



## A new species of the genus *Lygosoma* Hardwicke & Gray, 1827 (Squamata: Scincidae) from northeastern Cambodia, with an updated identification key to the genus *Lygosoma* in mainland Southeast Asia

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### Abstract

We describe a new species of the genus *Lygosoma* from northeastern Cambodia based on a single voucher specimen collected from Veun Sai Proposed Protected Forest, Veun Sai District, Ratanakiri Province. *Lygosoma veunsaiensis* **sp. nov.** is differentiated from all congeners occurring in mainland Southeast Asia by the combination of the following characters: outer ear opening absent; supranasals distinct and separated from each other by frontonasal; supranasals not fused with nasals; midbody scales in 22 rows; fontoparietals paired; five supralabials; a light stripe present on outer edge of the dorsum; and a dark dorsolateral stripe present, from behind the eye to the tail. A key to the Southeast Asian mainland species of *Lygoma* is provided.

**Key words:** taxonomy, *L. veunsaiensis* **sp. nov.**, Veun Sai Proposed Protected Forest, Ratanakiri Province, Indochina

### Introduction

The genus *Lygosoma* Hardwicke & Gray, 1827 currently includes 40 species and is distributed from Cook Island of Australia through Indonesia, Philippines and mainland Southeast Asia and the Indian Subcontinent to Central Africa, though the assignment, especially of the African taxa stays questionable (Greer 1977; Wagner *et al.* 2009; Geissler *et al.* 2011). Members of this genus occur in fossorial or subfossorial habitats and they are usually found on terrestrial leaf litter in the forest areas up to 800 m a.s.l. (Das 2010). Morphologically, *Lygosoma* species are characterized by the following features: oblong head with scaly or transparent movable lower eyelid, elongated snout with fusion or presence of supranasals, single or paired frontoparietals, elongated body with snout to vent length from 41 to 170 mm, short reduced limbs, relatively long tail, smooth or keeled subcycloid scales, and outer precloacals overlapping the inner precloacals (Taylor 1963; Greer 1977; Lim 1998; Das 2010). Sixteen species are currently recorded from Southeast Asia (Shreve 1940; Nguyen *et al.* 2009; Das 2010; Geissler *et al.* 2011) of which three are known from Cambodia: *L. bowringii* (Günther, 1864), *L. isodactylum* (Günther, 1864), and *L. quadrupes* (Linnaeus, 1766) (Stuart *et al.* 2006; Stuart & Emmett 2006; Grismer *et al.* 2007a; Bezuijen *et al.* 2009, Das 2010; ), although an additional species from the country is currently being described (Grismer in prep.).

The herpetofauna of Cambodia is poorly known due to three decades of conflict which effectively prevented herpetological investigations until the late 1990s. Recent field studies have mainly focused on the Cardamom Mountains in the southwest (Daltry & Wüster 2002; Stuart & Emmett, 2006; Grismer *et al.* 2007a,b; 2008a,b; 2010; Wood *et al.* 2010; Neang *et al.* 2010, 2011), with fewer studies undertaken in the lowlands and hills of central Cambodia (Bezuijen *et al.* 2009; Hartmann *et al.* 2009; 2010) and uplands in the country's east and northeast (Stuart *et al.* 2006, 2010; Rowley *et al.* 2010). The latter region is bordered to the east and north by Vietnam and Laos, respectively, and includes the Veun Sai Proposed Protected Forest, a 55,000 ha area located in the Veun Sai