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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:

Donald H. Bowman, agronomist, Delta Branch Experiment Station, Stoneville.

W. A. Douglas, and C. A. Henderson, entomologists, U.S.D.A., State College, Mississippi.

S. P. Crockett, superintendent, North Mississippi Branch Station, Holly Springs.

Robert C. Albritton, superintendent, Northeast Mississippi Branch Station, Verona.

B. C. Hurt, superintendent, Pontotoc Ridge-Flatwoods Branch Station, Pontotoc.

Louie Walton, superintendent, Black Belt Branch Station, Brooksville.

B. E. Waggoner, asst. agronomist, Coastal Plain Branch Station, Newton.

Robert E. Coats, agronomist, Brown Loam Branch Station, Raymond.

T. E. Ashley, superintendent, South Mississippi Branch Station, Poplarville.

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, Tylertown.

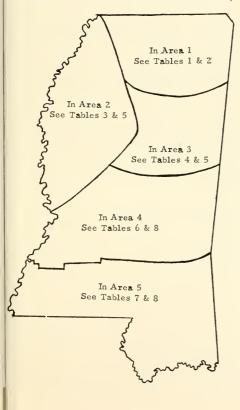
1962 HYBRID CORN TESTS

By C. O. GROGAN and C. M. CAMPBELL¹

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 h a v e 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.

¹Agronomists, 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.

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performance	
Summary	
11962	
Table	

													Corr	Corn Borer
					Ears	Moist.		Earv	Earworm	P.C.W. ²	Husk	sk		Plants
	Acre	Lod	Lodging	Ear	per	.u		Pene-	Ears in-	ears in-	Extens-	Tight-	plants	girdle &
Pedigree	vield	Root	Stalk	ht.	plant	grain	Stand	tration ¹	fested	fested	sion ³	ness ⁴	infested	broken
	Bu.	%	%	ft.	no.	%	%	in.	%	%	in.	in.	%	%
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	09	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	65	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
Divie 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	12.7	92	0.5	09	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	09	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	09	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	16	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 610	65.4	2.6 2.5	7.4	ς Γ	1.3	13.4	92	1.4	90	70	2.1	0.71	23.3	13.3
Embro 2221A	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
	64.8 1	4.5	11.3	3.8 2.8	[.]	12.7	95	1.9	90	20	1.2	1.28	18.3	1.7
Doker 13	04./	5.0	6.3 2.0	3.1 	4. I	12.3	92	1.4	06	70	2.4	0.80	13.3	0.0
Delta 990/ (Exp.)	64.5 0	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	0.2	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	1.5	12.3	3.2	1.1	12.4	94	1.4	80	70	2.4	0.75	20.0	5.0
Funk's G-/02	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	9.9	2.8	6.0	12.2	89	1.6	100	100	2.5	$0^{+}_{0}0$	20.0	5.0
Mean	68.3	2.6		3.6	1.3	12.8	92	1.5	85	72	2.4	0.80	19.7	7.3
Inches from tip of ear.	² Pink c	~		ches b	eyond t	³ Inches beyond tip of ear.	⁴ Diameter	of	silk channel at	tip of ear.				
*Insect data from Holly	Springs, only.		One repl	ication	replication except for		South western	Corn Borer.	Exp.	means experimental	perimental		hvhrid not commercially	mercially
				and the second				18						·

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MISSISSIPPI AGRICULTURAL EXPERIMENT STATION BULLETIN 656

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	vields in bushels	per acre for h	vbrids grown	in Area 1.

Tuble 2: 1902 and	thirte-year ave	rage yields in	busilets per	acte for hybrid	is grown in n	lica I.
	Area	Holly		Pontotoc	Pontotoc	3-year
Hybrid	Mean	Springs	Verona	Ridge	Flatwoods	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	

					Ears		Earworn	n Husk
	Acre	Lo	dging	Ear	per		Pene-	Exten-
Pedigree	yield	Root	Stalk	ht.	plant	Stand	tration ¹	sion ²
0	bu.	%	%	ft.	no.	%	in.	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	<u>98</u>	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

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

¹Inches from tip of ear. ²Inches beyond tip of ear.

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

es prolificy. 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.

$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Acre Lodging E. $3.711AA$ 93.9 5.7 7.1 02 <(Exp.) 93.3 5.7 7.1 02 <(Exp.) 93.3 5.7 7.1 02 <(Exp.) 93.5 7.1 7.1 0.2 <(Exp.) 93.7 5.7 7.1 7.732 93.5 5.7 7.1 7.732 93.5 5.7 7.1 7.732 93.6 3.7 7.7 7.732 93.4 1.4 1.2 7.732 93.4 1.4 1.2 7.732 91.4 1.4 1.3 5.733 90.4 0.1 1.8 7.732 91.4 1.4 1.3 7.733 90.4 0.1 1.8 90.4 0.2 2.8 3.7 7.75 88.5 2.6 4.0 7.7 88.5 2.6 4.0 <		Ears	Moist.	Earv	Earworm	P.C.W. ²	Husk	
yield Root Stalk ht. plant Grain Stand tration ¹ fested fested sion ³ r 5711A bin $\%^2$ $\%^2$ th. bin $\%^2$ $\%^2$ th. bin $\%^2$	yield Root Salk $3.711AA$ 93.9 5.7 7.1 02 5.7 5.7 7.1 $02.$ 5.7 3.7 5.3 7.732 93.5 3.7 5.3 7.732 93.5 3.7 5.3 7.732 93.6 3.4 2.2 5.732 93.6 3.4 2.2 5.732 93.6 3.4 2.2 5.733 91.4 1.4 5.3 5.733 92.4 0.1 1.8 5.733 92.4 0.1 1.8 5.733 92.4 0.1 1.8 5.730 91.4 1.4 1.5 5.730 91.4 1.4 1.5 5.730 90.6 2.8 3.7 5.75 90.4 3.7 7.7 60.9 8.5 2.6 4.0 7.7 <		per	in	Pene-	Ears in-	ears in-	Exten-	Tight-
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	3.711AA bu. $%$ $%$ 0.2 (Exp.) 93.7 5.7 7.1 0.2 (Exp.) 93.7 5.7 7.1 7.732 93.7 3.7 5.3 7.732 93.6 3.4 2.22 7.732 93.6 3.4 2.22 5.720 93.4 1.1 5.6 5.720 91.4 1.4 5.3 5.720 91.4 1.4 5.3 5.730 91.4 1.4 5.3 5.720 91.4 1.4 5.3 5.720 91.4 1.4 1.3 5.730 91.4 1.4 1.3 5.730 91.4 1.4 1.3 5.730 90.6 2.8 3.7 5.730 90.6 2.8 3.7 5.75 90.9 $8.5.0$ 8.1 1.3 5.75 90.6 2.8 3.7 7.7 5.900 8.7 3.9	Stalk	plant		tration ¹	fested	fested*	sion ³	ness ⁴
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	711AA 93.9 5.7 7.1 732 93.6 5.7 7.1 795W 93.6 5.7 7.1 795W 93.6 3.7 5.3 795W 93.6 3.7 5.5 795W 93.6 3.7 5.6 71 93.6 3.7 5.6 720 91.4 1.4 1.4 720 91.4 1.4 1.4 730 90.6 2.8 3.7 730 90.6 2.8 3.7 730 90.6 3.7 7.7 87 89.6 3.7 7.7 999 86.0 4.5 6.0 999 86.0 4.5 6.0 999 86.0 4.5 6.0 999 86.0 4.5 6.0 91.1 3.8 3.7 7.5 90.8 8.3 1.2 5.3 909 8.6 4.5 6.0 7	% % ft.	no.		in.	%	%	in.	-
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$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	5.6	1.5		1.0	87	95	3.1	
720 914 14 1.3 4.0 1.2 12.7 100 1.0 75 93 2.9 3.6 3.7 3.7 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.7 3.7 3.6 3.7 3.7 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.7 3.7 3.6 3.7 3.7 3.7 3.7 3.6 3.7 3.7 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.7 3.7	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		1.3		1.1	83	93	3.3	
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$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	3.8 4.7 3.9	1.5		1.0	75	95	3.6	DR 85.0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	(9B) 90.4 0.9 2.5 87 89.6 3.7 7.7 87 89.6 3.7 7.7 124 88.1 1.3 7.7 124 88.1 1.3 7.7 128 85.5 2.6 4.0 999 86.3 2.8 10.9 999 86.0 4.5 60 999 86.0 4.5 60 7<(Exp.)	2.8 3.5 4.0	1.3	-	1.0	82	95	3.0	
		0.9 2.5 3.7	1.3		1.1	86	93	2.8	
			1.5		1.3	86	90	3.4	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1	1.5	_	1.1	89	90	2.9	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2.6 4.0 4.3	1.5		1.0	70	78	3.7	09.0
$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		1.5		1.0	84	90	2.7	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		1.5		1.1	87	93	3.1	0.66 H
999 86.0 4.5 6.0 3.8 1.2 12.5 100 1.1 82 98 3.1 7<(Exp.)	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		1.4		1.2	91	93	3.0	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	7 (Exp.) 85.1 1.2 1.4 56CP 83.9 1.2 1.4 55 82.9 6.1 5.3 2 (Exp.) 82.1 3.5 10.9 2 (Exp.) 82.1 3.8 4.6 004 82.0 6.5 14.6 004 79.7 2.9 5.3 79.4 6.6 2.3 87.3 3.5 5.9		1.2		1.1	82	98	3.1	
	SCP 83.9 1.2 3.8 25 82.9 6.1 5.3 2 (Exp.) 82.8 3.5 10.9 2 (Exp.) 82.1 3.5 10.9 04 82.0 6.5 14.6 07 79.4 6.6 5.3 03 779.4 6.6 2.3 3.5 3.5 5.9	1.2 1.4 4.1	1.5		1.3	93	98	2.8	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	(Exp.) 82.9 6.1 5.3 2 (Exp.) 82.8 3.5 10.9 82.1 3.8 4.6 104 82.0 6.5 14.6 79.7 5.3 14.6 03 79.0 4.9 5.3 87.3 3.5 5.7		1.3		0.8	71	90	3.4	0.58
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 (Exp.) 82.8 3.5 10.9 82.1 3.8 4.6 04 82.0 6.5 14.6 79.7 5.9 5.3 79.0 4.9 5.3 87.3 3.5 5.7		1.4		1.3	92	98	2.9	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	04 82.1 3.8 4.6 904 82.0 6.5 14.6 79.7 5.9 5.3 03 79.0 4.9 5.9 87.3 3.5 5.7		1.5		. 0.8	69	90	3.7	0.58
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	004 82.0 6.5 14.6 79.7 2.9 5.3 003 79.0 6.6 2.3 87.3 3.5 5.9		1.5		0.8	72	95	3.4	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	79.7 2.9 79.4 6.6 87.3 3.5		1.1		1.0	83	93	3.1	0.72
79.4 6.6 2.3 3.8 1.3 13.1 98 0.9 82 98 3.0 03 79.0 4.9 5.9 3.9 1.1 12.6 99 1.3 93 100 2.2 87.3 3.5 5.7 4.1 1.4 13.0 97 1.1 82 93 300 2.2	003 79.4 6.6 87.3 3.5 87.3 3.5	2.9 5.3 4.6	1.4		0.8	61	85	3.7	0.57
b 1003 79.0 4.9 5.9 3.9 1.1 12.6 99 1.3 93 100 2.2 87.3 3.5 5.7 4.1 1.4 13.0 97 1.1 82 93 3.1	b 1003 79.0 4.9 87.3 3.5	6.6 2.3 3.8	1.3		6.0	82	98	3.0	0.64
87.3 3.5 5.7 4.1 1.4 13.0 97 1.1 82 93 3.1	87.3 3.5	4.9 5.9 3.9	1.1		1.3	93	100	2.2	0.78
		3.5 5.7 4.1	1.4		1.1	82	93	3.1	0.63

MISSISSIPPI CORN VARIETY TESTS FOR 1962

	Area	ea 2				Area	a 3		
	Arca-	Stone-	Clarks-	3-Year		Area	State	Brooks-	3-Year
Hybrid	mean	ville	dale	mcan	Hybrid	mean	College	ville	mean
Miss. 0002 (Exp.)	90.5	82.7	98.3	and a sum	Funk's G-711AA	93.9	90.2	97.6	
Pioneer 9187	87.4	81.7	93.0	and some	Miss 0002 (Exp.)	93.7	97.6	89.8	
Pioneer 8218	86.3	79.8	92.8	ann à an	Funk's G-732	93.6	89.2	97.9	
DeKalb 1225	84.3	80.2	88.4		Funk's G-795W	93.2	97.9	88.4	- 0
oker 67	83.7	75.5	91.8		Pioneer 8218	92.4	87.4	99.4	
Dixie 77	81.1	83.6	78.5	98.3	Funk's G-720	91.4	82.1	100.6	
McCurdy M97	80.7	86.8	74.6	an di annua	Delta 0234 (Exp.)	91.1	88.8	93.3	
mbro Departure IV	80.5	76.3	84.7		Funk's G-730	90.6	85.8	95.3	81.0
Funk's G-795W	77.3	75.0	79.6	anna di an	Pioneer 309B	90.4	90.0	90.8	76.8
oker 911	76.3	71.8	80.8		Dixie 82	89.6	88.4	90.8	82.4
ixie 55	75.5	71.9	79.0	99.5	Pioneer 9187	89.3	93.5	85.1	
McCurdy 999	75.3	77.4	73.2	90.8	Dixie 55	88.5	90.4	86.6	78.1
mbro 222TA	74.5	70.8	78.1	0-0-0 0-0	Pioneer 8224	88.1	85.0	91.2	
Delta 8812 (Exp.)	74.0	72.1	75.8	1.66	McNair 444B	87.0	86.7	87.2	- -
Pioneer 8224	73.9	74.6	73.1		Dixie 22	86.3	86.5	86.1	79.9
Pioneer 309B	72.2	72.0	72.4	93.3	McCurdy 999	86.0	82.1	89.9	
ioneer 509W	72.0	77.5	66.5	0-00-00-00	Delta 9907 (Exp.)	85.1	81.3	88.9	-
unk's G-710AA	71.4	76.1	66.6	94.6	Embro 256CP	83.9	85.9	81.9	
elta 0234 (Exp.)	70.4	67.2	73.6	anna dhuan	McNair 425	82.9	83.0	82.7	
Funk's G-711AA	69.0	75.2	62.7	88.8	Delta 8812 (Exp.)	82.8	87.4	78.1	
McCurdy M991	68.9	71.5	66.3	anna a' duran	Coker 67	82.1	82.1	82.1	71.9
ixie 22	68.5	70.8	66.2	96.3	DeKalb 1004	82.0	83.8	80.1	
DeKalb 1004	64.9	61.6	68.2	and annua	Dixie 18	79.7	84.4	74.9	70.5
DeKalb 1003	64.1	74.0	54.1		Coker 911	79.4	82.0	76.8	69.4
Delta 9907 (Exp.)	49.7	58.4	41.0	annin fina	DeKalb 1003	79.0	77.7	80.3	
Mean	74.9	73.5	75.2	an Q anoma	Mean	87.3	86.7	87.8	
LSD 5%		9.6	11.2		LSD 5%		10.1	7.1	i

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

					Ears	Moist.		Earworm
	Acre	Lod	ging	Ear	per	in		Pene-
Pedigree	yield	Root	Stalk	ht.	plant	Grain	Stand	tration ¹
	bu.	%	%	ft.	no.	%*	%	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
Embro 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
Embro 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
Embro Departure V	43.4	3.5	44.1	4.1	1.6	10.5	98	1.0
Embro 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
¹ Inches from tip of ear.								

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

*Raymond only

•*Yazoo City only

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

				1	Ears	Moist.		Earworm	'orm	P.C.W. ²	R.W. ³
	Acre	Lodging	Ing	Ear	per	.9		Dene.	Fare in-	eare in-	0.00
Pedigree	yield	Root	Stalk	ht.	plant	Grain	Stand	tration ¹	fested	fested	infes.
	bu.	%	%	ft.	no.	%	%	%	in	/0	/0
fiss 8288 (Exp.)	74.5	20.7	5.8	4.2	1.6	12.6	100		83	100	48
Miss 8484 (Exp.)	73.9	18.8	9.8	4.2	1.6	12.6	100	1.1	60	100	01 26
Dixie 18	73.4	37.9	5.2	3.9	1.7	12.6	67	2 10	43	100) V
Embro Flint-1	73.2	23.1	8.3	3.8	1.6	12.9	100	10	2 22	100	
JeKalb 1225	72.1	62.3	8.2	4.1	1.6	12.8	100	01		100	286
Coker 67	70.9	26.2	8.2	3.1	1.7	13.2	100	0.0	63	100	13
Coker 811A	70.5	13.3	2.5	3.1	1.8	13.0	100	0.8	20	100	j œ
Coker 811	69.4	35.8	10.0	3,3	1.8	12.6	100	0.6	20.	100	1
Pioneer 9187	69.0	17.1	17.9	2.7	1.5	13.2	100	1.2	80	100	22
runk's G-745	69.0	25.2	11.0	3.3	1.4	12.8	100	1.5	22	100	23 27
Funk's G-795W	68.4	9*9	13.2	2.3	1.7	12.7	100	1.4	93	100	00
Aiss 6004 (Exp.)	66.7	11.2	14.7	3.8	1.5	12.8	97	0.8	60	100	1 2
Coker 71	66.4	23.8	5.6	3.1	1.5	12.8	100	0.9	73	100	100
Jreenwood 471	65.6	22.8	8.1	3.4	1.5	12.3	100	0.8	65	100) oc
unk'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	20	100	2 20
AcNair 425	65.1	41.3	17.4	3.0	1.6	13.1	100	1.3	06	100	20
Aiss 6002 (Exp.)	64.0	13.5	16.2	3.8	1.5	13.1	93	0.1	23	100	2 00
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	20	100	000
Dixie 55	59.5	18.2	12.1	3.4	1.6	12.6	83	1.1	. č	100	30
Embro 260	58.7	21.9	13.2	3.7	1.4	13.5	95	80	89	100	27.0
Miss 8305 (Exp.)	51.5	25.3	16.1	4.0	1.5	12.7	73	0.3	30	100	1 4
6115	51.2	47.4	2.1	4.1	1.2	12.5	81	0.9	22	100	35
Mean	66.0	25.3	11.8	3.5	1.6	12.9	96	0.9	67	100	6
LSD, 5%	8.1								5	001	1
V. 10.8%											

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

MISSISSIPPI AGRICULTURAL EXPERIMENT STATION BULLETIN 656

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MISSISSIPPI CORN VARIETY TESTS FOR 1962