

Cladonia verticillata

SYNONYMS

Cladonia cervicornis subsp. *verticillata* (Hoffm.) Ahti

FAMILY

Cladoniaceae

AUTHORITY

Cladonia cervicornis subsp. *verticillata* (Hoffm.) Ahti

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 tiers of cups (usually more than one) proliferating from the centre of the cups.

DISTRIBUTION

North Island: Northland (Waipu Coast), Wellington (Waipakahi Valley Kaimanawa Ranges). **South Island:** Canterbury (Mt Binser), Otago (Bride Burn, Bedford Valley, Turret Head Mt Earnslaw, Invincible Creek, Rees Valley, French Ridge West Matukituki Valley, Mt Pisgah, Rock & Pillar Range, Flagstaff, Swampy Summit, Catlins), Southland (Pukerau). **Stewart Island:** (Mt Anglem, Glory Cove, Wilson Bay Port Pegasus). **Antipodes Islands.**

Known also from Australia.

HABITAT

Throughout, s.l. to 1500 m. On soil in grassland, among tussock bases, peat and on soil overlying rock, mosses, rotting logs, charred wood in *Leptospermum* scrub, both in semi-shade and in full sun.

DETAILED DESCRIPTION

Primary squamules persistent or disappearing, to 8 × 4 mm, irregularly cuneate or lobed, lobes crenate or slightly incised, flat or convolute, often ascending, rarely caespitose, **upper surface** olive-green or reddish-or brownish-glaucous or slaty green, **lower surface** white, grey-black at base, esorediate. Podetia growing from upper surface or margins of primary squamules to 5 cm tall and 3 mm diam., flaring gradually at apices into short, broad cups, to 9 mm wide, shallow and with small, pointed or cup-bearing proliferations growing from centres of closed cups, margins entire or with apothecia, sometimes with several tiers of cups arising from centre of previous tier.

Cortex continuous or areolate, areolae smooth, subcontiguous, narrow interspaces white, dull whitish, green to olivaceous or ashy or blue-green or brownish, esorediate, ± squamulose. **Apothecia** sessile or shortly stalked, less than 3 mm diam., brown or red-brown, rounded, wider than supporting podetium.

Chemistry: Cortex K⁻, C⁻, KC⁻, Pd⁺ red; containing fumarprotocetraric acid (major) and protocetraric acid (tr.).



Terricolous on coast, Waipu Northland.
Photographer: Marley Ford, Date taken: 11/06/2021, Licence: CC BY-NC.



Terricolous on coast under *Rytidosperma* sp., Waipu Northland. Photographer: Marley Ford, Date taken: 11/04/2022, Licence: CC BY-NC.

SIMILAR TAXA

Separated from *C. cervicornis* by: basal squamules entire or only shallowly lobed, lobes rounded, never lanceolate, not curled when dry, procumbent or pointing upright. The upper surface colour is bluish green when fresh.

Squamules often with a notched, downcurved brownish margin (Van Herk & Aptroot 2002). For more information see the *C. cervicornis* factsheet.

It is similar to *Cladonia krempelhuberi*, but that species contains atranorin (see notes).

SUBSTRATE

Terricolous, corticolous

Atranorin can be detected as it 'has a characteristic pungent to musty odour when dried specimens are smelled (strongly reminiscent of old paper in long-unopened books)'.

ATTRIBUTION

Fact sheet prepared by Marley Ford (3 April 2021). Brief description, Distribution, Habitat, Features and Similar taxa 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.

Van Herk C.M. and Aptroot A. 2002: A new status for the Western European taxa of the *Cladonia cervicornis* group. *Bibliotheca Lichenologica* 86: 193-203.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/cladonia-verticillata/>