



Barilius ardens* (Teleostei: Cyprinidae), a new species from the Western Ghats, India, with redescription of *B. malabaricus* and *B. canarensis

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Abstract

The identities of *Barilius canarensis* and *B. malabaricus* have hitherto been confused. An attempt to resolve their identities by examining fresh collections from their respective type localities, i.e., southern Karnataka and northern Kerala, yielded a new species, which is herein described as *B. ardens*. The new species differs from *B. canarensis* and *B. malabaricus* by the presence of a row of 7–9 large vertically elongate blotches on the flank, in large adults the first three blotches broken into a smaller row of intercalate spots (vs. two rows of spots: the first consisting of 9–11 oval spots, the second with 3–4 smaller spots); and 5+4+3 (vs. 5+4+2) pharyngeal teeth. The new species is distinguished from *B. bakeri* by having 5+4+3 (vs. 5+4+2) pharyngeal teeth; and the dorsal and anal fins margined with bright orange (vs. white). *Barilius malabaricus* (hitherto in the synonymy of *B. canarensis*) is shown to be a valid species distinguished from the latter by having 11½ (vs. 10½) branched dorsal-fin rays and 14½–15½ (vs. 13½) branched anal-fin rays; both species are redescribed.

Key words: *Opsarius, bakeri, gatensis*, Western Ghats, Canara, Kerala

Introduction

Opsarius canarensis Jerdon, 1849, was originally described from the streams flowing into Canara (now south-western Karnataka) as a species with a 'double row of green spots on the sides' and fins margined with white. Day (1870), however, considered it to be a species similar to *Barilius gatensis* (Valenciennes, in Cuvier & Valenciennes, 1844: 309, pl. 503—type locality Mountains of Gates [=Ghats]), which is characterized by a row of narrow vertical bars along the length of the body. In the same work, Day (1870) also placed *O. malabaricus*, which Jerdon (1849) clearly stated had 'round spots', in the synonymy of *B. gatensis*, rendering the identity of both *Barilius canarensis* and *B. malabaricus* ambiguous. In addition, Day (1865) described *Barilius bakeri*, a similar species with a single row of spots along the sides, from southern Kerala, which he later (Day, 1878) speculated was a regional variant of *B. canarensis*. To add to the uncertainty, Day (1878) described and illustrated (p. 592, pl. 149, fig. 1) *B. canarensis* as a species with a single or double row of large, vertically-elongate spots on the body, and considered *B. malabaricus* a synonym of *B. canarensis*. As a result of this uncertainty, fishes identified as *B. canarensis* were reported from across the southern Western Ghats, ranging from the River Bhadra in Shimoga District, Karnataka, to Ernakulam District, Kerala (Ajithkumar *et al.*, 1999; Beevi & Ramachandran, 2009; Shahnawaz *et al.*, 2010; Venkateshwarlu *et al.*, 2014) from both east- and west-flowing rivers. Moreover, the species represented as *B. canarensis* (Shaji & Easa, 2003; Manickam *et al.*, 2014) variously had small round spots or vertically elongate spots on the flank, with the fins tipped either with white or orange.

Re-examination of the original descriptions of both *Opsarius canarensis* and *O. malabaricus* revealed that Jerdon (1849) had clearly distinguished the two species based on the differences in body markings, fin colours and meristics. In order to assess these nominal species more closely (no known type material survives), fresh collections were made at the type localities, southern Karnataka and northern Kerala and two species consistent

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