



Taxonomic novelties in *Chamaecrista* (Leguminosae: Caesalpinioideae) from Brazil

JULIANA G. RANDO*, BENOIT LOEUILLE & JOSÉ RUBENS PIRANI

Instituto de Biociências, Departamento de Botânica, Universidade de São Paulo, Rua do Matão 277, São Paulo, Brazil

*Corresponding author, email: ju_rando@hotmail.com

Abstract

In the light of taxonomic studies of *Chamaecrista* sect. *Chamaecrista* ser. *Coriaceae* the status of several varieties is re-evaluated: Three former varieties are recognized at the specific level, two new combinations and one synonymization are here proposed. The geographic distribution and taxonomic affinities of these species are discussed.

Key words: campos rupestres, Fabaceae, systematics

Introduction

Chamaecrista Moench (1794: 272) is one of the largest genera of the subfamily Caesalpinioideae, with more than 330 species distributed mainly in tropical America (Lewis 2005). In Brazil 252 species are known, of which 203 are restricted to the country (Souza & Bortoluzzi 2013); many are narrow endemics. This high diversity of *Chamaecrista* is centered in the Cerrado Domain, mainly in the *campos rupestres* (Souza & Bortoluzzi 2013) that are highland areas with many rock outcrops surrounded by sandy or rocky soils, which are mostly covered by a low, herbaceous or shrubby vegetation (Giulietti *et al.* 1997). This formation is located in the Brazilian Central plateau. In the last taxonomic revision of the genus, Irwin & Barneby (1982) recognize 120 varieties in native Brazilian species. In current taxonomy, the category ‘variety’ is commonly used for sympatric taxa showing a morphological differentiation that is not sufficient to deserve species level recognition (McDade 1995). But in most of Rupert Barneby’s treatments the category ‘variety’ usually reflects a lack of knowledge due to scarce collection or to few observations in natural environment (e.g. Barneby 1991). Barneby (1991) in his monograph of the genus *Mimosa* Linnaeus (1753: 516) stated: “Where appropriate I have drawn attention to some of the unsolved taxonomic problems which can best be addressed by Latin American botanists living within easy access to the living plants”. Similar taxonomic problems occur in *Chamaecrista* sect. *Chamaecrista* ser. *Coriaceae* (Bentham 1870: 165) Irwin & Barneby (1982: 667) the target of this study. The series is composed of shrubs with a xylopodium, petiolar glands, thick-textured leaflets and axillary peduncles (Irwin & Barneby 1982). It comprises 20 species (with 10 varieties), distributed mainly in the Espinhaço Range of mountains in Minas Gerais and Bahia states (Rando & Pirani 2011). Based on morphological analysis and field observations, we here propose two new combinations and one new synonym regarding four taxa belonging to this series.

Material and methods

The present morphological analysis is based on field observations and on several collections from the main herbaria housing specimens from Central Brazil, which provided the data upon which the conclusions were