



## Article

### ***Pitcairnia frequens* (Bromeliaceae), a neglected new species from Morro dos Seis Lagos, Amazonas, Brazil**

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#### **Abstract**

This paper formally describes a *nomem in schedulum* for a *Pitcairnia* endemic to Morro dos Seis Lagos, São Gabriel da Cachoeira, Amazonas in North Brazil. It was first collected by Cyl Farney in 1987 in “Projeto Flora Amazônica”. The duplicate sent to New York Botanical Garden Herbarium was later annotated as *Pitcairnia frequens* by L. B. Smith and B. Holst, however it was never described and published.

**Key words:** Amazon, Guyana Shield, Neotropic, Pitcairnioideae

#### **Introduction**

*Pitcairnia* is a large and well distributed genus of Bromeliaceae; a Neotropical family that has its diversity related to high places in South America (Smith & Downs 1974, Martinelli *et al.* 2008). The genus has 391 accepted names (The Plant List 2010), and among these, 53 species occurs in Brazil and 17 in Brazilian Amazon (Forzza *et al.* 2012). It is generally associated with rivers and elevated places, such as inselbergs and tepuis (Smith & Downs 1974, Benzing 2000).

The hill Morro dos Seis Lagos is part of the Guyana Shield. This hill emerges above 300 m elevation, within the Amazon floodplains, and is covered with a reddish lateritic crust. It covers an area of ca. 20 km<sup>2</sup>, and is located 60 km northeast of São Gabriel da Cachoeira, Amazonas, Brazil. This area covers the Ya river basin, one of the main tributaries of the river Cauaburi, watershed of the upper Rio Negro (Projeto Radambrasil 1976). These types of isolated outcrops have been separated from the surrounding vegetation, and shelter different vegetation physiognomies, providing different ecological conditions (Porembski & Barthlott 2000). Thin soils support trees that lodge between the laterite blocks, and form a canopy at 10–15 m on the undulating plateau. This forest has a structure more typical of the forests found on white sand soils than true wet forest (Bush *et al.* 2004).

#### **Material & Methods**

Morro dos Seis Lagos was visited in October 1987 by “Projeto Flora Amazônica”. A new Bromeliaceae species was collected by Cyl Farney and annotated on the specimen by Lyman Smith and Bruce Holst as *Pitcairnia frequens* (NY 329217); nevertheless this taxon was never published, being a *nomem in schedulum*. This specie was collected again in August 2011 by Deisy Saraiva in an excursion organized by “Projeto Fronteiras”.

The anatomy analyses were performed freehand in resin. For embedding in resin, cross sections from the middle region of an intermediate healthy leaf blade were initially fixed in 70% ethanol, dehydrated in an increasing ethanol series, and embedded in resin hydroxyethyl metacrylate. Cross sections approximately 3 m thick were obtained using a Spencer rotary microtome, and stained with Toluidine blue (O’Brien & McCully