

# Record of the Armored Searobin *Peristedion barbiger* (Garman, 1899) (Actinopterygii: Teleostei: Peristediidae) off Peru with Taxonomic Notes

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A large series of *Peristedion barbiger* (Garman, 1899) was collected in the eastern Pacific off Peru during a joint survey conducted by the Japan Deep Sea Trawlers Association and the Instituto del Mar del Perú in 1998–2003. No detailed description of *P. barbiger* has been published since the original description, and the availability of 285 new specimens provided an opportunity to determine the extent morphological variability within this species. Our study revealed that the presence or absence of nasal spines and the shape of the preopercular margin, both having been used previously as taxonomic characters, vary intraspecifically. The species is diagnosed as having 16–19 dorsal-fin soft rays; 31–34 bony plates in the upper lateral row; 14–19 lower gill rakers; 17–25 chin barbels in total; short pectoral fin, 13.3–17.8% of SL; a relatively short pair of filamentous barbel on the lip, 26.4–57.1% of HL; a broad, spatulate rostral projection of a length 19.7–39.5% of HL; and a large black spot on the spinous portion of the dorsal fin. In addition, we herein designate a lectotype for *P. barbiger*.

**Key Words:** Nasal spine, preopercular, intraspecific variation, type status, lectotype.

## Introduction

The peristediid genus *Peristedion* Lacépède, 1801 is characterized by a lack of upper jaw teeth, a smooth lateral margin of the head, and the posterior bony plates in the lower lateral rows being contralaterally sutured along the midline (Kawai 2008). The genus comprises 24 benthic species of armored searobin inhabiting tropical and temperate waters of the world oceans (Miller and Richards 2002; Kawai 2008; Bussing 2010).

In 1998–2003, 285 specimens of *Peristedion barbiger* were collected at depths of 134–531 m, off Peru in the eastern Pacific (Fig. 1) during explorations conducted jointly by the Japanese research vessel “Shinkai-maru” and the Peruvian research vessel “Humboldt.” Kawai (2009) subsequently reported the species based on 10 of these specimens, but the description was very brief and lacked detail. *Peristedion barbiger* has not been fully treated since it was originally described by Garman (1899) from the Pacific side of Panama. The species is redescribed herein on the basis of the 285 new specimens from Peru and a lectotype is designated for it.

## Materials and Methods

The examined specimens are deposited in the collections of the Hokkaido University Museum, Hakodate,

Japan (HUMZ), the Museum of Comparative Zoology, Harvard University, Cambridge, MA, USA (MCZ), and the Smithsonian Institution National Museum of Natural History, Suitland, MD, USA (USNM). Counts and proportional measurements follow Kawai *et al.* (2004, 2008), except the distance between the tips of the rostral projections follows Miller (1967a) and the head width is measured between the sensory pores at the base of the preopercular spine of each side. All measurements were made to the nearest 0.1 mm with digital calipers and dividers. The terminology and counts for the bony plates and barbels (Fig. 2) follow Yaitou and Okamura (1985), with all plates in each row counted. The terminology for the cranial spines follows Miller (1967a). Gill rakers were counted on the outer side of the first arch of the right side; the single gill raker between the upper and lower limbs is included in the lower limb count. Standard length and head length are abbreviated as SL and HL, respectively. Specimens collected from off Peru are described here, and the data based on type specimens are shown only in the tables.

### *Peristedion barbiger* (Garman, 1899)

(Figs 3–8; Tables 1–4)

*Peristedium barbiger* Garman, 1899: 110–112 (type locality: off Pacific coast of Panama).

*Peristedion barbiger*: Teague 1961: 14–15 (type locality); Chirichigno F. and Vélez D. 1998: 262–263 (off Peru);