



A new species of *Mollinedia* (Monimiaceae, Mollinedioideae, Mollinedieae) from Atlantic Rainforest, Brazil

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Abstract

In this contribution we describe and illustrate *Mollinedia dolichotricha*, a new species of the section *Appendiculatae* Perkins. The new species is morphologically close to *M. argyrogyna*. We also comment on the taxonomy, ecology, affinities with related species, and conservation status of the new species.

Resumo

Neste trabalho é descrita e ilustrada *Mollinedia dolichotricha*, uma nova espécie pertencente à seção *Appendiculatae* Perkins. A nova espécie é relacionada com *M. argyrogyna*. São providos também comentários taxonômicos e ecológicos, a afinidade com espécie relacionada e avaliação de risco.

Introduction

Members of Monimiaceae are pantropical, with 28 genera and 195–270 species (Renner *et al.* 2010). The family has three subfamilies, supported by morphological and molecular analyses: Hortonioideae, Monimioideae and Mollinedioideae (Doyle & Endress 2000, Philipson 1987, 1993, Renner *et al.* 2010, Romanov *et al.* 2007, Takhtajan 2009). In the Neotropics the family is represented by six genera, including the monotypic *Peumus boldus* Molina (1782: 185) of the subfamily Monimioideae and five genera of the subfamily Mollinedioideae, three of them monotypic, *Grazielanthus arkeocarpus* Peixoto & Pereira-Moura (2008: 138), *Hennercartia omphalandra* Poisson (1885: 40) and *Macrotorus utriculatus* (Martius ex Tulasne 1857: 319) Perkins (1898: 561) (Lírio *et al.* 2015), and two polytypic, *Macropeplus* Perkins (1898: 556), with four species (Santos & Peixoto 2001), and *Mollinedia* Ruiz & Pavón (1794: 83), with ca. 60 species. In Brazil 45 species of Monimiaceae occur, 38 of them members of the genus *Mollinedia*, most of the latter inhabit the Atlantic Forest (Peixoto & Lírio 2015).

Mollinedia was described by Ruiz & Pavón (1794) and included by Perkins (1898) in the tribe Mollinedieae (along with *Macrotorus* and *Macropeplus*), which was circumscribed by pistillate flowers with circumscissile receptacle apex. This classification was accepted by later investigators (Lírio *et al.* 2015, Peixoto & Pereira-Moura 2008, Philipson 1987, 1993). *Mollinedia* is recognized by the staminate flower with nearly rounded buds, perianth lobes with ratio about 1:1 in relation to the length of the receptacle, stamens ovate or rounded, locules either with two longitudinal openings and an extended connective or confluent at the apex, making the anther horseshoe-shaped (Perkins 1898, 1900). The genus occurs in southern Mexico and Central and tropical South America (Lorence 2011).

Perkins (1900) proposed two sections for *Mollinedia*, sect. *Appendiculatae* Perkins (1900: 649) and sect. *Exappendiculatae* Perkins (1900: 646); the former is characterized by staminate flowers with an appendix on the internal lobes, and the latter by staminate flowers devoid of an appendix. The diagnostic characters of sect. *Appendiculatae* are clearly present in the new species and it does not match any of the species so far described in this section.

Here we describe and illustrate *Mollinedia dolichotricha*, a new species assigned to section *Appendiculatae*. We also provide ecological comments, assess the conservation status, and discuss the relationship to the morphologically most similar species, *Mollinedia argyrogyna* Perkins (1900: 661).