

Threatened Flora of the South Australian Murray-Darling Basin
Lowan Phebalium *Phebalium lowanense*

Nationally vulnerable

Description

- A shrub growing to an average height of 0.6 m.
- Branches are scaly and silvery to rust coloured.
- Leaves are linear, 4 -12 mm long and 1 mm wide with rounded tips.
- Leaf edges are strongly rolled in towards the midrib of the leaf.
- The upper leaf surface is devoid of hairs and the lower leaf surface is scaly.
- Flowers are terminal and arranged in a 1- 6 flowered cluster.
- Petals are about 5 mm long and 2.5 mm wide, yellow and have silvery or rust coloured scales on the outside.
- Seeds are 2 - 2.5 mm long, finely corrugated and black.

Ecology

- A perennial shrub that flowers between August and October.
- Plants may be about 6 years old before significant and consistent quantities of seeds are produced.
- Seeds have a hard seed coat and form a long-lived soil seed bank.
- A fire event is required for seed germination to occur.



Lowan Phebalium plant in flower.



Close-up of Lowan Phebalium flowers.

Conservation rating

Lowan Phebalium is listed as nationally vulnerable. The number of Lowan Phebalium individuals is not currently known however estimates suggest there may be up to 10,000,000 plants within four populations in the South Australian Murray Darling Basin covering approximately 260 hectares. Further survey work is required to more precisely establish the number of plants within this area.

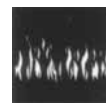
Threats



Kangaroo grazing



Weed competition



Innapropriate fire regime



Rabbit grazing

One of the major threats to Lowan Phebalium is the potential for an inappropriate fire regime. Fires that are either too frequent or too infrequent will threaten this species, by reducing its ability to maintain a viable seedbank. With the majority of the populations of Lowan Phebalium occurring in a restricted distribution, i.e. within Ngarkat Conservation Park, the species may also be threatened by unusual events such as frequent large scale fires. Current knowledge indicates that several threats have the potential to impact on this species in the future, including weed competition and grazing by kangaroos and rabbits. Further knowledge is required on the distribution, abundance and population trends of Lowan Phebalium to more accurately determine the species status.

Habitat



Lowan Phebalium growing in an open shrubland habitat.

Lowan Phebalium occurs in open shrubland and low open woodland communities.

The overstorey of the open shrubland habitats are dominated by species including;

- Desert Banksia (*Banksia ornata*)
- Silver Broombush (*Babingtonia behrii*)
- Dune Tea-tree (*Leptospermum coriaceum*)
- Dwarf Oak-bush (*Allocasuarina pusilla*)
- Heath Tea-tree (*Leptospermum myrsinoides*)

The overstorey of the woodland habitats are dominated by;

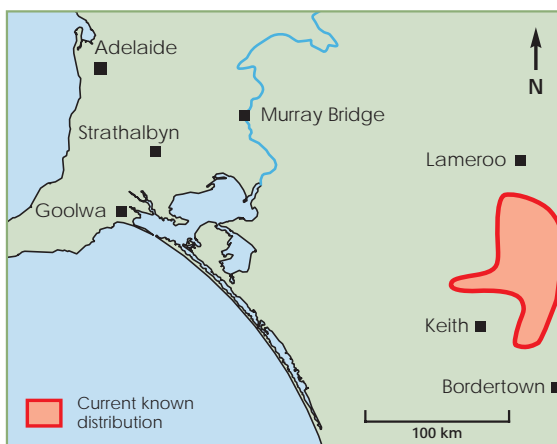
- Dune Stringybark (*Eucalyptus arenacea*)
- Ridge-fruited Mallee (*Eucalyptus incrassata*)

Understorey plants in these associations are typically native heath and sedge species including Desert Baeckea (*Baeckea crassifolia*) and Sticky Sword-sedge (*Lepidosperma viscidum*).

Distribution

Lowan Phebalium is distributed in Victoria and South Australia. Within South Australia populations are restricted to the South Australian Murray Darling Basin with populations in the following area;

- Ngarkat Conservation Park
- north of Bordertown to Ngarkat CP



Distribution of Lowan Phebalium in the SA Murraylands.

How you can help

Please be aware of native plants and help preserve them by;

- Preventing damage by grazing.
- Preventing removal/illegal collection.
- Preventing competition from weeds.
- Never picking native flowers, take a photo instead
- Joining your local Bush For Life or Native Vegetation Group and help to look after a threatened plant population.
- Reporting any sightings of Lowan Phebalium to the contacts listed below.

Details of contacts

- Dept for Environment and Heritage, Berri, SA (08) 8595 2111
- Threatened Plant Action Group, 120 Wakefield St, Adelaide, SA 5000 (08) 8223 6301

Further Information

Department for Environment and Heritage, Berri, SA

Telephone (08) 8595 2111

www.environment.sa.gov.au

Photos courtesy of C. Obst

Compiled by Environmental and Biodiversity Services

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