

**Validation of “*Neowollea manoromensis*” Tawong, *nom. inval.* (Cyanophyta, Nostocaceae) from Thailand**

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Tawong & al. (2019) described, illustrated, and presented molecular evidence for the recognition of a new genus and species of heterocytous cyanobacteria from Thailand. It has come to our attention that the designation “*Neowollea manoromense*” Tawong is nomenclaturally invalid as a living culture was designated as type (ICN Arts 8.4 and 40.8; Turland & al. 2018). As the type of “*Neowollea*” Tawong is invalid, the genus designation is also invalid (Arts 10.2, 10.3). Furthermore, a combination for the genus was proposed, but without making a full and direct reference to the basionym (Art. 41.5), rendering it also invalid.

Accordingly, we here validate the genus and species names:

***Neowollea*** Tawong, *gen. nov.*

Description: Colonies filamentous with densely packed trichomes, blue-green in colour, forming rough mats. Trichome solitary or gathered in fascicles, straight or slightly curved, unbranched, narrowing toward the ends, constricted at the cross-wall, without a sheath. Vegetative cells barrel-shaped, apical cells rounded-pointed. Heterocyte cells intercalary or terminal, spherical, sometimes elliptical, the width slightly greater than the length. Akinete cells cylindrical (young) to elliptical (old), generally solitary on either side of the heterocyte cell, dark green with granular contents, smooth at surface, never found remote from heterocyte cells.

Type: ***Neowollea manoromensis*** Tawong, *sp. nov.*, *infra*

***Neowollea manoromensis*** Tawong, *sp. nov.*

Description: Trichomes solitary or gathered in fascicles, straight or slightly curved, unbranched, narrowing toward the ends, constricted at the cross-wall, without a sheath. Vegetative cells barrel-shaped, 2.9–(3.92)–5.9 µm in length, 4.0–(4.78)–6.6 µm in width, L:W ratio 0.53–(0.84)–0.96, and apical cells rounded-pointed. Heterocyte cells intercalary or terminal, spherical, sometimes elliptical, the width slightly larger than the length with 3.8–(5.0)–6.8 µm in length, 4.5–(5.6)–7.5 µm in width, and L:W ratio 0.77–(0.90)–1.00. Akinete cells cylindrical (young) to elliptical (old), generally solitary on either side of the heterocyte cell, dark green with granular contents, smooth at surface, with 9.60–(13.4)–16.1 µm in length, 7.3–(9.3)–11.7 µm in width, L:W ratio 1.18–(1.46)–2.65; only found remote from heterocyte cells.

Representative illustrations: Tawong & al. (2019: 4: fig. 1).



Type: No. 132168, is fixed in 4% formaldehyde, deposited at the Queen Sirikit Botanic Garden Herbarium (**QBG**), Chiang Mai, Thailand.

Type locality: Thailand: Chai Nat Province: Manorom District, 15°17'28.2"N, 100°04'57.0"E.

Habitat: Shallow freshwater pond.

Representative culture: *NUACC15* (Naresuan University Algae and Cyanobacteria Collection (NUACC) of Faculty of Agriculture Natural Resources and Environment, Naresuan University, Thailand).

Etymology: Named for the district of Manorom, Chai Nat Province, Thailand.

*Neowollea salina* (Chatchawan, Kozlíková, Komárek & Kaštovský) Tawong, Pongcharoen, Pongpadung & Ponza, *comb. nov.*

Basionym: *Wollea salina* Chatchawan, Kozlíková, Komárek & Kaštovský, *Fottea* **16**(1): 48, 2016.

We are most grateful to Dr Tomohiro Nishimura for his kind advice.

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