

Register of Australian Herbage Plant Cultivars

B. Legumes

1. Clover

Trifolium purpureum Lois. (purple clover) cv. Paratta

Reg. No. B-1h-1

Registered March 1971

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Origin

Derived from seed collected by J.F. Miles and C.M. Donald of CSIRO, in the Lebanon in 1951 and introduced into Australia as C.P.I.13816. Submitted for registration by the Department of Agriculture of South Australia and recommended for registration by the South Australian Herbage Plant Liaison Committee. Registered March 1971.

Morphological description (2)

Herbaceous annual with erect or ascending appressed, or subappressed, pubescent stems. Leaves trifoliate, digitate, petiolate, and alternate. Petioles slightly hairy and decreasing in length from the base of the plant upwards. Leaflets oblong-lanceolate from 2-4 cm long and 0.2-1.0 cm wide, slightly hairy, more so on lower surface. Stipules oblong-lanceolate and adnate to petiole; body of stipule many-nerved and hairless, terminating in a sparsely hairy subulate tip. Heads terminal, many-flowered, 3-5 cm long, ovoid to conical in flower, long ovoid-oblong to cylindrical in fruit. Corolla purple and longer than calyx. Calyx tube hirsute, cylindrical; teeth hairy, unequal, upper four equal and same length as calyx tube, lower about twice as long as calyx tube. Fruiting calyx closed by hairy 2-lipped callosity. Pod sessile, ovoid, mucronate, one-seeded. Seed impressed ovoid, yellow, approx. 800,000 per kg.

Paratta has a mixture of leaf markers but is mainly plain or with a white marking (irregular crescent) across the centre of the leaflet. Other leaf markers constitute less than 1% of the total and include yellow and red marks across the leaflet and red tips to the leaflet.

Agronomic characters

Under the winter conditions prevailing in 500-760 mm rainfall areas of Kangaroo Island, S.A., where drainage is poor, Paratta has shown good winter growth. Late-flowering, commencing late September to early October and extending for 6-8 weeks until the end of November. Seed is slow maturing.

In trials (1) on Kangaroo Island, Paratta, when ungrazed, has equalled or out-yielded *Trifolium subterraneum* cv. Yarloop in winter growth. It has persisted under continuous grazing for 3 years at one site. When sown at equal seed rates in competition with Yarloop and not grazed, Paratta produced approximately twice the amount of dry matter by the end of winter-spring growth.

Response to cutting is good; defoliation in mid August did not delay or reduce flowering. Spaced plants spread outwards with many tillers and show a semi-upright growth habit. Under competition in thick swards Paratta has the ability to grow up to a height of 60 cm.

It is relatively deep-rooted (4), resulting in an ability to "hang on" and utilize late spring rains after Yarloop has matured. Oestrogenic potency is low (3). It is susceptible to clover anthracnose (*Kabatiella caulivora*).

The ability of Paratta to compete with Yarloop during winter months when soils are waterlogged makes it a possible replacement for Yarloop. Yarloop has caused severe ewe infertility problems and Paratta with its low oestrogenic potency should alleviate this problem.

References

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