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Petroscirtes pylei, a new saber-toothed blenny from the Fiji Islands (Teleostei: Blenniidae)

WILLIAM F. SMITH-VANIZ
U. S. Geological Survey, 7920 NW 71st Street, Gainesville, FL 32653-3701, USA.
E-mail: bill_smith-vaniz@usgs.gov

Abstract

Petroscirtes pylei is described from three specimens, 20.3–40.9 mm SL, obtained from a deep-water reef off Suva, Viti Levu, Fiji Islands. It is distinguished from all other congeners by its color pattern, including the presence of two dark body stripes, the lower one broadly extending onto the anal fin, and the dorsal fin with a broad, dark basal stripe, superimposed by a conspicuous white spot centered on the 4th spine. Among *Petroscirtes*, only the new species and *P. springeri* typically have 12 dorsal-fin spines but they are not closely related. The holotype was collected in 104–110 m, the second deepest depth record for a species of *Petroscirtes*. Discovery of this new species, and an apparently second new deep-water *Petroscrites* (uncollected), at a different Fijian reef indicates that our knowledge of the biodiversity of this habitat and of the saber-toothed blennies is very incomplete.

Key words: Blenniidae, taxonomy, new species, deep-reef, Indo-west Pacific, Fiji Islands

Introduction

Coral reefs are among the most complex and species-rich habitats on earth. The advent of scuba technology opened up wide new avenues for study of fishes associated with this ecosystem (Ehrlich, 1975; Sale, 1991). Despite this interest, the deep reef has received relatively little attention because conventional scuba severely limits the depth and duration of reef exploration, and submersibles and remotely operated vehicles (ROVs) are very expensive to operate, require extensive logistical support, and have comparatively limited ability to collect specimens. Thus, the aptly named “twilight zone” spanning depths from 60-150 m, and at the lower limits of photosynthetically useful sunlight penetration, is very poorly known scientifically (Pyle, 1996a, 1996b). Fortunately, reliable mixed-gas, closed-circuit rebreathers (CCR) are now available that allow long duration dives at these depths with the added advantage of no release of expelled bubbles (Pyle, 1999, 2000).

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