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**Transfer of *Petalonia filiformis* (Batters) Kuntze to the genus *Planosiphon* McDevit & G.W.Saunders (Scytosiphonaceae, Phaeophyceae)**

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Recent taxonomic and molecular phylogenetic studies by McDevit & Saunders (2017) of Canadian Scytosiphonaceae resulted to the description of the new genus *Planosiphon* McDevit & G.W.Saunders and a new species *Scytosiphon promiscuus* McDevit & G.W.Saunders. The proposal of the new genus was made to accommodate a highly supported clade consisting of species of *Scytosiphon* and *Petalonia* with flattened thalli that are hollow to partially hollow. Typically, *Planosiphon* species also lack paraphyses (ascocysts) amongst their uniseriate plurangia (McDevit and Saunders 2017). Together with the discovery of a new monotypic genus *Tronoella* Santiañez & Kogame (Santiañez *et al.* in press), the description of *Planosiphon* increases the number of genera in the family Scytosiphonaceae to 12. Comparing the morphologies and life histories of taxa that are closely related to *Planosiphon* suggested that the genus can be further defined through the life histories in culture of its members. In particular, *Planosiphon* species have been reported to have *Compsonea*-like prostrate sporophytic thalli that bear only unangia [unilocular sporangia] (Kogame and Kawai 1993, Kogame 1998, Kogame *et al.* 1999). As such, the description of the genus is expanded as follows:

***Planosiphon* McDevit & G.W.Saunders 2017**

Expanded description: Thalli erect, linear, compressed to flattened; hollow to partially hollow; non-constricted. Plurangia occur extensively over the thallus surface, uniseriate, closely packed, generally covered with a cuticle; paraphyses (ascocysts) absent. Prostrate sporophytic thalli *Compsonea*-like, bearing unangia only.

The species currently known as *Petalonia filiformis* (Batters) Kuntze is attributable to genus *Planosiphon*. The morphology and life history of *P. filiformis* has been described by Fletcher (1987). Morphologically, this species is referable to *Planosiphon* or *Petalonia* based on its flattened and partially hollow thalli. Fletcher (1987), however, reported that the species has a *Compsonea*-like prostrate sporophytic stage, typical of *Planosiphon* species. This character is different from those of *Petalonia* species which have *Stragularia*-type sporophytic thalli (Wynne 1969, Brophy & Murray 1989, Kogame 1998, Kogame *et al.* 1999, Parente *et al.* 2003). Accordingly, we here propose transfer of this species to the genus *Planosiphon*.

Batters (1888), in describing *Phyllitis filiformis*, did not designate a type specimen for the species. Such a designation was not required at the time. A search of the **BM** (Natural History Museum 2014) on-line database yielded two possible type collections: **BM** 000562830 and **BM** 000563650. Both of these sheets contain several specimens labelled “121. *Phyllitis filiformis*, Batters. / Berwick, January, 1887, E. Batters.” Thus, it appears that specimens on both sheets were part of a single gathering and can be considered a collection (Arts 8.2 and 8.3 Melbourne Code; McNeill *et al.* 2012). We here designate **BM** 000562830 (Fig. 1) as the lectotype of *P. filiformis*, and **BM** 000563650 is considered an isolectotype. These specimens were distributed as part of the exsiccata (curated by E.M. Holmes) *Algae britannicae raroires exsiccatae* no. 121 and it is likely that further isolectotypes exist in other herbaria with copies of this exsiccata.

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***Planosiphon filiformis*** (Batters) Santiañez & Kogame *comb. nov.*

Basionym: *Phyllitis filiformis* Batters 1888: *Journal of the Linnean Society of London, Botany* 24: 451, pl. XVIII [18]: figs 1–6.

Synonym: *Petalonia filiformis* (Batters) Kuntze 1898: 419.

Type locality: Berwick-[up]on-Tweed, [Northumberland], England (Batters 1888).

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Fig. 1. *Planosiphon filiformis* (Batters) Santiañez & Kogame *comb. nov.* Lectotype (**BM** 000562830, here designated) deposited in the Natural History Museum, London (**BM**). Scale = 1 cm.