

Chiodecton colensoi

SYNONYMS

Chiodecton conchylatum, *C. inconspicuum*, *C. moniliatum*, *C. sinuosum*, *C. submoniliforme*, *Leucodecton colensoi*, *Platygrapha inconspicua*, *Platygrapha tumidula*, *Platygraphis tumidula*, *Schismatomma tumidulum*, *Stigmatidium subtilissimum*

FAMILY

Roccellaceae

AUTHORITY

Chiodecton colensoi (A.Massal.) Müll.Arg.

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 corticolous habit, the clustered, perithecioid to lirelliform, black apothecia aggregated in stroma-like structures with 1–10 apothecia per stroma; a hymenium without oil droplets or granules; branched, prominent, paraphyses with pale-brown, K+ olive-grey apices; yellow pigments in the lower part of the medulla; and narrowly fusiform, curved, 3-septate ascospores, 35–55 × 3–4 µm.

DISTRIBUTION

North Island: Northland (Kaitaia, Mt Auckland near Glorit, Waiwera Scenic Reserve). Auckland (Waitakere Ra.), Wellington (Mt Ruapehu, Wellington).

South Island: Nelson (Tasman Mts, Roding Valley), Marlborough (Branch R.), Canterbury (Banks Peninsula), Otago (Mt Cargill).

Widely distributed also in Australia from Queensland to Tasmania (Thor 1990; Kantvilas 1990c; Kantvilas & Thor 1993; McCarthy 2003c, 2006). On rimu scales it forms often quite extensive colonies, together with other Roccellaceous taxa such as *Bactrospora arthonioides*, *B. metabola*, and species of *Lecanactis*.

HABITAT

On bark of *Agathis australis*, *Dacrydium cupressinum*, *Phyllocladus* spp. and other forest trees, s.l. to 980 m.



Paihia, Northland. Photographer: Melissa Hutchison, Date taken: 20/01/2020, Licence: CC BY-NC.



Paihia, Northland. Photographer: Melissa Hutchison, Date taken: 20/01/2020, Licence: CC BY-NC.

DETAILED DESCRIPTION

Thallus crustose, uniform, thin or thick, continuous or ± areolate-cracked, smooth, or granular-roughened, matt to somewhat pulverulent, in irregular, spreading patches, delimited by a thin, black prothallus, often forming confluent mosaics on bark. Photobiont green, *Trentepohlia*, cells minute, oblong-ellipsoid, in filaments. **Apothecia** innate, compound, in well-developed stromata in raised thalline verrucae, verrucae concolorous with thallus or paler, round to irregular, polycarpic, discs flat or subconcave, black or red-brown, matt, epruinose. Hypothecium brown or blackish-brown. **Asci** bitunicate, cylindrical-clavate, 8-spored. Paraphyses numerous, branched or netted.

Ascospores fusiform-acicular, flexuose, 3-5-septate, normally 3-septate, colourless.

Chemistry: Roccellic acid and yellow pigments (secalonic acid derivatives).

SUBSTRATE

Corticolous

ETYMOLOGY

colensoi: Named after William Colenso (7 November 1811 - 10 February 1899) who was a Cornish Christian missionary to New Zealand, and also a printer, botanist, explorer and politician.

Chiodecton is a genus of 16 currently accepted species (Thor 1990) included in the family Roccellaceae, although additional undescribed taxa are known from Asia, Africa and America. There are many species described in the literature but most are referable to other genera, including: *Arthonia*, *Byssoloma*, *Cryptothecia*, *Dirina*, *Enterographa*, *Lecanactis*, *Mazosia*, *Roccellina* and *Schismatomma* (Thor 1990). Species of *Chiodecton* are widely distributed (though often rare and local) in tropical, subtropical and temperate rainforest in America, Africa, Asia and Australasia. Neither isidia nor soredia are known in *Chiodecton*, with spore dispersal being the main agency of distribution. Spore walls and septa are thin, indicating that spores are probably short-lived and ruling out long-distance dispersal for the genus, thus accounting for the often restricted geographical ranges of particular species (Thor 1990). Two species are known with certainty from New Zealand (Galloway 1985; Thor 1990). Two additional saxicolous taxa described by Dodge (1971) from Macquarie Island (*C. acarosporoides* C.W.Dodge and *C. maquariensis* C.W.Dodge) were also recorded from the Auckland Islands, the Snares, and from alpine localities in the South Island (Dodge 1971: 442–443). Snares material seen of *Chiodecton maquariensis*, so identified by Carroll Dodge (Fineran 1969: 246), is referable to *Pertusaria graphica* (Galloway 2004d), and alpine rock specimens determined by Dodge are referable to *Porpidia*!

ATTRIBUTION

Fact sheet prepared by Melissa Hutchison (30 August 2021). Brief description, Distribution, Habitat, Features, Similar Taxa, and Extra information sections copied from Galloway (1985, 2007).

REFERENCES AND FURTHER READING

Dodge C.W. 1971 [“1970”]: Lichenological notes on the flora of the antarctic continent and the subantarctic islands IX–XI. *Nova Hedwigia* 19: 439-502.

Galloway D.J. 1985: *Flora of New Zealand: Lichens*. Wellington: PD Hasselberg, Government Printer. 662 pp.

Thor G. 1990: The lichen genus *Chiodecton* and five allied genera. *Opera Botanica* 103: 1-92.

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/chiodecton-colensoi/>