

Register of Australian Herbage Plant Cultivars

B. Legumes

1. Clover

Trifolium pratense L. (red clover) cv. Redwest

Reg. No. B-1b-3

Registered March 1972

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Origin

Derived by selection on a chemical basis (1) for low oestrogen (formononetin) content from the cultivar Grasslands Hamua. The programme was conducted at the Institute of Agriculture, University of Western Australia, by Dr. C.M. Francis in co-operation with Mr. B.J. Quinlivan (W.A. Department of Agriculture) and Dr. F.H.W. Morley (CSIRO, Canberra). Submitted for registration by C.M. Francis, Department of Agriculture of Western Australia. Recommended for registration by W.A. Herbage Plant Liaison Committee. Registered March, 1972.

Morphological description

Growth habit and general description as for Grasslands Hamua Selection toward elongated (elliptical oblong) leaves with conspicuous broad crescent has resulted in greater uniformity with respect to these characters than in the parent cultivar.

Agronomic characters

Contains approximately 0.02 percent formononetin as compared to over 1.0 percent in the parent and other red clover cultivars (2,3). This level of formation and consequent level of oestrogenic activity will be low and would not be expected to cause reproductive disorders in ewes (4). In its general agronomy it can be expected to conform closely to Grasslands Hamua, with a vigorous, erect growth habit and rapid early growth, although under Western Australian conditions at least, the Redwest cultivar is distinctly earlier flowering.

References

1. Francis C.M. and Millington, A.J. (1965). Varietal variation in the isoflavone content of subterranean clover: its estimation by a microtechnique. *Aust. J. Agric. Res.* **16**: 557-64.
2. Francis, C.M., Millington, A.J. and Bailey, E.T. (1967). The distribution of oestrogenic isoflavones in the genus *Trifolium*. *Aust. J. Agric. Res.* **18**: 47-54.
3. Francis, C.M. (1971). Selection for formononetin content in red clove *Trifolium pratense*. Proc. Aust. Plant Breeding, Perth 1971; Section 12, pp. 1-3
4. Neil, H.B., Fels, H. and Francis, C.M. (1969). Control of clover disease in sheep. *J. Dept. Agric. W.A.* **10**: 275-7.