

Leptogium oceanianum

SYNONYMS

Leptogium "denticulatum Nyl." sensu Galloway

FAMILY

Collembataceae

AUTHORITY

Leptogium oceanianum Kitaura & Marcelli.

FLORA CATEGORY

Lichen – Native

ENDEMIC TAXON

Indeterminate

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Foliose

CURRENT CONSERVATION STATUS

2018 | Not Threatened | Qualifiers: SO

BRIEF DESCRIPTION

Characterised by a slightly rugulose upper surface under 20x magnification and denticules on the margin of the lobes. The denticules may be simple when young or irregularly branched in the older parts. The thallus is thin, with 2-celled columnar hyphae, and both cortices have cells with thick walls that are covered by an amorphous cuticle-like layer. The cortices of *Leptogium oceanianum* are covered by amorphous cuticle-like layer, found in some species with thin thalli (e.g., *L. mastocheilum*). Apparently this species is normally collected sterile; according to Galloway's (1999) description, apothecia were not present in any of the specimens identified by him as *L. denticulatum*.

DISTRIBUTION

This species has been recently described from New Zealand (Kitaura *et al.* 2015), but probably is also found in Australia and surrounding parts of Oceania.

HABITAT

In New Zealand it is a common lowland species on trees in the upper North Island.



Corticolous on nikau, Hokianga Far North.
Photographer: Marley Ford, Date taken:
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Corticolous on nikau, Hokianga Far North.
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DETAILED DESCRIPTION

Thallus ca. 3 cm broad, dark bluish gray under fluorescent light (naked eye), opaque, matt to slightly glossy, pale gray under the stereomicroscope. **Lobes** up to 5.5 mm wide, irregularly agglomerated, attached in points, revolute to ascending, smooth to the naked eye, slightly rugulose under 20x magnification; apices rounded, revolute to ascending, smooth to ornamented; lateral margin usually with simple to branched denticules, ascending, undulated; lower side pale gray, smooth to the naked eye, smooth to rugulose under 20x magnification. **Denticules**, usually marginal on proximal region, flat, apices acute to irregular, simple to irregularly branched, 0.1–0.4 x 0.1–0.3 mm, without a constricted base. Isidia and lobules absent. Thallus attached by hapters, these evenly distributed, frequent; rhizines and hairs absent. **Apothecia** absent.

Thallus up to 30 mm thick, quadratic cells of the upper cortex, ca. 5.0 x 5.0–6.5 mm, with thick walls and covered by an amorphous layer, quadratic cells of the lower cortex ca. 5.0 x 5.0 mm, as thick as the upper cortex; columnar hyphae ca. 2.5 mm thick, erect to slightly inclined, 2-celled. **Cyanobacteria** green, cells spherical, 5.0 mm diam., their number in the filament not determined; gelatinous matrix scarce, hyaline.

SIMILAR TAXA

Similar to *Leptogium denticulatum*, but *L. oceanianum* has denticules on the margins of the lobes instead. *Leptogium mastocheilum*, another ornamented species from Oceania, has a thicker thallus (85–140 mm thick), with columnar hyphae up to 6 cells high and marginal lobules on the lobes.

SUBSTRATE

Corticolous, terricolous

ETYMOLOGY

oceanianum: The epithet refers to Oceania. The distribution of this species includes New Zealand and probably Australia and surrounding parts of Oceania.

Until recently this species was known as *L. denticulatum* in New Zealand.

ATTRIBUTION

Fact sheet prepared by Marley Ford (15 February 2022). Brief description, Distribution, Habitat, Features, and Similar taxa sections adapted from Kitaura *et al.* (2015).

REFERENCES AND FURTHER READING

Galloway D.J. 1999: Notes on the lichen genus *Leptogium* (Collemataceae, Ascomycota) in New Zealand. *Nova Hedwigia*: 317–355.

Kitaura M.J., Marcelli M.P., da Hora B.R., & Jungbluth P. 2015: *Leptogium denticulatum* (Collemataceae, lichenized Ascomycota) and some morphologically related species. *The Bryologist* 118(1): 11–21.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/leptogium-oceanianum/>