



***Cryptochloa stapfii* (Poaceae: Bambusoideae: Olyreae), a new neotropical herbaceous bamboo from Panama**

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Abstract

Cryptochloa stapfii, a new herbaceous bamboo species from Panama is described. This new bambusoid grass inhabits semi-shaded lowland forests in Bocas del Toro (Panama) and is related to *C. dressleri* Soderstr., an endemic species from Panama. This new taxon increases the number of species in *Cryptochloa* to eight, most of them present in Panama.

Key words: Taxonomy, Bocas del Toro, Central America, Flora of Panama, Poales

Introduction

Among the tribe Olyreae (Poaceae: Bambusoideae), *Cryptochloa* Swallen in Woodson & Schery (1942: 317) is one of the most well represented genera in the Republic of Panama with seven species (Judziewicz *et al.* 2000, TROPICOS 2014), including three endemics, i.e., *C. decumbens* Soderstrom & Zuloaga (1985: 29), *C. dressleri* Soderstrom in Soderstrom & Zuloaga (1982a: 25), and *C. soderstromii* Davidse in Davidse & Pohl (1992: 96).

The general distribution of the genus (Baldini & Ortiz 2014) shows a range from southern Mexico to northern South America (Colombia, Ecuador, Peru, Brazilian Amazonia) (Judziewicz *et al.* 1999). However, *C. capillata* (Trinius 1834: 114) Soderstrom (1982b: 202) from South America, extends its range up to Brazilian Atlantic Forest, but more investigations are required in order to establish its taxonomic status in *Cryptochloa* (Baldini & Ortiz 2013, 2014). Panama is a crucial centre of differentiation for *Cryptochloa* and other herbaceous bamboos, as there are several endemic taxa in the country (Calderón & Soderstrom 1973, Soderstrom & Calderón 1979, Soderstrom 1982a, 1982b, Soderstrom & Zuloaga 1985, Davidse & Pohl 1992, Judziewicz *et al.* 1999, Baldini & Ortiz 2014).

The grass flora of Panama, even though a relatively small region, is well represented by many forest endemics, a consequence of its paleogeographic history. It is therefore an important centre of conservation (Lewis 1971, Davidse 1985, Graham 2011, Bacon *et al.* 2012, Leigh *et al.* 2014, Bagley & Johnson 2014). According to the most recent floristic inventory, the grass family in Panama includes 417 taxa (Correa *et al.* 2004), and more taxa are expected to be described or reevaluated from taxonomical and nomenclatural points of views, according to our studies that are in progress.

In the present paper we describe a new species of *Cryptochloa* discovered in the Province of Bocas del Toro (Republic of Panama) during our field trips carried out from 2012–2014 with the aim to study the herbaceous bamboos of the Panamanian Flora and other Mesoamerican grasses.

Materials and methods

This study is based on the investigations of five living populations and herbarium collections of *Cryptochloa* taxa collected in Panama and housed at FT, MO, NY, PMA, SCZ and US. Field trips were carried out in the Republic of

TABLE 2. Synopsis of the geographic distribution of species of *Cryptochloa*. Data according to Judziewicz *et al.* (2000), Correa *et al.* (2004), TROPICOS (2014), herbarium data (MO, US) and unpubl. data. (*) means a taxon of uncertain taxonomic status, but according to Davidse (1994) this species must be considered a synonym of *Cryptochloa strictiflora* (Fournier 1876: 465) Swallen in Woodson & Schery (1942: 321).

Taxon	Distribution
<i>Cryptochloa capillata</i> = <i>Olyra capillata</i>	Brazil, French Guiana
<i>Cryptochloa concinna</i> (Hooker f. 1896: t. 7469) Swallen in Woodson & Schery (1942: 320) = <i>Olyra concinna</i> = <i>Raddia concinna</i> (Hooker f.) Chase (1908: 185)	Belize, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama and Peru
<i>Cryptochloa decumbens</i>	Panama (endemic)
<i>Cryptochloa dressleri</i>	Panama (endemic)
* <i>Cryptochloa granulifera</i>	Costa Rica, Ecuador, Guatemala, Honduras, Mexico, Panama
<i>Cryptochloa soderstromi</i>	Panama (endemic)
<i>Cryptochloa strictiflora</i> = <i>Strephium strictiflorum</i>	Belize, Honduras, Mexico, Nicaragua Honduras, Costa Rica, Panama , Ecuador
<i>Cryptochloa stapfii</i>	Panama (endemic)
<i>Cryptochloa unispiculata</i> Soderstrom (1982b: 200)	Brazil, Colombia, Bolivia, Ecuador, Panama (unpubl. data), Peru
<i>Cryptochloa variana</i> Swallen in Woodson & Schery (1942: 318)	Caribbean, Colombia, Honduras, Panama

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