



A new species of the gobiid genus *Eviota* (Teleostei: Gobioidei) from the Kermadec Islands, New Zealand

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Abstract

Eviota kermadecensis is described as a new species from the Kermadec Islands, mainly from Raoul Island, and is the only species of *Eviota* known from the Kermadec Islands. It is most similar to *E. abax* and *E. masudai* from Japan in morphology and fin-ray counts. All three species normally have 1,10 second dorsal fin-ray counts. *Eviota kermadecensis* differs largely in coloration. The species has a ratio of 1.5 females to males and males average a larger size.

Key words: Gobiidae; *Eviota* sp. nov.; taxonomy; New Zealand

Introduction

The genus *Eviota* is one of the most speciose genera of gobioid fishes, and is found in the Indo-Pacific region from Japan to Australia and Africa to Pitcairn Island. Currently 67 valid species have been described. However, with many undescribed species known, it is likely the total will be over 100. Species are normally found on coral reefs, sitting on the bottom sediment or corals; others typically swim just above corals. One found in southern Australia is associated with rocky reefs. The tropical species have a very short life cycle, as short as 3.5 weeks in some species (Depczynski & Bellwood, 2005). Some are known to be hermaphroditic (Cole, 2010).

The species described here was first collected from Raoul Island in the Kermadec Islands in 1976 in a pipe dredge by the RV Acheron. Because of its very small size (17mm SL), this specimen remained largely overlooked. Further specimens were collected in 1985 and reported (Francis, *et al.* 1987) when they were first recognised as distinct. The junior author collected a large series in 2004, allowing the present description to be prepared.

Material and methods

We follow Lachner & Karnella (1980) for methods of making counts and measurements, and for describing fin morphology and laterosensory pore/neuromast patterns. We use the term “segmented” for the fifth non-spinous ray in the pelvic fin in *Eviota* species, although it usually lacks segmentation when very short. In the list of material examined following the registration number is the number of specimens, with the size range in millimetre standard length given in parentheses. In the description of meristic features, the numbers in parentheses indicate numbers of individuals with a given count; underlined counts indicate holotype values. Although all specimens of *E. kermadecensis* were checked for diagnostic characters, data were not recorded for all specimens, because the species is known only from a localised area. Scale counts were obtained from only a few specimens because most had lost some or all scales. Type material is deposited in the Australian Museum (AMS) and Museum of New Zealand Te Papa Tongarewa (NMNZ). Comparative material from Japan is deposited in the Kagoshima University Museum, Kagoshima Japan (KAUM).

In the species studied, the first ray of the anal fin and second dorsal fin is always a spine. The remaining rays in these fins are segmented. The last ray of the second dorsal and anal fins, as counted, consists of two elements in