

Register of Australian Herbage Plant Cultivars

B. Legumes

8. Lucerne

a. *Medicago sativa* L. (lucerne)

cv. Validor

Reg. No. B-8a-15

Registered April 1983

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Origin (1, 6)

This cultivar was bred by W. Knipe of Northrup King Co., Woodland, Calif. Some 60 plants were selected from WL 318 (1) for resistance to *Phytophthora megasperma* var. *sojae* Hildebrand and morphological characteristics similar to 60 plants selected from the USDA germplasm Syn XX (6). These 120 plants were crossed at random and seed harvested was increased through two generations to produce breeders' seed.

Breeders' seed was used in testing in the U.S. for pest and disease reactions, forage production and persistence. Before introduction for production in Australia, seed was supplied to State Departments of Agriculture for similar evaluations under Australia 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

Validor is similar in growth habit to Hunter River. Stems are erect in mid summer tending to semi-erect in autumn. The cultivar expresses strong axillary branching, giving stands a dense appearance. Broad, low crowns develop at low populations in the field. Flowers are purple to light purple and seedpods are tightly whorled. The cultivar is very even in appearance and maintains this appearance through the basic and certified generations.

Agronomic characters

Validor is an intermediate dormancy type with winter growth similar to Nova (4). It is highly persistent in cutting trials showing a rating similar to Amador over three years (2, 5). Validor is moderately resistant to the spotted alfalfa aphid (*Therioaphis trifolii* (Monell) *f. maculata*) and is rated mid way between Falkiner and Springfield in resistance. It is susceptible to the blue green aphid (*Acyrtosiphon kondoi* Shinji) and similar to Springfield in resistance to the pea aphid (*Acyrtosiphon pisum* Harris) (2, 4). Validor is resistant to Phytophthora root rot (7, 9), bacterial wilt (*Corynebacterium insidiosum* (McCulloch) Jensen) (3), and stem nematode (*Ditylenchus dipsaci* (Kuhn) Filipjev) (5), and has shown some field resistance to leaf spot caused by *Stemphylium* spp. (9) and colletotrichum crown rot (*Colletotrichum trifolii* Bain & Ess.) (7, 9). Field performance data demonstrated that the cultivar is widely adapted, having yielded above the average of other semi-dormant cultivars in Victoria, South Australia and northern New South Wales (4, 8, 9). It is suited to areas in Victoria where bacterial wilt is a problem and to areas such as Queensland and New South Wales which need resistance to Phytophthora root rot. Satisfactory commercial seed yields have been obtained under Australian conditions. Experienced growers rate Validor as similar to Hunter River in seed yields.

References

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