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**Performance  
of  
Corn Hybrids  
in Alabama  
1979**

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## Performance of Corn Hybrids in Alabama, 1979

Cliff G. Currier<sup>1/</sup>

Corn hybrids are evaluated annually at 12 locations in the regular corn hybrid testing program of the Auburn University Agricultural Experiment Station. Preliminary tests also are conducted at 5 of the 12 locations. Entries in the regular tests have been tested one or more years and have performed well in the preliminary tests. Entries in preliminary tests are both experimental and newly released hybrids that have not been tested in the regular tests. If a hybrid is outstanding in the preliminary tests it is entered into the regular testing program the following year. White corn hybrid tests were initiated in 1979. Eight white corn hybrids were tested at one location in each region in 1979.

Rainfall distribution was fair to good depending upon location during the 1979 growing season. Excellent yields were obtained at Crossville, Fairhope, and the irrigated test at Headland. All locations, except the unirrigated test at Headland, had higher test averages than in 1978. Generally, yield reduction was due to the lack of adequate rainfall during the period of greatest need for moisture by the hybrids in the test. Data from Monroeville Experiment Field were not reported due to low and erratic yields. Data from Camp Hill were not reported due to large differences in plant population in the plots.

Locations of the tests, cultural practices, and average plant populations are shown in table 1. All hybrids at a location were treated the same. The experimental design was a randomized complete block with four replications. Row width was 36 to 42 inches depending on location. At Camp Hill, one-row plots 40 feet long were used. At all other locations, two-row plots were

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<sup>1/</sup>Research Associate, Department of Agronomy and Soils

used with row length varying from 18 to 30 feet depending on location. The target plant population for all tests was 20,000 plants per acre. The seeding rate was 23,000 seeds per acre at each location. The target plant population for the irrigated test at Headland was 26,000 plants per acre, with a seeding rate of 29,700 seeds per acre. Most locations achieved the target plant population.

Grain yields were adjusted to 15.5 percent moisture and converted to bushels (56 pounds) per acre. Stalks broken or leaning more than 45 degrees were considered lodged. Ear rot, earworm damage, size of grain, and luster of grain were used in rating grain quality. Height of ears was measured from the base of the ear to ground level. Husks were rated according to tightness and extension beyond the tip of the ear. Mid-silk data measured the number of days from planting until one half of the plants in the plot were showing silks.

Regional averages for 3, 2, and 1 years in northern Alabama are presented in tables 2, 3, and 4 respectively. Table 5 shows yields by location, and regional average yields for 1 to 5 years in northern Alabama. Similar data are given for central Alabama in tables 6-9, and for southern Alabama in tables 10-13. The irrigated hybrid test was moved from Camden to Headland in 1979. Yields from this test were excellent. Results of the irrigated corn hybrid test at Headland for 1 year are shown in table 14. In 1979, this test was sprinkler irrigated on May 28, June 1, 6, 12, and 18. Approximately 5 inches of irrigation water was applied over this period of time. Data from 1976, 1978, and 1979 tests at Marion Junction are given and should be used to assist in comparing hybrids grown in that area. Performance of corn hybrids at Marion Junction for 3, 2, and 1 years are given in tables 15, 16, and 17 respectively. Yields and other characteristics

of white corn hybrids grown at Crossville, E. V. Smith Research Center (near Shorter), and Headland are given in Table 18. Results of the preliminary tests are given in tables 20-22.

The corn hybrid tests are examined each year for viral and other disease symptoms by Dr. R.T. Gudauskas, Department of Botany, Plant Pathology, and Microbiology. When disease symptoms indicate that damage may occur, disease ratings are compiled and published in this report. An introduction and discussion of procedure and results are given. Virus infection data from the hybrid test at Camp Hill are given in table 19.

When comparing hybrids, small differences in yield may not be large enough to be considered real differences. 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) and C.V. (coefficient of variation) are given for yields at each location in 1979.

Since performance of hybrids may vary from year to year and location to location, long term averages from several locations are more reliable than 1-year averages when evaluating a hybrid from an area. Three-year results are considered sufficient to give a good indication of the relative performance of hybrids.

A composite rating system was used to determine the list of acceptable hybrids. The 3-year regional average grain yield of a hybrid was used as a base point. Then the composite score was obtained by subtracting weighted values for lodging, quality, and ear height from this yield. The value subtracted for each characteristic was proportional to the numerical values shown for the characteristics in tables 2, 6, and 10.

All acceptable hybrids are not equal in performance. Some are outstanding in one or more characteristics. Others may not be outstanding in any one characteristic, but possess a satisfactory combination of

characters. All information should be carefully considered when selecting a hybrid.

#### ACKNOWLEDGMENTS

Appreciation is expressed to the following people: W.H. Hearn and Mrs. Sally Bagwell, Research Data Analysis for the computation and summarization of the data in this report. R.T. Gudauskas, Department of Botany, Plant Pathology, and Microbiology for making the virus ratings and the virus infection tables in this report. Brenda Hood for typing this manuscript. The following cooperators in charge of their respective substations:

#### NORTHERN ALABAMA

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

#### CENTRAL ALABAMA

Black Belt Substation, Marion Junction - L.A. Smith, Superintendent  
 Experiment Field, Prattville - F.T. Glaze, Superintendent  
 E.V. Smith Research Center, Shorter - R. Akridge, Superintendent  
 Lower Coastal Plain Substation, Camden - J.A. Little, Superintendent  
 Piedmont Substation, Camp Hill - W.A. Griffey, Superintendent

#### SOUTHERN ALABAMA

Experiment Field, Brewton - W.E. Brown and J.A. Pitts<sup>1/</sup>  
 Experiment Field, Monroeville - W.E. Brown and J.A. Pitts<sup>1/</sup>  
 Gulf Coast Substation, Fairhope - E.L. Carden, Superintendent  
 Wiregrass Substation, Headland - J.G. Starling, Superintendent

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<sup>1/</sup>Former and current superintendent, respectively.

Table 1. Location and Cultural Practices for the 1979 Corn Hybrid Tests<sup>1/</sup>

Location	Planting date	Nitrogen rate and methods Lb. N./A.	Average plant population <sup>2/</sup> Thou.	Herbicide used
<u>Northern Alabama</u>				
Tennessee Valley Substation (Belle Mina)				
Regular test	4/11	170	21	Atrazine + Lasso
Preliminary test	4/11	170	20	Atrazine + Lasso
Sand Mountain Substation (Crossville)				
Regular test	4/18	150	21	Atrazine + Lasso
Preliminary test	4/18	150	20	Atrazine + Lasso
White corn test	4/19	150	21	Atrazine + Lasso
Upper Coastal Plain Substation (Winfield)	4/20	150	21	Atrazine + Lasso
<u>Central Alabama</u>				
Agromony Farm (E.V. Smith Research Center)				
Regular test	4/17	120 (split app.)	20	Atrazine
Preliminary test	4/17	120 (split app.)	18	Atrazine
White corn test	4/17	120 (split app.)	19	Atrazine
Lower Coastal Plain Substation (Camden)	4/17	130 (split app.)	22	Atrazine
Prattville Experiment Field (Prattville)	4/17	120	21	Atrazine
Black Belt Substation (Marion Junction)	5/3	120 (split app.)	17	Atrazine
<u>Southern Alabama</u>				
Brewton Experiment Field (Brewton)	3/20	120 (split app.)	20	Atrazine + Dual
Wiregrass Substation (Headland)				
Regular test	3/26	150 (split app.)	21	Atrazine + Sutan plus
Irrigated regular test	3/26	250 (split app.)	25	Atrazine + Sutan plus
Preliminary test	3/26	150 (split app.)	20	Atrazine + Sutan plus
White corn test	3/26	150 (split app.)	20	Atrazine + Sutan plus

Table 1. Location and Cultural Practices for the 1979 Corn Hybrid Tests<sup>1/</sup> (Continued)

Location	Planting date	Nitrogen rate and methods Lb, N./A.	Average plant populations <sup>2/</sup> Thou.	Herbicide used
Gulf Coast Substation (Fairhope)				
Regular test	3/20	120	22	Atrazine + Lasso
Preliminary test	3/20	120	21	Atrazine + Lasso

<sup>1/</sup>Lime, P<sub>2</sub>O<sub>5</sub>, and K<sub>2</sub>O were applied according to soil test recommendations.

<sup>2/</sup>See the introduction for a discussion of plant populations.

Table 2. Characteristics of Corn Hybrids Tested Three Years in Northern Alabama, 1977-79<sup>1/</sup>

Brand name	Hybrid	Yield per acre <sup>2/</sup> Bu.	Lodged stalks Pct.	Quality <sup>3/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>3/</sup> Rating
Pioneer-----	3147	90	13.1	2.7	0.8	3.8	82.3	2.9
Ring Around-----	1502	89	13.9	2.5	0.9	3.6	83.7	2.2
Pioneer-----	3369A	89	23.3	2.5	0.9	3.7	83.2	2.7
Trojan-----	TXS 114	83	17.8	2.9	0.9	3.7	83.5	2.6
Funk's-----	G-4507	81	16.6	3.0	0.8	3.8	84.8	2.8
Paymaster-----	UC9792	81	23.6	2.2	0.8	3.8	82.9	2.3
Coker-----	22	81	22.0	2.8	0.8	3.8	83.7	2.6
Coker-----	16	80	17.8	2.6	0.9	3.6	83.5	3.0
Funk's-----	G-4611	79	16.6	2.5	0.8	3.7	84.2	2.6
McCurdy-----	67-14	77	25.4	2.6	0.8	3.7	79.9	2.6
McCurdy-----	X-300	74	18.2	2.9	0.8	3.5	79.5	2.4
Coker-----	56	73	19.4	2.6	0.8	3.9	81.7	2.4
DeKalb-----	XL80	73	25.6	2.6	0.7	3.6	79.4	2.2
Funk's-----	G-4810	71	20.1	2.7	0.8	3.9	80.1	2.4
Pioneer-----	511A	70	33.3	2.7	0.8	3.9	78.5	2.2
DeKalb-----	XL394	69	16.0	2.6	0.7	4.2	83.3	2.3
Funk's-----	G-795W-1	67	31.7	2.9	0.8	3.8	80.5	2.2
McNair-----	S-338	66	21.1	2.7	0.8	3.8	77.3	2.6
Funk's-----	G-4864	61	15.3	3.1	0.7	4.0	82.4	2.0

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

<sup>2/</sup>Yield adjusted to 15.5% moisture and 56 lb. per bushel.

<sup>3/</sup>1 = excellent; 2 = good; 3 = fair; 4 = poor, 5 = very poor.

Table 3. Characteristics of Corn Hybrids Tested Two Years in Northern Alabama, 1978-79<sup>1/</sup>

Brand name	Hybrid	Yield per acre <sup>2/</sup> Bu.	Lodged stalks Pct.	Quality <sup>3/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>3/</sup> Rating
P-A-G	SX 17A	104	22.0	2.6	0.9	3.7	84.9	3.3
Ring Around	1502	103	9.5	2.5	0.9	3.7	83.7	2.1
Pioneer	3147	102	7.1	2.5	0.9	3.8	81.8	2.9
Ring Around	2501	102	9.1	2.3	0.9	3.6	82.5	2.5
Pioneer	3369A	99	15.0	2.4	0.9	3.8	82.9	2.8
Trojan	TXS 115A	99	11.1	2.9	0.8	3.9	86.2	2.5
McCurdy	84aa	97	11.1	2.6	0.8	3.7	83.5	2.5
Paymaster	UC8951	97	10.8	2.5	0.8	3.9	83.3	2.4
Ring Around	1501	96	7.9	2.7	0.8	3.8	85.6	2.6
Trojan	TXS 114	93	10.4	2.7	0.9	3.8	83.9	2.5
Coker	22	92	15.2	2.7	0.8	3.9	82.3	2.5
Ring Around	2502	92	7.3	2.7	0.8	3.3	83.9	2.4
Funk's	G-4507	92	11.7	2.9	0.8	3.9	85.0	2.7
McCurdy	67-14	91	23.5	2.5	0.8	3.9	79.3	2.7
Coker	16	90	15.4	2.5	0.9	3.8	83.6	3.1
Paymaster	UC9792	90	15.7	2.2	0.8	3.9	83.8	2.2
Funk's	G-4611	89	12.9	2.4	0.8	3.8	84.5	2.7
McCurdy	75-200	87	22.5	2.4	0.8	4.1	80.7	2.3
Northrup, King	PX 723	86	14.9	2.6	0.8	4.0	82.8	2.4
Northrup, King	PX 95	86	14.3	3.0	0.8	4.1	82.9	2.7
McNair	X-300	84	11.3	2.6	0.8	3.7	79.1	2.5
Coker	56	84	13.3	2.5	0.9	4.0	81.4	2.4
DeKalb	XL72b	84	5.7	2.8	0.8	3.6	84.8	2.9
DeKalb	XL80	83	25.7	2.5	0.7	3.7	78.8	2.2
Funk's	G-4810	82	12.0	2.6	0.8	4.0	79.6	2.5
DeKalb	XL394	82	15.5	2.5	0.7	4.3	83.0	2.3
McNair	X-170	80	11.3	2.5	0.8	3.6	82.6	2.9
Pioneer	511A	80	24.5	2.7	0.8	4.1	78.8	2.1
Funk's	G-795W-1	78	20.5	2.7	0.8	4.0	79.7	2.1
McNair	S-338	78	13.3	2.4	0.8	3.9	76.4	2.6
Funk's	G-4864	72	10.3	2.8	0.7	4.1	81.5	1.9

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

Table 4. Characteristics of Corn Hybrids Tested in Northern Alabama, 1979<sup>1/</sup>

Brand name	Hybrid	Yield per acre <sup>2/</sup> Bu.	Lodged stalks Pct.	Quality <sup>3/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>3/</sup> Rating	Mid-silk Days
Pioneer -----	3147	118	6.6	2.5	0.9	3.9	82.2	2.7	80
P-A-G -----	SX 17A	118	12.6	2.6	1.0	3.7	85.3	3.5	78
Ring Around -----	1502	116	10.6	2.5	0.9	3.6	85.0	2.2	72
P-A-G -----	SX 333	113	13.8	2.7	0.9	3.9	85.7	3.0	72
Funk's -----	G-4606	112	16.5	2.3	1.0	3.5	83.7	2.9	72
Ring Around -----	2501	111	7.0	2.3	0.9	3.5	82.8	2.8	73
Pioneer -----	3184	111	3.3	2.2	0.9	3.5	80.0	2.5	76
Paymaster -----	UC9792	109	10.0	1.9	0.9	3.9	83.0	2.3	76
P-A-G -----	SX 98	109	9.9	2.5	0.9	3.4	85.4	3.3	73
Pioneer -----	3369A	108	8.5	2.3	0.9	3.8	81.4	2.9	71
McCurdy -----	84aa	108	9.5	2.6	0.9	3.5	83.6	2.7	72
Trojan -----	TXS 119	104	10.5	2.8	0.9	3.6	83.9	2.9	73
Coker -----	19A	104	7.8	2.4	0.9	3.8	83.8	2.4	73
Coker -----	22	104	11.9	2.7	0.9	3.8	83.6	2.8	74
Trojan -----	TXS 115A	104	11.5	2.9	0.9	3.8	85.5	2.8	73
P-A-G -----	SX 346	104	12.7	2.5	0.9	3.6	84.9	2.9	74
Coker -----	16	103	9.5	2.3	0.9	3.7	83.4	2.9	71
Paymaster -----	UC8951	103	7.9	2.8	0.9	3.8	83.9	2.5	74
McCurdy -----	67-14	102	15.3	2.7	0.8	3.9	78.7	2.6	77
Ring Around -----	1501	102	8.8	2.9	0.8	3.6	84.8	2.5	73
Ring Around -----	2502	102	3.5	2.8	0.9	3.3	83.0	2.6	73
Funk's -----	G-4507	102	14.4	2.8	0.9	3.8	84.9	2.8	72
Gutwein -----	62	100	12.5	2.8	0.9	3.7	86.4	2.8	73
Funk's -----	G-4611	100	10.7	2.4	0.9	3.8	87.1	2.8	74
Trojan -----	TXS 114	99	14.6	2.8	0.9	3.6	83.8	2.3	73
Coker -----	56	99	10.8	2.4	0.9	4.0	81.2	2.0	79
DeKalb -----	XL72b	99	4.9	2.8	0.8	3.6	87.3	2.9	74
Golden Harvest -----	H-2606	99	10.0	2.8	0.9	3.6	85.1	2.5	72
McNair -----	X-300	98	7.4	2.4	0.9	3.6	78.2	2.5	76

Table 4. Characteristics of Corn Hybrids Tested in Northern Alabama, 1979<sup>1/</sup> (Continued)

Brand name	Hybrid	Yield per acre <sup>2/</sup> Bu.	Lodged stalks Pct.	Quality <sup>3/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>3/</sup> Rating	Mid-silk Days
Northrup, King	-----PX 723	98	9.1	2.4	0.8	3.9	83.3	2.0	76
DeKalb	-----XL80	97	15.7	2.5	0.8	3.7	77.4	2.3	76
McCurdy	-----75-200	97	21.9	2.4	0.8	4.0	79.5	2.1	78
Northrup, King	-----PX 95	97	8.9	3.2	0.8	4.0	82.6	2.7	77
Funk's	-----G-4810	94	9.2	2.6	0.8	3.8	80.2	2.7	76
Pioneer	-----511A	94	14.8	2.6	0.9	4.1	79.4	2.1	77
DeKalb	-----XL394	93	10.4	2.3	0.8	4.1	81.3	2.2	81
Funk's	-----G-795W-1	91	13.6	2.4	0.8	4.0	80.4	1.8	80
McNair	-----S-338	89	9.0	2.3	0.9	3.8	74.2	2.7	80
McNair	-----X-170	88	11.5	2.4	0.9	3.5	82.0	2.8	70
Funk's	-----G-4864	83	10.8	3.0	0.8	4.0	80.5	1.8	80

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

<sup>2/</sup>Yield adjusted to 15.5% moisture and 56 lb. per bushel.

<sup>3/</sup>1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 5. 1979 Yield of Corn Hybrids by Location and Regional Averages for 1-5 Years in Northern Alabama<sup>1/</sup>

Brand name	Hybrid	Belle Mina Bu.	Crossville Bu.	Winfield Bu.	Regional average yield per acre				
					1-yr. 1979 Bu.	2-yr. 1978-79 Bu.	3-yr. 1977-79 Bu.	4-yr. 1976-79 Bu.	5-yr. 1975-79 Bu.
Pioneer-----	3147	117	141	96	118	102	90	100	110
Pioneer-----	3369A	119	122	83	108	99	89	101	109
McCurdy-----	67-14	98	132	77	102	91	77	89	99
Coker-----	16	108	112	89	103	90	80	90	98
Coker-----	56	91	121	85	99	84	73	85	94
Funk's-----	G-4810	96	120	68	94	82	71	85	94
McNair-----	X-300	97	118	79	98	84	74	87	93
Pioneer-----	511A	95	114	73	94	80	70	83	93
DeKalb-----	XL80	96	118	78	97	83	73	84	91
Funk's-----	G-795W-1	99	113	60	91	78	67	79	90
Funk's-----	G-4864	83	116	50	83	72	61	78	89
McNair-----	S-338	81	110	76	89	78	66	80	88
Coker-----	22	115	122	75	104	92	81	94	
Funk's-----	G-4507	103	124	78	102	92	81	94	
Funk's-----	G-4611	118	116	65	100	89	79	93	
DeKalb-----	XL394	93	122	63	93	82	69	84	
Ring Around----	1502	121	136	90	116	103	89		
Trojan-----	TXS 114	92	122	84	99	93	83		
Paymaster-----	UC9792	113	123	92	109	90	81		
P-A-G-----	SX 17A	116	142	95	118	104			
Ring Around----	2501	112	127	95	111	102			
Trojan-----	TXS 115A	106	135	71	104	99			
McCurdy-----	84aa	115	134	73	108	97			
Paymaster-----	UC8951	95	123	89	103	97			
Ring Around----	1501	109	125	73	102	96			
Ring Around----	2502	97	125	85	102	92			
McCurdy-----	75-200	102	126	64	97	87			
Northrup, King-PX	723	96	123	75	98	86			
Northrup, King-PX	95	104	126	61	97	86			

Table 5. 1979 Yield of Corn Hybrids by Location and Regional Averages for 1-5 Years in Northern Alabama<sup>1/</sup> (Continued)

Brand name	Hybrid	Belle Mina Bu.	Crossville Bu.	Winfield Bu.	Regional average yield per acre				
					1-yr. 1979 Bu.	2-yr. 1978-79 Bu.	3-yr. 1977-79 Bu.	4-yr. 1976-79 Bu.	5-yr. 1975-79 Bu.
DeKalb-----	XL72b	100	123	73	99	84			
McNair-----	X-170	91	102	70	88	80			
P-A-G-----	SX 333	113	137	89	113				
Funk's-----	G-4606	107	134	94	112				
Pioneer-----	3184	123	127	82	111				
P-A-G-----	SX 98	113	129	84	109				
Coker-----	19A	115	131	67	104				
P-A-G-----	SX 346	102	122	86	104				
Trojan-----	TXS 119	102	131	80	104				
Gutwein-----	62	100	116	84	100				
Golden Harvest-	H-2606	99	116	80	99				
Test average:		104	124	78					
L.S.D. (.05):		14	9	19					
C.V. (%):		11.8	6.3	20.1					

<sup>1/</sup>Yields adjusted to 15.5% moisture and 56 lb. per bushel.

Table 6. Characteristics of Corn Hybrids Tested Three Years in Central Alabama, 1977-79<sup>1/</sup>

Brand name	Hybrid	Yield per acre <sup>2/</sup> Bu.	Lodged stalks Pct.	Quality <sup>3/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>3/</sup> Rating
Pioneer-----	3147	54	7.8	3.4	0.7	3.6	78.2	2.8
McNair-----	508	52	9.6	2.4	0.8	4.0	75.8	2.1
Trojan-----	TXS 114	52	7.2	2.9	0.7	3.6	79.4	2.2
Ring Around-----	1502	50	10.2	2.8	0.7	3.4	80.1	2.0
Ring Around-----	2502	48	10.4	3.1	0.7	3.2	77.5	2.9
Coker-----	56	47	13.4	2.7	0.7	3.7	76.5	2.3
Pioneer-----	3145	47	11.5	3.0	0.7	3.8	73.9	1.8
Pioneer-----	3368A	47	11.6	3.0	0.7	3.5	78.8	2.6
Pioneer-----	511A	46	20.0	3.0	0.7	3.8	76.4	1.9
Funk's-----	G-795W-1	46	16.7	3.1	0.7	3.7	74.9	2.0
Funk's-----	G-4507	46	7.5	3.5	0.6	3.6	79.7	3.1
Paymaster-----	UC9792	45	12.5	2.7	0.6	3.6	76.7	1.7
Pioneer-----	3369A	44	10.7	2.9	0.7	3.5	79.8	2.9
Coker-----	16	44	12.6	3.2	0.7	3.4	78.1	2.7
McCurdy-----	67-14	44	11.6	2.7	0.5	3.6	75.1	2.1
Funk's-----	G-4949A	43	8.1	2.7	0.6	4.1	74.7	2.4
Funk's-----	G-4776	42	9.3	3.1	0.7	3.9	75.1	2.3
Coker-----	77	41	11.2	2.8	0.6	4.1	76.6	2.2
Coker-----	22	41	15.7	3.0	0.6	3.6	77.2	2.5
Funk's-----	G-4611	41	9.5	3.1	0.6	3.7	79.7	2.6
DeKalb-----	XL394	41	19.3	2.7	0.6	3.9	76.6	1.8
McNair-----	X-300	41	14.7	3.2	0.6	3.4	75.9	2.5
Funk's-----	G-5945	39	17.9	2.5	0.6	4.0	76.9	2.0
Funk's-----	G-4810	39	9.0	3.2	0.6	3.6	73.8	2.6
Pioneer-----	3009	39	14.8	2.8	0.6	3.8	70.5	1.8
McNair-----	S-338	33	15.2	3.4	0.5	3.5	70.5	2.4
Funk's-----	G-4864	32	7.2	2.9	0.5	3.9	73.6	2.0

<sup>1/</sup>Camden, Camp Hill, Prattville, and E.V. Smith Research Center (1977 data is from Prattville only).

<sup>2/</sup>Yields adjusted to 15.5% moisture and 56 lb. per bushel.

<sup>3/1</sup> = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 7. Characteristics of Corn Hybrids Tested Two Years in Central Alabama, 1978-79<sup>1/</sup>

Brand name	Hybrid	Yield per acre <sup>2/</sup> Bu.	Lodged stalks Pct.	Quality <sup>3/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>3/</sup> Rating
Ring Around	-----1502	67	10.2	1.9	0.8	3.4	84.1	2.1
Trojan	-----TXS 114	66	7.2	2.2	0.8	3.6	83.6	2.2
Pioneer	-----3147	64	7.8	2.7	0.7	3.6	81.2	2.7
Funk's	-----G-4507	62	7.5	2.7	0.8	3.6	85.1	2.7
Paymaster	-----UC9792	60	12.5	1.8	0.7	3.6	81.1	1.9
McNair	-----508	59	9.6	2.0	0.8	4.0	77.5	1.9
Ring Around	-----2502	59	10.4	2.3	0.7	3.2	83.1	2.7
Pioneer	-----3145	58	11.5	2.3	0.7	3.8	77.9	1.9
Pioneer	-----511A	57	20.0	2.2	0.7	3.8	78.4	1.6
McCurdy	-----67-14	57	11.6	1.9	0.6	3.6	78.6	2.1
Coker	-----16	57	12.6	2.5	0.7	3.4	83.3	2.9
Pioneer	-----3368A	56	11.6	2.2	0.7	3.5	82.6	2.4
Coker	-----56	56	13.4	2.0	0.7	3.7	78.7	2.0
Funk's	-----G-795W-1	55	16.7	2.5	0.7	3.7	78.2	2.0
Coker	-----22	54	15.7	2.2	0.7	3.6	82.8	2.5
Pioneer	-----3369A	54	10.7	2.2	0.7	3.5	83.1	2.8
Funk's	-----G-4776	53	9.3	2.3	0.7	3.9	78.3	2.5
McNair	-----X-300	53	14.7	2.4	0.7	3.4	78.7	2.4
Funk's	-----G-4611	52	9.5	2.3	0.7	3.7	84.1	2.8
Asgrow	-----RX140A	49	12.7	1.8	0.6	3.7	76.9	1.8
Funk's	-----G-4949A	49	8.1	1.9	0.6	4.1	77.3	2.1
Funk's	-----G-4810	49	9.0	2.4	0.6	3.6	79.1	2.6
DeKalb	-----XL394	48	19.3	1.9	0.6	3.9	80.5	1.8
Pioneer	-----3009	47	14.8	2.2	0.6	3.8	73.1	1.8
Coker	-----77	46	11.2	1.9	0.6	4.1	78.8	2.1
McNair	-----S-338	45	15.2	2.6	0.6	3.5	74.8	2.5
Funk's	-----G-5945	45	17.9	1.9	0.5	4.0	78.9	1.9
Funk's	-----G-4864	41	7.2	2.1	0.5	3.9	79.2	1.9

<sup>1/</sup>Camden, Camp Hill, Prattville, and E.V. Smith Research Center.

<sup>2/</sup>Yields adjusted to 15.5% moisture and 56 lb. per bushel.

<sup>3/</sup>1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 8. Characteristics of Corn Hybrids Tested in Central Alabama, 1979<sup>1/</sup>

Brand name	Hybrid	Yield per acre <sup>2/</sup> Bu.	Lodged stalks Pct.	Quality <sup>3/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>3/</sup> Rating	Mid-silk Days
McNair-----	508	92	7.6	1.5	1.0	3.7	80.9	1.7	79
Ring Around-----	1502	86	9.5	1.9	0.9	3.3	84.1	2.1	68
P-A-G-----	SX 17A	85	6.9	2.8	0.8	3.3	84.7	2.5	71
Pioneer-----	3147	85	7.2	2.5	0.8	3.5	80.7	2.6	75
Trojan-----	TXS 114	84	8.4	1.9	0.9	3.4	85.2	2.1	68
McCurdy-----	84aa	82	8.4	2.3	0.9	3.4	83.2	2.3	69
Gutwein-----	72	82	7.9	2.1	0.8	3.3	83.9	2.4	68
Ring Around-----	2501	80	6.5	1.7	0.8	3.3	82.0	2.8	69
Paymaster-----	UC9792	80	11.0	1.5	0.8	3.4	80.7	1.6	71
Pioneer-----	511A	80	13.1	2.2	0.8	3.5	79.3	1.4	73
McCurdy-----	67-14	79	6.8	2.0	0.8	3.3	77.8	2.2	72
Funk's-----	G-795W-1	79	10.7	2.3	0.8	3.8	79.3	1.9	74
Coker-----	56	77	11.7	1.7	0.9	3.5	80.0	1.7	74
Pioneer-----	3145	77	7.7	2.0	0.8	3.4	76.7	1.8	72
Trojan-----	TXS 119	76	7.5	2.4	0.8	3.1	83.9	2.8	68
Funk's-----	G-4606	75	13.1	1.9	0.9	3.1	83.1	2.5	67
Funk's-----	G-4507	75	8.1	2.7	0.9	3.3	84.8	2.8	68
Coker-----	16	74	9.9	2.3	0.8	3.1	83.2	2.8	67
Ring Around-----	2502	74	7.4	2.2	0.8	3.0	82.7	2.6	70
Pioneer-----	3368A	72	9.3	2.2	0.8	3.3	81.9	2.3	69
Funk's-----	G-4776	72	6.1	2.0	0.8	3.6	79.3	2.2	71
Funk's-----	G-4949A	72	3.2	1.7	0.7	3.8	77.4	2.1	75
Coker-----	22	71	12.6	2.0	0.8	3.4	81.9	2.3	71
Funk's-----	G-4611	71	8.8	2.3	0.8	3.4	83.8	3.0	69
Pioneer-----	3369A	70	9.4	2.1	0.8	3.2	82.1	3.0	67
Coker-----	77	69	6.0	1.9	0.8	3.7	79.5	1.8	75
McNair-----	X-300	69	10.7	2.1	0.8	3.1	77.7	2.3	70
Trojan-----	TXS 119A	68	9.0	2.7	0.8	3.4	83.2	2.8	69

Table 8. Characteristics of Corn Hybrids Tested in Central Alabama, 1979<sup>1/</sup> (Continued)

Brand name	Hybrid	Yield per acre <sup>2/</sup> Bu.	Lodged stalks Pct.	Quality <sup>3/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>3/</sup> Rating	Mid-silk Days
DeKalb-----	XL78	68	14.9	2.2	0.8	3.2	83.5	2.3	67
Pioneer-----	3009	68	9.4	1.9	0.7	3.5	73.3	1.7	74
Gutwein-----	62	67	13.0	2.8	0.8	3.4	83.6	2.8	68
Ring Around-----	1501	66	11.3	2.9	0.8	3.3	85.1	2.8	68
Funk's-----	G-5945	65	14.7	1.7	0.7	3.6	79.1	1.8	76
DeKalb-----	XL394	65	22.7	1.8	0.7	3.4	80.8	1.8	75
Asgrow-----	RX140A	63	13.8	1.5	0.7	3.4	77.4	1.8	74
Northrup, King----	PX 723	62	22.2	2.3	0.7	3.5	81.7	2.1	72
Funk's-----	G-4810	62	6.3	2.3	0.7	3.3	78.6	2.8	72
McNair-----	S-338	61	14.6	2.1	0.7	3.2	74.5	2.1	72
Funk's-----	G-4864	61	6.0	1.9	0.6	3.7	78.4	1.8	75
Paymaster-----	UC12052	59	4.2	2.4	0.6	3.4	73.1	1.7	76

<sup>1/</sup>Camden, Prattville, and E.V. Smith Research Center.

<sup>2/</sup>Yields adjusted to 15.5% moisture and 56 lb. per bushel.

<sup>3/</sup>1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 9. 1979 Yield of Corn Hybrids by Location and Regional Averages for 1-5 Years in Central Alabama<sup>1/</sup>

Brand name	Hybrid	Regional average yield per acre <sup>2/</sup>							
		Camden	Prattville	E.V. Smith Research Center	1-yr.	2-yr.	3-yr.	4-yr.	5-yr.
					1979	1978-79	1977-79	1976-79	1975-79
		Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	
Pioneer-----	3147	105	53	96	85	64	54	57	66
McNair-----	508	116	37	124	92	59	52	55	63
Pioneer-----	3369A	77	61	71	70	54	44	50	61
Coker-----	77	91	36	79	69	46	41	48	61
Funk's-----	G-795W-1	89	56	91	79	55	46	50	59
Coker-----	56	88	58	86	77	56	47	51	58
Pioneer-----	511A	105	53	80	80	57	46	50	58
McCurdy-----	67-14	98	59	80	79	57	44	48	57
DeKalb-----	XL394	71	42	83	65	48	41	47	57
Coker-----	16	91	66	66	74	57	44	47	56
McNair-----	X-300	72	51	84	69	53	41	45	56
Funk's-----	G-4810	83	34	69	62	49	39	45	56
Pioneer-----	3009	87	39	78	68	47	39	45	55
Funk's-----	G-5945	79	35	82	65	45	39	44	55
Funk's-----	G-4949A	96	36	84	72	49	43	45	54
Funk's-----	G-4864	81	28	74	61	41	32	40	50
McNair-----	S-338	60	38	86	61	45	33	38	49
Pioneer-----	3145	90	61	79	77	58	47	50	
Pioneer-----	3368A	74	62	80	72	56	47	50	
Funk's-----	G-4507	80	68	77	75	62	46	50	
Funk's-----	G-4611	78	65	70	71	52	41	48	
Coker-----	22	80	64	69	71	54	41	45	
Trojan-----	TXS 114	107	67	76	84	66	52		
Ring Around---	1502	106	74	79	86	67	50		
Ring Around---	2502	90	51	81	74	59	48		
Paymaster-----	UC9792	95	61	84	80	60	45		
Funk's-----	G-4776	89	48	78	72	53	42		
Asgrow-----	RX140A	74	44	69	63	49			

Table 9. 1979 Yield of Corn Hybrids by Location and Regional Averages for 1-5 Years in Central Alabama<sup>1/</sup>

Brand name	Hybrid	Camden	Prattville	E.V. Smith Research Center	Regional average yield per acre <sup>2/</sup>				
					1-yr.	2-yr.	3-yr.	4-yr.	5-yr.
		Bu.	Bu.	Bu.	1979	1978-79	1977-79	1976-79	1975-79
					Bu.	Bu.	Bu.	Bu.	Bu.
P-A-G-----	SX 17A	114	61	81	85				
McCurdy-----	84aa	100	76	70	82				
Gutwein-----	72	92	68	85	82				
Ring Around----	2501	98	56	86	80				
Trojan-----	TXS 119	86	61	82	76				
Funk's-----	G-4606	91	67	67	75				
DeKalb-----	XL78	68	62	74	68				
Trojan-----	TXS 119A	72	63	69	68				
Gutwein-----	62	73	61	67	67				
Ring Around----	1501	80	58	61	66				
Northrup, King-PX-	723	62	57	68	62				
Paymaster-----	UC12052	72	34	71	59				
Test Average:		87	54	78					
L.S.D. (.05):		21	8	12					
C.V. (%):		20.5	11.8	13.1					

<sup>1/</sup>Yield adjusted to 15.5% moisture and 56 lb. per bushel.

<sup>2/</sup>Averages for 2-5 years include data from Camp Hill.

Table 10. Characteristics of Corn Hybrids Tested Three Years in Southern Alabama, 1977-79<sup>1/</sup>

Brand name	Hybrid	Yield per acre <sup>2/</sup> Bu.	Lodged stalks Pct.	Quality <sup>3/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>3/</sup> Rating
Ring Around-----	1502	99	13.4	2.3	0.9	2.8	82.9	2.3
Pioneer-----	3368A	99	17.1	2.0	0.9	2.8	82.9	2.6
Ring Around-----	2502	96	17.0	2.4	0.9	2.5	82.4	2.4
Pioneer-----	3147	96	19.2	2.6	0.9	3.0	81.5	2.7
Pioneer-----	3369A	95	17.7	2.3	0.9	2.7	82.9	2.7
Funk's-----	G-4507	94	21.0	3.0	0.9	2.9	83.2	2.8
Trojan-----	TXS 114	94	19.8	2.6	1.0	2.7	81.5	2.5
McCurdy-----	67-14	94	22.7	1.9	0.9	2.7	79.9	2.6
Pioneer-----	3145	94	14.2	2.2	0.9	3.0	78.8	2.1
Coker-----	22	93	19.2	2.6	0.9	2.9	81.9	2.5
Ring Around-----	1501	93	13.1	3.2	0.9	2.9	82.6	2.9
Coker-----	16	93	16.4	2.1	0.9	2.5	82.4	2.8
Pioneer-----	511A	91	25.3	2.0	0.9	3.1	79.8	2.2
Funk's-----	G-4810	91	17.1	2.2	0.9	2.9	80.4	2.6
Funk's-----	G-4611	90	23.3	2.3	0.9	2.8	82.6	2.5
DeKalb-----	XL80	89	24.5	2.0	0.9	2.6	80.2	2.5
Funk's-----	G-795W-1	87	28.3	2.1	0.9	3.0	79.2	2.1
DeKalb-----	XL394	86	17.8	2.1	0.9	3.1	82.3	2.5
Funk's-----	G-4864	86	18.9	2.0	0.8	3.0	81.7	2.0
Funk's-----	G-4949A	85	16.3	2.2	0.9	3.2	79.0	2.6
McNair-----	X-300	84	21.5	2.2	0.9	2.6	79.8	2.3
Coker-----	77	84	18.2	2.3	0.9	3.4	80.2	2.5
Pioneer-----	3030	82	18.1	2.0	0.9	3.1	76.3	1.8
Pioneer-----	3009	81	26.6	2.1	0.9	3.0	76.3	2.1
McNair-----	S-338	81	23.3	2.4	0.8	2.7	79.4	2.3
McNair-----	508	80	18.2	2.3	1.0	3.3	80.4	2.2
Funk's-----	G-5945	79	22.3	2.3	0.8	3.1	80.6	2.1

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

<sup>2/</sup>Yields adjusted to 15.5% moisture and 56 lb. per bushel.

<sup>3/</sup>1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 11. Characteristics of Corn Hybrids Tested Two Years in Southern Alabama, 1978-79<sup>1/</sup>

Brand name	Hybrid	Yield per acre <sup>2/</sup> Bu.	Lodged stalks Pct.	Quality <sup>3/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>3/</sup> Rating
Pioneer-----	3368A	119	10.6	1.6	1.0	2.9	83.5	2.5
Ring Around-----	1502	117	10.4	2.0	1.0	2.9	83.9	2.4
Pioneer-----	3369A	117	11.8	1.9	1.0	2.8	83.9	2.7
Pioneer-----	3147	117	16.4	2.1	1.0	3.1	82.5	2.7
McCurdy-----	84aa	116	12.8	2.2	1.0	3.0	83.3	2.5
Coker-----	22	116	11.7	2.3	1.0	3.1	83.4	2.5
Golden Harvest----	H-2500	115	9.7	2.8	1.0	3.0	84.2	2.6
Ring Around-----	2502	114	8.7	2.1	1.0	2.6	83.4	2.4
Funk's-----	G-4507	112	13.7	2.5	0.9	3.0	84.6	2.7
McCurdy-----	67-14	111	20.4	1.5	1.0	2.8	80.3	2.6
Pioneer-----	3145	111	11.2	1.8	1.0	3.1	79.5	2.1
Funk's-----	G-4810	111	13.1	1.7	0.9	3.0	81.3	2.7
Pioneer-----	511A	111	20.4	1.7	1.0	3.3	80.6	2.3
Ring Around-----	1501	110	10.4	2.9	0.9	3.0	83.8	2.9
Coker-----	16	109	11.0	1.8	1.0	2.6	83.4	2.9
Northrup, King----	PX 79	109	10.5	2.3	1.0	3.0	84.1	2.6
Trojan-----	TXS 114	108	16.9	2.3	1.0	2.7	82.6	2.6
Funk's-----	G-4611	108	15.0	2.0	0.9	2.9	83.5	2.5
Funk's-----	G-4949A	106	15.3	1.7	1.0	3.4	80.8	2.6
DeKalb-----	XL80	106	21.1	1.4	0.9	2.6	80.6	2.4
Funk's-----	G-795W-1	106	27.8	1.8	1.1	3.2	79.7	2.0
Coker-----	77	105	16.6	1.9	1.0	3.6	82.0	2.7
DeKalb-----	XL394	105	20.8	1.7	1.0	3.3	83.2	2.6
Funk's-----	G-4864	104	18.5	1.6	0.9	3.1	82.5	1.9
Pioneer-----	3030	103	15.8	1.6	1.0	3.2	77.8	1.8
McNair-----	X-300	102	13.2	1.8	1.0	2.6	80.7	2.2
Pioneer-----	3009	100	25.2	1.7	0.9	3.1	76.9	2.1
McNair-----	S-338	99	16.4	2.1	0.9	2.8	80.5	2.4
McNair-----	508	99	20.7	1.9	1.2	3.5	81.4	2.3
Funk's-----	G-5945	96	23.7	1.9	1.0	3.2	81.4	2.1

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

<sup>2/</sup>Yield adjusted to 15.5% moisture and 56 lb. per bushel.

Table 12. Characteristics of Corn Hybrids Tested in Southern Alabama, 1979<sup>1/</sup>

Brand name	Hybrid	Yield per acre <sup>2/</sup> Bu	Lodged stalks Pct.	Quality <sup>3/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>3/</sup> Rating	Mid-silk Days
Ring Around-----	1502	115	17.0	2.1	1.0	2.7	83.4	2.4	72
Pioneer-----	3147	113	24.2	2.2	1.0	3.0	81.2	2.3	78
Funk's-----	G-4606	112	18.4	2.6	1.0	2.8	83.1	2.8	70
Pioneer-----	3368A	111	16.1	1.5	0.9	2.9	82.7	2.5	72
Paymaster-----	UC8951	110	13.8	2.3	0.9	3.0	82.7	2.3	73
Gutwein-----	74	108	22.6	2.8	0.9	2.7	83.4	2.7	71
Golden Harvest---	H-2500	108	12.8	3.3	0.9	2.9	84.3	2.6	71
Ring Around-----	2502	108	11.9	2.0	0.9	2.4	82.5	2.3	70
Pioneer-----	3145	108	15.3	1.9	1.0	3.0	78.6	2.1	72
Pioneer-----	3369A	105	17.1	2.0	1.0	2.7	84.2	2.3	69
McCurdy-----	67-14	105	28.0	1.6	0.9	2.9	79.8	2.4	76
Ring Around-----	2501	105	16.0	1.7	0.9	2.7	82.6	2.5	71
McCurdy-----	84aa	105	16.3	2.3	0.9	2.8	82.5	2.4	71
Northrup, King---	PX 95	104	20.7	2.3	0.9	3.0	82.6	2.8	74
Funk's-----	G-795W-1	104	28.8	1.8	1.0	3.0	78.2	1.9	79
Pioneer-----	511A	104	22.6	1.8	1.0	3.1	79.2	2.1	77
Coker-----	22	103	16.7	2.3	0.9	3.0	82.1	2.6	74
Coker-----	19A	102	15.4	2.8	0.9	3.0	83.0	2.7	72
Golden Harvest---	H-2775	102	23.6	1.9	0.9	2.9	79.4	2.3	74
Funk's-----	G-4507	102	15.6	3.1	0.9	3.0	84.0	2.5	72
Funk's-----	G-4611	102	25.5	2.4	0.9	2.9	83.3	2.3	72
Funk's-----	G-4810	102	15.8	1.8	0.8	2.9	80.7	2.3	75
Northrup, King---	PX 79	101	15.9	2.5	0.9	2.7	83.5	2.4	73
P-A-G-----	SX 98	101	15.7	2.3	0.9	2.5	83.5	2.7	72
Ring Around-----	1501	101	12.4	3.3	0.9	2.9	83.2	2.8	72
Coker-----	16	99	17.0	1.8	0.9	2.7	83.1	2.9	68
Funk's-----	G-4709	99	22.2	2.6	0.9	2.8	80.3	2.8	75
Funk's-----	G-4864	98	27.3	1.8	0.9	3.0	81.9	2.0	77
Trojan-----	TXS 114	98	22.1	2.6	0.9	2.7	81.5	2.5	70
Pioneer-----	3184	98	16.2	2.4	0.9	2.7	80.5	2.5	74

Table 12. Characteristics of Corn Hybrids Tested in Southern Alabama, 1979<sup>1/</sup> (Continued)

Brand name	Hybrid	Yield	Lodged stalks	Quality <sup>3/</sup>	Ears per stalk	Height of ears	Shelling	Husk <sup>3/</sup>	Mid-silk
		per acre <sup>2/</sup>							
		Bu.							
DeKalb-----	XL80	98	30.3	1.6	0.9	2.7	80.2	2.3	73
DeKalb-----	XL394	98	23.0	1.6	0.9	3.0	83.3	2.3	78
Pioneer-----	3009	96	25.6	1.9	0.9	2.8	76.0	1.5	77
Pioneer-----	3030	93	19.1	1.7	0.9	3.1	77.0	1.6	81
Funk's-----	G-5945	93	28.4	1.8	0.9	3.0	80.4	1.8	80
Funk's-----	G-4949A	92	13.9	1.9	0.9	3.0	79.4	2.3	76
McNair-----	X-300	90	16.4	1.9	0.9	2.6	79.4	2.0	74
McNair-----	508	90	23.6	2.1	1.1	3.3	79.1	2.3	83
Coker-----	77	83	15.1	1.9	0.8	3.4	80.2	2.6	81
McNair-----	S-338	82	20.1	2.3	0.8	2.7	78.4	2.1	77

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

<sup>2/</sup>Yield adjusted to 15.5% moisture and 56 lb. per bushel.

<sup>3/</sup>1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 13. 1979 Yield of Corn Hybrids by Location and Regional Averages for 1-5 Years in Southern Alabama<sup>1/</sup>

Brand name	Hybrid	Fairhope	Brewton	Headland	Regional average yield per acre <sup>2/</sup>				
					1-yr. 1979	2-yr. 1978-79	3-yr. 1977-79	4-yr. 1976-79	5-yr. 1975-79
		Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.
Pioneer-----3147		164	101	74	113	117	96	106	108
Pioneer-----3369A		153	89	74	105	117	95	105	105
McCurdy-----67-14		153	93	69	105	111	94	104	105
Pioneer-----3145		147	98	80	108	111	94	101	102
Coker-----16		142	83	72	99	109	93	101	102
Funk's-----G-4810		146	106	53	102	111	91	100	102
Funk's-----G-795W-1		150	101	61	104	106	87	100	102
DeKalb-----XL80		141	105	47	98	106	89	101	101
Coker-----77		135	90	25	83	105	84	97	101
Pioneer-----511A		144	96	72	104	111	91	99	100
DeKalb-----XL394		137	96	60	98	105	86	99	100
McNair-----X-300		126	88	57	90	102	84	96	98
Funk's-----G-4864		151	99	46	98	104	86	95	97
McNair-----S-338		123	85	39	82	99	81	93	96
Funk's-----G-4949A		145	87	45	92	106	85	94	95
Pioneer-----3030		131	104	45	93	103	82	93	94
McNair-----508		138	101	31	90	99	80	93	94
Funk's-----G-5945		136	104	38	93	96	79	89	94
Pioneer-----3009		141	88	58	96	100	81	90	93
Pioneer-----3368A		155	92	86	111	119	99	109	
Ring Around----1502		162	103	80	115	117	99	109	
Coker-----22		148	100	60	103	116	93	105	
Funk's-----G-4507		146	96	64	102	112	94	104	
Funk's-----G-4611		156	78	71	102	108	90	100	
Ring Around----2502		152	99	74	108	114	96		
Trojan-----TXS 114		141	92	62	98	108	94		
Ring Around----1501		147	87	68	101	110	93		
McCurdy-----84aa		145	97	72	105	116			
Golden Harvest-H-2500		164	96	64	108	115			
Northrup, King-PX 79		151	83	69	101	109			

Table 13. 1979 Yield of Corn Hybrids by Location and Regional Averages for 1-5 Years in Southern Alabama<sup>1/</sup> (Continued)

Brand name	Hybrid	Fairhope	Brewton	Headland	Regional average yield per acre <sup>2/</sup>				
					1-yr. 1979	2-yr. 1978-79	3-yr. 1977-79	4-yr. 1976-79	5-yr. 1975-79
		Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.
Funk's-----	G-4606	162	103	72	112				
Paymaster-----	UC8951	158	107	65	110				
Gutwein-----	74	156	100	70	108				
Ring Around----	2501	159	93	63	105				
Northrup, King-PX	95	157	102	54	104				
Coker-----	19A	150	92	65	102				
Golden Harvest-H-	2775	152	87	66	102				
P-A-G-----	SX 98	150	86	67	101				
Funk's-----	G-4709	161	74	61	99				
Pioneer-----	3184	149	84	62	98				
Test average:		148	94	61					
L.S.D. (.05):		14	10	12					
C.V.(%):		7.8	9.1	16.8					

<sup>1/</sup>Yield adjusted to 15.5% moisture and 56 lb. per bushel.

<sup>2/</sup>Averages for 2-5 years include data from Monroeville.

Table 14. Characteristics of Corn Hybrids Tested Under Irrigation One Year at the Wiregrass Substation, 1979<sup>1/</sup>

Brand name	Hybrid	Yield per acre <sup>2/</sup> Bu.	Lodged stalks Pct.	Quality <sup>3/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>3/</sup> Rating	Mid-silk Days
Ring Around----	1502	187	12.4	2.0	1.1	3.0	84.6	2.3	67
Northrup, King-PX	95	186	18.8	2.8	1.1	3.3	83.3	3.0	69
Gutwein-----	74	186	20.6	2.0	1.1	2.8	85.0	3.0	69
McCurdy-----	84aa	186	16.1	2.3	1.1	3.0	83.2	2.5	69
Funk's-----	G-795W-1	183	26.2	2.3	1.2	2.8	80.3	2.3	77
Paymaster-----	UC8951	183	22.9	2.3	1.0	3.1	83.9	2.0	67
Pioneer-----	3368A	180	10.9	2.0	1.1	3.0	83.7	2.5	69
Funk's-----	G-4606	177	19.5	2.0	1.0	3.0	84.1	2.3	69
Coker-----	19A	176	9.8	2.3	1.1	3.0	84.7	2.5	69
Pioneer-----	3145	176	12.0	2.0	1.1	3.0	78.2	2.0	69
Coker-----	22	174	29.8	2.0	1.1	2.9	83.6	2.8	69
Pioneer-----	3184	173	13.4	2.0	1.0	2.7	80.5	2.8	69
Ring Around----	2501	171	13.1	2.3	1.0	2.9	83.3	2.5	69
Pioneer-----	511A	170	11.4	2.0	1.2	2.8	80.4	2.5	76
Coker-----	77	169	20.9	2.8	1.2	3.5	80.7	2.3	81
Pioneer-----	3147	167	25.3	2.8	1.0	3.0	82.5	2.5	76
Coker-----	16	166	17.9	2.3	1.1	2.9	84.4	2.8	67
DeKalb-----	XL394	164	20.5	2.0	1.1	3.1	81.6	2.8	76
McCurdy-----	67-14	164	35.6	2.0	1.1	2.9	79.4	2.5	70
Ring Around----	1501	161	14.2	2.3	1.0	2.9	85.7	3.3	67
McNair-----	508	161	22.6	2.3	1.3	3.6	81.8	2.0	81
Pioneer-----	3369A	160	17.8	2.0	1.0	3.1	83.9	3.0	67
Funk's-----	G-4949A	160	22.2	2.0	1.0	2.9	79.6	2.5	77
Ring Around----	2502	159	9.4	2.3	1.0	2.6	79.2	2.8	69
Funk's-----	G-4709	159	14.9	2.8	1.1	2.9	82.1	3.3	74
Funk's-----	G-4507	158	25.4	2.5	1.0	2.8	87.6	2.8	69
P-A-G-----	SX 98	158	19.3	2.0	1.0	2.8	84.4	2.3	67

Table 14. Characteristics of Corn Hybrids Tested Under Irrigation One Year at the Wiregrass Substation, 1979<sup>1/</sup>  
(Continued)

Brand name	Hybrid	Yield per acre <sup>2/</sup> Bu.	Lodged stalks Pct.	Quality <sup>3/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>3/</sup> Rating	Mid-silk Days
Northrup, King-PX	79	157	17.7	2.5	1.1	2.9	84.4	3.0	72
Golden Harvest-H	2775	156	15.0	2.0	1.1	2.7	79.0	2.3	74
Funk's-----G	4810	155	24.5	2.0	1.0	3.0	81.4	2.5	69
Funk's-----G	4864	154	17.3	2.8	1.0	2.9	82.2	2.3	77
Golden Harvest-H	2500	152	13.4	2.8	1.0	2.9	85.6	2.5	72
Pioneer-----	3009	151	29.5	2.0	1.1	3.1	75.5	2.3	70
Trojan-----	TXS 114	151	15.7	2.3	1.0	2.6	84.2	2.8	67
Funk's-----G	4611	148	21.6	2.3	1.0	2.9	84.6	2.0	70
McNair-----	X-300	146	14.3	2.3	1.0	2.7	79.1	2.0	74
Pioneer-----	3030	145	26.4	2.3	1.0	3.3	76.4	2.0	81
DeKalb-----	XL80	144	24.7	2.3	1.0	3.1	88.0	2.8	69
Funk's-----G	5945	143	25.5	2.3	1.1	3.0	80.5	2.0	76
McNair-----	S-338	142	27.3	2.3	1.0	2.8	76.4	2.3	70

<sup>1/</sup>The test received five inches of irrigation water from late May to mid-June.

<sup>2/</sup>Yield adjusted to 15.5% moisture and 56 lb. per bushel.

<sup>3/</sup>1 = excellent, 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 15. Characteristics of Corn Hybrids Tested Three Years at the Black Belt Substation, 1976, 1978, and 1979<sup>1/</sup>

Brand name	Hybrid	Yield per acre <sup>2/</sup> Bu.	Lodged stalks Pct.	Quality <sup>3/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>3/</sup> Rating
Pioneer-----	3145	81	6.8	2.2	1.0	3.6	78.7	2.0
Funk's-----	G-4810	72	9.7	2.6	0.8	3.4	79.3	2.3
Funk's-----	G-4864	71	7.1	2.5	0.8	3.7	80.9	1.6
Pioneer-----	3369A	68	21.0	2.5	0.9	3.3	80.0	3.3
Pioneer-----	3009	68	13.1	2.8	0.8	3.5	75.9	1.6
Pioneer-----	511A	66	20.6	2.7	0.9	3.6	80.4	1.7
Coker-----	77	66	15.8	2.1	0.8	3.9	82.2	1.9
McNair-----	508	66	11.2	1.9	1.0	3.9	78.8	2.0
Coker-----	56	66	5.5	2.4	0.9	3.6	80.8	2.2
Funk's-----	G-4776	65	8.5	1.8	0.9	3.7	80.4	1.9
DeKalb-----	XL394	62	11.9	2.6	0.8	3.6	81.3	1.6
Funk's-----	G-795W-1	62	18.4	2.8	0.9	3.6	76.4	1.3
Pioneer-----	3368A	60	7.1	2.2	0.8	3.2	81.2	3.1
Funk's-----	G-4507	60	17.1	3.1	0.8	3.3	84.3	3.0
Funk's-----	G-5945	60	16.1	2.1	0.8	3.7	80.2	2.1
Funk's-----	G-4949A	58	12.9	2.3	0.7	3.7	80.0	2.2
Coker-----	22	57	13.8	2.3	0.8	3.3	81.3	2.2
McNair-----	X-300	56	12.6	2.6	0.8	3.2	79.5	2.3
Coker-----	16	52	12.6	2.3	0.8	3.1	80.1	2.9

<sup>1/</sup> Due to severe drought and insect damage, no data were collected at this location in 1977. Averages are based on data obtained in 1976, 1978, and 1979.

<sup>2/</sup> Yields adjusted to 15.5% moisture and 56 lb. per bushel.

<sup>3/</sup> 1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 16. Characteristics of Corn Hybrids Tested Two Years at the Black Belt Substation, 1978-79

Brand name	Hybrid	Yield per acre <sup>1/</sup> Bu.	Lodged stalks Pct.	Quality <sup>2/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>2/</sup> Rating
Pioneer-----	3145	88	6.8	2.0	1.0	3.6	78.6	2.0
Pioneer-----	3369A	87	23.8	2.4	0.9	3.5	81.5	3.3
Pioneer-----	511A	77	23.6	2.6	0.8	3.8	80.2	1.8
Ring Around----	1502	76	13.5	2.0	0.9	3.3	82.5	2.4
Funk's-----	G-4864	76	8.3	2.3	0.8	3.7	80.5	1.8
Coker-----	56	75	5.7	2.5	0.9	3.7	80.7	2.3
Funk's-----	G-4810	74	11.5	2.3	0.8	3.4	79.7	2.4
Coker-----	77	73	17.4	1.8	0.8	3.9	82.3	2.2
Paymaster-----	UC9792	73	10.7	2.0	0.8	3.5	81.9	2.0
McNair-----	508	72	13.6	1.8	1.0	3.9	79.0	2.1
Funk's-----	G-4776	70	9.6	1.6	0.9	3.9	80.5	1.8
Ring Around----	2502	70	17.7	2.2	0.8	2.9	80.9	2.6
Pioneer-----	3009	69	15.5	3.0	0.8	3.5	74.9	1.6
Funk's-----	G-4611	68	10.0	1.8	0.8	3.3	78.9	2.0
Funk's-----	G-795W-1	68	21.0	2.9	0.9	3.7	78.4	1.4
Pioneer-----	3368A	65	8.1	1.9	0.8	3.4	81.5	3.1
Coker-----	22	65	15.2	1.8	0.8	3.5	81.3	2.1
McNair-----	X-300	64	15.3	2.4	0.8	3.3	79.5	2.4
Pioneer-----	3147	64	6.8	1.6	0.8	3.4	78.8	2.9
Funk's-----	G-4507	62	20.8	3.0	0.8	3.3	84.7	2.9
Asgrow-----	RX140A	61	18.0	2.0	0.7	3.3	79.6	1.6
McCurdy-----	67-14	60	10.5	1.7	0.9	3.3	78.1	1.5
Funk's-----	G-5945	60	19.1	2.1	0.8	3.7	80.3	2.0
DeKalb-----	XL394	59	13.4	2.5	0.8	3.7	80.8	1.3
Trojan-----	TXS 114	58	23.1	2.9	0.7	3.3	75.8	2.7
Funk's-----	G-4949A	57	15.8	2.1	0.7	3.6	79.5	2.1
Coker-----	16	57	15.8	1.8	0.8	3.1	80.9	2.8
McNair-----	S-338	53	19.0	2.3	0.8	3.3	78.5	2.4

Table 17. Characteristics of Corn Hybrids Tested One Year at the Black Belt Substation, 1979.

Brand name	Hybrid	Yield per acre <sup>1/</sup> Bu.	Lodged stalks Pct.	Quality <sup>2/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>2/</sup> Rating	Mid-silk Days
Pioneer-----	3145	108	1.9	1.3	1.1	3.6	80.9	1.5	63
Pioneer-----	3369A	107	10.7	2.5	1.0	3.3	82.7	3.3	59
Ring Around----	1502	98	16.0	1.5	1.0	3.3	83.6	2.0	59
Coker-----	77	97	17.9	1.7	1.0	4.0	84.8	1.7	71
Paymaster-----	UC9792	96	5.9	1.5	1.0	3.6	84.2	1.5	64
Ring Around----	2501	95	8.4	1.3	0.9	3.3	83.7	1.5	62
Paymaster-----	UC12052	95	0.0	1.0	0.9	3.5	81.9	2.0	71
P-A-G-----	SX 17A	94	18.7	1.3	1.0	3.2	84.3	2.3	64
Funk's-----	G-4606	92	8.1	2.3	1.0	3.2	83.3	3.0	62
Funk's-----	G-4611	91	4.8	1.0	0.9	3.4	80.3	2.0	63
Funk's-----	G-4864	90	3.2	1.3	0.9	3.7	83.2	1.5	66
Funk's-----	G-4810	90	1.9	1.8	0.9	3.4	82.3	2.3	66
Ring Around----	1501	88	3.3	1.5	0.9	3.5	85.6	2.8	61
Coker-----	56	86	5.7	2.5	1.0	3.6	82.7	2.0	71
Coker-----	22	85	3.2	1.0	0.9	3.4	82.8	2.0	61
Pioneer-----	511A	84	5.3	2.5	1.0	3.9	82.3	2.0	65
Pioneer-----	3009	84	5.0	2.7	0.9	3.5	79.7	1.3	68
Funk's-----	G-795W-1	83	19.5	2.3	0.9	3.9	80.6	1.3	64
McNair-----	508	82	18.1	1.0	1.0	4.0	81.8	1.7	70
Northrup, King-	PX 723	80	3.0	2.0	0.8	3.4	83.0	2.0	65
Pioneer-----	3368A	77	6.0	1.3	0.8	3.2	82.7	2.7	66
Torjan-----	TXS 114	76	35.9	2.5	0.9	3.3	74.3	2.7	63
Funk's-----	G-4507	75	4.2	3.3	0.9	3.2	87.7	2.0	65
Funk's-----	G-4776	74	2.3	1.5	0.9	3.8	82.4	1.5	67
Funk's-----	G-4949A	73	6.0	1.5	0.8	3.7	81.4	2.0	68
Trojan-----	TXS 119A	73	3.4	3.0	1.0	3.4	82.1	2.0	67
McNair-----	X-300	70	2.8	1.5	1.0	3.2	81.3	1.8	64
Ring Around----	2502	69	27.5	2.7	0.8	2.7	81.5	2.0	66
Asgrow-----	RX140A	67	3.4	1.3	0.8	3.4	81.1	1.3	68

Table 17. Characteristics of Corn Hybrids Tested One Year at the Black Belt Substation, 1979 (Continued).

Brand name	Hybrid	Yield	Lodged stalks	Quality <sup>2/</sup>	Ears	Height	Shelling	Husk <sup>2/</sup>	Mid-silk
		per acre <sup>1/</sup>	Pct.	Rating	per stalk	of ears		Pct.	Rating
		Bu.			No.	Ft.			
Trojan-----	TXS 119	67	16.5	2.0	0.9	2.8	83.2	2.3	63
McCurdy-----	67-14	66	1.9	1.7	0.9	3.3	80.6	1.3	67
Coker-----	16	65	1.8	1.5	0.8	2.8	82.3	1.8	63
Funk's-----	G-5945	64	5.0	1.7	0.9	3.8	82.3	1.3	72
DeKalb-----	XL78	61	3.1	2.0	0.9	2.8	83.7	2.0	64
McCurdy-----	84aa	59	7.8	2.0	0.8	3.1	80.8	1.5	64
Gutwein-----	62	57	1.2	2.3	0.8	3.3	82.4	2.7	64
McNair-----	S-338	56	9.5	1.8	0.8	3.5	81.2	1.8	66
DeKalb-----	XL394	53	2.0	3.0	0.9	3.7	82.7	1.0	75
Pioneer-----	3147	50	1.8	1.5	0.8	3.0	78.1	2.0	72
Gutwein-----	72	33	2.7	1.3	0.6	3.0	82.0	2.3	68
Test average:		78							
L.S.D. (.05):		15							
C.V. (%):		16.2							

<sup>1/</sup>Yield adjusted to 15.5% moisture and 56 lb. per bushel.

<sup>2/1</sup> = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 18. Characteristics of White Corn Hybrids Tested at Sand Mountain Substation, E.V. Smith Research Center, and the Wiregrass Substation, 1979

Brand name	Hybrid	Yield per acre <sup>1/</sup> Bu.	Lodged stalks Pct.	Quality <sup>2/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>2/</sup> Rating	Mid-silk Days
Sand Mountain Substation, Crossville									
Pioneer-----	511A	111	44.1	3.0	0.9	2.9	78.3	2.0	83
Funk's-----	G-795W-1	111	43.3	3.0	0.9	2.9	80.1	2.0	82
Ring Around----	2602W	105	36.0	3.0	0.8	3.1	75.4	2.0	82
DeKalb-----	XL390	104	51.5	3.0	0.9	2.8	80.4	2.3	81
Jacques-----	W-300	102	18.8	2.8	0.8	3.1	73.7	2.0	85
Golden Harvest--	H-2660W	99	27.2	3.0	0.8	3.1	74.0	2.0	83
Funk's-----	G-4747W-1	98	18.5	3.0	0.8	3.1	73.5	2.0	84
Funk's-----	G-4787W	95	22.0	3.0	0.8	3.0	78.1	2.0	85
Test average:		103							
L.S.D. (.05):		11							
C.V. (%)		8.8							
E.V. Smith Research Center Shorter									
Pioneer-----	511A	80	1.0	1.8	1.0	2.7	78.0	2.3	80
Funk's-----	G-795W-1	77	0.0	1.5	0.8	3.0	79.9	2.0	82
DeKalb-----	XL390	75	0.0	2.0	0.8	2.5	80.3	3.0	82
Jacques-----	W-300	53	1.0	2.5	0.7	2.9	70.7	1.0	83
Funk's-----	G-4787W	51	0.0	1.5	0.6	2.8	76.0	2.5	86
Funk's-----	G-4747W-1	48	1.0	2.5	0.7	2.9	68.6	1.8	82
Golden Harvest--	H-2660W	45	0.0	2.5	0.6	2.8	70.8	1.5	83
Ring Around----	2602W	38	0.0	2.8	0.6	3.0	69.2	1.3	83
Test average:		58							
L.S.D. (.05):		16							
C.V. (%)		22.3							

Table 18. Characteristics of White Corn Hybrids Tested at Sand Mountain Substation, E. V. Smith Research Center, and the Wiregrass Substation, 1979 (Continued)

Brand name	Hybrid	Yield per acre <sup>1/</sup> Bu.	Lodged stalk Pct.	Quality <sup>2/</sup> Rating	Ears. per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>2/</sup> Rating	Mid-silk Days
Wiregrass Substation, Headland									
DeKalb-----	XL390	71	76.0	2.3	0.9	2.4	79.5	2.7	76
Funk's-----	G-795W-1	66	59.2	3.0	0.8	2.8	76.7	2.7	79
Pioneer-----	511A	58	27.5	2.7	0.8	2.5	76.3	3.0	82
Jacques-----	W-300	57	44.0	2.7	0.8	2.6	73.5	3.7	82
Ring Around----	2602W	53	53.0	2.7	0.7	3.1	72.3	3.3	79
Funk's-----	G-4747W-1	50	34.8	3.0	0.9	2.9	72.4	3.3	82
Golden Harvest--	H-2660W	47	25.7	3.3	0.6	2.8	73.2	3.0	82
Funk's-----	G-4787W	39	35.9	3.7	0.6	2.4	74.8	4.0	85
Test average:		55							
L.S.D. (.05):		8							
C.V. (%):		12.3							

<sup>1/</sup>Yield adjusted to 15.5% moisture and 56 lb. per bushel.

<sup>2/</sup>1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

# VIRAL DISEASE REACTIONS OF SOME HYBRIDS IN 1979

Robert T. Gudauskas

Department of Botany, Plant Pathology, and Microbiology

## INTRODUCTION

The two most prevalent viral diseases of corn in Alabama are maize chlorotic dwarf (MCD) caused by the maize chlorotic dwarf virus (MCDV), and maize dwarf mosaic (MDM) caused by the maize dwarf mosaic virus (MDMV). Discovery of MDM in the State dates back to the early 1960's, while MCD has been recognized only since 1973. Both diseases probably occur throughout Alabama, however, they generally have been more prevalent and damaging in the northern two-thirds of the State.

Symptoms of the two diseases are similar in appearance and sometimes difficult to distinguish. Generally, affected plants are chlorotic or discolored and may be stunted. Leaves of MDM-diseased plants show an irregular, light and dark green mosaic or mottle; the initial symptom of MCD is a fine, chlorotic streaking over smallest veins.

The causal viruses are spread by feeding activities of insects. MCDV is transmitted by certain leafhoppers and MDMV is carried by some aphids. Both viruses have similar host ranges among a variety of wild and cultivated grasses. Johnsongrass is an important overseason or reservoir host for the viruses, and MCD and MDM incidence and damage usually are high in corn fields that are heavily infested with johnsongrass.

Use of resistant or tolerant corn hybrids presently is the most practical control for MCD and MDM. Commercial and experimental hybrids and inbred lines are evaluated yearly to identify resistant hybrids of promising

sources of resistance to the diseases. Results of evaluations of some commercial hybrids during 1979 are summarized in this report.

#### PROCEDURE

Viral disease ratings were made on entries in the corn hybrid test at the Piedmont Substation, Camp Hill. Plants showing symptoms of MCD and/or MDM were counted and data are reported as percent incidence of the diseases for each hybrid.

#### RESULTS

Evaluations for viral diseases in the hybrid test on the Piedmont Substation are given in table 19. Tests on the Black Belt, Tennessee Valley, Sand Mountain, and Upper Coastal substations were also examined but disease incidence was insignificant.

With two exceptions, MCD and MDM were found in every hybrid in the Piedmont test. Average incidents of MCD within all hybrids was 7.2% as compared to 16.7% for MDM. Occurrence of both diseases in the same plant was frequently observed.

Hybrids showing relatively greater resistance or tolerance were apparent. Under conditions of higher or lower incidence of viral diseases many hybrids would be more or less susceptible but should retain their relative ranking. When selecting a hybrid, viral disease reactions should be taken into account for areas where the diseases occur, along with consideration of yield and other characteristics given elsewhere in this report.

Table 19. Incidence of viral diseases in the regular corn variety test, Piedmont Substation, July 25, 1979

Brand name	Hybrid	Incidence (%) <sup>1/</sup>		
		MCD	MDM	Healthy
Asgrow	-----RX140A	7.5	12.5	80.0
Coker	-----16	16.1	30.3	60.7
Coker	-----22	8.0	30.0	66.0
Coker	-----56	25.5	21.3	59.6
Coker	-----77	7.4	40.7	55.5
Dekalb	-----XL78	0	14.6	85.4
Dekalb	-----XL394	1.8	0	98.2
Funk's	-----G-795W-1	11.4	31.4	57.1
Funk's	-----G-4507	20.0	14.3	68.6
Funk's	-----G-4606	15.8	19.3	68.4
Funk's	-----G-4611	7.5	12.2	85.4
Funk's	-----G-4776	0	22.0	78.0
Funk's	-----G-4810	0	0	100.0
Funk's	-----G-4864	30.8	23.1	57.7
Funk's	-----G-4949A	30.0	33.3	50.0
Funk's	-----G-5945	0	18.5	81.5
Gutwein	-----62	2.2	4.4	93.3
Gutwein	-----72	4.7	4.7	90.6
McCurdy	-----67-14	4.7	9.4	87.5
McCurdy	-----84aa	6.4	21.0	75.8
McNair	-----508	1.6	1.6	96.8
McNair	-----S-338	0	23.1	76.9
McNair	-----X-300	5.9	5.9	88.2
Northrup King	-----PX 723	7.1	5.3	87.5
P.A.G.	-----SX 17A	10.0	0	90.0
Paymaster	-----UC9792	9.7	12.2	82.9
Paymaster	-----UC12052	3.2	29.0	67.7
Pioneer	-----511A	4.3	23.4	74.5
Pioneer	-----3009	0	7.8	92.2
Pioneer	-----3145	0	0	100.0
Pioneer	-----3147	0	7.5	92.4
Pioneer	-----3368A	1.8	35.2	63.0
Pioneer	-----3369A	7.7	23.1	71.1
Ring Around	-----1501	0	4.7	95.3
Ring Around	-----1502	1.5	13.4	85.1
Ring Around	-----2501	3.7	5.5	90.7
Ring Around	-----2502	5.7	34.0	62.3
Trojan	-----TXS 114	14.7	13.2	72.1
Trojan	-----TXS 119	4.2	43.7	54.2
Trojan	-----TXS 119A	8.8	17.5	73.7

<sup>1/</sup>Percentage of plants showing symptoms of maize chlorotic dwarf (MCD), maize dwarf mosaic (MDM), or no symptoms (Healthy).

REPORT OF PRELIMINARY TESTS

Table 20. Characteristics of Corn Hybrids Tested One Year at Two Locations in Northern Alabama, 1979

Brand name	Hybrid	Yield per acre <sup>1/</sup>			Lodged stalks Pct.	Quality <sup>2/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>2/</sup> Rating	Mid-silk Days
		Belle Mina Bu.	Cross-ville Bu.	Regional Average Bu.							
Funk's-----	G-4740	116	141	128	0.9	3.4	1.0	3.4	85.3	3.0	80
Pioneer-----	3369A <sup>3/</sup>	119	132	125	0.9	2.4	1.0	3.7	88.9	2.5	72
Pioneer-----	3147 <sup>3/</sup>	107	143	125	0.9	2.8	0.9	3.9	83.1	2.5	80
Pioneer-----	X5407	108	132	120	0.9	2.4	0.9	3.7	85.8	2.3	74
Funk's-----	29018	102	133	118	2.2	2.8	0.9	3.7	84.5	2.6	75
Northrup, King-PX	79	100	134	117	0.9	2.5	0.9	3.8	86.8	2.6	75
Gutwein-----	2910	101	132	117	3.5	3.0	0.9	3.8	84.6	2.1	76
McCurdy-----	7787	109	123	116	2.3	2.6	1.0	3.5	85.2	2.5	72
Agrow-----	RX777	106	124	115	1.8	2.4	1.0	3.7	83.3	2.4	72
Pioneer-----	3183	101	127	114	0.4	2.8	0.9	3.7	83.7	2.3	76
Asgrow-----	RX909	99	128	114	4.1	2.0	0.9	3.6	85.2	2.5	75
Northrup, King-PX	87	105	121	113	1.0	2.5	0.9	3.7	83.9	2.5	76
Funk's-----	G-4709	112	115	113	1.3	3.3	1.0	3.8	84.1	3.3	78
P-A-G-----	SX 373	90	135	113	1.2	2.6	0.9	3.9	84.5	2.5	76
Coker-----	19	96	126	111	0.5	2.9	1.0	3.7	85.9	2.4	74
USS-----	2315	101	120	110	0.9	2.1	0.9	4.1	85.2	2.1	77
USS-----	1515	93	128	110	2.4	3.0	0.9	3.7	85.4	2.8	75
DeKalb-----	XL72AA	89	130	110	2.5	2.8	0.9	3.5	85.7	2.6	74
DeKalb-----	XL80b	85	133	109	1.2	3.1	0.8	3.9	79.7	2.6	77
Northrup, King-PX	74	100	117	109	0.9	2.8	0.9	3.7	86.2	2.5	74
Big D-----	4791	96	121	108	0.4	2.9	0.9	3.6	84.9	2.6	74
Big D-----	4862	90	123	107	3.6	2.8	0.9	3.7	85.0	2.5	74
Asgrow-----	RX90	91	120	106	3.4	2.8	0.9	3.6	85.0	2.6	73
DeKalb-----	XL78	96	115	105	2.7	2.4	0.9	3.7	83.9	2.5	73
Paymaster-----	UC9451	96	115	105	2.7	2.4	0.9	3.8	81.4	2.3	76
P-A-G-----	262193	86	123	105	3.2	3.0	0.9	3.7	84.4	3.0	73
Gutwein-----	2885	95	114	104	1.3	2.6	0.8	4.0	82.9	2.5	77
Golden Harvest-H-	2775	97	111	104	0.9	2.5	0.9	3.9	78.2	2.3	77

Table 20. Characteristics of Corn Hybrids Tested One Year at Two Locations in Northern Alabama, 1979 (Continued)

Brand name	Hybrid	Yield per acre <sup>1/</sup>			Lodged stalks Pct.	Quality <sup>2/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>2/</sup> Rating	Mid-silk Days
		Belle Mina Bu.	Cross-ville Bu.	Regional Average Bu.							
Trojan-----	TXS 119A	92	116	104	0.0	3.1	0.9	3.6	85.4	2.6	76
Ring Around-----	2601	93	114	103	1.4	2.3	0.8	3.7	80.2	2.4	78
Funk's-----	G-4574	87	118	103	2.3	3.1	0.9	3.9	85.4	2.6	74
Jacques-----	177	85	118	102	1.3	1.9	0.9	3.6	84.9	2.6	73
Paymaster-----	UC8201	82	120	101	1.4	3.0	0.9	3.6	85.7	2.5	74
Producers Choice-----	GK-955	80	121	100	0.9	2.8	0.8	4.0	82.6	2.3	80
Big D-----	4204	89	110	100	0.5	2.5	0.9	3.6	83.6	2.6	73
Jacques-----	180	92	107	100	2.2	2.8	0.9	3.7	86.0	2.4	74
Gutwein-----	72	81	117	99	0.5	3.1	1.0	3.7	85.3	2.5	75
Trojan-----	T 1189	90	105	98	5.7	2.8	0.9	3.3	83.4	2.3	73
Funk's-----	G-4657	79	105	92	2.3	3.1	0.8	3.5	85.1	2.8	76
Trojan-----	MDM 116	77	104	90	0.6	2.9	0.8	3.8	84.6	2.1	78
Test average:		95	122								
L.S.D. (.05):		15	10								
C.V. (%):		13.1	7.1								

<sup>1/</sup>Yields adjusted to 15.5% moisture and 56 lb. per bushel.

<sup>2/</sup>1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

<sup>3/</sup>Check hybrids.

Table 21. Characteristics of Corn Hybrids Tested One Year in Central Alabama at the E.V. Smith Research Center, 1979

Brand name	Hybrid	Yield per acre <sup>1/</sup> Bu.	Lodged stalks Pct.	Quality <sup>2/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>2/</sup> Rating	Mid-silk Days
Funk's-----	G-4740	89	0	1.8	1.0	2.3	81.9	3.5	79
McNair-----	488	87	0	1.0	1.0	2.7	80.1	2.3	83
Northrup, King-	PX95	82	0	1.8	1.0	2.8	81.8	3.3	76
Pioneer-----	X5407	82	0	1.3	0.9	2.5	84.0	1.3	74
Pioneer-----	3147 <sup>3/</sup>	81	0	2.3	0.9	2.6	81.7	2.3	81
Gutwein-----	2910	75	0	1.5	0.9	2.6	81.9	2.5	75
Producers Choice	GK-915	74	0	1.5	0.9	2.7	81.2	2.5	75
Funk's-----	28753	72	0	1.3	0.9	2.7	81.4	2.0	74
Paymaster-----	UC9451	69	0	2.5	0.9	2.5	78.8	3.3	74
McCurdy-----	7787	69	0	1.8	0.9	2.6	81.9	1.3	73
USS-----	2315	69	0	1.0	0.8	2.7	83.8	1.3	77
Pioneer-----	3183	68	0	1.8	0.8	2.4	82.0	2.0	75
Trojan-----	T 1189	67	0	1.0	0.9	2.5	79.4	3.3	73
Funk's-----	G-4709	67	0	2.8	0.8	2.6	80.4	3.8	76
USS-----	1515	67	0	1.8	0.8	2.6	84.3	1.5	74
Pioneer-----	3369A <sup>3/</sup>	67	0	2.0	0.8	2.6	82.4	3.5	74
Jacques-----	177	67	0	1.8	0.9	2.5	83.8	2.0	73
Jacques-----	180	66	0	1.8	0.9	2.6	83.6	2.5	74
Northrup, King-	PX 74	66	0	2.8	0.9	2.7	84.2	2.5	74
McCurdy-----	75-210	66	0	1.8	0.9	2.7	79.5	2.0	78
DeKalb-----	XL72AA	65	0	2.3	0.8	2.8	83.8	2.0	74
Asgrow-----	RX90	64	0	2.0	0.9	2.7	82.9	3.0	74
Asgrow-----	RX112	63	0	1.0	0.8	2.7	80.9	1.0	76
Funk's-----	29018	62	1	3.0	0.8	2.7	80.7	3.8	76
Ring Around----	2601	62	0	2.3	0.7	2.5	80.7	2.0	77
Big D-----	4862	62	0	2.5	0.8	2.7	82.3	2.8	74
McNair-----	X-170	61	0	1.8	0.9	2.4	83.5	2.0	72
DeKalb-----	XL72b	61	0	1.8	0.8	2.4	82.0	3.3	76

Table 21. Characteristics of Corn Hybrids Tested One Year in Central Alabama at the E.V. Smith Research Center, 1979 (Continued)

Brand name	Hybrid	Yield per acre <sup>1/</sup> Bu.	Lodged stalks Pct.	Quality <sup>2/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>2/</sup> Rating	Mid-silk Days
P-A-G-----	262193	60	1	3.5	0.8	2.7	79.9	3.8	74
Funk's-----	G-4848	60	0	2.0	0.7	2.5	73.6	2.5	81
Paymaster-----	UC8951	60	0	1.8	0.9	2.8	80.3	2.5	75
Northrup, King PX	79	59	1	2.3	0.8	2.5	82.1	2.8	75
Gutwein-----	2885	59	0	2.0	0.8	2.7	78.5	1.3	76
Big D-----	4791	58	0	2.8	0.8	2.6	82.7	3.3	74
Asgrow-----	RX909	57	0	1.8	0.9	2.3	80.4	1.5	75
Coker-----	19A	56	0	1.5	0.8	2.8	81.6	1.5	74
P-A-G-----	SX 373	56	0	2.3	0.8	2.6	82.0	2.0	78
Producers Choice	GK-748	54	1	2.5	0.8	2.4	79.5	2.5	75
Trojan-----	MDM 116	49	0	1.5	0.6	2.5	82.6	1.5	77
Pioneer-----	3184	49	0	3.0	0.7	2.3	75.6	4.0	75
Test average:		66							
L.S.D. (.05):		9							
C.V. (%):		11.8							

<sup>1/</sup>Yield adjusted to 15.5% moisture and 56 lb. per bushel.

<sup>2/</sup>1 = excellent, 2 = good; 3 = fair; 4 = poor; 5 = very poor.

<sup>3/</sup>Check hybrids.

Table 22. Characteristics of Corn Hybrids Tested at Two Locations in Southern Alabama, 1979

Brand name	Hybrid	Yield per acre <sup>1/</sup>			Lodged stalks Pct.	Quality <sup>3/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>2/</sup> Rating	Mid-silk Days
		Fair-hope Bu.	Head-land Bu.	Regional Average Bu.							
P-A-G-----	262193	168	91	130	10.7	3.2	1.0	3.3	82.6	2.9	69
Funk's-----	G-4740	160	92	126	8.2	2.0	1.1	3.0	80.8	2.9	75
Pioneer-----	3369A <sup>3/</sup>	158	87	123	17.7	2.1	1.0	3.2	81.1	2.9	69
Paymaster-----	UC9451	172	73	122	12.1	2.4	0.9	3.3	79.5	2.6	70
P-A-G-----	SX 333	163	79	121	13.1	2.5	1.0	3.3	83.8	2.8	69
Pioneer-----	3147 <sup>3/</sup>	162	79	121	16.6	2.3	0.9	3.1	80.4	2.8	76
Paymaster-----	UC9792	158	82	120	12.9	1.8	1.0	3.2	81.1	2.5	73
Northrup, King---	PX 74	149	87	118	12.7	2.6	0.9	3.2	82.8	2.8	70
Asgrow-----	RX90	157	77	117	28.4	2.6	1.0	3.3	82.8	2.9	68
Producers Choice	GK-748	156	78	117	11.2	2.3	0.9	3.1	83.4	3.0	70
Gutwein-----	2910	159	74	117	13.2	2.4	1.0	3.0	81.5	2.6	70
USS-----	2315	153	80	116	21.5	2.1	1.0	3.5	80.4	2.5	70
Trojan-----	TXS 119	157	75	116	2.4	2.6	0.9	3.1	82.6	2.9	69
DeKalb-----	XL72AA	156	75	116	10.9	2.8	0.9	3.3	83.2	2.6	69
Asgrow-----	RX909	156	75	116	15.9	2.3	1.0	3.1	81.7	2.6	70
DeKalb-----	XL78	154	76	115	20.3	2.1	0.9	3.0	83.6	2.6	69
Funk's-----	G-4574	156	74	115	18.0	2.4	0.9	3.3	83.1	2.8	70
Pioneer-----	3040	164	65	114	23.8	1.9	1.0	3.2	79.6	2.0	76
Pioneer-----	3183	141	86	113	11.4	1.9	0.9	3.2	79.8	2.1	74
McCurdy-----	75-210	163	63	113	26.2	2.0	0.9	3.3	79.0	2.5	72
McCurdy-----	9410	154	72	113	8.7	2.0	1.0	3.3	79.5	2.5	79
USS-----	1515	146	74	110	2.3	2.1	0.9	2.9	83.4	3.0	69
Funk's-----	28753	148	72	110	10.6	2.0	0.9	3.2	81.6	2.9	70
Gutwein-----	62	143	76	110	19.1	2.5	1.0	3.4	82.5	2.8	69
Northrup, King---	PX 87	154	64	109	15.2	2.3	0.9	3.1	81.3	2.6	74
Ring Around-----	2601	147	71	109	27.5	1.9	0.9	3.3	78.6	2.5	75
DeKalb-----	XL72b	143	74	109	4.7	2.5	0.9	2.9	82.8	3.1	71
Trojan-----	TXS 119A	141	76	108	8.5	2.3	0.9	3.0	82.2	2.8	70

Table 22. Characteristics of Corn Hybrids Tested at Two Locations in Southern Alabama, 1979 (Continued)

Brand name	Hybrid	Yield per acre <sup>1/</sup>			Lodged stalks Pct.	Quality <sup>3/</sup> Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk <sup>2/</sup> Rating	Mid-silk Days
		Fair-hope Bu.	Head-land Bu.	Regional Average Bu.							
Jacques-----	177	140	75	107	13.6	2.0	0.9	2.9	82.5	3.1	67
Coker-----	19	135	79	107	9.2	2.8	0.9	3.2	82.6	2.8	69
Trojan-----	T 1189	137	75	106	9.8	2.0	0.9	3.0	81.1	2.9	69
Golden Harvest-H-	2606	137	74	106	17.6	2.5	0.9	3.2	82.8	2.6	69
Big D-----	4862	132	76	105	13.9	2.4	0.9	3.3	82.3	2.6	70
Funk's-----	G-4636	134	75	104	11.7	2.1	1.0	3.1	82.1	2.8	68
Jacques-----	180	137	72	104	10.8	2.8	0.9	3.1	83.0	2.9	71
Paymaster-----	UC12052	144	62	103	45.4	1.9	0.9	3.2	74.0	2.0	79
Big D-----	4791	133	69	101	19.0	2.4	0.9	3.2	81.8	3.0	68
McNair-----	X-170	123	79	101	26.8	2.1	1.1	2.9	81.0	3.0	67
Producers Choice	GK-915	128	67	98	14.8	2.0	0.9	3.3	80.4	2.4	71
Asgrow-----	RX140A	128	55	91	16.6	2.0	0.8	3.2	77.1	2.9	75
Test average:		148	75								
L.S.D. (.05):		18	10								
C.V. (%):		10.3	11.3								

<sup>1/</sup> Yield adjusted to 15.5% moisture and 56 lb. per bushel.  
<sup>2/</sup> 1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.  
<sup>3/</sup> Check hybrid.

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 descending order of their composite rating. For relative maturity information for these hybrids, use the number of days to mid silk, found in tables 4, 8, and 12. All hybrids have yellow grain except the white hybrids indicated by a (W). All composite ratings are based on 1977-79 regional averages, found in tables 2, 6, and 10.

NORTHERN ALABAMA	
Brand name	Hybrid
Pioneer	3147
Ring Around	1502
Pioneer	3369A
Trojan	TXS 114
Coker	16
Funk's	G-4507
Funk's	G-4611
Paymaster	UC9792
Coker	22
McCurdy	67-14
McNair	X-300
Coker	56
DeKalb	XL80
Funk's	G-4810
DeKalb	XL394
Pioneer	511A (W)
Funk's	G-795W-1 (W)

CENTRAL ALABAMA	
Brand name	Hybrid
Pioneer	3147
McNair	508
Trojan	TXS 114
Ring Around	1502
Ring Around	2502
Coker	56
Pioneer	3368A
Pioneer	3145
Paymaster	UC9792
Funk's	G-4507
McCurdy	67-14
Pioneer	3369A
Funk's	G-795W-1 (W)
Funk's	G-4949A
Pioneer	511A (W)
Coker	16
Funk's	G-4776
Funk's	G-4611
Coker	77
Coker	22
McNair	X-300
DeKalb	XL394
*Funk's	G-4810
*Pioneer	3009
*Funk's	G-5945

SOUTHERN ALABAMA	
Brand name	Hybrid
Ring Around	1502
Pioneer	3368A
Ring Around	2502
Pioneer	3145
Pioneer	3369A
Coker	16
Pioneer	3147
McCurdy	67-14
Trojan	TXS 114
Ring Around	1501
Funk's	G-4810
Coker	22
Funk's	G-4507
Pioneer	511A (W)
Funk's	G-4611
DeKalb	XL80
DeKalb	XL394
Funk's	G-4864
Funk's	G-4949A
McNair	X-300
Coker	77
Funk's	G-795W-1 (W)
Pioneer	3030
*McNair	508
*McNair	S-338

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

Note: All acceptable hybrids have been tested 3 years in the regular variety tests. Hybrids that have outstanding performance for two years may be suitable for use on a trial basis. Two-year averages of yield and

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

