



An illustrated checklist of Bromeliaceae from Parque Estadual do Rio Preto, Minas Gerais, Brazil, with notes on phytogeography and one new species of *Cryptanthus*

LEONARDO M. VERSIEUX¹, RAFAEL B. LOUZADA^{2,4}, PEDRO LAGE VIANA³, NARA MOTA³ & MARIA DAS GRAÇAS LAPA WANDERLEY⁴

¹Universidade Federal do Rio Grande do Norte, Departamento de Botânica, Ecologia e Zoologia, 59072-970, Natal, Rio Grande do Norte, Brazil. E-mail: lversieux@yahoo.com.br

²Programa de Pós-Graduação em Ciências (Botânica), Instituto de Biociências, Universidade de São Paulo, Brazil
E-mail: rafael_louzada@hotmail.com

³Programa de Pós-Graduação em Biologia Vegetal, Instituto de Ciências Biológicas, Departamento de Botânica, Universidade Federal de Minas Gerais, Av. Antônio Carlos 6627, 31270-901, Belo Horizonte, Minas Gerais, Brazil.
E-mail: vianapl@yahoo.com.br, bhznara@yahoo.com.br

⁴Instituto de Botânica, Av. Miguel Estéfano 3687, 04301-012, São Paulo, São Paulo, Brazil. E-mail: gracaw@terra.com.br

Abstract

A checklist of the 14 genera and 34 species of Bromeliaceae from the Parque Estadual do Rio Preto in São Gonçalo do Rio Preto municipality, Minas Gerais state, southeastern Brazil, is presented. The Tillandsioideae was the most diverse subfamily and was found to be concentrated in rocky field areas. Bromelioideae is also a species rich subfamily, but its taxa have shown a preference to forested areas and savannas at lower altitudes. Pitcairnioideae is highlighted by its level of endemism, but has only four species. *Cryptanthus micrus*, a new species found in this area is described and illustrated. Our cluster analysis indicated that the Rio Preto State Park has a Bromeliaceae flora more similar to that from Pico do Itambé and Grão Mogol State Parks. Taxa like *Dyckia glandulosa*, *Orthophytum itambense* and *Vriesea medusa*, which were previously considered to be endemic to Pico do Itambé, now have their area of occurrence extended to Rio Preto. These new occurrences highlight the importance to create a corridor joining these neighboring reserves to connect populations of narrowly ranged or rare species. In this work we present pictures of 19 species in their habitats within the park, and we hope that these illustrations will help in the identification and conservation of these taxa.

Key words: *Cadeia do Espinhaço*, *campo rupestre*, Bromelioideae, Diamantina Plateau

Introduction

The Espinhaço mountain range in Brazil is floristically one of the richest regions in the world (Giulietti *et al.* 1997). This mountain range extends more than 1,000 km from Minas Gerais to Bahia State and has strong ecotonal characteristics that divide different biological zones and phytogeographical domains. Detailed characterizations of the Espinhaço range vegetation and patterns of plant species distribution can be found in Giulietti *et al.* (1987, 1997), Stannard (1995), Pirani *et al.* (2003), Zappi *et al.* (2003). Similar information can be found in a recent special issue of a journal edited by Conservation International and Instituto Biotrópicos in Brazil called Megadiversidade (Azevedo & Machado 2008). Most of these works highlight the importance of *campo rupestre* vegetation (rocky fields or grasslands with rocky soil) for endemic or narrowly ranged species.

The knowledge of the Bromeliaceae flora of Minas Gerais is in a state of flux and is progressively increasing due to several inventories focusing on small areas. This knowledge has revealed new data and in