Registration of Crop Cultivars

REGISTRATION OF BOONE BARLEY

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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 (F4) was made in 1966 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 5 years of testing in the North Carolina Official Variety Test, the yield of Boone relative to 'Clayton' in the Piedmont was 99.5 vs 56.6 quintal/ha. In the Coastal Plain, Boone is about 10 cm shorter than Clayton and is equal in yield.

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 testa 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 BANNER FINE FESCUE

Registration of Crop Cultivars

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

"Banner" fine fescue (Festuca rubra L. subsp. commutata Gaud.), was developed cooperatively by the New Jersey Agric. Exp. Stn. and Turf-Seed, Inc. and released in 1975. Its experimental designation was RU-45C.

Banner appears widely adapted to the Kentucky bluegrass- fescue areas, and may perform satisfactorily further into the southwest U.S. than many other Chewings types. Tolerance to low soil pH and low fertility, as frequently occur along roadides, is good. Tolerance to moderate shade is also good. Dense stands have been maintained, however, in full sun under intensive management including low (2 cm) frequent mowing and high fertilization.

Seed propagation is limited to two generations of increase 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.

REGISTRATION OF FORTRESS FINE FESCUE

Registration of Crop Cultivars

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

"Fortress", a type of fine fescue (Festuca rubra L. subsp. rubra), was developed cooperatively by the New Jersey Agric. Exp. Stn. and Turf-Seed, Inc. and released in 1975. Its experimental designation was RU-6S.

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

In variety trials, Fortress proved to be an attractive turf-type with moderately good resistance to powdery mildew (Erysiphe graminis DC.). Temporary thinning is noticed during mid-summer because of Helminthosporium leafspot. It produces a moderately dense, leafy turf of medium fine texture with a moderately dark green color. Fortress has aggressively spreading rhizomes and produces significantly less thatch than the improved varieties of the Chewings-type fine fescues.

REGISTRATION OF FORTRESS FINE FESCUE

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

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123