

A New Species of *Dasyphyllum* (Asteraceae–Mutisieae) from Paraguay

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ABSTRACT. A fourth species of *Dasyphyllum* sect. *Dasyphyllum* with a floral tube that is pilose on the outside is described here; the other three species are *Dasyphyllum inerme*, *D. lanceolatum*, and *D. vepreculatum*. This new species, which we name *Dasyphyllum maria-lianae*, is distinguished from the others by the broadly ovate leaves that are loosely villous above and densely villous below, a longer pedicel, a wider involucre, densely tomentose phyllaries, and a greater number of flowers.

As a result of recent exploratory work in Paraguay, a distinctive new species of *Dasyphyllum* has been collected, which we describe here. This is the fourth species of *Dasyphyllum* sect. *Dasyphyllum* [= section *Microcephala* (Baker) Cabrera] with the floral tube pilose outside and the first one with that feature recorded for Paraguay. The other three species of *Dasyphyllum* sect. *Dasyphyllum* with floral tube pilose on the outside surface are *Dasyphyllum inerme* (Rusby) Cabrera, *D. lanceolatum* (Lessing) Cabrera, and *D. vepreculatum* (D. Don) Cabrera (Cabrera, 1959). Aside from them, this feature is also known in three species of *Dasyphyllum* sect. *Macrocephala*, *D. lanosum* Cabrera, *D. fodinarum* (Gardner) Cabrera, and *D. donianum* (Gardner) Cabrera (Cabrera, 1959); this section is distinguished from section *Dasyphyllum* by the involucre larger than 2 cm high and by the heads solitary or few. With its beautiful hanging twigs covered by pale green leaves and bright yellow flowers, *Dasyphyllum maria-lianae* is a conspicuous part of the flora in the mountain forests of the Cordillera de Ybytyruzú and the Cerro Naville in eastern Paraguay.

Dasyphyllum maria-lianae Zardini & Soria, sp. nov. TYPE: Paraguay. Guairá: Mbocayaity–Melgarejo, Cerro Naville, 25°43'S, 56°21'W, forest on slopes, 6 July 1992, Zardini & Guerrero 32470 (holotype, FCQ; isotype, MO). Figure 1.

Frutex scandens usque ca. 5 m altus ramosus, ramis tomentosis spinosis; spinae axillares geminae. Folia alterna; petioli 5–10 mm longi; laminae late ovatae, apice acutae et basi rotundatae, supra laxe villosae et inferne dense villosae, trinervatae, 5–7 cm longae et 3–4 cm latae. Capitula campanulata 10–12 mm alta et lata in paniculis; pedicelli 10–15 mm longi; phyllaria ovata apice mucronata, tomentosa. Flores ca. 28 lutei; corollae pentasetae extus villosae ad tubum et apices segmentorum. Achaenia dense et longe albo-sericea; pappi setae plumosae, albae.

Climbing shrub to 5 m tall, much branched. Stems tomentose, hanging, with paired axillary spines. Leaves alternate; petiole 5–10 mm long; blade broadly ovate acute at apex and rounded at base, trinervate, loosely villous above and densely villous below, 5–7 × 3–4 cm. Heads in paniculate corymbiform racemes. Pedicel 10–15 mm. Involucre campanulate, 10–12 mm high and wide; phyllaries ovate mucronate at apex, tomentose. Flowers ca. 28; corolla yellow, 10–12 mm long, pentasect (segments 4–6 mm long) with one incision deeper than the others, with tube and apical parts of segments pilose on outside surface. Achenes cylindrical, 4–5 mm long, dense and long white sericeous; pappus of plumose whitish bristles 12–14 mm long.

Paratype. PARAGUAY. **Guairá:** Cordillera de Ybytyruzú, road Melgarejo–Antena, 2 km N of Antena, 25°45'S, 56°15'W, forest, 14 July 1989, Zardini & Velázquez 13263 (FCQ, MO).

The four species of *Dasyphyllum* sect. *Dasyphyllum* with a floral tube pilose on the outside surface can be differentiated as follows:

- 1a. Flowers ca. 28; pedicel 10–15 mm; involucre 10–12 mm wide; phyllaries ovate; mucronate at apex, densely tomentose; leaves broadly ovate, 5–7 × 3–4 cm, loosely villous above and densely villous below; eastern Paraguay
..... *Dasyphyllum maria-lianae* Zardini & Soria
- 1b. Flowers fewer than 20; pedicel 2–7 mm; involucre 6–7 mm wide; phyllaries ovate or lanceolate, mucronate or spiny at apex, loosely villous or sericeous; leaves ovate, elliptic or

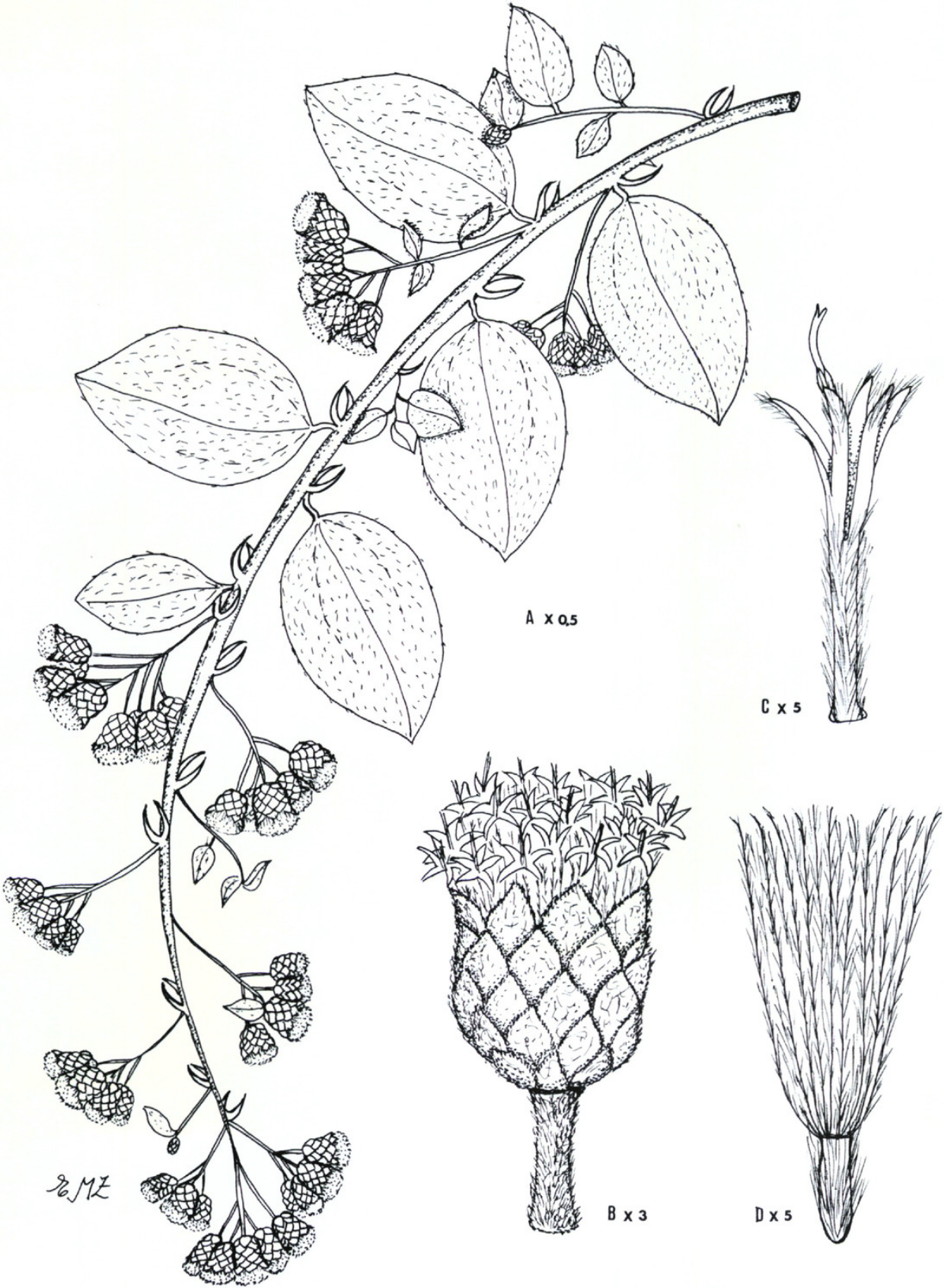


Figure 1. *Dasyphyllum maria-lianae* Zardini & Soria. —A. Flowering stem. —B. Head. —C. Corolla. —D. Achene.

- lanceolate, 4.5–8 × 1.5–4 cm, glabrous above and glabrous or loosely pubescent below.
- 2a. Phyllaries loosely villous, mucronate at apex; southern Bolivia and northwestern Argentina
..... *Dasyphyllum inerme* (Rusby) Cabrera
- 2b. Phyllaries sericeous, with an apical spine 1–2 mm long.
- 3a. Leaves elliptic-lanceolate or ovate-lanceolate, loosely villous, 5–8 × 2–4 cm; involucre 12 mm high; Venezuela and northeastern Brazil
... *Dasyphyllum vepreculatum* (D. Don) Cabrera
- 3b. Leaves lanceolate, loosely sericeous, 4.5 × 1–2 cm; involucre 8–10 mm high; southern Brazil
.... *Dasyphyllum lanceolatum* (Lessing) Cabrera

We name this species after María Liana Gentry Zardini, daughter of the senior author.

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