



## *Selaginella salinoi* (Selaginellaceae), a new species from Brazil

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### Abstract

A species of *Selaginella* from Parque Nacional do Caparaó, in Espírito Santo State, southeastern Brazil, is described as new to the science: *Selaginella salinoi* grows on rocks in Atlantic Rainforest vegetation at ca. 1200 m. The description includes photos of live plants and, scanning electron micrographs.

**Key words:** Atlantic Rainforest, Conservation Unit, Lycopodiophyta, spikemoss, taxonomy

### Introduction

*Selaginella* Palisot-Beauvois (1805: 101) (Selaginellaceae—Lycopodiophyta) is a cosmopolitan genus with about 750 species. In a recently published paper, where seven new species of Brazilian *Selaginella* were described (Valdespino *et al.* 2015), the authors indicated the existence of 58 native species in the country. However, they pointed out that this number could increase as a result of the ongoing studies on *Selaginella* in Brazil.

These recently described species are local endemics, except for *S. sematophylla* Valdespino, Heringer & Salino (2015: 89), and there are few known localities or collections for most of these taxa. Among these new species, only *S. mucronata* Heringer, Salino & Valdespino (2015: 78) was collected in the Atlantic Rainforest, the most deforested domain in Brazil (MMA 2015).

Working on his doctoral thesis, Góes-Neto discovered several new records and putative new species of *Selaginella* for Brazil during visits to Brazilian and foreign herbaria. These taxa, as well as other noted by Heringer (2011), are being studied and will be published soon. The new spikemoss described here, *Selaginella salinoi*, is part of this study. This species is so far known only from the state of Espírito Santo, in Parque Nacional do Caparaó (Caparaó National Park), an important Conservation Unit. This park encompasses 31.800 hectares in southeastern Brazil, including some of the highest peaks in Brazil, and is one of the most significant areas of conservation concern in the Atlantic Rainforest (ICMBio 2015).

### Material and Methods

In order to support the identity of the new species, this study was based on examination of specimens collected mainly in southeastern and northeastern Brazil, herbarium specimens including type collections from ALCB, BHCB, BM, BR, BSC, C, CEPEC, CESJ, F, HB, HRB, HUFU, IAN, INPA, K, L, MG, MO, NY, OUPR, P, PMA, R, RB, S, SCZ, SP, SPF, U, UC, and US, as well as high resolution scanned images from B, BM, F, K, MO, NY, P, and UB.

Samples for Scanning Electron Microscopy (SEM) were taken to document upper and lower surfaces of stems and leaves, as well as megaspores. These samples were transferred from herbarium specimens to aluminum SEM stubs coated with double-sided carbon tape. The stubs were sputter-coated with gold and examined and photographed at different magnifications with FEI Quanta 200 F, with an accelerating voltage of 15 kV, in the Center for Microscopy at the Federal University of Minas Gerais. The spore and leaf terminology follows Tryon & Lugardon (1991) and Valdespino *et al.* (2014), respectively.