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Performance of Corn Hybrids in Alabama, 1984

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PERFORMANCE OF CORN HYBRIDS

IN ALABAMA, 1984

by

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PERFORMANCE OF CORN HYBRIDS IN ALABAMA, 1984

W. C. Johnson and Darrell Williams¹

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 northern, 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 in the regular corn test the following year. White and early 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 to 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

¹Respectively, Professor and Research Associate of 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. Grain and husk quality ratings are given as a regional average of the 1984 tests. The ratings were based on a 1 = excellent to a 5 = very poor system.

The corn hybrid tests are examined for disease incidence each year by R.T. Gudauskas, Professor 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 1984 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 committee comprised of Department of Agronomy and Soils and Alabama Cooperative Extension Service personnel involved in corn research reviewed the past 3 years of corn hybrid test data to assemble the list of acceptable hybrids on page 26.

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 - W.B. Gordon

Southern Alabama

Brewton Experiment Field - J. R. Akridge

Monroeville Experiment Field - J. R. Akridge

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, Professor of Botany, Plant Pathology, and Microbiology, for making virus ratings and the virus disease reactions in this report, and Mrs. Linda Bankston, Department of Agronomy and Soils, for the coordination of this report.

Table 1. Locations and Cultural Practices for the 1984 Corn Hybrid Tests

Location	Planting date	Nitrogen ¹ rate	Plant population	Date harvested	Herbicides used
<u>Northern Alabama</u>					
Tennessee Valley Substation (Belle Mina)	April 6	135	20,000	Sept. 9	Atrazine
Sand Mountain Substation (Crossville)					
Regular test	April 13	160	20,000	Sept. 14	Atrazine
Preliminary test	April 13	160	20,000	Sept. 18	Atrazine
White corn test	April 13	160	20,000	Sept. 26	Atrazine
Early corn hybrid	April 13	160	20,000	Sept. 11	Atrazine
Upper Coastal Plain Substation (Winfield)	April 11	160	20,000	Sept. 7	Atrazine
<u>Central Alabama</u>					
E. V. Smith Research Center (Shorter)					
Early corn hybrid	April 20	150	20,000	Aug. 29	Atrazine + Dual
White corn test	April 20	150	20,000	Aug. 27	Atrazine + Dual
Plant Breeding Unit (Tallassee)	April 10	150	20,000	Aug. 28	Atrazine
Prattville Experiment Field	March 15	120	20,000	Aug. 24	Atrazine
Black Belt Substation (Marion Junction)	March 14	120	20,000	Aug. 28	Atrazine
Lower Coastal Plain Substation (Camden)	March 15	120	20,000	Aug. 30	Atrazine
<u>Southern Alabama</u>					
Brewton Experiment Field	March 14	170	20,000	Aug. 29	Atrazine
Monroeville Experiment Field	March 15	120	20,000	Sept. 7	Atrazine
Wiregrass Substation (Headland)					
Regular test (unirrigated)	April 12	150	20,000	Aug. 28	Atrazine
Regular test (irrigated)	April 12	200	26,000	Sept. 5	
White corn test (irrigated)	April 12	200	26,000	Sept. 5	Atrazine
Gulf Coast Substation (Fairhope)					
Regular test	March 26	125	20,000	Aug. 22	Atrazine + Lasso + Bladex
Preliminary test	March 26	125	20,000	Aug. 22	Atrazine + Lasso + Bladex
Early corn hybrid	March 2	125	20,000	July 26	Atrazine + Lasso + Paraquat

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

TABLE 2. TWO AND THREE YEAR YIELD AND LODGING AVERAGES FOR NORTHERN ALABAMA, 1982-84¹

BRAND NAME-HYBRID	YIELD PER ACRE AV.		LODGED STALKS AV.	
	3-YR.	2-YR.	3-YR.	2-YR.
	1982-84	1983-84	1982-84	1983-84
	BU.	BU.	PCT.	PCT.
PIONEER 3147	115	110	3.3	4.3
PIONEER 3320	113	109	2.8	3.5
JACQUES JX 180	113	112	4.4	5.7
DEKALB TX5 115A	111	111	3.8	5.2
RING ARCUNO 1502	111	107	1.8	2.0
DEKALB T 1230	110	108	2.9	3.8
JACQUES JX 247	110	108	4.1	3.5
MCCURDY 84AA	109	109	3.3	3.3
FUNKS G-4507A	109	106	4.3	6.0
FUNKS G-4740A	108	102	1.6	2.0
PIONEER 3369A	108	105	5.3	6.7
FUNKS G-4522	108	103	3.1	3.3
FUNKS G-4733	107	104	2.6	3.3
COKER 19	107	107	2.4	3.0
PAYMASTER 8951	107	102	3.2	3.8
COKER 19A	106	104	2.2	2.3
FUNKS G-4611	106	105	3.9	4.7
NORTHRUP KING PX 95	103	97	6.1	8.5
PIONEER 3187	-	108	-	4.5
P-A-G SX 351	-	106	-	4.3
MCCURDY 8150	-	106	-	4.2
RING AROUND 1604	-	106	-	3.3
NORTHRUP KING PX 87	-	104	-	5.3
COKER 21	-	102	-	4.7
NORTHRUP KING PX 79	-	101	-	4.8
AGRATECH 875	-	99	-	5.0

¹BELLE MINA, CROSSVILLE, AND WINFIELD

TABLE 3. 1984 YIELD OF CORN HYBRIDS BY LOCATION AND REGIONAL AVERAGES OF HYBRID CHARACTERISTICS
IN NORTHERN ALABAMA

BRAND NAME-HYBRID	1984 REGIONAL AVERAGES								
	BELLE MINA	CROSSVILLE	WINFIELD	YIELD	LODGED	TEST	MID-	HUSK*	GRAIN*
	BU.	BU.	BU.	PER ACRE	STALKS	WEIGHT	SILK	RATING	RATING
PIONEER 3165	165	166	85	138.	1.0	56.1	7-1	2	2
PIONEER 3147	170	152	81	134	1.0	52.9	7-4	2	3
PIONEER 3320	156	164	73	131	2.0	57.1	6-29	2	2
JACQUES JX 247	162	153	74	130	1.7	55.1	7-2	2	2
DEKALB T 1230	167	145	67	126	1.3	55.5	6-30	3	2
Q'S GOLD 2570	162	142	75	126	1.7	55.1	6-29	2	2
RING AROUND 1604	159	153	61	124	1.0	54.6	7-1	2	2
JACQUES 8400	142	152	75	123	1.3	57.5	7-1	3	2
NORTHRUP KING PX 9581	151	149	69	123	1.0	55.4	6-29	2	2
Q'S GOLD 5509	148	155	64	122	1.3	55.8	6-30	2	2
MCCURDY 8150	151	150	66	122	2.0	55.9	6-30	2	2
JACQUES JX 180	155	143	68	122	2.0	55.2	6-29	2	2
MCCURDY 84AA	157	146	62	122	2.3	56.4	6-29	3	3
FUNKS G-4733	151	145	68	121	0.3	56.0	7-2	2	2
COKER 21	163	145	56	121	1.7	54.2	7-1	2	2
PAYMASTER 8990	147	150	66	121	1.7	56.0	6-30	2	2
GOLDEN HARVEST H-2675	148	144	70	121	1.7	55.8	6-29	2	2
PIONEER 3369A	153	144	64	120	1.7	55.8	6-28	2	2
RING AROUND 1502	156	141	63	120	1.3	55.6	6-29	2	2
NORTHRUP KING PX 87	141	158	60	119	2.0	55.2	6-30	2	2
NORTHRUP KING PX 95	145	153	60	119	1.0	55.6	7-1	2	3
DEKALB TX5 115A	149	145	63	119	1.0	55.6	6-29	2	2
PIONEER 3187	153	129	73	118	1.3	55.8	7-2	2	2
FFR 848C	136	138	80	118	1.3	56.1	7-3	2	2
NORTHRUP KING PX 79	142	148	63	117	0.7	57.0	6-30	3	3
FUNKS G-4507A	147	141	63	117	2.0	55.0	6-29	2	2
FUNKS G-4611	149	142	59	117	3.0	56.0	6-30	3	2
FUNKS G-4740A	144	142	64	117	0.7	55.6	7-4	3	2
FUNKS G-4522	152	139	59	117	1.7	56.7	6-29	2	2
DEKALB DK 747	144	143	61	116	0.7	54.4	7-3	2	3
PAYMASTER 8951	145	146	56	116	3.3	55.8	6-30	3	2
P-A-G SX 351	145	146	56	116	1.7	53.4	6-30	3	2
COKER 19	151	140	55	115	2.0	55.2	6-28	3	3
COKER 19A	157	133	51	113	0.7	54.1	6-30	2	2
FFR 955C	144	132	62	113	2.0	56.1	7-5	2	3
RING AROUND 1505	145	141	51	112	1.0	53.4	6-30	3	2
ASGROW RX 777	135	135	66	112	1.0	58.3	6-28	2	2
AGRATECH 875	132	129	63	108	2.3	54.8	7-1	2	2
ZIMMERMAN Z 11 W	138	139	45	107	1.3	55.6	7-4	2	2
DEKALB DK 556	113	122	62	99	0.7	57.7	6-27	3	2
TEST AVERAGE	149.2	144.3	64.3						
L.S.D. (.05)	16.0	12.6	12.7						
C.V. (%)	7.0	6.2	12.9						

* 1= EXCELLENT; 5= VERY POOR

TABLE 4. TWO AND THREE YEAR YIELD AND LODGING AVERAGES FOR CENTRAL ALABAMA, 1982-84¹

BRAND NAME-HYBRID	YIELD PER ACRE AV.		LODGED STALKS AV.	
	3-YR.	2-YR.	3-YR.	2-YR.
	1982-84	1983-84	1982-84	1983-84
	BU.	BU.	PCT.	PCT.
PIONEER 3320	107	108	2.0	2.0
NORTHRUP KING PX 87	102	105	3.3	4.3
MCCURDY 84AA	100	99	3.5	3.5
MCCURDY 8150	100	101	1.3	1.5
JACQUES JX 180	99	100	2.5	3.0
JACQUES JX 247	99	99	3.0	2.5
RING AROUND 1604	98	95	3.2	2.8
COKER 21	98	99	3.0	2.5
PIONEER 3147	97	99	4.3	5.0
FUNKS G-4740A	96	93	2.8	3.3
DEKALB TX5 115A	96	95	1.5	1.0
RING AROUND 1502	95	93	1.7	1.5
COKER 19A	95	94	1.8	1.8
PIONEER 3369A	94	92	2.2	2.3
FUNKS G-4733	94	93	0.8	0.5
FUNKS G-4522	94	91	2.2	2.0
FUNKS G-4507A	93	90	4.3	2.3
GOLDEN HARVEST H-2775A	85	81	3.2	2.8
GOLDEN HARVEST H-2680	-	98	-	1.8
PIONEER 3165	-	97	-	5.0
NORTHRUP KING PX 95	-	95	-	3.5
PAYMASTER 8951	-	94	-	1.8
AGRATECH 868	-	87	-	2.3

PRATTVILLE, CAMDEN

TABLE 5. 1984 YIELD OF CORN HYBRIDS BY LOCATION AND REGIONAL AVERAGES OF HYBRID CHARACTERISTICS IN CENTRAL ALABAMA

BRAND NAME-HYBRID	1984 REGIONAL AVERAGES		YIELD PER ACRE	LODGED STALKS	TEST WEIGHT	MID- SILK	HUSK* RATING	GRAIN* RATING
	PRATTVILLE	CAMDEN						
	BU.	BU.	BU.	PCI.	LB./BU.	MO./DA.		
PIONEER 3320	101	103	102	4.0	57.8	6-4	1	1
PIONEER 3147	100	97	99	6.0	52.6	6-11	2	2
JACQUES 8400	95	102	98	1.5	59.6	6-6	2	1
NORTHRUP KING PX 87	77	118	97	3.5	58.1	6-7	2	2
DEKALB TX5 115A	89	101	95	0.0	54.6	6-5	2	2
JACQUES JX 180	89	99	94	3.0	53.8	6-5	2	2
P-A-G SX 351	82	105	93	2.0	53.9	6-4	2	2
D'S GOLD 2570	86	101	93	4.5	55.8	6-4	2	2
GOLDEN HARVEST H-2675	79	102	90	2.5	56.1	6-3	2	2
MCCURDY 8150	84	93	88	2.0	58.4	6-7	1	2
COKER 19A	80	96	88	1.5	54.7	6-5	2	2
PIONEER 3165	96	79	88	9.0	58.4	6-8	2	1
PAYMASTER 8951	83	92	87	2.5	58.3	6-4	2	2
FUNKS G-4740A	89	86	87	5.5	55.5	6-9	2	2
PIONEER 3369A	87	88	87	3.5	56.2	6-3	2	2
GOLDEN HARVEST H-2680	80	94	87	2.5	57.2	6-8	2	2
AGRATECH 868	80	94	87	2.5	57.2	6-5	2	2
RING ARROUND 1502	83	91	87	3.0	56.9	6-4	2	1
DEKALB T 1230	78	95	87	2.0	57.8	6-6	2	2
NORTHRUP KING PX 9581	79	94	86	5.5	56.4	6-3	1	2
NORTHRUP KING PX 79	88	84	86	2.0	56.2	6-5	2	2
MCCURDY 8172	88	84	86	2.0	58.9	6-8	1	1
MCCURDY 84AA	85	85	85	5.0	57.7	6-4	2	2
PAYMASTER 8990	87	81	84	2.0	58.2	6-7	2	1
D'S GOLD 5509	80	88	84	4.0	57.8	6-8	2	2
NORTHRUP KING PX 95	78	87	82	5.0	57.4	6-7	1	2
RING ARROUND 1505	81	84	82	3.0	53.2	6-6	2	2
FUNKS G-4507A	83	80	82	1.5	53.4	6-5	2	2
FFR 848C	90	73	81	2.0	55.8	6-6	2	2
JACQUES JX 247	79	83	81	3.0	58.1	6-7	2	2
COKER 21	80	82	81	3.0	56.5	6-8	2	2
FFR 955C	86	75	81	5.5	57.6	6-8	2	1
FUNKS G-4522	88	73	80	3.0	56.1	6-5	1	1
FUNKS G-4733	75	81	78	1.0	58.0	6-7	2	1
RING ARROUND 1604	79	73	76	3.5	57.2	6-7	2	2
DEKALB DK 747	76	72	74	0.5	56.5	6-10	1	2
GOLDEN HARVEST H-2775A	72	74	73	4.5	57.1	6-7	2	2
ZIMMERMAN Z 11 W	65	71	68	6.0	58.8	6-9	1	1
PAYMASTER 90015	65	70	67	6.0	55.6	6-13	1	2
DEKALB DK 556	74	55	64	4.0	55.3	6-3	2	2
TEST AVERAGE	82.8	86.9						
L.S.D. (.05)	9.6	27.0						
C.V. (3)	9.5	14.2						

*1= EXCELLENT; 5= VERY POOR

TABLE 6. TWO AND THREE YEAR YIELD AND LODGING AVERAGES FOR SOUTHERN ALABAMA, 1982-84¹

BRAND NAME-HYBRID	YIELD PER ACRE AV.		LODGED STALKS AV.	
	3-YR.	2-YR.	3-YR.	2-YR.
	1982-84	1983-84	1982-84	1983-84
	BU.	BU.	PCI.	PCI.
RING AROUND 1604	113	113	2.8	1.1
DEKALB T 1230	113	119	2.4	0.9
MCCURDY 8150	111	113	2.4	0.9
PIONEER 3147	111	115	4.8	1.9
COKER 21	109	113	3.0	1.5
JACQUES JX 247	108	112	3.1	1.1
GOLDEN HARVEST H-2680	107	111	4.0	1.3
NORTHRUP KING PX 95	106	110	3.1	1.4
PIONEER 3369A	104	104	3.3	0.6
NORTHRUP KING PX 87	104	106	3.6	1.4
MCCURDY 84AA	104	101	4.3	2.9
PAYMASTER 8951	103	100	3.2	1.3
FUNKS G-4733	101	102	1.9	0.4
DEKALB TX5 115A	101	103	2.3	1.1
RING AROUND 1502	100	97	2.0	0.8
FUNKS G-4507A	100	103	3.7	1.4
COKER 22	100	106	2.3	0.5
GOLDEN HARVEST H-2775A	99	99	4.1	2.0
FUNKS G-4522	99	100	3.8	1.4
COKER 19A	99	99	3.3	1.3
MCCURDY 8172	-	121	-	2.1
PIONEER 3165	-	115	-	1.3
AGRATECH 868	-	102	-	0.8
P-A-G SX 351	-	102	-	1.4
FUNKS G-4740A	-	101	-	1.0
GOLDEN HARVEST H-2686	-	97	-	1.0

¹FAIRHOPE, BREWTON, MONROEVILLE, HEADLAND

TABLE 7. 1984 YIELD OF CORN HYBRIDS BY LOCATION AND REGIONAL AVERAGES OF HYBRID CHARACTERISTICS
IN SOUTHERN ALABAMA

BRAND NAME-HYBRID	1984 REGIONAL AVERAGES					1984 REGIONAL AVERAGES					
	FAIRHOPE	BEECHTON	MONROEVILLE	HEADLAND	YIELD	LOGGED	TEST	MID-	HUSK*	GRAIN*	
	BU.	BU.	BU.	BU.	PER ACRE	STALKS	WEIGHT	SILK	RATING	RATING	
PAYMASTER 90015	98	130	145	91	116	1.3	56.6	6-13	1	2	
PIONEER 3165	96	147	102	112	114	1.0	58.1	6-9	2	2	
DEKALB T 1230	116	135	112	92	114	1.5	57.3	6-7	2	2	
GOLDEN HARVEST H-2680	105	132	115	94	111	1.8	57.5	6-7	2	2	
MCCURDY 8172	115	118	114	99	111	3.5	57.1	6-9	2	2	
PIONEER 3320	103	133	99	102	109	0.8	57.7	6-6	2	2	
MCCURDY 8150	111	119	111	96	109	1.0	58.0	6-7	2	2	
G'S GOLD 5509	109	106	123	97	109	1.0	56.6	6-7	3	2	
PIONEER 3147	112	128	106	85	108	2.3	54.6	6-10	3	3	
PIONEER 3187	97	120	111	100	107	0.3	56.8	6-6	2	2	
NORTHRUP KING PX 95	109	134	96	86	106	0.8	56.8	6-8	2	2	
FFR 955C	90	121	127	84	105	5.3	57.1	6-11	2	2	
RING AROUND 1604	92	134	108	87	105	1.8	57.3	6-8	3	2	
DEKALB DK 747	122	103	111	86	105	0.8	56.7	6-9	2	2	
FUNKS G-4740A	89	128	117	86	105	1.0	57.3	6-10	3	3	
PIONEER 3369A	112	104	112	89	104	1.0	55.8	6-2	3	2	
COKER 21	102	113	118	81	104	2.3	56.5	6-8	3	2	
DEKALB TX5 115A	110	103	114	86	103	1.3	52.9	6-5	3	2	
FUNKS G-4507A	102	102	118	96	102	2.5	53.5	6-5	2	3	
FFR 848C	95	121	106	86	102	2.5	54.8	6-8	2	2	
RING AROUND 1505	103	99	107	99	102	1.5	53.3	6-7	3	3	
FUNKS G-4522	112	123	104	68	102	2.0	56.0	6-6	3	2	
AGRATECH 868	106	111	116	70	101	1.3	56.6	6-6	2	2	
FUNKS G-4733	105	115	99	81	100	0.5	58.3	6-8	2	2	
PAYMASTER 8951	102	101	114	77	99	1.5	57.8	6-6	2	2	
P-A-G SX 351	97	91	124	81	98	2.5	53.8	6-5	3	2	
MCCURDY 844A	104	101	98	89	98	4.0	56.9	6-6	2	2	
JACQUES JX 247	98	108	111	75	98	1.5	57.4	6-7	2	2	
GOLDEN HARVEST H-2775A	90	102	113	84	97	3.3	56.9	6-8	3	3	
GOLDEN HARVEST H-2675	102	100	103	80	96	0.8	57.1	6-4	2	2	
COKER 22	97	97	109	81	96	0.8	56.4	6-7	3	2	
NORTHRUP KING PX 87	78	120	111	73	95	2.3	57.7	6-8	3	2	
JACQUES 8400	103	84	105	87	95	1.0	58.4	6-8	3	2	
RING AROUND 1502	107	81	108	81	94	1.3	56.0	6-6	3	2	
GOLDEN HARVEST H-2686	113	85	106	64	92	1.0	57.0	6-7	3	3	
COKER 19A	98	81	108	77	91	1.8	54.6	6-6	3	3	
ZIMMERMAN 7 11 W	89	85	109	75	89	5.5	57.9	6-9	2	2	
DEKALB DK 556	89	69	83	38	82	0.3	56.5	6-2	3	2	
TEST AVERAGE	102.0	110.0	110.3	85.5							
L.S.D. (.05)	18.4	26.6	13.4	12.3							
C.V. (%)	2.0	16.6	2.1	11.6							

*1= EXCELLENT; 5= VERY POOR

TABLE 8. BLACK BELT CORN HYBRID / VIRUS TEST 1982-84¹

BRAND NAME-HYBRID	YIELD PER ACRE AV.			LOGGED STALKS AV.			1984			
	3-YR.	2-YR.	1984	3-YR.	2-YR.	1984	MIDSILK	TFST	HUSK*	GRAIN*
	1982-84	1983-84	1984	1982-84	1983-84	1984	MO./DA.	WEIGHT	RATING	RATING
	BU.	BU.	RU.	PCT.	PCT.	PCT.		LB./BU.		
PIONEER 3147	156	148	145	1.0	0.5	0.0	6-15	55.4	3	1
NORTHROP KING PX 95	152	136	122	1.0	1.0	0.0	6-12	57.2	2	1
MCCURDY 84AA	146	130	136	0.7	0.5	0.0	6-11	59.4	3	1
FUNKS G-4733	145	130	122	0.0	0.0	0.0	6-11	59.4	3	1
DEKALB T 1230	142	133	129	0.7	0.5	0.0	6-12	60.1	2	1
PIONEER 3187	140	127	118	1.0	1.0	1.0	6-12	57.4	1	1
FUNKS G-4747W	140	130	129	0.7	0.5	0.0	6-14	58.6	2	2
PING AROUND 1502	138	121	128	0.3	0.5	0.0	6-10	58.8	2	2
AGRATECH 875	137	123	113	1.0	1.0	1.0	6-12	57.1	2	2
GOLDEN HARVEST H-2660W	134	123	124	0.7	0.5	0.0	6-13	59.1	1	2
PIONEER 3369A	129	118	108	0.7	0.5	0.0	6-9	57.4	5	2
ZIMMERMAN Z 11 W	-	146	135	-	1.0	1.0	6-13	58.7	2	2
PING AROUND 1604	-	141	132	-	0.5	0.0	6-13	60.3	2	1
JACQUES 8400	-	134	129	-	1.0	1.0	6-11	61.3	5	2
MCCURDY 82-21	-	128	113	-	0.0	0.0	6-14	59.4	3	1
FFR 929W	-	127	106	-	0.5	0.0	6-15	58.9	2	2
NORTHROP KING PX 79	-	124	125	-	0.5	0.0	6-11	57.6	3	1
FFR 848C	-	123	104	-	0.5	0.0	6-12	56.9	2	2
JACQUES JX 247	-	115	118	-	0.0	0.0	6-13	60.2	4	2
SUNBELT 1860	-	-	149	-	-	0.0	6-14	58.8	2	1
O'S GOLD 5509	-	-	140	-	-	0.0	6-13	59.8	2	1
FUNKS G-4858	-	-	138	-	-	1.0	6-15	56.8	3	2
FFR 955C	-	-	137	-	-	1.0	6-14	58.3	3	1
SUNBELT 1880	-	-	135	-	-	0.0	6-15	54.2	2	1
MCNAIR 508	-	-	135	-	-	0.0	6-22	57.6	2	1
NORTHROP KING PX 87	-	-	131	-	-	0.0	6-12	60.0	2	1
FUNKS G-4765	-	-	124	-	-	0.0	6-13	58.5	3	2
DEKALB XL-728	-	-	124	-	-	0.0	6-12	55.9	5	1
COKER 21	-	-	124	-	-	0.0	6-14	59.5	2	1
O'S GOLD 2570	-	-	123	-	-	0.0	6-10	56.9	2	2
MCCURDY X279	-	-	120	-	-	0.0	6-13	59.6	2	1
STAUFFER S 8445	-	-	117	-	-	1.0	6-13	57.2	2	1
COKER 56	-	-	113	-	-	0.0	6-15	59.4	3	1
ZIMMERMAN Z 60 W	-	-	113	-	-	0.0	6-13	56.7	1	2
AGRATECH 927W	-	-	109	-	-	0.0	6-16	58.3	2	3
TEST AVERAGE			124.7							
L.S.D. (.05)			18.9							
C.V. (%)			8.9							

¹ MARION JUNCTION, ALABAMA. SEE TABLE 9 FOR VIRUS DISEASE REACTIONS.

* 1= EXCELLENT; 5= VERY POOR

VIRAL DISEASE REACTIONS OF SOME HYBRIDS IN 1984²

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

²Prepared by Robert T. Gudauskas, Professor of Botany, Plant Pathology, and Microbiology.

to the diseases. Results of evaluations of some commercial hybrids during 1984 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 9, incidence of MDM ranged from 0 to 28.2 percent among hybrids and averaged 4.8 percent for the entire test; incidence of MCD ranged from 0 to 20.8 percent and averaged 8.1 percent for the test. DeKalb brand XL-72B showed no symptoms of either disease, and incidence of either disease was less than 5 percent in at least 27 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 the considerations of yield and other characteristics given elsewhere in this report.

TABLE 11. WHITE CORN HYBRID TEST, NORTHERN ALABAMA, 1982-84¹

BRAND NAME-HYBRID	YIELD PER ACRE AV.			LODGED STALKS AV.			1984			
	3-YR.	2-YR.	1984	3-YR.	2-YR.	1984	TEST			
	1982-84	1983-84	1984	1982-84	1983-84	1984	MIDSILK	WEIGHT	HUSK*	GRAIN*
	BU.	BU.	BU.	PCT.	PCT.	PCT.	MO./DA.	LB./BU.	RATING	RATING
RING AROUND 1502†	115	103	123	3.0	4.0	3.0	7-6	57.1	2	2
PIONEER 3147†	113	104	131	3.3	4.5	2.0	7-6	57.0	2	2
GOLDEN HARVEST H-2660W	107	100	138	3.7	4.5	2.0	7-6	57.1	2	2
FUNKS G-4779W	106	100	133	3.0	3.5	0.0	7-8	57.2	2	2
RING AROUND 3605W	106	98	129	4.3	5.0	4.0	7-6	58.4	2	2
PIONEER 519	104	91	125	3.7	5.0	1.0	7-8	58.1	2	2
FUNKS G-4747W	100	94	125	2.3	2.5	1.0	7-9	56.3	2	2
FFR 929W	-	104	140	-	3.5	2.0	7-8	57.8	2	2
ZIMMERMAN Z 52 W	-	104	140	-	4.5	2.0	7-7	56.5	2	2
RING AROUND 2606W	-	104	135	-	7.5	1.0	7-4	57.9	2	2
COKER 833 W	-	103	134	-	6.0	1.0	7-7	58.3	2	2
ASGROW RX 405W	-	98	129	-	10.0	1.0	7-5	57.0	2	2
ZIMMERMAN Z 11 W	-	94	122	-	2.5	1.0	7-9	56.9	2	2
FUNKS G-4787W	-	90	121	-	3.5	1.0	7-7	57.3	2	2
AGRATECH 927W	-	-	143	-	-	2.0	7-7	57.0	2	2
ZIMMERMAN Z 60 W	-	-	127	-	-	1.0	7-6	57.3	2	2
TEST AVERAGE			131.0							
L.S.D. (.05)			17.2							
C.V. (%)			5.3							

1 CROSSVILLE, ALABAMA

*1= EXCELLENT; 5= VERY POOR

† YELLOW CORN CHECK HYBRID

TABLE 10. IRRIGATED CORN HYBRID PERFORMANCE AND CHARACTERISTICS, HEADLAND, ALABAMA, 1982-84

BRAND NAME-HYBRID	YIELD PER ACRE AV.			LODGED STALKS AV.			1984	
	3-YR.	2-YR.	1984	3-YR.	2-YR.	1984	MIDSILK	TFST
	1982-84	1983-84	1984	1982-84	1983-84	1984	MO./DA.	LR./BU.
	RU.	BU.	RU.	PCT.	PCT.	PCT.		
PIONEER 3147	176	164	164	2.3	3.5	6.0	6-16	55.1
DEKALB T 1230	176	168	163	1.0	0.5	0.0	6-15	54.9
MCCURDY 84AA	170	156	155	0.3	0.0	0.0	6-14	57.0
RING AROUND 1604	169	158	146	0.7	0.5	1.0	6-16	55.5
JACQUES JX 247	168	152	147	1.3	1.0	1.0	6-15	55.7
NORTHRUP KING PX 87	163	153	136	0.7	0.5	1.0	6-15	57.2
COKER 21	163	145	141	1.0	1.0	2.0	6-15	57.2
NORTHRUP KING PX 95	161	151	143	2.7	2.0	2.0	6-12	55.5
RING AROUND 1502	160	150	154	0.3	0.0	0.0	6-12	56.9
PAYMASTER 8951	159	142	139	0.7	0.5	1.0	6-14	57.3
MCCURDY 8150	156	147	139	1.3	0.5	0.0	6-14	56.3
FUNKS G-4507A	153	149	148	3.7	1.5	2.0	6-14	52.6
PIONEER 3165	-	162	169	-	0.5	1.0	6-15	57.7
P-A-G SX 351	-	146	141	-	1.0	2.0	6-18	51.8
FUNKS G-4740A	-	136	119	-	0.0	0.0	6-16	57.8
COKER 22	-	-	167	-	-	0.0	6-13	56.2
SUNBELT 1860	-	-	163	-	-	0.0	6-15	57.5
PIONEER 3320	-	-	162	-	-	1.0	6-13	57.3
MCCURDY 8172	-	-	160	-	-	0.0	6-15	57.1
O'S GOLD 5509	-	-	155	-	-	1.0	6-16	55.3
NORTHRUP KING PX 9581	-	-	151	-	-	2.0	6-15	55.8
O'S GOLD 2570	-	-	149	-	-	1.0	6-15	56.2
JACQUES 8400	-	-	147	-	-	0.0	6-14	56.9
PAYMASTER 8990	-	-	143	-	-	0.0	6-16	56.7
STAUFFER S 7759	-	-	137	-	-	2.0	6-13	53.3
ASGROW RX 404	-	-	136	-	-	20.0	6-15	60.1
AGRATECH 3912	-	-	135	-	-	0.0	6-15	53.5
FFR 955C	-	-	134	-	-	4.0	6-14	57.7
DEKALB DK 556	-	-	131	-	-	1.0	6-14	53.5
GOLDEN HARVEST H-2675	-	-	130	-	-	3.0	6-14	55.8
FFR 811C	-	-	129	-	-	0.0	6-14	53.9
FFR 848C	-	-	124	-	-	1.0	6-13	55.0
TEST AVERAGE			145.5					
L.S.D. (.05)			11.0					
C.V. (%)			9.0					

THE TEST RECEIVED APPROXIMATELY 4.5 INCHES OF IRRIGATION WATER IN 4 APPLICATIONS DURING THE MONTH(S) OF May and June.

Table 9. Incidence of Viral Diseases in Regular Corn Hybrid
Test, Marion Junction, July 27, 1984

Brand name-hybrid	Maize chlorotic dwarf	Maize dwarf mosaic
	Pct.	Pct.
Agratech 875	4.6	2.8
Agratech 927W	10.1	4.5
Coker 21	6.2	4.1
Coker 56	8.4	28.2
DeKalb T1230	3.8	4.7
*DeKalb XL-72B	0	0
FFR 848C	17.1	11.6
FFR 929W	20.3	13.5
FFR 955C	13.4	3.0
Funk's G-4733	19.1	2.9
Funk's G-4747W	10.6	9.3
Funk's G-4765	20.8	4.5
Funk's G-4858	0	2.8
GH H-2660W	5.1	4.9
Jacques 8400	4.8	0
Jacques JX247	16.2	4.1
McCurdy 81-21	6.3	10.1
McCurdy 84AA	10.2	3.5
McCurdy X279	8.9	1.1
McNair 508	0	3.1
NK PX79	11.9	1.9
NK PX87	5.2	7.2
NK PX95	3.5	3.7
O's Gold 2570	11.7	0
O's Gold 5509	8.7	2.5
Pioneer 3147	2.7	2.7
Pioneer 3187	15.4	2.8
Pioneer 3369A	3.3	2.3
Ring Around 1502	2.2	2.2
Ring Around 1604	6.4	3.9
Stauffer S 8445	0	3.7
Sunbelt 1860	1.0	1.5
Sunbelt 1880	6.0	7.8
Zimmerman Z11W	3.6	1.8
Zimmerman Z60W	17.8	4.9

TABLE 12. WHITE CORN HYBRID TEST, CENTRAL ALABAMA, 1982-84¹

BRAND NAME-HYBRID	YIELD PER ACRE AV.			LODGED STALKS AV.			1984			
	3-YR.	2-YR.		3-YR.	2-YR.		TEST			
	1982-84	1983-84	1984	1982-84	1983-84	1984	MIDSILK	WEIGHT	HUSK*	GRAIN*
	BU _a	BU _a	BU _a	PCT _a	PCT _a	PCT _a	MO _a /DA _a	LB _a /BU _a	RATING	RATING
RING AROUND 1502†	79	89	95	5.0	1.0	0.0	7-8	-	3	3
PIONEER 3147†	79	93	100	2.7	2.0	1.0	7-8	-	3	3
RING AROUND 3605W	71	88	98	15.7	2.0	0.0	7-10	-	3	3
PIONEER 519	67	77	85	8.0	3.5	0.0	7-9	-	3	3
FUNKS G-4779W	62	77	86	5.0	0.0	0.0	7-11	-	2	3
GOLDEN HARVEST H-2660W	61	72	74	7.7	4.5	2.0	7-8	-	2	3
FUNKS G-4747W	59	75	81	4.3	0.5	0.0	7-10	-	3	3
RING AROUND 2606W	-	89	91	-	1.0	0.0	7-9	-	3	3
FFR 929W	-	87	99	-	2.5	0.0	7-10	-	2	3
COKER 833 W	-	87	91	-	0.5	0.0	7-10	-	3	3
ZIMMERMAN Z 52 W	-	86	93	-	0.5	0.0	7-11	-	2	3
FUNKS G-4787W	-	82	93	-	1.5	0.0	7-13	-	3	3
ASGROW RX 405W	-	82	98	-	4.0	0.0	7-11	-	2	3
ZIMMERMAN Z 11 W	-	76	79	-	2.5	0.0	7-9	-	3	3
ZIMMERMAN Z 60 W	-	-	96	-	-	0.0	7-10	-	2	2
AGRATECH 927W	-	-	95	-	-	0.0	7-9	-	2	3
TEST AVERAGE			90.7							
L.S.D. (.05)			7.9							
C.V. (%)			8.7							

¹E.V. SMITH RESEARCH CENTER, SHORTER, ALABAMA

*1= EXCELLENT; 5= VERY POOR

†YELLOW CORN CHECK HYBRID

TABLE 13. WHITE CORN HYBRID TEST, SOUTHERN ALABAMA, 1982-84¹

BRAND NAME-HYBRID	YIELD PER ACRE AV.			LODGED STALKS AV.			1984			
	3-YR.	2-YR.	1984	3-YR.	2-YR.	1984	TEST			
	1982-84	1983-84	1984	1982-84	1983-84	1984	MID SILK	WEIGHT	HUSK*	GRAIN*
	BU.	BU.	BU.	PCI.	PCI.	PCI.	MO./DA.	LB./BU.	PATING	RATING
PIONEER 3147 [†]	160	147	167	2.7	1.5	3.0	6-16	55.3	3	3
RING AROUND 1502 [†]	153	139	165	1.7	0.5	1.0	6-16	57.9	3	3
RING AROUND 3605W	140	128	142	3.0	1.0	0.0	6-16	57.8	2	2
FUNKS G-4779W	137	125	140	3.0	1.5	3.0	6-16	57.1	4	2
PIONEER 519	132	116	126	1.7	0.5	1.0	6-17	58.0	2	3
GOLDEN HARVEST H-2660W	126	113	128	3.7	1.5	3.0	6-16	58.9	2	2
FUNKS G-4747W	122	112	123	3.7	0.5	1.0	6-14	59.5	2	2
ZIMMERMAN Z 11 W	-	134	152	-	1.0	0.0	6-14	58.7	3	2
ZIMMERMAN Z 52 W	-	132	144	-	1.5	3.0	6-15	57.7	2	2
ASGROW RX 405W	-	127	142	-	2.5	4.0	6-15	60.5	2	2
FFR 929W	-	125	139	-	2.0	4.0	6-16	57.4	2	2
COKER 833 W	-	123	134	-	0.5	1.0	6-13	54.9	3	3
RING AROUND 2606W	-	120	127	-	1.5	3.0	6-16	60.1	3	2
FUNKS G-4787W	-	115	127	-	0.5	1.0	6-17	57.3	1	2
AGRATECH 927W	-	-	141	-	-	2.0	6-13	57.9	3	2
ZIMMERMAN Z 60 W	-	-	128	-	-	2.0	6-14	56.1	2	2
TEST AVERAGE			138.8							
L.S.D. (.05)			26.5							
C.V. (%)			9.6							

¹HEADLAND, ALABAMA

THE TEST RECEIVED APPROXIMATELY 4.5 INCHES OF IRRIGATION WATER IN

4 APPLICATIONS DURING THE MONTH(S) OF May and June

*1= EXCELLENT; 5= VERY POOR

[†]YELLOW CORN CHECK HYBRID

TABLE 14. EARLY CORN HYBRID TEST, NORTHERN ALABAMA, 1982-84¹

BRAND NAME-HYBRID	YIELD PER ACRE AV.			LOGGED STALKS AV.			1984			
	3-YR.	2-YR.		3-YR.	2-YR.		TEST			
	1982-84	1983-84	1984	1982-84	1983-84	1984	MIDSILK	WEIGHT	HUSK*	GRAIN*
	BU.	BU.	BU.	PCI.	PCI.	PCI.	MO./DA.	LB./BU.	RATING	RATING
RING AROUND 1404	116	108	123	0.3	0.5	1.0	7-1	54.1	3	2
O'S GOLD 2570	-	139	153	-	0.5	1.0	6-30	54.2	2	2
ASGROW RX 777	-	128	143	-	0.0	0.0	6-30	56.8	2	2
JACQUES 7900	-	124	143	-	0.5	1.0	6-29	57.0	3	2
O'S GOLD 6882	-	120	124	-	0.0	0.0	7-1	55.2	3	2
JACQUES 7780	-	116	131	-	0.5	1.0	6-30	53.3	3	2
NORTHRUP KING PX 9527	-	115	131	-	1.0	1.0	6-30	55.3	3	2
NORTHRUP KING PX 79	-	-	159	-	-	0.0	7-2	-	2	2
SUNBELT 1827	-	-	148	-	-	1.0	7-4	50.7	3	2
MCCURDY 7676	-	-	148	-	-	2.0	7-1	53.5	2	2
COKER 8570	-	-	144	-	-	0.0	6-29	57.7	3	2
AGRATECH 850	-	-	143	-	-	2.0	7-2	53.6	2	2
FUNKS G-4522	-	-	142	-	-	0.0	7-2	55.0	2	2
FUNKS EXP 6014	-	-	141	-	-	1.0	7-3	57.0	2	2
AGRATECH 3912	-	-	141	-	-	1.0	6-30	55.9	3	2
NORTHRUP KING PX 9581	-	-	138	-	-	1.0	6-30	54.2	2	2
SUNBELT 1802	-	-	136	-	-	2.0	7-2	53.4	2	2
GOLDEN HARVEST H-2604	-	-	134	-	-	1.0	6-30	54.7	3	2
GOLDEN HARVEST H-2500	-	-	132	-	-	2.0	7-1	54.2	3	2
FUNKS G-4507A	-	-	131	-	-	2.0	7-1	53.9	3	2
FFR 744C	-	-	131	-	-	1.0	6-30	-	3	2
DEKALB T 1100	-	-	125	-	-	0.0	7-1	54.7	3	2
JACQUES 7700	-	-	125	-	-	1.0	6-27	59.2	3	2
COKER 8575	-	-	123	-	-	0.0	7-1	56.2	3	2
DEKALB DK 556	-	-	116	-	-	1.0	6-27	56.9	3	2
TEST AVERAGE			136.2							
L.S.D. (.05)			13.1							
C.V. (%)			7.7							

CROSSVILLE, ALABAMA

*1= EXCELLENT; 5= VERY POOR

TABLE 15. EARLY CORN HYBRID TEST, CENTRAL ALABAMA, 1982-84¹

BRAND NAME-HYBRID	YIELD PER ACRE AV.			LODGED STALKS AV.			1984			
	3-YR.	2-YR.	1984	3-YR.	2-YR.	1984	TEST			
	1982-84	1983-84	1984	1982-84	1983-84	1984	MIDSILK	WEIGHT	HUSK*	GRAIN*
	BU.	BU.	BU.	PCT.	PCT.	PCT.	MO./DA.	LB./BU.	RATING	RATING
RING AROUND 1404	77	103	85	0.3	0.0	0.0	7-11	-	3	3
ASGROW RX 777	-	104	89	-	0.5	0.0	7-11	-	3	3
O'S GOLD 2570	-	100	79	-	0.0	0.0	7-9	-	3	3
O'S GOLD 6882	-	97	81	-	0.0	0.0	7-9	-	3	2
JACQUES 7780	-	93	69	-	0.5	0.0	7-9	-	2	3
NORTHRUP KING PX 9527	-	93	73	-	0.0	0.0	7-10	-	3	3
JACQUES 7900	-	92	76	-	0.5	0.0	7-10	-	3	3
AGPATECH 850	-	-	106	-	-	0.0	7-11	-	3	2
NORTHRUP KING PX 9581	-	-	104	-	-	0.0	7-10	-	3	3
MCCURDY 7676	-	-	96	-	-	0.0	7-10	-	3	3
SUNBELT 1802	-	-	91	-	-	0.0	7-10	-	3	3
NORTHRUP KING PX 79	-	-	91	-	-	0.0	7-10	-	3	3
FUNKS EXP 6014	-	-	90	-	-	0.0	7-11	-	3	3
AGRATECH 3912	-	-	90	-	-	0.0	7-9	-	2	3
FFR 744C	-	-	87	-	-	0.0	7-10	-	2	3
COKER 8575	-	-	86	-	-	0.0	7-11	-	3	3
GOLDEN HARVEST H-2500	-	-	86	-	-	0.0	7-11	-	3	3
GOLDEN HARVEST H-2604	-	-	85	-	-	0.0	7-10	-	3	3
SUNBELT 1827	-	-	84	-	-	0.0	7-11	-	2	3
DEKALB T 1100	-	-	83	-	-	0.0	7-10	-	2	3
FUNKS G-4507A	-	-	80	-	-	0.0	7-10	-	3	2
JACQUES 7700	-	-	79	-	-	0.0	7-10	-	3	2
FUNKS G-4522	-	-	72	-	-	0.0	7-9	-	3	3
TEST AVERAGE			85.2							
L.S.D. (.05)			20.5							
C.V. (%)			10.6							

¹E.V. SMITH RESEARCH CENTER, SHORTER, ALABAMA

*1= EXCELLENT; 5= VERY POOR

TABLE 16. EARLY CORN HYBRID TEST, SOUTHERN ALABAMA, 1982-84¹

BRAND NAME-HYBRID	YIELD PER ACRE AV.			LODGED STALKS AV.			1984			
	3-YR.	2-YR.		3-YR.	2-YR.		TEST			
	1982-84	1983-84	1984	1982-84	1983-84	1984	MIDSILK	WEIGHT	HUSK*	GRAIN*
	BU.	BU.	BU.	PCT.	PCT.	PCT.	MO./DA.	LB./BU.	RATING	RATING
FUNKS EXP 6014	-	-	130	-	-	1.0	-	-	3	2
SUNBELT 1827	-	-	128	-	-	0.0	-	-	3	3
SUNBELT 1802	-	-	126	-	-	0.0	-	-	4	2
FUNKS G-4522	-	-	123	-	-	0.0	-	-	3	2
O'S GOLD 2570	-	-	123	-	-	1.0	-	-	3	3
AGRATECH 850	-	-	120	-	-	0.0	-	-	3	3
NORTHRUP KING PX 9581	-	-	118	-	-	0.0	-	-	3	3
NORTHRUP KING PX 9527	-	-	115	-	-	0.0	-	-	4	3
ASGROW RX 777	-	-	114	-	-	3.0	-	-	4	3
FUNKS G-4507A	-	-	111	-	-	0.0	-	-	3	3
AGRATECH 3912	-	-	110	-	-	0.0	-	-	3	3
JACQUES 7900	-	-	109	-	-	0.0	-	-	3	2
O'S GOLD 6882	-	-	107	-	-	1.0	-	-	4	2
JACQUES 7780	-	-	101	-	-	1.0	-	-	4	3
RING AROUND 1404	-	-	100	-	-	0.0	-	-	4	3
NORTHRUP KING PX 79	-	-	98	-	-	0.0	-	-	3	3
COKER 8575	-	-	98	-	-	0.0	-	-	4	2
GOLDEN HARVEST H-2500	-	-	96	-	-	0.0	-	-	4	3
DEKALB T 1100	-	-	95	-	-	0.0	-	-	4	3
GOLDEN HARVEST H-2483	-	-	81	-	-	0.0	-	-	3	3
JACQUES 7700	-	-	71	-	-	0.0	-	-	4	3
TEST AVERAGE			108.2							
L.S.D. (.05)			16.5							
C.V. (%)			14.3							

¹FAIRHOPE, ALABAMA

*1= EXCELLENT; 5= VERY POOR

REPORT OF PRELIMINARY TESTS
 TABLE 17. CHARACTERISTICS OF CORN HYBRIDS TESTED ONE YEAR AT CROSSVILLE
 IN NORTHERN ALABAMA, 1984

BRAND NAME-HYBRID	YIELD PER ACRE AV.		LODGED STALKS	MIDSILK	TEST WEIGHT
	BU _a	PCI _a	MO _a /DA _a	LB _a /BU _a	
STAUFFER S 8500	160	2.0	7-4	59.2	
PIONEER 3055	151	1.0	7-7	54.8	
PIONEER 3147*	149	5.0	7-8	54.1	
SUNBELT 1827	145	2.0	7-4	56.6	
ZIMMERMAN Z 27 Y	144	2.0	7-6	56.7	
PIONEER 3192	144	1.0	7-3	59.5	
O'S GOLD 2545	144	1.0	7-1	58.0	
STAUFFER S 7759	140	1.0	7-3	57.2	
STAUFFER S 8818	140	2.0	7-4	56.6	
JACQUES 8100	138	2.0	7-1	56.5	
PAYMASTER 7990	138	1.0	7-1	56.4	
AGRATECH 3912	137	2.0	7-2	57.6	
MCCURDY 8155	137	3.0	7-3	57.3	
RING AROUND 1502*	137	2.0	7-3	56.8	
FUNKS G-4669	134	3.0	7-5	56.5	
JACQUES 7900	134	1.0	7-2	57.6	
DEKALB DK 656	134	1.0	7-2	57.4	
FUNKS EXP 6014	133	2.0	7-6	58.3	
ZIMMERMAN Z 28 Y	132	1.0	7-4	57.8	
FFR 744C	132	2.0	7-1	56.4	
SUNBELT 1860	132	1.0	7-8	55.6	
STAUFFER 114+	131	1.0	7-3	58.1	
DEKALB T 1100	130	2.0	7-2	57.0	
AGRATECH 850	128	2.0	7-3	57.0	
P-A-G SX 383	128	2.0	7-4	57.0	
STAUFFER S 8445	127	2.0	7-5	56.3	
FFR 811C	127	2.0	7-1	56.9	
MCCURDY X279	126	3.0	7-5	57.6	
RING AROUND 1502M	125	3.0	7-3	56.7	
FUNKS G-4765	123	1.0	7-7	56.7	
ZIMMERMAN Z 60 W	122	1.0	7-5	54.2	
COKER 8575	121	0.0	7-4	57.2	
P-A-G SX 354	120	4.0	7-3	57.1	
GOLDEN HARVEST H-2604	118	1.0	7-2	57.3	
NORTHRUP KING PX 9692	118	0.0	7-6	55.1	
ASGROW RX 404	117	8.0	7-7	58.2	
COKER 8570	112	1.0	6-30	59.0	
RING AROUND 3507	107	1.0	7-3	57.1	
DEKALB UK 556	104	0.0	6-30	58.1	
TEST AVERAGE	131.1				
L.S.D. (.05)	13.6				
C.V. (%)	9.0				

* CHECK HYBRIDS

REPORT OF PRELIMINARY TESTS
TABLE 18. CHARACTERISTICS OF CORN HYBRIDS TESTED ONE YEAR AT TALLASSEE
IN CENTRAL ALABAMA, 1984

BRAND NAME-HYBRID	YIELD PER ACRE AV.	LODGED STALKS	MIDSILK	TEST WEIGHT
	BU _s	PCT _s	MO _s /DA _s	LB _s /BU _s
SUNBELT 1876	196	-	-	49.2
NORTHROP KING PX 9692	185	-	-	52.0
SUNBELT 1827	178	-	-	53.6
STAUFFER S 7759	178	-	-	56.9
SUNBELT 1860	177	-	-	53.2
PIONEER 3192	176	-	-	58.2
PIONEER 3147*	176	-	-	50.4
ZIMMERMAN Z 27 Y	173	-	-	57.1
MCCURDY 8155	171	-	-	53.9
AGRATECH 850	170	-	-	56.2
P-A-G SX 383	169	-	-	53.7
RING AROUND 1502*	168	-	-	55.0
SUNBELT 1880	168	-	-	59.7
P-A-G SX 354	167	-	-	56.8
FFR 811C	166	-	-	55.0
AGRATECH 3912	166	-	-	58.5
RING AROUND 1502M	165	-	-	55.6
ZIMMERMAN Z 28 Y	163	-	-	56.9
COKER EX 2454	163	-	-	50.4
ZIMMERMAN Z 60 W	162	-	-	53.4
STAUFFER S 8500	161	-	-	58.4
FUNKS G-4669	160	-	-	55.1
FFR 744C	160	-	-	54.8
JACQUES 7900	159	-	-	57.4
COKER 8575	159	-	-	54.7
JACQUES 8100	155	-	-	55.1
MCCURDY X279	154	-	-	55.3
DEKALB DK 656	152	-	-	57.3
FUNKS EXP 6014	151	-	-	56.4
GOLDEN HARVEST H-2604	150	-	-	55.6
O'S GOLD 2545	145	-	-	56.0
JACQUES 1224	145	-	-	52.3
RING AROUND 3507	131	-	-	55.4
TEST AVERAGE	164.1			
L.S.D. (.05)	16.2			
C.V. (%)	7.8			

* CHECK HYBRIDS

REPORT OF PRELIMINARY TESTS
 TABLE 19. CHARACTERISTICS OF CORN HYBRIDS TESTED ONE YEAR AT FAIRHOPE
 IN SOUTHERN ALABAMA, 1984

BRAND NAME-HYBRID	YIELD PER ACRE	LOGGED STALKS	MIDSILK	TEST WEIGHT
	Bu _a	Pct _a	Mo _a /Da _a	Lb _a /Bu _a
RING AROUND 1502 *	108	0.0	6-6	-
PIONEER 3192	107	0.0	6-6	-
ZIMMERMAN Z 28 Y	102	0.0	6-7	-
RING AROUND 1502M	102	1.0	6-4	-
AGRATECH 850	101	0.0	6-5	-
USS 7001	101	3.0	6-5	-
PIONEER 3055	101	1.0	6-8	-
SUNBELT 1827	101	4.0	6-11	-
SUNBELT 1880	97	1.0	6-12	-
FUNKS EXP 6014	96	0.0	6-8	-
PAYMASTER 7990	95	1.0	6-6	-
PIONEER 3147 *	94	4.0	6-10	-
FUNKS G-4734	92	2.0	6-10	-
STAUFFER S 8500	90	1.0	6-7	-
P-A-G SX 383	90	2.0	6-6	-
ZIMMERMAN Z 27 Y	90	3.0	6-9	-
COKER 8575	88	0.0	6-7	-
P-A-G SX 354	88	0.0	6-6	-
FUNKS G-4858	87	0.0	6-12	-
COKER EX 2454	87	1.0	6-12	-
RING AROUND 1502WAXY	86	0.0	6-4	-
SUNBELT 1860	86	1.0	6-11	-
NORTHROP KING PX 9692	86	2.0	6-10	-
STAUFFER S 7759	85	0.0	6-6	-
USS 1218	84	0.0	6-4	-
O'S GOLD 2545	84	2.0	6-6	-
SUNBELT 1876	83	0.0	6-14	-
RING AROUND 3507	82	1.0	6-4	-
FUNKS G-4669	82	3.0	6-9	-
JACQUES 7900	81	1.0	6-4	-
JACQUES 1224	79	2.0	6-11	-
ZIMMERMAN Z 60 W	78	4.0	6-8	-
USS 9001	78	1.0	6-7	-
JACQUES 8100	77	2.0	6-4	-
AGRATECH 3912	77	5.0	6-4	-
GOLDEN HARVEST H-2483	72	1.0	6-3	-
TEST AVERAGE	89.3			
L.S.D. (.05)	16.7			
C.V. (%)	10.4			

* CHECK HYBRIDS

SOURCES OF 1984 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 McNair
Alabama Farmer's Co-op Decatur, AL	FFR	O's Gold Seed Co. P.O. Box 460 Parkersburg, IA 50665	O's Gold
Asgrow Seed Co. Dept. 9637, Building 190-1 Kalamazoo, MI 49001	Asgrow	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	Seed Processors, Inc. Rt. 4, Box 90 Wetumpka, AL 36092	Sunbelt
DeKalb-Pfizer Genetics Sycamore Rd. DeKalb, IL 60115	DeKalb	Stauffer Seeds, Inc. 975 South Durkin Dr. Springfield, IL 62704	Stauffer
Funk's Seed International Louisiana Seed Co. P.O. Box 7498 Alexandria, LA 71306	Funk's	USS Agri-Chemicals 233 Peachtree St. N.E. Atlanta, GA 30301	USS
Jacques Seed Co. Prescott, WI 54021	Jacques	W.O. McCurdy Fremont, IA 52561	McCurdy
		Zimmerman Hybrids, Inc. 5147 West Franklin Road Evansville, IN 47712	Zimmerman

ACCEPTABLE HYBRIDS FOR 1985

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 table 1, 2, and 3. Unless otherwise noted, 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.

<u>Northern Alabama</u>		<u>Central Alabama</u>		<u>Southern Alabama</u>		<u>Black Belt</u>	
<u>Brand name</u>	<u>Hybrid</u>	<u>Brand name</u>	<u>Hybrid</u>	<u>Brand name</u>	<u>Hybrid</u>	<u>Brand name</u>	<u>Hybrid</u>
Pioneer	3147	Pioneer	3320	Ring Around	1604	Pioneer	3147
Pioneer	3320	Northrup King	PX 87	Pioneer	3147	Northrup King	PX 95
Jacques	JX 180	McCurdy	84AA	McCurdy	8150	McCurdy	84AA
DeKalb	TX5 115A	McCurdy	8150	DeKalb	T 1230	Funk's	G-4733
Ring Around	1502	Jacques	JX 180	Coker	21	DeKalb	T 1230
DeKalb	T 1230	Jacques	JX 247	Northrup King	PX 95	Pioneer	3187
Jacques	JX 247	Ring Around	1604	McCurdy	84AA	Funk's	G-4747W
McCurdy	84AA	Coker	21	Jacques	JX 247	Ring Around	1502
Funk's	G-4507A	Pioneer	3147	Golden Harvest	H-2680	AgraTech	875
Funk's	G-4740A	Funk's	G-4740A	Pioneer	3369A	*Golden Harvest	H-2660W
Pioneer	3369A	DeKalb	TX5 115A	Paymaster	8951	+Zimmerman	Z 11 W
Funk's	G-4522	Ring Around	1502	Northrup King	PX 87	+Ring Around	1604
Funk's	G-4733	Coker	19A	Funk's	G-4733		
Coker	19	Pioneer	3369A	Ring Around	1502		
Paymaster	8951	Funk's	G-4733	*Coker	19A		
Coker	19A	Funk's	G-4522	+McCurdy	8172		
Funk's	G-4611	*Funk's	G-4507A				

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

†Recommended based on exceptional 2-year average.

