



# Article

urn:lsid:zoobank.org:pub:3692FAAA-71A3-4B34-B6B7-92941F1B3B09

## **A new species of the genus *Triplophysa* (Cypriniformes: Nemacheilidae), *Triplophysa longliensis* sp. nov, from Guizhou, China**

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### **Abstract**

A new species of nemacheilid loach, *Triplophysa longliensis*, is described from Yudonghe River, a small tributary of Pearl River in Guizhou Province, China. It can be distinguished from other valid *Triplophysa* loaches by the following combination of characters: body smooth and scaleless; head tapering; lips thin and smooth; posterior chamber of gas bladder highly developed, long, bag-shaped, tip reaching origin of pelvic fin; intestine short, bending in zigzag shape behind stomach; insertion of pelvic fin posterior to dorsal-fin origin; dorsal-fin origin closer to snout tip than to caudal-fin base; caudal fin deeply forked, upper lobe obviously longer than lower one; pelvic-fin tip reaching to anus.

**Key words:** *Triplophysa*; Guizhou; Pearl River; China

### **Introduction**

The genus *Triplophysa* Rendahl, 1933, is one of the largest groups in the family Nemacheilidae, including approximately 125 valid species, more than 85% of which are so far known from China (Froese & Pauly 2011; He 2008; Yang *et al.* 2012). It is known primarily from the Qinghai-Tibet Plateau and adjacent areas (Zhu 1989; Wu & Wu 1991), and distributed in the upper and middle Yangtze River, Nujiang River (upper Salween River), Lancangjiang River (upper Mekong River), Red River, Yellow River, and Pearl River drainages of China, upper Indus and Tigris River drainages of West Asia, and in river drainages of Central Asia as well (Zhu 1989; Zhou & Cui 1997; Prokofiev 2006). *Triplophysa* is uniquely distinguished by having a marked sexual dimorphism, males with an area of breeding tubercles between snout and eye on each side of head, and a thickened tuberculate pad on the dorsal surface of the outer broadened pectoral-fin rays (Zhu 1989).

In 2010, some medium-sized loaches were collected from a subterranean river of Pearl River basin at Baisheng village, Longli County, Guizhou Province, China. Through our examining, it represents a new species of genus *Triplophysa*. It is described herein and compared with species of the same drainage.

### **Materials and methods**

All counts and measurements follow the methods of Kottelat (1990) and Prokofiev (2007). Measurements were taken point to point to the nearest 0.1mm with digital calipers. Additional measurements, i.e., predorsal length was measured from the snout tip to the dorsal-fin origin; postorbital length was measured from the posterior margin of the eye to the posterior end of the operculum; pectoral-anal distance was measured from the pectoral-fin origin to the anal-fin origin; vent-anal distance was taken from the vent to the anal-fin origin. Gill rakers refer to the count on the inner side of the first arch. Specimens examined are deposited in the collection of the Kunming Institute of Zoology, Chinese Academy of Sciences, Kunming (KIZ). Abbreviations used in this paper are: SL, standard length; HL, head length; ex., examined specimens; vs., versus.