



Two new species of *Pseudotrimezia* (Iridaceae) endemic to Diamantina Plateau, Minas Gerais, Brazil

JULIANA LOVO* & RENATO MELLO-SILVA

Universidade de São Paulo, Departamento de Botânica, Rua do Matão, 277, ed. Sobre-as-Ondas, 05508-090 São Paulo, SP, Brazil;
e-mail: lovo.juliana@gmail.com

*author for correspondence

Abstract

Two new species of *Pseudotrimezia* are described and illustrated. Both species are endemic to localities of “campos rupestres” in Diamantina Plateau, Minas Gerais State, Brazil. *Pseudotrimezia nana* is remarkably distinguished by the overall size, one of the smallest within the genus, bracts on the flowering stem and leaf anatomy. *Pseudotrimezia striata* is noteworthy due a partly bifacial leaf that encloses the flowering stem. Morphological comparisons with similar species are also provided.

Key words: Campo Rupestre, IUCN Red List, *Pseudotrimezia nana*, *Pseudotrimezia striata*.

Introduction

Pseudotrimezia Foster (1945: 8) is easily distinguished from *Neomarica* Sprague (1928: 280), *Pseudiris* Chukr & A.Gil in Gil *et al.* (2008: 725) and *Trimezia* Salisb. ex Herbert (1844: 88), the other genera of tribe Trimezieae Ravenna, by its plain yellow flower, with highly similar sepals and petals, lacking both conspicuous ornamentations and glandular trichomes (Gil *et al.* 2008, Lovo *et al.* 2012). *Pseudotrimezia* comprises 17 species endemic to the Espinhaço range in Minas Gerais State, Brazil, from Serra de Grão-Mogol, in the north, to Serra do Cipó, in the south (Lovo 2014). Located mainly in the Cerrado domain, the Espinhaço range is covered by typical xeromorphophic vegetation, growing on rocky outcrops and shallow white sands, in altitudes above 900. This vegetation known as “Campos rupestres” is rich in endemics (Giulietti & Pirani 1988), which is the case of *Pseudotrimezia* species, many of them restricted to single locations with particular environmental conditions, mostly in the Diamantina Plateau (central region of Espinhaço range in Minas Gerais). In spite of this, these environments are still poorly studied and highly threatened (Antonelli *et al.* 2010) and afterwards, increasing our knowledge of the Campo Rupestre flora is essential for conservation purposes.

Recent phylogenetic analysis shows *Pseudotrimezia* as polyphyletic, because of some *Trimezia* species emerging within its clade (Lovo *et al.* 2012). However, that framework is still in need of better resolution in order to justify a different classification. As to improve the knowledge both of these taxa and of Campo Rupestre, we describe here two new species of *Pseudotrimezia* as traditionally recognized (Chukr & Giulietti 2003).

Material & Methods

Morphological characterization:—Morphological features of the new species and relatives were described using both dried herbarium material from C, G, MBM, SPF, and flowers (SPF) preserved in ethanol (70%). Measurements were taken with a flexible ruler and also an optical ruler attached to the microscope. Terminology follows Evert (2006), Goldblatt & Manning (2008) and Radford *et al.* (1976). Height of flowering stem was measured from the insertion in the underground stem to the basis of inflorescence (insertion of spathes). Acronyms according to Thiers (2014).

Leaf Anatomy:—For the anatomical study, we used middle portion of leaves preserved in 70% ethanol. Transverse sections were taken by free hand, clarified using sodium hypochlorite and afterwards stained with Safranin and Astra blue (Bukatsch 1972).

Additional specimen examined (paratypes):—BRAZIL. Minas Gerais: Diamantina. Estrada para Conselheiro Mata, a 31,9 km do entroncamento com a estrada Diamantina-Gouveia (BR 367), elev. 1119 m, 18°18'36.1"S 43°55'06.7"W, 21 November 2012 (fr), *J. Lovo & S.F. Alcantara 362* (MO!, SPF!); Galheiros, 5,1 km da estrada Diamantina-Conselheiro Mata (MG 220), entrada a 13,9 km da rodovia Diamantina-Datas (BR 367), elev. 1307 m, 18°15'21.7"S 43°48'29.5"W, 14 January 2014 (fl, fr) *J. Lovo, M.M.T. Cota & R. Mello-Silva 462* (NY!, SP!, SPF!); estrada Diamantina-Conselheiro Mata (MG 220), 21 km da estrada Diamantina-Datas (BR 367), grande "inselberg" quartzítico com campo limpo na base, próximo à estrada, elev. 1221 m, 18°17'41.9"S 43°50'49.2"W, 15 January 2014 (fl, fr) *J. Lovo, M.M.T. Cota & R. Mello-Silva 466* (NY!, SPF!).

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