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Corn Hybrids And Varieties

1951 Tests In Mississippi

MISSISSIPPI STATE COLLEGE
AGRICULTURAL EXPERIMENT STATION
CLAY LYLE, Director

These corn tests are a cooperative project between the Mississippi Experiment Station and the Division of Cereal Crops and Diseases, Bureau of Plant Industry, Soils and Agricultural Engineering, and the Division of Cereal and Forage Insect Investigations, Bureau of Entomology and Plant Quarantine, Agricultural Research Administration, U. S. Department of Agriculture.

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Two plantation trials included in these tests were made possible through the cooperation of E. T. Shaffer, Yazoo City and King and Anderson Plantation, Clarksdale.

Corn Hybrids And Varieties --- 1951

Three Dixie hybrids were top yielders in 1951 corn performance tests conducted by the Mississippi Agricultural Experiment Station. Dixie 33, 17, and 11, in that order, led when data from all tests, except South Mississippi, were averaged. The next three highest yielders in this average included Funk G785W, Funk G-714A and Pfister (PAG) 631.

At Poplarville, where tests for South Mississippi are conducted, Dixie 18 led the field of regular entries, although it was exceeded in yield by an experimental hybrid of which seed are not available for distribution.

These tests, designed to measure the performance of corn hybrids and varieties, were planted at State College, the seven branch stations and two farms in the Delta. The tests at Yazoo City and Brooksville were not harvested, consequently the results reported include the remaining eight experiments.

As farmers become more experienced in the use of corn hybrids they learn that all hybrids do not perform equally well. At the present time a few farmers are dissatisfied with corn hybrids because when purchasing the seed they did not specify a particular hybrid. Although there are a number of adapted hybrids better than the best adapted varieties, the Experiment Station has always recommended the use of a good adapted open-pollinated variety in preference to a poor unadapted hybrid which not only gives low yield but often has poor quality grain, and practically no insect resistance.

Explanation of Tables

Each test contained sixteen entries arranged in a balanced lattice design with five replications. Each plot was two rows wide and ten hills long with rows and

hills 40 inches apart (42 inches at Poplarville). Five seeds were planted per hill and later thinned to two or three plants per hill. Tests at Holly Springs, Newton, Oakley and Poplarville were thinned to two plants per hill which with a perfect stand resulted in about 8,000 plants per acre. Three plants per hill, or approximately 12,000 plants per acre, were left in the tests at Verona, State College, Stoneville, and Clarksdale. Subterranean cutworms further reduced the stand at Stoneville.

Lengthy drought periods in the early and latter part of the growing season seriously affected the yields of a majority of the tests. Late maturing hybrids were more adversely affected than the earlier hybrids. The lack of moisture preceding harvest is reflected in the generally low percentage of unsound ears.

Yields at Poplarville and Clarksdale are based on 70 pounds of field dry ear corn per bushel. Moisture samples were taken at all other locations where yields are based on actual weight of the shelled grain adjusted to 15.5% moisture. Three-year averages are more reliable than yield data from one year and should be carefully considered when choosing a hybrid.

The percentage of plants lodged is based on actual counts. All plants broken below the top ear-bearing node (joint) were classified as stalk lodged while all plants leaning 30 degrees or more were root lodged. At State College both and stalk lodging were each divided into two classifications depending upon whether the plants were lodged to the extent that the ears touched the ground.

Ears infested with rice weevil and corn earworms are shown in percent. Rice weevil damage was so slight that a measure of resistance could be obtained only at Poplarville. Data on earworm infestation are reported from four locations. Ear

height is reported as the distance in feet from the ground to the point where the top ear is attached to the plant. Ears per plant indicate whether the hybrid is one-eared or prolific; it is obtained by dividing the number of ears harvested by the total number of plants. Husk length is reported in the number of inches that the husk extends beyond the tip of the ear.

The shelling percentage is a measure of the ratio of grain to cob in a sample of ear corn. A shelling percentage of 85 means that in 100 pounds of ear corn, 85 pounds are grain and 15 pounds are cobs. Generally speaking prolific hybrids have more grain and less cob than do one-eared hybrids. The commonly used formula, 70 pounds of ear corn equal one bushel, is based upon dry corn having a shelling percentage of 80. When a farmer sells corn with a shelling percentage of 84 according to this formula, he is giving away 4 pounds of grain in every 100 pounds of ear corn.

Statewide Results

Fifteen of the sixteen hybrids and varieties were planted at all locations except Poplarville. The seven-station averages are reported in Table 1. Dixie 33, Dixie 17 and Dixie 11 were the three highest yielding hybrids with Funk G785W, Funk G714A, Pfister (PAG) 631 and Dixie 22 completing the list of those yielding in the top one-half of the test. It is important to note that the same Dixie hybrids were the highest yielding entries at six locations for the period 1949 through 1951. This shows that under a set of 18 different environmental conditions these hybrids have been consistently high yielding.

Dixie 17 is a white prolific hybrid that is high yielding in all parts of the state. However, since it has but fair husk coverage it is adapted as a full season corn only in the northern one-third of Mississippi. It is suitable in the remainder of the state for hogging-off or early harvest. In 1951, Dixie 17 stalk-lodged more than

other hybrids. Dixie 33 is similar to Dixie 17 and is adapted to the same area. It is more resistant to lodging than Dixie 17 but is more susceptible to ear rots. The kernels of both Dixie 17 and Dixie 33 have a reddish-copper tinge.

Dixie 11 is a high yielding prolific hybrid having pure white grain of excellent quality and high shelling percentage. The husk is longer and tighter than either Dixie 17 or Dixie 33 thus giving Dixie 11 better protection against the rice weevil. For this reason, Dixie 11 is better adapted to the central section of the state. Although it lodges badly under many conditions, it is the only high-yielding white corn available for this area.

Dixie 22 is a semi-prolific yellow hybrid with medium large ears, some of which are nearly red. The performance of Dixie 22 over a long period of time has proven it to be the highest yielding yellow hybrid tested. Because of loose husks it should be used only in the upper one-third of the state for a full season corn.

Dixie 82, a yellow hybrid similar to Dixie 22, was planted at State College and Newton. It outyielded Dixie 22 at both locations although the difference in yields was not statistically significant. Dixie 82 lodged slightly more and had a lower shelling percentage than Dixie 22.

Dixie 18 is a yellow hybrid with excellent quality grain. It is one of the few commercial hybrids possessing superior resistance to lodging. Dixie 18 has a long tight husk which makes it particularly desirable for use in the southern and central sections of the state where protection against the rice weevil is necessary. It also seems to be somewhat resistant to serious attacks of corn earworms. Under certain conditions the ears are high but no higher than Station Mosby. The yields of this late maturing hybrid were seriously affected by the extremely dry period in the late summer.

Funk G785W is a prolific white hybrid with good quality grain. It was entered for the first time in 1951 and on the basis of one year's trial appears to be a good hybrid. It ranked fourth in the average of the seven tests. It had more plants erect at the time of harvest than Dixie 11, Dixie 17 and other Funk hybrids tested, but did not stand as well as Dixie 33 and Dixie 18. Funk G714A is a yellow hybrid with grain of good quality. It ranked fifth highest in the average yield of all tests. This hybrid lodged badly, the stalk breakage exceeded only by Funk G780W and Dixie 17. Funk G714A has been tested two years. An average of the two-year data shows that Funk G714A yielded less and stalk lodged considerably more than the yellow hybrids Dixie 18 and Dixie 22. Funk G780W is a white hybrid with excellent quality grain. It lodged almost as much as Dixie 11 and Dixie 17 but had more stalk breakage than Dixie 11. In the 1949-51 average of six locations Funk G780W outyielded Station Mosby by about 5 percent but yielded 8 percent less than Dixie 11. In 1951, Funk G780W yielded proportionately better in the Delta than it did in the hill tests.

Pfister (PAG) 631 ranked sixth in the average of all stations in 1951. This white hybrid is chiefly one-eared and has enough husk coverage for adaptation to North Mississippi only. It did not lodge as much as Dixie 17 but lodged more than Dixie 33 and approximately the same as Dixie 22. An average of six stations over a period of 3 years shows Pfister (PAG) 631 to be about equal in yield to Funk G780W but it has consistently stood better than this Funk hybrid. Pfister (PAG) 620 was tested for the first time and although it stood somewhat better than Pfister (PAG) 631 it appeared to be no better in other respects. These hybrids are several days earlier than other hybrids in the test. About 10 percent of the ears of both Pfister (PAG) 631 and

Pfister (PAG) 620 had rotten butts. Both also yielded near the top of the test at State College and at the bottom at Stoneville. In both instances the yields were near 100 bushels per acre indicating that this is probably the maximum yield of these one-eared hybrids for the particular plant population. Where skips in the normal stand occur, such as at Stoneville, the yields of one-eared hybrids are reduced to a greater extent than are the yields of the prolific.

Coker 811 is a prolific hybrid with small ears of hard white grain and high quality. It was not outstanding in all tests from the standpoint of yield. It has excellent resistance to lodging, excelling even Dixie 18 in the 1951 tests. In experiments where lack of moisture was a major limitation the yields of this hybrid were low.

Experimental hybrid Miss. 1206 was below the half-way mark in the average of all tests but was among the high entries in lodging resistance. Miss. 1206 and Miss. 1210 (at Newton) showed a decided resistance to earworm infestation. Both of these hybrids are yellow.

Results at Poplarville

Dixie 18 was superior to other commercial hybrids in yield, resistance to lodging, resistance to rice weevil and in resistance to earworm. Coker 811 was high yielding and was highly resistant to lodging but had considerable damage from insects. Georgia 281 is a white hybrid. It yielded considerably less than Dixie 18 and Coker 811 but was equal to Dixie 18 in resistance to rice weevil and earworm and superior to Coker 811 in these respects. It lodges more than Dixie 18 and has a high ear attachment.

Miss. 0101 (white) was the highest yielding entry in the test despite the large amount of weevil damage. Dixie 17, Dixie 33 and Dixie 22 do not have sufficient husk coverage for use in South Mississippi except for early harvest or hogging-off.

Miss. 1202 (yellow) yielded reasonably well, had little lodging and was fairly resistant to rice weevil. Station Mosby yielded about midway in the test but was among those which lodged rather badly. La. 521 (white) yielded slightly more than Georgia 281 but lodged more than any entry in the experiment; the weevil resistance was fair. Miss. 0202 (yellow) was among the lower yielding hybrids but was superior in standability and resistance to rice weevil. Funk G791W (white) and Funk G737 (yellow) were low yielding and stalk lodged but gave above average resistance to attacks of rice weevil. Miss. 1204 (yellow) showed resistance to lodging but was low yielding.

The results of the individual tests are given in Table 2 through 9. The characteristics of the various hybrids can be obtained from an average (Table 1) of the seven tests but individual tables of the various locations show the effects of local environment. While studying the data, the reader should remember that the yield data from a three-year average is more reliable as a measure of the performance of a hybrid than the results of only one year.

Hybrid Recommendations

North Mississippi (North of U. S. Highway 82)

Dixie 17 (white)

Dixie 33 (white)

Dixie 22 (yellow)

Pfister (PAG) 631 (white)

Dixie 11 (white) southern counties

Dixie 18 (yellow) southern counties for cribbing

Central Mississippi (North of U. S. Highway 80 and South of U. S. 82)

Dixie 18 (yellow)

Dixie 11 (white)

Dixie 17 (white) early feed or hogging off only

Dixie 33 (white) early feed or hogging off only

Dixie 22 (yellow) early feed or hogging off only

Pfister (PAG) 631 (white) early feed or hogging off only

Southern Mississippi (South of U. S. Highway 80)

Dixie 18 (yellow)

Dixie 11 (white) northern counties

Georgia 281 (white) southern counties

Dixie 17 (white) early feed or hogging off only

Dixie 33 (white) early feed or hogging off only

Dixie 22 (yellow) early feed or hogging off only

Pfister (PAG) 631 (white) early feed or hogging off only

Table 1. Average of seven hybrid corn tss in 1951 (omitting Poplarville).

Pedigree	Acre yield	Average yield ⁴ 1949-51	Plants erect at harvest		Lodging		Un-1 sound ears	Ears infested		Ear ht.	Ears per plant	Husk ³ length	Shell-ing ⁴	Stand
			%	%	Root	Stalk		%	%					
Dixie 33	76.8	77.9	74	9	17	4	88	4.6	1.3	2.3	84.6	93		
Dixie 17	72.0	78.8	50	9	41	3	85	4.4	1.5	2.3	84.8	91		
Dixie 11	69.3	74.2	51	19	30	2	85	4.8	1.5	2.9	85.4	94		
Funk G785W	68.7	---	69	7	24	2	89	4.8	1.4	2.3	84.6	96		
Funk G714A	66.1	---	51	14	35	2	85	4.6	1.5	3.0	82.7	90		
Pfister (PAG) 631	65.9	68.2	67	6	27	9	88	3.6	1.1	2.6	81.8	91		
Dixie 22	65.0	74.2	61	10	29	3	89	4.4	1.3	2.8	81.2	90		
Dixie 18	64.3	---	78	6	16	1	80	5.5	1.3	3.6	83.8	94		
Miss. 1206	64.1	---	75	6	19	2	78	4.7	1.3	3.3	80.6	95		
Pfister (PAG) 620	63.5	---	72	4	24	10	91	3.8	1.0	1.6	83.2	89		
Miss. 1204	63.3	---	74	9	17	3	84	4.5	1.2	3.1	78.8	93		
Funk G780W	63.2	68.4	56	7	37	4	84	5.0	1.4	2.3	82.7	93		
Jellicorse*	61.9	64.9	67	7	26	6	85	4.1	1.3	2.0	82.0	89		
Coker 811	59.9	---	86	6	8	1	85	4.3	1.3	2.3	81.4	92		
Station Mosby*	58.1	65.2	57	14	29	4	89	5.4	1.1	2.4	82.5	86		

*Open pollinated varieties.

¹Two-station average.

²Three-station average.

³Five-station average.

⁴Six-station average.

Table 2. Hybrid corn test at Poplarville, 1951.

Pedigree	Acre yield bu.	Average yield 1949-51 bu.	Plants erect at harvest %	Lodging		Ears Infested		Ear ht. ft.	Ears per plant no.	Husk length in.	Stand %
				Root %	Stalk %	Rice Weevil %	Ear- worm %				
Miss. 0101	61.2	61.2	95	1	4	53	80	3.0	1.0	2.2	98
Dixie 18	60.7	62.6	98	0	2	20	64	2.9	1.5	3.4	98
Coker 811	58.1	-----	97	0	3	35	71	2.0	1.5	1.8	100
Dixie 82	55.1	-----	97	0	3	56	89	2.5	1.3	2.2	98
Dixie 11	53.9	59.7	73	3	24	36	68	2.9	1.6	2.0	94
Dixie 17	52.2	57.9	82	4	14	80	96	2.1	1.6	1.8	96
Miss. 1202	51.0	-----	95	0	5	30	79	2.5	1.1	2.8	98
Dixie 33	49.6	-----	94	1	5	90	99	2.0	1.3	1.2	98
Station Mosby*	49.6	50.8	79	6	15	65	91	3.1	1.2	2.4	94
La. 521	49.4	-----	63	10	27	30	75	3.2	1.4	2.0	93
Georgia 281	48.6	57.0	80	6	14	20	66	3.5	1.5	3.6	96
Miss. 0202	47.5	-----	97	0	3	23	71	2.2	1.4	2.8	96
Dixie 22	45.6	-----	82	2	16	74	91	2.2	1.2	2.0	98
Funk G791W	45.5	-----	80	0	20	30	69	3.1	1.1	2.4	96
Miss. 1204	45.5	-----	95	0	5	64	90	2.0	1.0	2.8	96
Funk G737	40.7	-----	76	4	20	34	74	2.2	1.1	2.6	94

*A difference in yield of 6.1 bushels per acre is required to be considered significant.

*Open pollinated variety.

Table 3. Hybrid corn test at Holly Springs, 1951.

Pedigree	Acre yield bu.	Average yield 1949-51 bu.	Plants erect at harvest %	Lodging			Ear ht. ft.	Ears per plant no.	Shell- ing %	Stand %
				Root %	Stalk					
					%	%				
Dixie 33	46.3	61.0	89	1	10	4.6	1.2	84.1	98	
Pfister (PAG) 631	40.9	54.0	81	1	18	3.8	1.0	81.1	96	
Dixie 17	38.4	57.0	50	1	49	4.3	1.3	83.2	91	
Pfister (PAG) 620	36.2	---	78	1	21	3.9	1.0	81.1	84	
Funk G714A	34.4	---	52	0	48	4.5	1.2	80.9	100	
Miss. 1204	32.8	---	83	1	16	4.3	1.0	78.5	94	
Dixie 22	32.0	55.7	65	1	34	4.5	1.0	80.3	87	
Jellicorse*	31.8	47.2	74	0	26	4.1	1.1	80.8	90	
Miss. 1210	31.6	---	70	0	30	4.8	1.1	79.1	90	
Miss. 1206	31.5	---	82	0	18	4.7	1.0	80.6	91	
Funk G785W	30.6	---	69	1	30	5.0	1.1	81.6	100	
Dixie 11	29.8	47.6	60	2	38	4.9	1.1	84.2	96	
Coker 811	29.0	---	91	1	8	4.5	1.2	79.4	86	
Dixie 18	27.2	---	78	0	22	5.7	0.9	82.5	102	
Funk G780W	26.3	44.1	56	0	44	5.1	1.0	79.1	98	
Station Mosby*	23.9	41.9	60	2	38	5.4	0.8	80.3	88	

*Open pollinated varieties.

A difference in yield of at least 3.9 bushels per acre is required to be considered significant.

Table 4. Hybrid corn test at Verona, 1951.

Pedigree	Acre yield	Average yield 1949-51	Plants erect at harvest	Lodging		Ear ht.	Ears per plant	Shell- ing	Stand
				Root	Stalk				
	bu.	bu.	%	%	%	ft.	no.	%	%
Dixie 33	73.7	82.1	67	18	15	4.3	1.2	85.8	84
Dixie 11	69.5	76.7	27	32	41	4.2	1.4	86.0	89
Dixie 17	67.6	78.0	38	11	51	3.8	1.3	86.4	83
Funk G785W	67.5	.....	59	19	22	4.4	1.2	85.1	90
Pfister (PAG) 631	66.4	68.3	58	19	23	3.5	1.0	83.1	82
Funk G714A	65.9	.....	35	35	30	4.2	1.3	83.5	78
Miss. 1206	63.5	.....	63	18	19	4.4	1.2	80.4	87
Jellicorse*	61.9	63.8	51	17	32	3.8	1.1	83.1	84
Dixie 22	61.4	75.7	39	29	32	4.2	1.1	82.2	85
Miss. 1210	60.8	.....	71	13	16	4.6	1.2	79.2	78
Dixie 18	60.7	.....	66	10	24	5.0	1.3	84.7	83
Pfister (PAG) 620	59.7	.....	72	12	16	3.6	.9	84.0	87
Coker 811	59.2	.....	79	14	7	3.8	1.2	81.8	85
Miss. 1204	58.6	.....	70	17	13	4.2	1.1	79.1	82
Funk G780W	56.2	67.5	40	16	44	4.3	1.2	82.9	78
Station Mosby*	55.4	66.2	45	32	23	4.9	1.0	82.0	84

*Open pollinated varieties.

A difference in yield of at least 5.4 bushels per acre is required to be considered significant.

Table 5. Hybrid corn test at State College, 1951

Pedigree	Acre yield	Average yield 1949-51	Plants erect at harvest	Lodging ¹						Ears per plant	Husk length	Shell- ing	Stand	
				Root		Stalk		Ears Infested	Earworm					Ear ht.
				A	B	A	B							
Dixie 33	104.1	107.9	62	20	1	5	12	86	4.9	1.2	85.8	98		
Pfister (PAG) 620	101.4	.....	73	9	0	4	14	95	4.3	1.0	84.7	100	
Pfister (PAG) 631	93.7	96.8	66	14	0	6	14	92	4.2	1.0	83.2	99		
Dixie 82	91.0	.....	47	16	1	6	30	92	5.1	1.3	80.7	96	
Dixie 17	90.7	107.9	39	23	2	2	34	88	4.8	1.4	85.9	95		
Dixie 11	90.6	106.2	18	42	12	2	26	83	5.3	1.5	85.5	95		
Funk G785W	89.6	.....	63	17	0	4	16	91	4.9	1.3	85.6	100	
Miss. 1204	88.4	.....	50	28	2	2	18	90	4.8	1.0	79.0	100	
Dixie 22	85.7	101.9	47	22	2	3	26	90	5.0	1.1	81.6	96		
Dixie 18	85.1	.....	63	20	1	4	12	75	5.6	1.2	79.0	101	
Jellicorse*	81.3	92.6	55	17	1	4	23	86	4.8	1.2	84.4	98		
Funk G714A	81.3	.....	40	27	3	5	25	89	4.9	1.2	83.5	100	
Funk G780W	78.5	99.9	54	12	2	10	22	83	5.6	1.2	84.0	103		
Miss. 1206	77.8	.....	57	19	0	6	18	81	4.9	1.1	80.7	101	
Station Mosby*	76.0	91.7	46	22	2	8	22	89	5.8	1.1	85.4	91		
Coker 811	67.5	.....	77	16	0	2	5	84	4.6	1.1	81.5	99	

*Open pollinated varieties.
¹A—Ears not touching the ground.
 B—Ears touching the ground.
 A difference in yield of 7.3 bushels per acre is required to be considered significant.

Table 6. Hybrid corn test at Newton, 1951

Pedigree	Acre yield	Average yield 1949-51	Plants erect at harvest	Lodging		Ears Infested Earworm	Ear ht.	Ears per plant	Husk length	Shell- ing	Stand ¹
				Root	Stalk						
	bu.	bu.	%	%	%	%	ft.	no.	in.	%	%
Dixie 33 -	61.6	57.1	95	0	5	82	4.2	1.4	2.4	83.4	104
Dixie 17 -	61.6	58.9	85	0	15	76	4.0	1.6	2.2	83.3	104
Pfister (PAG) 620	57.4		89	0	11	80	3.2	1.1	2.0	82.5	100
Jellicorse*	57.1	49.2	93	0	7	74	3.8	1.5	2.0	80.8	100
Dixie 82	56.1		88	2	10	78	4.8	1.5	2.4	78.9	102
Funk G785W	56.0		92	0	8	87	4.6	1.6	2.2	83.9	104
Pfister (PAG) 631	56.0	50.3	83	0	17	79	3.0	1.1	2.8	81.4	101
Funk G714A	55.5		88	0	12	77	4.8	1.7	3.4	81.7	102
Dixie 11	55.2	53.9	87	0	13	84	4.8	1.6	2.8	84.2	103
Miss. 1206	54.8		96	0	4	69	4.8	1.5	3.4	80.1	100
Miss. 1210	52.3		93	0	7	66	4.6	1.4	3.8	79.2	102
Miss. 1204	51.8		94	0	6	74	4.0	1.2	3.2	78.2	100
Dixie 22	51.8	52.8	91	0	9	84	4.0	1.3	2.8	80.8	102
Coker 811	51.5		99	0	1	83	4.0	1.5	2.2	80.7	100
Funk G780W	49.6	49.8	87	0	13	76	5.2	1.4	2.4	82.1	102
Station Mosby*	49.4	49.5	91	0	9	85	5.4	1.2	2.6	81.9	99
Dixie 18	49.1	52.2	100	0	0	82	5.6	1.3	3.6	82.7	102

*Open pollinated varieties.

¹Two plants per hill considered 100 percent stand. A difference in yield of at least 5.9 bushels per acre is required to be considered significant.

Table 7. Hybrid corn test at Oakley, 1951

Pedigree	Acre yield	Average yield 1949-51	Plants erect at harvest	Lodging		Ears Infested Earworm	Ear ht.	Ears per plant	Husk length	Shell- ing	Stand
				Root	Stalk						
	bu.	bu.	%	%	%	%	ft.	no.	in.	%	%
Dixie 11	65.5	61.2	69	21	10	89	4.8	1.8	2.8	84.4	91
Dixie 17	64.9	64.0	62	11	27	92	4.4	1.8	2.2	83.5	92
Funk G785W	61.2	---	76	6	18	90	5.0	1.7	2.6	84.5	97
Dixie 33	60.5	58.1	80	8	12	96	4.2	1.4	2.6	83.1	94
Miss. 1206	57.8	---	85	2	13	85	4.9	1.6	3.4	80.6	97
Dixie 18	56.6	---	92	4	4	83	5.5	1.6	3.2	82.8	88
Funk G780W	55.5	52.6	75	5	20	92	5.2	1.7	2.6	82.4	88
Funk G714A	54.8	---	65	9	26	90	4.2	1.8	3.4	82.3	82
Dixie 22	54.7	58.9	66	5	29	93	4.1	1.5	3.0	79.8	89
Station Mosby*	53.3	51.0	71	13	16	92	5.7	1.4	2.6	82.1	90
Miss. 1204	52.9	---	88	3	9	89	5.1	1.4	3.0	77.9	93
Pfister (PAG) 631	52.4	45.9	69	1	30	94	3.2	1.1	2.8	80.7	88
Miss. 1210	52.3	---	91	1	8	90	4.5	1.5	3.8	79.0	88
Jellicorse*	50.3	49.9	82	6	12	96	3.9	1.5	2.4	80.5	86
Pfister (PAG) 620	49.9	---	73	1	26	97	4.1	1.1	2.2	82.2	81
Coker 811	49.1	---	95	1	4	87	4.1	1.5	2.4	80.8	90

A difference in yield of at least 4.5 bushels per acre is required to be considered significant. *Open pollinated varieties.

Table 8. Hybrid corn test at Stoneville, 1951

Pedigree	Acres yield bu.	Average yield 1949-51 bu.	Plants erect at harvest		Lodging		Unsound cas %	Days to 50% silk no.	Ear ht. ft.	Ears per plant no.	Husk length in.	Shelling %	Stand %
			%	%	Root	Stalk							
Dixie 33	125.5	101.2	67	14	19	5	64	5.1	1.8	2.2	85.7	79	
Dixie 18	122.0	80	8	12	1	68	6.0	1.7	3.8	85.5	88		
Funk G785W	120.9	76	4	20	5	66	5.4	1.8	2.0	87.0	90		
Dixie 17	120.6	107.1	54	12	34	6	64	4.9	1.9	2.0	86.4	81	
Dixie 11	120.3	99.8	56	14	30	4	66	5.2	1.8	3.0	88.1	88	
Funk G780W	118.4	96.3	55	11	34	7	67	5.6	1.8	2.2	85.6	83	
Dixie 22	117.4	100.3	67	9	24	6	66	4.9	1.7	2.8	82.5	84	
Funk G714A	115.3	41	21	38	4	66	5.3	1.9	2.8	84.5	81		
Miss. 1210	115.1	84	1	15	4	66	5.5	1.7	3.8	81.0	92		
Coker 811	113.3	83	8	9	2	67	5.0	1.7	2.2	84.3	89		
Miss. 1206	113.1	84	3	13	4	66	5.3	1.7	3.2	81.4	92		
Miss. 1204	110.5	80	8	12	5	66	5.3	1.5	3.5	80.3	90		
Jellicorse*	103.5	86.6	73	4	23	8	64	4.7	1.7	1.8	83.9	74	
Station Mosby*	102.5	91.1	61	18	21	7	68	5.6	1.5	2.2	83.5	69	
Pfister (PAG) 631L	98.9	93.7	84	4	12	11	62	3.8	1.2	3.0	81.5	84	
Pfister (PAG) 620L	89.7	89	3	8	14	14	61	3.9	1.1	1.5	84.4	83	

*Open pollinated varieties.

A difference in yield of 10.6 bushels per acre is required to be considered significant.

Table 9. Hybrid corn test at Clarksdale, 1951

Pedigree	Acre yield	Plants erect at harvest	Lodging		Un- sound ears	Ear ht.	Ears per plant	Husk length	Stand
			Root	Stalk					
	bu.	%	%	%	%	ft.	no.	in.	%
Dixie 33	65.7	56	3	41	3	5.0	1.1	2.3	92
Dixie 17	59.9	27	0	73	0	4.3	1.4	3.0	91
Funk G780W	57.6	25	4	71	2	4.2	1.2	2.3	96
Miss. 1210	56.3	74	1	25	1	4.5	1.0	3.3	92
Funk G714A	55.8	32	5	63	1	4.2	1.3	3.0	86
Funk G785W	55.1	51	2	47	0	4.0	1.0	2.3	93
Dixie 11	54.5	41	9	50	0	4.7	1.2	3.0	93
Pfister (PAG) 631	53.1	34	0	66	8	3.5	1.0	2.3	85
Dixie 22	52.2	49	2	49	1	3.8	1.1	3.0	88
Pfister (PAG) 620	50.3	33	2	66	6	3.5	1.0	1.0	87
Miss. 1206	50.2	58	2	40	0	4.2	1.1	4.0	94
Coker 811	49.6	81	1	18	1	4.2	1.1	2.7	96
Dixie 18	49.2	62	2	36	1	5.3	1.1	4.0	94
Miss. 1204	48.4	57	2	41	2	4.0	0.9	3.3	91
Jellicorse*	47.7	40	3	57	5	3.7	1.0	2.3	90
Station Mosby*	46.0	30	6	64	1	5.2	0.8	2.7	84

*Open pollinated varieties.

A difference in yield of at least 11.3 bushels per acre is required to be considered significant.