



A new species of *Pleroma* (Melastomataceae, Melastomeae) from southeastern Brazil

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Abstract

Pleroma ceciliana, a new species of Melastomataceae (Melastomeae) from Rio de Janeiro State, Brazil, is described, illustrated and compared to its putative closest relatives. It is characterized mainly by the stamens dimorphic in size with the appendages covered with stipitate glands, leaf blades with the base rounded and slightly truncate, and 3+2 nerves with the marginal pair 1–2 mm suprabasal.

Resumo

Pleroma ceciliana, uma nova espécie de Melastomataceae (Melastomeae) do Estado do Rio de Janeiro, Brasil é descrita, ilustrada e comparada com táxons mais afins. Ela é caracterizada principalmente pelos estames dimórficos em tamanho com apêndices recobertos por glândulas estipitadas, lâminas foliares com a base arredondada e ligeiramente truncada e 3+2 nervuras com o par externo 1–2 mm suprabasal.

Keywords: *Tibouchina*, Rio de Janeiro, Atlantic rainforest, Conservation units.

Introduction

Pleroma D. Don (1823: 279) is a Neotropical genus of tribe Melastomeae Bartling (1830: 329), Melastomataceae, with over 160 species that occur in the Atlantic rain forest of eastern Brazil, central and northeastern Brazil in drier areas (cerrado and caatinga), and northwest and western South America (Fraga & Guimarães 2014, Oliveira *et al.* 2014). This name was until recently considered a synonym of *Tibouchina* Aublet (1775: 445), but recent phylogenetic studies on New World Melastomeae (Michelangeli *et al.* 2013) revealed that *Tibouchina* is not monophyletic and species from eastern Brazil must be recognized as two distinct genera, *Pleroma* and *Chaetogastra* A.P. de Candolle (1828:131).

Pleroma can be characterized by the hairy hypanthium, stamens with well-developed pedoconnectives, purple or pink anthers, anther connectives glabrous or with stipitate glands and caducous calyx lobes, these falling right after the anthesis. Species of *Pleroma* are found in forests, banks of rivers and streams, high altitude grasslands, fields, rocky outcrops on slopes and shrubby restinga, from sea level to elevations above 2000 m (Fraga & Guimarães 2014).

This new species of *Pleroma* was discovered during the inventory of tribe Melastomeae for the state of Rio de Janeiro, as part of the Re flora Project (Guimarães & Oliveira da Silva 2014). Melastomataceae displays an expressive diversity in this state with 28 genera and 335 species (Baumgratz *et al.* 2014), and of these, 44 are species of *Pleroma* (Guimarães & Oliveira da Silva, unpublished data).

features of *Tibouchina divaricata*, *T. corymbosa*, *T. gaudichaudiana* and *T. trichopoda*. The latter four species will be further transferred to *Pleroma* (Guimarães & Michelangeli unpublished data).

Paratypes:—BRAZIL. Rio de Janeiro: São Fidelis, 21° 46' 48"S, 41° 51' 00"W, 8 July 2014 (fl., fr.) *T.M. Scarponi, L.S. Nascimento, R.A. Ammon & D. Hottz* 53 (RB); São Sebastião do Alto, "fragmento de floresta estacional semidecídua fortemente alterado, sobre solo argiloso e terreno muito declivoso +/- 40°", elevation 470 m, 21° 57' 36"S, 42° 07' 12"W, 12 December 2013 (fl.) *L.B. Pimentel, A.S.C. Junqueira, M.Ramos & R. Giovanetti-Alvaes*, s.n. (RB); Silva Jardim, BR 101, elevation 20 m, 22°35' 11"S, 42° 23'6"W, 29 December 2004 (fl.) *P.J.F. Guimarães & N.N.R. Campos* 369 (RB); Santa Maria Madalena, sub-bosque de mata secundária da Serra do Sossego, 28 April 1995 (fl., fr.) *L.C. Giordano, S.V.A. Pessoa, Y. Brito & L. Goldfarb* 1946 (RB, R, US, NY); Santa Maria Madalena, Represa, 21 March 1989 (fl., fr.) *L.C. Giordano, R. Marquete, N. Marquete & M.C. Valente* 603 (RB, R, US, NY).

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