Register of Australian Herbage Plant Cultivars

B. Legumes

1. Clover

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

Reg. No. B-1d-9 Registered prior to December 1971

Published in the 2nd ed. of the Register of Australian Herbage Plant Cultivars, 1972.

Origin

Bred by J.W. Peak and F.H.W. Morley, CSIRO Division of Plant Industry, Canberra, by crossing Northam First Early and Tallarook (4). This variety is descended from an individual third-generation plant of the original cross, selected primarily for yield, early maturity, and seed yield; little selection was done on subsequent generations (4). First certified in Western Australia and Victoria in 1964 and in New South Wales in 1965-66.

Morphological description (2,4,5)

Growth habit in sward somewhat prostrate. Leaflets hairy, bluish green, base widely cuneate, tip emarginate to obcordate, and with pale crescent markings similar to Tallarook. Anthocyanin flecking and chocolate basal patch and chocolate fringe around crescent at low temperatures or early in season; markings become less distinct at season progresses. Stipules green. Flower corolla long, white with pink stripes; calyx green. Breeds true for morphological characters, clover stunt virus resistance and hypersensitive reaction to rust strain at Canberra (4).

Agronomic characters (1-6)

Early mid-season maturity; flowering commences about mid September and the same time as Woogenellup. There is, however, more variation in flowering time between individual plants in Howard than in other sub clover varieties. This may be related to it high cold requirement for flowering (2).

It is reported to do best on fairly deep sandy soils along the north-west coast of Tasmania; its productivity was higher particularly in early winter than Mt. Barker and Woogenellup in the first two years, but it lacks persistence (3). On the Central Tablelands of New South Wales it has not yielded as well as Woogenellup (6).

It buries a high proportion of burr on suitable soils and regenerates well and makes good recovery after freezing. It contains moderate to high levels of formononetin and its oestrogenic potency is medium (5). Its rhizobial requirement is the same as Mt. Barker (q.v.).

It has a high degree of resistance to clover stunt virus (1,4) and its principal merit lies in this character.

References

- Grylls, N.E., and Peak, J.W. (1960). Varietal reaction and genetic resistance of subterranean clover (*Trifolium subterraneum* L.) to subterranean clover stunt virus infection. *Aust. J. Agric. Res.* 11, 723-33.
- 2. Higgs, E.D. (1965). Personal communication. S. Aust. Dep. Agric., Adelaide.
- 3. Martin, G.J. (1971). Personal communication. Tasm. Dep. Agric., Hobart.
- Peak, J.W., and Morley, F.H.W. (1963). Howard subterranean clover. CSIRO Aust. Div. Pl. Ind. Fld Sta. Rec. No. 2(1), pp. 45-6.
- 5. Quinlivan, B.J., Francis, C.M., and Poole, M.L. (1968). The certified strains of subterranean clover. J. Agric. West. Aust. 9(4th Ser.), 161-77.
- 6. Simpson, P.C. (1970). Clovers for the Central Tablelands. Agric. Gaz. N.S.W. 81, 360-4.