Copyright © 2010 · Magnolia Press

Article



## Type locality and identity of *Acrossocheilus kreyenbergii* (Regan, 1908), a senior synonym of *Acrossocheilus cinctus* (Lin, 1931) (Teleostei: Cyprinidae)

LE-YANG YUAN<sup>1, 2</sup> & E ZHANG<sup>1\*</sup>

<sup>1</sup>Institute of Hydrobiology, Chinese Academy of Sciences, Wuhan 430072, Hubei Province, China

<sup>2</sup> Zhejiang Museum of Natural History, Hangzhou, 310014, China

\* Author for correspondence: Tel. : +86 27 68780260; Fax : +86 27 68780123; e-mail: zhange@ihb.ac.cn

## Abstract

Although *Acrossocheilus kreyenbergii* has been treated as a valid species since its original description, the type locality and identity of this species have hitherto remained uncertain. It is shown in this study that its precise location of 'Tinghsiang' or 'Pinghsiang,' the type locality of *Gymnostoma kreyenbergii* Regan, is the present Pingxiang City, Jiangxi Province, in the Gan Jiang, a tributary flowing to the Boyang Lake system, or in the Yangtze River drainage. Observation of the type specimens of this species and further comparison with those of other barred congeners reveal that *G. kreyenbergii* is in fact a senior synonym of *Barbus cinctus* Lin.

Key words: Gymnostoma kreyenbergii, taxonomy, type locality, synonymy

## Introduction

The cyprinid species *Acrossocheilus kreyenbergii*, which was originally described in *Gymnostoma* by Regan (1908), has hitherto been considered a valid species. It is presently distributed in river drainages in Fujian Province, and the Ling Jiang, Qiantang Jiang and Yong Jiang drainages in Zhejiang Province (Shan *et al.*, 2000). Even so, the type locality and identity of this species still remain uncertain. Regan's (1908) original account was based on two specimens of 90.0 and 160.0 mm total length, which were secured by Martin Kreyenberg from 'Nankancho, near Tinghsiang.' One year later, the type locality of this species was given as 'Yangtze River: Nankancho, near Pinghsiang' (Kreyenberg and Pappenheim, 1908). Oddly, in their systematic revision of Chinese cyprinid fishes Wu *et al.* (1977) took 'Tinghsiang' as the present Ding County, Hebei Province, North China where no species of *Acrossocheilus* has been found to date. Thus, it has until now been uncertain what phonetic letters 'Tinghsiang' or 'Pinghsiang' intend. Here we demonstrate that the type locality of *A. kreyenbergii* is in fact in the Yangtze River drainage; that its precise location of 'Tinghsiang' or 'Pinghsiang' is the present Pingxiang City, Jiangxi Province, in the Gan Jiang, a tributary discharging to the Boyang Lake system; and that *Gymnostoma kreyenbergii* Regan, 1908 (=*A. kreyenbergii*) is in fact a senior synonym of *Barbus cinctus* Lin, 1931.

## Material and methods

Measurements were taken point to point to the nearest 0.1 mm with digital calipers connected directly to a computer database. Measurements and counts, taken on the left side of individuals whenever possible, follow those of Kottelat (2001). Additional measurements, namely predorsal, prepectoral, prepelvic and preanal length, were taken from the anteriormost tip of the snout to the dorsal-, pectoral-, pelvic- and anal-fin origins,