



***Metavermlia ogasawaraensis* sp. nov. (Serpulidae: Sabellida: Polychaeta: Annelida) from deep-sea locations off Ogasawara Island, Japan with a literature overview of the genus**

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Abstract

A new species of the genus *Metavermlia* Bush, 1905 (Annelida, Polychaeta, Serpulidae) is described from deep-water locations (1600–1700 m) off Ogasawara Islands, Japan. The genus *Metavermlia* is characterized by a single synapomorphy, the structure of the opercular stalk (flat and ribbon-like) formed from the second dorsal branchial radiole. The *Metavermlia ogasawaraensis* n. sp., is most similar morphologically to *M. nanshaensis* in having a simple conical operculum covered with a brownish distal plate with a tubercle in the middle and short thoracic membranes. The two species differ from each other in details of tube morphology and thoracic uncini structure. The paper provides a key and a review of all 14 species currently known in the genus *Metavermlia*.

Key words: Annelida, Polychaeta, Serpulidae, *Metavermlia ogasawaraensis* sp. nov

Introduction

Saint-Joseph (1894) erected the genus *Vermiliopsis* for those serpulid species of *Vermilia*, which have sickle (“*Apomatus*”) thoracic chaetae in addition to simple limbate ones. Based on the development of the thoracic membranes, the general form of the abdominal chaetae and uncini, and the terminal tooth (anterior peg) of the uncini, Bush (1905) distinguished four genera: *Vermiliopsis*, *Paravermlia*, *Metavermlia*, and *Pseudovermlia* for the species previously referred to *Vermilia* and *Vermiliopsis*. However, Hartman (1959) included Bush's three genera under *Vermiliopsis* and placed in synonymy some of her species.

Zibrowius (1971) discovered three new species showing affinities to the Mediterranean *Vermiliopsis multicristata* (Philippi, 1844) and re-established the genus *Metavermlia* for four species: *M. multicristata* (Atlantic, Mediterranean, Western Indian Ocean), *M. nates* (Europa Island, Tanzania; Ponape), *M. annobonensis* (Annobon, West Africa), and *M. taenia* (Josephine Bank, Eastern Atlantic). Zibrowius (1971) also emended the diagnosis of *Metavermlia*. He considered the structure of the opercular stalk (flat and ribbon-like) formed from the second dorsal filament as the most important synapomorphic character uniting the species in the genus. The holotype of *Metavermlia multiannulata* described by Moore (1923) from California possesses a simple cylindrical opercular stalk and appears to be closely related to *V. infundibulum*, has been, therefore, referred by Zibrowius (1971) to the genus *Vermiliopsis*. His apparently unstudied cotypes belonged to *Pseudovermlia conchata* (see ten Hove, 1975).