

# Article



# *Macrognathus aureus*, a new spiny eel of the *M. aculeatus* species group from the Upper Ayeyarwaddy River Drainage, Myanmar (Teleostei: Synbranchiformes: Mastacembelidae)

### **RALF BRITZ**

Department of Zoology, Natural History Museum, Cromwell Road, London, SW7 5BD, UK E-mail: r.britz@nhm.ac.uk

#### **Abstract**

*Macrognathus aureus*, new species, from the upper Ayeyarwaddy River Drainage, northern Myanmar, is distinguished from all other species of the *M. aculeatus* species group by the following combination of characters: rostral tooth plates 8–10, dorsal-fin spines 21–22, and a unique colour pattern consisting of a series of large white-rimmed, dark-brown to black blotches along the dorsal fin and even larger blotches along the lateral line, of which some are confluent with the dorsal series.

Key words: Taxonomy; freshwater fish; Irrawaddy; Indo-Burma biodiversity hotspot

# Introduction

Spiny eels of the *Macrognathus aculeatus* species group are unique among mastacembelids in having a series of paired tooth plates that cover the long rostral tentacle ventrally. Following Sufi's (1956) revision of Asian mastacembelids, the predominant perception among ichthyologists for the next two decades was that this species group included only a single, extremely widespread species, *M. aculeatus* (Bloch). The contributions of Roberts (1980, 1986), Arunkumar & Tombi Singh (2000), Kottelat & Widjanarti (2005), and Pethiyagoda *et al.* (2008), and the recent revision of Myanmar representatives of this group by Britz (2010), have demonstrated that the species diversity is actually much higher. A total of 11 species can be distinguished: *M. pentophthalmos* (Gronow) from Sri Lanka, *M. aral* (Bloch & Schneider) from Pakistan, India, Nepal, and Bangladesh, *M. lineatomaculatus* Britz from India and Nepal, *M. morehensis* Arunkumar & Tombi Singh from the Chindwin drainage in India and Myanmar, *M. dorsiocellatus* Britz, *M. obscurus* Britz and *M. pavo* Britz from Myanmar, *M. meklongensis* Roberts from Thailand, *M. siamensis* (Günther) from Thailand, Cambodia and Vietnam, *M. tapirus* Kottelat & Widjanarti from Thailand, Peninsular Malaysia, Sumatra and Borneo, and *M. aculeatus* (Bloch) from Java.

During a recent field trip to Myanmar I was presented with two specimens of an unusually-coloured species of spiny eel of the *Macrognathus aculeatus* group, a third specimen of which was found among material deposited in the Swedish Museum of Natural History. A comparison with the other species of this group from within and outside of Myanmar showed that this is a species new to science, which is described herein.

## Material and methods

Measurements were taken with digital callipers to the nearest 0.1 mm. Obtaining accurate measurements in mastacembelids usually proves difficult because specimens are frequently preserved in a bent and twisted state. Standard length, predorsal length (spinous and soft), preanal length, head length and snout length were