Description of a new genus and two new species of labeonine fishes from South China (Teleostei: Cyprinidae)

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Abstract

A new genus and two new species are described from the Pearl River drainage in Guangxi Province, South China. Hong-shuia, new genus, can be distinguished from all other Asian genera of the Labeonini by having a lower lip with its median lobe modified into a round, fleshy plate peripherally greatly protruded so as to form a ring-like fold that is postero-omedially continuous with the mental region, and centrally sunken so as to form a round, flat, fleshy pad. This genus is distinct from all other Asian labeonine genera of the Garrina except for one newly described species of Parasinilabeo (P. longibarbus), Pseudocrossocheilus, and Sinocrossocheilus, in the presence of well-developed maxillary barbels. Hong-shuia differs from the above three genera in the lower lip morphology, and further from both Pseudocrossocheilus and Qianlabeo in the number of pharyngeal tooth rows and from Sinocrossocheilus in the colour pattern. Two new species, H. banmo and H. paoli, differ in the distribution density and degree of development of papillae on the rostral fold, depth of indentations on the distal edge of the rostral fold, presence or absence of papillae on the lower lip, size and shape of tubercles on the tip of the snout and anterior portion of the lachrymal, length, position and colour pattern of the dorsal fin, and snout length.

Key words: Hongshuia, endemic species, freshwater fish, South China

Introduction

The Labeonini (sensu Reid, 1982), which is essentially equivalent to the subfamily Labeoninae (sensu Chen et al., 1984), aggregates a large number of cyprinid fishes widely distributed in the freshwaters of tropical Africa and Asia. It shows a high degree of morphological modification in its oromandibular structures unshared with other cyprinid fish groups, which is the basis for recognition of most of the included genera (Zhang et al., 2000). The Labeonini is represented in Southeast Asia and South China by twenty-nine genera (pers. obs.).

South China falls in the easternmost extent of the known distribution of the Labeonini. The composition of Chinese Labeonini tends to be sparser in fish species, but more diverse at the generic level. In the monograph on Chinese cyprinid fishes by Zhang et al. (2000), there were 60 species or subspecies in 20 genera. This group also shows a high degree of endemism at the generic level in South China. Of Chinese Labeonini genera, seven are endemic to South China (Zhang et al., 2000).

The generic-level diversity of Chinese Labeonini continues to rise as a consequence of recent works. Zhang and Chen (2004) described Qianlabeo striatus as a new genus and species from the upper Pearl River drainage in Guizhou Province; Zhang and Chen (2006) showed that Bangana also has representatives in South China, where it is represented by 13 valid species, all of which were previously placed in Sinilabeo Rendahl, 1932 (Zhang et al., 2000); Zhang et al. (2006) made Sinilabeo Rendahl, 1932 available by fixing S.