Department of
Primary Industries and
Regional Development

GOVERNMENT OF
WESTERN AUSTRALIA

Environmental weed risk assessment

Red clover (*Trifolium pratense*)

Red clover is a temperate, perennial (and sometimes biennial) pasture legume, which is native to Europe and Northern Asia. It is now cultivated for forage in temperate areas worldwide but is sensitive to high temperatures so has a limited role in Australia. It was evaluated in early pasture trials in high rainfall south-western Australia but has had no commercial impact (Moore et al. 2021).

Red clover is highly sensitive to high temperatures and is unsuited to northern Western Australia (WA) even under irrigation.

Weed lists

National-international:

- Not listed in Weeds of Australia (398 weed species) https://weeds.org.au/weeds-profiles/
- "Widely naturalised in southern and eastern Australia (i.e. in south-eastern Queensland, New South Wales, the ACT, Victoria, Tasmania, south-eastern South Australia and the coastal districts of south-western and southern Western Australia).

  Red clover (*Trifolium pratense*) is regarded as an environmental weed in Western Australia and Victoria" Weeds of Australia website Fact sheet Index (lucidcentral.org)
- In the Global Compendium of Weeds, red clover is listed as an agricultural weed, casual alien, cultivation escape, environmental weed, garden thug, naturalised, weed (Randall 2017).

Western Australia:

- It has been recorded as naturalised in Western Australia (Hussey et al. 2007).
- Recorded as naturalised in the following IBRA Regions of WA: Avon wheatbelt, Jarrah forest and Esperance (Keighery and Longman 2004).
- Not listed in naturalised taxa recorded from conservation lands in Western Australia (Keighery 1991).

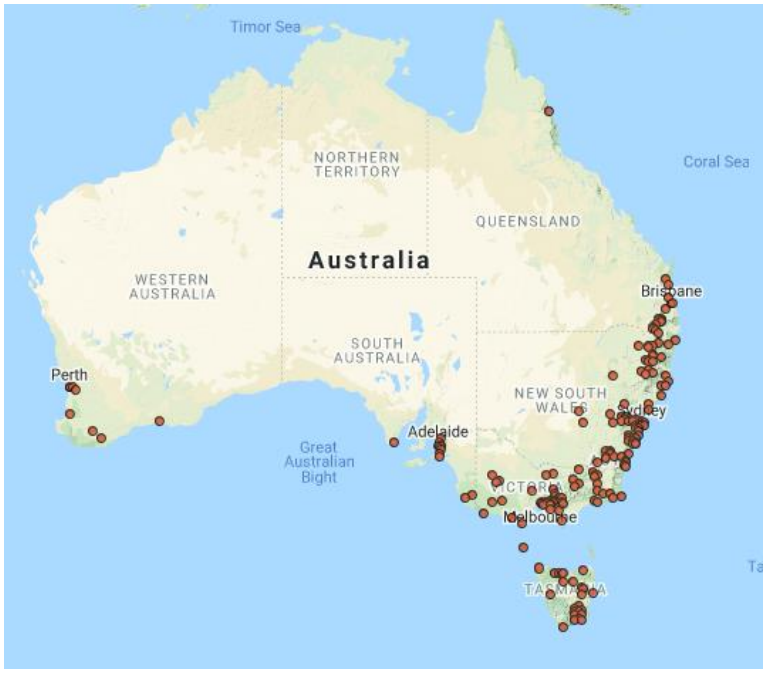

Figure 1 Distribution of red clover (*Trifolium pratense*) in Australia (Source: 'The Australasian Virtual Herbarium')

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 GA, Sanford P, Dolling PJ, Real D (2021) The challenges of developing resilient perennial pastures for a Mediterranean environment–a review for Western Australia. *Crop and Pasture Science* **72**: 613-633.

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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Important disclaimer