

Threatened Species of the Northern Territory

Gleichenia sp. Victoria River

Conservation status

Australia: Not listed

Northern Territory: Vulnerable



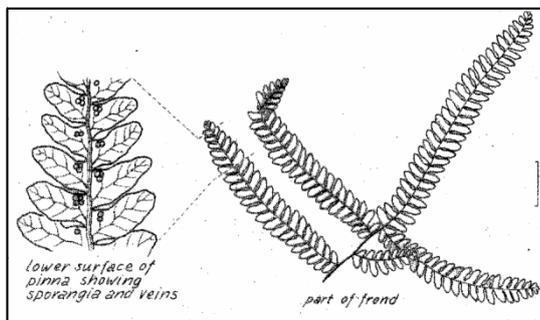
Photo: K. Brennan

Description

This undescribed taxon is a pendulous or erect fern to 50 cm. The leaves (fronds) of 1-3 tiers of branches, are 9- 200 cm long. The leaf stalk (stipe) is 10-55 cm long. The pinnules are oblong to triangular 1-2.5 mm long, 1-2 mm wide. The spores are in clusters (sori) of 2-4 sporangia.

This taxon is very similar to *Gleichenia dicarpa* (known in the NT only from Twin Falls) and is distinguished by having larger ultimate frond segments and in the number of sporangia per sorus (Short *et al.* 2003).

Fertile plant: May.

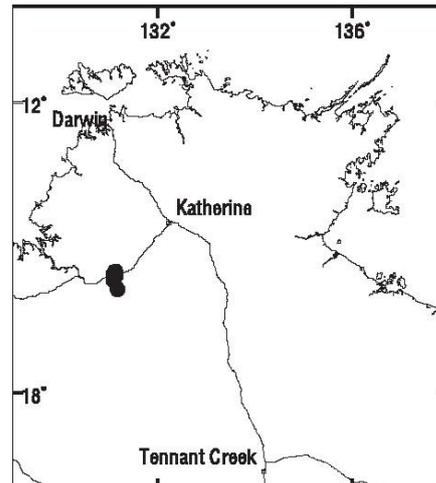


Fronds and pinnae of *Gleichenia sp.* Victoria River. (Illustrations M. Osterkamp Madsen)

Distribution

This taxon is apparently endemic to the NT. It has been recorded only from the Victoria River Gorge.

Conservation reserves where reported:
Gregory National Park.



Known locations of *Gleichenia sp.* Victoria River.

Ecology

This species is found growing in seepage areas at the base of sandstone scarps or rock overhangs (Chinnock and Bell 1998). One collection was reported as regrowing after fire damage.

Conservation assessment

Until recent records, this taxon was known only from a collection by Ferdinand Mueller from the upper Victoria River during the 1855-56 North Australian Expedition (Short *et al.* 2003).

Substantial survey in Gregory National Park yielded only four small populations of this taxon, however, extensive areas of potential habitat remain unsurveyed. Under the precautionary principle, this taxon qualifies as **Vulnerable** (under criteria D1+2) based on:

- a population size estimated to be <1000 individuals; and
- a restricted area of occupancy estimated to be <20 km².

At present all known populations are found in a conservation reserve.

Threatening processes

This species is susceptible to stochastic events. Rock slides and changes to hydrology are a potential threat.

Conservation objectives and management

Research and further survey is required to establish the status of this population and the extent of its distribution. A monitoring program should be established for at least one population.

Complied by

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References

- Chinnock, R.J., and Bell, G.H. (1998).
Gleicheniaceae. *Flora of Australia* **48**, 148-161.
- Short, P., Dixon, D., and Osterkamp Madsen, M.
(2003) A review of the ferns and fern allies of the Northern Territory. *The Beagle* **19**, 7-80.