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Two new Atlantic Forest Myrtaceae from Brazil

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Abstract

Two new Brazilian species of *Eugenia* are described and illustrated, *Eugenia regia* and *E. espinhacensis*. *Eugenia regia,* collected in coastal Atlantic rainforests in the southeastern states of São Paulo and Rio de Janeiro, is related to *E. bunchosiifolia,* from which it differs by its larger leaves, flowers and trichomes. *Eugenia espinhacensis* was collected in seasonal Atlantic forests of the state of Minas Gerais; it is similar to *E. bocainensis*, from wich can be distinguished by its obtuse sepals and pilose branches, pedicels and flowers.

Resumo

São descritas e ilustradas duas novas espécies de *Eugenia*: *Eugenia regia* e *E. espinhacensis.* A primeira encontrada nas matas ombrófilas costeiras do litoral norte de São Paulo e sul do Rio de Janeiro tem sido frequentemente e erroneamente nomeada sob *E. bunchosiifolia*, da qual difere-se pelo discrepante tamanho das folhas, flores e pilosidade. *E. espinhacensis* é uma espécie ocorrente nas matas semidecíduas do Quadrilátero Ferrífero, em Minas Gerais, numa região altamente explorada pela extração de minério de ferro. Esta assemelha-se a *E. bocainensis*, porém difere-se pelas sépalas obtusas e pilosidade dos pedicelos, sépalas e ramos.

Key words: *Eugenia,* Espinhaço Range, IUCN, Minas Gerais, São Paulo, Rio de Janeiro

Eugenia Linnaeus is a widespread tropical genus with about 371 species in Brazil (Govaerts *et al.* 2010, Sobral *et al.* 2013), most of which occur in the Brazilian Atlantic rainforest biome (Oliveira-Filho & Fontes 2000, Amorim *et al.* 2005).

The species of *Eugenia* have been informally classified into sections by Berg (1856) based on inflorescence morphology. Nevertheless, the Bergian concept of the genus did not include species with distinct flower morphologies segregated in distinct genera, namely *Phyllocalyx* O.Berg for species with well developed bracteoles and *Stenocalyx* O.Berg for species with mostly linear, deciduous bracteoles and inflorescences with subtending imbricate bracts. Both genera were included in synonymy of *Eugenia* as generic sections in later nineteenth century (Kiaerskou 1893; Niedenzu 1893) and this conclusion has been widely accepted since. According to Mazine (2006), *Eugenia* section *Phyllocalyx* is monophyletic and can be morphologically recognized by the leafy calyx and bracts associated to the flowers. During the preparation of a monograph of the species of *Eugenia* section *Phyllocalyx,* we have examined specimens that we consider as belonging to undescribed species that we here propose as new.

Eugenia regia Bünger & Sobral*, sp. nov.* (Fig. 1, 2)

This species is related to *Eugenia bunchosiifolia* but can be distinguished by larger sepals, bracteoles and blades, which are abaxially floccose.

TYPE:—BRAZIL. São Paulo, Ubatuba, no alto do Morro Escuro, a 800m do Rio Escuro, 7 November 1961 (fl, fr), *Fontella & Moura 94* (holotype SP!).

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Aditional specimens examined:—BRAZIL: Minas Gerais, Barão de Cocais, Mina de Baú, February 2008 (fl), *Filho et al. 142* (OUPR!); Catas Altas, Serra do Caraça, 23 October 1999 (fr), *Mota 86* (BHCB!, isoparatype SP!).

Distribution:—*Eugenia espinhacensis* is a tree from Atlantic montane forests at altitudes of 900–1000 m. It is currently known from Serra do Caraça, Barão de Cocais and near Diamantina in the Espinhaço Range in the state of Minas Gerais. These forests are distributed near cangas and *campos rupestres*, which are quartzite and hematite-rich rocky outcrops, and thus are probably under the risk of habitat disturbance by mining activities.

Phenology:—flowers were collected in November and fruits in October.

Etymology:—the epithet alludes to the Espinhaço Range, from where the type collection comes.

Conservation status:—In the localities, few individuals or small populations (<50 individuals) were found and the region is under a historical anthropic pressure like mining activities. According to the criterion A2c and D (IUCN 2013), the species is considered Endangered.

Discussion:—*Eugenia espinhacensis* is apparently related to *Eugenia bocainensis* Mattos, an Atlantic rainforest species collected from the northeastern state of Bahia to Rio de Janeiro, from which it can be distinguished through the following characters:

1. Sepals obtuse, glabrous abaxialy, pedicels and ovary strigose; coastal rainforests of Bahia to Rio de Janeiro .... *E. bocainensis*
1. Sepals acute, rufescent, pedicels rufescent and ovary tomentose; rocky outcrops of central Minas Gerais .... *E.espinhacensis*

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