

Register of Australian Herbage Plant Cultivars

A. Grasses

7. *Paspalum*

Paspalum plicatum L. (*plicatum*) cv. Hartley

Reg. No. A-7b-2

Registered prior to December 1971

Published in the 2nd Edition of Register of Australian Herbage Plant Cultivars 1972

Origin

Originated from seed collected in Brazil by W. Hartley and J.L. Stephens and received by CSIR (as C.P.I.11826) through the Division of Exploration and Introduction of the U.S.D.A. in August 1948. It was subject to extensive testing in south-eastern Queensland by CSIRO (1) and the Department of Primary Industries (2) particularly during the 1950s and early 1960s. It was named and released for commercial use by the Queensland Pasture Liaison Committee in 1963.

Morphological description (3)

Tufted perennial, up to 1.2 m high. Leaves usually about 40 cm long, but sometimes up to 90 cm long, 15 mm broad, folded at the base, glabrous except in seedling stage when they are covered with short soft hairs; leaf sheaths glabrous; ligule about 2 mm long. Inflorescence of 5-11 racemes, 2-6 cm long on a simple common axis; rachis 1 mm wide with a few long hairs at the base. Spikelets in pairs, ovate-elliptical, 3 mm long and 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 and glabrous; glume pubescent, 5-nerved. Seeds similar to but slightly smaller than in cv. Rodd's Bay and average about 948,000 per kg. It is a tetraploid with $2n = 40$ (6).

Hartley differs from cv. Rodd's Bay mainly in having broader leaves with no hairs on the leaf blades when plants pass the seedling stage.

Agronomic characters (1, 2, 4, 5, 7)

Similar in most agronomic characters to cv. Rodd's Bay and adapted to coastal areas of Queensland with a rainfall above 760 mm and the southern spear grass region of that State. It tends to give slightly lower yields than cv. Rodd's Bay but to be of somewhat higher nutritive value. In a comparative cutting experiment of a number of *Paspalum* introductions at Samford, near Brisbane, under high levels of fertility and moisture cv. Hartley ranked sixth in terms of dry matter production.

It will also grow on much poorer soils than *Paspalum dilatatum* and on low wet land. It also combines very well with a range of legumes to form pastures which may be maintained relatively easily in a balanced and stable condition. Under intermittent and rotational grazing at Beerwah, dry matter yields of this variety compared favourably with those of other *Paspalum* species. Its nutritional value is high compared with that of most subtropical grasses, and in pen-feeding experiments it had the highest intake of a number of commonly used subtropical grasses. It maintains a high nutritive value after frosting.

Like Rodd's Bay *plicatum* it is an aposporous apomict (6). Flowering occurs 2-3 weeks later than in cv. Rodd's Bay, for a short period in late summer. Its seeding capacity is not as good as Rodd's Bay.

References

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