



## ***Austrobatrachus iselesele*, a new toadfish species from South Africa (Teleostei: Batrachoididae)**

DAVID W. GREENFIELD

Research Associate, Department of Ichthyology, California Academy of Sciences, 55 Music Concourse Dr., Golden Gate Park, San Francisco, California 94118-4599 and Professor Emeritus, University of Hawaii. Mailing address: 994 Egan Ave, Pacific Grove, CA 93950. E-mail: greenfie@hawaii.edu

### **Abstract**

The second known species in the genus *Austrobatrachus* is described from KwaZulu-Natal, South Africa. Its live coloration is very different from the other known species, *A. foedus*, having many black spots on the body and solid colored fins. It also has a longer snout and larger eye. The species lives in holes in the reef at depths of 49–50 m.

**Key words:** *Austrobatrachus iselesele*, *Austrobatrachus foedus*, toadfishes, South Africa, Batrachoididae

### **Introduction**

While collecting fishes for a DNA barcode study at Park Rynie, KwaZulu-Natal, South Africa, located within the Aliwal Shoal Marine Protected Area, Dr. Allan Connell observed two large brown eyes looking out at him from a small hole in a reef. On a subsequent trip he brought a copper wire with a hook at the end and used it to gaff the fish out. He then pinned the specimen's fins, photographed, and preserved it (Fig. 1). After seeing the photograph, I suspected that the species was undescribed and requested that more specimens be obtained. Dr. Connell subsequently collected two additional individuals. The toadfish species is described here. The new species is the second known species in the formerly monotypic genus *Austrobatrachus*, and supports its validity.

### **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, and eye diameter is that of the exposed iris (skin grows over edges of eyes). Because of the extreme wrinkling on the anterior part of the body near the pectoral fins, lateral-line pore counts are difficult and probably underestimated. 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. Values for the holotype are presented first, followed by the range for all types and by the mean where appropriate in parentheses. Specimens have been deposited at SAIAB, South African Institute for Aquatic Biodiversity, Grahamstown. DNA tissue samples have also been deposited at SAIAB. All three specimens have been COI DNA barcoded, at the University of Guelph's Biodiversity Institute of Ontario, and the barcodes are held in their Barcode of Life database.

### **Genus *Austrobatrachus* Smith, 1949.**

**Type species:** *Pseudobatrachus foedus* Smith, 1947, by original designation and monotypy.

**Diagnosis.** A member of the subfamily Halophryninae (Greenfield et al., 2008) lacking scales and a maxillary flap; a foramen present at top of pectoral-fin axil; one subopercular spine and two filaments; supraorbital tentacles