Transfer of *Pyropia acanthophora* var. *robusta* M.G.Kavale, Kazi & Sreenadhan and *Porphyra acanthophora* var. *brasiliensis* E.C.Oliveira & Coll to *Phycocalidia* Santiáñez & M.J.Wynne (Bangiales, Rhodophyta)

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Based on morpho-anatomical and molecular phylogenetic criteria, Yang *et al.* (2020) proposed the new genus *Calidia* L.-E.Yang & J.Brodie. Santiáñez & Wynne (2020), however, pointed out that this name was illegitimate, being a later homonym of a lichen (fungal) genus *Calidia* Stirton (Stirton 1876: 91). Consequently, they proposed a new name, *Phycocalidia* Santiáñez & M.J.Wynne, for this warm-water genus of bladed Bangiales and subsequently transferred the known species (Santiáñez & Wynne 2020). In transferring the warm-water species of bladed Bangiales, Santiáñez & Wynne (2020) missed including some relevant taxa such as *Porphyra marcosii* Cordero, a putative endemic to the Philippines, as well as the infraspecific taxa *Pyropia acanthophora* var. *robusta* M.G.Kavale, Kazi & Sreenadhan, originally described from India based on morpho-anatomical and molecular genetic information (Kavale *et al.* 2015) and *Porphyra acanthophora* var. *brasiliensis* E.C.Oliveira & Coll from Paraná State, Brazil (Oliveira and Coll, 1975). Santiáñez (2020) has since transferred *Porphyra marcosii* to the genus *Phycocalidia*, but considered it as a heterotypic synonym of the earlier described *Phycocalidia vietnamensis* (Tak. Tanaka & P.H.Hô Santiáñez & M.J.Wynne [as *Porphyra vietnamensis* Tak. Tanaka & P.H.Hô (Tanaka and Hô, 1962)]. However, both *Porphyra acanthophora* var. *brasiliensis* E.C.Oliveira & Coll and *Pyropia acanthophora* var. *robusta* M.G.Kavale, Kazi & Sreenadhan have not been formally transferred to the genus *Phycocalidia*.

*Porphyra acanthophora* var. *brasiliensis* E.C.Oliveira & Coll was described based on a specimen from Caiobá, Paraná State, Brazil. It is differentiated from the nominate variety by its strap-shaped thallus that occurs as isolated or in few tufts, and its relatively longer and thinner blades (Oliveira and Coll 1975). To distinguish the different species of *Porphyra sensu lato* in Brazil, Milstein *et al.* (2011) provided DNA barcodes of the nominate variety and var. *brasiliensis* based on *cox1*, *cox2–3* spacer, and *UPA* gene markers. They noted that based on *cox1* sequence data, these varieties only differ by a single nucleotide (Milstein *et al*., 2011). The species *Porphyra acanthophora* E.C.Oliveira & Coll was transferred to *Pyropia* J. Agardh by Sutherland *et al.* (2011) as *Pyropia acanthophora* (E.C. Oliveira & Coll) M.C.Oliveira, D.Milstein & E.C.Oliveira based on its phylogenetic position. Similarly, Yang *et al.* (2020) transferred the species to *Calidia L.-E.Yang & J.Brodie nom. illeg.* as *Calidia acanthophora* (E.C.Oliveira & Coll) L.-E.Yang & J.Brodie, nom. illeg. This was later renamed and transferred to *Phycocalidia* as *Phycocalidia acanthophora* (E.C.Oliveira & Coll) Santiáñez by Santiáñez & Wynne (2020). However, on all those occasions, the var. *brasiliensis* has been overlooked. Meanwhile, *Pyropia acanthophora* var. *robusta* M.G.Kavale, Kazi & Sreenadhan was described based on a specimen from Cola, Goa, India (Kavale *et al.* 2015). At the time, it was among nine taxa of bladed Bangiales reported from India. *Pyropia acanthophora* var. *robusta* was morphologically distinguished from the nominate variety and *Porphyra acanthophora* var. *brasiliensis* E.C.Oliveira & Coll on the basis of its robust, longer, and wider thallus. Based on *cox1* sequence data, the var. *robusta* had 0.2% and 0.3% divergence from var. *brasiliensis* and var. *acanthophora*, respectively (Kavale *et al.* 2015). In their most recent study on the *Phycocalidia* in the Indian coast, Kavale *et al.* (2021) proposed the recognition of a new species *Phycocalidia sukshma* M.G.Kavale & Kazi and the new combination *Phycocalidia kanyakumariensis* (V.Krishnamurthy & Baluswami) M.G.Kavale & Kazi. Therein, they also considered var. *robusta* as a member of the genus *Phycocalidia* as “*Phycocalidia acanthophora* var.
"robusta" citing, incorrectly, “MG Kavale, MA Kazi & N Sreenadhan” as the authority for the name and citing “Kavale et al. (2015a, 2017)” as its reference (Kavale et al. 2021: table 2). This latter name is not validly published. I therefore propose here the transfer of both varieties of foliose Bangiales to the genus Phycocalidia.

**Phycocalidia acanthophora var. brasiliensis** (E.C.Oliveira & Coll) Santiañez, *comb. nov.*

**Phycocalidia acanthophora var. robusta** (M.G.Kavale, Kazi & Sreenadhan) Santiañez, *comb. nov.*
Note: The designation “Phycocalidia acanthophora var. robusta” was used several times in Kavale & al., (2021: 338, 345) but no validation was attempted.

I thank Drs Gavino C. Trono, Jr. and Edna T. Ganzon-Fortes for the inspiration and encouragement to conduct seaweed biodiversity and systematics research. I am also grateful for the comments and suggestions provided by Dr Michael Guiry and Eduardo Molinari that helped improve this manuscript. This work is partially funded by the UP Marine Science Institute In-house research grant and by the Predicting Responses between Ocean Transport and Ecological Connectivity of Threatened ecosystems in the West Philippines Sea (PROTECT WPS 2) project under the Biodiversity Management Bureau of the Department of Environment and Natural Resources.