



***Schistura papulifera*, a new species of cave loach from Meghalaya, India (Teleostei: Balitoridae)**

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Abstract

Schistura papulifera, new species, is described from a cave of the Synrang Pamiang system, Meghalaya State, India. It is distinguished from all other known species of *Schistura* in having the lower half of the head covered by small skin projections and 5 pores in the supratemporal canal of the cephalic lateral-line system. In addition, it has a white body and vestigial eyes. The closest epigean relative of *S. papulifera* has not yet been identified due to the lack of survey and usable data. The identity of the cave nemacheiline from Siju Cave is briefly discussed, but this remains inconclusive, again due to the lack of material and usable data.

Key words: cavefish, Meghalaya, *Schistura*, Balitoridae

Introduction

Nemacheiline loaches are typically benthic fishes inhabiting moderate to swift-flowing water bodies and spending most of their life near or under stones or in crevices. This and their usually slender body and feeding habits (predatory on small invertebrates) have preadapted them to colonize hypogean aquatic habitats. Although a large number of strictly hypogean loach species are already known from southeastern and eastern Asia (see Kottelat and Whitten, 1996; Vidthayanon and Kottelat, 2003; Kottelat, 2004; Proudlove, 2006), and new ones are continually being discovered, no distinctly troglomorphic species have been recorded from India. Cavernicolous populations of *Indoreonectes evezardi* (Day) are present in the Bastar region of central India. These have been reported to show certain morphological, behavioral and physiological differences from neighbouring epigean populations (e.g., Biswas et al, 1990; Pati and Agawal, 2002). However, the degree of reproductive isolation is not established, and they do not show well developed troglomorphic characteristics. *Schistura sijuensis* (Menon) is known from Siju Cave in the Garo Hills, but morphologically it is virtually indistinguishable from epigean populations. This apparent absence of cave loaches is possibly only an artifact resulting from a lack of biospeleological survey work. India currently has four known stygobitic (subterranean-limited) fish species, including two clariid catfishes (*Horaglanis krishnai* Menon and *H. alikunhii* Babu and Nayar), and two synbranchid eels (*Monopterus eapeni* Talwar and *M. roseni* Bailey and Gans). The area of known karatic limestone in India is limited, and these four species are found in shallow phreatic ground water. We describe here the first strictly hypogean loach from India.