



Article

Two new species of marsupial tree-frogs genus *Gastrotheca* Fitzinger, 1843 (Anura, Hemiphractidae) from the Brazilian Atlantic Forest

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ABSTRACT

Two new species of *Gastrotheca* are described from northeastern Minas Gerais and southern Bahia, in the Atlantic Forest of Brazil. Data on morphology, calls, mitochondrial, and nuclear DNA are provided. Allied to *G. fissipes* and *G. megacephala*, the new taxa provide evidence for a higher diversity of species of *Gastrotheca* than previously thought at the Atlantic Forest. The data also suggest that *G. pulchra*, another Atlantic Forest taxon, is more closely related to non-Atlantic Forest species than to the remaining analyzed Brazilian *Gastrotheca* species. This implies that the *Gastrotheca* at the Brazilian coastal forests have at least two independent origins.

Key words: Reserva Biológica da Mata Escura, Estação Ecológica Estadual de Wenceslau Guimarães, Jequitinhonha River, Atlantic Forest refuges.

INTRODUCTION

In their eighth volume of *Erpétologie Générale*, Duméril and Bibron (1841) described a new species of a tree-frog from Cuzco, Peru, which they attributed to the genus *Hyla*. The new species had a particularity that would distinguish it from all other congeners: it possessed a pouch on its back in which it carried its eggs. To this species, they gave the very appropriate name *Hyla marsupiata*. Two years later, Fitzinger (1843) removed this species from *Hyla* and created a new genus to accommodate this marsupial tree-frog, the genus *Gastrotheca*.

Almost 160 years after Fitzinger's (1843) work, *Gastrotheca* now comprises about 60 species distributed from southern Central America to northern Argentina and eastern South America (Duellman 1984). Its highest diversity is found along the Andean slopes and the tropical lowlands of northwestern South America. With fewer endemics, the genus also occurs along the Atlantic Forest of eastern Brazil (Duellman 1984; Caramaschi & Rodrigues 2007).

The taxonomic history of the Brazilian Atlantic Forest's *Gastrotheca* species begins when Boulenger (1888) described *Nototrema fissipes* from Pernambuco, in the northeastern coast. About two decades later, Andersson described *Nototrema microdiscus* from Paraná (Lönnerberg & Andersson 1910) and *N. fulvorufa* (Andersson 1911) from São Paulo. Ten more years had passed before Miranda-Ribeiro (1920) described *Gastrotheca ernestoi* from Rio de Janeiro; two decades later, A. Lutz and B. Lutz (1939) described *G. viridis* and *G. albolineata* from São Paulo and Rio de Janeiro states, respectively. After four and a half decades of taxonomic stasis, Duellman (1984) rendered all names but *G. fissipes* junior synonyms of *G. microdiscus*. A second reassessment based on newly collected specimens removed those species from *G. microdiscus* synonymy,