

# Threatened species of the Northern Territory

## *Elaeocarpus miegei*

### Conservation status

#### Australia: Not listed

Environment Protection and Biodiversity Conservation Act 1999

#### Northern Territory: Critically Endangered

Territory Parks and Wildlife Conservation Act 1976

### Description

*Elaeocarpus miegei* is a tall tree, to 35 m and is occasionally reported to have buttresses. In Papua New Guinea, it is reported to be a variable species<sup>1</sup>.

It is distinguished from *Elaeocarpus arnhemicus* by longer petals (3 – 3.5 mm in *E. arnhemicus* and 5 mm long in *E. miegei*), and leaf shape (elliptic acute and usually acuminate in *E. arnhemicus*, obovate and obtuse in *E. miegei*).

Fruiting: November.

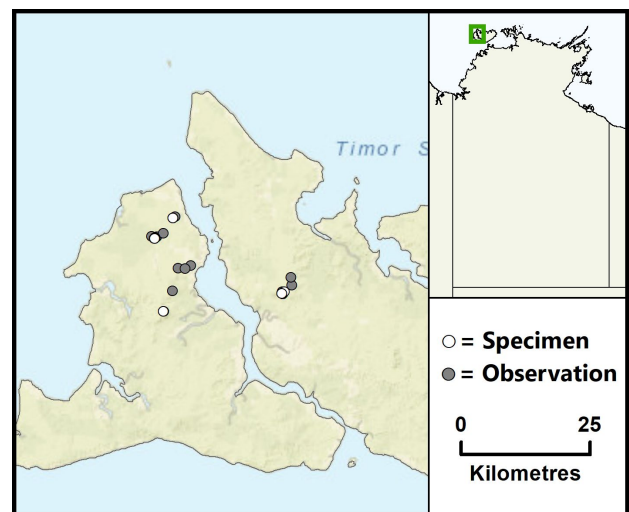
### Distribution

The only Australian occurrences of this tall rainforest tree are on the Tiwi Islands. Beyond Australia, it is also known from New Guinea, Malesia and the Solomon Islands. On the Tiwi Islands, it has been recorded from 11 wet rainforest patches.

NT conservation reserves where reported: None.



Credit: I.D.Cowie



Caption: Known locations of *Elaeocarpus miegei* in the NT ([nrmmaps.nt.gov.au](http://nrmmaps.nt.gov.au))

## Ecology

This species grows in permanently moist soils in wet, spring-fed rainforest patches.

## Threatening processes

Potential threats include cyclonic events, and feral animal activity (which may affect recruitment) may detrimentally affect this species. Excessive water extraction from the aquifers which supply water to its spring fed rain forest habitat can lead to a drying of these patches. Once ground water levels are reduced, the margins of these small forest patches are especially susceptible to invasion by introduced grassy weeds and the effects of intensified fire regimes. Land development for horticulture<sup>2,3</sup> would increase demand for ground water for irrigation, potentially affecting rainforest patches.

## Conservation objectives and management

A Recovery Plan for the threatened plant species of the Tiwi Islands was released in 2007 and many actions have been implemented<sup>4,5</sup>.

Further research into the status and extent of the population is required. A monitoring program should be established.

## References

<sup>1</sup> Coode, M.J.E. 1981. Elaeocarpaceae. In Handbooks of the Flora of Papua New Guinea: Volume II. (ed. E.E. Henty.) (Melbourne University Press, Melbourne.)

<sup>2</sup> Department of Land Resource Management 2015a. Tiwi Island Economic Development - Bio-Physical Resources of North East Bathurst Island (Summary Report). Technical Report Number 12/2014/D Department of Land Resource Management, Darwin, Northern Territory.

<sup>3</sup> Department of Land Resource Management 2015b. Tiwi Island Economic Development - Bio-Physical Resources of North East Bathurst Island (Technical Report). Technical Report Number 12/2014/D Department of Land Resource Management, Darwin, Northern Territory.

<sup>4</sup> Little D.T. and Elliott L.P. 2008. Tiwi Island threatened plants 2006 to 2008: field survey, population monitoring including establishment of a program to investigate the impact of pigs, and weed control. Report to Natural Resource Management Board (NT), NHT Project 2005/142,

Northern Territory Government Department of Natural Resources, Environment, The Arts and Sport, Palmerston.

<sup>5</sup> Woinarski, J., Brennan, K., Cowie, I., Kerrigan, R., and Hempel, C. 2003. *Biodiversity conservation on the Tiwi islands, Northern Territory. Part 1.*