

Register of Australian Herbage Plant Cultivars

B. Legumes

1. Clover

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

Reg. No. B-1d-15

Registered prior to December 1972

Published in the Journal of the Australian Institute of Agricultural Science 44(3&4):226, Sept.-Dec. 1978.

Origin

The exact origin of the variety is obscure. It was probably collected by Mr. A.B. Adams in the Northam townsite about 1930, but it does not fit any of his descriptions of the "Northam" varieties (1). It was known to be in CSIRO collections in Western Australia prior to 1950 (R.C. Rossiter - personal communication) and was described first by Quinlivan in 1957 (4). Gladstones in 1967 recorded it as a common variety in the Northam townsite area, but did not find it naturalized in any other part of the State (2).

Northam A came under consideration as a potential commercial variety in the mid-1960's in Western Australia because of its earliness and low isoflavone content. There was no official release of seed, but small areas were established by seed producers. By 1970 some 1500 acres had been sown. Submitted and recommended for registration by the Western Australian Herbage Plant Liaison Committee. Registered December 1972.

Morphological description (2,4)

Similar to Dwalganup in growth habit. Stems and petioles pubescent and medium thickness, normally green except when exposed to sunlight, petioles relatively long. Leaflets green and pubescent, with indented outer leaf margin. Leaflet marking consists of a thin pale green band across the centre. Stipules medium sized with red veins. Calyx tube strongly pigmented. Seeds black.

Agronomic characters (3,5,6)

A very early flowering variety commencing several days before Dwalganup which is the earliest flowering of the commercial cultivars. At Perth the first flowers appear in early to mid August from late April or May germination. It has a relatively extended flowering period and slow burr development and in overall maturity is similar to Geraldton. Hardseededness is relatively high. The isoflavone content, particularly formononetin, is low. It has a good seed setting capacity in the eastern and northern wheatbelt (5). Seed setting in the lower west and south coastal districts is frequently poor due to high susceptibility to bean yellow virus disease (C.M. Francis - personal communication).

References

1. Adams, A.B. (1934). Subterranean clover. New strains from Northam and Muresk. *J. Dept. Agric. W.A.* **11**:592.
2. Gladstones, J.S. (1966). Naturalized subterranean clover in Western Australia: the strains, their distribution, characteristics and possible origins. *Aust. J. Bot.* **14**:329.
3. Gladstones, J.S. (1967). Naturalized subterranean clover strains in Western Australia: a preliminary agronomic examination. *Aust. J. Agric. Res.* **18**:713.
4. Quinlivan, B.J. (1957). Strains of subterranean clover in Western Australia. *J. Dept. Agric. W.A.* **6** (Ser.3):343.
5. Rossiter, R.C. and Millington, A.J. (1961). Some characteristics of "Carnamah", a very early flowering strain of *Trifolium subterraneum* L. when grown as single plants, res L. when grown as single plants, *Aust. J. Agric. Res.* **12**:27-39.
6. Taylor, G.W. and Rossiter, R.C. (1967). Seed production and persistence of Carnamah and other early strains of *Trifolium subterraneum* in the wheatbelt of Western Australia. *Aust. J. Exp. Agric. & Anim. Husb.* **7**:25.