

A new species of *Heteroleotris* (Perciformes: Gobiidae) from the Red Sea

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Abstract

A new species of the genus *Heteroleotris* is described from the Gulf of Aqaba, Red Sea, on the basis of two specimens. *Heteroleotris psammophila* sp. nov. is unique among the species of the genus *Heteroleotris*, except for *H. diademata*, in lacking scales and head pores. The new species differs from the morphologically similar *H. diademata* in having fewer rays in the second dorsal and anal fins, and in coloration. The habitat preference of the new species for open sand area close to coral reefs in 8–21 m and its nocturnal habits are unusual for species of the genus *Heteroleotris*.

Key words: *Heteroleotris psammophila* sp. nov., Gobioidei, Gulf of Aqaba

Introduction

Heteroleotris Bleeker, 1874 is a moderately diverse genus of small-sized (standard length <50 mm), benthic gobies with cryptic behaviour, distributed in shallow coastal waters in the Indo-West Pacific. The genus was revised by Hoese (1986), with 13 valid species sharing several characters. The most important character is the synapomorphy of the first gill slit closed by a membrane from the gill cover to one-half or more of the lower limb of the first gill arch, although this feature occurs in some other gobioid fishes (Gill & Mooi 2012). Only one species, *H. poecila* (Fowler, 1946), extends its distribution from the Indian Ocean east to the West Pacific. Gill (1998) described one additional species, *H. georgegilli*, from the western Indian Ocean. Hoese and Larson (2005) included the single previously described species of the genus *Pascua*, *P. caudilinea* Randall, 2005 from Easter Island and two new species from South Pacific, both morphologically close to *P. caudilinea* Randall, 2005, in *Heteroleotris*, and treated *Pascua* as junior synonym. Randall (2006) argued that *Pascua* is a valid genus, adding the two species described by Hoese and Larson (2005) as *Heteroleotris* to the genus. Recently a new species, *H. exilis*, was described from Japan by Shibukawa (2010). We provisionally follow Randall's (2006) and Shibukawa's (2010) opinions on the validity of *Pascua*, expecting that more extensive research on this problem is needed to answer this question with more certainty. Regardless, the generic identity of the material in this paper matches *Heteroleotris* in both concepts of generic limits with 15 (Randall 2006) or 18 (Hoese & Larson 2005) described species. Two small individuals of an unknown gobiid species were photographed and collected by the second author from the Red Sea, Gulf of Aqaba, Egypt, Dahab, in November 2012. Examination of the material showed that these specimens belong to an undescribed species of the genus *Heteroleotris*, which we herein describe.

Material and methods

Morphometric methods mostly follow Gill (1998) for easier species comparison within the genus. The length of the specimens is presented as standard length + caudal-fin length. Standard length (SL) is measured from the median anterior point of the upper lip to the base of the caudal fin (posterior end of the hypural plate). Morphometric data presented are given as percentages of SL. Measurements: head length is taken from the median anterior point of the snout tip to the fleshy edge of the operculum; eye diameter is the horizontal (greatest) fleshy diameter; head width

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