Myrcia concisa (Myrtaceae), a New Species from Minas Gerais, Brazil

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ABSTRACT. Myrcia concisa Sobral & Leoni, a new species of Myrtaceae from rainforests of the southeastern Brazilian state of Minas Gerais, is described, illustrated, and evaluated for its conservation status according to IUCN criteria. The new species is apparently related to M. pubescens DC., from which it is set apart by the narrower blades and uniflorous to triflorous inflorescences.

RESUMO. Myrcia concisa Sobral & Leoni, uma nova espécie de Myrtaceae das florestas ombrófilas do estado de Minas Gerais, na região sudeste do Brasil, é descrita, ilustrada e avaliada em seu status de conservação de acordo com os critérios da IUCN. A nova espécie é considerada próxima a M. pubescens DC., da qual se distingue pelas lâminas mais estreitas e inflorescências unifloras ou trifloras.

Key words: Brazil, IUCN Red List, Minas Gerais, Myrcia, Myrtaceae.

The American genus *Myrcia* DC. ex Guill. (Myrtaceae) has a distribution ranging from the Antilles to Uruguay and comprises about 350 species, with at least 230 species in Brazil (Govaerts et al., 2010).

During the floristic inventory of two rainforest reserves in eastern Minas Gerais (Lombardi & Gonçalves, 2000), a fruiting species of Myrtaceae was collected and tentatively identified as Gomidesia O. Berg sp. 1; the specimen differed from all previously known species of Gomidesia by its pauciflorous inflorescences. Recently, flowers of this species were collected, which allowed us to consider this species as previously undescribed, and we describe the new species below.

The genus *Gomidesia* was erected (Berg, 1855–1856) to accommodate species previously included in *Myrcia* in which stamens presented the interior staminal sac of each theca opening extrorsely and apically, and the exterior sac opening introsely and basally (vs. longitudinally dehiscent in the other

species of Myrcia; McVaugh, 1968). Some authors challenged the independence of *Gomidesia* as a genus, frequently merging Berg's species in Myrcia (e.g., Kiaerskou, 1893; Niedenzu, 1893), while other authors accepted Berg's concept (Legrand, 1958; McVaugh, 1968; Mattos, 1984). Recently, Landrum and Kawasaki (1997) stressed the close affinity of Gomidesia and Myrcia and considered the first genus as a synonym of *Myrcia* in their generic treatment of Brazilian Myrtaceae. Furthermore, the results of Lucas et al. (2007) demonstrate that the species of Gomidesia are clearly nested within the genus Myrcia, although forming a monophyletic assemblage within it. We follow these results here and consider the presently described species as belonging to the genus Myrcia, rather than recognizing Gomidesia as a distinct genus.

Myrcia concisa Sobral & Leoni, sp. nov. TYPE: Brazil. Minas Gerais: Mun. Faria Lemos, Faz. Santa Rita, 16 Jan. 2006, L. Leoni 6364 (holotype, GFJP; isotype, BHCB). Figure 1.

Species haec *Myrciae pubescenti* DC. proxima, a qua foliis angustioribus et inflorescentiis paucifloris recedit.

Shrubs 1.5–3 m tall; twigs cylindrical or slightly complanate, with brown or gray simple trichomes 0.5-1 mm, the most distal internodes $12-20 \times \text{ca. } 1 \text{ mm}$, apically with acicular colleters to 1×0.05 mm. Leaves with petioles $3-5 \times 0.5-0.6$ mm; blades lanceolate to oblong, sometimes lanceolate-obovate, $45-80 \times 20-25$ mm, 2-4 times larger than wide, discolored when dry, with simple erect trichomes to 0.5 mm, scattered adaxially, more dense and uniform abaxially, with translucid glandular dots smaller than 0.1 mm diam., ca. 10 per mm², evident when observed against a source of light, but scarcely visible otherwise, apex and base acute to obtuse; midvein sulcate adaxially and convex abaxially; lateral veins 10 to 14 per side, moderately sulcate adaxially and convex abaxially, leaving the midvein at angles 70°-

doi: 10.3417/2007094 Novon 20: 345–347. Published on 13 September 2010.

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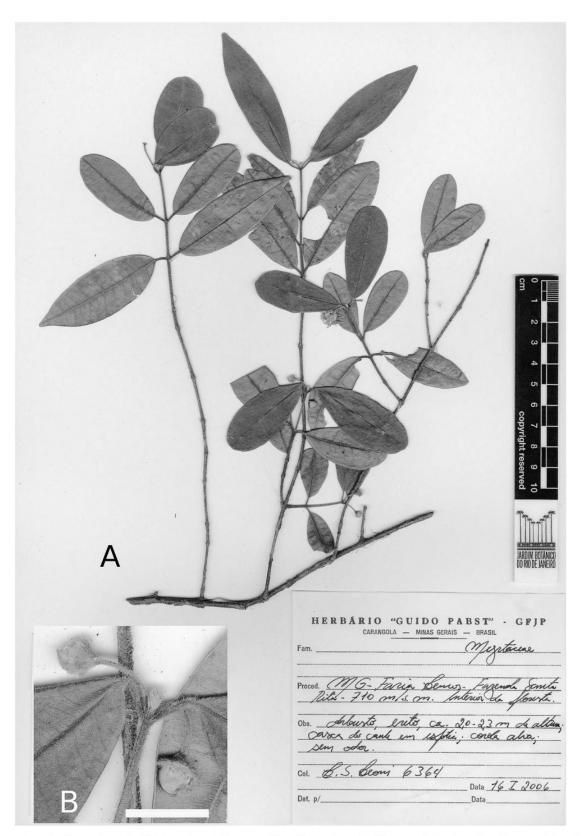


Figure 1. Myrcia concisa Sobral & Leoni. —A. Isotype at BHCB. —B. Detail of flowers. A, B taken from Leoni 6364; scale in B = 10 mm.

 80° ; marginal vein to 0.9 mm from the revolute margin, the margin itself revolute. Inflorescences axillary, uniflorous or triflorous, then the flowers crowded apically, the lateral ones sessile, the axis 7–

 18×0.2 –0.4 mm, densely covered with trichomes to 0.5 mm; bracts linear, to 2×0.3 mm, deciduous; pedicels absent (although in uniflorous inflorescences the axis may be confused with a pedicel); bracteoles

narrowly triangular, ca. 0.8 × 0.3 mm, deciduous before anthesis; flower buds globose to obovate, 3-4 × ca. 3 mm diam., uniformly covered with gray or ochraceous trichomes to 0.5 mm; calyx lobes hemispheric, $0.4-0.5 \times 1.5-1.8$ mm, pilose on both faces, adaxially with appressed trichomes to 0.2 mm, abaxially with trichomes to 0.5 mm; petals rounded, to 4 mm diam.; stamens ca. 80, 3-5 mm, anthers oblong, ca. 1×0.3 –0.4 mm, eglandular, thecae asymmetrical, opening apically; staminal ring to 3 mm diam., with trichomes to 0.2 mm; calvx tube to 0.5 mm deep; style to 5 mm, with white trichomes 0.2-0.3 mm in proximal half; stigma punctiform; ovary with 2 locules and 2 ovules per locule. Fruits globose, to 5-6 mm diam., immature; seeds immature, with 2 distinct cotyledons and a well-developed hypocotyl.

Distribution and habitat. Myrcia concisa is a shrub from the interior of semideciduous forests from eastern Minas Gerais, in the Atlantic rainforest biome of southeastern Brazil, growing at altitudes of 680–710 m above sea level.

IUCN Red List category. This species is assessed here as Vulnerable (VU) according to IUCN Red List criteria (IUCN, 2001), fitting criteria B1ab(iii). Its known area of occurrence is smaller than 20,000 km² (criterion B1), and it grows in a severely fragmented habitat (criterion a) that is subject to a continuing decline in area, extent, and quality (criterion b[iii]). The places where this species was collected have been suffering intense deforestation and substitution of native forests by Eucalyptus L'Hér. plantations.

Phenology. Flowers of the new species were collected in December and January, and fruits were collected in April.

Etymology. The specific epithet is derived from the Latin "concisa," meaning "concise" or "brief," alluding to the very small number of flowers in the inflorescences of this new species.

Taxonomic affinities. This species is apparently related to Myrcia pubescens DC. (for a description, see Berg, 1857–1859), from which it can be distinguished by its narrower blades (up to two times longer than wide in M. pubescens vs. up to four times longer than wide in M. concisa) and inflorescences with one to three flowers (vs. at least 20 flowers in M. pubescens).

Paratypes. BRAZIL. Minas Gerais: Mun. Caratinga, Estação Biol. de Caratinga, 6 July 1987, I. R. Andrade & L. V. Costa 65 (BHCB), 7 July 1987, I. R. Andrade & L. V. Costa 161 (BHCB), 21 Apr. 1987, M. A. Lopes & P. M. Andrade 263 (BHCB); Mun. Faria Lemos, Fazenda Santa Rita, 17 Dec. 2005, Leoni 6348 (BHCB, GFJP), 7 Apr. 2004, Leoni 5669 (BHCB, GFJP).

Acknowledgments. Thanks to Leslie Landrum (ASU), Victoria C. Hollowell (MO), and an anonymous reviewer for their helpful comments and improvements to the text, and to Rafaela Forzza and Erika von Sohsten Medeiros (RB) for their valuable help in preparing the images.

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Sobral, Marcos and Leoni, Lúcio Souza. 2010. "Myrcia concisa (Myrtaceae), a New Species from Minas Gerais, Brazil." *Novon a journal of botanical nomenclature from the Missouri Botanical Garden* 20, 345–347.

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