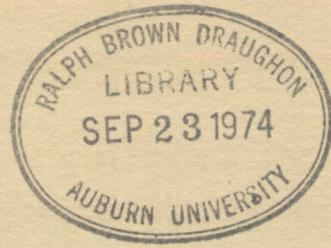


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Performance of Corn Varieties in Alabama, 1973

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"Performance of corn varieties in Alabama."

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Performance of Corn Varieties in Alabama, 1973

David H. Teem^{1/}

Corn performance tests were conducted at 12 locations by the Auburn University Agricultural Experiment Station in 1973. These tests are conducted annually to determine relative production of many varieties offered for sale and to furnish unbiased information by which growers may choose a variety. They are conducted to give a comparison of varieties entered in each test and are not intended for use as an absolute measure of the yielding potential of a variety in an area. Careful consideration should be given to all performance characteristics when choosing a variety since the proper choice may mean the difference between profit and loss.

Corn yields in most areas of Alabama were above average in 1973. Yields of more than 100 bushels per acre were obtained in 9 out of the 12 tests. With one exception, disease incidence was generally low at most locations. Leaf rust occurred throughout the Gulf Coast region and all varieties planted at the Gulf Coast Substation were susceptible to the disease; however, yields in this test did not appear to be appreciably affected.

In side-by-side irrigated and unirrigated tests at Camden, irrigation resulted in a large increase in yield. This test was not intended to show maximum production with irrigation. Plant population, fertilization and other factors were the same for both tests. The important result was that the relative yield of varieties was not the same irrigated as unirrigated. Higher plant population and fertilization would likely result in a greater response to irrigation. As a supplement to rainfall this test received 1 inch of water June 19, July 2, July 6, and July 13.

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Location of the tests and cultural practices used are shown in Table 1. Lime and fertilizer were applied in adequate amounts. For weed control either chemical, mechanical, or a combination were used as needed. The experimental design was a randomized complete block with four replications. Yields were adjusted to 15.5 per cent moisture and 56 pounds per bushel. 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 by 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 and regional average yields for 1-5 years in northern Alabama. Similar data are shown for central Alabama in Tables 6-9 and for southern Alabama in Tables 10-13. Results of irrigated and unirrigated tests at Camden are shown in Table 14. Results from preliminary tests are shown in Tables 15-17. If a hybrid is outstanding in these preliminary tests it is advanced to the regular testing program the following year.

When comparing hybrids, small differences in yield may not be real differences between hybrids but differences resulting from variation in the plots and testing procedures. 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 yield at each location. This means that if the difference between two hybrids being compared is greater than the L.S.D. value, the difference is considered real at the (.05) level of probability.

Long term averages are more reliable when choosing a hybrid. Three years testing is considered sufficient to give a good measure of the

performance of varieties. A rating system was used to determine the list of acceptable hybrids. The regional average yield of a variety was used as its base point. The composite rating was obtained by subtracting values for lodging, quality, and height of ears from its yield. The value subtracted for each characteristic was proportional to the numerical value shown for the characteristic in Tables 2, 6, and 10. Although those hybrids that have a good record for 2 years in the regular test are included, and noted, on the acceptable list; preferably, data from more than 3 years are used in evaluating the varieties.

All of the acceptable varieties are not equal in performance. Some are outstanding in one or more characteristics. Others are not outstanding in any one characteristic, but possess a satisfactory combination of characteristics. For these reasons, it is suggested that this report be carefully studied before choosing a variety of corn to plant in 1974.

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Table 1. Location and Cultural Practices in 1973 Tests

Location	Planting date	Nitrogen (lbs/A)	Row width (in.)	Plant population (thousand)
<u>Northern Alabama</u>				
Belle Mina-----	5/4	111	42	13
Crossville-----	5/1	140	42	18
Winfield-----	5/16	122	40	16
<u>Central Alabama</u>				
Auburn-----	5/14	140	40	19
Camden (unirrigated)-----	4/20	200	38	18
Camden (irrigated)-----	4/20	200	38	18
Camp Hill-----	5/16	130	42	16
Prattville-----	5/5	120	42	13
Tallassee-----	4/13	124	40	13
<u>Southern Alabama</u>				
Brewton-----	4/24	120	36	18
Fairhope-----	4/10	140	38	18
Headland-----	4/16	118	36	14
Monroeville-----	4/30	120	42	15

Table 2. Some Characteristics of Corn Varieties Tested Three Years in Northern Alabama, 1971-1973

Brand name	Hybrid or variety	Yield per acre ^{1/}	Lodged stalks	Quality ^{2/}	Ears per stalk	Height of ears	Shelling	Husk ^{2/}
		Bu.	Pct.	Rating	No.	Ft.	Pct.	Rating
McCurdy-----	67-14	111	4.8	1.5	1.0	3.7	80.4	2.5
Pioneer-----	3147	111	3.1	2.2	1.0	4.0	83.1	2.8
Pioneer-----	3179	111	6.1	1.9	1.0	4.0	84.1	2.6
Pioneer-----	3369A	109	4.0	1.9	1.0	3.5	83.4	2.5
Pioneer-----	3191	105	4.5	2.1	1.0	3.7	84.5	2.0
Pioneer-----	511A	101	8.3	2.2	1.2	4.0	81.7	2.0
Pennington---	CHR-W	101	8.6	2.3	1.1	4.0	81.4	1.8
Funk's-----	G-795W-1	99	10.0	2.4	1.1	3.8	80.9	1.8
P.A.G.-----	644W	94	6.0	2.3	0.9	4.3	82.2	2.1
Funk's-----	G-4761	94	4.1	2.2	1.0	3.6	84.7	2.0
Funk's-----	G-5757	92	5.3	2.4	1.0	3.6	83.3	2.2
Stull-----	807 SX	88	5.8	2.5	0.9	3.5	82.0	2.8
-----	Mosby	79	14.4	2.9	1.0	3.9	83.0	2.3

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

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

Table 3. Some Characteristics of Corn Varieties Tested Two Years in Northern Alabama, 1972-73

Brand name	Hybrid or variety	Yield		Quality ^{2/}	Ears per stalk	Height		
		per acre ^{1/}	Bu.			Lodged stalks	Pct.	Ft.
Pioneer-----	3179	116	6.5	1.7	1.0	4.1	84.3	2.4
Pioneer-----	3147	114	3.5	2.2	1.0	4.1	82.8	2.8
McCurdy-----	67-14	113	5.2	1.6	1.0	3.8	80.1	2.4
Pioneer-----	3369A	113	5.0	1.9	1.0	3.6	83.1	2.4
McCurdy-----	MSX88	108	3.6	2.1	1.0	3.6	82.1	2.6
Pioneer-----	511A	106	8.9	2.2	1.2	4.2	81.0	1.9
Pioneer-----	3191	106	5.6	2.2	1.0	3.8	84.3	2.0
DeKalb-----	805A	103	6.6	2.1	1.0	3.6	82.1	2.6
Pennington-----	CHR-W	100	9.0	2.3	1.2	4.0	81.2	1.6
Funk's-----	G-795W-1	100	10.9	2.4	1.2	4.0	80.7	1.9
Funk's-----	G-4761	99	4.4	2.2	1.0	3.7	84.6	1.9
P.A.G.-----	644W	96	6.5	2.4	1.0	4.4	82.0	2.1
Funk's-----	G-5757	96	5.3	2.5	1.0	3.7	83.0	2.2
McNair-----	338	96	7.0	2.2	1.0	3.8	81.1	2.0
Funk's-----	G-4808	96	4.7	2.3	1.0	3.8	81.4	1.9
Stull-----	807SX	83	6.0	2.4	0.9	3.6	82.2	2.9
-----	Mosby	80	14.6	2.8	1.0	4.1	83.2	2.4

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

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

Table 4. Some Characteristics of Corn Varieties Tested in Northern Alabama, 1973

Brand name	Hybrid or variety	Yield per acre ^{1/}	Lodged stalks	Quality ^{2/}	Ears per stalk	Height of ears	Shelling	Husk ^{2/}
		Bu.	Pct.	Rating	No.	Ft.	Pct.	Rating
Pioneer-----	3369A	112	1.3	2.1	1.0	3.5	81.5	2.3
Pioneer-----	3179	111	3.1	1.8	1.0	4.0	84.1	2.7
McCurdy-----	67-14	110	1.6	1.8	1.0	3.6	80.6	2.3
Pioneer-----	3147	106	0.9	2.3	1.0	4.2	82.7	2.8
DeKalb-----	XL-72A	103	2.3	1.9	1.0	3.4	83.4	2.9
McCurdy-----	MSX88	101	1.0	2.1	1.0	3.6	81.2	2.0
Funk's-----	G-4646	101	3.2	2.2	1.0	3.5	83.1	3.3
Funk's-----	G-4864	100	0.7	2.1	0.9	4.4	82.0	1.5
Pennington-----	CHR-W	100	4.2	2.3	1.1	4.1	80.8	1.5
McCurdy-----	67-10	99	2.3	1.8	1.0	3.5	81.2	1.8
Pioneer-----	3191	99	1.7	2.2	1.0	3.8	83.1	1.8
Pioneer-----	511A	99	4.5	2.3	1.1	4.2	80.4	2.0
Coker-----	16	98	3.2	2.2	1.0	3.3	83.9	2.8
DeKalb-----	805A	98	1.5	2.0	0.9	3.4	81.5	2.3
Funk's-----	G-4761	97	1.8	2.3	1.0	3.5	84.3	1.6
McNair-----	X300	97	2.2	1.9	1.0	3.6	80.6	1.7
Funk's-----	G-795W-1	96	5.3	2.3	1.1	4.0	79.8	1.8
Funk's-----	G-5757	92	4.2	2.3	1.0	3.5	83.0	2.1
McNair-----	338	90	2.4	2.3	1.0	3.7	82.0	2.0
Northrup-King---	PX77	90	2.0	2.2	1.0	3.5	79.0	1.7
P.A.G.-----	644W	90	2.7	2.4	1.0	4.4	82.6	2.0
Funk's-----	G-4808	89	3.8	2.3	1.0	3.6	81.4	1.7
McNair-----	X210	87	1.7	1.9	0.9	3.3	79.2	1.8
McCurdy-----	908.W	84	4.1	2.2	0.9	4.3	81.3	2.3
Northrup-King---	PX670	84	2.0	2.3	0.9	3.5	83.4	2.3
Stull-----	807SX	79	4.0	2.3	0.9	3.5	82.3	2.4
-----	Mosby	75	11.1	2.7	1.0	4.1	84.0	2.5

^{1/} Yields adjusted to 15.5% moisture and 56 lb. per bushel.^{2/} 1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 5. 1973 Yield of Corn Varieties by Location and Regional Averages for 1-5 Years in Northern Alabama^{1/}

Brand name	Hybrid or variety	Belle				Regional average yield per acre				
		Mina	Crossville	Winfield	1973	1972-73	1971-73	1969-73 ^{2/}	1968-73 ^{2/}	
		Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	
Funk's-----	G-795W-1	73	127	88	96	101	99	88	86	
Funk's-----	G-5757	80	129	68	92	96	92	84	82	
Stull-----	807 SX	72	117	47	79	84	88	78	77	
-----	Mosby	54	114	57	75	80	79	70	68	
Pioneer-----	511A	74	129	92	99	106	101	91		
Funk's-----	G-4761	88	125	77	97	99	94	85		
McCurdy-----	67-14	93	142	96	110	113	111			
Pioneer-----	3147	89	131	98	106	114	111			
Pioneer-----	3179	98	130	104	111	116	111			
Pioneer-----	3369A	95	134	105	112	113	109			
Pioneer-----	3191	85	116	96	99	106	105			
Pennington-----	CHR-W	69	135	96	100	101	101			
P.A.G.-----	644W	74	116	79	90	96	94			
McCurdy-----	MSX 88	107	114	83	101	108				
DeKalb-----	805A	87	135	72	98	103				
Funk's-----	G-4808	78	109	81	89	96				
McNair-----	338	72	118	80	90	96				
DeKalb-----	XL-72A	94	131	85	103					
Funk's-----	G-4864	80	132	90	101					
Funk's-----	G-4646	94	133	77	101					
McCurdy-----	67-10	90	127	79	99					
Coker-----	16	86	129	81	98					
McNair-----	X300	84	130	76	97					
Northrup-King--	PX77	82	122	66	90					
McNair-----	X210	84	114	63	87					
McCurdy-----	908W	76	112	65	84					
Northrup-King--	PX670	69	111	71	84					
Test average:		82	124	80		^{1/} Yields adjusted to 15.5% moisture and				
L.S.D. (.05):		14	15	16		56 lb. per bushel.				
C.V. (%)		11.7	8.3	14.0		^{2/} Does not include 1970 data.				

Table 6. Some Characteristics of Corn Varieties Tested Three Years in Central Alabama, 1971-73.

Brand name	Hybrid or variety	Yield per acre ^{1/}	Lodged stalks	Quality ^{2/}	Ears per stalk	Height of ears	Shelling Pct.	Husk ^{2/} Rating
		Bu.	Pct.	Rating	No.	Ft.	Pct.	Rating
Pioneer-----	3147	108	4.3	2.8	1.1	3.8	81.1	2.4
Funk's-----	G-795W-1	97	10.9	2.2	1.2	3.8	80.5	1.6
Pioneer-----	511A	97	10.2	2.1	1.2	3.8	80.1	1.8
McNair-----	508	97	5.1	1.9	1.3	4.1	81.4	1.9
Funk's-----	G-5945	97	4.7	2.0	1.1	4.4	81.7	1.7
McCurdy-----	67-14	95	3.5	1.8	1.0	3.4	79.8	2.4
Funk's-----	G-4761	94	2.2	2.2	1.1	3.3	83.9	1.9
Pioneer-----	3369A	93	4.2	2.3	1.0	3.3	80.6	2.6
Funk's-----	G-4949	92	3.0	2.0	1.1	4.4	81.3	2.1
P.A.G.-----	751	92	7.9	1.9	1.3	4.5	80.3	1.7
----- Mosby		66	19.4	2.9	1.0	3.6	79.1	2.3

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

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

Table 7. Some Characteristics of Corn Varieties Tested Two Years in Central Alabama, 1972-73

Brand name	Hybrid or variety	Yield per acre ^{1/}	Lodged stalks	Quality ^{2/}	Ears per stalk	Height of ears		Shelling	Husk ^{2/}
					Bu.	Pct.	Rating		
Pioneer -----	3147	107	4.5	2.7	1.1	3.7	81.3	2.3	
Pioneer -----	511A	101	8.7	2.1	1.1	3.7	80.5	1.9	
McNair -----	508	98	3.6	1.8	1.3	4.1	81.9	2.0	
Funk's -----	G-795W-1	96	9.6	2.1	1.2	3.7	80.9	1.7	
Pioneer -----	3369A	95	2.8	2.4	1.0	3.2	80.9	2.6	
Funk's -----	G-4761	95	1.8	2.1	1.1	3.1	83.9	2.0	
Funk's -----	G-5945	94	4.1	2.1	1.1	4.3	82.0	1.8	
P.A.G.-----	751	94	7.2	1.9	1.3	4.3	80.8	1.6	
Pioneer -----	3009	93	7.5	1.8	1.0	3.9	77.6	1.4	
McCurdy -----	67-14	93	2.3	1.8	1.0	3.3	79.8	2.3	
Greenwood ----	471	91	8.3	1.7	1.1	4.3	80.6	1.5	
McNair -----	338	90	4.9	2.2	1.0	3.3	80.6	1.9	
Pioneer -----	3030	90	3.9	1.8	1.1	4.0	78.0	1.3	
Funk's -----	G-4808	90	4.1	2.1	1.0	3.2	80.0	2.0	
Greenwood ----	45	89	6.4	1.9	1.1	3.7	80.3	1.9	
Funk's -----	G-4949	89	3.0	2.0	1.0	4.3	82.2	2.3	
P.A.G. -----	644-W	89	4.1	2.2	1.0	3.9	80.2	2.1	
-----	Fla. 200A	85	5.7	1.8	1.1	4.7	80.4	1.3	
-----	Mosby	66	17.2	2.9	1.0	3.6	79.2	2.3	

^{1/} Yields adjusted to 15.5% moisture and 56 lb. per bushel.^{2/} 1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor;

Table 8. Some Characteristics of Corn Varieties Tested in Central Alabama, 1973

Brand name	Hybrid or variety	Yield per acre ^{1/}	Lodged stalks	Quality ^{2/}	Ears per stalk	Height of ears	Shelling	Husk ^{2/}
		Bu.	Pct.	Rating	No.	Ft.	Pct.	Rating
Pioneer-----	3147	95	3.0	2.8	1.0	4.0	81.1	2.4
Pioneer-----	511A	95	8.3	2.1	1.1	3.9	80.8	1.8
Funk's-----	G-795W-1	92	7.6	2.0	1.1	4.1	81.2	1.6
Funk's-----	G-4761	90	1.8	2.3	1.1	3.4	84.1	2.1
Funk's-----	G-5945	88	5.0	2.1	1.1	4.6	82.5	1.8
Pioneer-----	3369A	88	4.1	2.7	1.0	3.4	81.6	2.6
McCurdy-----	67-14	87	2.9	1.8	1.0	3.6	80.5	2.3
Pioneer-----	3009	86	9.0	2.0	1.0	4.1	78.3	1.6
Funk's-----	G-4864	86	2.7	2.3	1.0	4.1	82.5	1.7
P.A.G.-----	751	84	9.0	1.9	1.2	4.6	81.3	1.6
McNair-----	X210	83	3.8	2.5	1.0	3.4	77.9	2.3
Coker-----	56	83	5.1	2.2	1.1	4.0	80.8	2.6
McNair-----	508	82	4.5	1.8	1.2	4.4	81.9	1.9
Greenwood-----	45	82	8.2	1.8	1.0	3.9	80.5	1.9
Pioneer-----	3030	82	4.6	1.8	1.1	4.2	78.0	1.3
Coker-----	54	81	4.9	1.8	1.1	4.0	79.7	1.5
Funk's-----	4808	80	3.7	2.3	1.0	3.5	80.2	2.1
Greenwood-----	471	80	9.8	1.6	1.0	4.5	81.0	1.4
Funk's-----	G-4949	79	4.1	2.1	1.0	4.6	82.8	2.3
McNair-----	338	79	6.6	2.6	1.0	3.4	80.9	2.1
DeKalb-----	1214	78	7.8	2.1	1.2	4.6	80.2	2.0
P.A.G.-----	644W	78	4.9	2.3	0.9	4.1	80.2	2.1
Taylor-----	304	78	10.4	2.6	1.1	4.0	80.3	2.4
Greenwood-----	228	77	6.5	1.8	1.1	4.0	77.6	1.8
Coker-----	814	76	4.8	2.1	1.1	4.5	80.2	1.9
DeKalb-----	XL99	76	12.8	1.9	1.1	4.7	79.9	1.9
-----	Fla. 200A	72	7.2	1.8	1.0	5.0	81.1	1.3
-----	Mosby	63	18.3	2.8	1.0	4.0	79.6	2.4

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

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

Table 9. 1973 Yield of Corn Varieties by Location and Regional Averages for 1-5 Years in Central Alabama^{1/}

Brand name	Hybrid or variety	Prattville Bu.	Tallassee Bu.	Auburn Bu.	Camden Bu.	Camp Hill Bu.	Regional average yield per acre				
							1-year 1973	2-year 1972-73	3-year 1971-73	4-year 1969-73 ^{2/}	5-year 1968-73 ^{2/}
Funk's-----	G-5945	91	101	96	68	90	88	94	97	86	83
Funk's-----	G-795W-1	99	108	97	75	82	92	96	97	85	82
Pioneer-----	511A	93	109	101	79	91	95	101	97	84	80
P.A.G.-----	751	91	106	93	66	65	84	94	92	80	77
Funk's-----	G-4949	88	99	82	59	68	79	89	92	80	77
-----	Mosby	71	76	70	55	46	63	66	66	54	51
Funk's-----	G-4761	97	98	106	68	81	90	95	94	81	
Pioneer-----	3147	97	106	105	67	102	95	107	108		
McNair-----	508	80	107	92	64	68	82	98	97		
McCurdy-----	67-14	91	98	98	73	77	87	93	95		
Pioneer-----	3369A	104	95	98	68	76	88	95	93		
Pioneer-----	3009	93	90	103	71	78	86	93			
Greenwood--	471	81	93	87	65	74	80	91			
McNair-----	338	82	84	101	66	61	79	90			
Pioneer-----	3030	88	94	98	63	66	82	90			
Funk's-----	G-4808	82	92	95	60	73	80	90			
Greenwood--	45	89	97	98	68	57	82	89			
P.A.G.-----	644-W	79	91	83	66	72	78	89			
-----	Fla. 200A	79	98	72	59	54	72	85			
Funk's-----	G-4864	92	90	102	64	82	86				
McNair-----	X210	94	91	89	69	73	83				
Coker-----	56	86	107	94	59	69	83				
Coker-----	54	87	87	87	74	70	81				
DeKalb-----	1214	76	92	93	65	69	78				
Taylor-----	304	82	105	83	55	63	78				
Greenwood--	228	82	86	95	71	53	77				
Coker-----	814	75	104	91	60	49	76				
DeKalb-----	XL99	77	107	81	61	53	76				
Test average:		87	97	92	66	70	^{1/} Yields adjusted to 15.5% moisture and 56 lb. per bushel.				
L.S.D. (.05)		10	14	14	8	15					
C.V. (%)		7.9	10.2	11.1	8.8	15.6	^{2/} Does not include 1970 data.				

Table 10. Some Characteristics of Corn Varieties Tested Three Years in Southern Alabama, 1971-1973.

Brand name	Hybrid or variety	Yield per acre ^{1/}	Lodged stalks	Quality ^{2/}	Ears per stalk	Height of ears	Shelling Pct.	Husk ^{2/} Rating
		Bu.	Pct.	Rating	No.	Ft.		
Funk's-----	G-795W-1	101	20.0	2.3	1.1	3.1	82.2	2.2
Pennington----	CHR-W	100	16.4	2.2	1.1	3.2	80.7	2.2
Pennington-----	7-C-11A	98	7.6	2.9	1.0	3.2	82.2	2.5
Funk's-----	G-4949	96	2.4	2.5	1.0	3.6	83.0	2.3
McCurdy-----	67-14	96	9.1	2.1	1.0	2.8	79.6	2.5
P.A.G.-----	751	95	11.0	2.1	1.2	3.7	81.0	1.8
Funk's-----	G-5945	93	5.3	2.3	1.0	3.5	83.7	2.3
Funk's-----	G-4761	92	5.2	2.4	1.0	2.7	85.5	2.2
McNair-----	508	91	5.3	2.1	1.1	3.5	82.0	2.2
Coker-----	71	83	7.3	1.8	1.1	3.6	79.2	1.9
-----	Mosby	71	22.5	3.1	1.0	3.2	80.3	2.7

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

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

Table 11. Some Characteristics of Corn Varieties Tested Two Years in Southern Alabama, 1972-1973

Brand name	Hybrid or variety	Yield per acre ^{1/}	Lodged stalks	Quality ^{2/}	Ears per stalk	Height of ears	Shelling Pct.	Husk ^{2/} Rating
					Bu.	Pct.	Rating	No.
Pioneer-----	511A	100	13.6	2.1	1.1	3.1	80.7	1.9
Funk's-----	G-795W-1	95	16.7	2.4	1.1	3.1	80.9	2.1
Pennington----	CHR-W	93	15.5	2.4	1.1	3.1	80.9	2.1
Pennington----	7-C-11A	91	5.2	2.5	1.0	3.1	80.5	2.1
Funk's-----	G-4949	89	1.9	2.5	1.0	3.5	82.5	2.3
P.A.G.-----	751	89	10.2	2.3	1.1	3.6	80.6	1.9
Funk's-----	G-5945	89	5.6	2.4	1.0	3.5	82.7	2.3
McCurdy-----	67-14	89	10.9	2.3	0.9	2.8	79.0	2.5
Pioneer-----	3369A	89	6.6	2.6	1.0	2.6	80.7	2.6
Pioneer-----	3030	88	5.9	1.9	1.0	3.3	78.4	1.5
Funk's-----	G-4808	88	6.7	2.7	1.0	2.7	80.7	2.2
Pioneer-----	3009	88	9.9	1.9	0.9	3.2	77.7	1.7
McNair-----	338	87	9.2	2.7	0.9	2.7	80.5	2.4
DeKalb-----	1214	86	3.8	1.9	1.1	3.4	79.7	2.2
Greenwood-----	45	85	6.8	1.8	1.0	3.0	80.4	2.2
Funk's-----	G-4761	85	5.7	2.6	1.0	2.6	84.3	2.2
McNair-----	508	83	3.3	2.1	1.1	3.4	81.8	2.0
Greenwood-----	471	83	7.6	1.9	1.0	3.6	80.4	1.7
Coker-----	71	77	7.2	1.9	1.0	3.5	79.1	2.0
Fla.-----	200A	77	5.2	1.8	1.0	3.9	80.3	1.5
-----	Mosby	66	22.2	3.2	1.0	3.1	79.7	2.9

^{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 12. Some Characteristics of Corn Varieties Tested in Southern Alabama, 1973

Brand name	Hybrid or variety	Yield per acre ^{1/}	Lodged stalks	Quality ^{2/}	Ears per stalk	Height of ears	Shelling	Husk ^{2/}
		Bu.	Pct.	Rating	No.	Ft.	Pct.	Rating
Pioneer-----	511A	103	12.8	2.1	1.1	3.5	81.4	1.9
Pennington-----	7-C-11A	100	5.9	3.2	1.0	3.5	82.6	2.6
Funk's-----	G-795W-1	99	18.6	2.3	1.1	3.5	81.6	2.0
Funk's-----	G-4864	99	5.3	2.1	1.0	3.3	82.1	1.8
Pennington-----	CHR-W	96	16.3	2.3	1.1	3.5	81.0	2.3
Funk's-----	G-4761	96	4.4	2.5	1.0	2.9	85.1	2.2
Funk's-----	G-4949	95	2.5	2.6	0.9	3.9	82.7	2.4
Funk's-----	G-4808	95	6.2	2.8	1.0	3.0	81.0	2.1
McCurdy-----	67-14	95	10.7	2.4	0.9	3.1	79.9	2.4
Pioneer-----	3369A	94	12.3	2.6	1.0	2.8	80.3	2.6
Funk's-----	G-5945	93	8.0	2.4	0.9	3.9	83.0	2.1
Pioneer-----	3009	93	11.4	1.9	0.9	3.6	78.2	1.8
Coker-----	54	92	3.9	1.6	1.0	3.6	81.6	1.7
P.A.G.-----	751	90	9.1	2.4	1.0	4.1	80.8	2.1
Pioneer-----	3030	89	5.6	2.1	1.0	3.7	79.2	1.4
DeKalb-----	1214	88	2.3	2.0	1.1	3.8	81.0	2.3
DeKalb-----	XL99	87	10.4	2.4	0.9	4.2	81.0	2.4
Greenwood-----	45	86	9.5	1.8	1.0	3.3	81.5	2.4
Greenwood-----	471	86	6.8	2.1	1.0	3.9	80.7	1.9
McNair-----	338	86	12.5	2.8	0.9	3.0	79.3	2.6
DeKalb-----	1002	85	8.9	3.4	0.9	3.7	84.3	3.6
Northrup-King----	PX77	84	4.8	3.0	1.0	2.8	82.0	2.5
Coker-----	56	84	5.8	1.9	1.0	3.5	81.8	2.2
Coker-----	814	82	4.3	2.9	1.0	4.0	79.5	2.1
McNair-----	508	81	2.6	2.4	1.0	3.7	81.4	2.1
Coker-----	71	78	6.3	1.9	1.0	4.0	79.3	2.1
Fla.-----	200A	77	3.5	2.1	0.9	4.4	79.2	1.6
-----	Mosby	69	18.2	2.9	0.9	3.5	80.0	3.0

^{1/} Yields adjusted to 15.5% moisture and 56 lb. per bushel.^{2/} 1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

Table 13. 1973 Yield of Corn Varieties by Locations and Regional Averages for 1-5 Years in Southern Alabama^{1/}

Brand name	Hybrid or variety	Regional average yield per acre								
		Monroe-			Headland	1-year 1973	2-year 1972-73	3-year 1971-73	4-year 1969-73 ^{2/}	5-year 1968-73 ^{2/}
		Fairhope	Brewton	vile		Bu.	Bu.	Bu.	Bu.	Bu.
Funk's-----	G-4949	130	126	78	46	95	89	96	86	79
Funk's-----	G-5945	130	121	82	38	93	89	93	84	79
Pennington---	7-C-11A	120	131	89	60	100	96	98	87	78
P.A.G.-----	751	117	132	71	41	90	89	95	85	77
Coker-----	71	93	111	69	41	78	77	83	74	66
	Mosby	88	98	55	34	69	66	71	64	57
Funk's-----	G-795W-1	123	133	87	53	99	95	101	91	
Pennington---	CHR-W	117	127	79	60	96	93	100	89	
McCurdy----	67-14	130	120	87	41	95	89	96		
Funk's-----	G-4761	124	109	87	64	96	85	92		
McNair-----	508	114	104	65	40	81	83	91		
Pioneer-----	511A	134	135	88	55	103	100			
Pioneer-----	3369A	134	111	68	66	94	89			
Pioneer-----	3030	116	111	83	47	89	88			
Funk's-----	G-4808	127	120	80	53	95	88			
Pioneer-----	3009	122	119	84	46	93	88			
McNair-----	338	123	102	70	48	86	87			
DeKalb-----	1214	116	114	70	51	87	86			
Greenwood----	45	113	105	75	52	86	85			
Greenwood----	471	121	114	67	43	86	83			
Fla.-----	200A	117	113	49	32	77	77			
Funk's-----	G-4864	127	117	90	61	99				
Coker-----	54	127	115	74	51	92				
DeKalb-----	XL99	119	125	68	37	87				
DeKalb-----	1002	117	113	64	45	85				
Northrup-King--	PX77	109	104	67	58	84				
Coker-----	56	109	107	78	43	84				
Coker-----	814	112	106	66	43	82				
Test average:		119	116	74	48					
L.S.D. (.05)		18	14	11	15					
C.V. (%)		10.7	8.7	10.2	22					

1/ Yields adjusted to 15.5% moisture and
56 lb. per bushel.
2/ Does not include 1970 data.

Table 14. Yield of Irrigated and Unirrigated Corn Varieties
at Camden, 1973

Brand name	Hybrid or variety	Yield per acre ^{1/}	
		Irrigated Bu.	Unirrigated Bu.
Funk's-----	G-795W-1	126	75
P.A.G.-----	751	120	66
Pioneer-----	511A	120	79
Funk's-----	G-5945	114	68
Pioneer-----	3030	113	63
Funk's-----	G-4864	112	64
Funk's-----	G-4949	107	59
Greenwood-----	228	106	71
DeKalb-----	XL 99	106	61
Coker-----	54	102	74
Greenwood-----	471	102	65
Pioneer-----	3369A	100	68
Funk's-----	G-4808	100	60
P.A.G.-----	644W	99	66
McNair-----	508	99	64
McNair-----	X210	99	69
-----	Fla. 200A	98	59
Coker-----	56	97	59
Funk's-----	G-4761	96	68
DeKalb-----	1214	96	65
Pioneer-----	3009	96	71
Taylor-----	304	95	55
Greenwood-----	45	95	68
Pioneer-----	3147	92	67
McCurdy-----	67-14	92	73
Coker-----	814	87	60
McNair-----	338	86	66
-----	Mosby	75	55
Test average		101	66
L.S.D. (.05)		12	8
C.V. (%)		8.8	8.8

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

Table 15. Some Characteristics of Corn Hybrids Tested One Year at Three Locations in Northern Alabama, 1973

Brand name	Hybrid	Yield per acre ^{1/}						Ears			
		Belle		Regional		Lodged	Quality ^{2/}	per stalk	Ear height	Shelling	Husk ^{2/}
		Mina	Winfield	Crossville	average	stalks			(3)	(3)	(3)
		Bu.	Bu.	Bu.	Bu.	Pct.	Rating	No.	Ft.	Pct.	Rating
Number of tests		(1)	(1)	(1)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
DeKalb-----	XL 85	113	85	135	111	3.6	1.5	1.0	3.5	84.1	2.4
McCurdy----	72-73	114	85	125	108	2.9	1.5	1.0	4.0	83.3	2.1
Pioneer-----	3369A ^{3/}	107	91	114	104	5.6	1.7	1.0	3.4	83.3	2.1
McCurdy-----	72-44	107	92	113	104	2.2	1.9	1.0	3.6	82.8	1.8
McNair-----	73002	98	76	129	101	13.3	1.8	1.0	3.4	83.3	3.0
McNair-----	X214	103	73	118	98	4.9	1.8	1.0	3.6	86.2	1.7
Funk's-----	G-795W-1 ^{3/}	87	84	120	97	6.9	2.5	1.1	4.0	81.2	1.7
Pioneer-----	3161	88	78	122	96	1.5	1.9	1.0	3.8	83.4	1.7
DeKalb-----	XL 380	98	84	106	96	4.3	1.8	0.9	3.5	79.2	1.9
McNair-----	X190	98	82	108	96	4.1	2.1	1.0	3.4	83.3	3.0
McNair-----	73011	89	89	107	95	4.8	2.1	1.1	4.7	82.7	2.0
DeKalb-----	XL 80	101	80	104	95	3.5	1.8	0.9	3.5	79.2	1.9
DeKalb-----	XL 74	93	78	111	94	4.5	1.7	1.0	3.5	81.5	2.6
McCurdy-----	72-14	88	76	110	91	5.3	2.2	1.1	4.5	81.4	1.8
Funk's-----	G-5945	84	71	115	90	6.7	2.1	1.0	4.5	82.1	1.9
McCurdy-----	72-22	86	70	114	90	5.3	2.6	1.1	4.8	82.2	1.1
Coker-----	56	85	82	100	89	2.2	1.9	1.2	3.9	81.2	2.6
Funk's-----	G-4949	78	72	105	85	4.7	2.3	1.0	4.5	81.7	2.1
McNair-----	508	61	63	95	73	5.2	3.3	1.2	4.4	80.4	1.8
Acco-----	AR 19627	72	53	85	70	5.3	2.1	0.9	3.7	79.4	1.8
Test average:		93	78	112							
L.S.D. (.05)		11	16	16							
C.V. (%)		8.4	14.0	10.0							

^{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/} Check hybrids.

Table 16. Some Characteristics of Corn Hybrids Tested One Year at Two Locations in Central Alabama, 1973

Brand name	Hybrid	Yield per acre ^{1/}			Lodged stalks	Quality ^{2/}	Ears			Shelling	Husk ^{2/}
		Tallassee	Auburn	Regional average			No. (2)	Ft. (2)	Ear height		
Number of tests		Bu. (1)	Bu. (1)	Bu. (2)	Pct. (2)	Rating (2)				Pct. (2)	Rating (2)
McCurdy-----	72-24	114	123	119	6.7	2.8	1.2	4.9	84.9	1.6	
McNair-----	73011	103	118	111	1.2	2.0	1.2	4.6	84.5	2.3	
Pennington----	CHR-W	99	122	110	4.0	2.3	1.2	3.9	82.6	2.4	
McNair-----	X 214	95	125	110	1.5	3.5	1.0	3.4	84.6	2.4	
Pioneer-----	3147 ^{3/}	95	124	109	2.4	3.6	1.1	3.8	81.8	3.0	
McCurdy-----	72-22	92	123	108	4.6	2.5	1.2	4.9	84.0	1.6	
McNair-----	X300	96	117	107	5.3	3.3	1.0	3.3	82.0	2.4	
McNair-----	73002	81	129	105	5.2	3.8	1.0	3.5	81.8	3.0	
Acco-----	AR14289	87	116	102	1.5	2.3	1.0	3.3	80.7	2.1	
Pioneer-----	3161	86	116	101	0.9	2.5	1.1	3.7	83.0	2.5	
Greenwood----	801	87	112	100	6.1	2.5	1.1	3.8	79.6	2.6	
Taylor-----	T-15	89	109	99	8.2	2.3	1.1	4.3	81.3	2.6	
Greenwood----	95	79	111	95	3.2	2.4	1.1	3.7	79.6	2.3	
Pioneer-----	3369A ^{3/}	81	107	94	3.6	3.4	1.0	3.2	80.0	3.4	
DeKalb-----	1002	72	103	87	1.8	3.9	1.0	3.7	78.8	3.9	
Northrup-King -	PX77	67	104	85	5.0	3.0	1.0	3.1	79.1	2.5	
Northrup-King -	PX670	58	100	79	2.1	3.0	1.0	3.3	83.7	2.9	
Funk's-----	G-4646	49	103	76	0.6	3.8	1.0	3.0	78.4	3.5	
Test average:		85	115								
L.S.D. (.05)		15	15								
C.V. (%)		12.4	9.0								

^{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/} Check hybrids.

Table 17. Some Characteristics of Corn Hybrids Tested One-Year at Two Locations in Southern Alabama, 1973

Brand name	Hybrid	Yield per acre ^{1/}			Lodged stalks	Quality ^{2/}	Ears per stalk	Ear height	Shelling Pct.	Husk ^{2/} Rating
		Fairhope	Headland	Regional average						
Number of tests		Bu. (1)	Bu. (1)	Bu. (2)	(2)	(2)	(2)	(2)	(2)	(2)
McNair	73011	156	57	106	2.1	1.5	1.1	4.9	84.2	2.3
McNair	73002	153	55	104	25.1	1.8	0.9	3.5	83.2	3.3
Pioneer	3161	142	60	101	5.4	1.8	1.0	3.4	83.2	2.4
McCurdy	67-143/	139	63	101	8.3	1.6	0.9	3.5	81.3	2.9
McNair	X300	141	60	100	8.5	1.8	1.0	3.4	81.1	2.6
McNair	X214	143	56	99	15.5	1.6	0.9	3.4	83.9	2.6
Greenwood	801	141	54	97	11.4	1.6	1.0	3.9	81.2	3.1
Pioneer	3147	142	53	97	7.5	2.6	1.0	3.7	83.8	2.8
McCurdy	72-26	144	46	95	17.2	1.6	1.0	4.9	84.7	1.9
McCurdy	72-22	139	51	95	10.1	2.3	1.0	4.7	83.3	1.4
McNair	X210	131	57	94	5.1	2.4	1.0	3.3	80.8	2.4
McNair	X190	117	68	92	4.4	2.0	1.0	3.0	82.9	3.6
Funk's	G-49493/	136	45	90	2.5	2.3	0.9	4.3	81.5	3.0
Greenwood	95	126	53	89	5.9	2.0	1.0	3.9	79.8	2.6
Greenwood	228	124	53	88	4.7	1.6	1.0	3.8	78.9	1.9
Funk's	G-4646	120	50	85	6.0	2.3	0.9	2.9	84.1	3.5
Northrup-King	PX670	110	52	81	9.4	2.4	1.0	3.3	82.7	2.6
Taylor	T-6	126	33	80	10.3	2.1	0.8	4.9	80.2	1.4
Acco	AR-19088	107	51	79	8.9	1.9	0.9	3.5	84.0	1.4
Test average:		133	53							
L.S.D. (.05)		12	12							
C.V. (%)		6.3	16.1							

^{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/} Check hybrid.

ACCEPTABLE HYBRIDS FOR 1974

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 group and yellow and white hybrids designated (Y) and (W) respectively.

NORTHERN ALABAMA

<u>Brand name</u>	<u>Hybrid</u>
<u>Early Season</u>	
Pioneer-----	3369A (Y)
DeKalb-----	805A (Y)
Funk's-----	G-4761 (Y)
Funk's-----	G-5757 (Y)
Stull-----	807SX (Y)
McCurdy-----	MSX88 (Y) ^{1/}
Funk's-----	G-4808 (Y) ^{1/}

Full Season

McCurdy-----	67-14 (Y)
Pioneer-----	3147 (Y)
Pioneer-----	3179 (Y)
Pioneer-----	3191 (Y)
Pioneer-----	511A (W)
Pennington---	CHR-W (W)
Funk's-----	G-795W-1 (W)
P.A.G.-----	644W (W)
McNair-----	338 (Y) ^{1/}

CENTRAL ALABAMA

<u>Brand name</u>	<u>Hybrid</u>
<u>Early Season</u>	
McCurdy-----	67-14 (Y)
Pioneer-----	3369A (Y)
Funk's-----	G-4761 (Y)
Funk's-----	G-4808 (Y) ^{1/}

Full Season

Pioneer-----	3147 (Y)
Funk's-----	G-795W-1 (W)
McNair-----	508 (Y)
Pioneer-----	511A (W)
Funk's-----	G-5945 (Y)
Funk's-----	G-4949 (Y)
P.A.G.-----	751 (Y)
Greenwood----	471 (Y)
Greenwood----	45 (Y) ^{1/}
McNair-----	338 (Y) ^{1/}
Pioneer-----	3009 (Y) ^{1/}
P.A.G.-----	644W (W) ^{1/}
Pioneer-----	3030 (Y) ^{1/}

SOUTHERN ALABAMA

<u>Brand name</u>	<u>Hybrid</u>
<u>Early Season</u>	
McCurdy-----	67-14 (Y)
Funk's-----	G-4761 (Y)
Pioneer-----	3369A (Y) ^{1/}
Funk's-----	G-4808 (Y) ^{1/}

Full Season

Pennington---	CHR-W (W)
Funk's-----	G-795W-1 (W)
Funk's-----	G-4949 (Y)
Pennington---	7-C-11A (Y)
P.A.G.-----	751 (Y)
Funk's-----	G-5945 (Y)
McNair-----	508 (Y)
Pioneer-----	511A (W) ^{1/}
Pioneer-----	3030 (Y) ^{1/}
Pioneer-----	3009 (Y) ^{1/}
DeKalb-----	1214 (Y) ^{1/}
Greenwood----	45 (Y) ^{1/}
McNair-----	338 (Y) ^{1/}

1/ Tested two years in regular tests and not listed by composite rating.