



## 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.*

### nightstock (*Matthiola longipetala*)

Nightstock is an annual winter weed of broad acre crops where it is significant as a seed contaminant, and has a limited distribution in South Australia.

#### Management Plan for Nightstock

##### Outcomes

- Minimise losses to cereal production from nightstock.

##### Objectives

- Prevent further spread of nightstock between properties as a seed contaminant.

##### Best Practice Implementation

- Regional landscape boards and Green Adelaide to prevent movement of contaminated seed as detected.

##### Regional Implementation

Refer to regional management plans for further details.

Region	Actions
Alinytjara Wilurara	Limited action
Eyre Peninsula	Prevent entry or sale (Regional alert)
Green Adelaide	Monitor (assess impacts)
Hills and Fleurieu	Monitor (assess impacts)
Kangaroo Island	Contain spread (Regional alert)
Limestone Coast	Prevent entry or sale (Regional alert)
Murraylands and Riverland	Limited action
Northern and Yorke	Prevent entry or sale
South Australian Arid Lands	Limited action

## Declaration

To implement this policy, nightstock is declared under the *Landscape South Australia Act 2019* throughout the whole of the State of South Australia to prevent movement in contaminated seed or other produce. 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.

Nightstock is declared in category 3 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 regional landscape board or Green Adelaide 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 nightstock 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 nightstock. 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 nightstock 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									
192(1) Land owners to destroy the plant on their properties									
192(2) Land owners to control the plant on their properties									
194 Recovery of control costs on adjoining road reserves									

## Review

This policy is to be reviewed by 2025, or in the event of a change in one or more regional management plans for nightstock.

## Weed Risk

### Invasiveness

Nightstock is an annual and is spread primarily as a contaminant of cereal seed for sowing. It is also grown as a cottage garden annual, and seed is sold for this purpose in other jurisdictions.

It can have very high rates of increase, due its to high seed production even though it requires cross-pollination to set seed.

### Impacts

Nightstock competes strongly with cereals, reducing yields. It is also a contaminant reducing value and marketability of seed and hay.

### Potential distribution

There is little information about the ecological limits of nightstock, which is native to southern Europe, north Africa and western Asia and established as a weed in Victoria and Queensland. Experience in cultivation suggests that it tolerates the levels of frost that occur in the Agricultural zone of South Australia, but may be disadvantaged at high temperatures. It will survive on annual rainfall as low as 300 mm.

## **Feasibility of Containment**

### Control costs

Nightstock may not be effectively controlled by the herbicides routinely used on cereal crops, requiring the use of an additional herbicide treatment to ensure its control or suppression.

### Persistence

A seed bank is formed, with seed dormant in soil for a decade or longer.

### Current distribution

Nightstock is scattered on the Yorke Peninsula and in the mid-north as far north as Jamestown, and is also recorded from the Fleurieu Peninsula. However, it is not present on most properties in these regions and prevention of spread at the property level is the main concern.

## **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:

<b>Land use</b>	<b>Weed Risk</b>	<b>Feasibility of control</b>	<b>Response at State Level</b>
Crop/pasture rotation	medium 57	high 18	protect sites

## **Considerations**

Nightstock was first found wild in South Australia in 1905. Its sale as a contaminant of seeds for sowing was prohibited under the former *Seeds Act 1979*. When this Act was repealed in 2002, the prohibition was continued under section 54 of the former *Animal and Plant Control (Agricultural Protection and Other Purposes) Act 1986* and subsequently under section 177 of the *Natural Resources Management Act 2004*. Nightstock is a familiar garden plant and is sold as seed in some other States and Territories, only being prohibited from sale in South Australia.

## nightstock policy

Risk assessment indicates protect sites as the management action; this is implemented by containing spread through the prohibition on movement and sale. As nightstock is not a threat to lands north of the rotational cropping zone, only limited action is needed in the Alinytjara Wilurara and South Australian Arid Lands.

### Synonymy

*Matthiola longipetala* (Vent.) DC., *Syst. Nat.* 2: 174 (1821)

Basionym: *Cheiranthus longipetalus* Vent. *Descr. Pl. Nouv.* t.93 (1803)

Nomenclatural synonyms:

*Matthiola longipetala* (Vent.) DC. ssp. *bicornis* (Sibth. & Sm.) P.W.Ball, *Feddes Repertorium* 68 (1963)

*Cheiranthus bicornis* Sibth. & Sm., *Fl. Graec. Prodr.* 2: 26 (1813)

*Matthiola bicornis* (Sibth. & Sm.) DC., *Syst. Nat.* 2: 177 (1821)

*Triceras bicornis* (Sibth. & Sm.) Maire, *Cavanillesia* 6: 9 (1933)

Other common names include night-scented stock, evening stock and two-horned stock.

Hon David Speirs MP

**Minister for Environment and Water**

Date: 28 March 2021