



Article

A new species of *Prosopanche* (Hydnoraceae) from northeastern Brazil

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Abstract

Prosopanche caatingicola, a new species from seasonally dry forests of northeastern Brazil, is described. It was found as a root parasite of *Parapiptadenia zehntneri*, *Mimosa ophthalmocentra* and *Calliandra depauperata* (all Fabaceae; Mimosoideae). It is closely related to *P. bonacinai*, a species from northern Argentina, Rio Grande do Sul (Brazil) and Paraguay, and differs from that species mostly by smaller flowers, shape of its deeply bilobed staminodial appendages and anthers with 5–8 thecae.

Resumo

Prosopanche caatingicola, uma nova espécie de florestas sazonalmente secas do nordeste do Brasil, é descrita. Foi encontrada como parasita de raízes de *Parapiptadenia zehntneri*, *Mimosa ophthalmocentra* e *Calliandra depauperata* (Fabaceae; Mimosoideae). É provavelmente mais relacionada a *P. bonacinai*, uma espécie do norte da Argentina e áreas adjacentes do Brasil (estado do Rio Grande do Sul) e Paraguai. Ela difere desta espécie principalmente pelas flores menores, forma dos apêndices estaminodiais profundamente bilobados e anteras com 5–8 tecas.

Key words: Aristolochiaceae, caatinga, *Hydnora*, Neotropical flora, parasitic plants, Piperales

Introduction

Hydnoraceae Agardh (1821: 88) are a small family of root parasites belonging to Piperales (APG III 2009). It had been described as a group of fungi (“Hydnorinae”), even though the author recognised the floral nature of its reproductive structures (“*Fungus trifidi floris rudimento instructi*”; Agardh 1821: 88). The family includes only two genera and about 9–10 species. *Hydnora* Thunberg (1775: 69) is restricted to Africa and has six species (Bolin *et al.* 2011), whereas *Prosopanche* de Bary (1868: 267) includes only two or three American species (Cocucci 1965, Gómez & Gómez 1981).

Phylogenetic analyses based on molecular markers from nuclear (SSU and LSU ribosomal DNA) and mitochondrial (*atp1*, *cox1* and *matR*) genomes support Hydnoraceae as monophyletic and embedded within Aristolochiaceae *s. l.*, including Lactoridaceae (Nickrent *et al.* 2002, Barkman *et al.* 2007). This relationship with Aristolochiaceae is supported morphologically by the monochlamydeous perianth with three sepals, synsepalous and tubular calyx, inferior ovary, and a general trend to fusion of elements of androecium and gynoecium.

Cocucci (1965) presented the most comprehensive revision of *Prosopanche*. He reduced the seven described taxa to two species: *P. americana* (Brown 1845: 245) Baillon (1886: 27) and *P. bonacinai* Spegazzini (1898: 19–22). These two species are distributed in an arc from southern South America (in southern Brazil and Argentina) westward to Paraguay and northward to Peru. Gómez & Gómez (1981) later described *P. costaricensis* Gómez & Gómez (1981: 53–54) from Costa Rica, which represents a significant