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Sarcolobus cambogensis (Marsdenieae, Asclepiadoideae, Apocynaceae): A new rheophytic shrub from Cambodia

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Abstract

A new species of Apocynaceae from Cambodia, *Sarcolobus cambogensis* McHone & Livsh., is described and illustrated. Specimens of the new species, all from the Central Cardamom Region, Koh Kong Province, have morphological characters diagnostic of *Sarcolobus* (truncate stylehead apices and oblong corpuscula). Like *Sarcolobus luzonensis* (Warb.) P.I. Forst. and *S. borneensis* (van Steenis) P.I. Forst., *S. cambogensis* has a rheophytic, shrubby habit, unusual in both *Sarcolobus* and Apocynaceae. It differs from the latter two species in its broader leaves, larger corona, and wider caudicles.

Introduction

The flora of Cambodia has been studied as part of the Indochinese flora, and floristic surveys were mainly conducted by French botanists, such as C. Thorel, L. Pierre, F.J. Harmand, Geoffray, A. Chevalier, and E. Poilane in the late 19th and early 20th centuries. Their work resulted in the compilation of seven volumes of *Flore Générale de L'indo-Chine* (Lecomte *et al.* 1907–1951), where ca. 8,000 species were described for Cambodia, Vietnam, and Laos. Dy Phon (1982) reported 2,308 out of these 8,000 species for Cambodia, although current estimates range as high as 5,000 species (Chassagne & Hul 2014). Since 1984, 39 new taxa of vascular plants with distributions in Cambodia have been named (IPNI, 2012).

The interior of the central Cardamom region in southwestern Cambodia was almost completely uncollected until the last two decades when collaborative international and national survey teams began the exploration of the biota (Daltry 2008, Grismer 2008). The new species here described was collected during surveys of the dry dipterocarp (240–400 m) and lowland evergreen (400–1,000 m) forests of the Central Cardomom, Koh Kong area (forest classification according to Meng *et al.* 2000), growing in the channels of seasonally fast-flowing rivers, swollen annually by the May to October monsoon (Fig. 1, 2A).

For Apocynaceae subfamilies Apocynoideae and Rauvolfioideae, all Cambodian species will be covered in the forthcoming treatment for the *Flore du Cambodge, du Laos et du Vietnam* (Middleton, in press).

For subfamilies Asclepiadoideae, Secamonoideae, and Periplocoideae, *Flore Générale de L'indo-Chine* was the last truly comprehensive floristic treatment for Cambodia (Lecomte 1912). Since then, several researchers have produced floristic treatments of these subfamilies for adjacent countries including 1) checklists and floras for Thailand and Vietnam (Craib & Kerr 1951, Hô 1993); 2) floristic studies of *Dischidia* Brown (1810b: 461) (from Laos and Vietnam), *Cynanchum* Linnaeus (1753: 212), and *Vincetoxicum* Wolf (1776: 130) (in Malesia) (Livshultz *et al.* 2005, Liede 1999); and 3) many new species of *Hoya* Brown (1810b: 459), including five from Vietnam (Tran *et al.* 2011, Bach *et al.* 2011, Pham & Averyanov 2012, Rodda *et al.* 2013), five from Thailand (Thaithong 2001, Kidyoo & Thaithong 2007, Kidyoo & Watthana 2012, Rodda & Juhonewe 2012a, Kidyoo 2013), and one from Laos (Rodda & Juhonewe 2012b). A recent photographic guide to Cambodian plants included 10 species from these three subfamilies (Leti *et al.* 2013).

Placement of the new species in Asclepiadoideae tribe Marsdenieae is unambiguous; it has the diagnostic characters of the tribe including contorted corolla lobes in the bud, hyaline anther apical connective appendages without a basal

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