REGISTRATION OF 'COUGBAR' BARLEY

'COUGBAR' barley (Hordeum vulgare L.) (Reg. no. 202), PI 496400, was released in 1985 by the Washington State University (WSU) College of Agriculture and Home Economics and the Idaho and Oregon Agricultural Experiment Stations. It was selected in Pullman, WA in 1977 as an F₅ row from a single F₄ plant from a 1973 cross of 'Beacon'/7136-62/6773-71. The cultivar name is derived from the combination of cougar, the WSU mascot, and barley. The cultivar was named Cougbar to help commemorate the university centennial in 1990.

The USDA Cereal Crops Research Unit, Madison, WI; the American Malting Barley Association (AMBA), Milwaukee, WI; Great Western Malting Company, Vancouver, WA; and Anheuser-Busch, Inc., St. Louis, MO, cooperated in testing malting and brewing quality. Plant scale quality evaluation of Cougbar remains to be done. Therefore, Cougbar is classed as a feed barley with promise as a malting type. The WSU Department of Animal Sciences cooperated in testing Cougbar for feed quality.

Cougbar is a six-rowed, medium maturing, spring barley. It has lax spikes with up to 10% erectoid types. The awns are rough and long and glumes have medium length hairs. The kernels are mid-long and moderately plump with smooth adhering hulls, short rachilla hairs, prominent veins, a crease which is closed at the base and flared at the tip, and a white aleurone.

Cougbar has produced yields statistically equal to 'Steptoe', the leading cultivar in the Pacific Northwest (averaged over 73 Washington and 27 Pacific Northwest location years), and greater than 'Advance' and 'Morex', the major Pacific Northwest six-rowed malting cultivars (1). Cougbar is similar to Steptoe in having wide adaptation. Under dryland conditions in eastern Washington, yields of Cougbar tend to range between 4000 and 6000 kg ha⁻¹ and under irrigation yields have exceeded 8000 kg ha⁻¹. Grain of Cougbar generally has a higher test weight than that of Steptoe and Advance, and is similar to that of Morex. It has plumper kernels than Advance. It is more lodging resistant than Steptoe, Advance, or Morex. The number of days to maturity for Cougbar is similar to Steptoe and Morex and greater than for Advance. Cougbar is similar to Morex in reaction to powdery mildew, incited by Erysiphe graminis DC. ex Merat f. sp. hordar Em. Marchal, less resistant than Steptoe, and more resistant than Advance. Cougbar is moderately susceptible to barley yellow dwarf virus, as are Steptoe, Advance, and Morex. No other diseases of consequence have been noted.

The overall malting quality of Cougbar is similar to Morex based on micro and pilot scale tests. However, it is lower in protein and potentially higher in viscosity. Trials with chicks and swine along with Cougbar's physical (plumpness and test weight) and chemical (protein and starch) characteristics indicate that it has better nutritional quality than Steptoe or Advance and is similar to other malting types (2).

Breeder seed stock is maintained by the WSU College of Agriculture and Home Economics at Pullman, WA 99164, and foundation seed is available through the Washington State Crop Improvement Association, Yakima, WA 98901. Seed production under certification will proceed from breeder through foundation, registered, and certified seed classes.

S. E. ULRICH, C. E. MUIR, AND R. A. NILAN (3)

References and Notes

REGISTRATION OF 'SHOWIN' BARLEY

'SHOWIN' barley (Hordeum vulgare L.) (Reg. no. 203), PI 491535, was released in 1985 by the Washington State University College of Agriculture and Home Economics and the Idaho Agricultural Experiment Station. It was selected initially in Pullman, WA in 1975 as a plant row in the F₂ generation derived from a single F₁ plant of the cross 68-1448/2116-67 made in 1971. The selection subsequently was tested as WA2905-75.

Showin is a six-rowed, mid-maturing, semidwarf feed barley. The name Showin was chosen because it is a short, winter type. The spike is lax and mid-long with some nod-