REGISTRATION OF VARIETIES

regarded feed types. Compared with Parkland, Conquest is two days earlier maturing and more resistant to lodging.

The principal spike and grain characteristics are given below:

**Spike** — Six-rowed; mid-long; lax, lateral kernels overlapping almost completely on upper 1/4 to 1/3 of spike; emerges 2 to 6 in.; seminoding to semierect; lemma awn long, smooth; glume awn three to four times the length of the glume; glume hairs long, numerous, generally confined to a broad band; rachis edges with numerous fine hairs.

**Grain** — Kernels mid-size, hull smooth to slightly wrinkled; aleurone blue; rachilla mid-long with numerous long hairs; lateral veins with a medium number of fine barbs; basal marking varies from a horseshoe to an incomplete horseshoe depression.

REGISTRATION OF CATSKILL BARLEY

(Reg. No. 85)

N. F. Jensen

'CATSKILL' (Hordeum vulgare L., emend. Lam.), C.I. 10889, was developed by the Cornell University Agricultural Experiment Station. It is a pure line selection from the hybrid of 'Hudson' 2X 'Kentucky No. 1' X 'Wong'. The cross was made at Ithaca in 1951 by N. F. Jensen. Catskill was approved for release in 1961 and seed supplies increased from Breeder through Foundation, Registered and Certified Seed, with first commercial sale taking place for the fall planting of 1964. The Cornell University Agricultural Experiment Station will maintain Breeder seed.

Catskill is a 6-rowed, awnleted winter barley that has shown better general adaptation to New York conditions than Wong. It is higher yielding, more winter hardy, has heavier test weight and stronger straw and is more resistant to the commonly occurring loose smuts than Wong. Catskill is resistant to Rhynchosporium scald. Undesirable features are later maturing than Wong or Hudson and longer straw than other varieties recommended for New York. The relative performance record of Catskill is shown in Table 1.

**Table 1. Performance record of Catskill barley, 1957-1964.**

<table>
<thead>
<tr>
<th>Variety</th>
<th>Yield, bu/acre</th>
<th>Test wt., Survival</th>
<th>Height, in</th>
<th>Lodging, %</th>
<th>Date headed, May</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15 N.Y. tests</td>
<td>lb/bu</td>
<td>42 U.S. tests</td>
<td>%</td>
<td>58 tests</td>
</tr>
<tr>
<td>Catskill</td>
<td>59.8</td>
<td>46.9</td>
<td>46.3</td>
<td>62.7</td>
<td>36.9</td>
</tr>
<tr>
<td>Wong</td>
<td>53.4</td>
<td>45.2</td>
<td>44.7</td>
<td>58.6</td>
<td>35.8</td>
</tr>
<tr>
<td>'Dutchess'</td>
<td>66.8</td>
<td>46.9</td>
<td>46.4</td>
<td>60.5</td>
<td>30.0</td>
</tr>
</tbody>
</table>

1 Registered under a memorandum of understanding between the Crops Research Division, ARS, USDA, and the American Society of Agronomy. Received Jan. 28, 1966.

2 Professor of Agronomy, Cornell University, Ithaca, N.Y.

REGISTRATION OF JAMES BARLEY

(Reg. No. 87)

T. M. Starling and C. W. Roane

'JAMES' (Hordeum vulgare L., emend. Lam.), a six-rowed, awnleted variety of winter barley. Sheaths occur primarily on the central rows. The spikelet is to midlong, parallel, waxy, and erect to inclined. It has a tough, hair like the edges, and the rachis is intermediate to 2 to 3 mm long. The glumes are approximately half the length of the lemma and have rough awns which are 2 to 3 mm long. Numerous teeth occur on the central and marginal nerves of the lemma and the rachilla. Leaves are long, wide, and drooping. James is similar in appearance to 'Wong' — one of its parents, but is slightly earlier in maturity, and slightly less winter hardy than Wong. The immature spikelets of James are grey-green while those of Wong are yellow-green. James is resistant to powdery mildew and leaf rust and is moderately resistant to some other conditions in Virginia. It is still strawed and lodging better than Wong. These two varieties were compared in more than 50 tests conducted at 8 locations from 1958 through 1965. The average yields of James have been 56.6 and 55.9 bushels per acre, respectively, and test weights of 43.1 and 43.5 pounds per bushel.

The cross of Wong × 'Bolivia' from which James was made was selected at the North Carolina Agricultural Experiment Station by C. R. Middleton and coworkers. Bulk of awnleted F2 plants was sent to the Virginia Agricultural Experiment Station in 1949. James was developed by trial and error, and the individual plant selection made in the F2 generation released in 1961 by the Virginia Agricultural Experiment Station. Breeder seed is being maintained by the Virginia Agricultural Experiment Station.

REGISTRATION OF KOROL BARLEY

(Reg. No. 86)

Frank C. Petr and Harland Stevens

'KOROL' (Hordeum distichon L. emend. Lam.), C.I. 6800, is a two-rowed, feed type, spring barley adapted to production in the irrigated and nonirrigated areas of southeastern Idaho. Korol was developed by the Cornell University Agricultural Experiment Station from the hybrid of Bey Korol, Istanbul, Turkey, and 'Hudson' 2X 'Kentucky No. 1' X 'Wong'. The cross was made at Ithaca in 1951 by N. F. Jensen. Korol was approved for release in 1960 by the Idaho Agricultural Experiment Station as Journal Paper No. 681. Received March 26, 1966.

Korol was introduced by the U.S. Department of Agriculture from Bey Korol, Istanbul, Turkey, by G. K. Middleton and coworkers. Bulk of the F2 plants was sent to the Vermont Agricultural Experiment Station for testing about 10 years prior to its cooperative release in 1960 by the Idaho Agricultural Experiment Station and the Agricultural Research Station of the U.S. Department of Agriculture. When correlated with recommended varieties in southeastern Idaho, Korol was about 2 days later than Munsing in yield to 'Munsing' and outyielded 'Soda Springs Smyrna' by 1%. Korol is considered midearly in maturity with a heading date about 2 days later than Munsing.

Korol has an erect early habit of growth, larger awns and a moderately plump, white kernel weighing about 40 and 45 mg. In approximately half of the kernels, the nerves have teeth or projections, but the lemma and rachilla with smooth lateral nerves. The kernels are about one-half the size of the lemma, with glume awns equal to the length of the rachis. There is a transverse moon-shaped crease at the base of the kernels. The rachis is tough and is hairy along the margin.

Korol is considered midearly in maturity with a heading date about 2 days later than Munsing.

Korol is currently grown on 12% of the barley area of southeastern Idaho where it is recommended to constitute about 1% of the acreage in other areas. Breeder seed will be maintained by the University of Idaho at the Tetonia Branch Experiment Station.

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(Reg. No. 87)

T. M. Starling and C. W. Roane

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