



***Eviota rubriceps*, a new goby from the Southwestern Pacific Ocean, with comments on *E. mikiae* and *E. raja* (Teleostei: Gobiidae)**

DAVID W. GREENFIELD¹ & SUSAN L. JEWETT²

¹Research Associate, Department of Ichthyology, California Academy of Sciences, 55 Music Concourse Dr., Golden Gate Park, San Francisco, California 94118-4503, and Emeritus Professor, University of Hawaii. Mailing address: 944 Egan Ave., Pacific Grove, CA 93950. E-mail: greenfie@hawaii.edu

²2920 Rosemary Lane, Falls Church, VA 22042-1814. E-mail: jewettsusan@gmail.com

Abstract

A new species of goby, *Eviota rubriceps*, most similar to *E. nigrispina*, is described from Indonesia, Papua New Guinea, and the Philippine Islands. Both species have the lower two thirds of the body dark in preserved specimens, belong to the cephalic sensory-pore pattern group 2 of Lachner and Karnella (1980), have an 8/7 dorsal/anal formula, and unbranched pectoral-fin rays. *Eviota rubriceps* differs from *E. nigrispina* in live and preserved coloration and in caudal-peduncle depth. The descriptions of *E. mikiae* and *E. raja* are expanded based on additional materials.

Key words: Ichthyology, systematics, Gobiidae, *Eviota*, new species, pygmygoby, dwarfgoby, S.W. Pacific Ocean

Introduction

In the 1970's and 1980's the second author, sometimes under the name Karnella, worked with Ernest A. Lachner on gobies of the Indo-Pacific Genus *Eviota* (Lachner & Karnella, 1978; Lachner & Karnella, 1980; Karnella & Lachner, 1981; Jewett & Lachner, 1983). At the time of Lachner's death they were working on describing a number of species that were not completed. Since that time two of the Jewett & Lachner manuscript species have been described by others, *E. raja* Allen (2001), and *E. mikiae* Allen (2001), and two, *E. hoesei* and *E. readerae*, by Gill and Jewett (2004). In this paper we describe one of those waiting species, *E. rubriceps*, that is very similar to the recently described *E. nigrispina* Greenfield & Suzuki (2010). Additional information based on the second author's earlier studies is presented for *E. mikiae* and *E. raja*. The common names pygmygoby and dwarfgoby have been used both for species in the genera *Eviota* and *Trimma*. By agreement (pers. comm., J.E. Randall & R. Winterbottom, 20 July 2011), we will be using the common name dwarfgoby for *Eviota* species and pygmygoby for *Trimma* species.

Material and methods

Counts and measurements, descriptions of fin morphology and the cephalic sensory-canal pore patterns follow Lachner and Karnella (1980). Measurements were made to the nearest 0.1 mm using an ocular micrometer and dial calipers, and are presented as percentage of standard Length (SL). All specimen lengths are SL. Cyanine Blue 5R (acid blue 113) stain was used to make pores more obvious (Akihito *et al.* 1993; Saruwatari *et al.* 1997; Nakabo 2002). Values for the holotype are given first, followed by the range for all types, and by the mean, where appropriate, in parentheses, or frequency of each count. Photographs of preserved specimens are included to aid in the identification of museum specimens. Specimens have been deposited in the following museums: BPBM—Bernice P. Bishop Museum, Honolulu; CAS—California Academy of Sciences, San Francisco; MZB—Museum Zoologicum Bogoriense, Cibinong, Indonesia; ROM—Royal Ontario Museum, Toronto, and USNM—United States National Museum (Smithsonian), Washington D.C.