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A new species of the genus *Smithophis* (Squamata: Serpentes: Natricidae) from southwestern China and northeastern Myanmar

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Abstract

A new species of natricid snake, *Smithophis linearis* **sp. nov.**, is described on the basis of a single recently collected specimen from Yingjiang County, Yunnan Province, People's Republic of China, and three historical specimens from Yunnan and from northeastern Myanmar. The new species is assigned to the genus *Smithophis* on the basis of its single internasal and single prefrontal shields, and on the basis of the results of phylogenetic analysis of mitochondrial cytochrome b DNA sequence data. The new species differs from its congeners in having the following combination of characters: temporal shields present, six or more circumorbital scales, and a distinctive colour pattern comprising regular, narrow, longitudinal dark and pale lines. Morphological and cytochrome b data are consistent with the recognition of *Smithophis* as distinct from the genus *Opisthotropis*. A revised key to the identification of the species of *Smithophis* is provided.

Key words: molecular phylogeny, Natricinae, *Opisthotropis*, *Smithophis linearis* **sp. nov.**, taxonomy

Introduction

Giri *et al.* (2019) recently erected the genus *Smithophis* Giri, Gower, Das, Lalremsanga, Lalronunga, Captain & Deepak to accommodate two species of natricine colubrid (or natricid in some classifications), namely *S. bicolor* (Blyth, 1854) and *S. atemporalis* Giri, Gower, Das, Lalremsanga, Lalronunga, Captain & Deepak, 2019. The members of *Smithophis* differ from those of the most similar genus *Opisthotropis* Günther, 1872 in having a single prefrontal (paired in some *Opisthotropis*), a single internasal, fewer than six supralabials on each side, and internasal(s) not or only slightly anteriorly tapered. The limited molecular phylogenetic data available to Giri *et al.* (2019) provided strong support for the monophyly of *Smithophis*, moderate to good support for the sister-group relationship between *Opisthotropis* and *Smithophis*, but only weak support for the monophyly of *Opisthotropis*.

During an expedition in Yingjiang County, Dehong Dai and Jingpo Autonomous Prefecture, Yunnan Province, China in 2015, a single specimen of natricine was found that was referable morphologically to *Smithophis* but which did not match with the two described species. This specimen closely resembles the historical, late 1800s and early 1900s specimens from Yunnan and from the Kachin Hills of Myanmar, reported as *S. bicolor* by Anderson (1879) and Wall (1925), respectively. Morphologically, these specimens are distinct from *S. bicolor*, and we herein describe them as a new species of *Smithophis*.