Glyptothorax lanceatus, a new species of sisorid catfish (Teleostei: Siluriformes) from southwestern China

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Abstract

Glyptothorax lanceatus, a new species of sisorid catfish from the upper Salween River drainage in southwestern China, is described. It can be distinguished from congeners in having the following combination of characters: length of nasal barbel 18.1–21.5% HL; length of maxillary barbel 86.2–91.1% HL; length of inner mandibular barbel 23.8–28.2% HL; length of outer mandibular barbel 42.8–49.1% HL; eye diameter 6.8–8.3% HL; interorbital distance 20.2–22.1% HL; elongate, ovoid tubercles on dorsal surface of head; head length 23.0–25.1% SL; head width 16.3–18.8% SL; width of adhesive apparatus 1.60–1.74 times in its length; depressed area in thoracic adhesive apparatus not wholly enclosed by ridges; ridges of thoracic adhesive apparatus not extending onto gular region; 10–13 serrations on posterior edge of pectoral spine; pectoral-fin length 21.1–24.5% SL; length of adipose-fin base 12.2–13.2% SL; dorsal-to-adipose distance 23.0–24.8% SL; distally expanded neural spines in vertebrae between dorsal and adipose fins; body depth at anus 12.4–14.8% SL; post-adipose distance 18.7–20.3% SL; caudal-peduncle length 20.3–21.8% SL; caudal-peduncle depth 6.7–7.4% SL; 40–41 vertebrae; reaching to at least ca. 170 mm TL in size; and uniformly dark-colored body generally devoid of pale or dark markings.

Key words: Sisoridae, Yunnan, Nujiang

Introduction

Catfishes of the sisorid genus Glyptothorax Blyth (1860) inhabit fast flowing hill-streams or faster flowing reaches of larger rivers. There are more than 90 nominal and about 70 valid species (Ng & Hadiaty, 2009) of Glyptothorax, making it the most speciose Asian catfish genus. Glyptothorax species are found throughout the entire southern arc of the Asian continent, from Asia Minor (in the Tigris and Euphrates River drainages) eastward to East Asia (in the Yangtze River drainage) and southward to Southeast Asia (Ferraris, 2007; Ng & Kottelat, 2008). Members of this genus are diagnosed by having a thoracic adhesive apparatus comprising of an elliptical field of folded longitudinal pleats of skin, a detached distal portion of the premaxilla, and with long and thin lateral arms of the vomer that extend under the entire length of the articular process of the lateral ethmoid (de Pinna, 1996).

During an ichthyological sampling of the Nujiang (upper Salween River) drainage by the third author, specimens of a Glyptothorax species resembling G. longjiangensis were collected. Glyptothorax longjiangensis is easily distinguished by the unusual shape of the tubercles on the dorsal surface of the head, not seen in any other congener; however, the Nujiang material lacked the distinct tuberculation characteristic of G. longjiangensis. This prompted us to investigate the possibility that the Nujiang specimens might belong to an unnamed species. In this study, we present morphological and molecular evidence to support this hypothesis and describe the new species herein as Glyptothorax lanceatus, sp. nov.