A taxonomic revision of Antillean *Symplocos* (Symplocaceae)

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Abstract

We present a taxonomic revision of *Symplocos* (Symplocaceae, Ericales, Angiospermae) for the Antilles. The seventeen species recognized are distributed among three major clades of the genus corresponding to *S.* sect. *Hopea*, *S.* ser. *Urbaniocharis*, the latter two comprising *S.* sect. *Symplocos*. Fifteen of the species are endemic to the Antilles and only one (*S. cubensis*) occurs in more than one major island group. The revision includes keys, descriptions, distribution maps, and a conservation assessment for each species. *Symplocos baracoensis* is described as new, and lectotypes are designated for *S. apiculata, S. domingensis, S. guadeloupensis, S. harrisii, S. hyboneura, S. jamaicensis, S. jurgensenii, S. lanata, S. latifolia, S. micrantha, S. pilifera, S. polyantha, S. tubulifera, and S. urbaniana.*

**Key words:** Caribbean, lectotype, new species

Introduction

*Symplocos* Jacquin (1760: 24) comprises ca. 340 species of woody, mostly evergreen flowering plants distributed in the Americas and the lands bordering the western Pacific Rim (Nootenboom 1975, Fritsch et al. 2008). The genus is found primarily in humid tropical montane forests, but several species extend into the north-temperate zone. The infrafamilial classification of the Symplocaceae was recently revised in accordance with strict monophyly on the basis of phylogenetic data from morphology and DNA sequences (Fritsch et al. 2008). Two genera are recognized, i.e., the strictly Asian *Cordyloblaste* Henschel ex Moritz (1848: 606), and *Symplocos*; the latter is divided into two subgenera [*Palura* G.Don (1837: 3 and *Symplocos*), three sections within *S.* subg. *Symplocos* [*Hopea* Linnaeus (1767: 105) Candolle (1844: 253), *Lodhra* G.Don (1837: 2), and *Symplocos*], and two series within *S.* sect. *Symplocos* [*Symplocos* and *Urbaniocharis* (Brand) P.W.Fritsch in Fritsch et al. (2008); Fritsch et al. 2008; Table 1].

A number of taxonomic studies conducted since 1990 have updated the family-wide species-level taxonomy of Brand (1901). These studies encompass all species in most of Andean South America (Stäh1 1991, 1993, 1994, 1995b, 1996, 2010a, 2010b), the Venezuelan Guayana (Steyermark & Berry 2005), central French Guiana (Mori & Brown 2002), Mexico and Mesoamerica (Kelly & Almeda 2009, Kelly *et al.* in preparation), and the United States (Almeda & Fritsch, 2009), as well as the species in *S.* sect. *Hopea* in South America (Aranha Filho 2011, Aranha Filho *et al.* 2012) and those of *S.* sect. *Symplocos* in part (the “Neosymplocos group”, endemic to South America; Aranha Filho *et al.* 2007, 2009). The major areas still remaining to be covered with detailed taxonomic treatments of New World *Symplocos* are non-Guayanana Venezuela [a treatment of Venezuelan species (Aristeguieta 1957) appears to be outdated], most of the Guianas, the Brazilian members of *S.* ser. *Symplocos*, and the Antilles.

In terms of biogeography and endemism, the Antilles may represent the most significant gap in taxonomic knowledge of the genus. The region, here defined as the islands of the Caribbean from Cuba through Puerto Rico (the Greater Antilles) south through Grenada (the Lesser Antilles) and excluding the Bahamas and the islands off the north coast of Venezuela (the latter of which are sometimes included in the Lesser Antilles), is poised between the two large continental landmasses of North America and South America. Its tropical climate and complex geology have resulted in both high biotic diversity and high endemism, with many plant species endemic to

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**Excluded name**

*Symplocos glabra* Euphrasén (1798: 224).

The main part of Euphrasén’s collections is reportedly in the Thunberg Herbarium at UPS, with a small portion at S (Stafleu and Cowan, 1976). Like Howard (1988), we were not able to locate type material. Howard (1988) considered it possible that this is conspecific with *Symplocos martinicensis* by the single-flowered axillary peduncles. Although the racemes of *S. martinicensis* can be single-flowered, usually there are several flowers. The glabrous leaves, however, differ from the leaves of *S. martinicensis*, which are at least sparsely strigillose to pilosulose proximally on the midvein of the abaxial surface.

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