



## *Serpocaulon tayronae* (Polypodiaceae), a new species from the Sierra Nevada de Santa Marta, Colombia

DAVID SANÍN

Botanic Garden Meise, Bouchout Domain, Nieuwelaan 38, 1860, Meise, Belgium.

Current address: University of the Amazonia, Faculty of Basic Science, Agroecosystems and Conservation of Amazonian Forest Research Group-GAIA, Street 17, Diagonal 17 with Carrera 3F - Porvenir Neighborhood.

Email: [dav.sanin@gmail.com](mailto:dav.sanin@gmail.com)

### Abstract

*Serpocaulon tayronae* is described as a new endemic fern species from the Sierra Nevada de Santa Marta, Colombia. This species has long-creeping rhizomes, whitish or light-coloured patent scales, free veins and spores with dense rounded verrucae. In this aspect it resembles the species *Serpocaulon eleutherophlebium*, *S. obscurinervium* and *S. patentissimum*, as well as the species complexes of *Polypodium plesiosorum* and *P. dulce*. However it differs from these taxa by the clathrate orange rhizome scales and the pectinate laminae, proximally reduced with its pinnae slightly ascending. A key to the Colombian species of *Serpocaulon* is provided to distinguish the new species from the other taxa.

**Key words:** continental archipelago, endemic ferns, key for the Colombian taxa, lower montane wet forest

### Resumen

*Serpocaulon tayronae* se describe como una nueva especie de helecho endémico de la Sierra Nevada de Santa Marta, Colombia. Esta especie presenta rizomas largamente reptantes, escamas patentes de color pardo claro, venas libres y esporas con verrugas redondeadas y densas. En este aspecto se asemeja a *Serpocaulon eleutherophlebium*, *S. obscurinervium* y *S. patentissimum*, así como a las especies de los complejos de *Polypodium plesiosorum* y *P. dulce*. Sin embargo, difiere de estos taxones por las escamas clatradas de color anaranjado, laminas pectinadas proximalmente reducidas con pinnas levemente ascendentes. Para distinguir la nueva especie de los otros taxones, se presenta una clave para las especies colombianas de *Serpocaulon*.

**Palabras clave:** archipiélago continental, helecho endémico, clave para los taxones colombianos, bosque húmedo montano bajo

### Introduction

*Serpocaulon* is neotropical genus comprising 51 specific names (Smith *et al.* 2006, Labiak & Prado 2008, Schwartzburd & Smith 2013, Rojas-Alvarado & Chaves-Fallas 2013, Sanín 2014, Sanín & Torrez 2014, Sanín unpublished data, Chaves-Fallas *et al.* 2015). Most of the species occur in the humid forests of the Andes and in the Brazilian Atlantic Forest (Smith *et al.* 2006, Labiak & Prado 2008, Schwartzburd & Smith 2013). In Colombia, 27 taxa, representing the 51% of the total in the genus, were recorded (Sanín unpublished data).

*Serpocaulon* contains many nomenclatural problems and is in need of monographic revision (Moran 1995, Smith *et al.* 2006, Schwartzburd & Smith 2013, Kreier *et al.* 2008), especially since several new species and hybrids have been described lately (Schwartzburd & Smith 2013, Rojas-Alvarado & Chaves-Fallas 2013, Sanín 2014, Sanín & Torrez 2014), and several others still remain to be described (Sanín unpublished data). Limited variation in chloroplast sequences and the morphologic homoplasy hamper unravelling the infrageneric phylogeny of *Serpocaulon* (Kreier *et al.* 2008).

The insufficient taxonomic knowledge of *Serpocaulon* is caused by the poor exploration of certain areas where