The 1984 Iowa Corn Yield Test Report, District 6

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

Disciplines
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THE 1984 IOWA CORN YIELD TEST REPORT

District 6

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

The presentation of data for the hybrids 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.

1984 Procedure

Producers of com 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 forty-four entries were compared in this test. Fifteen of the entries were determined to be widely grown and were entered by Iowa State University. In June, on even numbered years, approximately 21,000 survey cards are mailed in the state. Recipients of these cards are determined by a random drawing of names from landowners listed in the county plat books. Based on the survey results, the 15 hybrids grown on the most acres in the district are classified as widely grown for that district. The widely grown hybrids (*) in this report were determined by the 1982 survey. Iowa State University entered a maximum of three widely grown hybrids of any given brand. These entries were given priority over the remaining 129 entries made by seed producers.

Each entry was replicated four times in four-row plots at a planting rate of 28,000 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 1982, 1983, and 1984. Yield in bushels per acre and percentage of moisture, root lodging, stalk lodging, dropped ears, and stand are shown for all entries tested in 1984 and for those tested in 1982 and 1983 that were in the 1984 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 moistures 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.

1984 Field Data

The District 6 test was conducted on farms operated by Larry Linsley near Cedar in Mahaska County, and by Jerry Fricke near Mount Union in Henry County. The field data are presented in table A.

Subsoil moisture for the district was favorable to wet at planting time. Rainfall at the Mahaska County location was well above normal in May and June, near normal in July, well below normal in...
|-------|---------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
August, and below normal in September. Rainfall at the Henry County location was near normal in May and June, well above normal in July, well below normal in August, and above normal in September. Temperatures were well below normal in May and July, above normal in June, well above normal in August, and below normal in September. The average district yield was 20 bushels per acre or more than the mean of the five preceding years' averages. If last year's very low yields are disregarded, this year's average is 1 bushel per acre or more than the other four years' averages.

<table>
<thead>
<tr>
<th>Table A. Field Data</th>
<th>Linsley Farm</th>
<th>Fricke Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tainter silty clay loam</td>
<td>Tainter silty clay loam</td>
</tr>
<tr>
<td>Fertilizer applied, lb.</td>
<td>N</td>
<td>P2O5</td>
</tr>
<tr>
<td>Plowdown.</td>
<td>36</td>
<td>92</td>
</tr>
<tr>
<td>Plant.</td>
<td>170</td>
<td>206</td>
</tr>
<tr>
<td>Sidedress.</td>
<td>170</td>
<td>206</td>
</tr>
<tr>
<td>1983 crop.</td>
<td>Soybeans</td>
<td>Corn</td>
</tr>
<tr>
<td>Row width.</td>
<td>38 inches</td>
<td>30 inches</td>
</tr>
<tr>
<td>Planting date.</td>
<td>May 8</td>
<td>May 9</td>
</tr>
<tr>
<td>Harvest date.</td>
<td>Oct. 10</td>
<td>Oct. 9</td>
</tr>
</tbody>
</table>

**District 6**

Designations Identifying Brands in the Yield Test:

- **AgriPro**
- **Ames Best**
- **Asgrow**
- **Cargill**
- **Crows**
- **DeKalb**
- **Dockendorf**
- **Federal**
- **FS**
- **Golden Harvest**
- **Gutwein**
- **Hawkeye Hybrid**
- **Iowa-Missouri**
- **Iowa State**
- **Jacques**
- **Kruger**
- **Lewin**
- **Lynks**
- **McAllister**
- **McCurdy**
- **Middlekoop**
- **NC + Northrup King**
- **O'S Gold**
- **Ottile**
- **PAG**
- **Paymaster**
- **Pioneer**
- **Super Crop**
- **Wyffels**

Separate reports for variety performance are available for each district shown in figure 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 1984 Iowa Corn Yield Test Report:
- Pm-660-1-84 District 1
- Pm-660-2-84 District 2
- Pm-660-3-84 District 3
- Pm-660-4-84 District 4

File: Agronomy 1


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