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# A new species of *Chaetostoma* (Melastomataceae) from Minas Gerais, Brazil

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## ABSTRACT

ROMERO, R. & A. B. MARTINS (1999). A new species of *Chaetostoma* (Melastomataceae) from Minas Gerais, Brazil. *Candollea* 54: 449-452. In English, English and French abstracts.

A new species of *Chaetostoma* (Melastomataceae) was discovered during a floristic survey carried out by the Herbarium Uberlandense (HUFU) in the Serra da Canastra national park in south-western part of the state of Minas Gerais, Brazil. *Chaetostoma canastrense* R. Romero & A. B. Martins is described and illustrated.

## RÉSUMÉ

ROMERO, R. & A. B. MARTINS (1999). Une nouvelle espèce du genre *Chaetostoma* (Melastomataceae) de l'état de Minas Gerais, Brésil. *Candollea* 54: 449-452. En anglais, résumés anglais et français.

Une nouvelle espèce du genre *Chaetostoma* (Melastomataceae) a été découverte au cours d'un inventaire conduit par l'Herbarium Uberlandense (HUFU) de l'Université Fédérale de Uberlândia, sud-ouest de l'état de Minas Gerais, Brésil. *Chaetostoma canastrense* R. Romero & A. B. Martins est présentée avec une description accompagnée d'une illustration.

**KEY-WORDS:** Taxonomy – *Chaetostoma* – Highland vegetation – Campo rupestre – Minas Gerais.

*Chaetostoma canastrense* R. Romero & A. B. Martins, **spec. nova** (Fig. 1).

**Type: BRAZIL, Minas Gerais:** São Roque de Minas, Parque Nacional da Serra da Canastra, “base do morro próximo à sede administrativa”, 1250 m, 46°15'–47°00'W e 20°00'–20°30'S, 27.V.1996, R. Romero & J. N. Nakajima 3536 (Holo-: HUFU; iso-: UEC, US).

*Suffrutex, 20-40 cm altus. Rami dichotomi vel trichotomi, glabri vel trichomatibus sparsis, praecipue ad nodi. Lamina ovato-lanceolata, semi-amplexicaulis, margine serrulato-ciliato. Flos pedicellatus. Hypanthium striatum, pilosum. Antherae subulatae in apice rostratae.*

*Haec species maxime affinis C. pungente DC. sed hypanthio piloso praecipue differt.*

Subshrubs, 20-40 cm tall. Dichotomously or trichotomously branches, terete, frequently glabrous, sometimes with sparse trichomes, mainly on the nodes, older branches brown, becoming glabrous at the base, with conspicuous leaf scars. Leaves sessile, erect, blade 6-12 × 1-4 mm, ovate-lanceolate, apex acute-acuminate, pungent, base semi-amplexicaul, margin ciliate-



Fig. 1. – *Chaetostoma canastrense* R. Romero & A. B. Martins

A) Habit; B) Insertion of leaves on the nodes; C) Leaf, adaxial surface; D) Petal; E) Hypanthium, calyx and the crown of trichomes; F) Small and large stamens.

[R. Romero & J. N. Nakajima 3536].

serrulate and thickened, glabrous on both surfaces or with a few short trichomes, 5-7-nerved, central vein thickened and prominent, the other ones tenuous and inconspicuous below. Flowers 5-merous, terminal, solitary. Pedicels 1-1.5 mm. Hypanthium  $3.5 \times 2-2.6$  mm, oblong-campanulate, slightly multi-striate or not, with short, slender trichomes, frequently concentrated on the base, with a crown of many short and long trichomes, erect, thickened around the apex of the hypanthium; calyx lobes 2.8-3.2 mm long, triangular, apex acuminate, pungent, margin ciliate-serrulate, with central vein thickened and prominent, lateral veins inconspicuous; petals magenta,  $11-11.5 \times 6.5-7$  mm, obovate, apex asymmetrically acute and apiculate, margin glabrous. Stamens 10, slightly dimorphic, filaments 3-4 mm long, glabrous; thecae 2.5-4.3 mm long, subulate, apex shortly rostrate, large stamens with connective prolonged 0.8-1.2 mm, ventral appendage tuberculate, 0.5-0.6 mm long; small stamens with connective prolonged 0.5-0.6 mm, ventral appendage inconspicuous, ca. 0.2-0.3 mm. Ovary 4 mm long, free, 3-locular, glabrous; style 7-8 mm long, filiform, glabrous, stigma punctiform. Fruit  $5-6 \times 4-5$  mm, 3-valved, brown. Seeds numerous,  $0.8-0.9 \times 0.4-0.5$  mm, reniform, testa foveolate.

The Brazilian endemic genus *Chaetostoma* DC., recently revised by KOSCHNITZKE (1997), comprises eleven species that occur only in highland areas ("campos rupestres") and cerrado vegetation.

The most striking feature, present in all species of the genus, is the common possession of a crown of trichomes around the apex of the hypanthium.

According to KOSCHNITZKE (1997), the species can be also distinguished by the colour of the flowers, length of connectives, presence or absence and size of the appendages and in having or not trichomes spread on the whole surface of the hypanthium. Although *Chaetostoma* is a taxonomically difficult genus, due to the extremely fragile limits between the species included, the characters based on which these species were established are highly consistent.

*Chaetostoma canastrense* is closely related to *C. pungens* DC., that occurs sympatrically in the Serra da Canastra. These two species are readily distinguished by the following characters: *C. canastrense* has slender trichomes distributed all over the hypanthium, but more concentrated towards the base. The branches in *C. canastrense* are frequently glabrous, but sparse trichomes may occur on the nodes. *Chaetostoma pungens* has completely glabrous hypanthium and branches.

In *C. canastrense*, the ventral connective appendages of the large stamens are tuberculate and 0.5-0.6 mm long (measured in 35 flowers of 11 individuals), those of the small stamens are 0.2-0.3 mm long. The large stamens of *C. pungens* have short, tuberculate ventral appendages, up to 0.2 mm long, and the small stamens are inappendiculate.

The closest relationship between two allopatric species in the genus was observed in *C. canastrense* and *C. albiflorum* recently described by KOSCHNITZKE & MARTINS (1999). They differ mainly by the flower colour (magenta in *C. canastrense*, white in *C. albiflorum*) and presence (*C. canastrense*) or absence (*C. albiflorum*) of tubers on the connectives of the small stamens.

*Etymology.* – The specific epithet refers to the locality Serra da Canastra where the collections were made.

*Distribution.* – Brazil: Minas Gerais, Serra da Canastra national park.

*Ecology.* – Subshrub in highlands formations, 1200-1500 m altitude.

*Phenology.* – Flowers from February to June; fruits from March to June.

*Additional material examined.* – **BRAZIL, Minas Gerais:** Parque Nacional da Serra da Canastra, guarita de Sacramento, 15.IV.1994, R. Romero & al. 816 (HUFU, UEC); ibidem, 25.VI.1994, J. N. Nakajima & R. Romero 362 (HUFU); ibidem, 16.III.1995, R. Romero & al. 1884 (HUFU, UEC); estrada para o Retiro de Pedras, 14.V.1995, R. Romero & al. 2313 (HUFU, BHCB); morro próximo ao córrego dos Passageiros, 23.III.1996, J. N. Nakajima & R. Romero 1717

(HUFU); córrego próximo da Garagem de Pedras, 23.III.1996, *J. N. Nakajima & R. Romero 1712* (HUFU, US); cachoeira dos Rolinhos, 26.V.1996, *J. N. Nakajima & R. Romero 1791* (HUFU); base do morro próximo a sede administrativa, 27.V.1996, *R. Romero & J. N. Nakajima 3536* (HUFU); guarita de Sacramento, 08.VII.1996, *J. N. Nakajima & al. 1848* (HUFU); trilha para a parte de baixo da cachoeira Casca D'Anta, 21.II.1997, *R. Romero & al. 3890, 3894* (HUFU, K).

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