



***Parapercis pariomaculata* (Perciformes: Pinguipedidae), a new species of sandperch from Lombok and Bali, Indonesia and remarks on the validity of *P. quadrispinosa* (Weber 1913)**

JEFFREY W. JOHNSON¹ & WILLIAM T. WHITE²

¹*Ichthyology, Queensland Museum, PO Box 3300, South Brisbane, Qld 4101, Australia. E-mail: Jeff.Johnson@qm.qld.gov.au*

²*CSIRO Marine & Atmospheric Research, GPO Box 1538, Hobart, TAS 7001, Australia. E-mail: William.White@csiro.au*

¹*Corresponding author*

Abstract

A new species of pinguipedid fish, *Parapercis pariomaculata*, is described from seven specimens collected from Lombok and the southeast coast of Bali, Indonesia. The species appears locally common, having also been photographed underwater in several other locations off Bali. It is most similar to *Parapercis clathrata* in morphology, colouration and meristic values, but is unique among the genus in having a combination of dorsal-fin rays IV, 21, anal-fin rays I, 17, lateral-line scales 57–58, vomer with 2–4 rows of robust conical teeth, palatines edentate, angle of subopercle produced and with small spinules, 10 abdominal and 20 caudal vertebrae, some nape scales weakly ctenoid in males, pelvic fins not reaching anal-fin origin in males, and colouration, including two small black spots on the suborbital, one above the other within a triangular reddish-brown blotch, and the arrangement of black and white blotching and other markings on the caudal fin. Comparison of the mitochondrial cytochrome c oxidase subunit 1 (CO 1) genetic marker utilised in DNA barcoding produced a significant genetic divergence of about 12.8% between the new species and its closest congener. A lectotype is designated from the two syntypes of *Parapercis quadrispinosa* (Weber) which is determined to be a junior synonym of *P. clathrata* Ogilby.

Key words: Pinguipedidae, *Parapercis*, new species, *Parapercis pariomaculata*, *Parapercis quadrispinosa*, DNA barcoding, Bali, Lombok, Indonesia

Introduction

Parapercis Bleeker, 1863 currently includes 73 recognised species (Liao *et al.* 2011; Yamanaka *et al.* 2011; Ho *et al.* 2012; Sparks & Baldwin 2012). The meristic formulae for many species fall within a relatively narrow band and colouration is an important factor in distinguishing species. Many, if not all, are known to be protogynous hermaphrodites, with sex change often associated with changes in the colour pattern and enhancement of some fin rays, such as elongation of the caudal-fin lobes (e.g. Nakazono *et al.* 1985; Imamura & Yoshino 2007; Randall 1984, 2008). A number of species (e.g. *P. clathrata* Ogilby 1910, *P. millepunctata* (Günther 1860), *P. multiplicata* Randall 1984, *P. tetracantha* (Lacepède 1801) and *P. xanthozona* (Bleeker 1849)) share a broadly similar pattern of nine or ten brown transverse bars with darker centres on the lower half of the body.

The second author recently collected four specimens of *Parapercis* with the abovementioned colour pattern from the Tanjung Luar fish landing site, Lombok. The only known species with this colouration and four dorsal-fin spines are *P. clathrata* and *P. millepunctata*. Among these two species, gill raker counts, the irregular whitish blotch through the midsection to the caudal fin, and other colour features indicated they were most closely related to *P. clathrata*. However, they lacked both the characteristic ocellated black spot above the gill openings found in males, or the much smaller, non-ocellate black spot similarly placed in females of the latter. On closer inspection, there were also a number of other more subtle colour features that were not consistent with either male or female individuals of *P. clathrata*.

Bleeker (1853) described *Percis tetracanthus*, another nominal species of *Parapercis* with four dorsal-fin spines and a colouration including nine brownish red transverse bars. This species, from Batavia (= Jakarta), was preoccupied in *Parapercis* by *Labrus tetracanthus* Lacepède 1801, and *Parapercis quadrispinosa* (Weber 1913: