



## A new species of *Cyperus* L. (Cyperaceae) from northeastern Brazil

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### Abstract

A new species, *Cyperus potiguar*, is here described and illustrated. It is a perennial species morphologically related to *C. alvesii* and *C. ligularis*, but can be recognized by spikelet size, number and size of glumes, and length of rachilla internodes. It is found in the semi-arid vegetation of northeastern Brazil, locally called Caatinga.

**Key words:** Cyperoideae, *Cyperus* sect. *Turgiduli*, semi-arid vegetation, Neotropics, Caatinga, Rio Grande do Norte

### Resumo

Uma nova espécie, *Cyperus potiguar*, é aqui descrita e ilustrada. É uma espécie perene morfológicamente relacionada à *C. alvesii* e *C. ligularis*, mas pode ser distinguida pelo tamanho das espiguetas, número e tamanho das glumas e comprimento dos entrenós da ráquila. Esta espécie é encontrada em vegetação de Caatinga no Nordeste do Brasil.

**Palavras-chave:** Cyperoideae, *Cyperus* sect. *Turgiduli*, vegetação do semiárido, Neotrópicos, Caatinga, Rio Grande do Norte

### Introduction

*Cyperus* L. is a Pantropical genus comprising about 700 species (Govaerts *et al.* 2014), with about 100 species registered in Brazil, these occurring in diverse habitats and vegetation types (Alves *et al.* 2014). This genus is recognized by leaves in spiral phyllotaxis forming a rosette, inflorescence terminal, glumes distichous, flowers hermaphrodite, style trifid and fruits trigonous (Goetghebeur 1998).

The circumscription of *Cyperus* is somewhat controversial. Kükenthal (1936) accepted *Cyperus sensu lato*, including several taxa under infrageneric levels. Goetghebeur (1998) proposed *Cyperus sensu stricto*, raising some these subgenera to generic level. Recent molecular studies (Larridon *et al.* 2011a; 2011b; 2011c; 2013) demonstrated that “*Cyperus Clade*” comprises at least 13 genera, confirming the majority of subgenera and sections proposed by Kükenthal (1936) and including other genera traditionally segregated.

This new species belongs to subgenus *Mariscus* (Vahl) C.B. Clarke and section *Turgiduli* (C.B. Clarke) Kük, according classification of Kükenthal (1936). The subgenus *Mariscus* is recognized by spikelets articulated at the base and falling entire at maturity and *C.* sect. *Turgiduli* is characterized by species with compound anthelodium, rachilla widely winged and glumes appressed. Although *Mariscus* has been shown to be polyphyletic (Lye 1992; Larridon 2011b; 2013), this subgenus is clearly distinguished by spikelet disarticulation and its species are also within the *Cyperus s. s.* concept of Goetghebeur (1998).

Kükenthal (1936) included 16 species in *C.* sect. *Turgiduli* and recently Tucker (2008) described *C. alvesii*, which was also included in this section. The objective of the present work was to describe a new species of *Cyperus* from Northeastern Brazil, and to distinguish it from allied taxa belonging to *C.* sect. *Turgiduli*.

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