

Performance of Corn Hybrids in Alabama, 1985



December 1985

Department of Agronomy and Soils Departmental Series No. 105

Alabama Agricultural Experiment Station Auburn University

David H. Teem, Acting Director Auburn University, Alabama

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION.....	1
ACKNOWLEDGMENT.....	4
Table 1. Locations and Cultural Practices for the 1985 Corn Hybrid Tests.....	5
NORTHERN ALABAMA	
Table 2. Two- and Three-Year Yield and Lodging averages for Northern Alabama, 1983-85.....	6
Table 3. 1985 Yield of Corn Hybrids by Location and Regional Averages of Hybrid Characteristics in Northern Alabama.....	7
CENTRAL ALABAMA	
Table 4. Two- and Three-Year Yield and Lodging Average for Central Alabama, 1983-85.....	8
Table 5. 1985 Yield of Corn Hybrids by Location and Regional Averages of Hybrid Characteristics in Central Alabama...	9
SOUTHERN ALABAMA	
Table 6. Two- and Three-Year Yield and Lodging Averages for Southern Alabama, 1983-85.....	10
Table 7. 1985 Yield of Corn Hybrids by Location and Regional Averages of Hybrid Characteristics in Southern Alabama..	11
BLACK BELT	
Table 8. Black Belt Corn Hybrid/Virus Test 1983-85.....	12
VIRAL DISEASE REACTIONS OF SOME HYBRIDS IN 1985.....	13
Procedure.....	14
Results.....	14
Table 9. Incidence of Viral Diseases in Regular Corn Hybrid Tests, Marion Junction, August 2, 1985.....	15

IRRIGATED TESTS

Table 10. Irrigated Corn Hybrid Performance and Characteristics, Headland, 1983-85.....	16
WHITE CORN	
Table 11. White Corn Hybrid Test, Northern Alabama, 1983-85.....	17
Table 12. White Corn Hybrid Test, Central Alabama, 1983-85.....	18
Table 13. White Corn Hybrid Test, Southern Alabama, 1983-85.....	19
EARLY CORN	
Table 14. Early Corn Hybrid Test, Northern Alabama, 1983-85.....	20
Table 15. Early Corn Hybrid Test, Central Alabama, 1983-85.....	21
Table 16. Early Corn Hybrid Test, Southern Alabama, 1983-85.....	22
PRELIMINARY TESTS.....	23
Table 17. Characteristics of Corn Hybrids Tested One Year at Crossville in Northern Alabama, 1985.....	23
Table 18. Characteristics of Corn Hybrids Tested One Year at Tallassee in Central Alabama, 1985.....	24
Table 19. Characteristics of Corn Hybrids Tested One Year at Fairhope in Southern Alabama, 1985.....	25
SOURCES OF 1985 CORN HYBRID TEST SEED.....	26
ACCEPTABLE HYBRIDS FOR 1986.....	27

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

PERFORMANCE OF CORN HYBRIDS IN ALABAMA, 1985

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 25,000.

Grain yields were adjusted to 15.5 percent moisture and converted to bushels (56 pounds) per acre. Stalks broken or leaning more than 45

¹Respectively, Professor and Research Associate (resigned) of Agronomy and Soils.

degrees were considered lodged. The mid-silk data measured the number 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 (retired) and

H.W. Grimes

Prattville Experiment Field - D. P. Moore

E. V. Smith Research Center, Shorter - W.B. Gordon

Plant Breeding Unit, Tallassee - S. P. Nightengale

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 (retired) and H.W. Ivey

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 and Acting Head 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 1985 CORN HYBRIDS

Location	Planting date	Nitrogen ^{1/} rate	Plant population	Date harvested	Herbicides used
<u>Northern Alabama</u>					
Tennessee Valley Substation (Belle Mina)	April 4	150	20,000	August 23	Atrazine
Sand Mountain Substation (Crossville)					
Regular test	April 11	150	20,000	September 13	Atrazine + Dual
Preliminary test	April 10	150	20,000	September 17	Atrazine + Dual
White corn test	April 11	150	20,000	September 17	Atrazine + Dual
Early corn test	April 10	150	20,000	August 29	Atrazine + Dual
Upper Coastal Plain Substation (Winfield)	April 3	160	20,000	August 29	Atrazine
<u>Central Alabama</u>					
E.V. Smith Research Center (Shorter)					
Early corn test	March 8	120	20,000	August 1	Atrazine + Dual
White corn test	March 8	120	20,000	August 1	Atrazine + Dual
Plant Breeding Unit (Tallassee)	April 9	120	20,000	September 4	None
Prattville Experiment Field (Prattville)	March 20	120	20,000	August 19	Atrazine
Black Belt Substation (Marion Junction)	March 29	120	20,000	August 27	Atrazine + Paraquat
<u>Southern Alabama</u>					
Brewton Experiment Field (Brewton)	March 20	125	20,000	September 9	Atrazine
Monroeville Experiment Field (Monroeville)					
Regular test	March 20	120	20,000	September 12	Atrazine
Date of Planting 1	March 8	120	20,000	September 19	Atrazine
Date of Planting 2	April 4	120	20,000	September 19	Atrazine
Date of Planting 3	May 15	120	20,000	September 19	Atrazine
Lower Coastal Plain Substation (Camden)	March 29	120	20,000	August 27	Atrazine + Sutan
Wiregrass Substation (Headland)					
Regular test (unirrigated)	March 26	120	20,000	September 9	Atrazine + Lasso
Regular test (irrigated)	March 26	200	25,000	September 9	Atrazine + Lasso
White corn test (irrigated)	March 26	200	25,000	September 9	Atrazine + Lasso
Gulf Coast Substation (Fairhope)					
Regular test	March 19	150	20,000	August 19	Lasso + Bladex
Preliminary test	March 19	150	20,000	August 20	Lasso + Bladex
Early corn test	March 11	150	20,000	August 19	Atrazine + Lasso

^{1/}Pounds per acre N. Lime, phosphorus, potassium, zinc, and sulfur were applied according to recommendation based on soil test.

TABLE 2. TWO- AND THREE-YEAR YIELD AND LODGING AVERAGES FOR NORTHERN ALABAMA, 1983-85¹

BRAND NAME-HYBRID	YIELD PER ACRE, AV.		LODGED STALKS, AV.	
	3-YR.	2-YR.	3-YR.	2-YR.
	1983-85	1984-85	1983-85	1984-85
	BU.	BU.	PCI.	PCI.
PIONEER 3147	126	146	5.0	3.7
PIONEER 3320	126	144	3.7	3.0
PIONEER 3187	123	135	4.4	2.8
DEKALB T 1230	123	140	4.0	2.8
MCCURDY 8150	121	136	3.7	2.3
RING AROUND 1502	121	134	2.4	2.3
MCCURDY 84AA	120	133	4.3	4.3
JACQUES JX 180	120	129	5.0	2.8
FUNKS G-4507A	120	132	5.3	3.0
NORTHRUP KING PX 95	120	142	6.8	2.2
JACQUES JX 247	119	135	5.1	5.0
FUNKS G-4522	118	132	3.2	2.3
COKER 19A	117	129	2.3	1.5
FUNKS G-4733	117	132	3.3	1.8
NORTHRUP KING PX 87	117	131	5.3	3.7
COKER 21	116	132	4.8	3.3
PIONEER 3165	-	150	-	1.7
ASGROW/O'S GOLD 2570	-	136	-	2.7
NORTHRUP KING PX 9581	-	134	-	2.8
JACQUES 8400	-	133	-	2.2
ASGROW/O'S GOLD 5509	-	133	-	3.7
GOLDEN HARVEST H-2675	-	132	-	2.3
PAYMASTER 8990	-	131	-	2.5
FFR 848	-	127	-	3.0
ASGROW/O'S GOLD RX 777	-	125	-	2.3

1 BELLE MINA, CROSSVILLE, AND WINFIELD.

TABLE 3. 1985 YIELD OF CORN HYBRIDS BY LOCATION AND REGIONAL AVERAGES OF HYBRID CHARACTERISTICS
IN NORTHERN ALABAMA

BRAND NAME-HYBRID	BELL MINA	CROSSVILLE	WINFIELD	1985 REGIONAL AVERAGES					
				YIELD PER ACRE	LODGED STALKS	TEST WEIGHT	MID- SILK	HUSK*	GRAIN*
	BU.	BU.	BU.	BU.	PCI.	LB./BU.	MO./BU.	RATING	RATING
NORTHRUP KING PX 95	136	182	175	164	3.3	54.0	6-22	2	2
PIONEER 3055	139	192	129	163	2.3	55.6	6-21	2	2
PIONEER 3155	130	185	169	161	2.3	56.6	6-20	2	2
SUNBELT 1860	134	175	172	161	2.0	55.3	6-21	2	2
MCCURDY 8172	133	176	169	159	4.3	55.9	6-20	2	2
ZIMMERMAN Z 27 Y	140	179	156	158	5.3	56.2	6-20	3	2
PIONEER 3320	134	169	172	158	4.0	56.5	6-17	2	2
PIONEER 3147	133	170	171	158	6.3	52.6	6-21	2	2
SUNBELT 1852	143	167	160	157	2.7	55.7	6-17	2	2
DEKALB T 1230	137	179	143	153	4.3	55.0	6-19	2	2
PIONEER 3187	136	160	161	152	4.3	56.1	6-18	2	2
SUNBELT 1827	132	170	151	151	5.7	55.1	6-20	2	2
MCCURDY 8150	138	165	149	151	2.7	56.0	6-18	2	2
PAYMASTER 7990	133	174	143	150	2.0	54.4	6-17	2	2
KING AROUND 1502	140	158	149	149	3.3	55.5	6-17	2	2
AGRATECH GK 850	139	169	147	149	1.7	55.7	6-18	2	2
STAUFFER S 8500	140	168	136	148	2.7	58.1	6-19	3	2
ZIMMERMAN Z 28 Y	138	166	140	148	2.7	56.5	6-19	2	2
FUNKS G-4507A	134	141	169	148	4.0	53.6	6-17	2	2
FUNKS G-4522	153	164	125	147	3.0	55.7	6-17	2	2
ASGROW/O'S GOLD 2570	138	154	147	146	3.7	55.4	6-17	2	2
NORTHRUP KING PX 9581	137	164	137	146	4.7	55.8	6-16	2	2
FUNKS G-4669	144	164	127	145	6.0	54.6	6-19	2	2
JACQUES 7900	136	153	145	145	3.3	56.5	6-16	3	2
COKER 19A	134	145	153	144	2.3	54.9	6-17	2	2
FUNKS G-4733	130	166	135	144	3.3	56.6	6-20	2	2
MCCURDY 84AA	129	167	135	144	6.3	55.8	6-18	2	2
COKER 21	141	167	122	143	5.0	55.0	6-20	2	2
GOLDEN HARVEST H-2675	129	153	148	143	3.0	56.4	6-15	2	2
ASGROW/O'S GOLD 5509	129	167	133	143	6.0	55.2	6-20	2	2
NORTHRUP KING PX 87	134	171	125	143	5.3	55.1	6-19	2	2
JACQUES 8400	124	162	142	142	3.0	57.7	6-19	3	2
PAYMASTER 8990	141	156	128	142	3.3	57.7	6-19	2	2
JACQUES JX 247	130	172	121	141	8.3	54.7	6-20	2	2
GOLDEN HARVEST H-2689	142	148	131	140	5.7	55.6	6-19	2	2
STAUFFER S 7759	128	149	135	137	4.7	54.3	6-16	3	2
ASGROW/O'S GOLD RX 777	121	148	143	137	3.7	57.8	6-15	2	2
DEKALB DK 656	118	147	147	137	2.0	56.1	6-18	2	2
FER 848	115	145	152	137	4.7	55.4	6-19	2	2
JACQUES JX 180	126	141	142	136	3.7	54.5	6-18	2	2
TEST AVERAGE	133.8	163.5	146.5						
L.S.D. (.05)	18.8	16.5	33.2						
C.V. (%)	10.0	7.2	10.2						

* 1= EXCELLENT; 5= VERY POOR.

TABLE 4. TWO- AND THREE-YEAR YIELD AND LODGING AVERAGES FOR CENTRAL ALABAMA, 1983-85¹

BRAND NAME-HYBRID	YIELD PER ACRE, AV.		LODGED STALKS, AV.	
	3-YR.	2-YR.	3-YR.	2-YR.
	1983-85	1984-85	1983-85	1984-85
	BU.	BU.	PCI.	PCI.
PIONEER 3320	97	89	12.0	18.0
PIONEER 3165	94	89	8.7	12.5
PIONEER 3147	87	82	10.8	14.3
NORTHRUP KING PX 87	85	71	17.2	23.3
MCCURDY 8150	84	69	13.0	19.0
JACQUES JX 247	83	66	15.2	21.8
GOLDEN HARVEST H-2680	83	69	14.5	21.3
COKER 21	81	63	14.0	20.0
FUNKS G-4733	80	66	5.5	8.3
MCCURDY 84AA	79	62	15.0	21.5
JACQUES JX 180	79	65	16.2	22.8
FUNKS G-4522	75	62	12.2	17.8
RING AROUND 1502	75	63	11.2	16.8
PAYMASTER 8951	74	61	13.8	20.3
COKER 19A	72	58	17.5	25.3
AGRATECH GK 868	71	63	11.3	16.0
JACQUES 8400	-	81	-	14.5
MCCURDY 8172	-	76	-	10.3
ASGROW/O'S GOLD 2570	-	75	-	22.5
DEKALB T 1230	-	70	-	23.8
NORTHRUP KING PX 9581	-	67	-	16.8
ASGROW/O'S GOLD 5509	-	65	-	21.0
GOLDEN HARVEST H-2675	-	64	-	15.5
FFR 955	-	62	-	18.3
PAYMASTER 8990	-	55	-	14.5

¹ PRATTVILLE, CAMDEN.

TABLE 5. 1985 YIELD OF CORN HYBRIDS BY LOCATION AND REGIONAL AVERAGES OF HYBRID CHARACTERISTICS IN CENTRAL ALABAMA

BRAND NAME-HYBRID	PRATTVILLE	CAMDEN	1985 REGIONAL AVERAGES					
			YIELD	LOGGED	TEST	MID-	HUSK *	GRAIN *
			PER ACRE	SIALKS	WEIGHT	SILK	RAING	RAING
	BU.	BU.	BU.	PCI.	LB./BU.	MO./DA.		
PIONEER 3165	54	125	90	16.0	54.7	5-31	2	2
SUNBELT 1876	54	124	89	16.0	50.8	6-9	1	2
PIONEER 3320	60	92	76	32.0	53.6	5-28	3	2
SUNBELT 1860	39	95	67	19.5	54.9	6-2	2	2
MCCURDY 8172	46	87	67	18.5	56.8	6-1	2	2
PIONEER 3147	40	90	65	22.5	50.2	6-3	3	3
JACQUES 8400	52	74	63	27.5	56.9	5-30	3	3
ZIMMERMAN Z 27 Y	43	76	59	23.0	54.6	6-1	2	2
STAUFFER S 3500	54	64	59	29.0	56.8	5-30	3	2
ASGRON/O'S GOLD 2570	60	51	56	40.5	55.1	5-27	2	2
HUNKS G-4733	40	70	55	15.5	54.9	5-30	2	2
DEKALB T 1230	51	55	53	45.5	53.8	5-31	2	3
GOLDEN HARVEST H-2680	48	55	51	40.0	52.9	5-31	3	2
JACQUES JX 247	38	64	51	40.5	53.9	5-31	2	3
PIONEER 3055	36	66	51	23.5	55.0	5-30	1	2
MCCURDY 8150	47	53	50	36.0	54.4	5-29	2	3
NORTHRUP KING PX 9081	54	41	48	28.0	56.6	5-26	2	2
ASGRON/O'S GOLD 5509	47	45	46	38.0	54.4	5-31	2	3
OKER 21	47	45	46	37.0	53.4	5-31	2	3
NORTHRUP KING PX 87	42	46	44	43.0	53.3	5-31	2	3
HUNKS G-4522	53	34	43	32.5	54.6	5-27	2	2
OKER 955	42	45	43	31.0	55.1	6-1	3	2
OKER 811	45	38	41	35.5	52.6	5-29	3	3
ZIMMERMAN Z 28 Y	49	33	41	44.5	52.7	5-29	3	3
SUNBELT 1802	42	38	40	35.0	55.8	5-28	2	3
P-A-G SX 354	44	35	39	40.0	53.7	5-28	2	3
RING AROUND 1502	48	31	39	30.5	56.4	5-28	2	2
PAYMASTER 7990	51	27	39	49.0	52.4	5-28	2	3
MCCURDY 844A	47	30	39	38.0	55.3	5-28	2	3
SUNBELT 1827	37	41	39	47.0	50.8	5-31	2	4
AGRATECH GK 868	47	30	39	29.5	56.8	5-30	2	3
GOLDEN HARVEST H 2675	49	28	38	28.5	55.9	5-26	2	2
JACQUES JX 180	45	29	37	42.5	54.5	5-29	2	3
AGRATECH GK 850	52	21	36	30.5	55.9	5-27	2	2
STAUFFER S 7759	45	25	35	26.0	54.9	5-27	2	3
PAYMASTER 8951	46	23	34	38.0	56.5	5-30	2	3
P-A-G SX 383	41	27	34	39.5	55.5	5-30	2	3
ASGRON/O'S GOLD RX 777	46	11	29	23.0	58.2	5-26	2	3
OKER 19A	43	14	28	49.0	54.0	5-29	2	3
PAYMASTER 8990	35	16	25	27.0	54.4	5-31	2	3
TEST AVERAGE	46.3	49.7						
S.E.D. (D.F.)	10.9	21.6						
C.V. (%)	14.8	31.0						

* 1 = EXCELLENT; 5 = VERY POOR.

TABLE 6. TWO- AND THREE-YEAR YIELD AND LODGING AVERAGES FOR SOUTHERN ALABAMA, 1983-85 1

BRAND NAME-HYBRID	YIELD PER ACRE, AV.		LODGED STALKS, AV.	
	3-YR.	2-YR.	3-YR.	2-YR.
	1983-85	1984-85	1983-85	1984-85
	BU.	BU.	PCT.	PCT.
PIIONEER 3165	104	98	1.0	0.8
MCCURDY 3172	104	91	2.2	2.9
DEKALB T 1230	100	88	1.8	2.5
PIIONEER 3147	100	88	2.0	2.3
MCCURDY 8150	98	88	1.7	2.1
COKER 21	95	81	2.0	2.6
JACQUES JX 247	94	77	1.3	1.5
NORTHROP KING PX 95	93	84	2.4	2.6
GOLDEN HARVEST H-2680	93	84	1.9	2.5
NORTHROP KING PX 87	89	76	2.3	3.1
FUNKS G-4733	88	80	0.7	0.9
FUNKS G-4507A	87	78	2.5	3.6
AGRATECH GK 858	87	78	2.3	3.3
MCCURDY 84AA	87	78	3.2	3.9
RING AROUND 1502	85	77	1.1	1.5
COKER 19A	85	74	2.2	2.9
PAYMASTER 8951	84	75	1.8	2.3
PIIONEER 3320	-	95	-	1.0
RING AROUND 1505	-	84	-	2.1
PIIONEER 3187	-	83	-	0.1
ASGROW/O'S GOLD 5509	-	83	-	1.8
FFR 955	-	82	-	3.3
JACQUES 8400	-	78	-	2.4
GOLDEN HARVEST H-2675	-	77	-	2.4

IFAIRHUPE, BREWTON, MONROEVILLE, HEADLAND.

TABLE 7. 1985 YIELD OF CORN HYBRIDS BY LOCATION AND REGIONAL AVERAGES OF HYBRID CHARACTERISTICS IN SOUTHERN ALABAMA

BRAND NAME-HYBRID	FAIRHOPE	BREWTON	MONROEVILLE	HEADLAND	1985 REGIONAL AVERAGES						
					YIELD	LOGGED	TEST	MID-	HUSK	* GRAIN *	
					PER ACRE	STALKS	WEIGHT	SILK	RAILING	RAILING	
	BU.	BU.	BU.	BU.	BU.	PCI.	LB./BU.	MO./QA.	RAILING	RAILING	
PIONEER 3165	120	95	39	76	83	0.5	56.9	6-3	3	3	
PIONEER 3320	119	100	47	58	81	1.3	56.9	5-29	2	2	
MCCURDY 8172	139	73	30	42	71	2.3	57.5	6-3	3	3	
PIONEER 3055	129	74	26	52	70	1.8	57.5	6-3	2	3	
FUNKS G-4614	120	80	29	52	70	2.8	58.2	5-31	3	3	
PIONEER 3147	123	66	25	60	68	2.3	54.8	6-3	3	3	
MCCURDY 8150	128	66	31	43	67	3.3	57.6	6-1	2	3	
KING AROUND 1505	112	71	35	43	65	2.8	55.7	6-1	3	3	
JSS 7001	121	58	32	47	64	4.5	55.8	5-29	2	3	
PAYMASTER 7990	114	65	23	47	62	4.0	55.7	5-30	3	3	
DEKALB 1 1230	124	63	23	38	62	3.5	56.9	6-1	3	3	
ZIMMERMAN 2 27 Y	118	56	24	49	62	2.5	55.8	6-2	3	3	
FER 811	120	49	29	46	61	3.3	56.0	5-30	3	3	
JACQUES 8400	120	52	29	43	61	3.8	58.8	6-1	3	3	
NORTHRUP KING PX 95	125	55	23	41	61	4.5	56.8	6-3	2	3	
ASGROW/O'S GOLD 2570	122	58	25	39	61	4.5	56.8	5-30	2	3	
ASGROW/O'S GOLD RX 111	120	62	21	40	60	2.3	58.6	5-28	2	3	
KING AROUND 1502	121	53	24	43	60	1.8	57.3	5-29	2	3	
STAUFFER S 8500	125	58	28	31	60	2.3	58.8	5-31	3	3	
PIONEER 3187	117	57	31	34	59	0.0	56.6	6-1	2	3	
NORTHRUP KING PX 9581	125	55	19	38	59	5.3	57.5	5-29	2	3	
FER 955	113	59	23	41	59	1.3	56.8	6-3	3	3	
LOKER 21	122	52	26	36	59	3.0	57.5	6-2	3	3	
FUNKS G-4733	113	70	22	31	59	1.3	57.6	6-1	3	3	
GOLDEN HARVEST II-2675	126	54	25	27	58	4.0	57.2	5-28	3	3	
GOLDEN HARVEST II-2680	109	58	22	43	58	3.3	57.0	6-1	3	3	
MCCURDY 85AA	118	49	23	40	57	3.8	57.5	5-31	3	3	
SUNBELT 1827	114	62	22	26	57	4.8	56.8	6-3	3	3	
NORTHRUP KING PX 87	116	62	28	21	57	4.0	57.7	6-2	3	3	
JACQUES JX 247	119	52	26	30	57	1.5	57.1	6-3	3	3	
ASGROW/O'S GOLD 5509	114	61	24	27	56	2.5	56.3	6-2	3	3	
LOKER 19A	122	56	20	27	56	4.0	56.6	5-31	2	3	
AGRATECH GK 868	114	51	22	37	56	5.3	58.0	5-31	3	3	
AGRATECH GK 850	115	55	15	38	56	3.5	57.6	5-30	2	3	
ZIMMERMAN 2 28 Y	113	42	23	43	55	3.3	57.1	5-31	3	3	
SUNBELT 1802	124	51	15	30	55	4.0	57.5	5-30	3	3	
STAUFFER S 7759	113	50	25	32	55	2.3	56.8	5-30	3	3	
FUNKS G-4507A	120	45	23	30	54	4.8	56.1	5-30	3	3	
PAYMASTER 8951	111	46	15	36	52	3.0	56.9	5-31	3	3	
P-A-G SA 383	108	43	18	24	48	3.0	56.7	6-2	2	3	
TEST AVERAGE	119.1	59.5	25.2	39.5							
L.S.D. (4.05)	17.0	17.7	10.4	16.3							
C.V. (%)	10.2	21.2	23.2	29.3							

* 1 = EXCELLENT; 5 = VERY POOR.

TABLE 8. BLACK BELT CORN HYBRIDZ VIRUS TEST 1983-85¹

BRAND NAME-HYBRID	YIELD PER ACRE, AV.			LOGGED STALKS, AV.			1985			
	3-YR.	2-YR.	1985	3-YR.	2-YR.	1985	MIDSILK	TEST	HUSK*	GRAIN*
	1983-85	1984-85		1983-85	1984-85		MO./D.	LB./BU.	RATING	RATING
PIONEER 3147	139	133	122	1.3	1.5	3.0	6-16	-	3	2
NORTHROP KING PX 95	132	123	125	1.0	0.5	1.0	6-15	-	4	1
DEKALB T 1210	131	128	128	0.3	0	0	6-14	-	4	2
JACQUES 8400	128	123	117	1.0	1.0	1.0	6-13	-	4	2
FUNKS G-4733	127	121	121	0.3	0.5	1.0	6-15	-	3	2
MCCURDY 844A	126	127	118	0.7	0.5	1.0	6-12	-	4	2
ZIMMERMAN Z 11 W	122	104	73	1.0	1.0	1.0	6-18	-	1	2
FFR 929W	117	103	99	0.7	0.5	1.0	6-17	-	2	2
RING AROUND 1502	115	115	102	0.7	0.5	1.0	6-12	-	4	2
PIONEER 3187	113	102	86	0.7	0.5	0	6-13	-	4	3
GOLDEN HARVEST H-2660W	100	89	53	0.3	0	0	6-18	-	2	2
SUNBELT 1860	-	134	110	-	1.0	2.0	6-17	-	3	1
FUNKS G-4858	-	131	124	-	0.5	0	6-18	-	3	3
ASGROW/O'S GOLD 5509	-	129	119	-	1.0	2.0	6-13	-	4	2
FFR 955	-	126	116	-	3.0	5.0	6-16	-	3	1
NORTHROP KING PX 87	-	120	109	-	1.0	2.0	6-13	-	4	2
DEKALB DK 789	-	-	135	-	-	1.0	6-12	-	4	2
ZIMMERMAN Z 27 Y	-	-	129	-	-	1.0	6-16	-	4	2
MCCURDY 8150	-	-	128	-	-	1.0	6-13	-	3	1
TODD EXP 810	-	-	124	-	-	1.0	6-13	-	2	2
DK 689	-	-	122	-	-	1.0	6-14	-	3	2
FUNKS G-4734	-	-	122	-	-	1.0	6-14	-	3	1
AGRATECH GK 908	-	-	117	-	-	1.0	6-11	-	4	2
ASGROW/O'S GOLD 3344	-	-	116	-	-	2.0	6-12	-	3	2
TODD EXP 820	-	-	112	-	-	0	6-12	-	2	2
ASGROW/O'S GOLD RX 404	-	-	108	-	-	7.0	6-17	-	1	1
STAUFFER S 7759	-	-	106	-	-	0	6-13	-	5	3
GOLDEN HARVEST XC-710	-	-	104	-	-	2.0	6-14	-	2	1
AGRATECH GK 850	-	-	103	-	-	1.0	6-12	-	4	2
SUNBELT 1802	-	-	102	-	-	1.0	6-15	-	4	2
FFR 815	-	-	92	-	-	0	6-16	-	4	2
H60 X C103	-	-	77	-	-	3.0	6-14	-	4	2
FUNKS G-4779W	-	-	67	-	-	0	6-18	-	3	1
TEST AVERAGE			108.9							
L.S.D. (1.05)			17.2							
C.V. (%)			11.2							

¹MARTON JUNCTION. SEE TABLE 9 FOR VIRUS DISEASE REACTIONS.

*1=EXCELLENT; 5=VERY POOR

VIRAL DISEASE REACTIONS OF SOME HYBRIDS IN 1985²

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 and Acting Head of Botany, Plant Pathology, and Microbiology.

to the diseases. Results of evaluations of some commercial hybrids during 1985 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, incidence of MDM ranged from 0-6.1 percent among hybrids and averaged 2.1 percent for the entire test, table 9; incidence of MCD ranged from 0-29.4 percent and averaged 9.6 percent for the test. AgraTech brand GK850 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 the considerations of yield and other characteristics given elsewhere in this report.

TABLE 9. INCIDENCE OF VIRAL DISEASES IN REGULAR CORN HYBRIDS TEST,
MARION JUNCTION, AUGUST 2, 1985

Brand name	Hybrid	Maize chlorotic dwarf	Maize dwarf mosaic
AgraTech	850	0	0
AgraTech	900	1.1	0
Asgrow/O'Gold	RX 404	15.7	2.0
DeKalb	DK 789	8.3	5.8
DeKalb	T 1230	13.0	4.0
DeKalb	DK 689	8.6	5.8
FFR	815	15.7	2.7
FFR	955	15.9	3.1
FFR	929 W	21.2	2.1
Funk's	G-4733	8.8	1.0
Funk's	G-4779 W	25.4	1.0
Funk's	G-4734	13.7	2.9
Funk's	G-4858	3.4	0
Golden Harvest	H-2660 W	29.4	4.9
Golden Harvest	XC 918	8.5	1.0
Jacques	8400	1.6	0
McCurdy	84 AA	15.7	1.0
McCurdy	8150	4.7	2.8
Northrup King	PX 95	1.0	1.9
Northrup King	PX 87	8.5	1.0
Asgrow/O's Gold	3344	0	3.9
Asgrow/O's Gold	5509	6.5	2.6
Pioneer	3147	1.8	.9
Pioneer	3187	18.9	.8
Ring-Around	1502	8.9	2.2
Stauffer	S 7759	6.8	2.0
Sunbelt	1802	15.9	4.6
Sunbelt	1860	0	.8
Todd	EX 810	2.6	.8
Todd	EX 820	2.0	0
Zimmerman	Z 11 W	19.8	0
Zimmerman	Z 27 Y	2.6	6.1

TABLE 10. IRRIGATED CORN HYBRID PERFORMANCE AND CHARACTERISTICS, HEADLAND, ALABAMA, 1983-85

BRAND NAME-HYBRID	YIELD PER ACRE, AV.			LODGED STALKS, AV.			1985	
	3-YR.	2-YR.	1985	3-YR.	2-YR.	1985	MIDSILK	TEST
	1983-85	1984-85		1983-85	1984-85		MO./DA.	HEIGHT
	BU.	BU.	BU.	PCI.	PCI.	PCI.		LB./BU.
DEKALB T 1230	172	171	180	0.3	0	0	6-3	57.2
PIONEER 3165	160	175	180	1.3	2.0	3.0	6-3	55.8
PIONEER 3147	161	160	156	3.0	4.0	2.0	6-6	55.1
MCCURDY 84AA	159	159	164	0.3	0.5	1.0	6-3	57.2
NORTHROP KING PX 37	156	149	162	0.7	1.0	1.0	6-4	58.2
JACQUES JX 247	155	153	159	0.7	0.5	0	6-5	58.2
NORTHROP KING PX 95	154	153	162	1.7	1.5	1.0	6-4	56.5
MCCURDY 8150	152	150	161	0.3	0	0	6-3	57.0
RING AROUND 1502	151	154	155	0.3	0.5	1.0	6-3	57.0
SUNBELT 1860	-	170	178	-	1.0	2.0	6-4	58.5
MCCURDY 8172	-	159	158	-	0.5	1.0	6-4	57.5
PIONEER 3320	-	158	155	-	0.5	0	6-3	55.6
ASGROW/O'S GOLD 5509	-	156	158	-	0.5	0	6-4	57.9
ASGROW/O'S GOLD 2570	-	152	155	-	0.5	0	6-4	55.4
NORTHROP KING PX 9581	-	147	143	-	1.0	0	6-2	57.4
PAYMASTER 8990	-	142	141	-	0.5	1.0	6-5	58.4
JACQUES 8400	-	141	134	-	0	0	6-3	58.0
STAUFFER S 7759	-	138	140	-	1.5	1.0	6-3	55.6
FFR 811	-	136	142	-	0	0	6-4	55.4
SUNBELT 1874	-	-	174	-	-	3.0	6-8	56.8
FUNKS G-4614	-	-	168	-	-	1.0	6-3	58.5
AGRATECH GK 900	-	-	159	-	-	3.0	6-4	58.2
GOLDEN HARVEST H-2586	-	-	158	-	-	0	6-5	54.9
ZIMMERMAN Z 27 Y	-	-	157	-	-	2.0	6-3	54.5
AGRATECH GK 850	-	-	153	-	-	1.0	6-4	58.2
P-A-G SX 352	-	-	148	-	-	0	6-4	55.6
FUNKS G-4522	-	-	146	-	-	1.0	6-3	56.7
GOLDEN HARVEST H-2775A	-	-	145	-	-	0	6-3	57.1
ASGROW/O'S GOLD RX 892	-	-	144	-	-	0	6-3	56.9
FFR 747	-	-	141	-	-	0	6-3	56.9
COKER 8680	-	-	140	-	-	1.0	6-4	58.8
DEKALB T1100	-	-	135	-	-	0	6-2	55.3
USS 7001	-	-	134	-	-	0	6-2	55.4
COKER 8625	-	-	122	-	-	3.0	6-4	56.8
TEST AVERAGE			153.0					
L.S.D. (0.05)			22.2					
C.V. (%)			10.3					

THE TEST RECEIVED APPROXIMATELY 4 INCHES OF IRRIGATION WATER IN APPLICATIONS DURING THE MONTH(S) OF MAY AND JUNE.

TABLE 11. WHITE CORN HYBRID TEST, NORTHERN ALABAMA, 1983-85. 1

BRAND NAME-HYBRID	YIELD PER ACRE, AY.			LOGGED STALKS, AY.			1985			
	3-YR.	2-YR.	1985	3-YR.	2-YR.	1985	MIDSILK	TEST	HUSK	* GRAIN*
	1983-85	1984-85		1983-85	1984-85		BU./DU.	LB./DU.	BAING	BAING
COKER 833 W	123	140	162	4.7	1.5	2.0	6-26	55.9	2	2
FHR 929W	120	147	153	4.7	4.5	7.0	6-29	57.2	2	2
PIONER 3147 †	119	141	151	7.7	8.0	14.0	6-29	54.4	3	3
FUNKS G-4779W	117	142	150	3.0	1.0	2.0	6-28	58.2	3	2
RING AROUND 1502 †	116	133	144	3.3	2.5	2.0	6-24	55.6	2	2
ASGRON/D'S GOLD RX 409W	116	140	152	9.0	4.0	7.0	6-29	58.9	2	2
ZIMMERMAN Z 11 W	115	140	158	3.0	2.5	4.0	6-29	58.0	2	2
RING AROUND 2606W	110	129	124	7.7	4.5	8.0	6-24	59.4	2	2
GOLDEN HARVEST H-2600W	110	134	130	5.0	4.0	6.0	6-27	57.7	2	2
AGRATECH GK 927W	-	154	166	-	3.5	5.0	6-28	58.1	2	2
ZIMMERMAN Z 60 W	-	142	157	-	4.0	7.0	6-27	57.0	2	2
ZIMMERMAN Z 14 W	-	-	156	-	-	5.0	6-26	57.4	2	2
DEKALB DK 77W	-	-	150	-	-	11.0	6-29	57.1	2	2
TEST AVERAGE			150.1							
L.S.D. (.05)			14.2							
C.V. (%)			6.6							

1 CROSSVILLE.

* 1= EXCELLENT; 5= VERY POOR.

† YELLOW CORN CHECK HYBRID.

TABLE 12. WHITE CORN HYBRID TEST, CENTRAL ALABAMA, 1983-85¹

BRAND NAME-HYBRID	YIELD PER ACRE, AY.			LOGGED STALKS, AY.			MIDSILK	1985		
	3-YR.	2-YR.	1985	3-YR.	2-YR.	1985		TEST	HUSK *	GRAIN *
	1983-85	1984-85		1983-85	1984-85			WEIGHT	RATING	RATING
	BU.	BU.	BU.	PCI.	PCI.	PCI.	HQ./DA.	LB./BU.		
PIONEER 3147 †	110	121	142	1.7	1.0	1.0	6-7	-	2	2
RING AROUND 1502 †	106	117	140	0.7	0	0	6-7	-	2	2
ASGROW/O'S GOLD RX 405W	103	121	144	2.7	0	0	6-10	-	2	2
COKER 833 W	100	108	126	0.7	0.5	1.0	6-7	-	2	2
RING AROUND 2606W	100	106	121	1.0	0.5	1.0	6-8	-	2	2
IFR 929W	96	105	112	2.0	0.5	1.0	6-9	-	2	2
DUNKS G-4779W	88	98	110	0	0	0	6-9	-	2	2
ZIMMERMAN Z 11 W	84	90	102	1.7	0	0	6-10	-	2	2
GOLDEN HARVEST H-2660W	83	89	105	3.3	1.5	1.0	6-7	-	2	2
ZIMMERMAN Z 60 W	-	117	139	-	0	0	6-8	-	2	2
AGRATECH GK 927W	-	93	91	-	0	0	6-7	-	2	2
ZIMMERMAN Z 14 W	-	-	146	-	-	1.0	6-8	-	2	2
DEKALB DK 77W	-	-	127	-	-	1.0	6-9	-	2	2
TEST AVERAGE			123.3							
L.S.D. (0.05)			38.9							
C.V. (%)			22.0							

¹ E.V. SMITH RESEARCH CENTER, SHORTER.

² 1= EXCELLENT; 5= VERY POOR.

³ YELLOW CORN CHECK HYBRID.

TABLE 13. WHITE CORN HYBRID TEST. SOUTHERN ALABAMA, 1983-85 1

BRAND NAME-HYBRID	YIELD PER ACRE, AY.			LODGED STALKS, AY.			1985			
	3-YR.	2-YR.	1985	3-YR.	2-YR.	1985	MIDSILK	TEST	HUSK *	GRAIN *
	1983-85	1984-85		1983-85	1984-85		MO, ZUA	LB, ZHU	BAING	BAING
	BU.	BU.	BU.	PCI.	PCI.	PCI.		HEIGHT		
PIONEER 3147†	147	157	148	2.0	3.0	3.0	6-5	-	3	3
RING AROUND 1502 †	139	152	139	1.0	1.5	2.0	6-2	-	2	2
RING AROUND 2606W	129	136	145	1.3	2.0	1.0	6-4	-	2	3
FER 929W	127	136	133	2.0	3.0	2.0	6-4	-	3	2
ASGROW/D'S GOLD RX 405W	127	134	127	2.3	3.0	2.0	6-3	-	3	2
FUNKS G-4779W	125	133	126	1.7	2.5	2.0	6-5	-	3	3
COKER 833 W	125	132	130	0.7	1.0	1.0	6-5	-	2	3
ZIMMERMAN Z 11 W	124	129	106	1.0	0.5	1.0	6-5	-	2	3
GOLDEN HARVEST H-2660W	107	111	94	2.0	3.0	3.0	6-5	-	3	2
ZIMMERMAN Z 60 W	-	136	145	-	2.5	3.0	6-5	-	2	3
AGRATECH GK 927W	-	134	127	-	1.5	1.0	6-5	-	2	3
ZIMMERMAN Z 14 W	-	-	151	-	-	1.0	6-3	-	3	2
DEKALB DK 77W	-	-	136	-	-	3.0	6-6	-	3	3
TEST AVERAGE			131.2							
L.S.D. (1.0%)			37.4							
C.V. (3)			19.9							

1 HEADLAND

THE TEST RECEIVED APPROXIMATELY 4 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, 1983-85.¹

BRAND NAME-HYBRID	YIELD PER ACRE, AV.			LOADED STALKS, AV.			1985			
	3-YR.	2-YR.	1985	3-YR.	2-YR.	1985	MIDSILK	TEST	HUSK *	GRAIN *
	1983-85	1984-85		1983-85	1984-85			HEIGHT	RAILING	RAILING
	BU./A.	BU./A.	BU./A.	PCI.	PCI.	PCI.	MO./HA.	LB./BU.		
ASGROW/O'S GOLD 2570	142	151	149	1.7	2.5	4.0	6-21	52.7	2	2
ASGROW/O'S GOLD RX 777	137	149	155	1.3	2.0	4.0	6-19	56.1	3	2
JACOUES 7900	131	144	146	2.0	3.0	5.0	6-21	54.6	2	2
RING AROUND 1404	115	127	130	1.3	2.0	3.0	6-20	51.7	4	2
NORTHROP KING PX 77	-	159	158	-	1.0	2.0	6-22	52.2	2	2
FUNKS G-4614	-	153	165	-	3.0	5.0	6-21	57.0	3	2
SUNBELT 1827	-	153	157	-	3.0	5.0	6-23	52.2	2	2
AGRATECH GK 750	-	147	152	-	2.0	3.0	6-22	56.1	2	2
SUNBELT 1802	-	146	157	-	5.0	8.0	6-21	52.9	2	2
AGRATECH GK 850	-	146	150	-	2.5	3.0	6-21	54.1	2	2
NORTHROP KING PX 9581	-	145	151	-	2.5	4.0	6-20	53.9	2	2
FUNKS G-4522	-	144	146	-	2.0	4.0	6-20	53.9	2	2
DEKALB T 1100	-	134	143	-	1.5	3.0	6-21	52.9	3	2
COKER 8575	-	131	139	-	1.5	3.0	6-20	52.1	3	2
ZIMMERMAN Z 27 Y	-	-	175	-	-	5.0	6-24	55.1	2	2
PAYMASTER 7990	-	-	164	-	-	3.0	6-21	52.6	2	2
COKER 8601	-	-	161	-	-	2.0	6-22	53.2	2	2
FER 747	-	-	155	-	-	3.0	6-21	55.8	2	2
PAYMASTER 8951	-	-	152	-	-	6.0	6-21	53.6	2	2
STAUFFER 7711	-	-	151	-	-	4.0	6-21	54.9	2	2
MCCORDY 7372	-	-	147	-	-	7.0	6-18	56.0	2	2
FER 815	-	-	145	-	-	4.0	6-21	54.5	3	2
ASGROW/O'S GOLD 3354	-	-	140	-	-	7.0	6-20	51.3	2	2
JACOUES 7820	-	-	137	-	-	4.0	6-20	55.1	2	2
GOLDEN HARVEST H-2401	-	-	134	-	-	6.0	6-21	52.3	2	2
MCCORDY 5596	-	-	133	-	-	3.0	6-17	53.0	4	2
GOLDEN HARVEST H-2483	-	-	133	-	-	3.0	6-20	53.6	2	2
TEST AVERAGE			148.9							
L.S.D. (1.0%)			18.9							
C.V. (%)			9.0							

¹ CROSSVILLE.

* 1 = EXCELLENT; 5 = VERY POOR.

TABLE 15. EARLY CORN HYBRID TESTS, CENTRAL ALABAMA, 1983-85¹

BRAND NAME-HYBRID	YIELD PER ACRE, DY.			LOGGED STALKS, DY.			1985			
	3-YR.	2-YR.	1985	3-YR.	2-YR.	1985	MIDSILK	TEST	HUSK ^a	GRAIN ^a
	1983-85	1984-85		1983-85	1984-85		MO, ZQA	HEIGHT	BALING	BALING
	BU.	BU.	BU.	PCI.	PCI.	PCI.		LB, ZHU.		
RING AROUND 1404	119	118	150	0	0	0	6-3	-	3	2
ASGROW/O'S GOLD RX 777	116	115	141	0.3	0	0	6-4	-	2	2
ASGROW/O'S GOLD 6882	112	112	143	0	0	0	6-2	-	2	2
ASGROW/O'S GOLD 2570	111	107	134	0	0	0	6-1	-	3	2
JACQUES 7900	103	101	127	0.3	0	0	6-3	-	3	2
FUNKS G-4614	-	131	172	-	0	0	6-3	-	2	2
AGRATECH GK 850	-	130	155	-	1.0	2.0	6-4	-	3	2
NORTHROP KING PX 9581	-	125	147	-	0.5	1.0	6-1	-	2	2
SUNBELT 1802	-	119	147	-	0.5	1.0	6-4	-	2	2
NORTHROP KING PX 77	-	118	145	-	0.5	1.0	6-4	-	2	2
COKER 8575	-	116	147	-	0	0	6-4	-	3	2
AGRATECH GK 750	-	111	132	-	0	0	6-4	-	3	2
MCCURDY 7372	-	-	166	-	-	1.0	6-1	-	3	2
COKER 8601	-	-	164	-	-	1.0	6-3	-	3	2
ZIMMERMAN Z 27 Y	-	-	164	-	-	1.0	6-1	-	3	2
FFR 815	-	-	160	-	-	1.0	6-1	-	3	2
PAYMASTER 7990	-	-	156	-	-	0	6-4	-	3	2
MCCURDY 5596	-	-	155	-	-	2.0	6-1	-	3	2
PAYMASTER 8951	-	-	138	-	-	0	6-3	-	3	2
FFR 747	-	-	138	-	-	0	6-3	-	3	2
GOLDEN HARVEST H-2601	-	-	136	-	-	1.0	6-3	-	3	2
JACQUES 7820	-	-	131	-	-	0	6-3	-	3	2
STAUFFER 7711	-	-	125	-	-	0	6-3	-	3	2
GOLDEN HARVEST H-2481	-	-	109	-	-	0	6-3	-	3	2
TEST AVERAGE			144.9							
L.S.D. (.05)			21.8							
C.V. (%)			10.7							

¹ E.V. SMITH RESEARCH CENTER, SHORTER.

^a 1 = EXCELLENT; 5 = VERY POOR.

TABLE 16. EARLY LORRY HYBRID TEST. SOUTHERN ALABAMA, 1983-85. 1

BRAND NAME-HYBRID	YIELD PER ACRE, AY.			LODGED STALKS, AY.			1985			
	3-YR.	2-YR.	1985	3-YR.	2-YR.	1985	MIDSILK	TEST	HUSK *	GRAIN *
	1983-85	1984-85	1985	1983-85	1984-85	1985	MO./DA.	LD./BU.	BAING	BAING
SUNBELT 1827	-	135	142	-	0	0	5-23	55.7	3	4
ASGROW/O'S GOLD 2570	-	125	127	-	0.5	0	5-21	55.5	2	3
SUNBELT 1802	-	125	124	-	0	0	5-21	56.8	2	3
FUNKS G-4614	-	123	115	-	0.5	0	5-21	55.5	3	4
FUNKS G-4522	-	119	115	-	0	0	5-21	55.3	2	4
ASGROW/O'S GOLD RX 777	-	118	123	-	1.5	0	5-22	56.4	2	3
AGRATECH GK 850	-	117	113	-	0	0	5-18	56.2	2	3
NORTHRUP KING PX 9581	-	115	113	-	0	0	5-20	56.5	2	3
NORTHRUP KING PX 9527	-	115	114	-	0	0	5-22	54.5	4	4
JACQUES 7900	-	115	120	-	0	0	5-21	54.2	3	4
AGRATECH GK 750	-	113	116	-	0	0	5-21	56.8	2	4
COKER 8575	-	109	120	-	0	0	5-20	52.8	4	4
RING AROUND 1404	-	106	113	-	0	0	5-22	53.9	4	4
DEKALB T 1100	-	104	114	-	0	0	5-21	54.2	4	4
GOLDEN HARVEST H-2481	-	97	113	-	0	0	5-20	55.7	2	4
PAYMASTER 7990	-	-	140	-	-	0	5-21	53.9	3	4
ZIMMERMAN Z 27 Y	-	-	139	-	-	0	5-22	55.2	3	3
GOLDEN HARVEST H-2601	-	-	134	-	-	0	5-21	52.8	3	4
PAYMASTER 8951	-	-	130	-	-	0	5-21	55.8	2	4
COKER 8601	-	-	130	-	-	0	5-20	54.2	3	4
JACQUES 7820	-	-	129	-	-	0	5-21	55.7	2	4
FFR 747	-	-	128	-	-	0	5-21	56.7	2	4
MCCURDY 7372	-	-	126	-	-	0	5-21	56.2	3	4
FFR 815	-	-	125	-	-	0	5-23	54.5	3	4
ASGROW/O'S GOLD 3344	-	-	110	-	-	0	5-21	53.9	3	4
MCCURDY 5596	-	-	109	-	-	1.0	5-20	53.3	3	4
STAUFFER 7711	-	-	108	-	-	0	5-20	55.9	2	4
TEST AVERAGE			121.7							
L.S.D. (.05)			19.6							
C.V. (%)			11.5							

1 FAIRHOPE.

* 1= EXCELLENT; 5= VERY POOR.

REPORT OF PRELIMINARY TESTS
 TABLE 17. CHARACTERISTICS OF CORN HYBRIDS TESTED ONE YEAR AT CROSSVILLE
 IN NORTHERN ALABAMA, 1985

BRAND NAME-HYBRID	AV. YIELD	LODGED	MIDSILK	TEST
	PER ACRE	STALKS	MU ₂ /DA ₂	HEIGHT
	BU ₂	PCI ₂		LB ₂ /BU ₂
N. K. 9692	194	6.0	6-22	56.9
AGRATECH GK 925	193	5.0	6-22	57.1
FIR 901	191	3.0	6-23	59.2
DEKALB DK 748	188	4.0	6-23	55.8
JACOBS 8700	186	5.0	6-23	57.8
FUNKS G-4734	186	3.0	6-22	58.0
COKER C-8905	185	2.0	6-26	55.4
PIONEER 1147 *	185	10.0	6-25	54.5
DEKALB DK 689	183	2.0	6-24	56.8
MCCURDY 8020	183	5.0	6-22	58.1
PAYMASTER 9990	179	6.0	6-25	54.9
AGRATECH GK 900	179	2.0	6-23	59.8
MCCURDY 7800	177	6.0	6-22	59.7
TODD M 7800	171	2.0	6-20	60.3
FUNKS EXP-9002 X	170	3.0	6-26	55.6
TODD EXP 820	170	1.0	6-21	57.0
DIXIE 18	166	7.0	6-26	57.0
MCCURDY 7676	166	2.0	6-19	56.2
FUNKS EXP-5013 A	165	3.0	6-20	57.2
AGRATECH GK 750	164	1.0	6-20	59.7
R. A. 1502 *	163	4.0	6-21	56.8
MCCURDY 84-43	163	2.0	6-20	59.1
COKER C-8625	162	2.0	6-21	59.4
TODD M 88	162	3.0	6-20	56.9
FUNKS G-6858	160	5.0	6-26	56.5
STAUFFER 1154	160	5.0	6-19	58.1
COKER C-8680	159	2.0	6-21	59.6
N. K. 9540	158	2.0	6-19	59.2
GOLDEN HARVEST XC-118	158	9.0	6-22	58.5
SUNBELT 1804	156	1.0	6-21	55.8
ASGROW RK 892	155	3.0	6-21	57.3
TODD EXP 810	154	4.0	6-22	58.1
JACOBS 7820	150	2.0	6-20	-
FIR 815	140	1.0	6-23	55.8
COKER C-8707	134	2.0	6-18	58.8
FIR 767	126	4.0	6-19	57.5
TEST AVERAGE	167.6			
C.S.D. (1.0%)	16.3			
C.V. (%)	7.1			

* CHECK HYBRIDS.

REPORT OF PRELIMINARY TESTS
 TABLE 18. CHARACTERISTICS OF CORN HYBRIDS TESTED ONE YEAR AT TALLASSEE
 IN CENTRAL ALABAMA, 1982

BRAND NAME-HYBRID	AV. YIELD	LOGGED	MIDSILK	TEST
	PER ACRE	STALKS		WEIGHT
	BU.	PCI.	MU./DA.	LB./BU.
SUNBELT 1804	131	2.0	5-26	53.0
FUNKS G-4858	129	6.0	6-3	56.8
PIONEER 3147 *	128	12.0	5-26	53.4
R. A. 1502 *	128	4.0	5-26	53.8
FUNKS EXP-9002 X	125	4.0	5-29	54.3
TODD EXP 810	125	1.0	5-26	57.9
TODD EXP 820	124	1.0	5-31	54.5
AGRATICH GK 900	123	14.0	5-31	56.8
FUNKS G-4765	121	2.0	5-26	55.7
N. K. 9692	121.	3.0	5-28	54.1
PAYMASTER 9990	120	4.0	6-3	55.0
MCCURDY 84-56	120	10.0	5-28	56.7
MCCURDY 8020	119	2.0	5-26	57.1
FUNKS EXP-5013 A	119	6.0	5-29	55.0
JACQUES 8700	116	5.0	5-29	58.4
FFR 815	115	3.0	5-17	57.7
TODD H 7800	115	1.0	6-1	59.8
JACQUES 7820	114	1.0	5-26	57.2
DEKALB DK 689	113	9.0	5-26	57.1
SUNBELT 1882	113	6.0	5-30	54.8
COKER C-8680	113	1.0	5-23	58.6
TODD M 88	111	4.0	5-26	57.3
AGRATICH GK 750	110	1.0	5-23	59.7
COKER C-8707	109	7.0	6-1	58.5
COKER C-8625	106	0	5-29	59.7
GOLDEN HARVEST XC-918	101	11.0	5-26	59.2
N. K. 9540	100	1.0	5-23	57.8
ASGRUD RX 892	94	6.0	5-26	55.4
FFR 901	92	5.0	6-1	59.4
DIXIE 18	84	30.0	5-26	57.0
DEKALB DK 748	83	28.0	5-26	54.6
TEST AVERAGE	113.5			
L.S.D. (.05)	16.3			
C.V. (%)	10.7			

* CHECK HYBRIDS.

REPORT OF PRELIMINARY TESTS
 TABLE 19. CHARACTERISTICS OF CORN HYBRIDS TESTED ONE YEAR AT FAIRHOPE
 IN SOUTHERN ALABAMA, 1985

BRAND NAME-HYBRID	AV. YIELD	LODGED	MIDSILK	TEST
	PER ACRE	STALKS	MO. ZDA.	WEIGHT
	BU.	PCI.		LB./BU.
SUNBELT 1882	133	0	5-29	-
PIONEER 3147 *	126	1.0	5-30	-
DEKALB DK 748	122	0	5-27	-
DEKALB DK 689	121	0	5-29	-
TODD H 88	119	0	5-24	-
R. A. 1902 *	117	0	5-24	-
P-A-G SX 352	117	0	5-25	-
MCCURDY 84-63	115	0	5-25	-
P-A-G SX 379	112	0	5-28	-
PAYMASTER 9990	111	1.0	6-1	-
CUKLER C-8625	110	0	5-25	-
FUNKS EXP-5013 A	110	0	5-24	-
USS EXP 706	110	0	5-25	-
AGRATICH GK 900	110	0	5-27	-
JACQUES 8700	109	0	5-27	-
SUNBELT 1804	109	0	5-24	-
AGRATICH GK 750	108	0	5-25	-
JACQUES 7820	108	0	5-24	-
USS 2020	107	1.0	5-28	-
GOLDEN HARVEST XC-918	107	2.0	5-27	-
TODD EXP 820	106	0	5-25	-
CUKLER C 8707	105	0	5-24	-
FER 815	105	0	5-26	-
MCCURDY 8020	104	1.0	5-27	-
TODD EXP 810	104	0	5-27	-
FER 901	103	0	5-26	-
N. K. 9230	103	0	5-24	-
ASGROW RX 892	102	0	5-26	-
FUNKS EXP-9002 X	102	0	5-31	-
TODD A 7800	99	0	5-24	-
N. K. 9692	97	0	5-27	-
CUKLER C-8680	96	0	5-26	-
USS 7005	94	0	5-26	-
FER 767	87	1.0	5-24	-
ASGROW RX 404	81	3.0	5-30	-
DIXIE 18	74	1.0	6-4	-
TEST AVERAGE	106.7			
L.S.D. (.05)	16.3			
C.V. (%)	9.6			

* CHECK HYBRIDS.

SOURCES OF 1985 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	GK	Seedway, Inc. Hall, NY 14463	Todd
Asgrow Seed Co. 7000 Portage Rd. Kalamazoo, MI, 49001	Asgrow/ O's Gold	Stauffer Seeds, Inc. 975 South Durkin Dr. Springfield, IL 62704	Stauffer
Coker's Pedigreed Seed Co. P.O. Box 340 Hartsville, SC 29550	Coker	Sunbelt Hybrids, Inc. Wetumpka, AL	Sunbelt
Columbiana Seed Co. Eldred, IL 62027	Golden Harvest	USS Agri-Chemicals P.O. Box 1685 Atlanta, GA 30301	USS
DeKalb-Pfizer Genetics 3100 Sycamore Road DeKalb, IL 60115	DeKalb	Zimmerman Hybrids, Inc. 5147 W. Franklin Rd. Evansville, IN 47712	Zimmerman
FFR Cooperative 4112 E. State Rd. 225 W. Lafayette, IN 47906	FFR		
Funk Seeds International P.O. Box 2911 Bloomington, IL 61702	Funk's G Ring Around		
Jacques Seed Co. Prescott, WI 54021	Jacques		
McCurdy Seed Co. Fremont, IA 52561	McCurdy		
Northrup King Co. P.O. Box 151 Columbia, MS 39701	Northrup King		
PAG Seeds P.O. Box 9480 Minneapolis, MN 55440	PAG		
Paymaster Seeds P.O. Box 9493 Minneapolis, MN 55440	Paymaster		
Pioneer Hi-Bred International 1000 W. Jefferson St. Tipton, IN 46072	Pioneer		

ACCEPTABLE HYBRIDS FOR 1986

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 preceding tables. Unless otherwise noted, all acceptable hybrids have been tested at least 3 years in the regular variety tests and are listed in descending order of 3-year average yield.

NORTHERN ALABAMA

Yellow hybrids				White hybrids		Early hybrids	
Brand name	Hybrid	Brand name	Hybrid	Brand name	Hybrid	Brand name	Hybrid
Pioneer	3147	Northrup King	PX 95	Coker	833W	Asgrow/O's Gold	2570
Pioneer	3320	Jacques	JX 247	FFR	929W	Asgrow/O's Gold	RX777
Pioneer	3187	Funk's	G-4522	Funk's	G-4779W	Jacques	7900
DeKalb	T1230	Coker	19A	Asgrow/O's Gold	RX405W	†Northrup King	PX79
McCurdy	8150	Funk's	G-4733	Zimmerman	Z 11 W	†Funk's	G-4614
Ring Around	1502	Northrup King	PX87	†AgraTech	GK 927W	†Sunbelt	1827
McCurdy	84AA	Coker	21				
Jacques	JX180	†Pioneer	3165				
Funk's	G-4507A						

† Recommended based on exceptional 2-year average.

ACCEPTABLE HYBRIDS FOR 1986 (continued)
CENTRAL ALABAMA

Yellow hybrids		White hybrids		Early hybrids		Black Belt	
Brand name	Hybrid	Brand name	Hybrid	Brand name	Hybrid	Brand name	Hybrid
Pioneer	3320	Asgrow/O's Gold	RX405W	Ring Around	1404	Pioneer	3147
Pioneer	3165	Coker	833W	Asgrow/O's Gold	RX777	Northrup King	PX95
Pioneer	3147	Ring Around	2606W	Asgrow/O's Gold	6882	DeKalb	T1230
Northrup King	PX87	FFR	929W	Asgrow/O's Gold	2570	Jacques	8400
McCurdy	8150	† Zimmerman	Z 60 W	† Funk's	G-4614	Funk's	G-4733
Jacques	JX247			† AgraTech	GK 850	McCurdy	84AA
Golden Harvest	H-2680			† Northrup King	PX9581	*Ring Around	1502
Coker	21					*Pioneer	3187
Funk's	G-4733					† Sunbelt	1860
McCurdy	84AA					† Funk's	G-4858
Jacques	JX180					† Asgrow/O's Gold	5509
* Funk's	G-4522					† FFR	955
* Ring Around	1502						
* Coker	19A						

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

†Recommended based on exceptional 2-year average.

ACCEPTABLE HYBRIDS FOR 1986 (continued)
SOUTHERN ALABAMA

Yellow hybrid		White hybrid		Early Hybrid	
Brand name	Hybrid	Brand name	Hybrid	Brand name	Hybrid
Pioneer	3165	Ring Around	2606W	† Sunbelt	1827
McCurdy	8172	FFR	929W	† Asgrow/O's Gold	2570
DeKalb	T1230	Asgrow/O's Gold	RX405W	† Sunbelt	1802
Pioneer	3147	Funk's	G-4779W	† Funk's	G-4614
McCurdy	8150	Coker	833W		
Coker	21	Zimmerman	Z 11 W		
Jacques	JX247	† Zimmerman	Z 60 W		
Northrup King	PX95	† AgraTech	GK 927W		
Golden Harvest	H-2680				
* Northrup King	PX87				
* Funk's	G-4733				
* McCurdy	84AA				
* Ring Around	1502				
* Paymaster	8951				
† Pioneer	3320				

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

† Recommended based on exceptional 2-year average.

