A new species of the genus *Oxymycterus* (Mammalia: Rodentia: Cricetidae) from the vanishing Yungas of Argentina

J. PABLO JAYAT1, GUILLERMO D’ELÍA2,3, ULYSES F. J. PARDIÑAS3, M. DANIELA MIOTTI1 & PABLO E. ORTIZ4

1Laboratorio de Investigaciones Ecológicas de las Yungas, Universidad Nacional de Tucumán, Casilla de Correo 34, 4107 Yerba Buena, Tucumán, Argentina. E-mail: pjayat@proyungas.org.ar / E-mail: myoti@tuccbbs.com.ar
2Departamento de Zoología, casilla 160-C, Universidad de Concepción, Concepción, Chile. E-mail: guillermo@udec.cl
3Unidad de Investigación Diversidad, Sistemática y Evolución, Centro Nacional Patagónico, Casilla de Correo 128, 9120 Puerto Madryn, Chubut, Argentina. E-mail: ulyses@cenpat.edu.ar
4Cátedra de Paleontología, Facultad de Ciencias Naturales e Instituto Miguel Lillo, Universidad Nacional de Tucumán, Miguel Lillo 205, 4000 San Miguel de Tucumán, Argentina. E-mail: peortiz@uolsinectis.com.ar
5Corresponding author. E-mail: guillermo@udec.cl

Abstract

Morphological and molecular studies allowed us to recognize a new species of *Oxymycterus* from the southern end of the Yungas of Argentina. External morphologic traits allow the new species, *Oxymycterus wayku*, to be differentiated from *O. paramensis* and *O. akodontius*, the two currently recognized species for northwestern Argentina, as well as from the remaining species of the genus. Those traits include very dark general coloration, ears covered with nearly black hairs, a white spot on the chin, and claws on fore and hind feet long and robust. Cranial characteristics of the new species include wide and relatively shallow zygomatic notches, proportionally short incisive foramina and molar series, and a relatively robust braincase compared to *O. paramensis*. Phylogenetic analysis based on cytochrome b DNA sequences corroborates the distinctiveness of *Oxymycterus wayku* n. sp. Observed divergence values support this distinction. This new species is particularly important from a conservation viewpoint due to its rarity and the advanced level of alteration of its habitat.

Key words: hocicudo, new species, Northwestern Argentina, Sigmodontinae, taxonomy

Introduction

The rodent genus *Oxymycterus* Waterhouse, subfamily Sigmodontinae, is a diverse and geographically widespread group, with records ranging from central Argentina (Buenos Aires province) and southern Uruguay to the Amazon basin (Hershkovitz 1994). This genus was one of the first sigmodontine genera studied (see Azara 1802; Waterhouse 1837). However, as it is the case with most Sigmodontinae (D’Elía & Pardiñas, 2007), *Oxymycterus* remains a relatively poorly understood genus with regard to species limits, phylogenetic relationships, natural history, and distribution. Some of the described forms are only known from the vicinity of their type localities (e.g., *O. hucucha* Hinojosa, Anderson & Patton; *O. misionalis* Sanborn); for others, holotype was not designated in the original descriptions (e.g., *O. rufus* [Fischer]). Fortunately, some researchers (e.g., D’Elía et al. 2008; Gonçalves & Oliveira 2004; Hershkovitz 1994; Hoffmann et al. 2002; Oliveira 1998) have recently contributed to clarify the taxonomy of parts of the *Oxymycterus* radiation, providing a baseline for the advancement in the knowledge of its diversity and clarification of species limits.

At least 23 nominal forms have been proposed for the entities consistently assigned to this group (Oliveira 1998), but the number of species recognized has fluctuated greatly (e.g., Cabrera 1961; Honacki et al. 1982;