Austroblechnum lanceolatum

COMMON NAME

lance fern, nini, rereti

SYNONYMS

Blechnum lanceolatum (R. Br.) J. W. Sturm; Spicanta lanceolata (R.Br.) Kuntze; Stegania lanceolata R.Br.; Struthiopteris lanceolata (R.Br.) Ching; Lomaria doodioides Brack.; Lomaria lanceolata (R.Br.) Spreng.; Blechnum aggregatum Tindale; Blechnum doodioides (Brack.) Brownlie; Blechnum chambersii Tindale

FAMILY

Blechnaceae

AUTHORITY

Austroblechnum lanceolatum (R.Br.) Gasper et V.A.O.Dittrich

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

No

No

Ferns

NVS CODE

BLECHA

CHROMOSOME NUMBER

2n = 66

CURRENT CONSERVATION STATUS

2017 | Not Threatened | Qualifiers: SO

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

ENDEMIC GENUS ENDEMIC FAMILY STRUCTURAL CLASS





Wellington. Photographer: Jeremy R. Rolfe, Date taken: 25/07/1987, Licence: CC BY.



Young frond, Wellington. Photographer: Jeremy R. Rolfe, Licence: CC BY.

DISTRIBUTION

Indigenous. New Zealand: North Island, South Island, Stewart Island/Rakiura, Chatham Islands. Also Australia and some Pacific Islands

HABITAT

Coastal to montane. Usually inhabiting forested areas where it commony grows along shaded river and streams sides, or within the spray zone of waterfalls; or forms a dominant part of the ground cover in riparian forest. It also very common in coastal and lowland forest on shaded cliff faces. It becomes especially luxuriant in limestone country whereit is often a conspicuous fern of cave entrances and overhangs.

WETLAND PLANT INDICATOR STATUS RATING

FACU: Facultative Upland

Occasionally is a hydrophyte but usually occurs in uplands (non-wetlands).

DETAILED DESCRIPTION

Rhizome erect to suberect. **Fronds** dimorphic, 0.12–0.65 m long, 20–100 mm wide, emergent fronds green, often tinged pinkish, mature fronds dark green, often tinged maroon. **Stipe** 0.02–0.15 m long, stramineous, becoming purple-black towards base; scales linear-lanceolate, subulate, broadly based, entire, reddish-brown. **Lamina** narrowly linear-lanceolate, pinnate with 17–40 or more pairs of pinnae. **Rachis and costae** stramineous, often dark purplish towards base on undersurface, glabrous or with very sparse short acuminate red-brown scales. **Sterile pinnae** oblong, weakly falcate, obtuse or acuminate, $15-32 \times 5-10$ mm, adnate with broad bases; margins crenate to serrate; basal pinnae shorter, more obtuse. **Fertile pinnae** linear, $12.0-45.0 \times 1.0-2.5$ mm, reduced and often sterile towards lamina base.

SIMILAR TAXA

Austroblechnum lanceolatum and A. norfolkianum are a species pair that need further taxonomic investigation. Exact distinctions between these species are difficult. Chambers & Farrant (1998) suggest that this is due to hybridisim but the basis for that suggestion is not clear. Most field botanists distinguish these two species on the basis of distribution and ecology with A. norfolkianum known only from northern New Zealand where it is mostly found on offshore islands. In this area it is typically found on rodent-free, "sea bird" islands where it is a conspicuous member of the shaded forest floor of petrel colonies as well as the more usual shaded bank and cliff habitats. Austroblechnum norfolkianum usually has brighter green, succulent fronds without the darker pink or maroon pigmentation often seen in A. lanceolatum, and the pinna of A. norfolkianum are consistently falcate (those of A. lanceolatum less often so), while the fertile fronds of A. norfolkianum are said to be shorter than sterile ones (but this is not always the case). However, none of these characters can be consistently applied. On the Kermadec islands only A. norfolkianum is known. Austroblechnum lanceolatum is easily distinguished from A. membranaceum (with which it often grows) by its larger size and longer, narrower pinna.

FLOWERING

N.A.

FLOWER COLOURS

No flowers

FRUITING

N.A.

PROPAGATION TECHNIQUE

Easily grown from fresh spores. Prefers a deep, moist soil in shaded conditions. Responds well ot regular applications of lime.

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 (19 September 2012). Description adapted from Chambers & Farrant (1998)

REFERENCES AND FURTHER READING

Chambers TC, Farrant PA. 1998. Blechnaceae. <u>Flora of Australia 48, Ferns Gymnosperms and allied groups</u>: 359–384. ABRS/CSIRO Victoria, Australia.

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Perrie LR, Wilson RK, Shepherd LD, Ohlsen DJ, Batty EL, Brownsey PJ, Bayly MJ. 2014. Molecular phylogenetics and generic taxonomy of Blechnaceae ferns. *Taxon 63(4)*: 745–758. https://doi.org/10.12705/634.13.

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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. <u>Auckland</u> <u>Botanical Society Journal 72: 32–46</u>.

NZPCN FACT SHEET CITATION

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https://www.nzpcn.org.nz/flora/species/austroblechnum-lanceolatum/ (Date website was queried)

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/austroblechnum-lanceolatum/