



Myrtaceae from lowland Atlantic Forest areas in the State of Pernambuco, Northeastern Brazil

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Abstract

The lowland Atlantic Forest in the State of Pernambuco (northeastern Brazil) is a mosaic of forest fragments with high biological importance and a priority for biological inventories. Myrtaceae is represented by 38 species; with 12 species each, *Eugenia* and *Myrcia* are the richest genera, followed by *Psidium* with 4 species, *Myrciaria* with 3 species, *Campomanesia* and *Marlierea* with 2 species each and *Calypttranthes*, *Gomidesia* and *Plinia* with one species each. More than sixty percent of all species found in this inventory are endemic to the Atlantic Forest, one of them is a new record for northeastern Brazil (*Myrciaria glazioviana*); five are new records for the northern part of the Atlantic Forest (*Eugenia brevistyla*; *Marlierea excoriata*; *M. tomentosa*; *Myrcia insularis* and *M. tenuivenosa*) and one of them is a new record for the State of Pernambuco (*Eugenia luschnathiana*). An identification key, comments and illustrations of diagnostic characters of the species are provided.

Key words: Neotropics, *Eugenia*, *Myrcia*, Myrteae, taxonomy

Introduction

Myrtaceae comprises 3,800 to around 5,800 species and 133 genera and has a pan-tropical distribution. Australia, southeastern Asia and tropical America are centers of diversity (Wilson *et al.* 2001, Govaerts *et al.* 2010). Two tribes occur in the Neotropics: Metrosidereae Benth. including the monotypical genus *Tepualia* and Myrteae DC. The latter tribe comprises around 2,600 species and 47 genera distributed in the Neotropics, Mediterranean area and Australasia (McVaugh 1968, Wilson *et al.* 2005, Govaerts *et al.* 2010).

In South America, the Atlantic Forest is considered a biodiversity hotspot and highly threatened (Myers *et al.* 2000). The high level of endemism in the Atlantic Forests is related to its latitudinal extent and topography resulting in broad climatic variations, principally in terms of rainfall (Pinto & Brito 2005, Thomas & Barbosa 2008). One of the diversity centers for Myrtaceae is found in these Atlantic Forests, where it is the sixth most represented family (Stehmann *et al.* 2009) with 636 species and a high number of endemics (Sobral *et al.* 2009). The most representative genera are *Eugenia* and *Myrcia* (Stehmann *et al.* 2009).

The northern part of the Atlantic Forest, which includes the portion from the Rio São Francisco to its farthest northern extent, has a fragmented landscape with forest fragments usually smaller than 30 ha (Ranta *et al.* 1998, Trindade *et al.* 2008). The fragments are mainly located on top of hills surrounded by sugar-cane plantations (Andrade-Lima 1957) and are considered areas of high biological importance and a priority for biological research (MMA 2000). In this portion of the Atlantic Forest, precipitation has a range of 1000–2000 mm/year; there is a dry period of four months when 20–50% of the individual trees lose their leaves (Veloso 1992, Thomas & Barbosa 2008). The lowland forest extends from coastal elevations up to 200 m; its floristic differences are related with altitude and humidity (Andrade-Lima 1957, Veloso 1992, Thomas &