

Register of Australian Herbage Plant Cultivars

A. Grasses

7. Paspalum

Paspalum plicatum L. (plicatum) cv. Rodd's Bay

Reg. No. A-7b-1

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Origin

Introduced by CSIR in 1932 from Dr. J.G. Sales, Director of Agriculture, Guatemala, through the Kensett Champney Co., as C.P.I.2741. It was subject to extensive testing in south-eastern Queensland during the 1950s and early 1960s by CSIRO (2) and the Department of Primary Industries (3). Its cultivar name is derived from the Rodd's Bay district, 32 km south of Gladstone, where the CSIRO Division of Tropical Pastures used it in experimental pastures. It was released by the Queensland Pasture Liaison Committee for commercial use in 1963.

Morphological description (4)

Tufted perennial, up to 1.2 m high. Leaves usually about 40 cm long, but may grow to 85 cm long, 10 mm wide, folded at the base, pilose on upper surface at base near margins, glabrous towards the top; leaf sheaths glabrous or with a few hairs at the summit; ligule about 1.5 mm long. Inflorescence of 10-13 racemes 2-6 cm long, on a simple common axis; rachis 1 mm broad and long hairs at the base. Spikelets in pairs, ovate-elliptical, 3 mm long, 1.5-2.0 mm wide, usually one of a pair not developed at base of raceme; sterile lemma wrinkled just inside the margins, 5-nerved, glabrous; glume pubescent, 5-nerved. Seeds dark brown, shining, same general structure as in Paltridge scrobic paspalum but slightly longer (2.5 mm) and a little narrower; average about 780,000 per kg. It is a tetraploid, $2n = 40$ (6).

Cv. Rodd's Bay differs from Hartley plicatum in having slightly narrower leaves and hairs on the leaf blade when the plants are past the seedling stage.

Agronomic characters (1-3, 5, 7)

Summer-growing, frost-susceptible and adapted to a rainfall of 760 mm or more, Rodd's Bay grows faster than naturalized *Paspalum dilatatum* in autumn and summer and gives high yields compared with other types of paspalum at high levels of fertility and moisture. It will also grow and persist on much poorer and less fertile soils than *Paspalum dilatatum*; and has good drought resistance. It is also highly tolerant to waterlogging and flooding for short periods.

It combines excellently with a wide range of legumes to form a stable pasture; the balance between grass and legume is more easily maintained than is the case with many of the more aggressive and high nitrogen-demanding tropical grasses. It has shown great persistence in combination with a legume under intermittent, rotational, and continuous grazing, at stocking rates up to 1 beast to 0.4 to 0.6 ha with up to 220 kg liveweight gain per ha. Its nutritional value is comparable with that of *Cenchrus ciliaris*, but less than that of *Paspalum plicatum* var. *glabrum*, cv. Hartley (5). It maintains nutritive value well after frosting.

It is an aposporous apomict (6). Flowering occurs 2-3 weeks earlier than in cv. Hartley, over a short period in late summer. Due to its erect habit, with the seed heads well above the leaves, seed harvesting is easy.

References

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