



Micropterygium longicellulatum (Lepidoziaceae, Marchantiophyta), a new species from Colombia

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Abstract

We describe a new leafy liverwort species, *Micropterygium longicellulatum*, collected on Cerro del Torrá, in San José del Palmar, southern Chocó, in the biogeographic Chocó region in Colombia. The new species is characterized by its radially symmetric stems; very long leaf cells, to 80 µm; and strongly concave leaves and underleaves.

Key words: Colombia, Lepidoziaceae, *Micropterygium*, taxonomy

Introduction

Micropterygium Lindenb., Nees et Gottsche in Gottsche *et al.* (1845: 233), is characterized by strongly concave, complicate bilobulate leaves, with a sharp keel, with a ventral wing present, absent or occasionally rudimentary. It belongs to family Lepidoziaceae Limpr. subfamily *Micropterygioideae* Grolle (1964: 226). *Micropterygium* is a neotropical genus of 18–19 species, ranging from Cuba and Jamaica south to Brazil (Frey & Stech 2009). Some of the species are restricted (endemic) in distribution while others are widespread distributed (Fulford, 1966). The center of diversity of *Micropterygium* is in the Guiana Highlands, where about 10 endemic species occur (Gradstein *et al.* 2001). *Micropterygium* is the main hepatic genus of the tepuis of the Guiana Highlands, represented by 18 species (Désamoré *et al.* 2010).

Reimers (1933) recognized three sections within *Micropterygium*: Sect. *Conchifolia* Reimers, sect. *Subaequifolia* Reimers, and sect. *Genuina* Reimers. Sect. *Subaequifolia* is characterized by radially symmetrical foliose stems; large underleaves, (roughly the same size as the leaves), the dorsal wing very narrow, almost absent in some leaves. Schuster (2000) proposed to divide the genus into two subgenera: *Pseudolembidium* including plants isophyllous or subsophyllous; underleaves similar or identical to lateral leaves in size and form, and *Micropterygium* characterized by marked anisophylly.

In Colombia, there are seven species of *Micropterygium*: *M. carinatum* (Greville 1825: 276) Reimers (1936: 166), *M. lechleri* Reimers (1933: 184), *M. leiophyllum* Spruce (1885: 386), *M. parvistipulum* Spruce (1885: 383), *M. pterygophyllum* (Nees in von Martius 1833: 377) Trevisan (1877: 413), *M. reimersianum* Herzog (1943: 226) and *M. trachyphyllum* Reimers (1933: 186). They are distributed in the departments of Amazonas, Boyacá, Caquetá, Chocó, Cundinamarca, Guainía, Huila, Meta, Nariño, Risaralda, Santander and Vaupés, at elevations between 200 and 2000 m (Gradstein & Uribe, submitted). Three are in Chocó: *M. carinatum*, *M. pterygophyllum* and *M. reimersianum* (Vasco-P. *et al.* 2002).

The Cerro del Torrá, is in the Municipio de San José del Palmar, departamento del Chocó, at approximately 4°46'N, 76°29'W. This mountain is not connected to the Western Cordillera, and the separation of Cerro del Torrá creates an interesting biogeographical situation. The vegetation of the cloud forest in Cerro del Torrá can be classified in four elevational zones: 1) ca. 1600–2500m, 2) ca. 2400–2600m, 3) ca. 2500–2730m and 4) ca. 2730–2800m, although some of these zones intersect. The specimens of *Micropterygium* used in this study were collected at ca. 1920–1950 m, in zone 1, which is characterized by thick coats of bryophytes on tree trunks and branches (Silverstone-Sopkin & Ramos-Pérez, 1995).