

A new red-eyed *Gekko* (Reptilia: Gekkonidae) from Kanchanaburi Province, Thailand

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Abstract

A new species of gekkonid lizard, *Gekko nutaphandi*, is described from Kanchanaburi Province in central western Thailand. It is a member of the large-bodied *Gekko gecko* group and within this group is probably most closely related to *G. siamensis* Grossmann & Ulber, 1990 with which it shares a similar dorsal pattern of transverse series of white spots on a drab background. It differs from *G. siamensis* in its greater number of precloacal pores, lower number of dorsal tubercle rows, and in having red (versus green) eyes. Comparisons are also made with several other nominal *Gekko* species currently synonymized with *G. gecko* and with undescribed, but well-characterized “forms” of *G. gecko*. The new species is one of many recently described Southeast Asian geckos that appears to be restricted to limestone habitats and their surroundings.

Key words: *Gekko*, Gekkonidae, Thailand, description, *Gekko gecko* group, limestone

Introduction

Geckos of the genus *Gekko* Laurenti, 1768 are members of a relatively large, putatively monophyletic group of lizards that also includes *Lepidodactylus* Fitzinger, 1843, *Luperosaurus* Gray, 1845, *Pseudogekko* Taylor, 1922, and *Ptychozoon* Kuhl & van Hasselt, 1822 (Kluge 1968; Russell 1972; Bauer *et al.*, unpublished). The genus *Gekko* itself is species rich (38 species) and is generally characterized by regional endemism across its broad range in tropical Asia. Diversity is particularly high in the Philippines (Brown & Alcala 1978; Gaulke 2003; Rösler *et al.* 2006; Brown *et al.* 2008) and China (Zhou *et al.* 1982; Zhao *et al.* 1999; Du *et al.* 2002; Zhou & Wang 2008). More widespread species of *Gekko* may, in fact, represent complexes of cryptic species. The broadly distributed *G. vittatus* Houttuyn, 1782, for example, is believed to comprise several similar, but specifically distinct taxa (Crombie & Pregill 1999), and *G. melli* Vogt, 1922 has recently been removed from the synonymy of the widespread *G. subpalmatus* Günther, 1864 (Rösler & Tiedemann 2007), whereas several new species have been recognized in the *G. hokouensis* group (Toda *et al.* 2008). Likewise, *G. verreauxi* Tytler, 1864 was resurrected from the synonymy of *G. smithii* Gray, 1842 and *G. taylori* Ota & Nabhitabhata, 1991 (synonym of *G. siamensis* Grossmann & Ulber, 1990) was described, in part, on the basis of its chromosomal distinctiveness from other populations then considered to be *G. smithii* (Ota 1989; Ota & Nabhitabhata 1991).

Substantial geographic variation has also been reported in another widespread *Gekko* species, *G. gecko* (Linnaeus, 1758). As currently recognized, the species as a whole is distributed from Nepal, India and Bang-