
***Moorena* gen. nov., a valid name for “*Moorea* Engene & al.” nom. inval. (Oscillatoriaceae, Cyanobacteria)**

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Engene *et al.* (2012: 1176) described the cyanobacterial genus “*Moorea* Engene & al.” including two pantropical marine filamentous species, the new species “*M. producens*” as the type, and the new combination “*Moorea bouillonii*”. However, the name *Moorea* had previously been used in botanical nomenclature. Initially, Wynne (2013) proposed to conserve “*Moorea* Engene & al.” since the older *Moorea* names, *Moorea* Lemaire [in *Ill. Hort.* 2: 14–15 (1855)] and *Moorea* Rolfe [in *Gard. Chron.*, ser. 3, 8: 7 (1890)], had been rejected and were no longer in use. The Nomenclature Committee for Algae, however, recognized that the proposed generitype (“*Moorea producens*”) had not been properly designated in accordance with Art. 8.1 and Art. 9.1. of the ICN (Shenzhen Code; Turland *et al.* 2018). Both articles specify that “the type of a name of a species or infraspecific taxon is either a single specimen conserved in one herbarium or other collection or institution, or a published or unpublished illustration.” Engene *et al.* (2012) intended to designate the holotype as the voucher specimen “BRNM/HY 2364” deposited at the herbarium of the Moravian Museum Brno, but erroneously specified the holotype as “strain 3L^T” deposited in the CPCC and CCMP culture collections. Wynne’s (2013) proposal to conserve “*Moorea* Engene & al.” was thus rejected as the name was invalid (Prud’homme van Reine, 2016).

Here, we correct this nomenclatural issue by replacing “*Moorea* Engene & al.” nom. inval. with a valid genus name as well as describing the proposed generitype species and transfer a second species to the new taxon.

***Moorena* Engene & Tronholm, gen. nov.**

Replaced designation: “*Moorea* Engene & al.” *International Journal of Systematic and Evolutionary Microbiology* 62: 1176, 2012, nom. inval.

Description: Large filamentous cyanobacteria are common in tropical marine oceans, abundant on coral reefs, rocks or mangroves at depths ranging between 0.3–30 m. Filaments are unbranched, <10 cm in length, with wide diameters [25–65 (82) µm]. Trichomes are cylindrical, not attenuated towards ends, constricted or not constricted on crosswalls, surrounded by thick (3–5 µm) and distinct polysaccharide sheaths. The sheaths are typically covered by a rich diversity of mucus (often containing heterotrophic bacteria and other micro-organisms). The cells are discoid, always shorter than they are wide [20–55 (70) µm wide and (2) 3–10 µm long]. The trichomes contain necridic cells separating the trichomes into hormogonia. The terminal cells of the filaments and those of the hormogonia are rounded. Non-diazotrophic and the filaments lack heterocysts or other specialized cells. Members of the genus are photosynthetic and contain phycobiliproteins (phycocyanin, phycoerythrin, and allophycocyanin) and chlorophyll *a*. Strains are often rich in bioactive secondary metabolites typically biosynthesized by PKS, NRPS or mixed PKS/NRPS pathways.

Type: ***Moorena producens*** Engene & Tronholm, *sp. nov.*

Etymology: In memory of the eminent natural products chemist Professor Richard E. Moore (1933–2007). The name is feminine and is formed entirely in accordance with Art. 20.1 (Shenzhen Code; Turland *et al.* 2018) by addition of the arbitrary suffix “-na”.

Moorena producens Engene & Tronholm, *sp. nov.*

Replaced designation: “***Moorena producens*** Engene & *al.*” *International Journal of Systematic and Evolutionary Microbiology* 62: 1177, fig. 2 d-f, 2012, *nom. inval.*

Description: The thallus morphology ranges from tufts to extensive mats. The coloration is highly varied, ranging from dark red to greenish-brown. Filaments 30–67 (–82) μm in width. Sheaths are colourless, thin (1–2 μm , but can be 12 μm wide in extreme situations), slightly lamellose. Trichomes are cylindrical, attenuated at the ends, constricted on the cell walls, cells (25) 30–65 (70) μm wide and 3–7 μm long. Apical cells are rounded, without calyptra. The genomic DNA G+C content is 41.2 mol%.

Holotype: **BRNM/HY 2364**; dried, metabolically inactive material collected on coral rubble and rocks at 2–3 m depth in Curaçao, Netherlands Antilles (see Engene *et al.* 2012 for further collecting information).

Etymology: From the Latin participle *producens*, meaning “bringing forth, producing” referring to the fact that the species is rich in metabolic products.

Moorena bouillonii (L.Hoffmann & Demoulin) Engene & Tronholm, *comb. nov.*

Basionym: *Lyngbya bouillonii* L.Hoffmann & Demoulin, *Belgian Journal of Botany* 124: 85, figs 1–4, 6, 7, 1991.

≡ “***Moorena bouillonii*** Engene & *al.*” *International Journal of Systematic and Evolutionary Microbiology*. 62: 1177, fig. 2 a-c, 2010, *nom. inval.*

Additional information: The colony morphology is mat-like and firmly attached to surrounding substrate. The colonies are found in association with the Snapping Shrimp (*Alpheus frontalis* H. Milne Edwards, 1837). Coloration fluctuates between brownish-red and dark red depending on depth. The DNA G+C content of the reference strain is 42.3 mol%. Reference specimen (PNG5-198^R) collected from coral reefs at a depth of 10 m in New Ireland, Papua New Guinea (see Engene *et al.* 2012 for further collecting information).

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Hoffmann, L. & Demoulin, V. (1991). Marine Cyanophyceae of Papua New Guinea. II. *Lyngbya bouillonii* sp. nov., a remarkable tropical reef-inhabiting blue-green alga. *Belgian Journal of Botany* 124: 82–88.

Prud’homme van Reine, W.F. (2016). Report of the Nomenclature Committee for Algae: 14. *Taxon* 65(4): 880–881

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