REGISTRATION OF VARIETIES

In the McCurdy replicated oat yield trials conducted at Fremont, Iowa, Dassel, Minnesota, and Spring Valley, Minnesota, over a 3-year period, Goldfield had an average yield of 81.4 bushels with a test weight of 33.7 pounds compared with 62.5 bushels and 33.8 pounds for Cherokee, and 69 bushels and 34.2 pounds for Newton. Comparative performance data for Goldfield are given in Table 1 of the registration article for Colfax.

REGISTRATION OF JEWELL OATS
(Reg. No. 184)

LeRoy McCurdy and Carl Koehler

‘JEWELL’ (Avena sativa L.), C.I. 7598, (McCurdy 19–54) was developed by workers of the W. O. McCurdy & Sons Seed Company, Fremont, Iowa. It originated as an F2 plant selection from a cross made in 1950 between [(Clinton × Santa Fe) × Mo. 0–200] × Ajax. Santa Fe was obtained from H. C. Murphy, Iowa State University; Mo. 0–200 from J. M. Poehlman, University of Missouri; Clinton as certified seed from Iowa State University; and Ajax from a commercial lot. The Clinton and Santa Fe were first crossed and then an F2 selection from this cross was crossed with Mo. 0–200. One of the better F2 plants from the latter cross was then crossed with Ajax. The final cross was made in 1950 and an F2 selection made in 1952 was increased in 1953 with replicated yield testing and further increase initiated in 1954.

Jewell has been outstanding for yield in Minnesota and Iowa. It is an early variety with fast growth and early heading. The leaves and stems remain green as the panicles ripen. The culm is medium in size, of a willowy type that stands well under most conditions. The leaves are medium to narrow in width. Jewell has white, partly awned, medium-slim kernels with slightly below average bushel weight. It performs well over a wide area from Missouri through Iowa into central Minnesota, giving high yields throughout the area. Its maturity is between Cherokee and Minnesota. Jewell has some tolerance to yellow dwarf and to the various races of stem and crown rusts prevalent in recent years.

In the McCurdy replicated oat yield trials conducted at Fremont, Iowa, Dassel, Minnesota, and Spring Valley, Minnesota, over a 3-year period, Jewell yielded an average of 85.6 bushels with a test weight of 32.7 pounds compared with 62.5 bushels and 33.8 pounds for Cherokee, and 69 bushels and 34.2 pounds for Newton. Comparative performance data for Jewell are given in Table 1 of the registration article for Colfax.

REGISTRATION OF MAHASKA OATS
(Reg. No. 185)

LeRoy McCurdy and Carl Koehler

‘MAHASKA’ (Avena sativa L.), C.I. 7599, (McCurdy M-69) was developed by workers of the W. O. McCurdy & Sons Seed Company, Fremont, Iowa. It originated as an F2 plant selection from a cross made in 1950 of [(Clinton × Santa Fe) × Mo. 0–200] × Nemaha. Santa Fe was obtained from H. C. Murphy, Iowa State University; Mo. 0–200 from J. M. Poehlman, University of Missouri; Clinton as certified seed from Iowa State University; and Nemaha from a commercial source. An F2 plant selection from Clinton × Nemaha was then crossed with Mo. 0–200. One of the better F2 plants from the latter cross was then crossed with Nemaha in 1951. The cross was made by H. H. Love and W. T. Craig in the spring of 1953.

Mahaska was selected for its earliness, being earlier than Cherokee and Michigan. It is a white, partly awned, medium-slim kernel with slightly below average bushel weight. Mahaska has been consistently superior to Cherokee for yield and some tolerance to the races of stem and crown rusts prevalent in recent years.

In the McCurdy replicated oat yield trials conducted at Fremont, Iowa, Dassel, Minnesota, and Spring Valley, Minnesota, over a 3-year period, Mahaska yielded an average of 64.4 bushels with a test weight of 34.7 pounds compared with 62.5 bushels and 33.8 pounds for Cherokee, the earliest commonly grown variety, and 69.0 bushels and 34.2 pounds for Newton. Comparative performance data for Mahaska are given in Table 1 of the registration article for Colfax.

REGISTRATION OF DUTCHESS BARLEY
(Reg. No. 50)

N. F. Jensen

‘DUTCHESS’ (Hordeum vulgare L., emend. Lain.), CI 7596, (McCurdy 19–51) was developed by the Cornell University Agricultural Experiment Station. Dutchess was Cornell Sel. 5148B-2B-8 from ‘Faysel’ CI 11347 × (CI 7372 × ‘Hudson’). Dutchess is rust resistant barley selected as a mixture from the cross ‘Faysel’ CI 11347 × (CI 7372 × ‘Hudson’). It is rust resistant barley selected as a mixture from the cross ‘Faysel’ CI 11347 × (CI 7372 × ‘Hudson’). Dutchess was introduced in 1959 by N. F. Jensen, Cornell University, at which time the first 5-acre Foundation Plot was sown on the Richard Reed farm, Cortland, N.Y. Commercial sale of seed to farmers began in the fall of 1962.

Table 1. Performance data for Dutchess, Hudson, and Wong winter barley, 1957–61.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Yield, bu./A.</th>
<th>Test wt., bu./bu.</th>
<th>Height, inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dutchess</td>
<td>67.8</td>
<td>46.9</td>
<td>36.1</td>
</tr>
<tr>
<td>Hudson</td>
<td>66.7</td>
<td>45.3</td>
<td>36.6</td>
</tr>
<tr>
<td>Wong</td>
<td>48.8</td>
<td>44.5</td>
<td>41.3</td>
</tr>
</tbody>
</table>

Dutchess is a midseason-to-late maturing, hardy winter barley with 6-rowed, rough-awned winter barley. It is outstanding for winter hardiness and strong straw. Yield is similar to Hudson with about the same yield. It is mildew and scald resistant but moderately susceptible to loose smut and leaf rust. The outstanding characteristics are lodging resistance and improved plant type for harvesting. Comparative performance data for Dutchess, ‘Faysel’ (CI 7372 × ‘Hudson’), and ‘Wong’ from New York and USDA cooperatively are given in Table 1. Additional information on Dutchess was reported by Jensen.

REGISTRATION OF ERIE BARLEY
(Reg. No. 51)

N. F. Jensen

‘ERIE’ (Hordeum distichum L., emend. Lam.), CI 7597, (McCurdy 19–50) was developed by workers of the W. O. McCurdy & Sons Seed Company, Fremont, Iowa. It originated as an F1 plant selection from a cross made in 1951 of [(Clinton × Santa Fe) × Mo. 0–200] × Nemaha. Santa Fe was obtained from H. C. Murphy, Iowa State University; Mo. 0–200 from J. M. Poehlman, University of Missouri; Clinton as certified seed from Iowa State University; and Nemaha from a commercial source. An F1 plant selection from Clinton × Nemaha was then crossed with Mo. 0–200. One of the better F1 plants from the latter cross was then crossed with Nemaha in 1951. The cross was made by H. H. Love and W. T. Craig in the spring of 1953.

Erie was selected for its earliness, being earlier than Cherokee and Michigan. It is a pure line selection from the hybrid of ‘Goldfield’ × ‘Santa Fe’ × Mo. 0-200. ‘Faysel’ CI 11347 × (CI 7372 × ‘Hudson’). Eerie has been consistently superior to Cherokee for yield and some tolerance to the races of stem and crown rusts prevalent in recent years.

In the McCurdy replicated oat yield trials conducted at Fremont, Iowa, Dassel, Minnesota, and Spring Valley, Minnesota, over a 3-year period, Erie yielded an average of 64.4 bushels with a test weight of 34.7 pounds compared with 62.5 bushels and 33.8 pounds for Cherokee, the earliest commonly grown variety, and 69.0 bushels and 34.2 pounds for Newton. Comparative performance data for Erie are given in Table 1 of the registration article for Colfax.

*Registered under a memorandum of understanding between the Crops Research Division, ARS, USDA, and the American Society of Agronomy. Received Nov. 1, 1963.

†Agronomist and Plant Breeder, respectively, W. O. McCurdy & Sons Seed Company, Fremont, Iowa.

‡Registered under a memorandum of understanding between the Crops Research Division, ARS, USDA, and the American Society of Agronomy. Received Nov. 1, 1963.

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