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North Miss. Branch Station PONTOTOC Pontatoc Ridge-Flatwoods Branch Station

VERONA

Northeost Miss.

Branch Station

MISSISSIPPI STATE Central Station

BROOKSVILLE . Block Belt Branch Station

NEWTON Coostal Plain Bronch Station

POPLARVILLE
 uth Miss. Bronch Stotion

Mississippi Hybrid Corn Performance Trials in 1978

AREA 1

RAYMOND
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AREA 2

• STONEVILLE Delto Branch Station

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By James R. McCluskey and Gene E. Scott

> MITCHELL MEMORIAL TIBRARY Crop Science and Engineering Research Laboratory Delta States Area AR-SEA U.S. Department of Agriculture Mississippi State, MS 39762 in cooperation withississippi State, University

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MAFES MISSISSIPPI AGRICULTURAL & FORESTRY EXPERIMENT STATION R. RODNEY FOIL, DIRECTOR MISSISSIPPI STATE, MS 39762

Mississippi State University

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Bulletin 877

Mississippi Hybrid Corn Performance Trials in 1978

by

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The Delta States Area Crop Science and Engineering Research Laboratory SEA, AR, United States Department of Agriculture Mississippi State, MS 39762

in cooperation with

Mississippi Agricultural and Forestry Experiment Station Mississippi State University

January 1979

The following cooperated with the authors in conducting these test:

B. L. Arnold, Superintendent, North Mississippi Branch Station, Holly Springs

F. T. Withers, Jr., Superintendent, Pontotoc Ridge-Flatwoods Branch Experiment Station, Pontotoc

Normie Buehring, Agronomist, Northeast Mississippi Branch Station, Verona

Theodore C. Miller, Agronomist, Delta Branch Experiment Station, Stoneville

Robert E. Coats, Superintendent, Black Belt Branch Station, Brooksville J. W. McMillan, Agronomist, Coastal Plain Branch Station, Newton

Ned C. Edwards, Agronomist, Brown Loam Branch Station, Raymond

Carl Hovermale, Agronomist, South Mississippi Branch Station, Poplarville

The test reported in Wilkinson County was on a private farm through the cooperation of T. O. Whitaker, RFD 4, Woodville, and John Dale, County Agent.



Mississippi Hybrid Corn Performance Trials in 1978

Frials are conducted annually in Assissippi to provide farmers, sedsmen, county agents and oher interested persons with infornation on the performance of mmercially available corn brids. Results of the trials are povided for use by corn producers selecting hybrids suited to their aea. New hybrids may be comcred with familiar hybrids and th check hybrids (Dixie 55 and Mss. 6131), which are included in al tests. Seed of Dixie 55 may or cay not be commercially vailable. Seed of Miss. 6131 are nt commercially available.

Corn hybrids respond differently t variations in environment, and a even 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, goodquality 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 dis-

tributors of seed corn are eligible to enter hybrids in these tests. 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 Feb. 15. A nominal fee is charged for each hybrid tested in each area to help defray costs of the test.

Two or more tests were located in each area. Trials were conducted at 10 locations in 1978 (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.

| County | Location | No. of entries | Planting date | Harvest date |
|-------------|--|-------------------|------------------|-----------------|
| | · ···································· | | | |
| Marshall | Holly Springs | 49 | April 24 | Sept. 28 |
| Pontotoc | Pontotoc | 49 | April 19 | |
| Lee | Verona | 49 | April 25 | Sept. 29 |
| Noxubee | Brooksville | 49 | April 17 | Oct. 2 |
| Oktibbeha | Mississippi State | 49 | March 30 | Sept. 19-20 |
| Washington | Stoneville | 49 | March 29 | Sept. 5-6 |
| Newton | Newton | 57 | March 27 | |
| Hinds | Raymond | 57 | April 4 | Sept. 12 |
| Wilkinson | Woodville | 57 | March 28 | Sept. 7 |
| Pearl River | Poplarville | 57 | March 15 | Aug. 8 & 10 |

Table 1. Location, number of entries and dates of planting and harvest of hybrid corn performance trials in Mississippi, 1978.

Materials and Methods

Major changes in the testing program in 1978 were redesignation of test areas and addition of tests at higher plant populations. Areas I and II in earlier trials were combined to form the new Area I. The new Area II includes areas designated as III and IV in previous tests. Tests at populations of 16,000 plants per acre were continued, and tests at populations of 22,000 plants per acre were added at each location.

A randomized complete-block experimental design with three

replications at each population level was used at all locations. Each plot consisted of two rows, 40 inches apart and 200 inches long. All tests were overplanted and later thinned to either 16,000 or 22,000 plants per acre. 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.

All hybrids included in threeyear summaries for Area I (1978 designation) were grown in both Area I and Area II in 1976 and 1977, and those included in threeyear summaries for Area II (1978 designation) were grown in Area III and Area IV in the two previous years. However, results reported for each area in 1976 and 1977 include only those hybrids entered for testing by producers and/on distributors.

Test Results

Area 1

The test at Pontotoc was not harvested because yields were near zero as the result of extreme drought. Results of the tests at Holly Springs and Mississippi State were discarded. Yields at Holly Springs were quite low and highly variable, because heavy rain shortly after planting reduced stands, and dry weather late in the year limited plant development. Yields at Mississippi State were quite good but highly variable, possibly because irrigation was not uniform. Results of the Brooksville test with populations of 16,000 plants per acre were discarded because of extreme yield variability.

The trials at Stoneville suffered severe damage from a hail storm early in the season. A heavy natural incidence of maize dwarf mosaic at Brooksville reduced yield of susceptible hybrids.

Average yields of the 49 hybrids tested at populations of 16,000 plants per acre at Stoneville and Verona ranged from 65 to 113 bushels per acre (Table 2). Stalk lodging ranged from 9 to 87% at Stoneville, from 0 to only 15% at Verona, and stalk lodging of five of the hybrids grown at the two locations averaged less than 10%. Root lodging was serious for only a few hybrids.

Average yields of the 49 hybrids tested at populations of 22,000 plants per acre at Brooksville, Stoneville and Verona ranged from 74 to 110 bushels per acre (Table 3). Stalk lodging averaged over the three locations ranged from 3 to 31%.

Yields of hybrids tested at populations of 22,000 plants per acre at Stoneville and Verona averaged 12 bushels more than when tested at the lower plant population level. No practical differences in other performance characteristics were observed.

Average yields of the 19 hybrids that have been tested at populations of 16,000 plants per acre in Area I for the past three years ranged from 81 to 114 bushels per acre (Table 4). The percentage range for stalk lodging was from 6 to 33.

| PX95 N RX114 A 3147 Pi RX140A A RA2601 Ri 72-44A M 9997 W 55 D PX715 N XL394 D G-4880W F 62-795W F 22 C 488 M 3179 P XL78 D G-4574 F MSX84aa M | Brand oneer orthrup King sgrow oneer sgrow ing Around cCurdy 'ilstar ixie orthrup King eKalb unk's unk's oker cNair ioneer eKalb | Yield bu/A 113.0 109.8 108.5 106.7 104.9 104.5 102.8 101.5 101.4 101.0 97.9 95.8 95.7 94.6 93.8 | root % 5 0 11 2 13 0 0 1 5 0 4 3 2 | stalk % 23 12 15 16 9 15 8 13 41 15 15 19 20 | height cm. 153 150 129 140 132 129 136 129 161 138 140 136 | mid silk* no. 78 74 75 75 76 75 75 75 74 78 73 77 70 | ture % 16.5 15.1 15.5 16.0 16.3 17.4 15.9 17.2 17.4 16.0 16.8 | Stand % 108 100 98 100 98 100 98 100 98 100 102 98 100 102 98 100 80 101 104 |
|--|---|---|--|---|---|--|---|--|
| \$\lambda 5505 Pi \$\Perilse 2855 N \$\Perilse 2855 N \$\Perilse 2855 N \$\Perilse 2144 M \$\Perilse 244A M \$\Perilse 244A M \$\Perilse 244A M \$\Perilse 244A M \$\Perilse 2715 N \$\Perilse 2715 N \$\Perilse 2860W F \$\Perilse 2765W F \$\Perilse 22 C \$\Perilse 88 M \$\Perilse 179 P \$\Perilse 179 P \$\Perilse 178 D \$\Perilse 178 P \$\Perilse 178 M \$\Perilse 178 M \$\Perilse178 M <tr< th=""><th>orthrup King sgrow oneer sgrow ing Around icCurdy 'ilstar ixie orthrup King eKalb unk's unk's oker icNair ioneer</th><th>$\begin{array}{c} 113.0\\ 109.8\\ 108.5\\ 106.7\\ 104.9\\ 104.5\\ 102.8\\ 101.5\\ 101.4\\ 101.0\\ 97.9\\ 95.8\\ 95.7\\ 94.6\\ 93.8 \end{array}$</th><th>$5 \\ 0 \\ 11 \\ 2 \\ 13 \\ 0 \\ 0 \\ 1 \\ 5 \\ 0 \\ 4 \\ 4 \\ 3$</th><th>$23 \\ 12 \\ 15 \\ 16 \\ 9 \\ 15 \\ 8 \\ 13 \\ 41 \\ 15 \\ 15 \\ 19 \\ 19$</th><th>$153 \\ 150 \\ 129 \\ 140 \\ 132 \\ 129 \\ 136 \\ 129 \\ 161 \\ 138 \\ 140$</th><th>78 74 75 75 76 75 75 74 78 73 73</th><th>$16.5 \\ 15.1 \\ 15.5 \\ 16.0 \\ 16.3 \\ 17.4 \\ 15.9 \\ 17.2 \\ 17.4 \\ 16.0 \\ 16.8$</th><th>108 100 100 98 100 102 98 100 80 101</th></tr<> | orthrup King sgrow oneer sgrow ing Around icCurdy 'ilstar ixie orthrup King eKalb unk's unk's oker icNair ioneer | $\begin{array}{c} 113.0\\ 109.8\\ 108.5\\ 106.7\\ 104.9\\ 104.5\\ 102.8\\ 101.5\\ 101.4\\ 101.0\\ 97.9\\ 95.8\\ 95.7\\ 94.6\\ 93.8 \end{array}$ | $5 \\ 0 \\ 11 \\ 2 \\ 13 \\ 0 \\ 0 \\ 1 \\ 5 \\ 0 \\ 4 \\ 4 \\ 3 $ | $23 \\ 12 \\ 15 \\ 16 \\ 9 \\ 15 \\ 8 \\ 13 \\ 41 \\ 15 \\ 15 \\ 19 \\ 19$ | $153 \\ 150 \\ 129 \\ 140 \\ 132 \\ 129 \\ 136 \\ 129 \\ 161 \\ 138 \\ 140$ | 78 74 75 75 76 75 75 74 78 73 73 | $16.5 \\ 15.1 \\ 15.5 \\ 16.0 \\ 16.3 \\ 17.4 \\ 15.9 \\ 17.2 \\ 17.4 \\ 16.0 \\ 16.8 $ | 108 100 100 98 100 102 98 100 80 101 |
| PX95 N RX114 A RX147 Pi RX140A A R42601 Ri '2-44A M 997 W '5 D PX715 N KL394 D \$-4880W F \$-795W F '2 C 188 M 8179 P KL78 D \$-4574 F MSX84aa M | orthrup King sgrow oneer sgrow ing Around icCurdy 'ilstar ixie orthrup King eKalb unk's unk's oker icNair ioneer | $109.8 \\ 108.5 \\ 106.7 \\ 104.9 \\ 104.5 \\ 102.8 \\ 101.5 \\ 101.4 \\ 101.0 \\ 97.9 \\ 95.8 \\ 95.7 \\ 94.6 \\ 93.8 \\ 100.0 \\ 93.8 \\ 100.0 \\ 10$ | $\begin{array}{c} 0 \\ 11 \\ 2 \\ 13 \\ 0 \\ 0 \\ 1 \\ 5 \\ 0 \\ 4 \\ 4 \\ 3 \end{array}$ | 12 15 16 9 15 8 13 41 15 15 19 19 | $ 150 \\ 129 \\ 140 \\ 132 \\ 129 \\ 136 \\ 129 \\ 161 \\ 138 \\ 140 \\ $ | 74 75 76 75 75 75 74 78 73 77 | $15.1 \\ 15.5 \\ 16.0 \\ 16.3 \\ 17.4 \\ 15.9 \\ 17.2 \\ 17.4 \\ 16.0 \\ 16.8 $ | $ \begin{array}{r} 100 \\ 100 \\ 98 \\ 100 \\ 102 \\ 98 \\ 100 \\ 80 \\ 101 \\ \end{array} $ |
| PX95 N RX114 A 147 Pi RX140A A R2601 R 2-44A M 997 W 5 D PX715 N KL394 D \$4880W F \$-795W F 12 C 88 M \$179 P \$K178 D \$4574 F MSX84aa M | orthrup King sgrow oneer sgrow ing Around icCurdy 'ilstar ixie orthrup King eKalb unk's unk's oker icNair ioneer | $109.8 \\ 108.5 \\ 106.7 \\ 104.9 \\ 104.5 \\ 102.8 \\ 101.5 \\ 101.4 \\ 101.0 \\ 97.9 \\ 95.8 \\ 95.7 \\ 94.6 \\ 93.8 \\ 100.0 \\ 93.8 \\ 100.0 \\ 10$ | $\begin{array}{c} 0 \\ 11 \\ 2 \\ 13 \\ 0 \\ 0 \\ 1 \\ 5 \\ 0 \\ 4 \\ 4 \\ 3 \end{array}$ | 12 15 16 9 15 8 13 41 15 15 19 19 | $ 150 \\ 129 \\ 140 \\ 132 \\ 129 \\ 136 \\ 129 \\ 161 \\ 138 \\ 140 \\ $ | 74 75 76 75 75 75 74 78 73 77 | $15.1 \\ 15.5 \\ 16.0 \\ 16.3 \\ 17.4 \\ 15.9 \\ 17.2 \\ 17.4 \\ 16.0 \\ 16.8 $ | $ \begin{array}{r} 100 \\ 100 \\ 98 \\ 100 \\ 102 \\ 98 \\ 100 \\ 80 \\ 101 \end{array} $ |
| XX114 A 147 Pi XX140A A X2601 Ri 2-44A M 997 W 5 D PX715 N KL394 D \$-795W F 22 C 88 M \$179 P KL78 D \$-44574 F MSX84aa M | sgrow oneer sgrow ing Around icCurdy 'ilstar ixie orthrup King eKalb unk's unk's unk's oker ioneer | $\begin{array}{c} 108.5\\ 106.7\\ 104.9\\ 104.5\\ 102.8\\ 101.5\\ 101.4\\ 101.0\\ 97.9\\ 95.8\\ 95.7\\ 94.6\\ 93.8 \end{array}$ | $ \begin{array}{r} 11 \\ 2 \\ 13 \\ 0 \\ 0 \\ 1 \\ 5 \\ 0 \\ 4 \\ 4 \\ 3 \\ \end{array} $ | 15 16 9 15 8 13 41 15 15 15 19 19 | $ 129 \\ 140 \\ 132 \\ 129 \\ 136 \\ 129 \\ 161 \\ 138 \\ 140 \\ $ | 75 75 76 75 75 74 78 73 73 77 | $ 15.5 \\ 16.0 \\ 16.3 \\ 17.4 \\ 15.9 \\ 17.2 \\ 17.4 \\ 16.0 \\ 16.8 \\ $ | 100 98 100 102 98 100 80 101 |
| 147 Pi \$\X140A A \$\X120A M \$\X179 F \$\X179 P \$\X179 P \$\X178 D \$\X4574 F \$\X584aa M | ioneer sgrow ing Around icCurdy ilstar ixie orthrup King eKalb unk's unk's oker icNair ioneer | $106.7 \\ 104.9 \\ 104.5 \\ 102.8 \\ 101.5 \\ 101.4 \\ 101.0 \\ 97.9 \\ 95.8 \\ 95.7 \\ 94.6 \\ 93.8 \\ 95.8 \\ 95.7 \\ 94.6 \\ 93.8 \\ 95.8 \\ 95.7 \\ 94.6 \\ 93.8 \\ 95.8 \\ 95.8 \\ 95.7 \\ 94.6 \\ 93.8 \\ 95.8 \\ 95.8 \\ 95.7 \\ 94.6 \\ 93.8 \\ 95.8 \\ 95.8 \\ 95.8 \\ 95.8 \\ 95.7 \\ 94.6 \\ 93.8 \\ 95.8 \\ 95.8 \\ 95.8 \\ 95.7 \\ 94.6 \\ 93.8 \\ 95.8 \\ $ | $2 \\ 13 \\ 0 \\ 0 \\ 1 \\ 5 \\ 0 \\ 4 \\ 4 \\ 3 \\ 3$ | $ 16 \\ 9 \\ 15 \\ 8 \\ 13 \\ 41 \\ 15 \\ 15 \\ 15 \\ 19 \\ $ | $140 \\ 132 \\ 129 \\ 136 \\ 129 \\ 161 \\ 138 \\ 140$ | 75 76 75 74 78 73 77 | $16.0 \\ 16.3 \\ 17.4 \\ 15.9 \\ 17.2 \\ 17.4 \\ 16.0 \\ 16.8 $ | 98 100 102 98 100 80 101 |
| X140A A XA2601 R: '2-44A M 9997 W '5 D '2X715 N XL394 D 3-4880W F 3-795W F '22 C 188 M \$179 P XL78 D 3-4574 F MSX84aa M | sgrow ing Around lcCurdy ilstar ixie orthrup King eKalb unk's unk's oker lcNair ioneer | 104.9 104.5 102.8 101.5 101.4 101.0 97.9 95.8 95.7 94.6 93.8 | $ \begin{array}{r} 13 \\ 0 \\ 0 \\ 1 \\ 5 \\ 0 \\ 4 \\ 4 \\ 3 \\ \end{array} $ | $9 \\ 15 \\ 8 \\ 13 \\ 41 \\ 15 \\ 15 \\ 19$ | $ 132 \\ 129 \\ 136 \\ 129 \\ 161 \\ 138 \\ 140 $ | 76 75 75 74 78 73 77 | $16.3 \\ 17.4 \\ 15.9 \\ 17.2 \\ 17.4 \\ 16.0 \\ 16.8$ | 100 102 98 100 80 101 |
| Radia Radia '2-44A M '997 W '5 D '2X715 N 'X715 N '4880W F '-795W F '22 C '88 M \$1179 P KL78 D '-4574 F MSX84aa M | ing Around lcCurdy 'ilstar orthrup King eKalb unk's unk's oker lcNair ioneer | 104.5 102.8 101.5 101.4 101.0 97.9 95.8 95.7 94.6 93.8 | $\begin{array}{c} 0 \\ 0 \\ 1 \\ 5 \\ 0 \\ 4 \\ 4 \\ 3 \end{array}$ | 15 8 13 41 15 15 19 | 129 136 129 161 138 140 | 75 75 74 78 73 77 | $17.4 \\ 15.9 \\ 17.2 \\ 17.4 \\ 16.0 \\ 16.8$ | 102 98 100 80 101 |
| 2-44A M 997 W 5 D 2X715 N XL394 D 3-4880W F 3-795W F 22 C 88 M 8179 P KL78 D 3-4574 F MSX84aa M | lcCurdy 'ilstar orthrup King eKalb unk's unk's oker lcNair ioneer | 102.8 101.5 101.4 101.0 97.9 95.8 95.7 94.6 93.8 | $ \begin{array}{c} 0 \\ 1 \\ 5 \\ 0 \\ 4 \\ 4 \\ 3 \end{array} $ | 8 13 41 15 15 19 | 136 129 161 138 140 | 75 74 78 73 77 | 15.9 17.2 17.4 16.0 16.8 | 98 100 80 101 |
| 1997 W 5 D 2X715 N XL394 D \$+4880W F \$+795W F \$22 C \$88 M \$179 P \$KL78 D \$4574 F MSX84aa M | 'ilstar ixie orthrup King eKalb unk's unk's oker lcNair ioneer | $101.5 \\101.4 \\101.0 \\97.9 \\95.8 \\95.7 \\94.6 \\93.8$ | $ \begin{array}{c} 1 \\ 5 \\ 0 \\ 4 \\ 4 \\ 3 \end{array} $ | 13 41 15 15 19 | 129 161 138 140 | 74 78 73 77 | $17.2 \\ 17.4 \\ 16.0 \\ 16.8$ | 100 80 101 |
| 5 D PX715 N KL394 D F4880W F F795W F 2 C 88 M 179 P KL78 D F4574 F MSX84aa M | ixie orthrup King eKalb unk's unk's oker lcNair ioneer | $101.4 \\ 101.0 \\ 97.9 \\ 95.8 \\ 95.7 \\ 94.6 \\ 93.8 \\$ | $5 \\ 0 \\ 4 \\ 4 \\ 3$ | 41 15 15 19 | $ 161 \\ 138 \\ 140 $ | 78 73 77 | 17.4 16.0 16.8 | 80 101 |
| PX715 N KL394 D \$+4880W F \$-795W F \$2 C 88 M \$179 P \$L78 D \$-4574 F \$MSX84aa M | orthrup King eKalb unk's unk's oker lcNair ioneer | 101.0 97.9 95.8 95.7 94.6 93.8 | 0 4 4 3 | 15 15 19 | $\frac{138}{140}$ | 73 77 | $\begin{array}{c} 16.0 \\ 16.8 \end{array}$ | 101 |
| KL394 D \$+4880W F \$+795W F \$2 C \$88 M \$179 P \$KL78 D \$+4574 F MSX84aa M | eKalb unk's unk's oker IcNair ioneer | 97.9 95.8 95.7 94.6 93.8 | 4 4 3 | 15 19 | 140 | 77 | 16.8 | |
| +4880W F +795W F 12 C 88 M 179 P KL78 D +4574 F MSX84aa M | unk's unk's oker IcNair ioneer | 95.8 95.7 94.6 93.8 | 4 3 | 19 | | | | 104 |
| 795W F 12 C 88 M 179 P KL78 D 14574 F MSX84aa M | unk's oker lcNair ioneer | 95.7 94.6 93.8 | 3 | | | ./9 | 16.4 | 107 |
| 2 C 88 M 179 P KL78 D F4574 F MSX84aa M | oker IcNair ioneer | 94.6 93.8 | | | | 78 76 | | |
| 88 M 179 Pr (L78 D 74574 F MSX84aa M | lcNair ioneer | 93.8 | | | 138 | 76 | 16.8 | 100 99 |
| 179 Pi KL78 D 74574 F MSX84aa M | ioneer | | $\frac{2}{2}$ | $\frac{12}{20}$ | 131 | 75 82 | 15.2 | |
| KL78 D G-4574 F MSX84aa M | | 00.0 | 2 | | 153 | | 18.7 | 103 |
| A4574 F MSX84aa M | ekalb | 93.0 | 3 | 23 | 132 | 76 | 16.0 | 92 |
| MSX84aa M | | 91.2 | 0 | 12 | 120 | 74 | 16.0 | 96 |
| | unk's | 91.0 | 0 | 18 | 127 | 74 | 16.5 | 98 |
| 5131 M | lcCurdy | 90.2 | 0 | 15 | 124 | 74 | 16.3 | 97 |
| | liss | 89.4 | 7 | 51 | 156 | 78 | 16.6 | 98 |
| | ioneer | 88.9 | 0 | 16 | 121 | 74 | 15.5 | 94 |
| | listar | 88.9 | 2 | 17 | 123 | 74 | 16.2 | 95 |
| | oker | 88.5 | 0 | 15 | 132 | 74 | 15.5 | 99 |
| | ioneer | 87.8 | 0 | 8 | 137 | 74 | 16.4 | 96 |
| 338 M | lcNair | 87.7 | 3 | 18 | 131 | 76 | 16.4 | 96 |
| | lcNair | 87.5 | 1 | 5 | 111 | 74 | 16.1 | 100 |
| | eKalb | 86.7 | 1 | 11 | 118 | 74 | 15.2 | 92 |
| 77 C | oker | 86.5 | 4 | 25 | 162 | 78 | 16.0 | 98 |
| 751 P | -A-G | 86.5 | 1 | 33 | 152 | 79 | 16.5 | 103 |
| G-4611 F | unk's | 86.3 | 0 | 15 | 124 | 74 | 15.1 | 92 |
| PX723 N | orthrup King | 84.3 | 1 | 14 | 140 | 74 | 15.4 | 105 |
| | ioneer | 83.4 | 3 | 25 | 143 | 75 | 15.4 | 99 |
| ГХS114 Т | rojan | 82.9 | 2 | 25 | 131 | 74 | 15.0 | 102 |
| | unk's | 82.5 | 1 | 18 | 120 | 75 | 16.1 | 95 |
| | ioneer | 81.3 | 0 | 16 | 111 | 74 | 16.2 | 90 |
| | ing Around | 80.4 | 0 | 18 | 126 | 74 | 16.3 | 94 |
| | ing Around | 80.1 | 4 | 22 | 135 | 75 | 16.7 | 93 |
| | unk's | 79.9 | 0 | 11 | 143 | 75 | 15.7 | 101 |
| | ioneer | 79.6 | 1 | 26 | 136 | 74 | 17.4 | 96 |
| | 'unk's | 77.4 | 0 | 12 | 120 | 74 | 15.6 | 100 |
| | ing Around | 77.3 | 0 | 31 | 116 | 73 | 16.3 | 96 |
| | unk's | 76.2 | 0 | 23 | 127 | 74 | 15.6 | 99 |
| | 'unk's | 74.7 | 1 | 6 | 129 | 74 | 16.6 | 92 |
| | rojan | 73.3 | 4 | 24 | 123 | 74 | 17.0 | 95 |
| | | | 4 | | | 73 | 16.7 | 98 |
| | ing Around | 71.8 | | 18 | 108 | | | 95 95 |
| | /ilstar 'oltor | 71.1 | 3 | 21 | 123 | 74 75 | 16.1 | |
| | oker | 69.9 65.9 | 1 | 20 | 132 | 75 72 | 16.5 | 102 |
| | rojan | 65.2 | 0 | 17 | 124 | 73 | 15.4 | 101 |
| RA1501 R | ling Around | 64.9 | 5 | 23 | 128 | 74 | 15.1 | 98 |
| MEAN | | 88.1 | 2 | 18 | 132 | 75 | 16.2 | 98 |

rformance of 49 hybrids grown at two locations (Stonoville and Table 9 S.

Table 3. Summary of performance of 49 hybrids grown at three locations (Brooksville, Stoneville, Verona) at 22,000 plants per acre in the 1978 Mississippi hybrid corn performance trials.

| Hybrid | Brand | Yield | Lod root | lging stalk | Ear height | Days to mid silk* | Mois- ture | Stan |
|-----------------|--------------------|-------|-------------|----------------|---------------|----------------------|---------------|------|
| no. | | bu/A | % | % | cm. | no. | | |
| VEFOE | Di en e en | 110.2 | 10 | 15 | 150 | 70 | 10.0 | 100 |
| X5505 | Pioneer | 110.3 | 10 | 15 13 | 150 | 76 | 16.2 | 100 |
| 9997 MSX8400 | Wilstar McCundu | 105.2 | 6 | | 126 | 75 75 | 16.6 | 94 |
| MSX84aa | McCurdy | 102.3 | 1 | 16 9 | 127 | 75 | 15.7 | 93 |
| XL78 | DeKalb | 102.3 | 3 | | 116 | 77 | 15.7 | 95 |
| 72-44A | McCurdy | 101.8 | 1 | 10 | 138 | 76 | 14.9 | 97 |
| RX140A | Asgrow | 96.2 | 16 | 11 | 130 | 77 | 16.9 | 99 |
| XL72b | DeKalb | 96.2 | 3 | 7 | 114 | 76 | 14.9 | 100 |
| G-4507 | Funk's | 95.2 | 9 | 16 | 121 | 78 | 15.8 | 100 |
| 3145 | Pioneer | 94.6 | 1 | 7 | 137 | 79 | 16.0 | 98 |
| 3147 | Pioneer | 94.6 | 1 | 11 | 133 | 75 | 15.3 | 93 |
| 511A | Pioneer | 93.8 | 5 | 18 | 138 | 76 | 15.3 | 100 |
| 3179 | Pioneer | 93.5 | 6 | 25 | 136 | 77 | 15.3 | 96 |
| RA2601 | Ring Around | 93.2 | 9 | 13 | 127 | 76 | 16.5 | 94 |
| G-4776 | Funk's | 92.4 | 1 | 11 | 141 | 76 | 16.0 | 98 |
| G-4810 | Funk's | 91.5 | 4 | 8 | 134 | 78 | 16.5 | 97 |
| G-4606 | Funk's | 90.8 | 1 | 10 | 122 | 75 | 15.2 | 93 |
| TXS115A | Trojan | 90.1 | 8 | 13 | 124 | 76 | 14.9 | 91 |
| 3368A | Pioneer | 89.9 | 1 | 12 | 125 | 77 - | 15.5 | 96 |
| 22 | Coker | 89.0 | 1 | 16 | 125 | 77 | 15.1 | 97 |
| RA1502 | Ring Around | 88.5 | 1 | 16 | 121 | 76 | 15.9 | 91 |
| RX114 | Asgrow | 88.1 | 14 | 16 | 124 | 76 | 15.7 | 99 |
| G-4709 | Funk's | 87.9 | 6 | 13 | 123 | 76 | 15.8 | 94 |
| XL394 | DeKalb | 87.6 | 16 | 13 | 152 | 76 | 16.1 | 96 |
| 6663 | Wilstar | 87.3 | 7 | 21 | 126 | 75 | 15.3 | 93 |
| PX715 | Northrup King | 87.0 | 1 | 9 | 140 | 77 | 15.2 | 92 |
| G-4880W | Funk's | 87.0 | 2 | 12 | 136 | 77 | 15.9 | 95 |
| G-4574 | Funk's | 86.8 | 2 | 19 | 130 | 77 | 15.0 | 97 |
| PX723 | Northrup King | 86.8 | 7 | 19 | 137 | 76 | 15.7 | 91 |
| RA1501 | Ring Around | 86.7 | 8 | 15 | 129 | 76 | 15.0 | 92 |
| 56 | Coker | 86.5 | 1 | 11 | 137 | 77 | 16.3 | 98 |
| 3369A | Pioneer | 86.2 | 1 | 30 | 124 | 75 | 15.3 | 90 |
| S-338 | McNair | 85.8 | 5 | 19 | 129 | 76 | 16.8 | 95 |
| RA2602W | Ring Around | 85.5 | 10 | 14 | 139 | 76 | 16.4 | 89 |
| G-4611 | Funk's | 85.1 | 6 | 16 | 128 | 77 | 16.0 | 95 |
| TXS114 | Trojan | 84.9 | 0 | 15 | 119 | 77 | 15.7 | 91 |
| PX95 | Northrup King | 84.8 | 6 | 7 | 147 | 77 | 15.8 | 90 |
| 9990 | Wilstar | 84.8 | 5 | 14 | 114 | 77 | 15.3 | 93 |
| TX119A | Trojan | 83.8 | 1 | 13 | 118 | 77 | 15.1 | 98 |
| 18A | Coker | 83.0 | 2 | 11 | 124 | 76 | 16.1 | 90 |
| X-170 | McNair | 81.8 | 3 | 3 | 110 | 77 | 15.9 | 95 |
| 3009 | Pioneer | 81.4 | 16 | 18 | 120 | 77 | 16.9 | 94 |
| RA2502 | Ring Around | 80.1 | 1 | 20 | 108 | 77 | 16.2 | 94 |
| 55 | Dixie | 80.0 | 5 | 22 | 152 | 77 | 15.9 | 93 |
| G-795W | Funk's | 78.8 | 7 | 22 | 135 | 76 | 16.3 | 94 |
| RA2655 | Ring Around | 78.2 | 2 | 16 | 121 | 77 | 15.1 | 94 |
| 77 | Coker | 75.9 | 9 | 13 | 157 | 77 | 16.1 | 95 |
| 6131 | Miss | 75.9 | 8 | 31 | 155 | 77 | 15.9 | 97 |
| 488 | McNair | 74.9 | 5 | 12 | 139 | 79 | 16.9 | 97 |
| 751 | P-A-G | 74.2 | 10 | 16 | 145 | 77 | 16.1 | 100 |
| MEAN | | 88.3 | 5 | 15 | 131 | 77 | 15.8 | 95 |

| | Table 4. Three-year (1976-78) average performance of 19 hybrids grown in Area I at 16,000 |
|---|---|
| Į | plants per acre in the Mississippi hybrid corn performance trials. |

| prants per | acre in the mis | SISSIPPI IIJ | | | | | | |
|------------|-----------------|--------------|------|-------|--------|----------|-------|-------|
| | | 371 1 1 | | ging | Ear | Days to | Mois- | G4 1 |
| Hybrid | Brand | Yield | root | stalk | height | mid silk | ture | Stand |
| no. | | bu/A | % | % | cm. | no. | % | % |
| | | | | | | | | |
| 3147 | Pioneer | 113.5 | 1 | 10 | 136 | 80 | 17.5 | 94 |
| XL394 | DeKalb | 112.8 | 2 | 8 | 143 | 78 | 18.2 | 99 |
| 77 | Coker | 110.4 | 2 | 12 | 153 | 80 | 17.5 | 95 |
| 9997 | Wilstar | 110.3 | 1 | 9 | 125 | 76 | 18.7 | 95 |
| 3145 | Pioneer | 108.0 | 0 | 6 | 134 | 75 | 17.9 | 93 |
| 72-44A | McCurdy | 106.2 | 0 | 8 | 129 | 75 | 17.1 | 98 |
| 6131 | Miss | 105.4 | 3 | 33 | 157 | 80 | 16.9 | 97 |
| G-795W | Funk's | 103.6 | 3 | 18 | 133 | 77 | 17.6 | 94 |
| G-4880W | Funk's | 103.1 | 2 | 10 | 136 | 81 | 18.1 | 99 |
| G-4776 | Funk's | 100.3 | 0 | 9 | 140 | 76 | 17.7 | 96 |
| 55 | Dixie | 99.6 | 4 | 26 | 159 | 80 | 18.1 | 89 |
| 3009 | Pioneer | 97.4 | 2 | 16 | 138 | 77 | 19.4 | 95 |
| 56 | Coker | 96.2 | 1 | 10 | 132 | 79 | 18.0 | 95 |
| 511A | Pioneer | 95.5 | 3 | 16 | 138 | 78 | 17.0 | 95 |
| XL72b | DeKalb | 94.8 | 1 | 8 | 110 | 74 | 16.8 | 95 |
| 9990 | Wilstar | 94.6 | 1 | 12 | 117 | 76 | 17.5 | 93 |
| G-4611 | Funk's | 92.7 | 0 | 9 | 122 | 74 | 15.9 | 91 |
| G-4810 | Funk's | 91.3 | 1 | 6 | 128 | 75 | 17.8 | 96 |
| 6663 | Wilstar | 80.8 | 2 | 10 | 121 | 74 | 16.3 | 93 |
| MEAN | | 100.9 | 2 | 12 | 134 | 77 | 17.6 | 95 |
| | | | | | | | | |

The test at Newton was discarded before harvest because of circumstances beyond the control of the cooperator. Results of one replication of the Poplarville test with populations of 16,000 plants per acre were discarded. Two windstorms caused severe stalk lodging in the Raymond test.

Average yield per acre, root lodging and stalk lodging of the 57 hybrids tested at populations of 16,000 plants per acre were, respectively, 78 bushels and 1 and 7% at Poplarville; 64 bushels and 20 and 17% at Raymond and 65 bushels and 1 and 10% at Woodville. Yields, root lodging and stalk lodging averaged, respectively, from 45 to 83 bushels per acre, 0 to 19% and 1 to 25% (Table 5). Harvesting techniques used in plots where lodging was severe generally were more precise than would be feasible on a commercial scale; therefore, yields obtained from these plots likely were higher than they would have been with a normal harvesting operation.

Average yields of these 57 hybrids tested at populations of 22,000 plants per acre at the same locations ranged from 60 to 102 bushels per acre (Table 6). Average yields, root lodging and stalk lodging, respectively, were 13 bushels per acre, 3% and 7% higher at this plant population than at 16,000 plants per acre.

Average yields of the 23 hybrids that have been tested at populations of 16,000 plants per acre in Area II for the past three years ranged from 68 to 83 bushels per acre (Table 7). The percentage range for stalk lodging was from 4 to 25. Test Results Area 2 Table 5. Summary of performance of 57 hybrids grown at three locations (Poplarville, Raymond and Woodville) at 16,000 plants per acre in the 1978 Mississippi hybrid corn performance trials.

| United | Duand | Wield | | ging | Ear | Mois- | Ct |
|---------------|------------------|----------------|-----------|------------|---------------|-----------|-----------|
| Hybrid 10. | Brand | Yield bu/A | root % | stalk % | height cm. | ture % | Stan % |
| | | bu/A | 70 | 70 | | 70 | 70 |
| 76-25 | McCurdy | 82.8 | 1 | 10 | 134 | 16.9 | 96 |
| UC12052 | Paymaster | 82.3 | 7 | 1 | 110 | 19.3 | 89 |
| 3147 | Pioneer | 81.0 | 1 | 9 | 105 | 15.4 | 96 |
| 3030 | Pioneer | 80.7 | 9 | 6 | 113 | 17.0 | 94 |
| RA3602 | Ring Around | 79.7 | 7 | 15 | 118 | 16.0 | 93 |
| MSX86A | McCurdy | 79.5 | 2 | 13 | 103 | 16.1 | 93 |
| XL80 | DeKalb | 79.2 | 14 | 7 | 97 | 16.2 | 92 |
| G-4864 | Funk's | 78.3 | 6 | 7 | 114 | 17.0 | 93 |
| X5505 | Pioneer | 77.3 | 11 | 6 | 128 | 16.6 | 93 |
| 67-14 | McCurdy | 77.0 | 12 | 9 | 103 | 18.9 | 92 |
| RA2601 | Ring Around | 76.0 | 10 | 12 | 107 | 17.9 | 90 |
| XL394 | DeKalb | 75.6 | 15 | 9 | 130 | 17.3 | 94 |
| 75-200 | McCurdy | 75.3 | 17 | 12 | 122 | 18.4 | 93 |
| 55 | Dixie | 75.1 | 12 | 25 | 134 | 17.1 | 89 |
| S-338 | McNair | 74.7 | 19 | 18 | 113 | 16.7 | 92 |
| PX65 | Northrup King | 74.1 | 13 | 16 | 107 | 15.2 | 89 |
| 3368A | Pioneer | 72.8 | 2 | 10 | 100 | 16.3 | 89 |
| G-4709 | Funk's | 72.6 | 8 | 5 | 110 | 17.2 | 94 |
| G-4880W | Funk's | 72.2 | 6 | 7 | 115 | 17.1 | 95 |
| G-795W | Funk's | 72.0 | 19 | 19 | 112 | 17.2 | 93 |
| G-4949A | Funk's | 71.7 | 13 | 2 | 123 | 17.1 | 94 |
| 22 | Coker | 71.4 | 1 | 11 | 109 | 15.5 | 90 |
| 511A | Pioneer | 71.4 | 11 | 16 | 117 | 17.0 | 94 |
| G-4574 | Funk's | 71.3 | 7 | 18 | 104 | 16.3 | 91 |
| 77 | Coker | 71.2 | 3 | 5 | 130 | 17.3 | 90 |
| 3040 | Pioneer | 71.0 | 12 | 3 | 106 | 17.5 | 91 |
| 9997 | Wilstar | 70.7 | 10 | 9 | 106 | 17.8 | 94 |
| RA1502 | Ring Around | 70.3 | 0 | 5 | 100 | 16.8 | 95 |
| RX140A | Asgrow | 70.0 | 18 | 6 | 112 | 17.7 | 91 |
| G-4507 | Funk's | 69.8 | 1 | 19 | 108 | 15.5 | 91 |
| 3145 | Pioneer | 69.6 | 3 | 11 | 108 | 16.9 | 89 |
| 3369A | Pioneer | 69.1 | 1 | 9 | 93 | 15.4 | 92 |
| PX715 | Northrup King | 69.1 | 0 | 8 | 112 | 16.6 | 89 |
| 751 | P-A-G | 67.8 | 8 | 24 | 138 | 17.8 | 92 |
| PX723 | Northrup King | 67.8 | 5 | 17 | 110 | 16.6 | 90 |
| PX79 | Northrup King | 66.3 | 4 | | 107 | 16.0 | 89 |
| 3009 | Pioneer | 66.0 | 13 | 11 | 114 | 17.4 | 91 |
| G-4606 | Funk's | 65.7 | 3 | 16 | 103 | 16.3 | 91 |
| 18A | Coker | 65.2 | 2 | 12 | 110 | 16.0 | 91 |
| 54 | Coker | 64.6 | 11 | 13 | 113 | 17.7 | 94 |
| G-4611 | Funk's | 63.3 | 6 | 12 | 103 | 15.9 | 87 |
| RA2502 | Ring Around | 63.1 | 0 | 9 | 90 | 15.8 | 91 |
| PX675 | Northrup King | 62.9 | 4 | 17 | 105 | 16.5 | 88 |
| PX95 | Northrup King | 62.8 | 1 | 10 | 119 | 17.0 | 92 |
| G-4810 | Funk's | 62.7 | 9 | 9 | 107 | 15.8 | 91 |
| X4537 | Pioneer | 62.5 | 3 | 4 | 93 | 17.9 | 93 |
| 56 | Coker | 62.1 | 5 | 12 | 119 | 17.5 | 93 |
| G-5945 | Funk's | 61.4 | 18 | 10 | 128 | 16.9 | 89 |
| TXS114 | Trojan | 60.6 | 10 | 24 | 103 | 16.4 | 87 |
| XL78 | DeKalb | 60.2 | 2 | 24 | 96 | 15.7 | 91 |
| G-4776 | Funk's | 59.2 | 2 | 8 | 119 | 16.4 | 87 |
| TXS115A | | | 23 | 17 | 101 | 15.2 | 87 |
| 6131 | Trojan Miss | $56.8 \\ 56.7$ | 3 9 | 25 | 101 | 16.2 | 89 |
| | | | | | | | |
| 488 XI 205 | McNair | 56.4 | 10 | 5 | 125 | 19.2 | 96 87 |
| XL395 | DeKalb | 55.2 | 6 | 15 | 131 | 17.4 | |
| TX119A | Trojan MoNoir | 54.4 | 1 | 9 | 99 | 14.9 | 92 87 |
| X-170 | McNair | 47.9 | 9 | 13 | 94 | 15.3 | 87 |
| MEAN | | 68.9 | 7 | 12 | 112 | 16.8 | 91 |

Table 6. Summary of performance of 57 hybrids grown at three locations (Poplarville, Raymond and Woodville) at 22,000 plants per acre in the 1978 Mississippi hybrid corn performance trials.

| Hybrid | Brand | Yield | Lod root | lging stalk | Ear height | Mois- ture | Stan |
|------------------|-------------------------|--------------|------------------|-----------------|---------------|---------------|-----------|
| no. | Dranu | bu/A | <u>root</u> % | stark % | cm. | w ture | Stan % |
| | | | | | | | |
| MSX86A | McCurdy | 102.3 | 2 | 15 | 118 | 16.4 | 92 |
| X4537 | Pioneer | 96.5 | 9 | 2 | 101 | 18.1 | 92 |
| 22 | Coker | 96.4 | 9 | 19 | 116 | 17.0 | 90 |
| 3147 | Pioneer | 95.4 | 14 | 8 | 119 | 17.3 | 87 |
| G-4606 | Funk's | 94.2 | 4 | 25 | 113 | 17.3 | 93 |
| UC12052 | Paymaster | 93.5 | 15 | 3 | 119 | 19.2 | 85 |
| X5505 | Pioneer | 92.8 | 9 | 14 | 132 | 17.3 | 93 |
| XL394 | DeKalb | 91.2 | 17 | 15 | 128 | 19.0 | 88 |
| G-4574 | Funk's | 91.1 | 7 | 27 | 118 | 16.6 | 86 |
| 3030 | Pioneer | 90.2 | 14 | 10 | 131 | 19.3 | 89 |
| 3368A | Pioneer | 90.0 | 4 | 14 | 103 | 16.5 | 86 |
| 3369A | Pioneer | 88.6 | 8 | 23 | 105 | 16.2 | 89 |
| 18A | Coker | 88.3 | 5 | 9 | 108 | 16.8 | 90 |
| 67-14 | McCurdy | 87.4 | 10 | 31 | 108 | 18.0 | 82 |
| G-4864 | Funk's | 87.0 | 10 | 11 | 128 | 17.1 | 89 |
| RA2601 | Ring Around | 86.7 | 16 | 29 | 117 | 18.8 | 89 |
| 3040 | Pioneer | 86.4 | 17 | 7 | 122 | 18.9 | 88 |
| G-4507 | Funk's | 86.4 | 10 | 24 | 115 | 16.5 | 86 |
| 3145 | Pioneer | 86.1 | 3 | 13 | 119 | 17.0 | 88 |
| TXS114 | Trojan | 85.2 | 5 | 17 | 108 | 16.4 | 86 |
| RA1502 | Ring Around | 84.5 | 4 | 12 | 108 | 16.5 | 90 |
| PX723 | Northrup King | 84.2 | 7 | 22 | 134 | 16.6 | 84 |
| RA2502 | Ring Around | 83.7 | 0 | 21 | 99 | 17.0 | 89 |
| RA3602 | Ring Around | 83.6 | 2 | 31 | 118 | 17.2 | 84 |
| 3009 | Pioneer | 83.5 | 7 | 27 | 125 | 17.9 | 88 |
| 77 | Coker | 83.4 | 8 | 17 | 147 | 18.0 | 90 |
| G-4776 | Funk's | 82.0 | 3 | 20 | 128 | 17.6 | 89 |
| G-4810 | Funk's | 82.0 | 11 | 12 | 114 | 16.9 | 87 |
| G-795W | Funk's | 81.7 | 8 | 23 | 122 | 17.3 | 88 |
| 9997 | Wilstar | 80.9 | 17 | 15 | 113 | 18.0 | 88 |
| XL80 | DeKalb | 80.8 | 22 | 8 | 99 | 16.5 | 89 |
| 75-200 | McCurdy | 80.5 | 11 | 23 | 128 | 18.0 | 86 |
| TXS115A | Trojan | 80.5 | 7 | $\frac{20}{20}$ | 111 | 15.9 | 84 |
| RX140A | Asgrow | 79.4 | 27 | 8 | 124 | 17.8 | 88 |
| XL78 | DeKalb | 79.2 | 3 | 27 | 103 | 16.6 | 89 |
| G-4709 | Funk's | 79.1 | 17 | 12 | 113 | 16.9 | 90 |
| PX95 | Northrup King | 78.9 | 2 | 27 | 132 | 16.9 | |
| XL395 | DeKalb | 78.9 | 19 | 8 | 132 | 18.1 | 86 |
| PX675 | Northrup King | 78.8 | 19 | 18 | 111 | 16.9 | 88 |
| 54 | Coker | 78.3 | 9 | 30 | 119 | 18.5 | 90 |
| 76-25 | McCurdy | 76.3 77.7 | 9 4 | 30 21 | 119 | 18.8 | 90 94 |
| 76-20 55 | Dixie | 77.4 | 4 8 | 41 | $141 \\ 137$ | 18.8 | 94 88 |
| 55 511A | Pioneer | 77.0 | 8 | 41 27 | 137 | 17.5 | 93 |
| PX715 | Northrup King | 76.4 | 8 1 | 27 | 126 | 17.1 16.7 | 93 91 |
| G-4949A | Funk's | 76.4 75.3 | 17 | 23 | 120 | 16.7 | 91 92 |
| G-4949A PX79 | Northrup King | 75.3 75.2 | 17 | 9 17 | 124 118 | 18.3 16.5 | 92 89 |
| X-170 | McNair | 75.2 74.9 | 13 12 | 17 20 | 95 | 16.5 15.4 | 89 87 |
| G-4611 | Funk's | | | | | | 87 87 |
| PX65 | | 74.4 | 11 | 19 25 | 114 | 17.0 | |
| | Northrup King McNair | 72.4 | 8 | 25 41 | 113 | 15.7 | 91 83 |
| S-338 C-4880W | McNair Funk's | 71.9 | 7 | 41 | 118 | 17.9 | 83 |
| G-4880W | Funk's Cokor | 69.2 | 11 | 12 | 122 | 18.5 | 91 |
| 56 488 | Coker MaNair | 68.7 | 1 | 27 | 126 | 18.4 | 88 |
| 488 TV1104 | McNair | 64.5 | 12 | 12 | 131 | 19.3 | 88 |
| TX119A | Trojan | 64.0 | 4 | 20 | 103 | 16.3 | 87 |
| 751 | P-A-G | 63.9 | 9 | 25 | 141 | 17.3 | 83 |
| G-5945 | Funk's | 60.8 | 20 | 24 | 135 | 17.2 | 88 |
| 6131 | Miss | 59.9 | 8 | 44 | 143 | 17.6 | 86 |
| | | 01 E | 10 | 19 | 120 | 17.4 | 88 |
| MEAN | | 81.5 | 10 | 13 | 120 | | |

| plants per a | acre in the Mississ | ippi hybrid | corn perf | ormance t | rials. | | |
|--------------|---------------------|-------------|-----------|-----------|--------|-------|-------------|
| | | | Lod | ging | Ear | Mois- | |
| Hybrid | Brand | Yield | root | stalk | height | ture | Stan |
| no. | | bu/A | % | % | cm. | % | % |
| 77 | Coker | 82.9 | 1 | 5 | 128 | 18.6 | 96 |
| 3147 | Pioneer | 81.6 | 1 | 11 | 106 | 18.1 | 97 |
| 3030 | Pioneer | 79.1 | 3 | 8 | 110 | 19.7 | 96 |
| G-4949A | Funk's | 78.5 | 4 | 4 | 120 | 18.6 | 96 |
| 3145 | Pioneer | 78.3 | 1 | 9 | 104 | 18.5 | 94 |
| XL394 | DeKalb | 77.7 | 6 | 6 | 123 | 18.7 | 96 |
| 55 | Dixie | 77.0 | 5 | 22 | 131 | 19.1 | 94 |
| XL395 | DeKalb | 76.5 | 2 | 8 | 124 | 19.5 | 94 |
| 3009 | Pioneer | 75.8 | 2 5 | 10 | 111 | 19.8 | 95 |
| G-5945 | Funk's | 75.6 | 6 | 7 | 124 | 18.8 | 94 |
| G-4864 | Funk's | 75.4 | 2 | 7 | 107 | 17.8 | 95 |
| 3368A | Pioneer | 74.2 | 1 | 8 | 95 | 17.4 | 94 |
| 511A | Pioneer | 73.5 | 4 | 12 | 109 | 18.5 | 96 |
| RA2601 | Ring Around | 73.3 | 3 | 8 | 103 | 19.7 | 90 |
| 3369A | Pioneer | 72.9 | 0 | 11 | 89 | 16.9 | 95 |
| G-4810 | Funk's | 72.7 | 3 | 9 | · 104 | 18.4 | 96 |
| G-795W | Funk's | 72.6 | 7 | 20 | 109 | 18.5 | 95 5 |
| G-4776 | Funk's | 72.5 | 1 | 9 | 115 | 17.7 | 94 |
| 9997 | Wilstar | 72.1 | 4 | 10 | 105 | 20.2 | 96 |
| G-4880W | Funk's | 71.7 | 2 | 6 | 108 | 18.3 | 971 |
| 56 | Coker | 69.7 | 2 | 13 | 117 | 18.6 | 96 |
| 54 | Coker | 69.2 | 4 | 10 | 111 | 19.1 | 94 |
| 6131 | Miss | 68.1 | 4 | 25 | 124 | 18.5 | 93 |
| MEAN | | 74.8 | 3 | 10 | 112 | 18.7 | 95 |

Table 7. Three-year (1976-78) average performance of 23 hybrids grown in Area II at 16,00 plants per acre in the Mississippi hybrid corn performance trials.