

Sphaerophorus stereocauloides

SYNONYMS

Sphaerophorus nobilis, *Sphaerophorus robustum*, *Sphaerophorus tener* f. *stereocauloides*, *Thysanophoron pinkertonii*, *Thysanophoron stereocauloides*

FAMILY

Sphaerophoraceae

AUTHORITY

Sphaerophorus stereocauloides Nyl.

FLORA CATEGORY

Lichen – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Fruticose

CURRENT CONSERVATION STATUS

2018 | Not Threatened | Qualifiers: SO

BRIEF DESCRIPTION

A very distinctive species characterised by the corticolous, rarely saxicolous habit; its large (to 25 cm tall), handsome, coralloid thallus arising from a single, thick, rigid basal branch attached by a thick holdfast; the generally abundant, terminal globose apothecia; by the bundles of cephalodia; and the presence of sphaerophorin.

Sphaerophorus stereocauloides is one of the most beautiful lichens in New Zealand and is most commonly gathered from surface litter in areas of windthrow damage in beech forests, after dislodgement from canopy branches. In some cases the combined weight of moist, aggregated thalli is sufficient to cause even quite large branches supporting thalli to break. The cephalodia in this species are almost always indistinguishable from phyllocladia in fresh material but with care ($\times 10$ lens) can be distinguished. On storage, the colour of the phyllocladial branchlets bleaches to white and the bluish cephalodia are readily seen.

DISTRIBUTION

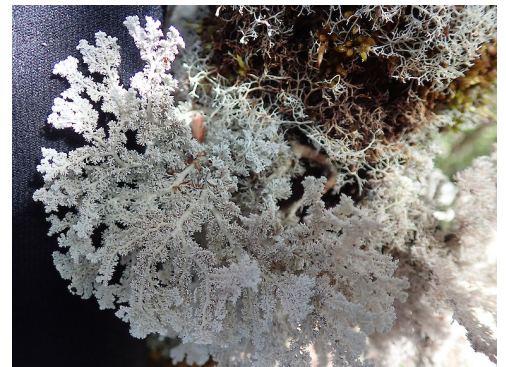
North Island: Gisborne (Urewera National Park), Wellington (Tongariro National Park to Tararua Ranges) **South Island:** Nelson (Mt Aorere, St Arnaud Range), Marlborough (Lookout Peak); Canterbury (Lewis River, Arthur's Pass, Bealey Spur, Cass, Woolshed Hill, Mt Winterslow), Westland (Mt Brewster); Otago (Lake Howden, Dart Valley, Rees Valley, Catlins River, Hunter's Hill), Southland (Stuart Mts, Borland Saddle, Lake Hauroko, Manapouri, Monowai, Doubtful Sound). **Stewart Island:** (Ulva Island).

HABITAT

Epiphytic on mountain and silver beech (*Nothofagus solandri* var. *cliffortioides* and *N. menziesii*) [*Fuscospora cliffortioides* and *Lophozonia menziesii*] in \pm open situations (especially in canopy branches), rarely on rocks on the forest floor in areas of high rainfall.



Edwards Valley, Arthurs Pass National Park.
Photographer: Melissa Hutchison, Date taken:
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DETAILED DESCRIPTION

Thallus fruticose, 7-15(-20) cm tall, attached to the substrate by a thick holdfast of brown branching rhizoids. **Main branches** terete, 2-6 mm thick, with terminal branchlets 1-1.5 mm in diam., branching irregular to subdichotomous, with numerous short, coralloid phyllocladial branchlets occurring in fasciculate groups. Surface of branches smooth, greenish-grey to whitish, transversely annulate-cracked. **Cephalodia** grey-blue, sparse to frequent, occurring with phyllocladial branchlets, small, cylindrical, to 5 mm long and 1.5-4 mm wide. Algal layer \pm continuous, 40-60 μ m thick, surrounding central medulla, photobiont *Protococcus*, spherical, 10-12 μ m diam. **Apothecia** terminal, subglobose to globose 1.5-44 mm diam., mazaedium apical, exposed at an early stage of development by rupture of the enclosing receptacle, when mature black, partially surrounded by receptacle. **Asci** cylindrical. **Ascospores** spherical to broadly ellipsoid, dark blue to dark brownish, 8-12 μ m diam.

Chemistry: Medulla K-, Pd-, I+ violet-blue; containing sphaerophorin (major) and several minor unidentified compounds.

SIMILAR TAXA

Some *Bunodophoron* species can look similar.

SUBSTRATE

Corticolous

ATTRIBUTION

Fact sheet prepared by Melissa Hutchison (17 January 2022). Brief description, Distribution, Habitat, and Features 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.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/sphaerophorus-stereocauloides/>