Register of Australian Herbage Plant Cultivars

A. Grasses
6. Panic
Panicum coloratum var. *makarikariense* Goosens (Makarikari grass) cv. Bambatsi

Reg. No. A-6a-1
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Origin

Derived from a naturally occurring ecotype collected in 1946 by Dr. O. West of the Matopos Research Station at Bambatsi lake on the Manzamnyama or Nata river in Southern Rhodesia (8). Described by West as similar to the upright Makarikari Prinshof strain 11/12, collected earlier by Pole-Evans in Bechuanaland, in vegetative characters, perhaps a little less leafy, but differing mainly in better seed set (8). Developed as a commercial variety in South Africa.

A CSIRO introduction (C.P.I.13372) of Bambatsi from Dr. West in 1951 was subject to preliminary trials in various locations including the north-west slopes of N.S.W. where it performed well (7). Commercial seed of Bambatsi was introduced by the N.S.W. Department of Agriculture in 1956-57 (4). From this seed a stand of 2.8 ha was established by Mr. L. Cosh at Pallamallawa in 1956-58 (4) and used for further seed production. Early introductions of commercial seed from South Africa into Queensland were made in 1958 by an importing agency and also by Mr. G. Foster, a private farmer, of Bowenville (5). The area sown to Bambatsi has expanded in Queensland largely from seed from the former source (5).

Morphological description (2, 3, 5, 6)

An erect, tussocky perennial, shortly thizomatous, seldom stoloniferous and then only from the lowermost nodes. When grown in spaced sward conditions clones develop to 91 cm in diameter. Culms robust, glaucous, branching, and erect to a height of 1.5-2.8 m; nodes geniculate slightly enlarged. Leaves glaucous and glabrous except for sparse deciduous tuberculate marginal hairs on the basal 1/3-1/2 of the lamina; lamina up to 46 cm long and 13 mm wide, rounded at the base, and with a prominent wide opaque midrib; sheaths glaucous, stem-enclosing, glabrous with occasional deciduous tubercle-based hairs. Auricle is absent. Ligule membranous when young but dividing to form a tuft of coarse ciliate haris 1.3 mm long. Inflorescence a large, open, nodding panicle 25-33 cm long, with lowermost branch solitary, and rachis grooved and partly flattened. Spikelets 2 mm long, pedicelled, awnless, of two florets, the upper fertile, the lower male, disarticulating below glumes when mature. Glumes unequal, green tinged purple with distinct purple tip, lower less than 1/3 length of upper, glabrous; upper glume keeled, 7-9 nerved. Lemma of fertile floret is grey to grey-black, 7-9-nerved, coriaceous, and glossy. Seed: the coriaceous lemma and palea closely invest the caryopsis; the "seed" is ovoid, ellipsoidal, 2.25 mm long, smooth, shiny, brown to grey-black with nerves of lemma lighter in colour.

In this cultivar about 95% of the population have the erect habit described above; about 5% have the more spreading and stoloniferous habit described for cv. Pollock. It is essentially a dark-seeded erect form that can be distinguished from most other such forms by its superior seed set (2).

Agronomic characters (1, 2, 5, 6, 9)

Summer-growing and adapted to self-mulching high fertility clay soils in the 500-890 mm rainfall (predominantly of summer incidence) belt of northern New South Wales and southern Queensland and the 635-1000-mm belt farther north. As in other cultivars of the species seedling growth in Bambatsi is comparatively slow. It makes no growth during winter but recovers better than green panic after winter. It stands waterlogged conditions as well as cv. Pollock and also has a reasonable degree of drought tolerance. Both leaf and stem are palatable, and the tall stems are acceptable to and well utilized by either sheep or cattle.

Cv. Bambatsi sets seed reasonably well, much better than the cultivars with a more stoloniferous habit. The seed ripens unevenly, however, from apex of panicle downwards and shatters readily. It requires a ripening period of up to six months.

References

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