



Redescription of *Parapercis macrophthalma* (Pietschmann, 1911) and description of a new species of *Parapercis* (Pisces: Pinguipedidae) from Taiwan

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Abstract

Parapercis macrophthalma is confirmed as a valid species and redescribed on the basis of the holotype and other specimens collected from the type locality, Taiwan, and Japan. It is morphologically similar to *P. muronis* Tanaka, 1918, but differs in having five vertical transverse bars that extend well below the lateral line versus five oblique transverse bars, with the third to fifth bars ending on or above the lateral line. A new species is also described on the basis of a specimen collected from southwestern Taiwan. It is distinct in having numerous pores interconnected by canals on the head, forming 10 vertical or oblique rows on the cheek and opercular apparatus, predorsal scales extending to the level of the posterior margin of the eye, four dorsal-fin spines, six oblique bars laterally on the body, and a combination of other characters. A key to species of *Parapercis* with narrow transverse bars on the upper body is provided.

Key words: Teleostei, taxonomy, *Parapercis macrophthalma*, *Parapercis moki* n. sp., new species, Taiwan

Introduction

Pietschmann (1911) described *Neopercis macrophthalma* on the basis of a single specimen 127 mm in total length collected from Taiwan (Fig. 1A). Cantwell (1964) placed it in *Parapercis* Bleeker, 1863, but with a doubtful status. Gloerfelt-Tarp & Kailola (1984) recognized it as a valid species, based on a 92 mm SL voucher specimen from Western Australia; however that record is based on an undescribed species (J. Johnson, unpub. data). Johnson (2006) described *Parapercis sexlorata* from eastern Australia and compared it to *P. macrophthalma* which brought the first author's attention of the presence of the Taiwanese holotype.

In Taiwan, *P. muronis* (Tanaka, 1918) has been recorded for several decades (Chen, 1969; Shen, 1984a, b; Chen & Yu, 1986; Shen *et al.*, 1993), whereas *P. macrophthalma* has never been mentioned, probably due to the close similarity of the two species. Johnson (2006) outlined the common features of the species, such as five dark transverse bars on the upper body, the presence of palatine teeth, and similar body shape and most meristic values; however characters that differentiate these two species were not provided.

In order to verify the two species mentioned above, a survey of the literature and examination of specimens of both species was conducted. This revealed that records of *P. muronis* from Taiwan and Japan were often confused with or misidentified as *P. macrophthalma*.

Furthermore, a single specimen with similar appearance to *P. muronis* was found in the Pisces collection of National Museum of Marine Biology and Aquarium (NMMB-P) during our investigations. The specimen has several unique characters and is not referable to any currently recognized species. The absence of any additional specimens in collections throughout the region indicate that the species is rare. Hence, although represented by only one specimen, we herein describe it as a new species.