Register of Australian Herbage Plant Cultivars

A. Grasses 1. Cocksfoot Dactylis glomerata L. (cocksfoot) cv. Berber

Reg. No. A-1a-7 Registered September 1967

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Origin

Developed at the Waite Agricultural Research Institute, University of Adelaide, by selection from C.P.I.18884, 18885, 18891, and 18897, which were collected by C.A. Neal-Smith of the FAO-CSIRO joint plant collection project of 1954 in the Atlas and Anti Atlas Mountains of Morocco, at elevations of 760-1100 m and in areas of 230-460 mm annual rainfall of predominantly winter incidence (2). Selection of these particular C.P.I. lines was based on spaced plant performance; selection of individual plants within the lines was based on uniformity of heading date, tillering, leaf type, and high summer dormancy. The final selection consisted of 12 plants from C.P.I.18884, 20 from 18885, 15 from 18891, and 40 from 18897. Under the symbol GI 34, Berber was tested for production and persistence in a number of locations in Western Australia, Tasmania, and New South Wales (3) as well as in South Australia (4).

Submitted by J.A. Carpenter of the Waite Agricultural Research Institute, and recommended for registration by the South Australian Herbage Plant Liaison Committee. Registered September 1967.

Morphological description

A Mediterranean or *hispanica* tetraploid type with a semi-erect habit and narrow green to blue-green leaves that show no winter browning, but die back completely in dry summer conditions. Tillering poorer than in northern European types under spaced plant conditions. The panicles are smaller and shorter than those of Currie, and the lower branches of the panicle are not as spreading as in Currie and northern European cultivars. The clusters of spikelets are small and narrow. The lemma is slightly to strongly bilobed at the apex, and has a shortly to prominently ciliate keel. Caryopsis small (0.37 mg), shedding easily from the palea and lemma during threshing.

Agronomic characters

Seedling establishment and growth are slow, possibly a little slower than in Currie. Early and mid-winter growth is good and comparable with that of Currie and annual grasses, but spring growth is less (4). Heading occurs in September, earlier than in Brignoles or Currie. In summer the plants show a high degree of dormancy and barely respond to rain or irrigation. Berber is more persistent in low rainfall, short growing season areas than Currie or Brignoles and survives better than Australian and Sirocco phalaris (1, 4). Because of this greater persistence, its yield under these conditions is greater. Under better rainfall and longer growing seasons no greater persistence is evident and yields are much less than Currie and phalaris. It is susceptible to leaf rust.

References

1.Hoen, K. (1968). The effect of plant size and developmental stage on summer survival of some perennial grasses. *Aust. J. Exp. Agric. Anim. Husb.* **8**, 190-6.

2.Neal-Smith, C.A. (1955). Report on herbage plant exploration in the Mediterranean region. FAO Rep. No. 415. (Rome.)

3.Oram, R.N., and Hoen, K. (1967). Perennial grass cultivars for long leys in the wheat belt of southern New South Wales. *Aust. J. Exp. Agric. Anim. Husb.* **7**, 249-54.

4. Waite Agricultural Research Institute, S.A. (1963). Ann. Rep. 1962-63, pp. 10-11.