



## A new species of karst dwelling *Cnemaspis* Strauch 1887 (Squamata: Gekkonidae) from Sarawak, Borneo

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### Abstract

A new species of karst dwelling *Cnemaspis* is described from western Sarawak, Malaysia on the island of Borneo. *Cnemaspis paripari* **sp. nov.** is presumably endemic to the karst outcroppings which extend approximately 4.2 km between Gua Angin and Gua Pari-pari in the district of Bau. It is the only species of Southeast Asian *Cnemaspis* with a median, subcaudal row of bead-like scales and whose adult males have a bright yellow head and a bright yellow regenerated tail. *Cnemaspis paripari* **sp. nov.** differs markedly from the other three species of Bornean *Cnemaspis* in aspects of size, squamation, and coloration and its presence underscores the potential unrealized diversity of this genus in Borneo as compared to Peninsular Malaysia.

**Key words:** *Cnemaspis*, *paripari*, Borneo, karst, new species, taxonomy

### Introduction

Within the last six years, geckos of the Southeast Asian genus *Cnemaspis* (*sensu* Bauer *et al.* 2007) have undergone extensive taxonomic revision resulting in the description of four new species from Vietnam (Grismer and Ngo 2007); one new species from Cambodia (J. Grismer *et al.* 2010); and 11 new species from Peninsular Malaysia and its associated archipelagos (Chan & Grismer, 2008; Das & Grismer 2003; Grismer & Chan, 2008; Grismer & Das, 2006; Grismer *et al.* 2008a,b; Grismer *et al.* 2009). Descriptions of four new species from Thailand, a new species from Laos, a new species from Vietnam, and three additional species from Peninsular Malaysia are currently underway (Grismer *et al.* in prep.). Overlooked in this taxonomic resurgence has been the island of Borneo which to date, is known to have only three species of *Cnemaspis* (Das & Bauer 1998). This stands in stark contrast to nearby Peninsular Malaysia which has a lower overall lizard diversity (Das & Norsham, 2007) but has at least 19 (16 described, three undescribed) species of *Cnemaspis*, 11 of which were described within the last six years (see previous references).

In January 2009, an animal importer/exporter in Kuala Lumpur, Malaysia alerted us to four small geckos brought to him by a bird collector from Sarawak. The lizards were found on karst formations associated with Gua Angin and Gua Pari-pari, caves in western Sarawak in the district of Bau near the border of Kalimantan, Indonesia (Fig. 1). We immediately recognized these lizards as belonging to the genus *Cnemaspis* in having broad, flattened heads; large, somewhat forward and upwardly directed eyes with round pupils and no eyelids; flattened bodies; and long, widely splayed limbs with long, inflected digits. However, we could not assign them to any of the three Bornean species nor to any other species of *Cnemaspis* from Southeast Asia. To confirm the provenance of these specimens and to acquire baseline natural history data we visited Gua Angin and Gua Pari-pari the following month and were able to confirm the presence of this undescribed species at