



## *Mystus velifer*, a new species of catfish from Indochina (Teleostei: Bagridae)

HEOK HEE NG

Tropical Marine Science Institute, National University of Singapore, 18 Kent Ridge Road, Singapore 119227.

E-mail: heokhee@nus.edu.sg

### Abstract

*Mystus velifer*, a new species of catfish from the lower reaches and estuaries of river drainages in mainland Southeast Asia is described here. It can be distinguished from congeners in having a combination of a produced, narrow snout, large eye (diameter 23.3–29.2% SL), the (anterior) cranial fontanel reaching past midway between the posterior orbital margin and the base of the supraoccipital spine, very long maxillary barbels that reach to or beyond the base of the caudal fin, head length 24.1–27.6% SL, length of dorsal spine 16.6–21.2% SL, 22–29 rakers on the first gill arch, the first dorsal-fin ray produced and reaching to the middle of the adipose-fin base, a short-based adipose fin (13.0–17.9% SL) without a deeply incised posterior margin, and depth of caudal peduncle 8.3–11.1% SL. The synonymy of *M. armiger* with *M. wolffii* is confirmed.

**Key words:** Siluriformes, *Mystus wolffii*, Mekong River

### Introduction

Bagrid catfishes of the genus *Mystus* Scopoli, 1777, are small- to medium-sized species found predominantly in freshwater habitats in West, South and Southeast Asia. The genus consists of more than 30 valid species, of which 21 are found in Southeast Asia (Ferraris, 2007; Ng & Kottelat, 2009). The monophyly of *Mystus* has not been rigorously tested. The group is unlikely to be natural, since phylogenetic analyses based on molecular evidence with limited taxon sampling (Hardman, 2005) have demonstrated its paraphyly in the absence of *Hemibagrus* and *Sperata*.

The overwhelming majority of the group's members are restricted to freshwater, but two species from South and Southeast Asia are known from estuarine and coastal marine habitats: *M. gulio* Hamilton 1822 and *M. wolffii* (Bleeker 1851). *Mystus gulio* was described from the “higher parts of the Gangetic estuaries” (Hamilton, 1822) and occurs throughout the Indian subcontinent, Myanmar and Sundaic Southeast Asia (except Borneo), while *M. wolffii* was described from Banjarmasin in southern Borneo (Bleeker, 1851) and is known from the Malay Peninsula, Singapore and Borneo (Ng, 2012). A third estuarine/coastal species (*M. armiger* Ng 2004) was described from coastal habitats of northeastern Peninsular Malaysia, but this species is now considered a junior synonym of *M. wolffii* (see Ng, 2012).

During the investigation of the identities of *M. wolffii* and *M. armiger*, it was noted that populations of “*M. wolffii*” from Indochina and the far northern portion of the Malay Peninsula displayed significant differences in head morphology from populations from the rest of Sundaic Southeast Asia. Further comparisons revealed other differences that suggested that the Indochinese population represented an unnamed species distinct from the Sundaic *M. wolffii*, which is described in this study as *M. velifer*, new species.

### 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