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**Validation of the noxious cyanophyte *Microseira wollei* (Farlow ex Gomont) G.B.McGregor & Sendall (*Oscillatoriaceae*)**

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McGregor & Sendall (2014: 51) proposed the establishment of a new genus, *Microseira* G.B.McGregor & Sendall for the toxigenic *Lyngbya wollei* (Farlow ex Gomont) Speziale & Dyck on the basis of this entity being phylogenetically distinct from other members of *Lyngbya* C.Agardh ex Gomont *sensu lato*. They indicated as type species *Microseira wollei* (Farlow ex Gomont) G.B.McGregor & Sendall. Unfortunately, this name is invalid according to Art. 6.10 of the ICN (Melbourne Code, McNeill et al. 2012) as they incorrectly cited basionym as *Lyngbya wollei* (Farlow ex Gomont) Speziale & Dyck (*viz*, a homotypic synonym) instead of *Plectonema wollei* Farlow ex Gomont. *Plectonema wollei* was first described by Farlow (1877: 77), but is a devalidated name in accordance with Art. 13.1(e) of the ICN (Melbourne Code, McNeill et al., 2012), which sets the later starting point for the “Nostocaceae homocysteeae” as 1 January 1892; it was first validated as *Plectonema wollei* Farlow ex Gomont by Gomont (1892 ‘1893’: 98, pl. I: fig. 1).

Although McGregor & Sendall indicated as type an invalid name, the direct reference to a single valid species name: *Lyngbya wollei* (Farlow ex Gomont) Speziale & Dyck, renders the genus *Microseira* valid according to Art. 40.3 of the ICN (Melbourne Code, McNeill et al. 2012).

The validation of *Microseira wollei*, the type species of the genus *Microseira*, is herein proposed:

***Microseira wollei*** (Farlow ex Gomont) G.B.McGregor & Sendall ex Kenins *comb. nov.*

Basionym: *Plectonema wollei* Farlow ex Gomont, *Annales des Sciences Naturelles, Botanique, Série 7*: 16: 98, pl. I: fig. 1, 1892 '1893'.

Homotypic synonym: *Lyngbya wollei* (Farlow ex Gomont) Speziale & Dyck 1992: 704.

Heterotypic synonyms: *Plectonema wollei* f. *robustum* G.S.West ('*robusta*'), *Lyngbya magnifica* N.L.Gardner, *Lyngbya latissima* Prescott [see Speziale & Dyck (1992)].

The designation of a lectotype of *Plectonema wollei* has been attempted on two occasions. The first was by Drouet (1968: 175), who designated Reverend Francis Wolle's collection (Pennsylvania: Bethlehem, F. Wolle, Farlow Herbarium). The second was by Speziale & Dyck (1992: 704-705), who acknowledged Drouet's selection, but proposed another type from the same collection on the basis of it being better representative of the morphological variation observed in this species. Article 9.19 of the ICN (Melbourne Code, McNeill et al., 2012) states that the author who first designated a lectotype must be followed and the reason provided by Speziale & Dyck (1992) does not meet the conditions required to supersede the Drouet's selection. Both Drouet (1968) and Speziale & Dyck (1992) regarded the type material as from Wolle's collection due to Farlow (1877) attributing it as the first gathering. However, in the protologue, material collected by Farlow (1877) at Horn Pond (Boston, Massachusetts, USA) was also cited and while no type was designated they are syntypes according to Art. 9.5 of the ICN (Melbourne Code, McNeill et al., 2012). My Fig. 1 shows the syntypes Catalog #: 945406, the isosyntypes Catalog #: 945405 and an uncited specimen Catalog #: 945408 of this species housed at NY. These herbarium sheets have been digitised by the Macroalgal Herbarium Consortium and are available online at <http://www.macroalgae.org>.

Drouet, F. (1968). Revision of the classification of the Oscillatoriaceae. *Proceedings of the Academy of Natural Sciences of Philadelphia* Monograph 15: i-vi, 1-370, 131 figs.

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- McNeill, J., Barrie, F.R., Buck, W.R., Demoulin, V., Greuter, W., Hawksworth, D.L., Herendeen, P.S., Knapp, S., Prado, J., Prud'homme van Reine, W.F., Smith, G.F., Wiersema, J.H. & Turland, N.J. (2012). *International Code of Nomenclature for algae, fungi and plants (Melbourne Code)* adopted by the Eighteenth International Botanical Congress Melbourne, Australia, July 2011. *Regnum Vegetabile*, Vol. 154. pp. [i]-xxx, 1-208. Königstein: Koeltz Scientific Books.
- Speziale, B.J. & Dyck, L.A. (1992). *Lyngbya* infestations: comparative taxonomy of *Lyngbya wollei* comb. nov. (Cyanobacteria). *Journal of Phycology* 28(5): 693-706, 13 figs, 5 tables.

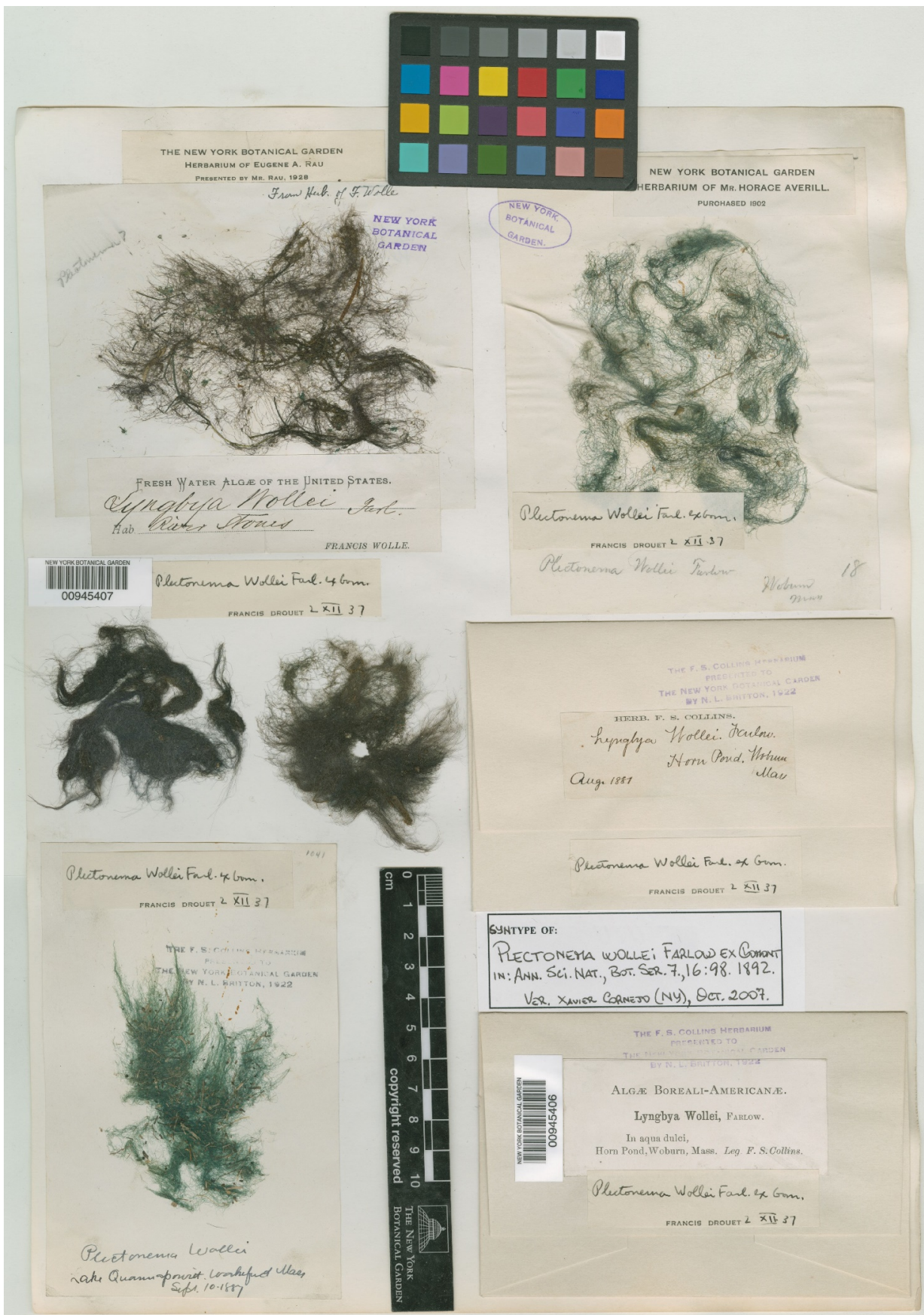


Fig. 1. Syntypes of *Plectonema wollei* Farlow ex Gomont, Catalog #: 945406, (NY) reproduced from <http://www.macroalgae.org> where "... images are made available under the Creative Commons Attribution-ShareAlike."