



A critically endangered new species of *Comanthera* from Bahia, Brazil (Paepalanthoideae, Eriocaulaceae)

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Abstract

The present work describes and illustrates the new narrowly endemic species *Comanthera pignalii* (Eriocaulaceae: Paepalanthoideae). This species is restricted to the white-sand environments in the Campos Rupestres at the border of the Serra Geral, in the Espinhaço Mountain Range in Bahia, Brazil. The morphological variation, habitat and geographic distribution of the species are discussed. It is critically endangered according to the IUCN criteria B2ab (i, ii, iii, iv), as evaluated by CNCFlora, the Plant Red List Authority in Brazil. This is the first newly published plant species already officially proposed to the Brazilian Red List.

Resumo

O presente trabalho descreve e ilustra a nova espécie micro-endêmica *Comanthera pignalii* (Eriocaulaceae : Paepalanthoideae). Essa espécie é restrita às areias brancas dos Campos Rupestres na borda da Serra Geral, na Cadeia do Espinhaço na Bahia, Brasil. A variação morfológica, habitat e distribuição geográfica dessa espécie nova são comentados. Ela está criticamente ameaçada de extinção de acordo com os critérios B2ab (i, ii, iii, iv) da IUCN, conforme avaliado pelo CNCFlora - a autoridade da Lista Vermelha das Plantas no Brasil. Esta é a primeira espécie de planta publicada já oficialmente proposta para a lista vermelha brasileira.

Introduction

The genus *Comanthera* Smith (1937: 38) comprises two sections previously placed in *Syngonanthus* Ruhland (1903: 242), elevated to *Comanthera* subg. *Comanthera* and *C.* subg. *Thysanocephalus* (Koernicke 1863: 429) L.R. Parra & Giul. in Parra *et al.* (2010: 1143). The genus is restricted to South America and includes 35 species, mostly concentrated in mountainous areas of eastern Brazil, mainly in the Campos Rupestres ('rocky savannas') of the Espinhaço Mountain Range, in Minas Gerais and Bahia states (Echternacht *et al.* 2014). Most species are narrow endemics and many are harvested in the wild for trading as ornamentals (commonly known as "Everlasting-plants" or "Sempre-vivas"). This, in combination with habitat loss, threatens several species with extinction (Biodiversitas 2000, MMA 2008, Martinelli & Moraes 2013).

Comanthera emerges as monophyletic in phylogenetic analyses (Andrade *et al.* 2010, Giulietti *et al.* 2012, Trovó *et al.* 2013, Echternacht *et al.* 2014) and can be easily distinguished from the remaining genera of Eriocaulaceae by its pistillate flowers with sepals shorter than petals, petals united in the middle and free at base and top, narrow-spathulate, and rugose seed surfaces (Parra *et al.* 2010, Barreto *et al.* 2013, Echternacht *et al.* 2014). In addition, *Comanthera* presents isostemonous flowers, the staminate flowers with filaments free from the corolla and two-locate tetrasporangiate anthers, and the pistillate flowers with a gynoeceium with stigmatic and nectariferous branches separating at the same level, the nectariferous portion papillate. *Comanthera* subg. *Comanthera* differs from *C.* subg. *Thysanocephalus* by its radiate, campanulate or hemispherical capitula (vs. cyathiform), involucrel bracts surpassing or equaling the flower level (vs. shorter than the flower level), pistillate flowers with pedicels elongating during fruit development (vs. not elongating) and seeds without micropapillae (vs. with micropapillae) (Barreto *et al.* 2013, Echternacht *et al.* in press). In addition, the subgenera differ in their habitats, as *C.* subg. *Comanthera* occurs mainly

Acknowledgments

The author wishes to express gratitude to Marc Pignal, who first documented this new species, together with his fieldwork team, Avaldo de Oliveira Soares Filho, Raymundo F. Reis Jr. and Milton Rodrigues da Silva; M. Pignal and Jacques Florence contributed to the latin diagnosis. Many thanks to Tiago Vilaça Bastos, Mariane da Silva Freitas and Arthur Werlang for fieldwork support and enjoyment; to the Instituto de Biologia (UFU) for providing our transportation to the field; and to the curator of HUESBVC, Avaldo de Oliveira Soares Filho, for the specimen loan. Many thanks to the CNCFlora team for their openness and engagement, leading to the current new proposition of a standard and official method for assessing the conservation status of a newly described species; the conservation status was evaluated by Raquel Negrão, reviewed by Tainan Messina and validated by the author. Financial support was provided by the Instituto de Biologia (UFU) and by PROPP-UFU (06/2013).

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