



## *Ceratolejeunea tahitensis*, a new synonym of *C. cornuta* (Lejeuneaceae, Marchantiophyta)

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The genus *Ceratolejeunea* was established by Jack and Stephani in 1892 based on *C. grandiloba* Jack & Stephani (1892: 16) from the Colombian Andes, as the similar name given by Schiffner (1893) based on Spruce's *Lejeunea* subg. *Cerato-Lejeunea* (Spruce 1884–85: 198) proved to be illegitimate (Dauphin 2003). The genus is mainly distributed in tropical and subtropical regions and the highest species diversity of the genus is in the tropical America with 24 species (Dauphin 2003; Frey & Stech 2009; Reiner-Drehwald 2011; Silva Brito & Ilkiu-Borges 2012). Most of species are common on bark and living leaves (Pócs 2011). The genus has been classified in a separate subtribe *Ceratolejeuneinae* Gradstein (2013: 14), together with *Luteolejeunea* Piippo (1986: 56). *Ceratolejeunea* is characterized and easily distinguished from other related genera by the dark color plants with pale brown cell walls, transverse section of stem with seven cortical cells and over four medullary ones, usual presence of ocelli in leaf lobes, curved apical tooth of the leaf lobule with a proximal hyaline papilla, pycnolejeuneoid leaf sequence of gynoeceium innovations, inflated perianths usually with horn-like projections, usual presence of utricles on branches, and usual absence of asexual reproductive organs (Zhu *et al.* 2005; Pócs 2011).

Stephani (1913) and Bonner (1953) recognized more than 100 species of *Ceratolejeunea*, most of which were considered later to be synonyms (e.g. Mizutani 1981; Dauphin 2003). Although about 45 species are currently accepted in *Ceratolejeunea*, some of them are poorly known and their status is still unclear. During our recent studies on Asian and African *Ceratolejeunea*, we found that *C. tahitensis* Stephani (1913: 444), previously known from Tahiti and the Philippines, is conspecific with *C. cornuta* (Lindenberg 1829: 23) Stephani (1895: 65), a common species in tropical Africa and neotropics. We have examined the type specimens of *C. tahitensis* in the herbaria G and JE, and compared them to various specimens of *C. cornuta* from Africa and America (including some type materials of its synonyms). Thus, we here propose *C. tahitensis* as a new synonym of *C. cornuta*. This result confirms that *C. cornuta* should be considered as a pantropic species. Pócs (2011) also noted that *Ceratolejeunea belangeriana* (Gottsche) Stephani (1913: 396), a common species in the Palearctic, is similar to *C. cornuta*, as already pointed out by Wigginton (2004). However, more samples of these two latter *Ceratolejeunea* species need to be examined for understanding of their status.

### Formal treatment

The format of this note follows Söderström *et al.* (2012).

*Ceratolejeunea cornuta* (Lindenb.) Steph. in Engler, *Pflanzenwelt Ost-Afrikas. Theil C*: 65. 1895.

= *Jungermannia cornuta* Lindenb., *Acta Nova Acad. Caes. Leop.-Carol. Suppl.* 14: 23. 1829. Type:—Jamaica, on *Grammitis serrulatus*, Swartz *s.n.* (holotype: W)

= *Ceratolejeunea calabariensis* Steph., *Hedwigia* 34: 234. 1895. Type:—NIGERIA. Niger-Gebiet: Neu Calabar, ad truncos, 8 October 1884, Mönkemeyer 5 (holotype G00045144, isotype JE!), synonymized by Pócs (2011: 133).

= *Ceratolejeunea tahitensis* Steph., *Sp. Hepat. [Stephani]* 5: 444. 1913. Type:—TAHITI. s.d., *Nadeaud s.n.* (lectotype G00069754!, designated here); PHILIPPINES, Luzon, Prov. Tayabas [Quezon Province]: M. Binnang, August 1909, *Robinson s.n.* (syntype JE!) *syn. nov.*