Declared Plant Policy
under the Natural Resources Management Act 2004

Calomba daisy (*Oncosiphon suffruticosum*)

Calomba daisy (*Oncosiphon suffruticosum*) is an annual that can become a major weed of pastures. It has a limited distribution within SA and has not reached its ecological limits.

**Management Plan for Calomba daisy**

**Outcomes**
- Prevent degradation of agricultural and pastoral land by Calomba daisy infestation.

**Objectives**
- Destroy all isolated high-priority infestations.
- Contain large infestations of lower priority and reduce the abundance of Calomba daisy in pastures in these areas.
- Prevent the spread of seed to uninfested areas.

**Implementation**
- NRM authorities to determine distribution and abundance of infestations in their regions.
- NRM authorities to manage infestations of Calomba daisy on public and private land, in accordance with their Regional Action Plans.
- NRM authorities to monitor hay, machinery and seed movement from infested properties to ensure contaminated produce does not leave infested areas.

**Regional Implementation**

Refer to regional management plans for further details.

<table>
<thead>
<tr>
<th>NRM Region</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelaide and Mount Lofty Ranges</td>
<td>Monitor</td>
</tr>
<tr>
<td>Alinytjara Wilurara</td>
<td>Limited action</td>
</tr>
<tr>
<td>Eyre Peninsula</td>
<td>Limited action</td>
</tr>
<tr>
<td>Kangaroo Island</td>
<td>Protect sites</td>
</tr>
<tr>
<td>Northern and Yorke</td>
<td>Monitor</td>
</tr>
<tr>
<td>South Australian Arid Lands</td>
<td>Limited action</td>
</tr>
<tr>
<td>South Australian Murray Darling Basin</td>
<td>Contain spread</td>
</tr>
<tr>
<td>South East</td>
<td>Eradicate – regional alert</td>
</tr>
</tbody>
</table>
**Declaration**

To implement this policy, Calomba daisy is declared under the *Natural Resources Management Act, 2004* throughout the whole of the State of South Australia to minimise the movement of seed. The movement or transport of the plant on a public road, by itself or as a contaminant, or the sale by itself or as a contaminant is prohibited. NRM authorities may require land owners to control Calomba daisy plants growing on their land. NRM authorities are required to control plants on road reserves, and may recover costs from the adjoining land owners.

Calomba daisy is declared in category 2 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 Chief Officer 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 Calomba daisy throughout each of the NRM regions noted below:

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

**Review**

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

**Weed Risk**

**Invasiveness**

Calomba daisy has high seed production, but as the seed has no adaptations for dispersal, its spread is slow and depends on opportunistic movement by water, hay or vehicles. It requires bare ground to establish and is a poor competitor, only dominating pastures if competition from grasses or perennial vegetation is reduced, especially by heavy grazing. Consequently, it has a low score for invasiveness in the risk assessment.
Impacts

Calomba daisy is primarily a weed of perennial pastures. It is unpalatable to stock and also reduces the growth of pasture species by allelopathic chemicals that it releases into the soil. If eaten by stock, the foliage will taint meat and milk products with its strong camomile scent.

Calomba daisy is not usually a problem in cropping rotations, as it is easily controlled by knockdown and pre-emergent herbicides. However, a late germination of Calomba daisy may reduce the yield of a stressed or uncompetitive crop. Alternatively, short crops such as field peas may be overtopped by a late germination of Calomba daisy resulting in yield reduction.

Potential distribution

The areas where it may establish are sandy mallee soils and pastoral areas. It is most common on red or red/brown (gravelly) clay loams, or granite and limestone soils. Calomba daisy can also be found in seasonally inundated areas and clay pans.

It has potential to spread as seed in hay, grain, pasture seed or cut flowers to other areas of the State. Calomba daisy is most commonly found in semi-arid sub tropical regions. The major areas of risk are the lower rainfall cereal growing areas of Eyre Peninsula and the Murray Mallee.

Feasibility of Containment

Control costs

Cultivation and late sowing of winter growing crops offers some control on arable lands. Calomba daisy will only dominate where competition is removed, therefore in semi arid pastures, preserving pasture via appropriate stocking density and removing small patches is the most effective control method.

Broadacre infestations can be controlled by a range of relatively cheap herbicides. Spot spraying gives effective control of isolated patches. Grazing or cutting rarely controls this weed, as it can easily regenerate after further rain.

Persistence

Calomba daisy is a winter annual species well adapted to semi-arid areas. It produces many thousands of small seeds, normally in late spring. The seeds remain dormant over summer, with most germinating in the following autumn, but a small percentage of the seed will remain dormant for three years or longer.

Current distribution

Calomba daisy is most abundant in the Northern Adelaide Plains, especially the Hundreds of Dublin, Balaklava and Inkerman. It is scattered on northern Yorke Peninsula and the mid north, with a few infestations in the SA Murray Darling Basin.
Calomba daisy policy

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:

<table>
<thead>
<tr>
<th>Land use</th>
<th>Weed Risk</th>
<th>Feasibility of control</th>
<th>Response at State Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop/pasture rotation</td>
<td>low</td>
<td>very high 6</td>
<td>monitor</td>
</tr>
<tr>
<td>Grazing - southern</td>
<td>medium</td>
<td>very high 2</td>
<td>contain spread</td>
</tr>
<tr>
<td>Grazing - rangeland</td>
<td>low</td>
<td>very high 2</td>
<td>monitor</td>
</tr>
<tr>
<td>Native vegetation</td>
<td>negligible</td>
<td>very high 2</td>
<td>monitor</td>
</tr>
</tbody>
</table>

Considerations

Calomba daisy was accidentally introduced in drought fodder from South Africa in the 1922 drought. Its distribution remains limited far short of its ecological limits, with potential to spread to Eyre Peninsula, Kangaroo Island and the Murray Mallee.

The land use at risk is permanent grazing in the southern part of SA, and risk assessment indicates containing spread as the appropriate action at State level. This is addressed primarily by prohibiting its movement in produce.

Limited action is undertaken in the Alinytjara Wilurara and South Australian Arid Lands regions where it is unlikely to become a significant weed, and the Eyre Peninsula region where it is not yet recorded. In the Northern and Yorke and Adelaide and Mount Lofty Ranges regions, where the main infestations, occur it is monitored. The South Australian Murray Darling Basin region aims to contain the spread of Calomba daisy, and Kangaroo Island aims to protect sites. In the South East region it is treated as an alert species to be contained or destroyed if found.

Synonymy


Basionym: *Tanacetum suffrutescens* L., Sp. Pl. 2: 843 (1753)

Nomenclatural synonyms:

Taxonomic synonyms:
- *Cotula tanacetifolia* L., Syst. Nat. ed 12, 2: 564 (1767)
Calumba daisy policy

Other common names include chamomile, matricaria, mayweed, sheepbush, stinking daisy, stinking weed, wurmbossie, yellow weed and yellowtop.

Hon Ian Hunter MP
Minister for Sustainability, Environment and Conservation

Date: 28 July 2014