



## A new deepwater goby of the genus *Discordipinna* Hoese & Fourmanoir, 1978 (Teleostei: Gobiidae) from Kumejima of the Ryukyus, Japan\*

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### Abstract

A new goby species of *Discordipinna* was collected by trawling from the deep waters off Kumejima, the Ryukyu Islands, Japan. The new species, *Discordipinna filamentosa*, can be well distinguished from the only other described species, *D. griessingeri* Hoese & Fourmanoir, 1978, by the following unique combination of features: (1) fins: first dorsal fin rays VI; pectoral fin rays 16; and first dorsal fin with the longest, filamentous first ray in male extending far beyond caudal fin base when adpressed; (2) squamation: longitudinal scale rows 26; transverse scale rows 8 and predorsal naked; (3) dorsal pterygiophore formulae 3/122101/9; (4) head lateral-line system: a longitudinal pattern of infraorbital papillae and both anterior oculoscapular canal and preopercular canal present, lacking posterior oculoscapular canal; and (5) its distinctive coloration. An artificial key to species of *Discordipinna* is also provided.

**Key words:** *Discordipinna*, Gobiidae, new species, Kumejima, Japan

### Introduction

Fishes in the family Gobiidae belong to one of largest group of marine teleost fishes in the World (Miller 1988; Wu 2008). The coral reef-associated gobiid genus, *Discordipinna* Hoese & Fourmanoir, 1978, is a very small-sized goby with a longitudinal infraorbital papilla pattern (Hagiwara *et al.* 1996; Akihito *et al.* 2002; Motomura & Matsuura 2010). The type species of the genus is *Discordipinna griessingeri* Hoese & Fourmanoir, 1978, with the holotype collected in the Gulf of Aqaba, Red Sea and other type series and recent records from the West Pacific including Indonesia, the Philippines as well as Japan (Hagiwara *et al.* 1996; Akihito *et al.* 2002).

In the 2009, Kumejima Expedition of Japan, a single gobiid specimen was collected by trawling net during deepwater marine biodiversity collections of the coral-reef region. This species was considered new by Suzuki & Shibukawa (2004), based on a series of underwater photographic records of by Japanese scuba divers. The aims of this paper are to present a formal description of this very rare new species as well as provide a diagnostic key for of *Discordipinna* species in the Indo-Pacific region.

### Materials and methods

The type specimen of the new goby was collected by using a 1 m beam trawl from deepwater habitat with coral rubbles off Kumejima, Ryukyu Islands of southern Japan. Other comparative congeneric specimens were collected by scuba diving.