

Pseudephebe minuscula

COMMON NAME

Coarse rockwool

SYNONYMS

Imbricaria lanata var. *minuscula* Nyl. ex Arnold

FAMILY

Parmeliaceae

AUTHORITY

Pseudephebe minuscula (Nyl. ex Arnold) Brodo & D.Hawksw.

FLORA CATEGORY

Lichen – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Fruticose

CURRENT CONSERVATION STATUS

2018 | At Risk – Naturally Uncommon | Qualifiers: SO, Sp

BRIEF DESCRIPTION

Characterised by the saxicolous habit; the prostrate, felted, mat-like, spreading thallus (3–10(–12) cm diam.), of loosely entangled, black, or brown-black, dichotomously to complexly branching, terete branches that are rarely flattened.

DISTRIBUTION

North Island: Gisborne (Mt Hikurangi), Hawke's Bay (Mt Kaweka), Wellington (Mt Ruapehu). **South Island:** Nelson (upper Cobb Valley, St Arnaud Range), Marlborough (Gordon Stream, Waihopai Pass), Canterbury (Craigieburn Range), East of the Main Divide to Otago (The Remarkables and Central Otago mountains). **Stewart Island:** (Mt Anglem). An arctic–alpine species known also from Europe, Scandinavia, the Arctic and North America.

HABITAT

On rock in fellfield debris and on rock outcrops, 900–2,200 m.

DETAILED DESCRIPTION

Thallus prostrate, straggling, forming mats, closely attached to substrate, often dying from centre and forming rosettes, to 12 cm broad, rarely exceeding 1 cm in height, branching frequent from base, isotomic-dichotomous, occasionally isotomic-trichotomous, branches often inter-woven, terete to slightly dorsiventrally compressed, to 0.2 mm diam., usually concolorous but sometimes paler at base, cervine brown, dark brown to black, shining or occasionally matt, the whole thallus with a very wiry texture. **Apothecia** occasional, lateral, thalline exciple concolorous with thallus, smooth, dentate to ciliate marginally, disc matt, greyish-black or brown, plane but becoming convex with age, to 5.5 mm diam. **Ascospores** 7–12 × 6–8 µm. **Pycnidia** occasional, on tubercles, particularly frequent near axils, black, to 0.4 mm diam. **Conidia** 5–7 × 1 µm.

Chemistry: TLC–, all reactions negative.



Local on subalpine flat scree fields in alpine, Mavora Southland. Photographer: Marley Ford, Date taken: 16/03/2023, Licence: CC BY.



Local on subalpine flat scree fields in alpine, Mavora Southland. Photographer: Marley Ford, Date taken: 16/03/2023, Licence: CC BY.

SIMILAR TAXA

Similar to *Gowardia nigricans* but darker black in colour and by the thallus not dying at the base.

SUBSTRATE

Saxicolous

Larger forms were previously referred to as *Pseudephebe pubescens* (L.) M.Choisy in New Zealand, but recent molecular study has shown *P. pubescens* is not present in New Zealand (Garrido-Benavent 2021).

ATTRIBUTION

Fact sheet prepared by Marley Ford (16 June 2023). Information in the Brief description, Distribution, Habitat, Features, and Similar taxa sections copied from Galloway (1985, 2007).

REFERENCES AND FURTHER READING

- Galloway D.J. 1985: *Flora of New Zealand: Lichens*. Wellington: PD Hasselberg, Government Printer. 662 pp.
- Galloway D.J. 2007: *Flora of New Zealand: Lichens, including lichen-forming and lichenicolous fungi*. 2nd edition. Lincoln, Manaaki Whenua Press. 2261 pp.
- Garrido-Benavent, I., Pérez-Ortega, S., de Los Ríos, A., Mayrhofer, H., & Fernández-Mendoza, F. 2021: Neogene speciation and Pleistocene expansion of the genus *Pseudephebe* (Parmeliaceae, lichenized fungi) involving multiple colonizations of Antarctica. *Molecular Phylogenetics and Evolution* 155: 107020.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/pseudephebe-minuscula/>