



Taxonomic adjustments in *Discocactus* (Cactaceae)

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Abstract

Discocactus petr-halfarii was previously regarded as synonym or subspecies of *D. bahiensis*. On the basis of field surveys and literature analyses, taxonomic investigations and phylogenetic studies, this species is placed as a subspecies of *D. zehntneri*. New synonymy is also established for *D. heptacanthus*.

Key words: cacti, conservation, new combination, taxonomy

Introduction

Discocactus Pfeiffer (1837: 241) is a genus of globose cacti belonging to subfamily Cactoideae, tribe Cereeae Salm-Dyck, being the sister group to *Melocactus* Link & Otto (1827:417), see Crozier (2005: 101). From the morphological point of view, *Discocactus* is characterized in having a discoid to depressed-globose, solitary or caespitose habit, the fertile part of the stem differentiated into a terminal cephalium bearing nocturnal white flowers pollinated by moths and fruits dehiscing by lateral slits, the seeds with a strongly tuberculate testa (Barthlott & Hunt 2000, Anderson 2001, Taylor & Zappi 2004, Machado 2004). The genus is mainly distributed in Brazil (Northern, Central-Western, Northeastern and Southeastern regions) with only two species, *D. boliviensis* Backeberg (1963: 5) and *D. hartmannii* (K.Schumann 1900: 170) Britton & Rose (1922: 217) occurring in adjacent Bolivian and Paraguayan areas, respectively.

The aim of the present work is to clarify the taxonomic identities of two *Discocactus* species, *D. zehntneri* Britton & Rose (1922: 218) subsp. *petr-halfarii* (Zachar 2008: 43) M.R.Santos & M.C.Machado *comb. nov.*, and *Discocactus heptacanthus* (Barbosa Rodrigues 1898: 29) Britton & Rose (1922: 218).

Taxonomic Treatment

1. *Discocactus zehntneri* subsp. *petr-halfarii* (M.Zachar) M.R.Santos & M.C.Machado, *comb. nov.* (Fig. 1).

Bas.: *Discocactus petr-halfarii* M.Zachar (2008:43), originally “*Discocactus petr-halfarii*”). Type:—BRAZIL. Bahia, Mun. Juazeiro, 03 March 2007, Zachar *s.n.* (holotype UFG!).

≡ *Discocactus bahiensis* subsp. *petr-halfarii* (M.Zachar) Braun & Eddie Esteves Pereira (2008: 184).

Description:—*Plants* depressed-globose to globose. *Roots* slightly branched, taproot thickened. *Stem* 4–5 × 2–15 cm, green. *Ribs* 10–14, broken into rounded tubercles. Visible *areoles* 2–5 per rib, oval to elliptic, 0.5–1.4 × 0.4 mm, not sunken, with much beige to white indumentum. *Spines* grey to yellow, the radial ones 7–12, 10–25 × 1.5 mm, arranged in c. 3 pairs on each side; central spine absent. *Cephalium* 0.6–2.0 × 2.6–3 cm, with white to greyish wool; bristles little