



## Taxonomic novelties in *Rhynchospora* (Cyperaceae)

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### Abstract

The genus *Rhynchospora* Vahl has about 354 species with concentration in tropical America. In Brazil, *Rhynchospora* is the most abundant genus of the family, with 157 species, of which 40 are considered endemic. With the knowledge obtained in field trips, literature and herbaria reviewed, this work aims to contribute to the taxonomy of the genus *Rhynchospora*. As main results we highlight the synonymization of *Rhynchospora glaziovii* and *R. floribunda*, *R. robusta* and *R. semihirsuta*, and *R. uniflora* and *R. biflora*. A new description for *R. conferta*, which is a valid species and has been considered as a synonym of *R. robusta*, is also presented. During the review, we found a new record to Rio Grande do Sul, *R. splendens*. A diagnosis of all these species are provided, as well as new lectotypes and neotypes designations.

### Introduction

The last revision of the genus *Rhynchospora* Vahl (1805:229) was made by Kükenthal (1949, 1950, 1951), who divided *Rhynchospora* into two subgenera and 28 sections, and describes most of the sections and species we know today. According to Govaerts *et al.* (2013), this genus includes about 354 species with concentration in tropical America. In Brazil, *Rhynchospora* is the most abundant genus of the family, with 157 species, of which 40 are endemic and 23 have wide distribution and are mostly ruderal or invasive species (Alves *et al.* 2009).

Guaglianone (1981), in her contributions to the study of *Rhynchospora*, considered *R. floribunda* Boeckeler (1890:27) as a distinct species from *R. hieronymi* Boeckeler (1888:30), and cites *R. glaziovii* Boeckeler (1874:405) as a related species, distinguishing them by a few characteristics that are presented in a brief description. She also searched for the type of *R. floribunda* but only discovered that it is a collection of G. Niederlein in the province of Misiones, Argentina.

Kükenthal (1950), in his monograph, treated *Rhynchospora robusta* (Kunth 1837:283) Boeckeler (1873:616), *R. semihirsuta* Boeckeler (1873:614) and *R. conferta* (Nees 1842:116) Boeckeler (1873:615) all as distinct species. Barros (1945, 1960) synonymized *R. conferta* into *R. robusta*, and did not comment anything about *R. semihirsuta*. Currently, *R. conferta* is considered as a synonym of *R. robusta*, and *R. semihirsuta* considered a distinct species (Zuloaga 2008, Alves *et al.* 2013). *Rhynchospora uniflora* and *R. biflora* were always considered as distinct species (Kükenthal 1949, Barros 1960, Zuloaga 2008, Alves *et al.* 2013).

Many of these species seem to have problems in their circumscription. In this paper, they were reviewed, along with related species, to try to solve these issues and thus facilitate the correct identification of these taxa.

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