Leptogium aucklandicum

SYNONYMS

Leptogium azureum, sensu D.J.Galloway (1985)

FAMILY

Collemataceae

AUTHORITY

Leptogium aucklandicum Zahlbr.

FLORA CATEGORY

Lichen - Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

Nο

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Foliose

CURRENT CONSERVATION STATUS

2018 | Not Threatened

BRIEF DESCRIPTION

Characterised by the corticolous habit; the distinctive blue to blue-grey colour, the large, rather thin lobes with entire, undulate margins, the absence of isidia, and of tomentum on the lower surface.

DISTRIBUTION

North Island: Northland (Kaipara) to Wellington (Kaitoke). **South Island**: Marlborough (Onamalutu) to Southland (Dusky Sound, Riverton). **Stewart Island**: (Glory Cove). **Campbell Island**.

HABITAT

Rather rare, mainly in wetter western areas where it grows among mosses on trunks and branches of trees and shrubs, also rarely foliicolous, and on mossy rocks in grassland, both East and West of the Main Divide, s.l. to 1000 m.





Corticolous, Tuatapere Domain Southland. Photographer: Marley Ford, Date taken: 16/06/2022, Licence: CC BY.



Corticolous, Tuatapere Domain Southland. Photographer: Marley Ford, Date taken: 16/06/2022, Licence: CC BY.

DETAILED DESCRIPTION

Thallus submonophyllous to polyphyllous, dark grey-blue to distinctly bluish when wet, dark leaden grey or slategrey when dry, 2–10 cm diam., attached to substratum by scattered tufts of hairs, loosely attached, corticolous, muscicolous. **Lobes** rather papery, orbicular to elongate, apices rounded, 2–8(–15) mm broad, margins sinuous, entire to sublobulate. **Upper surface** smooth to somewhat roughened, never wrinkled–plicate, without isidia or phyllidia. **Lower surface** concolorous with upper surface, without tomentum. **Apothecia** common, often abundant, to widely scattered, or occasionally absent, sessile to shortly pedicellate, laminal, 0.2–1.0(–2) mm diam., disc concave to plane or subconvex, pale orange-brown to red-brown, matt, proper exciple rarely seen, **thalline exciple** entire, thin or with occasional small, microphylline outgrowths, concolorous with thallus or paler, often creamish white. **Epithecium** orange or yellow-brown, 12.5–15 μm thick. **Hymenium** colourless, 90–115 μm tall. **Hypothecium** opaque, pale brownish. **Ascospores** broadly ellipsoidal, apices distinctly pointed, submuriform, with 3–7 transverse septa and 1–3 longitudinal septa, not constricted at septa, (20–)25–27.5(–32.5) × 10–12.5(–15) μm [Zahlbruckner (1941) gives 20–24 × 5.5–7 μm].

SIMILAR TAXA

Verdon (1992) records "... Many past and recent determinations of *L. azureum* from south-eastern Australia and N.Z. are misdeterminations of *Collema subconveniens* (blue-grey form)...", and care is needed to distinguish this *Collema* from specimens of *L. aucklandicum*. Young apothecia of *C. subconveniens* are commonly clustered together in \pm erumpent groups, the thalline margins only slightly raised above the level of the thallus. The spores of *C. subconveniens* are longer, 20–40(–43) µm (and more noticeably apiculate at the apices), and also broader, 8–10.5(–15) µm, and are distinctively constricted at the transverse septa than are those of *L. aucklandicum*, and generally have mainly 2 and not 3 longitudinal septa for each transverse septum (Degelius 1974).

SUBSTRATE

Corticolous, muscicolous, rarely foliicolous

ATTRIBUTION

Fact sheet prepared by Marley Ford (5 August 2022). Brief description, Distribution, Habitat, and Features sections copied from Galloway (2007).

REFERENCES AND FURTHER READING

Degelius G. 1974: The lichen genus *Collema* with special reference to the extra-European species. *Symbolae Botanicae Upsalienses 20(2)*: 1–215.

Galloway D.J. 2007: Flora of New Zealand: Lichens, including lichen-forming and lichenicolous fungi. 2nd edition. Lincoln, Manaaki Whenua Press. 2261 pp.

Verdon D. 1992: Leptogium. Flora of Australia 54: 173-192.

Zahlbruckner A. 1941: Lichenes Novae Zealandiae a cl. H.H.Allan eisque collaboratoribus lecti. *Denkschriften der Akademie der Wissenschaften in Wien mathematisch-naturwissenschaftliche Klasse* 104: 249–380.

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/leptogium-aucklandicum/