Redescription of a Poorly Known Southeastern Pacific Scorpionfish (Scorpaenidae), *Phenacoscorpius eschmeyeri* Parin and Mandrytsa

Hiroyuki Motomura¹,⁴, Naoko Kanehira² and Hisashi Imamura³

¹The Kagoshima University Museum, 1-21-30 Korimoto, Kagoshima 890-0065, Japan
²Morioka-kita High School, 298-1 Makinobayashi, Takizawa-mura, Iwate-gun, Iwate 020-0173, Japan
³Laboratory of Marine Biology and Biodiversity (Systematic Ichthyology), Faculty of Fisheries Sciences, Hokkaido University, 3-1-1 Minato-cho, Hakodate, Hokkaido 041-8611, Japan
⁴Corresponding author

(Accepted 4 October 2012)

A poorly known scorpionfish (Scorpaenidae), *Phenacoscorpius eschmeyeri* Parin and Mandrytsa, 1992, has been known only from the holotype from the Sala y Gomez Ridge, southeastern Pacific Ocean. Two new specimens of the species, collected from the Nazca Ridge, near the type locality, and found in the fish collection of the Hokkaido University Museum, are described in detail. The holotype was also reexamined. The two diagnostic characters of the species given in the original description to separate it from a related congener, *Phenacoscorpius adenensis* Norman, 1939, were found to be invalid, but a new series of diagnostic characters was found. A revised diagnosis of the species is thereupon provided. A color photograph of *P. eschmeyeri* when fresh is published for the first time.

Key Words: Teleostei, Actinopterygii, *Phenacoscorpius adenensis*, morphology, diagnosis.

Introduction

The deepwater scorpionfish genus *Phenacoscorpius* Fowler, 1938 (Scorpaenidae) is characterized by having the lateral line incomplete, with only a few anterior pored lateral-line scales present (Eschmeyer 1965b; Poss 1999; Motomura 2008). Five species of the genus in the Indo-Pacific are regarded as valid species (Motomura 2008; Motomura and Last 2009; Motomura et al. 2012). One of these five species, *Phenacoscorpius eschmeyeri* Parin and Mandrytsa in Mandrytsa, 1992, was originally described on the basis of a single specimen from the Sala y Gomez Ridge, southeastern Pacific Ocean. No additional specimens of this species have been reported since its original description.

During a deep-sea survey conducted by the Japan Marine Fishery Resources Research Center in 1999, two specimens of *Phenacoscorpius* were collected from the Nazca Ridge; this ridge is located on the same seamount chain as the Sala y Gomez Ridge, the type locality of *P. eschmeyeri*. Thus, in this study, the authors examined the holotype and the new specimens revealed that two important identifying characters given by Parin and Mandrytsa in Mandrytsa (1992) for *P. eschmeyeri*, i.e., 16 pectoral fin rays and six anal fin soft rays, are invalid for diagnosis. The new specimens are described below in detail and a revised diagnosis for *P. eschmeyeri* is provided. The first color description of *P. eschmeyeri* is also given here, based on a photograph of a new specimen taken before preservation; the fresh coloration of the species was otherwise unknown.

Material and Methods

Measurements generally follow Motomura (2004a, b), except head width (Motomura et al. 2005b, 2006a), and maxillary depth (Motomura et al. 2006b). Body depth was measured vertically from the origin of the pelvic-fin spine; second body depth was defined as the direct distance between the origins of the last dorsal-fin spine and the first anal-fin spine. Measurement of body depth was taken from the posterior end of the nuchal spine to the dorsal-fin origin. Counts of preopercular spines begin with the uppermost spine. Standard length is expressed as SL. Terminology of head spines follows Randall and Eschmeyer (2002: fig. 1) and Motomura (2004b: fig. 1) with the following additions: the spine at the base of the uppermost preopercular spine is referred to as the supple-mental preopercular spine (Eschmeyer 1965a); the spine on the lateral surface of the lacrimal bone is referred to as the lateral lacrimal spine (Motomura and Senou 2008: fig. 2; Motomura et al. 2011b: fig. 1); and the coronal and pre tympanic (as an extra spine) spines are as figured in Chen (1981: fig. 1) and Motomura et al. (2004: fig. 14b) respectively. The specimens examined in this study are deposited in the...