



PLANT

Microtis rara

Sweet Onion-orchid

AUS	SA	AMLR	Endemism	Life History
-	R	E	-	Perennial

Family ORCHIDACEAE



Photo: © R. Bates

Conservation Significance

The AMLR distribution is disjunct, isolated from other extant occurrences within SA. Within the AMLR the species' relative area of occupancy is classified as 'Extremely Restricted'. Relative to all AMLR extant species, the species' taxonomic uniqueness is classified as 'High'.⁵

Recommended to be assessed for Endangered listing under NPW Act.⁷

There is some confusion with this species and *M. oblonga* (J Quarmby *pers. comm.* 2009). Bates (2007) restricts *M. rara* to the lower southeast of the state and treats all records of *M. rara* in the southern Lofty as *M. oblonga*.² It is possible *M. oblonga* is a race of *M. rara*.²

Description

Slender green plant, 15-45 cm high. Flowers usually ten to thirty, spreading, green, fragrant.³ Flowers more widely spaced than in other *Microtis* species.²

Distribution and Population

Also occurs in WA, QLD, NSW, VIC and TAS. In SA occurs in SL, KI and SE regions.³

Post-1983 AMLR filtered records in the Mount Compass and Hindmarsh Valley areas.⁵

Pre-1983 AMLR filtered records indicate the historic distribution also included Kersbrook, Mylor and Deep Creek areas.⁵

Habitat

Uncommon species occurring in small colonies (spreads by vegetative increase) around permanent swamp margins often in deeply shaded places.³ In the AMLR restricted to peaty swamps and creek-sides often hidden in dense tree thickets and reeds and only flowering after fire or other disturbance.² Associated vegetation includes *Leptospermum* sp. and *Sprengelia incarnata* shrubland with emergent *Viminaria juncea* and mixed sedgeland.⁸

Within the AMLR the preferred broad vegetation group is Wetland.⁵

Within the AMLR the species' degree of habitat specialisation is classified as 'Very High'.⁵

Biology and Ecology

Flowers from late October to early January.^{2,3}

May form hybrids with several other *Microtis* species.²

Cover and/or abundance is likely to be severely reduced by three or more inappropriate fires (unconfirmed).⁶

Aboriginal Significance

Post-1983 records indicate the AMLR distribution occurs in southern Peramangk, Ngarrindjeri and Kaurna Nations.⁵

Orchidaceae species are recorded as being a traditional food source for Aboriginal people in NSW. The small tubers were roasted (Flood 1980).¹

Threats

Threats include:

- habitat degradation by weed infestation (e.g. Blackberries)
- altered water regimes, e.g. via swamp drainage
- climate change and drought⁴

Further information:

Biodiversity Conservation Unit, Adelaide Region
Phone: (61 8) 8336 0901 Fax: (61 8) 8336 0999
<http://www.environment.sa.gov.au/>

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Prepared as part of the Regional Recovery Plan for Threatened Species and Ecological Communities of Adelaide and the Mount Lofty Ranges, South Australia 2009 - 2014





ADELAIDE AND MOUNT LOFTY RANGES SOUTH AUSTRALIA

Threatened Species Profile

Department
for Environment
and Heritage

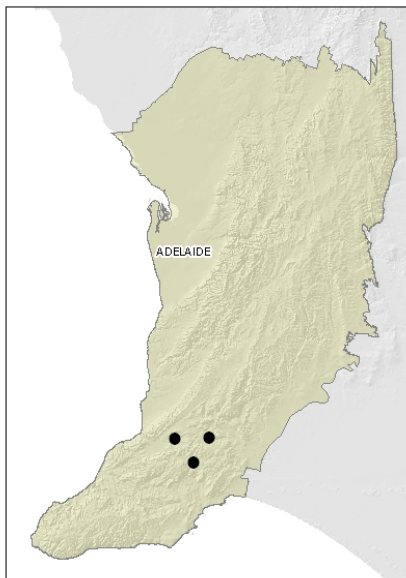
- damage from trampling by livestock and nutrient enrichment (R. Bates *pers. comm.*).

Some level of managed disturbance is required to keep swamp habitats open for orchids (kangaroo grazing and fire are therefore not considered significant threats) (R. Bates *pers. comm.*).

Very limited occurrence within the AMLR, however approximately a third of known distribution occurs within 2 km of confirmed or suspected *Phytophthora* infestations.

Additional current direct threats have been identified and rated for this species. Refer to the main plan accompanying these profiles.

Regional Distribution



Map based on filtered post-1983 records.⁵ Note, this map does not necessarily represent the actual species' distribution within the AMLR.

References

Note: In some cases original reference sources are not included in this list, however they can be obtained from the reference from which the information has been sourced (the reference cited in superscript).

1 Australian National Botanic Gardens (2007). *Aboriginal Plant Use - NSW Southern Tablelands*. Available from <http://www.anbg.gov.au/apu/index.html> (accessed August 2007).

2 Bates, R. J., ed. (2007). *South Australian Native Orchids. Electronic version, August 2007*. Native Orchid Society of South Australia.

3 Department for Environment and Heritage *Electronic Flora of South Australia species Fact Sheet: Microtis rara R.Br.*

Available from <http://www.flora.sa.gov.au> (accessed September 2007).

4 Department for Environment and Heritage. (2007). Adelaide and Mount Lofty Ranges Regional Recovery Pilot Expert Flora Workshop, Unpublished Notes. Participants: Bickerton, D., Croft, T., Jury, T., Lang, P., Prescott, A., Quarmby, J. and Smith, K., Adelaide.

5 Department for Environment and Heritage (2007). *Adelaide and Mount Lofty Ranges Regional Recovery Pilot Project Database*. Unpublished data extracted and edited from BDBSA, SA Herbarium (July 2007) and other sources.

6 Department for Environment and Heritage (2007). *Combined Fire Response Database*. Unpublished data, extracted September 2007.

7 Department for Environment and Heritage. (2007). Summary of two Wetland Threatened Flora Workshops (unpublished spreadsheet).

8 Department for Environment and Heritage (2007). *Wetlands Inventory Database of South Australia*. Unpublished data, extracted October 2007.

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