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Phylogenetic relationships of xenodermid snakes (Squamata: Serpentes: Xenodermidae), with the description of a new genus

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Abstract

Xenodermidae is a generally poorly known lineage of caenophidian snakes found in South, East and Southeast Asia. We report molecular phylogenetic analyses for a multilocus data set comprising all five currently recognised genera and including new mitochondrial and nuclear gene sequence data for the recently described *Stoliczkia vanhnuailianai*. Our phylogenetic results provide very strong support for the non-monophyly of *Stoliczkia,* as presently constituted, with *S. borneensis* being more closely related to *Xenodermus* than to the Northeast Indian *S. vanhnuailianai*. Based on phylogenetic relationships and morphological distinctiveness, we transfer *Stoliczkia borneensis* to a new monotypic genus endemic to Borneo, *Paraxenodermus* **gen. nov.** We also present new morphological data for *P. borneensis*.

Key words

Borneo, endemic, morphology, *Paraxenodermus* gen. nov., phylogeny, taxonomy

Introduction

The caenophidian snake family Xenodermidae Gray, 1849 includes five currently recognised genera, namely *Achalinus* Peters, 1869, *Fimbrios* Smith, 1921, *Parafimbrios* Teynié, David, Lottier, Le, Vidal & Nguyen, 2015, *Xenodermus* Reinhardt, 1836 and *Stoliczkia* Jerdon, 1870. *Achalinus* is the most speciose of these genera, with 19 currently recognised species, 10 of which were described in the past five years (Uetz et al. 2021). *Achalinus* spp. are distributed from north of 20° latitude in Vietnam, across south-east China and into central Japan (Fig. 1). *Fimbrios* comprises two species (Smith 1921; Ziegler et al. 2008), distributed in southern and central Laos and Vietnam,