

Register of Australian Herbage Plant Cultivars

B. Legumes

1. Clover

Trifolium subterraneum ssp. *subterraneum* (Katzn. et Morley) Zohary and Heller (sub clover) cv. Geraldton

Reg. No. B-1d-6

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Origin

Natural occurrence observed near Moonyoonka, 12 miles east of Geraldton, on the Geraldton-Mullewa Road, W.A., in 1950 by Dr. A.J. Millington (2). Seed collected and grown at Merredin Research Station and elsewhere in the wheat belt of Western Australia. Millington (2) gives details of comparative tests with Dwalganup. It was released by the Institute of Agriculture, University of Western Australia in 1959 (3). First certified by the Western Australian Department of Agriculture in 1958, by South Australia in 1960-61, and New South Wales in 1962-63.

Morphological description (2,6,7)

Has an unusually low prostrate habit of growth, its maximum height at maturity being about 15 cm. It branches freely and, as a spaced plant, forms 10-20 runners with relatively short internodes. Laterals may form on the runners. All stems are very hairy and often pigmented. The leaflets are medium small, triangular or obcordate-cuneate and hairy on upper surface; a light green narrow band extends transversely across from margin to margin and in cold weather anthocyanin often extends up the central vein. The petioles are relatively short, sparsely hairy, and often heavily pigmented. The stipules are green with red veins. Calyx, basal quarter of tube green, upper three-quarters and lobes red. Seedling as for Mt. Barker but hypocotyl heavily pigmented; cotyledons flecked; juvenile leaf with truncate base and pigmented with small basal wedge of brown; 1st trifoliate leaf with leaflet tips emarginate or truncate, pigmented with small basal wedge of anthocyanin, and with central pale green dot absent or rare (1).

Agronomic characters (2,3,6,7)

Very early-flowering and maturing; it commences flowering about the third week in August or 7-10 days after Dwalganup; but matures its seed about two weeks earlier than Dwalganup. It will develop satisfactorily with a growing season of four months in Western Australia.

It sets seed freely above ground and without burial of the burr; it is therefore suited to heavy as well as light-textured soils. Seed production is heavy and at maturity almost 100% seeds are impermeable; the level of impermeable seeds drops slowly so that by autumn high levels of impermeable seeds remain (5). These characters are associated with the very rapid rate of seed development (8).

A comparison of Geraldton and Dwalganup in field trials is given by Millington (3). Geraldton gives better seed production under low-rainfall condition (380 mm). The pasture is usually leafy and dense and grasses and other species tend to combine better with Geraldton than other sub clover varieties in the same maturity group (3). Oestrogenic activity medium (4). Rhizobial requirements same as Mt. Barker (q.v.).

References

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