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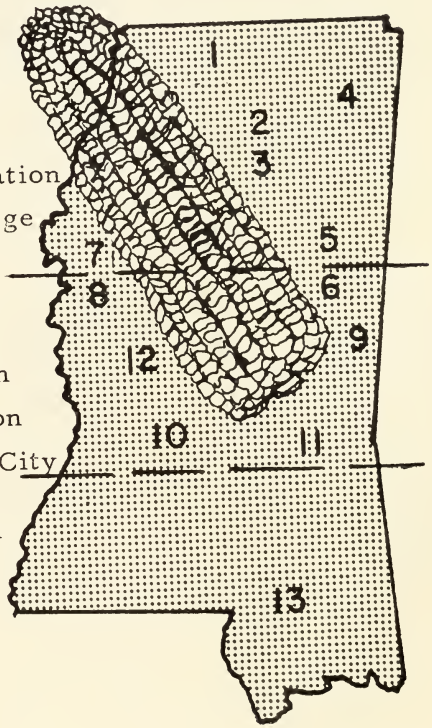
Corn Hybrids and Varieties, 1958 Tests in Misssissippi

Mississippi State University

Corn Hybrids and Varieties, 1958 Tests In Mississippi

Locations of 1958 Tests

1	North Miss. Branch Station
2, 3	Pontotoc Branch Station
4	Northeast Miss. Branch Station
5, 6	Central Station, State College
7, 8	Delta Branch Station
9	Black Belt Branch Station
10	Brown Loam Branch Station
11	Coastal Plain Branch Station
12	Schaefer Plantation Yazoo City
13	South Miss. Branch Station



MISSISSIPPI STATE UNIVERSITY
AGRICULTURAL EXPERIMENT STATION
CLAY LYLE, Director
STATE COLLEGE MISSISSIPPI

RECOMMENDATIONS

Based on the performance of the hybrids in 1958, as well as in past years, the following hybrids are recommended for Mississippi. All have been tested for at least two years.

North Mississippi

White grain: Dixie 55, Dixie 29, Funk G 779W, Pfister (PAG) 653W.

Yellow grain: Pioneer 309B, Dixie 22, Keystone 256, Pfister (PAG) 487.

Central Mississippi

White grain: Coker 911, Coker 811, Dixie 55 (in north), Funk G 785W.

Yellow grain: Dixie 22 (in north), Dixie 18, Dixie 82, Jackson, Funk G 730, Pfister (PAG) 487.

South Mississippi

White grain: Coker 811, Funk G793W, La. 521.

Yellow grain: Dixie 18, Jackson, Lee, Funk G740, McCurdy 1003.

Silage

The best quality corn silage is made from hybrids that produce a high yield of grain. Choose a hybrid in your section recommended for yield and erect plants.

COOPERATIVE PROJECT

These corn tests are a cooperative project between the Mississippi Experiment Station and the Agricultural Research Service, U. S. Department of Agriculture.

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1958 CORN HYBRIDS AND VARIETIES

Tests comparing different hybrids were conducted at sixteen different locations in Mississippi in 1958. Three tests were not harvested. The best guide to the desirability of a hybrid is its performance over a period of years at a number of locations.

For the 1958 corn variety tests the state was divided into three sections, North Mississippi, Central Mississippi, and South Mississippi. Holly Springs, Pontotoc, Verona, State College and Stoneville were placed in the northern section; Brooksville, Newton, Raymond, Yazoo City, State College and Stoneville in the central section; Poplarville in the southern section.

Since State College and Stoneville are on the boundary between North and Central Mississippi, two tests were run at each of these locations. One included the hybrids and varieties for North Mississippi and the other those for Central Mississippi. A few are suited to both areas; therefore they appeared in both tests. In some cases there was a difference in yield between the same varieties in these two tests at the same location as can be seen in tables 2 and 4.

Within a section entries were the same. The placing of corn hybrids in one of the sections was done on the recommendation of the breeder. The tests were balanced lattices of 25 entries with six replications.

Each plot was two rows wide and ten hills long except at State College where the plots were two rows wide and five hills long.

With a perfect stand, the plants per acre were 7112 at Brooksville and Poplarville, 11,760 at Stoneville and Verona, 8688 at State College, and 7840 at all other locations. Four or five seeds were planted per hill and thinned to the desired number of plants. The percentage of plants lodged as reported in the tables is based on actual counts. All plants broken below the top ear-bearing node (joint) were classified as stalk broken, while all plants leaning 30 degrees or more as root lodged.

Ears infested with rice weevil were rated on the percent of ears that were infested. The corn earworm damage grade is based on the number of kernels damaged, with the lowest best.

Ear height is reported as the distance in feet from the ground to the point where the top ear is attached to the plant. Husk length is reported as inches beyond the ear tip. Husk tightness is reported as a grade, with a low number loose, a high tight.

Table 1 Average of North Mississippi Main Hybrid 1958 Tests Grown at Holly Springs, Verona, State College, Pontotoc Ridge, Pontotoc Flatwoods, and Stoneville, respectively.

Pedigree	1958 Acre yield	3-yr. avg. yield 56-58	Plants erect at harvest	Lodging		Earworm damage[1]		Ear ht.	Ears per plant	Husk[2]		Shelling	Stand
				Root	Stalk					lgth.	Tightness		
	bu.	bu.	%	%	%	rat'g	%	ft.	no.	in.	grade	%	%
Dixie 55	74.3	79.5	95	1	4	.72	77	4.5	1.3	3.2	2.8	84	94
Pioneer 309B	69.6		98	1	1	.92	85	3.6	1.0	1.8	1.5	86	94
Funk G 779W	67.4	71.7	89	3	9	1.40	92	4.2	1.1	.2	.0	84	94
Funk G 710AA	67.1		90	2	8	.86	80	4.2	1.0	1.0	.5	85	95
Dixie 29	67.0	74.7	94	1	5	.80	86	3.9	1.1	1.0	.5	84	95
Dixie 22	66.4	73.9	90	2	8	.81	80	4.7	1.1	2.0	1.8	83	93
Keystone 255	66.1		89	2	9	.89	72	4.4	1.0	1.8	1.8	86	93
Pfister PAG 487	65.5		93	2	5	.80	78	4.5	1.2	3.0	3.0	86	92
Keystone 256	65.4		92	2	6	.60	68	4.4	1.0	2.5	2.5	87	94
Pioneer 309A	63.7	68.9	98	0	2	1.34	92	3.0	1.0	2.0	1.2	87	95
Pfister PAG 653W	63.4	71.7	94	1	5	.71	75	3.9	1.2	1.8	1.2	84	94
Mid-South	61.1		95	1	4	.93	86	4.2	1.0	2.0	1.5	81	96
Early South	60.6		91	4	5	1.46	93	3.8	1.0	1.0	.2	83	94
Tenn. 501	60.6		91	2	7	1.29	94	3.3	1.0	1.2	.5	82	93
Pfister PAG 633W	57.3	68.3	94	1	5	1.34	88	3.5	1.1	1.5	1.2	81	92
Pfister PAG 488	39.1	61.7	91	1	8	3.02	100	3.0	.9	.0	.0	84	92
Miss. 6135*	81.6	80.8	92	1	7	.90	82	4.7	1.6	2.5	2.5	85	97
Miss. 6131*	77.1	81.6	92	2	6	.91	86	4.4	1.4	2.5	2.2	85	95
Miss. 6133*	74.1	77.9	91	3	6	.90	84	4.5	1.4	2.8	2.5	85	96
Dixie 55* cms Rf	73.8		94	1	5	.70	69	4.5	1.2	3.0	2.8	83	96
Miss. 8000*	63.1		98	1	1	.80	82	3.7	1.2	2.8	2.2	82	94
Miss. 3020*	60.6		96	1	3	.95	84	3.9	1.2	1.5	1.0	84	88
Miss. 8008*	59.4		93	1	6	.56	62	4.0	1.2	3.0	2.8	85	91
Miss. 8006*	57.1		94	2	4	.64	72	3.9	1.2	1.8	1.2	84	89

[1] Two-station average.
[2] One-station data.

* Experimental hybrid; no seed available.

Table 2 Average Yield and Plants Erect at Harvest for 6 Locations in North Mississippi, 1958.

Pedigree	Yield in bushels per acre							Percent plants erect at harvest						
	Holly Springs	Verona	State Col.	Pontotoc Ridge	Pontotoc Flatw.	Stoneville	Avg. North Miss.	Holly Spr.	Verona	State Col.	Pontotoc Ridge	Pontotoc Flatw.	Stoneville	Avg. North Miss.
Dixie 55	81.6	59.0	101.1	66.4	45.7	92.2	74.3	95	96	98	93	89	97	95
Pioneer 309B	73.8	58.4	82.6	63.9	39.7	99.4	69.6	100	95	97	98	99	98	98
Funk G 779W	65.8	66.5	79.3	61.0	39.2	92.6	67.4	81	86	99	86	84	93	89
Funk G 710AA	65.6	62.0	82.2	61.6	34.9	96.5	67.1	84	83	94	95	83	97	90
Dixie 29	71.8	51.7	82.8	60.4	43.1	92.0	67.0	95	94	99	95	90	91	94
Dixie 22	73.1	51.4	82.7	58.8	41.5	90.8	66.4	84	89	100	89	82	95	90
Keystone 255	74.4	50.8	80.5	62.4	39.7	88.8	66.1	84	85	99	89	79	94	89
Pfister PAG 487	68.0	53.3	80.2	61.4	34.5	95.5	65.5	90	95	99	93	85	97	93
Keystone 256	68.4	56.4	79.7	58.4	37.4	91.9	65.4	90	92	99	89	84	96	92
Pioneer 309A	64.3	51.4	73.7	61.0	44.7	87.3	63.7	98	97	100	96	97	97	98
Pfister PAG 653W	63.1	45.7	85.2	55.8	35.6	94.7	63.4	93	93	97	95	91	92	94
Mid-South	62.1	45.6	80.4	56.0	32.8	89.9	61.1	88	92	100	95	92	98	95
Early South	65.4	56.2	71.9	50.9	31.5	87.6	60.6	93	86	92	85	92	94	91
Tenn. 501	62.6	50.3	71.9	52.9	42.3	83.9	60.6	96	85	100	90	97	91	91
Pfister PGA 633W	60.3	42.3	74.3	52.4	29.7	84.7	57.3	91	94	97	93	89	96	94
Pfister PAG 488	54.4	37.1	34.1	42.4	26.7	62.4	39.1	96	91	99	91	86	85	91
Miss. 6135*	88.7	53.1	113.8	76.0	46.5	111.5	81.6	91	95	100	91	84	94	92
Miss. 6131*	86.8	55.9	105.1	65.0	43.5	106.2	77.1	94	89	100	92	84	95	92
Miss. 6133*	81.7	51.3	97.2	65.2	38.8	110.2	74.1	94	89	96	88	87	92	91
Dixie 55 cms RF	83.2	55.8	88.3	65.5	45.8	103.9	73.8	94	96	98	91	90	95	94
Miss. 8000*	65.0	49.1	88.9	57.7	28.8	88.9	63.1	99	97	99	98	98	98	98
Miss. 8042	65.3	41.9	87.8	54.4	32.8	88.4	61.8	93	96	96	92	91	90	93
Miss. 8020*	64.8	43.9	84.5	55.8	28.9	85.8	60.6	94	97	98	98	94	97	96
Miss. 8008*	68.7	40.6	80.2	57.2	39.0	70.4	59.4	95	93	97	90	90	93	93
Miss. 8006*	63.9	39.7	82.6	56.7	30.1	69.4	57.1	96	96	97	94	89	96	94

* Experimental hybrid; no seed available.

Table 3 Average of Central Main Hybrid 1958 Tests Grown at Brooksville, Newton, Raymond, Yazoo City, Stoneville, and State College, respectively.

Pedigree	1958 Acre yield	3-yr. avg. yield 56-58	Plants erect at harvest	Lodging		Ears infested			Ear ht.	Ears per plant	Husk [3]		Shelling	Moisture in grain [4]	Stand
				Root	Stalk	Rice weevil [1]	Earworm [2]				lgth.	Tightness			
	bu.	bu.	%	%	%	%	class rat'g	%	ft.	no.	in.	grade	%	%	%
Dixie 18	88.3	69.2	94	4	2	4	.44	59	5.0	1.3	3.3	2.8	85.0	13.5	98
Dixie 55	88.0	87.5	91	5	4	16	.72	77	4.1	1.4	2.8	2.4	83.5	13.4	94
Dixie 82	86.6	76.3	85	8	7	22	.83	81	4.4	1.4	2.7	2.3	81.8	13.5	95
Jackson	84.3		93	5	2	8	.67	71	5.0	1.4	3.2	2.7	84.0	13.6	94
Coker 66	82.4		93	5	2	12	.69	73	4.0	1.5	1.6	1.6	83.7	13.5	97
Funk G 785W	82.0	72.1	86	5	9	20	.75	80	4.1	1.5	1.8	1.8	85.4	13.4	95
Coker 911	81.8	67.4	86	10	4	13	.90	79	3.7	1.2	1.6	1.2	84.7	13.5	96
Funk G 730	81.4		90	5	5	10	.73	73	4.0	1.2	2.4	2.2	85.4	13.5	96
Coker 811	80.3	66.7	95	4	1	3	.44	64	3.8	1.4	2.1	1.8	82.8	13.5	95
Pfister PAG 487	80.0		94	3	3	8	.86	84	4.1	1.3	1.0	1.8	85.5	13.6	97
Funk G 710AA	79.5		88	6	6	38	1.27	83	3.9	1.2	1.4	1.2	84.7	13.4	97
Coker 67	79.0		94	2	4	6	.58	67	3.9	1.5	2.0	2.1	83.0	13.6	95
Funk G 740	77.1		82	4	4	8	.87	79	4.6	1.2	2.0	2.1	83.8	13.5	97
Lee	76.5		97	1	2	4	.49	61	4.4	1.4	3.5	2.8	83.4	13.6	98
Pfister PAG 653W	76.4	71.8	88	6	6	22	.73	79	3.6	1.4	1.9	1.6	84.0	13.4	95
N C 288	76.3		89	5	6	12	.90	84	4.1	1.2	2.7	2.1	81.8	13.5	92
Dixie 22	76.0	70.1	87	4	9	33	.97	86	4.2	1.2	2.0	1.6	82.6	13.4	90
McCurdy 1003C	73.3		84	6	10	10	.70	70	4.1	1.1	2.8	2.4	85.8	13.3	94
Funk G 710	67.2	63.8	87	2	11	12	1.04	78	3.9	1.2	1.6	1.2	83.7	13.5	88
McCurdy 1003	62.4	58.8	89	3	8	10	.73	77	4.2	1.1	2.6	2.1	81.6	13.4	86
Pfister PAG 488	44.6	58.6	83	0	17	56	2.96	100	2.8	1.0	.8	.0	80.8	13.2	92
Miss. 6028*	80.0	71.5	95	2	3	12	.81	84	4.6	1.1	2.5	2.1	82.6	13.6	95
Miss. 6000*	77.7		95	1	4	4	.64	68	4.3	1.1	3.3	2.8	85.0	13.4	97
Miss. 6020*	68.8	65.6	96	2	2	4	.73	75	3.8	1.2	3.5	2.8	83.6	13.6	87
Miss. 6044*	68.6		93	1	6	8	.59	61	3.9	1.2	3.9	2.8	84.2	13.5	83

* Experimental Hybrid: No seed available.

1 Two-station average.

2 Three-station average.

3 Four-station average.

4 Five-station average.

Table 4 Average Yield and Plants Erect at Harvest for 6 Locations in Central Mississippi, 1958

Pedigree	Yield in bushels per acre							Percent plants erect at harvest						
	Brooksville	Newton	Raymond	Yazoo City	Stoneville	State College	Avg. Central Miss.	Brooksville	Newton	Raymond	Yazoo City	Stoneville	State Col.	Avg. Central Miss.
Dixie 18	45.1	74.9	96.5	121.8	102.9	88.4	88.3	99	99	98	68	97	99	94
Dixie 55	45.9	83.1	92.8	115.8	103.0	87.6	88.0	98	97	95	63	96	97	91
Dixie 82	56.5	66.7	85.0	118.0	104.6	88.5	86.6	93	87	88	50	95	97	85
Jackson	45.1	67.8	89.4	123.5	97.1	82.7	84.3	98	97	91	75	96	100	93
Coker 66	42.6	73.4	84.5	111.4	99.5	82.7	82.4	99	100	93	68	98	99	93
Funk G 785W	52.0	62.1	82.5	102.3	104.3	88.9	82.0	96	92	73	64	91	97	86
Coker 911	45.5	64.5	84.0	102.0	97.3	97.2	81.8	98	98	89	31	96	100	86
Funk G 730	49.9	68.8	82.4	105.7	100.7	82.0	81.4	99	98	84	63	97	100	90
Coker 811	36.8	62.5	82.7	111.8	102.4	85.6	80.3	97	100	97	75	98	100	95
Pfister PAG 487	47.4	66.8	84.3	101.4	100.2	79.4	80.0	96	96	78	77	97	100	94
Funk G 710AA	51.0	63.4	76.1	105.3	100.5	80.7	79.5	96	97	84	63	98	88	88
Coker 67	35.6	70.5	87.5	107.8	92.4	80.4	79.0	98	100	88	82	97	100	94
Funk G 740	42.5	67.4	80.9	102.1	92.0	77.5	77.1	97	96	95	70	96	99	82
Lee	35.9	66.8	74.0	109.7	96.6	75.7	76.5	100	99	93	94	99	98	97
Pfister PAG 653W	44.0	73.5	68.1	96.2	90.8	85.8	76.4	94	98	78	63	94	100	88
N C 288	50.0	69.4	70.7	102.9	89.5	75.5	76.3	96	96	88	70	97	87	89
Dixie 22	48.0	71.5	71.3	89.6	93.2	82.2	76.0	94	93	76	66	95	98	87
McCurdy 1003C	47.2	55.1	70.7	93.2	94.3	79.3	73.3	89	95	83	46	90	97	84
Funk G 710	42.4	57.9	59.7	83.8	83.6	76.1	67.2	96	89	72	79	90	97	87
McCurdy 1003	35.5	54.9	60.2	77.4	84.9	61.8	62.4	95	93	81	71	97	96	89
Pfister PAG 488	35.2	45.9	38.5	52.8	61.4	33.5	44.6	98	96	59	61	82	100	83
Miss. 6028*	37.7	65.8	86.0	121.6	91.3	77.6	80.0	100	95	92	86	98	95	95
Miss. 6000*	42.3	65.0	79.2	108.7	92.8	78.4	77.7	100	96	91	92	97	96	95
Miss. 6020*	40.7	53.5	73.1	95.5	80.7	69.0	68.8	100	98	97	86	98	97	96
Miss. 6044*	39.3	54.8	64.9	95.8	78.3	78.7	68.6	94	95	82	91	98	98	93

* Experimental hybrid; no seed available.

Table 5 Southern Main Hybrid Test Grown at Poplarville, Mississippi, 1958

Pedigree	1958 Acre yield	3-yr. avg. yield 56-58	Plants erect at harvest	Lodging		Ears infested			Ear ht.	Ears per plant	Husk		Shelling	Moisture in grain	Stand
				Root	Stalk	Rice weevil	Earworm class rat'g	Earworm %			lgth.	Tightness			
	bu.	bu.	%	%	%	%		%	ft	no.	in.	grade	%	%	%
Dixie 18	66.4	49.2	89	1	10	40	.28	50	3.4	1.3	2.2	2.2	85.1	11.6	99
Jackson	62.8		93	1	6	38	.70	62	3.7	1.3	2.8	2.7	84.3	11.5	96
Keystone 257	62.6		95	1	4	51	.39	53	3.8	1.2	2.2	2.2	85.4	11.3	92
Funk G 793W	62.3		87	0	13	27	.47	49	3.6	1.1	2.2	2.0	82.6	11.2	98
Coker 66	60.6		89	2	9	71	.70	60	3.3	1.6	2.3	2.2	82.3	11.4	91
Coker 811	60.6	49.0	87	3	10	39	.38	52	3.4	1.5	1.8	1.8	82.2	11.6	95
Lee	60.4		87	0	13	49	.33	39	3.2	1.4	2.0	2.0	83.6	11.3	91
La. 521	59.3	46.5	91	1	8	34	.71	66	3.6	1.3	1.7	1.7	84.9	12.1	99
Pfister PAG 487	58.7		96	0	4	53	.76	64	3.7	1.4	2.0	2.0	84.7	11.7	84
Coker 67	57.8		86	7	7	51	.52	60	3.3	1.6	1.8	1.8	83.1	12.2	91
McCurdy 1003	54.6	42.6	96	0	4	53	.58	59	3.5	1.1	2.6	2.5	82.7	11.1	93
Funk G 740	54.2	42.9	88	2	10	43	.71	66	3.6	1.1	2.2	2.0	83.5	11.4	92
McCurdy 1003C	48.6		90	6	4	53	.47	67	3.6	0.9	2.0	2.0	83.9	10.8	98
McCurdy 1003A	48.1		93	1	6	68	1.12	75	3.5	1.0	2.2	2.0	82.7	10.4	95
Miss. 6042*	69.8		90	3	7	35	.34	45	3.7	1.3	2.0	1.7	84.7	10.9	95
Miss. 6002*	67.0		90	0	10	41	.62	61	3.3	1.3	2.0	2.0	83.5	11.7	98
Miss 8464*	64.6		93	2	5	47	.70	58	3.7	1.5	1.8	1.8	83.2	10.9	93
Miss. 8424*	64.3		97	2	1	61	.70	61	3.8	1.2	1.8	1.8	84.7	11.4	98
Miss. 8428*	63.1		91	2	7	43	.46	54	3.6	1.3	1.8	1.7	84.0	11.1	99
Miss. 8484*	61.4		95	4	1	50	.70	53	3.8	1.3	2.0	1.5	82.2	11.3	97
Miss. 6000*	61.2	50.3	95	0	5	50	.54	51	3.6	1.2	2.2	2.2	85.3	11.5	94
Miss. 8402*	59.9		97	0	3	53	.65	71	3.8	1.2	2.2	2.0	82.9	11.4	97
Miss. 8400*	58.8		92	0	8	55	52	60	3.7	1.2	2.0	2.0	83.0	11.4	95
Miss. 6028*	57.2		93	3	4	68	1.06	83	3.8	1.1	2.8	2.3	82.1	11.3	98
Miss. 8286*	56.5		96	0	4	59	.68	70	3.8	1.1	2.0	1.8	83.8	10.7	97
Average	60.0												83.6	11.36	
L S D	6.7	C V - 9.78													

* Experimental hybrid; no seed available.