(2831) Proposal to conserve the name Exostema against Coutarea (Rubiaceae)

Werner Greuter¹ & Rosa Rankin-Rodríguez²

- 1 Botanischer Garten & Botanisches Museum Berlin, Freie Universität, Königin-Luise-Str. 6-8, 14195 Berlin, Germany
- 2 Jardín Botánico Nacional, Universidad de la Habana, C.P. 19230 Calabazar, Boyeros, Cuba

Addresses for correspondence: Werner Greuter, w.greuter@bgbm.org; Rosa Rankin-Rodríguez, rosarankin@fbio.uh.cu

DOI https://doi.org/10.1002/tax.12552

First published as part of this issue. See online for details.

- (2831) Exostema (Pers.) Bonpl. in Humboldt & Bonpland, Pl. Aequinoct. 1: 131. Apr 1807 (Cinchona subg. Exostema Pers., Syn. Pl. 1: 196. 1 Apr–15 Jun 1805) [Rub.], nom. cons. prop. Typus: Cinchona caribaea Jacq. (E. caribaeum (Jacq.) Roem. & Schult.).
- (=) Coutarea Aubl., Hist. Pl. Guiane: 314. Jun–Dec 1775, nom. rej. prop.

Type: *C. speciosa* Aubl., nom. illeg. (*Portlandia hexandra* Jacq., *C. hexandra* (Jacq.) K. Schum.).

As detailed in a background paper to be published separately (Greuter & Rankin, in press), results of a comprehensive nucleotide sequence analysis of both plastid and nuclear DNA of a large number of species of the tribe *Chiococceae* Benth. & Hook. f. (Paudyal & al. in Bot. J. Linn. Soc. 187: 365–396. 2018) entail a reconsideration of generic boundaries in what these authors define as their clade B (the "Exostema-Solenandra-Coutarea-Hintonia group"). Rather than recognising seven genera in that group (the four afore-named plus the newly described *Coutareopsis*, *Adolphoduckea*, and *Motleyothamnus*, the two latter unispecific), we concluded that recognition of a single, monophyletic genus is more convenient, being more informative and better in line with current and traditional treatments.

A genus so defined is to comprise 40 species of woody plants (trees and shrubs) of the new World tropics, forming five natural, morphologically definable sections. For reasons of priority the name of that genus would be *Coutarea*, unless the present proposal is accepted, in which case *Exostema* could be retained for it. Currently, for the 47 taxa of sectional, specific and subspecific rank recognised by us, only 9 names are available under *Coutarea*, as contrasted with 37 already available under *Exostema*. If our proposal were to be rejected, 37 new combinations would have to be published, as contrasted with 9 in case of acceptance (we refrain from proposing these combinations as long as the decision on the proposal is pending). It is of note that acceptance of the present proposal would not compromise the use of the generic name *Coutarea* for the traditionally defined, small genus (47 species) that excludes the type of *Exostema*. However, expanding the use of *Coutarea* to

include *Exostema*, resulting from rejection of the proposal, would have the unwelcome consequence of increasing the risk of confusion between *Coutarea* and the similarly spelled name *Coussarea* Aubl., in general use for a large genus of woody Neotropical *Rubiaceae*.

Exostema was published by Bonpland (in Humboldt & Bonpland, Pl. Aequinoct. 1: 131. 1807), who acknowledged that the generic description and subsequent observations on the genus had been provided to him by L.C. Richard, but did not ascribe the name itself to Richard. The generic name Exostema was typified on E. caribaeum by Rogers (in J. Arnold Arbor. 68: 165. 1987). The genus is of considerable biological and systematic interest as a model genus for studying evolutionary processes in insular environments; over 30 taxa, most of them Cuban endemics, have been considered by Berazaín & al. (in Bissea 3, Num. Espec. [1]: 82-84. 2009) as being threatened in some way. Otherwise, the economic importance of the genus is perhaps rather marginal. Exostema caribaeum, along with other Caribbean species, is renowned for producing "one of the most beautiful woods of Cuba" [transl.] (Roig, Dicc. Bot. Nombr. Vulg. Cub., ed. 4: 268-270. 2014, entry "cerillo"). The very bitter bark and fruits of the same species, and most prominently of the Lesser Antillean E. sanctae-luciae, are used in folk medicine as a surrogate of quinine for its febrifuge (and also emetic) properties (Roig, Pl. Medic., Aromát. Venen., ed. [3]: 284-286. 2012, entry "carey"). With their heavily scented white flowers, Exostema species may show future promise as ornamental shrubs or trees, but are not so far reported as having been used as such.

Author information

WG, http://orcid.org/0000-0002-8677-7544 RRR, https://orcid.org/0000-0002-7328-0395

Acknowledgement

The authors are grateful to the editors, John McNeill and John Wiersema, for critical discussion resulting in substantial improvement of the initial draft of the proposal. Open access funding enabled and organized by Projekt DEAL.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

^{© 2021} The Authors.

TAXON published by John Wiley & Sons Ltd on behalf of International Association for Plant Taxonomy.