



***Myrcia macrocalyx* (Myrtaceae), a new species from Brazil, with additional morphological highlights**

JAIR EUSTÁQUIO QUINTINO DE FARIA^{1,2}, KADJA MILENA GOMES-BEZERRA¹, MARIA ROSA VARGAS ZANATTA¹, MANOEL CLÁUDIO DA SILVA JÚNIOR¹ & LUCIA HELENA SOARES-SILVA¹

¹Botany Department, Herbarium, University of Brasília. Brasília, Distrito Federal, Brazil. PO Box 04457 - 70904-970.

²Author for correspondence: (jairquintino@yahoo.com.br)

Abstract

Myrcia macrocalyx, a new species from Cavalcante, Goiás, Brazil, is here described and illustrated. Additional details on the leaf architecture, geographical distribution, and conservation status of this species are also provided.

Keywords: Goiás State, *Myrcia goyazensis*, Cerrado

Introduction

Myrcia De Candolle (1827: 406) is one of the largest genera of Myrtaceae, comprising 418 species (Govaerts *et al.* 2015) of which 260 can be found in Brazil (Sobral *et al.* 2015). Most of the Brazilian species remain poorly known since Berg's (1857–1859) treatment, except for Nic Lughadha (1997) in the revision of the genus *Gomidesia* O.Berg (Berg 1855–1856: 6), now considered as a synonym of *Myrcia*, and some local floristic studies (e.g. Legrand & Klein 1969; Mattos 1984; Kawasaki 1989; Peron 1994; Marchiori & Sobral 1997; Sobral 2003, Rosa & Romero 2012).

While conducting field work on Myrtaceae in wet grasslands of northern Goiás state, a narrow-leaved subshrub drew the attention of the authors, and resulted in the present proposal of a new species.

Materials and methods

The specimens were processed according to current herbarium techniques (Silva Júnior *et al.* 2014). The specimens studied are deposited in the following herbaria: ASU, BHCN, CEN, HUEFS, HUEG, HUFSJ, IBGE, K, MBM, NY, RB and UB; acronyms according to Thiers (2015). Leaves and pollen grains of the specimens were also examined using Scanning Electron Microscopy (SEM).

Samples of pollen grains, bracteoles, and portions of median leaves of ca. 1cm² were mounted on stubs and gold coated with a Balzers sputter SCD 050. Examination and photography were carried out using a SEM Jeol JSM 7001F at the SEM laboratory of the University of Brasília.

In order to analyze leaf architecture, mature and fully expanded leaves were diaphanized according to Shobe & Lersten (1967) and Caires *et al.* (2012). Samples were mounted on glass slides with clear GP Arts[®] varnish (Paiva *et al.* 2006). Images of distinct levels of detail were obtained using a camera coupled to a Leica EZ4D stereomicroscope. Foliar architecture was described according to Ellis *et al.* (2009). The species distribution map was produced using ArcGIS 9.0.