



## Another new Rock Gecko (genus *Cnemaspis* Strauch 1887) from Pulau Langkawi, Kedah, Peninsular Malaysia

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### Abstract

A new species of forest dwelling Rock Gecko, *Cnemaspis roticanai* **sp. nov.**, is described from the upper elevations of Gunung Raya, Pulau Langkawi, Kedah, Peninsular Malaysia. *Cnemaspis roticanai* is the second species of *Cnemaspis* described from Pulau Langkawi and is differentiated from all other Southeast Asian *Cnemaspis* in having a unique combination of color pattern and scale characteristics including keeled subtibials, ventrals, subcaudals, dorsal tubercles, and forearm scales; 25–27 paravertebral tubercles; a median row of enlarged, keeled subcaudals; five or six precloacal, pore-bearing scales in males separated medially by one or two non-pore-bearing scales; 26–29 subdigital lamellae on the fourth toe; no dark, longitudinal gular markings or blotches; no dark shoulder patch enclosing a white to yellow ocellus; and having a yellow to white, prescapular crescent. *Cnemaspis roticanai* is the latest species in a growing list of new taxa being discovered from the Langkawi Archipelago.

**Key words:** *Cnemaspis*, *roticanai*, Pulau Langkawi, Malaysia, new species, taxonomy

### Introduction

The archipelagos of Peninsular Malaysia support a surprisingly large number of endemic reptiles and serve to warehouse a significant portion of Malaysia's herpetofaunal diversity (e.g. Grismer 2006; Grismer & Chan 2008; Grismer & Norhayati 2009; Grismer *et al.* 2006a,b, 2008a,b, 2009; Grismer & Pan 2008). Nowhere is the potential for high diversity and endemism greater than in the Langkawi Archipelago, lying 35 km off the west coast of the state of Kedah in the Indian Ocean (Fig. 1). The Langkawi Archipelago is composed of 104 landbridge islands ranging in size from 0.01–328 km<sup>2</sup> and for the most part, are covered entirely by primary forest. The largest of these islands, Pulau Langkawi (328 km<sup>2</sup>), is also the most environmentally diverse. Its interior is mountainous and covered with mixed dipterocarp forest and its highest peak, Gunung Raya, reaches 881 m above sea level. Broad, flat, low-lying expanses fringe the interior mountains providing suitable relief for agricultural areas as well as lowland dipterocarp forest, coastal vegetation, and mangrove communities. However, in comparison to the much smaller Seribu Archipelago off the southeastern coast of Peninsular Malaysia, the Langkawi Archipelago is clearly depauperate in its herpetological composition, having 15 times fewer species per area of landmass than the islands of the Seribu Archipelago (Grismer & Norhayati 2009). Surprisingly, Pulau Langkawi and two of its satellite islands, Pulau Singa Besar and Pulau Tuba, are the only islands in the archipelago that have been surveyed for their herpetofauna (Ibrahim *et al.* 2006; Grismer 2008; Grismer & Norhayati 2009; Grismer *et al.* 2006a; Lim *et al.* 2010; Norhayati *et al.* 2007; Zimmerer 2004).

Grismer *et al.* (2006b) reported *Cnemaspis affinis* from Pulau Langkawi on the basis of photographic evidence (LSUDPC 1791–92) of two specimens collected from Gunung Raya and Grismer *et al.* (2009) described *C. monachorum* from a lowland, karst formation at Wat Wanaram. On 18, 19 and 21 September 2009, we collected four additional specimens of *Cnemaspis* from the exact collection site of LSUDPC 1791–