



Declared Plant Policy

This policy relates to natural resources management under section 9(1)(d) of the Landscape South Australia Act 2019 (the Act), enabling co-ordinated implementation and promotion of sound management programs and practices for the use, development or protection of natural resources of the State. Specifically, this policy provides guidance on the use and management of natural resources relating to the prevention or control of impacts caused by pest species of plants that may have an adverse effect on the environment, primary production or the community, as per object s7(1)(f) of the Act.

plumerillo (*Jarava plumosa*)

Plumerillo is an unpalatable, perennial tussock grass that superficially resembles native *Austrodanthonia* species and may invade unsown pastures or native vegetation with a grassy understorey. It is known to be established at one locality in South Australia.

Management Plan for Plumerillo

Outcomes

- Pastures and native vegetation protected from degradation by invasive, unpalatable grasses.

Objectives

- Prevent the establishment of plumerillo in South Australia.

Best Practice Implementation

- Destruction of the single known infestation.
- Surveillance for further infestations as part of routine inspection by regional landscape boards and Green Adelaide.
- Any infestations found to be delimited, contained and destroyed.
- Movement of machinery or fodder from an infested property to be monitored to contain any dispersal.

Regional Implementation

Refer to regional management plans for further details.

Region	Actions
Alinytjara Wilurara	Prevent spread; destroy if detected
Eyre Peninsula	Prevent spread; destroy if detected
Green Adelaide	Prevent spread; destroy if detected
Hills and Fleurieu	Prevent spread; destroy if detected
Kangaroo Island	Prevent spread; destroy if detected
Limestone Coast	Prevent spread; destroy if detected
Murraylands and Riverland	Prevent spread; destroy if detected
Northern and Yorke	Prevent spread; destroy if detected
South Australian Arid Lands	Prevent spread; destroy if detected

Declaration

To implement this policy, plumerillo is declared under the *Landscape South Australia Act 2019* throughout the whole of the State of South Australia. Its entry to South Australia, movement or transport on a public road by itself or as a contaminant, or sale by itself or as a contaminant are prohibited. Notification of infestations is necessary to ensure these are destroyed. Land owners are required to destroy any plumerillo plants growing on their land. Landscape boards and Green Adelaide are required to destroy plants on road reserves in their regions, and may recover costs from the adjoining land owners.

Plumerillo is declared in category 1 under the Act, for the purpose of setting maximum penalties and for other purposes. Any permit to allow its entry, road transport or sale can only be issued by the Chief Executive of the Department for Environment and Water or their delegate pursuant to section 197.

Under the *Landscape South Australia (General) Regulations 2020*, Regulation 27 specifies the conditions under which a person is exempt from the operation of section 186 and may transport wool, grain or other produce or goods carrying plumerillo on public roads, or bring them into the State. Regulation 28 specifies conditions under which a person is exempt from the operation of section 188(2) and may sell wool, grain or other produce or goods carrying plumerillo. Note that certain produce or goods may be excluded from these general movement and sale exemptions by Gazettal Notice of the Chief Executive, DEW.

The following sections of the Act apply to plumerillo throughout each of the regions noted below:

Sections of Act	Region								
	AW	EP	GA	HF	KI	LC	MR	NY	SAAL
186(1) Prohibiting entry to area	X	X	X	X	X	X	X	X	X
186(2) Prohibiting movement on public roads	X	X	X	X	X	X	X	X	X
188(1) Prohibiting sale of the plant	X	X	X	X	X	X	X	X	X
188(2) Prohibiting sale of contaminated goods	X	X	X	X	X	X	X	X	X
190 Requiring notification of presence	X	X	X	X	X	X	X	X	X
192(1) Land owners to destroy the plant on their properties	X	X	X	X	X	X	X	X	X
192(2) Land owners to control the plant on their properties									
194 Recovery of control costs on adjoining road reserves	X	X	X	X	X	X	X	X	X

Review

This policy is to be reviewed by 2025, or in the event of plumerillo becoming established as a weed in South Australia.

Weed Risk

Invasiveness

Plumerillo disperses by seeds, which are produced abundantly in stalked panicles and become attached to animals or are blown by the wind. They could also be dispersed in contaminated produce, notably hay, or on vehicles and clothing.

Impacts

Plumerillo could form dense infestations in pasture and some native vegetation types where it would exclude desirable grasses. It has low feed value to stock, and is not very palatable so tends to be allowed to increase under grazing pressure as long as more palatable pasture species are present.

Potential distribution

Climate matching suggests that a large part of the southern agricultural regions of South Australia is suitable habitat for plumerillo. It would extend into drier regions than serrated tussock, and could grow in grasslands, pastures and grassy woodlands.

Feasibility of Containment

Control costs

Permits exist for use of glyphosate, fluazifop and flupropanate for the control of plumerillo. Herbicide control would be expensive and labour intensive, as these are non-selective controls and it would be necessary to repeat treatment over several years and search for remaining plants.

Persistence

Eradication of an incursion would be slowed by the long life of seeds in the soil and the difficulty of detecting all plumerillo plants among other grasses.

Current distribution

Plumerillo still persists in the Waite Arboretum in the Adelaide suburb of Urrbrae where it is subject to a destruction program. A former occurrence of a single patch several kilometres away in the Adelaide Parklands raises the possibility that it may occur elsewhere in the Adelaide metropolitan area.

State Level Risk Assessment

Assessment using the Biosecurity SA Weed Risk Management System gave the following comparative weed risk and feasibility of containment scores by land use:

Land use	Weed Risk	Feasibility of control	Response at State Level
Grazing - southern	medium 84	very high 1	contain spread
Native vegetation	low 13	very high 1	monitor

Considerations

Native to grasslands in Southern Brazil, Argentina, Bolivia, Chile, Uruguay and Peru, plumerillo was introduced to the Waite Institute in the 1940s for pasture trials. It remained in the open trial ground until the 1950s. In 1968 it was found growing wild in the adjoining arboretum. A small patch found in the Adelaide Parklands in 1990 was destroyed by 1994.

Risk assessment indicates containment of spread as a management action. This can be implemented by preventing movement and destroying the existing incursion in suburban Adelaide. Due to its medium weed risk, very localised distribution and very high feasibility of control, plumerillo is regarded as a State Alert Weed and a high priority surveillance target to increase the likelihood of early detection.

Synonymy

Jarava plumosa (Spreng.) S.W.L. Jacobs & J. Everett, *Telopea* 7: 301 (1997).

Basionym: *Calamagrostis plumosa* Spreng., *Syst. Veg.* (ed. 16) [Sprengel] 1: 253 (1824).

Taxonomic synonyms:

Stipa papposa Nees, *Fl. Bras. Enum. Pl.* 2: 377 (1829).

Achnatherum papposum (Nees) Barkworth, *Phytologia* 74: 11 (1993).

Other common names include jarava and South American ricegrass.

References

Gardner, J., Jessop, J.P. and Symon, D.E. (1996) The escape of *Stipa papposa*. *Journal of the Adelaide Botanic Gardens* 17: 173–176.

Hon David Speirs MP

Minister for Environment and Water

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