



A new species of the genus *Chamaecrista* (Leguminosae, Caesalpinioideae) from Chapada dos Veadeiros, Goiás, Brazil

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Abstract

Chamaecrista frondosa from Brazil is described, illustrated, and discussed herein. This species is morphologically similar to *C. psoraleopsis* in its general leaflet shape and belongs to *Chamaecrista* sect. *Absus* series *Microphyllae* due to its caespitose, subshrubby habit, young branches, inflorescence axis, and pedicel with glandular trichomes, leaflets resin-dotted, ascending in the rachis and partly facing each other, as well as flowers with 10 fertile stamens. The species appears to be restricted to Cerrado *sensu stricto* and rocky fields in the Chapada dos Veadeiros National Park, an area with notable endemism. A key to the species of *Chamaecrista* sect. *Absus* series *Microphyllae* occurring in the region is provided.

Key words: Cerrado biome, diversity, endemism, flora of Central Brazil

Introduction

Chamaecrista Moench (1794: 272) is a monophyletic genus (Conceição *et al.* 2009), which presents Pantropical distribution and comprises approximately 330 species, 266 of them occurring in the Americas and 252 in Brazil (Lewis 2005, Souza & Bortoluzzi 2013). Among the *Chamaecrista* species found in Brazil, 203 are endemic (Souza & Bortoluzzi 2013), and 105 occur in the Brazilian Central Plateau (Irwin & Barneby 1978, 1982, Lewis 2005).

According to Irwin & Barneby (1982), *Chamaecrista* comprises six sections: *Apoucouita* (Irwin & Barneby 1977: 281) Irwin & Barneby (1982: 641), *Absus* (Colladon 1816: 116) Irwin & Barneby (1982: 644), *Caliciopis* Irwin & Barneby (1982: 857), *Chamaecrista* (Moench 1794: 272), *Grimaldia* (Schrank 1805: 184) Irwin & Barneby (1982: 664), and *Xerocalyx* (Bentham 1870: 155) Irwin & Barneby (1982: 862). These sections are differentiated mainly by the type of inflorescence, presence or absence of extrafloral nectarines and glandular sticky trichomes, and types of venation of leaflets and sepals. However, among these sections, only *Xerocalyx* and *Apoucouita* have proved to be monophyletic (Conceição *et al.* 2009).

Chamaecrista section *Absus* is the largest one of this genus, comprising over 170 species distributed in four subsections: *Absus*, *Adenophyllum* (Irwin & Barneby 1978: 162) Irwin & Barneby (1982: 647), *Baseophyllum* (Colladon 1816: 115) Irwin & Barneby (1982: 646), and *Otophyllum* (Irwin & Barneby 1978: 17) Irwin & Barneby (1982: 647). This section includes plants recognized by racemose or paniculate inflorescences, branches, petioles, leaflets margin, inflorescence axis and external surface of sepals, bracteoles, and ovary usually covered with glandular sticky trichomes (Irwin & Barneby 1982). However, the knowledge of the species belonging to *Chamaecrista* section *Absus* is still insufficient, mainly in the Brazilian Central Plateau, home to more than 100 of them (Dantas & Silva 2013, Iglesias *et al.* 2011, Irwin & Barneby 1982).

During the taxonomic survey of *Chamaecrista* in Chapada dos Veadeiros, as part of the project “Leguminosae Cerrado *sensu lato*: floristic, taxonomic, phylogenetic, and biogeographic studies”, some plants collected in the municipalities of Alto Paraíso de Goiás and Cavalcante corresponded to a new species, which is described and illustrated herein. Additionally, the systematic position of this new species, its status of conservation, and its relationship with *Chamaecrista psoraleopsis* (H.S. Irwin & Barneby) H.S. Irwin & Barneby, a taxon most morphologically similar to it, are discussed.

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