

Two Southeast Asian Species of the Cyprinid Fish Genus *Labeo*, *L. erythropterus* and *L. pierrei*

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ABSTRACT

Two distinctive Southeast Asian cyprinid fish species of the genus *Labeo* have been lumped as *Labeo erythropterus*. *Labeo erythropterus* Valenciennes 1842, described from Java, also occurs in Sumatra. *Labeo pierrei* (Sauvage 1880), is known definitely only from the Mekong basin. The two species differ in morphology and coloration. The status of the nominal taxa *Osteochilus ochrus* Fowler 1935 and *Labeo cheveyi* Fowler 1937, described from the Chao Phraya basin and recently placed as junior synonyms of *L. erythropterus* (RAINBOTH, 1996), is uncertain. They might be junior synonyms of *L. pierrei*.

INTRODUCTION

Many species of the large Old World cyprinid subfamily Labeoninae currently are assigned to the genus *Labeo*. Labeoninae and *Labeo* are numerous in Africa, including the Nile and Congo basins, as well as in Asia. India has numerous species but Southeast Asia only a few. Two of these, *Labeo erythropterus* and *L. pierrei*, have been confused as one. Recent works on fishes of the Mekong basin (e.g. RAINBOTH, 1996) treat *L. pierrei* as a junior synonym of *L. erythropterus*. The two species differ in morphology and coloration. *Labeo erythropterus* has a relatively shorter and smaller head, more slender body, and roughened scales. *Labeo pierrei* is rather variable in coloration, and the same may be true of *L. erythropterus*, but the latter species may have rosier fins and at least sometimes an overall white or silvery coloration not observed in *L. pierrei*, while the latter has a distinctive pattern of vertically elongate lozenge like marks based on the scales that might not occur in the former. Roughening of the scales is unknown in *L. pierrei*.

Labeo pierrei occurs in the Mekong basin and probably also in the Chao Phraya (op cit.) but not elsewhere. *Labeo erythropterus*, described from Java, also occurs in Sumatra but not Borneo or the Malay peninsula or anywhere else in mainland Asia. (Roberts, 1993: 17; confirmed by recent investigations). There is thus a substantial gap in the geographical ranges of the two species.

Institutional abbreviations used in this paper are RMNH (Rijksmuseum voor Natuurlijke Historie, Leiden, recently renamed Nationaal Natuurhistorisch Museum); and ZMA, Zoological Museum of the University of Amsterdam.

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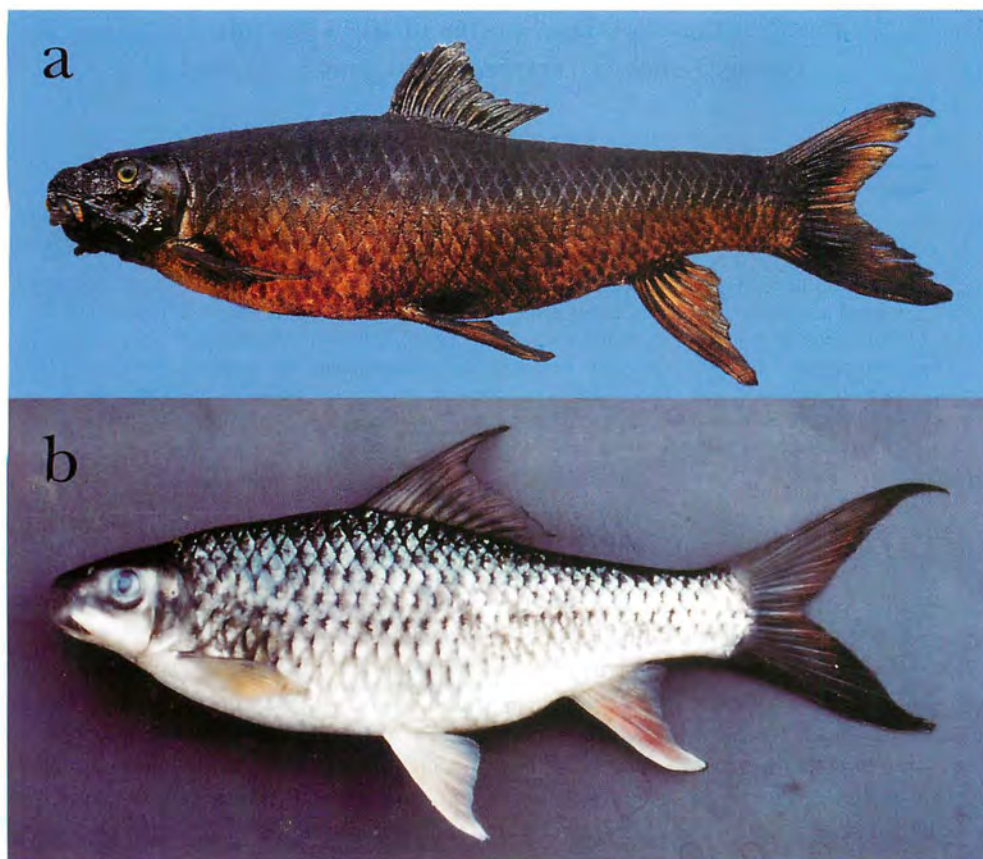


Figure 1. *Labeo erythropterus*. a, holotype, 516 mm, RMNH 2277, Bantam, Java, collected by Kuhl and van Hasselt in 1820–1823 (from ROBERTS, 1993); b, 189-mm specimen from Sungai Musi near Tebintingi, Sumatra, 26 April 1999.

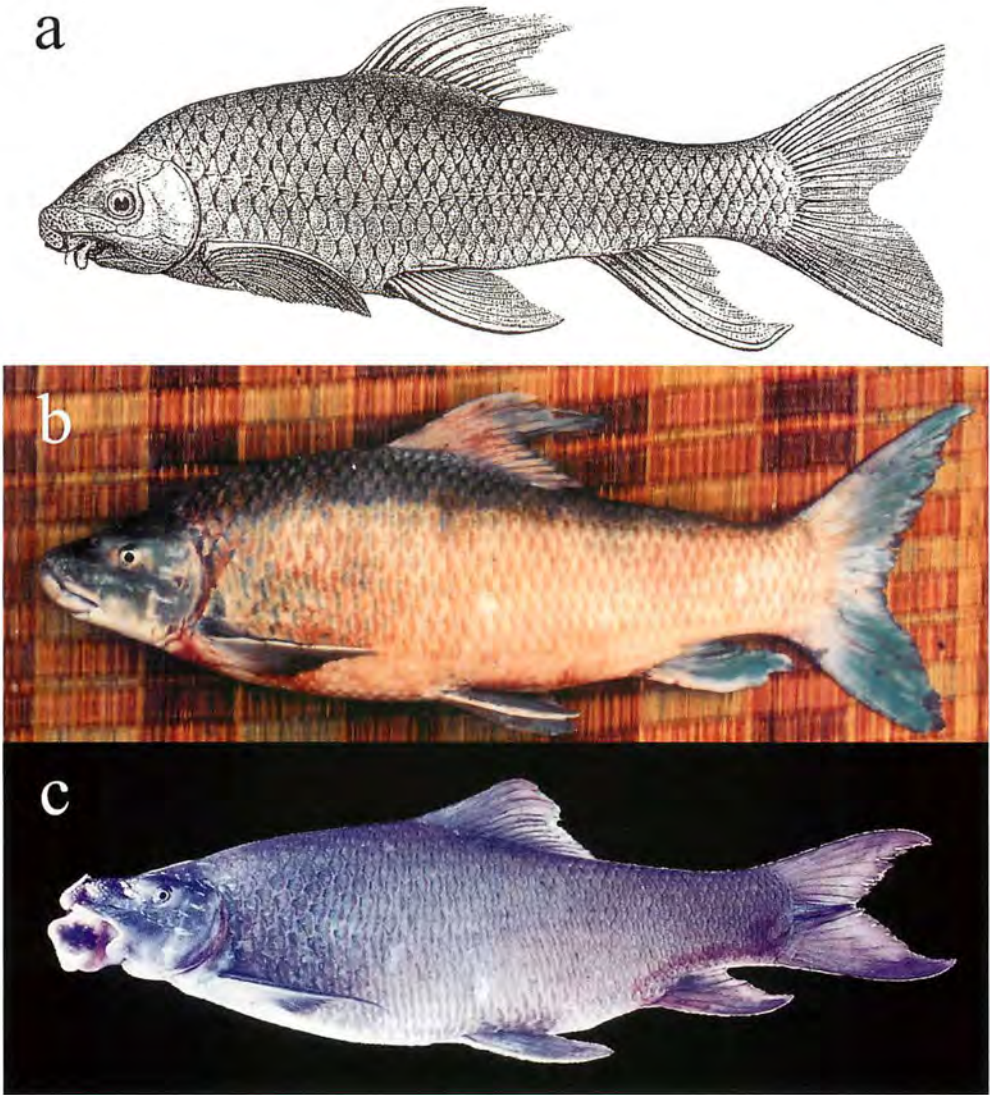


Figure 2. *Labeo pierrei*. a, lithograph by Delahaye of the mounted holotype (from SAUVAGE, 1881. pl. 5); b, ca 80 cm SL, Mekong River at Ban Hang Khone, southern Laos (photo by author); c, ca 80 cm SL, Nam Ngum near Nam Ngum hydropower projected dam site 3, central Laos (photo Jai Noi Sisompan, May 1995).

***Labeo erythropterus* Valenciennes 1842**

Figure 1

Labeo erythropterus Valenciennes (ex Kuhl & van Hasselt) in CUVIER & VALENCIENNES 1842: 354. Type locality rivers of Bantam, Java. Holotype RMNH D2277 (dry)

Labeo erythropterus has a comparatively short or small head and falcate fin lobes. As indicated by its name, the fins of *L. erythropterus* are tinged with red. A 189-mm fresh specimen from Sumatra has the distal part of the otherwise rather dark dorsal and caudal fins with a distinctly red or rosy tinge. The otherwise whitish pelvic and anal fins are largely rosy or pinkish, while the pectoral fin is faintly orange. Such red or rosy fin color is absent in *L. pierrei*. Each scale of the lateral line scale row has a black spot. (Fig. 1b). The 516-mm holotype, and also a 395-mm specimen from Java (ZMA 120.816) has the exposed part of the scales very rough (presumably the reason for the Kuhl and van Hasselt unpublished manuscript name for this species of "*Labeo scabrosus*" (ROBERTS, 1993: 17). The cause of the roughening is undetermined; it might be due to small keratinous multicellular tubercles. Such roughened scales have not been observed in *L. pierrei*.

This species apparently is the only *Labeo* in Indonesia. It has no junior synonyms. Only four specimens are known, two collected in western Java by Kuhl and van Hasselt, and two collected in Sumatra, at Air Penatai, Kurintji, in 1915 (ZMA 120.816, 395 mm) (ROBERTS, 1993: 17) and the 189-mm specimen reported here collected in 1999 (Fig. 1b).

The synonymy provided for *L. erythropterus* by RAINBOTH (1996) does not relate to this species.

***Labeo pierrei* (Sauvage 1880)**

Figure 2

Lobocheilus pierrii Sauvage, 1880:233. Type locality rapids of Dang-nai, Bien Hoa Prov., Indo-China. Holotype MNHN A-4451 (mounted) (Fig. 2a)

?*Osteochilus ochrus* Fowler, 1935:118, figs. 56–57. Type locality Bangkok, Thailand. Holotype ANSP 61781

?*Labeo cheveyi* Fowler, 1937: 205, figs. 173–174. Type locality Me Poon R., Chao Phraya basin, Chiangmai, Thailand. Holotype ANSP 68184

This species apparently is the only *Labeo* in the Mekong basin. It is unclear whether the species is endemic to the Mekong or if it occurs elsewhere. The synonymy provided by Rainboth for *L. erythropterus* might relate to this species but more study on this is needed.

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