

# A new species of wood mouse of the genus *Apodemus* (Rodentia, Muridae) from Iran

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**Abstract.** The wood mouse *Apodemus avicennicus* n. sp. is described from a collection of small mammals assembled during a zoological survey in Yazd province in central Iran. A diagnosis and description of the new species are provided on the basis of morphological and karyological analyses. The new wood mouse is distinguished from all other *Apodemus* species by reduced dental measurements, the structure of the palatopterygoid region and a broader interorbital region. Comparison of our material with the other *Apodemus* species from Iran and the adjoining areas demonstrates that this is a distinct species.

**Kurzfassung.** Aus einer Aufsammlung von Kleinsäugetern, die während einer zoologischen Erhebung in der Provinz Yazd in Zentraliran gemacht wurde, wird die Waldmaus *Apodemus avicennicus* n. sp. als neue Art beschrieben. Für die Artdiagnose und die Beschreibung der Art werden morphologische und karyologische Merkmale verwendet. *Apodemus avicennicus* n. sp. unterscheidet sich von allen anderen *Apodemus*-Arten durch geringere dentale Maße, die Struktur des Pterygopalatinum und eine breitere Interorbitalregion. Der Vergleich unseres Materials mit anderen *Apodemus*-Arten aus dem Iran und angrenzenden Gebieten zeigt, dass es sich um eine eigenständige Art handelt.

**Key words.** *Apodemus avicennicus* n. sp., morphology, karyology, Yazd, Middle East.

## Introduction

Speciation in wood mice of the genus *Apodemus* has been the subject of growing attention and has been investigated using different approaches (e.g. VORONTSOV et al. 1992, MUSSER et al. 1996, MICHAUX et al. 2002, 2004, MEZHHERIN et al. 1989 & 1992, MEZHHERIN 1991, FILIPPUCI et al. 1989). However, the systematics have proved to be complex and, despite a large number of studies (MACHOLAN et al. 2001, KRYŠTUFEK 2002, LIBOIS et al. 2001, MEZHHERIN 1997a, 1997b, FILIPPUCI et al. 1996, FRAGUEDAKIS et al. 1983, XIAOMING et al. 2004), they are still inadequately understood. There are still geographic areas from which only fragmentary and incomplete information is available. One such area is Iran and the adjoining region.

ZIMMERMANN (1962) subdivided the genus *Apodemus* into three subgenera: *Apodemus*, *Sylvaemus* and *Alsomys*. Recently, MUSSER et al. (1996) have reviewed the *Apodemus-Sylvaemus* systematics and have divided the genus *Apodemus* into three groups: *Apodemus*, *Sylvaemus* and *Argenteus*. Finally SERIZAWA et al. (2000) confirmed this classification but introduced the *gurkha*-group for the Asiatic species *A. gurkha* Thomas, 1924 on the basis of molecular analyses. An allozyme analysis (MACHOLAN et al. 2001) produced some new distribution records and a range extension for both *A. hermonensis* Filippucci, Simson & Nevo, 1989 and *A. flavicollis* (Melchior, 1834) in eastern Turkey and western Iran, *A.*