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The Rediscovery of *Sphenomorphus malayanus* Doria, 1888 (Squamata: Scincidae) from the Titiwangsa Mountain Range of Peninsular Malaysia and its re-description as *S. senja* sp. nov.

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Abstract

The discovery of an additional specimen of *Sphenomorphus malayanus* Doria, 1888 from Gunung Brinchang, Cameron Highlands, Pahang in Peninsular Malaysia reveals that it is not conspecific with the type specimen from Gunung Singgalan, West Sumatra, 600 km to the south. The new specimen and an additional specimen previously collected from Gunung Gerah, Perak, Peninsular Malaysia, 56 km to the north, are described here as the new species *S. senja* sp. nov. and differ from *S. malayanus* by having a larger SVL (60.0–65 mm versus 53 mm); a deeply recessed ear as opposed to a shallow tympanum; 72 or 73 versus 76 paravertebral scales; eight or nine superciliary scales as opposed to 10; and the posterior-most superciliary scale being large as opposed to small. Cameron Highlands is unique among other upland areas in Peninsular Malaysia in that it harbors an unprecedented number of closely related ecological equivalents living in close sympatry or syntopy.

Key words: Cameron Highlands, Peninsular Malaysia, *Sphenomorphus*, Sympatry, Syntopy

Introduction

In June of 1878, Dr. V. Orlando Beccari collected a single skink from “monte Singalug” [=Gunung Singgalang] in West Sumatra which was subsequently described by Doria (1888) as the new species *Lygosoma malayanum*. Weber (1890) collected an additional specimen from the same region at Alahan pandjang [=Panjang] at 1500 m above sea level (which must have been on Gunung Singgalang as they are currently in the same district in West Sumatra), stating that this species “seems to be a mountain species”. Boulenger (1912) was the first to report *Lygosoma malayanum* from Peninsular Malaysia, stating that two specimens had been obtained by Mr. J. N. Sheffield at 6,900 feet on Gunung Grah [=Gunung Gerah] in the Titiwangsa Mountain Range, Perak (Fig. 1) during August of 1905 (only one of which exists in the British Museum, the whereabouts of the other specimen is unknown) and that another specimen was listed in the Kuala Lumpur Museum (whereabouts also currently unknown). De Rooij (1915) conflated the descriptions of Doria (1888), Weber (1890), and Boulenger (1912) in listing this species from “Malacca” in addition to “Mt. Singalang” [=Gunung Singgalang] and Alahan Pandjang, [West] Sumatra. She was presumably summarizing Boulenger’s (1912) locality records for Peninsular Malaysia in that during the late 1800s and early 1900s, the terms Malacca, Malakka, and Melaka referred to the entire western coast of the Thai-Malay Peninsula (see Grismer 2011:499 for an explanation) which would encompass the locality records of Boulenger (1912). Smith (1937) continued to recognize *L. malayanum* as part of the herpetofauna of Malaysia as did Mittleman (1952) although the latter author transferred this species into the genus *Sphenomorphus*.

Based on fieldwork by Tran *et al.* (1981) in northern Vietnam from 1956 to 1976, their team reported *Sphenomorphus malayanum* from Thai Nguyen Province in the vicinity of Tam Dao. Although Bobrov (1995) followed this taxonomy, Nguyen *et al.* (2009) noted that the use of *S. malayanum* by Tran *et al.* (1981) was likely based on a misidentification of *S. rufocaudatus* Darevsky & Nguyen. This opinion was subsequently followed by

(Laidlaw) just meters apart in the same stream and *A. sarawacense* (Günther) and *Rhabdophis chrysargos* (Schlegel) are known from the same areas; the paratid Slug Snakes *Asthenodipsas vertebralis* (Boulenger) and *A. lasgalenensis* Loredó, Wood, Quah, Anuar, Greer, Norhayati, & Grismer occur in Tanah Rata along the same trails; we recently discovered that the arboreal viperid snakes *Popeia fucata* (Vogel, David, & Pauwels) and *P. nebularis* (Vogel, David, & Pauwels) both occur in Cameron Highlands; we have discovered new species of the agamid lizard genera *Pseudocalotes* **sp. nov.** and *Bronchocela* **sp. nov.** (Grismer *et al.* in prep.) living in near syntopy with *P. flavigula* (Smith) and *B. cristatella* (Kuhl), respectively; Wood *et al.* (2009) reports that the agamid lizards *Acanthosaura armata* (Hardwicke & Gray) and *A. titiwangsaensis* Wood, Grismer, Grismer, Chan, Norhayati & Bauer both occur in Cameron Highlands; and the nearly limbless, fossorial scincid lizards *Larutia trifasciata* (Tweedie) and *L. miodactyla* (Boulenger) are both known from Tanah Rata (Grismer 2011). Other upland localities such as Bukit Larut in the Banjaran Bintang of Perak; Fraser's Hill and Genting Highlands in the Banjaran Titiwangsa of Pahang; Gunung Benom, Pahang; and Gunung Lawit and Gunung Tebu, Terengganu are generally mountain tops or crests that have relatively limited areas. As such they lack the environmental diversity seen in the large upland plateau of Cameron Highlands which harbors a range of habitats from mossy forests to large, open canopy river systems—systems that are absent from the other regions.

Despite the fact that Cameron Highlands has been a focal point for Malaysian herpetology since the late 1800s (for review, see Grismer 2011), many new species are still being found on this plateau. Since 2009, two new species of frogs (Matsui 2009; Matsui *et al.* 2009), four new species of lizards (Wood *et al.* 2009; Zug 2010; Grismer *et al.* 2012, 2014), and one new species of snake (Vogel *et al.* 2004) have been described. We are currently in the process of describing two more species of frogs (Chan *et al.* in prep.), three more species of lizards (Grismer *et al.* in prep.), and five more species of snakes (Quah *et al.* in prep). This is all in the face of continuing degradation and pollution of its water systems and the rapid conversion of its forest to agricultural fields, housing, and hotels. Hopefully understanding the true nature of the biodiversity of the Cameron Highlands plateau will aid conservationists in convincing the appropriate personnel that they are irrevocably destroying their natural heritage for the sake of strawberries and tea.

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