

Davallia tasmanii subsp. cristata

COMMON NAME

Puketi hare'sfoot fern

SYNONYMS

None

FAMILY

Davalliaceae

AUTHORITY

Davallia tasmanii subsp. *cristata* von Konrat, Braggins et de Lange

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

DAVTSC

CHROMOSOME NUMBER

2n = c.79, 76-80

CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Critical | Qualifiers: OL, RF, RR, St

PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Critical | Qualifiers: CD, OL, RF, RR, St

2009 | Threatened – Nationally Critical | Qualifiers: CD, St, RF, OL, RR

2004 | Threatened – Nationally Critical

DISTRIBUTION

Endemic. New Zealand: North Island (Puketi Forest).

HABITAT

In open sites on the margin of a cliff face where it grows within kauri forest on leaf litter and also as a low epiphyte.

DETAILED DESCRIPTION

Usually terrestrial, creeping fern with long, widely creeping, branched rhizomes. **Rhizomes** 2–8 mm diam., rooting at intervals, initially densely covered in scales, these shedding with age. **Rhizome scales** on new growth, up to 10 × 2 mm, peltate, triangular-ovate, tapering to apex, pale orange-brown to yellow-brown, toothed from base to apex, with multiseptate hairs restricted to apex. **Stipe** black, stout, rather wiry, 20–180 mm long, glabrous except for scales at base. **Frond** 24–280 × 29–290 mm, deltoid-pentangular, tripinnate then pinnatifid, coriaceous, glabrescent, yellow-green to bright green. **Lowest primary pinnae** longer and broader than others; the basal basiscopic secondary pinnae 6–81 × 3–61 mm. **Larger ultimate sterile segments** incised, lobed or toothed; false veins frequent, conspicuous, extending almost to junction of true veins. **Larger ultimate fertile segments** truncate, bearing 1–(3) sori. **Indusia** 1.5 × 1.2 mm. **Spores** malformed, sterile.



Local on cliff, Puketi Northland. Photographer: Marley Ford, Date taken: 31/05/2023, Licence: CC BY-NC.



Local on cliff, Puketi Northland. Photographer: Marley Ford, Date taken: 31/05/2023, Licence: CC BY-NC.

SIMILAR TAXA

Separated from *D. tasmanii* Field subsp. *tasmanii* by the apices of the mature rhizome scales bearing multiseptate hairs, by the frequent presence of conspicuous false veins, and by the truncate, fertile frond segments usually bearing only one sorus. This subspecies is apparently completely sterile, and may be represented in the wild by only a single clone.

LIFE CYCLE

Spores are sterile.

PROPAGATION TECHNIQUE

Difficult. Can be grown in a well drained medium such as bark within a pot or tray. Very slow growing, prefers dappled light.

THREATS

Known from a single site on a forested cliff face within a reserved area. The population is small and vulnerable to trampling by people and feral animals. The fern is considered so highly threatened because it occupies such a small area, and the wild population may comprise only a single sterile clone.

ETYMOLOGY

davallia: Named after Edmond Davall, 18th century English-born Swiss botanist

tasmanii: Named after Abel Janzoon Tasman (1603-1659) who in the 17th century was the first European to sight Van Dieman's land (now known as Tasmania)

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 1 October 2003. Description adapted from von Konrat et al. (1999).

REFERENCES AND FURTHER READING

von Konrat MJ, Braggins JE, de Lange PJ. 1999. *Davallia* (Pteridophyta) in New Zealand, including description of a new subspecies of *D. tasmanii*. *New Zealand Journal of Botany* 37(4): 579–593.
<https://doi.org/10.1080/0028825X.1999.9512655>.

NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Davallia tasmanii* subsp. *cristata* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

<https://www.nzpcn.org.nz/flora/species/davallia-tasmanii-subsp-cristata/> (Date website was queried)

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/davallia-tasmanii-subsp-cristata/>