

Strigula delicata

FAMILY

Strigulaceae

AUTHORITY

Strigula delicata 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: RR, Sp

BRIEF DESCRIPTION

Characterised by the foliicolous habit; a thallus of dichotomously branched lobes forming an attractively patterned reticulum; hemispherical perithecia developing on tiny circular islands of thallus at lobe margins; ascospores with thick walls; and rather long macroconidia, $13\text{--}16 \times 3\text{--}3.5\ \mu\text{m}$. Two different growth forms occur: (1) with dichotomously branched, sparingly anastomosing lobes and a pale-green thallus; (2) with a more compact thallus forming an attractive reticulum of anastomosing lobes and an olive-brown thallus. Perithecia, asci, ascospores and conidia are identical in both forms, the observed differences in morphology being possibly the result of differing host leaf characteristics.

DISTRIBUTION

North Island: Northland (Herekino Gorge, Church Road Scenic Reserve near Kaitaia, Ngaiotonga Saddle), Wellington (Erua).

HABITAT

On leaves of *Beilschmiedia tawa*.



Campbells Beach, Omaha, Warkworth on taraire (*Beilschmiedia tarairi*) leaf, from a specimen collected by Peter de Lange. Photographer: Jeremy R. Rolfe, Date taken: 05/05/2015, Licence: CC BY.



Te Pahi, on taraire (*Beilschmiedia tarairi*), from a specimen collected by Peter de Lange. Photographer: Jeremy R. Rolfe, Date taken: 05/05/2015, Licence: CC BY.

DETAILED DESCRIPTION

Thallus foliicolous, subcuticular (along nerves, or at leaf margins or along tears or scars), ±circular 2–5 mm diam., abundant, pale-green or olive-brown (white when moribund), glossy, surface smooth, of dichotomously branching, narrow (0.1 mm wide) lobes, fusing laterally and forming a reticulum, margins with a discontinuous to continuous black, prothalline line and with numerous, small, elongate black papillae (×10 lens). **Photobiont** *Cephaleuros* with ± rectangular or rounded cells, 8–15 × 4–7 µm, yellow-green arranged in radiating rows. **Perithecia** abundant, typically at centre of small, circular (0.3–0.6 mm diam.) islands of thallus at or near lobe margins, solitary or 2–3-together, hemispherical, black, glossy, 0.20–0.25 mm diam., 0.10–0.18 mm tall, immersed in thallus to ⅓ of total height. Ostiole not apparent. Involucrellum heavily carbonised, outer wall black, 28–40 µm thick near ostiole, not or scarcely expanding laterally, outer wall absent under perithecial cavity, inner wall pale-brown, indistinct. Centrum 120–140 × 160–180 µm. **Paraphyses** branched and anastomosing, c. 1 µm thick. **Asci** clavate, 55–60 × 10–14 µm, with thickened apex containing a small ocular chamber. **Ascospores** 8 per ascus, biserial in ascus, ellipsoidal to fusiform, apices rounded, 1-septate, slightly constricted at septum, walls 0.7–1 µm thick, the proximal cell slightly longer, not breaking at septum and lacking gelatinous terminal appendages, 15–16(–18) × 4.5–5 µm. Pycnidia of two kinds: (1) flattened to hemispherical, 0.1 mm diam., solitary or 2–4-together, elongate, typically developed at margins of lobes producing **macroconidia**, oblong with rounded ends, 1-septate, not or slightly constricted at septum, 13–16 × 3–3.5 µm, with elongate, 3–5 µm long, gelatinous appendages at both or one end; (2) tiny black points at margins of thallus (or included in pycnidia with macroconidia) producing **microconidia**, ellipsoidal, ±deformed with rounded ends, 3 × 1 µm.

SUBSTRATE

Foliicolous

ATTRIBUTION

Fact sheet prepared by Marley Ford (19 January 2024). Brief description, Distribution, Habitat, Features and Similar taxa sections copied from Galloway (1985) & 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-delicata/>