

Register of Australian Herbage Plant Cultivars

B. Legumes

9. Annual Medics

d. *Medicago tornata* (L.) Mill. (disc medic)

cv. Murrayland

Reg. No. B-9d-2

Registered November 1971

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Origin

Material obtained by Miss V.E. Rogers of the CSIRO Riverina Laboratory, Deniliquin, N.S.W., from a volunteer stand of naturalised *Medicago tornata* on alkaline (pH 9.0) levee fine sand at Pooncarie in south-western New South Wales. The site on which the stand occurred carried an association of *Heterodendrum oleifolium* Desf. and *Casuarina cristata* Mig., and was a rather favoured location in a 250 mm rainfall zone.

It was grown and studied at the Falkiner Memorial Field Station, Deniliquin. Submitted for registration by the CSIRO Riverina Laboratory. Recommended for registration by the New South Wales Herbage Plant Liaison Committee. Registered November 1971.

Morphological description

This cultivar differs from cv. Tornafield in following characters. Its pods have 4-5 coils and are cylindrical rather than discoid. Habit strictly prostrate. The upper surfaces of its leaflets are more hairy and its stems are less hairy. Flowers only 4-6 per raceme and longer (8-10 mm); corolla a deeper yellow. Pod, thinner, lighter in weight, much more bent (to near hippocrepiform); colour paler than in Tornafield; 396 000 compared with approximately 240 000/kg for Tornafield.

It would seem to be one of the western Mediterranean forms of *Medicago tornata* described by Heyn (1).

Agronomic characters

Murrayland is a deeply rooting, widely spreading, low-growing, and vigorous annual legume which is very tolerant of dry seasonal conditions when once established on deep fine sands, with topsoils ranging in pH from mildly acid to strongly alkaline. It develops naturally into a good grazing stand of spaced large robust plants which requires very careful management to achieve with barrel medics. It grows well at Pooncarie on mean 12 p.p.m. phosphorus (Truog-available) in top 15 cm of soil. Coumestrol content is not considered dangerous.

It is approximately one week earlier in flowering than Tornafield and is almost exclusively self-fertile. Soft seed in new season pods 25-30%; good regeneration possible in first season after sowing.

Nodulation may not be entirely satisfactory when inoculated with the standard commercial inoculants for medics (strains SU47 and U45). However, effective strains of *Rhizobium meliloti* have been isolated from Pooncarie soil and it has been noted that fully grown plants may, because of the deep-rooting habit, grow quite satisfactorily without many nodules.

References

1. Heyn, C.C. (1963). The annual species of *Medicago*. *Scr. Acad. Hierosol.* **12**, 1-154.