

***Ventichthys biospeedoi* n. gen. et sp. (Teleostei, Ophidiidae) from a hydrothermal vent in the South East Pacific**

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Abstract

A new genus and species of ophidiid fishes, *Ventichthys biospeedoi*, is described based on two male specimens caught in the French BIOSPEEDO expedition to the South East Pacific Rise. They were caught by a baited trap at the hydrothermal vent site Oasis (17°25.38'S, 113°12.29'W) at 2586 m. The new genus differs from all of the 48 known ophidiid genera by its thick skin, posteriorly placed and enlarged kidneys, broad head, and 4 lateral lines. The most similar genera are *Benthocometes* and *Petrotyx* having a blunt snout, one basibranchial tooth patch, granular teeth, and no free pectoral fin rays. Remarks on the ecology of the new species are based on analysis of video documents taken in situ by a submarine *Nautilie*.

Key words: Ophidiidae, *Ventichthys biospeedoi* n. gen. et sp., South East Pacific Rise - hydrothermal vent

Introduction

Since the first hydrothermal vents were discovered about 30 years ago they have been intensively studied. From the East Pacific hydrothermal vents ten species of fish have been recorded (Bischoff et al. 2002). Of these five have been described, including *Thermichthys hollisi* (Cohen et al. 1990) belonging to the order Ophidiiformes.

During the French BIOSPEEDO cruise to the South East Pacific Rise in 2004 two 25–30 cm specimens of an unknown fish were caught at a hydrothermal vent at a depth of 2586 m. They belong to the order Ophidiiformes judging from the joined vertical fins, two rays in each pelvic fin, the number of rays in dorsal and anal fins exceeds the number of adjacent vertebrae and all fins with soft rays (Nielsen et al. 1999). The presence of a supramaxilla and the equal length of the rays in the dorsal and anal fins excludes the Carapidae and the presence of scales and a swimbladder excludes the Aphyonidae. This