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Dasyphyllum diamantinense (Asteraceae, Barnadesioideae): a new species from the Chapada Diamantina, Bahia State, Brazil

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Abstract

Dasyphyllum diamantinense is a new species endemic to the Chapada Diamantina Mountains in the northern section of the Espinhaço Range, in Bahia State, Brazil, which grows in rocky fields, forests and savannas, and on inselbergs. The new taxon is morphologically similar to *Dasyphyllum leptacanthum*. Affinities and diagnostic characters are discussed, and illustrations and a map are provided.

Key words: Barnadesieae, Campos rupestres, Compositae, Espinhaço Range, northeastern Brazil

Resumo

Dasyphyllum diamantinense é uma nova espécie endêmica do norte da Cadeia do Espinhaço, no estado da Bahia, Brasil, e que cresce em campos rupestres, florestas, savanas e inselbergs. O novo táxon é morfologicamente similar a *Dasyphyllum leptacanthum*. Afinidades e caracteres diagnósticos são discutidos e ilustrações e mapas apresentados.

Palavras-chave: Barnadesieae, Campos rupestres, Compositae, Cadeia do Espinhaço, nordeste do Brasil

Introduction

The South American genus *Dasyphyllum* Kunth (1820) comprises ca. 40 species distributed throughout the continent, except in the Amazon domain. It is taxonomically complicated due to morphologically poorly defined species with overlapping distributions. Cabrera (1959) undertook the most recent revision of this genus and had to deal with these issues, resulting in some species receiving only vague delimitations. Three new species have been described since then (Sagástegui-Alva 1980; Sagástegui-Alva & Dillon 1985; Zardini & Soria 1994) and a new combination made (Cabrera 1997). Several regional floras were also prepared, increasing the number of herbarium specimens available as well as the information about the genus (Cabrera & Klein 1973; Hind 1995; Roque & Pirani 1997; Cabrera & Freire 1998; Nakajima & Semir 2001; Magenta *et al.* 2011). Saavedra (2010) recently reported 21 species of *Dasyphyllum* from Brazil, occurring in the Atlantic Rain Forest, Cerrado, and Caatinga domains.

While conducting taxonomic studies of *Dasyphyllum*, it was noted that the delimitation of *D. leptacanthum* (Gardner 1845: 128) Cabrera (1959: 55) seemed too broad, and that two distinct morphotypes were represented in various herbarium collections. After analyzing the morphotype referable to *D. leptacanthum* s. str., the other morphotype was identified as belonging to a new species, described and illustrated here; its affinities and diagnostic features are discussed.

Dasyphyllum diamantinense Saavedra & M. Monge, *sp. nov.* (Figs. 1–2)

Type:—BRAZIL. Bahia: Mucugê, Capão do Correia, estrada vicinal saindo de Caraíba a 17.5 km da BA-142, 1221 m elev., 13º06′38″ S, 41º22′39″ W, 11 July 2009, *M.M. Saavedra et al. 968* (holotype RB!; isotypes CEPEC!, CEN!, HUEFS!, HUFU!, K!, NY!, P!, SI!, SPF!, SPFR!).

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Paratypes:—BRAZIL. Bahia: Abaíra, Chapada Diamantina, Catolés, trilha para a Serra do Barbado, 13º17′07″ S, 41º53′19″ W, 25 March 2005, *M.L. Guedes et al. 11880* (ALCB); subida para a Serra do Barbado, 13º17′ S, 41º50′ W, 30 April 2006, *M.L. Guedes et al. 12298* (ALCB); trilha para o Pico do Barbado, 13º17′41″ S, 41º54′31″ W, 17 November 2007, *S.C. Ferreira et al. 363* (HUEFS). Bonito, estrada Bonito–Utinga km 13, 12º01′ S, 41º11′ W, 870 m elev., 22 November 1992, *L. Coradin et al. 8697* (CEN, K, SPF, UEC); Assentamento Piratini, ponto T6, 20 May 2001, *L.J. Alves et al. 95* (ALCB); sede provisória do assentamento Santa Terezinha, 21 May 2001, *L.J. Alves et al. 120* (ALCB). Iguatu, estada para Mucugê, 13 June 2005, *M.D. Moraes 744* (UEC, TEX). Morro do Chapéu, próximo a Moreira, 11º52′ S, 41º12′ W, 880 m elev., 31 March 1986, *H.P. Bautista & A.C. Sarmento 1061* (HUEFS, RB). Mucugê, Capão do Correia, 13º06′38″ S, 41º22′38″ W, 1221 m elev., 5 August 2004, *E.L. Borba et al. 1937* (HUEFS). Palmeiras, Morro do Pai Inácio, 12º27′20″ S, 41º28′23″ W, 1070 m elev., 20 July 2006, *J. Paula-Souza et al. 6235* (ESA); 12º27′17″ S, 41º28′05″ W, 960 m elev., 25 November 1994, *M.L. Guedes et al. PCD763* (ALCB, CEPEC, HST, HUEFS, K, SPF); BR 242, west of Lençóis at Km 232, 12 June 1981, *S.A. Mori & B.M. Boom 14351* (CEPEC, NY); descida da torre de repetição, 12º27′34″ S, 41º28′29″ W, 1000 m elev., 27 June 1995, *M.L. Guedes et al. PCD1913* (ALCB, CEPEC, K, SPF); trilha de subida da antena para o topo, 12º27′22″ S, 41º28′23″ W, 710 m elev., 9 July 2009, *M.M. Saavedra et al. 954* (RB); lower slopes of Morro do Pai Inácio, ca. 14.5 km NW of Lençois, just N of the main Seabra–Itaberaba road, 12º27′ S, 41º28′ W, 700–1000 m elev., 23 May 1980, *R.M. Harley et al. 22506* (CEPEC, IPA, K, NY, RB, SI). Rio do Pires, Campo do cigano, 13º15′43″ S, 41º55′29″ W, 166–1750 m elev., 1 April 2000, *F.H.F. Nascimento 352* (ALCB, CEPEC, HRCB, HUEFS, SPF); 1 April 2000, *F.H.F. Nascimento 365* (HUEFS); beira do riacho da Forquilha, 13º54′ S, 42º29′ W, 1500 m elev., 24 July 1993, *W. Ganev 1945* (ALCB, HUEFS, K, SPF).

Discussion:—*Dasyphyllum diamantinense* belongs to *D.* sect. *Dasyphyllum* according to its cylindrical involucre 1–1.2 × 0.9–1.1 cm, and synflorescences in panicles or racemes. It is morphologically similar to *D. leptacanthum* due to its small, aristate leaves, short internodes, and densely spiny branches. *Dasyphyllum diamantinense* differs from *D. leptacanthum* by the spines on the branches being 10–32 mm long (versus 5–10 mm long), leaves with erect (vs. recumbent) arista at the apex, capitula pedunculate (vs. sessile), synflorescences in panicles or racemes formed by corymbs or umbels (vs. capitula solitary, or rarely synflorescences in single umbels with 3–4 capitula), involucral bracts brownish (vs. black), and corolla tubular (vs. subligulate or sub-bilabiate).

These two species occur in mountainous areas, although *Dasyphyllum diamantinense* is endemic to the Chapada Diamantina Mountains in the Espinhaço Range, in the Caatinga domain, whereas *D. leptacanthum* is endemic to the Serra dos Órgãos and Itatiaia areas, both in Mantiqueira Range in the Atlantic Forest domain. The areas of occurrence of these two species therefore are separated by at least 1,000 km.

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