
A New *Marsdenia* (Apocynaceae, Asclepiadoideae) from Baja California

W. D. Stevens

Missouri Botanical Garden, P.O. Box 299, St. Louis, Missouri 63166-0299, U.S.A.

Verónica Juárez-Jaimes

Instituto de Biología, UNAM, Apartado Postal 70-233, Del. Coyoacán, 04510 México, D. F., Mexico

ABSTRACT. *Marsdenia carterae*, a new species of Apocynaceae (Asclepiadoideae, Marsdenieae) from Baja California Sur, Mexico, is described and illustrated. This is the first North American species of *Marsdenia* with verticillate leaves and is also notable in lacking a developed corona and for its non-twining habit.

Marsdenia carterae W. D. Stevens & Juárez-Jaimes, sp. nov. TYPE: Mexico. Baja California Sur: eastern escarpment of Cerro Mechudo between Portezuelo de San Antonio and La Sabanilla, Sierra de la Giganta, 675 m, 24°49'N, 110°44'W, occasional on cliffs and talus, 4 Nov. 1971, R. Moran 18990 (holotype, UC; isotype, MO). Figure 1.

Distribution map and additional images can be found in W³TROPICOS (<http://mobot.mobot.org/Pick/Search/pick.html>).

A speciebus ceteris *Marsdeniae* regionis foliis verticillatis habitu haud volubili corona obsoleta distinguenda.

Shrub to 1.5 m tall and 2.5 m wide, branches decumbent or pendent, stems with thick, dark, corky bark on older wood, bark thinner and whitish on younger wood, branchlets roughened by raised leaf scars, densely pubescent with appressed, \pm curly, multicellular hairs to ca. 0.15 mm long, internodes 1–5(–25) mm long, ribbed except when still herbaceous; latex white; roots unknown. Leaves 3, rarely 1 or 2, per node, without pseudostipules but with 1–3 colleters in each stipular area, blades 5–8.5 cm long, 4–8 mm wide, very narrowly lanceolate to lorate or linear, apex acute to rounded or minutely mucronate, base acute, minutely pubescent when young, glabrescent except hairs \pm persistent along midrib of both sides, midrib prominent below, sulcate above, especially near petiole, venation pinnate, lateral veins obscure, ca. 7–13 pairs, middle veins arising ca. 55° to midrib,

margin thickened and \pm revolute, colleters 0–3, at adaxial base of blade; petiole 4–6 mm long, with indumentum of stem. Inflorescence extra-axillary, 1 per node and mostly not on adjacent nodes, cymose, congested-racemiform, or congested-paniculiform, sometimes bearing a fully formed leaf opposite the first flower or branch, 5–15-flowered, with indumentum of stem, peduncle 2–5 mm long, pedicel 3–4 mm long, bracts to 2.5 mm long, 1.1 mm wide, lanceolate; calyx divided to base, with 1–2 colleters below each sinus within, lobes 2.2–2.5 mm long, 0.9–1.4 mm wide, ovate or elliptic, with rounded tips, green with scarious margins, pubescent outside, glabrous inside; corolla rotate with ascending lobes, aestivation narrowly imbricate and dextrorse, glabrous outside, glabrous inside except throat densely barbate with stiff, white, unicellular hairs to ca. 0.5 mm long, these spreading at sinuses and retrorse between, cream-white, tube 1.2–1.4 mm long, lobes 2.3–3.1 mm long, 1.5–2.2 mm wide, elliptic with obliquely rounded tips; gynostegium ca. 2.2 mm tall, stipe ca. 1.7 mm long, corona obsolete, anthers rectangular, ca. 1.0 mm long, 1.5 mm wide, terminal appendages ovate, ca. 0.8 mm long, 0.6 mm wide, \pm erect and appressed to style apex, wings straight, parallel, ca. 0.5 mm long, 0.3 mm wide; corpusculum ca. 0.25 mm long, 0.08 mm wide, linear, dark red-brown, translator ca. 0.08 mm long, translucent and unwinged, pollinia erect, ca. 0.25 mm long, 0.15 mm wide, obovate, pale yellow; style apex conical, smooth, shallowly 2-lobed at apex, ca. 0.4 mm wide. Follicles single or occasionally paired, divergent when paired, fusiform-attenuate to napiform, somewhat asymmetrical, smooth, 7–12 cm long, 1.3–1.8 cm wide, densely tomentose, follicle wall ca. 0.5 mm thick, herbaceous; seeds obovate, flat, ca. 11 mm long, 7 mm wide, pale yellow-brown with a pale brown margin 0.4–0.5 mm wide, margin smooth and entire, surface smooth and glossy, coma about 2.5 cm long, pale tawny.

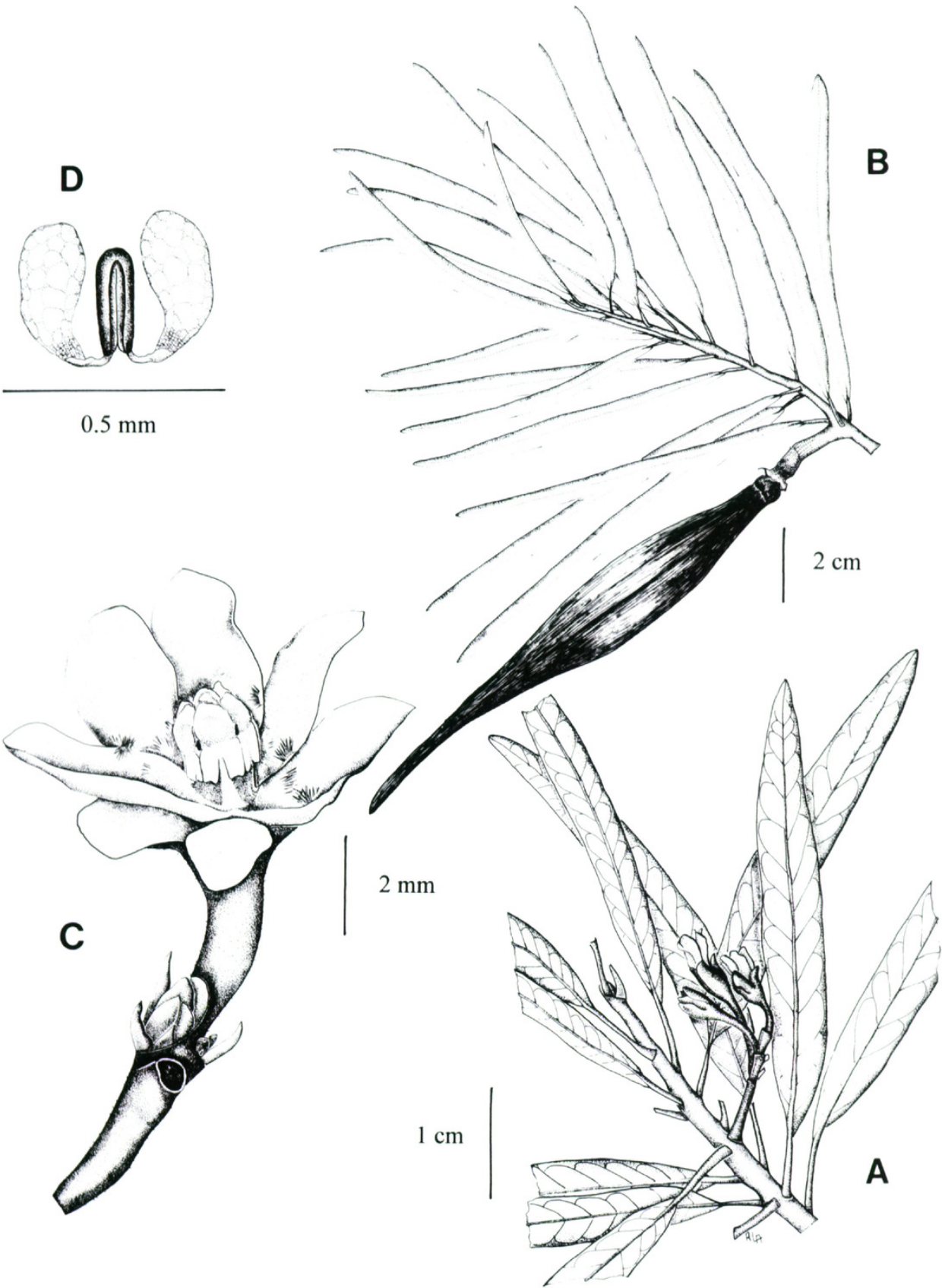


Figure 1. *Marsdenia carterae* W. D. Stevens & Juárez-Jaimes. —A. Flowering branch. —B. Fruiting branch. —C. Flower, corolla partially opened. —D. Pollinarium. Drawn from the type collection.

This species seems to be restricted to the eastern slopes of the Sierra de la Giganta, on dry cliffs and talus slopes, 75–1050 m in elevation. Sierra de la Giganta is an elongate range on the southeastern coast of Baja California. The few collections suggest that it flowers and fruits throughout the year.

Marsdenia is a genus of perhaps 200 species found throughout the tropics and subtropics. This is the first North and Central American species with verticillate leaves and only the second with a non-twining habit; the other non-twining Mexican species, *M. neriifolia* (Decaisne) Woodson, is an erect shrub. *Marsdenia carterae* is superficially similar in habit and leaf arrangement to *M. ericoides* Schlechter, an unrelated species from New Caledonia which may occupy similarly dry habitats. While the corona of *Marsdenia* is often reduced to a fleshy ridge on the back of each anther, this species seems to entirely lack the structure, a character state perhaps unique among species of *Marsdenia* without long, tubular corollas. *Marsdenia* is the only New World genus unambiguously placed within the tribe Marsdenieae, characterized by erect, uniformly fer-

tile pollinia, and this species clearly falls within the genus, although probably in a rather isolated position. No clearly related species have been identified. There is no adequate infrageneric classification of the genus, and this species would not fit well into any of the inadequate ones.

Paratypes. MEXICO. **Baja California Sur:** nearly vertical N-facing slope near summit of Pílon de las Parras, W of Loreto, Sierra de la Giganta, 1050 m, 25°58'N, 111°30'W, 14 Mar. 1961, A. Carter & H. Sharsmith 4220 (MO, UC); steep N-facing slope, Cañada de Tripuf SW of Puerto Escondido, Sierra de la Giganta, 400 m, 25°47.25'N, 111°21'W, 1 Dec. 1961, A. Carter 4353 (MO, UC); at mouth of Cajón del Salto, Bahía [Puerto] Agua Verde, Sierra de la Giganta, 75 m, 25°30'N, 111°05'W, 25 Aug. 1971, A. Carter 5605 (UC); lower cliffs, N base of Cerro Mechudo, Sierra de la Giganta, 700 m, 24°48'N, 110°43'W, 2 Nov. 1971, R. Moran 18902 (UC).

This remarkable new species is dedicated to Annetta Mary Carter (1907–1991), who first discovered the species in 1961 and brought it to the senior author's attention many years ago. The illustration was prepared by Alba Arbelaiz. Bruce Hansen and Mark Fishbein provided useful comments on an earlier version of the manuscript.



Juárez-Jaimes, Verónica and Stevens, W D. 1999. "A new Marsdenia (Apocynaceae, Asclepiadoideae) from Baja California." *Novon a journal of botanical nomenclature from the Missouri Botanical Garden* 9, 565–567.
<https://doi.org/10.2307/3392168>.

View This Item Online: <https://www.biodiversitylibrary.org/item/14669>

DOI: <https://doi.org/10.2307/3392168>

Permalink: <https://www.biodiversitylibrary.org/partpdf/3093>

Holding Institution

Missouri Botanical Garden, Peter H. Raven Library

Sponsored by

Missouri Botanical Garden

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.