

## Two new species of the gobiid fish *Trimma* from the coral reefs of THE western Pacific Ocean (Pisces; Perciformes; Gobioidae)

RICHARD WINTERBOTTOM

Department of Natural History, Royal Ontario Museum, 100 Queen's Park, Toronto, Ontario, M5S 2C6 and  
Department of Zoology, University of Toronto, Toronto, Ontario, M5S 3G5

### Abstract

Two new species of the gobiid fish genus *Trimma* are described. Both possess scales in the predorsal midline, have interorbital and postorbital trenches, and lack scales on the opercle. *Trimma anthrenum* is characterized by an unbranched fifth pelvic fin ray and an almost monochromatic color pattern. When alive, it has a yellow body, and the iris has a pair of blue and black triangles with their bases against the anterior and posterior margins of the pupil (giving the pupil a slit-like appearance), the posterior triangle continues anteroventrally around the pupil margin. Preserved specimens have a very finely outlined diamond pattern across the dorsal half of the body, which otherwise exhibits very few melanophores or chromatophores, a concentration of pigment on the top of the pectoral base, with little pigment on the base itself, a short line of melanophores just above the opercle, and strong basal black bands in the dorsal and anal fins. The species is currently known from Fiji and Tonga. *Trimma preclarum* is characterized by an elongate second and third dorsal spines and a fifth pelvic ray that may or may not be branched (depending on locality). When alive, *Trimma preclarum* has three yellow stripes extending along the body, and a red to purple-red iris with four large yellow spots. Preserved specimens have a finely outlined diamond pattern across the dorsal half of the body, and a diffuse, attenuating band of pale brown chromatophores over the abdomen which fades out above the anal fin. The species has been found at Fiji, Palau, Solomon Islands and Papua New Guinea, with underwater photographs from Saipan.

**Key words:** Systematics, new species, Gobiidae, *Trimma*, western Pacific, coral reefs

### Introduction

*Trimma* contains some 85 species of small (less than 30 mm SL), often colourful gobiids, primarily associated with Indo-West Pacific coral reefs. They are most abundant and diverse below depths of about 10 m, although a few species may be found shallower than this. Many museum collections contain samples from as deep as 45 m, but recent deep