

## Environmental weed risk assessment

### Button medic (*Medicago orbicularis*)

Button medic is a temperate annual pasture legume native to the Mediterranean region, which is adapted to well drained, alkaline sandy loam soils ( $\text{pH}_{\text{water}} > 6.5$ ) in low rainfall (AAR  $> 275\text{mm}$ ) temperate cropping zones. Used as a self-regenerating autumn-to-spring growing annual pasture (Howie et al. 2007). A very minor pasture species if grown at all in south-western Australia.

In experimental trials in northern Western Australia 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 database [Fact sheet Index \(lucidcentral.org\)](https://www.lucidcentral.org/fact-sheet-index/)
- In the Global Compendium of Weeds, button medic is listed as an agricultural weed, casual alien, environmental weed, naturalised, weed (Randall 2017).

Western Australia:

- "...It has been recorded as naturalised" (Hussey et al. 2007).
- Recorded as present but not naturalised in the following IBRA Regions of WA - Coolgardie (Keighery and Longman 2004).
- Not listed in Environmental weeds of Western Australia (Keighery 1991).



**Figure 1** Distribution of button medic (*Medicago orbicularis*) 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*?	
<b>Kimberley</b>	No	No	<b>Negligible to low</b>
<b>Pilbara</b>	No	No	<b>Negligible to low</b>
<b>Gascoyne – Goldfields</b>	No	No	<b>Negligible to low</b>
<b>Agricultural area</b>	No	No	<b>Negligible to low</b>

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

## References

- Howie J, Lloyd D, Revell C (2007) 'Medics'. Pastures Australia Fact Sheets, A collaboration between AWI, GRDC, MLA, RIRDC and Dairy Australia  
<https://keys.lucidcentral.org/keys/v3/pastures/Html/>
- 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](https://keyserver.lucidcentral.org/weeds/data/media/Html/trifolium_repens.htm) Site accessed 30 November 2021

Assessment by G Moore and N Nazeri  
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