The 1982 Iowa Corn Yield Test Report, District 4

Abstract
Results of the Iowa Corn Yield Test are published to aid Iowa farmers in selecting corn varieties. This is the sixty-third consecutive year for the test.

Disciplines
Agriculture | Agronomy and Crop Sciences

This report is available at Iowa State University Digital Repository: http://lib.dr.iastate.edu/cornyield/89
THE 1982 IOWA CORN YIELD TEST REPORT

District 4

Results of the Iowa Corn Yield Test are published to aid Iowa farmers in selecting corn varieties. This is the sixty-third consecutive year for the test.

The presentation of data for the varieties tested does not imply approval or endorsement by the authors or by the agencies sponsoring or conducting the test. Entries in tables 1 and 2 are designated by brand name and variety.

1982 Procedure

Producers of corn seed and Iowa State University were eligible to enter varieties in the Iowa Corn Yield Test. Each producer was allowed a maximum of six entries per district. All entries had to be available in a quantity of at least 10 bushels of seed.

One hundred thirty-two entries were compared in this test. Fifteen of them were determined to be widely grown and were entered by Iowa State University. A widely grown entry was planted on 0.75 percent or more of the corn acreage in the district according to a 1980 survey of Iowa corn growers. Iowa State University entered a maximum of three widely grown varieties of any given brand. These entries were given priority over the remaining 117 entries made by seed producers.

Each entry was replicated four times in four-row plots at a planting rate of 23,500 kernels per acre at each location. All locations were machine-planted. The center two rows of each plot were harvested with a corn combine. No gleanings or dropped ears were included in yield data. A moisture determination was made from each plot, and yields were corrected to 15.5-percent moisture for shelled corn.

How Information Is Presented

The data presented are averages of two locations in 1980, one location in 1981, and 2 locations in 1982. Yield in bushels per acre and percentage of moisture, root lodging, stalk lodging, dropped ears, and stand are shown for all entries tested in 1982 and for those tested in 1980 and 1981 that were in the 1982 test.

Interpretation of Results

Yield differences due to variation in soil, fertility, moisture availability, insect infestation, and diseases, plus any variation due to planting and harvesting techniques, are identified through statistical analysis. The LSD values shown in tables 1 and 2 represent, in bushels per acre, the amounts of yield variation that could be due to variations in the factors just mentioned. In comparing varieties, yield differences greater than the LSD value can be attributed to genetic differences in the yield potential of these varieties; yield differences less than the LSD value are not statistically different and could have been due to other factors.

Grain moitures shown in tables 1 and 2 are indicators of maturity and natural drying rate. Maturity of varieties entered generally ranged from early to full season. Yield comparisons should be made among varieties of similar maturity.

It is important to select varieties having stable performance over a range of environmental conditions. High yields for two or more consecutive years indicate stable performance. Supplemental yield and agronomic information about specific varieties may be obtained from your seed corn dealers and from neighbors who have grown these varieties.

1982 Field Data

The District 4 test was conducted on farms operated by Don Hunter near Salix in Woodbury County and by Merle Thiedeman near Westside in Crawford County. Field data are presented in table A.

Subsoil moisture for the district was favorable to wet west to east across the district at planting time. Rainfall was well above normal in May, well below normal in June, near normal in July and September, and below normal in August. Temperatures were above normal in May, well below normal in June, near normal in July and September, and below normal in August. The average district yield was 21 bushels per acre above the mean of the five preceding years' averages.
<table>
<thead>
<tr>
<th>BRAND</th>
<th>VARIETY</th>
<th>CROSS 1980/1</th>
<th>CROSS 1981/82</th>
<th>MOISTURE PCT.</th>
<th>LOGGING PCT.</th>
<th>LOGGING PCT.</th>
<th>LOGGING PCT.</th>
<th>EARS PCT.</th>
<th>STAND PCT.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3080</td>
<td>SX</td>
<td>83 126 129</td>
<td>19.6 17.5 12.8</td>
<td>0 0 9 6 10 0</td>
<td>0 2 3 1 91</td>
<td>89 90</td>
<td>100 100</td>
<td>97 98</td>
<td>97 98</td>
</tr>
<tr>
<td>9270</td>
<td>SX</td>
<td>83 126 129</td>
<td>19.6 20.1 18.1</td>
<td>5 0 7 5 2 0</td>
<td>0 2 3 1 91</td>
<td>89 90</td>
<td>100 100</td>
<td>97 98</td>
<td>97 98</td>
</tr>
<tr>
<td>1925</td>
<td>SX</td>
<td>83 126 129</td>
<td>19.6 17.5 12.8</td>
<td>0 0 9 6 10 0</td>
<td>0 2 3 1 91</td>
<td>89 90</td>
<td>100 100</td>
<td>97 98</td>
<td>97 98</td>
</tr>
<tr>
<td>5555</td>
<td>SX</td>
<td>83 126 129</td>
<td>19.6 17.5 12.8</td>
<td>0 0 9 6 10 0</td>
<td>0 2 3 1 91</td>
<td>89 90</td>
<td>100 100</td>
<td>97 98</td>
<td>97 98</td>
</tr>
<tr>
<td>7657</td>
<td>SX</td>
<td>83 126 129</td>
<td>19.6 17.5 12.8</td>
<td>0 0 9 6 10 0</td>
<td>0 2 3 1 91</td>
<td>89 90</td>
<td>100 100</td>
<td>97 98</td>
<td>97 98</td>
</tr>
<tr>
<td>9210</td>
<td>SX</td>
<td>83 126 129</td>
<td>19.6 17.5 12.8</td>
<td>0 0 9 6 10 0</td>
<td>0 2 3 1 91</td>
<td>89 90</td>
<td>100 100</td>
<td>97 98</td>
<td>97 98</td>
</tr>
<tr>
<td>7650</td>
<td>SX</td>
<td>83 126 129</td>
<td>19.6 17.5 12.8</td>
<td>0 0 9 6 10 0</td>
<td>0 2 3 1 91</td>
<td>89 90</td>
<td>100 100</td>
<td>97 98</td>
<td>97 98</td>
</tr>
<tr>
<td>7650</td>
<td>SX</td>
<td>83 126 129</td>
<td>19.6 17.5 12.8</td>
<td>0 0 9 6 10 0</td>
<td>0 2 3 1 91</td>
<td>89 90</td>
<td>100 100</td>
<td>97 98</td>
<td>97 98</td>
</tr>
<tr>
<td>7650</td>
<td>SX</td>
<td>83 126 129</td>
<td>19.6 17.5 12.8</td>
<td>0 0 9 6 10 0</td>
<td>0 2 3 1 91</td>
<td>89 90</td>
<td>100 100</td>
<td>97 98</td>
<td>97 98</td>
</tr>
<tr>
<td>7650</td>
<td>SX</td>
<td>83 126 129</td>
<td>19.6 17.5 12.8</td>
<td>0 0 9 6 10 0</td>
<td>0 2 3 1 91</td>
<td>89 90</td>
<td>100 100</td>
<td>97 98</td>
<td>97 98</td>
</tr>
</tbody>
</table>

**Table 1**: Average performance of varieties tested in District 9, 23,505 planting rate. LSD for 1982 yield in Region 11.
**Table A. Field Data**

<table>
<thead>
<tr>
<th>Fertilizer applied, lbs</th>
<th>N</th>
<th>P&lt;sub&gt;2&lt;/sub&gt;O&lt;sub&gt;5&lt;/sub&gt;</th>
<th>K&lt;sub&gt;2&lt;/sub&gt;O</th>
<th>N</th>
<th>P&lt;sub&gt;2&lt;/sub&gt;O&lt;sub&gt;5&lt;/sub&gt;</th>
<th>K&lt;sub&gt;2&lt;/sub&gt;O</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plowdown</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preplant</td>
<td>125</td>
<td>50</td>
<td>140</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>125</td>
<td>50</td>
<td>140</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1981 crop.
Row width: 30 inches
Planting date: May 7 & 8
Harvest date: Oct. 20 & 21

**District 4**

Designations Identifying Brands in the Yield Test:
Ames Best: Ames Best Hybrids, Ames, Ia. 50010
Asgrow: Asgrow Seed Company, Kalamaozo, Mich.
Cargill: Cargill, Inc., Minneapolis, Minn. 55440
Crowns: Crowns Hybrid Corn Co., Milford, Ill. 60953
Curry: Curry Seed Co., Elk Point, S.D. 57025
DeKalb: DeKalb AgResearch Inc., DeKalb, Ill. 60115
Disco: Disco Seeds, Mitchell, S.D. 57301
Federal: Federal Hybrid, Marion, Ia. 52302
Fontanelle: Fontanelle Hybrids, Nickerson, Neb. 68044
FS: Growmark, Inc., Bloomington, Ill. 61701
Funk: Funk Seeds International, Inc., Bloomington, Ill. 61701
*Golden Harvest: The J. C. Robinson Seed Company, Waterloo, Neb. 68069
Great Lakes: Great Lakes Hybrids Inc., Ovid, Mich. 48866
Grinn Hybrids: Grinn Hybrids, Manilla, Ia. 51454
Hoegemeyer: Hoegemeyer Hybrids Inc., Hooper, Neb. 68031
Horizon: Horizon Seeds, Inc., Lincoln, Neb. 68501
Iowa State: Raph Mathis, Elkhart, Ia. 50073
Jacobsen: Jacobsen Hybrid Corn Co., Inc., Lake View, Ia. 51450
Jacques: Jacques Seed Company, Prescot, Wisc. 54021
Kaltenberg: Kaltenberg Seed Farms, Winnakee, Wis. 53597
Kruger: Kruger Seed Company, Cedar Falls, Ia. 50613
Lewis: Lewis Hybrids, Urba, I1. 62376
Lynds: Lynds Hybrids, Marshalltown, Ia. 50158
McCurdy: McCurdy Seed Co., Fremont, Ia. 52621
Migro: Migro North American Plant Breeders, Ames, Ia. 50010
NC+: NC+ Hybrids, Lincoln, Neb. 68504
Northrup King: Northrup King Co., Minneapolis, Minn. 55440
*O'S Gold: O'S Gold Seed Co., Parkersburg, Ia. 50665
*PAC: PAC Seeds, Minneapolis, Minn. 55440
*Paymaster: Paymaster Seeds, Belmont, Ia. 50421
Pfister: Pfister Hybrid Co., El Paso, Ill. 61738
*Pioneer: Pioneer Hi-Bred International, Inc., Des Moines, Ia. 50308
Pride: Pride Company, Inc., Glen Haven, Wis. 53810
Renz: Renz Hybrids, Inc., Carroll, Ia. 51401
Riverside: Lynnville Seed Company, Lynnville, Ia. 50153
RO: Otttile Seed Farms, Marshalltown, Ia. 50158
Sar: Sar Hybrids, Inc., Charles City, Ia. 50616
Schechinger: Schechinger Seed Co., Harlan, Ia. 51537
Sokota: Sokota Hybrid Producers, Brookings, S. D. 57006
Stauffer: Stauffer Seeds, Springfield, Ill. 62704
Super Crost: Edward J. Funk & Sons, Inc., Kentland, Ind. 47951
Tall Corn: Tall Corn Hybrids, Inc., Grinnell, Ia. 50112
*Trojan: DeKalb-Pfizer Genetics, DeKalb, Ill. 60115
USS: USS Agri Chemicals, Atlanta, Ga. 30301
Wilson: Wilson Hybrids, Inc., Harlan, Ia. 51537

*Companies with one or more widely grown entries made by Iowa State University.

---

**Table 2. Averages of 1981-82 and 1980-81 Varieties**

<table>
<thead>
<tr>
<th>BRAND</th>
<th>VARIETY</th>
<th>CROSS</th>
<th>1980-82</th>
<th>1981-82</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>80-82 A</td>
<td>81-82 A</td>
</tr>
</tbody>
</table>

---

**Other Reports**

Separate reports for variety performance are available for each district shown in fig. 1. These publications are available at your county extension office or from Publications Distribution, Printing and Publications Building, Iowa State University, Ames, Iowa 50011.

The 1982 Iowa Corn Yield Test Report:
Pm-660-1-82 District 1
Pm-660-2-82 District 2
Pm-660-3-82 District 3
Pm-660-4-82 District 4
Pm-660-5-82 District 5
Pm-660-6-82 District 6
Pm-660-7-82 District 7


File: Agronomy 1

And justice for all

The Iowa Cooperative Extension Service’s programs and policies are consistent with pertinent federal and state laws and regulations on non-discrimination regarding race, color, national origin, religion, sex, age, and handicap.