



Threatened Species of the Northern Territory



Photo: J. Low Choy

Prostanthera (Wrixonia) *schultzii* (Tate) Carrick

Conservation status

Australia: Vulnerable

Northern Territory: Vulnerable

Description

Prostanthera schultzii is a shrub to 1.5 m high. The leaves are orbicular, shaped like a ping-pong paddle, 4-8 mm with thickened margins. The flowers are sessile, white with purple spots and yellow patches on the centre of the lower lip. They are bilaterally symmetrical with a distinct upper and lower lip (Jessop 1981).

This taxon was previously in the genus *Wrixonia* but recent taxonomic revision places it in *Prostanthera* (Wilson et al. 2012).

Flowering: April, July, September–November.

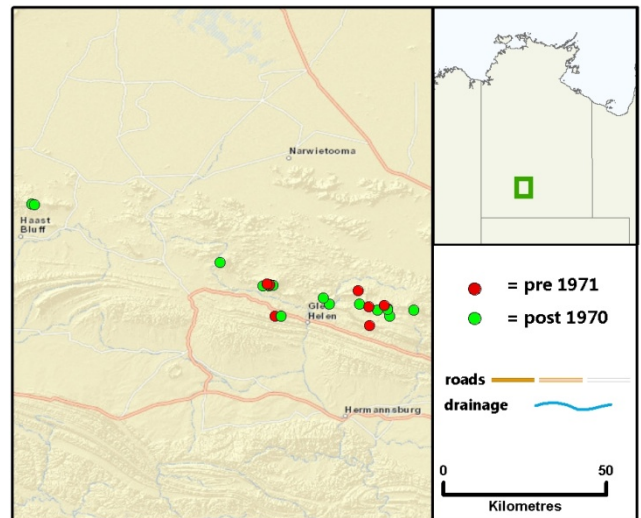
Fruiting: May, September–November.



Flowers of *Prostanthera schultzii* (Photo: D. Albrecht)

Distribution

This species is endemic to the Northern Territory (NT), and confined to the MacDonnell Ranges Bioregion, where it is restricted to the high



Known locations of *Prostanthera schultzii*

altitude tops of the quartzite ranges in the West MacDonnell Ranges (Chewings Range, Mt Sonder) with an outlying population at Mt Edward (White *et al.* 2000). The latitudinal range is 34 km and the longitudinal range is 107 km.

Conservation reserves where reported:
West MacDonnell National Park.

Ecology

Prostanthera schultzii occurs on shady, upper slopes and tops of quartzite mountains and ranges, particularly on southerly aspects. It grows in shallow soils.

This species does not appear to be negatively affected by fire under the current long-interval regime. Various stands were burned by wildfire in 2002 and a visit to one stand in 2003 revealed a high level (65 per cent, $n = 20$) of post-fire adult survivorship (A. Duguid unpublished data). Later, in 2011, fire-exposed stands on Mt. Giles were found to show no negative impact of fire, with high densities of both adult plants and new seedling recruits (C, Nano unpublished data).

Conservation assessment

Prostanthera schultzii is classified in the NT as **Vulnerable** (under criteria B1ab(iii), B2ab(iii)) based on:

- an extent of occurrence $<20\,000\text{ km}^2$;
- an area of occupancy $<2\,000\text{ km}^2$;
- a severely fragmented population; and
- an inferred decline in area, extent and/or quality of habitat due to climate change.

Threatening processes

There are no known extant threats to this species. However, given its small size and restricted distribution, *Prostanthera schultzii* may be vulnerable to the effects of stochastic processes such as disease. The habitat of this species has a narrow climatic envelope that is likely to be strongly affected by climate change. More frequent fire may have negative

consequences for this species, but data are presently lacking.

Conservation objectives and management

Population estimates and key threats need to be investigated for this species. Accurate mapping would also be highly beneficial for management.

A monitoring program should be established to track demographic changes in response to changes in climate and fire regimes for at least representative populations.

Compiled by

Catherine Nano
Raelee Kerrigan
David Albrecht
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References

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- White, M., Albrecht, D., Duguid, A., Latz, P., and Hamilton, M. (2000). *Plant species and sites of botanical significance in the southern bioregions of the Northern Territory. Volume 1: significant vascular plants*. A report to the Australian Heritage Commission. (Arid Lands Environment Centre, Alice Springs.)
- Wilson, T.C., Henwood, M.J. and Conn, B.J., (2012). Status of the genus *Wrixonia* F.Muell. (Lamiaceae). *Telopea* **14**, 3.