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 F₁ 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 Minneota. 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 M469) 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 F₂ plant selection of Clinton × Nemaha was then crossed with Mo. 0-200. One of the better F₂ plants from the latter cross was then crossed with Nemaha. 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.

Mahaska has some tolerance to yellow dwarf and 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 64.1 bushels with a test weight of 34.7 pounds compared with 62.5 bushels and 33.8 pounds for Cherokee, the earliest commonly grown cultivar, 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. L.) was developed by the Cornell University Agricultural Experiment Station. Dutchess was Cornell Sel. 5148B-2-8 from ‘Faysel’ CI 1347 × (CI 7372 × ‘Hudson’). Dutchess is a rust resistant barley selected as a mixture from the cross 'CI 7372 × ‘Hudson’. CI 7372 is a Japanese barley. It was developed at Ithaca in 1951 by N. F. Jensen. Dutchess was officially released in 1961 at which time the first 5-acre Foundation Field was grown 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., lb./bu.</th>
<th>Height, inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dutchess</td>
<td>65.7</td>
<td>46.9</td>
<td>36.1</td>
</tr>
<tr>
<td>Hudson</td>
<td>69.7</td>
<td>45.3</td>
<td>36.8</td>
</tr>
<tr>
<td>Wong</td>
<td>48.5</td>
<td>44.8</td>
<td>41.3</td>
</tr>
</tbody>
</table>

Dutchess is a midseason-to-late maturing, hard, 6-rowed, rough-awned winter barley. It is outstanding for its lodging resistance and improved plant type. Yields are consistently superior to Cherokee for yield and test weight. Dutchess has some tolerance to the races of stem and crown rust 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, Dutchess yielded an average of 64.1 bushels with a test weight of 34.7 pounds compared with 62.5 bushels and 33.8 pounds for Cherokee, the earliest commonly grown cultivar, and 69.0 bushels and 34.2 pounds for Newton. Comparative performance data for Dutchess are given in Table 1 of the registration article for Colfax.

REGISTRATION OF ERIE BARLEY

(Reg. No. 51)

N. F. Jensen

‘ERIE’ (Hordeum distichum L., emend. Lam.) was developed by the Cornell University Agricultural Experiment Station. It is a pure line selection from the hybrid of ‘Goldfoil’ × Wong. It was officially released in 1951 by N. F. Jensen and H. H. Love. It was officially released in 1951 by N. F. Jensen and H. H. Love. It was developed by workers of the W. O. McCurdy & Sons Seed Company, Fremont, Iowa.