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New Species of *Pseudovermis* (Opisthobranchia: Aeolidacea) from New Zealand and the Solomon Islands

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Abstract

Two new species of *Pseudovermis* are described; *P. mortoni* n.sp. from the Solomon Islands and *P. hancocki* n.sp. from New Zealand. The internal anatomy of *P. mortoni* is discussed. A brief resume of the feeding relationships of the genus is given together with information on the food of the New Zealand *P. hancocki*. A key to the species of *Pseudovermis* is included.

INTRODUCTION

EIGHT species of *Pseudovermis* Periaslavzeff, 1891, have been described from the littoral and sub-tidal sands of Europe and Brazil. In the course of the interstitial fauna survey carried out by the 1965 Royal Society Expedition to the Solomon Islands Protectorate a number of minute sand-dwelling opisthobranchs were collected. One of the most interesting of these was a species of *Pseudovermis*.

In January, 1968, a specimen of a further species of *Pseudovermis* was recovered from a sand sample dredged in the Bay of Islands, New Zealand. Despite intensive dredging, no further specimens were found at the original locality, but another single specimen was collected later from an adjacent area. This is the first interstitial opisthobranch collected from New Zealand sands.

MATERIALS AND METHODS

The animals were separated from the sand by a modification of Kowalevsky's (1901), method. The sand was placed in a bowl, covered with an inch or two of sea water, swirled around by hand until a vortex formed and the supernatant water containing the animals decanted off through a 100 micron mesh nylon gauze. The gauze was inverted in a petri-dish of sea water and the extracted animals sorted. Where possible microphotographs of the living animals were taken. The radula and jaws were prepared for examination by dissolving away the soft parts in 10 per cent potassium hydroxide and mounting the hard parts in Salmon's (1949) polyvinyl-lactophenol with Chlorazol Black. Serial sections of the Solomon Islands species were made in both transverse and longitudinal planes and the internal anatomy was reconstructed. Where the anatomy was complex, as in the reproductive system, the sections were each drawn with the aid of a camera lucida and a large scale stereographic diagram was made. Dissection was generally impractical

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