



<http://dx.doi.org/10.11646/phytotaxa.202.1.2>

Taxonomic notes on *Chiococca* and *Salzmannia* (Rubiaceae, Chiococceae) in northeastern Brazil, with a new combination and a new species

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Abstract

Chiococca and *Salzmannia* are similar and related, but have not been well studied. A review of their morphology clarified their separation and found that some variation documented in *Chiococca* has been overlooked, and the corolla lobes of *Salzmannia* are narrowly imbricated, not valvate in bud, and its flowers are protandrous and homostylous, with the style markedly elongated after anthesis. *Chiococca* is represented in northeastern Brazil by four species, and their distinctions are clarified. The problematic species *Erithalis insularis*, of Fernando de Noronha Island, better agrees morphologically and biogeographically with *Chiococca*, and is here transferred to this genus with the new combination *Chiococca insularis*; *Erithalis* is therefore restricted to the Caribbean basin. *Salzmannia* is endemic to coastal eastern and northeastern Brazil, and comprises two species; *S. arborea*, described here, is found along the coast of Bahia and notable in its tree habit and dimorphic vegetative and reproductive stems.

Keywords: Northeastern Brazil, Atlantic Forest, Cinchonoideae, *Erithalis*, Taxonomy

Resumo

Chiococca e *Salzmannia* são semelhantes e relacionados, porém, não foram bem estudados. Uma revisão da morfologia de ambos os taxa esclareceu sua distinção e demonstrou que parte da variação documentada em *Chiococca* não tinha sido observada, e que os lobos da corola em *Salzmannia* são estreitamente imbricados, não valvados, no botão e as flores são protandras e homostílicas, com o estilete se alongando de forma marcante após antese. *Chiococca* está representada no nordeste do Brasil por quatro espécies e suas diferenças são evidenciadas. *Erithalis insularis*, uma espécie problemática da Ilha de Fernando de Noronha, insere-se morfologicamente e biogeograficamente melhor em *Chiococca*, e aqui é transferida para este gênero, com a nova combinação *Chiococca insularis*; *Erithalis* é consequentemente restrito à região do Caribe. *Salzmannia* é endêmico da costa leste e nordeste do Brasil, e compreende duas espécies; *S. arborea*, aqui descrita, é encontrada ao longo da costa da Bahia e notável pelo seu hábito arbóreo e ramos vegetativos e reprodutivos dimórficos.

Palavras-chave: Nordeste do Brasil, Floresta Atlântica, Cinchonoideae, *Erithalis*, Taxonomia

Introduction

The Neotropical genera *Chiococca* Browne (1756: 164) and *Salzmannia* Candolle (1830: 617) are similar in habit and most of their characters, and have long been considered closely related (Müller, 1881). *Chiococca* comprises ca. 20 species of twining vines, scrambling to erect shrubs, and small trees found in evergreen to seasonal vegetation from southeastern USA, northern Mexico, the Antilles, through Central and South America to northern Argentina (Lorence, 2012, Bacigalupo *et al.*, 2008). *Salzmannia* has traditionally been described as one shrubby species occurring in

inflorescences with well developed bracts, small generally yellow flowers, and rather small, oblate to widely depressed ovoid, red fruits. This species is restricted to open areas in restinga or coastal savanna vegetation, where it is often locally common, from Bahia to Rio Grande do Norte. This is the most widely distributed and common species of *Salzmannia*, and it does not show clinal morphological variation across this range.

Acknowledgments

We thank André M. Amorim, Maria do Socorro Pereira, Sally Dawson, Sandra Knapp, and the valient Ranee Prakesh for logistical assistance, information, and invaluable help locating type specimens of *Palicourea insularis*, and William W. Thomas and the curators of ALCB, BM, CEPEC, HUEFS, JPB, and NY for access to specimens. Thanks to José Lima da Paixão for the support in the last field expedition in the Reserva Biológica de Una, and Rhudson H.S.F Cruz for the illustration. Thanks to Piero Delprete and an anonymous reviewer for very important suggestions on this manuscript. Charlotte M. Taylor's travel to Brazil was supported by a grant from CNPq (INCT-Herbário Virtual da Flora e dos Fungos). Partial support for this study was provided by the CNPq to Maria Regina V. Barbosa (Processes no. 307648/2010-9 and 562310/2010-0).

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