



<http://dx.doi.org/10.11646/zootaxa.4052.4.3>

<http://zoobank.org/urn:lsid:zoobank.org:pub:40071558-4CC3-464C-87A3-74128F2BEEA1>

## A new species of *Barbatula* from the Russian Altai (Teleostei: Nemacheilidae)

ARTEM M. PROKOFIEV<sup>1,2</sup>

<sup>1</sup>A. N. Severtsov Institute of Ecology and Evolution, Russian Academy of Sciences, Leninskii prospect 33, Moscow 119071, Russia\*

<sup>2</sup>I. D. Papanin Institute for Biology of Inland Water, Russian Academy of Sciences, Borok 152742, Yaroslavl, Russia.

E-mail: [prokartster@gmail.com](mailto:prokartster@gmail.com)

\*Address for correspondence

### Abstract

*Barbatula restricta*, new species, is described from the Saldan-Kol Lake in the upper Ob River drainage in the Altai Mountains. It is distinguished from all other species of *Barbatula* in Asia by its body depth increasing continuously between the nape and the dorsal-fin origin and a combination of characters: nares widely spaced, upper lip with a short medial incision, lower lip without lateral expansions, mental lobes of lower lip without conical protrusions, tips of paired fins formed by 1<sup>st</sup> and 2<sup>nd</sup> branched rays, 42–45 (mean 44) vertebrae, color pattern consisting of small irregular mottles without saddles on back. An overview of the status of all nominal Asiatic *Barbatula* species described is given.

**Key words:** Siberian loaches, new species, taxonomy, North Asia

### Introduction

Kottelat (2012) listed 16 valid species within *Barbatula*, 12 of these occur in Asia and four in Europe. Prokofiev (2014) already pointed out, that the diversity of the genus *Barbatula* in Asia is poorly understood. Since the overview provided by Kottelat (2012), Cao *et al.* (2012) described *B. gibba* from the Dali-Nur Lake in North-East China but Prokofiev (2014) treat *B. gibba* as a synonym of *B. toni*. Prokofiev (2014) included *Nemacheilus minxianensis* in *Barbatula*. Therefore, 17 species are actually recognized in *Barbatula*, 13 in Asia, where they are restricted to the drainages of the North Polar and Pacific Oceans southward to the Liaohe River drainage and the endorheic basins of Central Asia.

Already Prokofiev (2007) defined five groups of populations based on morphological characters within the (sub-) species he called “*Orthrias barbatulus toni*” from the mountain regions of Southern Siberia and Western Mongolia. These groups (called “morphotypes”) all might represent separate species. Among these five groups, the “sharp-nosed form” was recognized as *B. tomiana* by Dgebuadze *et al.* (2009) and Prokofiev (2014). The purpose of this paper is to formally describe the “Saldan-Kol form” (Prokofiev 2007: 49) as a new species and thus make the name available for biodiversity studies and habitat protection in the Altai Mountains.

### Material and methods

All data were taken from fishes fixed in 4% formaldehyde and stored in 70–75% ethanol. Standard length was measured from the tip of the snout to the end of the hypural plate. Head length was measured from the tip of the snout to the posterior-most point of the opercle. Caudal-peduncle length was measured from the posterior margin of the last anal-fin ray base to the end of the hypural plate. Predorsal and preanal distances were measured from the tip of the snout to the origin of these fins. Prepelvic distance was measured from the tip of the snout to pelvic-fin origin. Paired-fin length and dorsal- and anal-fin height were measured from the base to the tip of the longest ray in the corresponding fin. Dorsal- and anal-fin base lengths were measured from the anterior margin of the base of first ray to the hind margin of the base of last ray in these fins. Snout length was measured from the tip of snout to the