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Parosphromenus barbarae, a new species of Licorice Gourami from Sarawak, Borneo (Teleostei: Osphronemidae)

TAN HEOK HUI¹ & JONGKAR GRINANG^{2, *}

¹Lee Kong Chian Natural History Museum, National University of Singapore, 2 Conservatory Drive, Singapore 117377; heokhui@nus.edu.sg and Honorary Research Associate, Institute of Biodiversity and Environmental Conservation, Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia. — ² Institute of Biodiversity and Environmental Conservation, Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia. — * Corresponding author; email: gjongkar@unimas.my

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Abstract

In Sarawak, there are two main populations of *Parosphromenus* known, the eastern population linked to the Rejang River basin being *P. allani*, and the western population linked to the Batang Kayan basin, is herein described as *P. barbarae*, new species. *Parosphromenus barbarae* differs from its most similar species, *P. allani*, in having a distinct black ocellus on caudal-fin base, indistinct dark brown ocellus on posterior base of dorsal-fin; presence of clearly demarcated subdistal hyaline band on anal fin (vs. faint); dorsal-fin rays XI–XIV, 4-5 (total count 15–18, mode 17); anal-fin rays XI–XIII, 6-10 (total count 19–21, mode 21); lateral scales $29-31\frac{1}{2}$ (mode 29).

Key words

Allopatric speciation, Anabantiformes, biodiversity, peat swamps, Southeast Asia.

Introduction

Parosphromenus is a genus of small-sized labyrinth fish, not growing larger than 30-35 mm SL, endemic to Sundaland (KOTTELAT & NG, 1998; 2005). The history of species discovery and taxonomic issues have been detailed by KOTTELAT & NG (1998; 2005). They are stenotopic inhabitants of acidic water swamp forest streams and peat swamp habitats. Their distribution is very patchy and restricted to lowlands. Currently, there are 20 described species of Parosphromenus (fide Kottelat & Ng, 2005; Schindler & Linke, 2012). Six species (P. alfredi Kottelat & Ng, 2005, P. harveyi Brown, 1987, P. nagyi Schaller, 1985, P. paludicola Tweedie, 1952, P. tweediei Kottelat & Ng, 2005, P. rubrimontis Kottelat & Ng, 2005) are restricted to Malay Peninsula; five species (P. bintan Kottelat & Ng, 1998, P. deissneri (Bleeker, 1859), P. gunawani Schindler & Linke, 2012, P. phoenicurus Schindler & Linke, 2012, P. sumatranus Klausewitz, 1955) are located in Sumatra and its islands; and nine species (P. allani Brown, 1987, *P. anjunganensis* Kottelat, 1991, *P. filamentosus* Vierke, 1981, *P. linkei* Kottelat, 1991, *P. opallios* Kottelat & Ng, 2005, *P. ornaticauda* Kottelat, 1991, *P. pahuensis* Kottelat & Ng, 2005, *P. parvulus* Vierke, 1979, *P. quindecim* Kottelat & Ng, 2005) are restricted to Borneo.

BROWN & BROWN (1987) conducted a labyrinth fish (specifically looking for *Betta* and *Parosphromenus*) survey in Sarawak. However, due to different objectives, they only kept living material that they subsequently bred in captivity. From that survey material, *Parosphromenus allani* had been described by BROWN in 1987, and subsequently *Betta brownorum* was described by WITTE & SCHMIDT in 1992. In BROWN & BROWN's 1987 survey, they discovered three main populations of *Parosphromenus*. One population (type locality of *P. allani*; listed as 1/86/B&B and 17/86/B&B; basically the same general location) found along the outskirts of Sibu town, one

