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Performance of CORN VARIETIES in Alabama, 1976

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Performance of Corn Hybrids in Alabama, 1976

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Corn performance tests were conducted at 12 locations by the Auburn University Agricultural Experiment Station in 1976. These tests are conducted annually to determine the relative performance of many hybrids offered for sale in Alabama and to furnish unbiased information which growers may use to evaluate hybrids. They are designed to compare hybrids in an area and are not intended to measure absolute yielding potential of a hybrid.

Rainfall distribution was good in northern and southern Alabama during the 1976 growing season, and excellent yields were obtained in these areas. Yields of several hybrids exceeded 190 bushels per acre at Fairhope. Central Alabama yields were reduced by drought at all locations except Camp Hill.

Location of the tests and cultural practices used are shown in Table 1. Lime and fertilizer were applied in adequate amounts as indicated by soil tests. Chemical and/or mechanical weed control practices were employed as needed. A split block experimental design with four replications was used at all test locations. Grain yields were adjusted to 15.5 percent moisture and converted to bushels (56 pounds) per acre. Stalks broken below the ear or leaning more than 45 degrees were considered lodged. Ear rot, earworm damage, size of ear and grain, and luster of grain were considered in rating ear and grain quality. Height of ears was measured from ear base to the ground level. Husks were rated according to tightness and extension beyond the tip of the ear.

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

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and regional average yields for 1-5 years in northern Alabama. Similar data are given for central Alabama in tables 6-9, and for southern Alabama in tables 10-13. The performance of corn hybrids planted in 30-inch rows and irrigated at Camden for 3, 2, and 1 years is shown in tables 14, 15, and 16 respectively. In 1976, this test was furrow irrigated on June 16, and 24; and July 2, 13, and 23. Approximately 2 inches of water was applied at each irrigation. Performance of corn hybrids at the Black Belt Substation, Marion Junction, for 3, 2, and 1 years is given in tables 17, 18, and 19 respectively.

A new section entitled Viral Disease Reactions of Some Hybrids in 1976, is included in this report. This section was compiled by Robert T. Gudauskas, G. W. Karr, Jr., and Clauzell Stevens, Department of Botany and Microbiology. An introduction and discussion of procedure and results are given, and data from several locations are presented in tables 20-24. This section will be of particular interest to growers in areas where viral diseases occur.

At several locations preliminary tests were conducted to evaluate newly released and experimental hybrids. Results of these tests are given in tables 25-27. If a hybrid is outstanding in these preliminary tests it is included in the regular testing program the following year.

When comparing hybrids, small differences in yield may not be real differences but may result from variation in the plots and testing procedure. To aid in determining real differences between hybrids a statistical procedure, analysis of variance, was performed on data from each location. The L.S.D. (least significant difference) is given for yields at each location.

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 for an area. Three-year results are considered sufficient to give a good indication of the 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. The composite score was obtained by subtracting values for lodging, quality, and ear height from its yield. The value subtracted for each characteristic was proportional to the numerical value shown for the characteristics in tables 2, 6, and 10. Hybrids that have an exceptionally good record for 2 years in the regular test was included on the acceptable list with a conditional notation. However, data from 3 or more years are normally used in evaluating hybrids.

All of the 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 characteristics. All characteristics should be carefully considered when selecting a hybrid.

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A special thanks is expressed to W. H. Hearn and Mrs. Sally Bagwell, Research Data Analysis, for the computation and statistical analysis of the data in this report.

Table 1. Location and Cultural Practices for 1976 Corn Variety Tests^{1/}

Location	Plant- ing date	Nitro- gen rate Lb/A	Row width	Average Plant Population Thou.
<u>Northern Alabama</u>				
Tennessee Valley Substation (Belle Mina)	4/12	135	42	14
Sand Mountain Substation (Crossville)	^{2/}	160	42	21
Upper Coastal Plain Substation (Winfield)	4/13	165	40	17
<u>Central Alabama</u>				
Agronomy Farm (Milstead)	4/23	120	40	18
Lower Coastal Plain Substation (Camden)				
Irrigated	4/16	160	30	23
Unirrigated	4/16	120	36	18
Piedmont Substation (Camp Hill)	4/29	120	40	17
Prattville Experiment Field (Prattville)	4/27	120	42	17
Black Belt Substation (Marion Junction)	5/19 ^{3/}	120	36	12
<u>Southern Alabama</u>				
Brewton Experiment Field (Brewton)	4/8	120	36	19
Monroeville Experiment Field (Monroeville)	4/9	120	36	19
Wiregrass Substation (Headland)	4/8	120	36	20
Gulf Coastal Substation (Fairhope)	3/18	130	38	22

^{1/}Lime, P₂O₅ and K₂O were applied according to soil test recommendations.

^{2/}Regular test planted 4/9/76. Preliminary test planted 4/22/76.

^{3/}Late planting date due to loss of stand from first planting.

Table 2. Some Characteristics of Corn Varieties Tested Three Years in Northern Alabama, 1974-76^{1/}

Brand name	Hybrid	Yield per acre ^{2/} Bu.	Lodged stalks Pct.	Quality ^{3/} Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk ^{3/} Rating
Pioneer-----	3147	137	9.6	2.3	1.1	4.2	84.7	2.6
Pioneer-----	3369A	136	5.8	1.9	1.0	3.7	82.5	2.3
McCurdy-----	67-14	129	8.1	1.9	1.0	3.9	79.4	2.1
Pioneer-----	3179	127	9.4	2.3	1.0	4.2	83.0	2.5
Funk's-----	G-4864	126	5.5	2.2	1.0	4.3	82.6	1.5
Pioneer-----	511A	122	11.6	2.2	1.1	4.2	81.5	1.6
McNair-----	X-300	122	5.2	2.1	1.0	3.8	79.5	1.9
Coker-----	16	121	4.9	2.3	1.0	3.6	83.8	2.8
Funk's-----	G-795W-1	121	14.1	2.4	1.1	4.3	80.2	1.8
DeKalb-----	XL80	121	10.0	1.8	1.0	3.7	79.4	1.9
McNair-----	S-338	121	5.9	2.6	1.0	3.9	82.0	2.3
Coker-----	56	120	7.7	2.2	1.1	4.3	81.9	1.9
McCurdy-----	MSX 88	116	7.3	2.3	1.0	3.8	83.3	2.3
Funk's-----	G-5757	111	9.6	2.5	1.0	3.8	81.9	2.2

^{1/}Belle Mina, Crossville and Winfield.

^{2/}Yield adjusted to 15.5% moisture and 56 lb. per bushel.

^{3/1} = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 3. Some Characteristics of Corn Varieties Tested Two Years in Northern Alabama, 1975-76^{1/}

Brand name	Hybrid	Yield	Lodged stalks	Quality ^{3/}	Ears per stalk	Height of ears	Shelling	Husk ^{3/}
		per acre ^{2/}						
Pioneer-----	3369A	138	6.3	1.8	1.0	3.7	83.0	2.3
Pioneer-----	3147	138	12.9	2.2	1.1	4.2	84.9	2.7
Funk's-----	G-4864	131	6.4	2.2	1.0	4.2	82.0	1.4
Pioneer-----	3179	131	11.6	2.2	1.0	4.2	83.4	2.6
McCurdy-----	67-14	130	11.0	1.6	1.0	3.9	79.4	2.4
Funk's-----	G-4810	128	9.6	2.0	1.0	4.2	78.8	2.5
Pioneer-----	511A	127	10.6	2.0	1.2	4.2	80.3	1.6
Funk's-----	G-795W-1	126	11.4	2.2	1.1	4.2	79.9	1.7
Coker-----	16	125	5.2	2.2	1.0	3.6	84.3	2.9
Coker-----	56	125	7.6	2.1	1.1	4.2	81.4	1.9
McNair-----	X-300	123	7.1	2.0	1.0	3.8	78.6	1.8
McNair-----	S-338	120	6.9	2.6	1.0	3.9	82.4	2.3
DeKalb-----	XL80	117	12.2	1.7	1.0	3.7	79.4	1.8
Funk's-----	G-5757	117	12.5	2.4	1.0	3.7	82.6	2.2
McCurdy-----	MSX 88	117	8.2	2.5	1.0	3.8	84.2	2.4

^{1/}Belle Mina, Crossville and Winfield.

^{2/}Yields adjusted to 15.5% moisture and 56 lb. per bushel.

^{3/1} = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 4. Some Characteristics of Corn Varieties Tested in Northern Alabama, 1976^{1/}

Brand name	Hybrid	Yield per acre ^{2/} Bu.	Lodged stalks Pct.	Quality ^{3/} Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk ^{3/} Rating	Mid-silk ^{4/} Days
Pioneer----	3369A	138	8.0	1.9	1.0	3.7	81.6	2.4	80
Funk's-----	G-4611	136	10.4	1.7	1.0	3.9	84.6	1.9	81
Coker-----	22	132	9.4	2.3	1.0	4.1	80.0	2.3	82
Funk's-----	G-4507	131	6.1	2.3	1.0	4.0	81.9	2.6	77
DeKalb-----	XL394	131	10.5	2.2	1.1	4.9	79.6	2.0	88
Pioneer----	3147	130	18.5	2.3	1.0	4.2	84.3	2.7	86
Pioneer----	3368A	129	5.5	1.8	1.1	3.9	80.7	2.5	83
Coker-----	18	128	4.6	2.1	1.1	3.9	76.4	2.3	84
Funk's-----	G-4864	127	9.9	2.2	1.0	4.3	82.0	1.3	85
Pioneer----	3145	126	5.7	2.1	1.1	4.4	79.0	1.9	83
McNair-----	X-300	126	10.2	2.0	1.0	3.9	77.8	2.0	84
Funk's-----	G-4810	125	13.2	2.2	1.0	4.4	77.9	2.5	84
Funk's-----	G-4525	124	6.7	2.3	1.0	3.9	81.6	2.3	77
Pioneer----	3179	124	15.4	2.5	1.0	4.2	83.0	2.8	86
Pioneer----	511A	124	14.7	1.9	1.2	4.4	79.8	1.8	87
McCurdy----	67-14	122	17.7	1.7	1.0	4.1	76.8	2.3	85
Coker-----	16	122	6.0	2.1	1.0	3.5	80.7	3.0	75
Coker-----	56	121	11.3	2.4	1.1	4.5	82.5	1.8	89
McNair-----	S-338	120	8.8	2.4	1.0	4.0	80.0	2.3	88
DeKalb-----	XL80	117	16.8	1.8	1.0	3.6	78.6	1.8	84
Funk's-----	G-795W-1	114	17.8	1.9	1.1	4.4	78.7	1.7	86
Funk's-----	G-5757	113	18.0	2.4	1.0	3.8	81.9	2.0	79
McCurdy----	MSX 88	104	10.7	2.6	0.9	3.9	83.1	2.6	81
Greenwood---	44	93	15.7	2.6	0.9	3.9	80.6	2.3	78

^{1/}Belle Mina, Crossville and Winfield.

^{2/}Yields adjusted to 15.5% moisture and 56 lb. per bushel.

^{3/}1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

^{4/}Data from Belle Mina only. Test planted April 12, 1976.

Table 5. 1976 Yield of Corn Varieties by Location and Regional Averages for 1-5 Years in Northern Alabama^{1/}

Brand name	Hybrid	Belle Mina	Crossville	Winfield	Regional average yield per acre				
					1-yr. 1976	2-yr. 1975-76	3-yr. 1974-76	4-yr. 1973-76	5-yr. 1972-76
		Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.
Pioneer-----	3147	135	140	116	130	138	137	129	128
Pioneer-----	3369A	128	160	125	138	138	136	130	127
McCurdy-----	67-14	109	157	100	122	130	129	124	123
Pioneer-----	3179	132	131	108	124	131	127	123	122
Pioneer-----	511A	122	140	109	124	127	122	116	116
Funk's-----	G-795W-1	112	134	98	114	126	121	115	113
McCurdy-----	MSX 88	97	111	103	104	117	116	112	113
McNair-----	S-338	110	141	109	120	120	121	113	111
Funk's-----	G-5757	104	123	110	113	117	111	107	105
Funk's-----	G-4864	125	145	111	127	131	126	119	
McNair-----	X-300	114	152	111	126	123	122	116	
Coker-----	16	121	151	94	122	125	121	116	
DeKalb-----	XL80	113	132	106	117	117	121		
Coker-----	56	125	129	110	121	125	120		
Funk's-----	G-4810	110	147	117	125	128			
Funk's-----	G-4611	127	157	123	136				
Coker-----	22	140	159	97	132				
DeKalb-----	XL394	117	155	121	131				
Funk's-----	G-4507	130	152	112	131				
Pioneer-----	3368A	113	160	113	129				
Coker-----	18	123	165	98	128				
Pioneer-----	3145	123	138	118	126				
Funk's-----	G-4525	120	140	112	124				
Greenwood-----	44	91	110	79	93				
Test average:		118	143	108					
L.S.D. (.05):		20	18	28					
C.V. (%):		11.7	8.9	18.1					

^{1/}Yields adjusted to 15.5% moisture and 56 lb. per bushel.

Table 6. Some Characteristics of Corn Varieties Tested Three Years in Central Alabama, 1974-76^{1/}

Brand name	Hybrid	Yield	Lodged stalks	Quality ^{3/}	Ears per stalk	Height of ears	Shelling	Husk ^{3/}
		per acre ^{2/}						
		Bu.	Pct.	Rating	No.	Ft.	Pct.	Rating
McCurdy-----	72-24	90	27.9	2.2	1.0	4.3	84.2	1.6
Coker-----	77	86	14.5	2.0	1.0	4.0	82.3	1.7
Pioneer-----	3147	85	15.2	2.7	0.9	3.6	82.6	2.1
Funk's-----	G-795W-1	83	18.0	2.3	1.0	3.5	80.4	1.7
Pioneer-----	3369A	82	12.9	2.2	0.9	3.0	83.1	2.3
Pioneer-----	511A	80	18.3	2.1	1.0	3.5	80.2	1.6
Pioneer-----	3009	79	18.0	1.8	0.9	3.8	76.3	1.6
McNair-----	508	78	11.2	2.1	1.1	4.0	80.4	1.8
McCurdy-----	67-14	76	12.7	1.9	0.9	3.2	80.6	2.0
Funk's-----	G-4864	76	10.1	1.9	0.9	3.6	82.1	1.7
Coker-----	56	76	15.7	2.0	1.0	3.5	81.4	1.9
Funk's-----	G-5945	75	15.6	1.9	0.9	3.9	82.2	1.6
McNair-----	X300	74	14.9	2.3	0.9	3.1	80.1	1.8
McNair-----	S338	73	17.9	2.4	0.9	3.2	80.7	2.2
PAG-----	751	72	16.3	1.9	1.0	4.1	79.7	1.6
Funk's-----	G-4949A	72	17.9	2.0	0.9	3.9	80.5	2.0
Pioneer-----	3030	69	12.1	2.0	0.9	3.6	76.9	1.6
Greenwood-----	45	68	19.8	2.0	1.0	3.4	79.4	1.8

^{1/}Camden, Camp Hill, Prattville, Milstead (1976 data), and Auburn (1974-75 data).

^{2/}Yields adjusted to 15.5% moisture and 56 lb. per bushel.

^{3/}1 = excellent; 2 = good; 3 = fair, 4 = poor; 5 = very poor.

Table 7. Some Characteristics of Corn Varieties Tested Two Years in Central Alabama, 1975-76^{1/}

Brand name	Hybrid	Yield	Lodged stalks	Quality ^{3/}	Ears per stalk	Height of ears	Shelling	Husk ^{3/}
		per acre ^{2/} Bu.	Pct.	Rating	No.	Ft.	Pct.	Rating
Coker-----	77	91	18.9	1.9	1.0	4.0	83.5	1.6
McCurdy-----	72-24	86	30.2	2.2	1.0	4.4	84.3	1.6
Pioneer-----	3369A	85	15.5	1.9	0.9	3.0	83.7	2.1
Pioneer-----	3147	83	19.5	2.6	0.9	3.6	83.4	1.9
DeKalb-----	XL394	82	18.0	1.8	0.9	3.7	83.7	1.6
Funk's-----	G-4810	81	19.5	2.1	0.9	3.5	82.1	2.0
McNair-----	508	80	13.9	2.1	1.0	4.0	81.4	1.7
Pioneer-----	3009	80	22.6	1.6	0.9	3.7	78.4	1.4
McNair-----	X300	79	17.1	2.0	0.9	3.1	81.1	1.6
Funk's-----	G-795W-1	79	21.8	2.3	1.0	3.5	81.2	1.6
Funk's-----	G-4864	78	12.3	1.7	0.9	3.6	83.0	1.5
McCurdy-----	67-14	77	16.3	1.8	0.9	3.1	81.5	1.9
Funk's-----	G-5945	77	20.7	1.7	0.9	3.9	83.5	1.6
DeKalb-----	XL80	77	14.5	1.8	0.9	2.9	82.5	1.7
Pioneer-----	511A	76	22.3	2.0	1.0	3.5	80.8	1.5
Coker-----	56	75	19.3	1.9	1.0	3.5	81.8	1.6
Coker-----	54	75	22.5	1.6	1.0	3.7	80.2	1.4
PAG-----	751	75	20.9	1.8	1.0	4.1	80.4	1.5
Coker-----	16	75	19.5	2.5	0.9	3.0	82.7	2.1
McNair-----	S338	73	22.0	2.3	0.9	3.2	81.6	2.0
Funk's-----	G-4949A	71	23.8	1.8	0.9	4.0	81.3	1.8
Pioneer-----	3030	69	15.5	1.8	0.9	3.7	78.2	1.5
Greenwood-----	45	68	23.9	1.8	0.9	3.5	80.4	1.6

^{1/}Camden, Camp Hill, Prattville, Milstead (1976 data), and Auburn (1975 data).

^{2/}Yields adjusted to 15.5% moisture and 56 lb. per bushel.

^{3/}1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 8. Some Characteristics of Corn Varieties Tested in Central Alabama, 1976^{1/}

Brand name	Hybrid	Yield	Lodged stalks	Quality ^{3/}	Ears per stalk	Height of ears	Shelling	Husk ^{3/}	Mid-silk ^{4/}
		per acre ^{2/} Bu.	Pct.	Rating	No.	Ft.	Pct.	Rating	Days
Funk's-----G-4611		68	32.5	2.4	0.9	3.2	83.4	1.8	73
Pioneer-----3369A		67	29.3	2.1	0.9	3.0	84.0	2.0	72
Coker-----77		66	33.8	2.0	0.8	4.1	82.7	1.7	79
McNair-----508		66	22.1	1.9	0.9	4.3	80.4	1.8	84
McCurdy-----72-24		65	46.3	2.2	0.8	4.3	85.3	1.7	79
DeKalb-----XL80		65	25.4	1.9	0.8	3.0	82.3	1.6	74
Funk's-----G-4507		64	35.5	2.7	0.9	3.3	83.5	1.9	74
Pioneer-----3147		64	30.5	2.1	0.8	3.6	83.0	1.9	78
Pioneer-----3009		64	38.2	1.7	0.8	3.7	78.0	1.4	78
DeKalb-----XL394		64	33.2	1.5	0.8	3.8	83.7	1.8	78
Funk's-----G-4810		63	33.0	2.1	0.9	3.4	81.8	2.0	74
Funk's-----G-4864		63	23.4	1.7	0.7	3.6	82.0	1.6	76
Coker-----54		63	36.0	1.6	0.9	3.9	80.6	1.4	78
Coker-----56		61	32.5	1.8	0.9	3.6	81.4	1.6	77
Pioneer-----3368A		61	30.1	1.8	0.8	3.2	85.3	2.0	74
Funk's-----G-795W-1		61	38.9	2.4	0.8	3.6	81.4	1.6	76
Coker-----18		60	30.6	2.4	0.8	3.4	85.6	1.7	76
McCurdy-----67-14		60	28.1	1.8	0.8	3.1	82.4	1.6	74
Pioneer-----511A		60	36.8	2.1	0.9	3.6	80.2	1.5	76
McNair-----X300		59	30.6	2.1	0.8	3.1	80.7	1.6	74
Pioneer-----3145		59	19.9	1.6	0.9	3.6	80.9	1.7	74
Funk's-----G-5945		59	28.8	1.7	0.7	4.0	85.8	1.7	80
Coker-----16		57	36.7	2.5	0.8	2.9	82.1	2.3	71
PAG-----751		57	28.2	1.8	0.8	4.2	80.6	1.6	81
Coker-----22		57	30.9	2.3	0.9	3.2	81.9	1.6	74
Greenwood----45		55	45.1	1.8	0.8	3.6	80.2	1.4	77
Pioneer-----3030		55	27.7	1.8	0.8	3.7	77.0	1.3	80
Funk's-----G-4525		54	36.5	1.8	0.9	3.1	80.0	1.7	74
McNair-----S338		54	33.2	2.2	0.7	3.4	80.7	1.9	77
Funk's-----G-4949A		54	37.6	1.8	0.7	4.1	81.8	1.7	78

Continued:

Table 8. (Cont'd) Some Characteristics of Corn Varieties Tested in Central, Alabama, 1976^{1/}

Brand name	Hybrid	Yield per acre ^{2/}	Lodged stalks	Quality ^{3/}	Ears per stalk	Height of ears	Shelling	Husk ^{3/}	Mid-silk ^{4/}
		Bu.	Pct.	Rating	No.	Ft.	Pct.	Rating	Days
DeKalb-----	XL395	53	22.2	1.8	0.7	4.0	81.9	1.6	78
DeKalb-----	1214A	52	25.5	1.8	0.7	4.0	78.1	1.6	82
Greenwood----	44	49	27.1	2.1	0.8	3.1	81.6	1.8	70

^{1/}Camden, Camp Hill, Prattville, and Milstead.

^{2/}Yields adjusted to 15.5% moisture and 56 lb. per bushel.

^{3/}1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

^{4/}Average of Camden and Milstead data. Tests were planted April 16 and 23, respectively.

Table 9. 1976 Yield of Corn Varieties by Location and Regional Averages for 1-5 Years in Central Alabama^{1/}

Brand name	Hybrid	Regional average yield per acre								
		Camden	Camp Hill	Prattville	Milstead	1-yr.	2-yr.	3-yr.	4-yr.	5-yr.
		Bu.	Bu.	Bu.	Bu.	1976	1975-76	1974-76	1973-76	1972-76
Pioneer-----	3147	51	120	52	32	64	83	85	87	94
Funk's-----	G-795W-1	46	107	44	47	61	79	83	86	89
Pioneer-----	511A	57	92	46	44	60	76	80	84	89
Pioneer-----	3369A	22	145	52	50	67	85	82	84	87
McNair-----	508	57	133	39	33	66	80	78	79	86
Pioneer-----	3009	50	117	42	47	64	80	79	81	85
McCurdy-----	67-14	25	124	50	43	60	77	76	79	83
Funk's-----	G-5945	48	115	41	31	59	77	75	79	83
PAG-----	751	47	124	32	25	57	75	72	75	81
McNair-----	S338	30	113	36	36	54	73	73	74	80
Funk's-----	G-4949A	40	108	35	31	54	71	72	74	79
Pioneer-----	3030	44	99	41	33	55	69	69	72	78
Greenwood-----	45	37	106	32	47	55	68	68	71	77
Funk's-----	G-4864	51	124	39	39	63	78	76	79	
Coker-----	56	45	114	41	45	61	75	76	77	
McCurdy-----	72-24	49	118	46	47	65	86	90		
Coker-----	77	48	131	47	39	66	91	86		
McNair-----	X300	30	114	45	49	59	79	74		
DeKalb-----	XL394	48	131	43	31	64	82			
Funk's-----	G-4810	39	128	40	47	63	81			
DeKalb-----	XL80	30	132	49	47	65	77			
Coker-----	54	55	111	39	46	63	75			
Coker-----	16	14	119	47	51	57	75			
Funk's-----	G-4611	29	136	50	57	68				
Funk's-----	G-4507	28	119	56	54	64				
Pioneer-----	3368A	23	119	56	47	61				
Coker-----	18	16	122	51	52	60				
Pioneer-----	3145	45	100	43	48	59				
Coker-----	22	30	112	43	42	57				
Funk's-----	G-4525	31	99	46	39	54				

Continued:

Table 9. (Cont'd) 1976 Yield of Corn Varieties by Location and Regional Averages for 1-5 Years in Central Alabama^{1/}

Brand name	Hybrid	1976				1-yr.	2-yr.	3-yr.	4-yr.	5-yr.
		Camden	Camp Hill	Prattville	Milstead	1976	1975-76	1974-76	1973-76	1972-76
		Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.
DeKalb-----	XL395	40	105	37	31	53				
DeKalb-----	1214A	37	115	27	30	52				
Greenwood---	44	26	79	47	43	49				
Test average:		38	116	43	42					
L.S.D. (.05):		16	22	7	10					
C.V. (%):		29.2	13.4	11.2	17.0					

^{1/}Yield adjusted to 15.5% moisture and 56 lb. per bushel.

Table 10. Some Characteristics of Corn Varieties Tested Three Years in Southern Alabama, 1974-76^{1/}

Brand name	Hybrid	Yield per acre ^{2/} Bu.	Lodged stalks Pct.	Quality ^{3/} Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk ^{3/} Rating
Pioneer----	3147	118	17.8	2.6	1.0	3.4	83.4	2.9
Coker-----	77	116	17.5	2.0	1.2	4.0	82.3	2.5
Funk's-----	G-795W-1	115	26.0	2.0	1.1	3.5	81.7	2.1
Pioneer----	3369A	113	5.4	2.3	1.0	2.8	83.1	3.0
McCurdy----	67-14	111	11.5	1.9	1.0	3.0	80.3	2.8
McNair-----	S338	110	15.4	2.4	1.0	3.0	81.9	2.6
Pioneer----	511A	108	23.5	1.8	1.1	3.5	81.0	2.1
McNair-----	508	106	11.4	2.0	1.2	3.9	82.2	2.1
Funk's-----	G-4864	106	11.0	2.0	1.0	3.4	83.7	1.8
McNair-----	X300	106	8.0	2.1	1.0	2.9	80.3	2.4
Funk's-----	G-5945	105	19.5	2.2	1.0	3.8	82.2	2.1
Funk's-----	G-4949A	104	16.7	2.2	1.0	3.8	81.6	2.6
Pioneer----	3030	103	16.8	1.9	1.1	3.6	78.8	1.6
Coker-----	54	101	21.3	1.6	1.1	3.6	81.4	1.8
PAG-----	751	100	25.3	2.0	1.1	3.8	80.3	1.9
Pioneer----	3009	100	19.6	2.0	1.0	3.5	78.3	1.6
Greenwood--	45	95	14.6	1.9	1.0	3.2	81.1	2.3

^{1/}Brewton, Fairhope, Headland, and Monroeville.

^{2/}Yields adjusted to 15.5% moisture and 56 lb. per bushel.

^{3/}1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 11. Some Characteristics of Corn Varieties Tested Two Years in Southern Alabama, 1975-76^{1/}

Brand name	Hybrid	Yield per acre ^{2/} Bu.	Lodged stalks Pct.	Quality ^{3/} Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk ^{3/} Rating
Coker-----	77	128	21.2	1.8	1.2	4.0	82.6	2.5
Pioneer----	3147	127	21.1	2.4	1.0	3.4	83.5	2.7
Funk's-----	G-795W-1	124	26.2	1.8	1.1	3.6	81.6	2.1
Pioneer----	3369A	122	6.1	2.2	1.0	2.9	83.6	2.9
McCurdy----	67-14	122	13.4	1.7	1.0	3.1	80.6	2.6
DeKalb-----	XL80	121	13.1	1.8	1.0	2.9	81.3	2.1
DeKalb-----	XL394	120	20.6	1.9	1.1	3.7	83.1	2.3
McNair-----	X300	119	8.3	2.0	1.0	3.0	81.3	2.2
Funk's-----	G-4810	118	10.7	1.8	1.0	3.4	81.8	2.7
McNair-----	S338	118	18.8	2.3	1.0	3.1	82.4	2.5
McNair-----	508	117	14.1	1.8	1.3	3.9	82.4	2.0
Funk's-----	G-5945	116	24.8	2.0	1.0	3.8	82.2	2.1
Coker-----	16	116	7.1	2.3	1.0	2.8	83.2	3.1
Pioneer----	3145	114	10.3	1.8	1.0	3.4	80.8	2.0
Pioneer----	511A	114	25.2	1.7	1.1	3.6	81.5	2.1
Funk's-----	G-4864	113	13.4	1.9	1.0	3.5	84.0	1.7
Pioneer----	3030	111	20.1	1.6	1.1	3.6	78.7	1.6
Coker-----	54	111	24.4	1.6	1.1	3.7	81.5	1.7
PAG-----	751	111	31.0	1.9	1.2	3.8	80.6	1.9
Pioneer----	3009	110	24.1	1.8	1.0	3.5	78.7	1.5
Funk's-----	G-4949A	110	22.7	2.1	1.0	3.7	82.0	2.5
Greenwood--	45	102	15.4	1.8	1.1	3.2	81.7	2.2

^{1/}Brewton, Fairhope, Headland, and Monroeville.

^{2/}Yield adjusted to 15.5% moisture and 56 lb. per bushel.

^{3/}1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 12. Some Characteristics of Corn Varieties Tested in Southern Alabama, 1976^{1/}

Brand name	Hybrid	Yield per acre ^{2/} Bu.	Lodged stalks Pct.	Quality ^{3/} Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk ^{3/} Rating	Mid-silk ^{4/} Days
Coker-----	22	142	9.4	1.9	1.0	3.6	83.1	2.5	67
Coker-----	18	138	10.8	1.6	1.0	3.7	84.2	2.5	70
RA-----	1502	138	5.5	1.8	1.1	3.6	83.5	2.5	62
Pioneer-----	3147	138	18.8	2.1	1.0	3.7	84.0	2.8	72
Pioneer-----	3368A	137	3.1	3.1	1.1	5.2	77.9	2.6	67
DeKalb-----	XL80	136	13.3	1.7	1.0	3.2	81.0	2.0	68
Funk's-----	G-795W-1	136	23.1	1.4	1.1	4.0	81.7	2.1	70
DeKalb-----	XL 394	136	20.4	1.6	1.1	4.2	83.6	2.1	72
Pioneer-----	3369A	135	4.0	2.1	1.0	3.4	83.7	3.3	62
Coker-----	77	135	20.1	1.8	1.2	4.5	82.0	2.4	74
McCurdy-----	67-14	134	14.2	1.4	1.0	3.5	80.8	2.6	70
Funk's-----	G-4507	133	7.5	2.3	1.0	3.5	84.0	3.1	64
DeKalb-----	XL95	133	13.0	1.5	1.1	4.8	85.0	1.6	76
McNair-----	508	132	12.4	1.7	1.3	4.5	82.8	2.1	76
Funk's-----	G-4611	131	8.9	1.9	1.0	3.6	83.6	2.1	66
McNair-----	X300	129	7.0	1.9	1.0	3.4	81.6	2.4	69
McNair-----	S338	129	20.6	1.9	1.0	3.4	81.9	2.6	70
Coker-----	16	128	4.7	2.1	1.0	3.1	82.5	3.3	62
Funk's-----	G-4810	128	6.0	1.6	1.0	3.7	82.1	2.8	70
Funk's-----	G-4525	126	3.6	1.6	1.0	3.5	83.1	2.5	66
Pioneer-----	511A	125	19.9	1.4	1.1	4.1	81.1	2.1	70
Coker-----	56	125	15.3	1.5	1.1	3.8	82.6	2.4	72
Pioneer-----	3030	125	20.0	1.5	1.1	4.1	78.8	1.6	72
Pioneer-----	3145	124	5.4	1.6	1.0	3.7	80.4	1.9	68
GH-----	H-2775	123	11.7	1.8	1.0	3.5	81.2	2.2	70
PAG-----	751	122	25.0	1.8	1.2	4.3	80.9	1.9	75
Funk's-----	G-4949A	122	24.3	1.8	1.0	4.1	81.5	2.7	70
Funk's-----	G-5945	122	27.1	2.0	1.0	4.2	82.6	2.2	73
Funk's-----	G-4864	121	9.5	1.6	1.0	4.0	84.5	1.5	71
Greenwood----	45	119	13.5	1.6	1.1	3.6	82.6	2.3	71

Continued:

Table 12. (Cont'd) Some Characteristics of Corn Varieties Tested in Southern Alabama, 1976^{1/}

Brand name	Hybrid	Yield	Lodged stalks	Quality ^{3/}	Ears per stalk	Height of ears	Shelling	Husk ^{3/}	Mid-silk ^{4/}
		per acre ^{2/} Bu.	Pct.	Rating	No.	Ft.	Pct.	Rating	Days
Coker-----	54	117	24.3	1.5	1.1	4.2	81.4	1.8	72
Pioneer-----	3009	116	25.3	1.7	1.0	4.1	78.2	1.4	71
Greenwood---	44	97	12.9	2.2	0.9	3.5	82.5	2.9	62

^{1/}Brewton, Fairhope, Headland, and Monroeville.

^{2/}Yields adjusted to 15.5% moisture and 56 lb. per bushel.

^{3/}1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

^{4/}Average of Brewton and Monroeville data. Tests were planted April 8 and 9, respectively.

Table 13. 1976 Yield of Corn Varieties by Location and Regional Averages for 1-5 Years in Southern Alabama^{1/}

Brand name	Hybrid	Fairhope Bu.	Brewton Bu.	Monroeville Bu.	Headland Bu.	Regional average yield per acre				
						1-yr. 1976 Bu.	2-yr. 1975-76 Bu.	3-yr. 1974-76 Bu.	4-yr. 1973-76 Bu.	5-yr. 1972-76 Bu.
Funk's-----G-795W-1		192	139	103	110	136	124	115	111	107
Pioneer-----511A		182	125	91	103	125	114	108	107	105
Pioneer-----3369A		187	127	121	107	135	122	113	108	103
McCurdy-----67-14		196	135	106	99	134	122	111	107	102
McNair-----S338		181	130	97	108	129	118	110	104	101
Funk's-----G-5945		171	132	91	93	122	116	105	102	99
Funk's-----G-4949A		171	130	92	95	122	110	104	102	98
McNair-----508		190	145	86	109	132	117	106	100	97
Pioneer-----3030		177	129	83	110	125	111	103	100	97
PAG-----751		176	131	85	96	122	111	100	98	96
Pioneer-----3009		162	123	93	86	116	110	100	98	95
Greenwood-----45		166	124	87	100	119	102	95	93	91
Funk's-----G-4864		164	128	96	96	121	113	106	104	
Coker-----54		164	134	86	86	117	111	101	98	
Pioneer-----3147		192	127	105	126	138	127	118		
Coker-----77		199	150	96	96	135	128	116		
McNair-----X300		176	137	98	107	129	119	106		
DeKalb-----XL80		190	137	108	111	136	121			
DeKalb-----XL394		187	147	106	102	136	120			
Funk's-----G-4810		176	137	103	95	128	118			
Coker-----16		180	124	95	112	128	116			
Pioneer-----3145		168	120	104	104	124	114			
Coker-----22		206	147	109	104	142				
Coker-----18		198	137	108	110	138				
RA-----1502		179	134	120	118	138				
Pioneer-----3368A		186	133	114	117	137				
DeKalb-----XL95		192	145	86	107	133				
Funk's-----G-4507		179	124	124	104	133				

Continued:

Table 13 (Cont'd). 1976 Yield of Corn Varieties by Locations and Regional Averages for 1-5 Years in Southern Alabama^{1/}

Brand name	Hybrid	Fairhope	Brewton	Monroeville	Headland	Regional average yield per acre				
						1-yr. 1976	2-yr. 1975-76	3-yr. 1974-76	4-yr. 1973-76	5-yr. 1972-76
		Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.
Funk's-----G-4611		173	130	109	111	131				
Funk's-----G-4525		160	134	103	106	126				
Coker-----56		178	124	92	106	125				
GH-----H-2775		175	127	91	98	123				
Greenwood-----44		120	101	91	77	97				
Test average:		178	132	99	103					
L.S.D. (.05):		17	14	11	18					
C.V. (%):		6.7	7.5	7.9	12.1					

^{1/}Yields adjusted to 15.5% moisture and 56 lb. per bushel.

Table 14. Some Characteristics of Corn Hybrids Planted in 30-inch Rows and Irrigated, Camden-1974-76

Brand name	Hybrid	Yield per acre ^{1/} Bu.	Lodged Stalks Pct.	Quality ^{2/} Rating	Ears per Stalk No.	Ear Height Ft.	Shelling Pct.	Husk ^{2/} Rating
McCurdy-----	72-24	113	24.8	1.3	1.0	4.6	73.4	1.3
Coker-----	77	112	14.8	1.3	1.0	4.4	72.9	1.9
Pioneer-----	3147	112	8.2	1.6	1.0	3.9	74.7	2.0
Funk's-----	G-795W-1	111	21.0	1.5	1.0	3.7	71.5	1.3
Funk's-----	G-4864	111	3.1	1.3	0.9	3.9	75.3	1.0
McNair-----	508	107	8.2	1.2	1.1	4.3	72.0	1.9
Funk's-----	G-4949A	107	6.4	1.4	0.9	4.4	72.3	2.0
Pioneer-----	511A	107	19.1	1.5	1.1	3.8	71.1	1.4
Funk's-----	G-5945	106	12.9	1.4	1.0	4.2	73.1	1.5
PAG-----	751	106	22.3	1.3	1.0	4.4	71.0	1.5
Pioneer-----	3030	103	11.9	1.5	1.0	4.0	68.0	1.1
McNair-----	X300	101	4.4	1.3	1.0	3.2	71.5	1.8
McCurdy-----	67-14	101	10.1	1.3	1.0	3.4	71.8	2.0
Coker-----	56	100	9.4	1.3	1.0	3.7	72.5	1.9
Pioneer-----	3009	99	12.9	1.3	1.0	3.8	67.0	1.4
McNair-----	S338	98	18.2	1.7	1.0	3.4	73.7	2.0
Greenwood-----	45	97	14.9	1.0	1.0	3.6	70.5	1.6
Pioneer-----	3369A	93	7.1	1.7	1.0	3.3	72.8	2.1

^{1/}Yield adjusted to 15.5% moisture and 56 lb. per bushel.

^{2/}1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 15. Some Characteristics of Corn Hybrids Planted in 30-inch Rows and Irrigated, Camden-1975-76

Brand name	Hybrid	Yield per acre ^{1/} Bu.	Lodged Stalks Pct.	Quality ^{2/} Rating	Ears per stalk No.	Ear height Ft.	Shelling Pct.	Husk ^{2/} Rating
Pioneer-----	3147	108	4.8	1.1	1.0	3.6	73.9	1.3
Funk's-----	G-4864	106	2.8	1.0	1.0	3.7	74.9	1.0
DeKalb-----	XL394	105	11.2	1.1	0.9	4.0	73.6	1.0
McNair-----	508	104	8.5	1.0	1.0	4.3	70.8	1.3
PAG-----	751	103	22.4	1.0	1.0	4.3	70.9	1.0
Funk's-----	G-4949A	103	7.4	1.0	0.9	4.3	72.3	1.5
McCurdy-----	72-24	102	22.0	1.0	1.0	4.4	74.3	1.0
Coker-----	77	101	17.3	1.0	1.0	4.3	72.4	1.3
Funk's-----	G5945	100	15.2	1.0	1.0	4.0	72.9	1.0
Pioneer-----	511A	99	14.2	1.0	1.0	3.6	71.4	1.0
Pioneer-----	3030	99	13.7	1.1	0.9	3.8	66.6	1.0
Funk's-----	G-795W-1	98	16.0	1.1	0.9	3.6	71.1	1.0
Coker-----	56	98	9.4	1.0	1.0	3.6	72.0	1.5
McNair-----	X300	96	3.4	1.0	0.9	3.1	72.1	1.0
McCurdy-----	67-14	96	12.8	1.0	0.9	3.2	72.2	1.3
Coker-----	54	93	24.8	1.0	0.9	3.9	72.0	1.0
Funk's-----	G-4810	93	13.8	1.0	0.9	3.5	71.5	1.5
DeKalb-----	XL80	92	18.5	1.0	0.9	3.0	73.4	1.0
McNair-----	S338	91	16.9	1.4	0.9	3.2	74.1	1.5
Greenwood-----	45	90	14.9	1.0	0.9	3.4	70.6	1.0
Pioneer-----	3009	90	9.6	1.0	1.0	3.6	66.0	1.0
Pioneer-----	3369A	89	8.0	1.1	0.9	3.0	74.2	1.0
Coker-----	16	84	7.6	1.3	0.9	2.6	73.7	1.5

^{1/}Yield adjusted to 15.5% moisture and 56 lb. per bushel.

^{2/}1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 16. Some Characteristics of Corn Hybrids Planted in 30-inch Rows and Irrigated, Camden - 1976

Brand name	Hybrid	Yield	Lodged	Quality ^{2/}	Ears	Ear	Shelling	Mid-
		per acre ^{1/}	stalks	Rating	per stalk	Height		silk ^{3/}
		Bu.	Pct.		No.	Ft.	Pct.	Days
McNair-----	508	116	12.5	1.0	1.1	4.2	74.1	80
DeKalb-----	XL395	113	11.9	1.0	1.1	4.2	75.3	77
Pioneer-----	3147	112	5.4	1.0	1.0	3.4	76.2	74
McCurdy-----	72-24	111	23.1	1.0	1.0	4.1	76.3	74
Funk's-----	G-4949A	111	9.5	1.0	1.0	4.1	74.7	74
DeKalb-----	XL394	111	12.0	1.3	1.0	3.9	74.1	74
PAG-----	751	110	20.3	1.0	1.0	4.1	72.5	78
Funk's-----	G-4864	110	1.1	1.0	1.0	3.5	76.1	72
Funk's-----	G-5945	107	12.8	1.0	1.0	4.0	74.3	76
DeKalb-----	1214A	107	9.8	1.0	1.0	4.4	72.0	78
Pioneer-----	3030	107	19.5	1.0	0.9	3.8	69.7	76
Greenwood-----	45	106	18.3	1.0	1.0	3.3	73.4	74
McCurdy-----	67-14	105	16.0	1.0	1.0	3.1	73.9	72
Pioneer-----	511A	104	9.9	1.0	0.9	3.6	73.4	73
Coker-----	22	102	11.9	1.0	0.9	3.1	74.6	70
Coker-----	54	102	25.1	1.0	1.0	3.6	73.8	76
Funk's-----	G-4507	99	7.7	1.0	1.0	3.1	75.9	70
McNair-----	S338	99	24.3	1.0	1.0	3.1	75.4	72
Pioneer-----	3368A	98	3.1	1.0	0.9	3.2	76.7	70
Funk's-----	G-795W-1	97	17.0	1.0	0.9	3.6	72.9	73
McNair-----	X300	97	2.6	1.0	0.9	3.0	73.3	72
DeKalb-----	XL80	95	20.2	1.0	0.9	3.0	73.5	70
Coker-----	77	93	33.2	1.0	0.9	4.2	73.6	78
Coker-----	56	93	15.2	1.0	1.0	3.5	73.8	74
Pioneer-----	3009	91	6.8	1.0	1.0	3.0	67.2	73
Funk's-----	G-4525	90	6.3	1.0	1.0	2.8	72.9	70
Coker-----	18	90	7.1	1.5	1.0	3.3	76.4	72
Pioneer-----	3145	88	7.9	1.3	0.9	3.3	69.2	68
Funk's-----	G-4810	84	9.7	1.0	0.9	3.4	72.4	71
Funk's-----	G-4611	82	16.0	1.0	0.9	3.2	72.3	68

Continued:

Table 16. (Cont'd) Some Characteristics of Corn Hybrids Planted in 30-inch Rows and Irrigated, Camden - 1976

Brand name	Hybrid	Yield	Lodged stalks	Quality ^{2/}	Ears per stalk	Ear Height	Shelling	Mid-silk ^{3/}
		per acre ^{1/}	Pct.	Rating	No.	Ft.	Pct.	Days
Coker-----	16	76	12.7	1.5	0.9	2.6	72.3	69
Pioneer-----	3369A	75	6.7	1.3	0.9	2.9	73.4	67
Greenwood----	44	74	10.2	1.5	0.8	3.0	73.0	66

Test average: 98
L.S.D. (.05): 13
C.V. (%): 9.4

^{1/}Yield adjusted to 15.5% moisture and 56 lb. per bushel.

^{2/}1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

^{3/}Test was planted April 16, 1976.

Table 17. Performance of Corn Hybrids Tested Three Years at the Black Belt Substation, 1974-76^{1/}

Brand name	Hybrid	Yield per acre ^{2/} Bu.	Lodged stalks Pct.	Quality ^{3/} Rating	Ears per stalk No.	Height of ears Ft.	Shelling Pct.	Husk ^{3/} Rating
Funk's-----	G-4864	90	1.9	2.4	0.9	4.2	83.8	1.7
Pioneer-----	3009	80	5.6	2.5	0.9	4.2	80.4	2.0
Funk's-----	G-5945	79	2.5	2.6	1.0	4.5	82.3	2.0
Pioneer-----	3369A	61	20.4	3.0	0.7	3.3	80.3	3.0

^{1/}Some lodging and yield reduction due to deer and raccoon damage.

^{2/}Yield adjusted to 15.5% moisture and 56 lb. per bushel.

^{3/}1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 18. Performance of Corn Hybrids Tested Two Years at the Black Belt Substation, 1975-76^{1/}

Brand name	Hybrid	Yield per Acre ^{2/}	Lodged Stalks	Quality ^{3/}	Ears per Stalk	Height of Ears	Shelling	Husk ^{3/}
		Bu.	Pct.	Rating	No.	Ft.	Pct.	Rating
DeKalb-----	XL394	84	3.4	2.5	1.0	3.9	83.6	2.0
Funk's-----	G-4864	78	2.4	2.5	0.9	4.1	83.1	1.4
Funk's-----	G-5945	76	3.3	2.4	1.0	4.3	82.3	2.0
Pioneer-----	3009	75	6.1	2.8	1.0	4.2	80.7	1.9
Pioneer-----	3145	75	3.8	2.5	1.0	3.9	79.8	2.0
Funk's-----	G-4949A	71	4.9	2.8	0.9	4.2	81.5	2.1
Funk's-----	G-795W-1	71	5.1	2.6	1.0	3.9	77.9	1.5
McNair-----	508	68	2.6	2.1	1.1	4.0	81.5	1.6
Coker-----	56	66	3.7	2.1	1.0	3.7	82.5	2.0
Pioneer-----	511A	64	9.0	2.6	1.0	3.8	82.1	1.5
Pioneer-----	3030	64	8.9	2.1	0.9	4.0	78.5	1.3
PAG-----	751	62	8.6	2.3	1.0	4.2	80.8	1.8
Funk's-----	G-4525	60	9.8	3.3	0.9	3.2	81.6	2.5
Pioneer-----	3369A	55	16.6	2.7	0.7	3.2	78.6	2.8

^{1/}Some lodging and yield reduction due to deer and raccoon damage.

^{2/}Yield adjusted to 15.5% moisture and 56 lb. per bushel.

^{3/}1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 19. Performance of Corn Hybrids Tested One Year at the Black Belt Substation, 1976^{1/}

Brand name	Hybrid	Yield	Lodged stalks	Quality ^{3/}	Ears per stalk	Ear height	Shelling	Husk ^{3/}
		per acre ^{2/} Bu.	Pct.	Rating	No.	Ft.	Pct.	Rating
McCurdy-----	72-24	76	3.7	2.5	1.0	4.1	82.5	1.3
DeKalb-----	XL394	69	6.6	2.8	0.8	3.3	82.3	2.3
Funk's-----	G-4810	68	3.7	3.3	0.9	3.4	78.4	2.3
Pioneer-----	3009	66	5.0	2.5	0.9	3.6	78.7	1.5
Pioneer-----	3145	66	6.8	2.5	1.0	3.6	78.8	2.0
Funk's-----	G-4864	62	3.1	3.0	0.9	3.9	82.0	1.3
Funk's-----	G-5945	59	4.7	2.3	0.9	3.9	80.0	2.3
Funk's-----	G-4949A	59	1.8	2.5	0.8	3.9	81.3	2.3
Funk's-----	G-4776	56	4.0	2.3	1.0	3.5	80.1	2.3
Funk's-----	G-4507	54	2.1	3.3	0.9	3.1	83.0	3.3
McNair-----	508	53	2.5	2.3	1.0	3.8	77.9	1.8
Coker-----	77	52	9.3	2.5	0.9	3.8	82.1	1.3
Funk's-----	G-795W-1	51	8.6	2.8	0.9	3.4	70.5	1.3
Coker-----	54	51	9.1	2.3	1.1	3.7	79.9	1.8
Pioneer-----	3368A	50	3.5	2.8	0.9	2.9	80.3	3.0
PAG-----	751	50	10.4	2.3	0.8	3.8	78.4	2.0
Pioneer-----	3535	49	6.3	3.3	1.0	3.0	81.6	2.5
Funk's-----	G-4848	47	1.1	3.0	0.6	3.0	77.1	2.7
DeKalb-----	XL395	47	6.6	2.3	0.6	3.6	81.8	2.5
Coker-----	56	46	4.6	2.3	0.8	3.4	81.2	2.0
Pioneer-----	3030	46	4.6	2.0	0.8	3.4	75.3	1.0
DeKalb-----	1214A	46	7.0	3.0	0.8	4.0	76.3	1.5
Pioneer-----	511A	45	9.3	2.8	0.9	3.2	81.1	1.5
Greenwood---	44	45	5.7	2.5	0.7	3.1	81.0	3.0
Coker-----	16	43	1.1	3.3	1.0	2.9	77.6	3.3
Coker-----	22	42	8.3	3.3	0.7	3.0	81.3	2.3
McNair-----	X300	41	2.3	3.0	0.8	3.0	79.4	2.3

Continued:

Table 19. (Cont'd) Performance of Corn Hybrids Tested One Year at the Black Belt Substation, 1976^{1/}

Brand name	Hybrid	Yield per acre ^{2/} Bu.	Lodged stalks Pct.	Quality ^{3/} Rating	Ears per stalk No.	Ear height Ft.	Shelling Pct.	Husk ^{3/} Rating
Coker-----	18	40	10.3	3.3	0.9	3.0	83.8	2.8
Funk's-----	G-4525	37	6.8	3.0	0.8	2.7	80.8	2.3
Pioneer-----	3369A	31	8.1	2.8	0.7	3.0	70.8	3.3

Test average: 52
L.S.D. (.05): 16
C.V. (%): 21.9

^{1/}Some yield reduction due to deer and raccoon damage.

^{2/}Yield adjusted to 15.5% moisture and 56 lb. per bushel.

^{3/}1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

VIRAL DISEASE REACTIONS OF SOME HYBRIDS IN 1976

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INTRODUCTION

Presently, 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 or promising sources of resistance to the diseases. Results of evaluations of some commercial hybrids during 1976 are summarized in this report.

PROCEDURE

Viral disease ratings were made on entries in corn variety tests at six locations. Plants showing symptoms of MCD and/or MDM were counted and data are reported as percent incidence of the diseases for each hybrid. Average disease severity for each hybrid was calculated from ratings of individual plants on a 1-9 scale, where 1 - no visible symptoms, 2 = upper two or three leaves chlorotic or discolored; no stunting, 3 = all leaves above ear chlorotic or discolored; no stunting, 4 = general chlorosis or discoloration above ear; some stunting, 5 = general chlorosis or discoloration above the ear; plants stunted and ear reduced in size, 6 = upper three-fourths of plant chlorotic or discolored; plants stunted and ear reduced in size; 7 = entire plant chlorotic or discolored and stunted; small ear, 8 = entire plant chlorotic or discolored, stunted; no ear produced, 9 = plant dead; no ear.

RESULTS

Evaluations for viral diseases in variety tests on the Black Belt, Piedmont, Tennessee Valley, and Upper Coastal Plain substations are given in tables 20-24. Tests on the Main Station and Sand Mountain Substation were also examined but disease incidence was insignificant.

Highest overall disease incidence and severity occurred in the test on the Black Belt Substation; average incidence and severity for all hybrids

were 59% and 3.26, respectively. Incidence of MCD and MDM was not separated at this location. Virus ratings were made on the first planting of the test which was not harvested because of poor stand and damage to viral diseases; yield data are from the second planting.

Viral disease reactions were comparatively lower at the other locations. Average incidences of the two diseases were: Piedmont Substation, MCD - 14.5%, MDM - 5.9%; Tennessee Valley Substation, MCD - 12.8%, MDM - 11.3%; Upper Coastal Plain Substation, regular variety test, MCD - 29.4%, MDM - 5.8%; preliminary variety test, 23.4%, MDM - 4.6%.

Hybrids showing relatively high resistance or tolerance were apparent at each location. Under conditions of higher incidence of viral diseases many hybrids would be more 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 20. Viral Disease Reactions, Regular Corn Variety Test,
Marion Junction, July 23, 1976

Hybrid	Incidence (%)	Severity ^{1/}
Coker 16	74.1	4.03
Coker 18	88.6	5.07
Coker 22	72.2	3.73
Coker 54	75.2	4.20
Coker 56	81.5	4.10
Coker 77	80.1	3.79
DeKalb XL394	31.4	2.15
DeKalb XL395	66.3	3.81
DeKalb 1214A	59.5	2.82
Funks G-795W-1	78.5	3.71
Funks G-4507	73.1	3.73
Funks G-4525	51.5	2.48
Funks G-4776	31.4	1.86
Funks G-4810	45.6	2.15
Funks G-4848	17.5	1.58
Funks G-4864	50.4	3.14
Funks G-4949A	55.5	3.28
Funks G-5945	40.2	2.92
Greenwood 44	50.7	2.75
McCurdy 72-24	59.1	2.68
McNair 508	28.4	1.98
McNair X300	53.3	2.88
P.A.G. 751	71.7	3.50
Pioneer 511A	76.2	4.13
Pioneer 3009	60.3	3.07
Pioneer 3030	61.8	2.96
Pioneer 3145	47.6	2.94
Pioneer 3147	49.6	2.57
Pioneer 3368A	98.6	6.57
Pioneer 3369A	51.5	3.12

^{1/} 1-9 scale; 1 = no visible symptoms, 9 = severe symptoms

Table 21. Viral Disease Reactions, Regular Corn Variety Test,
Camp Hill, August 10, 1976

Hybrid	Incidence (%)		Severity rating ^{1/}
	MCD	MDM	
Coker 16	3.6	1.8	1.11
Coker 18	51.1	26.7	2.40
Coker 22	18.3	6.0	1.82
Coker 54	5.2	5.2	1.20
Coker 56	36.3	18.1	2.18
Coker 77	27.6	20.7	1.90
DeKalb XL80	11.4	1.6	1.52
DeKalb XL394	0	0	1.00
DeKalb XL395	13.1	19.6	1.70
DeKalb 1214A	4.4	0	1.10
Funks G-795W-1	6.2	20.9	1.58
Funks G-4507	5.4	0	1.27
Funks G-4525	13.0	0	1.15
Funks G-4611	26.5	10.2	1.65
Funks G-4810	1.7	0	1.14
Funks G-4864	26.2	8.2	1.66
Funks G-4949A	7.7	9.6	1.25
Funks G-5945	6.0	2.0	1.22
Greenwood 44	15.9	4.6	1.75
Greenwood 45	10.5	3.5	1.44
McCurdy 67-14	8.5	0	1.36
McCurdy 72-24	34.2	4.9	1.54
McNair 508	9.8	0	1.22
McNair S338	23.1	7.7	1.52
McNair X300	5.7	0	1.28
P.A.G. 751	8.3	2.1	1.21
Pioneer 511A	8.0	2.0	1.30
Pioneer 3009	10.2	3.4	1.32
Pioneer 3030	26.4	1.9	1.68
Pioneer 3145	19.6	3.9	1.65
Pioneer 3147	11.8	0	1.39
Pioneer 3368A	19.7	9.0	1.59
Pioneer 3369A	1.9	1.9	1.07

^{1/} 1-9 scale; 1 = no visible symptoms; 9 = severe symptoms

Table 22. Viral Disease Reactions, Regular Corn Variety Test,
Belle Mina, August 5, 1976

Hybrid	Incidence (%)		Severity rating ^{1/}
	MCD	MDM	
Coker 16	9.1	5.4	1.29
Coker 18	52.0	8.0	1.80
Coker 22	13.8	8.6	1.26
Coker 56	7.6	13.8	1.40
DeKalb XL80	14.7	1.6	1.21
DeKalb XL394	2.2	2.2	1.04
Funks G-795W-1	8.6	6.9	1.21
Funks G-4507	3.6	20.0	1.25
Funks G-4525	0	15.8	1.21
Funks G-4611	9.4	32.1	1.43
Funks G-4810	10.2	6.1	1.18
Funks G-4864	6.7	6.7	1.18
Funks G-5757	18.0	8.0	1.42
Greenwood 44	21.8	21.8	2.04
McCurdy 67-14	17.0	13.2	1.45
McCurdy MSX 88	39.6	15.1	2.40
McNair S338	14.0	12.0	1.30
McNair X300	12.5	8.9	1.36
Pioneer 511A	3.6	14.5	1.25
Pioneer 3145	4.2	2.1	1.06
Pioneer 3147	5.0	1.7	1.08
Pioneer 3179	10.7	0	1.32
Pioneer 3368A	20.7	45.2	2.72
Pioneer 3369A	4.8	3.2	1.14

^{1/} 1-9 scale; 1 = no visible symptoms, 9 = severe symptoms

Table 23. Viral Disease Reactions, Regular Corn Variety Test, Winfield, August 6, 1976

Hybrid	Incidence (%)		Severity rating ^{1/}
	MCD	MDM	
Coker 16	13.4	2.8	1.60
Coker 18	66.6	33.0	3.22
Coker 22	43.1	7.6	2.25
Coker 56	22.8	18.5	1.92
DeKalb XL80	18.3	2.5	1.69
DeKalb XL394	17.5	3.8	1.42
Funks G-795W-1	56.4	13.4	2.61
Funks G-4507	20.5	1.5	1.81
Funks G-4525	24.8	2.7	1.51
Funks G-4611	29.7	2.5	1.90
Funks G-4810	15.5	0	1.44
Funks G-4864	20.1	3.0	1.53
Funks G-5757	25.0	0	1.43
Greenwood 44	56.8	12.8	2.79
McCurdy 67-14	21.3	0	1.56
McCurdy MSX 88	48.2	0	2.65
McNair S 338	26.3	2.6	1.67
McNair X 300	27.1	1.3	1.56
Pioneer 511A	25.7	2.6	1.59
Pioneer 3145	26.0	5.1	1.64
Pioneer 3147	15.5	7.4	1.48
Pioneer 3179	54.9	3.1	2.88
Pioneer 3368A	23.6	13.6	1.67
Pioneer 3369A	7.4	1.3	1.30

^{1/} 1-9 scale; 1 = no visible symptom, 9 = severe symptoms

Table 24. Viral Disease Reactions, Preliminary Corn Variety Test, Winfield, August 6, 1976

Hybrid	Incidence (%)		Severity rating ^{1/}
	MCD	MDM	
ACCO UC 9792	15.8	2.6	1.29
ACCO AR 38146	12.2	24.4	1.66
ACCO UC 11982	34.2	4.9	1.78
Asgrow RX114	28.9	2.6	1.58
Asgrow RX115A	47.1	0	2.09
Funks G-4520	35.9	5.1	1.82
Funks G-4747W	31.7	2.4	1.58
Funks G-4776	5.1	0	1.05
Funks G-4848	16.7	5.6	1.28
Funks G-4850	8.1	0	1.22
Funks G-4880W	11.8	2.9	1.23
GH H-2740A	45.4	12.1	2.51
GH H-2775	25.6	0	1.46
GH XC-9045	35.3	8.8	1.91
McCurdy 72-44A	36.5	2.4	1.66
McCurdy 75-58	10.2	5.1	1.31
McCurdy MSX 84A	11.8	0	1.53
McNair S-237	11.6	6.9	1.39
MDM 116	30.8	10.3	1.87
Pioneer 3535	35.9	5.1	1.82
RA 1502	14.7	2.9	1.32
RA 2502	17.9	25.6	1.67
RA 2601	46.4	0	2.64
RA 2602-W	3.1	0	1.06
SS 102A	30.8	0	1.84
SS 112	22.8	2.8	1.86
SS 125	11.4	0	1.09
TXS 114	21.6	0	1.73
TXS 119	24.3	8.1	2.13
Wilstar 6663	16.7	0	1.17
Wilstar 9997	19.1	2.4	1.83

^{1/} 1-9 scale; 1 = no visible symptoms, 9 = severe symptoms

PRELIMINARY REPORT

Table 25. Some Characteristics of Corn Hybrids Tested One Year at Three Locations in Northern Alabama, 1976

Brand name	Hybrid or variety	Yield per acre ^{1/}				Lodged stalks	Quality ^{2/}	Ears				
		Belle Mina Bu.	Cross-ville Bu.	Win-field Bu.	Regional average Bu.			Pct.	Rating	per stalk No.	Ear height Ft.	Shelling Pct.
ACCO-----	UC 9792	129	168	126	141	5.0	1.8	1.1	4.3	85.1	1.1	84
Pioneer--	3147 ^{4/}	142	137	124	134	2.1	2.3	1.1	4.5	82.9	2.9	85
TXS-----	114	123	171	107	134	3.0	2.0	1.0	4.1	80.3	2.2	78
Pioneer--	3369A ^{4/}	130	163	105	133	1.1	2.0	1.0	3.7	81.0	2.6	79
RA-----	1502	135	160	100	132	1.0	2.2	1.1	3.8	82.0	1.7	79
SS-----	112	125	163	103	130	3.1	2.0	1.0	4.3	82.6	2.7	80
Funk's---	G-4848	128	141	119	129	2.1	2.3	1.0	4.2	77.8	2.5	86
McCurdy--	72-44A	125	148	110	128	3.2	2.0	1.0	3.9	79.5	1.7	80
Funk's---	G-4747W	111	152	119	127	4.2	1.8	1.0	4.8	76.2	1.5	85
GH-----	XC-9045	131	139	110	127	14.2	1.9	1.1	4.5	80.0	1.8	86
GH-----	H-2775	124	164	90	126	3.1	2.0	1.0	3.7	76.8	2.2	81
Funk's---	G-4776	132	137	101	124	4.8	2.3	1.1	4.6	79.4	2.6	82
Funk's---	G-4520	110	162	96	122	1.9	2.3	1.1	3.7	76.4	2.7	80
McCurdy--	MSX 84A	125	146	95	122	1.5	2.0	1.1	4.0	78.5	1.9	77
SS-----	102A	117	149	99	121	2.9	1.8	1.0	3.7	81.5	1.8	80
McCurdy--	75-58	110	142	107	119	4.7	1.8	1.0	3.7	80.7	1.6	81
RA-----	2602-W	106	132	119	119	2.9	1.8	0.9	4.6	79.1	1.8	85
MDM-----	116	122	137	98	119	2.7	2.6	1.1	4.3	79.6	1.8	82
TXS-----	119	115	142	99	119	3.1	2.2	1.0	3.9	78.8	2.7	79
Pioneer--	3535	125	128	100	118	0.8	2.3	1.1	3.9	81.1	3.2	76
ACCO-----	AR38146	106	135	110	117	3.0	2.4	1.0	4.5	78.3	2.2	86
RA-----	2502	122	126	103	117	4.5	2.4	1.0	3.7	79.6	2.7	79
Funk's---	G-4850	123	130	92	115	1.9	2.0	1.0	4.4	78.0	2.4	83
Wilstar--	6663	107	136	100	114	1.7	2.4	1.0	3.9	81.0	2.4	77
Wilstar--	9997	114	141	89	114	8.2	1.8	1.0	4.2	75.9	2.9	84
Asgrow---	RX114	110	133	100	114	4.1	2.0	1.0	4.0	78.1	1.9	83
SS-----	125	113	135	91	113	6.9	2.1	1.0	4.0	76.4	2.8	82
Asgrow---	RX115A	114	132	90	112	3.7	2.3	1.0	4.0	79.2	1.8	78
ACCO-----	UC 11982	118	121	96	112	3.5	2.4	1.0	4.4	77.5	2.0	88
Funk's---	G-4880W	105	117	109	110	5.6	2.3	1.0	4.5	82.0	1.2	88

Continued:

Table 25. (Cont'd) Some Characteristics of Corn Hybrids Tested One Year at Three Locations in Northern Alabama, 1976

Brand name	Hybrid or variety	Yield per acre ^{1/}				Lodged stalks	Quality ^{2/}	Ears per stalk	Ear height	Shelling	Husk ^{2/}	Mid-Silk ^{3/}
		Belle Mina	Cross-ville	Win-field	Regional average							
McNair---	S-237	111	111	102	108	5.8	2.3	0.9	4.5	78.9	2.8	82
RA-----	2601	99	119	82	100	2.5	2.0	1.0	3.9	76.3	2.7	83
GH-----	H-2740A	101	110	88	100	4.6	2.6	1.1	3.9	81.8	2.0	81

Test average: 118 140 102
L.S.D. (.05): 19 24 22
C.V. (%): 11.5 12.3 15.4

^{1/}Yields adjusted to 15.5% moisture and 56 lb. per bushel.

^{2/}1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

^{3/}Belle Mina only. Test was planted April 12, 1976.

^{4/}Check hybrids.

PRELIMINARY REPORT

Table 26. Some Characteristics of Corn Hybrids Tested One Year at Milstead, 1976

Brand name	Hybrid	Yield per acre ^{1/} Bu.	Lodged stalks Pct.	Ears per stalk No.	Ear Height Ft.	Shelling Pct.	Husk ^{2/} Rating	Mid-silk ^{3/} Days
RA-----	2502	79	3.2	1.0	2.6	85.3	2.5	74
Wilstar-----	9997	73	2.8	0.9	3.0	86.8	2.0	75
NK-----	PX 715	72	1.8	0.9	3.1	84.6	3.0	75
GH-----	XC-9045	71	1.9	0.9	3.0	83.0	2.3	75
Pioneer-----	3147 ^{4/}	71	0.8	0.9	3.2	84.7	2.3	77
Funk's-----	G-4848	70	1.3	0.8	2.9	79.8	2.3	79
GH-----	H-2775	69	0.0	1.0	2.9	82.4	2.0	76
TXS-----	119	69	2.7	0.9	2.7	83.4	2.8	74
Wilstar-----	6663	69	1.4	0.9	2.9	83.9	2.5	75
RA-----	3602	69	2.1	0.9	3.2	82.4	2.3	75
Pioneer-----	3535	68	2.6	1.0	2.9	83.2	2.8	74
SS-----	112	68	0.0	0.9	2.8	84.8	2.0	75
ACCO-----	UC 9792	68	2.1	0.8	3.2	84.5	1.8	78
SS-----	102A	68	0.4	0.9	2.7	84.0	2.3	74
TXS-----	114	68	6.8	1.0	3.0	83.2	1.8	75
McCurdy-----	72-44A	67	0.4	0.9	3.1	83.0	2.0	74
RA-----	1502	66	10.1	1.0	2.9	83.2	2.5	73
McCurdy-----	MSX 76	64	1.3	0.8	3.0	82.8	2.0	76
Funk's-----	G-4850	62	3.8	0.9	3.2	81.9	3.0	76
Pioneer-----	3369A ^{4/}	62	2.1	0.9	2.7	83.5	2.0	73
Asgrow-----	RX115A	62	5.8	0.9	2.8	82.1	1.8	74
MDM-----	116	61	8.1	0.8	2.8	84.8	2.5	75
NK-----	PX 675	61	1.4	0.9	2.9	83.4	2.0	75
Asgrow-----	RX140A	60	1.3	0.9	3.2	85.7	2.0	77
SS-----	125	59	0.9	0.8	2.9	82.8	2.0	76
Funk's-----	G-4520	59	5.4	0.9	3.0	83.9	2.3	75
PAG-----	653W	56	2.7	0.8	3.6	83.5	2.0	78
NK-----	PX 95	56	0.9	0.8	3.3	82.6	2.3	75
Greenwood-----	801	55	8.3	0.9	3.0	80.2	2.3	75
Funk's-----	G-4776	55	0.9	0.8	3.1	82.2	2.5	76

Continued:

Table 26 (Cont'd). Some Characteristics of Corn Hybrids Tested One Year at Milstead, 1976

Brand name	Hybrid	Yield	Lodged	Ears	Ear	Shelling	Husk ^{2/}	Mid
		per acre ^{1/}	stalks	per stalk	Height		Rating	silk ^{3/}
		Bu.	Pct.	No.	Ft.	Pct.		Days
Asgrow-----	RX114	54	3.1	0.9	3.0	80.4	2.0	75
RA-----	2601	54	1.4	0.7	3.0	83.6	2.0	75
Funk's-----	G-4880W	54	2.6	0.7	3.5	80.8	1.5	77
McNair-----	S-237	50	1.4	0.8	3.0	81.0	2.5	75
GH-----	H-2740A	50	3.5	0.8	2.9	81.8	2.3	75
McCurdy-----	75-15	44	14.9	0.7	3.7	81.5	1.5	87
DeKalb-----	XL395A	38	1.3	0.6	3.2	78.1	2.0	84
DeKalb-----	XL95	37	4.2	0.5	3.9	81.7	1.5	85

Test average: 62
L.S.D. (.05): 11
C.V. (%): 13.4

- ^{1/}Yield adjusted to 15.5% moisture and 56 lb. per bushel.
^{2/}1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.
^{3/}Test was planted April 23, 1976.
^{4/}Check hybrids.

PRELIMINARY REPORT

Table 27. Some Characteristics of Corn Hybrids Tested at Two Locations in Southern Alabama, 1976

Brand name	Hybrid	Yield per acre ^{1/}			Lodged stalks Pct.	Quality ^{2/} Rating	Ears per stalk No.	Ear height Ft.	Shelling Pct.	Husk ^{2/} Rating
		Head-land Bu.	Fair-hope Bu.	Average Bu.						
DeKalb-----	XL395A	127	202	165	6.9	2.1	1.0	4.0	83.0	2.0
Pioneer-----	3147 ^{3/}	132	137	159	11.8	2.4	1.0	3.8	84.3	2.5
Funk's-----	G-4520	121	185	153	7.0	2.0	1.1	3.4	83.4	2.5
Pioneer-----	3369A ^{3/}	121	183	152	7.8	2.1	1.0	3.3	83.0	2.8
McCurdy-----	MSX 76	115	188	151	6.8	1.8	1.0	3.8	81.8	2.4
Funk's-----	G-4747W	117	183	150	19.7	2.0	1.0	3.9	77.1	2.5
SS-----	112	124	176	150	8.3	2.5	1.0	3.7	84.6	1.9
TXS-----	114	118	181	150	15.6	2.5	1.0	3.3	83.3	2.0
RA-----	2502	127	171	149	4.3	2.6	1.0	3.5	84.0	2.5
SS-----	102A	116	180	148	9.1	2.0	1.0	3.5	82.3	1.9
Funk's-----	G-4848	117	179	148	6.9	2.1	1.0	3.8	76.7	2.5
DeKalb-----	1214A	114	177	146	6.4	1.8	1.0	4.2	80.5	2.1
DeKalb-----	XL395	109	181	145	5.8	1.9	1.0	4.5	84.1	2.9
Funk's-----	G-4776	108	170	142	5.8	2.1	1.1	4.1	83.3	2.0
Asgrow-----	RX 115A	116	168	142	12.2	2.3	1.0	3.6	81.3	2.1
ACCO-----	UC 9792	119	163	141	11.9	2.1	1.0	3.8	81.8	1.8
GH-----	XC-9045	107	175	141	13.2	2.3	1.0	3.9	81.7	2.1
Funk's-----	G-4850	108	174	141	6.5	2.5	0.9	3.8	80.8	3.0
Taylor-----	4020	106	169	138	10.5	2.6	1.2	4.3	82.4	2.3
ACCO-----	UC 11982	109	165	137	3.3	2.1	0.9	3.6	79.2	2.0
Asgrow-----	RX 140A	109	164	136	17.6	2.3	1.0	3.9	82.3	2.4
Greenwood---	747	103	169	136	12.6	2.1	1.1	4.2	82.1	1.8
Greenwood---	4406	105	166	136	7.7	2.0	1.0	4.2	79.0	1.6
McCurdy-----	73-73	100	167	134	15.4	2.0	1.0	4.0	81.9	2.1
TXS-----	119	111	154	133	3.5	2.8	1.0	3.1	84.5	2.4
Funk's-----	G-4880W	104	158	131	6.9	2.3	0.9	3.9	82.1	1.8
Asgrow-----	RX 450A	100	163	131	18.9	2.1	0.9	4.3	80.7	2.0
RA-----	2601	96	164	130	9.6	2.0	0.9	3.4	81.0	2.8
MDM-----	116	100	156	128	10.6	2.5	1.1	3.4	82.8	2.4
RA-----	3602	100	153	127	13.7	2.1	1.0	4.0	82.9	2.3

Continued:

Table 27. (Cont'd) Some Characteristics of Corn Hybrids Tested at Two Locations in Southern Alabama, 1976

Brand name	Hybrid	Yield per acre ^{1/}			Lodged stalks	Quality ^{2/}	Ears per stalk	Ear height	Shelling	Husk ^{2/}
		Head-land	Fair-hope	Average						
Pioneer-----	3535	108	144	126	2.3	2.0	1.1	3.5	80.0	2.1
ACCO-----	AR 38146	107	137	122	6.9	2.4	1.0	3.7	77.7	1.9
GH-----	H-2740A	81	141	111	7.0	2.6	1.1	3.7	81.8	2.4

Test average: 111 170
L.S.D. (.05): 13 16
C.V. (%): 8.4 6.6

^{1/}Yield adjusted to 15.5% moisture and 56 lb. per bushel.

^{2/}1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

^{3/}Check hybrids.

ACCEPTABLE HYBRIDS FOR 1977

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 according to composite rating within a group, and yellow and white hybrids are designated (Y) and (W) respectively.

NORTHERN ALABAMA

CENTRAL ALABAMA

SOUTHERN ALABAMA

<u>Brand name</u>	<u>Hybrid</u>		<u>Brand name</u>	<u>Hybrid</u>		<u>Brand name</u>	<u>Hybrid</u>	
<u>Early to Mid-Season</u>			<u>Early to Mid-Season</u>			<u>Early to Mid-Season</u>		
Pioneer-----	3369A	(Y)	Pioneer-----	3369A	(Y)	Pioneer-----	3369A	(Y)
McCurdy-----	67-14	(Y)	McCurdy-----	72-24	(Y)	McCurdy-----	67-14	(Y)
McNair-----	X300	(Y)	McCurdy-----	67-14	(Y)	McNair-----	X300	(Y)
Coker-----	16	(Y)	McNair-----	S338	(Y)	McNair-----	S338	(Y)
DeKalb-----	XL80	(Y)	McNair-----	X300	(Y)	**DeKalb-----	XL80	(Y)
McNair-----	S338	(Y)	<u>Full Season</u>			**Funk's-----	G-4810	(Y)
McCurdy-----	MSX-88	(Y)	Funk's-----	G-795W-1	(W)	**Coker-----	16	(Y)
*Funk's-----	G-5757	(Y)	Pioneer-----	3147	(Y)	<u>Full Season</u>		
			Pioneer-----	511A	(W)	Pioneer-----	3147	(Y)
			Funk's-----	G-4864	(Y)	Coker-----	77	(Y)
			Coker-----	77	(Y)	Funk's-----	G-795W-1	(W)
			Pioneer-----	3009	(Y)	Funk's-----	G-4864	(Y)
			McNair-----	508	(Y)	McNair-----	508	(Y)
			Coker-----	56	(Y)	Pioneer-----	511A	(W)
			Funk's-----	G-5945	(Y)	Pioneer-----	3030	(Y)
			P.A.G.-----	751	(Y)	Funk's-----	G-4949A	(Y)
			Funk's-----	G-4949A	(Y)	Funk's-----	G-5945	(Y)
			*Pioneer-----	3030	(Y)	Coker-----	54	(Y)
			*Greenwood-----	45	(Y)	Pioneer-----	3009	(Y)

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*If present trends continue, this variety will be removed from the acceptable list next year in the region indicated.
 **Tested two years in regular tests and not listed by composite rating.

