

Register of Australian Herbage Plant Cultivars

B. Legumes

8. Lucerne

a. *Medicago sativa* L. (lucerne)

cv. Du Puits

Reg. No. B-8a-2

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Origin

Developed by selection from the Ormelong strain of lucerne by the firm Tourneur Bros. of Coulommiers, France (9). It was released to European farmers in 1937 and received for testing in the U.S.A. in 1947 (1). In 1953 Ernest Tourneur sought patent rights for the variety and these were granted under French Patent No. 1.098.012 on 15 July 1955 (9). The brand and name 'Luzerne du Puits' has been described internationally at Berne under the No. 117.403. Du Puits is now multiplied in U.S.A under licence to Tourneur Bros. Seed was introduced to Australian by CSIRO in 1954 and 1955. Comparative yield trials were reported in New South Wales (5, 6, 8) and South Australia (4). Seed from C.P.I 20319 was multiplied and released in South Australia where it was first certified in 1963-64.

Morphological description

The patent (9) describes Du Puits as having an upright vegetative habit; fairly thick stems bearing few leaves at the base; leaves darker than all other types of lucerne; 85-90% violet and blue flowers and 10-15% variegated; more than 60% of plants with tap roots; the mean number of spiral turns in the pods as more than 2.5 and 30% of the pods as oval; and less than 45% of the seeds as reniform. Zaleski (10) at Cambridge, England, described the stems as thick, the leaflets as long and wide, and the habit as erect, rating the leaves of Hunter River as short and narrow and its habit as semi-erect. He described flower colour as 75% purple, 19% blue, and 6% variegated.

Australian assessment rates the stems thicker than in Hunter River and the leaf/stem ratio at 1.04 as less than Hunter River. The percentage of yellow and variegated flowers seems to approximate that given by Zaleski. The leaflet may be slightly broader and darker in colour. Seed size about the same as Hunter River.

Agronomic characters

The patent describes it as an early variety which grows away rapidly after cutting, as cold-resistant as the cultivar Grimm, and outyielding all other French types (9). In England, early spring growth, early flowering, and quick recovery after cutting are reported (10).

In Australia it is less susceptible to frost (3), more winter-dormant, and makes less growth in winter than Hunter River (2, 5, 6). In summer it yields more than Hunter River under moderately warm conditions such as are experienced on the Tablelands of New South Wales (6), in Tasmania (3), in Victoria (2), and in South Australia (4). Under these conditions 85% of its yield may be produced in the period September-February, compared with 75% of the annual yield of Hunter River (3). However, where summer temperatures are high (i.e. under irrigation at Deniliquin, N.S.W.) it is less productive and less persistent than Hunter River (8).

A reasonable resistance to downy mildew (*Peronospora trifoliarum*) (7) and to leaf spot (*Pseudopeziza medicaginis*) (3) has been reported. Nodulation requirements same as for Hunter River.

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