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Article



Danionella priapus, a new species of miniature cyprinid fish from West Bengal, India (Teleostei: Cypriniformes: Cyprinidae)

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Abstract

Danionella priapus, a new species of sexually dimorphic miniature cyprinid from the Brahmaputra drainage in India, is distinguished from the other three species in the genus by the presence in adult males of a conical projection of the genital papilla situated between funnel-shaped pelvic fins, the number of anal- and pectoral-fin rays, and the position of insertion of the last anal-fin pterygiophore. It differs further from *D. translucida* and *D. mirifica* in details of the colour pattern, from *D. dracula* and *D. mirifica* in number of procurrent caudal-fin rays, from *D. translucida* in number of vertebrae and from *D. dracula* in several skeletal characters. Like the other species in the genus, *D. priapus* shows a developmentally truncated skeleton that is associated with several evolutionary morphological novelties. The present distribution of the *Danionella* species may be the result of a vicariance event in the early Miocene, when the tectonic uplift of eastern Tibet and the Indo-Burman ranges lead to the interruption of the palaeo-connection between the Tsangpo (Brahmaputra) and the upper Irrawaddy Rivers.

Key words: miniature fishes, developmental truncation, evolutionary novelty, vicariance

Introduction

Species of the genus *Danionella* are completely transparent, miniaturized cyprinids. Three species have been known so far, all distributed in Myanmar: *D. translucida* Roberts, 1986, from the Bago Yoma in southern Myanmar, and *D. mirifica* Britz, 2003 and *D. dracula* Britz *et al.*, 2009, from the Myitkina district in northern Myanmar. All species of *Danionella* show a highly developmentally truncated skeleton, but exhibit at the same time astonishing morphological novelties (Britz *et al.*, 2009). The same is true for a *Danionella* species from the Jorai River in West Bengal, material of which I received recently. A detailed investigation revealed that this Indian species is new to science and the present paper serves to make a name available for it and report its unusual characters.

Danionella priapus, sp. nov. (Figs. 1–4)

Danionella sp.: Jorai River, Britz et al., 2009

Type material. Holotype: BMNH 2009.9.9.1, male, 14.4 mm SL; India, West Bengal, Jalpaiguri District, Brahmaputra drainage, Jorai River, a tributary of the Sankosh at Laskarpara, outskirts of Barobisha town. 26° 28' 52.3"N, 89° 49' 29.8"E; M. Das, 2 Apr 2008.

Paratypes: BMNH 2009.9.9.2-37 (36), 11.8–16.0 mm SL; data as for holotype. BMNH 2009.9.9.38–43 (6), cleared and double stained, 13.6–15.9 mm SL; data as for holotype.