Zootaxa 3985 (2): 203–218
www.mapress.com/zootaxa/

Article

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

http://dx.doi.org/10.11646/zootaxa.3985.2.2
http://zoobank.org/urn:lsid:zoobank.org:pub:084FF87D-0190-49FE-949C-9D9245019FFA

A new insular species of Rock Gecko (*Cnemaspis* Boulenger) from Pulau Langkawi, Kedah, Peninsular Malaysia

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Abstract

A new, diminutive species of Rock Gecko *Cnemaspis mahsuriae* **sp. nov.** of the *affinis* group, is described from Gunung Raya on Pulau Langkawi, Kedah, Peninsular Malaysia and is differentiated from all other species in the *affinis* group by having a unique combination of characters including a maximum SVL of 36.6 mm; keeled subtibials and ventrals; 21–24 paravertebral tubercles; no tubercles in the lateral caudal furrows; caudal tubercles not encircling tail; no precloacal pores; 23–26 subdigital lamellae on the fourth toe; no white ocelli in the shoulder region; no yellow postscapular band; and faint yellow bars on the flanks. *Cnemaspis mahsuriae* **sp. nov.** is a forest-dwelling species living in close sympatry or paraptry with the insular endemic *C. roticanai* Grismer & Chan. The Langkawi Archipelago harbors a unique mix of Malaysian and Indochinese taxa and the frequency of new discoveries from this group of islands is increasing.

Key words: *Cnemaspis,* Mashuri, Pulau Langkawi, Malaysia, new species, systematics

Introduction

Pulau Langkawi lies 35 km off the northwestern coast of the Thai-Malay Peninsula on the border between Thailand and Malaysia (Fig. 1). This unique geopolitical position is mirrored by its location within the Kangar-Pattani biogeographical transition zone that demarcates a climatic hinge between Malay-type evergreen rainforest and Thai-Burmese wet seasonal evergreen rainforest (Van Steenis 1950; Wikramanayake *et al.* 2000; Woofruff 2003). As such, Pulau Langkawi and its 106 satellite islands harbor a unique and rich amalgam of Indochinese and Sundaic taxa found nowhere else on the Thai-Malay Peninsula. This is especially true for its herpetofauna whose collective phylogenetic affinities are not confined to one side of the transition zone or the other (e.g. Grismer 2008a, 2011; Grismer & Norhayati 2008; Grismer *et al.* 2006, 2012, 2014, 2015). This, coupled with the topographical and environmental complexity of Pulau Langkawi contributes to its diversity of amphibians and reptiles manifesting a wide range of adaptive types whose numbers continue to grow (Grismer *et al.* 2015). To this, we add a new species of a small Rock Gecko (genus *Cnemaspis* Boulenger) represented by six specimens collected at 400–600 m in elevation on a northwest facing slope of Gunung Raya, the island's highest and centrally located mountain. We have determined that this new population represents a separate lineage of the *affinis* group (*sensu* Grismer *et al.* 2014) in that they bear the diagnostic characters of having a SVL ranging from 36.5–65.0 mm; 7–13

Accepted by A. Bauer: 12 Jun. 2015; published: 10 Jul. 2015