

# *Phenacoscorpius longilineatus*, a New Species of Deepwater Scorpionfish from the Southwestern Pacific Ocean and the First Records of *Phenacoscorpius adenensis* from the Pacific Ocean (Teleostei: Scorpaenidae)

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A new scorpionfish, *Phenacoscorpius longilineatus* n. sp., is described on the basis of 94 specimens from New Caledonia and New Zealand in the southwestern Pacific Ocean, at depths of 345–1089 m. The new species is distinguished from its congeners by the following combination of characters: 8–18 (mode 12) pored lateral-line scales, last of which is situated from below base of seventh spine to below base of fourth dorsal-fin soft ray; no slit behind fourth gill arch; palatine teeth present; second preopercular spine always absent; nuchal and parietal spines distinct; nape and anterior body strongly arched in adults of over ca. 80 mm standard length (SL); post-nuchal-spine length 5.0–9.7% (mean 7.2%) of SL; caudal fin length 21.4–26.7% (mean 23.4%) of SL; 1–5 (mode 2) black spots on posterior half of caudal peduncle; and body usually uniformly whitish without distinct dark saddles in preserved specimens. In addition, *P. adenensis* Norman, 1939, which is similar to *P. longilineatus* morphologically, is redescribed on the basis of 3 specimens from the western Indian Ocean and 52 specimens from the southwestern Pacific. The latter represent the first records of this species outside the western Indian Ocean.

**Key Words:** Teleostei, Actinopterygii, morphology, redescription, comparison, distribution.

## Introduction

The scorpionfish genus *Phenacoscorpius* Fowler, 1938 (Scorpaenidae) is characterized by an incomplete lateral line, with only a few pored lateral-line scales present anteriorly (Eschmeyer 1965b; Mandrytsa 1992; Poss 1999; Motomura 2008; Motomura and Last 2009). Recently, *Phenacoscorpius longirostris* Motomura and Last, 2009 was described as a new species from the Tasman Sea, and Motomura *et al.* (2012) redescribed a poorly known species, *Phenacoscorpius eschmeyeri* Parin and Mandrytsa in Mandrytsa, 1992, as a valid species on the basis of the holotype and two newly collected specimens. Including these two species, five species are currently regarded as valid in the genus.

While inspecting scorpionfish specimens deposited at the Muséum national d’Histoire naturelle in Paris (Motomura *et al.* 2011a) and the Museum of New Zealand Te Papa Tongarewa in Wellington (Motomura *et al.* 2011b), we found unidentified specimens of *Phenacoscorpius* that had been collected from the southwestern Pacific Ocean. These specimens were reported as *Phenacoscorpius* sp. 1 and *P.* sp. 2 by Motomura *et al.* (2011a), but in the present study, the first

is described as a new species and the second is identified as *Phenacoscorpius adenensis* Norman, 1939, a species that had been recorded before only from the western Indian Ocean.

## Material and Methods

Measurements generally follow Motomura (2004a, b), except for head width (Motomura *et al.* 2005b, 2006a), maxillary depth (Motomura *et al.* 2006b), and body depth, second body depth, and post-nuchal-spine length (Motomura *et al.* 2012). Counts follow Motomura *et al.* (2005a–c) and Motomura and Johnson (2006), with predorsal scale row 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