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A new species of arboreal forest-dwelling gecko (*Hemidactylus*: Squamata: Gekkonidae) from coastal Kenya, East Africa

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Abstract

A new species of *Hemidactylus*, *H. mrimaensis* **sp. nov.**, is described from coastal kaya forests of Kenya. This small-sized, arboreal gecko may be distinguished from its probable close relative, the sympatric *H. mabouia*, by its more slender habitus, golden color, small adult body length (maximum SVL 50 mm in females) and features of scalation including keeled dorsal tubercles in 11–14 longitudinal rows, pointed tubercles on tail larger than those on the dorsum, and 32–34 precloacal pores in males. This gecko may be endemic to the coastal forests and given the ongoing threats to this habitat, the species is of high conservation concern.

Key words: *Hemidactylus mrimaensis* **sp. nov.**, Gekkonidae, Kenya, coastal kaya forests, description

Introduction

Hemidactylus Oken, with over 120 recognized species, is one of the most species-rich genera of the family Gekkonidae and is widely distributed chiefly throughout the tropics and arid zones of Africa and Asia (Carranza & Arnold 2006, 2012; Sindaco *et al.* 2007). Several species are excellent colonizers and have become established elsewhere around the world in both tropical and temperate regions (Lever 2003; Kraus 2009). *Hemidactylus* is also one of the dominant gecko groups in Eastern Africa, with a major center of diversity in the Horn of Africa (Spawls *et al.* 2002; Largen & Spawls 2006; Bauer *et al.* 2010; Šmíd *et al.* 2013). Seventeen *Hemidactylus* species have been recorded from Kenya, the majority with restricted ranges in the northern frontier part of the country. Behaviorally, the majority are nocturnal and terrestrial, sheltering under rocks or logs (e.g., *Hemidactylus modestus* Günther, *H. isolepis* Boulenger, *H. tropidolepis* Mocquard, *H. squamulatus* Tornier, *H. barbouri* Loveridge, *H. citernii* Boulenger, *H. macropholis* Boulenger, *H. ruspolii* Boulenger, *H. albopunctatus* Loveridge, *H. funaiolli* Lanza, *H. robustus* Heyden and *H. barbierii* Sindaco, Razetti & Ziliani) and few are largely arboreal, such as *Hemidactylus mabouia* (Moreau de Jonnés), *H. angulatus* Hallowell, *H. platycephalus* Peters, *H. frenatus* Duméril & Bibron, and *H. bavazzanoi* Lanza (Loveridge 1947; Welch 1994; Spawls *et al.* 2002). Only *H. mabouia*, *H. angulatus*, *H. squamulatus* and *H. platycephalus* are relatively common and widespread across larger regions in the country (Spawls *et al.* 2002).

Herpetological surveys in poorly explored parts of Kenya continue to yield new species and/or new distribution records even in some of the known global biodiversity hotspots like the coastal forests (Myers *et al.* 2000; Myers 2003; Burgess *et al.* 2004). Some of the recent new country records include a garter snake, *Elapsoidea nigra* Günther (NMK [National Museums of Kenya]-S4032, S4071) and a limbless skink *Melanoseps pygmaeus* Broadley in the Shimba Hills National Reserve (NMK-L2805/1-4; L2899/1-6, L1463/1-3, L1344) and Gongoni forest (L1431), and a gliding lizard *Holaspis guentheri laevis* Werner in Kaya Jibana forest (NMK-L3232). All these were earlier known only from Tanzanian records (Broadley *et al.* 2006; Burgess *et al.* 2007).

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