
New combinations in *Neopyropia* J.Brodie & L.-E.Yang (*Bangiaceae*, *Rhodophyta*) from Japan

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Recently, Yang *et al.* (2020) proposed four new genera and the resurrection of *Porphyrella* with species transferred from the genus *Pyropia* (Bangiales). Two commercially important species *Pyropia tenera* (Kjellman) N.Kikuchi, Miyata, M.S.Hwang & H.G.Choi and *P. yezoensis* (Ueda) M.S.Hwang & H.G.Choi used for Nori cultivation in Japan were transferred to the genus *Neopyropia* J.Brodie & L.-E.Yang in this publication. However, two vigorously growing infraspecific taxa with elongated blades, *P. tenera* var. *tamatsuensis* (A.Miura) N.Kikuchi, Niwa & Nakada and *P. yezoensis* f. *narawaensis* N.Kikuchi, Niwa & Nakada were not transferred to *Neopyropia*.

In the same article, *Pyropia kuniedae* (Kurogi) M.S.Hwang & H.G.Choi was not transferred although it clearly is referable to *Neopyropia* (Clade III) based on the phylogenetic trees in Sutherland *et al.* (2011) and Yang *et al.* (2020).

Accordingly, we propose the following new combinations:

Neopyropia tenera* var. *tamatsuensis (A.Miura) N.Kikuchi & Niwa, *comb. nov.*

Basionym: *Porphyra tenera* Kjellman var. *tamatsuensis* A.Miura, *Journal of Tokyo University of Fisheries* 71: 2, 1984.

Lectotype: Miura 2035 (Fig. 1), Herbarium of Miura, Tokyo University of Marine Science and Technology, designated by Kikuchi *et al.* (2015: 381, fig. 1, individual on left, selected from syntypes).

Neopyropia yezoensis* f. *narawaensis (N.Kikuchi, Niwa & Nakada) N.Kikuchi & Niwa, *comb. nov.*

Basionym: *Pyropia yezoensis* f. *narawaensis* N.Kikuchi, Niwa & Nakada, *Journal of Japanese Botany* 90: 381, 2015.

Holotype: Miura 2665 (Fig. 2), Herbarium of Miura, Tokyo University of Marine Science and Technology (Kikuchi *et al.* 2015: 381, fig. 2).

Neopyropia kuniedae (Kurogi) N.Kikuchi & Niwa, *comb. nov.*

Basionym: *Porphyra kuniedae* Kurogi, *Suisanzoushoku* 4(4): 23, 1957.

Holotype: SAP 044803 (Fig. 3, Yoshida 1998: 444-445).

Remarks: Sutherland *et al.* (2011, p. 1144) described ‘Holotype: SAP 044803, collected by M. Kurogi, 22 Dec. 1952, Ishihama-Katsurajima, Matsushima Bay, Miyagi Pref., Japan.’ The collection date written in the label on the holotype sheet is ‘Dec. 22, 1952’. However, the date written on the small sheet on which the holotype specimen is mounted is ‘Dec. 24, 1952’. The same specimen with the holotype is listed in Kurogi (1961) as fig. A of plate IX with the caption ‘A Dec. 24, 1952 at Ishihama’. Therefore, the correct date of collection of the holotype specimen is 24 Dec. 1952.

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Fig.1. Lectotype (left individual) of *Neopyropia tenera* var. *tamatsuensis* (A.Miura) N.Kikuchi & Niwa. Miura 2035, Herbarium of Miura, Tokyo University of Marine Science and Technology.



Fig. 2 Holotype of *Neopyropia yezoensis* f. *narawaensis* (N.Kikuchi, Niwa & Nakada) N.Kikuchi & Niwa. Miura 2665, Herbarium of Miura, Tokyo University of Marine Science and Technology.

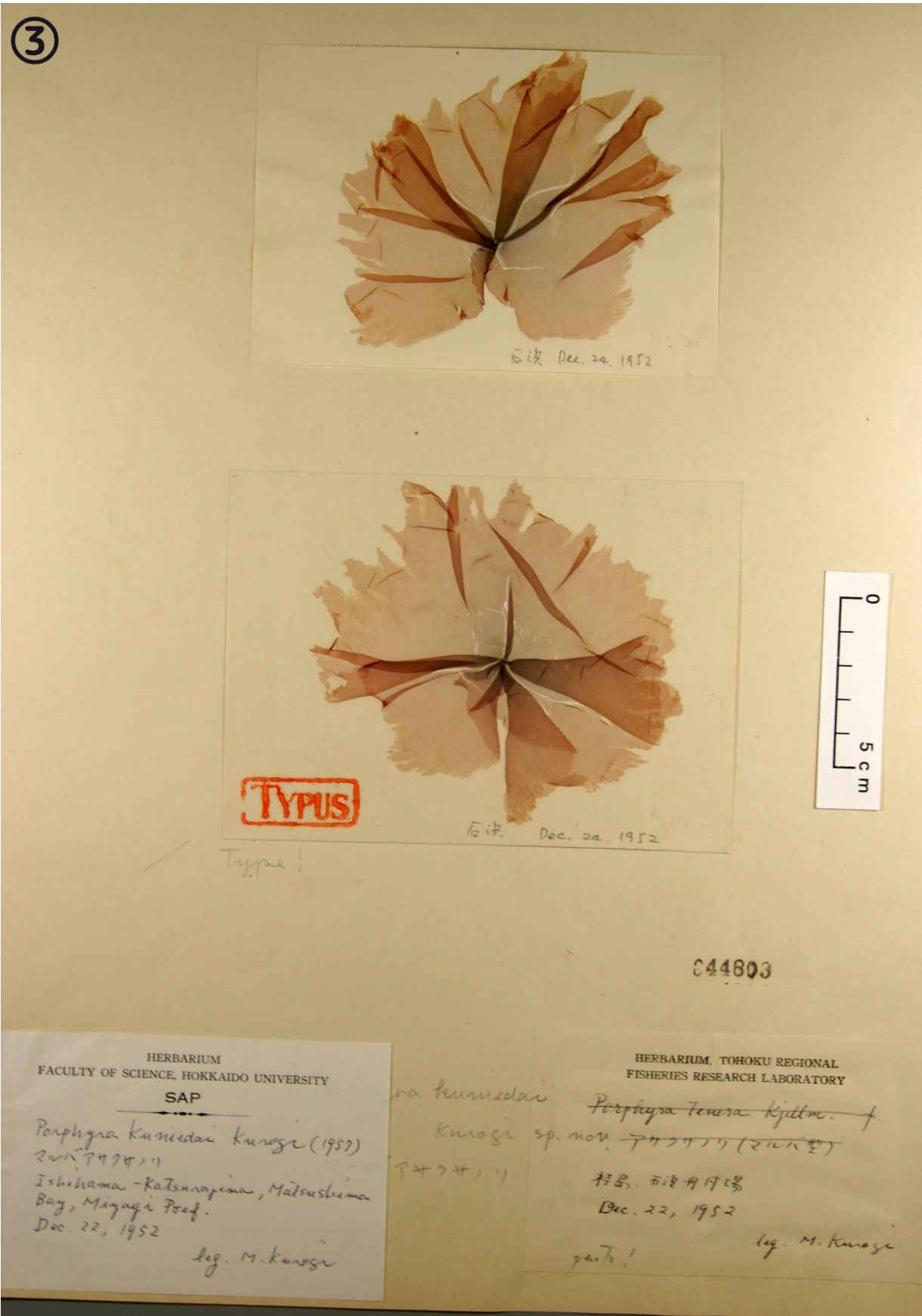


Fig. 3. Holotype (below individual) of *Neopyropia kuniedae* (Kurogi) N.Kikuchi & Niwa, SAP 044803.