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# Lectotypification of the fountain grass Cenchrus setaceus (Poaceae: Paniceae)

### P. PABLO FERRER-GALLEGO<sup>1</sup> & FERNANDO BOISSET<sup>2</sup>

1 Servicio de Vida Silvestre, Centro para la Investigación y Experimentación Forestal (CIEF), Generalitat Valenciana, Avda. Comarques del País Valencià 114, 46930 Quart de Poblet, Valencia, Spain 2 Departamento de Botánica, Facultad de Ciencias Biológicas, Universidad de Valencia, Avda. Dr. Moliner s/n, 46100 Burjassot, Valencia, Spain Author for correspondence: P. Pablo Ferrer-Gallego, flora.cief@gva.es

### Abstract

The typification of the name *Cenchrus setaceus* (Forsskål) Morrone (Poaceae) is discussed, and a lectotype is designated. *Cenchrus setaceus* is native to northeastern Africa, and cultivated as an ornamental plant in some parts of the world. It is an invasive species in a wide range of natural habitats worldwide, competing strongly with the native flora.

Key words: Pennisetum setaceum, fountain grass, Flora Aegyptiaco-Arabica, lectotype, nomenclature, Poaceae

### Introduction

The genus *Cenchrus* Linnaeus (1753: 1049) (Poaceae: Paniceae) is distributed throughout tropical and subtropical regions of the Old and New World (DeLisle 1963, Türpe 1983, Clayton & Renvoize 1986, Crins 1991, Watson & Dallwitz 1992). Morphological and molecular phylogenetic studies of the grass subfamily Panicoideae have shown that *Cenchrus* and *Pennisetum* Richard (1805: 72) are closely related genera within the bristle clade in tribe Paniceae, with *Cenchrus* nested within *Pennisetum* (Gómez-Martínez & Culham 2000, Zuloaga *et al.* 2000, Duvall *et al.* 2001, Giussani *et al.* 2001, Kellogg *et al.* 2004, Bess *et al.* 2005, Doust *et al.* 2007, Donadío *et al.* 2009). The name *Cenchrus* has priority at the genus level and all species of *Pennisetum* have been transferred to *Cenchrus*, which contains between 100–165 species (Chemisquy *et al.* 2010, Symon 2010, Verloove 2012, Verloove *et al.* 2014).

*Pennisetum setaceum* (Forsskål 1775: 17) Chiovenda (1923: 113), now recognized as *Cenchrus setaceus* (Forsskål) Morrone in Chemisquy *et al.* (2010: 129), is native to northeastern Africa (from Tunisia to Somalia) and cultivated as an ornamental plant in many places in the subtropics. The species has also been introduced in many areas of the world for soil stabilization, but it is a fire-promoting grass species that, due to its high phenotypic plasticity, has aggressively invaded a wide range of natural habitats, competing strongly with the native flora (Williams *et al.* 1995, Poulin *et al.* 2007, Rahlao *et al.* 2010).

Veldkamp (2014: 71) listed a sheet in the National Herbarium Copenhagen (C) as the holotype of *Cenchrus setaceus*: "Type: *Forsskåhl 117* (holo C, IDC microfiche 2200, BM, LD)". However, the original material of *Cenchrus setaceus* comprises several specimens, and thus Veldkamp's use of the term holotype is an error (see McNeill 2014). Although the use of a term defined in the *Code* (McNeill *et al.* 2012) as denoting a type, in a sense other than that in which it is so defined, is treated as an error to be corrected, in this case the use of the term holotype to denote what is in fact a lectotype cannot be corrected to lectotype because the requirements of Art. 7.10 are not met. The type designation made by Veldkamp (2014) does not include the phrase "designated here" or an equivalent. We here lectotypify the name.

## Typification

The naturalist Pehr Forsskål (1732–1763) participated in an expedition to Egypt and Arabia (The Arabia Felix) between the years 1761–1763, supported by the King of Denmark (Frederik V). This expedition visited Marseille (Estac), Malta, Turkey (Smyrna, Tenedos, Imros, Natolia, Tekirdað and Istanbul), Egypt and Yemen. Unfortunately, the expedition was ill-fated, and Forsskål died from malaria in July 1763 at Yemen.