





A New Giant Shrew Rat (Rodentia: Muridae: Murinae) from Flores, Indonesia and a Comparative Investigation of its Ecomorphology

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ABSTRACT. We describe a new genus and species of large-bodied murine from archaeological deposits at Liang Bua, a limestone cave in western Flores, East Nusa Tenggara, Indonesia. Among a large assemblage of murine remains, several mandibular elements recovered from mostly Holocene sediments show a distinct anatomy, with a long and robust jaw, massive proodont incisors, and relatively small molars. These morphological features are unusual among murines but most similar to terrestrial and carnivorous species of the Indo-Pacific, colloquially referred to as shrew rats (Philippines, Sulawesi) or moss mice (New Guinea), and indicate a potential carnivorous dietary adaptation, perhaps specializing in a vermivorous diet. The size of the mandible indicates that this murine is the largest shrew rat yet known. Although presumed extinct, targeted field research is needed to determine if this rat still lives on Flores today.

ABSTRAK [Bahasa Indonesia]. Kami mendeskripsikan genus dan spesies baru murine bertubuh besar dari deposit arkeologi Situs Liang Bua, sebuah gua kapur di Flores bagian barat, Nusa Tenggara Timur, Indonesia. Di antara himpunan besar sisa-sisa murine, beberapa elemen rahang bawah yang sebagian besar ditemukan dari sedimen Holosen menunjukkan anatomi yang berbeda, dengan rahang yang panjang dan kokoh, gigi seri proodont sangat besar, dan geraham yang relatif kecil. Ciri-ciri morfologi ini tidak biasa di antara murine, tetapi sangat mirip dengan spesies terestrial dan karnivora dari bahasa sehari-hari Indo-Pasifik yang disebut sebagai tikus celurut (Filipina, Sulawesi) atau tikus lumut (New Guinea) dan menunjukkan adanya potensi adaptasi diet karnivora, mungkin mengkhususkan diri dalam diet vermivora. Ukuran rahang bawah juga menunjukkan bahwa murine ini adalah tikus celurut terbesar yang pernah diketahui. Meskipun dianggap punah, penelitian lapangan yang ditargetkan diperlukan untuk menentukan apakah tikus ini masih hidup di Flores saat ini.

Keywords: Island Southeast Asia, Liang Bua, murine rodents, extinction, rodent anatomy

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