Pseudocyphellaria physciospora

SYNONYMS

Diphaeosticta physciospora, Phaeosticta physciospora, Sticta cellulifera, Sticta fossulata subsp. physciospora, Sticta physciospora

FAMILY

Lobariaceae

AUTHORITY

Pseudocyphellaria physciospora (Nyl.) Malme

FLORA CATEGORY

Lichen - Native

ENDEMIC TAXON

No

ENDEMIC GENUS

Nο

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Foliose

CURRENT CONSERVATION STATUS

2018 | At Risk - Naturally Uncommon | Qualifiers: DP, SO

BRIEF DESCRIPTION

Characterised by broad, rather divergent lobes, di- or trichotomously branching, with entire margins thickened above and below, but lacking pseudocyphellae; upper surface is matt, reticulate-faveolate, without isidia, maculae, phyllidia, pseudocyphellae or soredia; apothecia are marginal and laminal, pedicellate, the disc red-brown, epruinose, the exciple red-brown, coarsely corrugate; it has a white medulla; a green photobiont; a pale-buff or whitish, velvety, short-tomentose lower surface with a prominent glabrous marginal zone and with minute, inconspicuous yellow pseudocyphellae; it has a chemistry containing several hopane triterpenoids, tenuiorin, norstictic and salazinic acids, and traces of the pigments calycin and pulvinic dilactone present in the pseudocyphellae.





Low corticolous macro lichen in coastal forest, Dough Boy Bay, Stewart Island. Photographer: Marley Ford, Date taken: 26/01/2021, Licence: CC BY-NC.



Low corticolous macro lichen in coastal forest, Dough Boy Bay, Stewart Island. Photographer: Marley Ford, Date taken: 26/01/2021, Licence: CC BY-NC.

DISTRIBUTION

Stewart Island: (Port Pegasus, Tommy Island). **Auckland Islands**: (Enderby Island, Ranui Cove). **Campbell Island**: (Mt Azimuth, Lyell Ridge, Mt Sorensen, Filhol Peak). Known also from Juan Fernandez Island, Chile.

HABITAT

An epiphyte of coastal scrub and coastal forest trees, and of subalpine scrub in tussuck grassland.

DETAILED DESCRIPTION

Thallus orbicular to irregularly spreading, 5–15 cm diam., closely to loosely attached centrally, margins free, corticolous. Lobes divergent, di- or trichotomously branched, rather broad, 5-10(-20) mm wide, discrete and truncate at apices, imbricate centrally, sinuses rounded. Margins entire, rounded, distinctly ridged above, without projecting pseudocyphellae, markedly thickened below. Upper surface olive-green to yellow-green when moist, often suffused red-brown towards apices, olivaceous, brownish when dry, strongly to weakly reticulate-faveolate, interconnecting ridges prominent, broad, rather flat, matt or glossy, without soredia, isidia, phyllidia, maculae, papillae or pseudocyphellae. Medulla white. Photobiont green. Lower surface glabrous and glossy in a broad to narrow marginal zone, tomentose centrally, occasionally to margins, ridged-bullate centrally. Pseudocyphellae vellow, rather inconspicuous, sparse to numerous, widely scattered, raised, verruciform, 0.1 mm diam., or less, rarely to 0.2 mm, decorticate area flat, pinprick-like. Apothecia sessile to pedicellate at maturity, marginal and laminal, rounded, 0.5-4(-5) mm diam., deeply cupuliform at first, becoming shallowly concave at maturity, disc dark red-brown to black, glossy, epruinose, smooth, margins scabrid-areolate, pale pinkish to red-brown, conspicuously dentate-stellate in old fruits, exciple pale-pinkish to red-brown at margins of disc, coarsely corrugate or scabridareolate. Epithecium dark red-brown, violet-purple in K. Ascospores brown, 1-septate, fusiform to oval-ellipsoidal, (21–)23–29(–32) × 7–9 μm. **Pycnidia** common to rare, scattered laminally, mainly on thallus ridges, black, minute, 0.1 mm diam., or less, punctate-impressed.

Chemistry: Methyl evernate, tenuiorin, methyl gyrophorate, gyrophoric acid, 7β -acetoxyhopan-22-ol, hopane- 7β ,22-diol, hopane- 6α , 7β ,22-triol, norstictic, salazinic, consalazinic, stictic, cryptostictic, connorstictic and constictic acids, and traces of pulvinic dilactone and calycin.

SUBSTRATE

Corticolous

ATTRIBUTION

Fact sheet prepared by Marley Ford (6 October 2021). Brief description, Distribution, Habitat, and Features 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/pseudocyphellaria-physciospora/