

Article



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A new forest-dwelling gecko from Phuket Island, Southern Thailand, related to Cyrtodactylus macrotuberculatus (Squamata: Gekkonidae)

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Abstract

We describe a new sylvicolous *Cyrtodactylus* Gray from Phuket Island, southwestern peninsular Thailand, having a banded pattern, precloacal groove, continuous series of enlarged pore-bearing femoro-precloacal scales, and strongly developed tuberculation—characters that distinguish it from all congeneric taxa except *C. macrotuberculatus* Grismer & Ahmad, 2008 from Peninsular Malaysia, from which it can be separated mainly by having three instead of four dark bands between the limb insertions and a precloacal groove in females.

Key words: Thai-Malay Peninsula, Khao Phra Thaeo Non-hunting Area, insular endemism, *Cyrtodactylus phuketensis* sp. nov.

Introduction

Within the framework of our ongoing taxonomic and zoogeographical review of the herpetofauna of peninsular Thailand (see Grismer et al. 2010; Pauwels et al. 2004; Sumontha et al. 2011; Grismer et al. in prep.), we visited the forested areas of Phuket Island, one of the most popular tourist destinations of Thailand. Although most of the forested areas of the island have suffered much from anthropogenic disturbance and have been replaced by human settlements, tourism infrastructure, and agricultural plantations, some patches of primary and mature secondary forest remain, especially in the center of the island from where two presumably endemic squamate species were recently described (Das & Leong 2004; Sumontha et al. 2011). Although the snake fauna of the island benefitted from some dedicated surveys in the 1970s (Frith 1977, 1978), the lizard fauna has received little attention thus far (Pauwels & Bauer 2001; Leong et al. 2003), and we hence made efforts here to contribute to the inventory of the island's lizard fauna. In the Khao Phra Thaeo Non-hunting Area and its direct surroundings, we collected a series of Cyrtodactylus which, by their banded pattern, their possession of a precloacal groove and their very strong tuberculation, show obvious affinities with C. macrotuberculatus Grismer & Ahmad, 2008, originally described from the Peninsular Malaysian island of Langkawi but which has since been found in several localities in northwestern mainland Peninsular Malaysia from Perlis and Kedah states (Grismer 2011). We thoroughly investigated possible morphological differences between them and found that, while morphologically closely related, they are clearly distinguishable.

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