



Government
of South Australia

Declared Plant Policy

Dolichos Pea (*Dipogon lignosus*)

Dolichos pea is a climbing legume that can be invasive in native vegetation and is still localised in South Australia.

Management Plan for Dolichos Pea

Outcomes

Understorey species in native vegetation protected from displacement by dolichos pea.

Aims

- Reduce the distribution and density of dolichos pea in the control area.

Objectives

- Identification of the extent of dolichos pea infestations and significant native vegetation sites.
- Achieve control of dolichos pea where it threatens significant native vegetation sites.
- Increase awareness about the impacts of dolichos pea.
- Prohibit the sale and distribution of dolichos pea.

Regional Implementation

- Authorised Officers to inspect, map and monitor infestations adjacent to significant vegetation sites.
- Control of dolichos pea enforced on roadsides adjacent to significant sites.
- Provide risk assessment input to Local Government planning processes regarding roadside management.
- Increase awareness about the impacts of dolichos pea.
- Prohibit the sale and distribution of dolichos pea.

Refer to regional management plans for further details.

Dolichos Pea policy

NRM Region	Actions
Adelaide and Mount Lofty Ranges	Contain spread
Alinytjara Wilurara	Limited action
Eyre Peninsula	Protect sites
Kangaroo Island	Destroy infestations
Northern and Yorke	Limited action
South Australian Arid Lands	Limited action
South Australian Murray-Darling Basin	Limited action
South East	Contain spread

Declaration

To implement this policy, dolichos pea is declared under the *Natural Resources Management Act, 2004* throughout the whole of the State of South Australia. The movement or transport of the plant on a public road, by itself or as a contaminant, or sale by itself or as a contaminant are prohibited.

Natural Resources Management (NRM) authorities in the Adelaide and Mount Lofty Ranges, Eyre Peninsula, Kangaroo Island and South East NRM regions may require land owners to control dolichos pea plants growing on their land. NRM authorities in these regions are required to control plants on road reserves and may recover costs from adjoining land owners.

Dolichos pea is declared in category 3 under the Act for the purpose of setting maximum penalties and for other purposes. Any permit to allow its movement or sale can only be issued by the regional NRM Board pursuant to section 188. Under the *Natural Resources Management (General) Regulations 2005*, the transport or movement of grain for milling or wool for cleaning is exempt from the operation of sections 175 and the sale of wool or grain is exempt from section 177(2) if at the time of the sale the person believes on reasonable grounds that the purchaser will remove the plant from the wool or grain before any re-sale.

The following sections of the Act apply to dolichos pea throughout each of the NRM regions noted below:

Sections of Act	Region							
	AMLR	AW	EP	KI	NY	SAAL	SAMDB	SE
175(1) Prohibiting entry to area								
175(2) Prohibiting movement on public roads	X	X	X	X	X	X	X	X
177(1) Prohibiting sale of the plant	X	X	X	X	X	X	X	X
177(2) Prohibiting sale of contaminated goods	X	X	X	X	X	X	X	X
180 Requiring notification of infestations								
182(1) Landowners to destroy the plant on their properties								
182(2) Landowners to control the plant on their properties	X		X	X				X
185 Recovery of control costs on adjoining road reserves	X		X	X				X

Review

This policy is to be reviewed by 2020, or in the event of a change in one or more regional management plans for dolichos.

Weed Risk

Invasiveness

Dolichos pea reproduces by seed, and also spreads vegetatively by suckering and stem layering to form new roots. Seed production is high, and the hard seeds remain viable for many years.

Seed is explosively ejected from pods over several metres or spread further in dumped garden refuse or contaminated soil and can be dispersed by birds. It is unknown specifically how far the seeds may be dispersed but it is very likely that seeds will be dispersed more than 1 km by birds or water. The plant can also be spread by rhizomes.

Experience in other States suggests that dolichos pea is highly invasive in riparian vegetation, heathlands, woodlands, and dunes. It is known to invade other coastal vegetation including beaches and cliffs, dry sclerophyll forest, riparian vegetation, warm temperate rainforest and grassland.

Impacts

No studies have been made on the impacts of dolichos pea on native vegetation in Australia, and all information here is anecdotal. Dolichos pea has been observed invading gaps in native vegetation and on the margins where it can bring down trees and prevent regeneration of desirable species. The plant will continue to invade with increased light levels which would lead to a significant decrease in biodiversity.

Dolichos pea is reported to be able to ‘smother all ground floras’. As a nitrogen fixer, it can increase soil fertility, paving the way for other weeds to invade.

Potential distribution

Dolichos pea is tolerant of salt laden winds. It grows best in moderately shady sites in dense vegetation that provides support for its twining stems. It is likely to be able to grow in coastal gullies and higher rainfall areas in the southern part of the State.

Feasibility of Containment

Control costs

Control of woody weeds such as dolichos in native vegetation is highly labour-intensive. The best control strategy is minimum disturbance by removing small and scattered plants first and then targeting outer edges of larger infestations. Young seedlings can be sprayed with a suitable herbicide if appropriate. For larger infestations, the climbing stems may be cut at the roots with secateurs and the stumps then dug out or immediately swabbed with herbicide.

Burning has also been suggested as a potential control method to kill mature plants, followed by herbicide application on seedlings.

Persistence

As dolichos can regenerate rapidly from the base after burning or cutting, and seed can germinate on disturbed soil and or fire, destruction of infestations could be difficult. The plant appears to be tolerant of drought.

Current distribution

Dolichos is scattered in coastal and high-rainfall near-coastal areas in southern South Australia but never far from settled areas from southern Eyre Peninsula to the lower South-East.

State Level Risk Assessment

Assessment using the Biosecurity SA Weed Risk Management System gave the following comparative weed risk and feasibility of containment score at State level:

Land use	Weed Risk	Feasibility of control	Response at State Level
native vegetation	low 16	high 16	monitor

Considerations

Dolichos pea was widely planted in colonial times as an ornamental, especially over outhouses. It was not noticed as naturalised until 1974, and has not previously been declared under weeds legislation.

Risk assessment indicates monitoring as the appropriate action at State level in native vegetation. While sale and movement are prohibited uniformly across the State, regional actions vary according to the land uses in each region. The South East and Adelaide Mount Lofty Ranges NRM Boards aim to contain spread as their regional risk assessments place its risk in the medium band. The Eyre Peninsula NRM Board has a policy of site protection in native vegetation. The Kangaroo Island NRM Board aims to destroy infestations as dolichos is localised in the region.

Synonymy

Dipogon lignosus (L.) Verdc., Taxon 17: 537 (1968).

Basionym:

Dolichos lignosus L., Sp. Pl. 2: 726 (1753).

Nomenclatural synonym:

Verdcourtia lignosa (L.) R. Wilczek, Bull. Jard. Bot. État Brux. 36: 254 (1966).

Taxonomic synonym:

Dolichos gibbosus Thunb., Prodr. Pl. Cap. 130 (1794).

Other common names include Cape sweet pea, purple dolichos, climbing dipogon, dunny vine and lavatory creeper.

Hon Ian Hunter MLC
Minister for Sustainability, Environment and
Conservation

Date: 3 January 2015