



A new species of karst dwelling gecko (genus *Cnemaspis* Strauch 1887) from the border region of Thailand and Peninsular Malaysia

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Abstract

A new species of karst dwelling gecko, *Cnemaspis biocellata* **sp. nov.** is described from the border region in the Satun Province of southern Thailand and the state of Perlis in northern Peninsular Malaysia. *Cnemaspis biocellata* **sp. nov.** is differentiated from all other species of Southeast Asian *Cnemaspis* by having a maximum SVL of 40.1 mm; 6–10 supralabials; 5–7 infralabials; weakly keeled scales on anterior portion of forearm; smooth ventral scales; no femoral pores; 8–12 precloacal pores; smooth subcaudals with an enlarged median row; one or two cloacal tubercles; 29–37 subdigital lamellae on fourth toe; no dark bands encircling tail; two distinct, white, well defined, occipital ocelli; a black occipital band bordering a series of closely spaced, large, white to yellow spots which form a nuchal band and a small, black shoulder patch enclosing a single white to yellow ocellus. This species is restricted to the karst formations of the Nakawan Range spanning the Thai-Malaysian border and has been misidentified as *C. siamensis* by previous authors.

Key words: Malaysia, Thailand, Taxonomy, new species, Gekkonidae, *Cnemaspis biocellata*, karst, Nakawan Range

Introduction

In Southeast Asia, the gekkonid genus *Cnemaspis* Strauch, 1887 currently contains a minimum of 23 nominal species (Chan & Grismer, 2008; Grismer & Chan, 2008) whose disjunct distribution extends from southern Vietnam (Grismer & Ngo, 1997), southwestern Cambodia (Grismer *et al.*, 2008) and Thailand (Bauer & Das, 1998), southward through the Malay Peninsula and its associated islands (Das & Leong, 2004; Das & Grismer, 2003; Grismer & Chan, 2008; Grismer & Das, 2006) to Singapore, Sumatra, Borneo and their associated islands (Das, 2005; Das & Bauer 1998). Despite the diversity and wide, fragmented distribution of this genus, all its species share a general body plan of having a broad, flattened head; large, somewhat forward and upwardly directed eyes with round pupils; a flattened body; long, widely splayed limbs; and long, inflected digits. Such characters are suited for a scansorial life style on large, flat surfaces (usually rocks but sometimes trees) and for seeking refuge within crevice microhabitats. Although these species are generally nocturnal, many are also abroad during the day in microhabitats under low illumination such as the shaded surfaces of large rocks and tree trunks. This secretive, scansorial life style has undoubtedly contributed to the basic body plan of this genus as well as to its complicated taxonomic history (Bauer & Das, 1998; Das, 2005; Dring,