

Davallia tasmanii subsp. tasmanii

COMMON NAMES

davallia, Three Kings davallia

SYNONYMS

Davallia tasmanii Cheeseman - a heterotypic later homonym

FAMILY

Davalliaceae

AUTHORITY

Davallia tasmanii Field subsp. *tasmanii*

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

DAVTST

CHROMOSOME NUMBER

2n = 80

CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: IE

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: IE

2009 | At Risk – Naturally Uncommon | Qualifiers: IE

2004 | Range Restricted

DISTRIBUTION

Endemic. Manawatāwhi / Three Kings Islands. Present on Oromaki / North East Island, Manawatāwhi / Great Island, Moekawa / South West Island, Ōhau / West Island and also Arbutus Rock and Hinemoa Rock in the Princes Islands.

HABITAT

Mainly terrestrial but also present as a low epiphyte and also on fallen logs and branches. In full sun of heavy shade.

DETAILED DESCRIPTION

Terrestrial or low epiphytic, creeping fern with long, widely creeping, branched rhizomes. **Rhizomes** 2–8 mm diameter, rooting at intervals, initially densely covered in scales, these shedding with age. **Rhizome scales** on new growth, up to 12.5 × 2.2 mm, peltate, triangular-ovate, tapering to apex, pale orange-brown to yellow-brown, toothed from base to apex, bearing multiseptate hairs along margins from base to apex. **Stipe** black, stout, rather wiry, 62–210 mm long, glabrous except for scales at base. **Fron**d 51–210 × 61–280 mm, deltoid-pentangular, tripinnate then pinnatifid, coriaceous, glabrescent, dark green, green to yellow-green. **Lowest primary pinnae** longer and broader than others; the basal basisopic secondary pinnae 22–84 × 11–48 mm. **Larger ultimate sterile segments** incised, lobed or toothed; false veins scarce, if present inconspicuous, extending only half way to the junction of the true veins. **Larger ultimate fertile segments** notched, bearing 1–(2) sori. **Indusia** to 3 × 1.8 mm. **Spores** viable.



Great Island. Photographer: Peter J. de Lange, Licence: CC BY-NC.



Great Island. Photographer: Peter J. de Lange, Licence: CC BY-NC.

SIMILAR TAXA

Davallia tasmanii subsp. *crystata* von Konrat, Braggins et de Lange is very similar. This subspecies is endemic to Puketi Forest, Northland, North Island, and differs by the frequent rather than infrequent presence of conspicuous false veins which usually rather than rarely extend to the junction of the true veins, the usual presence of one rather than several sori per segment; by the truncate rather than notched fertile laminal segment; and by the restriction of multiseptate hairs in mature rhizome to the scale apex rather than their presence from the scale base to the apex. *Davallia tasmanii* subsp. *crystata* is unusual in that it appears to be completely sterile.

PROPAGATION TECHNIQUE

Can be grown from spores (rather slow) and rooted pieces. Rhizome cuttings strike easily enough though they can be slow to take. Resents root disturbance, so once established it is better left alone. Easy in a pot, and does very well even when root bound. Prefers a sunny situation in a well drained potting medium (bark is ideal). Will grow in a garden provided it is kept free from competing plants. Frost tender.

THREATS

A narrow range endemic abundant within its only known habitats.

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)

CULTIVATION

Occasionally available from mainline and specialist native plant nurseries.

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.

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Thorsen MJ, Dickinson KJM, Seddon PJ. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285–309. <https://doi.org/10.1016/j.ppees.2009.06.001>.

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

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

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