



## Four new species of *Bauhinia* sect. *Pauletia* and a new description of *Bauhinia burchellii* Bentham (Leguminosae) from Brazil

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### Abstract

Four new species of *Bauhinia* sect. *Pauletia* ser. *Cansenia* from Brazil are described: *Bauhinia funchiana*, *Bauhinia malmeana*, *Bauhinia piresii* and *Bauhinia uberlandiana*. All four are trees or treelets lacking tendrils and prickles. Flowers are arranged in pairs in pseudoracemes, each flower has a tubular hypanthium over 1.5 cm long and a calyx that is lobed at anthesis. In addition, the buds and flowers of *B. burchellii* are described for the first time.

### Resumo

Neste trabalho são descritas quatro novas espécies de *Bauhinia* sect. *Pauletia* ser. *Cansenia* do Brasil: *Bauhinia funchiana*, *Bauhinia malmeana*, *Bauhinia piresii* e *Bauhinia uberlandiana*. Os taxa aqui descritos são árvores ou arbustos nunca com gavinhas e nunca apresentando acúleos. As inflorescências são pseudoracemos com flores geminadas e hipanto tubular maior que 1.5 cm compr. e cálice lobado na antese. Além disso, uma descrição dos botões e flores até então desconhecidos de *Bauhinia burchellii* é apresentada.

### Introduction

*Bauhinia* Linnaeus (1753: 374) *sensu stricto* is a pantropical genus comprising approximately 150–160 species. It is most abundant in the Neotropics with c. 75 spp. in South America (Lewis & Forest 2005). The molecular phylogenetic studies of Sinou *et al.* (2009) support the proposal of Lewis & Forest (l.c.) that *Bauhinia* once again should be subdivided into a number of segregate genera. Wunderlin (2010) presented a reorganization of the tribe Cercideae which included a key to the recognised subtribes and the 12 constituent genera. Species of *Bauhinia sensu stricto* are trees or shrubs which lack tendrils even if flexuous branches are present. The circumscription of *Bauhinia* sect. *Pauletia* (Cavanilles 1799: 5) de Candolle (1825: 512) was delimited by Wunderlin *et al.* (1987) who proposed five series in the section. Vaz & Tozzi (2003a) proposed the addition of a new series *Bauhinia* ser. *Aculeatae* (Vaz & A.M.G. Azevedo in Vaz & Tozzi 2003: 143), together with a new circumscription of *Bauhinia* ser. *Cansenia* (Rafinesque 1838: 122) Wunderlin, Larsen & Larsen (1987: 12). A synopsis of *Bauhinia* sect. *Pauletia* in Brazil was published by Vaz & Tozzi (2005) and it included a key to the constituent series. Species of *Bauhinia* ser. *Cansenia* have ascending branches that lack prickles; terminal, leafless pseudoracemose inflorescences, and calyces at anthesis irregularly connate at their apex and splitting into two to five lobes (Vaz & Tozzi, 2003a). A taxonomic review of the Brazilian species of ser. *Cansenia* was also presented by Vaz & Tozzi (2003b). Vaz *et al.* (2010) published a checklist of the 57 species of *Bauhinia* native to Brazil including two subspecies and seven varieties. *Bauhinia burchellii* Bentham (1870: 186) was described in the Flora Brasiliensis (Bentham 1870), although the author commented that he had seen only remnants of flowers (“Florum nonnisi reliquas paucas vidi”). Vaz & Tozzi (2003b) included *Bauhinia burchellii* as a poorly known species lacking a description of buds and flowers. Recent collections, some of which include buds and flowers, vouchered as *G. Eiten* & *L. Eiten* 10536; *G. Hatschbach* & *R. Kummrow* 38451; and *V.C. Souza* 14893, permitted a better understanding of the affinities of this northern Brazilian endemic species.