

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

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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*. The newly collected specimens are herein identified as *P. eschmeyeri*. Examination of 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. Post-nuchal-spine length is taken from the posterior end of the nuchal spine tip to the dorsal-fin origin. Counts follow Motomura *et al.* (2005a–c) and Motomura and Johnson (2006), with predorsal scale counts following Motomura *et al.* (2006b). The last two soft rays of both the dorsal and anal fins are counted as single rays, each pair being associated with a single pterygiophore. 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 supplemental 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 pretympanic (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