



Peninsular Malaysia's first limbless lizard: a new species of skink of the genus *Larutia* (Böhme) from Pulau Pinang with a phylogeny of the genus

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Abstract

A new species of the scincid genus *Larutia*, *L. penangensis* **sp. nov.**, from Pulau Pinang, Peninsular Malaysia is separated from all other congeners by having the unique characteristics of the complete absence of limbs, four supralabials, large body scales, and no banding or striping pattern. Additionally, it has the following unique combination of characters that further separates it from all congeners: a single presubocular; separated nasals; paired frontoparietals; small, widely separated prefrontals; no supranasals or postnasal; two postsupralabials; and large, posterior chinshields that contact the infralabials. A molecular phylogeny based on one mitochondrial and two nuclear genes from all species of *Larutia* from Peninsular Malaysia indicates *L. penangensis* **sp. nov.** is most basal and that *L. seribuatensis* is the sister lineage to a clade containing *L. miodactyla* and the sister species *L. trifasciata* and *L. larutensis*. Consistencies and inconsistencies between this phylogeny and a previously proposed morphological phylogeny are discussed.

Key words: *Larutia*, *Larutia penangensis*, Malaysia, new species, Penang, Pulau Pinang, Scincidae, taxonomy, phylogeny

Introduction

Pulau Pinang (= Penang Island) is the largest island along the west coast of Peninsular Malaysia, encompassing approximately 330 square kilometers in area and reaching 830 meters in elevation at Penang Hill in the central ranges of Bukit Bendera. In 1786, it became the first British acquisition on the Malay Peninsula and for well over a century, the cool air of Penang Hill served as a retreat where Penang Island's colonialists could escape the hot, humid, coastal lowlands. During such retreats, a number of early naturalists (*i.e.* Cantor 1847; Flower 1896, 1899; Stoliczka 1870a,b,c, 1873) collected amphibians and reptiles and thus, Penang Hill became the type locality for a significant portion of Peninsular Malaysia's herpetofauna. Despite this auspicious historical legacy, Penang Hill has frustrated herpetologists for many years by harboring a number of species known only from one or two specimens collected well over a century ago. Notable among these are the skinks *Eutropis novemcarinata* (Anderson) (not seen on the island since the report of Flower 1896), *Lygosoma albopunctatum* (Gray) (first reported by Cantor 1847 but not confirmed until 1956 and not seen since then), and *Sphenomorphus anomalopus* (Boulenger) (not seen since its collection by Dr. J. G. Fischer around the year 1889). Therefore, it is not surprising that a new species of semi-fossorial skink recently found on Penang Hill has escaped detection for so long. Being that the specimen collected has an elongate, snake-like body; paired prefrontals; two loreals; separated nasals; three supraoculars; and