

***Lioscorpius trifasciatus*, a new scorpionfish (Scorpaeniformes: Setarchidae) from the South-West Pacific Ocean**

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Abstract

A new scorpionfish, *Lioscorpius trifasciatus* sp. nov., is described from material collected from the eastern Australian continental slope between Hinchinbrook Island (central Queensland) and Port Jackson (New South Wales) in 250–400 m depth. It differs from the only other member of the genus, the widely distributed Indo–West Pacific congener, *L. longiceps* Günther, in having the following combination of characters: 3 anal-fin spines (rather than 2), smaller head dimensions (i.e. length 38.7–42.3% SL, orbit 7.4–8.2% SL, upper jaw 19.1–20.7% SL, and maxilla depth 5.3–6.1% SL), shorter predorsal distance (36.2–38.8% SL), some relatively long fin elements (i.e. longest pelvic-fin ray 18.6–19.8% SL, first anal-fin spine 5.0–6.6% SL, and second anal-fin spine 10.4–12.7% SL), 3 diagonal red bands across the pectoral fin, and a red caudal-fin margin.

Key words: Setarchidae, *Lioscorpius*, new species, Coral Sea, Tasman Sea, southwestern Pacific Ocean, Australia

Introduction

The setarchid genus *Lioscorpius* Günther, 1880 is represented by a single species, *Lioscorpius longiceps* Günther, 1880, which has been collected in numerous Indo–West Pacific localities from Japan to Western Australia (Eschmeyer and Collette, 1966; Poss, 1999, 2000; Hutchins, 2001). Diagnostic characters of *Lioscorpius* include: a greatly reduced first spine of the lacrimal (preorbital) bone; 2 spines and 6 rays in the anal fin; 23–25 pectoral-fin rays; the last 2–3 dorsal-fin spines small and frequently buried; body depth 21–28% SL; and interorbital width 6–7% SL (Eschmeyer and Collette, 1966).

During 1985–86, two exploratory trawl surveys of the Coral Sea were conducted using the Commonwealth Scientific and Industrial Research Organisation (CSIRO) research vessel, FRV *Soela*. Amongst numerous new and interesting fishes discovered on these