



Additions to Cuban *Selaginella* (Selaginellaceae)

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Abstract

Three new *Selaginella* species from Cuba, *S. myriostachya*, *S. nanophylla* and *S. phiara*, are described, illustrated with Scanning Electron Micrographs, and compared to similar species. *Selaginella myriostachya* and *S. phiara* are from Pinar del Río province, the latter one is also found in Isla de la Juventud special municipality, both in the western part of Cuba. In contrast, *S. nanophylla* is from Guantánamo, Holguín, and Santiago de Cuba provinces in the eastern part of the island. Information about their habitat, distribution, and conservation status is provided. *Selaginella myriostachya* lives in cave openings on limestone rocks in Mogotes formations; *S. nanophylla* is one of the smallest plants reported for the genus and seems adapted to serpentine soils. *Selaginella phiara* has idioblasts with several bright, papillae on the upper surface of median leaves and lower surface of lateral leaves, and short hairs on the upper surface of the apices of median leaves.

Key words: Endemism, Serpentine, Sierra de Nipe, Sierra de los Órganos, Viñales Valley

Resumen

Tres especies nuevas de *Selaginella* de Cuba, *S. myriostachya*, *S. nanophylla* y *S. phiara* son descritas, ilustradas con Micrografías Electrónicas de Barrido y comparadas con especies similares. *Selaginella myriostachya* y *S. phiara* son originarias de la parte occidental de Cuba, específicamente de la provincia de Pinar del Río, aunque la segunda también se reporta para el Municipio Especial de Isla de la Juventud. En contraste, *S. nanophylla* se reporta para el oriente de la Isla; en las provincias de Guantánamo, Holguín y Santiago de Cuba. Igualmente, se provee información sobre el hábitat, distribución y estado de conservación de las especies descritas. *Selaginella myriostachya* crece sobre rocas calizas en lugares iluminados por aperturas en el techo de cuevas en Mogotes; *S. nanophylla* es una de las plantas más pequeñas reportadas para el género y parece estar adaptada a crecer en suelos de serpentina. *Selaginella phiara* posee idioblastos con muchas papilas brillantes tanto en la superficie superior de las hojas mediales como en la inferior de las hojas laterales.

Plabras clave:—Endemismo, Serpentina, Sierra de Nipe, Sierra de los Órganos, Valle de Viñales

Introduction

In the early 1990's, Dr. Carlos Sánchez from Cuba asked the senior author, who was then undertaking a revision of *Selaginella* subgenus *Heterostachys* for his doctoral dissertation, to work on *Selaginella* from Cuba. For that purpose, the senior author began a study of herbarium material based on collections available in many herbaria. As a result, several new species were uncovered and a draft key for Cuban *Selaginella* was prepared. Caluff and Shelton (2009) described two of these: *S. epipubens* Caluff & Shelton (2009: 116) and *S. urquiolae* Caluff & Shelton (2009: 112).

We describe here three new species, *S. myriostachya*, *S. nanophylla*, and *S. phiara*, and assess their possible taxonomic relationship and conservation status.

Acknowledgments

We thank the curators of B, BM, F, GH, HAJB, K, L, MO, NY, O, P, PMA, U, UC, US, W, and Z who made collections available to the senior author and have kindly allowed its study over a long period of time. The authors are indebted to Carlos Sánchez for originally suggesting the research topic. We are grateful for the support provided for this study, under the Cooperation Agreement between the Ministerio de Ciencias, Tecnología y Medio Ambiente (CITMA) of Cuba and the Autoridad Nacional del Ambiente (ANAM) of Panama, by Maritza García, María Antonia Castañeira and their team at the Centro Nacional de Áreas Protegidas (CNAP) of Cuba, and Lucía Chandeck former General Administrator of ANAM. The senior author is grateful to the Botany Department of the California Academy of Sciences, the Science Division of the New York Botanical Garden, and the Smithsonian Tropical Research Institute (STRI) in Panama where research on this paper was conducted. Mr. Jorge Ceballos at STRI provided valued assistance with the scanning electron microscopy aspects of this study and Mr. Pedro Argudo helped by preparing the SEM plates. The Dean office of the Faculty of Natural and Exact Sciences and Technology of the University of Panama provided institutional support for this research. The authors would like to thank Robbin Moran, Noris Salazar-Allen, Michael Sundue, Adriel Sierra and anonymous reviewers for comments made on the manuscript.

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