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Performance
of
Graminorrhum
Hybrids



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TABLE OF CONTENTS

	<u>Page</u>
Introduction.....	5
Experimental Procedures.....	5
Data.....	6
Acknowledgement.....	8
Upper Coastal Plain Substation, Winfield (Tables 1-3).....	9-12
Sand Mountain Substation, Crossville (Table 4).....	13
Prattville Experiment Field, Prattville (Tables 5-7).....	14-17
Black Belt Substation, Marion Junction (Tables 8-10).....	18-21
Lower Coastal Plain Substation, Camden (Tables 11-13).....	22-25
Monroeville Experiment Field, Monroeville (Tables 14-16).....	26-29
Wiregrass Substation, Headland (Tables 17-19).....	30-33
Gulf Coast Substation, Fairhope (Tables 20-22).....	34-37
Sources of Seed.....	38-39
List of Acceptable Hybrids for 1980.....	40

Performance of Grain Sorghum Hybrids in Alabama, 1979

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 1979 tests were planted at eight locations. Grain yields were high at Crossville, Headland, and Fairhope; intermediate at Winfield, and low at Marion Junction and Monroeville. Bagged head estimates of yield from Prattville and Camden were high. Factors mainly responsible for low yields were inadequate rainfall during the season and insect and disease damage. Bird damage estimates were high at Prattville and Camden. Due to extensive damage from drought and insects, data from Marion Junction were not reported in 1977. Three-year averages were obtained for this location by averaging data from 1976, 1978, and 1979.

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. Plot sizes and cultural practices for each test are listed by location in tables 3, 4, 7, 10, 13, 16, 19, and 22.

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Sources of seed used in the tests are listed on pages 38 and 39 .

Data

Yield

Grain yields are given in bushels per acre adjusted to 14% moisture at 56 pounds per bushel. At Prattville and Camden 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 harvesting the whole plot. At Crossville, Camden, Monroeville, and Fairhope plots were harvested with a plot combine. At all other locations, plots were hand harvested and heads sent to Auburn where they were threshed on a stationary thresher prior to weighing.

Bird damage

Visual estimates of bird damage were made at all locations. Where plot yields are reported, estimates of bird damage can be used to indicate the amount of grain loss caused by birds and to compare the bird damage of the various hybrids. However, when bagged head estimates of yield are shown, estimates of bird damage are not estimates of yield reduction. In this case, estimates of bird damage only give relative comparisons among hybrids for bird damage. When estimates of bird damage are not shown, no significant bird damage occurred at the location during the year(s) involved.

In selecting a hybrid, one should consider bird populations present

in relation to the size of area to be planted. Bird damage can be a major problem on small field plantings. If bird damage is anticipated, hybrids with low estimates of bird damage should be used.

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. 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 at the terminal leaf.

Head Type

Open or loose heads may be important in the Southeastern United States. 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 1 for tight heads and 3 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 heads in the plot are in bloom (showing anthers). Date of mid-bloom for entries at all locations is shown in tables 3, 4, 7, 10, 13, 16, 19, and 22.

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 1979. The difference in yields between two hybrids much exceed the L.S.D. value to be considered significantly different. The C.V., coefficient of variation, is a measure of uncontrolled variability within a test.

The list of acceptable hybrids is based on yield and lodging data. Three-year averages are reviewed for each location. Then the acceptable hybrid list is tabulated by combining location lists for each region. Since all acceptable hybrids are not equal in performance, a review of the data from several years at the testing location most similar to your situation is the most reliable method for selecting a hybrid best suited for your needs.

ACKNOWLEDGMENT

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Table 1. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at the Upper Coastal Plain Substation, Winfield, 1977-79

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating
Growers-----	GSA-1180	50.1	0	2.7	3.4	2.0
Surgro-----	ORO	49.8	0	2.5	1.9	2.5
Northrup, King-----	Savanna 5	49.5	8	3.4	5.4	1.9
Funk's-----	G-522	48.7	2	2.5	2.1	2.4
Funk's-----	G-522DR	46.9	0	2.7	1.9	2.2
McCurdy-----	M51YG	46.9	1	2.5	2.3	2.4
Taylor-Evans-----	T-E Y101-R	46.0	1	2.7	2.2	2.3
DeKalb-----	BR-65+	44.8	0	3.1	5.5	2.0
Growers-----	ML-135	44.3	1	2.6	1.9	2.4
Growers-----	GSA 1334 BR	42.3	4	2.7	2.9	2.8
Funk's-----	G-516BR	41.3	2	2.7	2.9	2.8
Pioneer-----	B815	41.0	18	3.4	4.1	2.3

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

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

Table 2. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Two Years at the Upper Coastal Plain Substation, Winfield, 1978-79

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating
Surgro-----	ORO	57.5	0	2.8	2.1	2.3
Pennington-----	Penngrain YE	56.8	6	2.9	2.3	2.1
Growers-----	GSA-1180	54.5	0	3.0	3.1	1.5
Funk's-----	G-522	53.4	3	2.8	2.0	2.1
Northrup, King-----	Savanna 5	53.3	13	3.9	5.5	1.4
Ring Around-----	808 GB	53.0	0	3.1	2.0	1.9
Taylor-Evans-----	T-E Y101-R	52.4	2	3.1	2.5	2.0
Coker-----	7675	52.3	1	3.0	1.5	1.5
McCurdy-----	M51YG	52.1	2	2.9	2.3	2.1
Warner-----	W-744DR	51.2	3	3.3	2.3	2.5
Taylor-Evans-----	T-E Dinero	50.9	1	2.8	2.0	1.8
Growers-----	ML-135	49.9	2	2.9	2.0	2.1
Funk's-----	G-522DR	49.5	1	3.0	2.0	1.8
McCurdy-----	Birds-Off 91AYG	48.6	0	3.2	2.3	2.5
DeKalb-----	BR-65+	47.2	0	3.4	4.6	1.5
McCurdy-----	M53YG	44.8	5	3.1	3.0	1.9
Growers-----	GSA 1334 BR	43.5	6	3.0	2.9	2.8
Funk's-----	G-516BR	43.4	3	3.0	3.1	2.6
Pioneer-----	B815	42.2	28	3.7	3.8	2.0
Paymaster-----	DR 1035	41.3	0	3.0	2.5	2.0
Paymaster-----	BRY-93	39.9	21	3.2	3.0	2.4

^{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 at the Upper Coastal Plain Substation, Winfield, 1979

Brand name	Hybrid	Yield ^{1/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{2/} In.	Mid-bloom Date	Head type ^{3/} Rating
Pennington-----	Penngrain YE	64.7	0	2.3	1.8	7/4	2.3
Paymaster-----	DR 1085	62.6	0	2.6	2.8	7/2	1.3
Coker-----	7675	61.6	0	2.5	1.8	7/6	1.0
Surgro-----	ORO XTRA	58.7	0	2.5	1.3	7/4	1.3
McCurdy-----	M51YG	57.9	0	2.4	2.0	7/2	2.0
Surgro-----	ORO	57.2	0	2.3	2.0	7/2	2.5
Taylor-Evans-----	T-E Y101-D	57.0	0	2.7	2.0	7/3	2.0
Ring Around-----	787	56.6	0	2.8	2.3	7/6	1.5
Funk's-----	G-522	56.3	0	2.3	1.5	7/2	2.3
Funk's-----	G-522DR	56.0	0	2.8	2.0	7/7	1.5
Northrup, King-----	Savanna 5	54.9	1	3.0	3.5	7/2	1.0
Ring Around-----	808GB	54.7	0	2.6	1.5	7/4	2.0
Taylor-Evans-----	T-E Dinero	53.6	0	2.3	1.8	7/7	1.5
Taylor-Evans-----	T-E Y101-R	52.7	0	2.5	1.8	7/5	2.0
McCurdy-----	Birds-Off 91AYG	52.0	0	2.6	2.0	7/5	3.0
Ring Around-----	733 GB	51.6	0	2.3	1.5	7/4	2.0
Growers-----	GSA-1180	51.2	0	2.5	3.3	7/2	1.3
Growers-----	GSA-1290	50.6	0	2.4	2.3	7/2	1.5
McNair-----	6193	50.5	0	2.6	2.8	7/2	1.0
DeKalb-----	BR-65+	50.4	0	2.8	4.3	7/3	1.0
Growers-----	ML-135	50.1	0	2.3	1.5	7/2	2.3
Funk's-----	G-611	49.7	0	2.7	2.5	7/6	2.3
Paymaster-----	R-1090	48.7	0	2.5	2.3	7/4	2.8
Pioneer-----	8311	48.3	1	2.7	2.5	7/2	1.8
McCurdy-----	M53YG	46.6	0	2.6	2.3	7/2	1.8

Table 3. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Upper Coastal Plain Substation, Winfield, 1979 (continued)

Brand name	Hybrid	Yield ^{1/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{2/} In.	Mid-bloom Date	Head type ^{3/} Rating
Coker-----	7681BR	46.5	0	2.6	2.0	7/7	2.5
Pioneer-----	B815	46.3	0	3.1	4.3	7/10	1.8
Ring Around-----	811A GB	45.7	0	2.8	2.8	7/6	2.0
Northrup, King-----	2778	45.3	0	2.5	3.0	7/2	2.0
Funk's-----	1762	43.3	1	2.3	1.8	7/2	3.0
DeKalb-----	D-42a	43.3	0	2.3	1.5	7/2	2.0
Ring Around-----	807	39.4	0	2.5	2.8	7/8	2.3
Warner-----	W-744DR	38.5	0	2.7	2.0	7/10	2.5
Growers-----	GSA 1334 BR	37.5	0	2.4	3.0	7/3	3.0
McNair-----	656 BR	35.8	0	2.5	1.8	7/4	3.0
Paymaster-----	BRY-93	34.2	2	2.6	2.8	7/4	2.8
Paymaster-----	DR 1035	34.0	0	2.4	2.8	7/2	2.3
Funk's-----	G-516BR	32.1	0	2.4	2.5	7/6	3.0
Test average:		49.4					
L.S.D. (.05):		13.3					
C.V. (%):		23					

^{1/}Whole plot 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.

Planted: April 20, 1979.

Plot Size: 2 rows, 20 feet long, 40 inch row spacing.

Nitrogen Rate: 150 lb. (N/A).

Herbicide: Aatrex .

Table 4. Yield and Other Characteristics of Bird Resistant Grain Sorghum Hybrids Tested at the Sand Mountain Substation, Crossville, 1979

Brand name	Hybrid	Yield ^{1/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{2/} In.	Mid-bloom Date	Head type ^{3/} Rating
Paymaster-----	BRY-93	104.6	2	3.9	5.6	7/22	2.0
Growers-----	GSA 1334 BR	101.5	1	3.8	6.5	7/25	2.5
Funk's-----	G-516 BR	98.6	0	3.9	6.3	7/25	2.8
McNair-----	656 BR	97.8	1	3.8	5.5	7/23	2.5
Warner-----	W-744DR	91.9	0	3.8	5.3	7/23	2.3
Northrup, King-----	Savanna 5	91.6	1	4.3	5.6	7/18	1.0
Coker-----	7681BR	88.3	0	3.8	5.4	7/25	2.0
DeKalb-----	BR-65+	86.9	0	4.2	6.9	7/24	1.0
Pioneer-----	B815	85.4	0	4.2	5.0	7/23	2.0
McCurdy-----	Birds-Off 91AYG	84.4	1	3.9	5.8	7/23	2.3
Test average:		93.1					
L.S.D. (.05):		9.5					
C.V. (%):		9					

^{1/}Whole plot yields adjusted to 14% moisture and 56 lb. per bushel. (No bird damage.)

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

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

Planted: April 19, 1979.

Plot size: 2 rows, 20 feet long, 36 inch row spacing.

Nitrogen Rate: 110 lb (N/A), split application.

Herbicide: Atrazine.

Table 5. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at Prattville Experiment Field, Prattville, 1977-79

Brand name	Hybrid	Yield	Lodging	Height	Head exsertion ^{1/}	Head type ^{2/}	Estimate of bird damage
		Bu/A	Pct.	Ft.	In.	Rating	Pct.
Pioneer-----	B815	62.4	1	4.2	5.1	1.9	4
Growers-----	GSA 1334 BR	60.8	0	3.6	3.8	3.0	1
DeKalb-----	BR-64	60.1	1	4.5	6.1	2.7	5
Funk's-----	G-516BR	58.6	0	3.6	2.6	2.8	0
Northrup, King-----	Savanna 5	55.3	4	4.8	7.0	1.0	2
DeKalb-----	BR-65+	54.2	0	4.1	5.4	1.4	2
Funk's-----	G-522DR	52.8	0	3.7	4.6	1.7	14
Surgro-----	ORO	52.7	0	3.5	3.3	2.3	17
Funk's-----	G-522	52.6	0	3.4	3.5	2.3	30
Growers-----	ML-135	50.1	0	3.5	3.0	2.7	19
Taylor-Evans-----	T-E Y101-R	48.9	0	3.4	4.5	2.1	13
Surgro-----	ORO T	42.7	23	4.0	3.5	1.7	45

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

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

Table 6. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Two Years at the Prattville Experiment Field, Prattville, 1978-79

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating	Estimate of bird damage ^{4/} Pct.
Coker-----	7681BR	83.2	0	3.9	2.9	2.4	5
Pioneer-----	B815	81.4	1	4.4	4.0	1.9	7
Paymaster-----	BRY-93	79.4	1	3.8	3.5	2.5	2
Growers-----	GSA 1334 BR	78.0	0	3.7	3.0	3.0	2
Warner-----	W-744DR	76.9	0	3.8	2.9	2.9	3
Funk's-----	G-516BR	76.5	0	3.6	2.3	2.9	1
DeKalb-----	BR-65+	71.9	0	4.1	5.5	1.1	3
Taylor-Evans-----	T-E Dinero	70.9	0	3.6	3.0	1.5	35
DeKalb-----	BR-64	70.1	2	4.6	5.1	2.6	8
Funk's-----	G-522DR	69.4	0	3.8	2.9	1.5	20
Pennington-----	Penngrain YE	66.4	0	3.5	3.1	2.3	17
Northrup, King-----	Savanna 5	66.1	1	4.7	5.5	1.0	3
DeKalb-----	DK-54	65.6	3	4.0	1.9	1.3	39
Growers-----	ML-135	63.8	0	3.5	3.3	2.5	29
Surgro-----	ORO	63.2	0	3.6	3.0	2.0	23
Funk's-----	G-522	63.1	0	3.6	3.1	2.3	42
Taylor-Evans-----	T-E Y101-R	60.7	0	3.5	3.4	1.8	20
McCurdy-----	Birds-Off 91AYG	60.5	0	3.5	2.8	2.8	2
Ring Around-----	807	59.7	0	3.6	2.9	1.6	36
Surgro-----	ORO T	52.0	33	4.1	2.9	1.4	64

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

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

Table 7. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Prattville Experiment Field, Prattville, 1979

Brand name	Hybrid	Yield ^{1/}	Lodging	Height	Head exertion ^{2/}	Mid-bloom	Head type ^{3/}	Estimate of bird damage ^{4/}
		Bu/A	Pct.	Ft.	In.	Date	Rating	Pct.
Pioneer-----	B815	98.0	0	4.5	5.3	6/29	1.8	5
Coker-----	7681BR	97.8	0	4.1	4.0	6/29	2.8	3
Coker-----	7675	93.8	0	4.0	5.0	6/29	1.3	23
DeKalb-----	BR-64	90.1	0	4.8	5.5	6/29	3.0	2
Warner-----	W-744DR	88.3	0	4.0	4.5	6/29	3.0	2
Paymaster-----	BRY-93	87.5	0	4.1	5.0	6/27	2.8	1
Growers-----	GSA 1334 BR	83.9	0	3.8	3.5	6/29	3.0	0
Funk's-----	G-522DR	82.5	0	4.2	4.8	6/29	1.5	21
Funk's-----	G-516BR	82.2	0	3.8	3.0	6/27	3.0	0
Taylor-Evans-----	T-E Dinero	80.7	0	3.9	4.0	6/29	1.8	52
Surgro-----	ORO-T XTRA	78.9	0	4.6	4.8	6/29	1.3	77
Pennington-----	Penngrain YE	75.2	0	3.7	4.0	6/27	2.3	13
DeKalb-----	DK-54	75.1	0	4.1	2.8	6/29	1.5	58
Surgro-----	ORO XTRA	74.1	0	4.0	3.8	6/29	1.3	43
DeKalb-----	BR-65+	73.3	0	4.3	6.5	6/28	1.0	3
McNair-----	656 BR	73.2	0	3.7	3.3	6/29	3.0	0
Northrup, King-----	2884	71.3	0	4.3	5.3	6/28	1.0	88
Surgro-----	ORO	71.0	0	3.7	3.5	6/27	2.3	18
Funk's-----	G-522	70.1	0	3.6	3.8	6/27	2.5	51
Northrup, King-----	Savanna 5	69.7	0	5.0	6.0	6/27	1.0	1
Pioneer-----	8311	69.5	0	4.0	4.0	6/28	2.0	25
Ring Around-----	733 GB	68.1	0	3.6	4.5	6/27	1.8	60
Northrup, King-----	2778	68.0	0	4.0	5.5	6/28	1.8	55
Funk's-----	G-611	67.8	0	4.1	5.0	7/1	1.8	62

Table 7. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Prattville Experiment Field, Prattville, 1979 (continued)

Brand name	Hybrid	Yield ^{1/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{2/} In.	Mid- bloom Date	Head type ^{3/} Rating	Estimate of bird damage ^{4/} Pct.
Growers-----	GSA 1444W	66.7	0	3.9	4.3	7/1	1.0	92
Paymaster-----	DR 1085	66.3	0	3.6	4.0	6/27	1.3	42
Taylor-Evans-----	T-E Y101-R	66.3	0	3.5	4.3	6/27	2.0	15
DeKalb-----	BR-45+	65.9	0	3.7	6.0	6/28	2.0	2
Growers-----	ML-135	65.3	0	3.5	3.8	6/28	2.5	36
McCurdy-----	Birds-Off 91AYG	63.1	0	3.6	3.5	7/1	3.0	1
DeKalb-----	D-42a	62.8	0	3.4	3.8	6/27	2.0	37
McNair-----	6193	61.8	0	3.8	6.0	6/28	1.0	36
Ring Around-----	807	61.7	0	3.7	4.0	6/29	1.8	52
Surgro-----	ORO T	61.0	0	4.4	3.8	6/28	1.5	85
McCurdy-----	M53YG	60.2	0	3.9	5.0	6/26	1.3	35
Taylor-Evans-----	T-E Y101-D	57.8	0	4.1	5.0	6/28	1.5	72
Paymaster-----	R 1090	56.7	0	3.8	4.8	6/27	2.8	60
Funk's-----	1762	56.5	0	3.3	2.0	6/28	2.8	6
Test average:		72.7						
L.S.D. (.05):		18.2						
C.V. (%):		21						

^{1/}Yields determined from bagged heads and 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/}Note: Bagged head estimates of yield removes the influence of bird damage.

Planted: April 23, 1979

Plot size: 2 rows, 30 feet long, 36 inch row spacing.

Nitrogen Rate: 130 lb (N/A).

Herbicide: None.

Table 8. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at the Black Belt Substation, Marion Junction, 1976, 1978 and 1979^{1/}

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exertion ^{2/} In.	Head type ^{3/} Rating
Pennington-----	Penngrain YE	61.9	0	3.7	4.7	2.3
Funk's-----	G-516BR	61.7	0	3.9	4.1	3.0
Growers-----	ML-135	60.9	0	3.6	3.1	2.4
Funk's-----	G-522	60.7	0	3.6	4.4	2.3
McNair-----	656 BR	60.5	0	3.9	4.3	3.0
Surgro-----	ORO T	59.5	2	4.4	4.2	2.0
Surgro-----	ORO	58.7	0	3.7	4.0	2.4
Growers-----	GSA 1334 BR	56.7	0	4.0	4.8	2.9
Pioneer-----	B815	55.3	2	4.4	3.9	1.8

^{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 9. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Two Years at the Black Belt Substation, Marion Junction, 1978-79

Brand name	Hybrid	Yield bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating	Estimate of bird damage Pct.
Warner-----	W-744DR	57.6	0	4.3	3.8	2.2	2
Pennington-----	Penngrain YE	54.8	0	3.9	5.5	2.1	4
Coker-----	7675	53.7	0	4.0	4.7	2.0	3
Paymaster-----	R 1090	53.6	0	4.0	5.2	3.0	2
McNair-----	656 BR	53.1	0	4.0	4.4	3.0	2
Coker-----	7681BR	53.1	2	4.4	3.4	2.3	2
Funk's-----	G-522DR	52.3	0	4.0	3.5	1.9	5
Taylor-Evans-----	T-E Y101-D	52.1	0	3.9	4.7	2.1	5
Taylor-Evans-----	T-E Y101-R	51.2	0	3.7	5.1	2.0	4
Funk's-----	G-522	50.5	0	3.7	4.8	2.1	5
Growers-----	ML-135	49.3	0	3.7	3.3	2.3	5
Funk's-----	G-516BR	49.1	0	4.0	4.2	3.0	2
Surgro-----	ORO	48.8	0	3.8	4.1	2.3	6
Paymaster-----	DR 1085	48.7	0	3.8	4.4	2.0	7
DeKalb-----	BR-45+	47.5	0	3.6	5.8	2.0	3
Pioneer-----	8311	46.1	0	3.7	3.2	2.0	4
Growers-----	GSA 1334 BR	45.7	0	4.1	4.9	3.0	4
Pioneer-----	B815	45.2	4	4.5	4.2	2.0	2
McCurdy-----	M53YG	45.0	2	4.1	4.8	2.0	4
Surgro-----	ORO T	43.2	3	4.5	4.1	2.0	4
DeKalb-----	BR-65+	41.3	0	4.4	6.4	1.8	2
Northrup, King-----	Savanna 5	40.8	5	5.0	7.9	1.0	2
DeKalb-----	BR-64	32.6	6	4.7	7.2	2.5	6

^{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 the Black Belt Substation, Marion Junction, 1979

Brand name	Hybrid	Yield ^{1/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{2/} In.	Mid- bloom Date	Head type ^{3/} Rating	Estimate of bird damage Pct.
Warner-----	W-744DR	57.9	0	4.2	3.6	7/10	2.3	3
Funk's-----	1762	49.1	0	3.2	1.9	7/8	2.3	10
Coker-----	7675	48.5	0	4.0	3.9	7/10	2.0	6
Ring Around-----	733 GB	47.7	0	3.6	4.0	7/7	2.0	8
Paymaster-----	BRY-93	46.9	0	4.4	6.0	7/12	2.0	3
Funk's-----	G-516BR	45.4	0	4.0	4.4	7/11	3.0	3
McNair-----	656 BR	43.9	0	4.1	4.2	7/10	3.0	3
Coker-----	7681BR	43.8	0	4.5	3.8	7/11	2.3	3
Pennington-----	Penngrain YE	43.1	0	3.9	4.4	7/13	2.0	7
Growers-----	ML-135	42.5	0	3.7	2.9	7/10	2.3	7
McCurdy-----	M53YG	42.0	0	4.3	4.7	7/9	2.0	6
Paymaster-----	DR 1085	41.2	0	3.8	4.9	7/6	2.0	11
Surgro-----	ORO T XTRA	41.2	0	5.0	5.0	7/14	1.3	5
Surgro-----	ORO XTRA	41.1	0	4.0	4.0	7/10	2.0	7
Taylor-Evans-----	T-E Y101-D	40.8	0	3.8	3.7	7/9	2.0	6
Paymaster-----	R 1090	39.0	0	4.1	4.8	7/11	3.0	3
Taylor-Evans-----	T-E Y101-R	38.2	0	3.8	4.5	7/9	2.0	6
Pioneer-----	B815	38.0	0	4.4	3.6	7/10	2.0	3
Funk's-----	G-522	37.9	0	3.7	3.8	7/5	2.0	6
Taylor-Evans-----	T-E Dinero	37.9	0	3.9	2.7	7/12	1.7	4
DeKalb-----	DK-54	37.5	0	4.6	3.8	7/10	1.7	6
Funk's-----	G-522DR	37.1	0	3.9	2.7	7/10	2.0	6
DeKalb-----	BR-45+	36.1	0	3.4	4.0	7/11	2.0	5
Surgro-----	ORO T	35.9	0	4.8	3.9	7/12	2.0	5
McNair-----	6193	35.8	0	3.9	4.2	7/11	2.0	9
McCurdy-----	Birds-Off 91AYG	35.2	0	4.1	5.2	7/12	3.0	3

Table 10. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Black Belt Substation, Marion Junction, 1979 (continued)

Brand name	Hybrid	Yield ^{1/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{2/} In.	Mid- bloom Date	Head type ^{3/} Rating	Estimate of bird damage Pct.
DeKalb-----	BR-64	35.1	0	4.7	5.8	7/8	3.0	7
Northrup, King-----	2778	34.5	0	4.6	5.7	7/8	2.0	7
Northrup, King-----	Savanna 5	34.3	0	5.1	7.0	7/12	1.0	3
Surgro-----	ORO	34.2	0	3.9	2.8	7/7	2.0	8
DeKalb-----	BR-65+	33.8	0	4.4	6.5	7/10	1.7	3
Pioneer-----	8311	30.8	0	3.6	2.3	7/12	2.0	6
Growers-----	GSA 1334 BR	30.0	0	4.3	5.2	7/10	3.0	5
DeKalb-----	D-42a	29.7	0	3.7	3.4	7/10	2.0	6
Northrup, King-----	2884	29.0	0	4.6	4.9	7/12	1.3	5
Funk's-----	G-611	27.0	0	3.9	3.6	7/12	2.0	6
Ring Around-----	807	24.5	0	3.9	4.4	7/12	2.0	3
Growers-----	GSA 1444W	23.6	0	4.3	3.7	7/15	2.3	3
Test average:		38.2						
L.S.D. (.05):		11.2						
C.V. (%):		21.6						

^{1/}Whole plot 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.

Planted: April 20, 1979.

Plot size: 2 rows, 16 feet long, 36 inch row spacing.

Nitrogen Rate: 120 lb (N/A), split application.

Herbicide: Atrazine.

Table 11. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at the Lower Coastal Plain Substation, Camden, 1977-79

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating
Northrup, King-----	Savanna 5	71.8	0	3.9	5.0	1.0
Funk's-----	G-516BR	63.4	0	3.1	2.6	3.0
DeKalb-----	BR-64	63.1	0	4.0	4.9	2.4
Pioneer-----	B815	59.8	0	3.7	3.4	1.7
Growers-----	GSA 1334 BR	56.1	0	3.1	3.0	2.9
Pioneer-----	8311	54.8	0	3.1	2.2	1.8
Surgro-----	ORO T	51.4	1	3.3	2.9	2.6
Funk's-----	G-522	48.1	0	2.9	2.4	2.6
Taylor-Evans-----	T-E Y101-R	46.0	0	3.1	4.2	2.5
Growers-----	ML-135	44.8	0	2.9	3.1	2.5
Surgro-----	ORO	40.3	0	2.9	2.5	2.0

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

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

Table 12. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Two Years at the Lower Coastal Plain Substation, Camden, 1978-79

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating
Northrup, King-----	Savanna 5	99.0	1	4.0	6.3	1.0
Warner-----	W-744DR	98.2	1	3.4	2.8	2.3
McCurdy-----	M53YG	97.6	3	3.1	2.7	2.1
DeKalb-----	BR-64	95.8	1	4.2	6.0	2.6
Pioneer-----	B815	94.1	0	3.7	4.4	1.8
DeKalb-----	BR-45+	90.0	1	3.0	3.9	2.0
Funk's-----	G-516BR	87.3	0	3.1	3.1	3.0
Growers-----	GSA 1334 BR	85.9	0	3.1	3.4	2.9
Surgro-----	ORO T	84.7	3	3.4	3.9	2.6
Taylor-Evans-----	T-E Y101-D	83.5	1	3.1	3.4	2.3
McCurdy-----	Birds-Off 91AYG	83.1	0	3.2	4.3	2.5
Pioneer-----	8311	81.6	0	3.0	2.8	1.6
Paymaster-----	R 1090	81.4	0	3.1	3.5	3.0
Funk's-----	G-522	81.0	0	2.9	3.0	2.5
Taylor-Evans-----	T-E Y101-R	80.5	0	3.2	4.7	2.5
Funk's-----	G-522DR	76.1	0	3.0	3.7	1.3
Pennington-----	Penngrain YE	71.5	0	3.0	2.5	2.5
Growers-----	ML-135	69.0	0	3.0	3.7	2.5
Surgro-----	ORO	63.2	0	3.0	3.1	1.9
Paymaster-----	DR 1085	56.7	0	3.0	3.9	1.9

^{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 at the Lower Coastal Plain Substation, Camden, 1979

Brand name	Hybrid	Yield ^{1/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{2/} In.	Mid-bloom Date	Head type ^{3/} Rating	Estimate of bird damage ^{4/} Pct.
DeKalb-----	BR-64	108.5	3	4.8	7.8	7/2	3.0	29
Coker-----	7681BR	103.6	0	3.8	4.4	7/1	2.3	31
Growers-----	GSA 1334 BR	99.3	0	3.4	4.6	6/29	3.0	23
Warner-----	W-744DR	98.1	1	3.5	2.3	7/1	2.5	31
DeKalb-----	BR-45+	96.7	1	3.4	5.0	6/28	2.3	26
Pioneer-----	0015	95.9	0	4.2	4.4	7/1	1.3	26
Northrup, King-----	Savanna 5	95.6	1	4.7	6.8	6/25	1.0	16
Funk's-----	G-611	93.1	0	3.7	4.1	7/1	2.0	71
McCurdy-----	M53YG	91.5	5	3.6	3.4	6/23	1.8	54
McNair-----	6193	89.8	0	3.3	5.5	7/1	1.3	31
Taylor-Evans-----	T-E Y101-R	89.0	0	3.9	6.9	6/28	2.3	71
Northrup, King-----	2778	89.0	1	3.8	4.5	6/24	2.3	49
Northrup, King-----	2884	88.6	1	4.0	3.6	6/25	2.8	63
Paymaster-----	BRY-93	87.3	1	3.6	3.8	6/23	2.0	13
DeKalb-----	BR-65+	86.2	0	4.1	9.0	7/1	1.8	43
Taylor-Evans-----	T-E Y101-D	85.0	1	3.5	4.0	6/26	2.0	43
Surgro-----	ORD T XTRA	83.1	1	3.7	2.9	7/1	1.3	70
McCurdy-----	Birds-Off 91AYG	80.3	0	3.8	5.9	7/2	2.3	29
Funk's-----	G-516BR	79.4	0	3.5	3.1	6/27	3.0	30
Ring Around-----	733 GB	76.7	0	3.5	4.3	6/29	3.0	71
DeKalb-----	D-42a	75.4	0	3.2	3.0	6/23	2.3	38
McNair-----	656 BR	75.2	0	3.4	3.3	6/29	2.5	28
Funk's-----	G-522	74.9	0	3.2	3.0	6/28	2.5	68
Ring Around-----	807	74.7	0	3.7	4.8	7/1	2.3	68
Taylor-Evans-----	T-E Dinero	74.7	3	3.7	5.1	7/1	1.3	71

Table 13. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Lower Coastal Plain Substation, Camden, 1979 (continued)

Brand name	Hybrid	Yield ^{1/}	Lodging	Height	Head exertion ^{2/}	Mid-bloom	Head type ^{3/}	Estimate of bird damage ^{4/}
		Bu/A	Pct.	Ft.	In.	Date	Rating	Pct.
Surgro	ORO T	73.5	6	4.1	4.5	6/28	2.5	88
Coker	-7675	72.5	0	3.4	4.0	6/29	1.3	51
Funk's	-G-522DR	71.0	0	3.4	3.8	7/2	1.5	61
Paymaster	-R 1090	71.0	0	3.6	4.5	6/27	3.0	56
Pioneer	-8311	69.1	0	3.5	3.6	6/28	1.3	56
DeKalb	-DK-54	66.3	0	4.2	5.3	7/3	1.8	73
Surgro	-ORO XTRA	63.5	0	3.9	4.6	7/1	1.5	70
Pennington	-Penngrain YE	62.4	0	3.5	3.4	6/24	2.8	66
Surgro	-ORO	61.5	0	3.5	3.9	6/27	2.3	66
Funk's	-1762	61.0	1	2.8	2.0	6/25	3.0	55
Growers	-GSA 1444W	60.1	0	4.0	4.5	7/2	2.3	83
Growers	-ML-135	59.2	0	3.5	4.1	7/1	3.0	79
Paymaster	-DR 1085	51.8	0	3.3	4.3	6/25	2.0	66
Test average:		79.9						
L.S.D. (.05):		21.5						
C.V. (%):		23						

^{1/}Yields determined from bagged heads and 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/}Note: Bagged head estimates of yield removes the influence of bird damage.

Planted: April 20, 1979.

Plot size: 2 rows, 20 feet long, 36 inch row spacing.

Nitrogen Rate: 80 lb. (N/A).

Herbicide: Milogard . (Propazine).

Table 14. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at the Monroeville Experiment Field, Monroeville, 1977-79

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating
Pioneer-----	B815	64.2	0	3.9	12.2	1.7
Northrup, King-----	Savanna 5	60.9	3	4.3	16.3	1.0
Pennington-----	Penngrain BR	60.4	6	3.4	10.9	2.8
DeKalb-----	BR-64	57.7	1	4.0	14.9	2.6
Growers-----	GSA 1334 BR	53.6	0	3.5	13.3	3.0
Funk's-----	G-516BR	50.7	0	3.5	12.6	2.9
Taylor-Evans-----	T-E Y101-R	49.7	0	3.2	11.9	1.8
Surgro-----	ORO T	49.4	3	3.9	11.4	2.1
Growers-----	ML-135	49.2	0	3.1	11.7	2.3
Funk's-----	G-522	47.2	0	3.2	11.8	2.1

^{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 Monroeville Experiment Field, Monroeville, 1978-79

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating	Estimate of bird damage Pct.
Pioneer-----	B815	53.0	0	3.4	10.5	1.9	3
Northrup, King-----	Savanna 5	52.5	0	3.6	14.5	1.0	1
Pennington-----	Penngrain BR	48.9	9	3.0	8.9	2.9	8
McNair-----	656 BR	44.8	0	2.9	8.4	3.0	2
Growers-----	GSA 1334 BR	44.6	0	3.0	12.6	3.0	1
Funk's-----	G-516BR	44.1	0	3.0	10.9	3.0	2
DeKalb-----	BR-64	44.0	1	3.5	13.5	2.5	4
DeKalb-----	BR-45+	42.6	0	2.9	11.1	1.5	3
Warner-----	W-744DR	39.7	0	3.0	10.6	2.1	3
McCurdy-----	Birds-Off 91AYG	37.0	0	3.2	10.0	3.0	6
Pennington-----	Penngrain YE	34.2	0	2.8	9.1	2.4	13
Funk's-----	G-522DR	34.0	0	2.9	9.5	1.5	8
Paymaster-----	R 1090	33.7	0	2.8	11.4	2.8	10
Taylor-Evans-----	T-E Y101-R	32.7	0	2.7	10.4	1.8	12
McCurdy-----	M53YG	30.8	0	2.9	9.3	1.6	8
Funk's-----	G-522	30.6	0	2.7	10.6	2.1	12
aylor-Evans-----	T-E Y101-D	29.2	0	2.9	10.4	1.5	13
Surgro-----	ORO-T	28.5	0	3.3	9.5	2.1	16
Paymaster-----	DR 1085	27.2	0	2.8	10.5	1.9	19
Growers-----	ML-135	27.2	0	2.6	9.3	2.5	14

^{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 Monroeville Experiment Field, Monroeville, 1979

Brand name	Hybrid	Yield ^{1/}	Lodging	Height	Head exsertion ^{2/}	Mid- bloom	Head ^{3/} type	Estimate of bird damage ^{4/}
		Bu/A	Pct.	Ft.	In.	Date	Rating	Pct.
Pioneer-----	B815	51.2	0	3.5	12	7/4	2.5	
DeKalb-----	BR-64	45.6	1	3.5	15	7/5	2.8	
Northrup, King-----	Savanna 5	44.0	0	3.5	17	7/2	1.0	
Funk's-----	G-516BR	41.6	0	2.9	12	7/4	3.0	
Pennington-----	Penngrain BR	40.8	0	2.8	9	7/4	3.0	
DeKalb-----	BR-65+	40.5	0	3.1	15	7/4	2.3	
McNair-----	656 BR	40.0	0	3.0	8	7/4	3.0	
Paymaster-----	BRY-93	39.8	0	2.9	14	7/3	3.0	
Growers-----	GSA 1334 BR	39.8	0	3.0	16	7/5	3.0	
Coker-----	7681BR	39.6	0	3.0	10	7/6	2.8	
DeKalb-----	BR-45+	37.9	0	2.9	12	7/3	1.8	
Warner-----	W-744DR	35.5	0	2.9	13	7/7	2.3	
McCurdy-----	Birds-Off 91AYG	35.1	0	3.3	11	7/7	3.0	
Funk's-----	G-522DR	31.5	0	2.8	11	7/5	1.8	
Growers-----	GSA-1290	29.3	0	2.7	10	7/4	2.0	
Funk's-----	1762	26.9	0	2.6	15	7/2	3.0	
Pennington-----	Penngrain YE	26.8	0	2.9	10	7/3	2.8	
Funk's-----	G-522	25.9	0	2.7	12	7/4	2.3	
Ring Around-----	811A GB	25.5	1	3.1	12	7/5	2.0	
Surgro-----	ORO T XTRA	25.5	1	3.4	11	7/5	1.8	
Taylor-Evans-----	T-E Y101-R	23.8	0	2.6	12	7/4	1.8	
Paymaster-----	R-1090	23.8	0	2.8	12	7/4	2.8	
Coker-----	7675	23.6	0	2.9	12	7/5	1.8	
Taylor-Evans-----	T-E Dinero	23.0	0	2.7	10	7/5	1.8	

Table 16. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Monroeville Experiment Field, Monroeville, 1979 (continued)

Brand name	Hybrid	Yield ^{1/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{2/} In.	Mid- bloom Date	Head type ^{3/} Rating	Estimate of bird damage ^{4/} Pct.
DeKalb-----	D-42a	22.9	0	2.7	14	7/3	2.0	
Paymaster-----	DR 1085	22.8	0	2.8	11	7/3	2.3	
McNair-----	6193	22.6	0	3.1	10	7/3	1.5	
Northrup, King-----	2778	22.5	0	2.8	10	7/3	2.0	
McCurdy-----	M51YG	22.4	0	2.6	12	7/2	2.0	
Growers-----	ML-135	22.4	0	2.6	10	7/4	2.8	
McCurdy-----	M53YG	21.9	1	3.0	10	7/3	2.0	
Ring Around-----	807	20.5	0	2.9	14	7/6	2.0	
Taylor-Evans-----	T-E Y101-D	19.5	0	2.8	11	7/4	2.0	
Funk's-----	G-611	18.8	0	2.9	14	7/7	1.8	
Northrup, King-----	2884	17.8	0	3.1	12	7/3	2.0	
Surgro-----	ORO T	16.8	0	3.4	10	7/4	2.3	
Test average:		29.7						
L.S.D. (.05):		6.2						
C.V. (%):		17						

^{1/}Whole plot 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/}Bird damage estimates were not taken at this location in 1979.

Planted: May 2, 1979.

Plot size: 2 rows, 20 feet long, 36 inch row spacing.

Nitrogen Rate: 120 lb. (N/A).

Herbicide: Aatrex.

Table 17. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at the Wiregrass Substation, Headland, 1977-79

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating
Growers-----	GSA 1334 BR	68.2	0	3.3	3.3	2.5
Pioneer-----	B815	66.2	1	3.7	3.8	2.5
Northrup, King-----	Savanna 5	64.6	1	4.0	6.3	1.4
Pennington-----	Penngrain BR	62.5	1	3.3	4.0	2.5
Growers-----	ML-135	61.2	1	2.9	3.0	2.1
Funk's-----	G-516BR	60.9	0	3.2	3.7	2.5
McCurdy-----	M51YG	59.7	2	3.0	3.2	2.1
DeKalb-----	BR-64	58.7	0	3.9	4.9	2.2
Funk's-----	G-522	58.6	0	3.0	3.3	2.2
Taylor-Evans-----	T-E Y101-R	58.4	0	3.1	3.5	2.1
DeKalb-----	BR-65+	52.1	1	3.7	5.5	1.6
Surgro-----	ORO T	51.1	2	3.6	3.8	2.0

^{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 the Wiregrass Substation, Headland, 1978-79

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{1/} In.	Head type ^{2/} Rating	Estimate of bird damage Pct.
Northrup, King	Savanna 5	84.5	0	4.4	7.2	1.2	0
Coker	7681BR	82.6	0	3.6	3.8	1.7	0
Pioneer	B815	81.6	0	4.0	4.6	1.2	0
Growers	GSA 1334 BR	81.2	0	3.6	3.9	2.0	0
Pennington	Penngrain BR	80.7	0	3.6	4.8	2.0	0
McCurdy	Brids-Off 91AYG	75.8	0	3.5	4.6	1.7	1
Growers	ML-135	75.2	0	3.1	3.8	1.7	1
McCurdy	M51YG	73.3	0	3.1	3.9	2.1	1
Paymaster	DRY-93	72.7	0	3.4	3.8	1.7	0
Funk's	G-516BR	72.0	0	3.5	3.9	2.0	0
Pennington	Penngrain YE	72.0	0	3.1	3.3	1.7	1
Taylor-Evans	T-E D'nero	71.5	0	3.5	4.0	2.0	3
Taylor-Evans	T-E Y101-R	70.2	0	3.4	4.6	1.7	4
Funk's	G-522	68.6	0	3.2	4.1	1.9	2
Coker	7675	68.6	0	3.4	3.8	1.9	3
Northrup, King	2884	65.5	0	3.7	4.4	1.9	5
Ring Around	807	62.1	0	3.5	4.1	2.1	13
DeKalb	BR-64	60.5	0	4.2	5.3	1.9	0
DeKalb	BR-65+	59.9	1	4.0	6.3	1.7	0
Surgro	ORO T	59.9	1	3.9	4.6	2.0	7
Funk's	G-522DR	57.3	0	3.2	4.1	2.0	3

^{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 the Wiregrass Substation, Headland, 1979

Brand name	Hybrid	Yield ^{1/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{2/} In.	Mid-bloom Date	Head type ^{3/} Rating
Pennington-----	Penngrain BR	79.9	0	3.3	3.5	7/7	3.0
Paymaster-----	R 1090	76.6	0	3.3	3.0	7/8	3.0
Northrup, King-----	2884	74.1	0	3.3	3.5	7/3	1.5
Surgro-----	ORO T XTRA	73.8	2	3.8	4.0	7/6	1.0
Funk's-----	G-522	73.4	0	3.0	3.0	7/9	2.5
Paymaster-----	BRY-93	73.0	0	3.1	3.0	7/5	2.5
Warner-----	W-744DR	72.8	0	3.5	3.5	7/7	3.0
DeKalb-----	D-42a	72.6	0	2.6	2.5	7/6	2.0
Pioneer-----	B815	72.3	0	3.7	4.0	7/7	3.0
Coker-----	7681BR	72.1	0	3.4	3.5	7/5	2.5
McNair-----	656 BR	72.0	0	3.3	3.5	7/5	3.0
Pennington-----	Penngrain YE	71.5	0	2.8	2.5	7/5	2.5
Funk's-----	G-516BR	71.5	0	3.3	3.5	7/3	3.0
Coker-----	7675	71.1	0	3.0	3.0	7/5	1.5
Surgro-----	ORO T	70.9	1	3.8	4.5	7/3	2.0
Growers-----	ML-135	70.4	0	3.0	3.0	7/6	2.5
Taylor-Evans-----	T-E Dinero	69.3	0	3.1	3.0	7/3	1.5
McCurdy-----	M53YG	68.9	0	3.0	3.0	7/3	2.0
Taylor-Evans-----	T-E Y101-D	68.7	0	3.0	3.5	7/6	1.0
Northrup, King-----	2778	67.8	0	3.0	4.0	7/6	2.0
Growers-----	GSA-1290	67.6	0	3.1	3.0	7/5	1.5
Growers-----	GSA 1334 BR	67.5	0	3.3	3.0	7/8	3.0
McCurdy-----	M51YG	67.1	0	2.9	3.0	7/6	2.0
Paymaster-----	DR 1085	66.4	0	2.9	3.5	7/5	1.5
DeKalb-----	BR-64	66.4	0	4.0	4.0	7/7	2.5

Table 19. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Wiregrass Substation, Headland, 1979 (Continued)

Brand name	Hybrid	Yield ^{1/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{2/} In.	Mid-bloom Date	Head type ^{3/} Rating
Taylor-Evans-----	T-E Y101-R	66.2	0	3.3	3.5	7/5	2.5
Ring Around-----	811A GB	65.1	0	3.6	4.5	7/5	2.0
McCurdy-----	Birds-Off 91AYG	64.3	0	3.3	4.0	7/10	3.0
Funk's-----	G-611	64.0	0	3.3	3.0	7/7	2.0
DeKalb-----	BR-65+	62.8	0	3.8	5.0	7/7	1.5
Funk's-----	G-522DR	62.6	0	2.8	3.0	7/10	1.5
McNair-----	6193	57.6	0	2.8	3.0	7/6	1.0
Funk's-----	G-611	56.9	0	2.9	2.0	7/5	2.5
DeKalb-----	BR-45+	56.8	0	3.1	3.0	7/7	2.0
Northrup, King-----	Savanna 5	56.4	0	4.2	7.3	7/2	1.0
Ring Around-----	807	53.9	0	3.3	3.5	7/9	2.0
Test average:		68.0					
L.S.D. (.05):		7.6					
C.V. (%):		10					

^{1/}Whole plot yields adjusted to 14% moisture and 56 lb. per bushel. (No bird damage.)

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

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

Planted: April 19, 1979

Plot size: 2 rows, 18 feet long, 36 inch row spacing.

Nitrogen rate: 100 lb. (N/A), split application.

Herbicide: Atrazine.

Table 20. Yield and Other Characteristics of Grain Sorghum Hybrids Tested Three Years at the Gulf Coast Substation, Fairhope, 1977-79

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exertion ^{1/} In.	Head type ^{2/} Rating
Northrup, King-----	Savanna 5	65.5	2	4.6	7.8	1.0
Pioneer-----	B815	60.6	0	4.2	5.4	1.8
Pennington-----	Penngrain BR	58.2	0	4.0	5.5	3.0
Funk's-----	G-516BR	56.4	0	3.8	5.6	2.9
Growers-----	GSA 1334 BR	53.6	0	4.1	6.6	2.9
DeKalb-----	BR-64	53.3	0	4.6	7.9	2.9
Surgro-----	ORO T	51.9	2	4.3	6.4	2.4
Growers-----	ML-135	51.3	0	3.6	5.8	2.5
Funk's-----	G-522	51.2	0	3.6	4.9	2.6
DeKalb-----	BR-65+	50.9	0	4.0	7.4	1.3
McCurdy-----	M51YG	46.4	0	3.6	6.5	2.6
Taylor-Evans-----	T-E Y101-R	44.9	0	3.4	6.6	2.3

^{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 Gulf Coast Substation, Fairhope, 1978-79

Brand name	Hybrid	Yield Bu/A	Lodging Pct.	Height Ft.	Head exertion ^{1/} In.	Head type ^{2/} Rating	Estimate of bird damage Pct.
Warner-----	W-744DR	80.9	0	4.1	5.4	2.8	1
Northrup, King-----	Savanna 5	77.0	3	5.0	8.4	1.0	0
Pennington-----	Penngrain BR	76.8	0	4.2	5.5	3.0	1
Pioneer-----	B815	74.8	1	4.4	6.0	1.6	0
Coker-----	7681BR	74.1	0	4.2	7.1	2.5	1
Funk's-----	G-516BR	72.0	0	3.8	5.6	2.9	3
Paymaster-----	BRV-93	71.9	3	4.3	6.6	2.6	0
Growers-----	GSA 1334 BR	70.3	1	4.2	7.3	2.9	3
Northrup, King-----	2884	70.3	0	4.4	7.3	1.1	11
Funk's-----	G-522DR	68.9	0	4.0	6.4	1.6	5
Taylor-Evans-----	T-E Dinero	66.9	0	3.9	5.8	1.1	4
Pennington-----	Penngrain YE	66.2	0	3.6	4.9	2.6	3
Taylor-Evans-----	T-E Y101-D	65.1	0	3.9	4.9	1.5	0
DeKalb-----	BR-64	65.0	0	4.8	7.6	2.9	1
Growers-----	ML-135	64.7	0	3.8	7.0	2.3	4
McClair-----	656 BR	64.6	0	4.2	7.1	3.0	0
Funk's-----	G-522	63.4	0	3.9	5.3	2.4	1
DeKalb-----	BR-65+	62.6	0	4.1	7.6	1.0	1
Taylor-Evans-----	T-E Y101-R	59.6	0	3.7	7.6	2.0	0
McCurdy-----	M51YG	58.9	0	3.8	7.3	2.4	3
Surgro-----	ORO T	58.2	3	4.5	6.6	2.3	11
McCurdy-----	Birds-Off 91AYG	58.1	0	4.0	7.0	2.9	3
Ring Around-----	807	45.6	0	3.7	5.9	1.8	25

^{1/}Measured from 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 Gulf Coast Substation, Fairhope, 1979

Brand name	Hybrid	Yield ^{1/}	Lodging	Height	Head exertion ^{2/}	Mid-bloom	Head type ^{3/}
		Bu/A	Pct.	Ft.	In.	Date	Rating
Pioneer-----	B815	73.8	2	3.8	5.5	6/28	2.3
Warner-----	W-744DR	73.4	0	3.7	6.3	6/27	2.5
Pennington-----	Penngrain BR	69.4	0	3.5	5.5	6/26	3.0
Northrup, King-----	2884	68.5	0	3.9	5.5	6/26	1.3
Coker-----	7681BR	68.3	0	3.8	8.0	6/28	2.3
Surgro-----	ORO T XTRA	67.8	0	4.1	5.0	7/01	1.5
Growers-----	GSA 1334 BR	66.3	2	3.7	6.0	6/28	3.0
Northrup, King-----	2778	61.7	1	3.4	6.6	6/24	1.8
McNair-----	656 BR	60.7	0	3.4	6.4	6/29	3.0
Funk's-----	G-522DR	60.4	0	3.4	6.8	6/27	1.3
Coker-----	7675	60.4	0	3.6	6.1	6/27	1.3
DeKalb-----	BR-64	60.2	1	4.1	6.1	6/26	3.0
Funk's-----	G-516BR	59.9	0	3.5	6.3	6/25	3.0
Northrup, King-----	Savanna 5	59.5	6	5.0	9.3	6/24	1.0
Paymaster-----	BRY-93	59.4	6	3.8	7.1	6/27	2.8
Funk's-----	G-611	59.0	0	3.4	5.0	7/01	2.0
Ring Around-----	811A GB	58.2	0	3.8	6.8	7/01	1.5
McCurdy-----	M53YG	57.5	0	3.4	7.0	6/24	1.5
Surgro-----	ORO T	57.2	6	3.9	5.3	7/01	2.3
DeKalb-----	D-42a	57.2	2	3.0	4.3	6/27	2.0
Paymaster-----	R 1090	57.0	0	3.4	5.3	6/27	3.0
Taylor-Evans-----	T-E Dinero	56.6	0	3.4	5.8	6/27	1.3
McCurdy-----	Birds-Off 91AYG	56.0	0	3.4	6.3	6/29	2.8
Funk's-----	G-522	53.9	0	3.5	5.8	6/26	2.8

Table 22. Yield and Other Characteristics of Grain Sorghum Hybrids Tested at the Gulf Coast Substation, Fairhope, 1979 (continued)

Brand name	Hybrid	Yield ^{1/} Bu/A	Lodging Pct.	Height Ft.	Head exsertion ^{2/} In.	Mid-bloom Date	Head type ^{3/} Rating
DeKalb-----	BR-65+	52.9	0	3.6	9.3	6/28	1.0
Pennington-----	Penngrain YE	52.9	0	3.2	5.8	6/25	2.8
Growers-----	GSA-1290	52.9	0	3.0	5.3	6/27	1.5
Taylor-Evans-----	T-E Y101-R	51.2	0	2.9	5.4	6/27	2.0
DeKalb-----	BR-45+	51.0	0	3.0	6.5	6/26	1.5
McCurdy-----	M51YG	51.0	0	3.4	9.8	6/24	2.8
Taylor-Evans-----	T-E Y101-D	50.9	0	3.4	5.6	6/28	1.8
Paymaster-----	DR 1085	50.0	0	3.3	6.6	6/24	1.8
McNair-----	6193	49.9	0	3.3	6.8	6/27	1.0
Growers-----	ML-135	49.5	0	3.2	6.5	6/27	2.5
Ring Around-----	807	45.3	0	3.2	4.4	7/2	1.5
Funk's-----	1762	35.4	0	2.8	3.0	6/26	3.0

Test average: 57.6
L.S.D. (.05): 6.9
C.V. (%): 10

^{1/}Whole plot yields adjusted to 14% moisture and 56 lb. per bushel. (No bird damage.)

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

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

Planted: April 17, 1979.

Plot size: 2 rows, 20 feet long, 36 inch row spacing.

Nitrogen Rate: 110 lb. (N/A), split application.

Herbicide: Atrazine.

Sources of Seed for the 1979 Grain Sorghum Tests

Entry designation	Source of seed
Coker..... 7675 *7681BR	Coker's Pedigreed Seed Company Route 1, Box 150 Lubbock, Texas
DeKalb..... *BR-45+ *BR-64 *BR-65+ D-42a DK-54	DeKalb Ag Research, Inc. Route 2 Lubbock, Texas
Funk's..... *G-516BR G-522 G-522DR G-611 1762	Louisiana Seed Co., Inc. P.O. Box 1867 Plainview, Texas
Growers..... GSA-1180 GSA-1290 *GSA-1334 BR GSA-1444W ML-135	Growers Seed Association P.O. Box 1656 Lubbock, Texas
McCurdy..... *Birds-Off 91AYG M51YG M53YG	McCurdy Seed Co. Fremont, Iowa
McNair..... *656BR 6193	McNair Seed Company P.O. Box 706 Laurinburg, North Carolina
Paymaster..... *BRY-93 DR 1035 DR 1085 R 1090	ACCO Seed P.O. Box 1630 Plainview, Texas
Northrup, King..... 2778 2779 2884 *Savanna 5	Northrup, King Co. P.O. Box 151 Columbus, Mississippi

Penngrain.....	Pennington Seed, Inc.
*BR	P.O. Box 290
YE	Madison, Georgia
Pioneer.....	Pioneer Hi-Bred International, Inc.
8311	1000 W. Jefferson St.
*B815	Tipton, Indiana
Ring Around.....	Ring Around Research
733 GB	P.O. Box 1629
787	Plainview, Texas
807	
808 GB	
811A GB	
Surgro.....	R.C. Young Seed and Grain Co.
ORO	624 27th Street
ORO T	Lubbock, Texas
ORO XTRA	
ORO T XTRA	
Taylor-Evans.....	Taylor-Evans Seed Co.
T-E Dinero	P.O. Box 68
T-E Y101-D	Tulia, Texas
T-E Y101-R	
Warner.....	George Warner Seed Co., Inc
*W-744DR	P.O. Box 1448
	Hereford, Texas

*Bird resistant hybrids

ACCEPTABLE HYBRIDS FOR 1980

All of the acceptable hybrids are not equal in performance. It is suggested that this report be carefully studied before choosing a hybrid. Hybrids are listed in alphabetical order within bird resistant and non-bird resistant groups. The locations used in making regional lists are as follows: Winfield, Northern Alabama; Marion Junction, Prattville, and Camden, Central Alabama; Headland, Monroeville, and Fairhope, Southern Alabama. For further information on hybrids see individual location tables.

NORTHERN ALABAMA

Bird resistant

<u>Brand name</u>	<u>Hybrid</u>
DeKalb-----	BR-65+
Funk's-----	G-516BR
Growers-----	GSA 1334 BR
Northrup, King----	Savanna 5

Non-Bird Resistant

<u>Brand name</u>	<u>Hybrid</u>
Funk's-----	G-522
Funk's-----	G-522DR
Growers-----	GSA-1180
McCurdy-----	M51YG
Surgro-----	ORO
Taylor-Evans-----	T-E Y101-R

CENTRAL ALABAMA^{2/}

Bird resistant

<u>Brand name</u>	<u>Hybrid</u>
DeKalb-----	BR-64
Funk's-----	G-516BR
Growers-----	GSA 1334 BR
Northrup, King----	Savanna 5
Pioneer-----	B815

Non-Bird Resistant

<u>Brand name</u>	<u>Hybrid</u>
Funk's-----	G-522
Growers-----	ML-135
Pennington-----	Penngrain YE
Surgro-----	ORO T ^{1/}

SOUTHERN ALABAMA

Bird resistant

<u>Brand name</u>	<u>Hybrid</u>
DeKalb-----	BR-64
Funk's-----	G-516BR
Growers-----	GSA 1334 BR
Northrup, King----	Savanna 5
Pennington-----	Penngrain BR
Pioneer-----	B815

Non-Bird Resistant

<u>Brand name</u>	<u>Hybrid</u>
Funk's-----	G-522
Growers-----	ML-135
McCurdy-----	M51YG ^{1/}
Surgro-----	ORO-T ^{1/}
Taylor-Evans-----	Y101-R ^{1/}

^{1/}If present trends continue, this hybrid will be removed from the acceptable list next year in the region indicated.

^{2/}Performance of hybrids in the Black Belt may be different from other areas of Central Alabama. For performance of hybrids in the Black Belt, see Tables 8, 9, and 10.

NOTE: All acceptable hybrids have been tested 3 years at one or more locations within the region.

Information contained herein is available to all
regardless of race, creed, or national origin