Ditassa obscura (Apocynaceae: Asclepiadoideae, Asclepiadeae), a New Combination from Minas Gerais State, Brazil

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ABSTRACT. *Ditassa obscura* (E. Fournier) Farinaccio & T. U. P. Konno (Apocynaceae: Asclepiadoideae, Asclepiadeae), a new combination from Minas Gerais State, Brazil, is proposed, and its relationships are discussed.

Key words: Apocynaceae, Asclepiadeae, Asclepiadoideae, Brazil, *Ditassa*, Minas Gerais, Neotropics.

Ditassa R. Brown is a Neotropical genus of the large tribe Asclepiadeae (Asclepiadoideae, Apocynaceae), containing approximately 100 species (Konno & Fontella-Pereira, 2004). It is one of the most species-rich genera in Brazil, with a center of diversity in the states of Bahia and Minas Gerais (Fontella-Pereira et al., 1987, 1989; Rapini et al., 2001; Farinaccio & Mello-Silva, 2004a).

The genus has a problematic delimitation (Farinaccio & Mello-Silva, 2004a, 2004b), but can usually be recognized by its subaxillary umbelliform cymes and flowers with a double corona, in which the outer segments are united at least at the base.

During the preparation of a monograph of the subfamily Asclepiadoideae for the Serra da Canastra National Park, in the state of Minas Gerais, southeastern Brazil (Farinaccio & Mello-Silva, 2004a), a specimen came to light that exhibited the same set of characters as the type collection of *Metastelma obscurum* E. Fournier. Its clear affinity with *Ditassa tomentosa* (Decaisne) Fontella, especially in relation to floral morphology and also vegetative features such as indument and leaf venation, justify its transfer to *Ditassa* (Fontella-Pereira, 1979). Therefore, we propose the new combination *Ditassa obscura* (E. Fournier) Farinaccio & T. U. P. Konno.

Ditassa obscura (E. Fournier) Farinaccio & T. U. P. Konno, comb. nov. Basionym: *Metastelma obscurum* E. Fournier, in Martius, Fl. Bras. 6(4): 208. 1885. TYPE: Brazil. "In prov. Minarum in Serra de Araxa," s.d., *St. Hilaire C1-449* (holotype, P). Figure 1.

Vines, densely tomentose; leaves opposite, patent; petiole 2–7 mm long, somewhat sulcate, densely tomentose; leaf blade 2–4.7 × 0.6–1.5 cm, elliptic to obovate, apex acute, mucronate, base cuneate, discolorous, opaque, chartaceous, adaxial surface tomentose, abaxially pubescent, margins strongly revolute, venation brochidodromous, midrib abaxially prominent, secondary veins conspicuously parallel, approximately perpendicular to the midrib, 2 to 4 colleters at the base on the adaxial side; inflorescence subaxillary, glomerulate, alternate, 5- to 10-flowered, erect; peduncles 0.3–1 mm long, densely tomentose, bracts 1.1–1.5 × 0.2–0.6 mm, lanceolate, abaxial surface tomentose, adaxial surface glabrous. Pedicel 0.3–0.5 mm long, tomentose. Calyx light green to green, lobes 1.7–2 × 0.55–0.6 mm, lanceolate to ovate, apex acuminate, abaxial surface tomentose, adaxial surface glabrous, with 1 colleter present below each sinus; corolla white to cream, subcampanulate, tube 0.7–0.75 mm long, abaxial surface glabrous, adaxial surface barbellate, glabrous only in the proximal region; lobes 1.5–2 × 0.7–0.95 mm, ovate, erect, recurved from about the middle, apex acute, abaxial surface glabrous, adaxial surface incanous-sericeous, barbellate in the proximal region, margins hyaline; corona white to cream, in 2 series: outer corona with 5 lobes joined at the base or free, not attached to the corolla tube, each lobe 0.64–0.8 × 0.35–0.4 mm, oblong to ovate, asymmetric, apex cuspidate, apiculate to unguiculate, shorter than the gynostegium; inner segments strongly reduced

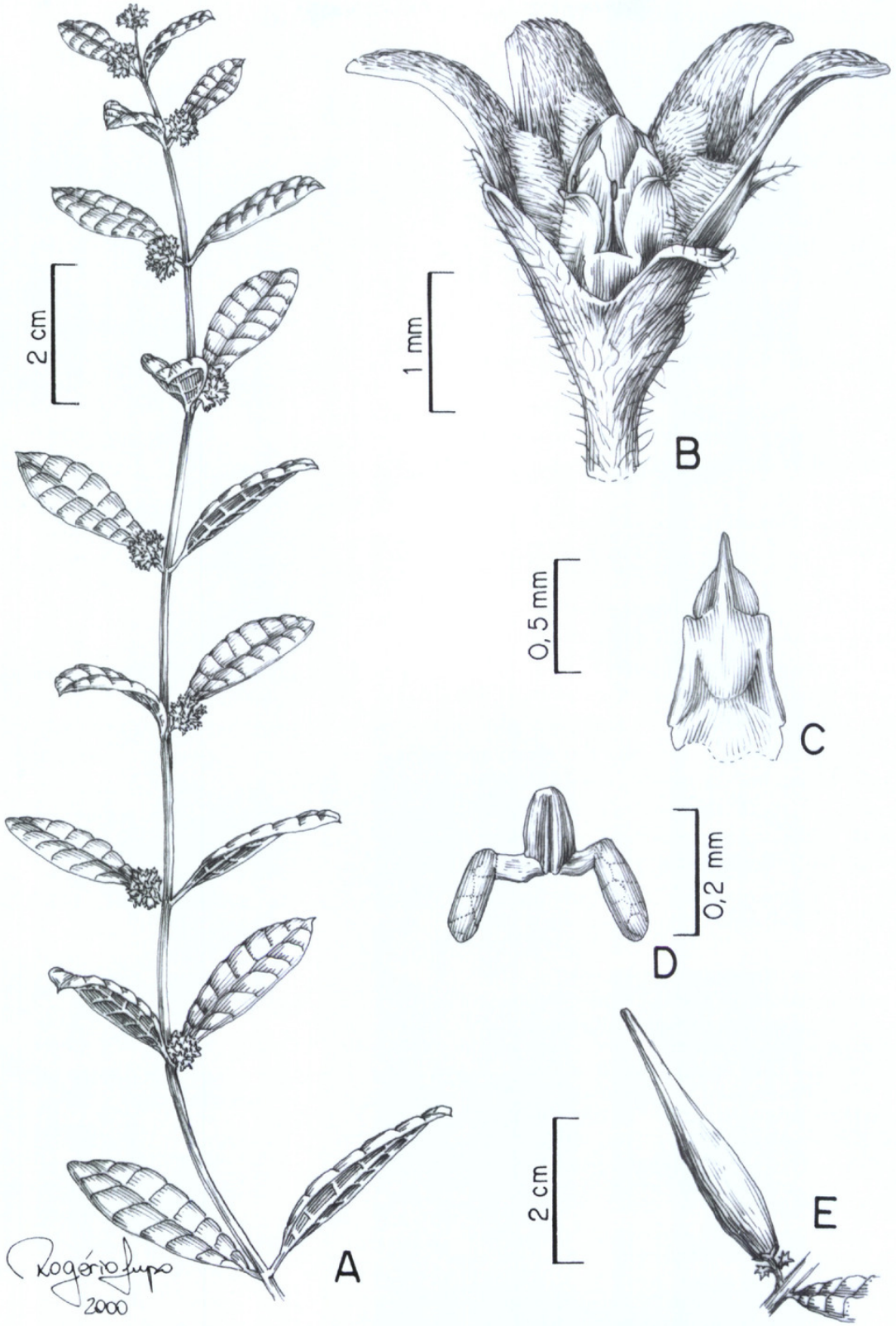

Figure 1. A–E. *Ditassa obscura* (E. Fournier) Farinaccio & T. U. P. Konno. —A. Flowering branch. —B. Flower with one lobe removed showing corona and gynostegium. —C. Abaxial surface of anther. —D. Pollinarium. —E. Fruit. (A from *Romero, Nakajima, Farinaccio & Roque 4770*, HUFU, SPF; B–E from *Farinaccio & Campos Filho 273*, BHCB, F, G, HRCB, K, MBM, MO, NY, RB, SPF.) Drawn by Rogério Lupo.

to absent; gynostegium cream, 0.8–1.1 mm long, 0.6–0.64 mm diam., sessile, cylindrical, apex capitate; anthers 0.4–0.52 × 0.32–0.36 mm, rectangular, gibbous, terminal appendage 0.35–0.4 × 0.16–0.24 mm, ovate, strongly acuminate, wings straight, longer than the dorsum; corpusculum 0.07–0.12 × 0.05–0.06 mm, ovate to conical, apex rounded, translator arms 0.03–0.05 mm long, flattened, broad, translucent, pollinia 0.14–0.16 × 0.05–0.07 mm, oblong to elliptic; fruit a single follicle, immature green to dark purple, 3.8–4 × 0.3–0.4 cm, oblong-lanceolate, hirsute; seeds 5–5.5 × 2–2.5 mm, ovate, comose at the micropylar end.

Habitat and distribution. *Ditassa obscura* occurs at the borders of small forest patches ("capões"), in gallery forests, and in grasslands with stony sandy soil.

Phenology. Flowering from October to November and from April to May; fruiting from March to May.

Ditassa obscura forms a complex with *D. tomentosa*, *D. cipoensis* (Fontella) Rapini, *D. itambensis* Rapini, *D. longicaulis* (E. Fournier) Rapini, and *D. longisepala* (Hua) Fontella & E. A. Schwarz (Table 1). It has bullate leaves like *D. longisepala*; nevertheless, its floral morphology and the shape and color of the leaves are distinctive. Also, *D. obscura* is very similiar to *D. tomentosa*, but the corolla lobes of *D. tomentosa* are twice as long as those of *D. obscura* (Table 1). Moreover, *D. obscura* has bullate leaves and much shorter peduncles and pedicels (Table 1) so that the inflorescences are almost sessile, densely clustered, and glomerulate.

Specimens examined. BRAZIL. **Minas Gerais:** São Roque de Minas, Par. Nac. da Serra da Canastra, Rio do Peixe, próximo à área de desenvolvimento, *Farinaccio & Campos Filho 273* (BHCB, F, G, HRCB, K, MBM, MO, NY, RB, SPF), *Farinaccio, Campos Filho & Vecchi 281* (CESJ, CTES, ESA, HUEFS, SPF); 20°15′27.8″S, 46°24′55.9″W, *Farinaccio, Pontes, Magenta & Magenta 514* (B, BHCB, ESA, G, SP, SPF); próximo à trilha para a Casca d'Anta, parte de cima, *Farinaccio & Pontes 516* (BR, FUEL, INPA, M, P, S, SP, SPF, U, UEC); base do morro próximo à sede admin. Nakajima, *Romero, Zanini & Simão 1483* (HUFU, SPF); margens do Rio São Francisco, *Romero, Nakajima & Guilherme 967* (HUFU, SPF); Córrego dos Passageiros, *Romero, Nakajima & Farinaccio 4179* (HUFU, SPF); Chapadão da Zagaia de frente para a Serra das Sete Voltas, após torre de observação, *Romero, Nakajima, Farinaccio & Roque 4770* (HUFU, SPF).

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Table 1. Comparison of the shape and length (mm) of structures in the *Ditassa tomentosa* complex.

Character	*D. cipoensis*	*D. itambensis*	*D. longicaulis*	*D. longisepala*	*D. obscura*	*D. tomentosa*
Petiole	2.0–7.0	4.0–11.0	2.0–5.0	1.0–4.0	2.0–7.0	2.0–4.0
Peduncle	0.5–1.5	2.0–4.0	0.5–1.0	2.0–2.5	0.3–1.0	0.5–2.0
Pedicel	1.0	1.7–2.0	1.2–1.5	1.5–2.0	0.3–0.5	1.0–3.0
Calyx lobes	2.1–2.3	2.7–3.0	2.0–2.5	3.0–4.5	1.7–2.0	1.5–2.5
Corolla lobes	1.6–2.3	2.5–2.7	3.0–3.2	2.5–3.0	1.5–2.0	3.0–5.0
Corolla tube	1.0–1.6	0.7–1.0	0.8–1.0	1.5–2.0	0.70–0.75	1.0–1.3
Gynostegium	conical, sessile	conical, subsessile	conical, subsessile	cylindrical, subsessile	cylindrical, sessile	cylindrical, sessile
Outer corona segments	subrectangular, shorter than gynostegium	oval, apex acuminate, shorter than gynostegium	linear, higher than gynostegium	ovate, apex acuminate, shorter than gynostegium	oblong to ovate, apex cuspidate, apiculate to unguiculate, shorter than gynostegium	ovate, apex dentate, shorter than gynostegium
Inner corona segments	absent	absent	absent	absent	strongly reduced to absent	strongly reduced to absent

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