

Revisiting the infrageneric classification of *Garcinia* L. (Clusiaceae): an updated sectional name and new, legitimate names in *Garcinia* for *Allanblackia gabonensis* (Pellegr.) Bamps and *A. parviflora* A.Chev.

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Abstract

In a recent publication dealing with the sectional-level taxonomy of *Garcinia*, an illegitimate superfluous sectional name and two illegitimate homonyms were published. Herein we choose a legitimate sectional name, *Garcinia* section *Rheediopsis* Pierre, for the superfluous name *Garcinia* section *Rheedia* (L.) S.W.Jones ex P.W.Sweeney; and create two new legitimate names in *Garcinia* for *Allanblackia gabonensis* (Pellegr.) Bamps and *A. parviflora* A.Chev.

Key words: Homonym, nomenclature, priority, taxonomy



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Introduction

In Gaudeul et al. (2024), *Garcinia* sect. *Rheedia* (L.) S.W.Jones ex P.W.Sweeney was recognized to include species placed by Jones (1980) into *G.* sect. *Rheedia* (L.) S.W.Jones *nom. inval.*, *G.* sect. *Rheediopsis* Pierre, and *G.* sect. *Teracentrum* Pierre. However, *Garcinia* section *Rheedia* (L.) S.W.Jones ex P.W.Sweeney is an illegitimate name (superfluous as per Art. 52.1, Turland et al. 2018) due to the two previously published sectional names being included within it. Instead, we here choose the name *Garcinia* section *Rheediopsis* Pierre for this section.

In Gaudeul et al. (2024), the genus *Allanblackia* was placed into synonymy under *Garcinia* section *Allanblackia* (Oliv.) P.W. Sweeney and new combinations and names were created in *Garcinia* for the former *Allanblackia* species. Two of these new names are illegitimate later homonyms (Art. 53.1 Turland et al. 2018). Here we provide new legitimate names for these species.

Nomenclature

***Garcinia* section *Rheediopsis* Pierre, Fl. Forest. Cochinch. 1, Fasc. 5 (1883).
Clade 2 in Gaudeul et al. (2024).**

Type. *Garcinia smeathmannii* (Planch. & Triana) Oliv., Fl. Trop. Afr. 1: 168 (1868), designated by Gaudeul et al. (2024).

Synonyms. *Rheedia* L., Sp. Pl.: 1193 (1753).

Garcinia section *Teracentrum* Pierre, Fl. Forest. Cochinch. 1, Fasc. 5 (1883).

Garcinia section *Rheedia* (L.) S.W.Jones ex P.W.Sweeney, *nom. illegit.*, PhytoKeys 239: 86 (2024).

Species. *Garcinia albuquerquei* (M.E.Berg) Bittrich; *G. ambrensis* (H.Perrier) P.W.Sweeney & Z.S.Rogers; *G. anjouanensis* (H.Perrier) P.W.Sweeney & Z.S.Rogers; *G. aphanophlebia* Baker; *G. apostoloi* Mouzinhos; *G. arenicola* (Jum. & H.Perrier) P.W.Sweeney & Z.S.Rogers; *G. aristata* (Griseb.) Borhidi; *G. bakeriana* (Urb.) Borhidi; *G. barkeriana* (Urb. & Ekman) Alain; *G. benthamiana* (Planch. & Triana) Pipoly; *G. brasiliensis* Mart.; *G. calcicola* (Jum. & H.Perrier) P.W.Sweeney & Z.S.Rogers; *G. cincta* (Urb.) Borhidi; *G. clarensis* Borhidi; *G. commersonii* (Planch. & Triana) Vesque; *G. cubensis* (Borhidi) Borhidi; *G. dalleizettei* (H.Perrier) P.W.Sweeney & Z.S.Rogers; *G. decussata* C.D.Adams; *G. floribunda* Miq.; *G. fluviatilis* Mouzinhos & L.Marinho; *G. gabonensis* Sosef & Dauby; *G. gardneriana* (Planch. & Triana) Zappi; *G. × guacopary* (S.Moore) M.Nee; *G. hessii* (Britton) Alain; *G. humilis* (Vahl) C.D.Adams; *G. intermedia* (Pittier) Hammel; *G. kingaensis* Engl.; *G. leptophylla* Bittrich; *G. livingstonei* T.Anderson; *G. macrophylla* Mart.; *G. madruno* (Kunth) Hammel; *G. magnifolia* (Pittier) Hammel; *G. magnophylla* (Cuatrec.) Hammel; *G. mangorensis* (R.Vig. & Humbert) P.W.Sweeney & Z.S.Rogers; *G. martinii* (Maguire) Govaerts; *G. megistophylla* P.W.Sweeney & Z.S.Rogers; *G. moaensis* (Bisse) Borhidi; *G. obliqua* Sosef & Dauby; *G. ophiticola* (Borhidi) Borhidi; *G. ovalifolia* Oliv.; *G. pachyclada* N.Robson; *G. parviflora* Benth.; *G. pervillei* (Planch. & Triana) Vesque; *G. polyneura* (Urb.) Borhidi; *G. portoricensis* (Urb.) Alain; *G. pulvinata* (Planch. & Triana) Hammel; *G. pungens* Borhidi; *G. revoluta* (Urb.) Borhidi; *G. robsoniana* Bamps; *G. ruscifolia* (Griseb.) Borhidi; *G. semseii* Verdc.; *G. serpentinei* Borhidi; *G. smeathmannii* (Planch. & Triana) Oliv.; *G. spruceana* (Engl.) Mouzinhos; *G. staudtii* Engl.; *G. thouvenotii* (H.Perrier) P.W.Sweeney & Z.S.Rogers; *G. tsimatimia* P.W.Sweeney & Z.S.Rogers; *G. urschii* (H.Perrier) P.W.Sweeney & Z.S.Rogers; *G. verticillata* Alain.

**New names for species included in *Garcinia* sect. *Allanblackia* (Oliv.)
P.W. Sweeney**

Garcinia alepensis* P.W.Sweeney, *nom. nov.

urn:lsid:ipni.org:names:77339326-1

≡ *Allanblackia parviflora* A.Chev., Vég. Ut. Afr. Trop. Franç. 5: 163 (1909). Type. Côte d'Ivoire: Alépé, *Chevalier* 16239. non *Garcinia parviflora* Benth., London J. Bot. 2: 370 (1843).

≡ *Garcinia guineensis* P.W.Sweeney, PhytoKeys 239: 87 (2024), *nom. illeg.* non *Garcinia guineensis* (G.Don) Vesque, Monogr. Phan. [A.DC. & C.DC.] 8: 335 (1893).

Note. A replacement name, *Garcinia alepensis*, is created here for *Allanblackia parviflora*, because the epithet *parviflora* was used previously in *Garcinia* for a different species. The epithet *alepensis* is chosen in reference to the type locality of the species, Alepe, Côte d'Ivoire.

***Garcinia agnoume* P.W.Sweeney, nom. nov.**

urn:lsid:ipni.org:names:77341601-1

≡*Allanblackia gabonensis* (Pellegr.) Bamps, Bull. Jard. Bot. Natl. Belg. 39: 356 (1969). Type. Gabon: between Moubighou and Nzoundou, *Le Testu* 6001. non *Garcinia gabonensis* Sosef & Dauby, *PhytoKeys* 17: 52 (2012).

≡*Garcinia ngouniensis* P.W.Sweeney, *PhytoKeys* 239: 88 (2024), *nom. illeg.* non *Garcinia ngouniensis* Pellegr., Bull. Mus. Natl. Hist. Nat. 27: 195 (1921).

Note. A replacement name, *Garcinia agnoume*, is created here for *Allanblackia gabonensis*, because the epithet *gabonensis* was used previously in *Garcinia* for a different species. The epithet *agnoume*, constructed as a noun in apposition, is in reference to a vernacular name *agnoumé* used for this species within parts of its range (Eyog Matig et al. 2006).

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Additional information

Conflict of interest

The authors have declared that no competing interests exist.

Ethical statement

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Author contributions

All authors have contributed equally.

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Data availability

All of the data that support the findings of this study are available in the main text.

References

- Eyog Matig O, Ndoye O, Kengue J, Awono A [Eds] (2006) Les Fruitiers Forestiers Comestibles du Cameroun. International Plant Genetic Resources Institute (IPGRI) Regional Office for West and Central Africa, Cotonou, Benin, [i–xiv] 1–204.
- Gaudeul M, Sweeney P, Munzinger J (2024) An updated infrageneric classification of the pantropical species-rich genus *Garcinia* L. (Clusiaceae) and some insights into the systematics of New Caledonian species, based on molecular and morphological evidence. *PhytoKeys* 239: 73–105. <https://doi.org/10.3897/phytokeys.239.112563>
- Jones SW (1980) Morphology and major taxonomy of *Garcinia* (Guttiferae). PhD Thesis, University of Leicester. <https://www.proquest.com/dissertations-theses/morphology-major-taxonomy-garcinia-guttiferae/docview/301438677/se-2>
- Turland NJ, Wiersema JH, Barrie FR, Greuter W, Hawksworth DL, Herendeen PS, Knapp S, Kusber W-H, Li D-Z, Marhold K, May TW, McNeill J, Monro AM, Prado J, Price MJ, Smith GF [Eds] (2018) International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017. *Regnum Vegetabile* 159. Koeltz Botanical Books, Glashütten. <https://doi.org/10.12705/Code.2018>