

Department of Primary Industries and Regional Development

Environmental weed risk assessment

Watermelon (Citrullus lanatus)

Watermelon is a flowering plant species of the Cucurbitaceae family and the name of its edible fruit. A scrambling and trailing vine-like plant, it is a highly cultivated fruit worldwide. Watermelons are thought to be native to northeastern Africa and have been domesticated since ancient times.

Weed lists

National-international:

- Not listed in Weeds of Australia (398 weed species) <u>https://weeds.org.au/weeds-profiles/</u>
- "Wild melon (*Citrullus lanatus var. lanatus*) is commonly a weed of pastures and agricultural areas, but also grows on floodplains, along riverbanks, in the centres of dry lakes, in drainage areas, and in disturbed sandy sites. It is currently regarded as a priority environmental weed in one Natural Resource Management region. A very widespread species that is naturalised throughout most of Australia and is particularly common in semi-arid regions. It is widely naturalised in Queensland, New South Wales, South Australia, Western Australia, and the Northern Territory.

The common edible watermelon is a cultivated variant of this species, but it is not widely naturalised or particularly weedy in Australia"

Weeds of Australia website Fact sheet Index (lucidcentral.org)

• In the Global Compendium of Weeds, watermelon is listed as an agricultural weed, casual alien, cultivation escape, environmental weed, garden thug, naturalised, noxious weed, weed (Randall 2017).

Western Australia:

- "Its long leafy trailing stems are a familiar sight along roadsides and disturbed watercourses throughout the state, and in late summer in paddocks in agricultural regions" (Hussey et al. 2007).
- Recorded as naturalised in the following IBRA Regions of WA Northern Kimberley, Victoria Bonaparte, Ord-Victoria plains, Central Kimberley, Dampierland, Pilbara, Little sandy dessert, Carnarvon, Gascoyne, Geraldton sandplains, Avon wheatbelt, Mallee, Swan Coastal Plain, Jarrah Forest, Coolgardie and Esperance (Keighery and Longman 2004).
- Not listed in naturalised taxa recorded from conservation lands in Western Australia (Keighery 1991).



Figure 1. Distribution of 'wild' watermelon (*Citrullus lanatus*) 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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