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A new species of *Murina* (Mammalia: Chiroptera: Vespertilionidae) from peninsular Thailand

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Abstract

A new species of *Murina* belonging to ‘*suilla*-group’ is described based on two specimens collected with harp traps in lowland evergreen forest in the southernmost part of peninsular Thailand. Morphology and molecular (mitochondrial COI) data suggest that the new species is most closely related to *M. eleryi*, which is currently known from Indochina. The new species, however, can be distinguished by the size and shape of the upper canine, the shape of the upper and lower premolars, and the colour of the ventral pelage. Additional data on bacular morphology, echolocation, ecology, and distribution are included.

Key words: Tube-nosed bat, new species, cryptic species, taxonomy, Thailand, Southeast Asia

Introduction

Until recently, the taxonomy of the genus *Murina* Gray was poorly understood, primarily because of the limited number of specimens represented in museum collections. Currently, 33 species are known to science, 18 of which have been described in the last eight years (Simmons, 2005; Csorba & Bates, 2005; Kuo *et al.*, 2006, 2009; Csorba *et al.*, 2007; Kruskop and Eger, 2008; Furey *et al.*, 2009; Csorba *et al.*, 2011; Eger and Lim, 2011; Ruedi *et al.* 2012; Francis and Eger, 2012). This rapid increase in our understanding of *Murina* diversity mainly results from an increased availability of voucher specimens for taxonomic study, a result of the greater use of harp traps in forest environments (Csorba *et al.*, 2011). Today’s species number, however, is still considered to be an underestimate due to the extensive cryptic diversity within this group (Francis *et al.*, 2010; Francis and Eger, 2012).

M. aurata Milne-Edwards was previously thought to be geographically widespread, ranging from the Indian Subcontinent to Indochina (Simmon, 2005). However, Furey *et al.* (2009) described a new species, *M. eleryi* from northern Vietnam, which closely resembles *M. aurata* but differs mainly in the size of upper canine (Furey *et al.*, 2009). Subsequent studies suggested that specimens previously regarded as *M. aurata* elsewhere in Southeast Asia should be referred to *M. eleryi*, whilst *M. aurata* may be restricted to the mountains around its type locality in Tibet (Francis *et al.*, 2010; Eger and Lim, 2011; Francis and Eger, 2012).

Between 2011 and 2012, a series of faunal surveys by research teams of the Halabala Wildlife Research Station and Prince of Songkla University were conducted in peninsular Thailand. Two specimens of *Murina*, which were identified as belonging to the ‘*suilla*-group’ and provisionally referred to *M. eleryi*, were collected in a harp trap set in secondary evergreen forest in the Halabala Wildlife Sanctuary, Narathiwat Province. The specimens were subsequently examined and compared with a range of other species in the collections of various museums. The new material exhibits a unique combination of external, craniodental and genetic differences, and is here described as a new species.

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