



## Redescription of the Indian toadfish *Perulibatrachus aquilonarius* Greenfield (Teleostei: Batrachoididae)

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### Abstract

The second known specimen of *Perulibatrachus aquilonarius* from India is compared to the holotype and new information on fresh color is presented. A mitochondrial COI barcode also was generated for the specimen.

**Key words:** Batrachoididae, *Perulibatrachus*, DNA barcode, India

### Introduction

The genus *Perulibatrachus* is represented by four species (Greenfield *et al.*, 2008). One of these, *P. aquilonarius* Greenfield, was described from a single specimen collected by A.W.C.T. Herre in 1941 in India (Greenfield, 2005). The specimen had been misidentified as *Chatrabus damaranus* and deposited in the ichthyological collections of Stanford University, and later was transferred to the California Academy of Sciences. Because of the age of the specimen, its color pattern was badly faded. In February 2010 the first author collected the second known specimen of *P. aquilonarius* from off Tuticorin, India and was able to photograph its fresh coloration. The species is re-described here.

### 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). Values for the holotype are presented first, followed by those of the second specimen (CAS 231007) 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: JF340436)

### *Perulibatrachus aquilonarius* Greenfield 2005

(Figs. 1–4)

**Diagnosis.** A species of *Perulibatrachus* with a wide head (37.1–43.6%SL), 17–18 dorsal-fin rays, 13 anal-fin rays, 21–23 pectoral-fin rays, a shallow, funnel-shaped pocket in the upper pectoral-fin axil, and the body and fins covered with small dark spots.