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# *Plinia nana* (Myrtaceae), a New Species from Minas Gerais, Brazil

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**ABSTRACT.** *Plinia nana* (Myrtaceae), a new species from the campos cerrados of the Brazilian state of Minas Gerais, is described, illustrated, and compared with the related *Plinia cauliflora* (Martius) Kausel, from which it is set apart by the shrubby habit and sessile cordate leaves.

**RESUMO.** *Plinia nana* (Myrtaceae), uma nova espécie dos campos cerrados de Minas Gerais, Brasil, é descrita, ilustrada e comparada com *Plinia cauliflora* (Martius) Kausel, da qual se distingue prin-

cipalmente pelo hábito arbustivo e pelas folhas sésseis e cordadas.

**Key words:** Brazil, Myrtaceae, *Plinia*.

The American genus *Plinia* extends from Antilles to Uruguay and comprises about 30 species (Landrum & Kawasaki, 1997), although this estimate does not include some eastern Brazilian tree species commonly known as “jaboticabas,” widely cultivated for their edible fruits, as for example *Pli-*



Figure 1. *Plinia nana*. Scanned image of isotype at MO (Hatschbach et al. 69578).



Figure 2. *Plinia nana*. Branch (Alves & Sobral 168).

*nia cauliflora* (Martius) Kausel, *P. jaboticaba* (Vellozo) Kausel, *P. trunciflora* (O. Berg) Kausel (Kausel, 1956), *P. phitrantha* (Kiaerskou) Sobral, and *P. grandifolia* (Mattos) Sobral (Sobral, 1994). These jaboticaba species are generally assigned to *Myrciaria* O. Berg (Berg, 1855–1856, 1857–1859), but Kausel (1956) proposed their inclusion in the genus *Plinia* due mainly to their seeds with separate plano-convex cotyledons rather than the fused ones of *Myrciaria*. This last genus is characterized mainly by fused bracteoles, a calyx-tube deciduous at anthesis, and seeds with generally fused cotyledons, while *Plinia* presents distinct bracteoles, a persistent calyx-tube, and seeds with separate, plano-convex cotyledons. Such limits unfortunately are not clear; some *Myrciaria* present plano-convex cotyledons and some *Plinia* may have a tardily deciduous calyx-tube. Considering such characters, assigning some species to one genus or the other

may be a matter of taxonomic opinion. Since jaboticabas encompass character states also found in *Plinia*, I currently prefer to include them in *Plinia*.

During a floristic inventory of the campos cerrados and campos rupestres of central Minas Gerais, a shrubby species of jaboticaba was collected and is herein described as new.

***Plinia nana*** Sobral, sp. nov. TYPE: Brazil. Minas Gerais: Diamantina, rod. BR-367, km 711, 23 Oct. 1999, G. Hatschbach, R. Spichiger, A. C. Cervi & E. Barbosa 69578 (holotype, MBM; isotype, MO). Figures 1–3.

Species haec *Plinae cauliflorae* proxima, a qua habitu suffruticoso et foliis sessilibus cordatisque recedit.

Shrub 0.5–1.5 m; plants glabrous except for scattered trichomes on the flowers; cortex smooth, exfoliating; young twigs smooth, gray or sometimes





Figure 3. *Plinia nana*. Flower bud, old flower and immature fruit (Alves & Sobral 1967). Scale bar 3 mm.

markedly reddened in living material. Leaves sessile or subsessile; petioles absent or to  $1 \times 1$  mm; blades cordate,  $24\text{--}50 \times 15\text{--}40$  mm, decussate, slightly discolored or concolorous; apex acuminate or mucronate; base cordate; midvein sulcate adaxially and markedly salient abaxially; secondary veins 8 to 15 pairs, visible on both faces and salient at least abaxially; marginal vein formed by the arches of the secondary veins, somewhat discontinuous, 2–2.5 mm from the margin, occasionally a second vein 0.5–1 mm from the margin visible, the margin itself slightly revolute; petioles absent or to  $1 \times 1\text{--}2$  mm. Inflorescences ramiflorous, uniflorous (occasionally two or three arising from the same place and apparently 2- to 3-florous), the fertile axis  $1\text{--}2 \times 0.5$  mm, with up to 5 series of bracts distally increasing in size, the proximal ones elliptic,  $0.8\text{--}1 \times 1\text{--}1.2$  mm and the distal ones lanceolate,  $3\text{--}3.5 \times 2\text{--}2.5$  mm; pedicels absent in flow-

ers or to  $1 \times 0.7$  mm, elongated in fruits to  $1\text{--}4 \times 0.7\text{--}0.8$  mm; bracteoles elliptic-lanceolate, to  $2 \times 1$  mm; buds elliptic to pyriform, white,  $4\text{--}5 \times 3\text{--}4$  mm, the ovaries with scattered gray trichomes 0.1 mm; calyx-lobes 4, well defined in bud but the staminal ring and calyx-tube tearing open outside at anthesis, elliptic-lanceolate to triangular-lanceolate,  $2\text{--}3 \times 2.2\text{--}2.5$  mm; petals 4, orbicular, white,  $5 \times 4\text{--}5$  mm; stamens 100 to 120, 3–4 mm, the anthers elliptic,  $0.4 \times 0.2$  mm, without apical glands; calyx-tube about 1 mm; style to 5 mm, stigma punctiform; ovary bilocular with 2 centrally attached ovules per locule. Fruits globose, purple to black when ripe, to 20 mm diam., glabrous or sometimes softly puberulent, crowned by the persistent and somewhat enlarged calyx-lobes (to  $4 \times 3$  mm); seeds reniform,  $5\text{--}6 \times 4$  mm, with membranous testa and discrete, plano-convex cotyledons, without evident hypocotyl.



*Affinities.* This species is related to *Plinia cauliflora* (Martius) Kausel, from which it can be distinguished by the following characters:

- 1a. Treelet or tree to 10 m high, inhabiting forests; leaves evidently petiolate, the petioles  $3 \times 0.5$  mm; blades membranous, with 2 well-defined marginal veins and an acute to obtuse base . . .  
..... *Plinia cauliflora*
- 1b. Shrub to 1.5 m high from campos cerrados; leaves sessile or with petioles, when present, to  $1 \times 1$  mm; blade chartaceous, with 1 (rarely 2) marginal vein, this occasionally discontinuous, and cordate base . . . . . *Plinia nana*

*Habitat and distribution.* *Plinia nana* was collected in campos cerrados and campos rupestres at the municipalities of Diamantina, Felício dos Santos, Itacambira, and São Gonçalo do Rio Preto in central Minas Gerais.

*Phenology.* Flowers were collected in August and October and fruits in October and November; according to collectors, ripe fruits have a very sweet taste.

*Etymology.* The epithet *nana*, from the Latin word for dwarf, alludes to the small size of the species. It is noteworthy that no shrubby species of jaboticaba was known until now.

*Paratypes.* BRAZIL. **Minas Gerais:** Felício dos San-

tos, 8 Aug. 2004, *P. Viana & N. Mota 1856* (BHCB). Itacambira: 30 Nov. 1984, *R. Harley et al. (SPF 36241)*, 13 Nov. 2001, *A. Tozzi & M. Alencar 2001–480* (UEC); 17°10'02"S, 43°07'00"W, 9 Nov. 2002, *F. Mazine et al. 662* (BHCB, ESA). São Gonçalo do Rio Preto: Parque Est. Rio Preto, Ribeirão das Éguas, 18 Nov. 1999, *J. Lombardi 2548* (BHCB); Poço dos Veados, 18 Oct. 2000, *J. Lombardi 4084* (BHCB); 3 Oct. 2003, *P. Viana et al. 1243* (BHCB); 15 Oct. 2003, *T. Alves & M. Sobral 167* (BHCB).

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