

# Doodia milnei

## SYNONYMS

*Doodia milnei* var. *milnei* ((Carruth.) Baker; *Doodia connexa* sensu Hook.f.; *Doodia caudata* var. *milnei* (Carruth.) Domin; *Doodia media* var. *milnei* (Carruth.) Baker in Hook. et Baker; *Blechnum kermadecense* Perrie et Brownsey

## FAMILY

Blechnaceae

## AUTHORITY

*Doodia milnei* Carruth

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Ferns

## NVS CODE

DOOMIL

## CHROMOSOME NUMBER

2n = c.160

## CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: IE, RR

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: IE, RR

2009 | At Risk – Naturally Uncommon | Qualifiers: OL IE

2004 | Range Restricted

## DISTRIBUTION

Endemic. Kermadec Islands (Raoul and Macauley Island).

## HABITAT

Coastal, usually associated with Kermadec pohutukawa (*Metrosideros kermadecensis*)-dominated forest where it grows amongst rocks, on cliff faces and within leaf litter. It also has been recorded from Macauley Island (southern Kermadec Islands group) where it grows under sparse Kermadec ngaio (*Myoporum rapense* subsp. *kermadecense*).

## DETAILED DESCRIPTION

Bright green to green fern. Fertile and sterile fronds similar. **Rhizomes** erect (sometimes forming a small caudex up to 100 mm tall). **Stipes** 150–200 mm long; stipes and rachises bearing sparse brown scales, sparsely hairy, glabrescent to glabrous. **Fron**d laminae elliptic to narrowly elliptic, pinnate, 120–600 × 100–200 mm, slightly coriaceous to firmly fleshy, slightly scaly, emergent fronds green (never pink or pink tinged). **Pinnae** in 20–46 pairs, the lower ones stalked or partially adnate, the middle and upper adnate; terminal pinna 15–60 mm long (somewhat less than 1/3 total frond length); longest pinnae 50–180 × 3–18 mm. **Indusia** linear.



February in cultivation. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Raoul Island. May 2009. Photographer: Peter J. de Lange, Licence: CC BY-NC.

## SIMILAR TAXA

Superficially similar to *Doodia australis* with which it is sympatric in the Kermadec Islands. From that species *D. milnei* differs by its uniformly green to bright green, longer and wider fronds. The young expanding fronds are always green, never tinged pink or completely pink as is typical of *D. australis*, the stipes and frond laminae are very sparsely hairy or more usually glabrous, while the pinnae may be up to 180 mm long (100 mm in *D. australis*). *Doodia milnei* is endemic to the Kermadec islands group.

## FLOWERING

Not applicable—spore producing

## FLOWER COLOURS

No flowers

## FRUITING

Not applicable—spore producing

## PROPAGATION TECHNIQUE

Easily grown in most soils and fresh spores germinate well. However, it is cold intolerant, and prefers a sunny situation in a free draining, dry soil. It does not like excessive moisture. An excellent pot plant.

## THREATS

Not Threatened. On Raoul this is a very common fern of the drier Kermadec pohutukawa-dominated forest. Its exact status on Macauley Island rests on inadequate gatherings made in 1989. Either way it is listed as Naturally Uncommon only because it is a naturally range restricted island endemic.

## ETYMOLOGY

**doodia**: Named for Samuel Doody, 17th century London apothecary and curator

## TAXONOMIC NOTES

Perrie et al. (2014) advocated for a broadened circumscription of Blechnaceae whereby a number of genera traditionally recognised as distinct from *Blechnum* were merged within it. However, this view has not met with universal acceptance (see Gasper et al. 2016) and does not seem to be followed worldwide (PPG 2016). From a New Zealand perspective the decision to merge *Doodia* in *Blechnum*, and rejection of *Diploblechnum* has not been universally accepted either e.g., Wilcox & Warden (2017), and as such it is considered appropriate to follow world opinion and accept the taxonomy of Gasper et al. (2016) and recommendations of the PPG (2016).

## ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (2 February 2005). Description adapted from Parris (1973) and Brownsey & Smith-Dodsworth (2000)

## REFERENCES AND FURTHER READING

Brownsey PJ, Smith-Dodsworth JC. 2000. New Zealand Ferns and Allied Plants. David Bateman, Auckland, NZ. 168 p.

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Wilcox M, Warden J. 2017. Botany of Hillsborough coast bush reserves, Manukau Harbour, Auckland. *Auckland Botanical Society Journal* 72: 32–46.

## NZPCN FACT SHEET CITATION

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<https://www.nzpcn.org.nz/flora/species/doodia-milnei/>