

Environmental weed risk assessment

Fodder beet, beet (Beta vulgaris)

Fodder beet (mangelwurzel) is a cultivated root vegetable used to feed livestock either *in situ* or harvested, although it has also been used for human consumption in Europe. Considered a crop for cool-temperate climates, fodder beet sown in autumn can be grown as a winter crop in warm-temperate to subtropical climates. A very minor crop in south-western Australia, occasionally sown as feed for dairy cattle.

Fodder beet has had only preliminary evaluation in northern WA under irrigation, so there is minimal yield data, but may be highly susceptible to insect damage (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 <u>Fact sheet Index (lucidcentral.org)</u>
- In the Global Compendium of Weeds, Fodder beet is listed as agricultural weed, casual alien, cultivation escape, environmental weed, naturalised, weed (Randall 2017).

Western Australia:

- Not listed in Western weeds. A guide to the weeds of Western Australia (Hussey et al. 2007)
- Not listed in The naturalized vascular plants of Western Australia 1: Checklist, environmental weeds, and distribution in IBRA regions (Keighery and Longman 2004)
- Not listed in Environmental weeds of Western Australia (Keighery 1991).



Figure 1 Distribution of Fodder beet (*Beta vulgaris*) 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 Is the species a weed in similar	Filter B Is the species likely to persist in the	Weed Risk Assessment rating
	environments in Australia or overseas?	environment without management*?	J.
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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