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Stigmaphyllon caatingicola (Malpighiaceae), a new species from Seasonally Dry Tropical Forests in Brazil

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Abstract

Stigmaphyllon caatingicola is described and illustrated. We also provide a distribution map, and comments on species distributions, conservation and taxonomy. This species is distinguished from *Stigmaphyllon urenifolium* by its deciduous leaves when flowering, lamina membranaceous, entire to apically trilobed, abaxially tomentose, with hairs deciduous in patches, one latero-anterior petal with reddish macula, sepals with darkish hairs, styles glabrous, stigma foliolate, and samaroid mericarps densely sericeous, with a dorsal wing horizontally orientated.

Key words: Caatinga, Malpighiales, *Ryssopterys*, Taxonomy

Resumo

Stigmaphyllon caatingicola é descrito e ilustrado. Em adição, nós fornecemos mapa de distribuição e comentários sobre distribuição, conservação e taxonomia da espécie. Esta espécie é distinta de *Stigmaphyllon urenifolium* por suas folhas decíduas na floração, lâmina membranácea, inteiras ou apicalmente tri-lobadas, face abaxial tomentosa, com tricomas desprendendo-se em regiões, uma pétala latero-anterior com mácula avermelhada, sépalas com tricomas enegrecidos, estiletes glabros, ápice dos estiletes com folíolos reduzidos e samarídeos densamente seríceos, com ala dorsal orientada horizontalmente.

Palavras-chave: Caatinga, Malpighiales, *Ryssopterys*, Taxonomia

Introduction

Stigmaphyllon A.Juss. (1833: 37) comprises 112 species occurring worldwide within the tropics (Anderson 2011). Most species are woody vines with long-petioled, elliptical to cordate leaves, clusters of yellow flowers arranged in dichasia, and styles with lateral appendages at their apices (stigma foliolate). The fruit is a schizocarp that splits into three samaroid mericarps with large dorsal wings (Anderson 1997). The genus is currently divided into two subgenera, subg. *Stigmaphyllon* with 92 species restricted to the Neotropics, except for *S. bannisterioides* (L.) C.E.Anderson (1992: 328) which reaches West Africa; and subg. *Ryssopterys* (A.Juss.) C.E.Anderson (2011: 76) with 20 species restricted to Southeast Asia and Oceania. Both subgenera were regarded as separate by different authors (Anderson 1997; Niedenzu 1928), but recent phylogenetic studies support their combination (Davis & Anderson 2010). Monographs for both groups were presented by Anderson (1997, 2011).

Stigmaphyllon is represented in Brazil by 46 species, occurring mostly along streams in the Amazon and Atlantic Forests (Anderson 1997; Mamede *et al.* 2014), with only a few species occurring in dry habitats, such as *Caatinga* (dryland) and *Cerrado* (neotropical savanna) vegetation (Mamede *et al.* 2014). Caatinga vegetation is included within the Seasonally Dry Tropical Forests Domain in South America (Santos *et al.* 2012), being a mosaic of thorn scrub and seasonally dry forests (Leal *et al.* 2005, Moro *et al.* 2014) and holding more than 2000 species of vascular plants, fishes, reptiles, amphibians, birds, and mammals. Endemism levels vary from 7% to 57% within these groups (Leal *et al.* 2005).

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TABLE 1. Comparison of diagnostic morphological characters between *S. caatingicola* and *S. urenifolium*.

Characters	*S. caatingicola*	*S. urenifolium*
Apex of leaves	3-lobed to cordiform	5-lobed
Leaf persistence when flowering	Deciduous	Persistent
Persistence of leaf indumentum abaxially	Deciduous on patches	Persistent
Inflorescence type	Dichasia disposed on a thyrse	Simple dichasia
Indumentum of inflorescence branches	Sericeous	Tomentose
Color of indumentum of inflorescence branches	Whitish	Ocher
Indumentum of styles	Glabrous	Pubescent
Apex of styles	Foliolate	Efoliolate
Indumentum of samaroid mericarps	Densely sericeous	Tomentose to glabrate
Angle of dorsal wing	20°	70°

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