



***Bromelia gracilisepala* (Bromeliaceae), a new species from the northwestern frontier of Brazil**

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Abstract

We describe and illustrate a new species of *Bromelia*, from Nova Mamoré, Rondônia state, Brazil. *Bromelia gracilisepala* is distinguished from its closest relatives by its leaves narrowed toward the base; inflorescence capituliform, sunk in the center of the rosette; sepals linear exposing most of the petals; petals magenta with white margins. This study also discusses its similarities with other species of *Bromelia*.

Keywords Bromelioideae, Rondônia, Amazon, *Distiakanthus*

Introduction

Bromelia is one of the early divergent lineages within Bromelioideae, Bromeliaceae, a group called “basal bromelioids” (Schulte *et al.* 2009, Silvestro *et al.* 2014). The genus includes 66 species (WCSP cont.updated, Forzza *et al.* cont. updated) distributed from Mexico to Argentina, most often in dry environments. The Cerrado, a biome between Amazonia and the Atlantic Forest, part of the South American Dry Diagonal in central northwestern Brazil, has the highest diversity with about 30 species (Forzza *et al.* cont.updated), in contrast to the general rule for the subfamily, which reaches its highest diversity in the Atlantic Forest (Martinelli *et al.* 2008).

The taxonomy of *Bromelia*, as for most genera of Bromelioideae, is very confusing, especially with respect to species delimitation (Schulte *et al.* 2009). Therefore, to be sure if the taxon to be described is actually new, it is essential to carefully study the original descriptions of the already validly published taxa, specimens in herbaria, especially nomenclatural types, and to conduct fieldwork (Winston 1999).

Despite the problems with species definition, members of the genus *Bromelia* are recognized by rosettes of leaves with curved spines along the margin, leaf sheaths covered with fine linear brownish trichomes, a compound inflorescence, raised above or sunk in the center of the rosette, sepals usually floccose, petals chartaceous to fleshy, without appendages, filaments fused in a tube, and flattened, naked seeds (Mez 1891, Smith & Downs 1979, Monteiro 2009).

The city of Nova Mamoré, state of Rondônia in the Amazon domain, covers about 10,000 km² and includes two protected areas: a small part of the Parque Nacional de Pacaás Novos and most of the Parque Estadual Gurajá-Mirim. This city was a district from Guarajá-Mirim, and was built by residents of Vila Murtinho after the railway Madeira-Mamoré’s deactivation, to avoid the isolation (IBGE cont.updated). Nova Mamoré is situated at the border with Bolivia, and its flora is poorly known, as are the floras of most Brazilian frontier regions, especially in the Amazon biome (Hopkins 2007, Fiaschi & Pirani 2009, Forzza *et al.* 2012).

Methods

A specimen of this new species was collected in 2012 and then cultivated in a greenhouse at the Jardim Botânico do Rio de Janeiro. In July 2013 this specimen bloomed, and afterwards it was photographed, dried and deposited in RB.

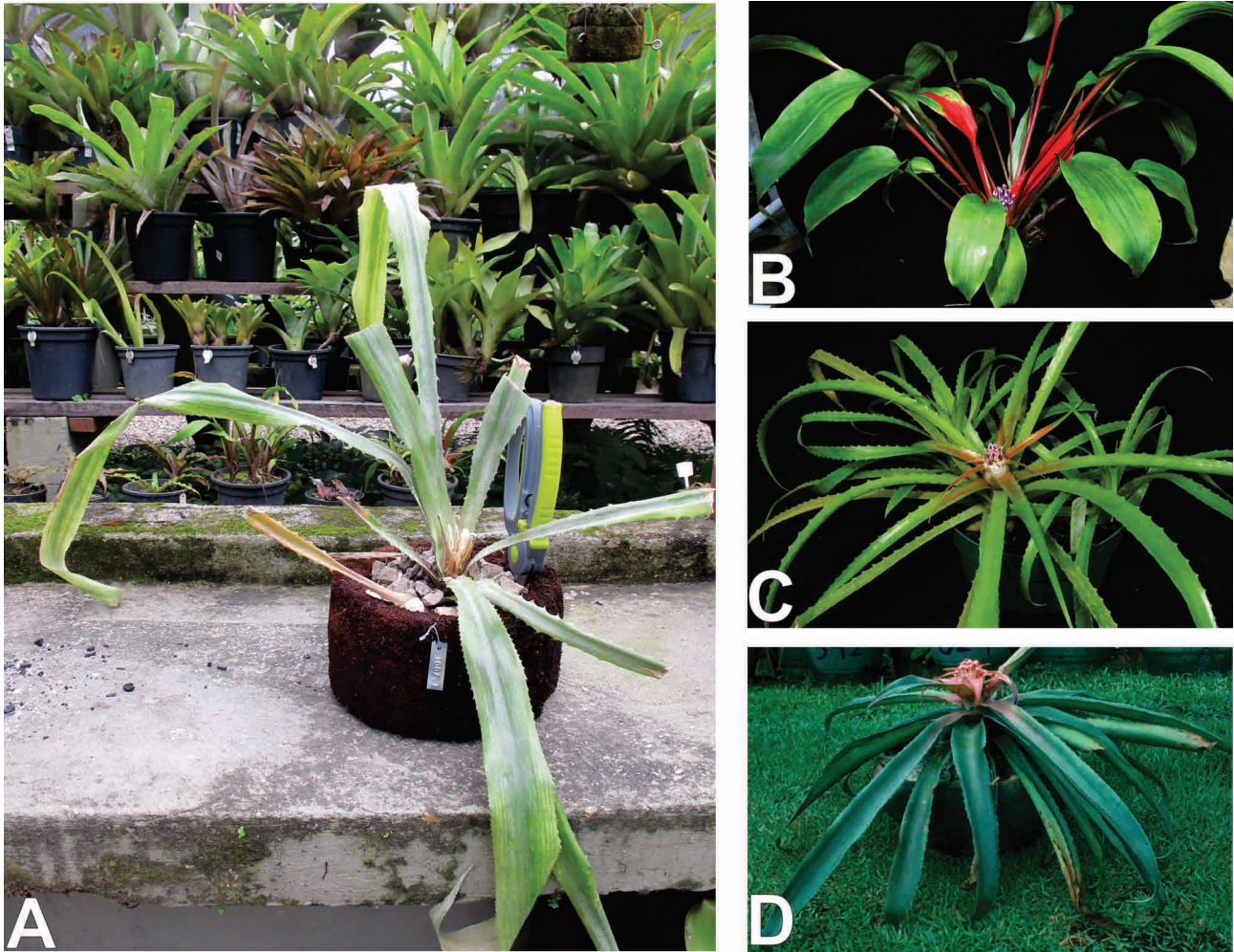


FIGURE 3. Habit of *Bromelia* species. **A.** *Bromelia morreniana*. **B.** *Bromelia scarlatina*. **C.** *Bromelia flemingii*. **D.** *Bromelia horstii*. **A** photo by R. F. Monteiro **B–C** photos by B. Holst, **D** photo by B. R. Silva.

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