



Marsdenia microcarpa, a new species of *Marsdenia* (Apocynaceae, Asclepiadoideae) from montane Guerrero, Mexico

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Abstract

A new species of *Marsdenia* (Apocynaceae; Asclepiadoideae) from montane cloud forest in the state of Guerrero, Mexico, is described and illustrated. *Marsdenia microcarpa* is distinguished from congeners by a gynostegial corona with lobes oblong-ovate, adnate to the gynostegium, apices obtuse, free, erect or divergent, lobe margins connate at base, a corpuscle with rostrate apex, and follicles narrowly fusiform, less than 5 cm long at maturity. A key to the species of *Marsdenia* in the state of Guerrero is presented.

Key words: Malinaltepec, *Pseudomarsdenia*, taxonomy

Introduction

Marsdenia (Brown 1810: 460) contains about 200 species with a subtropical distribution. These are usually woody vines with opposite and entire leaves, umbelliform to racemiform or paniculiform inflorescences, campanulate to sometimes urceolate or tubular flowers that sometimes have a fleshy callus below each sinus (forming the corolline corona), a gynostegial corona with 5 free lobes that are rarely connate at base, and erect pollinia (Stevens 2009). About 60 species of *Marsdenia* are distributed in the Americas, of which 31 are known from Mexico (Juárez-Jaimes *et al.* 2007). The most recent work on *Marsdenia* in Mexico is that of Juárez-Jaimes and Ángeles-Trujillo (2013), who recognized eight species for the state of Guerrero. During fieldwork and a review of herbarium specimens for a taxonomic study of *Marsdenia* in Mexico, we found specimens from the state of Guerrero that could not be referred to any of the known species of the genus. After comparing attributes such as leaf shape, flowers (e.g., gynostegial corona lobes, corpuscles), and fruits, we propose the recognition of a new species of *Marsdenia*.

Marsdenia microcarpa Juárez-Jaimes & Lozada-Pérez *sp. nov.*, Fig. 1 A–G

Marsdenia microcarpa is similar to *M. mayana*; it differs morphologically from the latter by the inflorescence pedunculate, corolla white, urceolate, lobes of the gynostegial corona oblong-ovate, adnate to gynostegium, apex obtuse, erect or divergent, base with margins connate, corpuscle with apex rostrate, and follicles narrowly fusiform, up to 4.5 cm long at maturity.

Type:—México. Guerrero: Municipio Malinaltepec, sobre el camino que conduce a Xochiatenco, 1953 m, 17°08'35.5"N, 98°40'52.8"W, 30 July 2005 (fl), *L. Lozada et al.* 2822 (holotype, FCME!; isotypes, ENCB!, F!, MEXU!, MO!).

Twining vine. Stems glabrescent. Leaves opposite, blades oblong, 6.5–10.5 × 2.05–5.0 cm, adaxial surface glabrous, dark green, abaxial surface glabrous, lateral veins in 8–10 pairs, apex cuspidate, base obtuse, margin entire, colleters 4–5, at the base of the blade on the midnerve; petioles 2.0–2.5 cm long, glabrescent. Inflorescences of paniculiform cymes, 1 per node, much-branched; peduncles 1.5–2.5 cm long, puberulent; pedicels 3.5 mm long, puberulent. Flowers with calyx lobes broadly elliptic, ca. 2.1 × 1.7 mm, apex acute, abaxial surface pubescent, margin ciliolate, colleters 1–2 per sinus; corolla white, urceolate, tube 2.5 mm long, with thin lines of villous pubescence extending