The proposal of *Willeella brachyclados* (Montagne) M.J.Wynne comb. nov. (*Ulvophyceae*)

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The green algal species *Cladophora montagneana* Kützing has been reported to have a broad distribution along the tropical to warm temperate Atlantic coast of America (Harvey 1858, as *Cladophora brachyclados*; Taylor 1960, as *C. brachyclados*; Hoek 1982, Wynne 2011, Suárez *et al*. 2015), western Africa (Lawson & John 1987), southern to western Australia (Hoek & Womersley 1984, Silva *et al*. 1996) and Brazil (Alves *et al*. 2012). The type locality of this species is Cuba (Montagne 1837: 349; 1842: 15, pl. IV, fig. 2, as *Conferva brachyclados*). It was also depicted by Kützing (1854, pl. 41, fig. II, as *Cladophora montagneana*). Although there has been some uncertainty whether the type is of freshwater or marine provenance (De Toni 1889, Taylor 1960), Hoek (1982: 106) stated that the material "very clearly belongs to a marine species".

A recent publication by Boedeker *et al.* (2016) reported on the molecular phylogeny of the Cladophoraceae. One of their results was to provide molecular evidence to reinstate the genus *Willeella* Børgesen (1930: 155) contrary to Hoek's (1982) proposal to merge the genus within *Cladophora* and to treat it as a section within *Cladophora*. Wysor & Kooistra (2003) had supported that treatment. In addition to the generitype *Willeella ordinata* Børgesen and the later described species *W. japonica* Yamada *et* Segawa in Segawa (1938), Boedeker (in Boedeker *et al*. 2016) demonstrated with molecular evidence that *Cladophora montagneana* belongs to the genus *Willeella*, and the binomial *Willeella montagneana* (Kützing) Boedeker was effected.

However, *Cladophora montagneana* Kützing (1847: 166) was a replacement name for *Conferva brachyclados* Montagne (1837: 349) because Kützing was aware of the existence of *Cladophora brachyclados* (Kützing) Kützing (1845: 216), a heterotypic name based on *Conferva crispata* var. *brachyclados* Kützing, a taxon that was treated by Hoek (1963) as conspecific with *Cladophora rivularis* (Linnaeus) Kuntze (1891). *Conferva brachyclados* Montagne (1837), however, is a valid name that predates *Cladophora montagneana* Kützing (1847) and is thus available as the basionym of this newly recognized *Willeella* species.

***Willeella brachyclados* (Montagne) M.J.Wynne, comb. nov.**
Basionym: *Conferva brachyclados* Montagne, *Annales des Sciences Naturelles, Botanique*, sér. 2, 8: 349. 1837.

Homotypic synonyms:
Cladophora montagneana Kützing 1847: 166.
Cladophora brachyclados (Montagne) Montagne 1856: 456. *nom. illeg.*, non Kützing 1845: 216.
Aegagropila montagneana (Kützing) Kützing 1854: 14, pl. 65, fig. II.
Willeella montagneana (Kützing) Boedeker in Boedeker *et al*. 2016: 922.

According to Hoek (1982), the following should also be treated as taxonomic synonyms:
Cladophora delicatula (Montagne) Montagne (1856: 458), based on *Conferva delicatula* Montagne (1850: 302)
Cladophora polyacantha (Montagne) Montagne (1856: 458), based on *Conferva polyacantha* Montagne (1850: 302)
Cladophora stricta P. Crouan & H. Crouan in Schramm & Mazé (1865: 38)

Hoek (1982: 106) stated that the alga depicted by Kützing (1854, pl. 65, fig. II, as *Aegagropila montagneana*) is actually *Cladophora catenata sensu* Hoek [which represents *Cladophora*

fuliginosa Kützing according to Cormaci *et al.* (2014: 328)]. Nonetheless, that binomial *Aegagropila montagneana* is a homotypic synonym because its identity is determined by the basionym, not by the "material in hand" that Kützing used to depict that species.

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