

# Threatened Species of the Northern Territory

## Sticherus flabellatus var. compactus

### Conservation status

Australia: Not listed

Northern Territory: Vulnerable

### Description

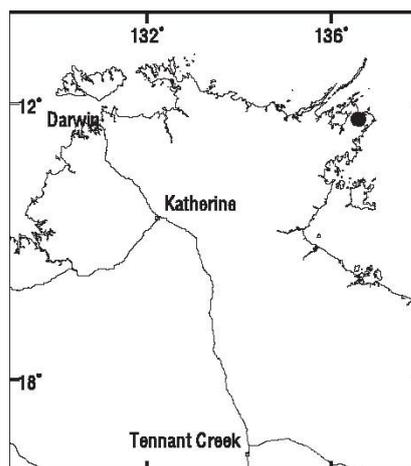
*S. flabellatus* var. *compactus* is a terrestrial fern. The plant base is 2-7 mm diameter. Fronds are of 1-3 tiers of opposite primary branches that in turn are divided 2-3 times. The stipe is 7-96 cm long. The ultimate segments are linear, toothed along margins, 6-15 mm long. The spore clusters (sporangia) are 2-3 mm in diameter, located half way between the margin and midrib. It can be confused with *Dicranopteris*.

### Distribution

*Sticherus flabellatus* is known from two varieties: var. *flabellatus* occurs in New Guinea, New Zealand, New Caledonia and the east coast of Australia; and var. *compactus* is known only from northeastern Queensland and the NT (Short *et al.* 2003). In the Northern Territory, it is known from only one locality in northeastern Arnhem Land. *Conservation reserves where reported:* None.

### Ecology

For the NT, it is known from "sandstone cliffs in riparian vine forests" (Short *et al.* 2003). Elsewhere, the species has been reported from along creeks and rivers on damp banks, river flats or among, or on, rocks and boulders in wet places (Chinnock and Bell 1998). It frequently forms dense colonies.



Known locations of *Sticherus flabellatus* var. *compactus*.

### Conservation assessment

Relatively little is known about the abundance and distribution of this fern and it could readily be considered data deficient. In the field there may be some confusion with *Dicranopteris*. However, monsoon rainforests have been relatively well surveyed (Russell-Smith 1991; Liddle *et al.* 1994) and the taxon is sufficiently distinct to have been identified during these surveys.

Using the precautionary principle and given the knowledge we have to date, this taxon satisfies a classification of **Vulnerable** (under criteria D1+2) based on:

- an estimated population size of <1000 individuals; and
- a restricted area of occupancy estimated to be <20km<sup>2</sup>.

### **Threatening processes**

With a small population, this species is susceptible to stochastic events such as destruction of forest canopy from cyclonic events. Changes to hydrology and infestation from exotic weeds have the potential to threaten the known populations but at present they are not imminent threats.

### **Conservation objectives and management**

Further research is required to monitor the known populations, to search for others, and to assess the impacts of possible threatening factors.

### **Compiled by**

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### **References**

- Chinnock, R.J., and Bell, G.H. (1998)  
Gleicheniaceae. *Flora of Australia* **48**, 148-162.
- 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. (Australian Biological Resources Study, Canberra.)
- Russell-Smith, J. (1991). Classification, species richness, and environmental relations of monsoon rain forest in northern Australia. *Journal of Vegetation Science* **2**, 259-278.
- 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.