

Register of Australian Herbage Plant Cultivars

B. Legumes

1. Clover

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

Reg. No. B-1d-17

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Origin

Collected by Dr. J.S. Katznelson, (1) Volcani Institute, Israel, in northern Greece between Larisa and Trikkala as CPI 39313Y. The collection tour was a part of an overall program organized by Dr F.H.W. Morley, CSIRO, Canberra, aimed at increasing the range of genotypes of subspecies *yannanicum* (2) available in Australia. Larisa was selected from this collection by Dr C.M. Francis and Dr J.S. Gladstones then of the Institute of Agriculture, University of Western Australia, on the basis of low formononetin content, maturity and growth habit. Seed increase was carried out by the Western Australian Department of Agriculture. Submitted for registration by the Western Australian Department of Agriculture and the Institute of Agriculture. Recommended for registration by the Western Australian Herbage Plant Liaison Committee. Registered, February 1975.

Morphological description

A typical member of subspecies *yannanicum* being almost glabrous, possessing long petioles and large cream seeds. Growth habit is prostrate. Leaflets are obcordate, dark green on long petioles which are typically finer than the related cv. Yarloop. Leaflet crescent is distinct with pale green central area and well-defined white arms extending from crescent to leaflet margins. Leaf flecking absent. Stipules green with pink veins and pink flush between veins under appropriate cool conditions. Calyx tube, green glabrous; corolla lacks pink venation. Seed like that of Yarloop, cream to amber, approximately 105 000 per kg. In the seedling, unifoliate leaf apex rounded (base reniform), no anthocyanin flecks, traces of whitish crescent arms visible. First trifoliate leaf has no flecks with leaflet apex emarginate and base rounded, central crescent and whitish crescent arms visible but less distinct than in larger leaves.

Agronomic characters (3-9)

Contains very low concentrations (0.03-0.10%, dry weight) of the plant oestrogen formononetin. Of late mid season maturity its first flowering is 3-5 days later than cv. Mount Barker or about 148 days after germination under Western Australian conditions. Its winter growth, like Mount Barker is slow but it makes excellent growth in spring. Tolerant of waterlogging (3), it grows well on acid soils in high rainfall areas. In long growing seasons it will outproduce Yarloop in both seed and dry matter yield and was competitively superior to cv. Yarloop under irrigated conditions at Canberra (4). At Deniliquin and Leeton, although dry matter production was superior to Yarloop, slow germination as a result of high embryo dormancy may affect its competitive performance with Yarloop (5,6). Under poorly drained wet situations (850 mm rainfall) near Albany, Western Australia (7) and Kyabram, Victoria (9), its overall performance has been markedly superior to Yarloop, but with shorter growing seasons it has been generally inferior to Yarloop (7). The cultivar has shown an important degree of resistance to clover scorch (*Kabatiella caulivora*), and although by no means fully resistant, it is considerably less susceptible than Yarloop or Woogenellup (8). Resistance to red-leaf virus has been reported in Victoria (9). Capable of producing a moderate level of hard seeds under hot summer conditions (like Perty), but under cooler, moister conditions little hard seed is formed (4) - only a slight disadvantage, if any, in the long growing season environment to which the cultivar is best suited.

References

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