

because of the very small size of the animals and the difficulty of holding specimens, but useful gross dissections of the buccal mass and of the central nervous system were made. Several whole animals were mounted in polyvinyl-lactophenol permitting some superficial features such as the very small epidermal spicules to be seen under phase contrast.

The drawings were made from photographs or with the aid of a camera lucida.

Family PSEUDOVERMIDAE Pelseneer, 1906

Genus PSEUDOVERMIS Periaslavzeff, 1891

*Pseudovermis mortoni* n.sp

DESCRIPTION: Fully extended animal (Fig. 1a) approximately 5mm long; ratio of breadth to length approximately 1:17. Colour in life translucent white, digestive gland, creamy yellow stippled with black spots. Head completely ciliated, reasonably distinct from the body, having the greater diameter. Eyes absent. Body vermiform, tapering posteriorly, terminating in a short tail. Cerata non-retractile, simple, finger-like, shorter than head diameter, first pair opposite, remainder approximately alternate, seven on left side of body, five or six on right in larger specimens, number variable in immature specimens. Epidermis of dorsal body wall behind first pair of cerata sparsely invested with small, colourless, calcareous spicules (Fig. 1f-g). Foot not set off in any way from body, distinguishable externally only by ciliated sole, bordered internally by two rows of cyanophil pedal glands from nerve ring backwards. Groups of similar gland cells scattered around internal body wall of anterior region (Fig. 4a-c). Buccal bulb (Fig. 3a) supported by two lateral mandibles (Fig. 1b-c) having thickened anterior borders bearing approximately 24 teeth. Inner border of mandibles bent upwards and also thickened. Radular formula 1-1-1  $\times$  34. Median plate (Fig. 1d) having a large median tooth and three lateral denticles on either side increasing in both height and size from the innermost to the outermost denticle. Outermost denticle a little taller than median tooth. Lateral plates slender, tapering, curved, with a secondary denticle extending to about half the length of the plate.

TYPE LOCALITY: The holotype and 17 paratypes were collected by the author in mid-September, 1965, from coarse, clean, shell-sand at Low Water Neap Tide 100 yards NNW of the southern end of Maraunibina Island, Marau Sound, East Guadalcanal.

OTHER LOCALITIES: Further material was collected from a similar tidal level at Komimbo Bay, West Guadalcanal, three specimens; Banika Beach, Russell Islands, two specimens; Pango Beach, Efaté, New Hebrides, two specimens.

The beaches where this animal was collected were invariably sheltered to a large degree from direct wave action by an offshore fringing coral reef. They were generally short and separated from the reef by an area of silty, rubble-strewn, spring-tidal flat. The sand of the lower part of the beach to which the animal was restricted was coarse, clean, highly oxygenated and composed mainly of fine broken shell, small rock fragments and very large numbers of living micro-foraminifera.

A general account of the habitat and of the precise distribution of *Pseudovermis* and of the other interstitial opisthobranchs collected during the expedition is provided elsewhere (Challis, 1969).

TYPES: Of the total of 25 specimens of *P. mortoni* collected, 10 remain intact together with two other badly damaged specimens. The holotype with four paratypes and a slide of the jaws and radula of a further paratype have been deposited in the British Museum (Nat. Hist.), London. A series of four paratypes with a slide of the jaws and radula of another paratype has been deposited in the Dominion Museum, Wellington, New Zealand. The remaining paratypes and the sectioned material are retained by the author.

REMARKS: While a number of species of *Pseudovermis* have individual characteristics in common with *P. mortoni*, for example, the general external body form, the length of the cerata, the double point of the lateral plates of the radula and the lack of eyes, only *P. mortoni* has these characters in combination. The number of