



## The synonymization of *Philodice* with *Syngonanthus* (Eriocaulaceae)

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### Abstract

*Philodice hoffmannseggii* and *P. cuyabensis*, the only species in this genus, are here recognized as a single species and transferred to the genus *Syngonanthus* as *S. cuyabensis*. The taxonomic history and morphology of *Philodice* are reviewed, and infraspecific variation, and affinities within *Syngonanthus* are discussed.

### Resumo

*Philodice hoffmannseggii* e *P. cuyabensis*, as únicas espécies do gênero, são aqui reconhecidas como uma só espécie e transferidas para o gênero *Syngonanthus* como *S. cuyabensis*. É apresentada revisão da história taxonômica e da morfologia de *Philodice*, e discutidas as variações infra-específicas e afinidades dentro de *Syngonanthus*.

**Key words:** new combination, new synonyms, *Philodice hoffmannseggii*, South America, *Syngonanthus cuyabensis*, taxonomy

### Introduction

The Eriocaulaceae have long been recognized as a pantropical family with approximately 1,200 species in 11 genera (Andrade *et al.* 2010). However, molecular studies have resulted in a number of taxonomic changes at the generic level. These include the synonymization of *Blastocaulon* Ruhland (1903: 279) in *Paepalanthus* Martius (1834: 26) (Andrade *et al.* 2011) and the reestablishment of *Comanthera* Smith (1937: 38) (Parra *et al.* 2010). Recent molecular and morphological analyses also support the merging of *Philodice* Martius (1834: 26) with *Syngonanthus* Ruhland (1900: 487). *Philodice* is the older name, but proposal no. 1902 (Giulietti *et al.* 2009) to conserve the name *Syngonanthus* against *Philodice* was approved during the Nomenclature Meeting of the International Botany Congress in Melbourne 2011, based on the report of vascular plants (Brummitt 2011). As a result of these changes, the number of accepted genera in Eriocaulaceae is now reduced to ten.

Andrade (2007) and Andrade *et al.* (2010) presented phylogenetic studies on Eriocaulaceae and indicated *Syngonanthus* as polyphyletic in two different clades: Clade (*Syngonanthus* sect. *Eulepis* + *S.* sect. *Thysanocephalus*), which is monophyletic and distinct from the Clade (*Philodice* (*S.* sect. *Syngonanthus* + *S.* sect. *Carphocephalus*)). These results corroborate previous studies on *Syngonanthus* based on morphology (Parra 2000), chemistry (Ricci *et al.* 1996) and pollen grains (Borges *et al.* 2009).