1976 Alabama Grain Sorghum Performance Tests

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Emmett L. Carden[1/]

Grain sorghum performance trials were conducted by the Auburn University Agricultural Experiment Station at seven locations in 1976. These tests were conducted to give a relative comparison of hybrids rather than to give an absolute measure of their yield potentials. 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 give test. The experimental design for all tests was a randomized complete block with four replications. Locations of the tests, plot sizes, and cultural practices are listed in Table 1. Sources of seed used in the tests are listed on pages 26-27.

Data

Yield

Yields are given in bushels per acre and are adjusted to 14 percent moisture and 56 pounds per bushel. Due to excessive bird damage, yields at Prattville Field were calculated from 10 heads per plot which had been protected from bird damage by covering with perforated paper bags soon after blooming. Yields were calculated by multiplying the average weight of grain per head obtained from the 10 bagged heads times the number of heads per plot. At other locations, yields were calculated from the weight of threshed grain from each plot. For locations where it was significant, bird damage is listed as a visual estimate of grain loss . These yields are not adjusted for bird damage.

Lodging

Lodging is given as the percent of plants broken or leaning at an angle of more than 45 degrees. The seedheads of most lodged plants would probably be missed by a combine. However, they are included in the yields in this report.

Plant Height

Plant height, in feet, was measured from the soil at the base of the plant to the tip of the head. Height can affect harvest efficiency; however, most of the sorghums tested are medium in height and are acceptable in this respect.

1/Research Associate, Department of Agronomy and Soils.

Head Exsertion

Head exsertion was measured from the collar of the terminal or flag leaf to the base of the head. Poor head exsertion may result in excessive green plant material in the harvested grain, as well as damage to the lower part of the head resulting from water accumulating in the terminal leaf.

Head type

Open or loose heads may be important in the humid Southeast. Open heads allow better air movement and faster drying after rains or dew. This may be helpful in reducing damage from insects and diseases which attack the heads. A rating of one for tight heads and three for open heads was used at all locations.

Mid-bloom

One measure of relative maturity is the mid-bloom date. This is the date when approximately one-half of the main heads in a plot are in bloom. Date of mid-bloom is shown for entries at several locations in tables 4, 7, 14, 17, 20, and 23.

Selecting a Hybrid

The performance of hybrids varies among years and locations. Small yield differences between hybrids may not be real, but may be the result of slight differences in soil fertility, and other factors. A review of data from several years of testing at the location most similar to yours is the best method for selecting a hybrid.

ACKNOWLEDGMENT

These performance trials were conducted in cooperation with the following substation superintendents whose help is gratefully acknowledged: L. A. Smith, Black Belt; J. A. Little, Lower Coastal Plain; R. A. Moore, Upper Coastal Plain; W. E. Brown, Monroeville Field; F. T. Glaze, Prattville Field, and J. G. Starling, Wiregrass. Appreciation is expressed to Mr. James Powell who provided space for a late planted test on his farm near Prattville. A special thanks is expressed to W. H. Hearn and Mrs. Sally Bagwell for the processing of data in this report.

Table 1. Test Locations and Cultural Practices for 1976 Grain Sorghum Tests

	Black Belt (Marion Junction)	Lower Coastal Plain (Camden)	Upper Coastal Plain (Winfield) early planting	Upper Coastal Plain (Winfield) late planting	Prattville Field (Prattville)	Powell Farm (Prattville)	Monroeville Field (Monroeville)	Wiregrass (Headland)
Planting date:	4-30	5-18	5-5	6-22	5-12	6-16	5-12	5-12
Seeding rate (Seed/ft.)	9	9	11	11	9	9	9	9
Plot size:								
Row number	2	2	2	2	2	2	2	2
Row width (in.)	36	36	40	40	42	40	36	36
Row length (ft.)	20	20	16	16	20	20	20	22
Replications (no.)	4	4	4	4	4	4	4	4
Nitrogen rate: (lb. N/A)	95	80	120	120	100	80	120	110
Herbicide:								
Kind	Atrazine	None	Atrazine	Atrazine	Atrazine	None	Atrazine	Atrazine
Rate (lb A.I./A)	3.0	--	2.0	2.0	2.0	--	2.0	2.5
Method	Broadcast	--	Broadcast	Broadcast	Broadcast	--	Broadcast	Broadcast

Table 2. Yield and Other Characteristics of Early Planted Grain Sorghum Hybrids Tested Three Years at the Upper Coastal Plain Substation, Winfield, 1974-76

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion[1/]	Head type[2/]
		Bu/A	Pct.	Ft.	In.	Rating
DeKalb	BR-54	75.1	3	4.2	8.0	2.8
Penngrain	BR	64.5	1	3.8	8.2	3.0
Funk's	G-516BR	64.1	1	3.6	8.3	2.9
Funk's	BR-79	60.0	15	4.5	9.3	3.0
Pioneer	B815	59.8	0	4.3	7.6	1.8
Funk's	G-522	59.7	0	3.4	7.4	2.3
DeKalb	E-59	57.0	0	3.4	7.0	2.2

1/Measured from terminal leaf to base of the head.
2/1=tight; 2=medium; 3=loose.

Table 3. Yield and Other Characteristics of Early Planted Grain Sorghum Hybrids Tested Two Years at the Upper Coastal Plain Substation, Winfield, 1975-76

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion[1]	Head type[2]	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
DeKalb	BR-54	73.5	4	4.6	10.1	2.8	0
McNair 656	656	69.5	0	3.8	9.4	3.0	0
Northrup-King	X3101A	68.3	0	4.8	12.3	1.0	0
Penngrain	BR	66.8	2	3.9	9.5	3.0	0
Funk's	G-516BR	66.1	1	3.8	10.1	3.0	0
McNair	650	60.5	1	3.8	10.1	2.4	2
Warner	W-832	60.1	0	4.1	9.4	1.5	2
Funk's	BR-79	59.1	23	4.6	10.6	3.0	0
Pioneer	B815	58.3	0	4.5	9.0	1.8	0
DeKalb	E-59	57.8	0	3.6	8.8	2.3	0
Funk's	G-522	57.2	0	3.6	9.4	2.4	4
Niagara	ORO	55.5	0	3.6	8.3	2.1	6
Funk's	G-589	54.8	0	3.9	8.5	1.4	0
Warner	W-866	53.2	0	4.5	10.5	1.5	9
Niagara	ORO T	47.4	5	4.2	10.3	2.0	14

[1] Measured from terminal leaf to base of the head.
[2] 1 = tight; 2 = medium; 3 = loose.

Table 4. Yield and Other Characteristics of Early Planted Grain Sorghum Hybrids Tested at the Upper Coastal Plain Substation, Winfield, 1976[1/]

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion[2/]	Mid-bloom	Head type[3/]	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Date	Rating	Pct.
DeKalb	BR-54	96.3	8	5.5	14.3	7/24	2.8	0
Growers	GSA 1334BR	95.9	2	4.7	12.8	7/24	3.0	0
Pioneer	B18	95.0	0	5.0	15.3	7/24	1.5	0
Asgrow	Dorado M	93.3	6	4.8	14.3	7/24	2.5	8
Funk's	G-516BR	89.1	2	4.5	14.8	7/25	3.0	0
Penngrain	BR	88.8	2	4.4	14.3	7/23	3.0	0
McNair	656BR	87.8	1	4.8	13.8	7/25	3.0	0
Warner	W-744	87.1	0	4.4	14.8	7/22	3.0	1
Growers	GSA 1180	86.7	0	4.1	13.0	7/23	1.0	1
McNair	650	84.2	0	4.3	14.5	7/25	2.3	4
DeKalb	E-59	83.9	0	4.3	13.0	7/25	1.8	2
Pioneer	B815	81.8	1	5.1	13.3	7/25	1.3	0
Warner	W-832	78.0	0	4.7	13.0	7/25	1.0	4
Funk's	G-522	77.3	0	4.2	14.0	7/25	2.0	8
Northrup-King	284	77.1	0	4.5	14.0	7/23	1.0	1
Asgrow	Capitan	76.2	0	4.2	14.5	7/26	1.3	2
Growers	GSA 1210	75.8	4	4.8	13.5	7/22	1.5	15
Northrup-King	X3101A	75.7	0	5.7	18.3	7/21	1.0	0
Asgrow	Bug Off	75.4	0	4.3	13.5	7/24	1.8	8
Growers	ML 135	74.6	3	4.0	14.5	7/25	2.0	6
Funk's	G-622GBR	74.3	0	4.2	13.0	7/25	1.3	6
Funk's	BR-79	74.0	42	5.4	15.5	7/21	3.0	0
Penngrain	YE	72.0	0	4.1	12.0	7/26	1.8	12
Niagara	ORO	71.4	1	4.2	12.8	7/25	1.8	11
Warner	W-866	71.0	0	5.3	14.8	7/22	1.0	18
Funk's	G-589	70.9	0	4.6	12.0	7/24	1.0	14
Niagara	ORO T	67.0	10	5.3	14.3	7/25	1.8	27
DeKalb	BR-65	64.6	0	4.7	17.5	7/26	1.3	0
Funk's	G-722DR	60.3	0	4.7	14.0	7/26	1.0	0
McNair	695D	52.5	3	4.6	11.8	7/24	2.0	2
McNair	650D	48.8	1	4.4	14.0	7/24	3.0	5

1/Planted May 5, 1976.
2/Measured from terminal leaf to base of the head.
3/1 = tight; 2 = medium; 3 = loose.

Table 5. Yield and Other Characteristics of Late Planted Grain Sorghum Hybrids Tested Three Years at the Upper Coastal Plain Substation, Winfield, 1974-76

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion[1/]	Head type[2/]	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
DeKalb	BR-54	42.2	0	3.2	6.4	2.7	1
Funk's	BR-79	39.8	3	3.2	5.3	2.9	0
Funk's	G-516BR	39.1	0	2.4	2.9	2.8	1
Penngrain	BR	37.8	4	2.8	4.3	2.9	0
DeKalb	E-59	35.6	0	2.4	3.7	1.6	4
Funk's	G-522	31.9	0	2.3	3.2	1.9	7
Pioneer	B815	31.1	0	3.3	5.1	1.6	0

1/ Measured from terminal leaf to base of the head.
2/ 1 = tight; 2 = medium; 3 = loose.

Table 6. Yield and Other Characteristics of Late Planted Grain Sorghum Hybrids Tested Two Years at the Upper Coastal Plain Substation, Winfield, 1975-76

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion[1/]	Head type[2/]	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
DeKalb	BR-54	43.1	0	3.0	6.5	2.8	1
Funk's	BR-79	39.6	4	2.9	4.8	3.0	0
DeKalb	E-59	39.3	0	2.3	3.8	1.4	0
Funk's	G-516BR	38.7	0	2.3	3.0	2.9	2
Northrup-King	X3101A	38.4	0	3.1	5.8	1.0	0
Penngrain	BR	37.8	7	2.7	4.5	2.9	1
Niagara	ORO T	37.2	1	2.8	4.8	1.6	2
McNair	656	36.0	0	2.3	3.2	2.4	2
Funk's	G-589	34.8	0	2.6	4.3	1.0	1
Funk's	G-522	34.2	0	2.1	3.1	1.9	0
McNair	650	33.9	0	2.1	3.8	1.9	1
Niagara	ORO	33.5	0	2.1	2.6	1.8	1
Warner	W-832	33.5	0	2.6	4.7	1.0	0
Pioneer	B815	31.8	0	3.2	5.2	1.6	0
Warner	W-866	27.4	4	2.9	5.3	1.0	3

[1/] Measured from terminal leaf to base of the head.
[2/] 1 = tight; 2 = medium; 3 = loose.

Table 7. Yield and Other Characteristics of Late Planted Grain Sorghum Hybrids Tested at the Upper Coastal Plain Substation, Winfield, 1976[1/]

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion[2/]	Mid-bloom	Head type[3/]	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Date	Rating	Pct.
DeKalb	BR-54	53.6	1	2.6	3.3	8/26	2.7	2
Niagara	ORO T	53.1	1	2.3	1.5	8/25	2.0	4
Penngrain	BR	52.2	0	2.1	1.8	8/26	2.8	1
Growers	GSA 1210	52.0	0	2.3	1.8	8/25	1.8	4
Growers	GSA 1334 BR	51.9	0	2.1	2.5	8/29	2.8	1
Funk's	BR-79	50.3	5	2.5	1.5	8/20	3.0	0
Funk's	G-522	49.3	0	1.9	2.0	8/27	2.0	0
DeKalb	BR-65	48.3	0	2.6	4.0	8/28	1.0	0
Asgrow	Dorado M	47.2	0	2.1	2.3	8/27	2.8	5
Funk's	G-516 BR	45.9	0	2.2	1.7	9/01	3.0	3
Pioneer	B18	45.7	0	3.0	3.7	8/28	1.7	0
Niagara	ORO	45.0	1	1.8	1.3	8/23	2.0	1
Growers	ML 135	44.3	0	1.8	1.8	8/25	2.3	1
McNair	650	43.8	0	1.9	1.5	8/26	2.0	3
Warner	W-832	43.3	0	2.2	2.7	8/27	1.0	0
Funk's	G-589	42.5	0	2.3	1.8	8/26	1.0	3
DeKalb	E-59	42.0	1	2.1	2.0	8/28	1.5	0
McNair	656	40.7	0	2.1	1.7	8/26	2.3	3
Pioneer	B815	40.4	0	3.0	3.3	8/28	1.7	0
Asgrow	Capitan	40.2	0	2.0	2.8	9/01	1.3	1
Northrup-King	X3101A	40.0	1	2.4	2.8	8/27	1.0	0
Funk's	G-622GBR	39.8	1	2.0	1.5	8/23	2.0	3
Warner	W-744	39.8	0	2.0	2.3	8/27	3.0	3
Growers	GSA 1180	39.5	1	2.1	2.3	8/25	1.3	0
Funk's	G-722DR	35.2	0	2.4	3.3	9/01	1.0	0
Asgrow	Bug Off	34.6	1	1.8	2.0	8/27	2.3	1
Penngrain	YE	33.5	0	1.8	1.7	8/27	2.0	3
Warner	W-866	32.7	8	2.4	2.3	8/24	1.0	5
Northrup-King	284	31.2	1	2.0	2.3	8/27	1.8	3
McNair	695D	26.3	2	2.1	3.3	8/28	1.7	2
McNair	650D	20.5	3	1.9	1.5	8/26	2.0	0

1/Planted June 22, 1976.
2/Measured from terminal leaf to base of the head.
3/1 = tight; 2 = medium; 3 = loose.

Table 8. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at Prattville Field, 1974-76

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion[1/]	Head type[2/]
		Bu/A	Pct.	Ft.	In.	Rating
Penngrain	BR	77.1	6	4.0	4.4	2.9
DeKalb	BR-54	76.7	14	4.1	5.5	2.9
Pioneer	B815	68.7	16	4.1	4.3	1.8
Funk's	BR-79	67.8	37	4.2	4.8	2.9
McNair	656	67.0	3	3.6	3.8	3.0
Funk's	G-516BR	63.8	2	3.6	3.7	3.0

1/Measured from terminal leaf to base of the head.
2/1=tight; 2=medium; 3=loose.

Table 9. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Two Years at Prattville Field, 1975-76

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion[1/]	Head type[2/]
		Bu/A	Pct.	Ft.	In.	Rating
Penngrain	BR	71.2	1	4.2	4.9	3.0
DeKalb	BR-54	70.7	21	4.2	5.2	3.0
Pioneer	B815	68.9	24	4.3	4.1	2.0
McNair	656	62.1	4	3.8	4.3	3.0
Funk's	G-516BR	61.1	3	3.8	4.1	3.0
Northrup-King	X3101A	57.6	8	4.7	8.4	1.0
Funk's	BR-79	51.0	43	4.3	5.3	2.9

1/Measured from terminal leaf to base of the head.
2/1=tight; 2=medium; 3=loose.

Table 10. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at Prattville Field, 1976[1/]

Brand name	Hybrid	Yield[2/]	Lodging	Height	Head exsertion[3/]	Head type[4/]
		Bu/A	Pct.	Ft.	In.	Rating
Asgrow	Dorado M	87.0	3	3.9	4.5	1.8
Funk's	G-622GBR	85.4	0	3.5	4.8	2.0
Pioneer	B815	83.4	49	4.0	3.3	2.0
Pioneer	B18	82.3	55	3.9	4.5	1.8
Niagara	ORO	81.7	0	3.3	3.3	2.0
Asgrow	Capitan	80.9	0	3.3	3.0	2.0
Growers	ML 135	77.5	0	3.4	2.5	2.3
DeKalb	BR-54	77.2	41	3.2	3.4	3.0
Funk's	G-522	76.7	0	3.4	2.8	2.0
McNair	650	76.2	0	3.3	2.8	2.3
Growers	GSA 1334 BR	75.2	5	3.4	3.0	3.0
Penngrain	BR	74.3	3	3.5	3.3	3.0
DeKalb	E-59	74.0	0	3.3	2.8	2.5
Growers	GSA 1210	72.9	0	3.8	4.0	1.3
Niagara	ORO T	70.3	13	4.0	2.8	2.0
DeKalb	BR-65	69.6	0	3.8	6.5	1.3
McNair	656	65.5	8	3.5	2.5	3.0
Warner	W-744	64.8	8	3.5	3.3	3.0
Penngrain	YE	64.8	2	3.2	2.8	2.3
Asgrow	Bug Off	64.0	0	3.4	2.5	2.5
Funk's	G-516BR	63.4	5	3.4	2.3	3.0
Northrup-King	X3101A	56.1	15	4.1	5.3	1.0
McNair	650D	52.6	1	3.4	3.5	1.8
Funk's	BR-79	52.3	86	3.6	4.0	2.8
Northrup-King	284	50.6	3	3.6	3.5	2.0
McNair	695D	48.1	1	3.5	1.8	1.8
Growers	GSA 1180	42.9	1	3.6	4.5	1.3
Funk's	G-589	39.4	0	3.7	5.0	1.0
Funk's	G-722DR	34.1	1	3.5	2.3	1.0
Warner	W-866	31.5	8	4.0	3.8	1.0
Warner	W-832	31.4	0	3.6	3.5	1.0

1/Planted May 12, 1976.
2/Yields calculated from bagged heads and adjusted to 14% moisture and 56 lb. per bushel.
3/Measured from terminal leaf to base of the head.
4/1 = tight; 2 = medium; 3 = loose.

Table 11. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Powell Farm, Prattville, 1976[1/]

Brand name	Hybrid	Yield[2/]	Lodging	Height	Head exsertion[3/]	Head type[4/]	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
Pioneer	B18	79.5	3	4.3	5.3	2.5	0
DeKalb	BR-54	77.0	4	4.7	7.5	2.8	0
Pioneer	B815	75.2	1	4.5	7.0	2.0	0
Northrup-King	X3101A	72.6	0	4.6	7.5	1.0	0
Growers	GSA 1334BR	69.1	0	3.9	5.5	3.0	0
Penngrain	BR	67.1	0	4.0	5.0	3.0	0
McNair	656	66.1	0	3.9	6.0	2.5	0
Funk's	BR-79	64.6	8	4.0	6.0	3.0	0
Warner	W-744	63.5	0	4.0	7.5	2.8	0
Funk's	G-516BR	63.2	0	3.9	6.0	3.0	0
DeKalb	E-59	61.2	0	3.7	6.0	2.8	4
DeKalb	BR-65	60.6	0	4.2	7.0	1.5	0
Niagara	ORO T	57.4	2	4.3	6.0	2.3	11
Funk's	G-522	54.3	0	3.4	6.0	3.0	16
Warner	W-866	54.3	0	4.2	6.0	1.0	15
Asgrow	Capitan	52.7	0	3.6	6.5	2.0	7
Asgrow	Dorado M	51.3	1	4.1	7.0	3.0	13
Northrup-King	284	51.3	0	3.6	6.5	1.8	7
Funk's	G-622GBR	50.4	0	3.8	7.0	2.8	10
Funk's	G-589	50.1	0	4.1	6.0	1.3	17
Growers	GSA 1210	49.5	0	4.0	6.5	2.0	22
Niagara	ORO	49.1	1	3.5	5.5	2.8	9
Penngrain	YE	48.4	0	3.5	6.0	2.8	7
Asgrow	Bug Off	47.6	0	3.6	6.0	3.0	15
Growers	ML 135	47.1	0	3.4	5.5	3.0	15
Funk's	G-722DR	46.8	0	4.4	6.5	1.0	4
Growers	GSA 1180	46.8	0	3.6	6.0	2.0	21
Warner	W-832	45.9	0	4.1	6.5	1.0	18
McNair	650	45.5	0	3.6	6.0	3.0	6
McNair	695D	39.4	0	4.1	7.0	2.3	2
McNair	695D	33.3	0	3.6	5.5	3.0	1

1/Planted June 16, 1976.
2/Yields adjusted to 14% moisture and 56 lb. per bushel.
3/Measured from terminal leaf to base of the head.
4/1 = tight; 2 = medium; 3 = loose.

Table 12. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at the Black Belt Substation, Marion Junction, 1974-76

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion[1/]	Head type[2/]
		Bu/A	Pct.	Ft.	In.	Rating
Funk's	G-516BR	72.6	0	4.0	5.5	2.9
Funk's	BR-79	72.5	1	4.9	5.9	2.5
Pioneer	B815	70.8	0	4.7	5.0	1.8
Funk's	G-522	70.3	0	3.8	6.0	2.3
DeKalb	BR-54	69.5	0	5.3	6.1	2.5
DeKalb	E-59	68.3	0	3.8	4.9	2.3
Penngrain	BR	68.2	0	4.4	5.9	2.4

1/Measured from terminal leaf to base of the head.
2/1=tight; 2=medium; 3=loose.

Table 13. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Two Years at the Black Belt Substation, Marion Junction, 1975-76

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion[1]	Head type[2]
		Bu/A	Pct.	Ft.	In.	Rating
Niagara	ORO T	74.1	0	4.7	7.0	2.0
Funk's	G-516BR	70.7	0	3.9	6.4	2.9
Pioneer	B815	70.1	0	4.7	6.1	1.8
DeKalb	BR-54	68.4	0	5.2	7.6	2.9
McNair	656	68.4	0	3.9	6.6	2.8
Funk's	G-522	66.6	0	3.7	6.3	2.4
McNair	650	66.0	0	3.8	7.1	2.3
Funk's	BR-79	65.3	1	4.7	6.8	2.5
Penngrain	BR	65.2	0	4.3	6.1	2.5
Niagara	ORO	63.3	0	3.8	6.4	2.4
Funk's	G-589	63.2	0	4.1	6.0	1.4
DeKalb	E-59	62.6	0	3.8	5.5	2.4
Northrup-King	X3101A	57.8	0	5.1	7.0	1.0

1/Measured from terminal leaf to base of the head.
2/1=tight; 2=medium; 3=loose.

Table 14. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Black Belt Substation, Marion Junction, 1976[1/]

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion[2/]	Mid-bloom	Head type[3/]
		Bu/A	Pct.	Ft.	In.	Date	Rating
Niagara	ORO T	92.0	0	4.3	4.5	7/21	2.0
Asgrow	Dorado M	89.7	0	4.0	4.3	7/23	2.8
Funk's	G-516 BR	86.9	0	3.6	4.0	7/19	3.0
Warner	W-866	86.7	0	4.1	4.5	7/21	1.0
Growers	ML 135	84.3	0	3.4	2.8	7/20	2.8
McNair	650	84.1	0	3.5	4.5	7/22	2.3
Asgrow	Bug Off	82.5	0	3.3	3.8	7/19	2.3
Funk's	G-522	81.0	0	3.4	3.5	7/22	2.5
Growers	GSA 1334 BR	78.6	0	3.8	4.8	7/22	2.8
Growers	GSA 1210	78.4	0	3.9	5.3	7/21	2.0
Niagara	ORO	78.4	0	3.5	4.0	7/22	2.8
DeKalb	BR-54	78.2	0	4.8	6.0	7/22	3.0
DeKalb	BR-65	77.4	0	3.6	4.0	7/26	1.0
Funk's	G-589	77.2	0	3.8	4.0	7/23	1.0
Pioneer	B18	76.4	0	4.4	4.5	7/25	1.5
Penngrain	YE	76.2	0	3.3	3.0	7/23	2.5
Funk's	BR-79	76.0	3	4.4	4.8	7/21	2.8
Pioneer	B815	75.6	0	4.3	3.3	7/23	1.5
McNair	656	75.2	0	3.5	4.3	7/20	3.0
Warner	W-744	74.6	1	3.7	4.3	7/21	3.0
Northrup-King	284	73.5	0	3.7	4.5	7/23	2.0
Northrup-King	X3101A	72.5	0	4.8	6.0	7/23	1.0
Warner	W-832	72.3	0	3.7	4.5	7/24	1.0
DeKalb	E-59	71.7	0	3.4	3.3	7/24	2.8
Funk's	G-622GBR	69.7	0	3.4	4.0	7/20	2.0
Asgrow	Capitan	68.9	0	3.4	2.5	7/26	2.0
Penngrain	BR	67.3	0	3.7	4.0	7/21	3.0
Growers	GSA 1180	63.4	0	3.5	4.8	7/24	2.3
McNair	650D	61.6	0	3.5	4.3	7/23	2.0
McNair	695D	55.1	0	3.9	3.3	7/23	1.8
Funk's	G-722DR	49.8	0	4.0	3.5	7/28	1.0

1/Planted April 30, 1976.
2/Measured from terminal leaf to base of the head.
3/1 = tight; 2 = medium; 3 = loose.

Table 15. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at the Lower Coastal Plain Substation, Camden, 1974-76

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion[1/]	Head type[2/]
		Bu/A	Pct.	Ft.	In.	Rating
Pioneer	B815	65.5	2	4.3	3.8	1.9
DeKalb	BR-54	60.5	4	4.6	6.4	2.7
Niagara	ORO T	57.9	1	4.2	4.4	1.9
Funk's	BR-79	52.8	20	4.3	5.4	2.8
Penngrain	BR	52.5	21	3.9	5.2	2.5
McNair	656	51.0	0	3.7	4.6	2.7
Niagara	ORO	50.4	1	3.5	5.0	2.0
DeKalb	E-59	49.9	0	3.5	4.1	2.1
McNair	650	47.5	2	3.4	3.9	2.2
Funk's	G-516BR	47.0	0	3.8	4.0	2.8
Funk's	G-522	45.5	5	3.4	3.7	2.2

1/Measured from terminal leaf to base of the head.
2/1=tight; 2=medium; 3=loose.

Table 16. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Two Years at the Lower Coastal Plain Substation, Camden, 1975-76

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion[1/]	Head type[2/]
		Bu/A	Pct.	Ft.	In.	Rating
Pioneer	B815	69.7	2	4.3	4.9	2.0
Niagara	ORO T	58.6	2	4.1	5.0	1.9
DeKalb	BR-54	57.3	5	4.6	6.8	2.8
Funk's	BR-79	56.6	29	4.1	5.4	3.0
Funk's	G-589	51.4	0	3.4	3.8	1.0
Northrup-King	X3101A	49.7	2	4.5	6.5	1.1
McNair	650	48.6	2	3.3	4.7	2.3
DeKalb	E-59	48.1	0	3.3	4.5	2.1
McNair	656	47.3	0	3.7	4.9	2.6
Funk's	G-516BR	47.1	1	3.5	4.6	2.6
Penngrain	BR	46.8	32	3.8	5.7	2.6
Grower	ML 135	46.3	0	3.4	4.4	2.4
Funk's	G-522	43.3	7	3.4	4.4	2.3
Niagara	ORO	42.0	1	3.4	6.2	2.0

1/Measured from terminal leaf to base of the head.
2/1=tight; 2=medium; 3=loose.

Table 17. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Lower Coastal Plain Substation, Camden, 1976[1/]

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion[2/]	Mid-bloom	Head type[3/]
		Bu/A	Pct.	Ft.	In.	Date	Rating
Pioneer	B815	60.1	0	3.8	4.2	8/02	1.8
DeKalb	BR-54	56.4	3	3.7	6.7	7/28	2.5
Niagara	ORO T	51.0	0	3.4	5.7	7/29	1.8
Penngrain	BR	51.0	1	3.3	6.2	8/04	2.3
Northrup-King	X3101A	49.6	0	3.8	6.6	8/01	1.3
Pioneer	B18	48.0	1	3.5	5.5	8/09	2.5
Funk's	BR-79	47.2	1	3.4	4.9	8/09	3.0
Funk's	G-516BR	47.2	0	2.9	4.3	8/01	2.3
Growers	ML 135	44.4	0	2.6	2.7	8/01	2.5
Asgrow	Dorado M	43.9	1	3.1	4.6	8/07	2.8
McNair	656	43.9	1	3.1	4.4	8/09	2.0
Warner	W-832	43.6	0	3.2	3.7	8/02	1.3
Growers	GSA 1334BR	42.6	0	3.4	6.0	8/01	2.5
Warner	W-744	42.5	0	3.0	4.7	8/09	2.3
Growers	GSA 1210	41.5	0	3.0	4.0	8/01	2.5
McNair	650	41.3	0	2.8	3.2	8/03	2.3
Funk's	G-589	40.2	0	2.7	2.7	8/01	1.0
DeKalb	E-59	40.0	0	2.8	3.4	8/02	2.0
Asgrow	Bug Off	38.9	0	2.7	3.8	7/26	2.0
Funk's	G-522	38.4	0	2.9	4.1	8/01	2.3
Asgrow	Capitan	37.3	0	3.1	5.9	8/07	1.8
McNair	695D	36.9	3	3.0	4.2	8/01	2.0
McNair	650D	36.0	0	2.9	15.7	8/02	2.8
Niagara	ORO	34.2	0	2.9	6.5	8/01	2.0
DeKalb	BR-65	33.4	3	3.4	6.9	8/03	1.0
Growers	GSA 1180	32.7	0	3.1	6.0	8/08	1.3
Warner	W-866	29.2	0	3.3	5.6	8/05	1.5
Funk's	G-722DR	28.2	0	3.1	2.6	8/02	1.0
Penngrain	YE	26.1	0	2.9	3.3	8/01	1.8
Funk's	G-622GBR	25.4	0	2.9	4.5	8/01	2.0
Northrup-King	284	23.3	0	2.8	5.1	8/01	1.3

1/Planted May 18, 1976.
2/Measured from terminal leaf to base of the head.
3/1 = tight; 2 = medium; 3 = loose.

Table 18. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at Monroeville Field, 1974-76

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion [1]	Head type [2]	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
Funk's	BR-79	52.4	29	4.3	16.4	2.8	0
Funk's	G-516BR	52.0	2	3.7	14.0	2.8	0
Penngrain	BR	50.5	14	4.0	15.0	2.9	0
DeKalb	BR-54	49.9	17	4.5	15.2	2.8	0
Pioneer	B815	47.6	8	4.1	13.4	1.8	0
Funk's	G-522	[3]	4	3.5	14.2	2.6	30
DeKalb	E-59	[3]	1	3.5	15.3	2.5	41

[1] Measured from terminal leaf to base of the head.
[2] 1 = tight; 2 = medium; 3 = loose.
[3] Omitted due to excessive bird damage.

Table 19. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Two Years at Monroeville Field, 1975-76

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion [1]	Head type [2]	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
Penngrain	BR	52.8	9	4.0	15.4	2.9	0
Funk's	G-516BR	51.1	1	3.8	14.4	3.0	0
Pioneer	B815	49.6	3	4.1	14.3	2.3	0
McNair	656	48.6	1	3.8	14.0	2.8	0
Funk's	BR-79	48.2	30	4.4	16.1	2.9	0
Northrup-King	X3101A	46.9	8	4.7	17.0	1.0	0
DeKalb	BR-54	46.5	20	4.6	15.4	2.9	0
McNair	650	42.9	2	3.5	14.9	2.6	5
Funk's	G-522	41.3	4	3.4	13.9	2.9	6
Niagara	ORO	40.1	3	3.5	14.0	2.8	9
Funk's	G-589	39.0	3	3.9	14.6	1.1	3
DeKalb	E-59	38.6	1	3.5	15.3	2.8	18
Niagara	ORO T	34.2	14	4.3	13.3	2.4	26
Asgrow	Capitan	32.2	0	3.4	14.8	1.9	18

[1] Measured from terminal leaf to base of the head.
[2] 1 = tight; 2 = medium; 3 = loose.

Table 20. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at Monroeville Field, 1976[1/]

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion[2/]	Mid-bloom	Head type[3/]	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Date	Rating	Pct.
Penngrain	BR	69.6	1	3.4	13.5	7/20	3.0	0
Growers	GSA 1334BR	69.0	1	3.4	10.5	7/21	3.0	0
Funk's	G-516BR	66.7	1	3.4	12.0	7/19	3.0	0
Growers	GSA 1210	66.1	9	3.8	14.3	7/19	2.0	3
Asgrow	Dorado M	66.0	16	3.9	12.3	7/19	3.0	6
Funk's	G-622GBR	66.0	1	3.6	12.3	7/19	2.3	4
Pioneer	B815	65.3	4	3.8	11.5	7/20	2.3	0
McNair	656	63.5	1	3.4	11.0	7/21	3.0	0
Warner	W-744	63.0	4	3.5	12.8	7/20	3.0	1
McNair	650	62.6	4	3.3	12.5	7/19	3.0	3
Pioneer	B18	62.3	7	3.9	11.5	7/22	2.3	0
Niagara	ORO	61.5	6	3.3	12.5	7/19	3.0	5
Niagara	ORO T	61.5	29	3.9	10.5	7/19	2.5	3
Funk's	BR-79	61.1	39	4.2	14.8	7/19	2.8	0
DeKalb	E-59	60.2	3	3.1	13.0	7/20	3.0	6
Asgrow	Bug Off	59.9	0	3.3	13.3	7/20	2.5	6
Funk's	G-522	59.9	4	3.2	10.3	7/19	3.0	4
Growers	ML 135	58.6	6	3.3	12.5	7/19	3.0	6
DeKalb	BR-65	58.4	1	3.7	16.3	7/22	1.0	0
Penngrain	YE	55.6	3	3.1	10.8	7/19	3.0	3
Northrup-King	X3101A	54.6	16	4.3	14.0	7/20	1.0	0
DeKalb	BR-54	50.4	40	4.0	12.0	7/20	3.0	1
Northrup-King	284	50.3	0	3.3	11.8	7/21	2.3	5
Growers	GSA 1180	49.4	4	3.5	13.3	7/20	2.0	9
Asgrow	Capitan	48.0	0	3.1	13.0	7/23	2.0	9
Funk's	G-589	46.3	5	3.5	12.8	7/21	1.3	6
McNair	650D	45.7	3	3.2	14.3	7/20	3.0	2
McNair	695D	40.5	0	3.5	12.3	7/21	2.0	2
Warner	W-832	40.0	6	3.6	12.0	7/20	1.0	3
Warner	W-866	38.9	19	3.8	12.3	7/19	1.0	7
Funk's	G-722DR	35.4	0	3.6	13.3	7/23	1.3	1

1/Planted May 12, 1976.
2/Measured from terminal leaf to base of the head.
3/1 = tight; 2 = medium; 3 = loose.

Table 21. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at the Wiregrass Substation, Headland, 1974-76

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion[1]	Head type[2]	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
DeKalb	BR-54	85.6	6	4.4	9.9	3.0	0
Pioneer	B815	83.2	11	4.3	10.0	1.9	0
Funk's	BR-79	80.2	22	4.0	8.9	3.0	0
Funk's	G-516BR	72.7	12	3.7	6.7	3.0	0
Penngrain	BR	70.0	26	3.8	7.3	2.8	0
Funk's	G-522	[3]	4	3.5	6.0	3.0	51
DeKalb	E-59	[3]	2	3.7	7.2	3.0	51

[1] Measured from terminal leaf to base of the head.
[2] 1 = tight; 2 = medium; 3 = loose.
[3] Omitted due to excessive bird damage.

Table 22. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Two Years at the Wiregrass Substation, Headland, 1975-76

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion[1]	Head type[2]	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
DeKalb	BR-54	81.5	8	4.6	12.5	3.0	0
Pioneer	B 815	75.6	13	4.4	12.3	2.1	0
Funk's	BR-79	72.3	23	3.9	9.9	3.0	0
McNair	656	70.3	17	3.8	8.4	3.0	0
Funk's	G-516BR	67.4	18	3.7	8.4	3.0	0
Northrup-King	X3101A	66.9	7	4.5	12.3	1.3	0
Penngrain	BR	65.5	37	3.9	9.8	2.8	0
Funk's	G-589	46.8	28	3.9	9.4	2.3	7
Funk's	G-522	[3]	5	3.5	7.8	3.0	36
DeKalb	E-59	[3]	3	3.3	9.5	3.0	37
Niagara	ORO T	[3]	12	4.3	11.5	3.0	48
McNair	650	[3]	12	3.5	7.4	3.0	49
Asgrow	Capitan	[3]	2	3.7	9.8	3.0	49
Niagra	ORO	[3]	9	3.5	8.1	3.0	48

[1] Measured from terminal leaf to base of the head.
[2] 1 = tight; 2 = medium; 3 = loose.
[3] Omitted due to excessive bird damage.

Table 23. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Wiregrass Substation, Headland, 1976[1/]

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion[2/]	Mid-bloom	Head type[3/]
		Bu/A	Pct.	Ft.	In.	Date	Rating
DeKalb	E-59	69.6	6	3.7	8.0	8/03	3.0
Funk's	G-522	68.8	11	3.3	6.0	8/01	3.0
Niagara	ORO T	68.3	24	4.0	9.5	8/02	3.0
Funk's	G-622GBR	66.8	7	3.4	6.8	8/01	3.0
Asgrow	Dorado M	65.2	40	3.4	8.5	8/03	3.0
DeKalb	BR-54	64.0	13	4.2	9.5	8/03	3.0
Growers	ML 135	59.4	29	3.3	5.8	8/01	3.0
Asgrow	Bug Off	59.1	18	3.5	8.0	8/03	3.0
Growers	GSA 1334BR	57.9	30	3.4	5.5	8/03	3.0
McNair	650	56.9	24	3.3	5.3	8/02	3.0
Pioneer	B815	56.6	24	4.0	11.0	8/04	2.3
Funk's	BR-79	55.6	31	3.3	5.3	7/26	3.0
Asgrow	Capitan	55.3	3	3.6	8.5	8/09	3.0
Pioneer	B18	55.0	21	4.0	9.0	8/05	2.3
Growers	GSA 1210	54.4	40	3.6	7.3	8/02	3.0
Penngrain	YE	54.4	14	3.3	5.5	8/03	3.0
Niagara	ORO	53.6	18	3.3	6.3	8/05	3.0
Penngrain	BR	52.9	58	3.5	5.8	8/01	3.0
DeKalb	BR-65	52.6	40	3.8	11.5	8/04	2.3
McNair	656	52.6	34	3.5	5.8	8/02	3.0
Funk's	G-516BR	51.3	36	3.5	5.8	8/06	3.0
Northrup-King	X3101A	51.1	14	4.2	11.5	8/02	1.5
Warner	W-744	44.0	19	3.4	5.8	8/05	3.0
McNair	650D	42.5	18	3.4	5.5	8/01	3.0
Funk's	G-589	38.1	56	3.5	8.8	8/01	2.8
McNair	695D	37.8	12	3.4	6.0	8/08	3.0
Growers	GSA 1180	33.5	33	3.5	9.0	8/02	2.0
Northrup-King	284	32.7	53	3.3	8.5	8/03	3.0
Warner	W-832	30.7	76	3.6	8.5	7/29	2.8
Warner	W-866	27.9	69	3.4	8.0	8/04	2.0
Funk's	G-722DR	26.5	50	3.3	6.5	8/03	2.8

1/Planted May 20, 1976.
2/Measured from terminal leaf to base of the head.
3/1 = tight; 2 = medium; 3 = loose.

Sources of Seed for the 1976 Grain Sorghum Tests

Entry designation	Source of seed
Asgrow	Asgrow Seed Co.
Bug Off	P. O. Box 2010
Capitan	Des Moines, Iowa
Dorado M	
DeKalb	DeKalb Agricultural
*BR-54	Association, Inc.
*BR-65	Route 2
E-59	Lubbock, Texas
Funk's	Louisiana Seed Co., Inc.
*BR 79	P. O. Box 1867
*G-516BR	Plainview, Texas
G-522	
G-589	
G-622GBR	
G-722DR	
Growers	Growers Seed Association
ML 135	P. O. Box 1656
*GSA 1180	Lubbock, Texas
GSA 1210	
*GSA 1334BR	
McNair	McNair Seed Company
650	P. O. Box 706
650D	Laurinburg, N.C.
*656BR	
695D	
Niagara	FMC Corporation
ORO	Agricultural Chemical Div
ORO T	6065 Roswell Rd., N.E.
	Atlanta, Georgia
Northrup-King	Northrup-King and Company
*X3101A	P. O. Box 370
284	Richardson, Texas
Penngrain	Pennington, Inc.
*BR	P. O. Box 290
YE	Madison, Georgia

*Bird resistant

Pioneer	Pioneer Hi-Bred International, Inc. 221 N. Main Street Tipton, Indiana
*B18	
*B815	
Warner	George Warner Seed Co., Inc. P. O. Box 1448 Hereford, Texas
*W-744	
W-832	
W-866	

*Bird resistant