

## ***Gymnoamblyopus novaeguineae*, a new genus and species of worm goby from Papua New Guinea (Gobiidae: Amblyopinae)**

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### **Abstract**

A new genus and species of worm goby, *Gymnoamblyopus novaeguineae*, is described on the basis of a single specimen from the Fly River, Papua New Guinea. It differs from all other amblyopine gobies by the following combination of characters: only one anal-fin pterygiophore anterior to first hemal spine; no Y-shaped second anal-fin pterygiophore; no chin barbels; no scales; no raised dermal folds or ridges; pleural ribs short and posteriorly directed; and mouth vertical. This new taxon is figured and a key to the “Taenioides” group of the Amblyopinae is provided.

**Key words:** worm goby, Amblyopinae, Gobiidae, new genus, new species

### **Introduction**

Gobies of the subfamily Amblyopinae are commonly referred to as eel or worm gobies. A worm goby collected in 1987 from the Fly River, Papua New Guinea was figured in Allen (1991: 202, photo 31) as an unidentified species of *Taenioides* and catalogued in the Western Australian Museum (WAM). This specimen was examined and found not to possess the Y-shaped form of the second anal-fin pterygiophore, which is a diagnostic feature of all species of *Taenioides* (Birdsong et al., 1988; Murdy and Randall, 2002). However, this specimen did possess the 3-12210 pterygiophore formula (Birdsong et al., 1988) that is characteristic of the “Taenioides” group of the Amblyopine. We compared the specimen with all remaining genera of the “Taenioides” group (i.e., *Brachyamblyopus*, *Odontamblyopus*, and *Pseudotrypauchen*) and found that the specimen was not assignable to any of these genera or to any other amblyopine genus. Inasmuch as we cannot include this new