Register of Australian Herbage Plant Cultivars

B. Legumes
1. Clover
Trifolium repens L. (white clover) cv. Grasslands Huia

Reg. No. B-1a-1
Registered prior to December 1971

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Origin

Known as New Zealand white clover prior to 1964 (2). Developed from ecotypes found in New Zealand permanent pastures by D.S.I.R., New Zealand (3,8,10); first certified on a regional basis in 1932 (6) and later (1937-38) on a pedigree basis. Selected originally for longevity and production from regional strains developed on the very fertile soils of Rangiora and Woodend in North Canterbury and parts of Heretaunga Plains in Hawke's Bay (8). Certified by Tasmanian Department of Agriculture in 1935.

Morphological description (7 et al.)

A perennial herb of prostrate habit with hairless stems (stolons) radiating from a central crown and rooting at the nodes. Leaflets elliptical to broadly ovate or obovate to almost heart-shaped, margin denticulate; veins widely spaced and not much branched, glabrous; leaflet markings usually a white or light green crescent or inverted V on upper surface, and minor anthocyanin fleckings may be present. Stipules membranous and transparent, completely clasping base of petiole, glabrous, free portion triangular, pointed, not toothed but tip often irregularly torn, veins numerous, brownish or greenish, distinct. Petioles long, solid, glabrous. Inflorescence, globular heads on peduncles longer than the petioles, with 30-40 white to pinkish flowers borne on short slender stalks, reflexed after fertilization; calyx tube about half length of the standard of the corolla, upper calyx teeth slightly longer than the lower, glabrous. Pods oblong with slight constrictions between seeds, usually 3-4 seeds. Seeds mostly pale lemon in colour but ranging to tan or reddish brown, obovoid to heart-shaped, slightly laterally compressed, radicle lobe generally nearly equalling cotyledonary lobe, hilum usually terminal, furrow usually rather distinct; approx. 1.5-1.6 million per kg.

There are practically no differences in morphological characters between varieties of white clover other than differences in size of the plants and their individual parts. Grasslands Huia is of intermediate size having larger leaves, longer petioles, stouter and longer stolons, and a less dense form than the small north European varieties such as Kent Wild White and Aberstwyth S.184, but having smaller organs and a denser plant form than cv. Ladino. Cyanophoric number high.

Agronomic characters

Adapted to a moist temperate climate and soils of medium to high fertility, with 600 mm or more of evenly distributed rainfall and characterized by high production in spring and autumn and persistence under grazing (5). Nodulates satisfactorily with Rhizobium strain TA1 contained in Australian commercial inoculant "B". Flowers about one week later than Ladino and is almost completely self-sterile.

Well suited to Tasmanian conditions (11) where it is reported to be slow to establish relative to many of the larger-leafed cultivars, but under moderate to high rainfall is more competitive than all other white clover varieties tested; by the third year after sowing it is usually the most productive. In Victoria it is considered agronomically rather similar to cv. Irrigation but better than that cultivar for natural moderate to high rainfall conditions (1,4). On the Central Tablelands of New South Wales under rainfall of 630-1000 mm it establishes more readily than subterranean clover on low-fertility acid soils, gives better initial production, and performs as well as any other variety (13).

In areas of warmer and drier summers under irrigation it performs almost as well as cv. Irrigation (1,9) but yields less in winter than Louisiana (12) and less in summer than Ladino (9).

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