

NEW SPECIES AND NEW COMBINATIONS IN *PHANERA* LOUR. (CAESALPINIOIDEAE: CERCIDEAE) FROM THE CAATINGA BIOME

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ABSTRACT

A new species of *Phanera* Lour., *Phanera trichosepala* L.P.Queiroz, is described and illustrated. It is known from the States of Bahia and Minas Gerais, in caatinga and seasonally dry forests. Additionally, three new combinations are proposed in *Phanera* for species previously treated as *Bauhinia*: *Phanera flexuosa* (Moric.) L.P.Queiroz, *Phanera microstachya* (Raddi) L.P.Queiroz, and *Phanera outimouta* (Aubl.) L.P.Queiroz.

The genus *Phanera* Lour. embraces 120 to 130 species, mostly from tropical areas of the New World, Southern Asia and Malesia. Some authors treated *Phanera* as a subgenus of *Bauhinia* L. (e.g. Wunderlin et al. 1987), diagnosing *Bauhinia* by a suite of symplesiomorphies such as branches not modified in cladodes, petals present, seeds with crescentic hilum and multinerved, bilobed leaves. However, there is growing evidence that *Bauhinia*, as circumscribed by Wunderlin et al. (1981, 1987), is not monophyletic (Hao et al. 2003). This supports a narrower definition of *Bauhinia* and the recognition of five genera previously included in it (Lewis et al. 2005).

Phanera may be distinguished from *Bauhinia* by the lianescent habit, presence of axillary tendrils, flower with mostly cupulate hypanthium and calyx lobes regular. In this sense, it includes all the lianas previously treated under *Bauhinia* by Wunderlin et al. (1987). The genus is represented in the Caatinga Biome by four species. However, none of these has been formally named in *Phanera*. Besides, one of them is still undescribed, although it is known in herbaria and in floristic accounts since the 80's under the name of *Bauhinia*

trichosepala (e.g. Lewis 1987).

Thus, this paper aims to provide nomenclatural adjustments for the species of *Phanera* from the Caatinga, describing one new species and proposing three new combinations.

***Phanera flexuosa* (Moric.) L.P.Queiroz, comb. nov.**

Basionym: *Bauhinia flexuosa* Moric., Pl. nouv. Amér. 6: 80, tab. 53. 1840.

COMMENTS: Known mainly from Caatinga and seasonally dry forests in Northeastern Brazil. However, there are collections in the end of the 19th Century from the Rio de Janeiro.

***Phanera microstachya* (Raddi) L.P.Queiroz, comb. nov.**

Basionym: *Schnella microstachya* Raddi, Mem. Mat. Fis. Soc. Ital. Sci. Modena, Pt. Mem. Fis. 18: 411. 1820.

COMMENTS: Plant from rainforests, known both from the Amazon and the Atlantic Forest. In the Caatinga it occurs mostly in transitions between Caatinga and

coastal forests, in areas locally known as 'Matas de Cipó', in altitudes of c. 900 m.

Phanera outimouta (Aubl.) L.P.Queiroz, **comb. nov.**

Basionym: *Bauhinia outimouta* Aubl., Hist. Pl. Guiane 1: 375, t. 144. 1775.

COMMENTS: This is a widely distributed species in the Neotropics, occurring from Central America to eastern South America, mostly in rainforests. In the area of the Caatinga Biome, it is found in gallery forests and in mountain forests, mainly in the States of Ceará and Paraíba, at altitudes of c. 600 m.

Phanera trichosepala L.P.Queiroz, **sp. nov.** Type: Brazil, Bahia, Ruy Barbosa, Serra do Orobó, trilha para o Pátio das Orquídeas, 12°18'S, 40°29'W, 08.feb.2005, D. Cardoso 281 (holotype: HUEFS; isotypes: CEPEC, K). Figs. 1, 2.

Species Phanerae habito scandenti cirrhoso sed foliis lobis rotundatis, basi cordata, calyce urceolato, truncato, laciniis parvis et petalis erubescens differt.

Liana, reaching the canopy c. 7-10 m high; young **branches** densely pubescent with tan hairs; tendrils present, axillary to the leaves at the base of the inflorescence. **Stípules** setaceous. **Petiole** (6-)21-26 mm long; leaf blade 44-60 × 54-80 mm, suborbicular, slightly wider than longer, divided for 1/4-1/3 of its length, lobes widely rounded, divergent (angle c. 30°), base cordate, main veins 9, salient on the lower surface, smaller nerves reticulate, upper surface glabrescent and rugose, lower surface glabrescent except by tan, velutinous trichomes on the main nerves. **Spike** dense, terminal. **Flower** buds obconical, constrict and 5-appendiculate at the apex. Calyx widely cylindrical, striate, truncate, 6-9 mm long, lacinia 2-3 mm long; petals bright

pink, darker toward the base, 25-30 × 10-12 mm, obovate, clawed; stamens 10; ovary sessile, villose, covered by long, tan trichomes, 4-5-ovulate. **Legume** indehiscent, stipitate, elliptic-linear, 16-20 × 4.4-5 cm, coriaceous, glabrous.

COMMENTS: *Phanera trichosepala* occurs in caatinga and seasonally dry forests, mostly on fertile soils, frequently associated to areas near to limestone outcrops. It is recorded for elevations of 800 to 1000 m. Flowering period: March to May; fruit period: April to July.

The name *Bauhinia trichosepala* was proposed by Wunderlin but never validly published. This name has been used since the 80's in herbarium specimens and floristic treatments (e.g. Lewis 1987).

It may be differentiated from the other species of *Phanera* by the combination of the leaves wider than long, ending in divergent rounded lobes, pink petals, and indehiscent, coriaceous fruits. It seems to be related to the species formerly included in *Bauhinia* subgn. *Phanera* sect. *Schnella* (sensu Wunderlin et al. 1987) because it shares with other species of this group the turbinate hypanthium, calyx dentate in upper part and fruits thin valved and indehiscent. Additionally, Novaes (2005) demonstrated that the pollen grains of *Phanera trichosepala* present large supratectal processes that are common in the sect. *Schnella* but absent in other groups of Neotropical liana species of *Bauhinia* s.l. (Wunderlin et al. 1987). Its affinity within the *Schnella* group is unknown and phylogenetic studies are necessary to clarify this issue.

It is a handsome plant especially due to its bright pink flowers appearing in dense inflorescences. Plants from Southwestern Bahia have flowers visited by butterflies (*Queiroz 5990 in sched.*).

VERNACULAR NAMES: escada-de-macaco (Itaberaba, BA), mororó (Casa Nova, BA)

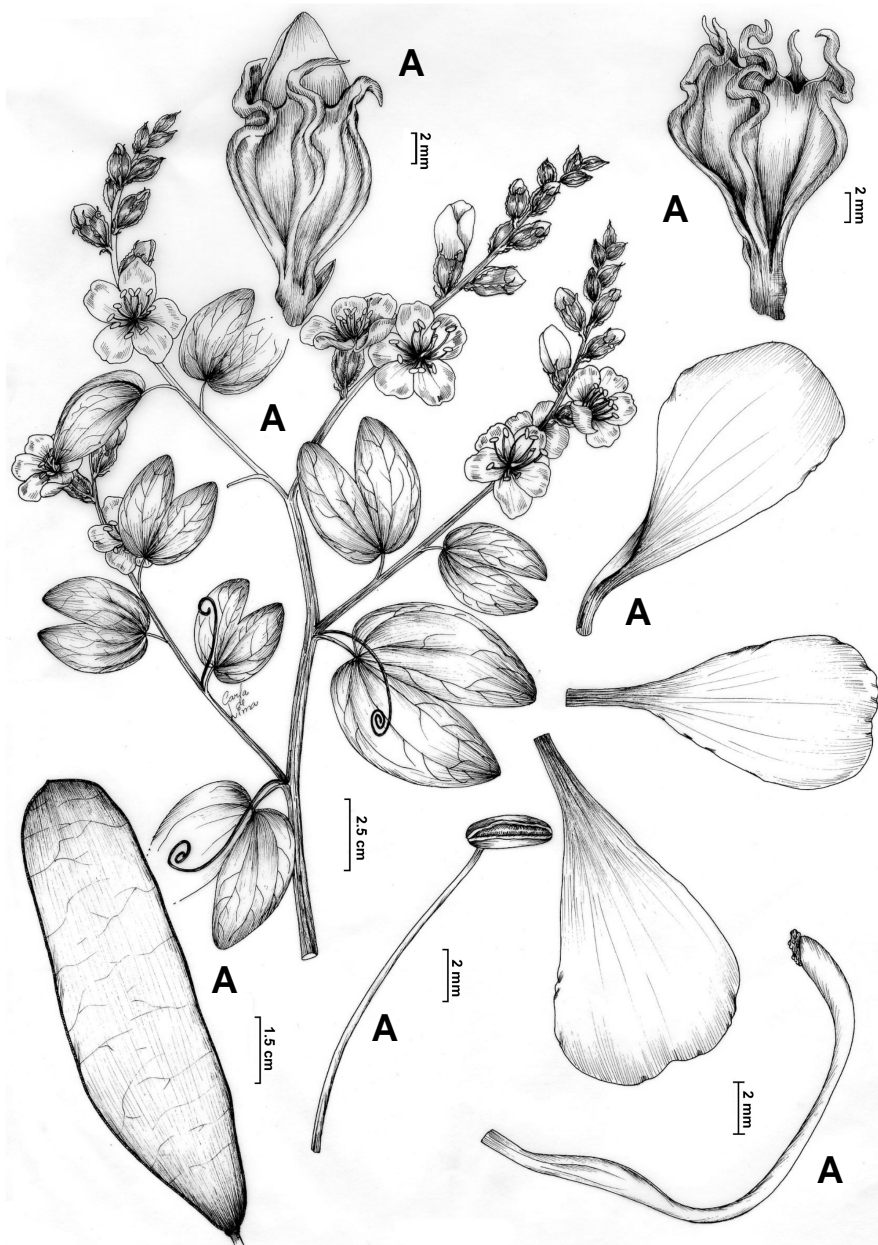


Fig. 1. *Phanera trichosepala* L.P. Queiroz.



Fig 2. *Phanera trichosepala* L.P.Queiroz: A. Flower. B. Fruit.

PARATYPES: Brazil, Bahia: Abaíra, 27.dec.1992, *W. Ganev 1754* (HUEFS, K, SPF); Andaraí, *A.M. Giulietti & R.M. Harley 2082* (HUEFS); Bom Jesus da Lapa, *L. Coradin et al. 6353* (CEN, K); Encruzilhada, *R.P. Belém 3625* (CEPEC, K); Formosa do Rio Preto, 3 km da cidade de Formosa do Rio Preto, na BR-135, na direção de Barreiras, 31.mar.2000, *R.M. Harley et al. 53782* (HUEFS); 3 km na estrada para localidade de Mato Grosso a partir da rodoviária, 30.mar.2000, *E.B. Miranda-Silva et al. 333* (HUEFS); Ibotirama, *T.S. Santos 1592* (CEPEC, K); Iraquara, 22.jul.1997, *L.P. Queiroz & N.S. Nascimento 3045* (HUEFS, K); Itaberaba, *L.P. Queiroz et al. 10725* (HUEFS); Morro do Chapéu, *R.M. Harley et al. 19397* (CEPEC, K); Ruy Barbosa, Serra do Orobó, caminho para o Pátio das Orquídeas, 28.may.2005, *L.P. Queiroz et al. 10725* (HUEFS); Santa Maria da Vitória, ca. 23 km E de Santa Maria da Vitória na estrada para Bom Jesus da Lapa, 13.feb.2000, *L.P. Queiroz et al. 5948* (HUEFS); Santa Rita de Cássia, *E. Melo et al. 2743* (HUEFS); Santana, *L.P. Queiroz et al. 5990* (HUEFS); Saúde, *M.L.S. Guedes et al. PCD 2901* (ALCB, HUEFS); Utinga, *G.P. Silva et al. 3618* (CEN, HUEFS). Minas Gerais: s.l., BR-122, próximo ao trevo para Coronel Enéas, *G. Hatschbach et al. 61845* (HUEFS, MBM).

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