

# Notocladonia cochleata

## SYNONYMS

Ramalea cochleata Müll.Arg

## FAMILY

Cladoniaceae

## AUTHORITY

Notocladonia cochleata (Müll.Arg.) S.Hammer

## FLORA CATEGORY

Lichen – Native

## ENDEMIC TAXON

No

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Lichens - Fruticose

## CURRENT CONSERVATION STATUS

2018 | At Risk – Declining | Qualifiers: DP, RR, SO, Sp

## BRIEF DESCRIPTION

Characterised by the terricolous habit; the persistent, crowded primary squamules; podetia 2–10 mm tall, arising from margins of squamules and becoming fissured-clathrate, branch axils open; and terminal, clustered-peltate apothecia at tips of podetia.

## DISTRIBUTION

**North Island:** Northland (Te Pahi, Te Kao, Karikari Peninsula), Aotea / Great Barrier Island, Coromandel Peninsula (Kauaeranga Valley), Wellington (Silica Rapids, Tongariro National Park), Remutaka Hill. **South Island:** Nelson (Red Hill). Probably more widely distributed in New Zealand, though still very poorly collected here. Also in Australia.

## HABITAT

In the north, formerly locally abundant below stunted *Leptospermum scoparium* and scattered *Hakea*, on leaf litter overlying open clay-cemented sand pavement at 80 m, and in skeletal soils often associating with *Cladonia capitellata*, *C. vulcanica*, and abundant *Thysanothecium hookeri*. In Nelson on serpentine soil at c. 1500 m and associating there with *Cladonia murrayi*, *C. ochrochlora*, *C. pleurota* and *C. sulcata*.

## DETAILED DESCRIPTION

**Primary thallus** squamulose, squamules scattered to ± imbricate-crowded, terricolous. **Squamules** 0.2–2 mm wide and to 3.5 mm long, plane to subconvex, spatulate or cuneate, margins entire or minutely crenulate or occasionally ± bifurcate, ± ascending, not noticeably thickened. **Upper surface** pale yellow-green to olivaceous or brownish, smooth, matt, minutely maculate (×10 lens). **Lower surface** white, arachnoid. **Pseudopodetia** 2–8(–10) mm tall, concolorous with squamules or paler, ± minutely maculate, arising from margins of squamules, 0.1–0.5 mm diam. at base and there ± terete, expanding above to 1–2 mm diam., fissured-clathrate towards apices, exposing white medullary hyphae. **Apothecia** terminal, clustered-peltate, 0.05–0.3(–0.8) mm diam., disc round to irregular, plane to subconvex, brown-pink, sometimes ± white-pruinose, margins entire to crenulate, paler than disc, persistent.

**Ascospores** simple, 6–9 × 3–4 µm.

**Chemistry:** Cortex K–, KC+ yellow; medulla K–, C–, Pd–; containing usnic, divaricatic and nordivaricatic acids.



Growing trackside with *Cladia* and bryophytes, Great Barrier Island. Photographer: Marley Ford, Date taken: 11/04/2023, Licence: CC BY.



Growing trackside with *Cladia* and bryophytes, Great Barrier Island. Photographer: Marley Ford, Date taken: 11/04/2023, Licence: CC BY.

### **SIMILAR TAXA**

Separated from *Notocladonia undulata* by the open podetia axils.

### **SUBSTRATE**

Terricolous

### **ATTRIBUTION**

Fact sheet prepared by Marley Ford (23 April 2023) and updated by Peter de Lange (8 June 2024). Information in the 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.

### **NZPCN FACT SHEET CITATION**

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<https://www.nzpcn.org.nz/flora/species/notocladonia-cochleata/> (Date website was queried)

### **MORE INFORMATION**

<https://www.nzpcn.org.nz/flora/species/notocladonia-cochleata/>