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.

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

Seed propagation is limited to two generations from breeder seed – one each of foundation and breeder seed is produced and maintained at E. F. Burlingham & Sons, Forest Grove, OR 97116

Plant variety protection has been applied for.

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

2 Associate professor of Crop Science at North Carolina State Univ., Raleigh, NC 27607.

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 N. J. Dep. of Agric. Exp. Stn. and Turf-Seed, Inc. and released for registration in January 1976.

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

In variety trials, Fortress proved to be a superior turf type with moderately good resistance to leaf rust (Erysiphe graminis D.C.). Temporarily thinning mid-summer because of Helminthosporium leaf spot produces a moderately dense, leafy turf of a dense, moderately dark green color, with a moderately dark green color, and produces significantly less thatch and significantly less thatch than the improved varieties of the Chewings-type fine rescues.

Fortress has a spreading rhizome and produces significantly less thatch, a moderately dark green color, and produces significantly less thatch than the improved varieties of the Chewings-type fine rescues.