

# Threatened Species of the Northern Territory

## VENUS-HAIR FERN

### *Adiantum capillus-veneris*

#### Conservation status

Australia: Not listed

Northern Territory: Vulnerable



Photo: Martin Armstrong

#### Description

This species is a rock-dwelling fern. Its fronds/leaves are tufted, to 36 cm long. The delicate and membranous leaf blade is 2-3-pinnate, triangular 5-20 cm long x 4-15 cm wide. There are 1-10 spore clusters (sori) along margins.

#### Distribution

The Venus-hair fern occurs in all Australian states and territories except Tasmania and the ACT, but is nowhere common (Bostock 1998). It also occurs overseas. In the NT, it has a disjunct distribution occurring at Jasper Gorge (where last collected in 1974) and Mount Wilson Creek in or near Gregory National Park and at one location (Hugh Gorge) in the West MacDonnell Ranges (Short *et al.* 2003).

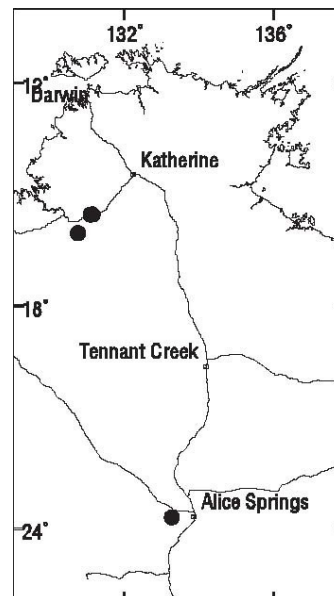
#### Conservation reserves where reported:

Gregory National Park, West MacDonnell National Park.

#### Ecology

In Australia, this species usually grows on limestone or sandstone rock, or on alkaline soils. At the Chewings Range (Hugh Gorge), it

grows in quartzite rock crevices in deep sheltered gorges where the root zone is fed by permanent streams or seepage (White *et al.* 2000).



#### Conservation assessment

With fewer than 50 individuals known from the West MacDonnell locality and no indication of abundance in the Jasper Gorge locality, the population size and distribution of this species is difficult to estimate. The precautionary principle and consideration of

the survey effort in likely habitat were taken into account in estimating these parameters. In the NT, this species qualifies as **Vulnerable** (under criteria D1+2), based on:

- its highly restricted distribution, with an estimated area of occupancy of <20 km<sup>2</sup>; and
- a small population size of <1000 individuals.

### **Threatening processes**

The populations are probably secure in the short term (barring unforeseen events such as the cessation of spring waters or disease). In the longer term, populations may be threatened by global climate change.

### **Conservation objectives and management**

The NT distribution of this species is not necessarily relictual and it could conceivably be a vagrant that has 'recently' dispersed to these locations via wind blown spore. The populations are probably secure in the short term. Searches are recommended to attempt to re-locate the Jasper Gorge population, and to monitor all populations.

### **Compiled by**

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### **References**

- Bostock, P.D. (1998). Adiantaceae. *Flora of Australia* 48, 248-286.
- 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.
- 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.)