



On the taxonomic status of the Brazilian mouse *Calomys anoblepas* Winge, 1887 (Mammalia, Rodentia, Cricetidae)

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Abstract

We studied the holotype and only known specimen of the rodent *Calomys anoblepas* Winge, 1887, an enigmatic and putatively extinct pentalophodont sigmodontine found in the limestone caves of Lagoa Santa, Minas Gerais, Brazil. Comparisons with other sigmodontines suggest that *anoblepas* can be allocated under the genus *Juliomys* González, 2000 and probably represents an extinct form within it. Cranial characters that support our generic hypothesis include the combination of an interlacrymal depression behind nasals, anterior portion of interfrontal suture with incomplete fusion, zygomatic plate nearly vertical with almost nonexistent upper free border, anterior border of the mesopterygoid fossa located at the level of third molar hypoflexus, and brachyodont molars with crested coronal topography. *Juliomys* includes three living species of sylvan and arboreal mice endemic of the Atlantic forests. This genus is absent in contemporaneous rodent assemblage from Lagoa Santa area, suggesting different environmental conditions during Pleistocene deposition times.

Key words: Sigmodontinae, *Juliomys*, Lagoa Santa, Brazil

Introduction

The Quaternary fossil vertebrate faunas from Lagoa Santa, Minas Gerais, Brazil, captured the attention of zoologists since its discovering by the Danish naturalist Peter Wilhelm Lund in the early 19th century. Lund explored and studied fossil and recent animals from the limestone cave formations of Lagoa Santa and their surroundings between 1835 and 1845. Most of the collected specimens were sent and housed in Denmark, where most of them were re-studied by other Danish zoologists (Cartelle, 2002); Herluf Winge was the most prolific of them and the rodents of Lagoa Santa received a masterful memory in 1887. However, this contribution was partially ignored and many forms there described, both on fossil or recent material, were named again during the past century (see Massoia, 1980, Voss & Myers, 1991).

Today, most of the 25 species recognized by Winge (1887) as constituting the sigmodontine fauna of Lagoa Santa have been identified with living forms (e.g., Avila-Pires, 1960; Massoia & Fornes, 1965; Massoia, 1980; Voss & Myers, 1991; Voss & Carleton, 1993; Voss, 1993; Musser *et al.*, 1998; Pardiñas *et al.*, 2008a). However, a few still remain unstudied and this is the case of the poorly known sigmodontine taxon *Calomys anoblepas*. In his conception, Winge (1887) included in *Calomys* several unspecialized species with pentalophodont molars and mesolophids, excluding species now placed in *Calomys*, which he placed in *Hesperomys* instead. In fact, Winge (1887:44) considered *anoblepas* as closely related to his *Calomys longicaudatus* (= *Oligoryzomys nigripes*). Perhaps as a result of this observation, Trouessart (1898:527) moved *anoblepas* to *Oryzomys*, an opinion that does not changed during more than a century. After a briefly look on the original specimen that one of the authors (UFJP) made in 2000, a connection with *Oecomys* was suggested (Pardiñas *et al.* 2002:242). However, a deeper study of our notes and the direct inspection of several oryzomyines and thomasomyines convinced us about the incorrectness of this tenuous attribution. In this note we present a detailed study of the type specimen of *C. anoblepas*, comparing it with other Sigmodontinae and suggest its allocation under the genus *Juliomys* González, 2000.