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A new species of *Erythroxylum* (Erythroxylaceae) from the Brazilian semiarid region

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Abstract

Erythroxylum angelicae, a new species of *Erythroxylum* sect. *Archerythroxylum*, is described and illustrated. This species occurs in "Carrasco" vegetation of the state of Ceará, northeastern Brazil. It is recognized by the persistent cataphylls, non-striated, long-triangular, and palleaceous; stipules non-striated, 3-setulose; flowers subsessile, calyx lobes triangular, and styles free. Affinity relationships with other species of *Erythroxylum* are also presented and discussed.

Key words: Erythroxylaceae, Taxonomy, Northeastern Brazil, Neotropics

Introduction

Erythroxylum Browne (1756: 278) (Erythroxylaceae) includes 240 species (Daly 2004) and is divided into 19 sections (Schulz 1907). Approximately 187 species are native to the Neotropics (Plowman & Hensold 2004). The flora of Brazil is recognized as one of the richest and most diverse in the world (Lewinsohn & Prado 2000, Peixoto & Thomas 2005). This richness and diversity is amply demonstrated in the genus *Erythroxylum*, which I am currently reviewing for the Lista de Espécies da Flora do Brasil, with about 120 (73 endemic) registered taxa (Loiola 2013). Continuing studies of Neotropical *Erythroxylum* have revealed several new species, especially in the northeastern region of Brazil (Plowman 1986, 1987; Loiola & Sales 2008, 2012).

The new taxon, described and illustrated here, presents characteristics of *Erythroxylum* sect. *Archerythroxylum* O.E. Schulz (1907: 69), one of the nine sections proposed by Schulz (1907), that comprises only Neotropical species. This is one of the largest sections, including ca. 60 species, most of which are found in Brazil and characterized by the occurrence of non-striated stipules and cataphylls, calyx with valvate aestivation, and lobes generally of triangular shape.

Erythroxylum angelicae Loiola, *sp. nov.* (Fig. 1A–G)

A new species characterized by persistent cataphylls, non-striated, long-triangular, palleaceous; stipules non-striated, 3–setulose; flowers subsessile, calyx lobes triangular, and styles free.

Type:—BRAZIL. Ceará: Novo Oriente, Baixa Fria, Planalto da Ibiapaba, 760 m, 8 November 1990, (fl), *F. S. Araújo 209* (holotype EAC 19335A, isotypes EAC 19335B, RB).

Shrubs. Branches ascending, relatively short and straight, 1–2.5 mm diam., grayish to dark brown (when young), longitudinally finely striate, without distinct lenticels. Short shoots absent. Cataphylls alternate or congested along the shoots (in number of 5-7, the inferior shorter than superior), persistent, long-triangular, 2–6 mm long, non-striated, palleaceous. Foliar stipules persistent, narrowly triangular, 1.7–4 mm long, rounded apex, non-striated, membranaceous, 3–setulose, keels sub-alate, margin entire; setae deciduous, 1–1.5 mm long,presenting colleters. Leaves persistent, short-petiolate; petioles subterete, 1–1.5 mm long, narrowly canaliculate adaxially; leaf blades ovate, 2.3–5.2 × 0.9–2.1 cm, acuminate to acute at apex, acute at base,

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Erytroxylum angelicae and the similar species discussed here are not found in sympatry. *E. vacciniifolium* is reported from savanna formations (cerrado) and savanna-steppe vegetation (caatinga) in the west-portion of Brazil (Loiola 2013) and *E. tenue* is recorded from the coastal forest in southern Bahia (Plowman 1987).

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