Physcia caesia

COMMON NAME blue-grey rosette lichen

SYNONYMS Lichen caesius

FAMILY Physciaceae

AUTHORITY Physcia caesia (Hoffm.) Fürnr.

FLORA CATEGORY Lichen – Native

ENDEMIC TAXON No

ENDEMIC GENUS No

ENDEMIC FAMILY No

STRUCTURAL CLASS Lichens - Foliose

CURRENT CONSERVATION STATUS 2018 | Not Threatened | Qualifiers: SO

BRIEF DESCRIPTION

Characterised by the saxicolous habit; the rather narrow convex lobes; maculae on the upper surface (×10 lens) imparting a distinctive spotted or marbled appearance; and the marginal capitate soralia; and the thick, blackish, simple rhizines often projecting from the lower surface at lobe apices.

DISTRIBUTION

North Island: Northland (Karikari Peninsula) to Wellington. South Island: Nelson (Mt Owen) to Southland. Stewart Island: (Port Pegasus). Chatham Islands: (SW of Waitangi).

Known from all major landmasses including Antarctica.

HABITAT

Widespread, s.l. to 1900 m a.s.l. on both acidic and basic rocks, in full sun (often very common and forming large, confluent, grey-white swards covering large areas on dry, vertical schist faces in Central Otago), to partial shade, on concrete fenceposts, bridges, gravestones etc., and on asphalt footpaths and along concrete curbing.

DETAILED DESCRIPTION

Thallus orbicular to spreading, closely attached, to 6 cm diam., saxicolous. **Lobes** irregularly or pinnately branched, ± convex often imbricate, rounded at apices, 0.5-2 mm wide. **Upper surface** grey or whitish-grey, often greyishpruinose, conspicuously white-maculate, sorediate. Soralia laminal, occasionally marginal, scattered, often confluent, soredia granular, white. **Lower surface** pale brown to brown, rhizinate. **Rhizines** sparse, pale. **Apothecia** (not seen in New Zealand material) rare, sessile, to 1.5 mm diam. **Ascospores** 17-24 × 7-11 µm. **Pycnidia** immersed. Conidia 4-5 × 1 µm.

Chemistry: Upper cortex and medulla K+ yellow; containing atranorin and zeorin.





Acheron River, Canterbury. Photographer: Melissa Hutchison, Date taken: 07/03/2020, Licence: CC BY-NC.



Magnet Bay, Banks Peninsula, Canterbury. Photographer: Melissa Hutchison, Date taken: 21/08/2020, Licence: CC BY-NC.

SIMILAR TAXA

May sometimes be confused with *Physcia poncinsii* but the distinctly crateriform soralia of the latter species are characteristic.

SUBSTRATE

Saxicolous, artificial surfaces (concrete fenceposts, curbs, bridges, gravestones, asphalt footpaths)

Specimens from coastal habitats from Northland (Karikari Peninsula) to southern Stewart Island (Port Pegasus) are sometimes parasitised by the lichenicolous fungus **Polycoccum pulvinatum* (Eitner) R.Sant. (Galloway *et al.* 1999), which is characterised by its distinctive laminal, erumpent galls on the upper surface of *P. caesia*, and its brown, 1-septate ascospores, $(16-)17-20(-21) \times 7-9 \mu m$, the upper cell larger.

ATTRIBUTION

Fact sheet prepared by Melissa Hutchison (28 March 2022). Brief description, Distribution, Habitat, Features and Similar taxa 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.

Galloway D.J., Knight A., Johnson P.N. and Hayward B.W. 1999: Additional lichen records from New Zealand 30. *Polycoccum galligenum* new to New Zealand and the Southern Hemsiphere. *Australasian Lichenology* 45: 8-9.

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/physcia-caesia/