Register of Australian Herbage Plant Cultivars

B. Legumes 9. Annual Medics *e. Medicago scutellata* (L.) Mill. (snail medic)

cv. Sair Reg. No. B-9f-2 Registered April 1980

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Origin (9)

Obtained by M.J. Mathison, South Australia Department of Agriculture and Fisheries, in 1976 as commercial snail from M.F. Hodge and Sons Pty Ltd, Adelaide, S.A., for use as a standard in field experiments. The origin of the seed could not be determined satisfactorily. It was selected for better seedling tolerance to sitona weevil adults (*Sitona humeralis* Steph.) than other seedlots of commercial snail and indexed as SAD 5909 (9).

Submitted by the South Australian Department of Agriculture and Fisheries and recommended for registration by the South Australian Herbage Plant Liaison Committee. Breeders' seed will be maintained by the South Australian Department of Agriculture. Registered April 1980.

Morphological description (1, 4, 7)

Sair has similar morphology to other naturalised snail medics including cv. Robinson.

Agronomic characters (1-11)

Cv. Sair is expected to perform almost identically with plants from other seedlots of commercial snail medic (1), except for its better tolerance to adult sitona weevils (9). Sair seedlings exhibit slightly more tolerance to adult sitona weevils than commercial snail at the cotyledon stage and markedly more tolerance by the third leaf stage. At that stage Sair and Robinson are equally tolerant, but Sair is markedly more tolerant at the seventh trifoliate leaf stage. Tolerance is less than in some other snail medics tested both in preference and confined, no choice experiments (9).

Sair has good tolerance to blue-green aphids (*Acyrthosiphon kondoi* Shinji) and is a uniformly poorer host than most South Australian seedlots of commercial snail tested in New Zealand (10). Young plants are not as susceptible as those of Robinson (5) which appears to be heterogeneous for a marked susceptibility to initial infestation at the cotyledon stage (6). By the fourth trifoliate leaf stage Robinson and Sair are equally tolerant to initial infestation (6).

Sair and other snail medics have very good seedling tolerance to spotted alfalfa aphid (*Therioaphis trifolii* (Monell)) *f. maculata*), being better than all other annual medic cultivars (6,8). At the onset of flowering, Sair, like most snail medics so far tested, becomes a moderately susceptible host to both the spotted alfalfa aphid and the blue green aphid (6, 8).

Sair, like Robinson and other snail medics, is not as susceptible to red-legged earth mite (*Halotydeus destructor* Tucker) or lucerne flea (*Sminthurus viridis* L.) as barrel, disc, and strand medics and subterraneum clover cultivars. Cotyledons are attacked by red-legged earth mite but not the succeeding leaves (6).

Sair is suggested as a substitute for Robinson and other seedlots of commercial snail for medicgrowing areas where gama medic cultivars are unsuitable, especially on alkaline heavy textured soils receiving between 300 and 350 mm average annual rainfall and on neutral of alkaline light textured soils in the 300-350 mm average annual rainfall zone.

Flowering and maturity times differ from those of commercial and Robinson by no more than 2 days at Parafield (4).

Sair has been reported as being susceptible to the cowpea aphid (*Aphis craccivora* Koch) (11). Coumestrol content of mature pods with seed is very low (3).

Snail medics are compatible with a wide range of volunteer nodule bacteria (2). For effective nitrogen fixation, this species is in the same host group as *Medicago truncatula* Gaertn. and *Medicago orbicularis* (L.) Bart. (2). Sair appears to have this species characteristic (9).

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