



A new species of hynobiid salamander (Urodela: Hynobiidae: *Pseudohynobius*) from Southwestern China

GANG WEI^{1,2,#}, JIAN-LI XIONG^{3,#}, MIAN HOU⁴ & XIAO-MAO ZENG^{5,6}

¹Institute of Entomology, Guizhou University, Guiyang 550025, Guizhou, China

²Department of Biology and Engineering of Environment, Guiyang University, Guiyang 550005, Guizhou, China

³Animal Science and Technology College, Henan University of Science and Technology, Luoyang 471003, China

⁴Sichuan Normal University, Chengdu 610041, Sichuan, China

⁵Chengdu Institute of Biology, Chinese Academy of Sciences, Chengdu 610041, Sichuan, China

⁶Corresponding author. E-mail: zengxm@cib.ac.cn

#These authors contributed equally to this work

Abstract

A new species of hynobiid salamander, *Pseudohynobius jinfo*, is described from Mt. Jinfo, Nanchuan County, Chongqing Municipality, southwestern China. The new species is unique in having a longer tail than in the other species of the genus. Other diagnostic characters include 8–9 vomerine teeth on each side, which distinguishes the new species from *P. flavomaculatus* and *P. kuankuoshuiensis*, and the presence of small yellow dorsal spots, and the fore and hind limbs merely meeting when adpressed, which distinguish the new species from *P. shuichengensis*. A species identification key for the genus *Pseudohynobius* is also provided.

Key words: Hynobiidae, new species, *Pseudohynobius jinfo*, long tail, vomerine teeth

Introduction

The genus *Pseudohynobius* (Urodela: Hynobiidae) was first described by Fei and Ye (1983). Ever since, the validity of the genus has been controversial (e.g., Fei and Ye 1983; Zhao and Hu 1984; Zhao and Adler 1993; Zhao and Wu 1995; Ikebe *et al.* 2000; Kuzmin and Thiesmeier 2001; Fei *et al.* 2006). Recent molecular work strongly supported the validity of the genus (Zeng *et al.* 2006) and seemingly settled the argument. Up to now, three species, *P. flavomaculatus* (Fei and Ye 1982), *P. shuichengensis* (Tian *et al.* 1998) and *P. kuankuoshuiensis* (Xu *et al.* 2007), have been described, and all of them are endemic to China.

Based on allozyme electrophoresis data and mitochondrial DNA sequence data, Zeng *et al.* (2006) suggested that the population of *P. flavomaculatus* from Mt. Jinfo is likely a cryptic species. After several trips to the area made in 2006, we managed to collect two adult specimens, adding to our collection of egg sacs and larvae samples obtained in 1956, 1990, and 2001. Morphological examination of these specimens confirmed the results of the molecular analyses. This study provides a full description of this new species. In addition, we construct a species identification key for the species of the genus *Pseudohynobius*.

Materials and methods

An adult male (CIB 85290), an adult female (CIB 85291), and two larvae (CIB 85292–85293) were examined in this study. Specimens were fixed in 10 % formalin and preserved in 70 % ethanol as described by Zhao and Adler (1993). Voucher specimens were deposited in the Chengdu Institute of Biology (CIB). The description