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A brief review of *Triplophysa* (Cypriniformes: Balitoridae) species from the Tarim Basin in Xinjiang, China, with description of a new species

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Abstract

Recent fieldwork allows a revision of the loaches of the genus *Triplophysa* inhabiting the Tarim Basin in Xinjiang, China. Eleven species were previously recorded. *T. stewarti* is a new record. *Triplophysa papilloso-labiatus* should be regarded as a valid species name. *Triplophysa laterimaculata* **sp. n.** was collected from the Kezile River, a tributary of the Tarim River, Kashigar City, Xinjiang on August 22, 2004. The new species can be distinguished from its congeners by the following combination of the characters: body compressed posteriorly; origin of dorsal fin closer to caudal base than to snout tip; pelvic fin insertion below $2^{nd}-3^{rd}$ branched dorsal rays, fins extending beyond anus or nearly reaching anal fin origin; caudal fin slightly emarginate; body scaleless; lateral line complete; lips thick with strong furrows and papillae remarkable at mouth angle; anterior margin of lower lip covering anterior margin of lower jaw; intestine with 2 coils; free posterior portion of air bladder nearly equal to eye diameter, connecting to anterior encapsulated portion with long tube.

Key words: Triplophysa, new species, review, Tarim Basin, Xinjiang, China

Introduction

The genus *Triplophysa* (Rendahl 1933) is one of the most diverse lineages of the Nemacheilinae loaches comprising approximately 100 nominal species (Prokofiev 2004; Tang 2005). The Tarim River is the longest inland river in China, and fishes in the Tarim Basin have been investigated by many authors since Kessler (1874). Eleven valid species of *Triplophysa* have previously been recorded in the Tarim River system (Fang 1935; Jayaram 1981; Zhu 1989; Wu & Wu 1991; Prokofiev 2002): *T. microps* (Steindachner 1866), *T. stoliczkae* (Steindachner 1866), *T. ladacensis* (Günther 1868), *T. tenuis* (Day 1877), *T. yarkandensis yarkandensis* (Day 1877), *T. bombifrons* (Herzenstein 1888), *T. incipiens* (Herzenstein 1888), *T. stenura* (Herzenstein 1888), *T. orientalis* (Herzenstein 1888), *T. microphysa* (Fang 1935), and *T. zamegacephala* (Zhao 1985). Among our collections from the Tarim River in 2004, *T. stewarti* (Hora 1922) is a new record, and some specimens represent an undescribed species.

Material and methods

Counts and measurements follow Kottelat (1990). Some additional terms used are listed as follows: caudal peduncle width (**CPW**) is measured at the end of anal fin base; gill rakers refer to the count on the inner side