

Strigula novae-zelandiae

FAMILY

Strigulaceae

AUTHORITY

Strigula novae-zelandiae (Nag Raj) Sérus.

FLORA CATEGORY

Lichen – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Crustose

CURRENT CONSERVATION STATUS

2018 | At Risk – Naturally Uncommon | Qualifiers: SP, RR, Sp

BRIEF DESCRIPTION

Characterised by the foliicolous habit; the circular thalli with a crenulate to a deeply digitate margin; and numerous pycnidia producing polarilocular macroconidia.

DISTRIBUTION

North Island: Northland (Church Road Scenic Reserve near Kaitaia, Orewa), Auckland (Titirangi), South Auckland (Ravensthorpe near Bombay Hills).

HABITAT

On leaves of taraire (*Beilschmiedia taraire*), tawa (*B. tawa*) and tītoki (*Alectryon excelsus* subsp. *excelsus*).



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DETAILED DESCRIPTION

Thallus foliicolous, subcuticular, on surface of leaves, almost never at leaf margins or along leaf scars, forming circular colonies, 3–6 (–10) mm diam., abundant, pale-green to ash-green (white when moribund), glossy surface, smooth to subirregular, margin always rounded, 0.1–0.3 mm wide, sometimes deeply digitate, the marginal lobes giving thalli a typically crenulate appearance, 40–50 µm thick, without a prothallus. **Photobiont** *Cephaleuros* cells rectangular to rounded, 8–20 × 4–7 µm, yellowish green, arranged in rows. **Perithecia** rather sparsely developed, but numerous when present, slightly flattened; apex hemispherical to subconical, solitary or 2–3-together, typically arranged in a circle, immersed at first, later with more than half of outer surface exposed, black or greenish when still covered with thallus, smooth, glossy, 0.25–0.35(–0.4) mm diam., 0.2 mm tall; ostiole central. Involucrellum black, expanding laterally under thallus, 0.5–0.6 mm diam., 25–35 µm thick near ostiole. Exciple pale-brown, less than 10 µm thick. Centrum rather flattened, 300–340 × 100 µm. Paraphyses simple or sparingly branched, c. 1 µm thick. **Asci** obclavate, apex thickened with a small ocular chamber, 55–60 × 10–12 µm. **Ascospores** 8 per ascus, biserial in ascus, fusiform, ends acute becoming rounded, 1-septate, distal cell enlarged and somewhat swollen at maturity, not breaking into halves at septum, and without any terminal gelatinous appendages, 16–18(–22) × (3–)4.5–5 µm. **Pycnidia** producing abundant macroconidia, even on thalli with perithecia and sometimes overgrowing them, circular, 100–130 µm diam., solitary to aggregated in linear or irregular groups of 2–10, hemispherical, black, glossy with distinct, central ostiole; conidiogenous cells lining base of cavity cylindrical or slightly inflated at base; macroconidia abundant, sometimes protruding from pycnidium as a cylindrical, whitish cirrus, subapically produced, subcylindrical (ellipsoidal to bacillar) with rounded ends, proximal end with obconical, sublateral appendage, distal end with cap- or fan-shaped gelatinous appendage, 1-septate, septum thickened (1–1.5 µm thick) with a central pore (polarilocular), 13–17 × 3–4.5 µm. Microconidia not seen.

SIMILAR TAXA

For similar taxa see *Strigula oleistrata*.

SUBSTRATE

Foliicolous

ETYMOLOGY

novae-zelandiae: Of New Zealand

ATTRIBUTION

Fact sheet prepared by Marley Ford (2 August 2021). Information in the Brief description, Distribution, Habitat, Features and Similar taxa sections copied from Galloway (2007).

REFERENCES AND FURTHER READING

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

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/strigula-novae-zelandiae/>