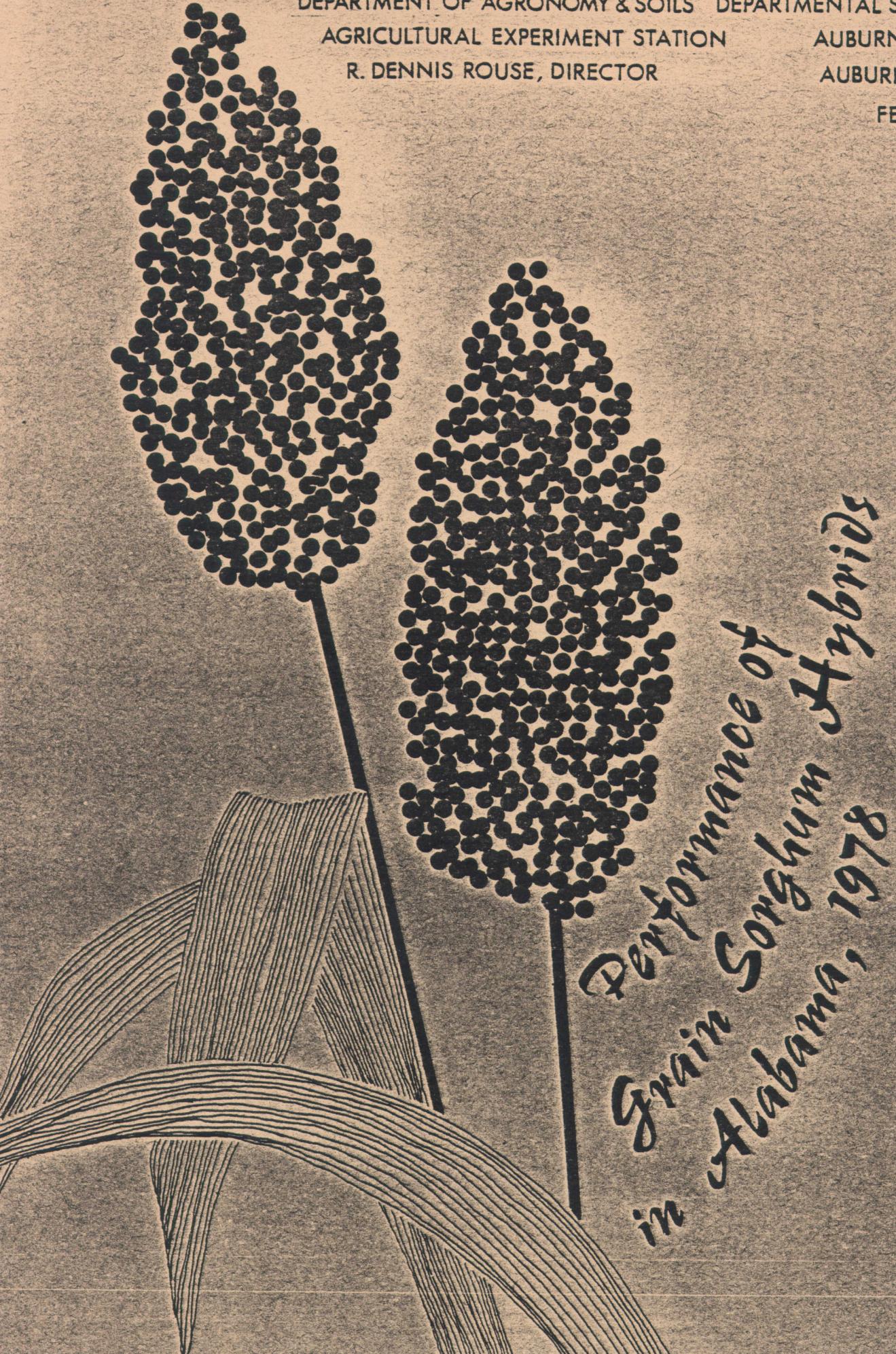


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Performance of
Grain Sorghum Hybrids
in Alabama, 1978

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Cliff Currier^{1/}

Introduction

Grain sorghum performance tests are conducted annually throughout Alabama by the Auburn University Agricultural Experiment Station. These tests give a relative comparison of hybrid performance under the conditions at a particular location. The performance of hybrids varies with location; therefore, this report should be carefully studied before a hybrid is selected.

In 1978, eight tests were planted at seven locations. Drought conditions reduced yields at most locations. Camden, Winfield, and Monroeville were affected most by these conditions. Bird damage estimates were high at Prattville, Camden, and Monroeville. Data from 1977 for Marion Junction and the late-planted test at Winfield were not reported. Two- and 3-year averages were obtained for these locations by averaging data from 1976 and 1978, and 1975, 1976, and 1978, respectively. The test at Fairhope has been conducted for 2 years. One and 2-year averages are given for this location.

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. 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 41 and 42.

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Data

Yield

Yields are given in bushels per acre adjusted to 14% moisture at 56 pounds per bushel. At Camden and the late-planted test at Winfield yields were calculated from 10 heads per plot. The heads were selected at random and protected from bird damage by covering with perforated paper bags soon after blooming. Plot yields were then 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 grain obtained from whole plots. Bird damage estimates are shown with plot yields for most locations. At Prattville, Camden, and Monroeville plots were harvested with a plot combine. At all other locations, plots were harvested and heads sent to Auburn where they were threshed on a stationary thresher prior to weighing.

Lodging

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

Plant Height

Plant height was measured from the soil surface 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.

Head Exsertion

Head exertion was measured from the collar of the terminal or flag leaf to the base of the head. Poor head exertion 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 the plot are in bloom (showing anthers). Date of mid-bloom is shown for entries at several locations in tables 4, 10, 13, 19, and 24.

Selecting a Hybrid

The performance of hybrids varies among years and locations. Small yield differences between hybrids may be the result of slight differences in soil fertility and other factors. Also, some variation may be due to the relatively small samples obtained from the 10-head sampling method described earlier. To aid in determining real differences between hybrids, a statistical procedure, analysis of variance, was performed on the data from each location. The L.S.D. (least significant difference) is given for comparing yields at each location in 1978. The difference in yields between two hybrids must exceed the L.S.D. value to be considered significantly different. The C.V., coefficient of variation, is a measure of variability within a test. A high C.V. value indicates a large amount of uncontrolled variability among the treatments. With these factors in mind, a review of the data from several years at the testing location most similar to yours is the most reliable method for selecting a hybrid.

ACKNOWLEDGMENT

These performance trials were conducted in cooperation with the following substation superintendents whose help is gratefully acknowledged: R. A. Moore, Upper Coastal Plain; F. T. Glaze, Prattville Field; L. A. Smith, Black Belt; J. A. Little, Lower Coastal Plain; W. E. Brown, Monroeville Field; J. G. Starling, Wiregrass; and E. L. Carden, Gulf Coast. Special thanks is expressed to W. H. Hearn and Mrs. Sally Bagwell for processing the data presented in this report. Appreciation is also expressed to Mrs. Mona Meadows for typing this report.

Table 1. Test Locations and Cultural Practices for 1978 Grain Sorghum Tests

	Upper Coastal Plain (Winfield) Regular planting	Prattville Field (Prattville) Late planting	Black Belt (Marion Junc.)	Lower Coastal Plain (Camden)	Monroeville Field (Monroeville)	Wiregrass (Headland)	Gulf Coast (Fairhope)
Planting date:	4-19	6-19	4-26	4-27	5-16	4-26	6-6
Plot size: ^{1/}							
Row number	2	2	2	2	2	2	2
Row width (In.)	40	40	42	36	36	36	38
Row length (Ft.)	20	20	30	20	20	20	20
Replications (No.)	4	4	4	4	4	4	4
Nitrogen Rate: (lb. N/A)	160	160	100	90	125	120	100
Herbicide:							
Kind	None	None	Atrazine	Atrazine	Milogard	Atrazine	Atrazine
Rate (lb. AI/A)	-	-	2.0	2.5	2.0	2.0	2.5
Method of Application	-	-	Broadcast	Broadcast	Broadcast	Broadcast	Broadcast
			Postemergence	Postemergence	Preemergence	Preemergence	Postemergence

^{1/} Seeding rate for all varieties at all locations was seven seeds per foot of row.

Table 2. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at the Upper Coastal Plain Substation, Winfield, 1976-78

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating
Growers-----	GSA 1180	61.9	0	3.3	6.7	1.9
Growers-----	GSA 1334 BR	61.8	5	3.4	6.2	2.8
Funk's-----	G-516BR	60.3	3	3.4	7.0	2.8
McNair-----	650	56.5	2	3.1	6.7	2.5
Funk's-----	G-522	55.7	3	3.2	6.3	2.3
Surgrow-----	ORO	54.5	0	3.1	5.5	2.3
Asgrow-----	Bug-Off	53.2	0	3.1	6.3	2.3
Pioneer-----	B815	52.8	19	4.0	7.1	2.2
Growers-----	ML 135	52.4	3	3.2	6.3	2.3
Pennington-----	Penngrain BR	51.7	30	3.3	5.9	2.9
Asgrow-----	Capitan	44.7	0	3.2	6.9	2.0
Surgro-----	ORO-T	44.7	25	4.0	6.7	2.3

^{1/} Measured from terminal leaf to base of the head.

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

Table 3. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Two Years at the Upper Coastal Plain Substation, Winfield, 1977-78

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating
Growers-----	GSA 1180	49.6	0	2.8	3.5	2.4
Funk's-----	G-662	47.5	9	2.8	4.1	2.5
Northrup, King-----	Savanna 5	46.8	13	3.6	6.4	2.4
Surgro-----	ORO	46.1	0	2.6	1.9	2.5
Funk's-----	G-516BR	45.9	4	2.8	3.1	2.6
Funk's-----	G-522	44.9	4	2.7	2.4	2.5
Growers-----	GSA 1334 BR	44.7	6	2.8	2.9	2.8
McNair-----	650	42.7	3	2.6	2.8	2.6
Taylor Evans-----	T-E Y101-R	42.7	3	2.8	2.4	2.5
Funk's-----	G-522DR	42.4	1	2.6	1.9	2.5
Asgrow-----	Bug-Off	42.1	0	2.5	2.6	2.5
DeKalb-----	BR-65+	42.0	0	3.3	6.1	2.5
Growers-----	ML 135	41.4	3	2.8	2.1	2.5
McCurdy-----	M51YG	41.3	3	2.6	2.4	2.6
Pioneer-----	B815	38.3	28	3.5	4.0	2.6
Pioneer-----	8225	38.3	27	3.1	3.3	2.4
DeKalb-----	BR-64	37.7	0	3.6	4.0	2.6
Pioneer-----	8272	37.5	0	2.5	1.9	2.3
McNair-----	535	36.8	0	2.6	3.3	2.4
Northrup, King-----	2779	36.2	4	2.7	2.8	2.6
DeKalb-----	E-59+	35.6	0	2.9	3.3	2.6
Funk's-----	G-399	33.6	0	2.6	3.4	2.3
Surgro-----	ORO-T	33.6	33	3.3	2.9	2.6
Pennington-----	Penngrain BR	33.1	44	2.8	1.8	2.9
Asgrow-----	Capitan	28.9	0	2.7	3.1	2.4

^{1/} Measured from terminal leaf to base of the head.

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

Table 4. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Upper Coastal Plain Substation, Winfield 1978¹

Brand name	Hybrid	Yield ² / Bu/A	Lodging Pct.	Height Ft.	Head exertion ³ / In.	Mid-bloom Date	Head type ⁴ / Rating
Warner-----	W-744DR	63.9	8	3.9	2.5	7/4	2.5
Growers-----	GSA 1180	57.7	0	3.4	3.0	7/1	1.8
Surgro-----	ORO	57.7	0	3.3	2.3	7/2	2.0
McNair-----	535	55.0	0	3.3	2.8	6/29	2.3
Funk's-----	G-516BR	54.6	8	3.6	3.8	7/2	2.3
Funk's-----	G-662	53.5	18	3.6	4.8	6/29	2.0
McNair-----	650	52.3	5	3.3	2.5	7/2	2.3
Taylor-Evans-----	T-E Y101-R	52.1	5	3.7	3.3	7/3	2.0
Northrup-King-----	Savanna 5	51.7	25	4.8	7.5	6/29	1.8
Ring Around-----	808gb	51.4	0	3.7	2.5	7/8	1.8
Funk's-----	G-522	50.5	8	3.4	2.5	7/3	2.0
Growers-----	ML 135	49.7	5	3.6	2.5	7/2	2.0
Funk's-----	G-399	49.5	0	3.3	3.3	7/1	1.8
Growers-----	GSA 1334 BR	49.5	13	3.6	2.8	7/3	2.5
Pennington-----	Penngrain YE	48.8	13	3.5	2.8	7/1	2.0
Paymaster-----	DR-1035	48.6	1	3.5	2.3	7/1	1.8
Taylor-Evans-----	T-E Dinero	48.3	3	3.3	2.3	7/4	2.0
Asgrow-----	Bug-Off	46.8	0	3.1	3.0	7/1	2.0
McCurdy-----	M51YG	46.3	5	3.3	2.5	7/3	2.3
Asgrow-----	Capitan	45.9	0	3.3	2.8	7/5	1.8
Paymaster-----	BRY-93	45.5	40	3.9	3.3	6/24	2.0
McCurdy's-----	Birds-Off 91AYG	45.2	0	3.7	2.5	7/4	2.0
Northrup-King-----	2779	44.4	8	3.5	3.8	7/1	2.3
DeKalb-----	BR-65+	43.9	0	4.1	5.0	7/4	2.0
DeKalb-----	BR-64	43.2	0	4.5	2.8	7/5	2.3
Funk's-----	G-522DR	43.0	3	3.3	2.0	7/5	2.0
Coker-----	7675	43.0	4	3.5	1.3	5/27	2.0
McCurdy-----	M53YG	43.0	10	3.5	3.8	7/2	2.0

Table 4. (Cont'd) Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Upper Coastal Plain Substation, Winfield 1978^{1/}

Brand name	Hybrid	Yield ^{2/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{3/} In.	Mid-bloom Date	Head type ^{4/} Rating
Pioneer-----	8272	40.1	0	3.1	1.3	7/3	1.5
Funk's-----	HW-2195	39.9	0	3.7	1.8	7/6	1.8
Coker-----	7672 BR	39.5	13	3.8	2.5	7/4	2.0
Northrup-King-----	2884	38.4	45	4.0	2.8	7/2	2.5
Pioneer-----	B815	38.1	56	4.3	3.3	7/4	2.3
DeKalb-----	E-59+	37.7	0	3.7	2.8	7/5	2.3
DeKalb-----	D-54	36.4	13	4.0	1.8	7/3	2.0
Pennington-----	Penngrain BR	35.2	89	3.5	1.8	6/29	2.8
Pioneer-----	8225	34.6	54	3.9	3.5	7/2	1.8
Surgro-----	ORO-T	30.4	65	4.3	3.3	7/2	2.3

Test average: 46.2

L.S.D. (.05): 9.9

C.V. (%): 18.2

^{1/}Planted April 19, 1978.

^{2/}Whole plot 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 5. Yield and Other Characteristics of Late-Planted Grain Sorghum Hybrids Tested Three Years at the Upper Coastal Plain Substation, Winfield, 1975, 1976, and 1978^{1/}

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating
Surgro-----	ORO-T	40.1	1	3.0	4.5	1.8
Funk's-----	G-516BR	38.2	0	2.5	2.7	2.8
Pennington-----	Penngrain BR	35.8	14	2.8	3.9	2.8
McNair-----	650	34.8	0	2.4	2.9	2.1
Funk's-----	G-522	34.5	0	2.4	2.7	2.0
McNair-----	656 BR	33.7	0	2.5	2.9	2.6
Pioneer-----	B815	33.5	0	3.3	4.6	1.7
Surgro-----	ORO	31.2	0	2.3	2.6	1.9

^{1/}Data were not reported in 1977 due to high bird damage.

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

^{3/}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, 1976 and 1978^{1/}

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating
Growers-----	GSA 1334 BR	51.0	0	2.6	2.6	2.8
Surgro-----	ORO-T	49.5	1	2.8	2.8	2.0
Growers-----	ML 135	43.6	1	2.4	1.8	2.3
Funk's-----	G-522	42.2	0	2.4	1.9	2.1
Pennington-----	Penngrain BR	42.0	15	2.6	2.3	2.8
Funk's-----	G-516BR	41.5	0	2.5	2.0	2.8
McNair-----	650	40.2	0	2.3	1.4	2.3
Growers-----	GSA 1180	39.7	0	2.4	2.3	1.7
Pioneer-----	B815	38.7	0	3.3	3.4	1.8
Funk's-----	G-622GBR	38.0	0	2.4	2.3	2.1
Asgrow-----	Capitan	36.6	0	2.5	2.5	1.6
Surgro-----	ORO	35.9	0	2.2	1.9	2.1
McNair-----	656 BR	34.9	0	2.5	2.0	2.7
Pennington-----	Penngrain YE	33.9	0	2.2	1.7	2.1
Funk's-----	G-722DR	32.1	0	2.7	2.5	1.1
Asgrow-----	Bug-Off	29.3	0	2.3	2.1	2.1
McNair-----	650 D	22.7	2	2.4	2.4	2.0

^{1/}Data were not reported in 1977 due to high 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 Late-Planted Grain Sorghum Hybrids Tested at the Upper Coastal Plain Substation, Winfield, 1978¹

Brand name	Hybrid	Yield ² / Bu/A	Lodging Pct.	Height Ft.	Head exertion ³ / In.	Head type ⁴ / Rating
Growers-----	GSA 1334 BR	50.2	0	3.1	2.8	2.8
Paymaster-----	DR-1085	48.5	0	3.0	3.0	1.8
Surgro-----	ORO-T	45.9	1	3.4	4.0	2.0
Funk's-----	G-522DR	45.2	0	3.1	1.8	1.8
Growers-----	ML 135	42.9	3	3.0	1.8	2.3
DeKalb-----	E-59+	41.5	0	2.7	2.8	2.0
Coker-----	7638	41.0	0	2.4	2.3	2.3
Coker-----	7652 BR	40.8	5	2.8	1.3	3.0
Northrup-King-----	Savanna 5	40.6	0	3.6	4.0	1.0
Growers-----	GSA 1180	39.9	0	2.8	2.3	2.0
Funk's-----	G-516BR	37.1	0	2.9	2.3	2.5
Pioneer-----	B815	36.9	0	3.5	3.5	2.0
McNair-----	650	36.7	0	2.8	1.3	2.5
Funk's-----	G-622GBR	36.2	0	2.9	3.0	2.3
Paymaster-----	R-1090	36.1	5	3.1	2.5	3.0
Warner-----	W-744DR	35.4	1	3.1	2.0	1.8
Funk's-----	G-522	35.2	0	2.9	1.8	2.3
DeKalb-----	BR-45+	34.8	0	2.9	3.8	2.0
Pennington-----	Penngrain YE	34.2	0	2.7	1.8	2.3
McNair-----	535	33.5	0	2.5	1.3	1.8
Asgrow-----	Double Tx	33.5	0	3.0	2.0	1.5
Asgrow-----	Capitan	32.9	0	2.9	2.3	2.0
Pennington-----	Penngrain BR	31.8	30	3.0	2.8	2.8
McNair-----	656 BR	29.1	0	3.0	2.3	3.0
Funk's-----	G-722DR	29.0	0	3.0	1.8	1.3
Surgro-----	ORO	26.8	0	2.7	2.5	2.3
DeKalb-----	BR-65+	26.6	0	3.0	4.8	1.5
Ring Around-----	807	26.5	0	3.0	1.8	1.8

Table 7 (Cont'd) Yield and Other Characteristics of Late-Planted Grain Sorghum Hybrids Tested at the Upper Coastal Plain Substation, Winfield, 1978^{1/}

Brand name	Hybrid	Yield ^{2/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{3/} In.	Head type ^{4/} Rating
Coker-----	7681 BR	25.6	0.0	3.0	1.3	2.0
Pioneer-----	8311	25.3	0.0	3.1	3.3	2.0
McNair-----	650 D	25.0	0.0	2.9	3.3	2.0
Northrup-King-----	2650	24.6	1.3	3.4	1.3	1.0
Taylor-Evans-----	T-E Y101-D	24.5	0.0	3.0	3.0	1.8
Asgrow-----	Bug-Off	24.1	0.0	2.9	2.3	2.0
Funk's-----	G-499GBR	21.1	0.0	2.6	1.0	2.8
Ring Around-----	BG68gb	18.5	0.0	2.5	1.0	2.3

Test average: 33.8
 L.S.D. (.05): 10.9
 C.V. (%): 27.6

^{1/}Planted June 19, 1978.

^{2/}Yields determined 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 8. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at Prattville Field,
1976-78

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head ₂ / type Rating	Estimate of bird damage Pct.
Growers-----	GSA 1334 BR	57.9	2	3.5	3.6	3.0	2
Pioneer-----	B815	57.6	18	4.0	4.4	2.0	4
Surgro-----	ORO	56.3	1	3.4	3.2	2.2	30
Funk's-----	G-522	54.8	0	3.4	3.2	2.1	37
Growers-----	ML 135	54.2	1	3.4	2.6	2.6	29
Funk's-----	G-516BR	52.3	2	3.4	2.3	2.8	1
McNair-----	650	52.1	0	3.3	4.0	2.6	24
Asgrow-----	Capitan	50.4	0	3.4	3.1	1.9	18
Pennington-----	Penngrain BR	49.5	6	3.8	3.4	2.7	10
Surgro-----	ORO-T	45.8	27	3.9	3.2	1.8	41
Asgrow-----	Bug Off	45.6	0	3.3	2.8	2.0	29

^{1/}Measured from the 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,
1977-78

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating	Estimate of bird damage Pct.
Growers-----	GSA 1334 BR	49.2	0	3.6	3.9	3.0	3
Northrup, King-----	Savanna 5	48.0	6	4.7	7.5	1.0	3
Funk's-----	G-516BR	46.7	1	3.5	2.4	2.8	1
DeKalb-----	BR-64	45.0	3	4.3	6.4	2.5	8
DeKalb-----	BR-65+	44.6	0	3.9	4.9	1.6	1
Pioneer-----	B815	44.6	2	4.1	5.0	2.0	5
Funk's-----	G-522	43.8	0	3.3	3.4	2.1	21
Surgro-----	ORO	43.6	1	3.4	3.1	2.3	17
Growers-----	ML 135	42.5	1	3.4	2.6	2.8	12
McNair-----	535	41.2	1	3.3	3.3	1.6	21
Taylor-Evans-----	T-E Y101-R	40.3	1	3.3	4.6	2.1	13
McNair-----	650	40.0	1	3.3	4.6	2.8	13
Funk's-----	G-522DR	38.0	0	3.5	4.5	1.8	11
Pioneer-----	8272	37.6	0	3.4	3.6	1.9	18
Pioneer-----	8225	37.4	5	3.9	4.9	1.0	19
Pennington-----	Penngrain BR	37.1	8	3.9	3.5	2.5	15
Asgrow-----	Bug-Off	36.4	1	3.2	3.0	1.8	10
Funk's-----	G-662	35.9	1	3.4	5.8	2.5	18
Asgrow-----	Capitan	35.2	0	3.4	3.1	1.9	19
McCurdy-----	M51YG	35.2	5	3.3	3.5	2.3	16
DeKalb-----	E-59+	33.9	0	3.5	3.8	1.8	22
Northrup, King-----	2779	33.9	1	3.2	5.0	1.8	36
Surgro-----	ORO-T	33.6	35	3.8	3.4	1.8	26
Funk's-----	G-399	25.1	0	3.3	4.4	1.3	43

^{1/}Measured from the 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, 1978^{1/}

Brand name	Hybrid	Yield ^{2/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{3/} In.	Mid- bloom Date	Head type ^{4/} Rating	Estimated bird damage Pct.
Growers-----	GSA 1334 BR	71.2	0	3.5	2.5	7/1	3.0	6
Paymaster-----	BRY-93	71.3	2	3.6	2.0	6/29	2.3	4
Funk's-----	G-516BR	70.8	0	3.5	1.5	7/1	2.8	3
DeKalb-----	BR-65+	70.5	0	4.0	4.5	7/1	1.3	3
Coker-----	7681 BR	68.7	0	3.7	1.8	7/2	2.0	8
Coker-----	7638	65.8	0	3.5	3.3	6/28	1.5	7
Warner-----	W-744DR	65.5	0	3.5	1.3	7/1	2.8	4
Pioneer-----	B815	64.9	4	4.2	2.8	7/1	2.0	10
Coker-----	7672 BR	63.5	0	3.3	1.5	7/1	3.0	11
Northrup-King-----	Savanna 5	62.4	3	4.5	5.0	6/29	1.0	7
Growers-----	ML 135	62.3	0	3.5	2.8	6/29	2.5	24
Taylor-Evans-----	T-E Dinero	61.1	0	3.4	2.0	7/1	1.3	18
Coker-----	7652 BR	59.1	1	3.5	1.5	6/29	2.0	8
McNair-----	650	58.8	0	3.3	2.3	6/28	2.8	26
McNair-----	535	58.4	1	3.3	2.3	7/5	1.5	19
McCurdy-----	Birds-Off 91AYG	57.8	0	3.4	2.0	7/2	2.5	3
Ring Around-----	807	57.6	0	3.4	1.8	7/1	1.5	20
Pennington-----	Penngrain YE	57.6	0	3.4	2.3	6/28	2.3	21
Pennington-----	Penngrain BR	56.3	14	4.3	2.3	6/28	2.3	18
Funk's-----	G-522DR	56.3	0	3.4	1.0	7/1	1.5	19
DeKalb-----	D-54	56.2	7	4.0	1.0	7/1	1.0	20
Funk's-----	G-522	56.2	1	3.5	2.5	6/29	2.0	34
Surgro-----	ORO	55.5	2	3.5	2.5	6/28	1.8	28
Funk's-----	G-662	55.5	1	3.7	5.5	6/29	2.3	32
Ring Around-----	BG68gb	55.4	0	3.4	3.5	7/3	2.8	4
Taylor-Evans-----	T-E Y101-R	55.1	0	3.4	2.5	7/1	1.5	27
Asgrow-----	Bug-Off	54.9	0	3.4	1.8	6/29	1.5	16
Funk's-----	G-499GBR	53.0	0	3.1	1.5	6/28	3.0	34

Table 10. (Cont'd) Yield and Other Characteristics of Grain Sorghum Hybrids Tested at Prattville Field, 1978^{1/}

Brand name	Hybrid	Yield ^{2/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{3/} In.	Mid- bloom Date	Head type ^{4/}	Estimated bird damage Pct.
McNair-----	650 D	51.9	0	3.8	3.8	6/29	1.0	21
McCurdy-----	M51YG	50.8	0	3.5	3.5	6/29	1.5	30
Northrup, King-----	2779	50.7	0	3.4	3.3	6/29	2.0	27
DeKalb-----	BR-64	50.1	6	4.4	4.8	7/1	2.3	15
Asgrow-----	Capitan	50.0	0	3.4	2.8	7/1	1.5	37
DeKalb-----	E-59+	49.3	0	3.5	1.8	7/1	1.3	44
Paymaster-----	DR-1035	48.9	1	3.6	1.8	6/29	2.0	40
Pioneer-----	8272	48.8	0	3.3	2.0	7/1	2.0	33
Surgro-----	ORO-T	43.0	68	3.8	2.0	7/1	1.3	44
Pioneer-----	8225	38.6	8	3.8	1.8	7/1	1.0	38
Funk's-----	G-399	38.6	0	3.4	5.3	6/27	1.0	60

Test average: 57.0
 L.S.D. (.05): 6.7
 C.V. (%): 10.1

^{1/}Planted April 26, 1978.

^{2/}Whole plot 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 11. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at the Black Belt Substation, Marion Junction, 1975, 1976, and 1978^{1/}

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{2/} In.	Head type ^{3/} Rating
McNair-----	656 BR	66.4	0	3.9	5.9	2.8
Surgro-----	ORO-T	66.3	2	4.6	6.1	2.0
Funk's-----	G-522	65.4	0	3.7	6.1	2.3
Funk's-----	G-516BR	64.7	0	3.9	5.6	2.9
Pioneer-----	B815	64.2	3	4.6	5.7	1.8
Surgro-----	ORO	63.4	0	3.8	6.0	2.4
McNair-----	650	63.2	1	3.8	6.3	2.2
Pennington-----	Penngrain BR	54.7	11	4.1	5.3	2.4

^{1/}Data were not reported in 1977 due to drought and insect damage.

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

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

Table 12. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Two Years at the Black Belt Substation, Marion Junction, 1976 and 1978^{1/}

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{2/} In.	Head type ^{3/} Rating
Asgrow-----	Bug-Off	77.3	0	3.5	4.4	2.3
Funk's-----	G-522	72.0	0	3.6	4.6	2.4
Surgro-----	ORO-T	71.3	3	4.3	4.4	2.0
Pennington-----	Penngain-YE	71.3	0	3.6	4.8	2.4
Surgro-----	ORO	70.9	0	3.7	4.7	2.6
McNair-----	650	70.7	1	3.7	4.5	2.1
Growers-----	ML 135	70.2	0	3.6	3.3	2.5
Growers-----	GSA 1334 BR	70.0	1	3.9	4.6	2.9
Funk's-----	G-516BR	69.8	0	3.8	4.0	3.0
McNair-----	656 BR	68.8	0	3.7	4.4	3.0
Funk's-----	G-622GBR	64.1	0	3.6	4.8	2.0
Pioneer-----	B815	63.9	4	4.4	4.0	1.8
Asgrow-----	Capitan	63.6	0	3.6	3.6	2.0
Growers-----	GSA 1180	60.0	0	3.6	5.0	2.1
McNair-----	650D	53.6	1	3.7	4.6	2.0
Pennington-----	Penngain BR	50.4	17	3.7	3.8	2.6
Funk's-----	G-722DR	50.0	0	4.1	3.1	1.1

^{1/}Data were not reported in 1977 due to drought and insect 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 at the Black Belt Substation,
Marion Junction, 1978^{1/}

Brand name	Hybrid	Yield ^{2/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{3/} In.	Mid- bloom Date	Head type ^{4/} Rating	Estimated bird damage Pct.
Asgrow-----	Bug-Off	72.2	0	3.8	5.1	7/4	2.3	1
Paymaster-----	R-1090	68.2	0	4.0	5.5	7/4	3.0	0
Funk's-----	G-522DR	67.5	1	4.0	4.4	7/5	1.8	4
Pennington-----	Penngrain YE	66.4	0	3.9	6.6	7/5	2.3	0
Taylor-Evans-----	T-E Y101-R	64.2	0	3.7	5.6	7/5	2.0	1
Surgro-----	ORO	63.5	0	3.8	5.4	7/4	2.5	4
Taylor-Evans-----	T-E Y101-D	63.4	1	4.1	5.8	7/5	2.3	3
Funk's-----	G-522	63.1	0	3.7	5.8	7/5	2.3	4
Coker-----	7652 BR	63.0	0	3.9	4.5	7/4	2.0	1
Coker-----	7681 BR	62.5	3	4.3	2.9	7/5	2.3	0
McNair-----	656 BR	62.4	0	3.9	4.5	7/7	3.0	1
Funk's-----	G-662	62.3	0	4.3	10.5	7/4	2.3	3
Growers-----	GSA 1334 BR	61.4	1	4.0	4.5	7/6	3.0	3
Pioneer-----	8311	61.3	0	3.8	4.0	7/6	2.0	1
Northrup, King-----	2779	59.5	0	3.8	6.8	7/5	2.3	3
Coker-----	7675	58.9	1	4.0	5.4	7/6	2.0	0
Coker-----	7672 BR	58.8	0	4.1	5.0	7/6	3.0	0
DeKalb-----	BR-45+	58.8	0	3.8	7.6	7/4	2.0	0
Funk's-----	G-622GBR	58.5	0	3.8	5.6	7/5	2.0	5
Asgrow-----	Capitan	58.4	0	3.9	4.8	7/10	2.0	4
McNair-----	650	57.4	3	3.8	4.5	7/5	2.0	0
Warner-----	W-744DR	57.3	1	4.3	4.1	7/6	2.0	0
Growers-----	GSA 1180	56.6	0	3.7	5.3	7/5	2.0	0
Paymaster-----	DR-1085	56.2	0	3.8	4.0	7/7	2.0	3
Growers-----	ML 135	56.1	0	3.7	3.8	7/6	2.3	3
Funk's-----	HW-2195	55.3	4	4.1	3.8	7/9	1.5	1
Funk's-----	G-516 BR	52.7	0	4.0	4.0	7/6	3.0	0
Ring Around-----	808gb	52.4	0	4.0	4.6	7/6	2.0	0
Pioneer-----	B815	52.3	9	4.5	4.8	7/7	2.0	0

Table 13. (Cont'd) Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Black Belt Substation,
Marion Junction, 1978^{1/}

Brand name	Hybrid	Yield ^{2/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{3/} In.	Mid- bloom Date	Head type ^{4/}	Estimated bird damag e Pct.
Surgro-----	ORO-T	50.6	6	4.3	4.3	7/6	2.0	3
Funk's-----	G-722DR	50.2	3	4.1	2.8	7/13	1.3	0
DeKalb-----	BR-65+	48.8	1	4.4	6.4	7/9	2.0	0
Northrup, King-----	2650	48.1	11	4.2	3.6	7/10	1.0	0
McCurdy-----	M53YG	48.0	5	4.0	5.0	7/5	2.0	1
Northrup, King-----	Savanna 5	47.3	11	4.9	8.9	7/6	1.0	0
McNair-----	650D	45.6	3	3.8	5.0	7/5	2.0	3
Ring Around-----	BG68gb	45.4	0	3.8	3.4	7/8	2.5	4
Asgrow-----	Double TX	39.8	18	3.8	4.8	7/8	1.8	0
Pennington-----	Penngrain BR	33.6	34	3.8	3.5	7/5	2.3	5
DeKalb-----	BR-64	30.2	14	4.8	8.6	7/8	2.0	4

Test average: 56.0

L.S.D. (.05): 12.1

C.V. (%): 18.5

^{1/}Planted April 27, 1978.

^{2/}Whole plot 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 14. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at the Lower Coastal Plain Substation, Camden, 1976-78

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating
Pioneer-----	B815	65.1	0	3.6	3.4	1.8
Surgro-----	ORO-T	64.5	0	3.1	3.0	2.3
Funk's-----	G-516BR	64.2	0	2.9	2.9	2.8
McNair-----	650	58.5	0	2.8	2.9	2.3
Pennington-----	Penngrain BR	57.6	2	3.1	3.6	2.7
Growers-----	GSA 1334 BR	55.1	0	3.1	3.5	2.8
Growers-----	ML 135	54.4	0	2.6	2.7	2.3
Funk's-----	G-522	52.6	0	2.8	2.8	2.5
Asgrow-----	Capitan	50.6	0	2.9	3.6	1.7
Asgrow-----	Bug-Off	49.6	0	2.7	2.5	2.5
Surgro-----	ORO	46.6	0	2.7	3.4	1.9
Growers-----	GSA 1180	44.1	0	2.9	4.2	1.9

^{1/} Measured from terminal leaf to base of the head.

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

Table 15. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Two Years at the Lower Coastal Plain Substation, Camden, 1977-78

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating
Northrup, King-----	Savanna 5	84.4	0	3.6	4.0	1.0
Funk's-----	G-516BR	72.7	0	2.9	2.3	3.0
Surgro-----	ORO-T	71.2	0	3.0	2.1	2.6
Pioneer-----	8225	70.7	0	3.2	2.9	1.4
DeKalb-----	BR-64	70.1	0	3.6	3.5	2.1
Pioneer-----	8311	68.5	0	2.9	1.4	2.1
Pioneer-----	8815	67.6	0	3.5	2.9	1.9
McNair-----	650	67.1	0	2.8	2.8	2.3
Growers-----	GSA 1334 BR	61.3	0	3.0	2.3	2.9
Pennington-----	Penngrain BR	60.9	3	2.9	2.4	2.9
Funk's-----	G-522	59.7	0	2.7	2.1	2.6
Growers-----	ML 135	59.4	0	2.6	2.6	2.3
Taylor-Evans-----	T-E Y101-R	57.6	0	2.6	2.9	2.6
Asgrow-----	Capitan	57.2	0	2.8	2.5	1.6
Asgrow-----	Bug-Off	54.9	0	2.7	1.9	2.8
DeKalb-----	E-59+	53.5	0	2.8	2.8	2.4
Surgro-----	ORO	52.8	0	2.6	1.8	1.9
McNair-----	535	50.4	0	2.6	2.5	2.4
Growers-----	GSA 1180	49.7	0	2.8	3.3	2.0
Northrup, King-----	2779	42.3	0	2.7	3.0	2.6
Funk's-----	G-399	40.3	0	2.6	3.1	2.5

^{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 at the Lower Coastal Plain Substation,
Camden, 1978^{1/}

Brand name	Hybrid	Yield ^{2/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{3/} In.	Head type ^{4/} Rating
Pioneer-----	8225	103.9	0	3.1	3.8	1.5
McCurdy-----	M53YG	103.6	0	2.6	2.0	2.5
Northrup, King-----	Savanna 5	102.4	0	3.3	5.8	1.0
Warner-----	W-744DR	98.2	0	3.2	3.3	2.0
Surgro-----	ORO-T	95.8	0	2.8	3.3	2.8
Funk's-----	G-516BR	95.2	0	2.8	3.0	3.0
Pioneer-----	8311	94.1	0	2.5	1.9	2.0
Pioneer-----	B815	92.2	0	3.3	4.4	2.3
Paymaster-----	R-1090	91.8	0	2.6	2.5	3.0
McNair-----	650D	90.2	0	2.8	3.3	1.5
Funk's-----	G-522	87.0	0	2.5	3.0	2.5
McCurdy-----	Bird-Off 91AYG	86.0	0	2.7	2.8	1.8
McNair-----	650	83.5	0	2.6	3.5	1.8
DeKalb-----	BR-45+	83.2	0	2.5	2.8	1.8
DeKalb-----	BR-64	83.0	0	3.7	4.3	2.3
Taylor-Evans-----	T-E Y101-D	82.0	0	2.7	2.8	2.5
Funk's-----	G-522DR	81.2	0	2.6	3.6	1.0
Pennington-----	Penngrain YE	80.7	0	2.5	1.6	2.3
DeKalb-----	E-59+	79.5	0	2.7	3.3	2.3
Growers-----	ML 135	78.8	0	2.6	3.3	2.0
Coker-----	7652 BR	78.4	0	2.7	1.6	2.5
Northrup, King-----	2650	77.9	0	2.9	4.0	1.3

Table 16. (Cont'd) Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Lower Coastal Plain Substation, Camden, 1978^{1/}

Brand name	Hybrid	Yield ^{2/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{3/} In.	Head type ^{4/} Rating
Asgrow-----	Bug-Off	76.1	0	2.6	2.8	2.8
Pennington-----	Penngrain BR	75.6	5	2.8	3.0	2.8
McNair-----	535	74.8	0	2.6	3.0	2.3
Asgrow-----	Double Tx	73.5	0	2.7	4.5	2.3
Coker-----	7638	73.4	0	2.4	1.5	3.0
Funk's-----	HW-2195	72.9	0	2.8	2.0	1.3
Asgrow-----	Capitan	72.7	0	2.6	3.3	2.0
Growers-----	GSA 1334 BR	72.5	0	2.8	2.3	2.8
Taylor-Evans-----	T-E Y101-R	71.9	0	2.5	2.5	2.8
Growers-----	GSA 1180	71.7	0	2.6	3.5	1.8
McCurdy-----	M51YG	68.6	0	2.5	2.5	1.8
Northrup, King-----	2779	67.7	0	2.6	3.8	2.5
Funk's-----	G-399	64.9	0	2.5	3.3	2.3
Surgro-----	ORO	64.8	0	2.5	2.4	1.5
Paymaster-----	DR-1085	61.6	0	2.8	3.5	1.8
Ring Around-----	BG68gb	58.5	0	2.7	1.8	2.8

Test Average: 80.8
 L.S.D. (.05); 19.8
 C.V. (%) 20.9

^{1/}Planted May 16, 1978.

^{2/}Yields determined 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 17. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at Monroeville Field,
1976-78

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating
Pennington-----	Penngrain BR	69.9	7	3.6	12.4	2.8
Pioneer-----	B815	68.9	2	4.0	12.0	1.6
Surgro-----	ORO-T	64.3	13	4.0	11.6	2.2
Growers-----	GSA 1334 BR	63.3	0	3.6	11.5	3.0
Growers-----	ML 135	61.3	2	3.3	12.5	2.4
Asgrow-----	Capitan	61.1	0	3.5	12.5	1.8
McNair-----	650	59.9	1	3.4	12.2	2.4
Surgro-----	ORO	59.8	3	3.4	12.0	2.3
Funk's-----	G-516BR	59.1	0	3.6	12.6	2.9
Funk's-----	G-522	58.5	1	3.3	11.2	2.3
Asgrow-----	Bug-Off	57.5	0	3.3	12.9	2.1
Growers-----	GSA 1180	48.0	2	3.5	12.9	1.4

^{1/}Measured from terminal leaf to base of the head.

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

Table 18. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Two Years at Monroeville Field,
1977-78

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/}	Rating
Pioneer-----	B815	70.7	1	4.1	12.3		1.3
Pennington-----	Penngrain BR	70.1	9	3.7	11.9		2.8
Northrup, King-----	Savanna 5	69.3	5	4.7	15.9		1.0
Asgrow-----	Capitan	67.6	0	3.6	12.4		1.8
Surgro-----	ORO-T	65.8	5	4.1	12.1		2.0
DeKalb-----	BR-64	63.7	1	4.3	14.9		2.5
Taylor-Evans-----	T-E Y101-R	62.6	0	3.5	11.9		1.9
Growers-----	ML 135	62.6	0	3.4	12.5		2.1
McNair-----	535	62.5	1	3.3	12.6		1.8
Growers-----	GSA 1334 BR	60.5	0	3.7	12.0		3.0
Surgro-----	ORO	58.9	1	3.4	11.8		2.0
McNair-----	650	58.5	0	3.4	12.0		2.1
Funk's-----	G-522	57.9	0	3.4	11.6		2.0
Northrup, King-----	2779	57.4	0	3.5	12.5		2.0
Asgrow-----	Bug-Off	56.4	0	3.3	12.8		1.9
Funk's-----	G-516BR	55.2	0	3.7	12.9		2.9
DeKalb-----	E-59+	53.7	0	3.5	13.1		1.9
Pioneer-----	8311	51.1	0	3.3	12.4		1.3
Funk's-----	G-399	49.9	0	3.2	11.8		1.8
Pioneer-----	8225	47.3	0	3.9	11.5		1.3
Growers-----	GSA 1180	47.3	0	3.5	12.8		1.1

^{1/}Measured from terminal leaf to base of the head.

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

Table 19. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at Monroeville Field, 1978^{1/}

Brand name	Hybrid	Yield ^{2/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{3/} In.	Mid- Bloom Date	Head type ^{4/} Rating	Estimated bird damage Pct.
Northrup, King-----	Savanna 5	61.1	0	3.7	12.0	7/4	1.0	3
Pennington-----	Penngrain Br	56.9	19	3.1	8.8	7/1	2.8	15
Pioneer-----	B815	54.8	1	3.4	9.0	7/8	1.3	5
McNair-----	656 Br	49.7	0	2.9	8.8	7/9	3.0	3
Growers-----	GSA 1334 BR	49.5	0	3.1	9.3	7/11	3.0	1
Coker-----	7652 BR	49.3	0	2.7	9.5	7/5	1.0	11
DeKalb-----	BR-45+	47.3	0	2.8	10.3	7/5	1.3	4
Pioneer-----	8311	46.9	0	2.9	9.3	7/5	1.3	19
Growers-----	GSA 1180	46.9	0	2.8	10.0	7/5	1.3	13
Funk's-----	G-516BR	46.5	0	3.0	9.8	7/9	3.0	3
McNair-----	535	46.4	0	2.8	10.3	6/29	1.8	11
Coker-----	7638	45.2	0	2.7	10.3	7/6	1.5	15
Funk's-----	G-399	44.6	0	2.8	9.8	6/29	2.0	25
Warner-----	W-744DR	43.9	0	3.1	8.3	7/10	2.0	5
Paymaster-----	R-1090	43.7	1	2.9	10.8	7/4	2.8	16
DeKalb-----	BR-64	42.5	1	3.5	12.0	7/6	2.3	8
Taylor-Evans-----	T-E Y101-R	41.7	0	2.9	8.8	7/6	1.8	20
Pennington-----	Penngrain YE	41.5	0	2.8	8.3	7/3	2.0	23
Northrup, King-----	2650	41.1	1	3.2	9.3	7/8	1.0	16
Northrup, King-----	2779	40.2	0	2.9	9.5	7/4	2.0	29
Surgro-----	ORO-T	40.1	0	3.2	9.0	7/4	2.0	30
McCurdy-----	M53YG	39.8	1	2.8	8.5	7/6	1.3	15
Asgrow-----	Double TX	39.4	2	2.8	10.0	7/6	1.0	19
Pioneer-----	8225	39.1	0	3.1	9.0	7/7	1.5	15
Taylor-Evans-----	T-E Y101-D	38.8	0	2.9	9.8	7/6	1.0	23
McCurdy-----	Bird's-Off 91AYG	38.8	0	3.1	9.0	7/11	3.0	10
Asgrow-----	Capitan	38.3	0	2.9	9.3	7/8	1.5	23

Table 19. (Cont'd) Yield and Other Characteristics of Grain Sorghum Hybrids Tested at Monroeville Field, 1978^{1/}

Brand name	Hybrid	Yield ^{2/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{3/} In.	Mid- Bloom Date	Head type ^{4/} Rating	Estimated bird damage Pct.
McNair-----	650	38.2	0	2.7	9.0	7/5	2.0	28
Funk's-----	G-522DR	36.5	0	3.0	8.0	7/8	1.3	15
Asgrow-----	Bug-Off	35.5	0	2.5	9.3	7/7	1.8	25
Funk's-----	G-522	35.3	0	2.8	9.3	7/5	2.0	21
Surgro-----	ORO	32.6	0	2.7	8.3	7/5	2.0	26
Funk's-----	HW-2195	32.5	0	2.8	7.3	7/11	1.0	23
Growers-----	ML 135	32.0	0	2.7	8.5	7/6	2.3	25
Paymaster-----	DR-1085	31.6	1	2.8	10.0	7/5	1.5	34
DeKalb-----	E-59+	29.8	0	2.9	10.5	7/8	1.8	26
Ring Around-----	BG68gb	29.4	0	2.9	8.3	7/12	2.3	19

Test average: 41.8
 L.S.D(.05): 8.2
 C.V. (%): 16.7

^{1/}Planted April 26, 1978.

^{2/}Whole plot 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 Grain Sorghum Hybrids Tested Three Years at the Wiregrass Substation, Headland, 1976-78

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ¹ / In.	Head type ² / Rating
Growers-----	GSA 1334 BR	65.1	11	3.4	4.2	3.0
Pioneer-----	B815	60.9	10	3.8	6.2	1.9
Asgrow-----	Capitan	58.7	4	3.3	5.3	2.0
Growers-----	ML 135	57.5	11	3.0	3.9	2.3
Funk's-----	G-522	57.1	4	3.1	4.3	2.5
Asgrow-----	Bug-Off	55.7	6	3.3	4.8	2.6
Funk's-----	G-516BR	54.1	12	3.3	4.4	3.0
Pennington-----	Penngrain BR	53.5	21	3.3	4.8	3.0
McNair-----	650	51.9	8	3.1	3.8	2.4
Surgro-----	ORO-T	50.2	10	3.7	5.5	2.2
Surgro-----	ORO	50.0	6	3.1	4.1	2.5
Funk's-----	G-722DR	46.3	18	3.4	4.7	1.5
Growers-----	GSA 1180	33.4	12	3.2	5.8	1.9

¹/ Measured from terminal leaf to base of the head.

²/ 1 = tight, 2 = medium; 3 = loose.

Table 21. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Two Years at the Wiregrass Sub-station, Headland, 1977-78

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating
Northrup, King-----	Savanna 5	68.8	2	3.9	5.8	1.0
Growers-----	GSA 1334 BR	68.6	1	3.3	3.5	3.0
Pioneer-----	B815	63.1	3	3.7	3.8	1.9
Asgrow-----	Capitan	60.5	4	3.2	3.8	1.8
Pioneer-----	8225	58.0	2	3.6	3.8	1.0
Pioneer-----	8272	56.9	2	3.1	3.3	1.9
Growers-----	ML 135	56.6	2	2.9	3.0	2.2
Funk's-----	G-722DR	56.1	2	3.5	3.8	1.0
McCurdy-----	M51YG	56.0	4	3.0	3.3	2.4
Funk's-----	G-516BR	55.6	1	3.2	3.8	3.0
DeKalb-----	BR-64	54.8	0	3.9	5.4	2.6
Taylor-Evans-----	T-E Y101-R	54.5	1	3.0	3.5	2.4
Asgrow-----	Bug Off	54.1	1	3.2	3.3	2.5
Pennington-----	Penngrain BR	53.8	2	3.2	4.3	3.0
Funk's-----	G-522	51.2	1	3.0	3.5	2.4
DeKalb-----	E-59+	50.0	0	3.2	4.5	2.3
McNair-----	650	49.3	0	3.0	3.1	2.3
Surgro-----	ORO	48.2	0	3.1	3.0	2.4
DeKalb-----	BR-65+	46.7	3	3.6	5.8	1.0
Funk's-----	G-662	46.7	0	3.2	4.5	2.5
Northrup, King-----	2779	43.7	1	3.2	4.1	2.4
McNair-----	535	42.6	1	2.8	3.1	2.0
Surgro-----	ORO-T	41.1	3	3.5	3.5	1.8
Growers-----	GSA 1180	33.4	2	3.1	4.3	1.9
Funk's-----	G-399	30.0	2	2.8	3.3	1.9

^{1/} Measured from the terminal leaf to base of the head.

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

Table 22. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Wiregrass Substation,
Headland, 1978¹

Brand name	Hybrid	Yield ² / Bu/A	Lodging Pct.	Height Ft.	Head exsertion ³ / In.	Stand Pct.	Head type ⁴ / Rating	Estimated bird damage Pct.
Northrup, King-----	Savanna 5	112.7	0	4.7	7.0	100	1.0	0
Funk's-----	G-722DR	98.4	0	4.2	4.5	92	1.0	1
Pioneer-----	8225	95.5	0	4.3	4.8	100	1.0	16
Growers-----	GSA 1334 BR	95.0	0	3.9	4.8	98	3.0	0
Coker-----	7681 BR	93.0	0	3.9	4.0	100	2.0	0
Pioneer-----	B815	90.9	0	4.2	5.3	93	1.5	0
Coker-----	7652 BR	90.9	0	3.8	4.8	100	3.0	0
Asgrow-----	Capitan	89.6	0	3.5	4.0	100	1.5	1
McCurdy-----	Birds-Off 91AYG	87.3	0	3.8	5.3	95	2.5	1
Pioneer-----	8272	84.7	0	3.7	4.5	93	1.7	2
Pennington-----	Penngrain BR	81.4	0	3.8	6.0	94	3.0	1
Growers-----	ML 135	80.1	0	3.3	4.5	100	2.0	1
McCurdy-----	M51YG	79.5	0	3.3	4.8	98	2.2	2
Asgrow-----	Bug-Off	79.1	0	3.7	4.3	100	2.2	2
Taylor-Evans-----	T-E Y101-R	74.2	0	3.5	5.8	98	2.0	8
Taylor-Evans-----	T-E Dinero	73.6	0	3.8	5.0	100	1.5	5
Paymaster-----	BRY-93	72.5	0	3.6	4.5	91	2.0	0
Funk's-----	G-516BR	72.5	0	3.7	4.3	100	3.0	0
Pennington-----	Penngrain YE	72.5	0	3.5	4.0	100	2.0	3
Ring Around-----	807	70.4	1	3.6	4.8	100	2.2	27
Coker-----	7675	66.3	0	3.8	4.5	94	1.2	6
McNair-----	535	65.6	0	3.2	4.8	92	1.7	1
DeKalb-----	D-54	65.4	0	4.2	4.8	100	1.5	5
Funk's-----	G-662	64.1	0	3.6	6.3	85	2.5	18
Funk's-----	G-522	63.9	0	3.4	5.3	100	2.2	5
Surgro-----	ORO	63.9	0	3.6	4.3	96	2.2	15
Funk's-----	G-499GBR	60.1	0	3.0	4.3	100	3.0	2
DeKalb-----	BR-65+	56.9	1	4.1	7.5	74	1.0	1
Northrup, King-----	2884	56.8	0	4.0	5.3	87	1.2	10

Table 22. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Wiregrass Substation,
 (Cont'd) Headland, 1978^{1/}

Brand name	Hybrid	Yield ^{2/} Bu/A	Lodging	Height	Head exsertion ^{3/} In.	Stand	Head type ^{4/} Rating	Estimated bird damage Pct.
			Pct.	Ft.	Pct.	Pct.	Pct.	
DeKalb-----	E-59+	54.9	0	3.5	5.8	91	2.2	11
DeKalb-----	BR-64	54.7	0	4.3	6.5	93	2.2	0
McNair-----	650 D	53.8	0	3.7	6.5	100	2.0	35
Funk's-----	G-399	52.2	0	3.2	4.5	98	1.7	5
Funk's-----	G-522DR	52.1	0	3.5	5.3	91	1.5	6
McNair-----	650	51.9	0	3.3	4.5	100	2.0	9
Growers-----	GSA 1180	50.3	0	3.6	6.5	95	1.7	15
Northrup, King-----	2779	50.1	0	3.6	6.5	63	2.7	7
Surgro-----	ORO-T	48.8	0	4.1	4.8	99	2.0	13
Paymaster-----	DR-1035	42.3	0	3.9	4.3	87	2.2	31
Ring Around-----	808gb	39.8	0	3.7	5.3	80	2.0	17

Test average: 70.2
 L.S.D. (.05): 27.7
 C.V. (%): 33.6

^{1/}Planted June 6, 1978.

^{2/}Whole plot 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 23. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Gulf Coast Substation,
Fairhope, 1977-78

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ¹ / In.	Head type ² / Rating
Northrup, King-----	Savanna 5	68.6	0	4.4	7.0	1.0
Funk's-----	G-516BR	54.6	0	3.9	5.3	2.9
Pioneer-----	B815	54.0	0	4.4	5.4	1.5
Pennington-----	Penngrain BR	52.6	0	4.3	5.5	3.0
Surgro-----	ORO	52.5	0	3.7	5.4	2.6
Pioneer-----	8225	52.2	0	4.2	6.5	1.1
Growers-----	ML 135	52.1	0	3.8	5.5	2.5
McNair-----	650	50.0	0	3.7	4.8	2.6
DeKalb-----	BR-65+	49.9	0	4.2	6.5	1.5
DeKalb-----	BR-64	49.8	0	4.8	8.8	2.9
Funk's-----	G-522	49.8	0	3.6	4.5	2.5
Surgro-----	ORO-T	49.3	0	4.4	7.0	2.5
Asgrow-----	Capitan	48.1	0	4.1	7.3	2.1
Funk's-----	G-662	47.2	0	3.9	7.6	2.6
Growers-----	GSA 1334 BR	47.2	0	4.2	6.9	2.9
Funk's-----	G-722DR	44.5	0	4.2	7.0	1.1
McCurdy-----	M51YG	44.1	0	3.7	4.9	2.5
Growers-----	GSA 1180	43.3	0	4.0	6.8	1.8
Northrup, King-----	2779	43.1	0	3.6	4.8	2.5
Asgrow-----	Bug-Off	43.0	0	3.9	6.1	2.4
Pioneer-----	8272	42.1	0	3.9	6.3	2.4
Taylor-Evans-----	T-E Y101-R	41.8	0	3.6	7.3	2.5
McNair-----	535	41.3	0	3.6	5.0	2.6
DeKalb-----	E-59+	40.8	0	4.2	6.1	2.8
Funk's-----	G-399	36.5	0	3.6	4.9	2.1

¹/Measured from terminal leaf to base of the head.

²/1 = tight; 2 = medium; 3 = loose.

Table 24. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Gulf Coast Substation,
Fairhope, 1978^{1/}

Brand name	Hybrid	Yield ^{2/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{3/} In.	Mid- bloom Date	Head type ^{4/} Rating	Estimated bird damage Pct.
Northrup, King-----	Savanna 5	94.6	0	5.0	7.5	7/1	1.0	0
Warner-----	W-744DR	88.4	0	4.4	4.5	7/1	3.0	3
Coker-----	7672 BR	85.3	0	4.5	7.3	7/1	3.0	5
Paymaster-----	BRY-93	84.5	0	4.8	6.0	6/29	2.5	0
Pennington-----	Penngrain BR	84.2	0	5.0	5.5	6/28	3.0	3
Funk's-----	G-516BR	84.1	0	4.2	5.0	7/1	2.8	5
Growers-----	ML 135	79.9	0	4.4	7.5	6/29	2.0	8
Coker-----	7681 BR	79.9	0	4.5	6.3	7/2	2.8	3
Pennington-----	Penngrain YE	79.5	0	4.0	4.0	6/29	2.5	7
Taylor-Evans-----	T-E Y101-D	79.3	0	4.5	4.3	7/1	1.3	0
McNair-----	650	77.7	0	4.4	5.3	7/1	2.3	3
Funk's-----	G-522DR	77.5	0	4.6	6.0	6/29	2.0	10
Taylor-Evans-----	T-E Dinero	77.2	0	4.4	5.8	7/1	1.0	9
Surgro-----	ORO	76.5	0	4.3	5.3	6/29	2.3	8
Pioneer-----	8225	76.3	0	4.9	7.3	7/1	1.0	8
Pioneer-----	B815	75.8	0	5.0	6.5	7/1	1.0	0
Growers-----	GSA 1334 BR	74.3	0	4.8	8.5	7/2	2.8	5
Funk's-----	G-522	72.8	0	4.3	4.8	7/1	2.0	3
DeKalb-----	BR-65+	72.2	0	4.6	6.0	7/1	1.0	3
Northrup, King-----	2884	72.1	0	5.0	9.0	7/1	1.0	23
Funk's-----	G-662	71.9	0	4.4	8.5	6/27	2.3	10
DeKalb-----	BR-64	69.7	0	5.4	9.0	7/1	2.8	3
McNair-----	656 BR	68.5	0	5.0	7.8	7/2	3.0	0
Taylor-Evans-----	T-E Y101-R	67.9	0	4.4	9.8	7/1	2.0	0
Asgrow-----	Bug-Off	67.6	0	4.6	8.3	7/1	1.8	4
Northrup, King-----	2779	67.6	0	4.1	4.5	6/28	2.0	10
Ring Around-----	808gb	67.5	0	4.6	7.8	7/1	2.3	18
Asgrow-----	Capitan	66.9	0	5.0	8.8	7/1	1.3	23
McCurdy-----	M51YG	66.8	0	4.2	4.8	6/29	2.0	5
DeKalb-----	D-54	65.7	0	4.7	7.0	7/1	1.8	5

Table 24. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Gulf Coast Substation,
 (Cont'd) Fairhope, 1978^{1/}

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height .Ft.	Head exsertion ^{3/} In.	Mid- bloom Date	Head type ^{4/} Rating	Estimated bird damage Pct.
Growers-----	GSA 1180	64.4	0	4.6	9.0	6/29	1.0	13
McCurdy-----	Birds-Off 91AYG	60.2	0	4.5	7.8	7/2	3.0	5
Surgro-----	ORO-T	59.2	0	5.1	8.0	7/1	2.3	23
McNair-----	535	58.5	0	4.1	6.3	6/26	2.3	3
Funk's-----	G-722DR	57.9	0	4.7	7.0	7/1	1.0	8
Funk's-----	G-399	57.7	0	4.3	6.8	6/29	1.5	0
Pioneer-----	8272	57.1	0	4.6	7.0	7/2	2.0	18
DeKalb-----	E-59+	51.7	0	4.9	7.8	7/1	2.5	5
Funk's-----	G-499GBR	48.8	0	3.9	3.3	6/29	3.0	8
Ring Around-----	807	46.0	0	4.1	7.5	7/2	2.0	50

Test Average: 70.8
 L.S.D. (.05): 10.0
 C.V. (%): 12.1

^{1/}Planted April 26, 1978.

^{2/}Whole plot 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.

Sources of Seed for the 1978 Grain Sorghum Tests

Entry designation	Source of seed
Asgrow Bug-Off Capitan Double TX	Asgrow Seed Co. P. O. Box 1059- Clive Branch Des Moines, Iowa
Coker. 7638 *7652 BR *7672 BR 7675 *7681 BR	Coker's Pedigreed Seed Company Route 1, Box 150 Lubbock, Texas
DeKalb *BR45+ *BR-64 *BR-65+ D-54 E-59+	DeKalb Agresearch, Inc. Route 2 Lubbock, Texas
Funk's G-399 G-499GBR *G-516BR G-522 G-522DR G-622GBR G-662 G-722DR HW-2195	Louisiana Seed Co., Inc. P. O. Box 1867 Plainview, Texas
Growers. GSA 1180 *GSA 1334 BR ML 135	Growers Seed Association P. O. Box 1656 Lubbock, Texas
McCurdy. *Birds-Off 91AYG M51YG M53YG	W. O. McCurdy & Sons Fremont, Iowa
McNair 535 650 650 D *656. BR	McNair Seed Company P. O. Box 706 Laurinburg, North Carolina

Paymaster.	ACCO Seed 515 River Avenue North Belmond, Iowa
*BRY-93	
DR-1035	
DR-1085	
R-1090	
Northrup, King	Northrup, King and Co. P. O. Box 151 Columbus, Mississippi
2650	
2779	
2884	
*Savanna 5	
Penngrain.	Pennington Seed, Inc. P. O. Box 290 Madison, Georgia
*BR	
YE	
Pioneer.	Pioneer Hi-Bred International, Inc. 1000 W. Jefferson St. Tipton, Indiana
8225	
8272	
8311	
*B815	
Ring Around.	Ring Around P. O. Box 1629 Plainview, Texas
807	
808gb	
*BG68gb	
Surgro	R. C. Young Seed and Grain Company 624 27th Street Lubbock, Texas
ORO	
ORO-T	
Taylor-Evans	Taylor-Evans Seed Co. P. O. Box 68 Tulia, Texas
T-E Dinero	
T-E Y101-D	
T-E Y101-R	
Warner	George Warner Seed Co., I P. O. Box 1448 Hereford, Texas

*Bird resistant hybrids

