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Acanthosaura phuketensis (Squamata: Agamidae), a new long-horned tree agamid from southwestern Thailand

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Abstract

We describe a new lowland forest-dwelling species of the genus *Acanthosaura* from Phuket Island and the Phuket mountain range in southwestern Thailand. *Acanthosaura phuketensis* **sp. nov.**, the 11th species in the genus, seems most closely related to *A. crucigera* from Myanmar and western Thailand and *A. cardamomensis* from the Cardamom Mountains, but can be differentiated from them by a combination of morphological and coloration characteristics. This new discovery stresses the importance of preserving the last forest patches remaining on Phuket Island, home to three other squamate endemics.

Key words: Thai-Malay Peninsula, Phuket mountain range, Phuket Island, Khao Phra Thaeo Non-hunting Area, Khao Lak–Lam Ru National Park

Introduction

The genus *Acanthosaura* Gray includes ten currently recognized species, and globally extends from northeastern India, east to southern China including Hainan Island, and south, through the Indochinese and Thai-Malay peninsulas, to Sumatra, and the Anambas and Natunas Archipelagos (Wood *et al.* 2010; Ananjeva *et al.* 2011). Phylogenetic studies (Kalyabina-Hauf *et al.* 2004, Ananjeva *et al.* 2008) showed that the genus was in need of revision as it included several undescribed and cryptic species as revealed by molecular data. Until the present Century, the most widespread species, *Acanthosaura crucigera* Boulenger, 1885, whose type locality is Tavoy in Myanmar, was believed to extend from Myanmar east through Thailand, Cambodia, and southward to Peninsular Malaysia. However, populations from eastern Thailand and Cambodia have been shown to belong to a distinct species, *A. cardamomensis* Wood, Grismer, Grismer, Neang, Chav & Holden, 2010 (Wood *et al.* 2010; Pauwels & Iskandar 2010). In addition, Wood *et al.* (2009) and Grismer (2011) have indicated that populations from southern Thailand and Peninsular Malaysia might actually belong to five species, all related to, but distinct from, *A. crucigera*. So far only two of them were named: *A. bintangensis* Wood, Grismer, Grismer, Norhayati, Chan & Bauer, 2009 and *A. titiwangsaensis* Wood, Grismer, Grismer, Norhayati, Chan & Bauer, 2009.

Geographically situated south of the distribution of populations regarded as belonging to true *A. crucigera* and west of these five species mentioned above, is a population with extremely long cephalic horns and dorsal spines found in Phuket Island, southwestern Thailand, that has been referred in the literature as *A. cf. crucigera*