

Gondwania cribrosa

SYNONYMS

Polycauliona cribrosa Hue, *Thamnoma* ["*Thamnonoma*"] *cribrosa* (Hue) Gyeln., *Kuttlingeria macquariensis* C.W.Dodge, *Caloplaca cribrosa* (Hue) Zahlbr.

FAMILY

Teloschistaceae

AUTHORITY

Gondwania cribrosa (Hue) Søchting, Frödén & Arup

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 (coastal rocks); the distinctive, plicate-radiate, rosette-forming to spreading thallus, often confluent (2–)3–6(–10) cm diam.; the ±terete, subfruticose lobes with scattered, effigurate, slightly sunken pseudocyphellae on their surface. It is one of a group of coastal saxicolous lichens found in the subantarctic zone.

DISTRIBUTION

North Island: Northland (Three Kings Islands, Pukeke, Kawerua, Poor Knights Islands, Hen & Chicken Islands), South Auckland (Slipper Islands, Waikawau Bay Coromandel Peninsula), Wellington. **South Island:** Nelson to Marlborough (Ship Cove, Hippah Island, Goose Bay, Chetwode Islands), Canterbury (Taylor's Mistake, Tumbledown Bay, Banks Peninsula), Otago (Long Beach, Kaikai Beach, Quarantine Islands, Blackhead, Taieri Beach, Motu Rata, Akatore, Cook Head, Chrystall's Beach, Kaka Point, Cannibal Bay), Southland (Howell's Point, Bluff). **Stewart Island:** (Port Pegasus). **Chatham Islands:** (Tapurangi-Monau Reef, South West of Waitangi, Ellice Point). **Snares Islands. Aucklands Island:** (Adams Islands, Shoe Island, Davis Island, Ocean Island, Port Ross), **Campbell Island. Antipodes:** (Hut Cove, South Bay, Anchorage Bay).
Known also from Tasmania and Macquarie Island (type locality).

HABITAT

On coastal rocks (mainly acidic rocks but also occasionally on maritime limestone rocks, and rarely on decorticated wood) associating with *Amandinea otagensis*, *Caloplaca circumlutosa*, *C. papanui*, *C. rosei*, and *C. sublobulata*.



Locally common on coastal rocks, Horseshoe Bay Stewart Island. Photographer: Marley Ford, Date taken: 09/04/2021, Licence: CC BY.



Locally common on coastal rocks, Horseshoe Bay Stewart Island. Photographer: Marley Ford, Date taken: 09/04/2021, Licence: CC BY.

DETAILED DESCRIPTION

Thallus caespitose, 1-4 cm diam., rosette-forming to ± spreading, deep chrome yellow, paler at margins, verrucose-areolate centrally, areolae small, marginal **lobes** radiate, convex, closely dichotomous, 10-15 mm long, ± terete, 0.5-0.8 mm diam., apices subflabellate, digitate, ultimate lobules 1-1.5 mm long, 0.4 mm diam., closely attached, surface smooth, with effigurate, yellowish maculae (×10 lens). **Apothecia** frequent, central, rarely marginal, 0.5-1.0 mm diam., sessile, disc orange, concave to plane, margins ± prominent, paler than disc. **Ascospores** ellipsoid, 10-13 × 5.5-8 µm.

SUBSTRATE

Saxicolous, lignicolous

Recent genetic studies by Søchting *et al.* (2023) suggest New Zealand specimens of *G. cribrosa* represent a distinct clade that may merit status as a species. If this is confirmed by further molecular data, then the southern species from NZ may also include specimens from Macquarie Island, from where *Kuettlingeria macquariensis* C.W. Dodge was described. Galloway (2007) considered *Kuettlingeria macquariensis* to be conspecific with *Caloplaca cribrosa* in New Zealand and accordingly to be a synonym to that species. Based on inspection of the type of *Kuettlingeria macquariensis* Søchting *et al.* (2023) agree, and if the southern taxon proves distinct, it could take the name *Gondwania macquariensis*. Unfortunately, collections from Macquarie Island have not been available for molecular studies.

ATTRIBUTION

Fact sheet prepared by Marley Ford (14 January 2024). Brief description, Distribution, Habitat, and Features sections copied from Galloway (1985) & Galloway (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.
Søchting, U., Sancho, L.G., & Arup, U. 2023: The lichen genera *Gondwania* and *Transdrakea* gen. nov. (Teloschistaceae) - speciation in three southern continents. *Plant and Fungal Systematics* 68(2): 304-319.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/gondwania-cribrosa/>