



Cyrtodactylus dumnuui (Squamata: Gekkonidae), a new cave-dwelling gecko from Chiang Mai Province, Thailand

AARON M. BAUER^{1,7}, KIRATI KUNYA², MONTRI SUMONTHA³, PIYAWAN NIYOMWAN⁴,
OLIVIER S.G. PAUWELS⁵, LAWAN CHANHOME⁶ & TUNYAKORN KUNYA²

¹Department of Biology, Villanova University, 800 Lancaster Avenue, Villanova, Pennsylvania 19085, USA

²Nakhonratchasima Zoo, 111 M.1, Ratchasima-Pak Tongchai Rd., Chaimongkol, Muang Nakhonratchasima 30000, THAILAND

³Ranong Marine Fisheries Station, 157 M. 1, Saphan-Pla Road, Paknam, Muang Ranong 85000, THAILAND

⁴National Park, Wildlife and Plant Conservation Department, 61 Phaholyothin Rd., Ladyao Jatujak, Bangkok 10900, THAILAND

⁵Département des Vertébrés Récents, Institut Royal des Sciences naturelles de Belgique, 29 Rue Vautier, B-1000 Brussels, BELGIUM

⁶Queen Saovabha Memorial Institute, Thai Red Cross Society, 1871 Rama IV Road, Bangkok 10330, THAILAND

⁷Corresponding author

Abstract

A new cave-dwelling species of *Cyrtodactylus* is described from Chiang Mai Province in northern Thailand. *Cyrtodactylus dumnuui* **sp. nov.** may be distinguished from all other congeners by the possession of a series of enlarged femoral scales, disjunct precloacal and femoral pores in males (minute precloacal pores variably present in females), a relatively high number (18–22) of closely spaced, regularly arranged dorsal tubercle rows, well-defined non-denticulate ventrolateral folds, transversely enlarged subcaudal plates, and a color pattern of approximately six pairs of alternating light and dark transverse bands on the trunk. It is the nineteenth member of the genus recorded from Thailand and the eighth Thai *Cyrtodactylus* known to be a facultative troglophile.

Key words: Thailand, Chiang Mai, Reptilia, Gekkonidae, *Cyrtodactylus dumnuui*, new species, taxonomy, cave-dwelling

Introduction

Bent-toed geckos of the genus *Cyrtodactylus* Gray are the most species-rich of all gekkotan genera, with approximately 120 species. Roughly half of these have been described in the last decade (Uetz 2010). The greatest rate of new discovery in the group has been in Southeast Asia. For example, extensive recent work in Vietnam has revealed nineteen, mostly endemic species, many associated with karst substrates or limestone caves (e.g., Nazarov *et al.* 2008; Ngo 2008; Ngo & Bauer 2008; Ngo *et al.* 2008; Ziegler *et al.* 2010 and references therein). In Thailand Bauer *et al.* (2002) recognized 13 species of *Cyrtodactylus*. Another five species have subsequently been described from diverse localities around the country (Bauer *et al.* 2003; Pauwels *et al.* 2004; Bauer *et al.* 2009; Sumontha *et al.* 2010), including several from limestone caves (see Sumontha *et al.* 2010). We here describe another new Thai gecko from an area of limestone caves in the northwestern province of Chiang Mai.

Material and methods

The following measurements were taken with digital calipers to the nearest 0.1 mm following the methods of Bauer (2002, 2003): CrusL: crus length; EarL: ear length; EyeEar: eye to ear distance; ForeaL: forearm length; HeadH: head height; HeadL: head length; HeadW: head width; Internar: internarial distance; Interorb: interorbital distance; NarEye: nares to eye distance; OrbD: orbital diameter; SnEye: snout to eye distance; SVL: snout-vent length; TailL: tail length; TailW: tail width; TrunkL: trunk length. Basal subdigital lamellae