REGISTRATION OF VARIETIES

REGISTRATION OF BESBAR BARLEY¹
(Reg. No. 90)

I. K. Bespalow²

'BESBAR' (Hordeum vulgare L., emend Lam.), CI 10882, was developed at the Crops Research Center of Eastern States Farmers' Exchange, Inc., located at Feeding Hills, Massachusetts. In 1955, two sister lines, 6-W-3-55 and 5-W-1-55, were selected by I. K. Bespalow as natural hybrids from the variety Wong. The 1955-56 winter was very severe and all surviving plants of both selections were composited under selection No. 6-W-3-55. This seed was increased in 1960 and designated as breeder seed of Besbar. In 1962, Besbar was increased for first commercial sale of seed to Eastern States Farmers' Exchange (now Agway, Inc.) members in Pennsylvania, Maryland, and Delaware. In 1963, in most areas and on most farms, Besbar outyielded Wong by a significant amount and compared favorably with 'Hudson'. Besbar barley is the first privately developed small grain to be offered to farmers in the Northeast.

Besbar is a six-rowed, awnleted winter barley. The spike is erect and dense, with light blue kernels in yellow lemma. Lemmas may be awnless or with full length awns on the two central rows of kernels.

Besbar is similar in general appearance to Wong. It is stiff-strawed, with better lodging resistance than Wong. Besbar exceeds Wong in winter hardiness. Besbar is more resistant to stripe and more tolerant to scald than Wong, but moderately susceptible to loose smut. Besbar, like Wong, generally produces lower test weight grain than awned varieties.

Comparative performance data for Besbar, Wong, and Hudson from Massachusetts and USDA cooperative tests are given in Table 1. Additional information on Besbar was reported by Hugh MacWilliam.²

Description. Six-rowed, awnleted winter barley, early growth, semi-prostrate; plant midseason, midtall; basal leaf sheaths hairy or without hairs, green or faintly purple; upper leaf sheaths slightly waxy, yellow at maturity; auricles white; leaves long, wide, drooping; flagleaves long and wide; stems yellow at maturity; exposed nodes green; distance flagleaf to spike 8 to 20 cm; collars closed or open; basal rachis internode straight, 1 to 3 mm long; rachis tough, with long-haired edges. Spike dense, short to mid-long, slightly waxy, erect; lemma awns short, on central rows 0 to 6 cm long, on lateral rows from 0 to 2 cm long; awns rough; glume awn twice the length of the glume; glumes half the length of the lemma with short or mid-long hairs; rachilla long; short-haired; lemma yellow, several teeth on lateral nerves with few or none on marginal nerves; stigma hairy, kernels light blue, midlong, weight 30 to 34 mg; hulls semi-wrinkled.

Breeder seed will be maintained by Agway, Inc.

Table 1. Performance data for Besbar, Wong, and Hudson barleys, 1961-1963.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Grain L, No. tests</th>
<th>Yield, bu/ha.</th>
<th>Test wt., lb/100</th>
<th>Plant ht., date headed, in.</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Besbar</td>
<td>54.7</td>
<td>45.4</td>
<td>39.9</td>
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<tr>
<td>Wong</td>
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¹ Registered by the Crop Science Society of America. Received August 1, 1966.

REGISTRATION OF AMSOY SOYBEANS¹
(Reg. No. 57)

C. R. Weber²

'AMSOY' soybeans (Glycine max (L.) Merr.) originated as an F₃ plant selection from the cross 'Adams' × 'Harosoy'. Hybridization, selection, and development of AMSOY was done at the Iowa Agricultural and Home Economics Experiment Station in cooperation with the Crops Research Division, Agricultural Re-

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² Professors, Department of Plant Breeding, Cornell University, Ithaca, New York.

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(Reg. No. 90)

I. K. Bespalow²

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