



## A new species of *Myrceugenia* (Myrteae, Myrtaceae) from Distrito Federal, Brazil, with notes on its micromorphology

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### Abstract

During field collections for the doctoral thesis of the first author, a population of *Myrceugenia* was found in a gallery forest along Bananal stream in the Distrito Federal, Brazil. This population was recognized as a new species related to *Myrceugenia glaucescens* and *M. acutata*, separated by 800 km or more from previously known populations of those species in Rio de Janeiro, Paraná, Santa Catarina and Rio Grande do Sul states. Specimens were studied using scanning electron microscopy (SEM) and the leaf architecture was studied in diaphanized leaves.

### Introduction

The genus *Myrceugenia* O.Berg (1855: 131) of the Myrtaceae is characterized as follows: trees or shrubs; indumentum of simple or dibrachiate trichomes, of varying shades of reddish brown, yellowish brown or white; flowers tetramerous, solitary or in dichasia, or peduncles clustered together in bracteate shoots (racemes) or superimposed in the leaf axils, the bracteoles commonly persistent, the ovary 2–4-locular with several ovules per locule; fruit a berry, and seed with a myrcioid embryo, that is with leafy folded cotyledons and a long hypocotyl that wraps around the cotyledons.

*Myrceugenia* belongs to tribe Myrteae, it is restricted to South America. It is hypothesized to have originated in southern South America with two present centers of species diversity in Central Chile and Southeastern Brazil, (Landrum 1981; Lucas *et al.* 2007; Murillo-A. *et al.* 2012).

*Myrceugenia* currently includes 39 species, 25 of which are distributed mainly in the Southeast and South of Brazil, with less representation in the Northeast (Bahia) and Midwest (Goiás and Distrito Federal), and also in Paraguay, Uruguay and northeastern Argentina. Twelve species are recorded for Chile and the Andean region of southwestern Argentina and two species are endemic to the Juan Fernandez Archipelago (Landrum 1981). Some authors (Murillo & Ruiz 2011) accept *Myrceugenia fernandeziana* (Hook. Et Arn.) Johow (1896: 94) as an independent monotypic genus, *Nothomyrcia* Kausel (1948 “1947”: 148).

During field collections for the doctoral thesis of the first author, populations of *Myrceugenia* were found in the gallery forest of the Bananal stream. Initially it was thought that these populations might be the rare *Myrceugenia alpigena* var. *longifolia* (Burret) Landrum (1980:372), the only *Myrceugenia* known from the vicinity of Brasília. This taxon is known to us from only four collections: Glaziou (21147) from the vicinity of the streams Torto and Bananal; Heringer (9961) from Formosa municipality, Goiás; Harley (26218 & 26683) from Rio de Contas municipality, Pico das Almas, Bahia. The first two were cited by Landrum (1981), and the second two were collected in 1988. The Bananal population is clearly different from *M. alpigena* var. *longifolia*. The two entities are compared in the key below.

Trichomes symmetrically dibrachiate, appressed; peduncles pubescent, commonly in superimposed pairs (occasionally in triplets); bracteoles pubescent, 2.2–3.2 mm long; leaves 3.5–5 times as long as wide. .... *Myrceugenia alpigena* var. *longifolia*  
Trichomes simple and dibrachiate, spreading; peduncles subglabrous, usually solitary, rarely superimposed in pairs; bracteoles subglabrous, 1.3–1.5 mm long; leaves 1.9–2.6 times as long as wide. .... *Myrceugenia bananalensis*

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