Psilorhynchus khopai, a new fish species (Teleostei: Psilorhynchidae) from Mizoram, northeastern India

LALRAMLIANA¹, BEIHROSA SOLO², SAMUEL LALRONUNGA² & LALNUNTLUANGA²

¹Department of Zoology, Pachhunga University College, Aizawl-Mizoram, India, 796 001. E-mail: lrl_zoo@yahoo.co.in
²Department of Environmental Science, Mizoram University, Aizawl-Mizoram, India, 796 004. E-mail: beihrosarolo@yahoo.com; samuellrna@gmail.com; tluanga_249@rediffmail.com

Abstract:

Psilorhynchus khopai, a new species of Psilorhynchidae, is described from Tuisi River, a tributary of Kaladan River, in Mizoram, India. The species is proposed to be a member of the Psilorhynchus homaloptera species group and can be distinguished from its congeners in having a forked caudal-fin with 9 + 9 principal caudal rays, 14–17 predorsal scale rows, 39–41 lateral-line scale rows, mid-lateral body with 9–12 indistinct small dark brown round markings forming a lateral stripe and, in life, a faint gold stripe along dorsal midline with 4–5 black spots between dorsal fin and caudal fin base.

Key words: Indo-Myanmar, Saiha District, Khopai Village, new species

Introduction

Fishes of the genus Psilorhynchus McClelland are hillstream cyprinids, characterized by arched dorsum, flattened ventral surface and without any barbels. They are distributed in the Ganga-Brahmaputra drainage of northeastern India, Nepal, Bangladesh and southeastern Tibet, the Korkanhalla stream of Peninsular India, the Chindwin basin of Manipur, India, the Ayeyarwaddy drainage of northern and central Myanmar, the Ann Chaung drainage of western slope Rakhine Yoma, Myanmar and the Ataran River drainage of southern Myanmar (Rainboth, 1983; Conway & Kottelat, 2007; Arunachalam & Muralidharan, 2008; Conway & Kottelat, 2010, Shangningam & Vishwanath, 2013a,b), and usually inhabit fast flowing rivers and streams. With the elevation of Psilorhynchus homaloptera rowleyi to P. rowleyi (Shangningam et al., 2013) there are currently twenty one species of Psilorhynchus considered valid, and out of which five species belong to P. homaloptera species group, which are characterized by their high unbranched pectoral fin ray counts (between seven and ten) and high lateral-line scale rows (39–48) (Conway, 2011): P. homaloptera Hora & Mukerji, 1935, P. rowleyi (Hora & Misra, 1941), P. pseudecheneis Menon & Datta 1964, P. microphthalmus Vishwanath & Manojkumar, 1995 and P. arunachalensis (Nebeshwar et al., 2007).

Collections from Tuisi River, a tributary of Kaladan River, Mizoram, northeastern India included Psilorhynchus species that could not be readily identified. Detailed comparison of this material with congeners revealed it to belong to an unnamed species. The description of this material as Psilorhynchus khopai, new species, forms the basis of this study.

Material and methods

Counts, measurements and description follow Conway et al., (2013). Counts and measurements were made on the left side of specimens whenever possible. Measurements were made point to point with digital calipers to the nearest 0.1 mm. Measurements of body parts are given as proportions of standard length. Subunits of the head are presented as proportions of head length. For vertebral counts, two paratypes were cleared and double stained...
Acknowledgements

We are grateful to Krishnamoorthy Venkataraman (ZSI) and Laishram Kosygin (ZSI) for permission and access to material under their care; Vanlalmalsawma and Khawlhring Vanlalthanzauva for their field assistance. Funding of SLRN from MZU-UGC Research Scholars’ Fellowship is acknowledged.

Literature cited


