TWO NEW VARIETIES OF *EUGENIA CAPPARIDIFOLIA* DC. AND A NEW NAME FOR *EUGENIA MONTICOLA* (SW.) DC. VAR. *RACEMOSA* AMSH. (MYRTACEAE)

F.F. MAZINE[1] & V.C. SOUZA[1]

[1]Herbarium ESA, Departamento de Ciências Biológicas, Escola Superior de Agricultura "Luiz de Queiroz", Caixa Postal 9, Piracicaba, SP, 13418-900, Brazil. e-mail: ffmazine@carpa.ciagri.usp.br

ABSTRACT

Two new varieties of *Eugenia capparidifolia* DC. (Myrtaceae), *E. capparidifolia* var. *major* Mazine and *E. capparidifolia* var. *longipetiolata* Mazine, are described and illustrated. They are endemic from the Espinhaço Range in Minas Gerais (Brazil). In addition, *Eugenia monticola* (Sw.) DC. var. *racemosa* Amsh., is elevated to species level, receiving the new name *Eugenia gerdae* Mazine, since the name *Eugenia racemosa* is already occupied.

Eugenia is currently estimated to contain ca. 500 (Holst et al. 2003) to 2000 species (Sanchez-Vindas et al. 2001), distributed from South of Mexico, Cuba, the Antilles to Uruguay and Argentina, with a small number of species (ca. 60) in Africa (Van der Merwe et al. 2005). Some species, with edible fruits, have been cultivated in tropical and subtropical regions (e.g., *Eugenia uniflora* L., *E. brasiliensis* Lam.). *Eugenia* is the largest genus in Myrtaceae and has the highest number of species of tree species in the rainforests and semi-deciduous of the Brazilian Atlantic Forest region (Oliveira-Filho & Fontes 2000). The most common features of Eugenia are the 4-merous flowers, with free sepals that are distinct in the flower bud, and with the hypanthium little or not prolonged beyond the summit of the ovary, which is bilocular, with many ovules per locule.

During the preparation of the treatment of *Eugenia* sect. *Racemosae* O. Berg from the Neotropics, 59 species were recognized (38 occurring in Brazil). Two new varieties of *Eugenia capparidifolia* DC. have been found and are herein described and illustrated. Also, a new name for *Eugenia monticola* (Sw.) DC. var. *racemosa* Amsh. is given, once it has to be elevated to species level and the epithet "*racemosa*" is already occupied for *Eugenia*.

NEW VARIETIES OF *EUGENIA CAPPARIDIFOLIA* DC.

Endemic from Espinhaço Range in Minas Gerais (Brazil), Eugenia capparidifolia includes plants with coriaceous leaves, robust and rigid racemes, with thick rachis. Four varieties are recognized in *Eugenia capparidifolia*, distinguished principally by their distribution, leaf base and leaf petiole.

1. Plants from Diamantina and region ....*E. capparidifolia* var. *capparidifolia*
1'. Plants from other regions of Espinhaço Range in Minas Gerais.....2
2. Base of the leaves generally cordate .....*E. capparidifolia* var. *neglecta*
2'. Base of the leaves acute or obtuse.....3
3. Subshrub 20-50 cm, apex of the leaf not pendent, raceme with long peduncle (1.2-1.9 cm long), pedicel long (0.9-1.3 cm long).....*E. capparidifolia* var. *longipetiolata*

3'. Treelet 2.5 m, apex of the leaf pendent, raceme with short peduncle (0.4-1.1 cm long), pedicel short (0.3-0.4 cm long) .....*E. capparidifolia* var. *major*

Eugenia capparidifolia var. **longipetiolata** Mazine, **var. nov.** Type: BRAZIL. Minas Gerais: Joaquim Felício, rio da Onça, 19 Jan 1996, *G.Hatschbach, M.Hatschbach & J.M.Silva 64419* (Holotype ESA; isotype MBM). Fig. 1 A-C.

Eugeniae capparidifoliae var. neglectae affinis, sed basi folii acuta vel obtusa (nec cordata vel rotundata) et petiolo longo (nec inconspicuo) distincta.

Subshrub 20-50 cm. **Leaf** 6.5-9.5 cm long, 3.4-4.5 cm wide, sparsely to moderately pubescent on both surfaces; apex acute, not pendent; base acute or obtuse; petiole 3-4 mm long. **Raceme** (1-)2-3(-4) pairs of flowers; peduncle 1.2-1.9 cm long. **Pedicel** 0.9-1.3 cm long. **Fruit** unknown.

COMMENTS. *Eugenia capparidifolia* var. *longipetiolata* is endemic to the region of Itacambira and Joaquim Felício (Espinhaço Range in Minas Gerais, Brazil), occurring only in cerrado. It is similar to *E. capparidifolia* var. *neglecta* (O. Berg) Mazine, but can be distinguished by the base of the leaves acute or obtuse and the longer petiole (the petiole of *E. capparidifolia* var. *neglecta* is inconspicuous and the base of the leaves are cordate, rarely rounded).

PARATYPE. BRAZIL. Minas Gerais: Itacambira, rd. to Montes Claros, 9 Jan 1986, *J. R.Pirani et al. CFCR 9177* (ESA, SPF).

Eugenia capparidifolia DC. var. **major** Mazine, **var. nov.** Type: BRAZIL. Minas Gerais: Turmalina, rd. Turmalina-Itacambira, 700m.s.m., 17º20'S 43º5'W, 24 Feb 2002, *V.C.Souza, D.Sampaio, A.O.Araújo, G.O.Romão & S.I.Elias 28284* (Holotype ESA, isotype K). Fig. 1 D-F.

Eugeniae capparidifoliae var. neglectae affinis, sed habitu arboreo (nec fruticoso) et basi folii obtusa (nec cordata vel rotundata) distincta.

Treelet 2.5 m. **Leaf** blade 8.3-10 cm long, 4-4.8 cm wide, moderately pubescent on both surfaces, more densely at the midvein; apex shortly acuminate, pendent; base obtuse; petiole 5-7 mm long. **Raceme** 3 pairs of flowers; peduncle 0.4-1.1 cm long. **Pedicel** 3-4 mm long. **Fruit** unknown.

COMMENTS. *Eugenia capparidifolia* var. *major* is an endemic to the municipality of Turmalina (Espinhaço Range, in Minas Gerais, Brazil), occurring only in riverside relicts. Known from a single collection, this is the only specimen of *Eugenia capparidifolia* that is a treelet and can reach more than 2m tall. It has leaves with pendent apexes and short flower pedicels. It is similar to *Eugenia capparidifolia* var. *neglecta* (O. Berg) Mazine, but can be distinguished by the leaves with obtuse base and the treelet habit.

A NEW NAME FOR *EUGENIA MONTICOLA* (SW.) DC. VAR. *RACEMOSA* AMSH.

Eugenia gerdae Mazine, **nom. nov.**

Basionym: *Eugenia monticola* (Sw.) DC. var. *racemosa* Amsh. in A. A. Pulle, Fl. Suriname 3(2): 121. 1951. Type: Surinam, Upper Gran Rio, 20 Sep 1908, *Tresling 459* (syntype U, lectotype here designated); Copename R., Voltzberg, Aug, *Pulle 244* (syntype U-not found), *Lanjouw 926* (syntype U-not found).

Eugenia gerdae Mazine occurs in Northern South America and differs from *E. monticola* by having flowers in racemes, with a distinct rachis. The epithet honors Gerda Jane Hillegonda Amshoff, the author of the variety in *Eugenia monticola* (Sw.) DC.

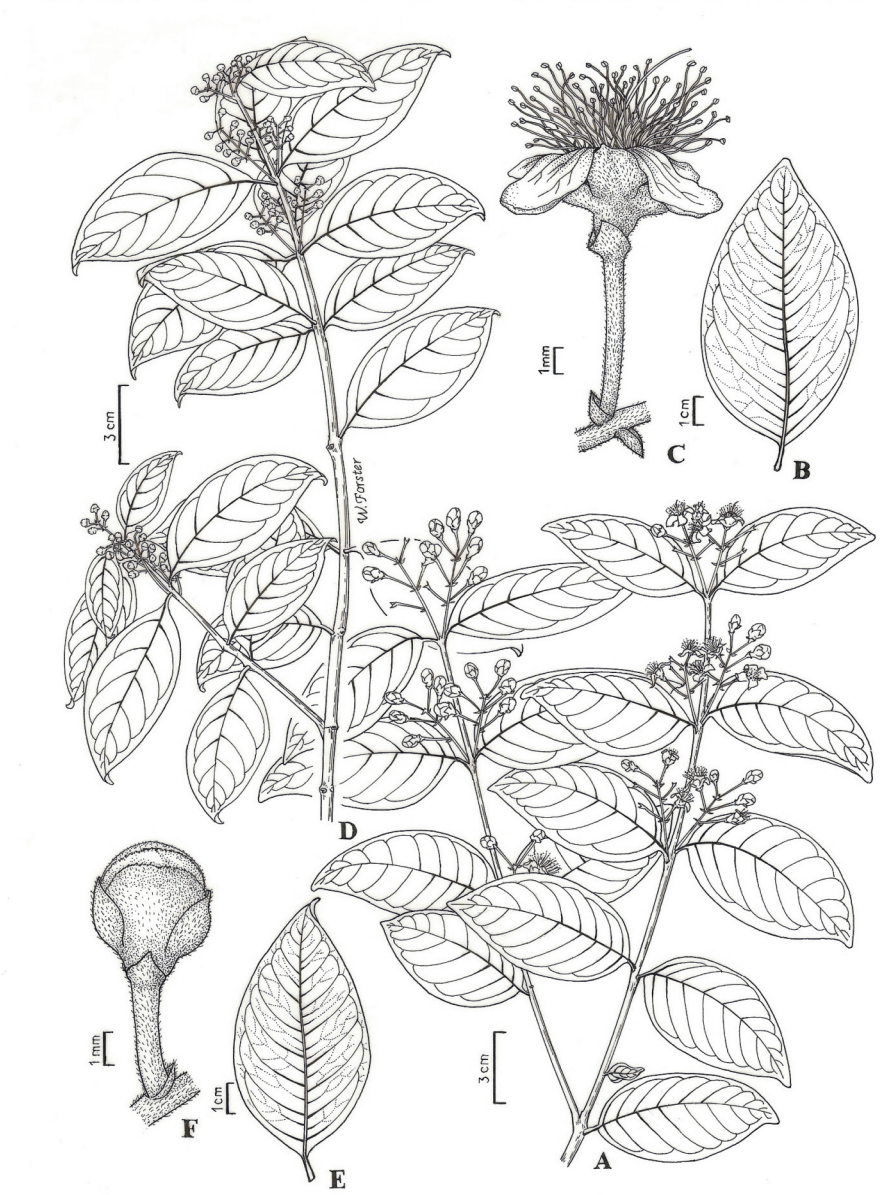

Figure 1. A-C. *Eugenia capparidifolia* DC. var. *longipetiolata* Mazine. A. Flowering branch. B. Leaf (upper surface). C. Flower. D-F. *Eugenia capparidifolia* DC. var. *major* Mazine. D. Flowering branch. E. Leaf (upper surface). F. Flower bud. (A-C. *Hatschbach et al. 64419*; D-F. *Souza et al. 28284*). Drawn by Wellington Forster.

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LITERATURE CITED

Holst, B.K., Landrum L. & Grifo F. 2003. Myrtaceae. In: Berry PE, Yatskievych K, Holst BK. *Flora of the Venezuelan Guayana* 7:1-99. Missouri Botanical Garden Press.

Oliveira-Filho, A.T. & Fontes M.A.L. 2000. Patterns of floristic differentiation among Atlantic Forests in Southeastern Brazil and the influence of climate. *Biotropica* 32: 793-810.

Sanchez-Vindas, P.E., Holst B.K. & Pool A. 2001. Myrtaceae. In: Stevens WD, Ulloa C, Pool A, Montiel OM. Flora de Nicaragua. Angiospermas: Fabaceae-Oxalidaceae. *Monographs in Systematic Botany from the Missouri Botanical Garden* 85: 1564-1580.

Van der Merwe, M.M., Van Wyk, A.E. & Botha, A.M. 2005. Molecular phylogenetic analysis of *Eugenia* L. (Myrtaceae), with emphasis on southern African taxa. *Plant Systematics and Evolution* 251: 21-34.

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