

## Environmental weed risk assessment

### Arrowleaf clover (*Trifolium vesiculosum*)

Arrowleaf clover (*Trifolium vesiculosum*) is an upright, annual pasture legume which occurs naturally in the Mediterranean Basin (Italy, Greece, Corsica, western Turkey, the Balkans and north of the Black Sea). Arrowleaf clover is a long season annual suited to forage production systems which grows strongly in spring but has poor winter growth.

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 on the Weeds of Australia website [Fact sheet Index \(lucidcentral.org\)](https://www.lucidcentral.org/fact-sheet-index/)
- In the Global Compendium of Weeds, Arrowleaf clover is listed as an agricultural weed, casual alien, cultivation escape, environmental weed, naturalised, weed (Randall 2017).

Western Australia:

- “Newly entering cultivation as a deep-rooted drought tolerant pasture or for hay production or rotational grazing in medium to high rainfall zones, and likely to naturalise on sandy soils” (Hussey et al. 2007).
- Recorded as naturalised in the following IBRA Region of WA: Swan Coastal Plain (Keighery and Longman 2004).
- Not listed in naturalised taxa recorded from conservation lands in Western Australia (Keighery 1991).



**Figure 1** Distribution of arrowleaf clover (*Trifolium vesiculosum*) 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	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

- 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  
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**