



## *Eugenia submontana* (Myrteae, Myrtaceae), a new species from the Atlantic Forest of northeastern Brazil and notes on *Eugenia culicina*

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### Abstract

A new species of *Eugenia* is here described and illustrated. *Eugenia submontana* is known from submontane Atlantic Forest in Pernambuco and is related to species bearing inflorescences with short internodes. *E. submontana* differs from related species in having sulcate midvein on adaxial leaf surface, short bracteoles and calyx lobes, a squared staminal ring and globose fruits with smooth surface. We also present here the first description of the fruits of *Eugenia culicina*, as well as a revision of its conservation status in light of new information.

**Key words:** biodiversity, endemics, IUCN, Pernambuco, Neotropics

### Resumo

Uma nova espécie de *Eugenia* é aqui descrita e ilustrada. *Eugenia submontana* é conhecida para a Floresta Atlântica submontana do estado de Pernambuco e é relacionada com espécies que possuem inflorescência com entrenós curtos. *E. submontana* se diferencia das espécies mais relacionadas por apresentar venação primária sulcada na face adaxial das folhas, bractéolas e lobos do cálice pequenos, anel estaminal quadrangular e frutos globosos com superfície lisa. Também é apresentada a primeira descrição do fruto de *Eugenia culicina*, além da mudança do seu status de conservação com base nas informações obtidas.

**Palavras-chave:** biodiversidade, endemismo, IUCN, Pernambuco, região Neotropical

### Introduction

*Eugenia* P. Michelli ex Linnaeus (1753: 470) is one of the largest genera in Myrtaceae with up to 1,080 species (World Checklist of Selected Plant Families [WCSP] 2014). The genus is the most representative of the family in South America with 822 species (WCSP 2014), and its highest diversity is found in Brazil where 378 species can be found, of which 313 are endemic (Sobral *et al.* 2014). In the Brazilian Atlantic Forest, *Eugenia* is the most species-rich genus of Angiosperms with more than 200 endemic species (Sobral *et al.* 2014, Stehmann *et al.* 2009).

In general, the Myrtaceae in the northeastern Atlantic Forest remain poorly surveyed (Murray-Smith 2009), but taxonomic and floristic studies have been carried out recently (Amorim & Alves 2012a, 2011, Landim & Landrum 2002, Lourenço & Barbosa 2012, Oliveira *et al.* 2012). The high level of endemism, particularly to the state of Bahia (northeastern Brazil), was cited by Thomas *et al.* (1998, 2008), and Sobral *et al.* (2014) pointed out that 90% of the diversity of *Eugenia* in the Atlantic Forest of northeastern Brazil comes from the state of Bahia.

The geographical distribution of several species, including among the Myrtaceae, suggest a possible floristic connection between the humid forests from southern Bahia with the submontane and montane forests located in the states of Alagoas and Pernambuco (Amorim & Alves 2012b, Barros *et al.* 2014, Forzza *et al.* 2014, Giacomini *et al.* 2013, Gregório *et al.* 2014, Koch *et al.* 2014, Santos & Alves 2013). The high diversity of the forests in the septentrional part of the Atlantic Forest has been evidenced by new species which have been recently described (Alves-Araújo &