

Environmental weed risk assessment

Strand medic (*Medicago littoralis*)

Strand medic is a temperate annual pasture legume native to the calcareous sandy soils along the coast of the Mediterranean. It is adapted to well drained soils with a slightly acid ($\text{pH}_{\text{Ca}} > 5.8$), neutral and alkaline conditions (AAR 275-500mm). Used as a self-regenerating autumn-to-spring growing annual pasture. A minor pasture species in south-western Australia (Gillespie 2001).

In experimental trials in northern Western Australia (WA) the annual legumes and herbs had good feed quality but in general, with low forage yields under irrigation, are unlikely to be economically viable (Moore et al. 2021).

Weed lists

National-international:

- Not listed in Weeds of Australia (398 weed species) <https://weeds.org.au/weeds-profiles/>
- Not listed in Weeds of Australia website [Fact sheet Index \(lucidcentral.org\)](https://www.lucidcentral.org/fact-sheet-index)
- In the Global Compendium of Weeds, strand medic is listed as an agricultural weed, casual alien, cultivation escape, environmental weed, naturalised, weed (Randall 2017).

Western Australia:

- “It is found on roadsides and disturbed sites in the central wheatbelt and coastal sands of the Swan Coastal Plain from Perth to Bunbury” (Hussey et al. 2007).
- Recorded as naturalised in the following IBRA Regions of WA: Geraldton sandplains, Avon Wheatbelt, Mallee (Keighery and Longman 2004).
- Not listed in Environmental weeds of Western Australia (Keighery 1991).



Figure 1 Distribution of strand medic (*Medicago littoralis*) in Australia (Source: 'The Australasian Virtual Herbarium')

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Assessed using the 'Environmental weed risk assessment protocol for growing non-indigenous plants in the Western Australian rangelands' (Moore et al. 2022)

| Region | Filter A | Filter B | Weed Risk Assessment rating |
|------------------------------|---|--|-----------------------------|
| | Is the species a weed in similar environments in Australia or overseas? | Is the species likely to persist in the environment without management*? | |
| Kimberley | No | No | Negligible to low |
| Pilbara | No | No | Negligible to low |
| Gascoyne – Goldfields | No | No | Negligible to low |
| Agricultural area | No | No | Negligible to low |

*Without management means no fertiliser, Rhizobia, irrigation, grazing management or control of competition from other species

References

- Gillespie D (2001) 'Medics' In Chapter 9: Pastures: soil and climatic requirements, Soilguide: A handbook for understanding and managing agricultural soils. (Ed. GA Moore), Department of Primary Industries and Regional Development, Western Australia, Perth. Bulletin 4343.
- Hussey BMJ, Keighery GJ, Dodd J, Lloyd SG, Cousens RD (2007) 'Western weeds. A guide to the weeds of Western Australia'. Second Edition. The Weeds Society of Western Australia Inc.
- Keighery GJ (1991) Environmental weeds of Western Australia. *Kowari*, **2**: 180-188.
- Keighery G, Longman V (2004) The naturalized vascular plants of Western Australia 1: Checklist, environmental weeds and distribution in IBRA regions. *Plant Protection Quarterly*, **19(1)**: 12-32.
- Moore G, Revell C, Schelfhout C, Ham C, Crouch S (2021) 'Mosaic agriculture: a guide to irrigated crop and forage production in northern WA', Department of Primary Industries and Regional Development, Bulletin no. 4915, Perth.
- Moore G, Munday C, Barua P (2022) 'Environmental weed risk assessment protocol for growing non-indigenous plants in the Western Australian rangelands', Department of Primary Industries and Regional Development, *Bulletin no. 4924*, Perth.
- Randall RP (2017) 'Global compendium of weeds' (No. Ed. 3).
- Weeds of Australia database
https://keyserver.lucidcentral.org/weeds/data/media/Html/trifolium_repens.htm Site accessed 30 November 2021

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January 2022

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