

Rexiella sullivanii

SYNONYMS

Cladia sullivanii, *Cladonia sullivanii*, *Rexia sullivanii*

FAMILY

Cladoniaceae

AUTHORITY

Cladia sullivanii (Müll.Arg.) W.Martin

FLORA CATEGORY

Lichen – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lichens - Fruticose

CURRENT CONSERVATION STATUS

2018 | Not Threatened | Qualifiers: SO

BRIEF DESCRIPTION

Characterised by the dark-brown or black medullary hyphae that fill the central canal, and by the crystalline outer surface (×10 lens), which distinguishes it from the related *Rexiella fuliginosa*.

DISTRIBUTION

North Island: Northland (Karikari Peninsula), South Auckland (Te Aroha, Opepe, Taupo, Huka Falls), Gisborne (Aniwaniwa Lake Waikaremoana), Wellington (Waiopahu Tararua Ra.). **South Island:** Nelson (Hope Range, Mt Arthur tableland, Kaiteriteri, Lead Hills, Cobb Valley, Denniston Plateau), Westland (Mt Euclid Paparoa Range, upper Otira Valley), Canterbury (Lewis Pass, Arthur's Pass), Otago (Haast Pass, Forgotten River, Theatre Flat Rockburn, Key Summit, Chinaman Flat Dart Valley, Maungatua, Kuriwao, Blue Mts), Southland (Astronomer's Point Dusky Sound, Mt Clerke Resolution Island, Lake Monk, Dome Bog, Te Anau, Makarewa, Awarua Bog). **Stewart Island:** (Mt Anglem, Freshwater Valley, Rakeahua River, Tin Range, Fright Cove, Noble Island Port Pegasus). Also in SW and SE Australia and southern South America.

HABITAT

On sandy soil, subalpine peat bogs, alpine grasslands and lowland peat soils and heaths (it is especially richly developed at margins of peat bogs and on the summit plateau of the Blue Mountains in W Otago).



Chatham Islands/Rekohu. Photographer: Melissa Hutchison, Date taken: 22/12/2020, Licence: CC BY-NC.



Stewart Island. Photographer: Melissa Hutchison, Date taken: 19/04/2021, Licence: CC BY-NC.

DETAILED DESCRIPTION

Thallus in mats or cushions 5-15(-30) cm diam., terricolous or muscicolous. Primary thallus nodular-papillate, evanescent. **Pseudopodetia** dying at base, 2.5-11 cm tall, 0.5-4 mm diam., subcylindrical or angular or somewhat flattened, yellowish and black, brown or pale greenish-grey, corticate, dull, opaque, minutely crystalline ($\times 10$ lens), spongy when wet, rigid when dry, branching dichotomous and sympodial, branches spreading or suberect, sterile apices blunt or obtusely spurred, axils closed, walls perforate, perforations circular, oval or elongate, in several series but fewer and less regular than in *Pulchrocladia retipora*. **Medulla** filling central canal, whitish above, black or brown below. **Apothecia** minute, 0.25-0.35 mm diam., peltate, dark brown or black, single or clustered on apical branchlets.

Chemistry: Thallus K-, C-, KC-, Pd-; containing \pm usnic, \pm ursolic, \pm protolichesterinic, \pm nordivaricatic and divaricatic acids and unidentified triterpenoids.

SIMILAR TAXA

The crystalline outer surface ($\times 10$ lens) distinguishes it from the related *Rexiella fuliginosa*.

SUBSTRATE

Terricolous

ATTRIBUTION

Fact sheet prepared by Melissa Hutchison (29 August 2021). 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.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/rexiella-sullivanii/>