

Parablechnum montanum

COMMON NAME

mountain kiokio, Dunedin-Cass blechnum

SYNONYMS

Lomaria procera var. tegmentosa Hombr.; Blechnum montanum
T.C.Chambers et P.A.Farrant

FAMILY

Blechnaceae

AUTHORITY

Parablechnum montanum (T.C. Chambers et P.A.Farrant) Gasper et Salino

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

BLEMON

CHROMOSOME NUMBER

2n = 56

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. North Island (from Mt Pirongia south), South Island, Chatham Islands, Antipodes Islands, Auckland Islands and Campbell Island/Motu Ihupuku.

WETLAND PLANT INDICATOR STATUS RATING

FACU: Facultative Upland

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



At Arthurs Pass. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Arthurs Pass. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DETAILED DESCRIPTION

Rhizome short creeping; scales to 12×3 mm, linear to lanceolate, acuminate, light reddish brown, sometimes tending to be slightly bicolorous with a somewhat darker central region, entire to finely toothed. **Fronds** dimorphic, erect, $100\text{--}600 \times 30\text{--}250$ mm, widest at or below the middle of the lamina; sterile and fertile fronds similar in length. **Stipes** $70\text{--}450$ mm (stipes of fertile fronds often longer than stipes of sterile fronds), slender, usually less than c. 3 mm diameter, pale brown or pinkish brown, darkening at base, sometimes darker and blotchy (especially fertile fronds); stipes scaly; scales variable in size, $2\text{--}8 \times 5\text{--}20$ mm, but mostly small, appressed, linear, ovate or cordate, pale brown, brown, reddish brown, or “black spot”, entire or toothed, sometimes branched at base. Lamina ovate to narrowly deltoid, mid or dark olive green and shiny at maturity, 1-pinnate, 3–20 pairs pinnae. **Rachis and costae** pale pinkish brown, brown, or reddish brown (often paler for sterile fronds); with moderately dense scales and irregular branched hairs; scales $1\text{--}10 \times 5\text{--}10$ mm, mostly inconspicuous, linear, branched or stellate, sometimes appressed; peltate “black spot” scales (especially conspicuous on costae) usually $2\text{--}3 \times c. 1$ mm, broadly lanceolate-ovate, with attenuate apices (twisted in dried specimens) and irregular marginal outgrowths, intermixed with pale linear (to 6 mm) and smaller pale dendritic scales. **Sterile pinnae** $25\text{--}140 \times 10\text{--}20$ mm, oblong to lanceolate, often falcate, apices acute to attenuate, usually acuminate and becoming increasingly acute towards the base of the lamina, truncate or rounded-cordate at rachis; shortly petiolate or sub-petiolate at base of lamina becoming basiscopically adnate and decurrent at apex; coriaceous; margins toothed and often markedly crenate; veins simple or once-furcate; small branched or stellate scales often extending on to surface of pinnae; basal pinnae as long as or slightly shorter than middle pinnae, rarely less than half their length, more deflexed, and with more obtuse to rounded apices, auricles and auriculate pinnae bases absent; terminal pinna more elongate. **Fertile pinnae** $40.0\text{--}160.0 \times 2.5\text{--}5.0$ mm, narrow, linear, acuminate, sessile or shortly petiolate at base of lamina, becoming basiscopically adnate and winged towards apex; sori covering underside other than apex; indusium brown, lacinate. **Spores** $42\text{--}60 \times 23\text{--}46$ μm .

SIMILAR TAXA

Parablechnum montanum is superficially similar to *P. novae-zelandiae* in growth habit. From *Parablechnum novae-zelandiae*, *P. montanum* is distinguished by the narrowly deltoid fronds, absence of auricles, and the pinnae tend to be falcate and upward-pointing. It is more easily confused with *P. procerum* with which it often grows.

Parablechnum montanum differs from *P. procerum* by bearing the characteristic “black-spot” scales on the abaxial costae, rachis, and stipe. The scales of *P. procerum* are mostly concolorous, shiny, dark reddish brown, rarely slightly bicolorous with paler margins (though never, ever furnished with a central “black spot”).

FLOWERING

Not applicable–spore producing

FLOWER COLOURS

No flowers

FRUITING

Not applicable–spore producing

PROPAGATION TECHNIQUE

Easily grown from fresh spores and whole plants. transplants well and flourishes in most conditions, though does best when plants in a shaded site and a permanently moist, rich soil. Dislikes humidity and drought but once established is remarkably tolerant.

ETYMOLOGY

montanum: From the Latin mons ‘mountain’, meaning growing on mountains

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

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (7 March 2012). Description adapted Chambers & Farrant (1998).

REFERENCES AND FURTHER READING

Chambers TC, Farrant PA. 1998. The *Blechnum procerum* ("capense") (Blechnaceae) complex in New Zealand. *New Zealand Journal of Botany* 36(1): 1-19. <https://doi.org/10.1080/0028825X.1998.9512544>.

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NZPCN FACT SHEET CITATION

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<https://www.nzpcn.org.nz/flora/species/parablechnum-montanum/> (Date website was queried)

MORE INFORMATION

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