

# Austroblechnum norfolkianum

## SYNONYMS

*Lomaria norfolkiana* Heward, *Blechnum lanceolatum* var. *norfolkianum* (Heward) Laing, *Blechnum norfolkianum* (Heward) Maiden nom. superfl., nom. illeg., *Lomaria acuminata* Baker nom. illeg. non Desv. (1811), nec C.Presl. (1825), *Spicanta acuminata* (Baker) Kuntze, nom. illeg., *Blechnum acuminatum* (Baker) Maiden nom. illeg. non Fée (1852), nec Sturm (1853); *Lomaria attenuata* sensu Hook.f.; *Blechnum norfolkianum* (Heward) C.Chr.

## FAMILY

Blechnaceae

## AUTHORITY

*Austroblechnum norfolkianum* (Heward) Gasper et V.A.O.Dittrich

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

No

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Ferns

## NVS CODE

BLENOR

## CHROMOSOME NUMBER

2n = c.66

## CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: TO

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: TO

2009 | At Risk – Naturally Uncommon | Qualifiers: TO

2004 | Sparse

## DISTRIBUTION

Indigenous. Common on Raoul Island (Kermadec Island group) and Manawatāwhi / Three Kings Islands, otherwise uncommon and sparingly distributed on mainly offshore islands from the Cavallis south to Mayor Island / Tuhua. Known on the Chatham Islands from South East Island (Rangatira). Also on Norfolk Island where it is now seriously at risk of extinction.

## HABITAT

Strictly Coastal. This species is most frequently seen on the outer Hauraki Gulf offshore islands, and on the more remote Manawatāwhi / Three Kings Islands and Kermadec Islands. It favours shaded sites, usually in or near petrel colonies, or near penguin trails and nests.



Great Mercury Island. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Cultivated ex Great Mercury Island. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Tufted fern. **Rhizomes** stout, erect. Covered in old stipe ends. **Stipes** of sterile fronds 50–150 mm long, scaly at base. **Sterile laminae** narrowly elliptic, pinnate, 350–900 × 90–180 mm, dark green to bright green, never red-tinged. somewhat fleshy, upper surfaces shining, glabrous. **Sterile pinnae** in 35–60 pairs, longest at the middle, 50–90 × 8–18 mm, falcate and tapering to acute apices, gradually reducing to short flanges at base, margins finely toothed, bases adnate. **Fertile fronds** only slightly shorter than sterile.

## SIMILAR TAXA

Most often confused with *Austroblechnum lanceolatum*, from which it is most reliably distinguished by its dark green to bright green, somewhat fleshy fronds, which are never red or pink-tinged, by the distinctly sickle-shaped (falcate) pinnules and much shorter fertile fronds (these are usually half the length of the sterile fronds). In New Zealand *A. norfolkianum* is an offshore island species, usually found in or near petrel burrows in deeply shaded forest or in rocky sites within overhangs and damp recesses.

## FLOWERING

Not applicable—spore producing

## FLOWER COLOURS

No flowers

## FRUITING

Not applicable—spore producing

## PROPAGATION TECHNIQUE

Easy from fresh spores. Does best in a sheltered spot planted within free draining, fertile, moist soil. Responds well to frequent mulching with partially rotted leaf litter.

## THREATS

Not threatened in New Zealand, although close to extinction on Norfolk Island. In New Zealand it has a primarily northern offshore island distribution, and is by and large uncommon except on the Kermadec Islands and Manawatāwhi / Three Kings Islands.

## TAXONOMIC INFORMATION

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). See also the comments by Pyner (2017).

## ATTRIBUTION

Fact Sheet by P.J. de Lange 6 June 2005. Description from 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.
- Gasper AL, de Oliveira Dittrich VA, Smith AR, Salino A. 2016. A classification for Blechnaceae (Polypodiales: Polypodiopsida): New genera, resurrected names, and combinations. *Phytotaxa* 275: 191–227. <https://doi.org/10.11646/phytotaxa.275.3.1>.
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- PPG 1: The Pteridophyte Phylogeny Group 2016. A community-derived classification for extant lycophytes and ferns. *Journal of Systematics and Evolution* 54: 563–603. <https://doi.org/10.1111/jse.12229>.
- Pyner T. 2017. A new classification of *Blechnum*. British Pteridological Society. <https://ebps.org.uk/new-classification-blechnum/>. Accessed [INSERT DATE ACCESSED].
- 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/austroblechnum-norfolkianum/> (Date website was queried)

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