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A new species of *Hetereleotris* (Perciformes: Gobiidae) from Farasan Island (Red Sea)

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Abstract

A new species of the genus *Hetereleotris* is described from Farasan Island, Saudi Arabia, Red Sea, on the basis of a single specimen. *Hetereleotris dorsovittata* sp. nov. is unique among the known sixteen species of *Hetereleotris*, except for *H. diademata* and *H. psammophila*, in the combination of the absence of head canals and lack of squamation. The low count of pectoral-fin rays (14) is only overlap with *H. psammophila* (14 or 15), whereas all other *Hetereleotris* species have a higher number of pectoral-fin rays. The new species differs from *H. psammophila* in having more soft rays in the dorsal and anal fins, by the arrangement of papillae in the preoperculo-mandibular row *i* and by coloration. The single specimen was collected in the large lagoon at the base of an isolated small coral patch at a depth of 1m.

Key words: *Hetereleotris dorsovittata*, endemism, systematics, coral reef fishes, Saudi Arabia.

Introduction

The genus *Hetereleotris* Bleeker, 1874 is comprised of small-sized (standard length <50 mm), benthic gobies with cryptic behaviour, distributed in shallow coastal waters in the Indo-West Pacific. The most important diagnostic character of this genus is 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 (Hoese 1986). The genus was revised by Hoese (1986) with 13 valid species. Later descriptions have included *H. georgegilli* Gill, 1998; *H. exilis* Shibukawa, 2010; and *H. psammophila* Kovačić & Bogorodsky 2014. Hoese and Larson (2005) assigned 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* in *Hetereleotris*, and treated *Pascua* as junior synonym. Randall (2006) argued that *Pascua* is a valid genus for these three known species. For the purpose of comparison of *Hetereleotris* species in this paper, we provisionally follow Randall's (2006) and Shibukawa's (2010) opinions on the validity of *Pascua*.

The single specimen of an unknown gobiid species was collected by the second author from Farasan Island, Saudi Arabia, Red Sea, in March 2012. Examination of the specimen showed that it represents an undescribed species of genus *Hetereleotris*, both *sensu* Hoese and Larson (2005) and Randall (2006) i.e. the generic identity of the specimen matches *Hetereleotris* in both concepts of generic limits with 16 (Randall 2006) or 19 (Hoese & Larson 2005) described species. The aim of this paper is to describe the new *Hetereleotris* species.

Materials and Methods

Morphometric methods for *Hetereleotris* 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).

margaretae Hoese, 1986, and *H. psammophila*), four occur in the Red Sea. Considering morphology, the genus could be divided into groups based on these characters i.e. the presence of scales or the presence of head canals and pores; however, at present no clear relationships among *Heteroleotris* species are visible from morphology.

Comparative material examined

Heteroleotris diademata: PMR VP2479, 1 female, 27.2 + 7.2 mm, Red Sea, Egypt, Hurghada, coll. S.V. Bogorodsky, 22 Sep. 2009.

Heteroleotris psammophila: holotype, PMR VP3054, female, 26.9 + 7.3 mm, Red Sea, Gulf of Aqaba, Egypt, Dahab, coll. S.V. Bogorodsky, 23 Nov. 2012; paratype, PMR VP3049, female, 26.8 + 7.0 mm, Red Sea, Gulf of Aqaba, Egypt, Dahab, coll. S.V. Bogorodsky, 19 Nov. 2012.

Heteroleotris vulgaris: PMR VP2477, 3 juveniles of unidentified sex, 15.2 + 4.4–17.2 + 4.5 mm, Red Sea, Egypt, El Quseir, Mangrove Bay, coll. S.V. Bogorodsky, 12 May 2008; PMR VP2478, 1 female, 20.9 + 4.8 mm, Red Sea, Egypt, Hurghada, coll. S.V. Bogorodsky, 22 Sep. 2009.

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