

Register of Australian Herbage Plant Cultivars

10. *Macroptilium*

b. *Macroptilium lathyroides* (L.) Urban (Phasey bean)

cv. Murray

Reg. No. B-10b-1

Registered prior to December 1971

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Origin

This species was first recorded in the Brisbane district by Bailey (3) in 1879, and must have been introduced to Australia prior to this date; it rapidly naturalised in coastal Queensland (2) and for years was regarded as an agricultural weed. The variety in commercial use in Queensland was named Murray by the Queensland Herbage Plant Liaison Committee in 1966.

Morphological description (2, 9)

Herbaceous annual or short-lived perennial, erectly branching, 60-90 cm high under normal conditions, lower parts becoming somewhat woody; when grown under shade or in association with tall grasses (8), or sown early (1), assumes a twining habit and may attain 1.5 m. Branches terete, clothed with long deciduous reflexed hairs. Leaflets entire, ovate to lanceolate, or elliptic, 4-8 cm long. Stipules lanceolate, setaceous, 6-9 mm. Inflorescence, semi-erect spicate racemes about 15 cm long borne on axillary peduncles up to 31 cm, exceeding leaves; pedicels very short. Flowers red-purple; calyx campanulate, under 6 mm long, teeth ovate lanceolate, acute, the upper one shorter; standard roundish 13 mm, keel spirally twisted. Pods sub-cylindrical, 8-10 cm long and 3 mm wide, slightly curved, glabrous, approximately 20-seeded. Seeds oblong to rhomboidal, slightly compressed, about 3 mm long, mottled light and dark grey-brown, about 119 000/kg.

Murray is more robust and taller with larger leaves and generally more glabrous than most other introductions of the species.

Agronomic characters (4, 8-10)

Murray is summer-growing and retains its leaves until frosted; it shoots again from the base in spring unless very heavily frosted when it behaves as an annual. It has a wide adaptation to climate being used in the 635-2030 mm annual rainfall zone. It also has a wide adaptation to soils, tolerating poorly drained, infertile, and acid soils, and responding well to better conditions. It seems best adapted to sub-tropical coastal areas in southern Queensland and northern New South Wales. Suitable for use on seasonally flooded soils for the Northern Territory, when it combines well with para grass.

It flowers through summer and is closely self-pollinated (5); the pods shatter readily as they mature. Although free-seeding, seedling regeneration in pastures is usually poor after the second year and it is mainly treated as biennial. It combines well with Paltridge scrobic and Petrie green panic (1).

It is not *Rhizobium*-specific, nodulates readily with indigenous 'cowpea type' rhizobia, or with commercial cowpea inoculant, and is easy to establish. Seedlings are susceptible to bean fly (7), and on friable and sandy soils it is susceptible to phaseolus virus 2 (10) and root-knot nematode (*Meloidogyne incognita*) (5), but shows field resistance to legume little leaf (6).

References

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