



## A new species of *Eugenia* (Myrtaceae) from South America

FIGORELLA F. MAZINE<sup>1,3</sup> & JAIR EUSTÁQUIO QUINTINO DE FARIA<sup>2</sup>

<sup>1</sup> Universidade Federal de São Carlos, campus Sorocaba, Rod. João Leme dos Santos km110, Sorocaba, SP, Brazil

<sup>2</sup> Programa de Pós-Graduação em Botânica, Departamento de Botânica, Universidade de Brasília, C.P. 4457, Brasília, DF, 70919-970, Brazil

<sup>3</sup> Author for correspondence: email: [fiorella@ufscar.br](mailto:fiorella@ufscar.br)

### Abstract

*Eugenia densiracemosa*, a new species from central Brazil to French Guiana, is described, illustrated and compared to the related *Eugenia egensis*, from which it is set apart by the longer inflorescences, longer rachis (1.2–6.0 cm long), with 9–25 pairs of flowers, while in *E. egensis* the inflorescences are smaller, with rachis 0.1–0.6 cm long, and a smaller number of flowers (1–4 pairs of flowers in each inflorescence).

**Key words:** *Eugenia egensis*, Myrteae, French Guiana, Brazil

*Eugenia* L. (1753: 470) is one of the largest genera in Myrtaceae, with 1043 species (WCSP 2013), with the majority of these occurring in central and South America and relatively few in Africa (van der Merwe *et al.* 2005). In Brazil, it is the most diverse genus in Myrtaceae and also one of the most species-rich genera of the Brazilian flora, with 370 species, 287 of which are endemic to Brazil (Sobral *et al.* 2013).

During the studies of *Eugenia* L., several specimens were found in several herbaria that were incorrectly named or filed as *Eugenia* sp. Further analysis has shown they are an undescribed species broadly distributed through Brazil and French Guiana.

***Eugenia densiracemosa*** Mazine & Faria, *sp. nov.* Type:—BRAZIL. Mato Grosso. Chapada dos Guimarães, Parque Nacional da Chapada dos Guimarães, Vêu da Noiva, ao longo do rio Coxipozinho, trilha para a base da cachoeira, 15°24'S 55°50'W, 15 Jan 2004, F. F. Mazine *et al.* 1072 (holotype ESA, isotype K). Figure 1.

Shrub or tree 1–10 m. Branches densely pubescent, rarely sparsely. Leaves 6.6–20 × 1.8–8.5 cm, obovate, oblong to elliptic or narrow-elliptic, base acute or obtuse, apex acuminate, chartaceous or subcoriaceous, adaxially sparsely to moderately pubescent, abaxially glabrous to moderately pubescent, trichomes simple, midvein sulcate or flat adaxially, puberulent to strigose on both sides, lateral veins prominent, 10–13 pairs, first pair of lateral veins confluent with the marginal vein, marginal vein simple 0.8–3.5 mm from the margin; glands salient on the lower surface to flat on the upper one; petioles 4–13 × 0.9–2 mm. Inflorescences bracteate shoots bearing 9–25 pairs of flowers, axillary or extra-axillary, sessile to subsessile, rachis 1.2–6.0 cm long, puberulous to densely pubescent, trichomes usually white, sometimes brown. Flower bud 2–3 mm diam.; bracts persistent, deltoid to lanceolate, pubescent, trichomes pale brown, 0.7–1.6 mm long; pedicel 0.2–1.1 cm long, densely pubescent; bracteoles deltoids, free, 0.5–1.5 mm long, apex acute, sparsely to densely pubescent, thicker in the region of the midvein, ciliate, persistent; sepals orbicular, 1–2 × 1.4–1.9 mm, apex rounded, glabrous to densely pubescent, ciliate, trichomes whitish; hypanthium subglabrous to very densely pubescent; petals white, orbicular to oblong, 2.3–3.7 mm long, apex rounded to acute, glands salient; stamina disk puberulous, trichomes whitish to brown, stamens 78–86, anthers with apical gland; style 5–7 mm

47°56'10" W, 17 Nov 2010, *J. B. Pereira & J. P. Amaral* 286 (CEN, UB); Porto Nacional, fazenda Mourão, próximo a Porto Nacional, 7 Dec 1999, *Arnaldo et al.* 1981 (UB); *ibid.*, ponte sobre o rio Tocantins, 17 Aug 1993, *E. Santos et al.* 197 (HTO, UB). UNKNOWN LOCALITY: "Brasil central", sertão d'Amaroleité, Sep–Oct 1844, *M. A. Weddell* 2708 (P); Rio Tocantins, ressaca, 28 Jun 1986, *Revilla et al.* 4536 (INPA). Unknown locality, Nov 1879, *Glaziou* 10824 (K); Unknown locality, Nov 1879, *Glaziou* 10826 (K, P); Unknown locality, Nov 1879, *Glaziou* 10827 (P). FRENCH GUIANA. Cayenne, Monts Bakra, 30 Sep 1980, *Granville* 4044 (K); Monts d'Arawa, 53°22'04" O 02°48'54" N, 21 Mar 2006, *J.F. Molino & D. Sabatier* 2235 (CAY).

*E. densiracemosa* has sessile inflorescences and hypanthia that can be subglabrous to very densely pubescent. The flowers are generally very densely distributed along the rachis of the inflorescence, with very short floral internodes. It is related to *Eugenia egensis* DC. (1828: 281), differing as the inflorescences in *E. densiracemosa* are longer, the rachis 1.2–6.0 cm long with 9–25 pairs of flowers, while in *E. egensis* the inflorescences are shorter, normally barely developed, with rachises 0.1–0.6 cm long, and a smaller number of flowers (1–4 pairs of flowers in each inflorescence). Also, the rachis of the inflorescences of *E. densiracemosa* is puberulous to densely pubescent, while that of *E. egensis* is glabrous or subglabrous. The leaf blades of *E. densiracemosa* are sparsely to moderately pubescent on the upper surface, glabrous to moderately pubescent on the lower surface (versus glabrous leaves in *E. egensis*) and with prominent glands on the lower surface and flat on the upper one (prominent glands in both surfaces in *E. egensis*).

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