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A review of the glyptosternine catfish genus *Exostoma* Blyth 1860 from Thailand, with descriptions of two new species (Teleostei: Siluriformes)

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Abstract

We review members of the sisorid catfish genus *Exostoma* known from Thailand. Three species are recognized, of which two from the headwaters of the Chao Phraya River drainage in northwestern Thailand, are described here as new: *E. effrenum* and *E. peregrinator*. In addition to the two new species, *E. berdmorei* (which is here redescribed) is also known from the Salween River drainage in western Thailand. The three species can be distinguished from each other and other congeners by the morphologies of the adipose and caudal fins, as well as morphometric data for the eye diameter, head width, dorsal-to-adipose distance, body depth at anus, caudal-peduncle length, caudal-peduncle depth, and numbers of branched pectoral-fin rays and preanal vertebrae.

Key words: Sisoridae, Glyptosternini, Salween River, Chao Phraya River

Introduction

Glyptosternines are sisorid catfishes with distinctively depressed heads and bodies and greatly-enlarged paired fins modified to form an adhesive apparatus. Known from torrential streams and rivers from the upper reaches of the Amu Darya River drainage in Turkmenistan southwards to the Mekong River drainage in Indochina and eastwards to the Yangtze River (Changjiang) drainage in central China, glyptosternines have been shown to be a monophyletic group (de Pinna, 1996; Peng *et al.*, 2004; Guo *et al.*, 2005).

The glyptosternine catfish genus *Exostoma* currently consists of five species known from the Brahmaputra, Irrawaddy and Salween river drainages in China, India and Myanmar (Thomson & Page, 2006; Vishwanath & Joyshree, 2007). Members of the genus are diagnosed from other glyptosternines by a combination of: continuous post-labial groove; gill openings not extending onto venter; homodont dentition; oar-shaped, distally flattened teeth in both jaws; tooth patches separated in upper jaw; 10–11 branched pectoral rays (Thomson & Page, 2006).

The distribution of the genus reaches its easternmost limit in Thailand, where populations collected from the Chao Phraya and Salween River drainages appear morphologically distinct and seem to represent more than one distinct species. In our study, we review the *Exostoma* species found in Thailand; three species are recognized, of which two (*E. effrenum* and *E. peregrinator*) are described herein as new. Because the third species (*E. berdmorei*) is poorly described and diagnosed in existing literature, we also provide a redescription of this species here.

Material and methods

Measurements were made point to point with dial calipers and data recorded to tenths of a millimeter. Counts and measurements were made on the left side of specimens whenever possible. Subunits of the head are presented as percentage proportions of head length (% HL). Head length and measurements of body parts are given as percentage proportions of standard length (% SL). Measurements follow Ng & Rainboth (2001), with the following

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