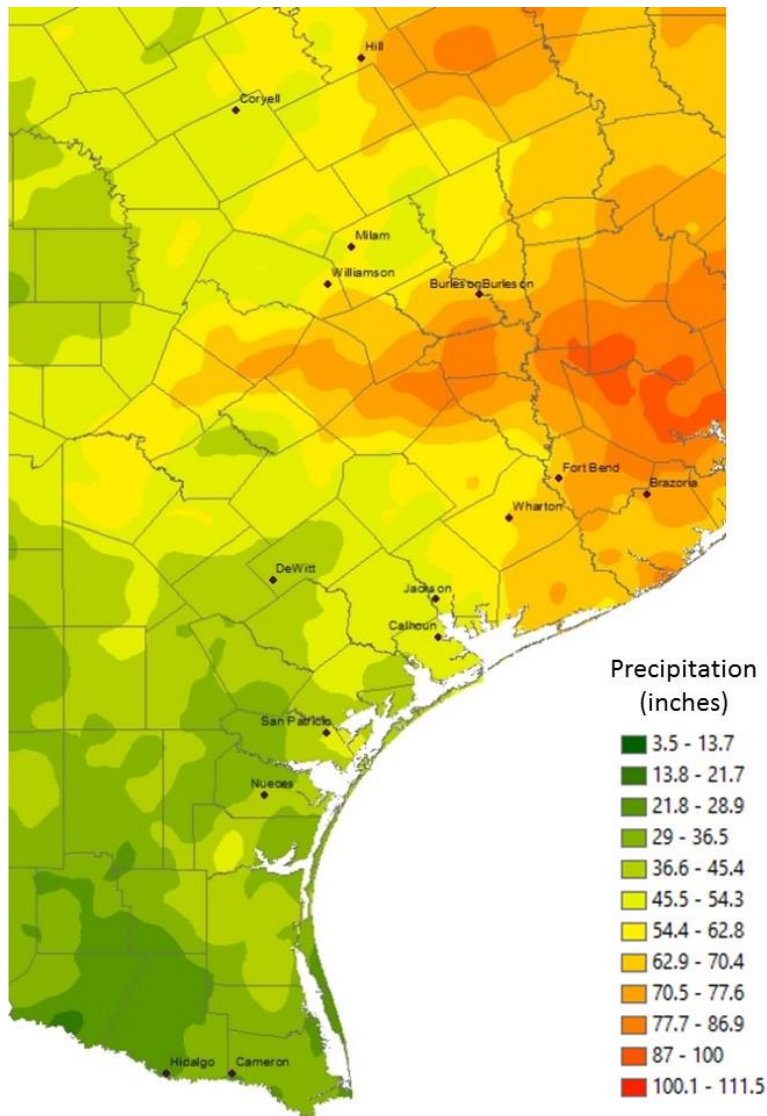


Figure 1. Rainfall in inches for the water year 2016 (October 1, 2015 - September 30, 2016).

Company Information:

Company	Contact	Phone	Email
Terral Seed - REV	Marty Hale	318-231-8800	mhale@terralseed.com
CPS Dyna-Gro	Cord Willms	361-960-4399	James.willms@cpsagu.com
Advanta - Alta	Travis Kidd	806-340-2031	Travis.kidd@advantaseeds.com
Monsanto Dekalb	Jim Bosch	361-571-4234	James.c.bosch@monsanto.com
B-H Genetics	Travis Janak	361-771-8722	travisj@bhgenetics.com

2016 Grain Sorghum Rio Grande Valley Regional Summary



Company	Brand	Hybrid	Moisture (%)	Test Weight (lb/bu)	Yield (lb/acre)
Monsanto	Dekalb	DKS 51-01	14.6	58.0	4,714
CPS Dyna-Gro	Dyna-Gro	M75GR47	13.8	56.4	4,477
Terral Seed	REV	9562	14.0	58.0	4,257
Advanta	Alta	AG3201	13.7	56.3	4,185
B-H Genetics	B-H Genetics	5620	14.0	57.8	4,072

Hybrid (Pr>F)	0.000
Location (Pr>F)	0.000
Hybrid*Location (Pr>F)	0.000

Yield is presented as the least square mean, which is an estimate from a linear model. The model (Proc Mixed, SAS 9.3) adjusts means for fixed and random affects in the model, including hybrid (f) location (f) and rep (r), to provide better estimates of yield for each hybrid in the regional trial. Yields highlighted in yellow are not significantly different than the top ranked hybrid (Tukeys $p=0.05$). If no yields are highlighted, refer to individual locations for evaluation of hybrid performance.

Cameron County Grain Sorghum Hybrid Trial 2016



Company	Brand	Hybrid	Moisture %	Test Weight (lb/bu)	Yield (lbs/acre)
Monsanto	Dekalb	DKS 51-01	13.6	58.00	6,198
B-H Genetics	B-H Genetics	4100	13.5	56.83	5,802
Advanta	Alta	AG3201	13.4	56.00	5,430
Terral Seed	REV	9562	13.6	57.33	5,277
CPS Dyna-Gro	Dyna-Gro	M75GR47	13.5	56.00	5,246
B-H Genetics	B-H Genetics	5620	13.5	57.50	5,144

Agronomic Information

Plant Date	2/16/2016
Harvest Date	6/21/2016
Irrigated	Yes
Row Spacing (in)	38
Number of Rows	12
Seeds per Acre	
Nitrogen (lb N/ac)	
Phosphorus (lb P2O5/ac)	
Potassium (lb K2O/ac)	
Precipitation (inches)	7.69
Soil Type	Harlingen clay

Mean	13.52	56.94	5,516
C.V. (%)	3.000	1.000	1.050
L.S.D.		0.70	104.9
Pr>F (hybrid)	0.991	0.000	0.000

Cooperator: Greg Schreiber
Agent: Enrique Perez

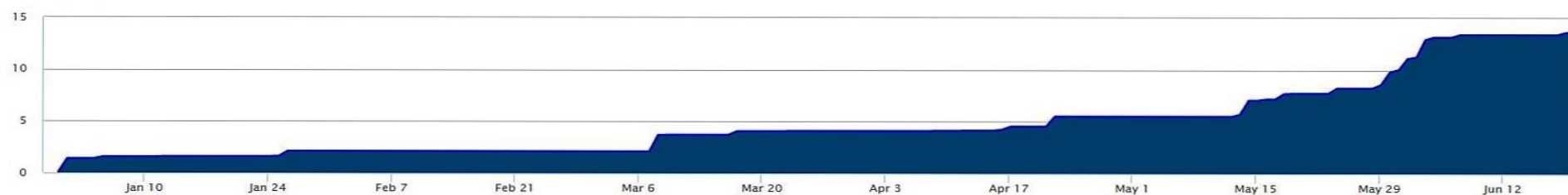
Model : yield = hybrid + blk. LSD provided when hybrid significant at p < 0.05 (SAS 9.4). Yields highlighted in yellow are not statistically different from the top ranked hybrid. Weather data provided by © 2016 The Climate Corporation. For additional information contact your local county extension agent or:
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Cameron County 2016 Grain Sorghum Uniform Hybrid Trial

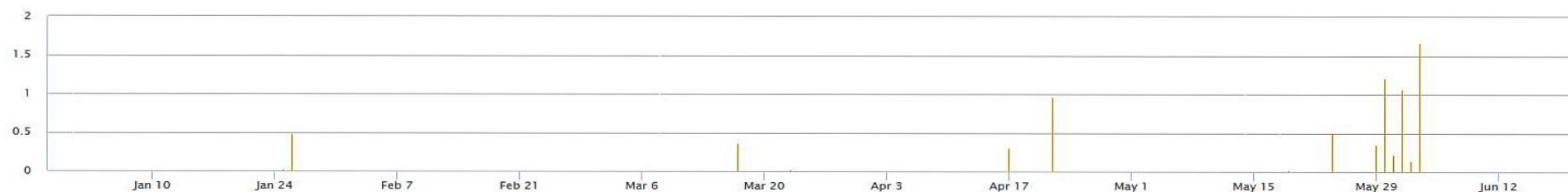


Weather Information

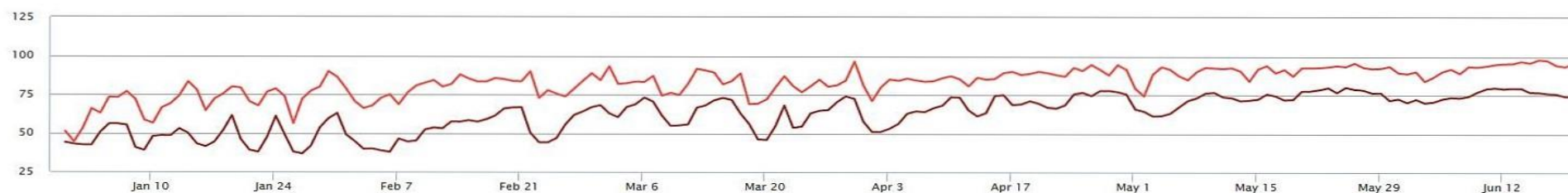
Accumulated Precip



Daily Amounts of Precip



Temperatures - High And Low



Hidalgo County Grain Sorghum Hybrid Trial 2016



Company	Brand	Hybrid	Moisture %	Test Weight (lb/bu)	Yield (lbs/acre)
CPS Dyna-Gro	Dyna-Gro	M75GR47	14.1	56.83	3,708
Terral Seed	REV	9562	14.4	58.67	3,237
Monsanto	Dekalb	DKS 51-01	15.7	58.00	3,229
B-H Genetics	B-H Genetics	5620	14.4	58.00	3,000
Advanta	Alta	AG3201	14.0	56.67	2,941

Agronomic Information

Plant Date	<input type="text" value="2/11/2016"/>
Harvest Date	<input type="text" value="6/23/2016"/>
Irrigated	<input type="text" value="Yes"/>
Row Spacing (in)	<input type="text" value="40"/>
Number of Rows	<input type="text" value="12"/>
Seeds per Acre	<input type="text"/>
Nitrogen (lb N/ac)	<input type="text"/>
Phosphorus (lb P2O5/ac)	<input type="text"/>
Potassium (lb K2O/ac)	<input type="text"/>
Precipitation (inches)	<input type="text" value="10.41"/>
Soil Type	<input type="text" value="Runn silty clay"/>

Mean	<input type="text" value="14.53"/>	<input type="text" value="57.63"/>	<input type="text" value="3,223"/>
C.V. (%)	<input type="text" value="9.000"/>	<input type="text" value="2.000"/>	<input type="text" value="6.040"/>
L.S.D.	<input type="text"/>	<input type="text"/>	<input type="text" value="366.2"/>
Pr>F (hybrid)	<input type="text" value="0.613"/>	<input type="text" value="0.101"/>	<input type="text" value="0.009"/>

Cooperator:
Agent:

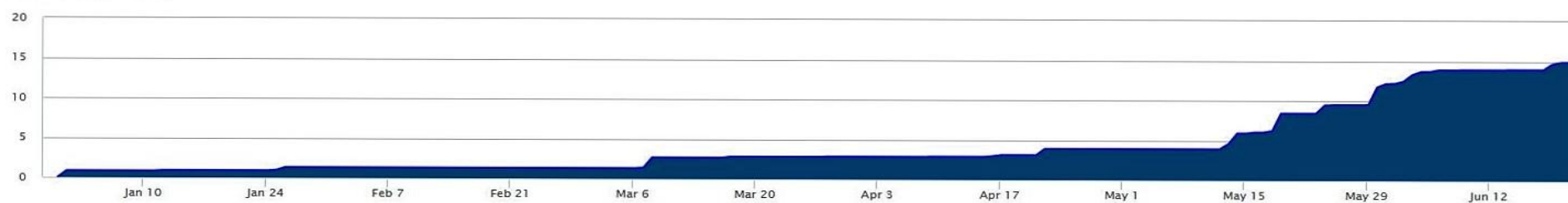
Model : yield = hybrid + blk. LSD provided when hybrid significant at p < 0.05 (SAS 9.4). Yields highlighted in yellow are not statistically different from the top ranked hybrid. Weather data provided by © 2016 The Climate Corporation. For additional information contact your local county extension agent or:
 Dr. Ronnie Schnell
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 979-845-2935

Hidalgo County 2016 Grain Sorghum Uniform Hybrid Trial

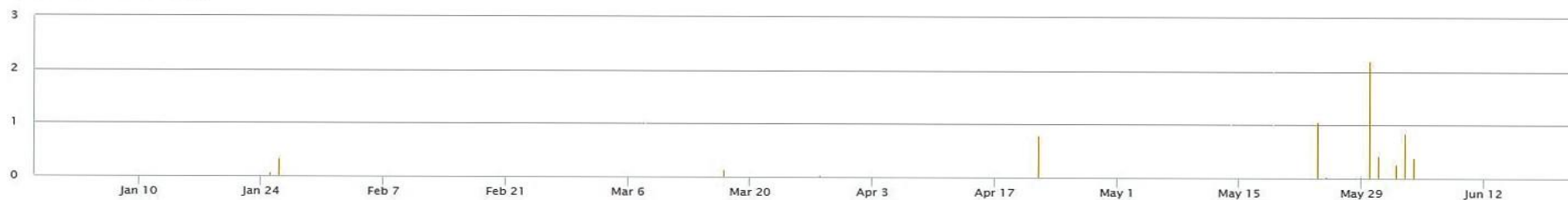


Weather Information

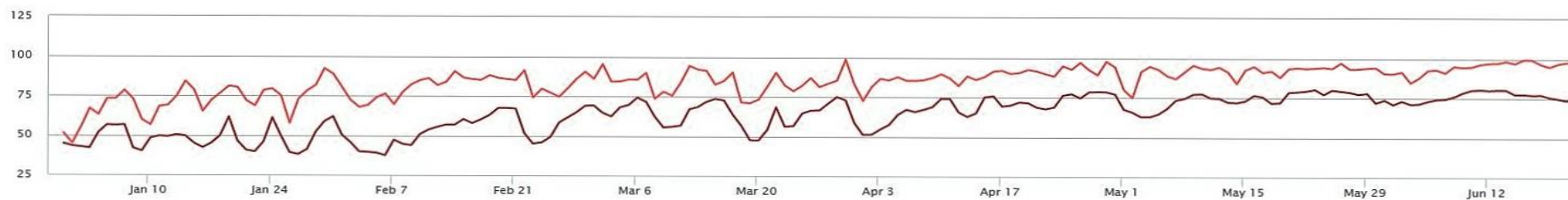
Accumulated Precip



Daily Amounts of Precip



Temperatures - High And Low



2016 Grain Sorghum Coastal Bend Regional Summary



Company	Brand	Hybrid	Moisture (%)	Test Weight (lb/bu)	Yield (lb/acre)
Monsanto	Dekalb	DKS 51-01	14.0	58.2	5,765
Advanta	Alta	AG3201	13.6	55.5	5,172
Terral Seed	REV	9562	13.8	56.8	4,954
CPS Dyna-Gro	Dyna-Gro	M75GR47	13.7	55.3	4,098

Hybrid (Pr>F)	0.000
Location (Pr>F)	0.000
Hybrid*Location (Pr>F)	0.000

Yield is presented as the least square mean, which is an estimate from a linear model. The model (Proc Mixed, SAS 9.3) adjusts means for fixed and random affects in the model, including hybrid (f) location (f) and rep (r), to provide better estimates of yield for each hybrid in the regional trial. Yields highlighted in yellow are not significantly different than the top ranked hybrid (Tukeys $p=0.05$). If no yields are highlighted, refer to individual locations for evaluation of hybrid performance.

Nueces County Grain Sorghum Hybrid Trial 2016



Company	Brand	Hybrid	Moisture %	Test Weight (lb/bu)	Yield (lbs/acre)
Monsanto	Dekalb	DKS 53-67	14.0	58.00	5,986
Monsanto	Dekalb	DKS 51-01	13.2	58.67	5,943
Dupont	Pioneer	83P99	13.5	59.00	5,887
Advanta	Alta	AG3201	12.9	54.67	5,764
Terral Seed	REV	9562	13.0	55.67	5,261
CPS Dyna-Gro	Dyna-Gro	M75GR47	13.1	55.33	5,123

Agronomic Information

Plant Date	2/15/2016
Harvest Date	6/28/2016
Irrigated	No
Row Spacing (in)	30
Number of Rows	4
Seeds per Acre	53,000
Nitrogen (lb N/ac)	66
Phosphorus (lb P2O5/ac)	33
Potassium (lb K2O/ac)	0
Precipitation (inches)	18.56
Soil Type	Victoria clay

Mean	13.29	56.89	5,661
C.V. (%)	4.000	3.000	1.930
L.S.D.			198.5
Pr>F (hybrid)	0.178	0.085	0.000

Cooperator: Ordner Farm
Agent: Jason Ott

Model : yield = hybrid + blk. LSD provided when hybrid significant at p < 0.05 (SAS 9.4). Yields highlighted in yellow are not statistically different from the top ranked hybrid. Weather data provided by © 2016 The Climate Corporation. For additional information contact your local county extension agent or:
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Nueces County 2016 Grain Sorghum Uniform Hybrid Trial

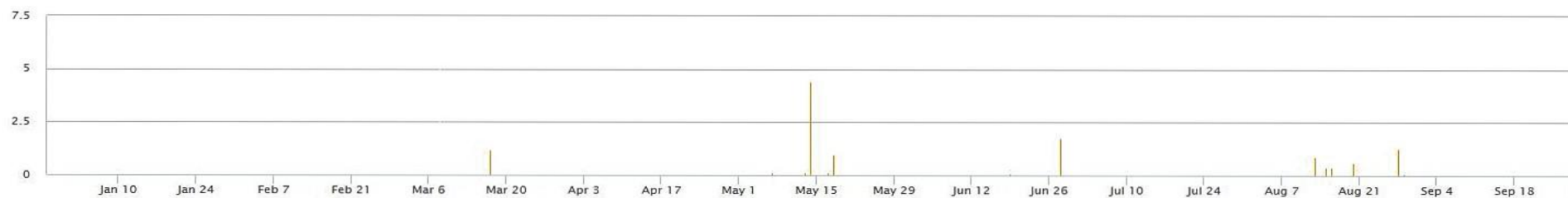


Weather Information

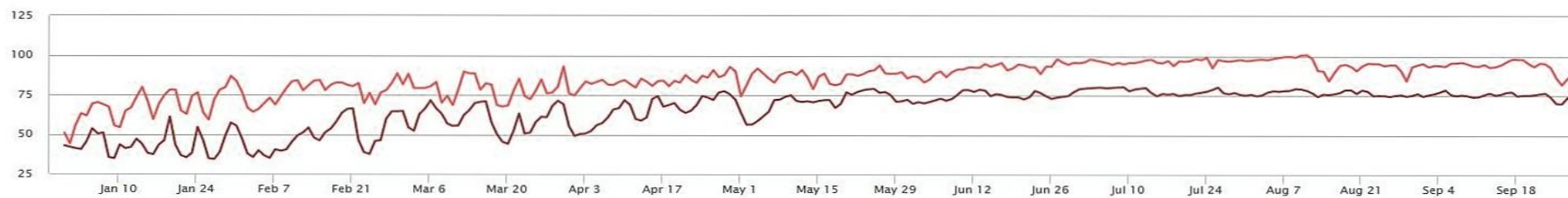
Accumulated Precip



Daily Amounts of Precip



Temperatures - High And Low



San Patricio County Grain Sorghum Hybrid Trial 2016



Company	Brand	Hybrid	Moisture %	Test Weight (lb/bu)	Yield (lbs/acre)
Monsanto	Dekalb	DKS 53-53	14.5	57.00	5,628
Monsanto	Dekalb	DKS 51-01	14.7	57.67	5,587
Dupont	Pioneer	83P73	14.7	56.33	5,287
Monsanto	Dekalb	DKS 48-07	14.1	58.00	5,152
Terral Seed	REV	9562	14.5	58.00	4,647
Advanta	Alta	AG3201	14.3	56.33	4,579
Mycogen Seeds	Mycogen	1G741	14.4	57.67	4,551
B-H Genetics	B-H Genetics	5556	14.6	57.33	4,518
Dupont	Pioneer	83P56	14.8	56.67	4,427
B-H Genetics	B-H Genetics	4100	14.4	56.67	4,325
Monsanto	Dekalb	DKS 37-07	14.6	55.33	3,845
CPS Dyna-Gro	Dyna-Gro	M75GR47	14.3	55.33	3,073

Agronomic Information

Plant Date	2/25/2016
Harvest Date	7/11/2016
Irrigated	No
Row Spacing (in)	30
Number of Rows	12
Seeds per Acre	65,000
Nitrogen (lb N/ac)	84
Phosphorus (lb P2O5/ac)	12
Potassium (lb K2O/ac)	0
Precipitation (inches)	24.24
Soil Type	Victoria clay

Mean	14.50	56.86	4,635
C.V. (%)	2.000	2.000	4.500
L.S.D.			352.9
Pr>F (hybrid)	0.148	0.301	0.000

Cooperator: Andrew Miller
Agent: Bob McCool

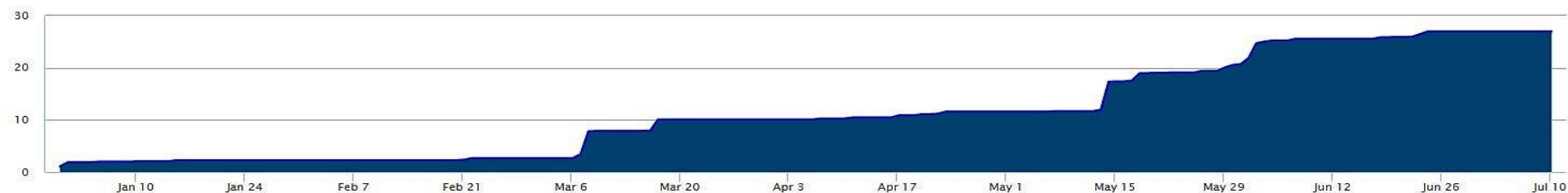
Model : yield = hybrid + blk. LSD provided when hybrid significant at p < 0.05 (SAS 9.4). Yields highlighted in yellow are not statistically different from the top ranked hybrid. Weather data provided by © 2016 The Climate Corporation. For additional information contact your local county extension agent or:
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ronschnell@tamu.edu
979-845-2935

San Patricio County 2016 Grain Sorghum Uniform Hybrid Trial

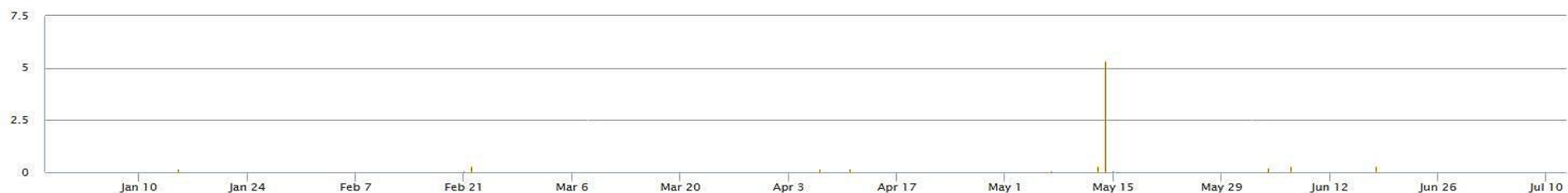


Weather Information

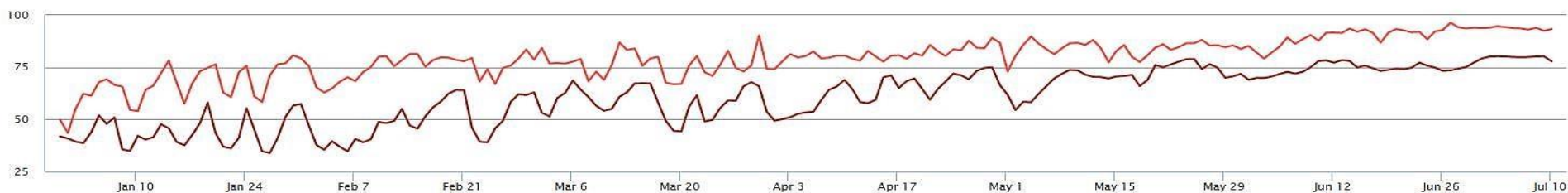
Accumulated Precip



Daily Amounts of Precip



Temperatures - High And Low



2016 Grain Sorghum Upper Gulf Coast Regional Summary



Company	Brand	Hybrid	Moisture (%)	Test Weight (lb/bu)	Yield (lb/acre)
Terral Seed	REV	9924	13.4	51.2	4,875
Monsanto	Dekalb	DKS 53-53	13.6	50.1	4,821
Advanta	Alta	AG1203	12.2	47.8	4,017
CPS Dyna-Gro	Dyna-Gro	M75GR47	13.2	50.6	3,878

Hybrid (Pr>F)	0.000
Location (Pr>F)	0.000
Hybrid*Location (Pr>F)	0.000

Yield is presented as the least square mean, which is an estimate from a linear model. The model (Proc Mixed, SAS 9.3) adjusts means for fixed and random affects in the model, including hybrid (f) location (f) and rep (r), to provide better estimates of yield for each hybrid in the regional trial. Yields highlighted in yellow are not significantly different than the top ranked hybrid (Tukeys $p=0.05$). If no yields are highlighted, refer to individual locations for evaluation of hybrid performance.

Brazoria County Grain Sorghum Hybrid Trial 2016



Company	Brand	Hybrid	Moisture %	Test Weight (lb/bu)	Yield (lbs/acre)
Terral Seed	REV	9924	13.8	13.72	2,429
CPS Dyna-Gro	Dyna-Gro	M75GR47	13.5	11.54	2,143
Advanta	Alta	AG1203	11.6	10.56	1,822
Monsanto	Dekalb	DKS 53-53	13.4	9.65	1,792

Agronomic Information

Plant Date	3/4/2016
Harvest Date	7/22/2016
Irrigated	No
Row Spacing (in)	38
Number of Rows	6
Seeds per Acre	
Nitrogen (lb N/ac)	
Phosphorus (lb P2O5/ac)	
Potassium (lb K2O/ac)	
Precipitation (inches)	28.83
Soil Type	Lake Charles clay

Mean	13.08	11.37	2,046
C.V. (%)	6.000	13.000	10.720
L.S.D.			438.4
Pr>F (hybrid)	0.054	0.057	0.035

Cooperator: TDCJ Darrington
Agent: Jessica Chase

Model : yield = hybrid + blk. LSD provided when hybrid significant at p < 0.05 (SAS 9.4). Yields highlighted in yellow are not statistically different from the top ranked hybrid. Weather data provided by © 2016 The Climate Corporation. For additional information contact your local county extension agent or:
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Brazoria County 2016 Grain Sorghum Uniform Hybrid Trial

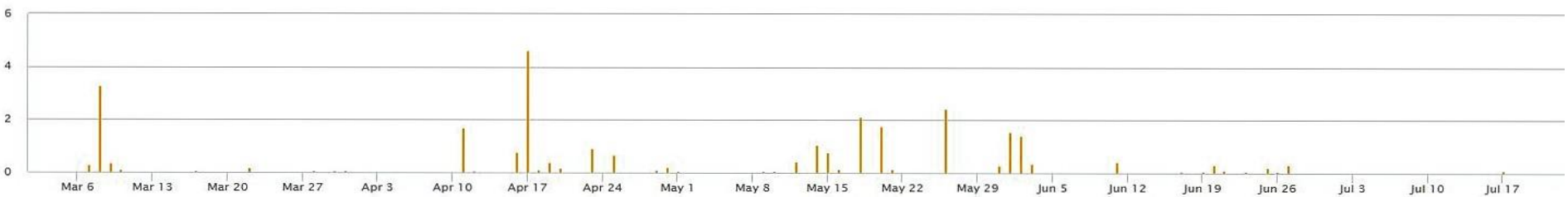


Weather Information

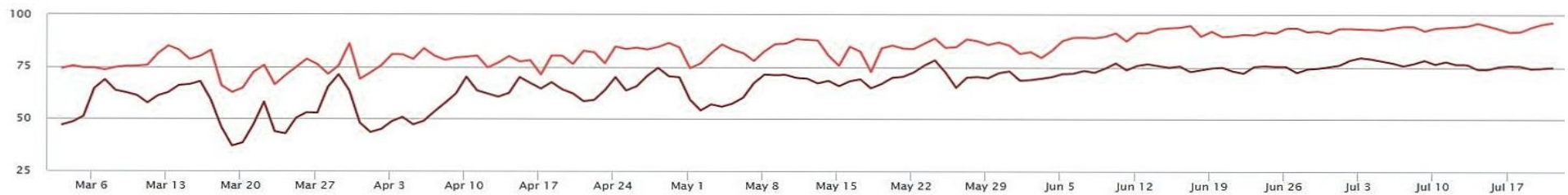
Accumulated Precip



Daily Amounts of Precip



temperatures - High And Low



Calhoun County Grain Sorghum Hybrid Trial 2016



Company	Brand	Hybrid	Moisture %	Test Weight (lb/bu)	Yield (lbs/acre)
Terral Seed	REV	9924	12.0	58.33	5,677
Monsanto	Dekalb	DKS 53-53	12.3	58.67	5,533
Advanta	Alta	AG1203	9.7	55.33	4,702
CPS Dyna-Gro	Dyna-Gro	M75GR47	11.0	55.67	3,434

Agronomic Information

Plant Date	3/1/2016
Harvest Date	7/15/2016
Irrigated	No
Row Spacing (in)	40
Number of Rows	6
Seeds per Acre	72,000
Nitrogen (lb N/ac)	115
Phosphorus (lb P2O5/ac)	35
Potassium (lb K2O/ac)	0
Precipitation (inches)	19.29
Soil Type	Laewest clay

Mean	11.26	57.00	4,837
C.V. (%)	6.000	2.000	5.990
L.S.D.	1.26	1.85	578.7
Pr>F (hybrid)	0.008	0.008	0.000

Cooperator: Sam Nunley
Agent: Eric Taylor

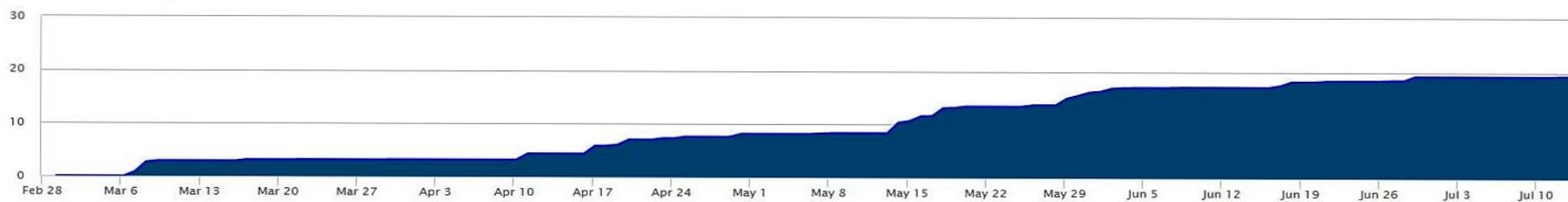
Model : yield = hybrid + blk. LSD provided when hybrid significant at p < 0.05 (SAS 9.4). Yields highlighted in yellow are not statistically different from the top ranked hybrid. Weather data provided by © 2016 The Climate Corporation. For additional information contact your local county extension agent or:
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Calhoun County 2016 Grain Sorghum Uniform Hybrid Trial

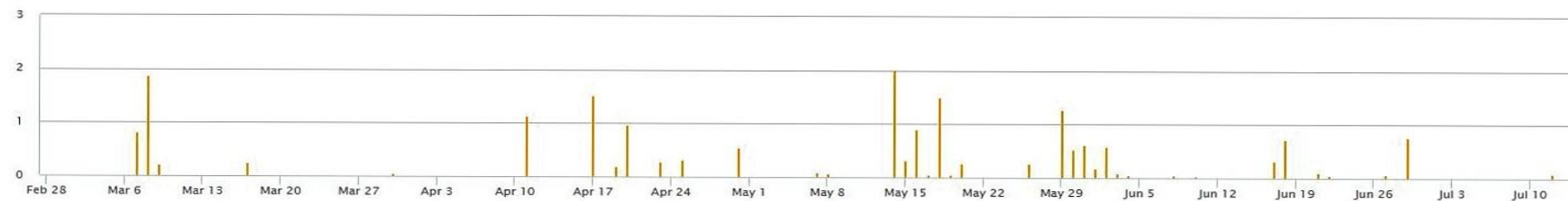


Weather Information

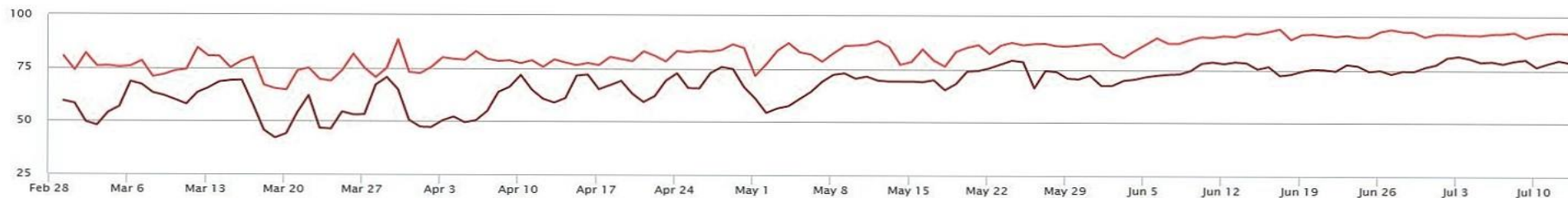
Accumulated Precip



Daily Amounts of Precip



temperatures - High And Low



DeWitt County Grain Sorghum Hybrid Trial 2016



Company	Brand	Hybrid	Moisture %	Test Weight (lb/bu)	Yield (lbs/acre)
Golden Acres Genetics	Golden Acres	3696	13.6	59.73	6,019
Monsanto	Dekalb	DKS 53-53	13.2	60.27	5,846
Terral Seed	REV	9924	13.2	59.27	5,526
Dupont	Pioneer	83G19	13.1	58.45	4,830
Advanta	Alta	AG1203	12.6	54.43	4,151
CPS Dyna-Gro	Dyna-Gro	M75GR47	13.4	60.40	4,115

Agronomic Information

Plant Date	<input type="text" value="3/22/2016"/>
Harvest Date	<input type="text" value="7/14/2016"/>
Irrigated	<input type="text" value="No"/>
Row Spacing (in)	<input type="text" value="30"/>
Number of Rows	<input type="text" value="6"/>
Seeds per Acre	<input type="text"/>
Nitrogen (lb N/ac)	<input type="text" value="116"/>
Phosphorus (lb P2O5/ac)	<input type="text" value="28"/>
Potassium (lb K2O/ac)	<input type="text" value="12"/>
Precipitation (inches)	<input type="text" value="12.89"/>
Soil Type	<input type="text" value="Weesatche sandy clay loam"/>

Mean	<input type="text" value="13.17"/>	<input type="text" value="58.76"/>	<input type="text" value="5,081"/>
C.V. (%)	<input type="text" value="2.000"/>	<input type="text" value="1.000"/>	<input type="text" value="9.610"/>
L.S.D.	<input type="text" value="0.45"/>	<input type="text" value="1.31"/>	<input type="text" value="856.5"/>
Pr>F (hybrid)	<input type="text" value="0.011"/>	<input type="text" value="0.000"/>	<input type="text" value="0.001"/>

Cooperator:
 Agent:

Model : yield = hybrid + blk. LSD provided when hybrid significant at p < 0.05 (SAS 9.4). Yields highlighted in yellow are not statistically different from the top ranked hybrid. Weather data provided by © 2016 The Climate Corporation. For additional information contact your local county extension agent or:
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 979-845-2935

DeWitt County 2016 Grain Sorghum Uniform Hybrid Trial



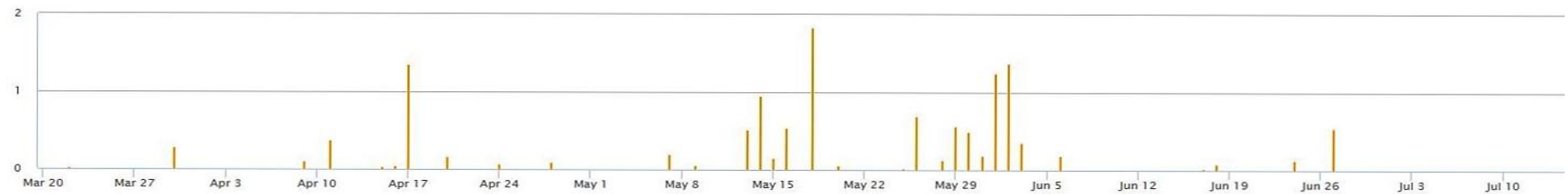
Weather Information

Precipitation

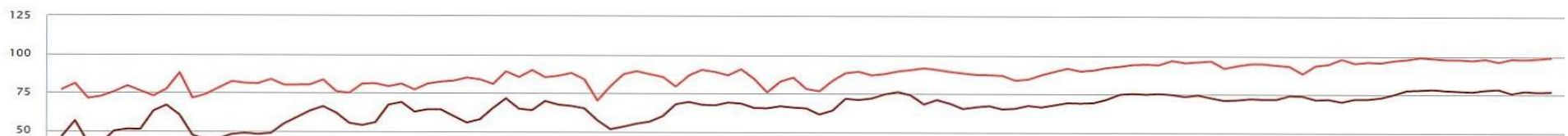
Accumulated Precip



Daily Amounts of Precip



Temperatures - High And Low



Fort Bend County Grain Sorghum Hybrid Trial 2016



Company	Brand	Hybrid	Moisture %	Test Weight (lb/bu)	Yield (lbs/acre)
Terral Seed	REV	9924	12.6	58.00	4,813
Warner Seeds Inc.	Warner Seed	W-7051	12.7	59.00	4,658
Monsanto	Dekalb	DKS 53-67	12.5	58.00	4,643
Monsanto	Dekalb	DKS 53-53	12.7	53.00	4,381
CPS Dyna-Gro	Dyna-Gro	M75GR47	12.5	58.00	4,155
Advanta	Alta	AG3201	12.3	55.33	3,656
Advanta	Alta	AG1203	10.2	48.67	3,288

Agronomic Information

Plant Date	3/6/2016
Harvest Date	7/7/2016
Irrigated	No
Row Spacing (in)	36
Number of Rows	6
Seeds per Acre	75,000
Nitrogen (lb N/ac)	122
Phosphorus (lb P2O5/ac)	5
Potassium (lb K2O/ac)	1
Precipitation (inches)	27.71
Soil Type	Lake Charles clay

Mean	12.20	55.71	4,228
C.V. (%)	8.000	7.000	7.100
L.S.D.			533.7
Pr>F (hybrid)	0.083	0.059	0.000

Cooperator: Alan and Lisa Stasney

Agent: John Gordy

Model : yield = hybrid + blk. LSD provided when hybrid significant at p < 0.05 (SAS 9.4). Yields highlighted in yellow are not statistically different from the top ranked hybrid. Weather data provided by © 2016 The Climate Corporation. For additional information contact your local county extension agent or:
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Fort Bend County 2016 Grain Sorghum Uniform Hybrid Trial

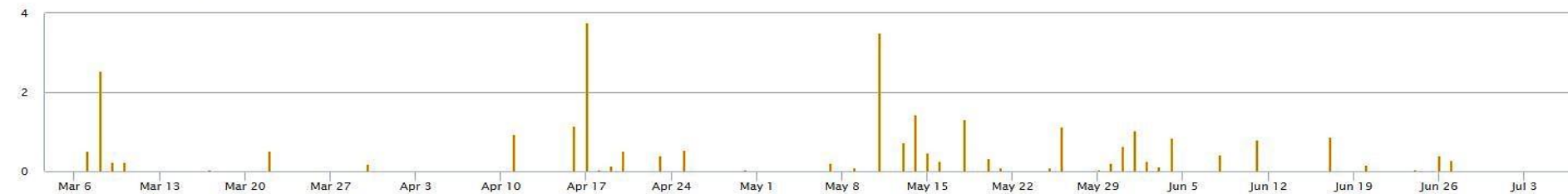


Weather Information

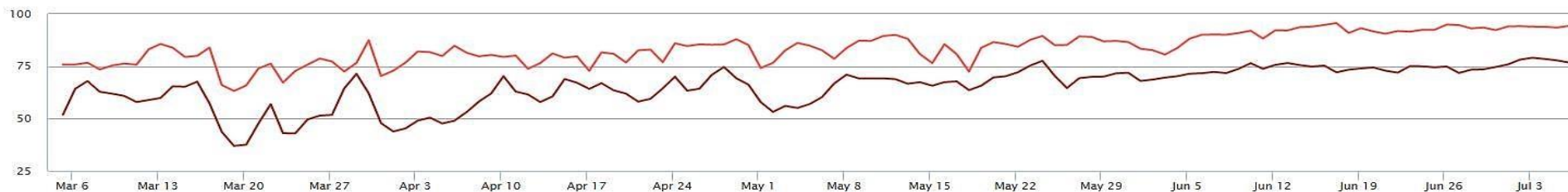
Accumulated Precip



Daily Amounts of Precip



Temperatures - High And Low



Jackson County Grain Sorghum Hybrid Trial 2016



Company	Brand	Hybrid	Moisture %	Test Weight (lb/bu)	Yield (lbs/acre)
Monsanto	Dekalb	DKS 53-53	14.3	58.13	4,429
Terral Seed	REV	9924	14.1	57.50	4,371
Advanta	Alta	AG1203	14.4	57.00	4,069
CPS Dyna-Gro	Dyna-Gro	M75GR47	14.2	57.63	3,701

Agronomic Information	
Plant Date	2/18/2016
Harvest Date	7/14/2016
Irrigated	No
Row Spacing (in)	38
Number of Rows	6
Seeds per Acre	61,000
Nitrogen (lb N/ac)	108
Phosphorus (lb P2O5/ac)	2
Potassium (lb K2O/ac)	0
Precipitation (inches)	26.26
Soil Type	Dacosta sandy clay loam

Mean	14.26	57.56	4,143
C.V. (%)	2.000	2.000	4.170
L.S.D.			276.3
Pr>F (hybrid)	0.358	0.502	0.001

Cooperator: Kulak Farms
Agent: Mike Hiller

Model : yield = hybrid + blk. LSD provided when hybrid significant at p < 0.05 (SAS 9.4). Yields highlighted in yellow are not statistically different from the top ranked hybrid. Weather data provided by © 2016 The Climate Corporation. For additional information contact your local county extension agent or:
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Jackson County 2016 Grain Sorghum Uniform Hybrid Trial

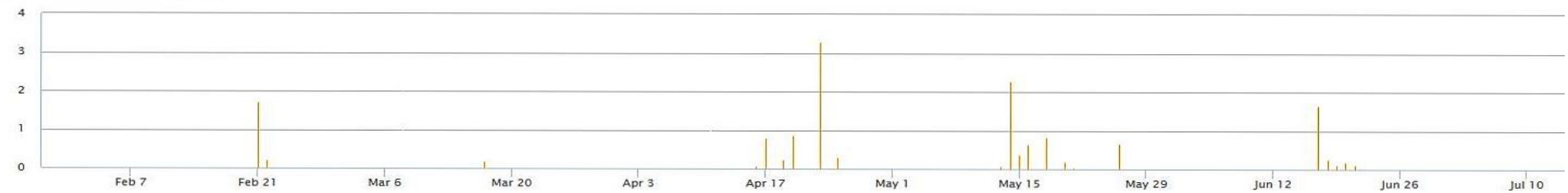


Weather Information

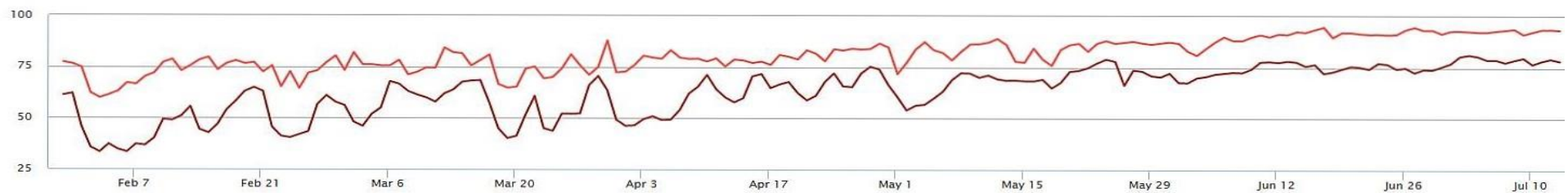
Accumulated Precip



Daily Amounts of Precip



Temperatures - High And Low



Wharton County Grain Sorghum Hybrid Trial 2016



Company	Brand	Hybrid	Moisture %	Test Weight (lb/bu)	Yield (lbs/acre)
Monsanto	Dekalb	DKS 53-53	15.3	58.00	6,944
Terral Seed	REV	9924	14.3	58.33	6,435
Advanta	Alta	AG1203	14.2	58.00	6,069
CPS Dyna-Gro	Dyna-Gro	M75GR47	14.6	58.33	5,718

Agronomic Information

Plant Date	3/3/2016
Harvest Date	7/5/2016
Irrigated	No
Row Spacing (in)	40
Number of Rows	6
Seeds per Acre	70,000
Nitrogen (lb N/ac)	165
Phosphorus (lb P2O5/ac)	34
Potassium (lb K2O/ac)	14
Precipitation (inches)	28.67
Soil Type	Lake Charles clay

Mean	14.60	58.17	6,292
C.V. (%)	2.000	1.000	1.090
L.S.D.	0.55		136.6
Pr>F (hybrid)	0.010	0.776	0.000

Cooperator: Duane Lutringer

Agent: Corrie Bowen

Model : yield = hybrid + blk. LSD provided when hybrid significant at $p < 0.05$ (SAS 9.4). Yields highlighted in yellow are not statistically different from the top ranked hybrid. Weather data provided by © 2016 The Climate Corporation. For additional information contact your local county extension agent or:

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Wharton County 2016 Grain Sorghum Uniform Hybrid Trial

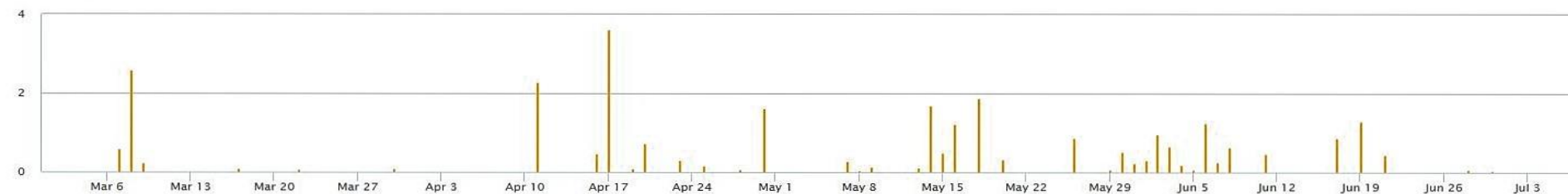


Weather Information

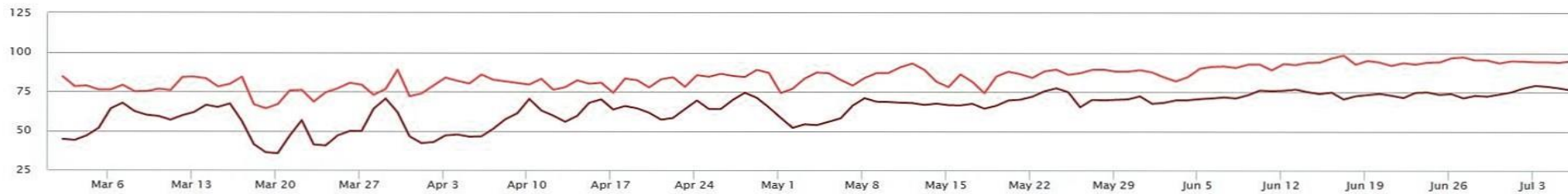
Accumulated Precip



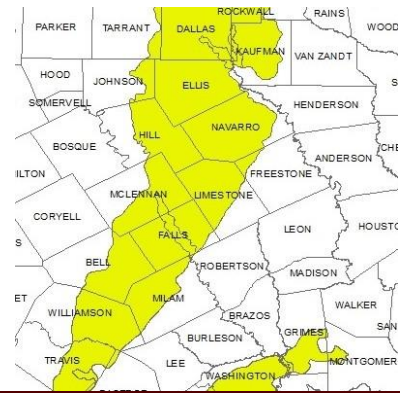
Daily Amounts of Precip



Temperatures - High And Low



2016 Grain Sorghum Blacklands Regional Summary



Company	Brand	Hybrid	Moisture (%)	Test Weight (lb/bu)	Yield (lb/acre)
CPS Dyna-Gro	Dyna-Gro	M75GR47	12.5	56.2	5,110
Monsanto	Dekalb	DKS 53-53	12.1	58.5	5,072
Advanta	Alta	AG1203	12.5	53.8	4,797
B-H Genetics	B-H Genetics	4100	12.6	57.2	4,708
Terral Seed	REV	9782	12.0	57.3	4,697

Hybrid (Pr>F)	0.720
Location (Pr>F)	0.084
Hybrid*Location (Pr>F)	0.931

Yield is presented as the least square mean, which is an estimate from a linear model. The model (Proc Mixed, SAS 9.3) adjusts means for fixed and random affects in the model, including hybrid (f) location (f) and rep (r), to provide better estimates of yield for each hybrid in the regional trial. Yields highlighted in yellow are not significantly different than the top ranked hybrid (Tukeys $p=0.05$). If no yields are highlighted, refer to individual locations for evaluation of hybrid performance.

Coryell County Grain Sorghum Hybrid Trial 2016



Company	Brand	Hybrid	Moisture %	Test Weight (lb/bu)	Yield (lbs/acre)
Chromatin Inc.	Sorghum Partners	NK 7633	12.8	56.00	3,645
CPS Dyna-Gro	Dyna-Gro	M75GR47	14.8	53.00	3,449
Terral Seed	REV	9782	12.1	55.00	3,115
Advanta	Alta	AG1203	12.1	49.00	2,967
Monsanto	Dekalb	DKS 53-53	12.1	56.00	2,926
B-H Genetics	B-H Genetics	4100	12.2	53.00	2,764

Agronomic Information

Plant Date	<input type="text" value="3/21/2016"/>
Harvest Date	<input type="text" value="8/31/2016"/>
Irrigated	<input type="text" value="No"/>
Row Spacing (in)	<input type="text" value="30"/>
Number of Rows	<input type="text" value="16"/>
Seeds per Acre	<input type="text"/>
Nitrogen (lb N/ac)	<input type="text"/>
Phosphorus (lb P2O5/ac)	<input type="text"/>
Potassium (lb K2O/ac)	<input type="text"/>
Precipitation (inches)	<input type="text" value="17.54"/>
Soil Type	<input type="text" value="Denton silty clay"/>

Mean	<input type="text" value="12.68"/>	<input type="text" value="53.67"/>	<input type="text" value="3,144"/>
C.V. (%)	<input type="text"/>	<input type="text"/>	<input type="text"/>
L.S.D.	<input type="text"/>	<input type="text"/>	<input type="text"/>
Pr>F (hybrid)	<input type="text"/>	<input type="text"/>	<input type="text"/>

Cooperator:
Agent:

Model : yield = hybrid + blk. LSD provided when hybrid significant at p < 0.05 (SAS 9.4). Yields highlighted in yellow are not statistically different from the top ranked hybrid. Weather data provided by © 2016 The Climate Corporation. For additional information contact your local county extension agent or:
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Coryell County 2016 Grain Sorghum Uniform Hybrid Trial

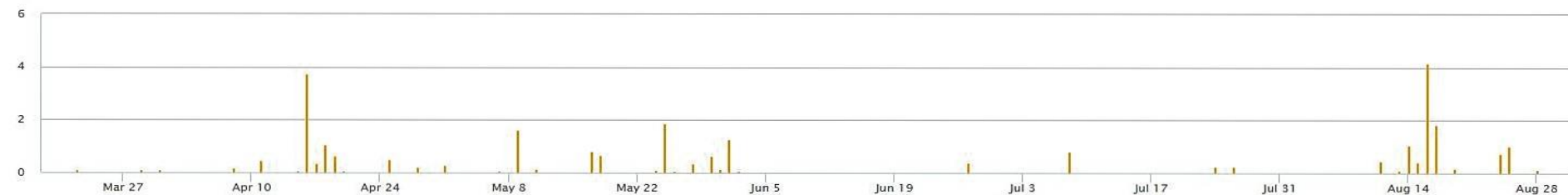


Weather Information

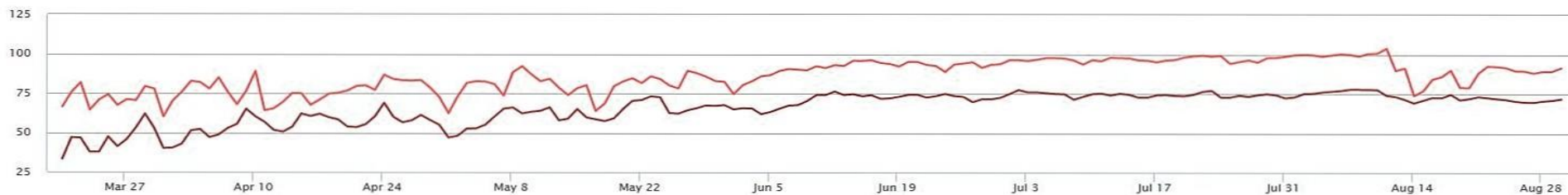
Accumulated Precip



Daily Amounts of Precip



Temperatures - High And Low



Hill County Grain Sorghum Hybrid Trial 2016



Company	Brand	Hybrid	Moisture %	Test Weight (lb/bu)	Yield (lbs/acre)
Monsanto	Dekalb	DKS 53-53	11.6	59.93	5,335
B-H Genetics	B-H Genetics	4100	11.4	59.23	5,292
Advanta	Alta	AG1203	11.2	60.00	5,129
Golden Acres Genetics	Golden Acres	3545 SN	11.8	59.90	5,070
CPS Dyna-Gro	Dyna-Gro	M75GR47	11.3	56.83	4,685
Terral Seed	REV	9782	11.5	58.60	4,564

Agronomic Information

Plant Date	3/29/2016
Harvest Date	8/9/2016
Irrigated	No
Row Spacing (in)	30
Number of Rows	8
Seeds per Acre	60,000
Nitrogen (lb N/ac)	140
Phosphorus (lb P2O5/ac)	37
Potassium (lb K2O/ac)	0
Precipitation (inches)	20.04
Soil Type	Houston Black clay

Mean	11.48	59.08	5,012
C.V. (%)	1.000	2.000	2.460
L.S.D.	0.29		224.0
Pr>F (hybrid)	0.017	0.096	0.000

Cooperator: Chad Kaska
Agent: Zach Davis

Model : yield = hybrid + blk. LSD provided when hybrid significant at $p < 0.05$ (SAS 9.4). Yields highlighted in yellow are not statistically different from the top ranked hybrid. Weather data provided by © 2016 The Climate Corporation. For additional information contact your local county extension agent or:
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Hill County 2016 Grain Sorghum Uniform Hybrid Trial

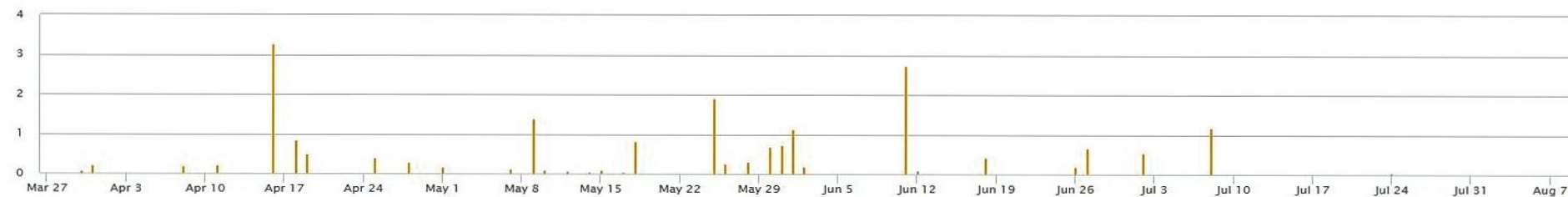


Weather Information

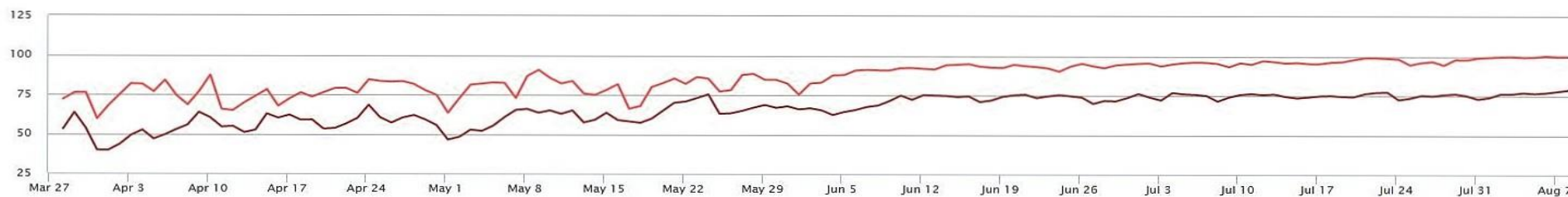
Accumulated Precip



Daily Amounts of Precip



Temperatures - High And Low



Milam County Grain Sorghum Hybrid Trial 2016



Company	Brand	Hybrid	Moisture %	Test Weight (lb/bu)	Yield (lbs/acre)
CPS Dyna-Gro	Dyna-Gro	M75GR47	11.5	55.10	6,721
Monsanto	Dekalb	DKS 53-53	11.8	54.77	6,684
Terral Seed	REV	9782	11.4	54.77	6,349
B-H Genetics	B-H Genetics	4100	12.2	57.37	6,280
Advanta	Alta	AG1203	12.4	55.70	6,161
B-H Genetics	B-H Genetics	BH-XPS 1630	11.5	56.60	5,678

Agronomic Information

Plant Date	3/23/2016
Harvest Date	8/31/2016
Irrigated	No
Row Spacing (in)	30
Number of Rows	8
Seeds per Acre	80,000
Nitrogen (lb N/ac)	96
Phosphorus (lb P2O5/ac)	0
Potassium (lb K2O/ac)	25
Precipitation (inches)	30.55
Soil Type	Frio silty clay

Mean	11.82	55.72	6,312
C.V. (%)	3.000	5.000	16.630
L.S.D.	0.64		
Pr>F (hybrid)	0.031	0.850	0.839

Cooperator: Jay Beckhusen
Agent: Floyd Ingram

Model : yield = hybrid + blk. LSD provided when hybrid significant at $p < 0.05$ (SAS 9.4). Yields highlighted in yellow are not statistically different from the top ranked hybrid. Weather data provided by © 2016 The Climate Corporation. For additional information contact your local county extension agent or:
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Milam County 2016 Grain Sorghum Uniform Hybrid Trial



Weather Information

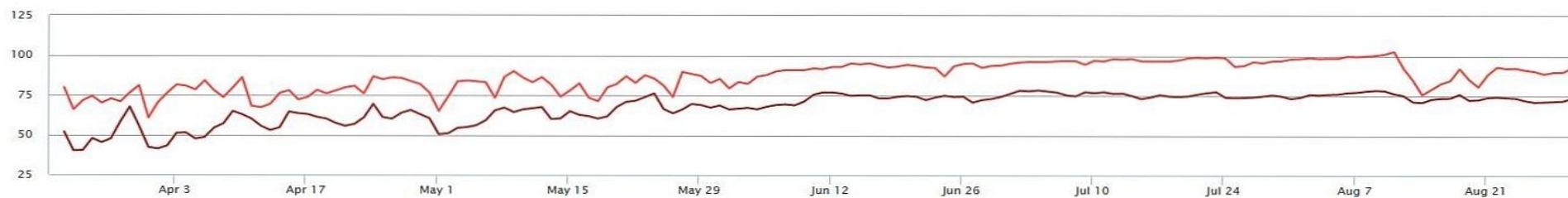
Accumulated Precip



Daily Amounts of Precip



Temperatures - High And Low



Williamson County Grain Sorghum Hybrid Trial 2016



Company	Brand	Hybrid	Moisture %	Test Weight (lb/bu)	Yield (lbs/acre)
Monsanto	Dekalb	DKS 53-53	12.3	61.90	5,607
Dupont	Pioneer	84P80	13.2	51.60	5,295
Advanta	Alta	AG1203	12.6	53.60	5,263
CPS Dyna-Gro	Dyna-Gro	M75GR47	12.6	57.80	5,160
B-H Genetics	B-H Genetics	4100	13.0	58.20	5,079
Terral Seed	REV	9782	12.4	59.80	4,628

Agronomic Information

Plant Date	<input type="text" value="3/25/2016"/>
Harvest Date	<input type="text" value="7/25/2016"/>
Irrigated	<input type="text" value="No"/>
Row Spacing (in)	<input type="text" value="38"/>
Number of Rows	<input type="text" value="4"/>
Seeds per Acre	<input type="text" value="66,559"/>
Nitrogen (lb N/ac)	<input type="text" value="140"/>
Phosphorus (lb P2O5/ac)	<input type="text" value="36"/>
Potassium (lb K2O/ac)	<input type="text" value="6"/>
Precipitation (inches)	<input type="text" value="19.13"/>
Soil Type	<input type="text" value="Burleson clay"/>

Mean	<input type="text" value="12.67"/>	<input type="text" value="57.15"/>	<input type="text" value="5,172"/>
C.V. (%)	<input type="text" value="4.000"/>	<input type="text" value="0.000"/>	<input type="text" value="3.640"/>
L.S.D.	<input type="text" value=""/>	<input type="text" value="0.00"/>	<input type="text" value="283.9"/>
Pr>F (hybrid)	<input type="text" value="0.235"/>	<input type="text" value="0.000"/>	<input type="text" value="0.000"/>

Cooperator:

Agent:

Model : yield = hybrid + blk. LSD provided when hybrid significant at p < 0.05 (SAS 9.4). Yields highlighted in yellow are not statistically different from the top ranked hybrid. Weather data provided by © 2016 The Climate Corporation. For additional information contact your local county extension agent or:
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Williamson County 2016 Grain Sorghum Uniform Hybrid Trial

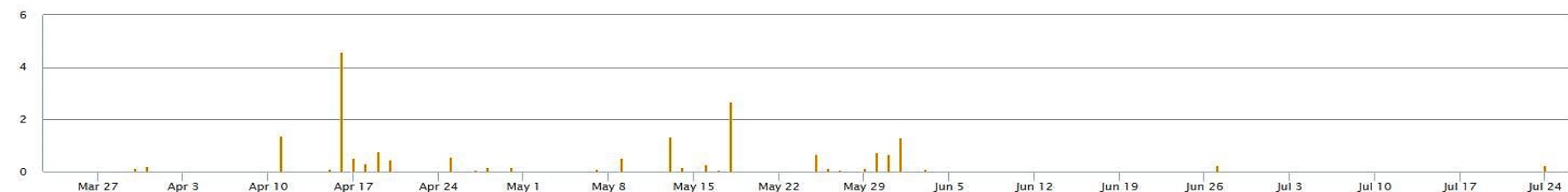


Weather Information

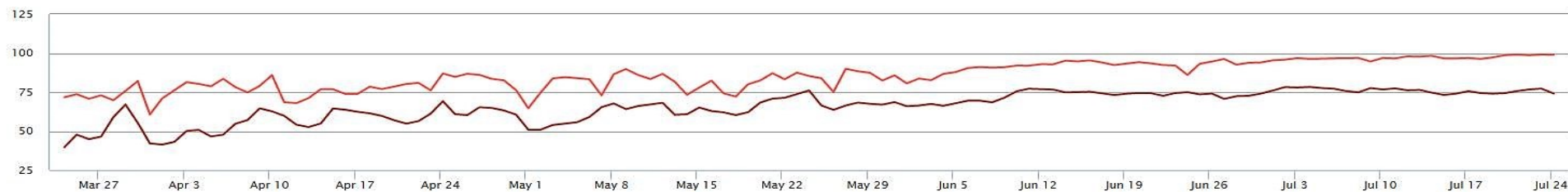
Accumulated Precip



Daily Amounts of Precip



Temperatures - High And Low



Burleson County Grain Sorghum Hybrid Trial 2016



Company	Brand	Hybrid	Moisture %	Test Weight (lb/bu)	Yield (lbs/acre)
Monsanto	Dekalb	DKS 37-07	12.9	52.85	3,134
CPS Dyna-Gro	Dyna-Gro	M75GR47	10.8	46.10	2,740
B-H Genetics	B-H Genetics	4100	12.2	47.70	2,725
Monsanto	Dekalb	DKS 53-53	11.8	51.94	2,580
Terral Seed	REV	9782	11.9	51.66	2,114
Advanta	Alta	AG1203	12.1	47.35	1,893

Agronomic Information

Plant Date	4/4/2016
Harvest Date	9/2/2016
Irrigated	No
Row Spacing (in)	30
Number of Rows	2
Seeds per Acre	60,000
Nitrogen (lb N/ac)	104
Phosphorus (lb P2O5/ac)	49
Potassium (lb K2O/ac)	0
Precipitation (inches)	25.78
Soil Type	Ships clay

Mean	11.95	49.60	2,531
C.V. (%)	4.000	2.000	15.700
L.S.D.	0.89	2.07	
Pr>F (hybrid)	0.008	0.000	0.086

Cooperator: Texas A&M AgriLife Research
Agent:

Model : yield = hybrid + blk. LSD provided when hybrid significant at $p < 0.05$ (SAS 9.4). Yields highlighted in yellow are not statistically different from the top ranked hybrid. Weather data provided by © 2016 The Climate Corporation. For additional information contact your local county extension agent or:
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Burleson County Grain Sorghum Hybrid Trial 2016



Company	Brand	Hybrid	Moisture %	Test Weight (lb/bu)	Yield (lbs/acre)
B-H Genetics	B-H Genetics	4100	13.6	51.07	2,721
Monsanto	Dekalb	DKS 37-07	13.3	54.44	2,443
Monsanto	Dekalb	DKS 53-53	13.5	52.43	2,162
Advanta	Alta	AG1203	14.1	49.33	2,101
Terral Seed	REV	9782	14.4	53.19	1,963
CPS Dyna-Gro	Dyna-Gro	M75GR47	13.2	46.00	1,863

Agronomic Information

Plant Date	4/4/2016
Harvest Date	9/2/2016
Irrigated	Yes
Row Spacing (in)	30
Number of Rows	2
Seeds per Acre	60,000
Nitrogen (lb N/ac)	104
Phosphorus (lb P2O5/ac)	49
Potassium (lb K2O/ac)	0
Precipitation (inches)	25.78
Soil Type	Ships clay

Mean	13.69	51.08	2,209
C.V. (%)	8.000	2.000	14.240
L.S.D.		1.67	
Pr>F (hybrid)	0.696	0.000	0.060

Cooperator: Texas A&M AgriLife Research
Agent:

Model : yield = hybrid + blk. LSD provided when hybrid significant at $p < 0.05$ (SAS 9.4). Yields highlighted in yellow are not statistically different from the top ranked hybrid. Weather data provided by © 2016 The Climate Corporation. For additional information contact your local county extension agent or:
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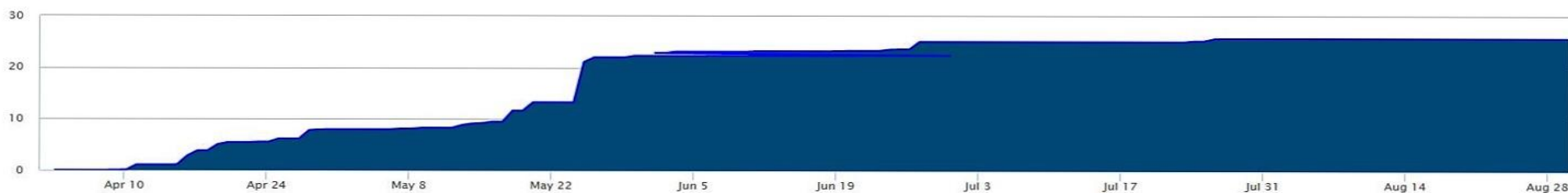
Burleson County 2016 Grain Sorghum Uniform Hybrid Trial



Weather Information

Precipitation

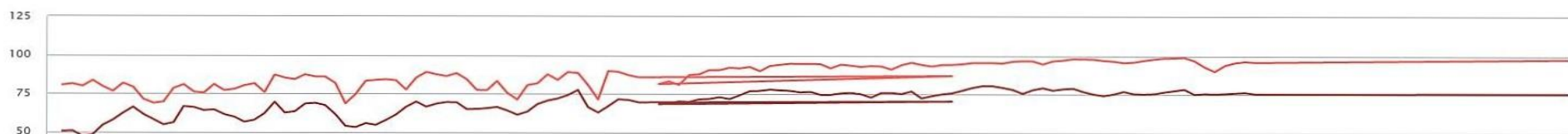
Accumulated Precip



Daily Amounts of Precip



Temperatures - High And Low



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