Copyright © 2010 · Magnolia Press





Redescription of the striped catfish *Mystus carcio* (Hamilton) (Siluriformes: Bagridae)

A. DARSHAN¹, N. ANGANTHOIBI² & W. VISHWANATH³

Department of Life Sciences, Manipur University, Canchipur, Manipur 795003, India E-mail: ¹achom_darshan@yahoo.com; ²angannong@gmail.com; ³wvnath@gmail.com

Abstract

Pimelodus carcio, originally described in 1822 by Francis Hamilton, has long been treated as a junior synonym of either *Mystus tengara* or *M. vittatus*. In this paper we revalidate and redescribe the species and diagnose it from other striped *Mystus* by the following combination of characters: small adult size, maturing at 44.0 mm standard length; adipose-fin base shorter than or equal to dorsal-fin base; pelvic fin reaching anal-fin origin; pectoral girdle with coracoid shield exposed ventro-laterally below pectoral fin; eyes rounded and large, dorsally orientated on head; vomerine tooth-patch interrupted at midline. The species is distributed in the Ganga-Brahmaputra drainage of northeast India and Bangladesh.

Key words: Bagrid catfish, Mystus tengara, Mystus vittatus, distinctive characters, coracoid shield

Introduction

Hamilton (1822) described *Pimelodus carcio* from ponds in the northern parts of Bengal, India. No type specimens are known, and the identity of this fish is based solely on his description. He also did not make any reference to this species in his drawings. After reading the descriptions of *P. batasio* and *P. carcio* and comparing them with Hamilton's fig. 60, it is quite obvious that Hamilton (1822) made a mistake in designating which species fig. 60 represents. Hora (1929: Plate XXII, fig. 3) published Hamilton's manuscript drawing that was meant to be captioned as *Pimelodus batasio* (now *Batasio batasio*). Day (1871), Hora (1929), Hora & Law (1941), and Jayaram (1954) felt that Hamilton's (1822) Plate 23, fig. 60, labelled *Pimelodus Batasius* (described as *Pimelodus batasio* on p. 179) is in fact *P. carcio*. We also found that Hamilton's (1822) description of *P. carcio*, on pages 181–183, is consistent with his fig. 60 and clearly distinguishes the species from its congeners.

Day (1877) synonymised *Pimelodus carcio* with *Macrones vittatus* (now *Mystus*). Misra (1976), Sharma & Dutt (1983), Roberts (1992), Menon (1999), Jayaram (2006) and Ferraris (2007) also considered it a synonym of *Mystus vittatus*. However, Jayaram & Sanyal (2003) treated it a synonym of *M. tengara*. Collections of fishes from the Brahmaputra River, Assam, India and wetlands of Comilla District, Bangladesh included 32 specimens of a species of *Mystus* consistent with the original description of *M. carcio*. Here we redescribe this species and differentiate it from its closest congeners, *M. vittatus* (Bloch, 1794), *M. tengara* (Hamilton, 1822) and *M. bleekeri* (Day, 1877).

Materials and methods

Measurements were made with dial callipers to the nearest 0.1 mm. Subunits of the head are presented as proportions of head length (HL). Methods for counts and measurements follow Ng & Dodson (1999). Clearing and staining of specimens for osteology follow Hollister (1934) and osteological nomenclature follows Mo (1991). We use the terms coracoid shield for the externally exposed portion of the posterior