

MANDEVILLA CATIMBAUENSIS
(APOCYNACEAE), A NEW SPECIES FROM THE
SEMI-ARID REGION, PERNAMBUCO, BRAZIL

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Mandevilla (Apocynaceae) is a neotropical genus which is well represented in Brazil. A recent taxonomic revision of the Brazilian species of *Mandevilla* subgenus *Mandevilla* included eight new species, one of them from the State of Pernambuco. Nevertheless, while preparing a survey of Apocynaceae from the Brazilian semi-arid region, a new species of the subgenus was recognised. *Mandevilla catimbauensis* Souza-Silva, Rapini & J.F.Morales is here described and illustrated. It is a twining plant with elliptic, glabrous leaves and hypocrateriform, purple flowers, known only from the Vale do Catimbau National Park, in the State of Pernambuco.

Keywords. Apocynoideae, *caatinga*, neotropics, Northeast Brazil, taxonomy.

INTRODUCTION

The genus *Mandevilla* Lindl. (Apocynaceae – Apocynoideae) belongs to the tribe Mesechiteae (Endress *et al.*, 2007) and comprises around 170 species distributed from Mexico and the Antilles to northern Argentina (Morales, 2005, 2007). It is the largest neotropical genus of Apocynoideae and is characterised by foliar and calycinal colleters, racemose inflorescences and an umbraculiform, pentacostate style-head (Sales, 1993). Woodson (1933) divided *Mandevilla* into two subgenera: *Mandevilla* subgenus *Mandevilla*, in which the adaxial side of the leaves usually has colleters restricted to the base of the central vein, the adaxial side of the calyx has colleters alternate to the sepals or uniformly distributed at the base, and the corolla is radial; and *Mandevilla* subgenus *Exothostemon* (G.Don) Woodson, in which the adaxial side of the leaves usually has colleters distributed along the entire length of the central vein, the adaxial side of the calyx has small colleters opposite the sepals, and the corolla is slightly bilateral (for a discussion about infrageneric relationships in *Mandevilla*, see Simões *et al.*, 2006).

The Brazilian members of the subgenus *Mandevilla* were revised by Sales (1993), who recognised 40 species, including eight new ones (Sales *et al.*, 2006). Among them, *Mandevilla dardanoi* M.F.Sales, Kin-Gouv. & A.O.Simões was described from

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the State of Pernambuco, but has also been found in the State of Paraíba. A survey of Apocynaceae from the Brazilian semi-arid region (Souza-Silva & Rapini, in prep.) included 29 native species of *Mandevilla*. In this region *Mandevilla* is the most diverse Apocynoideae genus, and seven species are endemic. They occur mainly in the *caatinga*, a seasonally dry vegetation at lower altitudes in the semi-arid region. While preparing the survey of Apocynaceae, a new species of the subgenus *Mandevilla* was identified. *Mandevilla catimbauensis* Souza-Silva, Rapini & J.F.Morales is here described and illustrated. It is a twining plant with elliptic, glabrous leaves and hypocrateriform, purple flowers. It is known only from the Vale do Catimbau National Park, in Buíque, State of Pernambuco. The Park is 62,000 ha in area and is noted for its diverse and unique vegetation on the western slopes of the Borborema Plateau. It shares several floristic elements with the *campos rupestres* of Chapada Diamantina, in the State of Bahia (Andrade *et al.*, 2004), an open vegetation on quartzite soils over 900 m, which is also known for its high level of plant endemism.

SPECIES DESCRIPTION

***Mandevilla catimbauensis* Souza-Silva, Rapini & J.F.Morales, sp. nov. Fig. 1.**

Mandevilla dardanoi M.F.Sales, Kin-Gouv. & A.O.Simões similis, a qua corolla hypocrateriformi (vs. infundibuliformi) differt; *M. leptophylla* (A.DC.) etiam K.Schum. affinis, foliis ellipticis (vs. anguste lanceolatis vel linearibus) et glabris (vs. pubescentibus) differt. – Type: Brazil, State of Pernambuco, Buíque, Vale do Catimbau National Park, Serra de Jerusalém, caatinga, 08°34'57"S, 37°14'24"W, 910 m, 10 xi 2003, E.B. Miranda, E. Souza, A. Conceição, M. Arcaño & L. Ramos 576 (holo HUEFS).

Suffrutescent vine. *Stem* sparsely minutely scabrous when young, soon glabrous, with a papery cortex; interpetiolar colleters c.1 mm long, finger-like, inconspicuous. *Leaves* opposite; coriaceous; petiole 3–4 mm long; blade 3.5–4 × 2.1–2.2 cm, elliptic, almost conduplicate, apex acute, base cuneate, glabrous, with 2 or 3 colleters adaxially at the base of the midrib, the margin not revolute, not bullate. *Inflor-escences* axillary, umbelliform, c.5 flowers at one time; glabrous; peduncle c.3 mm long; bracts triangular to lanceolate, 1–1.5 mm long, glabrous, narrowly ovate, scarious, the colleters irregularly distributed; pedicels c.8 mm long. *Calyx* green; sepals lanceolate, c.3 × 1.5 mm, short and relatively inconspicuous, the apex acute to inconspicuously and shortly acuminate, with 1 or 2 colleters adaxially alternate with the sepals. *Corolla* hypocrateriform, the tube green, purplish towards the lobes, the mouth yellow, glabrous outside, barbulate c.3 mm below the anthers within, tube cylindrical, c.1.9 × 0.2 cm, lobes obliquely obovate, 9–11 × 7–8 mm. *Stamens* inserted near the corolla mouth, anthers oblong, subsessile, c.6 mm long, the apex apiculate, the base auriculate, the auricles oblong and parallel to each other, glabrous. *Nectary* 5-lobed, lobes c.1 mm long. *Ovary* c.1.5 mm long, ovoid, glabrous; style c.1.1 cm long; style-head umbraculiform, c.2.5 mm long, the apex bilobate. *Fruits* not seen.

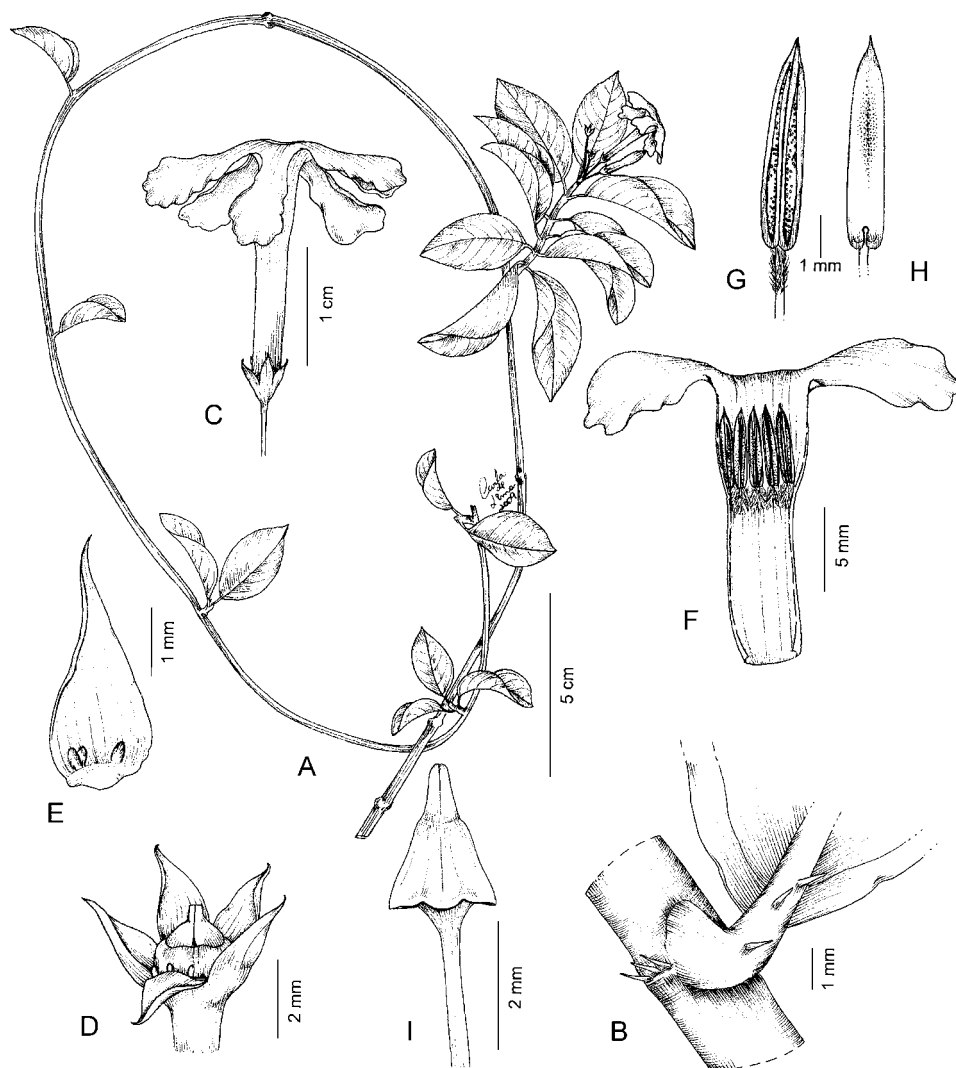


FIG. 1. *Mandevilla catimbauensis* Souza-Silva, Rapini & J.F.Morales. A, habit with inflorescence; B, detail of the petiole, showing colleters; C, flower; D, calyx, showing axillary colleters, nectary and ovary; E, lobe of calyx, adaxial view, showing axillary colleters; F, corolla open, showing stamens; G, stamen, adaxial view; H, stamen, abaxial view; I, style-head. From Miranda *et al.* 576 (holotype, HUEFS).

Distribution. Known only from Serra de Jerusalém, in the Vale do Catimbau National Park, Buíque, State of Pernambuco, Brazil.

Habitat. In *caatinga*, a seasonally dry vegetation, at 910 m.

Proposed IUCN conservation status. Data Deficient (DD). Although *Mandevilla catimbauensis* is known by only a single collection, it is premature to consider that it

is endangered under IUCN guidelines (IUCN, 2001; IUCN Standards and Petitions Working Group, 2008), especially as it occurs in a protected area.

This species can be recognised by the twining habit, elliptic and conduplicate leaves, and flowers with a purplish, hypocrateriform corolla. The colour and shape of the corolla are similar to that of *Mandevilla leptophylla* (A.DC.) K.Schum., a species that occurs in northern Minas Gerais, Bahia and Ceará, whereas the leaves are similar to those of *M. dardanoi*, a species that occurs in Pernambuco and Paraíba. *Mandevilla catimbauensis* can be easily distinguished from the former by its glabrous leaves which are elliptic and almost conduplicate, and with a non-revolute margin (vs. densely pubescent, lanceolate to almost linear and revolute), and from the latter by the purple and hypocrateriform flowers (vs. pinkish and infundibuliform).

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