

# New records of mammals from Iran with systematic comments on hedgehogs (*Erinaceidae*) and mouse-like hamsters (*Calomyscus*, *Muridae*)

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**Abstract.** We report on a collection of small mammals made during a zoological survey of the southeastern deserts and adjoining areas of Iran in the months of June and July, 1999. Two new distribution records marking a range extension for the genus *Calomyscus* are provided. Analyses of a partial sequence of the mitochondrial cytochrome-b (mtDNA cyt-b) region supports the recognition of the Long-eared Hedgehog *Hemiechinus auritus megalotis* as a subspecies of *H. auritus* while providing little resolution in the investigation of the relationships among three genera within the subfamily Erinaceinae. This is the first study to use mtDNA sequence data in a systematic review of these Iranian specimens.

**Kurzfassung.** Wir berichten über eine Kleinsäugetiersammlung, die von einer zoologischen Forschungsreise im Juni und Juli 1999 in die Wüsten im Südost-Iran und in benachbarte Gebieten stammt. Neue Fundorte für die Gattung *Calomyscus* stellen eine Erweiterung des bisher bekannten Verbreitungsgebietes dar. Die partielle Analyse von mitochondrialer DNA aus dem Cytochrom-b (mtDNA cyt-b) unterstützt die Ansicht, dass es sich bei *Hemiechinus auritus megalotis* um eine Subspezies des Langohrighels *H. auritus* handelt. Die DNA-Analysen brachten dagegen wenig Klarheit in die systematischen Beziehungen innerhalb von drei Gattungen der Subfamilie Erinaceinae. Dies ist die erste Studie, bei der mitochondriale DNA-Sequenzen iranischer Säugetiere für taxonomische Zwecke eingesetzt werden.

**Key words.** *Calomyscus*, *Hemiechinus*, Middle East, systematics, taxonomy, zoogeography.

## Introduction

For the first time in over 20 years, Iranian biologists from Tehran and Gorgan universities invited American and Russian scholars for a joint zoological expedition in their country. This paper is a preliminary report on the mammalian fauna surveyed in Iran during the period of June 4 through July 2, 1999. The areas visited were selected by our herpetologist colleagues, who were continuing their long-term phylogeographic studies of the amphibian and reptilian fauna of central Asia (MACEY et al. 2000). Localities visited were based, in part, on the detailed distribution maps from ANDERSON'S (2000) "Lizards of Iran". Collection sites for mammals occurred at or on the way to these localities. Our research activities had three primary goals: to begin what was hoped to be a long-term collaborative effort with local scientists, while providing lessons in trapping, tissue collecting, and specimen preparation to our Iranian colleagues; to identify the systematic, distributional, and ecological characteristics of the mammals encountered; and to redirect the attention of the international scientific community to the vast and complex fauna of this region.

The mammalian fauna of Iran, particularly that of the non-volant small mammals (insectivores and rodents) is poorly known. Our identifications of specimens collected are thus