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A further note on the identity of *Barbus mussullah* Sykes (Teleostei: Cyprinidae)

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Knight *et al.* (2013a) clarified the identity of *Barbus mussullah* Sykes, the type species of *Hypselobarbus* Bleeker, showing it to represent a lineage clearly distinct from *Tor* Gray (type species *Tor hamiltonii* Gray (= *Cyprinus tor* Hamilton)). They showed the two species to be distinguished by a suite of characters, with *Hypselobarbus* lacking the distinctive median fleshy lobe of the lower lip (present in *T. tor*), having the last simple ray of the dorsal fin weak (vs. strong, 'osseous'), gill rakers long and branched (vs. short and simple, unbranched) on first gill arch, and the proximal end of the fifth ceratobranchial hooked (vs. only slightly curved). Nevertheless, some subsequent authors (e.g., Ambili *et al.* 2014; Khare *et al.* 2014) have persisted in referring *Barbus mussullah* to *Tor*, in effect synonymizing *Hypselobarbus* (in which 12 species are currently recognized) with *Tor* and thereby causing confusion with regard to the identities of these groups of fishes which, being large and relatively common cyprinids, are of significant economic importance.

Knight *et al.* (2013a) were unable to stabilize the identity of *Hypselobarbus* through the designation of a neotype for *Barbus mussullah* because at the time of that study no specimens of this species were available from close to the type locality, "Seroor" (=Shirur) on the "Goreh River" (= Ghod River in Maharashtra State, a tributary of Bhima River, within the Krishna River basin). During recent surveys in Maharashtra, however, two specimens of *Hypselobarbus mussullah* were collected downstream of the Bhira dam, which derives its water from the Mulshi dam across the Mula River, another tributary of the Bhima (Krishna basin): see Fig. 1. The ichthyofauna of the Ghod River in the vicinity of Shirur has been greatly disturbed by the construction of a series of impoundments, and a thorough search resulted in no species of *Hypselobarbus* being recorded from this watercourse. There have, however, been reports of *H. mussullah* (identified either as *H. kurali* or *H. curmuca* sensu Day, 1878) from Maharashtra and the Deccan (e.g., Sarwade & Khillare, 2010; Chandra & Sharma, 2012) and it is relevant to note that there could have been possible misidentification of *H. mussullah* with the closely related *H. curmuca* (or as *H. kolus*), which is common in the Krishna basin.

As shown above, the redescription of *Barbus mussullah* by Knight *et al.* (2013a) has been insufficient to clarify its status and it is therefore necessary to define this taxon objectively through the designation of a neotype. The new material from Bhira now makes this possible, and we here designate as neotype ZSI/SRC F 8759, a specimen of 263 mm SL (standard length) from the downstream of the Bhira dam at Kolad, Maharashtra State (ZSI/SRC: Zoological Survey of India, Southern Regional Station, Chennai, India). A second specimen from the same locality (MKC 420, 258 mm SL) is registered in the collection of J. D. Marcus Knight (see Table 1).

There are no confirmed reports of the fish specimens collected by Sykes to be still surviving in any museums. Sykes (1839) mentions that he had seen specimens ranging from 12 inches (30 cm) to 5 feet (152 cm) in fork length (length to the fork of the caudal fin), but referred to only one specific example among these, a male measuring 3 feet 4 inches [101 cm] in fork length and weighing 42 lbs (19 kg) brought to him at Shirur on the Ghod River. We here designate this specimen as the lectotype of *Barbus mussullah* Sykes, 1839. Sykes (1839: 356-357) states that the flesh of this specimen "wanted flavor", a clear indication that it was consumed, leaving no doubt that the lectotype is lost. The neotype here designated is consistent with Sykes' (1839) description and (1840) illustration; and it comes from as nearly as is practical from the type locality (see Fig. 1). A diagnosis of *H. mussullah* is provided in Knight *et al.* (2013a).

satisfied, and the younger name, *Hypselobarbus kurali* Menon & Rema Devi, 1995, *nomen protectum*, has precedence over *Gobio canarensis* Jerdon, 1849, *nomen oblitum*.

It is relevant to note, however, that Knight *et al.* (2013a) only tentatively acknowledged the validity of *Hypselobarbus kurali*, distinguishing it from *H. mussullah* based on a single additional scale in the transverse scale count ($\frac{1}{2}7-\frac{1}{2}8/1\frac{1}{2}$ in *H. kurali*, vs. $8/1\frac{1}{3}\frac{1}{2}-4$ in *H. mussullah*). While noting that the neotype of *H. mussullah* is evidently of the same species as *H. kurali*, in view of their type localities being in basins draining to the east and the west of the Indian peninsula, respectively, we tentatively retain both as valid species subject to a future genetic analysis.

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