A new species of mole-rat (Rodentia, Bathyergidae) from the Horn of Africa

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Abstract

A new species of mole-rat with a striking colour pattern is described from a single mounted specimen in the historical collection of the ‘Museo Civico di Zoologia’ in Rome, Italy. The lack of skull and original collecting data does not allow the gathering of firm evidences about its taxonomic relationships, geographical range and ecological preferences. This taxon is provisionally allocated to the recently created genus Fukomys Kock, Ingram, Frabotta, Honeycutt and Burda 2006 on the grounds of pelage colour pattern and geographical origin. All the available evidence, including label and other fragmentary historical data, supports Fukomys ilariae sp. nov. as originating from the Lower Shebelle region near Mogadishu, Somalia, historically known as Benadir. This discovery highlights the relevance for biodiversity conservation of the Horn of Africa and the need of further faunistic research to describe its fauna.

Key words: Historical collections, Museo Civico di Zoologia, Mammalia, Fukomys, Horn of Africa

Introduction

The mole-rat family Bathyergidae is endemic to sub-Saharan Africa. This family is commonly divided into two subfamilies, Bathyerginae (with grooved upper incisors) represented by the genus Bathyergus, and Georychinae (with ungrooved upper incisors), which includes Heterocephalus, Heliophobius, Georychus, Cryptomys and Fukomys (Woods & Kilpatrick, 2005). Two genera are restricted to southern Africa (Georychus and Bathyergus) and two other genera are distributed in eastern Africa (Heterocephalus and Heliophobius). Cryptomys and Fukomys are the most speciose and widely distributed genera with 16 species currently recognized (Ingram et al., 2004). Nevertheless, with the growing contribution of genetics, it is probable that more species will be formally described in the future (cf Kock et al., 2006; van Daele et al., 2007). A brief description of each genus is provided following De Graaf (1981), Kingdon (1974) and Meester & Setzer (1977): Bathyergus—upper incisors not extending behind toothrows, foreclaws much enlarged for digging; Heterocephalus—checkteeth either 3/3 or 2/2, fur reduced to a few scattered hairs, third digit of manus longer than fourth; Heliophobius—checkteeth at full dentition 6/6, hairs of pelage about 20–25 mm in length, palate not extending behind tooth row; Georychus—checkteeth at full dentition 4/4, black cap on head, white ring round ear, cheeks black and nose white; Cryptomys—checkteeth at full dentition 4/4, simplified to ring-pattern in adult, face not contrastingly coloured. Fukomys has been separated from Cryptomys (=Coetomys) on molecular evidence by Ingram et al. (2004), but it cannot be separated from Cryptomys on the basis of morphological and/or morphometric characters (Kock et al., 2006).

During the revision of part of the mammal collections stored at the “Museo Civico di Zoologia” of Rome (MCZR), one of us (S.G.) came across a mounted specimen of a mole-rat that could not be readily assigned to a known species. The absence of a skull and lack of detailed information on the origin of this specimen (MCZR 7016) greatly hampered its identification. However, the uniqueness of the skin colour pattern and the reliability of the few available historical data concerning its origin justified the description of a new species of mole-rat from the family Bathyergidae, with the aim also to encourage ad hoc efforts to secure more specimens. This record is noteworthy as north-east Africa is considered to be only inhabited by the naked-mole rat Heterocephalus glaber (Rüppell 1842).