Registration of Crop Cultivars

REGISTRATION OF BOONE BARLEY
(Reg. No. 145)

C. F. Murphy

‘Boone’ barley (Hordeum vulgare L., CI 15494), is a selection from the cross ‘Wade’/‘Davie’/‘Piedmont’. The cross was made at Raleigh, North Carolina in 1962, and the final selection (F2) was made in 1968 and tested as NC 74. Varietal release was approved in 1974.

Boone is a short awned line with early maturity and excellent yield potential. It is adapted to both the Piedmont and Coastal Plain areas, although North Carolina barley production is concentrated in the Piedmont. In 3 years of testing in the North Carolina Official Variety Test, the yield of Boone relative to ‘Clayton’ in the Piedmont was 39.5 vs 35.6 quintal/ha. In the Coastal Plain the comparison was 38.7 vs 34.1 quintal/ha. Comparisons for test weight were 57.5 vs 54.7 kg/hl in the Piedmont and 57.1 vs 54.9 kg/hl in the Coastal Plain. Boone is about 10 cm shorter than Clayton and is about equal in maturity.

While North Carolina farmers have been slow to accept awned barley, the excellent threshability of this line should appeal to growers. Boone has excellent test weight, good straw strength, and resistance to leaf rust. It is rather susceptible to powdery mildew but has produced good yields even in those nurseries where mildew appeared to be a major factor.

The cultivar is a six-rowed winter-type characterized by semi-prostrate growth and a leaf sheath without hairs. The collar is open, the lateral kernels do not overlap, and the spikes are erect. Rachis edges are hairy and the basal rachis internode is short and curved. The glumes are covered with hairs and the glume awns are rough and are less than the length of the glume. Boone has short, rough awns and is also characterized by a hairy stigma. Kernel length is short to midlong, lemma teeth are lacking, hulls are semiwrinkled, and the aleurone color is white. Seventy-five percent rachilla abortion is observed and normal rachillas are short haired.

Breeder seed of Boone will be maintained by the North Carolina Agric. Exp. Stn.

REGISTRATION OF FORTRESS FINE FESCUE
(Reg. No. 11)

R. W. Duell, R. M. Schmit, C. R. Funk, and R. J. Peterson

‘Fortress’, a type of fine fescue (Festuca rubra), was developed cooperatively by the New Jersey Agric. Exp. Stn. and Turf-Seed, Inc. and released experimentally as RU-6S.

Fortress is a six-clone synthetic variety. All six clones were selected as the best of many creeping red fescue recesions collected from old turf areas in New Jersey, Maryland, and Virginia from 1962 through 1968. Selection was on the basis of good turf quality and similar maturity of original clones and polycross progenies. The cultivar was first synthesized in 1971.

In variety trials, Fortress proved to be an attractive turf-type with moderately good resistance to winter hardening (Erysiphe graminis D.C.). Temporary thinning mid-summer because of Helminthosporium leaf spot produces a moderately dense, leafy turf of a light green color, with a moderately dark green color, uniformly spreading rhizomes and produces significant yields even in those nurseries where incineration is a major factor.

Breeder seed is produced and maintained by the New Jersey Agric. Exp. Stn., and normal rachillas are short haired.

REGISTRATION OF BANNER FINE FESCUE
(Reg. No. 10)

R. W. Duell, R. M. Schmit, C. R. Funk, and B. L. Rosnagel

‘Banner’, a Chewings-type fine fescue (Festuca rubra L. subsp. commutata Gaud.), was developed cooperatively by the New Jersey Agric. Exp. Stn. and Turf-Seed, Inc. and released experimentally as RU-6S.

Banner appears widely adapted to the southeast U.S. than many other Chewings types. Dense stands have been maintained, however, with intensive management including low (2 cm) frequent mowing and high fertilization.

Seed propagation is limited to two generations from breeder seed — one each of foundation and certified. Breeder seed is produced and maintained by the New Jersey Agric. Exp. Stn.

Plant variety protection has been applied for.

1 Registered by the Crop Sci. Soc. of Am. Received 28 Oct. 1975.
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