



# Article

## *Colletteichthys flavipinnis*, a new toadfish species from Sri Lanka and India (Teleostei: Batrachoididae)

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### Abstract

The third known species in the genus *Colletteichthys* is described from Sri Lanka and India. *Colletteichthys flavipinnis* differs from *C. dussumieri* in having one instead of two or more tentacles above the eye. It differs from both *C. occidentalis* and *C. dussumieri* in having yellow-orange fins, and from *C. occidentalis* in usually having 16 instead of 15 anal-fin rays and 20 instead of 19 dorsal-fin rays, and in having a slightly smaller (1–2% SL) eye. Mitochondrial COI barcode interspecific distance is 4.4% between *C. flavippinis* and *C. dussumieri*.

**Key words:** Batrachoididae, *Colletteichthys dussumieri*, *Colletteichthys occidentalis*, India, Sri Lanka

### Introduction

The genus *Colletteichthys* has two described species, *C. dussumieri* Valenciennes, 1837 from the western coast of India, and *C. occidentalis* Greenfield, 2012 from the Arabian Peninsula and northern Arabian Sea. In 2009, Arumugam Murugan collected and photographed a toadfish specimen with yellow-orange fins that was trawled at a depth of 10 to 20 m off Tuticorin, India (Fig. 1). In 2010, the second author obtained a second specimen from off Tuticorin (Fig. 2), and then subsequently collected 20 more specimens from the same location. This yellow-finned species represents the third known species in the genus *Colletteichthys* and is described here. Earlier references of *C. dussumieri* occurring in Sri Lanka, (Hutchins, 1984, Randall, 1995 and Greenfield et al., 2008), that is located adjacent to Tuticorin, India, were based on misidentifications of this yellow-finned species (USNM 221342).

### Material and methods

All counts and measurements follow Hubbs and Lagler (1964), except that the last two fin rays are not counted as one unless it is clear that they are joined at the base. Measurements were made to the nearest 0.1 mm using dial calipers. All measurements are expressed as percentage of standard length (SL). All specimen lengths are SL. Counts were made from radiographs. Pectoral-fin rays are difficult to count in larger specimens, the dorsal and ventral-most rays are very small and often embedded in skin, but can be exposed with dissection. Values for the holotype are presented first, followed by the range for all types, and by the mean or mode, where appropriate, in parentheses. Tissue samples were collected and preserved in 95% ethanol, and total DNA extracted by standard protocols (Miller et al., 1988). A mitochondrial COI barcode was generated following Ward et al. (2005) and the sequence data submitted to the NCBI GenBank (Accession number: JQ037844). Specimens from Sri Lanka have been deposited in the following museums: CAS—California Academy of Sciences, San Francisco; USNM—United States National Museum of Natural History (Smithsonian), Washington D.C. Indian specimens have been deposited at CMFRI, Central Marine Fisheries Research Institute, Cochin, Kerala, India.