



# Article

## Revision of the genus *Parequula* (Pisces: Gerreidae) with a new species from southwestern Australia

YUKIO IWATSUKI<sup>1,3</sup>, JOHN J. POGONOSKI<sup>2</sup> & PETER LAST<sup>2</sup>

<sup>1</sup>Department of Marine Biology & Environmental Sciences, Faculty of Agriculture, University of Miyazaki, 1-1 Gakuen-kibanadai-nishi, Miyazaki 889-2192, Japan. E-mail: yuk@cc.miyazaki-u.ac.jp

<sup>2</sup>Wealth from Oceans Flagship, CSIRO Marine and Atmospheric Research, GPO Box 1538, Hobart, Tas., 7001, AUSTRALIA. E-mail: john.pogonoski@csiro.au; E-mail: Peter.Last@csiro.au

<sup>3</sup>Corresponding author

### Abstract

The genus *Parequula*, which has long been considered monotypic, is reviewed with a new species described from southwestern Australia on the basis of 21 types and 17 non-type specimens (42–81 mm in standard length); its only congener, *P. melbournensis* (Castelnau), is also redescribed. *Parequula elongata* **n. sp.** differs from *P. melbournensis* in having a more slender body, a lower soft anal-fin ray count (14–15, mode 15 vs. 16–18, mode 17), a lower pored lateral-line scale count (34–35, mode 34 vs. 37–40, mode 38), and the dorsal fin with a reddish upper margin when fresh (vs. semi-translucent to bluish with a narrow, parallel, yellowish vertical line on each fin membrane and a yellowish fin margin in *P. melbournensis*). Furthermore, the head profile of *P. elongata* **n. sp.** is nearly straight to slightly convex, whereas *P. melbournensis* is distinctly concave in outline above the eyes. Nominal species (junior synonyms) of *P. melbournensis* are discussed and a key to the two species is also provided.

**Key words:** Taxonomy, Revision, *Parequula*, *Parequula elongata* **n. sp.**, Australia

### Introduction

The genus *Parequula* (Steindachner 1879a) has long been considered monotypic, known only for *Parequula melbournensis* (Castelnau 1872) from southern Australia in the Indo-West Pacific (Castelnau 1872; Gomon *et al.* 2008). *Parequula melbournensis* is unique within the family Gerreidae because it is more colorful and has more anal fin rays than other typically silvery gerreid species (Gomon *et al.* 2008). It also has a more temperate distribution, occurring in southern Australia, whereas other gerreid species are usually known from tropical to subtropical regions (Iwatsuki *et al.* 1996, 1998, 1999a, 1999b, 2001a, 2001b, 2001c, 2002; Woodland 2001; Gilmore and Greenfield 2003; Iwatsuki and Heemstra 2001, 2007; Iwatsuki and Kimura 1997, 1998).

A trawl survey of the ichthyofauna of the continental shelf of southwestern Australia from the FRV *Naturaliste* (Last *et al.* 2006) revealed specimens of an unfamiliar *Parequula* species with a slender body. The species was collected in depths of around 100 m near Rottnest Island, off Perth, southwestern Australia, and was tentatively identified by one of us (PL) as *Parequula* sp. A. Fresh specimens (50–78 mm SL) had a distinctive reddish margin on the dorsal-fin spines and rays, and a whitish body with a silvery tinge unlike any other known gerreid species; specimens collected were shared between the Australian National Fish Collection (ANFC) and Museum Victoria (NMV). Subsequently, Gomon *et al.* (2008) noted “Population off W coast with shallower body, may be separate species; description (of *P. melbournensis*) based on deeper-bodied specimens. Last *et al.* (2011) also suggested that this genus might contain previously undetected cryptic species. After closer inspection we discovered that *Parequula* sp. A also differs from *P. melbournensis* in having lower counts of the pored lateral-line scales, and lower counts of the soft anal-fin rays.

We concluded that this species is new to science within *Parequula* of the family Gerreidae. *Parequula elongata* **n. sp.** is described on the basis of specimens collected during the *Naturaliste* survey, together with