



Four new species of Ampharetidae (Annelida: Polychaeta) from Pacific hot vents and cold seeps, with a key and synoptic table of characters for all genera

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Abstract

Four new species of the polychaete family Ampharetidae are described from hot vents and cold seeps in the Pacific. *Amage benhami* **sp. nov.**, *Amphisamytha vanuatuensis* **sp. nov.**, *Anobothrus apaleatus* **sp. nov.**, *Glyphanostomum holthei* **sp. nov.** For *Amphisamytha vanuatuensis* **sp. nov.**, different stages in the development of branchiae are described. While this species was found in the Western Pacific, *A. galapagensis* is presumed to be restricted to the Eastern Pacific with *Amphisamytha fauchaldi* being a junior synonym. A key to members of the genera *Amphisamytha* and *Glyphanostomum*, and synoptic tables of characters for all members of the genera *Amphisamytha* and *Anobothrus* are provided. A key and synoptic table of characters comprising all genera of the Ampharetidae is also given together with a discussion of taxonomic problems within the subfamily Ampharetinae in order to clarify the taxonomy of the group. An additional table contains special information on all genera within the Ampharetinae, which show dorsal modifications on some segments.

Key words: *Amage*, *Amphisamytha*, *Anobothrus*, *Glyphanostomum*, deep-sea