

**Designation of a lectotype for the red algal parasite *Gonimophyllum insulare* and notes on its host species (*Delesseriaceae*, *Rhodophyta*)**

Maren Preuss, *School of Biological Sciences, Victoria University of Wellington, PO Box 600, Wellington, 6140, New Zealand* (correspondence: [maren.preuss@vuw.ac.nz](mailto:maren.preuss@vuw.ac.nz))

Wagner (1954: 334, figs 251–269) described the red algal parasite *Gonimophyllum insulare* F.S.Wagner found on the red alga *Hymenena semicostata* (J.Agardh) Kylin collected at Half Moon Bay on Rakiura (Stewart Island) in Aotearoa (New Zealand) by G.F. Papenfuss (1903–1981) in 1949. A holotype was not clearly designed in the original description by Wagner (1954). The location of the type material is, however, currently unknown. Herbaria that were unsuccessfully searched included herbaria in New Zealand, mainly the Allan Herbarium, Manaaki Whenua - Landcare Research, Christchurch (**CHR**), the Museum of New Zealand Te Papa Tongarewa in Wellington (**WELT**). The Selmar Schonland Herbarium, Albany Museum, Grahamstown (**GRA**) in South Africa, which houses many specimens collected by Papenfuss, was also searched. In addition, major USA herbaria were checked including the University of California at Berkeley (**UC**), where Wagner's research was carried out under the supervision of Papenfuss, and Harvard University Herbarium (**FH**). I propose to designate an illustration published by Wagner as lectotype following ICN Art. 9.3 (Shenzhen Code, Turland & al. 2018).

*Gonimophyllum insulare* F.S.Wagner *University of California Publications in Botany* 27(5): 334, figs 251–269, 1954.

**Lectotype (designated here):** fig. 251 in *University of California Publications in Botany* 27(5), 1954.

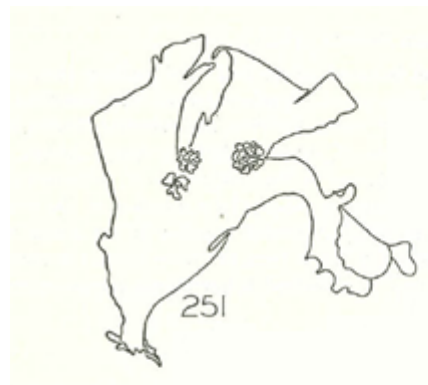
Note: The identity of the host of *Gonimophyllum insulare* is uncertain. *Hymenena semicostata* (J.Agardh) Kylin (= *Nitophyllum semicostatum* J.Agardh) was originally described by J. Agardh (1876: 699, as “*Nitophyllum (Durvillaei) semicostatum*”) based upon material from Dunedin, New Zealand collected by Sven Berggren (1837–1917). Kylin (1929:13) specified that the “*Originalexemplar*” [generally meaning type] of “*Nitophyllum semicostatum*” J.Agardh (1876: 699) is found as “*eines der Originalexemplare*” for *Nitophyllum polyglossum* J.Agardh (Agardh 1898: 79) and in the same publication Agardh (1898: 80) provided further details for “*N. semicostatum*” based upon material collected in the South Island in New Zealand in 1887. Although the host species is currently referred to as *Hymenena durvillaei* (Bory) Kylin in New Zealand, Kylin (1929: 14) stated clearly “*Nitophyllum Durvillei aus Neu-Seeland ist nicht N. Durvillei* (Bory) J. Ag. *Sondern Hymenena semicostata...*”. *Hymenena semicostata* was listed by Papenfuss (1964: 53) from the Auckland Islands referring to Kylin (1929: 13, pl. 12: fig. 28, which was identified by Kylin as “*Originalexemplar*” of “*Nitophyllum semicostatum*” Agardh (1898: 80). Further investigation of the genus *Hymenena* in New Zealand is clearly required.

I thank Tony Dold (**GRA**), Bridget Hatton (**WELT**), Kathy Ann Miller (**UC**), Wendy Nelson (NIWA, University of Auckland), Ines Schönberger (**CHR**), Genevieve E. Tocci (**FH**) and Michael Wynne (**MICH**) for helpful suggestions and checking collections for a potential type. This work was supported by a Marsden Fast-Start (Grant no. 19-VUW-006) by the Royal Society Te Apārangi.

Agardh, J.G. (1876). *Species genera et ordines algarum*, seu descriptiones succinctae specierum, generum et ordinum, quibus algarum regnum constituitur. Volumen tertium: De Florideis curae posteriores. Part 1. pp. [ii\*–iii\*], [i] – [vii], [1] –724. Lipsiae [Leipzig]: apud T.O.Weigel.

Agardh, J.G. (1898). *Species genera et ordines algarum*, seu descriptiones succinctae specierum, generum et ordinum, quibus algarum regnum constituitur. Voluminis Tertii, Pars Tertia. De

- dispositione Delesseriearum curae posteriores. pp. i-vii, 1–239. Lundae [Lund]: apud C.W.K. Gleerup.
- Kylin, H. (1929). Die Delesseriaceen Neu-seelands. *Lunds Universitets Årsskrifts N.F. Avd. 2* 25 (2): 1–15, 12 pls.
- Papenfuss, G.F. (1964). Catalogue and bibliography of Antarctic and Sub-Antarctic benthic marine algae. In: *Antarctic Research Series. Volume 1. Bibliography of the Antarctic Seas*. (Lee, M.O. Eds), pp. 1–76. Washington D.C.: American Geophysical Union.
- Turland, N.J., Wiersema, J.H., Barrie, F.R., Greuter, W., Hawksworth, D.L., Herendeen, P.S., Knapp, S., Kusber, W.-H., Li, D.-Z., Marhold, K., May, T.W., McNeill, J., Monro, A.M., Prado, J., Price, M.J. & Smith, G.F., editors (2018). *International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code)* adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017. *Regnum Vegetabile*, Vol. 159. pp. [i]–xxxviii, 1–253. Glashütten: Koeltz Botanical Books.
- Wagner, F.S. (1954). Contributions to the morphology of the Delesseriaceae. *University of California Publications Botany* 27: 279–346, 290 pls.



**Fig. 1.** Lectotype (here designated) of *Gonimophyllum insulare* F.S. Wagner