

<http://dx.doi.org/10.111646/zootaxa.3905.3.7>
<http://zoobank.org/urn:lsid:zoobank.org:pub:47F7A700-B92C-44BE-99CC-AA1DB98ED4C7>

A new species of the genus *Triplophysa* (Nemacheilinae), *Triplophysa qilianensis* sp. nov., from Qinghai, China

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Abstract

A new nemacheilid loach species, *Triplophysa qilianensis*, is described from Heihe River in Haibei Tibetan Autonomous Prefecture, Qinghai, China. It can be distinguished from all other species of *Triplophysa* by the following combination of characters: body long and compressed; skin smooth, scaleless; head short (20.1–23.1% of stand length); head convex from the position of posterior nostrils; posterior chamber of air bladder completely degenerated; intestine short, bending in zig-zag pattern posterior to stomach; unbranched rays of pelvic fin ii; caudal fin forked, upper lobe and lower lobe equal in length; and pointed fin tips. A key to the known species of *Triplophysa* from the Heihe River is provided.

Key words: *Triplophysa*, new species, Heihe River, Qinghai, China

Introduction

The genus *Triplophysa* (Rendahl) as one of the largest groups of the family Nemacheilinae, with about 130 nominal species worldwide; more than 85% of these species are found in China (He *et al.* 2006; He *et al.* 2011; Ren *et al.* 2012; Froese & Pauly 2013). *Triplophysa* is known primarily from the Qinghai-Tibet Plateau and adjacent areas (Zhu 1989; Wu & Wu 1991), but is also distributed in North China and Central Asia. Species of *Triplophysa* are important components of fish fauna of Qinghai-Tibet Plateau.

Heihe River is part of Hexi inner drainages and originates from Qilian Mountain in Qinghai Province. A total of nine species of *Triplophysa* have been recognized in the Hexi inner drainages, but only two (*Triplophysa brevicauda* Herzenstein and *T. hsutschouensis* Rendahl) were collected from Qilian County (Zhao & Wang 1988; Zhu 1989; Wu & Wu 1991). In July 2010, loaches were collected from the western upper stream of Heihe River at Zhamashi Town, Qilian County of Haibei Tibetan Autonomous Prefecture, Qinghai Province, China. Following comparisons with other Heihe River species deposited in the Museum of the Northwest Institute of Plateau Biology, Chinese Academy of Sciences (NWIPB), these loaches were determined to represent a distinct species described herein.

Material and methods

Counts and measurements follow the methods of Kottelat (1990) and Prokofiev (2007). Measurements were made with digital calipers and recorded to 0.01 mm. Some other characteristics selected are listed as follows: lateral head length is from tip of snout to posterior-most bony point of opercle. Gill rakers refer to the count on the inner side of the first arch. Specimens examined are deposited in the collection of the Northwest Institute of Plateau Biology (NWIPB), Chinese Academy of Sciences, Xining. Abbreviations used in the text are: Co., county; ex., examined specimens; Prov., province; HL, lateral head length; SL, standard length.

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