

# Register of Australian Herbage Plant Cultivars

## B. Legumes

### 4. Glycine

#### a. *Neonotonia wightii* (Wight & Arn.) Lackey

#### cv. Clarence

Reg. No. B-4a-3

Registered prior to December 1971

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#### Origin

Introduced by the New South Wales Department of Agriculture in 1956 from South Africa. It was evaluated for a number of years at the research stations at Grafton and Wollongbar where its early-flowering habit and higher production compared with Tinaroo led to its development and commercial release in 1962 (5).

#### Morphological description (7)

Stems coarser, less well branched than Cooper or Tinaroo and less stoloniferous; brown pigmentation of epidermal tissues and hairs pronounced over the whole plant, extending to young shoots; is more pubescent over the whole plant with stem hairs antrorsely appressed. Leaflets 5-10 cm long, 4-6 cm wide, ovate-obtuse to elliptical, base obtuse (asymmetrical about the midrib as in Tinaroo), puberulent on upper surface and less appressed pubescent on lower surface, both surfaces more obviously hairy than Tinaroo but the upper less hairy than Cooper. The veins of the lower surface prominent and rusty brown-coloured. Stipules lanceolate acute but less attenuated than Tinaroo. Inflorescence, an interrupted raceme 5-20 cm long on peduncle about 8-10 cm, stouter than Cooper or Tinaroo; pedicels 2-3 mm long, bracteoles setaceous as in the other cultivars. Flowers 9 mm, larger than Cooper or Tinaroo with obvious pink-violet marks on the standard; calyx 4.5-6 mm long, teeth twice as long as the tube; corolla 1.5 times as long as calyx. Pods dark brown antrorsely hirsute. Seeds olive-green to dark brown, 156 000-170 000/kg. Chromosome number: tetraploid,  $2n = 44$  (6).

#### Agronomic characters

It is a little earlier flowering than Cooper (3), sufficiently so to mature seed before frosts in northern New South Wales and southern Queensland (1, 2). It also commences growth earlier in spring than Cooper or Tinaroo (1), but autumn-winter growth is poorer (7). It has a specific inoculant requirement similar to Tinaroo.

Although smaller-seeded than Tinaroo, seedling establishment and first year growth are usually more rapid (7). It is considered more suitable than the other varieties for areas subject to early frosts (2).

#### References

1. Anon. (1964). *Economic Pastures. Their Establishment and Development in N.S.W. and Queensland*. 56 pp. (Anderson Seeds Pty. Ltd., Summer Hill, N.S.W.)
2. Douglas, N.J., and Luck, P.E (1964). Farmers' guide to tropical pastures in south-east Queensland. *Qd. Agric. J.* **90**, 583-94.
3. Edye, L.A., and Kiers, H.J. (1966). Variation in maturity stolon development and frost resistance of *Glycine javanica*. *Aust. J. Exp. Agric. Anim. Husb.* **6**, 380-7
4. Hall, F. Autry (1965). *Glycine* based pastures for the North Coast. *Agric. Gaz. N.S.W.* **76**, 642-8.
5. Murtagh, G.J., and Wilson, G.P.M. (1962). *Glycine*: a summer growing legume. *Agric. Gaz. N.S.W.* **73**, 634-7.
6. Pritchard, A.J. (1966). Personal communication. CSIRO Div. Trop. Pastures, Brisbane.
7. Williams, R.J. (1966). Personal communication. CSIRO Div. Plant Ind., Brisbane.