

Department of Primary Industries and Regional Development

Environmental weed risk assessment

Woolly pod vetch (Vicia villosa)

Woolly pod vetch is a self-regenerating annual type of vetch native to some of Europe and western Asia. It is adapted to a wide range of soil types, especially well-drained soils, but does not tolerate waterlogging. The seed (grain) can cause toxicity and even death of livestock. Woolly pod vetch is a minor pasture species in south-western Australia.

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. However, vetch has a larger seed and much faster early growth than the small-seeded annual clovers and serradella. Production in experimental trials to date has been modest, but vetch may have potential as a green or brown manure crop in an annual rotation to improve the soil and to boost organic matter content (Moore et al. 2021).

Weed lists

National-international:

- Not listed in Weeds of Australia (398 weed species) <u>https://weeds.org.au/weeds-profiles/</u>
- Not listed in Weeds of Australia website <u>Fact sheet Index (lucidcentral.org)</u>
- In the Global Compendium of Weeds, woolly pod vetch is listed as an agricultural weed, casual alien, cultivation escape, environmental weed, naturalised, weed (Randall 2017).

Western Australia:

- "...Found occasionally at Armadale, Kojonup and near Esperance." (Hussey et al. 2007).
- Recorded as naturalised in Esperance (Keighery and Longman 2004).
- Not listed in Environmental weeds of Western Australia (Keighery 1991).



Figure 1 Distribution of woolly pod vetch (*Vicia villosa*) 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	Yes	Yes	ТВС

*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 nonindigenous 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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