

Doodia mollis

COMMON NAME

mokimoki, mukimuki

SYNONYMS

Doodia caudata sensu Allan (1961), *Doodia caudata* sensu A.Rich.; *Doodia media* var. *caudata* G.M.Thomson; *Blechnum molle* (Parris) Christenh.

FAMILY

Blechnaceae

AUTHORITY

Doodia mollis Parris

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

DOOMOL

CHROMOSOME NUMBER

$2n = c.192$

CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: DP, Sp

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: Sp

2009 | At Risk – Naturally Uncommon

2004 | Sparse

DISTRIBUTION

Endemic. New Zealand: Kermadec Islands (Macaulay Island), North Island from Awanui south to the Hamilton Basin, Hauraki Plains, coastal portion of the Bay of Plenty and from Hawke's Bay, and southern Wairarapa.

HABITAT

Usually found in coastal to lowland forest, often along river margins or in alluvial forest, especially in damp sites or in deep highly fertile forest soils (especially overlying basalt, andesite or alluvium). Occasionally found under light scrub on damp clay banks. This species has also been gathered from the margins of drains running through alluvial forest. Often found in association with *Doodia australis*, with which it forms sterile hybrids known as *D. ×digena* Parris. More rarely found sympatric with *D. squarrosa*, with which it may also hybridise.



Kitekite Falls (February). Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Kitekite Falls (February). Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DETAILED DESCRIPTION

Small, tufted fern. **Rhizomes** erect. **Stipes** 30–150 mm long, clad in pale brown scales; rachises finely hairy. **Frond** faintly, sweetly scented when crushed. Sterile fronds spreading to prostrate with short, broad pinnae. Fertile fronds erect with longer narrower pinnae. Frond laminae narrowly elliptic to linear, pinnate, pinnules usually basally and broadly lobed, 80–260 × 15–50 mm, firmly fleshy, hairy or glabrous, pink or pinkish-green when young, maturing pale yellow-green to green. **Pinnae** in 10–20 pairs, the lower and middle ones stalked, the upper adnate. Terminal pinna 7–25 mm long (usually less than $\frac{1}{8}$ of the total frond length). Longest pinnae 8–30 × 2–3 mm. **Sori** usually running together at maturity. **Indusia** linear, occasionally hairy.

SIMILAR TAXA

Superficially similar to *Doodia squarrosa* to which it seems to be closely related. For example both species have markedly dimorphic fronds, i.e., the sterile fronds have broader pinnules and are usually spreading and prostrate while the fertile fronds have narrower, linear pinnules and are held erect. However, *D. squarrosa* is usually much larger, it also tends to grow in drier and more exposed conditions, such as on basalt lava fields, scoria cones, and in the flood zone of creeks, streams and rivers. The terminal pinna of *D. squarrosa* is rather longer than in *D. mollis* (up to about half the total length of the frond) and the rachis is distinctly scaly rather than hairy as in *D. mollis*. Some apparently sterile, intermediate collections made from sites around Awanui where both species are sympatric suggests that they may hybridise.

FLOWERING

Not applicable—spore producing

FLOWER COLOURS

No flowers

FRUITING

Not applicable—spore producing

PROPAGATION TECHNIQUE

Easily grown from fresh spores. An attractive fern that does well in dappled light on free draining, fertile but damp soil. Makes an excellent pot plant. Despite its apparently delicate nature it can be very drought tolerant.

THREATS

An apparently naturally uncommon, biologically sparse species. Although some populations have been lost through land development the species remains rather widespread, and can at times be locally common.

ETYMOLOGY

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

mollis: Soft

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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MORE INFORMATION

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