



A review of the species of *Oreichthys* (Teleostei: Cyprinidae) in the Western Ghats, India

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Abstract

Fishes currently assigned to *Oreichthys cosuatis* from the Western Ghats are shown to belong to a closely-related group of three valid species: *Puntius coorgensis*, which is raised from synonymy, and two new species, *O. duospilus* and *O. incognito*. *Oreichthys coorgensis* can be distinguished from its congeners by a combination of characters that include 22–23+1–2 scales in the longitudinal series with 5–8 pored scales; $\frac{1}{2}3/1/2\frac{1}{2}$ scales in the transverse row; 6–7 predorsal scales and usually a faint blackish spot on the caudal-fin base. *Oreichthys duospilus*, sp. nov., can be distinguished by possessing an almost complete lateral line with 11–21 pored scales and two black spots: one on the dorsal fin and the other on the anal fin. *Oreichthys incognito*, sp. nov., can be distinguished by a lateral line with 5 pored scales; $\frac{1}{2}3/1/1\frac{1}{2}$ scales in the transverse row; 8 predorsal scales and a vertical black bar on the dorsal fin.

Key words: *Puntius*, *coorgensis*, *duospilus*, *incognito*, barbs, Kerala, Karnataka

Introduction

The genus *Oreichthys* was erected by Smith (1933) for a small cyprinid fish from Thailand with a weak, smooth last unbranched dorsal ray, the dorsal fin inserted in advance of the ventral, possessing large scales and an incomplete lateral line. Hora (1937a) assigned *Cyprinus cosuatis* Hamilton, 1822, described from the Kosi river in Northern India, to the genus *Oreichthys* and synonymised *O. parvus* Smith, 1933 with it. Based on this, the genus *Oreichthys* was long considered monotypic, with a large distribution throughout India and South East Asia (Talwar & Jhingran, 1991; Jayaram, 1999; Menon, 1999; Jayaram, 2010). Schäfer (2009) described a new species, *Oreichthys crenuchoides*, from the River Jorai in West Bengal, and re-described *O. parvus*, resurrecting it from the synonymy of *O. cosuatis*. Recently, Knight (2014) described *Oreichthys andrewi* from the River Dibru, in Assam, northeastern India, thus bringing the number of valid species under this genus to four.

Day (1878) considered *Barbus cosuatis* to be widely distributed in India, ranging from "Bengal, through the N.W. provinces, the Deccan and Bombay, and down the Western coast as low as Cottayam in Travancore (Kottayam district in modern day Kerala)". Others, following his lead, have therefore treated specimens resembling *O. cosuatis* from the Western Ghats as conspecific. Hora (1937a) recorded a specimen from Mysore with an almost complete lateral line, which he referred to *O. cosuatis*. Jayaram (1982) described *Puntius coorgensis* from the Cauvery in Karnataka, which Menon (1999) recognized as an *Oreichthys* but placed in the synonymy of *O. cosuatis*.

In order to assess these nominal species more closely, fresh collections were made in Karnataka and Kerala, (Fig. 1) which yielded three distinct species of *Oreichthys*. One of the species, from Coorg, fits the original description of *Puntius coorgensis*, thereby making *Oreichthys coorgensis* a valid species distinct from *O. cosuatis*. The other two species, one, from Karnataka, similar to the specimen that Hora (1937a) documented from Mysore and the other, from Kerala, were found to be new and are described herein.

overlooked the absence of serrations on the last unbranched dorsal-fin ray in his specimens when referring them to *R. pangut*. It is also possible, as noted by Day (1867) regarding *Barbus khudree*, that Sykes based his description on more than one species. In this regard, it should be noted that the name 'pangut' (pronounced *puhn-gut*, the first syllable rhyming with 'bun' but with a soft n) in Maharashtra is applied today to *Hypselobarbus dobsoni*. Either way, we concur with Schäfer (2009) that *Rohtee pangut* of Sykes does not represent an *Oreichthys*.

Schäfer (2009) drew attention to the drawing of *O. cosuatis* in Day (1878b: pl. 144 fig. 1) and speculated that it was possibly another undescribed species. As specimens of *Oreichthys* from Madhya Pradesh, Central India, were not examined in the present study, it is not possible to shed more light on this observation. It is quite possible that additional species await discovery in Central India and elsewhere.

Comparative material

Oreichthys cosuatis: MKC 400, 10.xii.2011, 2 ex., 29.4–29.7 mm SL, Toofanganj, Cooch Behar District, West Bengal, coll. Andrew Rao; MKC 423, 14.x.2013, 2 ex., 32.3–34.1 mm SL, Nadia, West Bengal, coll. Andrew Rao.

Oreichthys crenuchoides: ZSI/SRC F 8754, 27.vii.2010, 2 ex., 26.8–28.6 mm SL, River Jorai, near Barobisha, Jalpaiguri District, West Bengal, coll. Andrew Rao; MKC 30, 27.vii.2010, 2 ex., 27.8–30.5 mm SL, River Jorai, near Barobisha, Jalpaiguri District, West Bengal, coll. Andrew Rao

Oreichthys andrewi: Holotype, ZSI/SRC F 8755, 38.7mm SL, 10.xii.2011, River Dibru at Guijan Ghat, Tinsukia District, Assam, India, coll. Andrew Rao.

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