



## ***Phenacoscorpius longirostris*, a new species of deep water scorpionfish (Scorpaeniformes: Scorpaenidae) from the northern Tasman Sea, southwestern Pacific Ocean**

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### **Abstract**

A new species of deep water scorpionfish, *Phenacoscorpius longirostris*, is described on the basis of two specimens from the Norfolk Island Ridge and Lord Howe Rise, northern Tasman Sea, at depths of 300–322 m. The new species is distinguished from other congeners by the following combination of characters: all pectoral-fin rays unbranched; no palatine teeth; second preopercular spine well-developed, its length longer than third or fourth spines; and several morphometric characters, including orbit diameter, head width, caudal-peduncle length and depth, and snout, predorsal, preanal and prepelvic lengths.

**Key words:** Scorpaenidae, scorpionfish, *Phenacoscorpius longirostris*, new species, Tasman Sea, Australia

### **Introduction**

The scorpionfish genus *Phenacoscorpius* Fowler, 1938 (Scorpaeniformes: Scorpaenidae) is characterized by having the lateral line incomplete, with only a few anterior pored lateral-line scales present (Eschmeyer, 1965b; Mandrytsa, 1993; Poss 1999; Motomura, 2008). Five nominal species have been attributed to the genus (Motomura, 2008) and two of them, *P. stigma* (Fowler, 1938) and *P. megalops* Fowler, 1938, can be easily distinguished from the remaining congeners by the lack of palatine teeth (Motomura, 2008).

Motomura (2008) recognized that *P. stigma* and *P. megalops* are synonyms and selected the latter as a valid name (being a senior synonym of *S. stigma*) following article 24 (ICZN, 1999). Thus, the type species of the genus, *P. megalops*, is the only species in the genus currently known to lack palatine teeth (Motomura, 2008).

In May–June 2003, the biodiversity of the northern Tasman Sea was surveyed by an international research team using the New Zealand FRV *Tangaroa*. This survey, known as the NORFANZ voyage, led to the collection of several unidentified scorpionfish specimens (e.g., *Scorpaena bulacephala* Motomura *et al.*, 2005 from off Norfolk and Lord Howe Islands, at depths of 86–113 m). Two specimens of *Phenacoscorpius* were also collected from Norfolk Island Ridge and Lord Howe Rise at depths of 300–322 during this survey. These specimens lack palatine teeth, but differ from *P. megalops* in several aspects, including head spination and several morphometrics. The specimens are therefore described herein in detail as a new species.