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# Performance of Corn Hybrids in Alabama, 1983

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Auburn University, Alabama  
Gale A. Buchanan, Director



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IN ALABAMA, 1983

by

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Information contained herein is available to all without regard to race, color, sex or national origin.





# PERFORMANCE OF CORN HYBRIDS IN ALABAMA, 1983

W. C. Johnson and Darrell Williams<sup>1</sup>

## INTRODUCTION

Corn hybrids are evaluated annually by the Alabama Agricultural Experiment Station in the Regular Corn Hybrid Test and the Preliminary Corn Test on a north, central, and southern regional basis. The Marion Junction, or Black Belt Substation, corn test is used as the prairie soil regional comparison. Entries in the preliminary tests are both experimental and newly released hybrids. If a hybrid is outstanding in the preliminary test, it is entered into the regular corn test the following year. White corn hybrids are tested at one location in each region. One regular and one white corn hybrid test are irrigated at Headland in southern Alabama.

The locations and cultural practices for the tests are shown in Table 1.

The tests were designed as a randomized complete block with four replications. Row width was 36 to 40 inches depending on location. Two-row plots were used with row length ranging from 20-30 feet depending, again, on location. The target plant population for the tests was 20,000 plants per acre with a seeding rate of 23,000 seeds per acre. The irrigated tests at Headland were seeded at a rate of 30,000 plants per acre and thinned to 26,000.

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. The mid-silk data measured the number

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<sup>1</sup>Professor and Technical Assistant, Department of Agronomy and Soils.

of days from planting until one-half of the plants in the plots were showing silks.

Bushel test weights are reported as regional averages from this year's data. All test weight values were adjusted to 15.5 percent moisture to make comparisons easier.

The corn hybrid tests are examined for disease incidence each year by Dr. R. T. Gudauskas, Department of Botany, Plant Pathology, and Microbiology. When virus or other disease symptoms indicate crop damage, disease ratings are compiled and published in this report. Virus infection data from the test at Marion Junction are reported this year.

To aid in determining real yield differences, a statistical analysis of variance is performed on the data from each location. The L.S.D. (least significant difference) and C.V. (coefficient of variation) are given for each location's 1983 test. The difference in yield of two hybrids must exceed the L.S.D. value for one hybrid to be considered superior to the others in yield in that particular test. The C.V. is a measure of the variability in an experiment. An increase in its value indicates an increase in the unaccounted for variability.

Since the performance of hybrids varies with location and year, long-term averages from several locations are more reliable than 1-year performance. Three-year regional averages are considered a reliable evaluation of the relative performance of hybrids.

A composite rating system was used to assemble a list of acceptable hybrids. The 3-year regional average grain yield was used as a base point. The composite score was obtained by subtracting weighted values for lodging, quality, and ear height from the yield.

The recommended hybrids are not all equal in performance. Some are outstanding in one or more characteristics; while others may not be obviously outstanding, they might possess a satisfactory combination of all characteristics.

#### ACKNOWLEDGMENTS

Appreciation is expressed to the following station superintendents and their staffs. It is their quality work which makes this a reliable source of information for farmers in their areas.

##### Northern Alabama

Tennessee Valley Substation, Belle Mina - W. B. Webster

Sand Mountain Substation, Crossville - J. T. Eason

Upper Coastal Plain Substation, Winfield - R. A. Moore, Jr.

##### Central Alabama

Black Belt Substation, Marion Junction - L. A. Smith

Prattville Experiment Field - D. P. Moore

E. V. Smith Research Center, Shorter - J. R. Akridge

##### Southern Alabama

Brewton Experiment Field - J. A. Pitts

Monroeville Experiment Field - J. A. Pitts

Gulf Coast Substation, Fairhope - E. L. Carden

Wiregrass Substation, Headland - J. G. Starling

Appreciation is also expressed to the following people:

W. H. Hearn and Mrs. Sally Bagwell, Research Data Analysis, for the computation, summarization, and analysis of the data in this report, R. T. Gudauskas, Department of Botany, Plant Pathology, and Microbiology, for making virus ratings and the virus disease reactions in this report, and Ms. Mary Ann Taylor, Department of Agronomy and Soils, for the coordination of this report.

Table 1. Locations and Cultural Practices for the 1983 Corn Hybrid Tests

Location	Planting date	Nitrogen <sup>1</sup> rate	Plant population	Date harvested	Herbicides used
<u>Northern Alabama</u>					
Tennessee Valley Substation (Belle Mina)	April 12	130	20,000	Aug. 31	Atrazine + Lasso
Sand Mountain Substation (Crossville)					
Regular test	April 20	150	20,000	Sept. 13	Atrazine + Dual
Preliminary test	April 20	150	20,000	Sept. 16	Atrazine
White corn test	May 3	150	20,000	Oct. 11	Atrazine + Dual
Early corn hybrid	April 27	150	20,000	Sept. 1	Atrazine + Dual
Upper Coastal Plain Substation (Winfield)	April 29	150	20,000	Aug. 19	Atrazine
<u>Central Alabama</u>					
E. V. Smith Research Center (Shorter)					
Early corn hybrid	April 13	130	20,000	Aug. 31	Atrazine
White corn test	April 13	130	20,000	Aug. 31	Atrazine
Plant Breeding Unit (Tallassee)	April 5	120	20,000	Aug. 29	Atrazine
Prattville Experiment Field (Prattville)	March 15	120	20,000	Sept. 1	Atrazine
Black Belt Substation (Marion Junction)	April 20	120	20,000	Sept. 8	Atrazine + Paraquat
<u>Southern Alabama</u>					
Brewton Experiment Field (Brewton)	March 15	150	20,000	Aug. 26	Aatrex
Monroeville Experiment Field (Monroeville)	March 9	120	20,000	Aug. 16	Aatrex
Wiregrass Substation (Headland)					
Regular test (unirrigated)	April 6	150	20,000	Aug. 11	Aatrex + Lasso
Regular test (irrigated)	April 6	200	26,000	Aug. 11	Aatrex + Lasso
White corn test (irrigated)	March 17	200	26,000	Aug. 16	Aatrex + Lasso
Gulf Coast Substation (Fairhope)					
Regular test	March 23	120	20,000	Aug. 23	Aatrex + Lasso
Preliminary test	March 22	120	20,000	Aug. 23	Aatrex + Lasso

<sup>1</sup>Pounds per acre N. Lime, phosphorus, and potassium were applied according to soil test recommendations.

Table 2. Three-Year Yield and Lodging<sup>1</sup> Averages for Northern Alabama, 1981-83<sup>1</sup>

Brand name	Hybrid	Yield per acre Bu.	Lodged stalks Pct.
McCurdy	84AA	109	5.2
Jacques	JX 180	109	5.9
Ring Around	1502	108	3.0
DeKalb	TXS 115A	108	5.6
Pioneer	3147	107	5.5
Coker	19A	106	3.7
Funk's	G-4507A	106	5.7
Funk's	G-4740A	105	2.1
Coker	19	105	3.0
Paymaster	8951	105	4.9
Pioneer	3320	104	3.5
Pioneer	3369A	104	8.6
Funk's	G-4611	103	4.9
Pioneer	3184	99	1.1
Coker	16	99	5.3
Golden Harvest	H-2680	99	5.1

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

Table 3. Two-Year Yield and Lodging<sup>1</sup>Averages for Northern Alabama, 1982-83

Brand name	Hybrid	Yield per acre	Lodged stalks
		Bu.	Pct.
Jacques	JX 180	108	8.0
DeKalb	TXS 115A	108	7.4
Ring Around	1502	107	2.8
Funk's	G-4507A	105	7.6
Pioneer	3147	105	6.2
Pioneer	3320	104	4.4
Funk's	G-4740A	104	2.7
McCurdy	84AA	103	5.8
Funk's	G-4522	103	5.4
Coker	19A	103	4.3
Coker	19	103	3.6
DeKalb	T 1230	103	5.5
Paymaster	8951	102	4.7
Funk's	G-4689	102	9.1
Pioneer	3369A	102	10.2
Funk's	G-4611	101	6.4
Funk's	G-4733	100	5.4
Jacques	JX 247	99	7.5
Golden Harvest	H-2680	99	5.4
Coker	16	98	4.8
Pioneer	3184	96	1.4
Northrup King	PX 95	96	12.1

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

Table 4. Characteristics of Corn Hybrids Tested in Northern Alabama, 1983<sup>1</sup>

Brand name	Hybrid	Yield per acre	Lodged stalks	Midsilk	Test weight
		Bu.	Pct.	Days	Lb./bu.
DeKalb	TXS 115A	102	13.2	75	51.5
Jacques	JX 180	101	13.3	74	50.4
Pioneer	3187	98	11.2	75	55.4
Coker	19	98	5.1	75	51.4
P-A-G	SX 351	97	9.8	74	50.1
McCurdy	84AA	96	6.4	76	54.3
Coker	19A	95	5.9	74	53.0
Funk's	G-4507A	94	14.0	73	51.8
Ring Around	1502	94	3.8	75	54.2
Funk's	G-4611	93	9.2	75	53.8
P-A-G	SX 373	92	7.2	76	53.1
McCurdy	8150	91	8.9	75	56.1
Pioneer	3358	91	2.4	74	56.0
Funk's	G-4589	90	15.6	76	54.7
Funk's	G-4689	90	17.1	75	55.5
Pioneer	3369A	90	16.5	74	53.9
DeKalb	T 1230	90	9.0	77	53.9
Goldkist	GK 875	89	11.0	76	54.5
Funk's	G-4522	89	7.4	75	53.6
Ring Around	1604	88	7.4	76	54.0
Paymaster	8951	88	6.7	76	55.3
Pioneer	3320	88	6.7	74	57.0
Northrup King	PX 87	88	12.6	76	53.9
Funk's	G-4740A	87	4.8	78	55.6
Golden Harvest	H-2680	87	8.8	77	54.7
Funk's	G-4733	86	9.6	77	56.0
Jacques	JX 247	86	7.3	77	54.2
Northrup King	PX 79	86	13.5	76	50.1
Pioneer	3147	85	10.8	79	50.5
Goldkist	GK 925	85	15.6	77	54.2
Funk's	G-4578	84	9.1	74	53.5
Coker	21	83	11.5	77	54.3
Coker	16	83	7.1	73	54.4
Pioneer	3184	80	2.5	77	54.6
Northrup King	PX 95	75	23.0	76	53.2

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

Table 5. 1983 Yield of Corn Hybrids by Location and Regional Averages for 1-5 Years in Northern Alabama

Brand name	Hybrid	Belle Mina	Crossville	Winfield	Regional average yield per acre				
					1-yr. 1983	2-yr. 1982-83	3-yr. 1981-83	4-yr. 1980-83	5-yr. 1979-83
		Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.
McCurdy	84AA	98	108	83	96	103	109	95	97
DeKalb	TXS 115A	102	116	89	102	108	108	95	97
Ring Around	1502	85	107	91	94	107	108	93	97
Pioneer	3147	79	115	62	85	105	107	90	96
Funk's	G-4507A	94	113	76	94	105	106	94	95
Coker	19A	88	120	76	95	103	106	92	95
Pioneer	3369A	97	104	68	90	102	104	91	94
Paymaster	8951	93	106	65	88	102	105	90	93
Funk's	G-4611	96	112	70	93	101	103	90	92
Pioneer	3184	81	97	63	80	96	99	85	90
Coker	16	74	99	76	83	98	99	86	89
Coker	19	97	111	85	98	103	105	93	
Funk's	G-4740A	79	109	74	87	104	105	92	
Pioneer	3320	80	101	82	88	104	104	91	
Jacques	JX 180	100	119	86	101	108	109		
Golden Harvest	H-2680	81	100	80	87	99	99		
DeKalb	T 1230	91	110	68	90	103			
Funk's	G-4522	84	112	72	89	103			
Funk's	G-4689	93	108	68	90	102			
Funk's	G-4733	90	94	74	86	100			
Jacques	JX 247	91	97	69	86	99			
Northrup King	PX 95	70	92	64	75	96			
Pioneer	3187	85	106	104	98				
P-A-G	SX 351	95	114	84	97				
P-A-G	SX 373	87	105	82	92				
McCurdy	8150	81	112	79	91				
Pioneer	3358	87	106	78	91				
Funk's	G-4589	93	107	71	90				
Goldkist	GK 875	81	113	74	89				
Ring Around	1604	96	100	68	88				

(continued on following page)



Table 5 (continued). 1983 Yield of Corn Hybrids by Location and Regional Averages for 1-5 Years in Northern Alabama

Brand name	Hybrid	Belle Mina	Crossville	Winfield	Regional average yield per acre				
					1-yr. 1983	2-yr. 1982-83	3-yr. 1981-83	4-yr. 1980-83	5-yr. 1979-83
		<u>Bu.</u>	<u>Bu.</u>	<u>Bu.</u>	<u>Bu.</u>	<u>Bu.</u>	<u>Bu.</u>	<u>Bu.</u>	<u>Bu.</u>
Northrup King	PX 87	91	102	69	88				
Northrup King	PX 79	82	100	75	86				
Goldkist	GK 925	76	103	75	85				
Funk's	G-4578	78	99	76	84				
Coker	21	85	97	69	83				
1983									
Test average.....		87	106	76					
L.S.D. (.05).....		15	10	18					
C.V. (%).....		12.2	6.5	17.2					

Table 6. Three-Year Yield and Lodging<sup>1</sup> Averages for Central Alabama, 1981-83<sup>1</sup>

Brand name	Hybrid	Yield per acre		Lodged stalks	
		Bu.		Pct.	
McCurdy	84AA	100		10.4	
Pioneer	3320	100		5.6	
Jacques	JX 247	100		8.2	
McCurdy	8150	98		7.9	
Ring Around	1604	97		9.6	
Pioneer	3369A	95		8.6	
Jacques	JX 180	95		9.8	
Funk's	G-4507A	94		13.6	
Ring Around	1502	93		5.7	
Funk's	G-4740A	92		4.9	
Funk's	G-4689	91		11.7	
Pioneer	3147	88		6.8	
Coker	16	85		9.4	

<sup>1</sup>Camden and Prattville. 1983 Camden test ear samples were lost when fire destroyed building where they were being processed.

Table 7. Two-Year Yield and Lodging Averages for Central Alabama, 1982-83<sup>1</sup>

Brand name	Hybrid	Yield per acre	
		Bu.	Lodged stalks Pct.
Pioneer	3320	109	1.8
Ring Around	1604	109	5.7
Jacques	JX 247	108	5.5
McCurdy	84AA	108	4.9
Coker	21	106	5.8
McCurdy	8150	106	2.1
Goldkist	GK 925	105	4.6
Northrup King	PX 87	105	5.6
Jacques	JX 180	102	4.3
Funk's	G-4733	101	1.7
Funk's	G-4740A	100	2.6
Funk's	G-4522	100	2.7
Northrup King	PX 74	99	12.7
Ring Around	1502	99	2.3
Funk's	G-4507A	99	10.9
Coker	19A	98	4.0
Pioneer	3369A	98	2.0
Funk's	G-4689	97	6.3
Pioneer	3147	96	6.0
DeKalb	TXS115A	96	3.7
Golden Harvest	H-2775A	90	4.6
Coker	16	89	4.5
DeKalb	XL-71	85	1.7

<sup>1</sup>Camden and Prattville. 1983 Camden test ear samples were lost when fire destroyed building where they were being processed.

Table 8. Characteristics of Corn Hybrids Tested in Central Alabama, 1983<sup>1</sup>

Brand name	Hybrid	Yield per acre	Lodged stalks	Midsilk	Test weight
		Bu.	Pct.	Days	Lb./bu.
Jacques	JX 247	118	3.6	96	54.4
Coker	21	117	4.1	97	54.9
Pioneer	3320	115	.0	96	57.9
McCurdy	8150	114	2.2	95	56.2
McCurdy	84AA	114	3.7	95	56.6
Ring Around	1604	114	4.1	97	53.7
Goldkist	GK 925	114	2.7	96	55.3
Northrup King	PX 87	113	8.3	96	54.3
Todd	M95	112	4.3	97	55.8
Golden Harvest	H-2680	110	2.4	97	55.3
Northrup King	PX 95	108	3.1	100	55.2
Funk's	G-4733	107	.0	97	58.4
Pioneer	3165	106	.9	102	56.8
Jacques	JX 180	106	5.8	96	52.4
Paymaster	8951	102	1.3	97	54.9
Funk's	G-4522	101	1.0	94	56.3
Northrup King	PX 83	100	3.2	96	59.4
Coker	19A	100	4.2	97	54.5
Pioneer	3147	99	6.5	103	50.5
Funk's	G-4507A	99	6.0	95	52.0
Ring Around	1502	98	0.5	95	55.7
Funk's	G-4740A	98	1.4	101	56.1
Northrup King	PX 74	97	15.2	95	53.5
Funk's	G-4589	96	2.6	98	55.1
Pioneer	3369A	96	.9	94	53.8
Funk's	G-4689	95	1.8	97	57.4
DeKalb	TXS115A	94	2.7	96	53.5
Coker	16	92	5.2	94	55.5
Golden Harvest	H-2775A	89	2.4	99	57.4
Goldkist	GK 868	88	4.4	97	57.0
DeKalb	XL-71	73	1.7	96	54.2

1983

Test average.....103

L.S.D. (.05)..... 15

C.V. (%).....10.2

<sup>1</sup>Prattville only. Camden test ear samples were lost when fire destroyed building where they were being processed.

Table 9. 1983 Yield of Corn Hybrids by Location and Regional Averages for 1-5 Years in Central Alabama<sup>1</sup>

Brand name	Hybrid	Prattville	Regional average yield per acre				
			1-yr.	2-yr.	3-yr.	4-yr.	5-yr.
			1983	1982-83	1981-83	1980-83	1979-83
		Bu.	Bu.	Bu.	Bu.	Bu.	Bu.
McCurdy	84AA	114	114	108	100	94	92
Ring Around	1502	98	98	99	93	90	89
Pioneer	3369A	96	96	98	95	90	86
Funk's	G-4507A	99	99	99	94	89	86
Pioneer	3147	99	96	88	85	85	85
Coker	16	92	92	89	85	81	79
Pioneer	3320	115	115	109	100	95	
Jacques	JX 180	106	106	102	95	91	
Funk's	G-4740A	98	98	100	92	88	
Jacques	JX 247	118	118	108	100		
McCurdy	8150	114	114	106	98		
Ring Around	1604	114	114	109	97		
Funk's	G-4689	95	95	97	91		
Coker	21	117	117	106			
Goldkist	GK 925	114	114	105			
Northrup King	PX 87	113	113	105			
Funk's	G-4733	107	107	101			
Funk's	G-4522	101	101	100			
Northrup King	PX 74	97	97	99			
Coker	19A	100	100	98			
DeKalb	TXS 115A	94	94	96			
Golden Harvest	H-2775A	89	89	90			
DeKalb	XL-71	73	73	85			
Todd	M95	112	112				
Golden Harvest	H-2680	110	110				
Northrup King	PX 95	108	108				
Pioneer	3165	106	106				
Paymaster	8951	102	102				
Northrup King	PX 83	100	100				
Funk's	G-4589	96	96				
Goldkist	GK 868	88	88				

1983

Test average.....	103
L.S.D. (.05).....	15
C.V. (%).....	10.2

<sup>1</sup>Prattville only.

Table 10. Three-Year Yield and Lodging Averages for Southern Alabama, 1981-83<sup>1</sup>

Brand name	Hybrid	Yield per acre	
		Bu.	Lodged stalks Pct.
McCurdy	8150	109	6.6
Ring Around	1604	108	9.6
DeKalb	T 1230	107	6.7
Jacques	JX 247	107	9.3
Paymaster	9902	106	7.6
Pioneer	3147	105	12.5
McCurdy	84AA	103	9.8
Paymaster	8951	102	8.6
Ring Around	1502	102	6.4
Coker	19A	101	8.6
Northrup King	PX 95	100	6.9
Pioneer	3369A	100	11.6
DeKalb	TXS 115A	98	7.2
Coker	22	98	8.6
Golden Harvest	H-2775A	98	10.4
Funk's	G-4507A	97	9.5
Funk's	G-4689	94	5.4
Coker	77B	91	14.4
Golden Harvest	H-2500	89	7.2

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

Table 11. Two-Year Yield and Lodging Averages for Corn Hybrids Tested in Southern Alabama, 1982-83<sup>1</sup>

Brand name	Hybrid	Yield per acre	
		Bu.	Lodged stalks Pct.
Ring Around	1604	116	6.9
Jacques	JX 247	113	5.4
Coker	21	113	8.7
Pioneer	3147	112	12.4
McCurdy	8150	112	6.2
DeKalb	T 1230	112	4.9
Paymaster	9902	111	6.3
Northrup King	PX 87	108	8.4
McCurdy	84AA	107	6.5
Northrup King	PX 95	107	6.9
Golden Harvest	H-2680	105	8.6
Paymaster	8951	105	5.0
Pioneer	3369A	104	12.2
Ring Around	1502	103	3.4
Coker	22	103	4.3
Coker	19A	103	6.8
Paymaster	12052A	102	15.2
Funk's	G-4733	102	2.8
Golden Harvest	H-2775A	100	9.0
DeKalb	XL 71	99	5.4
DeKalb	TXS 115A	99	5.5
Funk's	G-4507A	99	9.1
Coker	77B	98	10.3
Funk's	G-4522	98	10.3
Funk's	G-4689	95	4.7
Northrup King	PX 79	90	3.9
Golden Harvest	H-2500	88	5.8

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

Table 12. Characteristics of Corn Hybrids Tested in Southern Alabama, 1983<sup>1</sup>

Brand name	Hybrid	Yield per acre	Lodged stalks	Midsilk	Test weight
		Bu.	Pct.	Days	Lb./bu.
McCurdy	8172	130	1.2	91	57.0
Jacques	JX 247	126	1.4	89	55.7
Paymaster	9902	126	2.3	90	53.1
DeKalb	T 1230	124	.2	90	56.2
Pioneer	3147	123	2.4	94	54.3
Coker	21	122	1.6	90	55.5
Ring Around	1604	120	.7	89	55.9
Coker	22	118	.5	89	55.1
McCurdy	8150	117	1.3	89	55.8
Pioneer	3165	117	2.6	91	56.6
Northrup King	PX 87	116	.6	89	55.9
Northrup King	PX 95	113	3.6	91	55.7
Golden Harvest	H-2680	110	1.4	89	56.0
Todd	M95	108	2.0	90	55.3
Goldkist	GK 925	107	1.4	90	55.5
Coker	19A	107	1.5	87	55.0
Coker	77B	106	7.8	94	54.4
P-A-G	SX 351	106	.5	86	54.0
Funk's	G-4507A	105	.6	87	53.6
McCurdy	84AA	105	2.8	87	55.6
Paymaster	12052A	105	6.8	94	54.7
Funk's	G-4733	104	.3	89	57.4
Pioneer	3369A	104	.6	86	55.1
Goldkist	GK 868	103	.4	90	56.2
P-A-G	SX 373	103	.9	89	55.5
Golden Harvest	H-2686	103	2.1	92	55.8
DeKalb	TXS 115A	102	1.8	88	53.7
Golden Harvest	H-2775A	102	1.6	90	56.4
Paymaster	8951	101	1.7	89	55.7
Ring Around	1502	100	.5	87	55.9
Funk's	G-4589	99	1.5	88	55.6
Asgrow	777	99	.8	88	58.0
Northrup King	PX 83	99	2.0	88	57.7
DeKalb	XL 71	98	1.5	88	55.6
Funk's	G-4522	98	1.2	87	55.6
Funk's	G-4740A	96	1.5	93	55.0
Funk's	G-4689	94	.7	86	57.1
Funk's	G-4578	90	.7	87	55.3
Northrup King	PX 79	89	.3	89	55.6
Golden Harvest	H-2500	89	.7	88	56.1

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



Table 13. 1983 Yield of Corn Hybrids by Location and Regional Averages for 1-5 Years in Southern Alabama

Brand name	Hybrid	Fairhope	Brewton	Monroeville	Headland	Regional average yield per acre				
						1-yr. 1983	2-yr. 1982-83	3-yr. 1981-83	4-yr. 1980-83	5-yr. 1979-83
		Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.
Pioneer	3147	135	144	93	120	123	112	105	104	106
Ring Around	1502	94	103	100	103	100	103	102	101	104
McCurdy	84AA	113	129	72	106	105	107	103	101	102
Paymaster	8951	99	108	99	98	101	105	102	99	102
Coker	19A	97	115	103	111	107	103	101	98	99
Northrup King	PX 95	108	130	107	107	113	107	100	96	98
Pioneer	3369A	91	118	103	102	104	104	100	95	97
Coker	22	127	121	112	113	118	103	98	95	97
Funk's	G-4507A	91	112	111	107	105	99	97	94	96
Golden Harvest	H-2500	76	72	95	112	89	88	89	90	93
Coker	77B	108	126	92	100	106	98	91	88	87
McCurdy	8150	117	138	108	106	117	112	109		
Ring Around	1604	119	148	101	114	120	116	108		
Jacques	JX 247	129	149	115	111	126	113	107		
DeKalb	T 1230	125	143	124	106	124	112	107		
Paymaster	9902	133	145	115	110	126	111	106		
Golden Harvest	H-2775A	97	120	95	95	102	100	98		
DeKalb	TXS 115A	107	98	98	105	102	99	98		
Funk's	G-4689	77	102	88	110	94	95	94		
Coker	21	123	144	109	113	122	113			
Northrup King	PX 87	104	150	107	105	116	108			
Golden Harvest	H-2680	107	115	113	105	110	105			
Paymaster	12052A	95	129	91	104	105	102			
Funk's	G-4733	97	112	105	104	104	102			
DeKalb	XL 71	77	111	98	105	98	99			
Funk's	G-4522	116	97	69	108	98	98			
Northrup King	PX 79	86	77	89	104	89	90			
McCurdy	8172	125	158	124	112	130				
Pioneer	3165	104	130	112	120	117				
Todd	M95	110	123	90	107	108				

(continued on following page)

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Table 13 (continued). 1983 Yield of Corn Hybrids by Location and Regional Averages for 1-5 Years in Southern Alabama

Brand name	Hybrid	Fairhope	Brewton	Monroeville	Headland	Regional average yield per acre				
						1-yr. 1983	2-yr. 1982-83	3-yr. 1981-83	4-yr. 1980-83	5-yr. 1979-83
		Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.
Goldkist	GK 925	116	112	102	100	107				
P-A-G	SX 351	106	107	103	108	106				
P-A-G	SX 373	100	116	96	101	103				
Golden Harvest	H-2686	95	119	97	100	103				
Goldkist	GK 868	105	115	94	100	103				
Asgrow	777	96	105	94	103	99				
Funk's	G-4589	86	109	101	102	99				
Northrup King	PX 83	88	116	94	98	99				
Funk's	G-4740A	93	102	93	97	96				
Funk's	G-4578	78	91	91	100	90				
1983										
Test average.....		104	119	100	106					
L.S.D. (.05).....		24	23	26	14					
C.V. (%).....		16.6	13.9	15.7	9.6					

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Table 14. Three-Year Yield and Lodging Averages for Corn Hybrids at Headland, 1981-83

Brand name	Hybrid	Yield per acre		Lodged stalks	
		Bu.		Pct.	
Ring Around	1604	170		1.3	
DeKalb	T 1230	170		2.1	
Jacques	JX 247	169		1.8	
McCurdy	84AA	167		1.6	
Pioneer	3147	167		1.2	
Paymaster	9902	161		2.0	
Paymaster	8951	158		.4	
McCurdy	8150	158		2.1	
Northrup King	PX 95	155		3.1	
Ring Around	1502	154		1.2	
Coker	77B	153		2.4	
DeKalb	TXS 115A	151		1.3	
Funk's	G-4507A	149		4.5	
Pioneer	3369A	143		1.8	

Table 15. Two-Year Yield and Lodging Averages for Corn Hybrids Tested Under Irrigation at Headland, 1982-83

Brand name	Hybrid	Yield per acre	
		Bu.	Lodged stalks Pct.
Pioneer	3147	182	.7
DeKalb	T 1230	182	2.1
Jacques	JX 247	182	1.8
Ring Around	1604	181	.7
McCurdy	84AA	177	.6
Northrup King	PX 87	176	.6
Coker	21	174	.8
Northrup King	PX 95	169	4.1
Paymaster	9902	169	2.2
Paymaster	8951	168	.6
Coker	77B	167	1.3
McCurdy	8150	165	2.0
Ring Around	1502	163	.8
Pioneer	3369A	158	1.3
DeKalb	TXS 115A	158	1.5
Funk's	G-4507A	155	6.1
Funk's	G-4522	152	1.3
DeKalb	XL-71	151	1.4

Table 16. Characteristics of Corn Hybrids Tested Under Irrigation One Year at Headland, 1983<sup>1</sup>

Brand name	Hybrid	Yield per acre		Lodged stalks		Test weight	
		Bu.		Pct.		Lb./bu.	
DeKalb	T 1230	172		1.5		57.9	
Ring Around	1604	171		.0		57.5	
Northrup King	PX 87	171		.0		59.7	
Paymaster	9902	166		.9		54.8	
Jacques	JX 247	165		.8		58.7	
Pioneer	3147	164		1.5		55.4	
Northrup King	PX 95	158		2.5		58.1	
McCurdy	84AA	157		.0		58.9	
Todd	M 95	157		.9		57.8	
McCurdy	8150	154		.8		57.6	
Pioneer	3165	154		.0		59.0	
Funk's	G-4740A	154		.0		57.7	
Asgrow	RX 777	153		1.6		60.6	
Funk's	G-4507A	151		.8		52.9	
P-A-G	SX 373	150		1.7		57.9	
P-A-G	SX 351	150		.0		54.6	
Coker	2T	150		.0		56.5	
DeKalb	TXS 115A	150		1.6		55.3	
Coker	77B	149		1.7		57.1	
Funk's	G-4733	148		.0		59.2	
Goldkist	GK 925	147		1.7		57.2	
Ring Around	1502	145		.0		57.6	
Paymaster	8951	145		.0		59.5	
Pioneer	3369A	139		.7		57.1	
Funk's	G-4522	137		.0		57.2	
DeKalb	XL-71	135		.0		58.9	
Golden Harvest	H-2686	135		1.0		59.3	
Northrup King	PX 79	133		.0		55.7	
Test average.....		152					
L.S.D. (.05).....		16					
C.V. (%).....		7.5					

<sup>1</sup>The test received approximately 3.25 inches of irrigation water in 3 applications during the months of June and July.

Table 17. Three-Year Yield and Lodging Averages for Corn Hybrids  
Tested at Marion Junction, 1981-83

Brand name	Hybrid	Yield per acre	
		Bu.	Lodged stalks Pct.
Northrup King	PX 95	157	2.2
Pioneer	3147	152	6.4
Funk's	G-4733	147	.1
Golden Harvest	H-2660W	139	2.4
DeKalb	T 1230	137	1.5
Ring Around	1502	136	1.0
Funk's	G-4747W	136	1.3
Pioneer	3369A	134	7.3
Funk's	G-4740A	132	2.9
Funk's	G-4507A	131	2.1
Golden Harvest	H-2745	122	3.4

Table 18. Two-Year Yield and Lodging Averages for Corn Hybrids Tested at Marion Junction, 1982-83

Brand name	Hybrid	Yield per acre	
		Bu.	Lodged stalks Pct.
Northrup King	PX 95	166	2.6
Pioneer	3147	161	2.5
Funk's	G-4733	156	.2
Pioneer	3187	151	1.7
McCurdy	84AA	151	1.1
Goldkist	GK 875	150	1.0
DeKalb	T 1230	148	1.6
Funk's	G-4747W	145	1.1
Ring Around	1502	143	.6
Pioneer	3369A	139	.8
Golden Harvest	H-2660W	139	1.4
Funk's	G-4507A	138	1.1
Funk's	G-4740A	133	1.8
Golden Harvest	H-2745	126	1.1

Table 19. Characteristics of Corn Hybrids Tested One Year at Marion Junction, 1983

Brand name	Hybrid	Yield per acre	Lodged stalks	Midsilk	Test weight
		Bu.	Pct.	Days	Lb./bu.
Zimmerman	Z11W	158	.9	74	57.0
Pioneer	3147	151	1.4	75	48.8
Northrup King	PX 95	150	3.3	72	56.1
Ring Around	1604	149	.9	72	56.0
FFR	929W	149	.9	75	57.8
FFR	848C	143	1.3	71	57.6
McCurdy	82-21	143	.5	75	56.6
Jacques	8400	139	.9	71	60.1
Funk's	G-4733	137	.4	72	59.6
DeKalb	T 1230	137	2.4	72	56.5
Pioneer	3187	136	1.5	71	55.5
Goldkist	GK 875	132	.9	72	----
Funk's	G-4747W	131	1.0	74	58.5
McCurdy	81-34	128	1.4	69	59.6
Pioneer	3369A	126	.9	67	56.3
Asgrow	RX 114	126	1.0	73	56.3
Golden Harvest	H-2745	125	1.9	70	54.7
McCurdy	84AA	125	1.4	72	57.3
Zimmerman	Z53W	123	.5	77	57.9
Golden Harvest	H-2660W	123	1.4	74	----
Northrup King	PX 79	122	2.4	70	56.6
McCurdy	7978	122	.5	71	58.3
McCurdy	5596	117	.0	66	56.0
Ring Around	1502	114	1.5	70	57.5
Jacques	JX 247	113	.5	72	56.6
Funk's	G-4740A	112	1.9	74	57.6
Funk's	G-4507A	111	1.5	70	54.9
Test average.....		131			
L.S.D. (.05).....		20			
C.V. (%).....		10.8			



Table 20. Three-Year Yield and Lodging Averages for White Corn Hybrids Tested at Crossville, 1981-83

Brand name	Hybrid	Yield per acre		Lodged stalks	
		Bu.		Pct.	
Ring Around	1502*	105		6.6	
Pioneer	3147*	98		6.9	
Ring Around	2602W	87		6.5	
Ring Around	3605W	83		6.4	
Golden Harvest	H-2660W	83		3.9	
Pioneer	519	81		6.5	
Funk's	G-4747W	78		3.9	

\*Yellow corn check hybrids.

Table 21. Two-Year Yield and Lodging Averages for White Corn Hybrids Tested at Crossville, 1982-83

Brand name	Hybrid	Yield per acre		Lodged stalks	
		Bu.		Pct.	
Ring Around	1502*	111		5.7	
Pioneer	3147*	104		7.6	
Ring Aroung	2602W	95		8.4	
Ring Around	3605W	94		9.0	
Pioneer	519	93		9.2	
Funk's	G-4779W	92		8.0	
Golden Harvest	H-2660W	92		8.5	
Funk's	G-4747W	88		5.2	

\*Yellow corn check hybrids.

Table 22. Characteristics of White Corn Hybrids Tested at Crossville, 1983

Brand name	Hybrid	Yield per acre	Lodged stalks	Midsilk	Test weight
		Bu.	Pct.	Days	Lb./bu.
Ring Around	1502*	82	9.0	76	54.4
Pioneer	3147*	76	12.7	80	50.7
Ring Around	2606W	72	25.7	79	59.9
Coker	833W	72	20.6	78	50.1
Zimmerman	Z 52W	68	13.9	80	51.8
FFR	929W	68	10.5	79	54.7
Funk's	G-4779W	67	13.7	80	55.4
Ring Around	2602W	67	10.0	80	55.8
Ring Around	3605W	67	12.0	80	53.2
Zimmerman	Z 11W	67	7.8	80	57.6
Asgrow	RX 405W	66	35.6	80	51.7
Zimmerman	Z 53W	65	16.3	80	52.7
Funk's	G-4747W	62	7.1	80	56.3
Asgrow	RX 962W	62	12.3	80	56.3
Golden Harvest	H-2660W	61	12.7	80	54.9
Funk's	G-4787W	59	11.8	82	48.0
Pioneer	519	58	17.0	80	52.6
Test average.....		67			
L.S.D. (.05).....		10			
C.V. (%).....		10.9			

\*Yellow corn check hybrids.

Table 23. Three-Year Yield and Lodging Averages for White Corn Hybrids Tested at E. V. Smith Research Center, 1981-83

Brand name	Hybrid	Yield per acre		Lodged stalks	
		Bu.		Pct.	
Ring Around	1502*	72		12.2	
Pioneer	3147*	63		6.2	
Pioneer	519	54		16.9	
Golden Harvest	H-2660W	51		14.2	
Ring Around	3605W	51		29.2	
Ring Around	2602W	49		34.3	
Funk's	G-4747W	46		10.1	

\*Yellow corn check hybrids.

Table 24. Two-Year Yield and Lodging Averages for White Corn Hybrids Tested at E. V. Smith Research Center, 1982-83

Brand name	Hybrid	Yield per acre		Lodged stalks	
		Bu.		Pct.	
Ring Around	1502*	71		14.5	
Pioneer	3147*	68		6.6	
Pioneer	519	58		23.2	
Ring Around	3605W	58		46.1	
Ring Around	2602W	56		51.0	
Golden Harvest	H-2660W	55		22.8	
Funk's	G-4779W	50		14.9	
Funk's	G-4747W	49		12.5	

\*Yellow corn check hybrids.

Table 25. Characteristics of White Corn Hybrids Tested at E. V. Smith Research Center, 1983

Brand name	Hybrid	Yield per acre	Lodged stalks	Test weight
		Bu.	Pct.	Lb./bu.
Ring Around	2606W	88	2.6	60.1
Pioneer	3147*	86	5.7	49.3
Ring Around	1502*	84	3.4	51.5
Coker	833W	84	.9	51.9
Zimmerman	Z 52W	79	1.8	59.4
Ring Around	3605W	78	6.5	56.0
FFR	929W	76	9.3	55.9
Ring Around	2602W	74	6.3	57.1
Zimmerman	Z 11W	72	8.4	56.4
Funk's	G-4787W	71	4.2	58.3
Golden Harvest	H-2660W	71	13.0	55.7
Funk's	G-4747W	69	1.0	59.3
Pioneer	519	69	12.3	51.5
Funk's	G-4779W	67	.4	56.6
Asgrow	RX 962W	67	8.0	56.6
Asgrow	RX 405W	65	14.7	54.6
Zimmerman	Z 53W	62	3.0	56.8
Test average.....		74		
L.S.D. (.05).....		17		
C.V. (%).....		16.0		

\*Yellow corn check hybrids.

Table 26. Three-Year Yield and Lodging Averages for White Corn Hybrids Tested Under Irrigation at Headland, 1981-83

Brand name	Hybrid	Yield per acre	Lodged stalks
		Bu.	Pct.
Pioneer	3147*	152	3.3
Ring Around	1502*	150	2.6
Ring Around	3605W	139	5.7
Pioneer	519	134	3.1
Ring Around	2602W	130	4.9
Golden Harvest	H-2660W	126	5.6
Funk's	G-4747W	124	7.8

\*Yellow corn check hybrids.

Table 27. Two-Year Yield and Lodging Averages for White Corn Hybrids Tested Under Irrigation at Headland, 1982-83

Brand name	Hybrid	Yield per acre	Lodged stalks
		Bu.	Pct.
Pioneer	3147*	157	4.1
Ring Around	1502*	147	3.3
Ring Around	3605W	140	7.0
Funk's	G-4779W	136	5.2
Pioneer	519	135	3.3
Ring Around	2602W	132	5.4
Golden Harvest	H-2660W	126	7.1
Funk's	G-4747W	122	8.5

\*Yellow corn check hybrids.

Table 28. Characteristics of White Corn Hybrids Tested Under Irrigation at Headland, 1983<sup>1</sup>

Brand name	Hybrid	Yield per acre	Lodged stalks	Test weight
		Bu.	Pct.	Lb./bu.
Pioneer	3147*	127	.0	54.2
Zimmerman	Z 52W	119	.0	58.5
Zimmerman	Z 11W	115	3.1	58.5
Ring Around	3605W	114	3.2	59.0
Ring Around	2606W	114	.0	59.5
Ring Around	1502*	113	.0	57.3
Ring Around	2602W	112	1.2	58.6
Asgrow	RX 405W	112	2.3	58.4
FFR	929W	111	.0	58.4
Coker	833W	111	.0	55.8
Funk's	G-4779W	110	.0	54.7
Asgrow	RX 962W	110	.0	59.1
Pioneer	519	106	.0	57.4
Zimmerman	Z 53W	106	.0	56.1
Funk's	G-4787W	104	.0	56.3
Funk's	G-4747W	101	.0	58.9
Golden Harvest	H-2660W	99	.0	57.9
Test average.....		111		
L.S.D. (.05).....		10		
C.V. (%).....		6.1		

<sup>1</sup>The test received approximately 3.5 inches of irrigation water in 3 applications during the months of May and June.

\*Yellow corn check hybrids.

Table 29. Early Corn Hybrid Test, North Alabama, 1983<sup>1</sup>

Brand name	Hybrid	Yield per acre	1982-83	Lodged stalks	Midsilk	Test weight
		Bu.	2-yr. av. Bu.	Pct.	Days	Lb./bu.
O's Gold	2570	126	--	0.0	75	53.9
O's Gold	6882	116	--	0.0	73	53.2
FFR	848 C	115	--	1.9	76	52.5
Asgrow	RX 777	113	--	0.0	74	55.2
Paymaster	8951	112	--	0.0	76	55.5
PAG	SX 275	108	--	0.4	69	53.8
PAG	SX 239	108	--	0.5	68	56.6
Goldkist	GK 695	105	116	0.0	74	52.1
Jacques	7900	105	--	0.0	75	53.7
McCurdy	5596	104	--	0.0	68	55.5
Jacques	JX 167	104	115	0.0	69	56.4
Ring Around	1502	104	129	0.9	75	54.7
McCurdy	84AA	102	--	0.0	74	53.1
Jacques	7780	101	--	0.0	73	53.8
Goldkist	GK 615	99	--	0.5	72	55.8
Northrup King	9527	99	--	2.3	75	54.6
Northrup King	9415	93	--	0.5	68	57.3
Ring Around	1404	93	112	0.0	75	52.9
FFR	905C	84	--	1.0	77	51.5
Test average.....		105				
L.S.D. (.05).....		14				
C.V. (%).....		9.5				

<sup>1</sup>Located at Crossville.

Table 30. Early Corn Hybrid Test, Central Alabama, 1983<sup>1</sup>

Brand name	Hybrid	Yield per acre	1982-83	Lodged stalks	Test weight
		Bu.	2-yr. av.	Pct.	Lb./bu.
Ring Around	1404	121	72	.0	54.7
O's Gold	2570	120	--	.4	54.4
Asgrow	RX 777	118	--	1.4	58.4
Jacques	7780	117	--	1.3	55.7
Goldkist	GK 695	113	80	.0	55.0
Northrup King	PX 9527	113	--	.0	54.2
Todd	M 7300	113	--	.0	53.6
O's Gold	6882	112	--	.0	52.1
Todd	M 5505	108	--	.9	57.0
McCurdy	5596	108	--	1.8	53.8
Goldkist	GK 615	107	--	.0	55.3
Jacques	7900	107	--	1.3	54.3
McCurdy	84AA	107	--	1.7	54.6
FFR	905C	107	--	3.3	51.6
P-A-G	SX 275	107	--	.8	52.5
Northrup King	PX 9415	104	--	4.3	57.1
Todd	M 95	103	--	1.6	55.4
Jacques	JX 167	102	73	.0	55.9
FFR	848C	102	--	7.0	53.0
Todd	M 8800	101	--	.9	54.5
P-A-G	SX 239	101	--	.0	56.4
Ring Around	1502	97	70	.0	55.7
Paymaster	8951	94	--	2.5	57.6
Test average.....		108			
L.S.D. (.05).....		18			
C.V. (%).....		11.8			

<sup>1</sup>Located at Shorter.



## VIRAL DISEASE REACTIONS OF SOME HYBRIDS IN 1983<sup>2</sup>

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 the 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 and the control or avoidance of johnsongrass infested areas are the most practical controls for MCD and MDM. Commercial and experimental hybrids are evaluated yearly to identify resistant hybrids or promising sources of resistance

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<sup>2</sup>Prepared by Robert T. Gudauskas, Department of Botany, Plant Pathology, and Microbiology.

to the diseases. Results of evaluations of some commercial hybrids during 1983 are summarized in this report.

#### Procedure

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

#### Results

At the Black Belt Substation (Table 30), incidence of MDM ranged from 0-16 percent among hybrids and averaged 4.9 percent for the entire test; incidence of MCD ranged from 0-14 percent and averaged 3.6 percent for the test. McCurdy brands 81-34 and 7978, and Northrup King brand PX95 showed no symptoms of either disease, and incidence of either disease was less than 5 percent in at least 11 other hybrids.

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

Table 31. Incidence of Viral Diseases in Regular Corn Hybrid Test,  
Marion Junction, August 7, 1983

Brand name	Hybrid	Maize chlorotic dwarf	Maize dwarf mosaic
		Pct.	Pct.
Asgrow	RX 114	6.2	9.1
DeKalb	T 1230	9.7	12.5
FFR	848C	0	5.2
FFR	929W	3.4	0.8
Funk's	G-4507A	3.4	5.8
Funk's	G-4733	.8	4.3
Funk's	G-4740A	9.6	2.8
Funk's	G-4747W	5.3	15.9
Golden Harvest	H-2660W	2.7	3.6
Golden Harvest	H-2745	1.9	0
Gold Kist	GK 875	2.4	6.8
Jacques	8400	4.8	7.2
Jacques	JX 247	12.4	8.1
McCurdy	81-34	0	0
McCurdy	82-21	1.7	4.3
McCurdy	84AA	7.9	10.5
McCurdy	5596	0	2.5
McCurdy	7978	0	0
Northrup King	PX 79	8.2	0
Northrup King	PX 95	0	0
Pioneer	3147	0	3.4
Pioneer	3187	0	1.0
Pioneer	3369A	.9	4.5
Ring Around	1502	0	5.7
Ring Around	1604	14.0	13.9
Zimmerman	Z11W	1.7	2.5
Zimmerman	Z53W	0	1.0

REPORT OF PRELIMINARY TESTS

Table 32. Characteristics of Corn Hybrids Tested One Year at Crossville in Northern Alabama, 1983

Brand name	Hybrid	Yield per acre	Lodged stalks	Mid silk	Test weight
		Bu.	Pct.	Days	Lb./bu.
DeKalb	EXP-365	124	.5	79	56.5
O's Gold	2570	122	5.1	78	55.4
Paymaster	8990	119	2.0	82	57.3
FFR	848 C	118	1.9	82	54.8
Cargill	967	118	1.4	78	54.0
Pioneer	3165	117	2.4	84	58.1
Golden Harvest	H-2604	117	1.9	79	57.0
Pioneer	3147*	117	3.8	83	52.2
Cargill	980	115	2.5	83	58.1
Golden Harvest	H-2675	115	.5	78	55.8
Northrup King	PX 9581	114	2.5	78	56.5
O's Gold	5509	113	5.6	82	54.9
Ring Around	1505	112	3.3	82	53.1
Pioneer	3369A*	111	.9	76	54.5
Ring Around	9505C	111	1.5	79	55.4
Asgrow	RX 777	109	4.0	76	56.6
Zimmerman	Z25Y	108	1.6	82	54.4
Jacques	8400	106	7.0	82	57.6
DeKalb	EXP-378	105	4.7	84	52.9
Funk's	G-7007A	104	6.1	83	57.6
DeKalb	DK-747	104	5.5	83	56.7
Aztec	SX 612	104	5.3	86	56.7
P-A-G	SX 354	103	2.9	80	55.7
Golden Harvest	H-2775A	103	3.7	83	56.2
FFR	905 C	102	3.3	84	55.4
P-A-G	SX 379	102	5.9	82	57.0
Aztec	SX 615	101	1.5	83	55.8
Funk's	G-8006X	101	2.7	86	54.5
Northrup King	PX 9527	100	2.7	78	54.8
Aztec	SX 642	99	5.7	83	54.6
Asgrow	RX 114	98	4.2	82	57.5
DeKalb	EXP-379	97	6.4	83	54.0
Ring Around	1404	97	1.1	79	54.9
Funk's	G-4734	95	7.7	84	56.2
Northrup King	PX 9415	87	10.5	75	58.3
Paymaster	12052A	84	.0	88	53.8
DeKalb	XL-394	78	5.1	88	55.5
Aztec	SX 640	66	1.2	83	55.5
Pioneer	X 304C	25	17.3	91	52.1

Test average.....103  
L.S.D. (.05)..... 11  
C.V. (%).....7.6

\*Check hybrids.

Table 33. Characteristics of Corn Hybrids Tested One Year at Fairhope in Southern Alabama, 1983

Brand name	Hybrid	Yield per acre	Lodged stalks	Midsilk	Test weight
		Bu.	Pct.	Days	Lb./bu.
P-A-G	EXP 90015	143	0	89	57.7
DeKalb	EXP-378	139	0	85	56.3
Aztec	SX 615	130	0	82	57.2
DeKalb	DK-747	128	0	83	57.9
P-A-G	SX 379	126	0	81	58.2
O's Gold	5509	125	0	82	57.4
Pioneer	3147*	119	0	84	57.2
DeKalb	EXP-379	119	0	84	56.7
Ring Around	1505	117	0	82	55.1
FFR	955C	115	0	85	57.7
Pioneer	3369A*	115	0	76	54.7
Aztec	SX 612	114	0	82	56.2
Golden Harvest	H-2675	112	0	77	58.4
Pioneer	X 7515	111	0	84	57.7
Jacques	8400	109	0	81	59.6
Aztec	SX 642	109	0	83	60.1
DeKalb	T-1100	108	0	79	56.7
Asgrow	RX 114	106	0	83	59.3
DeKalb	EXP-365	105	0	78	56.8
Pioneer	3320	105	0	79	55.5
Funk's	G-8006X	103	0	85	56.4
Paymaster	8990	103	0	82	58.8
Funk's	G-7007A	100	0	81	57.5
P-A-G	SX 354	100	0	76	56.4
Funk's	G-4734	98	0	81	58.1
Northrup King	PX 9581	97	0	76	56.7
Funk's	G-6000X	97	0	80	58.0
Cargill	980	95	0	83	58.4
O's Gold	2570	93	0	79	58.0
Ring Around	9505C	93	0	78	55.9
Northrup King	PX 9527	90	0	80	56.7
Cargill	967	90	0	77	55.1
Pioneer	X 7360	89	0	77	59.2
Golden Harvest	H-2604	87	0	79	57.3
Ring Around	1404	79	0	78	55.7
Pioneer	X 304C	61	0	91	54.5
Northrup King	9415	49	0	75	56.7
Aztec	SX 640	39	0	81	56.9
Test average.....		103			
L.S.D. (.05).....		25			
C.V. (%).....		17.4			

\*Check hybrids.

SOURCES OF 1983 CORN HYBRID TEST SEED

<u>Seed Company</u>	<u>Brand</u>	<u>Seed Company</u>	<u>Brand</u>
Agratech Seeds, Inc. P.O. Box 644 Ashburn, GA 31714	Gold Kist	Northrup King Seed Co. P.O. Box 151 Columbus, MS 39701	Northrup King
Asgrow Seed Co. Dept. 9637, Building 190-1 Kalamazoo, MI 49001	Asgrow	O's Gold Seed Co. P.O. Box 460 Parkersburg, IA 50665	O's Gold
Aztec Seed Route 2, Box 109A Attica, IN 47918	Aztec	Paymaster Seeds P.O. Box 1630 Plainview, TX 79072	Paymaster
Cargill Seed Div P.O. Box 5645 Minneapolis, MN 55440	Cargill P-A-G	Pioneer Hi-Bred Int. 1000 West Jefferson Tipton, IN 46072	Pioneer
Coker's Pedigreed Seed co. P.O. Box 340 Hartsville, SC 29550	Coker	Ring Around Products, Inc. P.O. Box 589 Montgomery, AL 36101	Ring Around
Columbiana Seed Co. Elred, IL 62027	Golden Harvest	Todd Hybrid Corn Co. Burlington, IN 46915	Todd
DeKalb-Pfizer Genetics Sycamore Rd. DeKalb, IL 60115	DeKalb	W. O. McCurdy and Son Fremont, IA 52561	McCurdy
Funk's Seed International Louisiana Seed Co. P.O. Box 7498 Alexandria, LA 71306	Funk's	Zimmerman Hybrids, Inc. 5147 West Franklin Road Evansville, IN 47712	Zimmerman
Jacques Seed Co. Prescott, WI 54021	Jacques		
Jim Richardson Seeds P.O. Box 152 Leoma, TN 38468	FFR		

### ACCEPTABLE HYBRIDS FOR 1984

All of the acceptable hybrids are not equal in performance. It is suggested that this report be carefully studied before choosing a hybrid. For relative maturity information, use the days to mid silk data in Tables 4, 8, and 11. All acceptable hybrids on this page have been tested at least 3 years in the regular variety tests and are listed in descending order of 3-year average yield for each region.

Northern Alabama		Central Alabama		Southern Alabama		Black Belt	
Brand name	Hybrid	Brand name	Hybrid	Brand name	Hybrid	Brand name	Hybrid
McCurdy	84AA	McCurdy	84AA	McCurdy	8150	Northrup King	PX 95
Jacques	JX 180	Pioneer	3320	Ring Around	1604	Pioneer	3147
Ring Around	1502	Jacques	JX 247	DeKalb	T-1230	Funk's	G-4733
DeKalb	TXS 115A	McCurdy	8150	Jacques	JX 247	Golden Harvest	H-2660W
Pioneer	3147	Ring Around	1604	Paymaster	9902	DeKalb	T-1230
Coker	19A	Pioneer	3369A	Pioneer	3147	Ring Around	1502
Funk's	G-4507A	Jacques	JX 180	McCurdy	84AA	Funk's	G-4747W
Funk's	G-4740A	Funk's	G-4507A	Paymaster	8951	*Pioneer	3369A
Coker	19	Ring Around	1502	Ring Around	1502	*Funk's	G-4740A
Paymaster	8951	Funk's	G-4740A	Coker	19A	*Funk's	G-4507A
Pioneer	3320	*Pioneer	3147	Northrup King	PX 95		
Pioneer	3369A	*Coker	16	Pioneer	3369A		
Funk's	G-4611			*Coker	22		
*Pioneer	3184			*Funk's	G-4507A		
*Coker	16						

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

