



Article

New species of *Dyckia* (Bromeliaceae) from Brazil

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Abstract

We describe and illustrate 10 new *Dyckia* species from the Brazilian states of Goiás, Mato Grosso, Mato Grosso do Sul, Minas Gerais and Paraná: *Dyckia acutiflora*, *D. arenitcola*, *D. formosensis*, *D. glabrifolia*, *D. gouveiana*, *D. montezumensis*, *D. pottiorum*, *D. rondonopolitana*, *D. secundifolia* and *D. walteriana*. The morphological affinities of the new taxa are also discussed.

Key words: Taxonomy, Pitcairnioideae, morphology

Introduction

In the family Bromeliaceae, *Dyckia* is the second largest genus in the subfamily Pitcairnioideae s. str. (Givnish *et al.* 2007) with 145 species, being surpassed only by *Pitcairnia* (336 spp.), while the remaining three pitcairnioid genera, *Deuterocohnia*, *Encholirium* and *Fosterella*, have 18 spp., 23 spp., and 31 spp., respectively (Luther 2010, Leme *et al.* 2010, Esteves & Hofacker 2011, Leme & Kollmann 2011).

Dyckia is known from Argentina, Bolivia, Brazil, Paraguay and Uruguay. In Brazil, where 83% of the known *Dyckia* species can be found, it occurs from sea level to elevations over 1000 m, usually in sun-exposed niches of the Atlantic Forest, Restinga, Caatinga, Campos Rupestres and Cerrado vegetation. They can be found as single segregated individual plants established by dispersed seeds or forming large and densely grouped clumps, the result of vigorous clonal propagation. *Dyckia* species are usually xeromorphic terrestrials growing in well-drained soils, or rupicolous on diverse rock outcrops (i.e., granitic, quartzitic, sandstone, or iron-rich “canga”), of dry or sometimes humid habits. In a few species, they are well adapted to wet or to periodically flooded habitats, as exemplified by the rheophyte *Dyckia brevifolia* Baker (1871: 236), found in the Uruguay River valley in the states of Santa Catarina and Rio Grande do Sul (Strehl 1994), or *D. distachya* Hassler (1919: 308), which produces abundant seeds that can be dispersed via surface water due to their partial buoyancy, and germinate under flooding conditions (Wiesbauer *et al.* 2007).

Dyckia species are characterized by non-impounding rosettes formed by usually coriaceous or succulent leaves often bearing well developed marginal spines. Plants propagate vegetatively by means of short shoots or long underground rhizomes. The racemose inflorescence is always lateral, simple or branched, and the flowers prevailingly show yellow, orange, or red colors, but castaneous-wine or greenish colors are reported in few species. The odorless to slightly fragrant flowers are nearly sessile to pedicellate, presenting tubular (sometimes convergent at the apex), or campanulate corollas. Stamens are included, but in some may surpass the petals by only a fraction of the anthers length, and a few species they are distinctly exserted. Filaments are thick, free to highly connate above the common tube with the petals, with frequently recurved, near basally attached anthers. The stigma is conduplicate-spiral and the sulcate pollen grains have nearly psillate, perforate