

Triplophysa qini, a new stygobitic species of loach (Teleostei: Nemacheilidae) from the upper Chang-Jiang Basin in Chongqing, Southwest China

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Triplophysa qini, a new stygobitic fish, is described from two subterranean pools (in the Wu-Jiang of the upper Chang-Jiang basin) located in Wulong and Fengdu counties, Chongqing City, Southwest China. It exhibits a concave distal margin of the dorsal fin and absence of nasal barbels; two characters that combined differentiate it from all congeners of the eyeless group except *T. qiubeiensis*. The new species differs from *T. qiubeiensis* in the number of branched dorsal-fin rays (9 vs. 8) and in the shorter head. The specific status of *T. qini* is confirmed by its significant sequence divergence for the cyt b gene with sampled congeneric species, particularly those coexisting in the mid-upper Chang-Jiang basin, and by its monophyly recovered in a cyt b gene-based phylogenetic analysis.

Introduction

The loaches genus *Triplophysa* include approximately 160 currently known species widespread in Central Asia, from Afghanistan and Baluchistan through the high Asian region to the Balkhash and Uvs-Nuur lakes, Outer Mongolia and China (Prokofiev, 2010; Kottelat, 2012; Fricke et al., 2022). Within their known range, these species inhabit lakes, rivers and streams (including subterranean waters of South China). In China, *Triplophysa* species are mainly distributed in the Qinghai-Tibet Plateau and its adjacent water bodies. A few species extend southeast to the plateau areas in

the middle and upper reaches of the Pearl River and the middle and upper reaches of the Yangtze River in Sichuan, Yunnan, Chongqing, Guizhou, Guangxi and Hunan provinces (Zhu, 1989; Huang et al., 2019; Zhang et al., 2019; Huang et al., 2020; Chen et al., 2021). Sixty three species of *Triplophysa* are presently known from South China where there is a wide range of karst landforms (Huang et al., 2019; Zhou, 2019; Chen et al., 2021). Among these, 36 are cave-dwelling species, 28 of which originally described after 2000. Two cave-dwelling species, *T. rosa* and *T. wulongensis*, have so far been reported from the Wu-Jiang, a tributary on the southern bank of the upper Chang-Jiang

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Received 18 November 2021

Revised 22 January 2022

Accepted 3 May 2022

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