

# Mississippi Hybrid Corn Tests, 1962

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## COOPERATIVE PROJECT

Corn breeding and testing in Mississippi is a cooperative project between the U. S. Department of Agriculture and the Mississippi Agricultural Experiment Station. In addition to Dr. Grogan and Dr. Campbell, who are listed as authors of this report, the following research men supervised the tests at the various branch stations or participated in it at State College:

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Three of the tests were on private farms through the cooperation of P. F. Williams, Jr., Clarksdale; E. T. Schaefer, Yazoo City; and M. A. Luter, Tyler-town.

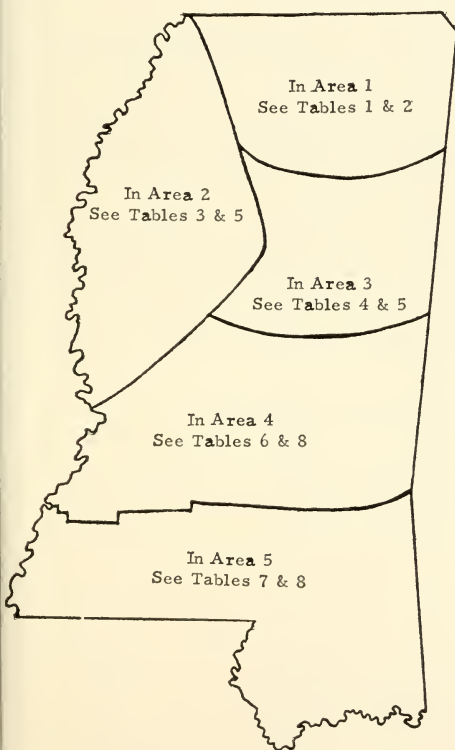
# 1962 HYBRID CORN TESTS

By C. O. GROGAN and C. M. CAMPBELL<sup>1</sup>

Mississippi as a whole experienced an unfavorable season for corn production. However, there were isolated areas that had reasonably good rainfall distribution during the growing season, and often these were within a few miles of an area where the opposite conditions existed. Two tests were not harvested and the yields of some others were considerably below average.

The tests were grouped differently in 1962 than in the past. Previously the tests were grouped in three broad regions—northern, central, and southern.

Under the new system, the testing area of the state was divided into five areas,



each representing a different set of environmental conditions. At least two tests were planted in each area. No restrictions were placed on the commercial companies as to number or which hybrids to enter. This system permitted the entry of hybrids that were in the advanced experimental stage and hybrids that might be particularly well adapted to Mississippi. It is believed the new policy will mean better hybrids for Mississippi farmers.

At least five replications were planted as a randomized block at each location, or the test was a balanced lattice with six replications. Individual plots consisted of 10 hills planted in 2-by-5 hill checks to facilitate ease of planting, thinning, taking notes, and greater accuracy in statistical computations. Tests have shown that comparable yields for a given plant population are obtained with either check or drill planting.

Notes were taken on yield, lodging, ear height, ears per plant, moisture, stand and insect reaction. Normally one is concerned primarily with yield. Growers should not consider just one year at one location, but rather the area yield and particularly the performance for a period of years. The best estimate of what to expect from a hybrid is that obtained from at least a three-year average which permits the subjection of the hybrids to a variety of climatic conditions.

<sup>1</sup>Agronomists, Crops Research Division, Agricultural Research Service, U. S. Department of Agriculture; and Mississippi Agricultural Experiment Station, cooperating. Cooperative research also was with the Entomology Division, Agricultural Research Service, U. S. Department of Agriculture. The tests were conducted jointly with the Branch Experiment Stations and on three private farms. See opposite page.

Table 1.—1962 Summary performance of the main hybrids tests in Area 1 (Holly Springs, Verona, and Pontotoc).

Pedigree	Acre yield		Lodging		Ear		Ears per plant		Moist.		Stand		Penetration <sup>1</sup>		Earworm		P.C.W. <sup>2</sup>		Husk		Corn Borer		
	Bu.	%	Root	Stalk	ht.	ft.	no.	plant	in grain	%	%	in.	%	in.	%	in.	%	in.	%	in.	%	plants infested	plants girdle & broken
Pioneer 9187	79.8	0.9	17.9	3.9	1.6	13.4	94	1.1	70	50	2.2	0.70	38.3	13.3									
Pioneer 8224	77.8	0.7	9.8	3.6	1.5	13.5	96	0.8	70	60	2.9	0.68	26.7	3.3									
Funk's G-795W	76.4	0.8	3.1	3.4	1.6	12.8	89	1.0	90	60	2.8	0.75	8.3	1.7									
Miss 6135 (Exp.)	75.5	1.0	3.2	4.0	1.6	12.7	94	1.4	90	70	2.9	0.63	25.0	6.7									
Pioneer 309B	74.0	1.5	4.1	3.4	1.3	12.9	95	1.1	100	80	2.1	0.75	33.3	13.3									
Stull's 111YA	73.1	4.0	7.6	4.2	1.2	12.9	94	1.4	90	80	2.6	0.73	18.3	8.3									
Dixie 22	73.1	1.7	10.4	4.1	1.3	13.2	94	1.3	70	50	2.7	0.73	25.0	10.0									
McNair 444B	73.1	3.4	8.5	3.8	1.4	13.2	94	1.3	70	40	2.0	0.83	16.7	5.0									
Dixie 55	71.8	1.1	5.9	4.2	1.4	13.2	93	1.5	100	90	2.5	0.63	23.3	8.3									
Dixie 77	71.5	5.0	9.3	3.7	1.5	13.0	90	1.0	80	80	2.8	0.70	15.0	3.3									
Delta 8812 (Exp.)	71.2	6.1	11.5	3.8	1.4	13.5	93	0.9	80	70	3.5	0.58	11.7	8.3									
Miss 6133 (Exp.)	71.1	2.0	10.9	3.8	1.6	12.3	90	1.2	80	70	2.7	0.75	26.7	6.7									
Embro Jarvis E.	70.2	7.8	14.6	3.0	1.1	12.9	94	1.5	90	50	3.5	0.60	18.3	8.3									
Embro Departure VIII	69.8	10.2	17.5	3.5	2.5	13.7	92	0.5	50	50	2.1	0.70	11.7	8.3									
Delta 0234 (Exp.)	69.7	2.8	2.5	3.5	1.3	13.1	91	1.2	70	60	2.9	0.68	13.3	6.7									
Pioneer 509W	69.7	0.9	10.0	3.3	1.3	12.1	92	2.0	100	100	4.0	0.50	21.6	10.0									
Pioneer 310	68.3	0.8	7.2	3.1	1.1	12.2	92	1.5	100	80	2.2	0.78	18.3	8.3									
Funk's G-711AA	67.8	1.9	5.6	3.7	1.1	13.5	92	2.0	80	60	1.2	1.15	26.7	6.7									
McCurdy M98L	67.0	1.9	12.1	3.7	1.1	12.5	91	1.2	80	60	2.8	0.78	23.3	10.0									
Pioneer 309A	67.0	0.3	3.5	3.4	1.1	12.8	96	1.2	80	50	2.1	0.76	18.3	3.3									
McNair 304A	66.7	2.2	2.8	3.2	1.2	13.0	91	1.2	80	90	1.9	0.93	10.0	3.3									
Embro Jarvis Star	66.6	3.4	12.8	3.6	1.2	13.1	92	1.2	80	70	2.7	0.73	13.3	6.7									
Stull's 500W	66.2	1.6	14.6	3.2	1.1	12.7	89	2.5	100	90	2.3	0.73	15.0	6.7									
Coker 616	65.4	2.6	7.4	3.3	1.3	13.4	92	1.4	90	70	2.1	0.71	23.3	13.3									
Embro 222TA	65.1	0.5	4.8	4.0	1.0	13.5	92	1.4	80	80	3.1	0.78	18.3	10.0									
Stull's 111Y	64.8	4.3	11.3	3.8	1.1	12.7	95	1.9	90	70	1.2	1.28	18.3	1.7									
Coker 15	64.7	3.6	6.3	3.1	1.4	12.3	92	1.4	90	70	2.4	0.80	13.3	0.0									
Delta 9907 (Exp.)	64.5	1.2	2.8	4.1	1.5	13.4	70	1.2	60	60	2.1	0.73	16.7	5.0									
Stull's 108Y	63.0	0.5	3.8	3.9	1.0	12.5	94	3.1	100	100	0.7	1.38	11.7	5.0									
DeKalb 925	62.2	1.2	12.3	3.2	1.1	12.4	94	1.4	80	70	2.4	0.75	20.0	5.0									
Funk's G-702	61.6	1.8	11.1	3.0	1.1	12.3	95	2.8	100	90	1.8	0.98	25.0	15.0									
DeKalb 1004	58.9	4.5	10.8	3.6	1.1	12.2	92	2.2	90	100	1.9	0.95	36.7	15.0									
DeKalb 1003	56.6	1.9	7.7	3.6	1.1	12.1	91	2.3	90	80	1.4	1.00	6.7	5.0									
DeKalb 805	54.2	3.5	6.6	2.8	0.9	12.2	89	1.6	100	100	2.5	0.90	20.0	5.0									
Mean	68.3	2.6	8.8	3.6	1.3	12.8	92	1.5	85	72	2.4	0.80	19.7	7.3									

<sup>1</sup>Inches from tip of ear.<sup>2</sup>Pink corn worm.<sup>3</sup>Inches beyond tip of ear.<sup>4</sup>Diameter of silk channel at tip of ear.

\*Insect data from Holly Springs, only. One replication except for Southwestern Corn Borer. Exp. means experimental hybrid not commercially

One important factor in yield is the ability of the hybrids to stand erect until harvest. Frequently some hybrids have very high yield but inherent susceptibility to lodging reduces the amount harvested. Losses stem not only from ears missed during harvest but also from rotting and rodents when the ears are on or near the ground.

The height of the ear merits some consideration when the corn is to be picked by hand or with some types of mechanical harvesters. In some cases excessive ear height contributes to lodging where the extra burden by the weight and position of the ear is sufficient to cause the stalk to fall.

### Early Planting Favored

Grain moisture is generally not a problem in Mississippi unless the corn is planted late. Under some conditions, diseases may be serious where grain moisture is excessive. Planting corn late enough where the grain moisture will be high at the normal harvesting date is not recommended. Tests have shown that late-planted corn is usually lower in yield, has more lodging, and will be badly infested with insects. These tests have shown also that corn can be safely planted before, and harvested before, cotton and at the same time get higher yields than if planted after cotton.

The number of ears per plant indicat-

Table 2.—1962 and three-year average yields in bushels per acre for hybrids grown in Area 1.

Hybrid	Area Mean	Holly Springs	Verona	Pontotoc Ridge	Pontotoc Flatwoods	3-year mean
Pioneer 9187	79.8	83.6	69.3	92.3	73.8	---
Pioneer 8224	77.8	80.1	70.3	84.6	76.1	---
Funk's G-795W	76.4	89.3	63.4	82.8	70.0	---
Miss 6135 (Exp.)	75.5	84.0	55.5	86.8	75.6	---
Pioneer 309B	74.0	72.3	66.2	80.8	76.8	71.1
Stull's 111YA	73.1	67.5	64.8	89.4	70.7	---
Dixie 22	73.1	77.6	56.4	81.5	76.9	70.2
McNair 444B	73.1	79.7	61.3	78.4	73.1	---
Dixie 55	71.8	69.0	61.5	81.3	75.4	73.0
Dixie 77	71.5	76.6	47.3	89.6	72.6	71.0
Delta 8812 (Exp.)	71.2	78.9	55.5	79.4	70.9	70.4
Miss 6133 (Exp.)	71.1	85.6	47.4	82.7	68.5	70.7
Embro Jarvis E	70.2	73.6	57.1	83.5	66.4	---
Embro Departure VIII	69.8	76.9	55.9	72.7	73.7	---
Delta 0234 (Exp.)	69.7	74.2	52.2	89.8	62.4	---
Pioneer 509W	69.7	62.9	58.1	85.9	71.9	---
Pioneer 310	68.3	69.5	60.1	74.2	69.3	---
Funk's G-711AA	67.8	72.3	57.5	74.3	67.0	68.0
McCurdy M98L	67.0	70.4	62.8	74.1	60.5	---
Pioneer 309A	67.0	70.1	61.8	73.6	62.3	66.3
McNair 304A	66.7	67.8	55.7	74.9	68.5	---
Embro Jarvis Star	66.6	66.8	54.8	85.4	59.3	---
Stull's 500W	66.2	67.7	51.1	81.3	64.7	---
Coker 616	65.4	75.8	48.5	77.8	59.3	65.7
Embro 222TA	65.1	68.1	52.8	72.0	67.4	---
Stull's 111Y	64.8	65.4	54.1	74.5	65.1	---
Coker 15	64.7	68.9	48.4	74.8	66.6	---
Delta 9907 (Exp.)	64.5	76.5	45.0	73.6	62.7	---
Stull's 108Y	63.0	60.0	60.0	70.3	61.6	---
DeKalb 925	62.2	65.7	59.0	69.0	55.1	---
Funk's G-702	61.6	63.2	54.3	68.2	60.7	---
DeKalb 1004	58.9	64.4	49.5	67.5	54.2	---
DeKalb 1003	56.6	56.9	46.4	64.2	58.7	---
DeKalb 805	54.2	59.4	40.8	60.6	55.9	---
Mean	68.3	71.9	56.1	78.1	66.9	---
LSD 5%		11.4	11.6	9.9	11.6	---

Table 3.—1962 Summary performance of the main hybrid tests in Area 2 (Stoneville and Clarksdale)

Pedigree	Acre yield bu.	Lodging		Ear ht. ft.	Ears per plant no.		Stand %	Earworm Husk	
		Root %	Stalk %		Pene- tration <sup>1</sup> in.	Exten- sion <sup>2</sup> in.			
Miss. 0002 (Exp.)	90.5	0	8	4.7	1.5	98	0.9	3.8	
Pioneer 9187	87.4	0	17	3.8	1.3	100	1.7	2.7	
Pioneer 8218	86.3	0	5	3.9	1.2	100	1.2	3.5	
DeKalb 1225	84.3	0	12	4.7	1.4	98	0.5	3.4	
Coker 67	83.7	0	3	4.0	1.4	100	0.7	2.9	
Dixie 77	81.1	0	10	3.9	1.4	96	1.2	2.5	
McCurdy M97	80.7	0	7	3.8	1.1	100	2.4	1.7	
Embro Departure IV	80.5	0	9	4.4	1.9	94	0.9	3.4	
Funk's G-795W	77.3	0	14	3.9	1.4	91	1.0	3.5	
Coker 911	76.3	0	5	4.0	1.1	100	1.2	3.1	
Dixie 55	75.5	0	5	4.1	1.4	85	1.1	3.9	
McCurdy 999	75.3	0	10	3.6	1.1	100	1.8	2.8	
Embro 222TA	74.5	0	8	4.1	1.1	98	2.1	2.1	
Delta 8812 (Exp.)	74.0	0	19	3.9	1.3	97	0.9	3.4	
Pioneer 8224	73.9	0	9	3.7	1.2	96	1.2	3.1	
Pioneer 309B	72.2	0	7	3.4	1.1	93	1.3	2.6	
Pioneer 509W	72.0	0	8	3.5	1.2	94	2.5	2.5	
Funk's G-710AA	71.4	0	10	4.0	1.1	98	2.0	2.6	
Delta 0234 (Exp.)	70.4	0	4	3.5	1.1	87	0.9	3.5	
Funk's G-711AA	69.0	0	14	3.9	1.1	96	1.5	2.0	
McCurdy M991	68.9	0	21	3.8	1.1	95	1.4	2.9	
Dixie 22	68.5	0	6	4.3	1.2	86	1.4	2.8	
DeKalb 1004	64.9	0	10	3.8	1.1	93	3.4	1.8	
DeKalb 1003	64.1	0	8	3.9	0.9	96	3.7	0.9	
Delta 9907 (Exp.)	49.7	0	8	4.1	1.3	54	0.8	3.0	
Mean	74.9	0	9	3.9	1.2	94	1.5	2.8	

<sup>1</sup>Inches from tip of ear. <sup>2</sup>Inches beyond tip of ear.

Moisture in grain at harvest of all hybrids was less than 12.0%.

es prolificity. A prolific hybrid can better adjust to the environment under which it is growing than a non-prolific (single ear) hybrid. Under adverse conditions, a prolific hybrid may produce only one ear per plant, but under good environmental conditions, two or more ears per plant may be produced with the same plant density.

The insect notes were taken by Mr. W. A. Douglas and C. A. Henderson, USDA entomologists. Insect ratings are important considerations in selecting hybrids. Often resistance is the difference between profit and loss. The Southwestern corn borer is commanding more attention in Mississippi. Research is in progress to determine methods of control.

In selecting a hybrid, the point of comparing yields over a period of years should be kept firmly in mind. The corn grower who plants all of his acreage to a hybrid based on the performance of only one test year takes a risk. If he wishes to try a hybrid because of a particularly outstanding performance, he should plant only a part of that acreage to that hybrid and the remainder of the land to one that is known to be consistently good. Insect resistance, lodging, and other agronomic features which determine the harvestable yield should be considered. Study carefully the performance records of 1962 before selecting a hybrid for 1963.

Table 4.—1962 summary performance of the main hybrid tests in Area 3 (State College and Brooksville)

Pedigree	Acre yield	Lodging		Ear ht.	Ears		Moist.		Stand %	Earworm		P.C.W. <sup>2</sup>		Husk	
		Root %	Stalk %		Ear plant no.	in grain	Penetration <sup>1</sup>	Ears in-fested %		cars in-fested*	Extension <sup>3</sup>	Tightness <sup>4</sup>			
Funk's G-711AA	93.9	5.7	7.1	3.8	1.3	12.3	98	1.3	84	93	2.5	0.78			
Miss. 0002 (Exp.)	93.7	3.7	5.3	4.3	1.6	13.1	97	1.2	83	90	3.7	0.62			
Funk's G-732	93.6	3.4	2.2	4.0	1.5	13.7	97	1.1	88	95	2.9	0.69			
Funk's G-795W	93.2	4.1	5.6	3.9	1.5	12.2	98	1.0	87	95	3.1	0.64			
Pioneer 8218	92.4	0.0	1.8	4.0	1.3	13.3	100	1.1	83	93	3.3	0.65			
Funk's G-720	91.4	1.4	1.3	4.0	1.2	12.7	100	1.0	75	93	2.9	0.66			
Delta 0234 (Exp.)	91.1	3.8	4.7	3.9	1.5	12.6	98	1.0	75	95	3.6	0.58			
Funk's G-730	90.6	2.8	3.5	4.0	1.3	12.6	100	1.0	82	95	3.0	0.77			
Pioneer 309B	90.4	0.9	2.5	3.7	1.3	12.7	99	1.1	86	93	2.8	0.64			
Dixie 82	89.6	3.7	7.7	4.3	1.5	12.9	96	1.3	86	90	3.4	0.65			
Pioneer 9187	89.3	3.1	15.5	4.0	1.5	13.0	100	1.1	89	90	2.9	0.68			
Dixie 55	88.5	2.6	4.0	4.3	1.5	13.4	91	1.0	70	78	3.7	0.60			
Pioneer 8224	88.1	1.3	7.5	3.7	1.5	13.3	98	1.0	84	90	2.7	0.70			
McNair 444B	87.0	8.3	3.7	4.1	1.5	13.0	98	1.1	87	93	3.1	0.66			
Dixie 22	86.3	2.8	10.9	4.2	1.4	13.4	94	1.2	91	93	3.0	0.72			
McCurdy 999	86.0	4.5	6.0	3.8	1.2	12.5	100	1.1	82	98	3.1	0.66			
Delta 9907 (Exp.)	85.1	1.2	1.4	4.1	1.5	13.5	74	1.3	93	98	2.8	0.74			
Embro 256CP	83.9	1.2	3.8	4.4	1.3	13.4	99	0.8	71	90	3.4	0.58			
McNair 425	82.9	6.1	5.3	3.9	1.4	13.4	98	1.3	92	98	2.9	0.69			
Delta 8812 (Exp.)	82.8	3.5	10.9	4.0	1.5	12.6	98	0.8	69	90	3.7	0.58			
Coker 67	82.1	3.8	4.6	4.1	1.5	13.4	97	0.8	72	95	3.4	0.63			
DeKalb 1004	82.0	6.5	14.6	3.9	1.1	12.7	95	1.0	83	93	3.1	0.72			
Dixie 18	79.7	2.9	5.3	4.6	1.4	13.5	98	0.8	61	85	3.7	0.57			
Coker 911	79.4	6.6	2.3	3.8	1.3	13.1	98	0.9	82	98	3.0	0.64			
DeKalb 1003	79.0	4.9	5.9	3.9	1.1	12.6	99	1.3	93	100	2.2	0.78			
Mean	87.3	3.5	5.7	4.1	1.4	13.0	97	1.1	82	93	3.1	0.63			

<sup>1</sup>Inches from tip of ear. <sup>2</sup>Pink corn worm. <sup>3</sup>Inches beyond tip of ear. <sup>4</sup>Diameter of silk channel at tip of ear. \*Brooksville only.

Table 5.—1962 and three-year average yields in bushels per acre for hybrids grown in Areas 2 and 3.

Hybrid	Area 2			Area 3				
	Area- mean	Stone- ville	Clarks- dale	3-Year mean	Area mean	State College	Brooks- ville	3-Year mean*
Miss. 0002 (Exp.)	90.5	82.7	98.3	---	93.9	90.2	97.6	---
Pioneer 9187	87.4	81.7	93.0	---	93.7	97.6	89.8	---
Pioneer 8218	86.3	79.8	92.8	---	93.6	89.2	97.9	---
DeKalb 1225	84.3	80.2	88.4	---	93.2	97.9	88.4	---
Coker 67	83.7	75.5	91.8	---	92.4	87.4	99.4	---
Dixie 77	81.1	83.6	78.5	98.3	91.4	82.1	100.6	---
McCurdy M97	80.7	86.8	74.6	---	91.1	88.8	93.3	---
Embro Departure IV	80.5	76.3	84.7	---	90.6	85.8	95.3	81.0
Funk's G-795W	77.3	75.0	79.6	---	90.4	90.0	90.8	76.8
Coker 911	76.3	71.8	80.8	---	89.6	88.4	90.8	82.4
Dixie 55	75.5	71.9	79.0	99.5	89.3	93.5	85.1	---
McCurdy 999	75.3	77.4	73.2	90.8	88.5	90.4	86.6	78.1
Embro 222TA	74.5	70.8	78.1	---	88.1	85.0	91.2	---
Delta 8812 (Exp.)	74.0	72.1	75.8	99.1	87.0	86.7	87.2	---
Pioneer 8224	73.9	74.6	73.1	---	86.3	86.5	86.1	79.9
Pioneer 309B	72.2	72.0	72.4	93.3	86.0	82.1	89.9	---
Pioneer 509W	72.0	77.5	66.5	---	85.1	81.3	88.9	---
Funk's G-710AA	71.4	76.1	66.6	94.6	83.9	85.9	81.9	---
Delta 0234 (Exp.)	70.4	67.2	73.6	---	82.9	83.0	82.7	---
Funk's G-711AA	69.0	75.2	62.7	88.8	82.8	87.4	78.1	---
McCurdy M991	68.9	71.5	66.3	---	82.1	82.1	82.1	71.9
Dixie 22	68.5	70.8	68.2	96.3	82.0	83.8	80.1	---
DeKalb 1004	64.9	61.6	68.2	---	79.7	84.4	74.9	70.5
DeKalb 1003	64.1	74.0	54.1	---	79.4	82.0	76.8	69.4
Delta 9907 (Exp.)	49.7	58.4	41.0	---	79.0	77.7	80.3	---
Mean	74.9	73.5	75.2	---	87.3	86.7	87.8	---
LSD 5%		9.6	11.2	---		10.1	7.1	---

\*Brooksville only



Table 6.—1962 summary performance of the main hybrid tests in Area 4 (Raymond and Yazoo City).

Pedigree	Acre yield	Lodging		Ear ht.	Ears per plant	Moist. in Grain %*	Stand %	Earworm
		Root %	Stalk %					Pene- tration <sup>1</sup> in.**
Funk's G-795W	54.0	1.5	35.8	3.7	1.3	10.5	94	1.0
Funk's G-745	54.0	5.5	34.8	4.5	1.1	11.0	100	1.2
Embryo Low Boy	53.4	1.5	33.6	3.5	1.1	10.3	97	1.0
Miss 0002 (Exp.)	52.1	0.0	36.2	4.3	1.2	10.7	93	1.3
Funk's G-740	51.9	4.4	43.9	4.7	1.1	10.5	96	1.3
Pioneer 9187	49.8	0.0	49.0	3.6	1.0	10.4	96	1.8
Coker 811A	48.9	0.0	23.6	3.7	1.2	10.2	95	0.6
McCurdy M301-1	48.3	1.0	44.8	4.8	1.0	9.8	91	1.0
McNair 444B	47.7	1.5	42.5	4.1	1.1	10.1	98	1.0
Pioneer 8226	47.4	3.4	23.4	4.2	0.9	11.1	95	0.7
McCurdy 1003C	47.4	3.0	48.5	4.6	1.0	10.1	93	0.8
Funk's G-732	47.1	5.0	26.1	4.3	1.0	10.7	97	1.0
Pioneer 309B	46.8	1.0	36.4	3.4	1.0	10.6	92	1.3
Dixie 22	46.4	0.0	38.2	4.6	1.1	10.7	91	1.7
Dixie 82	46.2	2.5	32.3	4.4	1.0	10.6	88	1.0
McCurdy 999	45.7	0.5	47.6	3.8	1.0	11.1	93	1.3
Coker 67	45.5	3.5	14.4	4.3	1.2	11.1	91	0.6
McNair 425	45.4	1.5	33.7	4.3	1.1	10.5	96	1.3
Funk's G-730	45.4	3.0	28.6	3.7	1.0	10.8	97	1.5
Embryo 261	45.0	2.0	35.0	4.1	1.0	10.6	92	0.8
Greenwood 471	44.8	3.0	35.7	4.4	1.1	10.5	96	0.7
Coker 71	44.0	1.0	12.8	4.2	1.0	10.8	98	0.5
DeKalb 1225	43.8	11.5	29.9	5.0	1.0	10.8	89	0.5
Dixie 18	43.7	4.5	34.1	4.8	1.1	10.7	88	0.5
Embryo Departure V	43.4	3.5	44.1	4.1	1.6	10.5	98	1.0
Embryo 256CP	43.0	1.5	39.9	4.7	1.0	10.7	90	0.8
Coker 911	41.9	2.0	33.7	4.0	1.0	10.8	96	0.8
Greenwood 18	40.1	3.0	31.3	4.8	1.0	11.0	96	0.7
Mean	46.9	2.5	34.6	4.2	1.1	10.6	94	1.0

<sup>1</sup>Inches from tip of ear.

\*Raymond only

\*\*Yazoo City only

The performance of NC288 and Dixie 55 was not determined at Yazoo City because of a poor stand.

Table 7.—Summary performance of the main hybrid test grown at Poplarville (Exp. 212)  
Area 5

Pedigree	Acre yield bu.	Lodging		Ear ht. ft.	Ears per plant no.	Moist. in Grain %	Stand %	Earworm		P.C.W. <sup>2</sup> ears in- fested %	R.W. <sup>3</sup> ears in- fests. %
		Root %	Stalk %					Per- cent- ration <sup>1</sup> %	Ears in- fested in.		
Miss 8288 (Exp.)	74.5	20.7	5.8	4.2	1.6	12.6	100	1.1	83	100	48
Miss 8484 (Exp.)	73.9	18.8	9.8	4.2	1.6	12.6	100	1.0	60	100	23
Dixie 18	73.4	37.9	5.2	3.9	1.7	12.6	97	0.5	43	100	5
Embro Flint-1	73.2	23.1	8.3	3.8	1.6	12.9	100	0.7	53	100	15
DeKalb 1225	72.1	62.3	8.2	4.1	1.6	12.8	100	1.0	65	100	28
Coker 67	70.9	26.2	8.2	3.1	1.7	13.2	100	0.9	63	100	13
Coker 811A	70.5	13.3	2.5	3.1	1.8	13.0	100	0.8	50	100	8
Coker 811	69.4	35.8	10.0	3.3	1.8	12.6	100	0.6	50	100	15
Pioneer 9187	69.0	17.1	17.9	2.7	1.5	13.2	100	1.2	80	100	23
Funk's G-745	69.0	25.2	11.0	3.3	1.4	12.8	100	1.5	85	100	23
Funk's G-795W	68.4	6.6	13.2	2.3	1.7	12.7	100	1.4	93	100	29
Miss 6004 (Exp.)	66.7	11.2	14.7	3.8	1.5	12.8	97	0.8	60	100	13
Coker 71	66.4	23.8	5.6	3.1	1.5	12.8	100	0.9	73	100	35
Greenwood 471	65.6	22.8	8.1	3.4	1.5	12.3	100	0.8	65	100	8
Funk's G-732	65.1	22.0	5.1	2.8	1.6	12.6	98	1.2	85	100	30
Keystone 257	65.1	14.4	19.2	3.5	1.4	13.0	100	0.8	70	100	35
McNair 425	65.1	41.3	17.4	3.0	1.6	13.1	100	1.3	90	100	20
Miss 6002 (Exp.)	64.0	13.5	16.2	3.8	1.5	13.1	93	1.0	53	100	8
Funk's G-740	62.7	23.3	24.2	3.8	1.4	13.5	100	1.1	75	100	23
Embro 76-24	62.6	27.8	27.0	3.4	1.8	13.6	96	0.9	73	100	30
Greenwood 18	60.8	33.0	13.9	3.6	1.4	12.9	96	0.9	70	100	18
Dixie 55	59.5	18.2	12.1	3.4	1.6	12.6	83	1.1	83	100	30
Embro 260	58.7	21.9	13.2	3.7	1.4	13.5	95	0.8	68	100	25
Miss 8305 (Exp.)	51.5	25.3	16.1	4.0	1.5	12.7	73	0.3	30	100	13
Miss 6115 (Exp.)	51.2	47.4	2.1	4.1	1.2	12.5	81	0.9	53	100	35
Mean	66.0	25.3	11.8	3.5	1.6	12.9	96	0.9	67	100	22
LSD, 5%	8.1										
C.V., 10.8%											

<sup>1</sup>Inches from tip of ear. <sup>2</sup>Pink corn worm. <sup>3</sup>Rice weevil.

Table 8.—1962 and three-year average yields in bushels per acre for hybrids grown in Areas 4 and 5.

Hybrid	Area 4		Yazoo City	3-year mean	Area 5 (Poplarville only)		3-Year mean
	Area mean	Raymond			Hybrid	Area mean	
Funk's G-795W	54.0	44.2	63.8	---	Miss 8288 (Exp.)	74.5	61.7
Funk's G-745	54.0	43.8	64.1	---	Miss 8484 (Exp.)	73.9	61.1
Embro Low Boy	53.4	38.4	68.3	---	Dixie 18	73.4	58.6
Miss 0002 (Exp.)	52.1	35.7	68.4	---	Embro Flint-1	73.2	---
Funk's G-740	51.9	42.9	60.8	---	DeKalb 1225	72.1	57.5
Pioneer 9187	49.8	45.2	54.4	---	Coker 67	70.9	61.0
Coker 811A	48.9	37.1	60.7	---	Coker 811A	70.5	---
McCurdy M301-1	48.3	39.3	57.2	---	Coker 811	69.4	57.8
McNair 444B	47.7	43.4	51.9	---	Pioneer 9187	69.0	---
Pioneer 8226	47.4	34.0	60.8	---	Funk's G-745	69.0	---
McCurdy 1003C	47.4	38.6	56.1	66.3	Funk's G-795W	68.4	---
Funk's G-732	47.1	36.3	57.9	---	Miss 6004 (Exp.)	66.7	58.1
Pioneer 309B	46.8	34.5	59.0	64.5	Coker 71	66.4	55.9
Dixie 22	46.4	33.2	59.6	67.5	Greenwood 471	65.6	---
Dixie 82	46.2	31.5	60.9	76.9	Funk's G-732	65.1	48.2
McCurdy 999	45.7	40.4	50.9	---	Keystone 257	65.1	---
Coker 67	45.5	34.8	56.1	68.8	McNair 425	65.1	---
McNair 425	45.4	35.9	54.8	---	Miss 6002 (Exp.)	64.0	---
Funk's G-730	45.4	34.3	56.5	65.8	Funk's G-740	62.7	53.0
Embro 261	45.0	32.6	57.4	---	Embro 76-24	62.6	---
Greenwood 471	44.8	33.5	56.0	---	Greenwood 18	60.8	---
Coker 71	44.0	33.6	54.4	64.2	Dixie 55	59.5	55.6
DeKalb 1225	43.8	26.5	61.0	67.5	Embro 260	58.7	---
Dixie 18	43.7	29.7	57.6	68.3	Miss 8305 (Exp.)	51.5	47.6
Embro Departure V	43.4	31.6	55.2	---	Miss 6115 (Exp.)	51.2	48.2
Embro 256CP	43.0	30.3	55.7	---	Mean	66.0	---
Coker 911	41.9	27.6	56.1	66.4	LSD 5%	8.1	---
Greenwood 18	40.1	27.1	53.0	---			
Dixie 55	---	33.4	---	---			
NC288	---	28.7	---	---			
Mean	46.9	35.3	58.2	---			
LSD 5%	---	10.0	N.S.	---			