



A new *Dyckia* species (Bromeliaceae, Pitcairnioideae) from the Brazilian Northeastern region

EDDIE ESTEVES PEREIRA^{1,3} & ERIC JOHN GOUDA²

¹Alameda das Sibipirunas, Qd. 16-B, Lt. 02, Condomínio Residencial Aldeia do Vale, CEP: 74680-510, Goiânia - Goiás, Brazil.
Email: cactosbr@terra.com.br

²Utrecht University Botanic Gardens, Budapestlaan 17, 3584 CD Utrecht, Netherlands. Email: e.j.gouda@uu.nl

³Author for correspondence.

Abstract

A new species of *Dyckia* (Pitcairnioideae) is described and illustrated here. *Dyckia piauiensis* sp. nov. was found in the state of Piauí, in northern Brazil, in very dry Cerrado vegetation and cultivated by the first author. This new species' closest relative is *Dyckia pernambucana*, but differs from it by its larger and retrorse spines, shorter inflorescence and floral bracts, rounded or emarginated sepals and by highly connate stamens.

Key words: Flora of Brazil, Cerrado, taxonomy

Introduction

Dyckia Schult. & Schult. f. (1830: 1194) is a large genus of the subfamily Pitcairnioideae (Bromeliaceae), comprising around 158 species (Butcher & Gouda continuously updated). The genus occurs throughout Brazil and surrounding countries like Argentina, Bolivia, Paraguay and Uruguay (Smith & Downs 1974). For Brazil a total of 115 species and four varieties are known, with ca. 100 species being considered endemic to the country (Forzza *et al.* 2010). The centre of diversity is south-eastern Brazil with 37 species, of which 32 occur in Minas Gerais; 26 species are endemic to this state. Geographically *Dyckia* is distributed mostly in the Cerrado with the Atlantic Domain having 10 species (Forzza *et al.* 2010, Guarçoni *et al.* 2012). Recently 11 new species were described (Leme *et al.* 2012, Guarçoni *et al.* 2012) and one, *Dyckia strehliana* Büneker & Ponte (2013: 285–288), was published last year.

Material & Methods

Living material of this new species was collected at the type locality in 1978 and has been cultivated in the collection of the first author where it flowered in 2011. This material was used for this study and a voucher was preserved for the type specimen that is deposited in the herbarium UFG.

Taxonomy

Dyckia piauiensis Esteves & Gouda, sp. nov. Figs. 1, 2A–F.

This new species differs from its closest relative, *Dyckia pernambucana*, by the following combination of characters: leaf blades with retrorse spines (*vs.* antrorse), ca. 4 mm long (*vs.* 0.5–1.5 mm), shorter inflorescences (5.5–14 cm *vs.* 25–45 cm long), shorter floral bracts (ca. 8 mm *vs.* 10–12 mm long), sepals with apex rounded or emarginate (*vs.* acute to narrowly obtuse and apiculate) and filaments highly connate above the common tube with the petals (*vs.* connate for 2–2.5 mm in a common tube with the petals).

Type:—BRAZIL. Piauí: Canto do Buriti, dispersed in dry Cerrado, 335 m elevation, 8°1'9.04" S, 42°56'35.80" W, 335m, July 1978, flowered in cult. September 2011, *E. E. Pereira E-375* (holotype UFG!).

References

- Braun, P.J. & Pereira, E.E. (1990) Neue Taxa in *Leocereus* Britton & Rose (Cactaceae): *Leocereus estevesii* P.J. Braun *spec. nov. Kakteen und andere Sukkulente* 41: 204–205.
- Braun, P.J. & Pereira, E.E. (1995) *Discocactus piauiensis* P. J. Braun & Esteves *spec. nov.* - Eine neue Art aus Piauí, Brasilien. *Kakteen und andere Sukkulente* 46: 57–62.
- Büneker, H. Mallmann, Corrêa Pontes, R., Pureza Soares, K., Witeck Neto, L. & Jonas Longhi, S. (2013) Uma nova espécie reófito de *Dyckia* (Bromeliaceae, Pitcairnioideae) para a flora do Rio Grande do Sul, Brasil. *Revista Brasileira de Biociências* 11: 284–289.
- Butcher, D. & Gouda, E.J. (continuously updated) The New Bromeliad Taxon List. Available from: <http://BromTaxonList.floraPix.nl>. University Botanic Gardens, Utrecht (accessed: 19 December 2013).
- Byles, R.S. & Rowley, G.D. (1957) *Pilosocereus* Byl. & Rowl. nom. gen. nov. (Cactaceae). *British Cactus & Succulent Journal* 19: 66–67.
- Câmara, M.A. da (1810) *Dissertação sobre as Plantas do Brasil*. Regia, Rio de Janeiro, 50 pp.
- Candolle, A.P. de (1828) *Prodromus systematis naturalis regni vegetabilis, sive, Enumeratio contracta ordinum generum specierumque plantarum huc usque cognitatum, juxta methodi naturalis, normas digesta*. Vol. 3. Treuttel & Würtz, Paris, 494 pp.
<http://dx.doi.org/10.5962/bhl.title.286>
- Forzza, R.C., Costa, A., Alves, J., Filho, S., Martinelli, G. (2010) *Bromeliaceae*. In: Forzza, R.C., Baumgratz, J.F.A., Bicudo, C.E.M., Carvalho Jr., A.A., Costa, A., Costa, D.P., Hopkins, M., Leitman, P.M., Lohmann, L.G., Costa, L.M., Martinelli, G., Menezes, M., Morim, M.P., Nadruz, M.A. C., Peixoto, A.L., Pirani, J.R., Prado, J., Queiroz, L.P., Souza, V.C., Stehmann, J.R., Sylvestre, L.S., Walter, B.M.T. & Zappi, D. (eds.). *Catálogo de plantas e fungos do Brasil*, Vol. 1. Andrea Jakobsson Estúdio, Rio de Janeiro, pp. 778–816.
- Guarçoni, E.A.E., M.A. Sartori & C.C. de Paula (2012) *Dyckia inflexifolia* (Bromeliaceae), a new species from Brazil. *Annales Botanici Fennici* 49(5–6): 407–411.
<http://dx.doi.org/10.5735/085.049.0616>
- Leme, E.M.C., Ribeiro, O.B. & Miranda, Z. (2012) New species of *Dyckia* (Bromeliaceae) from Brazil. *Phytotaxa* 67: 9–37.
- Leme, E.M.C. & Siqueira-Filho, J.A. (2007) *Fragments of the Atlantic Forest of Northeast Brazil - Biodiversity, Conservation and the Bromeliads*. Andrea Jakobsson Estúdio, Rio de Janeiro, 416 pp.
- Mez, C. (1894) Bromeliaceae (part 3). In: *Martius, C.F.P. von, Flora Brasiliensis*. F. Fleischer, Leipzig, pp. 425–634, pl. 81–114.
- Schultes, J.A. & Schultes, J.H. (1830) *Systema Vegetabilium ed. 15. 7(2)*. J.G. Cotta, Stuttgart, pp. 755–1816.
<http://dx.doi.org/10.5962/bhl.title.825>
- Smith, L.B. (1970) Notes on Bromeliaceae XXXI. *Phytologia* 20:121–183.
- Smith, L.B. & Downs, R.J. (1974) Pitcairnioideae (Bromeliaceae). *Flora Neotropica*. Monograph 14(1). Hafner Press, New York, pp. 1–660.
- Ule, E. (1908) Beiträge zur Flora von Bahia. I. *Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie* 42: 191–238.