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1973 Alabama Grain Sorghum Performance Tests

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1973 Alabama Grain Sorghum Performance Tests

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Grain sorghum performance trials were conducted by the Auburn University Agricultural Experiment Station at seven locations in 1973. These tests were conducted to give a comparison of hybrids entered in each test and were not intended for use as an absolute measure of the yielding potential of a hybrid in an area. Performance of hybrids varies with location and it is therefore suggested that this report be carefully studied before choosing a hybrid.

Experimental Procedures

Cultural practices were uniform for all hybrids within a test. The experimental design for all tests was a randomized complete block with four replications. Tests were planted with tractor-mounted cone planters and were hand harvested. Location of the tests, plot size, and cultural practices are listed in Table 1.

Data

Yield

Yields were calculated from the weight of threshed grain from each plot. Yields are given in bushels per acre and were adjusted to 14 per cent moisture and 56 lb. per bushel.

At locations where bird damage was a problem yields were also estimated from 10 heads per plot which were protected by covering with perforated

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paper bags soon after blooming. Yields were calculated by multiplying the average weight of grain per head obtained from 10 bagged heads x the number of heads per plot.

Lodging

Lodging is given as the percent of plants broken or leaning more than 45 degrees. Seedheads of most of these plants would be missed by a combine; however, they are included in the yields in this report.

Plant Height

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

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 and damage to the lower part of the head from water accumulating on 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 pests which attack the heads. A rating of one for tight heads and three for open heads was used.

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 blooming. Date of mid-bloom is shown for entries at several locations in Tables 8, 11, 14, 19 and 22.

Selecting a Hybrid

Performance of hybrids will vary from year to year depending on many factors. Variation also occurs from location to location. Small yield differences may not be real differences between hybrids. These small differences may be caused by slight differences in soil, fertility, diseases, and other factors. For these reasons it is suggested that this report be carefully studied when choosing a hybrid. Data from several years testing at the location most nearly simulating your conditions is the best method for selecting a hybrid.

ACKNOWLEDGMENT

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Table 1. Locations and Cultural Practices for 1973 Grain Sorghum Tests

	Black Belt (Marion Junction)	Gulf Coast (Fairhope)	Lower Coastal Plain (Camden)	Upper Coastal Plain (Winfield)		Powell Farm (Prattville)	Monroeville Field (Monroeville)	Wiregrass (Headland)
				early	late			
Planting date:	4-24	5-30	5-1	5-16	6-20	7-5	5-1	5-11
Seeding rate (plants/ft.)	8	8	8	8	8	8	8	8
Plot size:								
Row number	2	2	2	2	2	2	2	2
Row width (in)	36	38	38	40	40	40	42	36
Row length (ft)	16	20	20	16	16	20	16	20
Replications (No.)	4	4	4	4	4	4	4	4
Nitrogen rate (lb N/A)	80	116	96	148	122	80	112	80
Herbicide:								
Kind	None	None	None	None	None	None	None	Atrazine
Rate (lb/A)	-	-	-	-	-	-	-	3
Method	-	-	-	-	-	-	-	Broadcast

Table 2. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Black Belt Substation, 1973^{1/}

Brand name	Hybrid	Yield ^{2/}	Estimated yield ^{3/}	Lodging	Height	Head exertion ^{4/}	Head type ^{5/}	Estimated bird damage
		Bu/A	Bu/A	Pct.	Ft.	In.	Rating	Pct.
Pennington-----	Penngrain BR	64	62	1	4.3	3.3	2.8	6
Funk's-----	BR-79	63	64	0	4.6	4.5	3.0	3
-----	AKS 614	62	64	0	4.1	3.3	2.8	8
-----	Ga. 615	56	58	0	4.5	2.8	3.0	10
Warner-----	758	54	46	0	4.0	2.5	3.0	6
-----	RS 700	54	52	0	4.2	4.3	1.3	1
Excel-----	Bird Go-68	53	49	0	4.1	3.8	2.8	5
DeKalb-----	BR-54	52	56	0	4.9	5.0	2.8	5
Dorman-----	BR-100	48	54	0	4.2	3.8	2.8	16
Excel-----	Bird-Go-A	47	50	0	4.0	2.0	2.8	11
DeKalb-----	BR-64	47	46	0	4.8	5.1	2.8	5
Golden Acres-----	T.E. Bird-A-Boo	46	48	0	3.5	2.4	3.0	11
Funk's-----	G 516 BR	45	45	0	4.2	4.3	3.0	5
-----	AKS 663	43	43	0	4.1	3.9	3.0	5
Funk's-----	BR-630	39	38	0	3.6	2.0	2.5	14
McNair-----	656	38	37	0	3.9	3.9	3.0	5
McNair-----	546	32	29	0	3.6	2.9	2.5	14
Excel-----	808	26	41	0	4.2	3.1	2.3	53
Golden Acres-----	T.E. Y-101	26	39	0	3.6	2.6	1.8	48
McNair-----	650	23	41	0	3.6	3.1	2.0	49
McNair-----	654	22	38	0	4.2	4.1	1.8	69
Funk's-----	G-522	22	43	0	3.6	2.6	2.3	49
DeKalb-----	E-59	18	39	0	4.0	4.8	2.0	56
Funk's-----	G-577	17	30	0	3.9	4.6	1.3	39
McNair-----	895	15	42	0	4.8	2.6	1.5	79

1/ Planted: April 24, 1973.

2/ Yields adjusted to 14% moisture and 56 lb. per bushel; not adjusted for bird damage.

3/ Yields estimated from bagged heads.

4/ Measured from terminal leaf to base of the head.

5/ 1=tight; 2=medium; 3=loose.

Table 3. Yield and Other Characteristics of Grain Sorghum Hybrids Tested for Two Years at the Black Belt Substation, 1972-73

Brand name	Hybrid	Yield ^{1/}	Lodging	Height	Head exsertion ^{2/}	Head type ^{3/}	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
Funk's-----	BR-79	75	0	4.4	3.6	2.8	1
Pennington-----	Penngrain BR	72	4	4.2	2.7	2.6	4
-----	Ga. 615	72	3	4.3	2.5	2.8	8
-----	AKS 614	64	9	4.0	3.3	2.6	7
Warner-----	758	63	1	3.8	2.1	2.8	3
DeKalb-----	BR-64	63	0	4.6	4.5	2.6	3
Dorman-----	BR-100	59	4	4.0	3.2	2.6	13
Funk's-----	G-516 BR	57	0	3.8	3.3	3.0	3
Golden Acres-----	T.E. Bird-A-Boo	56	3	3.4	2.2	2.4	12
Funk's-----	BR-630	56	0	3.6	2.1	2.4	8
-----	AKS 663	55	0	4.2	3.2	3.0	4
Excel-----	Bird-Go-A	54	1	3.9	1.8	2.6	6
McNair-----	546	52	0	3.5	2.6	2.3	7
Funk's-----	G-522	43	0	3.5	1.9	2.1	28
DeKalb-----	E-59	40	0	3.7	3.4	1.9	32
Golden Acres-----	T.E. Y-101	38	0	3.6	2.5	1.8	40
McNair-----	654	37	0	4.1	3.4	1.7	65

1/ Yields adjusted to 14% moisture and 56 lb. per bushel; not adjusted for bird damage.

2/ Measured from terminal leaf to base of the head.

3/ 1=tight; 2=medium; 3=loose.

Table 4. Yield and Other Characteristics of Grain Sorghum Hybrids Tested for Three Years at the Black Belt Substation, 1971-73

Brand name	Hybrid	Yield ^{1/}	Lodging	Height	Head exsertion ^{2/}	Head type ^{3/}	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
Funk's-----	BR-79	63	0	4.4	4.8	2.5	1
Pennington-----	Penngrain BR	61	2	4.3	3.9	2.4	3
-----	Ga. 615	60	2	4.4	3.8	2.5	5
Warner-----	758	55	1	3.9	3.1	2.8	2
-----	AKS-614	55	6	4.0	4.4	2.4	5
DeKalb-----	BR-64	54	0	4.7	6.5	2.4	2
Dorman-----	BR-100	52	2	4.1	4.4	2.4	9
Golden Acres-----	T.E. Bird-A-Boo	49	2	3.5	3.2	2.6	8
-----	AKS 663	48	0	4.3	4.5	3.0	5
Funk's-----	BR-630	47	0	3.7	3.6	2.3	6
McNair-----	546	43	0	3.6	3.8	2.5	5
DeKalb-----	E-59	27	0	3.7	4.8	1.6	54

1/ Yields adjusted to 14% moisture and 56 lb. per bushel; not adjusted for bird damage.

2/ Measured from terminal leaf to base of the head.

3/ 1=tight; 2=medium; 3=loose.

Table 5. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Gulf Coast Substation, 1973^{1/}

Brand name	Hybrid	Yield ^{2/} Bu/A	Estimated yield ^{3/} Bu/A	Lodging Pct.	Height In.	Head exsertion ^{4/} In.	Head type ^{5/} Rating	Estimated bird damage Pct.
-----	AKS 614	80	67	5	5.0	6.8	2.5	3
Pennington-----	Penngrain BR	79	68	10	4.7	4.5	2.8	4
-----	Ga. 615	79	63	8	4.2	4.8	3.0	3
Funk's-----	BR-79	78	68	9	4.9	5.0	2.0	5
Pioneer-----	XB 110	75	80	2	5.0	5.3	1.0	3
-----	AKS 618	73	61	6	5.1	6.3	2.8	3
Warner-----	758	72	57	2	4.5	4.5	2.5	2
Golden Acres-----	T.E. Bird-A-Boo	71	73	2	4.3	3.8	2.8	3
McNair-----	546	70	63	1	4.3	4.5	2.5	2
Excel-----	Bird Go-A	68	51	1	4.3	3.3	3.0	2
Northrup-King-----	Savanna 3	66	63	1	4.9	5.5	2.3	6
-----	AKS 663	66	55	1	5.5	8.5	3.0	7
Coker-----	72-3	65	56	26	4.9	7.5	1.5	4
Funk's-----	BR-630	65	55	2	4.1	3.8	3.0	3
Pioneer-----	B 818	64	74	11	6.1	8.0	2.0	11
Dorman-----	BR-100	62	73	3	4.8	4.8	2.3	3
Northrup-King-----	Savanna 2	62	72	1	4.8	7.0	2.0	11
Coker-----	72-14	54	37	1	4.3	4.0	2.5	2
DeKalb-----	BR-64	52	45	1	5.0	8.0	2.0	7
Golden Acres-----	T.E. Y-101	33	72	1	4.5	6.0	2.0	15
Growers-----	ML 130	27	42	1	4.9	7.3	1.0	13
Funk's-----	G 522	24	64	1	4.6	6.0	2.0	28
Growers-----	ML 135	24	51	1	4.6	8.0	2.0	28
McNair-----	654	21	40	2	5.1	6.0	2.0	22
DeKalb-----	E-59	20	53	1	4.6	6.8	2.0	20

^{1/} Planted: May 30, 1973.

^{2/} Yields adjusted to 14% moisture and 56 lb. per bushel; not adjusted for bird damage.

^{3/} Estimated from bagged heads.

^{4/} Measured from terminal leaf to base of the head.

^{5/} 1=tight; 2=medium; 3=loose.

Table 6. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Two Years at the Gulf Coast Substation, 1972-1973

Brand name	Hybrid	Yield ^{1/}	Lodging	Height	Head exertion ^{2/}	Head type ^{3/}	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
Funk's-----	BR-79	74	7	4.9	5.1	2.5	7
Pennington-----	Penngrain BR	73	10	4.7	4.1	2.9	4
-----	Ga. 615	71	9	4.7	4.3	2.9	4
-----	AKS 614	69	7	4.7	5.1	2.8	3
McNair-----	546	67	3	4.1	4.4	2.8	4
Golden Acres---	T.E. Bird-A-Boo	67	10	4.0	4.1	2.9	3
Funk's-----	BR-630	65	3	4.0	4.1	3.0	3
Excel-----	Bird-Go-A	63	6	4.2	3.5	3.0	4
Warner-----	758	62	6	4.3	4.1	2.4	2
-----	AKS 663	62	9	5.2	7.0	3.0	7
Dorman-----	BR-100	60	7	4.6	4.4	2.6	3
DeKalb-----	BR-64	60	5	5.0	6.5	2.5	8
Golden Acres---	T.E. Y-101	46	1	4.1	4.9	2.0	16
Funk's-----	G-522	42	1	4.3	4.4	2.0	29
DeKalb-----	E-59	36	1	4.3	5.4	2.0	29
McNair-----	654	29	2	4.7	5.1	2.1	43

^{1/} Yields adjusted to 14% moisture and 56 lb. per bushel; not adjusted for bird damage.

^{2/} Measured from terminal leaf to base of the head.

^{3/} 1=tight; 2=medium; 3=loose.

Table 7. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at the Gulf Coast Substation, 1971-1973

Brand name	Hybrid	Yield ^{1/}	Lodging	Height	Head exsertion ^{2/}	Head type ^{3/}	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
Funk's-----	BR-79	68	5	4.6	5.1	2.7	5
Pennington-----	Penngrain BR	66	7	4.4	4.1	2.9	3
-----	Ga. 615	64	7	4.5	4.2	2.9	3
-----	AKS 614	62	6	4.4	4.9	2.8	2
McNair-----	546	61	2	3.8	4.4	2.8	2
Funk's-----	BR-630	60	3	3.8	4.1	3.0	2
Golden Acres-----	T.E. Bird-A-Boo	59	7	3.8	4.3	2.9	2
DeKalb-----	BR-64	57	4	4.8	6.5	2.7	6
Excel-----	Bird Go-A	57	4	4.0	3.7	3.0	3
Warner-----	758	56	5	4.0	4.1	2.6	2
Asgrow-----	Dorman BR-100	56	5	4.3	4.8	2.8	2
Funk's-----	G-522	48	1	4.1	4.3	2.0	28

^{1/} Yields adjusted to 14% moisture and 56 lb. per bushel; not adjusted for bird damage.

^{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 at the Lower Coastal Plain Substation, 1973^{1/}

Brand name	Hybrid	Yield ^{2/}	Estimated	Lodging ^{4/}	Height	Head	Mid-bloom	Head	Estimated
		Bu/A	yield ^{3/}	Pct.		exsertion ^{5/}		type ^{6/}	bird damage
			Bu/A		Ft.	In.	Date	Rating	Pct.
Northrup-King--	Savanna 3	69	74	21	4.6	9.3	7-6	2.3	1
-----	Ga. 615	66	45	94	5.1	7.0	7-5	2.8	0
Pioneer-----	XB 110	65	60	70	5.1	7.0	7-9	1.5	4
Pioneer-----	B 818	64	62	63	5.5	8.8	7-6	2.8	10
Pennington----	Penngrain BR	60	64	89	4.5	8.5	6-30	2.5	0
-----	AKS 614	59	55	90	5.0	8.3	6-29	2.8	3
Funk's-----	BR-79	59	45	90	5.0	7.5	7-6	3.0	4
Coker-----	72-14	58	56	94	4.6	6.3	7-4	3.0	0
McNair-----	654	56	71	78	4.9	8.5	7-6	1.5	19
DeKalb-----	BR-64	55	56	23	5.3	7.8	7-9	2.8	8
McNair-----	546	55	53	81	4.6	8.3	7-3	3.0	1
-----	AKS 618	54	63	83	4.9	8.3	6-29	3.0	3
-----	AKS 663	53	59	23	5.0	10.3	7-9	3.0	3
Funk's-----	BR-630	53	46	40	4.3	6.3	7-3	3.0	0
Warner-----	758	53	51	95	5.3	7.0	7-2	3.0	3
Dorman-----	BR-100	52	64	83	4.9	8.5	6-29	2.0	4
Golden Acres---	T.E. Bird-A-Boo	46	51	65	4.5	8.0	6-30	3.0	3
Growers-----	ML-135	44	64	79	4.4	9.0	7-6	3.0	9
Excel-----	Bird-Go-A	44	38	85	4.5	6.8	7-5	3.0	1
Funk's-----	G-522	42	76	56	4.4	8.5	7-5	2.5	18
Golden Acres---	T.E. Y-101	42	50	66	4.1	7.0	7-6	3.0	9
Coker-----	72-3	38	36	85	4.9	9.8	7-8	2.8	1
Growers-----	ML-130	35	40	71	5.1	8.8	7-6	1.5	6
Northrup-King--	Savanna 2	30	39	55	4.4	6.5	7-9	2.5	4
DeKalb-----	E-59	25	62	39	4.6	8.5	7-7	2.0	39

1/ Planted: May 1, 1973

2/ Yields adjusted to 14% moisture and 56 lb. per bushel; not adjusted for bird damage.

3/ Yields estimated from bagged heads.

4/ Excessive lodging due to windstorm.

5/ Measured from terminal leaf to base of the head.

6/ 1=tight; 2=medium; 3=loose.

Table 9. Yield and Other Characteristics of Grain Sorghum Hybrids Tested for Two Years at the Lower Coastal Plain Substation, 1972-73.

Brand name	Hybrid	Yield ^{1/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{2/} In.	Head type ^{3/} Rating	Estimated bird damage Pct.
-----	Ga. 615	73	47	5.2	8.3	2.9	0
Pennington-----	Penngrain BR	72	44	4.9	9.1	2.8	0
Funk's-----	BR-630	69	20	4.3	7.6	3.0	0
Funk's-----	BR-79	67	45	5.2	8.9	3.0	2
McNair-----	546	67	41	4.6	8.6	3.0	1
Excel-----	Bird-Go-A	66	43	4.6	7.4	3.0	1
-----	AKS 614	66	45	4.7	8.5	2.8	1
Golden Acres-----	T.E. Bird-A-Boo	63	33	4.3	8.4	3.0	1
-----	AKS 663	62	11	5.0	9.9	3.0	1
Warner-----	758	62	47	4.9	7.8	3.0	1
Dorman-----	BR-100	61	41	4.7	9.0	2.4	2
DeKalb-----	BR-64	41	11	5.4	9.0	2.3	6
McNair-----	654	32	39	4.8	9.1	1.8	53
Funk's-----	G-522	25	28	4.3	8.6	2.1	44
Golden Acres-----	T.E. Y-101	25	33	4.2	7.8	2.5	31
DeKalb-----	E-59	17	19	4.5	9.5	2.1	59

^{1/} Yields adjusted to 14% moisture and 56 lb. per bushel; not adjusted for bird damage.

^{2/} Measured from terminal leaf to base of the head.

^{3/} 1=tight; 2=medium; 3=loose.

Table 10. Yield and Other Characteristics of Grain Sorghum Tested for Three Years at the Lower Coastal Plain Substation, 1971-73.

Brand name	Hybrid	Yield ^{1/}	Lodging	Height	Head exertion ^{2/}	Head type ^{3/}	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
----- Ga. 615		68	33	5.1	10.5	2.6	1
Funk's----- BR-79		68	33	5.1	10.3	2.8	1
Pennington----- Penngrain BR		67	31	4.9	10.9	2.7	0
----- AKS 614		66	32	4.7	10.3	2.7	1
McNair----- 546		65	27	4.4	10.8	3.0	0
Excel----- Bird Go-A		62	28	4.4	8.9	2.8	0
Funk's----- BR-630		62	13	4.2	9.8	2.8	1
Dorman----- BR-100		60	29	4.7	11.0	2.3	3
Golden Acres----- T.E. Bird-A-Boo		60	22	4.2	10.6	3.0	1
Warner----- 758		60	32	4.7	9.5	2.8	1
DeKalb----- BR-64		43	8	5.5	12.0	2.3	7

1/ Yields adjusted to 14% moisture and 56 lb. per bushel; not adjusted for bird damage.

2/ Measured from terminal leaf to base of the head.

3/ 1=tight; 2=medium; 3=loose.

Table 11. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at Monroeville Field, 1973^{1/}

Brand name	Hybrid	Yield ^{2/} Bu/A	Estimated yield ^{3/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{4/} In.	Mid-bloom Date	Head type ^{5/} Rating	Estimated bird damage Pct.
DeKalb	BR-54	61	61	33	5.2	17.8	7-10	2.3	0
	AKS 614	60	53	36	4.3	17.0	7-6	2.0	0
Excel	Bird-Go-68	59	45	1	4.4	14.5	7-12	2.3	0
Funk's	G-516 BR	59	43	0	4.5	15.5	7-12	1.8	2
Pennington	Penngrain BR	57	60	36	4.2	17.5	7-7	2.0	0
	Ga. 615	56	62	63	4.6	16.0	7-8	2.0	0
McNair	546	54	52	14	4.3	18.3	7-6	2.0	0
DeKalb	BR-64	54	50	9	5.2	17.3	7-10	2.0	0
Golden Acres	T.E. Bird-A-Boo	53	42	28	4.3	18.5	7-6	2.0	0
Funk's	BR-630	53	44	16	4.1	17.3	7-6	2.3	0
Funk's	BR-79	52	44	48	4.5	17.5	7-7	2.0	0
Dorman	BR-100	51	65	26	4.4	16.5	7-7	2.0	5
	RS 700	50	44	25	4.6	18.5	7-10	1.3	0
Excel	Bird-Go-A	50	34	26	4.2	15.5	7-6	2.5	0
Funk's	C-522	48	46	10	4.1	16.8	7-8	2.0	4
Warner	758	47	38	60	4.2	16.8	7-6	2.3	0
McNair	656	47	66	1	4.3	14.3	7-13	2.0	0
	AKS 663	42	28	5	4.6	17.0	7-13	2.5	8
McNair	650	37	47	3	4.0	16.0	7-8	2.0	43
Golden Acres	T.E. Y-101	37	46	8	3.9	16.3	7-9	2.0	61
Funk's	G-577	35	57	0	4.1	17.0	7-10	1.3	24
Excel	808	29	42	28	4.4	15.8	7-10	2.0	59
McNair	654	29	48	23	4.7	16.8	7-8	2.0	66
DeKalb	E-59	22	58	8	4.2	17.3	7-13	2.0	34
McNair	895	15	63	4	4.7	15.5	7-12	2.0	88

1/ Planted: May 1, 1973

2/ Yields adjusted to 14% moisture and 56 lb. per bushel; not adjusted for bird damage.

3/ Yields estimated from bagged heads.

4/ Measured from terminal leaf to base of the head.

5/ 1=tight; 2=medium; 3=loose.

Table 12. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Two Years at Monroeville Field, 1972-73

Brand name	Hybrid	Yield ^{1/}	Lodging	Height	Head exertion ^{2/}	Head type ^{3/}	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
-----	AKS 614	61	20	4.4	11.4	2.5	0
Dorman-----	BR-100	61	13	4.4	11.4	2.5	3
Pennington-----	Penngrain BR	60	19	4.4	10.6	2.5	0
Funk's-----	BR-79	60	25	4.6	11.5	2.5	0
Golden Acres-----	T.E. Bird-A-Boo	57	14	4.0	11.8	2.5	0
-----	Ga. 615	55	32	4.4	10.4	2.5	0
DeKalb-----	BR-64	54	4	5.1	11.5	2.5	0
Funk's-----	BR-630	54	8	3.9	10.0	2.6	0
McNair-----	546	53	7	4.0	11.0	2.5	0
Excel-----	Bird-Go-A	52	13	4.1	9.4	2.8	0
-----	AKS 663	50	3	4.5	10.1	2.8	4
Funk's-----	G-522	49	5	3.7	9.9	2.0	25
Golden Acres-----	T.E. Y-101	49	4	3.7	9.9	2.5	34
Warner-----	758	47	30	4.1	10.3	2.6	0
McNair-----	650	42	1	3.8	9.0	2.5	28
McNair-----	654	33	11	4.4	9.9	2.5	54
DeKalb-----	E-59	32	4	4.0	10.1	2.5	32

1/ Yields adjusted to 14% moisture and 56 lb. per bushel; not adjusted for bird damage.

2/ Measured from terminal leaf to base of the head.

3/ 1=tight; 2=medium; 3=loose.

Table 13. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at Monroeville Field, 1971-73.

Brand name	Hybrid	Yield ^{1/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{2/} In.	Head type ^{3/} Rating	Estimated bird damage Pct.
-----	AKS 614	55	13	4.1	7.6	2.3	0
Dorman-----	BR-100	53	10	4.2	7.9	2.7	6
Funk's-----	BR-79	53	17	4.3	7.7	2.7	4
Pennington-----	Penngrain BR	51	13	4.1	7.1	2.7	4
Golden Acres-----	T.E. Bird-A-Boo	51	9	3.7	7.8	2.5	0
McNair-----	546	49	5	3.7	7.3	2.7	8
Funk's-----	BR-630	48	5	3.6	6.7	2.8	2
-----	Ga. 615	47	23	4.1	6.9	2.7	3
DeKalb-----	BR-64	47	3	4.8	9.0	2.5	7
Warner-----	758	44	22	3.9	6.8	2.8	0
-----	AKS 663	39	2	4.2	7.8	2.8	23
DeKalb-----	E-59	21	3	3.6	7.1	2.0	54

^{1/} Yields adjusted to 14% moisture and 56 lb. per bushel; not adjusted for bird damage.

^{2/} Measured from terminal leaf to base of the head.

^{3/} 1=tight; 2=medium; 3=loose.

Table 14. Yield and Other Characteristics of Grain Sorghum Hybrids, Tested at Prattville, Alabama 1973^{1/}

Brand name	Hybrid	Yield ^{2/}	Lodging	Height	Head exertion ^{3/}	Head type ^{4/}	Mid-bloom	Charcoal rot incidence ^{5/}
		Bu/A	Pct.	Ft.	In.	Rating	Date	Pct.
AKS 614		42	19	3.8	5.0	2.5	8-28	14
Pennington	Penngrain BR	42	13	3.6	4.3	2.5	8-28	18
Growers	ML 135	39	0	3.1	3.3	2.3	8-31	25
Warner	758	38	11	3.9	5.0	3.0	8-26	11
	AKS 618	38	8	3.8	5.0	3.0	8-29	14
Dorman	BR-100	38	5	3.7	5.5	3.0	8-28	18
Funk's	BR-79	38	14	3.9	4.5	2.8	8-29	21
Coker	72-3	37	34	4.2	7.5	2.0	8-27	26
Golden Acres	T.E. Y-101	37	0	3.3	3.3	2.3	8-31	15
Funk's	G-522	37	0	3.2	2.8	2.0	9-1	13
	Ga. 615	36	19	3.9	4.3	3.0	8-29	3
McNair	546	36	1	3.6	3.8	2.8	8-26	13
DeKalb	BR-64	36	0	4.1	5.8	2.5	9-1	11
Golden Acres	T.E. Bird-A-Boo	35	4	3.4	5.5	3.0	8-24	15
Funk's	BR-630	34	1	3.5	4.5	3.0	8-26	7
Pioneer	XB 110	34	2	4.1	4.5	1.0	9-1	7
McNair	654	34	3	3.5	4.0	2.0	8-31	25
Grower's	ML 130	34	0	3.7	6.0	1.0	8-29	14
Northrup-King	Savanna 2	33	0	3.3	4.0	2.3	9-3	29
DeKalb	E-59	33	0	3.2	3.5	2.0	9-2	19
Coker	72-14	33	14	3.7	2.8	2.0	8-31	16
Excel	Bird-Go-A	32	1	3.5	4.0	3.0	8-30	8
Pioneer	B 818	30	0	4.1	5.3	2.5	8-31	15
Northrup-King	Savanna 3	30	0	3.2	3.5	2.0	9-3	20
	AKS 663	26	0	3.2	3.0	3.0	9-4	11

1/ Planted: July 5, 1973 on farm of Mr. James Powell.

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.

5/ Macrophomina phaseoli (Maubl.) Ashby.

Table 15. Yield and Other Characteristics of Grain Sorghum Hybrid Tested Two Years at Prattville, Alabama, 1972-1973

Brand name	Hybrid	Yield ^{1/}	Lodging	Height	Head exertion ^{2/}	Head type ^{3/}	Charcoal rot incidence ^{4/}
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
Dorman	BR-100	48	14	4.0	5.8	3.0	39
Golden Acres	T.E. Y-101	48	1	3.5	4.1	2.6	33
Funk's	G-522	48	1	3.4	3.1	2.5	19
	AKS 614	47	31	4.0	5.5	2.5	27
Funk's	BR-630	45	9	3.6	4.5	3.0	48
DeKalb	E-59	44	0	3.6	5.3	2.5	20
DeKalb	BR-64	41	0	4.6	7.6	2.0	8
Pennington	Penngrain BR	40	47	4.0	3.6	2.8	54
McNair	654	40	9	3.8	4.5	2.5	53
Golden Acres	T.E. Bird-A-Boo	39	16	3.6	4.9	3.0	28
Funk's	BR-79	39	29	4.2	10.0	2.9	16
	Ga. 615	38	28	4.0	4.6	3.0	27
Excel	Bird Go-A	38	10	3.7	4.0	3.0	44
McNair	546	37	6	3.7	3.8	2.9	12
Warner	758	34	13	4.0	4.5	2.8	18
	AKS 663	32	13	3.8	4.5	3.0	8

1/ Yields adjusted to 14% moisture and 56 lb. per bushel.

2/ Measured from terminal leaf to base of the head.

3/ 1=tight; 2=medium; 3=loose.

4/ Macrophomina phaseoli (Maubl.) Ashby.

Table 16. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at Prattville, Alabama, 1971-1973

Brand name	Hybrid	Yield ^{1/}	Lodging	Height	Head exsertion ^{2/}	Head type ^{3/}	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
-----	AKS 614	45	21	3.9	4.2	2.7	6
Dorman-----	BR-100	44	10	3.9	4.5	3.0	7
Funk's-----	BR-630	43	6	3.5	3.5	3.0	4
Golden Acres----	T.E. Bird-A-Boo	41	10	3.5	3.9	3.0	1
Pennington-----	Penngrain BR	36	31	3.8	3.1	2.8	5
DeKalb-----	BR-64	36	0	4.4	6.4	2.3	11
-----	Ga. 615	35	18	3.9	3.6	3.0	13
McNair-----	546	34	4	3.6	3.2	2.8	6
Funk's-----	BR-79	33	19	4.1	7.5	2.9	19
Warner-----	758	32	8	3.8	3.7	2.8	5
Golden Acres----	T.E. Y-101	32	1	3.4	3.8	2.1	33
DeKalb-----	E-59	29	0	3.5	4.3	2.0	33
-----	AKS 663	21	8	3.9	4.3	3.0	33

^{1/} Yields adjusted to 14% moisture and 56 lb. per bushel; not adjusted for bird damage.

^{2/} Measured from terminal leaf to base of the head.

^{3/} 1=tight; 2=medium; 3=loose.

Table 17. Yield and Other Characteristics of Early Planted Grain Sorghum Hybrids Tested at the Upper Coastal Plain Substation, 1973^{1/}

Brand name	Hybrid	Yield ^{2/}	Lodging	Height	Head exsertion ^{3/}	Head type ^{4/}
		Bu/A	Pct.	Ft.	In.	Rating
DeKalb-----	BR-54	78	0	4.0	5.0	2.0
DeKalb-----	BR-64	74	0	4.1	8.0	2.3
Excel-----	808	68	0	3.4	4.0	1.8
Excel-----	Bird-Go-68	67	0	3.3	4.8	2.5
McNair-----	895	64	0	3.9	6.3	1.3
-----	RS 700	60	0	3.8	8.0	1.0
Golden Acres-----	T.E. Y-101	58	0	2.8	3.8	1.8
Funk's-----	G-516 BR	58	0	3.5	4.8	2.3
McNair-----	654	55	0	3.7	6.0	2.0
McNair-----	650	55	0	2.9	3.8	2.0
Funk's-----	G-522	55	0	2.9	4.3	1.8
McNair-----	656	51	0	3.1	4.5	2.3
-----	Ga. 615	50	35	3.9	6.0	3.0
DeKalb-----	E-59	50	0	3.1	4.3	1.5
Funk's-----	G-577	47	0	3.4	5.3	1.0
Excel-----	Bird-Go-A	46	9	3.2	3.5	3.0
-----	AKS 614	41	44	3.5	6.0	3.0
Dorman-----	BR-100	40	20	3.4	6.5	3.0
-----	AKS 663	40	0	3.2	4.5	3.0
Warner-----	758	39	49	3.3	4.8	3.0
Pennington-----	Penngrain BR	36	46	3.5	4.5	3.0
McNair-----	546	32	41	2.8	4.0	3.0
Golden Acres-----	T.E. Bird-A-Boo	32	33	3.0	5.0	3.0
Funk's-----	BR-79	30	53	3.4	4.3	3.0
Funk's-----	BR-630	29	19	2.8	4.0	3.0

1/ Planted: May 16, 1973

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 18. Yield and Other Characteristics of Early Planted Grain Sorghum Hybrids Tested for Two Years at the Upper Coastal Plain Substation, 1972-73

Brand name	Hybrid	Yield ^{1/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{2/} In.	Head ^{3/} type Rating
DeKalb-----	BR-64	88	0	4.2	6.0	2.3
Funk's-----	G-516 BR	78	0	3.6	4.2	2.7
Funk's-----	G-522	77	0	3.0	3.1	1.9
Golden Acres-----	T.E. Y-101	76	1	2.9	2.9	1.8
-----	Ga. 615	73	31	3.9	4.1	2.9
DeKalb-----	E-59	71	0	3.2	3.6	1.8
-----	AKS 614	69	25	3.7	4.6	2.9
Dorman-----	BR-100	69	13	3.7	5.0	2.8
Pennington-----	Penngrain BR	69	34	3.7	3.3	2.8
McNair-----	654	67	3	3.7	4.3	2.0
Excel-----	Bird-Go-A	66	7	3.3	2.5	3.0
Funk's-----	BR-79	63	33	3.8	3.8	2.6
Warner-----	758	62	26	3.4	3.6	3.0
McNair-----	546	58	24	3.1	3.1	2.9
-----	AKS 663	56	0	3.1	3.8	3.0
Funk's-----	BR-630	55	11	3.0	3.3	2.9
Golden Acres-----	T.E. Bird-A-Boo	54	22	3.0	3.9	3.0

^{1/} Yields adjusted to 14% moisture and 56 lb. per bushel.

^{2/} Measured from terminal leaf to base of the head.

^{3/} 1=tight; 2=medium; 3=loose.

Table 19. Yield and Other Characteristics of Late Planted Grain Sorghum Hybrids Tested at the Upper Coastal Plain Substation, 1973^{1/}

Brand name	Hybrid	Yield ^{2/}	Lodging	Height	Head exertion ^{3/}	Head type ^{4/}	Mid-bloom
		Bu/A	Pct.	Ft.	In.	Rating	Date
DeKalb-----	BR-54	41	0	3.0	6.3	2.0	8-22
DeKalb-----	BR-64	36	0	3.2	6.8	2.0	8-25
Golden Acres----	T.E. Y-101	35	0	2.3	3.3	1.5	8-18
Pennington-----	Penngrain BR	31	0	2.3	4.0	2.8	8-18
Funk's-----	BR-79	30	0	2.9	6.3	2.5	8-18
Excel-----	808	30	0	2.3	3.0	1.5	8-22
McNair-----	650	28	0	2.3	4.3	1.5	8-18
-----	Ga. 615	27	0	2.8	5.0	2.3	8-18
McNair-----	895	26	0	2.6	4.8	1.3	8-18
Excel-----	Bird-Go-A	26	0	2.5	3.8	3.0	8-18
Funk's-----	G-522	26	0	2.0	3.0	1.5	8-22
-----	AKS 614	25	0	2.4	4.8	2.3	8-18
-----	RS 700	25	0	2.7	5.0	2.0	8-25
Dorman-----	BR-100	25	0	2.5	6.0	2.5	8-18
Funk's-----	G-577	25	0	2.3	4.3	1.0	8-22
Warner-----	758	23	0	2.5	4.5	3.0	8-18
McNair-----	654	23	0	2.6	5.8	1.8	8-18
Funk's-----	BR-630	22	0	2.3	4.8	2.8	8-18
Funk's-----	G-516 BR	22	0	2.3	3.5	2.0	8-30
-----	AKS 663	21	0	2.7	4.0	3.0	8-30
DeKalb-----	E-59	21	0	2.2	4.3	1.5	8-25
McNair-----	546	20	0	2.2	4.8	3.0	8-18
Golden Acres----	T.E. Bird-A-Boo	20	0	1.9	4.3	2.8	8-18
Excel-----	Bird Go 68	20	0	2.2	3.0	2.0	8-25
McNair-----	656	17	0	2.2	3.0	2.3	8-25

1/ Planted: June 20, 1973

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 20. Yield and Other Characteristics of Late Planted Grain Sorghum Hybrids Tested Two Years at the Upper Coastal Plain Substation, 1972-73.

Brand name	Hybrid	Yield ^{1/}	Lodging	Height	Head exertion ^{2/}	Head type ^{3/}	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
DeKalb-----	BR-64	49	0	3.7	6.5	2.1	0
Golden Acres-----	T.E. Y-101	45	0	2.6	2.8	1.8	0
Funk's-----	BR-79	44	31	3.4	5.8	2.5	0
Pennington-----	Penngrain BR	43	29	3.1	4.4	2.6	0
Dorman-----	BR-100	42	5	3.1	5.3	2.3	0
-----	AKS 614	42	4	3.0	4.9	2.1	0
Excel-----	Bird Go A	42	3	3.0	3.5	2.9	0
-----	Ga. 615	41	22	3.2	4.1	2.1	0
Funk's-----	BR-630	39	4	2.7	4.6	2.6	0
-----	AKS 663	39	0	2.9	2.9	3.0	0
Warner-----	758	39	11	2.9	3.6	2.9	0
McNair-----	546	39	1	2.7	3.9	2.8	0
Golden Acres-----	T.E. Bird-A-Boo	38	9	2.5	4.4	2.9	0
Funk's-----	G-522	38	0	2.6	3.3	1.6	0
DeKalb-----	E-59	36	0	2.7	4.0	1.5	3
McNair-----	654	35	6	3.1	4.9	1.8	8

^{1/} Yields adjusted to 14% moisture and 56 lb. per bushel; not adjusted for bird damage.

^{2/} Measured from terminal leaf to base of the head.

^{3/} 1=tight; 2=medium; 3=loose.

Table 21. Yield and Other Characteristics of Late Planted Grain Sorghum Hybrids Tested Three Years at the Upper Coastal Plain Substation, 1971-73.

Brand name	Hybrid	Yield ^{1/}	Lodging	Height	Head exsertion ^{2/}	Head type ^{3/}
		Bu/A	Pct.	Ft.	In.	Rating
Funk's-----	BR-630	37	3	2.7	3.4	2.6
McNair-----	546	36	2	2.7	3.3	2.7
Pennington-----	Penngrain BR	35	21	3.2	4.3	2.4
-----	AKS 614	35	8	3.0	4.3	2.1
Dorman-----	BR-100	34	5	3.1	4.2	2.2
Funk's-----	BR-79	34	22	3.2	4.8	2.3
Warner-----	758	33	10	2.9	3.1	2.8
-----	Ga. 615	32	16	3.1	3.4	2.1
Golden Acres-----	T.E. Bird-A-Boo	32	11	2.5	3.6	2.8
-----	AKS 663	29	0	2.9	2.9	2.7

^{1/} Yields adjusted to 14% moisture and 56 lb. per bushel.

^{2/} Measured from terminal leaf to base of the head.

^{3/} 1=tight; 2=medium; 3=loose.

Table 22. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Wiregrass Substation, 1973^{1/}

Brand name	Variety	Yield ^{2/}	Lodging	Height	Head exertion ^{3/}	Mid-bloom	Head type ^{4/}	Estimated bird damage
		Bu/A	Pct.	Ft.	In.	Date	Rating	Pct.
Excel-----	Bird Go-68	64	0	4.1	5.0	7-14	2.0	0
Funk's-----	G 516 BR	62	0	3.9	4.3	7-12	2.0	8
Funk's-----	G-522	58	0	3.6	5.5	7-10	2.0	6
-----	RS700	56	0	3.9	7.5	7-9	1.0	3
Excel-----	808	53	0	3.7	4.3	7-12	1.5	6
-----	AKS 663	53	0	4.0	5.8	7-14	2.8	0
-----	Ga. 615	52	7	4.0	5.0	7-12	2.3	7
McNair-----	656	50	0	3.6	4.8	7-16	2.0	0
Golden Acres---	T.E. Y-101	50	0	3.4	5.0	7-11	2.0	4
McNair-----	654	49	0	3.8	5.3	7-9	1.8	14
DeKalb-----	BR-54	48	30	4.2	6.5	7-9	2.5	0
-----	AKS 614	45	35	3.5	6.0	7-6	3.0	0
McNair-----	650	45	0	3.6	6.0	7-11	2.0	11
McNair-----	895	45	5	4.0	5.5	7-11	1.3	11
Funk's-----	BR-79	44	39	3.6	6.0	7-9	3.0	0
DeKalb-----	E-59	42	21	3.4	6.0	7-14	2.3	4
Golden Acres---	T.E. Bird-A-Boo	41	36	3.2	5.3	7-6	3.0	0
Dorman-----	BR-100	41	25	3.6	5.7	7-6	3.0	0
Excel-----	Bird-Go-A	38	5	3.3	4.0	7-8	3.0	0
Funk's-----	BR-630	38	14	3.1	4.3	7-6	3.0	0
Pennington-----	Penngrain BR	38	14	3.2	5.3	7-6	3.0	0
DeKalb-----	BR-64	37	0	3.9	5.3	7-14	1.7	5
Funk's-----	G-577	37	0	3.8	7.0	7-9	1.0	35
McNair-----	546	34	0	3.0	4.5	7-10	2.8	0
Warner-----	758	34	35	3.6	5.3	7-8	3.0	0

1/ Planted: May 11, 1973

2/ Yields adjusted to 14% moisture and 56 lb. per bushel; not adjusted for bird damage.

3/ Measured from terminal leaf to base of the head.

4/ 1=tight; 2=medium; 3=loose.

Table 23. Yield and Other Characteristics of Grain Sorghum Tested Two Years at the Wiregrass Substation, 1971 and 1973

Brand name	Hybrid	Yield ^{1/}	Lodging	Height	Head exsertion ^{2/}	Head type ^{3/}	Estimated' bird damage
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
Excel-----	Bird Go-68	78	0	4.2	7.0	2.5	0
-----	AKS 663	71	0	4.5	8.4	2.4	0
DeKalb-----	E-59	71	11	4.0	8.0	2.4	2
Golden Acres----	T.E. Y-101	70	0	3.8	5.3	2.5	2
-----	AKS 614	70	18	4.1	8.5	3.0	0
-----	Ga. 615	66	3	4.3	6.5	2.7	3
McNair-----	654	66	0	4.2	7.1	1.9	7
Golden Acres----	T.E. Bird-A-Boo	64	18	3.7	7.6	3.0	0
DeKalb-----	BR-64	63	0	4.8	8.7	2.3	3
Dorman-----	BR-100	62	13	4.0	8.3	3.0	0
Pennington-----	Penngrain BR	62	7	3.9	7.1	3.0	0
Funk's-----	BR-79	62	19	4.4	8.0	3.0	0
McNair-----	546	58	0	3.5	6.5	2.4	0
Warner-----	758	56	18	3.9	7.4	3.0	0
Funk's-----	BR-630	55	7	3.4	6.4	3.0	0

1/ Yields adjusted to 14% moisture and 56 lb. per bushel; not adjusted for bird damage.

2/ Measured from terminal leaf to base of the head.

3/ 1=tight; 2=medium; 3=loose.

Source of Seed for the 1973 Grain Sorghum Tests

Entry Designation	Source of Seed
AKS.	Department of Agronomy University of Arkansas Fayetteville, Arkansas
Coker.	Coker's Pedigreed Seed Company Hartsville, South Carolina
DeKalb	DeKalb Agricultural Assoc. Inc. Route 2 Lubbock, Texas
Dorman	Dorman & Company Lubbock, Texas
Excel.	Excel Seed Company P. O. Box 1629 Plainview, Texas
Funk's	Louisiana Seed Company, Inc. P. O. Box 1867 Plainview, Texas
Ga. and RS	Department of Agronomy Georgia Station Experiment, Georgia
Golden Acres	Taylor-Evans Seed Co. P. O. Box 480 Tulia, Texas
Growers.	Growers Seed Association P. O. Box 1656 Lubbock, Texas
McNair	McNair Seed Company P. O. Box 1132 Plainview, Texas
Northrup-King.	Northrup, King and Company P. O. Box 370 Richardson, Texas
Pennington	Pennington Grain & Seed, Inc. P. O. Box 290 Madison, Georgia

Pioneer Pioneer Corn Company, Inc.
221 North Main Street
Tipton, Indiana

Warner George Warner Seed Co., Inc.
P. O. Box 1448
Hereford, Texas