

# Threatened Species of the Northern Territory

## Babingtonia behrii (Schltdl.) A.R.Bean (MYRTACEAE) BROOM HEATH MYRTLE

### Conservation status

Australia: Not listed

Northern Territory: Vulnerable



Photo: D. Albrecht

### Description

*Babingtonia behrii* is an ascending myrtaceous shrub 1.5 to 3 m tall. Leaves are opposite and shortly petiolate. Inflorescences are axillary and pedunculate and the flowers are 5-merous and white. The stamens are grouped opposite the sepals, the anthers are adnate, and dehiscing by pores or short slits. The ovaries are inferior, or close to, each fruit is a loculicidal capsule and the seeds are angular and not arillate (Wilson et al. 2007).

Flowering: recorded in October.

Fruiting: recorded in April, July and September.

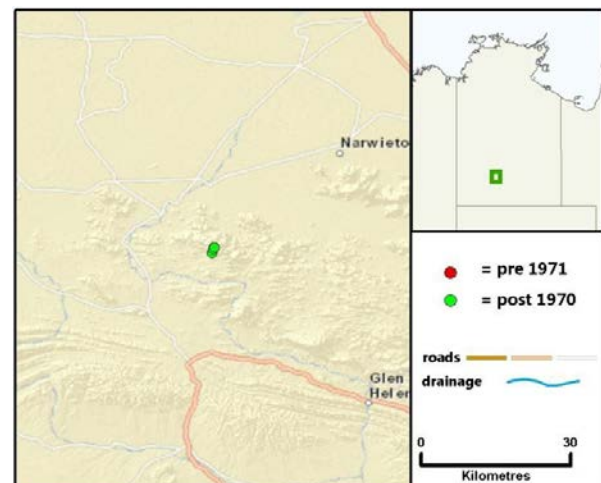
### Distribution

*Babingtonia behrii* is known in the Northern Territory (NT) from a single population, located on Mt Zeil, which is the highest mountain in central Australia. The NT population has not yet been quantified but is estimated to number fewer than 1 000 mature individuals (D. Albrecht pers. obs.). This species is, however, common in low

rainfall areas with mallee or heath vegetation in Western Australia, South Australia and Victoria.

Conservation reserves where reported:

None.



Known locations of *Babingtonia behrii*

### Ecology

In the NT, this species is restricted to a single location on the southern side of Mt Zeil (White et al. 2000). Mt Zeil has a different geology and corresponding different flora to other high peaks in the West MacDonnell

Ranges and is geographically isolated from them. The habitat that *Babingtonia behrii* occupies on Mt Zeil is extremely limited and not replicated in central Australia. Consequently *B. behrii* is unlikely to be found elsewhere in central Australia. Adults of this species are known to resprout from the base following fire. In other parts of its range, this species is often found on sand rises and dunes and is therefore associated with low nutrient soils.

### Conservation assessment

*Babingtonia behrii* is classified in the NT as **Vulnerable** (under criteria D1 + D2) based on:

- its extremely small NT population size;
- small area of occupancy (< 20 km<sup>2</sup>), restriction to a single location; and
- under threat from climate change.

### Threatening processes

There are no known extant threats to this species. However, given its small size and restricted distribution, the NT population of *B. behrii* may be vulnerable to the effects of stochastic processes such as disease. This habitat has a narrow climatic envelope that is likely to be vulnerable to climate change impacts, given current predictions.

### Conservation objectives and management

The size of the NT population should be quantified and mapped. Monitoring of fire occurrence and adult, sub-adult and seedling responses would provide valuable information. Similarly, current rates of seedling recruitment and adult mortality in response to varying climate parameters should be quantified.

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### References

- 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, P.G., Heslewood, M.M. & Quinn C.J. (2007), Re- evaluation of the genus *Babingtonia* (Myrtaceae) in eastern Australia and New Caledonia. *Australian Systematic Botany* 20(4) 302–318