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HYBRID CORN PERFORMANCETRIALS IN 1982

Trials are conducted annually in Mississippi to provide farmers, seedsmen, county agents and others with information on the performance of commercially available corn hybrids. Results of the trials are provided for use by corn producers in selecting hybrids suited to their area. New hybrids may be compared with familiar hybrids.

Corn hybrids respond differently to variations in environment, and a given hybrid is not always the best under all conditions. Therefore, it is suggested that corn producers grow two or more good hybrids each year. This practice also reduces the chances for spread of a disease or insect infestation

through the total corn acreage.

The yield of harvestable, good-quality grain (or silage) determines the desirability of corn hybrids. However, attributes other than yield may be extremely important in some instances. For example, resistance to a particular disease should be the prime consideration in areas where the disease occurs. That is, hybrids selected should be from those known to have resistance to diseases found in a geographic area.

All producers and/or distributors of seed corn are eligible to enter hybrids in these tests. Hybrids can be entered for testing in Area 1 (northern Mississippi), Area 2, (southern Mississippi) or

both. The producers designate the hybrids they want entered in each area. Hybrids must be submitted for entry to the Mississippi Agricultural and Forestry Experiment Station by February 15. A nominal fee is charged for each hybrid tested in each area to help defray costs of the tests.

Three or more tests were located in each area. Trials were conducted at nine locations in 1982 (Table 1).

The best guide to the desirability of a hybrid is its performance over a period of years at a number of locations. Therefore, three-year summaries are reported for each area.

Materials and Methods

Hybrids were tested at two population levels. The design was a randomized complete block with three replications. All tests were overplanted and later thinned to 16,000 or 22,000 plants per acre, stand permitting. Each plot con-

sisted of two rows, 38 inches apart and 200 inches long. Fertilizer was applied by each cooperator as he thought necessary, and weeds were controlled by cultivation and herbicides.

All tests were harvested with a

mechanical picker-sheller. Grain harvested from each plot was weighed, and moisture content was determined. All weights were converted to bushels per acre at 15.5% moisture.

Results and Discussion

Area 1

Amounts and distribution of rainfall in 1982 were good at the six locations. The test at Brooksville was not harvested because stands were poor, and the stand problem was compounded by chinch bug damage.

Average yields of the hybrids tested at 16,000 plants/acre were 109,99,118,135 and 136 bu/acre at Holly Springs, Pontotoc, Verona, Stoneville and Mississippi State, respectively. Yields averaged over all locations ranged from 76 to 143

bu/acre, with a mean of 119 bu/acre (Table 2). Time from planting to mid-silk ranged from 74 to 91 days and averaged 80 days (data from Mississippi State with planting on March 24).

Differences in the performance of the hybrids tested at Holly Springs and Verona could not be determined because of field variations; therefore, results at this plant population are summarized for only three locations (Table 3). As normally can be expected under better growing conditions, yields averaged over the three locations were higher (137 bu/acre) at the higher plant population than at 16,000 plants/acre (123 bu/acre).

Average yields of all hybrids tested at 22,000 plants/acre were 101, 147 and 163 bu/acre at Pontotoc, Stoneville and Mississippi State, respectively. Yields averaged over the three locations ranged from 94 to 164 bu/acre (Table 3).

Root and stalk lodging in the trials at 22,000 plants/acre was not

serious at any location. Time from planting to mid-silk at Mississippi State ranged from 75 to 91 days and averaged 81 days. Therefore, maturity from growing 22,000 plants/acre (as measured by days

to mid-silk) was one day later than a mean of 102 bu/acre (Table 4). growing 16,000 plants/acre. Yields of the same hybrids grown

Average yields of the 22 hybrids that have been tested at 16,000 plants/acre for the last three years ranged from 89 to 108 bu/acre, with

a mean of 102 bu/acre (Table 4). Yields of the same hybrids grown at 22,000 plants/acre over the three year period ranged from 89 to 113 bu/acre and averaged 102 bu/acre (Table 5).

Area 2.

Amounts and distribution of rainfall in 1982 were not as good in southern Mississippi as in northern Mississippi. The trial at Raymond was not harvested, primarily because of poor yields resulting from drought.

Yields of all hybrids grown at 16,000 plants/acre averaged 54 and 63 bu/acre at Newton and Poplarville, respectively. Yields averaged over the two locations ranged from 45 to 79 bu/acre, with a mean of 58 bu/acre (Table 6). Root and stalk lodging of most

entries was relatively unimportant.

Yields of all hybrids grown at 22,000 plants/acre averaged 51 and 54 bu/acre at Newton and Poplarville, respectively. Yields averaged over the two locations (Table 7) ranged from 37 to 73 bu/acre and averaged 52 bu/acre, 6 bu/acre less than for 16,000 plants/acre.

Harvestable yield of plots planted at the rate of 22,000 plants/acre at Poplarville was not affected by the negligible amount of stalk lodging observed. Therefore, the stalk-lodging data

reported in Table 7 reflect roughly one half of the stalk lodging observed at Newton.

Yields of the 26 hybrids that have been evaluated in Area Two for the last three years (Table 8) averaged 60 bu/acre at 16,000 plants/acre and ranged from 52 to 71 bu/acre. Yields of the same hybrids when tested at 22,000 plants/averaged 56 bu/acre and ranged from 45 to 67 bu/acre (Table 9). Inferences from these data need to be drawn with caution, because both plant populations were not tested at all sites each year.

Area and		No. of	Planting	Harvest
County	Location	entries	date	date
Area l	,			
Marshall	Holly Springs	50	May 6	Sept. 21
Pontotoc	Pontotoc	50	March 26	Sept. 9
Lee	Verona	50	April 7	Sept. 17
Washington	Stoneville	50	April 13	Sept. 8
Noxubee	Brooksville	50	April 15	5ept. 0
Oktibbeha	Mississippi State	50	March 24	Aug. 25
Area 2		•		
Newton	Newton	49	March 17	Aug. 23
Hinds	Raymond	49	March 18	nug. 23
Pearl River	Poplarville	49	March 3	Aug. 12

Table 2. Summary of performance of 50 hybrids grown at five locations (Holly Springs, Pontotoc, Verona, Stoneville and Mississippi State) at 16,000 plants per acre in the

1982 Mississippi hybrid corn performance trials.

Hybrid	Dwond	772 - 7 - 7		dging	Ear	Days to	Mois-	
no.	Brand	Yield 'a	root	stalk	height	mid_silk*	ture	Stand
110.		bu/A	윰	ક્ષ	cm.	no.	8	8
EXP.8003X	Funk's	142.5	0	1	120	. 04	15.0	
EXP.8006X	Funk's	139.8	1	3	115	84	15.9	100
3165	Pioneer	138.3	ō	1	119	83	15.2	98
XL394	DeKalb	134.7	ŏ	4	130	83 85	15.1	101
508	McNair	134.0	ŏ	5	133	85 91	15.7	101
84aa	McCurdy	132.3	0 -	6	112	79	16.9	99
3147	Pioneer	131.7	1	4·	121	79 84	14.3	95
21	Coker	131.3	ō	6	115	81 ·	16.1	100
XL395A	DeKalb	128.9	ō	3	126	88	14.4	99
519	Pioneer	128.0	Ö	1	128		17.3	100
77B	Coker	127.3	ĭ	5	129	83 86	14.4	100
81-7	McCurdy	126.4	ō	2	126		16.2	97
G-4525A	Funk's	125.7	ō	4	106	82 77	14.8	100
G-4733	Funk's	124.6	Ö	2	114	77	13.4	98
PX95	Northrup King	124.6	0	2	114 130	81 82	15.8	99
EX7979	DeKalb	124.5	0	3	116	82 82	15.3	101
PX87	Northrup King	124.5	Ö	7	115	82 81	13.7	99
RA1502	Ring Around	124.1	ŏ	5	107	78	14.3	100
JX247	Jacques	123.2	Ö	6.	113	78 81	14.0	97
8150	McCurdy	122.8	ì	2	122	80	14.0	99
G-4673A	Funk's	122.5	ō	3.	117	80	15.7	99
RA1604	Ring Around	121.3	Ö	5	115	80	14.0	103
X-300	McNair	121.2	Ö	6	109	80	14.2	99
8220	Jacques	120.8	ō	4	104	78	15.8	101
G-4779W	Funk's	120.3	ō	3	122	82	14.4	99
8230	McCurdy	120.0	Ö	2	123	81	14.6	97
T1230	Trojan	119.9	ō	4	112	81	16.1 14.7	102
USS2020	Agri-Chemicals	119.0	ō	6	118	80		98
3369A	Pioneer	118.6	Ö	7	109	76	14.4	97
3184	Pioneer	118.6	Ö	í	106	76 79	13.8	97
G-4740	Funk's	117.5	Ö	2	103	84	14.4 15.8	99
XL390B	DeKalb	117.5	Ö	5	120	80		95
G-4522	Funk's	117.2	ō	4	104	75	13.7	99
RX909	Asgrow	115.5	0	3	102	75 78	13.6 13.5	97
3187	Pioneer	115.4	1	1	115	80		99
JX227	Jacques	113.9	ō	4	112	79	14.8 13.3	101
XL72bb	DeKalb	113.7	ŏ	6	104	79 78		97
22	Coker	113.5	Ö	7	114	80	13.9	100
XL71	DeKalb	113.5	Ö	í	107	78	14.8 13.9	96 98
L9A	Coker	111.5	ō	3	113	. 77		
RX777	Asgrow	109.2	0	5	106	74	13.9	97
L9	Coker	108.6	0	2	110	74 77	13.5	97
PX707	Northrup King	108.6	1	4	115	7 <i>7</i> 79	13.4	97
G-4578	Funk's	107.1	Ô	3	112	79 74	15.0 13.3	98
PX79	Northrup King	106.8	ĺ	2	115	74 80	13.4	97 97
Г− E6998	Taylor-Evans	106.2	Ō	6	107	80		97 97
7X180	Jacques	105.1	Ō	6	115	78	14.3	97 07
56	Coker	104.4	0	7	116		13.3	97
JSS1010	Agri-Chemicals	96.7	1	5	112	84 75	16.9	97
JSS0526	Agri-Chemicals	76.1	0	5	102	75 74	13.7 13.3	97 92
Mean								92
T7 - 12 526		119.4	_0	4	115	80	14.6	98_

CV = 13.53%

LSD (.05) = 12.0 bu/A

^{*}Data for Mississippi State only

Table 3. Summary of performance of 50 hybrids grown at three locations (Pontotoc, Stoneville, and Mississippi State) at 22,000 plants per acre in the 1982 Mississippi hybrid corn performance trials.

Hybrid	Brand	Yield	root	dging	Ear	Days to	Mois-	
no.	<u> Drana</u>	bu/A	- 100E	stalk	height	mid Silk	ture	Stand
		Du/A	6	8	cm.	no.	8	왐
21	Coker	164.1	0	5	112	81	13.1	00
EXP.8003X	Funk's	153.0	ō	. 1	121	86	15.4	99
XL395A	DeKalb	152.8	. 0	3	126	88		97
3165	Pioneer	152.3	0	í	118	84	17.0 14.2	95
3147	Pioneer	151.3	Ö	5	125	84	15.8	99
RA1604	Ring Around	150.8	ŏ	6	116	81	13.5	.95
EXP.8006X	Funk's	150.6	ō	4	121	86	14.4	97
84aa	McCurdy	149.7	Õ	9	115	80	13.4	97
JX247	Jacques	149.0	Ö	7	116	80 82	14.2	97
EX7979	DeKalb	146.9	Ō	3	121	83	13.7	97
PX87	Northrup King	146.8	Ö	9	118	81	13.1	95
8150	McCurdy	146.7	Ō	4	122	81	15.0	91 9 7
508	McNair	144.9	0	7	134	91	16.0	
G-4673A	Funk's	144.4	ō	3	115	82		96
JX227	Jacques	143.2	ō	1	112	80	14.0 13.5	95
T1230	Trojan	142.7	ō	6	110	82		98
RX909	Asgrow	142.5	Ö	3	105	80	13.3	97
3187	Pioneer	139.4	Ö	2	117	80	13.7 13.5	97
RA1502	Ring Around	139.3	ŏ	5	107	80 80		95
81-7	McCurdy	138.7	0 .	6	126	83	13.6 14.8	98
USS2020	Agri-Chemicals	138.3	0	4	111	81		98
8220	Jacques ·	137.8	Ō	7	106	78	13.5	95
PX95	Northrup King	137.7	ŏ	7	129	83	14.4	94
G-4740	Funk's	136.6	Ö	4	107	85	13.7 15.8	97 06
T-E6998	Taylor-Evans	136.3	Õ	7	113	81	14.4	96 92
8230	McCurdy	136.0	Ö	2	118	83	15.1	92 96
3184	Pioneer	135.9	ō	2	109	81	14.6	96 95
G-4525A	Funk's	135.8	ō	7	109	79	12.4	95 95
G-4522	Funk's	134.8	Ö	3	105	75 77	12.4	95 95
X-300	McNair	134.2	Ö	12	111	82	15.0	95 97
PX707	Northrup King	133.8	0	5	118	80	13.0	97 93
JX180	Jacques	132.4	Ö	3	117	78	13.3	95 95
XL394	DeKalb	131.9	ŏ	5	133	85	14.7	93
G-4578	Funk's	131.5	Ö	3	112	76	12.5	93 99
19A	Coker	131.3	ō	2	112	79	13.0	93
19	Coker	131.3	ō	2	110	78	13.0	92
G-4779W	Funk's	131.2	ō	4	127	84	14.3	92 96
XL71	DeKalb	131.1	ō	7	105	80	13.9	95
G-4733	Funk's	130.7	Ō	3	106	82	15.2	96
519	Pioneer	130.4	ō	2	130	84	13.8	99
3369A	Pioneer	129.0	ō	9	111	77	13.6	92
22	Coker	128.7	ŏ	6	112	80	13.8	95
RX777	Asgrow	128.6	ō	2	113	75	13.3	99
7 7B	Coker	127.9	ō	11	136	86	15.5	
USS1010	Agri-Chemicals	127.5	0	4	113	77	12.9	95 94
XL72bb	DeKalb	124.8	Ŏ	4	111	80	13.2	94 94
XL390B	DeKalb	121.0	0	9	129	83		
PX79	Northrup King	117.3	0	3			14.6	96
56	Coker	116.2	0	3 10	114	81	13.5	98
USS0526	Agri-Chemicals	94.7	0	6	118	85 75	15.6	94
	3 CHOMITOGIS				104	75	12.2	89
Mean		136.9	0	5	116	81	14.0	96

CV = 11.98%

LSD (.05) = 15.2 bu/A

^{*}Data for Mississippi State only

Table 4. Three-year (1980-82) average performance of 22 hybrids grown in Area I at 16,000 plants per acre in the Mississippi hybrid corn performance trials.

Hybrid	D		Lod	ging	Ear	Days to	Mois-	
no.	Brand	Yield	root	stalk	heights	mid silk		Stand
		bu/A	%	%	cm	no.	%	<u>stand</u>
3147	Pioneer	107.5	1	11	120	84		
8150	McCurdy	103.5	1	4	122	80	14.8	97
8230	McCurdy	103.0	Ō	4	119	81	14.7	100
84aa	McCurdy	102.9	Ō	9	106	79	15.3	102
T1230	Trojan	102.1	Ŏ	10	114		14.1	97
519	Pioneer	100.0	1	9	125	81	14.5	99
G-4740	Funk's	99.8	- 1	6	103	83	14.9	100
3369A	Pioneer	99.0	ō	9	105	84	15.1	97
PX87	Northrup King		ō	11	116	76	13.7	96
XL394	DeKalb `	95.2	ĺ	12	128	81	14.4	100
PX95	Northrup King	95.1	3	13	125	85	15.2	102
19A	Coker	94.8	Ō	4	112	82	14.5	98
508	McNair	94.7	1	13	136	77	13.8	96
X-300	McNair	94.3	Ō	17	106	91	16.0	102
19	Coker	93.5	Ö	4	109	80	14.8	99
XL71	DeKalb	93.0	Ŏ	5	109	77	13.4	97
22	Coker	91.8	Õ	11	115	78	13.5	100
USS1010	Agri Chemical	91.5	1	6	110	80	14.4	96
XL390B	DeKa1b	91.0	1	17		75	13.8	98
PX79	Northrup King	89.7	2	5	124	80	14.5	97
PX707	Northrup King	89.5	2	8	113	80	13.5	97
56	Coker	89.2	ō	10	117	79	14.3	98
MEAN		96.3	1		119	84	16.1	99
		30.3	Τ.	9	116	81	14.5	99

Table 5. Three-year (1980-82) average performance of 22 hybrids grown in Area I at 22,000 plants per acre in the Mississippi hybrid corn performance trials.

F-TTOTIME	nee triais.							
Hybrid	Brand	V2 - 1 1		dging	Ear	Days to	Mois-	
no.	Drang	Yield	root		heights	mid silk	ture	Stand
		bu/A	%	%	cm	no.		
8150 3147 84aa PX87 T1230 USS1010 19 8230 G-4740 19A 508 XL394 XL71 3369A 519 X-300 PX95 PX79 22	McCurdy Pioneer McCurdy Northrup King Torjan Agri Chemcial Coker McCurdy Funk's Coker McNair DeKalb Pioneer Pioneer McNair Northrup King Northrup King	bu/A 113.2 112.8 112.1 109.0 107.4 106.4 106.3 106.1 104.6 103.1 102.3 102.0 101.3 100.2 99.5 98.4 96.9 96.8 95.0	% 0 1 0 0 1 0 1 0 1 0 2 0 2 1	7 8 9 11 9 10 6 5 7 7 13 9 10 12 9 18 11 6			% 14.6 15.2 14.4 14.2 14.0 13.4 13.5 15.5 15.0 13.8 16.2 14.9 14.2 13.9 14.5 14.7 13.9 13.4	98 98 99 95 97 96 92 97 95 93 95 94 96 92 96 97
PX707 56 XL390B	Northrup King Coker DeKalb	93.3 90.1	2 0	9 12	117 120	79 83	14.2 13.9 15.6	93 95 95
MEAN	·	89.4	1	14 10	125 116	81 80	14.5	93

Table 6. Summary of performance of 49 hybrids grown at two locations (Newton and Poplarville) at 16,000 plants per acre in the 1982 Mississippi

hybrid corn performance trials.

Hybrid	Brand	Yield	root	ging stalk	Ear height	Mois-	Stand
	Brand	bu/A	- 100C	%	cm.	- curc	§ 8
no.		Du/ A	·	ŭ	Ç.ii.•	•	_
508	McNair	79.4	0	1	116	21.4	97
3165	Pioneer	77.8	1	1	89.	20.9	103
12052A	Paymaster	77.0	1	0	91	21.1	105
EXP8006X	Funk's	75.0	0	0	87	21.5	92
81-37	McCurdy	74.4	1	2	95	19.5	100
3147	Pioneer	74.1	0	2	95	20.7	99
EXP8003X	Funk's	68.7	ō	1	88	21.4	95
XL395A	Dekalb	68.5	0	1	100	21.9	100
3187	Pioneer	68.0	1	2	86	20.4	98
EX7979	Dekalb	66.9	ō	1	89	19.6	92
G-4740	Funk's	66.0	1	2	76	21.6	97
XL394	Dekalb	65.9	Ō	ī	103	17.8	96
RA1604	Ring Around	65.7	Ö	4	92	18.4	95
RA1504 RA1502	Ring Around	62.8	1	2	89	18.3	92
	Pioneer	62.6	1	1	96	20.9	93
3030		62.5	0	1	89	20.0	95
8230	McCurdy Pioneer	60.9	2	5	81	18.8	93
3320	Northrup King	60.8	0	1	95	22.3	95
PX95	Northrup King Pioneer	59.7	0	2	79	18.1	99.
3369A			3	3	89	20.6	95
8951	Paymaster	58.6	3 4	4	87	19.6	94
G-4673A	Funk's	58.3	1	14	7.9	17.5	89
8220	Jacques	57.8				23.4	88
77B	Coker	57.7	0	2 ,	83		92
G-4522	Funk¹s	57.5	1	9	83	20.3	
519	Pioneer	57.0	1	. 4	99	16.7	92
G-4733	Funk's	55.5	Ò,	5	83	21.5	87
G-4779W	Funk's	55.5	0	3	96	19.9	93
G-4949A	Funk's	54.8	3	1	96	21.1	96
XL390B	Dekalb	54.4	2	2	103	19.1	95
G-4525A	Funk's	53 . 9	0	9	78	18.4	92
PX707	Northrup King	53.4	3	3	94	19.3	87
G-4578	Funk's	53.0	2	8	84	19.8	85
8150	McCurdy	52.5	0	4	100	20.2	88
19	Coker	52.4	0	2	84	19.6	78
PX79	Northrup King	52.0	0	2	86	17.2	95
56	Coker	51.3	3	1	93	21.0	90
22	Coker	50.9	0	2	92	20.0	92
x-300	McNair	50.7	1	3	83	22.0	94
JX227	Jacques	50.7	0	0	90	18.4	95
497	Paymaster	50.3	0	0	86	21.3	93
21	Coker	50.2	0	18	87	19.4	90
19A	Coker	50.1	3	6	91	18.3	8.0
USS2020	Agri-Chemical	50.1	0	8	84	19.0	80
JX180	Jacques	49.7	1	8	85	18.3	87
XL71	Dekalb	48.3	0	7	84	17.4	96
T1230	Trojan	47.7	2 .	15	84	20.8	90
PX87	Northrup King	46.7	1	14	94	19.7	84
JX247	Jacques	45.2	0	7	85	18.9	93
USS1009	Agri-Chemical	45.0	Ö	12	73	18.0	83
Mean		58.5	1	4	89	19.8	93

CV = 21.85%

LSD(.05) = 14.5 bu/A

Table 7. Summary of performance of 49 hybrids grown at two locations (Newton and Poplarville) at 22,000 plants per acre in the 1982 Mississippi hybrid corn performance trials.

Hybrid	Brand	Yield		ing Ear	Mois-		<u></u> .
no.	Draid	bu/A	root	stalk	height		Stand
		Du/A	ક	8	cm.	8	%
EXP8003X	Funk's	72.9	1	3	88	21.5	99
G-4740	Funk's	71.7	3	3	89	22.0	99 89
508	McNair	67.9	ō	6	109	23.2	91
EXP8006X	Funk's	66.2	Ö	3	93	20.7	95
77B	Coker	63.9	4	4	117	19.7	92
EX7979	Dekalb	62.3	ō	3	102	19.2	92 96
12052A	Paymaster	62.1	4	2.	92	22.2	98
3187	Pioneer	61.9	ī	4	93	17.1	94
3165	Pioneer	61.3	0	3	93	21.1	98
3230	McCurdy	61.1	2	3	93	20.5	98 95
3030	Pioneer	60.3	0	4	96	21.4	95 91
1 −300	McNair	59.4	4	7	88		
G -4 578	Funk's	59.4	ī	9	93	19.6 20.8	93
L9	Coker	58.1	0	8	93 87	20.8 19.7	90
519	Pioneer	57.8	1.	4	95		90
5~ 4733	Funk's	56.9	0	6		17.2	93
G-4673A	Funk's	56.4	0	8	93	19.6	95
KL395A	Dekalb	55.0	2	3	90	19.1	91
197	Paymaster	54.8	0		103	21.9	94
.9A	Coker	54.5	0	6	91	19.1	95
369A	Pioneer	54.1	3	7	97	18.2	88
951	Paymaster	52.8	0	5 7	85	19.6	88
320	Pioneer	52.0	0	7	86	18.6	94
L71	Dekalb	52.1	0		94	19.4	94
150	McCurdy	52.1 52.1	0	7	84	21.3	89
147	Pioneer	51.5	0	. 5	95	20.8	94
11-37	McCurdy	51.3	1	7	100	20.4	99
A1502	Ring Around	51.0	0	10	99	20.1	93
6	Coker	50.4	2	9	90	22.5	87
X180	Jacques	50.4		6	97	19.4	85
SS2020	Agri-Chemical	50.3 50.2	0	16	92	18.0	87
L394	Dekalb		0	8	91	18.6	85
-4525A	Funk's	50.0	3	4	95	20.6	93
4J2JA 1	Coker	49.5	0	6	93	18.3	88
т X79	Northrup King	47.7	0	11_	83	18.7	80
-4522	Funk's	47.3	0	5	94	17.1	96
-4522 X95	Northrup King	46.8	0	8	80	18.1	83
X247	Jacques	44.8	0	5	102	21.9	95
x70 7	Northrup King	44.8	0	14	87	20.1	87
-4949A	Funk's	44.1	1	9	96	21.1	97
-4949A L390B		43.8	1	5	104	21.5	98
цзэов X227	Dekalb	43.0	l	9	105	21.0	87
1230	Jacques Trojan	42.9	1	4	90	19.7	93
1230 A1604	-	. 41.5	0	14	89	20.5	87
SS109	Ring Around	41.3	0	8	91	19.6	94
2 2	Agri-Chemicals	41.2	0	22	73	20.2	90
	Coker	40.4	1	11	88	19.1	86
-4779₩	Funk's	40.3	0	5	99	22.0	98
220	Jacques	37.4	1	36	84	21.7	80
X87	Northrup King	37.2	0	22	87	19.7	90
ean		52.6	1	8	. 93	20.1	92

CV = 25.11%

LSD(.05) = 14.9bu/A

Table 8. Three-year (1980-82) average performance of 26 hybrids grown in Area II at 16,000 plants per acre in the Mississippi hybrid corn performance trials.

pertormance				lging	Ear	Mois-	0	
Hybrid	Brand	Yield	root	stalk_	height	ture	Stand	
no.		bu/A	%	%	cm	%	%	
12052A	Paymaster	70.6	1	2	93	20.4	96	
3147	Pioneer	68.4	1	5	90	17.9	94	
XL395A	DeKa1b	67.5	1 .	6	99	20.1	94	
3030	Pioneer	64.9	1	5	99	19.9	97	
G-4740	Funk's	64.6	0	4	79	19.0	95	
3 -77-7 3 8951	Paymaster	64.5	1	5	93	18.3	96	
519	Pioneer	62.5	1	4	98	16.9	93	
508	McNair	62.2	0	6	112	20.5	97	
3320	Pioneer	62.0	1	3	81	17.2	92	
8150	McCardy	61.4	1	4	96	17.2	93	
XL394	DeKalb	59.9	1	5	98	17.9	95	
T1230	Trojan	59.5	1	15	90	18.5	93	
USS2020	Agri Chemicals		0	8	88	18.2	89	
PX79	Northrup King	59.2	0	3	90	16.0	96	
19	Coker	58.4	Ō	. 4	83	16.7	86	
PX95	Northrup King	57.3	0	3	98	19.3	92	
19A	Coker	57.2	1	5	89	16.7	93	
3369A	Pioneer	56.3	1	7	78	16.9	93	
G-4949A	Funk's	56.0	3	7	99	20.0	96	
PX707	Northrup King	55.5	1	5	94	17.6	91	
XL71	DeKalb	55.5	0	9	82	16.6	- 98	
56	Coker	54.6	2	8	96	18.8	89	
X-300	McNair	54.5	0	5	83	19.1	94	
XL390B	DeKalb	54.4	2	12	103	18.2	89	
PX87	Northrup King	53.7	1	12	90	17.3	90	
22	Coker	52.1	0	7	87	18.2	. 94	
MEAN	,	60.0	1	6	92	18.2	93	

Table 9. Three-year (1980-82) average performance of 26 hybrids grown in Area II at 22,000 plants per acre in the Mississippi hybrid corn performance trials.

			Loc	lging	Ear	Mois-	
Hybrid	Brand	Yield	root	stalk	height	ture	Stand
no.		bu/A	%	%	Cm	%	%
G-4740	Funk's	67.4	2	6	83	19.4	87
XL395A	DeKalb	63.2	1	3	99	20.3	90
3147	Pioneer	60.9	0	9	94	18.0	91
508	McNair	59.3	0	12	108	21.9	85
19	Coker	59.2	2	6	86	17.1	87
12052A	Paymaster	59.1	3	4	93	22.0	89
3320	Pioneer	58.9	- 0	6	87	17.6	88
USS2020	Agri Chemicals	58.8	0	. 6	92	17.5	85
3030	Pioneer	58.3	1	6	101	20.2	90
519	Pioneer	58.1	1	6	97	16.5	92
19A	Coker	58.0	0	9	93	16.6	88
3951	Paymaster	57.8	0	7	89	17.4	90
8150	McCurdy	57.5	0	6	97	18.0	92
XL394	DeKa1b	57.3	1	4	100	18.9	86
X-300	McNair	56.4	2	9	. 86	18.1	81
XL71	DeKalb	54.6	0	12	85	17.9	83
T1230	Trojan	53.3	0	11	86	18.3	83
PX79	Northrup King	53.0	0	3	90	15.9	91
3369A	Pioneer	51.8	1 ·	9	83	16.8	86
PX87	Northrup King	51.3	1 _. 1	18	88	17.6	91
G-4949A	Funk's	51.1	1	7	104	19.7	91
22	Coker	51.0	0	13	87	17.9	82
PX95	Northrup King	50.9	1	6	100	19.2	89
PX707	Northrup King	50.3	0	9	95	18.3	88
56	Coker	47.1	1 .	10	95	19.5	80
XL390B	DeKa1b	44.6	1	16	104	19.1	85
MEAN		55.7	1	8	93	18.4	87

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In conformity with Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973, Dr. T. K. Martin, Vice President, 610 Allen Hall, P. O. Drawer J, Mississippi State, Mississippi 39762, office telephone number 325-3221, has been designated as the responsible employee to coordinate efforts to carry out responsibilities and make investigation of complaints relating to nondiscrimination.