



A new species of *Philodendron* (Araceae) and a key to Brazilian Atlantic Forest species of *P.* subgenus *Pteromischum*

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Abstract

This paper describes and illustrates a new *Philodendron* subgenus *Pteromischum* species from Espírito Santo State, in Southeastern Brazil, including information on its conservation in a high priority area for conservation of the Atlantic Forest. The work also includes a key to the Brazilian Atlantic Forest species of the subgenus.

Key words: aroids, endemism, humid flora, taxonomy

Introduction

Philodendron Schott (1829: 780) is the second largest genus of Araceae, being exclusively Neotropical with ca. 480 published species and ca. 700 estimated (Boyce & Croat 2012). In Brazil it has ca. 165 species (Sakuragui *et al.* 2012) in several biomes, especially in Amazonian and Atlantic rainforests, with 59% and 39% of the diversity respectively (Sakuragui *et al.* 2012). The infrageneric classification into three subgenera is widely accepted: *Philodendron* (80% of the species), *Pteromischum* (Schott 1856: 77) Mayo (1989: 168) (15% of the species) and *Meconostigma* (Schott 1832: 20) Engler (1899: 554) (5% of the species).

The species of the subgenus *Pteromischum*, originally a section of subgenus *Euphilodendron* Engler (1899: 510) (e.g. in Krause 1913), can be morphologically characterized by the well-developed foliar sheath and anisophyllous sympodial growth, bearing many leaves per article (Grayum 1996). Mayo (1989), based on anatomical investigations, elevated *Pteromischum* to the status of subgenus, a decision that was later supported by a molecular phylogenetic study (Gauthier *et al.* 2008), which indicated that the other two subgenera were also monophyletic.

Philodendron subg. *Pteromischum* has two centers of diversity, one in Central America and another in West Amazonia (Grayum 1996), but is poorly represented in extra-Amazonian South America. Grayum's (1996) detailed revision of species occurring in Central America and the Pacific Coast of South America is the only modern study of the group. However, in that work, most Brazilian species were not discussed.

Here we describe *Philodendron rhodospermum* sp. nov. and propose an updated key to Brazilian species of the subgenus from the Atlantic Forest.

Methods

During field expeditions and a visit to the MBML herbarium, in Espírito Santo State, we found an unidentified specimen of *Philodendron* subgenus *Pteromischum* from Reserva Biológica Augusto Ruschi (REBIO Augusto Ruschi). To provide a more detailed description of the species and its habitat, the first author visited