



Environmental weed risk assessment

Persian clover (*Trifolium resupinatum*)

Persian clover is an annual clover native to Turkey, Afghanistan, Portugal, Greece, Iran and Iraq. It was introduced to South Australia in the 1950s and grown commercially in the early 1970s. It has become a valuable species for temperate pastures of southern Australia, but is a minor pasture species in south-western Australia.

There are two main subspecies of *Trifolium resupinatum*: var. *majus* and var. *resupinatum*. *Trifolium resupinatum* var. *majus* has an erect habit, thick hollow stems and large leaflets, but a low level of hard seed (1-2%) and is utilised as a multi-cut forage crop. *Trifolium resupinatum* var. *resupinatum* has a more prostrate habit, thinner stems and smaller leaflets, but a higher proportion of hard seed and higher seed yields.

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, Persian clover is listed as an agricultural weed, casual alien, cultivation escape, environmental weed, naturalised, weed (Randall 2017).

Western Australia:

- “Persian clover found mainly from Gingin to Augusta, also at coastal and inland sites in the lower Great Southern” (Hussey et al. 2007).
- Recorded as naturalised in the following IBRA Regions of WA: Swan Coastal Plain, and Jarrah forest (Keighery and Longman 2004).
- Not listed in naturalised taxa recorded from conservation lands in Western Australia (Keighery 1991).



Figure 1 Distribution of Persian clover (*Trifolium resupinatum*) 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

- 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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