

Environmental weed risk assessment

Tall fescue (Festuca arundinacea)

Tall fescue is a temperate, perennial bunch grass native to Europe, temperate Asia and north-west Africa and has been introduced into temperate North and South America, New Zealand, South Africa and southern Australia because of its value as a forage. There are two types of tall fescue; the spring/summer-active (temperate) types are from temperate Europe and the winter-active/summer-dormant types (Mediterranean) are from the Mediterranean regions of southern Europe and north Africa.

Tall fescue is a minor pasture grass in high rainfall south-western Australia and requires annual rainfall greater than 500mm and a growing season longer than 6 months (Mediterranean types) or 7 months (temperate types) to persist (Sanford 2006). Tall fescue is a cool season grass and is unsuited to northern Western Australia (WA) even under irrigation.

Weed lists

National-international:

- Not listed in Weeds of Australia (398 weed species) https://weeds.org.au/weeds-profiles/
- "Widely naturalised in the temperate regions of southern Australia (i.e. in eastern New South Wales, the ACT, Victoria, Tasmania, many parts of South Australia and southwestern Western Australia).

Tall fescue (*Festuca arundinacea*) was introduced as a pasture grass, and some cultivars are still widely grown in Australia today. However, it has spread from cultivation and is regarded as a significant environmental weed in Victoria and as an environmental weed in the wider Sydney and Blue Mountains region in New South Wales.

In Western Australia it is established on road verges and in disturbed sites from Pemberton to Denmark, and in Perth, but is regarded as a low priority environmental weed" Weeds of Australia website Fact sheet Index (lucidcentral.org)

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

Western Australia:

- "Introduced as a pasture grass, now established on road verges and disturbed ground from Perth to Margaret river, and Pemberton to Denmark" (Hussey et al. 2007).
- Recorded as naturalised in the following IBRA Regions of WA: Swan coastal plain, Jarrah Forrest and Warren (Keighery and Longman 2004).
- Not listed in Environmental weeds of Western Australia (Keighery 1991).



Figure 1 Distribution of tall fescue (*Festuca arundinacea*) 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	
	Is the species a weed in similar environments in Australia or overseas?	Is the species likely to persist in the environment without management*?	Weed Risk Assessment rating
Kimberley	No	No	Negligible to low
Pilbara	No	No	Negligible to low
Gascoyne - Goldfields	No	No	Negligible to low
Agricultural area	Yes	Yes (>500mm AAR)	TBD

^{*}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).

Sanford P (2006) Chapter 4, Temperate grasses. *In* 'Perennial pastures for Western Australia'. (Ed. GA Moore, P Sanford and T Wiley). Department of Primary Industries and Regional Development, Western Australia, Perth. Bulletin 4690.

Weeds of Australia database

https://keyserver.lucidcentral.org/weeds/data/media/Html/trifolium_repens.htm Site accessed 30 November 2021

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