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A new species of *Myrcia* (Myrtaceae) from the Federal District, Brazil, with micromorphological highlights

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Abstract

Myrcia federalis, a new species closely related to *M. goyazensis*, distinguished by its hirsute flowers and strongly revolute blades, is described for the savannas of Central Brazil, in the Federal District. Additionally to its macromorphological description, leaf architecture and pollen morphology are described and illustrated; a couplet to distinguish it from *M. goyazensis,* a distribution map, and illustration are also presented.

Key words: *Myrcia goyazensis*, Myrciinae, pollen, Savannas

Resumo

Myrcia federalis, uma nova espécie aparentada a *M. goyazensis,* da qual se distingue pelas flores hirsutas e lâminas fortemente revolutas, é descrita para o Cerrado do Brasil Central no Distrito Federal. Adicionalmente à descrição macromorfológica são descritas e ilustradas a arquitetura foliar e a morfologia do pólen; é apresentada uma chave para distingui-la de *M. goyazensis*, bem como uma ilustração da espécie e um mapa de sua distribuição.

Palavras chave: *Myrcia goyazensis*, Myrciinae, pólen, Cerrado

Myrcia de Candolle (1827: 406) with 396 species is one of the largest genera in Myrtaceae (Govaerts *et al.* 2013), mainly distributed in the neotropical region. The Brazilian flora has the largest number of representatives of this genera with 241 species, of which 188 are endemic (Sobral *et al.* 2013).

Myrcia, Gomidesia O. Berg (1855: 6), *Myrceugenia* O. Berg (1855: 5), *Marlierea* Cambessèdes (1833: 373), and *Calyptranthes* Swartz (1788: 79) were traditionally included in the subtribe Myrciinae, which differs from other Myrteae subtribes mainly by the foliaceous, contortuplicate embryo. However, molecular phylogenetic studies indicate that subtribe grouping may differ from the Berg's concept.

Lucas *et al.* (2007) analyzed nuclear ITS and ETS ribosomal DNA, and plastid *psbA-trnH* and *matK* DNA sequences from 75 Myrteae species and 13 outgroup taxa. Using parsimony and Bayesian inference, included *Myrcia* (including *Gomidesia*), *Calyptranthes* and *Marlierea* in the "*Myrcia*" group, and *Myrceugenia*, *Luma* A. Gray (1853: 52) and *Blepharocalyx cruckshanksii* (Hooker & Arnott) Niedenzu (1893: 71) in the *Myrceugenia* group.

Furthermore, Lucas *et al.* (2011) proposed a new generic architecture consisted of nine clades, which would function as subgeneric sections based on Bayesian inference and parsimony analysis of 74 species of *Myrcia s.l.*

Field collections for the first author's doctoral thesis, covered a *Myrcia* population found in Chapada da Contagem, Federal District, Brazil, previously identified as *Myrcia goyazensis* Cambessèdes (1833: 305). The specimen, although very similar, showed reduced inflorescence and narrower leaves more strongly revolute than those of the holotype. Further morphological, foliar architecture and pollen analysis indicated a new taxon, *M. federalis*, here described.

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