2008 Corn and Grain Sorghum Standardized County Hybrid Trials

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Abstract

The 2008 growing season was the first year for the Corn and Grain Sorghum Standardized County Hybrid Trials. The trials were a collaborative effort between growers, county Extension agents, Extension specialists and industry representatives. The trials were developed to help promote and standardize the hybrid demonstrations that were already taking place in many counties. Through this program, company representatives were able to place hybrids in counties in 5 different districts to compare yield data. Districts included the Northeast, Central, Southeast, River Valley and Southwest districts. Industry representatives were allowed to choose hybrids entered, but were asked to provide only hybrids that were commercially available. All hybrids were glyphosate tolerant and Bt. Relative maturity of hybrids entered ranged from 107 to 119 days. Trials were strip trials and were not replicated. Twenty one counties participated in 2008 and 18 corn trials and 7 grain sorghum trials were harvested. Four corn and four grain sorghum trials were not planted or not harvested due to excessive rainfall in the spring. All producers followed their normal production practices and were advised by the county Extension agent. Producers donate time, equipment and hired labor to make these trials possible. All results were summarized at the end of the year.

Example of Corn Hybrid Trail Form filled out by County Agent

University of Arkansas County Hybrid Demonstration

UNIVERSITY OF ARKANSAS DIVISION OF AGRICULTURE Cooperative Extension Service

County: Craighead | Crop: Corn

County Agent: Branon Thiesse | Grower: Keith Dooley

Location of Field: Intersection od CR 936 and CR 937 Brookland, Ar

	Soil Type	pH	P	K	SO4-S	Zn
		********** lbs per acre **********				
Soil Information:	Calloway Silt Loam	7.8	0	80	0	0.0

Previous Crop: Wheat/soybeans | Row Width: 30"

Planting Date: April 21, 2008 | Planting Population: 33,000

Fertility: (lb/ac)	N	P	K	S	Zn
--- Preplant	80	40	80	10	0.5
--- Sidedress	95	0	0	0	0
--- Pretassel	46	0	0	0	0
Total Fertility:	221	40	80	10	0.5

Irrigation Type: Furrow | Number: 3

	Date	Products and Rates Used
Herbicide:	May 10, 2008	1 qt. Atrazine + 22 oz. Roundup PowerMax + 1 qt. Force Plus(foliar P)
Fungicide:	July 8, 2008	Headline 6 oz./A
Insecticide:	July 8, 2008	Intrepid 2 F 6 oz./A

Harvest Date: October 6, 2008

Hybrid	Adj. Yield[1]	Area	Weight	Yield	% Moisture	Plant Stand[2]	Lodging Score[3]	Test Weight
Belle 1545RY	193.35	0.276	2,950	190.86	14.4	33,000	2.5	57
Belle 1646RY	189.97	0.276	2,870	185.57	13.5	33,000	3	55.5
Croplan 6631VT3	181.85	0.275	2,758	179.09	14.2	33,000	8.5	57
Croplan 7505VT3	186.75	0.275	2,816	182.86	13.7	33,000	2.5	59.5
DeKalb DKC 64-79VT3	156.88	0.275	2,352	152.73	13.2	33,000	2.5	58
DeKalb DKC 66-23	167.96	0.275	2,518	163.51	13.2	33,000	6	56
Dyna-Gro 58V24	190.04	0.276	2,886	186.72	14.0	33,000	3	55
Dyna-Gro 57V05	192.05	0.276	2,920	188.92	14.1	33,000	4	57
NC+ 6361	162.19	0.277	2,452	158.07	13.3	33,000	3	55
NC+ 5453	167.38	0.277	2,560	165.03	14.3	33,000	2.5	57
NK N78N-GT/CB/LL	192.09	0.277	2,938	189.40	14.3	33,000	2.5	58
NK N70-C7	173.61	0.277	2,640	170.19	13.8	33,000	4	57
Pioneer 31P42	192.87	0.276	2,912	188.41	13.5	33,000	2.5	58.5
Pioneer 33N58	167.43	0.276	2,528	163.56	13.5	33,000	2	58
Terral 25BR71	175.86	0.277	2,696	173.80	14.5	33,000	5	59.5
Terral 26BR61	184.47	0.277	2,838	182.96	14.8	33,000	4	58

[1] Yield is adjusted to 15.5% moisture.
[2] Plant Stand is given as plants per acre.
[3] Lodging score - 1 is no lodging, 10 is completely lodged.

Example of Grain Sorghum Hybrid Trail Form filled out by County Agent

University of Arkansas County Hybrid Demonstration

UNIVERSITY OF ARKANSAS DIVISION OF AGRICULTURE Cooperative Extension Service

County: Craighead | Crop: Grain Sorghum

County Agent: Branon Thiesse | Grower: Keith Dooley

Location of Field: 1/4 mile North of CR 928 on CR 825

	Soil Type	pH	P	K	SO4-S	Zn
		********** lbs per acre **********				
Soil Information:	Convent Fine Sandy Loam	7.0	94	152	26	10.4

Previous Crop: Corn | Row Width: 30"

Planting Date: May 1, 2008 | Planting Population: 100,000

Fertility: (lb/ac)	N	P	K	S	Zn
--- Preplant	60	40	60	0	0
--- Sidedress	95	0	0	0	0
Total Fertility:	155	40	60	0	0

Irrigation Type: Furrow | Number: 2

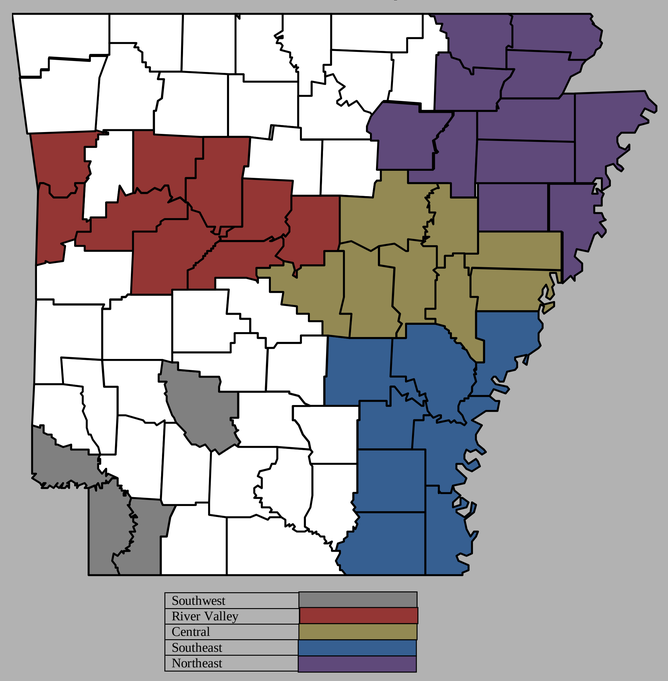
	Date	Products and Rates Used
Herbicide:	May 3, 2008	1.3 qt. Bicept II + 16 oz Atrazine
Fungicide:		
Insecticide:		

Harvest Date: October 9, 2008

Hybrid	Adj. Yield[1]	Area	Weight	Yield	% Moisture	Plant Stand[2]	Lodging Score[3]	Test Weight
Asgrow A571	109.34	0.364	2,216	108.71	13.5	59,000	3	55
DeKalb DKS 54-00	125.04	0.364	2,641	129.56	17.0	68,000	3	55
Garst 5464	120.08	0.364	2,506	122.94	16.0	73,000	7	55
Garst 5515	113.04	0.364	2,334	114.50	15.1	73,000	1	55
NC+ 7851	117.41	0.364	2,410	118.23	14.6	64,000	2	55
NC+ 8R18	107.06	0.364	2,208	108.32	15.0	87,000	4	56
Pioneer 82G10	134.15	0.364	2,770	135.89	15.1	74,000	1	56
Pioneer 84G62	122.67	0.364	2,530	124.12	15.0	75,000	1	59
Terral 96H81	114.10	0.364	2,370	116.27	15.6	55,000	4	55
Terral 96H91	120.42	0.364	2,522	123.72	16.3	85,000	6	56
Triumph TR82-G	105.60	0.364	2,150	105.47	13.9	76,000	9.5	60
Triumph TR459	113.90	0.364	2,338	114.70	14.6	60,000	1	58

[1] Yield is adjusted to 14.0% moisture.
[2] Plant Stand is given as plants per acre.
[3] Lodging score - 1 is no lodging, 10 is completely lodged.

Corn and Grain Sorghum Standardized County Hybrid Trials District Map



Corn and Grain Sorghum Hybrid Trials

Special thanks to the industry representatives that supplied seed for the county trials.

Company	Representative
Belle	Jeff Pangle
Croplan Genetics	Jeremy Frankenberger
Dyna-Gro	Larry Stauber
Monsanto (DeKalb, Asgrow)	Bill Rushing, Autumn Day, Robert Wier, Mark Krieghauser, Danny Gonzalez, Bradley Jackson, Richie Workman
NC+	David Beary
Pioneer	William Johnson, Roger Gipson, Otis Howe
Syngenta (Garst, NK)	Robert Prince, James Sims
Terral	Paul Sumner
Triumph	Terry Fuller

Introduction

The 2008 growing season was the first year for the Corn and Grain Sorghum Standardized County Hybrid Trials. The trials were a collaborative effort between growers, county Extension agents, Extension specialists and industry representatives. The trials were developed to help promote and standardize the hybrid demonstrations that were already taking place in many counties. Through this program, company representatives were able to place hybrids in counties in 5 different districts to compare yield data. Districts included the Northeast, Central, Southeast, River Valley and Southwest districts. A map on this poster shows the counties in each district. Industry representatives were allowed to choose hybrids entered, but were asked to provide only hybrids that were commercially available. All hybrids were glyphosate tolerant and Bt. Relative maturity of hybrids entered ranged from 107 to 119 days. Trials were strip trials and were not replicated.

The Extension agent was responsible for finding a cooperator, planting and harvesting the trials. The data was sent to the Program Associate – Corn and Grain Sorghum Verification Coordinator to compile in this publication. Each county Extension agent in the districts was given the opportunity to plant three different types of trials.

1. A corn trial that consisted of one hybrid from each company.

2. A corn trial that consisted of two hybrids from each company.

3. A grain sorghum trial that consisted of two hybrids from each company.

Twenty one counties participated in 2008 and 18 corn trials and 7 grain sorghum trials were harvested. Four corn and four grain sorghum trials were not planted or not harvested due to excessive rainfall in the spring. A corn trial was planted in Monroe County, but yields were not reported due to unexplained variability in yields.

All producers followed their normal production practices and were advised by the county Extension agent. The cooperation of all producers is appreciated. Producers donate time, equipment and hired labor to make these trials possible.

Results

All results were sent in to the Corn and Grain Sorghum Verification Coordinator. Results were compiled and placed in a publication and sent to all producers, county agents and industry representatives that participated. The results were also placed on the University of Arkansas Division of Agriculture Cooperative Extension Service website at http://www.aragriculture.org/crops/corn/hybrid_trials for corn & http://www.aragriculture.org/crops/sorghum/hybrid_trials for grain sorghum.

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