

A new species of the gobiid fish *Trimma* from the Western Pacific and Northern Indian Ocean coral reefs, with a description of its osteology

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Abstract

A new species of the genus *Trimma* is described. *Trimma annosum* is characterized by the presence of scales in the predorsal midline, non-elongate spines in the first dorsal fin, and a moderate interorbital trench. The fifth pelvic-fin ray is branched dichotomously once and is 40-65% the length of the fourth. When alive, *Trimma annosum* is bluish grey with 3 or 4 rows of large yellow blotches on the head and body. In addition to the northern Indian Ocean where it is apparently rare, the species is distributed eastward throughout Indonesia and the Philippines to China, Micronesia and Fiji. The osteology of this species is described and illustrated in some detail to form the basis for a series of phylogenetic studies of *Trimma* currently being undertaken.

Key words: Ichthyology, systematics, Gobiidae, *Trimma*, new species, osteology

Introduction

Trimma contains some 80 species of small (less than 30 mm SL), often colourful gobiids, primarily associated with Indo-Pacific coral reefs. *Trimma* may be recognized by the lack of cephalic sensory canal pores, much reduced cephalic sensory papillae pattern, wide gill opening extending to below the vertical limb of the preopercle or anterior to this, lack of spicules on the outer gill rakers of the first gill arch, fewer than 12 dorsal and anal rays, and a fifth pelvic fin ray that is equal to or more than half the length of the fourth pelvic fin ray. This last value has now been reduced to 40% in order to include the new species.

There is currently no detailed description of the osteology of any species of *Trimma* available, although certain selected features may be found in Winterbottom's (1990) phylogenetic study of heterochrony in *Trimmatom*, where *Trimma anaima* was used as the