



## Considerations on the genus *Schizachyrium* (Poaceae–Andropogoneae) in Central America and West Indies, and confirmation of the occurrence of *S. glaziovii*

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### Abstract

*Schizachyrium* (Poaceae–Andropogoneae) includes ca. 60 species, 10 of them previously cited for Central America and 13 for West Indies. The confirmation of the occurrence of *Schizachyrium glaziovii* in these regions is reported here, expanding its northern limit of distribution to Guatemala and Belize. The species was previously accepted only for South America. We provide a description of the species, a distribution map, and a key to distinguish it from *S. microstachyum* and *S. condensatum*, species whose circumscriptions are confused in floras of Central America and West Indies. Taxonomic comments, illustrations of the type materials and images of the three species are also provided. A revised synonymy of *S. glaziovii* is presented and a lectotype for *Andropogon condensatus* subsp. *elongatus* (a synonym of *Schizachyrium glaziovii*) is designated here.

**Key words:** Gramineae, lectotypification, Mesoamerica, *Schizachyrium condensatum*, *Schizachyrium microstachyum*

### Resumen

*Schizachyrium* (Poaceae–Andropogoneae) incluye cerca de 60 especies, 10 de las cuales fueron previamente citadas para América Central y 13 especies para las Indias Occidentales. En este trabajo se reporta la presencia de *Schizachyrium glaziovii* para esa región, expandiendo su límite Norte hasta Guatemala y Belice. Esta especie fue previamente aceptada solamente para Sudamérica. Se proporciona la descripción de la especie, el mapa de distribución y una clave para distinguirla de *S. microstachyum* y *S. condensatum*, especies cuyas circunscripciones son muy confusas en las floras de América Central e Indias Occidentales. También se incluyen comentarios taxonómicos, ilustraciones del material tipo y fotografías de las tres especies. Se presenta la sinonimia revisada de *S. glaziovii* y se designa aquí el lectotipo de *Andropogon condensatus* subsp. *elongatus* (sinónimo de *Schizachyrium glaziovii*).

**Palabras clave:** Gramineae, lectotipificación, Mesoamérica, *Schizachyrium condensatum*, *Schizachyrium microstachyum*

### Introduction

*Schizachyrium* Nees (1829: 331) (Poaceae–Andropogoneae) includes ca. 60 species from tropical and subtropical regions of the world (Clayton & Renvoize 1986). The genus is represented in America by ca. 30 species, distributed from Canada to Argentina and Uruguay (Filgueiras 2003). Ten species have been cited for Central America: eight of them for Guatemala, six for Belize, Costa Rica, Honduras, and Nicaragua, five for Panama, and four for El Salvador (Manrique 1994, Pohl 1994, Filgueiras 2003). Thirteen species have been cited for West Indies (Hitchcock 1936, Filgueiras 2003) (Table 1).

The species of *Schizachyrium* have been divided into two morphological groups, based on inflorescence traits (Peichoto *et al.* 2008). The first group includes taxa with straight rachis internodes and pedicels, and sparsely branched inflorescences with one to a few racemes. The other group includes taxa with flexuous rachis internodes and pedicels at maturity, and highly branched inflorescences, like *S. condensatum* (Kunth 1816: 188) Nees (1829: 333) and related species. A molecular phylogeny of *Schizachyrium* is being performed in order to test the monophyly of the genus and of these two morphological groups of species (Peichoto *et al.* in prep.). No molecular phylogeny of the genus is currently available. Turpe (1984) accepted *S. condensatum* in a broad sense, considering as its synonyms almost all

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## Appendix

Additional material examined

***Schizachyrium condensatum*** (Kunth) Nees (Figs. 1A–C, 2A–B).

Type:—COLOMBIA. Tolima, regni novogranatensis, prope Ibagué & Valle de Carabajal, October, *Humboldt & Bonpland s.n.* (holotype P!, isotype US! [fragm. ex P]).

***Schizachyrium microstachyum*** (Desv. ex Ham.) Roseng., B.R. Arrill. & Izag. (Figs. 1H–K, 2E–F).

Type:—WEST INDIES. *Desvaux* 8 (holotype P!, isotype US! [fragm. ex P]).

A large number of specimens of *Schizachyrium condensatum* and *S. microstachyum* from different countries was also examined. These herbarium specimens are listed in Peichoto (2010) and Welker & Longhi-Wagner (2012b).