

Threatened Species of the Northern Territory

Cephalomanes obscurum

Conservation status

Australia: Not listed

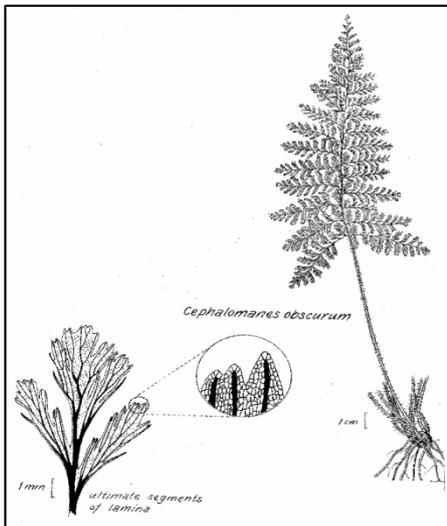
Northern Territory: Endangered



Photo: J. Risler

Description

Cephalomanes obscurum is a terrestrial fern, erect to 20 cm tall. The leaf blade is 3-pinnate to 3-pinnate-pinnatifid, 5-15 cm long, 2-9 cm wide. Clusters of spores (sori) are erect, borne on short lobes in the axils of tertiary segments.



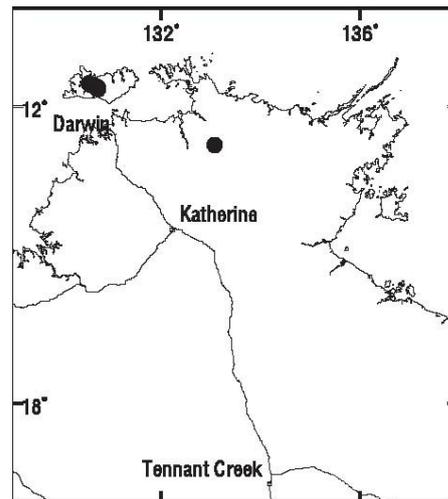
Frond and pinnae of *Cephalomanes obscurum*. (Illustrations M. Osterkamp Madsen)

Distribution

This species occurs from north-eastern Queensland to north-eastern NSW. It also occurs in Sri Lanka, southern India to Taiwan, Malesia, Solomon Island and possibly Vanuatu. In the NT, it has been collected from Tarracumbie Falls on Melville Island, and Magela Creek in Arnhem Land (Short *et al.* 2003).

Conservation reserves where reported:

None.



Known locations of *Cephalomanes obscurum*.

Ecology

Across its broad range, this species grows in damp gullies, along creek banks or under rock ledges, in tropical and subtropical rainforest, and in the splash zones of permanent waterfalls.

It has been recorded as a common coloniser, growing in dense patches, with young plants (sporelings) appearing in disturbed sites.

Conservation assessment

This taxon qualifies for **Endangered** (under criteria D) based on the number of mature individuals in the total population estimated to be <250.

The Magela Creek population, collected in 1984, consisted of four individuals. The Tarracumbie population, first collected in 1975 and last collected in 2000, consists of approximately 100 individuals. A possible second population nearby on Melville Island has not been recollected since 1994. No further populations have been located, despite substantial survey effort on the Tiwi Islands in the last 3-4 years (Woinarski *et al.* 2003).

Threatening processes

With a small population size this species is susceptible to stochastic events. Changes to hydrology and infestation from exotic weeds have the potential to threaten known populations but at present they are not imminent threats.

Conservation objectives and management

A Recovery Plan for this species, and other threatened plants on the Tiwi Islands, is due to be released in 2007, but many actions in its draft are currently being implemented.

Further survey is required to monitor the known populations and to search for others.

Compiled by

Raelee Kerrigan
Ian Cowie
[April 2006]

References

- Bostock, P.D., and Spokes, M.T. (1998). Hymenophyllaceae. *Flora of Australia* **48**, 116-147. (ABRS, Canberra.)
- Liddle, D.T., Russell-Smith, J., Brock, J., Leach, G.J., and Connors, G.T. (1994) *Atlas of the vascular rainforest plants of the Northern Territory*. Flora of Australia Supplementary Series No. 3, (ABRS, Canberra.)

Short, P., Dixon, D., and Osterkamp Madsen, M. (2003). A review of ferns and fern allies of the Northern Territory. *The Beagle* **19**, 7-80.

Woinarski, J., Brennan, K., Cowie, I., Kerrigan, R., and Hempel, C. (2003). *Biodiversity conservation on the Tiwi islands, Northern Territory. Part 1. Plants and environments*. 144 pp. (Department of Infrastructure Planning and Environment, Darwin.)