



A new species of *Guatteria* (Annonaceae) endemic to the Atlantic Forest of Brazil

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Introduction

One of the most important families in terms of species richness in the Atlantic Forest and other lowland tropical forests is Annonaceae (Leitão-Filho 1987, Ter Steege *et al.* 2000), among which *Guatteria* is one of the largest genera with 211 species (Maas *et al.* 2011); it is also one of the most diverse genera of Neotropical trees. Erkens *et al.* (2007) stated that an updated revision is needed, and Lobão *et al.* (2012) revised the species of the Brazilian Atlantic Forest.

The last taxonomic treatment of *Guatteria* recognized 30 sections (Fries 1939). The sections of *Guatteria* are in most cases not monophyletic or need to be rearranged (Erkens *et al.* 2007). This is the case of *Guatteria* sect. *Mecocarpus* endemic to the Amazon, that is considered monophyletic by Erkens *et al.* (2007) with the inclusion of *G. inundata* Martius (1841: 36) and *G. megalophylla* Diels (1905: 127). However in the taxonomic revision of Maas & Westra (2011), *Guatteria* sect. *Mecocarpus* does not include these species, but includes *G. brevicuspis* Fries (1939: 491), synonym of *G. blepharophylla* Martius (1841: 38), which is not nested in *Mecocarpus* clade (Erkens *et al.* 2007). Maas & Westra (2011) characterized *Guatteria* sect. *Mecocarpus* by their possession of monocarps longer than the stipe, verrucose leaves and highly rugose seeds. These features are also present in *G. inundata*, *G. megalophylla* and *G. blepharophylla*.

Until now, the only species of the Atlantic Forest with an elongated monocarp has been *G. stenocarpa* Lobão, Maas & Mello-Silva (2010: 122), recently described from Espírito Santo. Here we present another species of *Guatteria* with this character from the Atlantic Forest of Brazil.

Description

Guatteria capixabae Lobão & J.C.Lopes, *sp. nov.* (Fig. 1)

Guatteria capixabae is unique by the combination of the following features: verrucose leaves that are glabrous on both sides and a small number of narrowly ellipsoid monocarps with short stipes.

Type:—BRAZIL. Espírito Santo: Santa Teresa, Valsugana Velha, Estação Biológica de Santa Lúcia, baixo da cachoeira, 500 m, 11 February 1999 (fl), Kollmann *et al.* 1948 (holotype RB, isotype MBML).

Trees or shrubs 2–6 m tall, 4–6 cm in diam.; young twig glabrous. Leaf petiole shallowly canaliculate, 3.8–5.6 (–6.6) mm long, 1.2–1.7 mm in diam., blackish, glabrous; blade narrowly elliptic, rarely oblanceolate, 7.0–15.0 × 1.5–5.0 cm; densely verrucose above, grayish-green when dry, glabrous on both sides, rarely sparsely covered by appressed hairs below; base decurrent; apex acuminate, acumen 0.5–10.0 mm long; venation brochidodromous; primary vein flat above, secondary veins distinct, 9–18 on either sides of primary vein, smallest distance between loops and margin 2–3 mm, angles with primary vein 60–80°; tertiary veins reticulate, raised below. Flowers solitary, axillary; bracts caducous; pedicels 8.0–10.8 (–30.0) mm long, 0.8–1.0 mm in diam., blackish, sparsely covered with appressed hairs to glabrous; articulated at 1.8–3.9 mm from the base; flower buds broadly ovoid, c. 4.0 × 2.5 mm; sepals deltate, 3 × 3–4 mm, sparsely covered with appressed hairs to glabrous on both sides; petals

Sterile specimens of *G. capixabae* can be misidentified as *G. australis* Saint-Hilaire (1825: 37) because of leaf shape, indument and dimensions, but reproductive characters such as smaller pedicel, shape and number of monocarps, and size of stipes differentiate these two species (Table 1). Recently several species were synonymized under *G. australis*, a species with large phenotypic variation, especially in leaf characters (Lobão *et al.* 2011). However, the features mentioned above provide support for recognition of these two species.

Key to the Atlantic Forest species of *Guatteria* with narrowly ellipsoid to oblong-ellipsoid monocarps

1. Leaves narrowly elliptic, verrucose, pedicels 8.0–10.8 mm long, monocarps 5–7, 12.8–15.7 mm long, stipes 2–4 mm long *Guatteria capixabae*
- Leaves narrowly obovate, not verrucose, pedicels 20.0–35.0 mm long, monocarps 8–19, 22.0–25.0 mm long, stipes 5–10 mm long *Guatteria stenocarpa*

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