The 1979 Iowa Corn Yield Test Report, District 2

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The 1979 Iowa Corn Yield Test Report, District 2

Abstract
Results of the Iowa Corn Yield Test are published to sixtieth consecutive year for the test.

Disciplines
Agriculture | Agronomy and Crop Sciences

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THE 1979 IOWA CORN YIELD TEST REPORT

District 2

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

The presentation of data for the entries tested does not imply approval or endorsement by the authors or by the agencies sponsoring or conducting the test. Iowa State University approves the reproduction of any table in this report only if no portion is deleted and if the order of the data is not rearranged. Entries in tables 1 and 2 are designated by brand name and variety.

1979 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 nine 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. One open-pedigree variety was entered by Iowa State University from its corn breeding program. Fifteen of the entries were determined to be widely grown and were entered by Iowa State University. Entries were considered widely grown if they were planted on 0.75 per cent or more of the corn acreage in the district according to a 1978 survey of Iowa corn growers. Iowa State University entered a maximum of five widely grown varieties of any given brand. These entries were given priority over the remaining 116 entries made by seed producers.

Each entry was replicated four times in 4-row plots at a planting rate of 25,500 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 three locations in 1977 and two locations in 1978 and 1979. Yield in bushels per acre and percentage of moisture, root lodging, stalk lodging, dropped ears, and stand are shown for all entries in 1979 and for those tested in 1977 and 1978 that were in the 1979 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.

<table>
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**Table 1: Average performance of varieties tested in district 287.**

**Yield in bushels per acre.**

**Note:** All entries are single crosses. NA = not available.
1979 Field Data

The District 2 test was conducted on farms operated by Clifford Branstad near Thompson in Winnebago County, by Elvin Toppin near Rudd in Floyd County, and by Harold Kerndt near Waukon in Allamakee County. The Allamakee County location was not harvested because of excessive variation resulting from poor stands. The field data are presented in Table A.

Subsoil moisture for the district was favorable at planting time. Rainfall was below normal in May and July, well above normal in August, and well below normal in September. In June, the Winnebago County location received well below normal rainfall, while the other two locations received near normal rainfall. Temperature were below normal in May, July and August, normal in June, and above normal in September. Yields were above normal for the district.

### Table A. Field Data

<table>
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<tr>
<th>Fertilizer applied, lbs.</th>
<th>Branstad Farm</th>
<th>Toppin Farm</th>
<th>Total</th>
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<tr>
<td>N</td>
<td>P₂O₅</td>
<td>K₂O</td>
<td>N</td>
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<tr>
<td>Plowdown</td>
<td>—</td>
<td>—</td>
<td>10</td>
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<tr>
<td>Preplant</td>
<td>200</td>
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<td>80</td>
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<tr>
<td>Starter</td>
<td>—</td>
<td>34</td>
<td>—</td>
</tr>
<tr>
<td>TOTAL</td>
<td>200</td>
<td>120</td>
<td>80</td>
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</table>

1978 Crop: Soybeans
Row Width: 30 inches
Planting date: May 17
Harvest date: Nov. 9 & 14

### District 2

#### Designations Identifying Brands in the Yield Test

| ACCO | ACCO Seed Div. of Anderson, Clayton & Co., Belmond, la. 50421
| Ames Best | Ames Best Hybrids, Ames, la. 50010
| *Agrow | Agrow Co., Des Moines, la. 50305
| *Bale | Bale Farms, Inc., Madison, Wis. 53711
| Cargill | Cargill, Inc., Minneapolis, Minn. 55440
| Cenex | Cenex Seed Corn Co., Cedar Falls, la. 50613
| CFS | Custom Farm Seed, Monroe, Ill. 60954
| Cornellus | Cornellus Seed Co., Bellevue, la. 50031
| Curry | Curry Seed Company, Elk Point, S.D. 57025
| Dairyland | Dairyland Seed Co., Inc., Kewaskum, Wis. 53040
| DeKalb | DeKalb Ag. Research, Inc., DeKalb, Ill. 60115
| Embro | Embro Seed Co., Mankato, Minn. 50010
| Enco | Enco Ag. Co., Sheffield, la. 50475
| *Federal | Federal Hybrids, Marion, la. 52302
| F.S. | F.S. Service, Inc., Bloomington, Ill. 61701
| Funk | Funk Seeds Co., Grinnell, la. 50112
| *Golden Harvest | Golden Harvest Seed Co., Waterloo, Neb. 68869
| Gutwein | Gutwein, Inc., Francesville, Ind. 47946
| *Jacques | Jacques Seed Co., Prescott, Wis. 54021
| Kaltenberg | Kaltenberg Seed Farms, Waunakee, Wis. 53597
| Lyink | Lyink Hybrids, Marshalltown, la. 50158
| McCurdy | McCurdy Seed Co., Fremont, la. 52611
| Middlekoop | Middlekoop Seed Co., Marshalltown, la. 50158
| Mirog | North American Plant Breeders, Ames, la. 50010
| Northrup King | Northrup King Seed Co., Minneapolis, Minn. 55440
| O's Gold | O's Gold Seed Co., Parksburg, la. 50665
| *PAG | PAG Seeds, Minneapolis, Minn. 55440
| Pfister | Pfister Seed Co., Grinnell, la. 50112
| *Pioneer | Pioneer Hi-Bred International, Inc., Des Moines, la. 50308
| Prairie Valley | Prairie Valley, Inc., Phillips, Neb. 68865
| Pride | Pride Seed Co., Bellows Falls, Vt. 05742
| RBA | RBA Seed Co., Perry, la. 50220
| Sar | Sar Hybrids, Inc., Ames, la. 50010
| *Super Crost | Super Crost Seed Co., Spearville, la. 67669

### 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, la. 50011.

The 1979 Iowa Corn Yield Test Report:
- Pm-660-1-79 District 1
- Pm-660-2-79 District 2
- Pm-660-3-79 District 3
- Pm-660-4-79 District 4

File: Agronomy 1