Mississippi State University

Scholars Junction

Bulletins

Mississippi Agricultural and Forestry Experiment Station (MAFES)

1-1-1983

1982 hybrid corn performance trials

James R. McCluskey

Gene E. Scott

Follow this and additional works at: https://scholarsjunction.msstate.edu/mafes-bulletins

Recommended Citation

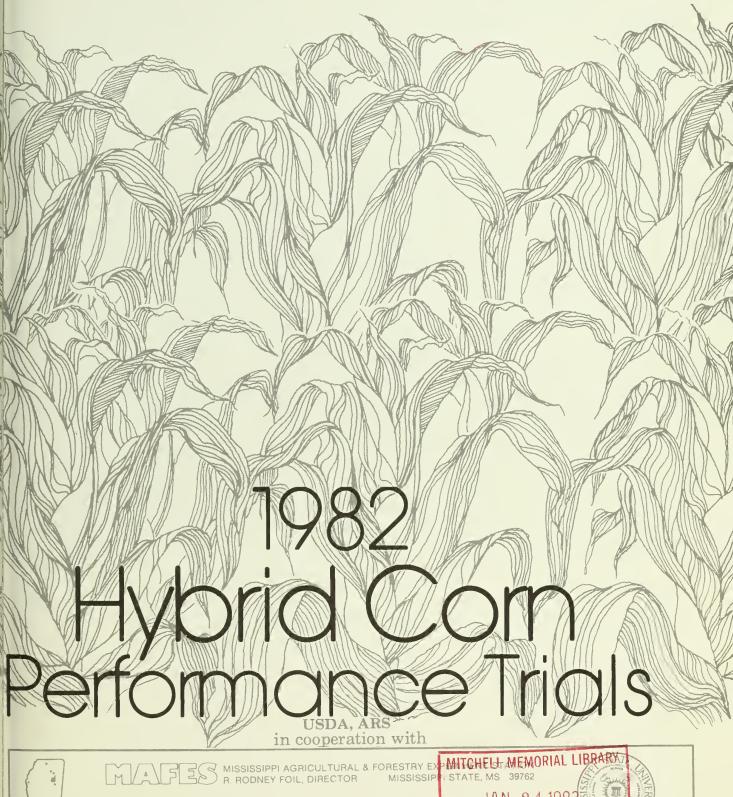
McCluskey, James R. and Scott, Gene E., "1982 hybrid corn performance trials" (1983). *Bulletins*. 163. https://scholarsjunction.msstate.edu/mafes-bulletins/163

This Article is brought to you for free and open access by the Mississippi Agricultural and Forestry Experiment Station (MAFES) at Scholars Junction. It has been accepted for inclusion in Bulletins by an authorized administrator of Scholars Junction. For more information, please contact scholcomm@msstate.libanswers.com.

etin 914

January 1983





JAN 24 1983

Mississippi State University

James D. McComas, President

Louis N. Wise, Vice President

Mississippi State University

James R. McCluskey, research technician and Gene E. Scott, supervisory research agronomist, USDA, ARS, Crop Science and Engineering Research Laboratory, Delta States Area

The following cooperated with the authors in conducting these tests:

- B. L. Arnold, superintendent, North Mississippi Branch Station
- H. D. Palmertree, superintendent, Pontotoc Ridge-Flatwoods Branch Station
- Normie Buehring, agronomist, Northeast Mississippi Branch Station
- Charles Fisher, assistant superintendent, Delta Branch Station

- Robert E. Coats, superintendent, Black Belt Branch Station
- J. W. McMillan, agronomist, Coastal Plains Branch Station
- Ned C. Edwards, agronomist, Brown Loam Branch Station
- Carl Hovermale, agronomist, South Mississippi Branch Station

HYBRID CORN PERFORMANCETRIALS IN 1982

Trials are conducted annually in lississippi to provide farmers, sedsmen, county agents and thers with information on the erformance of commercially vailable corn hybrids. Results of he trials are provided for use by orn producers in selecting hybrids uited to their area. New hybrids nay be compared with familiar lybrids.

Corn hybrids respond differently ovariations 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

rea 1

Amounts and distribution of ainfall in 1982 were good at the six ocations. 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 growing 16,000 plants/acre.

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 Yields of the same hybrids grow at 22,000 plants/acre over the threyear period ranged from 89 to 1 bu/acre and averaged 102 bu/acr (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 rough one half of the stalk lodging obserted at Newton.

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

Table 1. Location, number of entries, and dates of planting harvest of hybrid corn performance trials in Mississippi, 1982.

Area

Area				
and		No. of	Planting	Harvest
County	Location	entries	date	date
Area 1				
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	
Oktibbeha	Mississippi State	50	March 24	Aug. 25
Area 2				
Newton	Newton	49	March 17	Aug. 23
Hinds	Raymond	49	March 18	
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	Brand	Yield	root	dging stalk	Ear height	Days to mid silk*	Mois- ture	Stand
no.	BLANG	bu/A	8	%	cm.	no.	%	%
1.00		24,		·			·	
EXP.8003X	Funk's	142.5	0	1	120	84	15.9	100
EXP.8006X	Funk's	139.8	1	3	115	83	15.2	98
3165	Pioneer	138.3	0	1	119	83	15.1	101
KL394	DeKalb	134.7	0	4	130	85	15.7	101
508	McNair	134.0	0	5	133	91	16.9	99
84aa	McCurdy	132.3	0	6	112	79	14.3	95
3147	Pioneer	131.7	1	4	121	84	16.1	100
21	Coker	131.3	0	6	115	81	14.4	99
XL395A	DeKalb	128.9	0	3	126	88	17.3	100
519	Pioneer	128.0	0	1	128	83	14.4	100
77B	Coker	127.3	1	5	129	86	16.2	97
81-7	McCurdy	126.4	0	2	126	82	14.8	100
G-4525A	Funk's	125.7	0	4	106	77	13.4	98
G-4733	Funk's	124.6	0	2	114	81	15.8	99
PX95	Northrup King	124.6	0	2	130	82	15.3	101
EX7979	DeKalb	124.5	0	3	116	82	13.7	99
PX87	Northrup King	124.5	0	7	115	81	14.3	100
RA1502	Ring Around	124.1	0	5	107	78	14.0	97
JX247	Jacques	123.2	. 0	6	113	81	14.0	99
8150	McCurdy .	122.8	1	2	122	80	15.7	99
G-4673A	Funk's	122.5	0	3	117	80	14.0	103
RA1604	Ring Around	121.3	0	5	115	80	14.2	99
X-300	McNair	121.2	0	6	109	80	15.8	101
8220	Jacques	120.8	0	4	104	78	14.4	99
G-4779W	Funk's	120.3	0	3	122	82	14.6	97
8230	McCurdy	120.0	0	2	123	81	16.1	102
T1230	Trojan	119.9	0	4	112	81	14.7	98
USS2020	Agri-Chemicals	119.0	0	6	118	80	14.4	97
3369A	Pioneer	118.6	0	7	109	76	13.8	97
3184	Pioneer	118.6	0	1	106	79	14.4	99
G-4740	Funk's	117.5	0	2	103	84	15.8	95
XL390B	DeKalb	117.5	0	5	120	80	13.7	99
G-4522	Funk's	117.2	0	4	104	75	13.6	97
RX909	Asgrow	115.5	0	3	102	78	13.5	99
3187	Pioneer	115.4	1	1	115	80	14.8	101
JX227	Jacques	113.9	0	4	112	79	13.3	97
XL72bb	DeKalb	113.7	0	6	104	78	13.9	100
22	Coker	113.7	0	7	114	80	14.8	96
ZZ XL71	DeKalb	113.5	0	í	107	78	13.9	98
		111.5	0	3	113	77	13.9	97
19A RX777	Coker	109.2	0	5	106	74	13.5	97
19	Asgrow Coker	109.2	0	2	110	77	13.4	97
		108.6	1	4	115	79	15.0	98
PX707	Northrup King	107.1	0	3	112	74	13.3	97
G-4578	Funk's		1	2	115	80	13.4	97
PX79	Northrup King	106.8		6	107	80	14.3	97
T-E6998	Taylor-Evans	106.2	0	6	115	78	13.3	97
JX180	Jacques	105.1		7	116	84	16.9	97
56	Coker	104.4		5	110	75	13.7	97
USS1010	Agri-Chemicals	96.7				75 74	13.7	92
US\$0526	Agri-Chemicals	76.1	0	5	102			
Mean		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.

				dging	Ear	Days to	Mois-	
Hybrid	Brand	Yield	root	stalk	height	mid silk*	ture	Stand
no.		bu/A	8	%	cm.	no.	%	%
21	Coker	164.1	0	5	112	81	13.1	99
EXP.8003X	Funk's	153.0	0	1	121	86	15.4	97
XL395A	DeKalb	152.8	0	3	126	88	17.0	95
3165	Pioneer	152.3	0	1	118	84	14.2	99
3147	Pioneer	151.3	0	5	125	84	15.8	95
RA1604	Ring Around	150.8	0	6	116	81	13.5	97
EXP.8006X	Funk's	150.6	0	4	121	86	14.4	97
84aa	McCurdy	149.7	0	9	115	80	13.4	97
JX247	Jacques	149.0	0	7	116	82	14.2	97
EX7979	DeKalb	146.9	0	3	121	83	13.7	95
PX87	Northrup King	146.8	0	9	118	81	13.1	91
8150	McCurdy	146.7	0	4	122	81	15.0	97
508	McNair	144.9	0	7	134	91	16.0	96
G-4673A	Funk's	144.4	0	3	115	82	14.0	95
JX227	Jacques	143.2	0	1	112	` 80	13.5	98
T1230	Trojan	142.7	0	6	110	82	13.3	97
RX909	Asgrow	142.5	0	3	105	80	13.7	97
3187	Pioneer	139.4	0	2	117	. 80	13.5	95
RA1502	Ring Around	139.3	0	5	107	80	13.6	98
81-7	McCurdy	138.7	0	6	126	83	14.8	98
USS2020	Agri-Chemicals	138.3	0	4	111	81	13.5	95
8220	Jacques	137.8	0	7	106	78	14.4	94
PX95	Northrup King	137.7	0	7	129	83	13.7	97
G-4740	Funk's	136.6	0	4	107	85	15.8	96
T-E6998	Taylor-Evans	136.3	0	7	113	81	14.4	92
8230	McCurdy	136.0	0	2	118	83	15.1	96
3184	Pioneer	135.9	0	2	109	81	14.6	95
G-4525A	Funk's	135.8	0	7	109	79	12.4	95
G-4522	Funk's	134.8	0	3	105	77	12.8	95
X-300	McNair	134.2	0	12	111	82	15.0	97
PX707	Northrup King	133.8	0	5	118	80	13.0	93
JX180	Jacques	132.4	0	3	117	78	13.3	95
XL394	DeKalb	131.9	0	5	133	85	14.7	93
G-4578	Funk's	131.5	0	3	112	76	12.5	99
19A	Coker	131.3	0	2	112	79	13.0	93
19	Coker	131.3	0	2	110	78	13.0	92
G-4779W	Funk's	131.2	0	4	127	84	14.3	96
XL71	DeKalb	131.1	0	7	105	80	13.9	95
G-4733	Funk's	130.7	0	3	106	82	15.2	96
519	Pioneer	130.4	0	2	130	84	13.8	99
3369A	Pioneer	129.0	0	9	111	77	13.6	92
22	Coker	128.7	0	6	112	80	13.8	95
RX777	Asgrow	128.6	0	2	113	75	13.3	99
77B	Coker	127.9	0	11	136	86	15.5	95
USS1010	Agri-Chemicals	127.5	0	4	113	77	12.9	94
XL72bb	DeKalb	124.8	0	4	111	80	13.2	94
XL390B	DeKalb	121.0	0	9	129	83	14.6	96
PX79	Northrup King	117.3	0	3	114	81	13.5	98
56	Coker	116.2	0	10	118	85	15.6	94
USS0526	Agri-Chemicals	94.7	0	6	104	75	12.2	89
	rigit chemicals					81	14.0	96
Mean		136.9	0	5	116	9.1	14.0	

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.

			Lod	ging	Ear	Days to	Mois-	
Hybrid	Brand	Yield	root	stalk	heights	mid silk	ture	Stand
no.		bu/A	%	%	cm	no.	%	%
3147	Pioneer	107.5	1	11	120	84	14.8	97
8150	McCurdy	103.5	1	4	122	80	14.7	100
8230	McCurdy	103.0	0	4	119	81	15.3	102
84aa	McCurdy	102.9	0	9	106	79	14.1	97
T1230	Trojan	102.1	0	10	114	81	14.5	99
519	Pioneer	100.0	1	9	125	83	14.9	100
G-4740	Funk's	99.8	1	6	103	84	15.1	97
3369A	Pioneer	99.0	0	9	105	76	13.7	96
PX87	Northrup King		0	11	116	81	14.4	100
XL394	DeKalb	95.2	1	12	128	85	15.2	102
PX95	Northrup King	95.1	3	13	125	82	14.5	98
19A	Coker	94.8	0	4	112	77	13.8	96
508	McNair	94.7	1	13	136	91	16.0	102
X-300	McNair	94.3	0	17	106	80	14.8	99
19	Coker	93.5	0	4	109	77	13.4	97
XL71	DeKalb	93.0	0	5	109	78	13.5	100
22	Coker	91.8	0	11	115	80	14.4	96
USS1010	Agri Chemical		1	6	110	75	13.8	98
XL390B	DeKa1b	91.0	1	17	124	80	14.5	97
PX79	Northrup King	89.7	2	5	113	80	13.5	97
PX707	Northrup King	89.5	2	8	117	79	14.3	9 8
56	Coker	89.2	0	10	119	84	16.1	99
MEAN		96.3	1	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.

***************************************			Lod	ging	Ear	Days to	Mois-	
Hybrid	Brand	Yield	root	stalk	heights	mid silk	ture	Stand
no.		bu/A	%	%	cm	no.	%	%
8150	McCurdy	113.2	0	7	122	79	14.6	9 8
3147	Pioneer	112.8	1	8	122	83	15.2	93
84a a	McCurdy	112.1	0	9	113	77	14.4	96
PX87	Northrup King	109.0	0	11	113	79	14.2	95
T1230	Torjan	107.4	0	9	109	80	14.0	97
US S 1010	Agri Chemcial	106.4	1	10	110	75	13.4	96
19	Coker	106.3	0	6	108	76	13.5	92
8230	McCurdy	106.1	1	5	118	81	15.5	97
G-4740	Funk's	104.6	1	7	106	82	15.0	95
19A	Coker	103.1	0	7	113	77	13.8	93
508	McNair	102.3	1	13	133	88	16.2	95
XL394	DeKalb	102.0	1	9	128	84	14.9	93
XL71	DeKalb	101.3	0	10	108	77	14.2	95
3369A	Pioneer	100.2	0	12	108	75	13.9	94
519	Pioneer	99.5	2	9	126	81	14.5	96
X-300	McNair	98.4	0	18	109	80	14.7	92
PX95	Northrup King	96.9	2	11	126	81	13.9	96
PX79	Northrup King	96.8	1	6	115	78	13.4	97
22	Coker	95.0	1	13	111	78	14.2	93
PX707	Northrup King	93.3	2	9	117	79	13.9	95
56	Coker	90.1	0	12	120	83	15.6	95
XL390B	DeKalb	89.4	1	14	125	81	14.5	93
MEAN		102.1	1	10	116	80	14.4	95
THEMIN		102.1	T	10	TTO	00	14.4	7.7

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.

				dging	Ear	Mois-	
Hybrid	Brand	Yield	root	stalk		t ture	Stand
no.		bu/A	%	8	cm.	8	olo Olo
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
31-37	McCurdy	74.4	1	2	95	19.5	100
3147	Pioneer	74.1	0	2	95	20.7	99
EXP8003X	Funk's	68.7	0	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	0	1	89	19.6	92
G-4740	Funk's	66.0	1	2	76	21.6	97
XL394	Dekalb	65.9	0	1	103	17.8	96
RA1604	Ring Around	65.7	0	4	92	18.4	95
RA1502	Ring Around	62.8	1	2	89	18.3	92
3030	Pioneer	62.6	1	1	96	20.9	93
8230	McCurdy	62.5	0	1	89	20.0	95
3320	Pioneer	60.9	2	5	81	18.8	93
PX95	Northrup King	60.8	0	1	95	22.3	95
3369A	Pioneer	59.7	0	2	79	18.1	99
330 <i>3</i> A 3951		58.6	3	3		20.6	95
G-4673A	Paymaster		4		89		
	Funk's	58.3		4	87	19.6	94
8220	Jacques	57.8	1	14	79	17.5	89
77B	Coker	57.7	0	2	83	23.4	88
G-4522	Funk's	57.5	1	9	83	20.3	92
519	Pioneer	57.0	1	4	99	16.7	92
G-4733	Funk's	55.5	0	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	80
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	0	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.

			_	ing Ear	Mois-		
Hybrid	Brand	Yield	root	stalk	height	ture	Stand
no.		bu/A	%	do	cm.	8	%
EXP8003X	Funk's	72.9	1	3	88	21.5	99
G-4740	Funk's	71.7	3	3	89	22.0	89
508	McNair	67.9	0	6	109	23.2	91
EXP8006X	Funk's	66.2	0	3	93	20.7	95
7 7 B	Coker	63.9	4	4	117	19.7	92
EX7979	Dekalb	62.3	0	3	102	19.2	96
12052A	Paymaster	62.1	4	2	92	22.2	98
3187	Pioneer	61.9	1	4	93	17.1	94
3165	Pioneer	61.3	0	3	93	21.1	98
8230	McCurdy	61.1	2	3	93	20.5	95
3030	Pioneer	60.3	0	4	96	21.4	91
x-300	McNair	59.4	4	7	88	19.6	93
G - 4578	Funk's	59.4	1	9	93	20.8	90
19	Coker	58.1	0	8	87	19.7	90
519	Pioneer	57.8	1	4	95	17.2	93
G-4733	Funk's	56.9	0	6	93	19.6	95
G-4673A	Funk's	56.4	0	8	90	19.1	91
KL395A	Dekalb	55.0	2	3	103	21.9	94
497	Paymaster	54.8	0	6	91	19.1	95
197 L9A	Coker	54.5	0	7	97	18.2	88
3369A	Pioneer	54.1	3	5	85	19.6	88
		52.8	0	7	86	18.6	94
3951	Paymaster Pioneer			7	94	19.4	94
3320		52.2	0	7			
XL71	Dekalb	52.1	0		84	21.3	89
8150	McCurdy	52.1	0	5	95	20.8	94
3147	Pioneer	51.5	0	7	100	20.4	99
31-37	McCurdy	51.3	1	10	99	20.1	93
RA1502	Ring Around	51.0	0	9	90	22.5	87
56	Coker	50.4	2	6	97	19.4	85
JX180	Jacques	50.3	0	16	92	18.0	87
USS2020	Agri-Chemical	50.2	0	8	91	18.6	85
KL394	Dekalb	50.0	3	4	95	20.6	93
G-4525A	Funk's	49.5	0	6	93	18.3	88
21	Coker	47.7	0	11	83	18.7	80
2X79	Northrup King	47.3	0	5	94	17.1	96
G-4522	Funk's	46.8	0	8	80	18.1	83
2X95	Northrup King	44.8	0	5	102	21.9	95
JX247	Jacques	44.8	0	14	87	20.1	87
PX70 7	Northrup King	44.1	1	9	96	21.1	97
G-4949A	Funk's	43.8	1	5	104	21.5	98
XL390B	Dekalb	43.0	1	9	105	21.0	87
JX227	Jacques	42.9	1	4	90	19.7	93
r1230	Trojan	41.5	0	14	89	20.5	87
RA1604	Ring Around	41.3	0	8	91	19.6	94
JSS109	Agri-Chemicals	41.2	0	22	73	20.2	90
22	Coker	40.4	1	11	88	19.1	86
G-4779W	Funk's	40.3	0	5	99	22.0	98
8220	Jacques	37.4	1	36	84	21.7	80
PX87	Northrup King	37.2	0	22	87	19.7	90
Mean		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.

			Lo	dging	Ear	Mois-	
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
KL395A	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
3951	Paymaster	64.5	1	5	93	18.3	96
519	Pioneer	62.5	1	4	98	16.9	93
808	McNair	62.2	0	6	112	20.5	97
3320	Pioneer	62.0	1	3	81	17.2	92
3150	McCardy	61.4	1	4	96	17.2	93
KL394	DeKa1b	59.9	1	5	98	17.9	95
1230	Trojan	59.5	1	15	90	18.5	93
JSS2020	Agri Chemicals		0	8	88	18.2	89
2X79	Northrup King	59.2	0	3	90	16.0	96
.9	Coker	58.4	0	4	83	16.7	86
X95	Northrup King	57.3	0	3	98	19.3	92
9A	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
X707	Northrup King	55.5	1	5	94	17.6	91
KL71	DeKalb	55.5	0	9	82	16.6	98
56	Coker	54.6	2	8	96	18.8	89
<-300	McNair	54.5	0	5	83	19.1	94
KL390B	DeKa1b	54.4	2	12	103	18.2	89
2X87	Northrup King	53.7	1	12	90	17.3	90
22	Coker	52.1	0	7	87	18.2	94
1EAN		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	iging	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	DeKa1b	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
8951	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	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

Mention of a trademark or proprietary product does not constitute a guarantee or warranty of the product by the Mississippi Agricultural and Forestry Experiment Station or the USDA and does not imply its approval to the exclusion of other products that also may be suitable.

Mississippi State University does not discriminate on the basis of race, color, religion, national origin, sex, age, or handicap.

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.