

Environmental weed risk assessment

Cultivated carrot (Daucus carota)

The carrot is a root vegetable, typically orange in color, though purple, black, red, white, and yellow cultivars exist, all of which are domesticated forms of the wild carrot, which is native to Europe and Southwestern Asia.

Carrots are the highest value vegetable crop in Western Australia being grown on the sandy soils near Perth and a significant export crop.

Weed lists

National-international:

- Not listed in Weeds of Australia (398 weed species) https://weeds.org.au/weeds-profiles/
- "The wild form of the cultivated vegetable carrot (Daucus carota) is regarded as an environmental weed in Victoria, Western Australia and some parts of New South Wales (e.g., in the Bega Valley Shire). Though it is primarily a weed of roadsides, disturbed sites, and agricultural areas, it was recently listed as a priority environmental weed in one Natural Resource Management region. It spreads into disturbed natural communities and can also occasionally invade less disturbed native vegetation" Weeds of Australia website Fact sheet Index (lucidcentral.org)
- In the Global Compendium of Weeds; *Daucus carota* (wild form) is listed as an agricultural weed, casual alien, cultivation escape, environmental weed, garden thug, naturalised, noxious weed, weed (Randall 2017).

Western Australia:

- "Locally common on road verges and wasteland from Albany to Walpole" (Hussey et al. 2007)
- Recorded as naturalised in the following IBRA Regions of WA: Jarrah Forest and Warren (Keighery and Longman 2004).
- Not listed in naturalised taxa recorded from conservation lands in Western Australia (Keighery 1991).



Figure 1 Distribution of cultivated carrot (*Daucus carota*) in Australia (Source: 'The Australasian Virtual Herbarium')

Environmental weed risk assessment (cultivated variant)

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, 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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