



A new species of *Cnemaspis* Strauch 1887 (Squamata: Gekkonidae) from Pulau Perhentian Besar, Terengganu, Peninsular Malaysia

L. LEE GRISMER^{1,2} & CHAN KIN ONN^{2,3}

¹Department of Biology, La Sierra University, 4500 Riverwalk Parkway, Riverside, California, 92515-8247 USA. E-mail: lgrismer@lasierra.edu

²Institute for Environment and Development (LESTARI), Universiti Kebangsaan Malaysia, 43600 Bangi, Selangor Darul Ehsan, Malaysia

³Forest Research Institute Malaysia, 52109 Kepong, Malaysia. E-mail: kin_onn@yahoo.com

Abstract

A new species of gekkoind lizard, *Cnemaspis perhentianensis* sp. nov., is described from Pulau Perhentian Besar, 21 km off the east coast of the state of Terengganu, Peninsular Malaysia. *Cnemaspis perhentianensis* is differentiated from all other Southeast Asian *Cnemaspis* in having a maximum SVL of 47.2 mm; the scales of the anterior portion of the forearm are keeled; the ventral scales are weakly keeled; there are no femoral pores; eight preanal pores; there is no linearly arranged row of tubercles on the flanks; there are paravertebral, longitudinal rows of caudal tubercles and lateral caudal rows anteriorly; the keeled subcaudals lack an enlarged median row; there are no large, shield-like subtibial or submetatarsal scales; 28–31 subdigital lamellae are on the fourth toe; distinct, large, dark spots occur on the neck and back that alternate with transverse, white markings; and there are white markings on flanks that alternate with dark blotches.

Key words: Malaysia, Pulau Perhentian Besar, Archipelago, Gekkonidae, *Cnemaspis perhentianensis*

Introduction

There are at least 30 species of *Cnemaspis* in Southeast Asia which range from southern Vietnam and southern Thailand, down the Malay Peninsula and eastward through Indonesia to Wallace's Line (Biawas, 2007; Grismer & Ngo 2007; Grismer, in prep.). Of these, eight are found in Peninsular Malaysia and its associated islands (Das & Grismer, 2003; Grismer & Das 2006; Manthey & Grossmann, 1997). All share a distinctive body plan of having broad, flattened heads; large, somewhat forward and upwardly directed eyes; flattened bodies; long, widely splayed limbs; and long, inflected digits. Such characters are suited for their scansorial life style on large, flat surfaces (usually rocks but sometimes trees) and for seeking refuge within crevice microhabitats. Many species are active during the day but often go unnoticed because they are cryptically colored and forage on shaded surfaces in forested areas. Thus, it is not surprising that new species of *Cnemaspis* continue to be discovered as new areas in Southeast Asia are being explored (Grismer & Ngo 2007; Grismer *et al.* 2008; Grismer in preparation) and reasonably well-explored areas are still serving as active centers for field research (Bauer & Das, 1998; Das, 2005; Das & Grismer, 2003; Das & Leong, 2004; Grismer & Das 2006).

Observations conducted on Pulau Perhentian Besar, Terengganu from 18–20 October 2007, and 11–12 March 2008 resulted in the discovery of five specimens of a small, diurnal, saxicolous gekkonid. All were allocated to the genus *Cnemaspis* because each had the combination of a flattened snout and body with relatively large eyes and round pupils; long, widely splayed limbs; and long, inflected digits with only slightly