# Declared Plant Policy

Government of South Australia

*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.*

## 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.

**Best Practice Implementation**

- Landscape regions 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 regional planning processes regarding roadside management.
- Increase awareness about the impacts of dolichos pea.
- Prohibit the sale and distribution of dolichos pea.

## Regional Implementation

Refer to regional management plans for further details.

| Region | Actions |
|---|---|
| Alinytjara Wilurara | Limited action |
| Eyre Peninsula | Protect sites |
| Green Adelaide | Contain spread |
| Hills and Fleurieu | Contain spread |
| Kangaroo Island | Control infestations |
| Limestone Coast | Contain spread |
| Murraylands and Riverland | Limited action |
| Northern and Yorke | Limited action |
| South Australian Arid Lands | Limited action |

## Declaration

To implement this policy, dolichos pea is declared under the *Landscape South Australia Act 2019* throughout the whole of the State of South Australia. Its movement or transport on a public road, by itself or as a contaminant, or sale by itself or as a contaminant are prohibited.

The Eyre Peninsula, Hills and Fleurieu, Kangaroo Island and Limestone Coast Landscape Boards and Green Adelaide may require land owners to control dolichos pea plants growing on their land. These authorities are required to control plants on road reserves in their regions 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 sale or road transport can only be issued by the regional landscape board or Green Adelaide pursuant to section197.

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 dolichos pea on public roads. 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 dolichos pea. Note that certain produce or goods may be excluded from these general movement and sale exemptions by Gazettal Notice of the Chief Executive of the Department for Environment and Water.

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

| Region<br>Sections of Act | AW | EP | GA | HF | KI | LC | MR | NY | SAAL |
|---|---|---|---|---|---|---|---|---|---|
| 186(1) Prohibiting entry to area | | | | | | | | | |
| 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 | | | | | | | | | |
| 192(1) Land owners to destroy the plant on their properties | | | | | | | | | |
| 192(2) Land owners to control the plant on their properties | | X | X | X | X | X | | | |
| 194 Recovery of control costs on adjoining road reserves | | X | X | X | X | X | | | |

## Review

This policy is to be reviewed by 2025, 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, control 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 Limestone Coast.

**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<br>16 | high<br>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 Green Adelaide, Hills and Fleurieu, and Limestone Coast regions aim to contain spread as their regional risk assessments place its risk in the medium band. The Eyre Peninsula region has a policy of site protection in native vegetation. The Kangaroo Island region aims to control infestations as dolichos pea 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 David Speirs MP
**Minister for Environment and Water**

Date: 28 March 2021