

Garcinia sumbawaensis comb. nova (Clusiaceae) based on *Septogarcinia sumbawaensis*

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Unispecific *Septogarcinia* from Indonesia is clearly related to *Garcinia*, but it was considered sufficiently distinct to warrant generic status. *Septogarcinia sumbawaensis* Kosterm. was sampled in a recent phylogenetic study of Clusiaceae and became nested within *Garcinia*, with which it shares several morphological features. Therefore, a new combination, *Garcinia sumbawaensis* (Kosterm.) Medellín-Zabala & L. Marinho, is proposed here.

Garcinia is a pantropical genus in Clusiaceae. It comprises more than 250 species of dioecious shrubs and trees common in lowland tropical forests (Sweeney 2008). The main morphological features of this group are the presence of yellow or white latex; opposite, oblong-elliptic and coriaceous leaves; petiole bases usually strongly excavated; terminal or axillary inflorescences; androecium generally phalangioid, the stamens connate or free and staminodia frequently present in pistillate flowers; and the fruit an indehiscent drupe or berry (Kearns 1998, Stevens 2006).

Clusiaceae are divided into three tribes: Clusiaceae, Garcinieae and Symphonieae. Molecular phylogenetic studies find support for a monophyletic Clusiaceae that is sister to a strongly supported clade that includes the tribes Symphonieae and Garcinieae, the latter containing *Garcinia* and the African endemic *Allanblackia* (Ruhfel *et al.* 2011, 2013).

The phylogeny of *Garcinia* published by Sweeney (2008) included about 60 species, plus several segregate genera (*Ochrocarpos*, *Pentalphangium*, *Rheedia* and *Tripetalum*). However, the author did not sample *Septogarcinia sumbawaensis*, the single representative of its genus and known from Indonesia. It was segregated from *Garcinia* on the basis of its dehiscent fruits. Following Sweeney's work, there have been several nomenclatural changes in *Garcinia*, with descriptions of new species, new combinations and synonymies (Sweeney & Rogers 2008, Sosef & Dauby 2012).

Ruhfel *et al.* (2013) published a phylogeny of the clusioid clade based on morphological and molecular characters. The authors found *Garcinia* to be paraphyletic based on the position of *S. sumbawaensis*, which was nested within the group of *Garcinia* species that includes *G. morella* from India and Sri Lanka (Nimanthika & Kaththiriarachchi 2010). Despite *Septogarcinia*

already being cited as a synonym of *Garcinia* in the Angiosperm Phylogeny Website (<http://www.mobot.org/MOBOT/research/APweb/genera/clusiaceaeegen.html>), the necessary combination was never made.

***Garcinia sumbawaensis* (Kosterm.)
Medellín-Zabala & L. Marinho, *comb. nova***

Septogarcinia sumbawaensis Kosterm., Reinwardtia 6: 167. 1962. — TYPE: Indonesia. Island W. Sumbawa. Mt. Batulanteh, northwest slope, 7 May 1961 A.J.G.H. Kostermans 18767 (holotype BO; isotypes A, B, BISH, BH, BM, BO, BR, BRI, BZF, CAL, CANB, G, K, KEP, L, LAE, LE, NSW, NY, P, PNH, SING, US).

This species was described by Kostermans (1962) from Sumbawa Island in the Lesser Sunda Islands. The archipelago is divided among four countries: Brunei, East Timor, Indonesia, and Malaysia, with most of the islands belonging to Indonesia. Van Steenis (1979) recognized *Septogarcinia* as the only genus endemic to the archipelago, occurring on islands belonging to Indonesia and Malaysia, in areas occupied by tropical forest between 500–700 m a.s.l. Monk *et al.* (1997) listed five genera endemic to Malaysia, including *Septogarcinia*.

Garcinia sumbawaensis is a tree up to 20 m high. It has yellow latex, subsessile and axillary flowers, and indehiscent fruits purplish to reddish and with a yellow pericarp. Based on the examination of the isotypes [A. Kostermans 18767 (BM, K, NY)] its subsessile male flowers are very similar to the staminate flowers in several species in the section *Brindonia*, such as *G. chapelierii* (Sweeney & Rogers 2008), which have four sepals, four obovate to rotundate obtuse petals 5 mm long, and numerous stamens growing together into one quadrangular phalange, as Kostermans (1962) described.

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