

Porpidia macrocarpa

SYNONYMS

Glyphis neozelandica, *Patellaria macrocarpa*

FAMILY

Lecideaceae

AUTHORITY

Porpidia macrocarpa (DC.) Hertel & A.J.Schwab

FLORA CATEGORY

Lichen – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Crustose

CURRENT CONSERVATION STATUS

2018 | Not Threatened | Qualifiers: SO

BRIEF DESCRIPTION

Characterised by the saxicolous habit; the usually inconspicuous, whitish (often suffused rust-red) thallus; rather large apothecia (1–4 mm diam.) with a broad margin not darkly pigmented; a sometimes K+ reddish exciple with rather thick hyphae (4–9 µm diam., in inner parts of exciple); a relatively tall hymenium (75–100(–130) µm); large, halonate ascospores, 15–22(–33) × 7–10(–14) µm; and stictic acid as major secondary metabolite (Hertel 1985: 313).

DISTRIBUTION

South Island: Nelson (Lake Rotoiti), Westland (Fox Glacier, Karangarua River, Paringa River, Haast), Canterbury (Arthur's Pass), Otago (Teviot Valley, Maungatua), Southland (above Lake Chamberlain, Doubtful Sound, Tiwai Point).

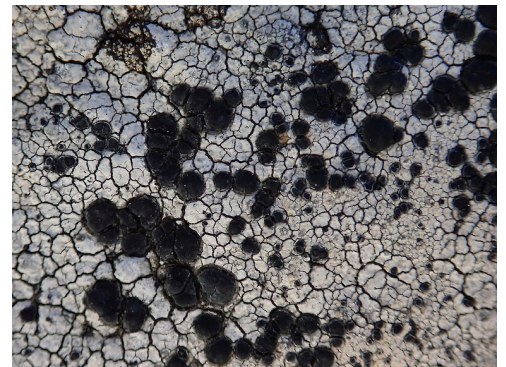
Widely distributed in North America, Europe, Asia and South America, but still very poorly known in the Southern Hemisphere where it is presently recorded from alpine localities in both New Zealand (Hertel 1985: 314) and Australia.

HABITAT

Often common on rocks and boulders along streams or in glacial environments, roadside cuttings and rock outcrops in grassland, and on quartz pebbles at coast (Tiwai Point).



Banks Peninsula. Photographer: Melissa Hutchison, Date taken: 23/06/2019, Licence: CC BY-NC.



Port Hills, Christchurch. Photographer: Melissa Hutchison, Date taken: 07/10/2019, Licence: CC BY-NC.

DETAILED DESCRIPTION

Thallus variable, inconspicuous and ±obsolete to thick, tartareous, continuous, cracked to ±areolate, surface roughened–arachnoid to wrinkled or papillate; pale greyish fawn or whitish or cream, sometimes patchily oxidised rust-red. **Medulla** l–. **Prothallus** indistinct, delimiting thalline patches as a thin, wavy, black line. **Apothecia** rather large, 1.2–4 mm diam., sessile, abundant, scattered or crowded, level with thallus surface to slightly proud, often separated from thallus by a ±continuous gaping crack, persistent, black, shining, raised, thin to thick entire, flexuous or crenulate, in larger apothecia often ±gyrose or divided by formation of secondary margins within the disc, hyphae 4–9 µm thick in inner part of exciple and reacting K+ reddish; disc subconcave to plane or convex, black or brown-black, matt or shiny, occasionally to commonly grey-pruinose. Exciple 150–200 µm thick, ectal zone brown-black, pigmented part 10–15 µm thick; inner zone brown to dark-brown. **Hypothecium** brown to dark-brown to 300–350 µm thick. Hymenium 75–100(–130) µm tall, colourless, l+ blue; epithecium olivaceous 12–20 µm thick.

Ascospores 15–22(–33) × 7–10(–14) µm.

Chemistry: cortex K–, C–, Pd–; medulla K± yellowish to orange-red, Pd± orange; containing stictic (±) and cryptostictic acids (±).

SUBSTRATE

Saxicolous

ETYMOLOGY

macrocarpa: Large fruit

ATTRIBUTION

Fact sheet prepared by Melissa Hutchison (27 March 2022). 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.

Hertel H. 1985: New, or little-known New Zealand lecideoid lichens. *Mitteilungen der Botanischen Staatssammlung München* 21: 301–337.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/porpidia-macrocarpa/>