



Tidying up the mess: lectotype selections, synonyms, a new status and a new species in *Syngonanthus* sect. *Carphocephalus* (Eriocaulaceae)

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Abstract

Novelties and nomenclatural issues in *Syngonanthus* sect. *Carphocephalus* (Eriocaulaceae) are presented here. This study is based on analyses of herbarium materials and field observations. *Syngonanthus* sect. *Carphocephalus* contains 13 species, all restricted to the Americas. Some species are widely distributed, such as *S. caulescens*, but most are rare or only known from the holotype. This taxonomic treatment presents new synonyms (*S. inundatus* and *S. yacuambensis*), lectotype selections for six names (*Syngonanthus* sect. *Carphocephalus*, *S. appressus*, *S. hygrotichus*, *S. inundatus*, *S. peruvianus*, and *S. rhizonema*), nomenclatural changes (*S. caulescens* var. *discretifolius*) and a new species (*S. mollis*), from *S.* sect. *Carphocephalus*.

Key words: Brazil, Everlasting plants, Monocotyledons, new species, Taxonomy, Nomenclatural Changes

Resumo

Novidades e questões relacionadas à nomenclatura de *Syngonanthus* sect. *Carphocephalus* (Eriocaulaceae) são apresentadas nesse artigo. Este estudo é baseado na análise de materiais de herbário e observações em campo. *Syngonanthus* sect. *Carphocephalus* contém 13 espécies, todas restritas ao continente americano. Algumas espécies são amplamente distribuídas, tais como *S. caulescens*, mas a maioria é rara ou conhecida apenas pelo holótipo. Este tratamento taxonômico apresenta novos sinônimos (*S. inundatus* e *S. yacuambensis*), lectotipificações (de *Syngonanthus* sect. *Carphocephalus*, *S. appressus*, *S. hygrotichus*, *S. inundatus*, *S. peruvianus* e *S. rhizonema*), mudanças nomenclaturais (*S. caulescens* var. *discretifolius*) e uma nova espécie (*S. mollis*) para *S.* sect. *Carphocephalus*.

Palavras chave: Brasil, Monocotiledôneas, espécies novas, Sempre-vivas, Taxonomia, Mudanças nomenclaturais

Introduction

Syngonanthus Ruhland (1900: 487) is the third largest genus in Eriocaulaceae and comprises 120–150 species (Giulietti & Hensold 1990, Echternacht *et al.* 2014, Watanabe 2015). It has a disjunct distribution and its diversity is concentrated in South America, mainly in the Espinhaço Range (Brazil) and Guiana Highlands (Giulietti & Hensold 1990). Fewer than twenty taxa occur in Africa. The genus is characterized by isostemonous flowers, ditheous anthers, and pistillate flowers with petals fused in the middle (Giulietti & Hensold 1990, Giulietti *et al.* 2012a), characteristics shared with *Comanthera* Smith (1937: 38) *emend.* Parra *et al.* (2010: 1136). *Syngonanthus* differs from *Comanthera* by the following features: pistillate flowers with petals fused in the distal part with short lobes free (petals shorter than sepals), predominance of flavonoids as 6-hydroxyluteoline derivatives, and seed surfaces reticulate (Ricci *et al.* 1996, Giulietti *et al.* 2012b, Echternacht *et al.* 2014).

Ruhland (1900) described *Syngonanthus* from species previously included in *Paepalanthus* Martius (1834: 28) based on the fusion of the petals of pistillate flowers. Ruhland (1903) also proposed an infrageneric system for *Syngonanthus* based on some subgenera previously described in *Paepalanthus* by Körnicke (1863). Five sections were