



## ***Eremitis afimbriata* and *E. magnifica* (Poaceae, Bambusoideae, Olyreae): two remarkable new species from Brazil and a first record of blue iridescence in bamboo leaves**

FABRÍCIO MOREIRA FERREIRA<sup>1,3</sup>, MARCOS C. DÓREA<sup>1</sup>, KELLY REGINA B. LEITE<sup>2</sup>  
& REYJANE P. OLIVEIRA<sup>1</sup>

<sup>1</sup>Programa de Pós-Graduação em Botânica, Departamento de Ciências Biológicas, Avenida Transnordestina s.n., Novo Horizonte, CEP 44036-900, Feira de Santana, Bahia, Brasil.

<sup>2</sup>Universidade Federal da Bahia, Instituto de Biologia, Departamento de Botânica, Rua Barão de Jeremoabo s.n, Ondina, CEP 40170-290, Salvador, Bahia, Brasil

<sup>3</sup>Corresponding author, e-mail: [fmoreiraf@yahoo.com.br](mailto:fmoreiraf@yahoo.com.br)

### **Abstract**

Two new species belonging to the herbaceous bamboo genus *Eremitis* (Poaceae, Bambusoideae) are herein described as *E. afimbriata* and *E. magnifica*. We discuss the morphological characters and SEM leaf epidermis patterns that distinguish the new species and compare them to *E. parviflora*, the only species currently accepted in this genus. An identification key for the species is provided. Both new species display blue iridescence in their leaf blades, the first time this is recorded in bamboos. These new taxa are only known from their type localities, both from Atlantic Forest in Southern Brazil, the first one from Southern Espírito Santo and the second from Eastern Minas Gerais. They are restricted to semi-deciduous seasonal forests and are considered critically endangered according to the IUCN criteria, while *E. parviflora*, restricted to Bahia, occurs in distinct forest types throughout its distribution area.

**Key words:** grasses, herbaceous bamboos, IUCN red list, leaf epidermis, Parianinae, SEM

### **Introduction**

*Eremitis* Döll (1877: 338) is a poorly known genus of herbaceous bamboos included in tribe Olyreae. Its distribution is restricted to the Atlantic Coast of Brazil, occurring in the states of Bahia, Espírito Santo (Hollowell 1987, Judziewicz *et al.* 1999), Minas Gerais (Santos-Gonçalves 2000), Rio de Janeiro (Hollowell 1987) and Pernambuco (Oliveira 2001), growing at low elevations, often below 200 meters (Judziewicz *et al.* 1999).

The number of accepted species in this genus has varied considerably among different authors, with five (Hollowell 1987, Judziewicz *et al.* 1999) or more (Calderón & Soderstrom 1980, Clayton & Renvoize 1986) being cited. However, only one species is currently accepted, *E. parviflora* (Trinius 1834: 105) Calderón & Soderstrom (1980: 20), that occurs dense ombrophilous and semi-deciduous forests along the Atlantic forest in Bahia.

Leaf sheaths bearing fimbriae at the apex and spike-like inflorescences (Hollowell 1987, 1997, Judziewicz *et al.* 1999), in addition to molecular data (GPWG 2001, Oliveira 2006, Duvall *et al.* 2007, Bouchenak Khelladi *et al.* 2008, Ferreira 2013) place *Eremitis* in a quite distinct group within Olyreae, the subtribe Parianinae. Also included in this subtribe are the genera *Pariana* Aublet (1775: 876), from Central America and the Amazon basin, and *Parianella* Hollowell, F.M.Ferreira & R.P.Oliveira (2013: 30) recently described as endemic to Southern Bahia, Brazil (Ferreira *et al.* 2013). All the three genera are strongly supported as monophyletic (Ferreira 2013).