

Digital Library

Environmental Weed Risk Assessments

Biosecurity, pests, weeds and diseases research

2022

Medicago littoralis - environmental weed risk assessment 2022

Department of Primary Industries and Regional Development, Western Australia

Follow this and additional works at: https://library.dpird.wa.gov.au/bs_wra



Part of the Biosecurity Commons, and the Weed Science Commons

Recommended Citation

Department of Primary Industries and Regional Development, Western Australia. (2022), Medicago littoralis environmental weed risk assessment 2022. Department of Primary Industries and Regional Development, Western Australia, Perth. Report.

https://library.dpird.wa.gov.au/bs_wra/69

This report is brought to you for free and open access by the Biosecurity, pests, weeds and diseases research at Digital Library. It has been accepted for inclusion in Environmental Weed Risk Assessments by an authorized administrator of Digital Library. For more information, please contact library@dpird.wa.gov.au.



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 (pH_{Ca} >5.8), neutral and alkaline conditions (AAR 275-500mm). Used as a self-regenerating autumnto-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 <u>Fact sheet Index (lucidcentral.org)</u>
- 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')

Environmental weed risk assessment

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 Is the species a weed in similar	Filter B Is the species likely to persist in the	Weed Risk Assessment rating
	environments in Australia or overseas?	environment without management*?	J.
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

Assessment by G Moore and N Nazeri January 2022

Important disclaimer

The Chief Executive Officer of the Department of Primary Industries and Regional Development and the State of Western Australia accept no liability whatsoever by reason of negligence or otherwise arising from the use or release of this information or any part of it.

Copyright © Department of Primary Industries and Regional Development, 2022