Garra findolabium, a new species of cyprinid fish (Teleostei: Cypriniformes) from the Red River drainage in Yunnan, China

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Abstract

Garra findolabium, new species, is described from the Red River (Yuan-Jiang in Chinese, Song Hong in Vietnamese) in Yunnan, China. It can be distinguished from all other congeners in Southeast Asia and China by the following combination of characters: posterior edge of the oral sucking disc with a median fissure and divided it into two lamellas; caudal fin with an anomalous dark patch, extending to 50% of length of caudal fin; no barbels; absence of proboscis in front of nostrils; 37–38 lateral-line scales; 16 circumpeduncular scales; distance of anus to anal-fin origin about 33.3–38.7% of distance of pelvic-fin origin to anal-fin origin.

Key words: Garra; new species; Red River; Yunnan

Introduction

Species of the cyprinid genus Garra Hamilton are widely distributed, occurring in India, Sri Lanka, Myanmar, Thailand, Vietnam and Kalimantan (Wu et al. 1977; Chu & Cui 1987, 1989; Zhang et al. 2000; Kottelat 2001a, b). Most species of Garra inhabit swiftly flowing waters of rivers and mountain streams, where they commonly adhere to the surface of rocks by an oral sucking disc modified from the lower lip and by horizontally extended paired fins. The genus Placocheilus Wu, also characterized by having the lower lip modified into an adhesive disc, was treated as a valid genus by Wu et al. (1977) and Zhang et al. (2002), while other authors treated it as a synonym of Garra (Kottelat 2001a; Zhou et al. 2005). Kottelat (2001a) suggested that the reduced number of pharyngeal tooth rows was a reductive character that could not be used to define genera. In the present study, we treat Placocheilus as a synonym of Garra.

Presently, nine species of Garra have been recorded from the Red River (Yuan-Jiang in Chinese, Song Hong in Vietnamese): G. apogon (Norman), G. bourreti Pellegrin, G. caudofasciatus (Pellegrin & Chevey), G. gracilis (Pellegrin & Chevey), G. imberba Garman, G. laichowensis Nguyen & Doan, G. micropulvinus Zhou et al., G. orientalis Nichols and G. robustus (Zhang et al.) (Chu & Cui 1989; Kottelat 2001a; Zhang et al. 2002; Zhou et al. 2005). When examining materials collected from the Red River of Yunnan, we found that some specimens were different from previously recorded species of Garra from this river. After comparisons with specimens collected from Yunnan and adjoining regions, we confirmed that these specimens represent a new species, which is described below.

Materials and methods

Identification of specimens was based on Kottelat (2001a, b) and Zhou et al. (2005). Counts and measure-