NOMENCLATURAL NOTES ON *BILLBERGIA MEYERI* (BROMELIACEAE: BROMELIOIDEAE)

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ABSTRACT. In this work, we propose the second-step lectotypification of the name *Billbergia meyeri* and the lectotypification of the name *Billbergia leucantha*. We also discuss the geographic distribution of *Billbergia meyeri*.

Key words. Brazil; Bromeliad; lectotype; Mato Grosso; type.

NOTAS NOMENCLATURAIS SOBRE *BILLBERGIA MEYERI* (BROMELIACEAE: BROMELIOIDEAE)

RESUMO. No presente estudo propomos a Segunda etapa de lectotipificação do nome *Billbergia meyeri* e a lectotipificação do nome *Billbergia leucantha*. Também discutimos a distribuição geográfica de *Billbergia meyeri*.

Palavras-chave. Brasil; bromelia; lectótipo; Mato Grosso; tipo.

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INTRODUCTION

The genus *Billbergia* Thunberg (1821) of the Bromeliaceae comprises 63 species, distributed from Mexico to Argentina and southern Brazil (Smith & Downs, 1979; Gouda et al., 2026 [cont. updated]). It is divided into two subgenera: (1) *B*. subg. *Billbergia*, recognised by the simple to compound, glabrous inflorescence and flowers with curved petals, and (2) *B*. subg. *Helicodea* (Lemaire 1864) Baker (1889), recognised by the simple, densely mealy inflorescence and flowers with petals curled tightly in a spiral at anthesis (Smith & Downs, 1979).

In Brazil, *Billbergia* comprises 44 species, distributed across all phytogeographic domains, with the greatest diversity in the Atlantic Forest (Jacques & Neves, 2026). *Billbergia* subg. *Billbergia* is restricted to Eastern Brazil and is primarily associated with the Atlantic Forest, whereas *B*. subg. *Helicodea* is distributed throughout the country, including eight species in the Amazon Domain (Smith & Downs, 1979; Jacques & Neves 2025).

During the investigation of Brazilian *Billbergia* species we recognised the need to typify the names *B. meyeri* Mez and its heterotypic synonym *B. leucantha* Hoehne. Additionally, the geographic distribution of *B. meyeri* in Brazil is discussed and updated.

MATERIAL AND METHODS

A relevant bibliography of *Billbergia* and relatives are consulted during the investigation (i.e. Pilger, 1902; Hoehne, 1951; Smith & Downs, 1979; Dubs, 1998; Proença et al., 2007; Jacques & Neves, 2026). The typifications are provided in accordance with the Madrid Code (Turland et al., 2025).

RESULTS AND DISCUSSION

Billbergia meyeri Mez *in* Pilger (1902: 148).

Type: Brazil. Mato Grosso: Upper Rio Coliseu [as oberer Kolisehu], fl., 30. June 1899, *R. Pilger 705* (lectotype B [barcode B 10 0244074!], lectotype first-step in Smith & Downs 1979 [corrected from holotype], second-step lectotypification **selected here**; isolectotype B [barcode B 10 0244075!]). (Figure 1A–B).

= *Billbergia leucantha* Hoehne (1919: 8).

Type: Brazil. Mato Grosso do Sul [as Matto Grosso]: Coxim, fl. alvas, May 1911, *F.C. Hoehne in Commissão Rondon 3554* (lectotype, R [barcode 000004809!], **selected here**); Ibdem, sul do Estado, epiphyta, fl. alva, fl., May 1911, *F.C. Hoehne in Commissão Rondon 3555* (remain syntype R [barcode R000052530!]). (Figure 1C–D).

Billbergia meyeri was described by Mez (in Pilger, 1902), based on a sample collected by *R. Pilger* [nº 705] at the Coliseu River, state of Mato Grosso, and deposited in the Berlin Herbarium (B). This sample comprises two sheets, each with its own label and distinct barcode [B 10 0244074 and B 10 0244075]. Additionally, there is dubious information in pencil marked [probably added later to the sheets] as I and II, numbered as 2933 and 2934, and as the holotype and isotype, respectively.

The two specimens at B were likely kept separately, being stored together after Mez's examination. Only the specimen [B 10 0244074] bears Mez's annotation, and the description in the protologue corresponds to it.

In the protologue, only the location, [collector] number, and date are mentioned (i.e., Mattogrosso: Epiphyt auf verschiedenen Bäumen im Uferwald am oberen Kulisehu [n. 705 – Blühend im Juni 1899]), with no mention of the herbarium in which it is deposited. Additionally, the samples have different labels and barcodes, which are interpreted as two distinct collections (Art. 8.3). Although these two samples are distinguished as holotype and isotype, they are characterised as syntypes (Art. 9.6).

Smith & Downs (1979) indicate in the monograph of *Billbergia* for Flora Neotropica that the holotype of *B. meyeri* is found in B. However, they do not provide further information [i.e., number, parts or duplicates]. In this way, an inadvertent lectotypification was carried out (Art. 7.11), as it was not indicated which of the samples is the lectotype [as holotype], with the need for a second-step lectotypification (Art. 9.17), which is provided here, with collection B 10 0244074 being selected and designated as the lectotype of *B. meyeri*.

The perception that the samples correspond to syntypes has not been realised so far, probably because they were initially considered two parts of the same collection and later treated as two duplicates, mistakenly noted as holotype [sample examined by Mez] and isotype. This interpretation is replicated in subsequent works (i.e., Dubs, 1998; Versieux & Wendt, 2006; Gouda et al., 2026; Tropicos, 2026). Additionally, Smith & Downs (1979) indicate the existence of a photo of the type in F (Field Museum Type Photograph Negative – F 11340), which is a superposition of the two exsiccates of B, both incompletely represented in the image.

In the Specieslink database (CRIA, 2026), another image of material from B is deposited in the Herbarium MO (as Field Museum Type Photograph Negative 11340 [MO 2909750, not seen]), indicating that the material in B is destroyed. However, the material in B was not destroyed during World War II (Figure 1 A–B).

Billbergia leucantha was described by Hoehne (1919) from two collections he made on the Coxim River at a place of the same name in the south of the former state of Matto Grosso or Mato Grosso [currently Mato Grosso and Mato Grosso do Sul from 1977], both deposited in the Herbarium of the National Museum – R (Hoehne, 1951). These two collections constitute syntypes (Art. 9.6), and the lectotypification is provided here by selecting and designating *Hoehne's Commissão Rondom 3554* as the lectotype.

Given its current geographic position, the type locality of *B. leucantha* is located in the north-central region of the State of Mato Grosso do Sul, very close to the border with the State of Mato Grosso. The occurrence of *B. meyeri* in Mato Grosso do Sul is not considered at any time (e.g., Smith & Downs, 1979; Dubs, 1998; Versieux & Wendt, 2006; Proença et al., 2007; Jacques & Neves, 2020; 2026), being confirmed and validated here with the addition of a new sample from the municipality of Bandeirantes (*M.E. Engels 11550* [UPCB!]).

Billbergia meyeri occurs in Bolivia and Brazil (São Paulo, Minas Gerais, Goiás, Mato Grosso do Sul [new report!], Mato Grosso and Rondônia States). It occurs as an epiphyte in the Atlantic Forest, the Cerrado and on the southern edge of the Amazon Domain (Smith & Downs, 1979; Jacques & Neves, 2026).

Figure 1. A – B. Type material of *Billbergia meyeri*. A. Lectotype (barcode B 10 0244074), B. Isolectotype (barcode B 10 0244075), C – D. Type material of *Billbergia leucantha*, C. Lectotype (F.C. Hoehne in Commissão Rondon 3554 [barcode R000004809]), D. Remain syntype (F.C. Hoehne in Commissão Rondon 3555 [barcode R000052530]). Images available at CRIA (2026).

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