

# First Japanese Specimen-based Record of *Liopropoma tonstrinum* (Teleostei: Serranidae), from Minami-daito Island, Daito Islands, southern Japan

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(Received 11 September 2014; Accepted 11 April 2015)

A single specimen (25.8 mm standard length) of a serranid fish, *Liopropoma tonstrinum* Randall and Taylor, 1988, was collected from Minami-daito Island in the Daito Islands, southern Japan. This species was previously known based on specimens from Christmas Island in the eastern Indian Ocean, and various islands in the Pacific Ocean, including the Society Islands, American Samoa, Fiji, New Caledonia, Indonesia, Palau, Micronesia, the Marshall Islands, and Wake Island, as well as from underwater photographs taken in the Mariana Islands and southern Japan. Thus, the present specimen represents the first record from Japan based on a voucher specimen, as well as the northernmost specimen-based record of this species up to now.

**Key Words:** *Liopropoma tonstrinum*, *Liopropoma multilineatum*, Perciformes, new record, voucher specimen, distribution, taxonomy, Daito Islands, Japan.

## Introduction

The serranid genus *Liopropoma*, inhabiting deep to shallow waters, comprises 23 species from the Indo-Pacific Ocean (Eschmeyer 2014). Of these, 11 species have been recorded from Japanese waters, most of them occurring from the Izu Islands to the Ryukyu Archipelago (Senou 2013).

During an ichthyofaunal survey at Minami-daito Island, Daito Islands (ca. 300 km east of Okinawa Island), southern Japan, a single specimen of *L. tonstrinum* Randall and Taylor, 1988 was collected off the island at a depth of 25 m. This species, one of seven new species of this genus described by Randall and Taylor (1988), has been recorded from the eastern Indian and Pacific oceans, and the northernmost record on the basis of voucher specimens has been from Palau. The Minami-daito specimen is herein described as the first specimen-based record of *L. tonstrinum* from Japan and the northernmost record of this species.

## Materials and Methods

Counts and measurements follow Randall and Taylor (1988). Predorsal, preanal, and prepelvic lengths given in Randall and Taylor (1988) are described as pre-dorsal-fin, pre-anal-fin, and pre-pelvic-fin lengths, respectively, in the present paper. Measurements were made to the nearest 0.1 mm with needle-point calipers under a dissecting microscope. Standard and head lengths are abbreviated as SL and

HL, respectively. The morphological description is based on the specimen collected from Minami-daito Island. Curatorial procedures for the collected specimen followed Motomura and Ishikawa (2013). The specimen of *L. tonstrinum* examined in this study is deposited at the National Museum of Nature and Science, Tsukuba, Japan (NSMT). The underwater photographs of *L. tonstrinum* referred to in this paper are registered at the Image Database of Fishes in the Kanagawa Prefectural Museum of Natural History, Odawara, Japan (KPM-NR). The mitochondrial gene COI (653 bp) was sequenced following Ivanova *et al.* (2007), and the sequence is available at DDBJ/EMBL/GenBank under accession number AB983160.

*Liopropoma tonstrinum* Randall and Taylor, 1988  
[New standard Japanese name: Borojino-hanasuzuki]  
(Fig. 1)

*Liopropoma* sp. 1: Allen and Steene 1979: 24 (Christmas Island, Australia).

*Liopropoma tonstrinum* Randall and Taylor, 1988: 38, pl. 2, fig. B (holotype locality: Augulpelu Reef, Palau; paratypes localities: Christmas Island, Australia; Tutuila, American Samoa; Ono-Ilau Island, Fiji; Pohnpei and Ant Atoll, Micronesia; Kwajalein Atoll and Enewetak Atoll, Marshall Islands); Kulbicki and Williams 1997: 14 (Ouvea Atoll, New Caledonia); Heemstra and Randall 1999: 2460 (western Pacific); Randall *et al.* 2002: 159, fig. 4 (Tahiti, Society Islands); Allen and Adrim 2003: 32 (Sulawesi, Indonesia); Myers and Donaldson 2003: 618 (Mariana Islands); Lobel