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PERFORMANCE OF GRAIN SORGHUM  
HYBRIDS IN ALABAMA

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1983

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### INTRODUCTION

Grain sorghum performance tests are conducted annually throughout Alabama by the Alabama Agricultural Experiment Station. These tests give a comparison of hybrid performance under the conditions at a particular location. The locations used represent major soil and climatic areas of the State. The performance of hybrids varies with location. Therefore, this report should be carefully studied before a hybrid is selected.

### EXPERIMENTAL PROCEDURES

Cultural practices were uniform for all hybrids within a given test. The experimental design for all tests was a randomized complete block with four replications. Test plots were two-36-inch rows, 20 feet in length. The target plant population was 50,000 plants per acre, with a seeding rate 25 percent higher to ensure a good stand. Test cultural practices are listed in table 1.

Grain yields were obtained by harvesting the whole test plot, either by hand or plot combine, and adjusting harvested grain weight and moisture to a standard 14 percent moisture and 56 pounds per bushel.

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Lodging is given as the percentage of plants broken or leaning at an angle of more than 45 degrees. The seed heads of lodged plants were not included in the yields reported.

Days to mid-bloom is one measure of relative maturity. This is taken as days from planting to the date when approximately one-half of the heads in the plot are in bloom.

A ratoon, or stubble, crop was harvested at Headland. The first harvest was combined and the stalks were cut to a 6-inch height. An additional 50 pounds of nitrogen per acre were sidedressed to the 6-inch stubble. The ratoon crop yield reported should be added to 1983 yield to calculate total yield.

The preliminary grain sorghum hybrid test, table 13, is used to evaluate new hybrids and experimental lines. If a new variety does well in the preliminary test, it is planted in the regular test the next year.

The test at the Tennessee Valley Substation was lost after a week of standing water on the test caused delayed herbicide damage in late May.

At Prattville and Headland bird damage was moderate. In these tests, the bird-resistant hybrids showed 0-6 percent damage, while the non bird-resistant hybrids showed bird damage which ranged from 6 to 45 percent of yield. Bird damage can be a problem in small fields. In selecting a hybrid, consideration should be given to bird populations; if damage is anticipated, bird-resistant hybrids should be used. Bird-resistant grain sorghum hybrids are sometimes difficult to market and may have lower feed value than the non bird-resistant hybrids.

## VARIETY COMPARISONS

The performance of hybrids varies among years and locations. Small yield differences among hybrids may be the result of slight environmental or cultural differences rather than differences in yield potential among varieties. To aid in determining real differences, a statistical analysis of variance was performed on the data from each location. The L.S.D. (least significant difference) at the 5 percent level is reported to help determine real differences between hybrid yields for each location in 1983. If the yield difference is greater than the L.S.D. value between two hybrids at a given location, the two hybrids are considered to be significantly different in yield. The C.V. (coefficient of variation) is a measure of test variability. An increase in its value indicates a decrease in the precision of the test data.

The list of acceptable hybrids is based on 3-year average grain yield and lodging data. The list is divided into three regions, north, central, and south. Since all acceptable hybrids are not equal in performance, a review of the data from several years at the test location similar to your situation is the most reliable method for selecting a hybrid best suited for your farming needs.

## ACKNOWLEDGMENTS

The performance trials were conducted in cooperation with the following substation and experiment field superintendents and their staffs whose quality work makes this report a reliable source of information for farmers in their areas.

Northern Alabama

Tennessee Valley Substation, Belle Mina - W. B. Webster, Superintendent  
Sand Mountain Substation, Crossville - J. T. Eason, Superintendent  
Upper Coastal Plain Substation, Winfield - R. A. Moore, Jr., Superintendent

Central Alabama

Black Belt Substation, Marion Junction - L. A. Smith, Superintendent  
Prattville Experiment Field, Prattville - D. P. Moore, Superintendent  
E. V. Smith Research Center, Shorter - J. R. Akridge, Superintendent

Southern Alabama

Monroeville Experiment Field, Monroeville - J. A. Pitts, Superintendent  
Wiregrass Substation, Headland - J. G. Starling, Superintendent  
Gulf Coast Substation, Fairhope - E. L. Carden, Superintendent

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Table 1. Locations and Cultural Practices for the 1983 Grain Sorghum Hybrid Tests

Location	Planting date	Nitrogen rate <sup>1</sup>	Plant population	Harvest date	Herbicides	Insecticides <sup>2</sup>
Tennessee Valley Substation (Belle Mina)	Test lost due to cold, wet spring weather and delayed herbicide damage.					
Sand Mountain Substation (Crossville)	May 5	120	50,000	August 26	Atrazine <sup>3</sup>	Furadan, Lannate (1), Cygon (1)
Upper Coastal Plain Substation (Winfield)	May 2	140	50,000	August 16	Atrazine	None
E. V. Smith Research Center (Shorter)	April 21	100	50,000	August 1	Atrazine	Sevin (2)
Prattville Experiment Field (Prattville)	April 5	81	50,000	August 8	Atrazine	Lannate (1)
Black Belt Substation (Marion Junction)	April 28	85	50,000	August 25	Atrazine + Lasso	Sevin (7)
Monroeville Experiment Field (Monroeville)	April 22	120	50,000	August 30	Atrazine	Lorsban (2)
Wiregrass Substation (Headland)	May 2	87	50,000	August 10	Atrazine + Dual	None
Gulf Coast Substation (Fairhope)	May 17	100	50,000	August 31	Atrazine	Sevin + Malathion (2)

<sup>1</sup>Pounds per acre N. Lime, phosphorus, and potassium were applied according to soil test recommendations.

<sup>2</sup>Spray materials (number of applications).

<sup>3</sup>Atrazine alone was applied post emergence.

Table 2. Three-Year Yield and Lodging Averages for Northern Alabama, 1981-83

<u>Brand name</u>	<u>Hybrid</u>	<u>Yield per acre</u>	<u>Lodged stalks</u>
		<u>Bu.</u>	<u>Pct.</u>
Pioneer	B815*	78	11
Funk's	G-522DR	76	8
Funk's	G-522A	76	8
McCurdy's	M 57 YG	74	7
Taylor-Evans	Dinero	73	6
Terra	HT-126DR	71	8
Coker	7675	70	7
Gold Kist	GK 802 G	70	7
Ring Around	733 GB	69	7
Funk's	G-550	68	8
Funk's	G-611	68	5
McCurdy's	M 51 YG	68	8
Pennington	Penngrain YE	68	4
Northrup King	Savanna 5*	67	26
Taylor-Evans	Y-101-R	66	6
Northrup King	2670	64	23

<sup>1</sup>Belle Mina, Crossville, Winfield. 1983 Belle Mina data not included.

\*Bird-resistant hybrid.

Table 3. Sand Mountain Substation Grain Sorghum Hybrid Trial, 1983<sup>1</sup>

Brand name	Hybrid	1983	1982-83	1981-83	1983	
		yield <u>Bu.</u>	2-yr. av. <u>Bu.</u>	3-yr. av. <u>Bu.</u>	Lodging <u>Pct.</u>	Mid-bloom <u>Mo./day</u>
DeKalb	DK-59	88	89	--	4	7/25
Paymaster	GR1138	85	--	--	4	7/24
Pioneer	B 815*	84	96	80	19	7/24
Taylor-Evans	Dinero	84	85	69	19	7/24
McCurdy	M 990 YG	83	--	--	16	7/24
Chem Nut	GSA1290	82	--	--	2	7/24
Funk's	G-611	81	83	69	18	7/25
Ring Around	787	81	--	--	14	7/24
McCurdy	M 57 YG	79	82	67	21	7/25
Gold Kist	GK802G	79	82	66	10	7/25
Terra	HT-126DR	78	81	66	22	7/25
Funk's	G-522DR	78	85	71	22	7/23
Helena	1225 DR	78	82	--	22	7/24
Pennington	Penngrain DR	76	--	--	28	7/24
Funk's	G-550	76	78	66	14	7/23
Funk's	G-1498	74	--	--	1	7/21
Ring Around	808GB	74	--	--	7	7/25
McCurdy	M 737	74	--	--	19	7/24
Pioneer	8222	74	--	--	5	7/23
Taylor Evans	Y-101-R	73	76	62	10	7/24
Coker	7675	73	81	67	21	7/25
Funk's	G-522A	73	78	65	28	7/24
McCurdy	M 52 YG	72	71	59	22	7/21
Ring Around	433A	70	62	--	8	7/20
Pennington	Penngrain YE	70	74	61	12	7/23
Northrup King	2660	70	78	--	24	7/24
Ring Around	733GB	68	69	59	20	7/23
Coker	7638	68	65	--	26	7/23
Crop Seed	BC162G	67	--	--	26	7/23
Gold Kist	GK712G	64	--	--	10	7/24
Northrup King	2244	62	--	--	16	7/20
Helena	1330 DR	54	--	--	48	7/24
Coker	7623	51	47	--	54	7/23
Northrup King	2670	51	64	50	48	7/24
DeKalb	DK-64	31	--	--	70	7/22
Northrup King	Savanna 5*	31	64	53	74	7/20

1983 test average -                   71 bu.  
 L.S.D. (.05) -                   18 bu.  
 C.V. -                           18.0%

<sup>1</sup>Crossville, Alabama.

\*Bird-resistant hybrid.

Table 4. Upper Coastal Plain Substation Grain Sorghum Hybrid Trial, 1983<sup>1</sup>

Brand name	Hybrid	1983	1982-83	1981-83	1983	
		yield Bu.	2-yr. av. Bu.	3-yr. av. Bu.	Mid-bloom Mo./day	Lodging Pct.
Funk's	G-522A	96	91	87	7/12	1
McCurdy	M57GY	89	85	82	7/15	8
Northrup King	Savanna 5*	87	85	81	7/09	50
Taylor-Evans	Dinero	86	81	77	7/14	0
Northrup King	2660	82	75	--	7/14	9
Funk's	G-611	82	69	66	7/14	2
Pennington	Penngrain YE	82	77	76	7/13	0
Funk's	G-550	82	73	70	7/14	20
Helena	1330DR	80	--	--	7/15	49
Pioneer	8222	80	--	--	7/15	1
Pioneer	B 815*	80	80	77	7/15	31
Chem Nut	GSA1290	80	--	--	7/14	0
Gold Kist	GK802G	79	78	75	7/13	0
Pennington	Penngrain DR	79	--	--	7/15	0
McCurdy	M 737	79	--	--	7/14	5
Coker	7675	78	77	72	7/14	0
Northrup King	2670	78	82	79	7/14	46
Crop Seed	BC162G	78	--	--	7/14	9
DeKalb	DK-64	77	--	--	7/09	75
Funk's	G-522DR	77	83	82	7/14	15
Terra	HT-126DR	77	80	76	7/14	2
Paymaster	GR11387	76	--	--	7/12	0
McCurdy	M51YG	75	78	77	7/14	2
Ring Around	733GB	75	77	74	7/14	2
Helena	1225 DR	75	73	--	7/15	0
Coker	7638	75	69	--	7/14	2
Ring Around	808GB	72	--	--	7/15	0
McCurdy	M990YG	72	--	--	7/16	4
Ring Around	787	72	--	--	7/14	14
Taylor-Evans	Y-101-R	68	72	70	7/12	2
DeKalb	DK-59	68	68	--	7/17	1
Coker	7623	67	64	--	7/09	5
Gold Kist	GK712G	66	--	--	7/14	0
Funk's	G-1498	59	--	--	7/08	0
Northrup King	2244	56	--	--	7/08	0
Ring Around	433A	55	49	--	7/10	0

1983 test average - 76 bu.  
 L.S.D. (.05) - 14 bu.  
 C.V. - 13.2%

<sup>1</sup>Winfield, Alabama.

\*Bird-resistant hybrid.

Table 5. Three-Year Yield and Lodging Averages for Central Alabama, 1981-83<sup>1</sup>

Brand name	Hybrid	Yield per acre	Lodged stalks
			Bu. Pct.
Pioneer	B815*	78	0
Northrup King	Savanna 5*	76	0
Gold Kist	GK 802 G	74	0
Taylor-Evans	Dinero	73	0
Coker	7675	72	0
Chem-Nut	GSA 1290	71	0
Pennington	Penngrain YE	71	0
Funk's	G-522 DR	69	0
Gold Kist	GK 712 G	68	0
Terra	HT-1260R	68	0
Coker	7723	67	0
Northrup King	2670	67	0
McCurdy	M 57 YG	67	0
Ring Around	733 GB	66	0
Funk's	G-522 A	65	0
Funk's	G-550	65	0
McCurdy's	M 51 YG	65	0
Funk's	G-611	64	0
DeKalb	DK-64	57	0

<sup>1</sup>Shorter, Prattville, and Marion Junction.

\*Bird-resistant hybrid.

Table 6. E. V. Smith Research Center Grain Sorghum Hybrid Trial, 1983<sup>1</sup>

Brand name	Hybrid	1983	1982-83	1981-83	1983
		yield <u>Bu.</u>	2-yr. av. <u>Bu.</u>	3-yr. av. <u>Bu.</u>	bird damage <u>Pct.</u>
McCurdy	M 990 YG	52	--	--	5
Pioneer	8815*	48	67	64	1
Ring Around	808GB	47	--	--	5
Northrup King	Savanna 5*	47	60	60	1
Funk's	G-522A	46	68	54	9
Helena	1225 DR	44	63	--	12
Ring Around	787	43	--	--	10
Northrup King	2244	43	--	--	8
Gold Kist	GK802G	42	63	53	9
McCurdy	M 737	42	--	--	4
Coker	7723	42	56	42	9
Helena	1330 DR	41	--	--	16
Taylor Evans	Dinero	41	56	50	9
Funk's	G-550	41	56	54	12
Chem Nut	GSA1290	40	57	60	5
Paymaster	GR1138	40	--	--	6
Ring Around	733GB	40	58	56	11
Coker	7638	39	55	--	2
Pioneer	8222	39	--	--	6
Pennington	Penngrain DR	38	--	--	2
Gold Kist	GK712G	38	61	57	8
Northrup King	2670	38	59	47	6
Funk's	G-522DR	37	61	51	16
Crop Seed	BC162G	37	--	--	10
DeKalb	DK-59	35	45	--	8
Funk's	G-611	35	48	44	8
McCurdy	M 51 YG	35	57	54	14
DeKalb	DK-64	34	40	31	9
Pennington	Penngrain YE	34	61	57	8
Funk's	G-1498	34	--	--	11
Terra	HT-126DR	33	52	48	10
McCurdy	M 57 YG	32	51	46	2
Ring Around	433A	29	36	--	6
Coker	7675	29	54	49	8

  

1983 test average -	39 bu.
L.S.D. (.05) -	12 bu.
C.V. -	22.4%

<sup>1</sup>Shorter, Alabama.

\*Bird-resistant hybrid.

Table 7. Prattville Grain Sorghum Hybrid Trial, 1983

Brand name	Hybrid	1983	1982-83	1981-83	1983	
		yield <u>Bu.</u>	2-yr. av. <u>Bu.</u>	3-yr. av. <u>Bu.</u>	Mid-bloom <u>Mo./day</u>	Bird damage <u>Pct.</u>
Pioneer	B815*	70	92	90	6/25	4
Terra	HT-1260R	68	95	86	6/24	11
Northrup King	Savanna 5*	66	88	84	6/22	0
Coker	7638	65	85	--	6/23	12
Gold Kist	GK802G	64	91	88	6/24	10
Taylor-Evans	Dinero	61	90	87	6/24	15
McCurdy	M 51 YG	61	84	77	6/22	20
Pennington	Penngrain DR	61	--	--	6/24	18
Coker	7675	59	89	88	6/24	11
Crop Seed	BC162G	58	--	--	6/24	9
McCurdy	M 737	58	--	--	6/24	12
McCurdy	M 990 YG	57	--	--	6/24	18
Gold Kist	GK712G	56	82	81	6/24	11
Ring Around	808GB	55	--	--	6/24	15
DeKalb	DK-59	55	78	--	6/25	14
McCurdy	M 57 YG	54	85	84	6/25	10
Funk's	G-522A	54	81	75	6/23	16
Northrup King	2670	54	80	80	6/24	16
Pioneer	8222	54	--	--	6/24	12
Pennington	Penngrain YE	53	84	80	6/24	16
Ring Around	733GB	52	76	74	6/24	19
Funk's	G-611	51	81	79	6/25	12
Paymaster	GR1138	50	--	--	6/23	16
Helena	1330 DR	49	--	--	6/24	16
Northrup King	2244	49	--	--	6/22	32
Funk's	G-522DR	47	81	80	6/24	18
Ring Around	787	46	--	--	6/23	22
Coker	7723	46	80	83	6/24	21
Chem Nut	GSA1290	45	78	75	6/23	20
Helena	1225 DR	45	80	--	6/24	19
DeKalb	DK-64	44	76	75	6/23	16
Funk's	G-1498	44	--	--	6/22	28
Ring Around	433A	43	60	--	6/22	30
Funk's	G-550	42	71	70	6/22	24

1983 test average - 54 bu.  
L.S.D. (.05) - 11 bu.  
C.V. - 14.7%

\*Bird-resistant hybrid.

Table 8. Black Belt Substation Grain Sorghum Hybrid Trial, 1983<sup>1</sup>

Brand name	Hybrid	1983 yield <u>Bu.</u>	1982-83	1981-83	1983	
			2-yr. av. <u>Bu.</u>	3-yr. av. <u>Bu.</u>	Mid-bloom <u>Mo./day</u>	Bird <u>Pct.</u>
Taylor-Evans	Dinero	64	83	81	7/15	5
Chem Nut	GSA1290	62	79	78	7/15	2
McCurdy	M 57 YG	60	73	72	7/16	8
Funk's	G-522A	60	72	65	7/15	10
Pioneer	8222	59	--	--	7/17	8
Northrup King	Savanna 5*	59	90	85	7/16	4
Ring Around	787	58	--	--	7/14	8
Pennington	Penngrain YE	57	75	75	7/16	9
Pioneer	8815*	57	79	79	7/17	2
McCurdy	M990YG	57	--	--	7/15	8
Funk's	G-522DR	55	78	75	7/18	4
Coker	7723	54	74	75	7/14	9
Terra	HT-126DR	54	70	71	7/16	4
Pennington	Penngrain DR	54	--	--	7/19	4
Gold Kist	GK802G	54	79	81	7/17	9
Coker	7675	54	75	79	7/17	8
Northrup King	2670	53	73	74	7/15	5
Funk's	G-1498	53	--	--	7/11	10
Funk's	G-550	52	71	70	7/11	11
Funk's	G-611	52	74	69	7/18	6
Helena	1330 DR	52	--	--	7/16	9
DeKalb	DK-64	51	65	65	7/13	14
Ring Around	733GB	50	64	69	7/14	6
McCurdy	M 51 YG	50	64	64	7/13	10
Northrup King	2244	50	--	--	7/11	11
DeKalb	DK-59	49	69	--	7/20	5
Helena	1225 DR	47	68	--	7/18	5
Coker	7638	47	67	--	7/15	8
McCurdy	M 737	45	--	--	7/17	8
Crop Seed	BC 162G	44	--	--	7/13	9
Gold Kist	GK712G	42	61	66	7/15	6
Paymaster	GR1138	41	--	--	7/19	1
Ring Around	808GB	40	--	--	7/19	12
Ring Around	433A	34	41	--	7/09	19

  

1983 test average -	52 bu.
L.S.D. (.05)	13 bu.
C.V.	17.7%

<sup>1</sup>Marion Junction, Alabama.

\*Bird-resistant hybrid.

Table 9. Three-Year Yield and Lodging Averages for Southern Alabama, 1981-83<sup>1</sup>

Brand name	Hybrid	Yield per acre <u>Bu.</u>	Lodged stalks
			<u>Pct.</u>
Northrup King	Savanna 5*	70	0
Taylor-Evans	Dinero	66	0
Coker	7675	65	0
Funk's	G-522A	65	0
McCurdy	M 57 YG	65	0
Pioneer	8815*	65	0
Funk's	G-522DR	64	0
Gold Kist	GK 802 G	64	0
Chem-Nut	GSA 1290	63	0
Pennington	Penngrain YE	63	0
Funk's	G-611	62	0
Coker	7723	60	0
Northrup King	2670	60	0
Terra	HT-126 DR	60	0
Funk's	G-550	58	0
Ring Around	733 GB	56	0
DeKalb	DK-64	55	0

<sup>1</sup>Headland, Monroeville, and Fairhope.

\*Bird-resistant hybrid.

Table 10. Monroeville Grain Sorghum Hybrid Trial, 1983

Brand name	Hybrid	1983	1982-83	1981-83	1983
		yield <u>Bu.</u>	2-yr. av. <u>Bu.</u>	3-yr. av. <u>Bu.</u>	mid-bloom Mo./Day
Helena	1330 DR	55	--	--	7/01
Terra	HT-126DR	52	60	57	6/29
Northrup King	2670	52	58	53	7/01
Taylor-Evans	Y-77	51	--	--	7/01
Funks	G-522A	51	60	58	6/38
Pennington	Penngrain DR	51	--	--	7/01
Chem Nut	GSA1290	51	61	61	6/38
Northrup King	2660	50	57	--	7/01
McCurdy	M990YG	49	--	--	7/01
Gold Kist	GK802G	47	59	58	7/01
Funks	G-1498	46	--	--	6/26
Taylor-Evans	Dinero	46	57	58	7/01
DeKalb	DK-64	46	52	48	6/26
Ring Around	787	46	--	--	7/01
McCurdy	M57YG	46	53	55	7/02
Ring Around	433A	46	46	--	6/25
Funks	G-522DR	45	56	56	6/29
Helena	1225 DR	45	54	--	7/01
Coker	7675	45	56	56	7/01
Paymaster	GR1138	44	--	--	7/01
Pioneer	8815*	44	56	58	7/02
Northrup King	2244	44	--	--	6/26
Pennington	Penngrain YE	44	57	58	7/01
Funks	G-611	44	56	55	7/02
Funks	G-550	44	52	54	6/28
Coker	7723	43	58	53	7/01
Taylor-Evans	Y-101-R	42	--	--	6/29
Ring Around	733GB	41	49	52	7/01
Pioneer	8222	41	--	--	7/01
DeKalb	DK-59	35	47	--	7/03
Northrup King	Savanna 5*	35	61	60	6/27
Ring Around	808GB	34	--	--	7/01
Gold Kist	GK712G	34	--	--	6/29
McCurdy	M727	32	--	--	6/29
Crop Seed	BC162G	31	--	--	6/29
<hr/>					
1983 test average -		44 bu.			
L.S.D. (.05)	-	9 bu.			
C.V.	-	14.1%			

\*Bird-resistant hybrid.

Table 11. Wiregrass Substation Grain Sorghum Hybrid Trial, 1983<sup>1</sup>

Brand name	Hybrid	1983		Total yield <u>Bu.</u>	1982-83 2-yr. av. <u>Bu.</u>	1981-83 3-yr. av. <u>Bu.</u>	1983	
		yield <u>Bu.</u>	Ratoon <sup>2</sup> <u>Bu.</u>				bird damage <u>Pct.</u>	
Northrup King	Savanna 5*	62	66	128	73	68	4	
Taylor-Evans	Y-77	55	46	101	--	--	13	
Pennington	Penngrain YE	53	27	80	54	58	12	
Pioneer	B815*	53	38	91	62	62	6	
Pioneer	8222	50	31	81	--	--	11	
Funk's	G-522A	49	28	77	54	60	12	
Helena	1225 DR	48	22	70	52	--	9	
Helena	1330 DR	48	32	80	--	--	17	
Funk's	G-611	46	10	56	50	56	6	
McCurdy	M 57 YG	46	41	87	60	62	6	
McCurdy	M737	46	32	78	--	--	11	
Taylor-Evans	Dinero	45	11	56	56	61	5	
DeKalb	DK-59	44	19	63	49	--	8	
Taylor-Evans	Y-101-R	44	15	59	--	--	7	
Ring Around	733GB	42	21	63	45	51	10	
McCurdy	M990YG	40	30	70	--	--	16	
Coker	7723	40	20	60	49	57	9	
Funk's	G-522DR	39	25	64	47	55	8	
Northrup King	2660	39	37	76	57	--	31	
Ring Around	808GB	38	23	61	--	--	5	
Gold Kist	GK712G	38	28	66	--	--	7	
Crop Seed	BC162G	37	34	71	--	--	16	
Coker	7675	35	25	60	50	61	21	
Funk's	G-1498	33	34	67	--	--	33	
Terra	HT-126DR	33	26	59	45	44	36	
Pennington	Penngrain DR	33	18	51	--	--	10	
Paymaster	GR1138	33	29	62	--	--	19	
Ring Around	787	33	31	64	--	--	28	
Northrup King	2670	32	19	51	46	50	17	
Gold Kist	GK802G	32	16	48	51	59	13	
DeKalb	DK-64	30	44	74	36	45	7	
Funk's	G-550	30	25	55	40	47	39	
Chem Nut	GSA1290	28	44	72	42	53	45	
Northrup King	2244	24	41	65	--	--	17	
Ring Around	433A	23	17	40	21	--	17	
1983 test average -		40 bu.						
L.S.D. (.05)	-	19 bu.						
C.V.	-	29.1%						

<sup>1</sup>Headland, Alabama.<sup>2</sup>Ratoon crop cut December 1.

\*Bird-resistant hybrid.

Table 12. Gulf Coast Substation Grain Sorghum Hybrid Trial, 1983<sup>1</sup>

Brand name	Hybrid	1983	1982-83	1981-83	1983
		yield <u>Bu.</u>	2-yr. av. <u>Bu.</u>	3-yr. av. <u>Bu.</u>	mid-bloom <u>Mo./day</u>
Funk's	G-522DR	61	74	80	7/14
Terra	HT-126DR	60	73	78	7/14
Northrup King	2660	60	73	--	7/14
Funk's	G-522A	59	69	76	7/12
Pennington	Penngrain DR	57	--	--	7/14
Pioneer	8815*	57	69	74	7/14
Ring Around	787	57	--	--	7/15
McCurdy	M 57 YG	56	69	78	7/16
Funk's	G-550	56	67	72	7/16
DeKalb	DK-64	55	61	72	7/15
McCurdy	M990YG	54	--	--	7/14
Helena	1225 DR	54	70	--	7/14
Taylor-Evans	Dinero	54	70	78	7/13
Taylor-Evans	Y-77	54	--	--	7/16
Chem Nut	GSA1290	54	67	76	7/13
Northrup King	Savanna 5*	54	71	82	7/14
Funk's	G-611	54	67	74	7/15
McCurdy	M737	53	--	--	7/11
Northrup King	2670	52	69	77	7/14
DeKalb	DK-59	52	67	--	7/17
Pioneer	8222	51	--	--	7/14
Crop Seed	BC162G	50	--	--	7/11
Taylor-Evans	Y-101-R	49	--	--	7/14
Paymaster	GR1138	49	--	--	7/16
Ring Around	733GB	48	60	66	7/14
Pennington	Penngrain YE	48	68	74	7/14
Gold Kist	GK802G	48	67	75	7/14
Coker	7723	47	63	70	7/15
Ring Around	808GB	47	--	--	7/16
Helena	1330 DR	46	--	--	7/16
Ring Around	433A	45	41	--	7/11
Coker	7675	44	64	77	7/14
Northrup King	2244	41	--	--	7/12
Gold Kist	GK712G	41	--	--	7/11
Funk's	G-1498	41	--	--	7/14
<hr/>					
1983 test average -		52 bu.			
L.S.D. (.05)	-	10 bu.			
C.V.	-	13.1%			

<sup>1</sup>Fairhope, Alabama.

\*Bird-resistant hybrid.

Table 13. Preliminary Grain Sorghum Hybrid Trial,  
E. V. Smith Research Center, 1983<sup>1</sup>

Brand name	Hybrid	Yield <u>Bu.</u>	Lodging	Bird damage
			<u>Pct.</u>	<u>Pct.</u>
Helena	1230 GB	52	0	0
Paymaster	R1090	49	0	10
Paymaster	BR-90*	49	0	2
Funk's	HW 5974	44	0	5
Funk's	G-1711	44	0	7
Pioneer	8300	44	0	6
Crop Seed	BR 156	44	0	2
Funk's	HW 5247	44	0	10
Ring Around	RA747	42	0	18
Terra	HT-124	41	0	10
Paymaster	1022	40	0	23
Pioneer	8333	40	0	10
Funk's	HW 6031	37	0	7
Funk's	HW 5449	37	0	2
Crop Seed	BC142G	30	0	20
Funk's	G-1400	29	0	37
Gold Kist	GK522G	26	0	22
<hr/>				
1983 test average -		41 bu.		
L.S.D. (.05)	-	14 bu.		
C.V.	-	24.4%		

<sup>1</sup>Shorter, Alabama.

\*Bird-resistant hybrid.

Sources of Seed for the 1983 Grain Sorghum Tests

Entry designation	Source of seed
Chem Nut .....	Chem Nut, Inc. P. O. Box 3706 Albany, Georgia 31706
1290	
Coker .....	Coker's Pedigreed Seed Company Route 1, Box 150 Lubbock, Texas 79408
7623	
7638	
7675	
7723	
Crop Seed .....	Crop Seed, Inc. P. O. Box 16854 Lubbock, Texas 79490
BC142G	
*RC 156	
BC 162G	
DeKalb .....	DeKalb Ag. Research, Inc. Route 2 Lubbock, Texas 79408
DK-59	
DK-64	
Funk's .....	Louisiana Seed Company, Inc. P. O. Box 1867 Plainview, Texas 79072
G-522A HW-5247	
G-522DR HW-5449	
G-550 HW-5974	
G-611 HW-6031	
G-1400	
G-1498	
G-1711	
Gold Kist .....	Gold Kist, Inc. P. O. Box 644 Ashburn, Georgia 31714
GK 522G	
GK 712G	
GK 802G	
Helena .....	Helena Chemical Company 5100 Poplar Avenue Memphis, Tennessee 38137
1225DR	
1330DR	
1230GB	
McCurdy .....	McCurdy Seed Company Fremont, Iowa 52561
737YG	
M51YG	
M57YG	
M990YG	

(continued on the following page)

Sources of Seed for the 1983 Grain Sorghum Tests (continued)

Entry designation	Source of seed
Northrup King ..... 2244 2660 2670 *Savanna 5	Northrup King Company P. O. Box 151 Columbus, Mississippi 39701
Paymaster ..... *BR 90 1022 R1090 GR1138	ACCO - Paymaster P. O. Box 1630 Plainview, Texas 79072
Pennington ..... Penngrain DR Penngrain YE	Pennington Seed, Inc. P. O. Box 290 Madison, Georgia 30650
Pioneer ..... *8 815 8222 8300 8333	Pioneer Hi-Bred International, Inc. 1000 West Jefferson Street Tipton, Indiana 46072
Ring Around ..... 433A 733GB 747 787 808GB	Ring Around Products, Inc. 12000 Ford Road Dallas, Texas 75234
Taylor-Evans ..... T-E Dinero T-E Y-77 T-E Y101R	Taylor-Evans Seed Company P. O. Box 68 Tulia, Texas 79088
Terra ..... HT-124 HT-126 DR	Terra Seed Company P. O. Box 10121 Lubbock, Texas 79408

\*Bird-resistant hybrid.

### Acceptable Hybrids For 1984

All acceptable hybrids have been tested for 3 consecutive years in the region listed. All of the acceptable hybrids are not equal in performance. It is suggested that this report be carefully studied before choosing a hybrid. The hybrids are listed in descending order of 3-year average yield for each region.

<u>Northern Alabama<sup>1</sup></u>		<u>Central Alabama<sup>2</sup></u>		<u>Southern Alabama<sup>3</sup></u>	
<u>Brand name</u>	<u>Hybrid</u>	<u>Brand name</u>	<u>Hybrid</u>	<u>Brand name</u>	<u>Hybrid</u>
Pioneer	B815	Pioneer	B815	Northrup King	Savanna 5
Funk's	G-522DR	Northrup King	Savanna 5	Taylor-Evans	Dinero
Funk's	G-522A	Gold Kist	GK 802G	Coker	7675
McCurdy	M 57 YG	Taylor-Evans	Dinero	Funk's	G-522A
Taylor-Evans	Dinero	Coker	7675	McCurdy	M 57 YG
Terra	HT-126 DR	Chem-Nut	GSA 1290	Pioneer	B815
Coker	7675	Pennington	Penngrain YE	Funk's	G-522DR
Gold Kist	GK 802G	Funk's	G-522DR	Gold Kist	GK 802 G
Ring Around	733 GB	Gold Kist	GK 712 G*	Chem-Nut	GSA 1290
Funk's	G-550	Terra	HT-126DR*	Pennington	Penngrain YE
Funk's	G-611	Coker	7723*	Funk's	G-611
McCurdy's	M 51 YG	Northrup King	2670*	Coker	7723*
Pennington	Penngain YE	McCurdy	M 57 YG*	Northrup King	2670*
Northrup King	Savanna 5*	Ring Around	733 GB*	Terra	HT-126DR*
Taylor-Evans	Y-101-R*	Funk's	G-522A*	Funk's	G-550*
Northrup King	2670*	Funk's	G-550*	Ring Around	733GB*
		McCurdy's	M 51 YG*	DeKalb	DK-64*
		Funk's	G-611*		

<sup>1</sup>Belle Mina, Crossville, and Winfield test locations.

<sup>2</sup>Shorter, Prattville, and Marion Junction test locations.

<sup>3</sup>Headland, Monroeville, and Fairhope test locations.

†Bird-resistant hybrids.

\*If present trends continue, this hybrid will be removed from the acceptable list next year in the region indicated.



