

Subsection CLATHRINAE

The writer is convinced that Carroll W. Dodge (1929-31) was correct in placing plants of this subsection in Nylander's genus *Cladia*. Nylander included in this genus *Cladonia aggregata* and *C. retipora*, the then known species of *Clathrinae*. To these *C. sullivanii* should be added. What was believed to be the primary thallus has been observed only in *C. retipora*, this being crustose or papillose in character. All plants belonging to *Cladia* have the chondroid layer external to the algal layer, and not lining the central canal as in *Cladonia*. The walls of the podetia have a very thin medulla and are conspicuously porose, save in some forms of *C. aggregata*, where perforations may be few. All lack soredia, squamules, isidia, and scyphi. The apothecia are minute, black, peltate, and clustered in small cymes.

Cladia aggregata is a very polymorphic and widely distributed species with at least a dozen named forms, several of doubtful validity, with numerous connecting forms. The species is predominantly K —, but some gatherings are K +. What appears to be a distinct but unnamed form is described below.

Cladia aggregata (Sev.) Nyl. f. *fiordense* forma nova

TYPE. New Zealand; lodged in herbarium of the Botany Division of the D.S.I.R. at Lincoln, Canterbury.

DESCRIPTION. Podetia adscendentia, robusta, rigida, superne pallida vel albidoviridia, ad basi spadicia vel testacea, ad nodis 3-4mm lata, ad internodis \pm 2mm lata, foraminibus paucis, apicibus bi- (raro ter-) furcatis, subulatis; ramulis 1-15mm longis, numerosis, sterilis.

This form has short stems (3-5cm) and numerous branches, many little more than spines, while others may be 1-3cm long. The podetia are light coloured above, dark or light brown below, wider at the nodes, \pm ascending, forming open clusters; the tips of the stems are mainly bifid, ending in short, subulate spines. The foramina vary from small to large and from oblong to circular, but are not numerous. The surface is dull, not nitidous. Fertile plants were not seen. K —, P —. It is allied to f. *inflata* F. Wilson from Australia.

DISTRIBUTION. Secretary Island, Doubtful Sound, West Otago, amongst mosses and low shrubs at 1,000 metres in Cladonia Gut. Collected by the late Dr James Murray, February, 1959.

Cladia sullivanii (Müll. Arg.) Martin comb. nov.

Syn. *Cladonia sullivanii* Müll. Arg. in Monogr. Clad. Univ. Vol. 1 (1887) p. 230.

Nylander transferred *Cladonia aggregata* and *C. retipora* to a new genus *Cladia*. *C. sullivanii* is somewhat intermediate in form between these two species, and indeed was regarded by Vainio as a form of *C. aggregata*. It therefore becomes necessary to transfer *Cladonia sullivanii* to the genus *Cladia*.

LITERATURE

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