Department of Agronomy and Soils
Alabama Agricultural Experiment Station
Gale A. Buchanan, Director

Departmental Series No. 80
Auburn University, Alabama
January, 1983

Performance of Corn Hybrids in Alabama 1982

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

TABLE OF CONTENTS (continued) Page

PERFORMANCE OF CORN HYBRIDS IN ALABAMA, 1982[1]

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 are designed as a randomized complete block with four replication. 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 date measured the number

---

[1]Organized and compiled by Cliff Currier, W. C. Johnson, and Darrell Williams.

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

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 tests at Marion Junction, Winfield, and Belle Mina 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 1982 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 test variability. An increase in its value indicates a decrease in the reliability of the data.

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 superintendents of the substations 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, Superintendent

Sand Mountain Substation, Crossville - J. T. Eason, Superintendent

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

Central Alabama

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

Prattville Experiment Field - D. P. Moore, Superintendent

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

Lower Coastal Plain Substation, Camden - J. A. Little, Superintendent

Southern Alabama

Brewton Experiment Field - J. A. Pitts, Superintendent

Monroeville Experiment Field - J. A. Pitts, Superintendent

Gulf Coast Substation, Fairhope - E. L. Carden, Superintendent

Wiregrass Substation, Headland - J. G. Starling, Superintendent

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, and R. T. Gudauskas, Department of Botany, Plant Pathology, and Microbiology, for making virus ratings and the virus disease reactions in this report.

Table 1. Locations and Cultural Practices for the 1982 Corn Hybrid Tests

Location	Planting date	Nitrogen rate[1]	Plant population	Date harvested	Herbicides used
Northern Alabama					
Tennessee Valley Substation (Belle Mina)	April 1	135	20,000	Sept. 10	Atrazine + Lasso
Sand Mountain Substation (Crossville)					
Regular test	April 24	150	20,000	Sept. 8	Atrazine
Preliminary test	April 24	150	20,000	Sept. 21	Atrazine
White corn test	May 3	150	20,000	Oct. 11	Atrazine + Dual
Early corn hybrid	May 3	150	20,000	Aug. 31	Atrazine + Dual
Upper Coastal Plain Substation (Winfield)	March 31	150	20,000	Sept. 2	Atrazine
Central Alabama					
E. V. Smith Research Center (Shorter)					
Early corn hybrid	March 15	135	26,000	July 15	Atrazine + Dual
Preliminary test	April 1	135	24,000	Sept. 2	Atrazine + Dual
White corn test	April 1	135	24,000	Sept. 2	Atrazine + Dual
Lower Coastal Plain Substation (Camden)	March 19	120	20,000	Aug. 10	Atrazine + Sutan+
Prattville Experiment Field (Prattville)	March 29	120	20,000	Aug. 30	Atrazine
Black Belt Substation (Marion Junction)	March 15	120	22,000	Sept. 8	Atrazine
Southern Alabama					
Brewton Experiment Field (Brewton)	March 15	150	20,000	Aug. 18	Aatrex
Monroeville Experiment Field (Monroeville)	March 11	140	20,000	July 29	Aatrex
Wiregrass Substation (Headland)					
Regular test (unirrigated)	March 16	130	20,000	Aug. 11	Aatrex + Lasso
Regular test (irrigated)	March 16	200	26,000	Aug. 12	Aatrex + Lasso
White corn test (irrigated)	March 17	200	26,000	Aug. 16	Aatrex + Lasso
Gulf Coast Substation (Fairhope)					
Regular test	March 17	130	20,000	Aug. 13	Aatrex + Lasso
Preliminary test	April 5	130	20,000	Aug. 13	Aatrex

[1]Pounds per acre N. Lime, phosphorus, and potassium were applied according to soil test recommendations.

Table 2. Characteristics of Corn Hybrids Tested Three Years in Northern Alabama, 1980-82[1]

Brand name	Hybrid	Yield per acre[2]	Lodged stalks
		Bu.	Pct.
Gutwein	62	96	2.7
McCurdy	84AA	94	4.8
Funk's	G-4507A	93	2.2
Funk's	G-4740A	93	.9
Ring Around	1502	93	2.5
Trojan	TXS115A	92	1.7
McCurdy	7787	92	5.3
Pioneer	3320	92	1.9
Pioneer	3147	92	2.9
Coker	19	92	2.1
Coker	19A	92	2.9
Pioneer	3369A	92	6.3
USS	1515	91	4.1
Paymaster	UC8951	91	4.6
Ring Around	1501	91	2.0
Funk's	G-4611	89	3.5
Gutwein	2910	88	8.6
DeKalb	XL72B	88	2.2
Coker	16	87	5.2
Pioneer	3184	87	.7
Funk's	G-4606-1	86	8.3
Coker	22	83	8.3
Funk's	G-795W-1	77	8.5

[1]Belle Mina, Crossville, and Winfield.

[2]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 3. Characteristics of Corn Hybrids Tested Two Years in Northern Alabama, 1981-82[1]

Brand name	Hybrid	Yield per acre[2]	Lodged stalks
		Bu.	Pct.
Pioneer	3147	118	2.9
Paymaster	UC8201	115	2.1
Ring Around	1502	115	2.6
McCurdy	84AA	115	4.6
Gutwein	62	115	2.4
Funk's	G-4740A	115	.9
Paymaster	UC8951	113	4.0
Pioneer	3160	113	5.1
Paymaster	UC9532	113	2.7
Pioneer	3320	112	1.8
Jacques	JX180	112	2.2
Funk's	G-4507A	112	1.6
Coker	19A	111	2.5
Trojan	TXS115A	111	1.6
Pioneer	3369A	111	4.6
Ring Around	1501	111	1.9
USS	1515	111	3.3
McCurdy	7787	110	4.8
Gutwein	2910	109	6.9
Pioneer	3184	109	.4
Funk's	G-4611	108	2.7
Coker	19	108	1.9
Coker	16	107	4.4
Gold Kist	GK748	107	3.9
Big D	4862	106	2.8
DeKalb	XL72B	106	1.5
DeKalb	XL72BB	105	2.6
Golden Harvest	H-2680	105	3.3
Funk's	G-4606-1	104	8.8
Coker	22	104	7.0
Funk's	G-795W-1	97	8.9

[1]Belle Mina, Crossville, and Winfield.

[2]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 4. Characteristics of Corn Hybrids Tested in Northern Alabama, 1982[1]

Brand name	Hybrid	Yield per acre[2]	Lodged stalks	Midsilk
		Bu.	Pct.	Days
Pioneer	3147	124	1.7	83
Pioneer	3160	121	1.0	79
Funk's	G-4740A	121	.6	81
Pioneer	3320	121	1.9	78
Big D	6986	119	4.8	80
Ring Around	1502	119	1.8	77
Funk's	G-4522	117	3.6	76
Gutwein	62	117	2.2	77
Paymaster	UC8951	117	2.8	77
Funk's	G-4507A	116	1.2	76
Northrup King	PX95	116	1.5	81
Trojan	T1230	115	1.7	80
USS	1515	115	2.3	77
Paymaster	UC8201	115	1.2	76
Funk's	G-4733	115	1.3	78
Jacques	JX180	114	2.7	77
Funk's	G-4689	114	1.2	78
Pioneer	3369A	114	3.6	78
Pioneer	3368A	113	2.9	78
Jacques	JX247	113	7.8	79
Paymaster	UC9532	113	1.7	80
Trojan	TXS115A	113	1.2	78
Coker	16	113	2.2	76
Pioneer	3184	112	.2	78
Ring Around	1501	112	2.3	77
Gold Kist	GK748	112	3.6	76
Gutwein	2910	112	6.2	79
Coker	19A	111	2.7	77
McCurdy	84AA	111	5.2	77
Golden Harvest	H-2680	111	2.0	80
Funk's	G-4611	110	3.5	76
DeKalb	XL72B	109	1.2	78
Funk's	G-4606-1	108	5.3	77
Funk's	G-795W-1	108	6.3	83
Coker	19	108	1.8	78
DeKalb	XL72BB	107	2.6	77
Coker	22	105	7.3	78
Big D	4862	105	3.8	76
McCurdy	7787	104	6.4	76
Pioneer	3572	99	1.3	74

[1]Belle Mina, Crossville, and Winfield.

[2]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 5. 1982 Yield of Corn Hybrids 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. 1982	2-yr. 1981-82	3-yr. 1980-82	4-yr. 1979-82	5-yr. 1978-82
		Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.
Ring Around	1502	110	148	99	119	115	93	98	97
Pioneer	3147	122	150	101	124	118	92	99	96
McCurdy	84AA	105	140	88	111	115	94	98	95
Pioneer	3369A	98	146	97	114	111	92	96	95
Trojan	TXS115A	105	140	93	113	111	92	95	95
Paymaster	UC8951	101	142	107	117	113	91	94	94
Funk's	G-4507A	100	143	104	116	112	93	96	93
Ring Around	1501	98	143	95	112	111	91	94	93
Funk's	G-4611	101	135	92	110	108	89	91	89
Coker	16	99	133	106	113	107	87	91	88
Coker	22	101	132	83	105	104	83	88	87
DeKalb	XL72B	99	132	96	109	106	88	91	86
Funk's	G-795W-1	92	115	119	108	97	77	80	77
Gutwein	62	103	140	107	117	115	96	97	
Coker	19A	97	142	94	111	111	92	95	
Pioneer	3184	107	136	93	112	109	87	93	
Funk's	G-4606-1	98	135	92	108	104	86	92	
Funk's	G-4740A	117	140	106	121	115	93		
Pioneer	3320	112	150	100	121	112	92		
McCurdy	7787	103	127	83	104	110	92		
Coker	19	100	134	90	108	108	92		
USS	1515	100	145	100	115	111	91		
Gutwein	2910	98	149	89	112	109	88		
Paymaster	UC8201	90	141	113	115	115			
Pioneer	3160	103	153	108	121	113			
Paymaster	UC9532	108	139	92	113	113			

(continued on following page)

Table 5. 1982 Yield of Corn Hybrids by Location and Regional Averages for 1-5 Years in Northern Alabama[1] (continued)

Brand name	Hybrid	Belle Mina	Crossville	Winfield	Regional average yield per acre				
					1-yr. 1982	2-yr. 1981-82	3-yr. 1980-82	4-yr. 1979-82	5-yr. 1978-82
		Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.
Jacques	JX180	105	150	88	114	112			
Gold Kist	GK748	96	138	102	112	107			
Big D	4862	98	125	92	105	106			
Golden Harvest	H-2680	80	144	108	111	105			
DeKalb	XL72BB	95	124	102	107	105			
Big D	6986	108	152	98	119				
Funk's	G-4522	112	133	107	117				
Northrup King	PX95	91	143	114	116				
Funk's	G-4733	103	146	96	115				
Trojan	T1230	103	145	99	115				
Funk's	G-4689	95	136	111	114				
Pioneer	3368A	91	142	106	113				
Jacques	JX247	98	148	92	113				
Pioneer	3572	81	126	90	99				
1982									
Test average		101	140	99					
L.S.D. (.05)		15	13	25					
C.V.(%)		10.7	6.5	18.1					

[1]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 6. Characteristics of Corn Hybrids Tested Three Years in Central Alabama, 1980-82[1]

Brand name	Hybrid	Yield per acre[2]	Lodged stalks
		Bu.	Pct.
Pioneer	3320	88	7.3
Pioneer	3369A	88	10.2
Ring Around	1502	87	7.8
McCurdy	84AA	87	13.2
Funk's	G-4507A	86	13.1
Jacques	JX180	86	12.1
USS	1515	85	9.6
Funk's	G-4740A	85	5.2
Ring Around	1501	84	9.6
McCurdy	7787	84	22.3
Pioneer	3368A	84	9.6
Gutwein	2910	82	13.1
Funk's	G-4606-1	80	18.7
Pioneer	3147	80	6.2
Coker	16	77	10.9
Coker	22	74	11.6
Funk's	G-795W-1	71	14.8
Coker	56	66	11.8

[1]Camden and Prattville.

[2]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 7. Characteristics of Corn Hybrids Tested Two Years in Central Alabama, 1981-82[1]

Brand name	Hybrid	Yield per acre[2]	Lodged stalks
		Bu.	Pct.
Pioneer	3369A	95	12.4
McCurdy	84AA	93	13.6
Pioneer	3320	93	8.3
Pioneer	3160	92	12.5
Funk's	G-4507A	91	17.3
Ring Around	1502	90	8.3
USS	2020	90	15.9
Jacques	JX247	90	10.6
Ring Around	1501	90	10.4
Funk's	G-4689	90	16.6
McCurdy	8150	89	10.7
Jacques	JX180	89	11.9
Pioneer	3368A	89	11.6
Ring Around	1604	89	12.4
Funk's	G-4740A	89	6.6
USS	1515	89	12.0
McCurdy	7787	88	22.8
Gutwein	62	88	8.9
Big D	4862	88	11.4
Funk's	G-4606-1	88	24.7
Gutwein	2910	86	12.9
DeKalb	XL82	83	6.7
Pioneer	3147	82	6.9
Coker	16	82	11.5
Coker	22	81	13.1
Funk's	G-795W-1	77	15.5
Coker	56	72	12.3

[1]Camden and Prattville.

[2]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 8. Characteristics of Corn Hybrids Tested in Central Alabama, 1982[1]

Brand name	Hybrid	Yield per acre[2]	Lodged stalks	Midsilk
		Bu.	Pct.	Days
Pioneer	3320	104	3.7	77
Ring Around	1604	103	7.5	80
Funk's	G-4740A	103	3.8	80
USS	2020	102	7.2	80
McCurdy	84AA	102	6.1	78
Northrup King	PX74	101	10.1	78
Funk's	G-4689	100	10.7	78
Pioneer	3369A	100	3.3	78
Ring Around	1502	99	4.4	78
Funk's	G-4522	99	4.5	78
DeKalb	XL82	99	5.0	80
Funk's	G-4507A	98	15.9	79
Trojan	TXS115A	98	4.9	79
Jacques	JX180	98	2.6	79
Gutwein	2910	98	4.9	80
Pioneer	3160	98	10.5	79
Jacques	JX247	98	7.6	80
Funk's	G-4606-1	98	11.1	78
Ring Around	1501	98	4.7	78
DeKalb	XL71	97	1.7	78
McCurdy	8150	97	1.9	80
Gutwein	62	97	2.4	79
Gold Kist	GK925	97	6.6	80
Northrup King	PX87	97	2.8	80
Coker	19A	96	3.8	79
Pioneer	3368A	96	5.2	78
McCurdy	7787	96	9.9	77
Funk's	G-4733	95	3.6	81
Coker	21	95	7.6	80
Paymaster	UC9532	94	5.5	79
Pioneer	3147	94	5.5	82
USS	1515	93	2.6	78
Big D	4862	93	4.5	78
Coker	22	93	6.1	79
Golden Harvest	H-2775A	92	6.8	79
Gold Kist	GK748	88	5.3	79
McCurdy	8230	88	3.0	80
Funk's	G-795W-1	87	11.0	82
Coker	16	86	3.7	76
Coker	56	81	5.5	82

[1]Camden and Prattville.

[2]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 9. 1982 Yield of Corn Hybrids by Location and Regional Averages for 1-5 Years in Central Alabama[1]

Brand name	Hybrid	Camden	Prattville	Regional average yield per acre				
				1-yr. 1982	2-yr. 1981-82	3-yr. 1980-82	4-yr. 1979-82	5-yr. 1978-82
		Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.
Ring Around	1502	66	133	99	90	87	87	79
Funk's	G-4507A	63	134	98	91	86	83	76
Pioneer	3369A	63	136	100	95	88	83	74
Pioneer	3147	51	136	94	82	80	81	74
Pioneer	3368A	65	127	96	89	84	81	73
Coker	16	61	111	86	82	77	76	69
Coker	22	56	130	93	81	74	73	66
Funk's	G-795W-1	48	125	87	77	71	73	64
Coker	56	48	113	81	72	66	69	62
McCurdy	84AA	64	140	102	93	87	86	
Ring Around	1501	70	125	98	90	84	80	
Funk's	G-4606-1	63	132	98	88	80	79	
Pioneer	3320	65	142	104	93	88		
Jacques	JX180	68	128	98	89	86		
Funk's	G-4740A	61	145	103	89	85		
USS	1515	57	130	93	89	85		
McCurdy	7787	62	130	96	88	84		
Gutwein	2910	62	135	98	86	82		
Pioneer	3160	57	139	98	92			
USS	2020	61	143	102	90			
Funk's	G-4689	69	131	100	90			
Jacques	JX247	60	136	98	90			
Ring Around	1604	67	140	103	89			
McCurdy	8150	65	129	97	89			
Gutwein	62	60	133	97	88			
Big D	4862	69	117	93	88			

(continued on following page)

Table 9. 1982 Yield of Corn Hybrids by Location and Regional Averages for 1-5 Years in Central Alabama[1] (continued)

Brand name	Hybrid	Camden	Prattville	Regional average yield per acre				
				1-yr. 1982	2-yr. 1981-82	3-yr. 1980-82	4-yr. 1979-82	5-yr. 1978-82
		Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.
DeKalb	XL82	65	134	99	83			
Northrup King	PX74	74	128	101				
Funk's	G-4522	67	132	99				
Trojan	TXS115A	68	128	98				
DeKalb	XL71	65	129	97				
Northrup King	PX87	66	127	97				
Gold Kist	GK925	62	131	97				
Coker	19A	71	121	96				
Coker	21	57	134	95				
Funk's	G-4733	61	130	95				
Paymaster	UC9532	58	130	94				
Golden Harvest	H-2775A	61	124	92				
McCurdy	8230	45	131	88				
Gold Kist	GK748	58	119	88				
1982								
Test average		62	131					
L.S.D. (.05)		11	11					
C.V.(%)		13.1	6.2					

[1]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 10. Characteristics of Corn Hybrids Tested Three Years in Southern Alabama, 1980-82[1]

Brand name	Hybrid	Yield per acre[2]	Lodged stalks
		Bu.	Pct.
Ring Around	1502	102	7.3
McCurdy	84AA	100	11.3
Paymaster	UC8951	99	10.0
Pioneer	3147	97	12.5
Coker	19A	96	9.0
Pioneer	3368A	95	7.3
Gutwein	2910	93	11.1
Pioneer	3369A	92	7.8
Ring Around	1501	91	7.0
Funk's	G-4507A	91	9.0
Northrup King	PX95	91	6.3
Funk's	G-4949A	90	12.9
Golden Harvest	H-2500	90	8.3
Funk's	G-4606-1	88	11.0
Coker	22	88	10.3
DeKalb	XL80	87	12.1
Pioneer	3030	84	13.1
Coker	16	83	6.4
Coker	77B	82	15.9

[1]Brewton, Fairhope, Headland, and Monroeville.

[2]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 11. Characteristics of Corn Hybrids Tested Two Years in Southern Alabama, 1981-82[1]

Brand name	Hybrid	Yield per acre[2]	Lodged stalks
		Bu.	Pct.
McCurdy	8150	105	8.4
Ring Around	1502	103	10.1
Paymaster	UC8951	103	13.9
McCurdy	84AA	103	14.2
Ring Around	1604	101	12.7
Trojan	T1230	99	9.7
Pioneer	3160	98	11.8
Jacques	JX247	98	14.8
Coker	19A	98	12.6
Pioneer	3369A	98	10.2
Gutwein	2910	97	13.5
Pioneer	3368A	97	8.3
Trojan	TXS115A	96	9.4
Pioneer	3147	96	16.6
Paymaster	9902	96	11.1
Golden Harvest	H-2775A	96	13.8
Northrup King	PX95	94	9.2
Funk's	G-4689	94	8.7
Funk's	G-4507A	93	12.6
Ring Around	1501	93	9.8
Funk's	G-4949A	92	17.1
Funk's	G-4606-1	91	14.3
DeKalb	XL82	90	13.2
Golden Harvest	H-2500	89	11.4
Coker	22	88	13.6
DeKalb	XL80	87	16.0
Coker	16	87	8.0
Pioneer	3030	83	16.4
Coker	77B	83	19.5

[1]Brewton, Fairhope, Headland, and Monroeville.

[2]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 12. Characteristics of Corn Hybrids Tested in Southern Alabama, 1982[1]

Brand name	Hybrid	Yield per acre[2]	Lodged stalks	Midsilk
		Bu.	Pct.	Days
Ring Around	1604	112	10.8	80
Pioneer	3160	110	10.7	76
Paymaster	UC8951	109	12.4	76
McCurdy	84AA	108	12.6	76
McCurdy	8150	107	9.6	78
Ring Around	1502	106	8.3	76
Big D	6986	106	7.7	78
Pioneer	3369A	105	10.0	76
Coker	21	103	10.6	79
Gutwein	2910	102	12.4	79
Pioneer	3147	102	20.3	81
DeKalb	XL71	101	11.5	76
Golden Harvest	H-2680	101	17.2	79
Northrup King	PX95	100	11.5	79
Trojan	T1230	100	9.5	79
Coker	19A	100	13.2	77
Northrup King	PX87	99	13.9	79
Jacques	JX247	99	13.0	79
Paymaster	12052A	99	22.7	83
Funk's	G-4733	99	8.9	79
Golden Harvest	H-2775A	99	14.7	77
Funk's	G-4522	98	15.6	75
USS	2020	98	14.3	79
Funk's	C-4949A	98	22.1	81
Ring Around	1501	97	14.0	76
Funk's	G-4606-1	97	11.1	76
Paymaster	9902	97	12.3	78
Pioneer	3368A	97	7.4	77
Trojan	TXS115A	97	8.4	77
Funk's	G-4689	95	10.7	77
Funk's	G-795W-1	94	18.1	82
Funk's	G-4507A	93	15.1	75
Northrup King	PX79	90	9.1	76
DeKalb	XL80	90	25.0	78
Coker	77B	89	16.5	83
Coker	16	89	8.1	73
Coker	22	88	10.7	78
Golden Harvest	H-2500	88	13.3	76
DeKalb	XL82	87	18.9	79
Pioneer	3030	82	15.5	83

[1]Brewton, Fairhope, Headland, and Monroeville.

[2]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 13. 1982 Yield of Corn Hybrids by Location 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. 1982	2-yr. 1981-82	3-yr. 1980-82	4-yr. 1979-82	5-yr. 1978-82
		Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.
Ring Around	1502	123	110	90	102	106	103	102	105	108
McCurdy	84AA	138	100	86	109	108	103	100	101	107
Pioneer	3147	108	100	84	115	102	96	97	101	105
Pioneer	3368A	113	89	77	108	97	97	95	99	105
Pioneer	3369A	111	113	88	106	105	98	92	95	102
Golden Harvest	H-2500	105	78	66	101	88	89	90	95	100
Funk	G-4507A	96	84	89	103	93	93	91	94	99
Ring Around	1501	109	84	97	98	97	93	91	93	99
Coker	22	118	76	74	84	88	88	88	92	99
Funk's	G-4949A	114	105	74	97	98	92	90	91	97
DeKalb	XL80	99	88	77	95	90	87	87	90	95
Coker	16	105	89	71	90	89	87	83	87	93
Pioneer	3030	92	90	60	85	82	83	84	86	92
Coker	77B	109	106	64	79	89	83	82	82	91
Paymaster	UC8951	141	115	81	99	109	103	99	102	
Coker	19A	115	95	83	106	100	98	96	97	
Northrup King	PX95	124	109	75	92	100	94	91	94	
Funk's	G-4606-1	110	103	77	98	97	91	88	94	
Gutwein	2910	133	93	81	102	102	97	93		
McCurdy	8150	119	116	90	105	107	105			
Ring Around	1604	146	125	69	110	112	101			
Trojan	T1230	125	105	77	92	100	99			
Pioneer	3160	112	116	90	123	110	98			
Jacques	JX247	130	88	77	102	99	98			
Golden Harvest	H-2775A	108	102	77	108	99	96			
Paymaster	9902	116	98	83	92	97	96			
Trojan	TXS115A	116	89	79	102	97	96			

(continued on following page)

Table 13. 1982 Yield of Corn Hybrids by Location and Regional Averages for 1-5 Years in Southern Alabama[1] (continued)

Brand name	Hybrid	Fairhope	Brewton	Monroeville	Headland	Regional average yield per acre				
						1-yr. 1982	2-yr. 1981-82	3-yr. 1980-82	4-yr. 1979-82	5-yr. 1978-82
		Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.	Bu.
Funk's	G-4689	109	99	73	100	95	94			
DeKalb	XL82	120	75	73	79	87	90			
Big D	6986	139	103	81	102	106				
Coker	21	115	96	95	105	103				
DeKalb	XL71	114	104	85	101	101				
Golden Harvest	H-2680	132	84	86	101	101				
Paymaster	12052A	119	97	82	99	99				
Funk's	G-4733	122	99	82	92	99				
Northrup King	PX87	126	94	77	100	99				
Funk's	G-4522	119	104	68	100	98				
USS	2020	125	92	73	101	98				
Funk's	G-795W-1	105	92	69	108	94				
Northrup King	PX79	114	70	83	95	90				
1982										
Test average		117	97	79	100					
L.S.D. (.05)		21	35	19	12					
C.V.(%)		12.8	25.7	16.7	8.2					

[1]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 14. Characteristics of Corn Hybrids Tested Under Irrigation Three Years at Headland, 1980-82

Brand name	Hybrid	Yield per acre[1]	Lodged stalks
		Bu.	Pct.
McCurdy	84AA	170	2.1
Gutwein	2910	167	2.5
Pioneer	3147	165	1.5
Ring Around	1502	165	1.2
Paymaster	UC8951	162	1.6
Pioneer	3368A	156	1.5
Coker	77B	156	3.4
Northrup King	PX95	155	2.7
Funk's	G-4507A	151	4.5
Funk's	G-4949-A	151	4.6
Funk's	G-4606-1	148	1.8
Coker	19A	148	1.3
Coker	22	147	2.1
Golden Harvest	H-2500	145	1.2
Pioneer	3369A	141	2.0
Coker	16	130	1.5

[1]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 15. Characteristics of Corn Hybrids Tested Under Irrigation Two Years at Headland, 1981-82

Brand name	Hybrid	Yield per acre[1]	Lodged stalks
		Bu.	Pct.
McCurdy	84AA	172	2.3
Jacques	JX247	172	2.2
Ring Around	1604	169	1.9
Trojan	T1230	169	2.4
Pioneer	3147	168	1.0
Gutwein	2910	168	2.1
Paymaster	UC8951	165	.5
McCurdy	8150	159	2.7
Paymaster	UC9902	159	2.5
Ring Around	1502	159	1.6
Coker	77B	156	2.7
Pioneer	3368A	155	2.3
Northrup King	PX95	154	3.3
McCurdy	8230	152	1.1
Trojan	TXS115A	151	1.1
Funk's	G-4507A	148	6.2
Coker	22	148	2.4
Funk's	G-4949A	147	4.7
Funk's	G-4606-1	147	2.2
Coker	19A	146	1.7
Pioneer	3369A	146	2.3
Golden Harvest	H-2500	145	.7
Pioneer	3160	144	2.4
Coker	16	130	2.3

[1]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 16. Characteristics of Corn Hybrids Tested Under Irrigation One Year at Headland, 1982[1]

Brand name	Hybrid	Yield per acre[2]	Lodged stalks	Midsilk
		Bu.	Pct.	Days
Pioneer	3147	200	0	85
Jacques	JX247	198	2.8	84
Coker	21	198	1.4	83
McCurdy	84AA	197	1.1	78
Paymaster	UC8951	192	1.0	77
Trojan	T1230	191	2.7	85
Ring Around	1604	191	1.3	83
Gutwein	2910	188	1.4	84
Coker	77B	185	1.0	87
Ring Around	1502	182	1.4	78
Northrup King	PX87	182	1.1	83
Northrup King	PX95	180	5.3	78
Pioneer	3368A	180	2.4	78
Funk's	G-4949A	178	8.0	85
Funk's	G-795W-1	177	17.3	85
Pioneer	3369A	177	1.8	78
McCurdy	8150	175	3.0	80
McCurdy	8230	174	1.4	80
Paymaster	UC9902	172	3.3	84
Funk's	G-4733	172	0	84
Pioneer	3160	168	1.5	76
Funk's	G-4522	168	2.4	81
Trojan	TXS115A	166	1.4	81
DeKalb	XL71	166	2.5	81
Funk's	G-4606-1	166	3.1	81
Coker	22	161	3.2	85
Golden Harvest	H-2500	160	1.0	78
Funk's	G-4507A	160	10.9	76
Coker	19A	160	2.5	81
Coker	16	145	2.5	75
Test Average.....		177		
L.S.D. (.05).....		15		
C.V. (%).....		6.2		

[1]The test received approximately 3.5 inches of irrigation water in 3 applications during the months of May and June.

[2]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 17. Characteristics of Corn Hybrids Tested Three Years at Marion Junction, 1980-82

Brand name	Hybrid	Yield per acre[1]	Lodged stalks
		Bu.	Pct.
Pioneer	3147	118	8.3
Ring Around	1502	114	1.3
Funk's	G-4740A	113	2.8
Pioneer	3160	111	2.0
Funk's	G-4507A	109	3.4
Golden Harvest	H-2660W	108	5.7
Funk's	G-795W-1	106	7.3
Pioneer	3369A	104	10.0
DeKalb	XL72BB	103	3.0
DeKalb	XL72B	103	2.8
Coker	22	98	2.9
Ring Around	1501	98	3.8
Funk's	G-4606-1	94	5.7
Coker	56	93	5.4
Funk's	G-4611	91	8.2

[1]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 18. Characteristics of Corn Hybrids Tested Two Years at Marion Junction, 1981-82

Brand name	Hybrid	Yield per acre[1]	Lodged stalks
		Bu.	Pct.
Northrup King	PX95	161	1.7
Pioneer	3147	153	8.6
Funk's	G-4733	152	0
Ring Around	1502	148	.8
Golden Harvest	H-2660W	147	3.0
Funk's	G-4740A	142	3.4
Paymaster	UC9797	141	1.5
Funk's	G-4507A	141	2.3
Funk's	G-795W-1	139	9.8
Gunks	G-4747W-1	139	1.5
Pioneer	3369A	137	10.1
Trojan	T1230	137	1.1
Gutwein	MDM2885	137	2.4
Pioneer	3160	135	2.9
DeKalb	XL72B	134	1.9
McCurdy	8225	134	6.6
Paymaster	UC9532	134	1.1
DeKalb	XL72BB	133	2.4
Coker	22	131	2.4
Ring Around	1501	128	2.1
Coker	56	126	5.3
Funk's	G-4606-1	124	2.6
Golden Harvest	H-2745	120	4.2
Funk's	G-4611	117	6.2

[1]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 19. Characteristics of Corn Hybrids Tested One Year at Marion Junction, 1982

Brand name	Hybrid	Yield per acre[1]	Lodged stalks	Midsilk
		Bu.	Pct.	Days
Northrup King	PX95	183	2.1	90
Pioneer	3179	178	2.7	89
McCurdy	84AA	177	.8	88
Funk's	G-4733	176	0	87
Ring Around	1502	172	0	86
Pioneer	3147	172	3.3	92
McCurdy	81-35	168	2.4	85
Gold Kist	GK875	167	1.1	89
Pioneer	3187	167	1.9	89
Funk's	G-4507A	166	.8	85
Funk's	G-795W-1	165	3.4	93
Trojan	T1230	159	.8	88
Funk's	G-4747W-1	159	1.2	90
Paymaster	UC9797	158	0	88
Golden Harvest	H-2660W	156	1.4	90
Funk's	G-4740A	154	1.7	89
Coker	22	153	1.2	89
DeKalb	XL72B	153	1.2	83
Pioneer	3369A	152	.8	86
McCurdy	8225	152	.8	85
Ring Around	1501	152	.8	83
Gutwein	MDM2885	152	1.6	88
Funk's	G-4525A	152	1.7	87
DeKalb	XL72BB	149	2.4	84
Paymaster	UC9532	149	0	88
Pioneer	3160	148	5.3	87
Coker	56	139	3.0	91
Funk's	G-4606-1	137	1.3	84
Funk's	G-4611	127	1.6	85
Golden Harvest	H-2745	126	.4	84
Test average.....		157		
L.S.D. (.05).....		17		
C.V. (%).....		7.7		

[1]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 20. Characteristics of White Corn Hybrids Tested Three Years at Crossville, 1980-82

Brand name	Hybrid	Yield per acre[1]	Lodged stalks
		Bu.	Pct.
Ring Around	1502*	99	3.4
Pioneer	3147*	94	4.1
Funk's	G-795W-1	83	9.6
Pioneer	519	79	2.5
DeKalb	XL390B	78	6.0
Ring Around	2602W	78	6.3
Golden Harvest	H-2660W	76	4.0
Ring Around	3605W	74	5.8
Funk's	G-4747W-1	70	2.6

[1]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.
*Yellow corn check hybrids.

Table 21. Characteristics of White Corn Hybrids Tested Two Years at Crossville, 1981-82

Brand name	Hybrid	Yield per acre[1]	Lodged stalks
		Bu.	Pct.
Ring Around	1502*	116	3.4
Pioneer	3147*	109	1.9
Funk's	G-795W-1	101	8.0
Ring Around	2602W	97	4.9
Golden Harvest	H-2660W	94	3.5
Pioneer	519	93	1.2
Ring Around	3605W	91	4.4
DeKalb	XL390B	91	5.1
Funk's	G-4747W-1	86	2.3

[1]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.
*Yellow corn check hybrids.

Table 22. Characteristics of White Corn Hybrids Tested at Crossville, 1982

Brand name	Hybrid	Yield per acre[1]	Lodged stalks	Midsilk
		Bu.	Pct.	Days
Ring Around	1502*	140	2.3	62
Paymaster	U398W	133	3.8	68
Pioneer	3147*	132	2.4	68
DeKalb	XL390B	130	8.4	66
Pioneer	519	128	1.4	69
Funk's	G-795W-1	125	11.5	69
Ring Around	2602W	123	6.7	67
Ring Around	X9609W	123	4.7	67
Golden Harvest	H-2660W	122	4.3	67
Ring Around	3605W	121	6.2	68
Funk's	G-4779W	118	2.7	68
Funk's	G-4747W-1	114	3.2	67
Test average.....		126		
L.S.D. (.05).....		14		
C.V. (%).....		8.0		

[1]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

*Yellow corn check hybrids.

Table 23. Characteristics of White Corn Hybrids Tested Two Years at the E. V. Smith Research Center, 1981-82

Brand name	Hybrid	Yield per acre[1]	Lodged stalks
		Bu.	Pct.
Ring Around	1502*	66	13.3
Pioneer	3147*	52	5.2
Pioneer	519	46	15.4
DeKalb	XL390B	45	23.9
Funk's	G-795W-1	43	30.1
Golden Harvest	H-2660W	42	11.7
Ring Around	3605W	38	32.2
Ring Around	2602W	37	38.6
Funk's	G-4747W-1	34	11.6

[1]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

*Yellow corn check hybrids.

Table 24. Characteristics of White Corn Hybrids Tested at the E. V. Smith Research Center, 1982

Brand name	Hybrid	Yield per acre[1]	Lodged stalks	Midsilk
		Bu.	Pct.	Days
Ring Around	1502*	58	17.6	82
Ring Around	X9609W	55	21.8	83
Pioneer	3147*	51	4.8	89
Pioneer	519	48	22.7	84
DeKalb	XL390B	44	34.8	85
Funk's	G-795W-1	42	49.1	87
Golden Harvest	H-2660W	39	21.3	87
Ring Around	2602W	39	65.9	86
Paymaster	U398W	38	38.7	86
Ring Around	3605W	38	58.1	88
Funk's	G-4779W	33	20.1	87
Funk's	G-4747W-1	28	16.4	88

Test average..... 43
L.S.D. (.05)..... 15
C.V. (%).....24.0

[1]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

*Yellow corn check hybrids.

Table 25. Characteristics of White Corn Hybrids Tested Under Irrigation Three Years at Headland, 1980-82

Brand name	Hybrid	Yield per acre[1]	Lodged stalks
		Bu.	Pct.
Ring Around	1502*	165	3.4
Pioneer	3147*	163	4.6
Funk's	G-795W-1	155	14.5
DeKalb	XL390B	153	6.3
Ring Around	3605W	150	6.7
Pioneer	519	145	4.4
Ring Around	2602W	140	6.7
Golden Harvest	H-2660W	137	7.6
Funk's	G-4747W-1	135	8.1

[1]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

*Yellow corn check hybrids.

Table 26. Characteristics of White Corn Hybrids Tested Under Irrigation Two Years at Headland, 1981-82

Brand name	Hybrid	Yield per acre[1]	Lodged stalks
		Bu.	Pct.
Ring Around	1502*	168	3.5
Pioneer	3147*	165	4.7
DeKalb	XL390B	165	6.7
Funk's	G-795W-1	158	15.9
Ring Around	3605W	151	6.7
Pioneer	519	148	4.2
Golden Harvest	H-2660W	139	7.6
Ring Around	2602W	139	6.1
Funk's	G-4747W-1	135	10.7

[1]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

*Yellow corn check hybrids.

Table 27. Characteristics of White Corn Hybrids Tested Under Irrigation at Headland, 1982[1]

Brand name	Hybrid	Yield per acre[1]	Lodged stalks	Midsilk
		Bu.	Pct.	Days
Pioneer	3147*	187	7.0	85
DeKalb	XL390B	183	6.7	81
Ring Around	1502*	181	5.2	76
Funk's	G-795W-1	175	20.3	87
Ring Around	3605W	166	9.4	84
Pioneer	519	164	5.3	89
Funk's	G-4779W	161	8.3	84
Ring Around	X9609W	157	8.3	81
Golden Harvest	H-2660W	153	11.4	81
Paymaster	U398W	152	8.7	77
Ring Around	2602W	152	8.0	84
Funk's	G-4747W-1	143	13.9	84
Test average.....		164		
L.S.D. (.05).....		14		
C.V. (%).....		6.1		

[1]The test received approximately 3.5 inches of irrigation water in 3 applications during the months of May and June.

[2]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

*Yellow corn check hybrids.

Table 28. Early Corn Hybrid Test, North Alabama, 1982[1]

Brand name	Hybrid	Yield per acre[1]	Lodged stalks
		Bu.	Pct.
Ring Around	1502	154	.5
Funk's	4006X	135	.4
DeKalb	XL61	134	.5
DeKalb	XL32AA	134	.5
Pioneer	3535	133	0
Ring Around	1404	132	.5
Jacques	147	131	.4
Funk's	G-4323	129	0
Trojan	T1069	128	0
Jacques	167	126	1.3
Coker	1054	126	0
Gold Kist	GK695	126	0
McCurdy	46	124	.5
Pioneer	3744	124	0
USS	7501	89	7.4
Test average		128	
L.S.D. (.05)		13	
C.V. (%)		6.8	

[1]Located at Crossville, Alabama.

[2]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

Table 29. Early Corn Hybrid Test, Central Alabama, 1982[1]

Brand name	Hybrid	Yield per acre[2]	Lodged stalks
		Bu.	Pct.
Trojan	T1069	57	2.9
Pioneer	3744	55	3.7
McCurdy	46	52	3.2
Pioneer	3572	51	2.6
Coker	1054	49	4.8
Gold Kist	GK695	47	1.3
DeKalb	XL61	46	1.4
Jacques	JX147	46	1.9
Ring Around	1502	44	2.6
Jacques	JX167	44	0
Funk's	G-4323	43	3.7
DeKalb	XL32AA	42	1.0
USS	7501	41	7.4
Ring Around	1404	23	1.3
Funk's	4006X	22	0
Test average.....		44	
L.S.D. (.05).....		20	
C.V. (%).....		32.0	

[1]Located at Shorter, Alabama.

[2]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

VIRAL DISEASE REACTIONS OF SOME HYBRIDS IN 1982[1]

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

---

[1]Prepared by Robert T. Gudauskas, Department of Botany, Plant Pathology, and Microbiology.

to the diseases. Results of evaluations of some commercial hybrids during 1982 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, the Tennessee Valley Substation, Belle Mina, and the Upper Coastal Plain Substation, Winfield. 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 0-31 percent among hybrids and averaged 3.9 percent for the entire test; MCD was found in only three plants in the test. Several hybrids showed no symptoms of either disease, e.g. DeKalb brand XL72BB, Funk's brand G-4747W-1, Gutwein brand MDM 2885, McCurdy brands 81-35 and 8225, and Pioneer brands 3147 and 3160. Incidence of either disease was less than 5 percent in at least 16 other hybrids.

Incidences of MDM and MCD generally were low throughout the test at the Tennessee Valley Substation (table 31).

In the test at the Upper Coastal Plain Substation (table 32), incidence of MDM ranged from 0-30 percent and averaged 6.5 percent overall; that for MCD ranged from 0-21 percent and averaged 4.8 percent. No symptoms of MDM or MCD were found in Northrup King brand PX95 and Pioneer brand 3147 and 3320. Incidence of either disease was less than 5 percent in several 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 consideration of yield and other characteristics given elsewhere in this report.

Table 30. Incidence of Maize Dwarf Mosaic in the Regular Corn Hybrid Test, Marion Junction, July 16, 1982

Brand name	Hybrid	Maize dwarf mosaic
		Pct.
Coker	22	2.4
Coker	56	6.2
DeKalb	XL72B	4.4
DeKalb	XL72BB	0
Funk's	G-4507A	5.1
Funk's	G-4525A	1.6
Funk's	G-4606-1	6.7
Funk's	G-4611	9.2
Funk's	G-4733	3.6
Funk's	G-4740A	2.4
Funk's	G-4747W-1	0
Funk's	G-795W-1	8.6
Golden Harvest	H-2660W	1.0
Golden Harvest	H-2745	1.6
Gold Kist	GK875	1.0
Gutwein	MDM 2885	0
McCurdy	81-35	0
McCurdy	8225	0
McCurdy	84AA	1.5
Northrup King	PX95	1.0
Paymaster	UC9532	2.0
Paymaster	UC9797	1.6
Pioneer	3147	0
Pioneer	3160	0
Pioneer	3179	1.0
Pioneer	3187	1.6
Pioneer	3369A	31.0
Ring Around	1501	3.6
Ring Around	1502	2.7
Trojan	T1230	16.5

Table 31. Incidence of Viral Diseases in the Regular Corn Hybrid Test, Tennessee Valley Substation, July 22, 1982

Brand name	Hybrid	Maize chlorotic dwarf	Maize dwarf mosaic
		Pct.	Pct.
Big D	4862	0	5.8
Big D	6986	0	5.1
Coker	16	0	3.1
Coker	19	0	2.3
Coker	19A	0	1.1
Coker	22	1.0	0
DeKalb	XL72B	0	1.8
DeKalb	XL72BB	0	1.5
Funk's	G-4507A	0	3.3
Funk's	G-4522	0	3.3
Funk's	G-4606-1	0	2.8
Funk's	G-4611	0	3.2
Funk's	G-4689	1.0	3.1
Funk's	G-4733	0	1.0
Funk's	G-4740A	0	1.5
Funk's	G-795W-1	1.5	6.3
Golden Harvest	H-2680	0	1.0
Gold Kist	GK748	0	1.0
Gutwein	62	1.0	1.0
Gutwein	2910	2.7	6.1
Jacques	JX180	0	1.6
Jacques	JX247	1.0	8.1
McCurdy	84AA	1.0	3.3
McCurdy	7787	1.0	3.5
Northrup King	PX95	0	1.0
Paymaster	UC8201	1.5	1.5
Paymaster	UC8951	0	1.1
Paymaster	UC9532	0	2.2
Pioneer	3147	0	1.1
Pioneer	3160	0	2.3
Pioneer	3184	0	1.0
Pioneer	3320	0	2.1
Pioneer	3368A	0	12.6
Pioneer	3369A	1.7	7.3
Pioneer	3572	1.0	1.2
Ring Around	1501	0	1.0
Ring Around	1502	0	1.0
Trojan	T1230	0	3.5
Trojan	TXS115A	0	1.0
USS	1515	0	1.1

Table 32. Incidence of Viral Diseases in the Regular Corn Hybrid Test, Upper Coastal Plain Substation, July 23, 1982

Brand name	Hybrid	Maize chlorotic dwarf	Maize dwarf mosaic
		Pct.	Pct.
Big D	4862	1.0	4.9
Big D	6986	10.5	10.6
Coker	16	5.7	24.6
Coker	19	0	5.7
Coker	19A	0	5.0
Coker	22	9.8	7.9
DeKalb	XL72B	0	1.0
DeKalb	XL72BB	5.6	2.7
Funk's	G-4507A	2.4	4.4
Funk's	G-4522	7.8	12.0
Funk's	G-4606-1	7.1	8.7
Funk's	G-4611	7.6	7.2
Funk's	G-4689	9.3	12.6
Funk's	G-4733	0	1.0
Funk's	G-4740A	0	1.0
Funk's	G-795W-1	5.0	4.8
Golden Harvest	H-2680	0	2.5
Gold Kist	GK 748	9.2	1.4
Gutwein	62	1.8	5.2
Gutwein	2910	10.7	10.4
Jacques	JX180	7.1	2.4
Jacques	JX247	15.1	7.3
McCurdy	84AA	21.2	14.4
McCurdy	7787	5.2	8.0
Northrup King	PX95	0	0
Paymaster	UC8201	0	1.6
Paymaster	UC8951	1.0	6.0
Paymaster	UC9532	1.0	1.6
Pioneer	3147	0	0
Pioneer	3160	1.4	1.4
Pioneer	3184	1.5	1.0
Pioneer	3320	0	0
Pioneer	3368A	6.2	20.6
Pioneer	3369A	16.8	30.0
Pioneer	3572	1.0	6.5
Ring Around	1501	4.5	6.6
Ring Around	1502	4.1	6.9
Trojan	T1230	5.3	6.6
Trojan	TX5115A	1.0	4.7
USS	1515	5.7	2.5

Table 33. Characteristics of Corn Hybrids Tested One Year at Crossville in Northern Alabama, 1982

Brand name	Hybrid	Yield per acre[1]	Lodged stalks	Midsilk
		Bu.	Pct.	Days
Ring Around	1604	159	6.1	72
Paymaster	UC7251	159	1.4	69
McCurdy	7676	158	5.4	70
Funk's	8003X	154	1.8	75
Big D	4747	153	5.3	70
Pioneer	3147*	150	4.5	76
Coker	21	150	10.7	72
Funk's	G-4763A	149	4.7	71
Pioneer	3187	148	3.3	71
CNS	5500	148	11.9	72
Jacques	8220	148	6.0	69
CNS	4500	147	4.1	70
Northrup King	PX79	147	.5	71
DeKalb	XL82	146	4.5	72
Trojan	T1240	146	9.0	71
Gold Kist	GK875	143	4.2	72
Northrup King	PX87	143	7.4	72
Golden Harvest	H-2775A	142	9.3	73
O's Gold	6882	142	4.7	69
Funk's	G-4589	142	1.4	70
USS	2020	141	10.1	71
Pioneer	3358	141	2.7	71
Northrup King	PX83	141	10.9	69
Funk's	G-4578	141	1.8	69
Pioneer	3369A*	141	3.4	67
Paymaster	UC9797	139	2.8	74
Gold Kist	GK868	136	8.3	72
Gutwein	2875	134	4.3	72
SS	730	130	3.6	71
Golden Harvest	H-2745	112	7.7	71
Test average.....		144		
L.S.D. (.05).....		13		
C.V. (%).....		6.2		

[1]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

*Check hybrids.

Table 34. Characteristics of Corn Hybrids Tested One Year at the E. V. Smith Research Center in Central Alabama, 1982

Brand name	Hybrid	Yield per acre[1]	Lodged stalks[2]	Midsilk
		Bu.	Pct.	Days
McCurdy	81-37	61	6.3	92
McCurdy	81-7	55	14.8	86
Funk's	8003X	52	15.1	90
Northrup King	PX83	51	31.6	84
Pioneer	3165	50	11.6	90
Funk's	G-4589	48	24.7	85
Big D	6986	47	16.6	84
Funk's	G-4578	41	16.7	85
Funk's	G-4763A	40	9.7	87
Paymaster	UC8951	40	14.2	85
Trojan	T1230	39	10.4	86
CNS	5500	39	20.4	84
Gutwein	2875[2]	39	14.2	83
Pioneer	3369A*	39	22.9	85
Gold Kist	GK868	37	13.3	84
O's Gold	6882	37	13.9	85
DeKalb	EX7979	36	3.5	87
Golden Harvest	H-2680	35	18.5	87
Pioneer	3147*	34	11.7	88
Trojan	T1240	33	8.6	84
DeKalb	19511	32	28.6	91
CNS	4500	32	19.5	82
Paymaster	12052A	32	7.3	92
Northrup King	PX79	32	9.3	86
Gold Kist	GK875	32	16.5	85
Golden Harvest	H-2686A	30	26.1	88
SS	730	30	7.4	85
Coker	77B	28	16.1	89
DeKalb	XL80	27	61.8	86
Jacques	JX227	27	10.7	83
Test average.....		38		
L.S.D. (.05).....		10		
C.V. (%).....		19.0		

[1]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

[2]High lodging due to thunderstorm 8/12/82.

*Check hybrids.

Table 35. Characteristics of Corn Hybrids Tested One Year at Fairhope in Southern Alabama, 1982

Brand name	Hybrid	Yield per acre[1]	Lodged stalks	Midsilk
		Bu.	Pct.	Days
McCurdy	81-7	147	15.5	67
Todd	M95	139	25.5	67
Golden Harvest	H-2686A	136	33.2	68
DeKalb	EX7979	134	12.7	65
Pioneer	3147*	131	37.3	70
Trojan	T1240	130	17.3	66
McCurdy	81-37	127	4.1	70
Asgrow	RX777	126	28.2	63
Gold Kist	GK868	123	12.7	67
Gold Kist	GK925	120	23.6	66
Pioneer	3320	119	23.6	66
Funk's	8003X	119	17.3	69
O's Gold	6882	117	9.1	64
Northrup King	PX83	116	46.8	65
Gutwein	2875	116	6.8	66
DeKalb	19511	116	36.8	71
Funk's	G-4589	116	5.9	66
Funk's	G-4578	115	14.1	64
Paymaster	UC9532	114	24.5	68
Jacques	8220	112	16.8	65
Pioneer	3165	111	24.1	67
Jacques	JX180	110	24.1	65
CNS	5500	107	38.2	67
Coker	56	105	18.2	69
Big D	4862	105	20.9	65
Big D	4747	102	27.7	65
CNS	4500	102	21.4	65
Pioneer	3369A*	101	29.1	65
SS	730	100	10.9	66
USS	1515	77	5.9	64
Test average		116		
L.S.D. (.05)		20		
C.V. (%)		12.3		

[1]Yield adjusted to 15.5 percent moisture and 56 pounds per bushel.

*Check hybrids.

SOURCES OF 1982 CORN HYBRID TEST SEED

Seed Company	Brand	Seed Company	Brand
Asgrow Seed Co. Dept. 9637, Building 190-1 Kalmazoo, MI 49001	Asgrow	Northrup King Seed Co. P. O. Box 151 Columbus, MS 39701	Northrup King
Big D Seed Comp. Catlin, IL 61817	Big D	O's Gold Seed Co. P. O. Box 460 Parkersburg, IA 50665	O's Gold
Chem-nut, Inc. P. O. Box 3706 Albany, GA 31706	CNS	Paymaster Seeds P. O. Box 1630 Plainview, TX 79072	Paymaster
Coker's Pedigreed Seed Co. P. O. Box 340 Hartsville, SC 29550	Coker	Pfizer Genetics P. O. Box 367 Windfall, IN 46076	Trojan
Columbiana Seed Co. Elred, IL 62027	Golden Harvest	Pioneer Hi-Bred Int. 1000 W. Jefferson Tipton, IN 46072	Pioneer
DeKalb Ag. Research Inc. Route 2, Box 135 Leesburg, GA 31763	DeKalb	Ring Around Products, Inc. P. O. Box 589 Montgomery, AL 36101	Ring Around
Fred Gutwein and Sons, Inc. Franceville, IN 47946	Gutwein	Todd Hybrid Sales Inc. P. O. Box 66 Abbott's Town, PA 17301	Todd
Funk's Seed International Louisiana Seed Co. P. O. Box 7498 Alexandria, LA 71306	Funk's	USS AG. CHEM. P. O. Box 1685 Atlanta, GA 30301	USS
Gold Kist, Inc. P. O. Box 2210 Atlanta, GA 30301	Gold Kist	W. O. McCurdy and Son Fremont, IA 52561	McCurdy
Jacques Seed Co. Prescott, WI 54021	Jacques		

ACCEPTABLE HYBRIDS FOR 1983

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 midsilk data in tables 4, 8, and 12. 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 three-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
Gutwein	62	Pioneer	3320	Ring Around	1502	Pioneer	3147
McCurdy	84AA	Pioneer	3369A	McCurdy	84AA	Ring Around	1502
Funk's	G-4507A	Ring Around	1502	Paymaster	UC8951	Funk's	G-4740A
Funk's	G4740A	McCurdy	84AA	Pioneer	3147	Pioneer	3160
Ring Around	1502	Funk's	G-4507A	Coker	19A	Funk's	G-4507A
Trojan	TXS 115A	Jacques	JX180	Pioneer	3368A	Golden Harvest	H-2660W
McCurdy	7787	USS	1515	Gutwein	2910	Funk's	G-795W-1
Pioneer	3320	Funk's	G-4740A	Pioneer	3369A	Pioneer	3369A
Pioneer	3147	Ring Around	1501	Ring Around	1501	DeKalb	XL 72BB
Coker	19	McCurdy	7787	Funk's	G-4507A	DeKalb	XL 72B
Coker	19A	Pioneer	3368A	Northrup King	PX95		
Pioneer	3369A	Gutwein	2910	*Golden Harvest	H-2500		
USS	1515	*Funk's	G-4606-1	*Funk's	G-4606-1		
Paymaster	UC8951	*Pioneer	3147	*Coker	22		
Ring Around	1501	*Coker	16	*DeKalb	XL80		
DeKalb	XL 72B			*Pioneer	3030		
Funk's	G-4611						
Gutwein	2910						
Coker	16						
Pioneer	3184						
Funk's	G-4606-1						

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

Information contained herein is available to all persons regardless of race, color, sex, or national origin.