

# Register of Australian Herbage Plant Cultivars

## B. Legumes

### 8. Lucerne

#### a. *Medicago sativa* L. (lucerne)

##### cv. Maxidor 2

Reg. No. B-8a-14

Registered April 1983

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#### Origin

This cultivar was bred by W. Knipe of Northrup King Co., Woodland, California. It was developed by crossing the three Northrup King experimental lines PCc-78-524, PCc-78-525 and PCg-78-300; 100, 100 and 60 plants respectively were used in making the cross. PCc-78-524 and PCc-78-525 were developed by crossing plants selected from WL 318 (1) and WL 512 for resistance to *Phytophthora* root rot (PRR) caused by *Phytophthora megasperma* var. *sojae* Hildebrand, with plants selected from CUF 101 (6) for resistance to the blue-green aphid (*Acyrtosiphon kondii* Shinji), and PRR. PCg-78-300 was selected from African and Turkistan lines for resistance to PRR and *Colletotrichum* crown rot, caused by *Colletotrichum trifolii* Bain & Ess. Seed from the final cross of the three lines in the field was designated breeders' seed. Breeders' seed was used in testing in the U.S for pest and disease reactions and was entered in field trials for forage production and persistence. Before introduction for production in Australia, seed was supplied to State Departments of Agriculture for similar evaluations under Australian field conditions. Submitted for registration by Northrup King Pty. Ltd., which will produce basic seed from breeders' seed maintained by the breeder. Recommended for registration by the Victorian Herbage Plant Liaison Committee. Registered April, 1983.

#### Morphological description

Maxidor 2 is an erect-growing cultivar typical of the highly winter-active dormancy type. Strong axillary growth makes plants appear more dense than CUF 101. At low plant populations it develops a broader crown than CUF 101. Flower colour varies from very pale to intense purple. The cultivar shows little variability in other morphological characteristics. Seed pods are tightly whorled.

#### Agronomic characters

Maxidor 2 is a highly winter-active cultivar with a seasonal growth pattern similar to CUF 101 and Siriver. Maxidor 2 is resistant to the spotted alfalfa aphid (*Therioaphis trifolii* (Monell) f. *maculata*), moderately resistant to the blue-green aphid, and resistant to the pea aphid (*Acyrtosiphone pisum* Harris) (2, 4). Maxidor is moderately resistant to PRR (7), root rot caused by *Fusarium* spp., stem nematode (*Ditylenchus dipsaci* (Kuhn) Filipjev) (5), and bacterial wilt (*Corynebacterium insidiosum* (McCulloch) Jensen) (3). It has low level of field resistance to *colletotrichum* crown rot caused by *Colletotrichum trifolii* Bain & Ess. and low to moderate field resistance to leaf spot caused by *Stemphylium* spp. (9). Field performance data have indicated that Maxidor 2 is adapted to all areas where winter-active cultivars will grow (4, 8, 9). The broad-spectrum disease resistance has resulted in excellent field performance and persistence at all test sites in South Australia, Victoria, New South Wales. Satisfactory commercial seed yields have been obtained under Australian conditions.

#### Reference

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