



## Three new bathyal raphitomine gastropods (Mollusca: Conoidea) from the Indo-Pacific region

MAURO MORASSI<sup>1</sup> & ANTONIO BONFITTO<sup>2,3</sup>

<sup>1</sup>Via dei Musei 17, 25121 Brescia, Italy

<sup>2</sup>Department of Biology, Geology and Environmental sciences (BiGeA), via Selmi 3, 40126 Bologna, Italy

<sup>3</sup>Corresponding author. E-mail: [antonio.bonfitto@unibo.it](mailto:antonio.bonfitto@unibo.it)

### Abstract

Three new species of Conoidea are described from Red Sea, Gulf of Aden and Philippines. *Awheaturreis lozoueti* **sp. nov.**, from Philippines, is the first representative in the recent Indo-Pacific molluscan fauna of a hitherto Miocene fossil genus. *Taranis adenensis* **sp. nov.**, from Gulf of Aden, is the first species certainly referable to genus *Taranis* Jeffreys, 1870 reported in the Gulf of Aden and the smallest described member of this genus in the Indo-Pacific region. *Mioawateria vivens* **sp. nov.** represents the first member of the genus *Mioawateria* Vella, 1954 reported in the Red Sea. The status of *Mioawateria* is discussed and photographs of its type species, *Awateria (Mioawateria) personata* Powell, 1942, from the Pliocene of New Zealand, are presented for the first time.

**Key words:** Conoidea, Raphitomidae, new species, Red Sea, Gulf of Aden, Philippines

### Introduction

The purpose of the present paper is to describe three species belonging to the genera *Taranis* Jeffreys, 1870, *Mioawateria* Vella, 1954 and *Awheaturreis* Beu, 1970, belonging to the family Raphitomidae. The discovery of *Taranis adenensis* **sp. nov.** in the Gulf of Aden is of interest as it represents the first species certainly referable to *Taranis* reported in that area. The type material of *Awheaturreis lozoueti* **sp. nov.**, from the Philippines, represents the first record in the recent fauna of a genus previously reported in the Miocene of New Zealand and Chile. *Awheaturreis lozoueti* is assigned to the family Raphitomidae mainly on the basis of its *Mioawateria*-like teleoconch features. Maxwell (1988) and Sysoev (1997) used the generic name *Mioawateria* for some recent species which implies assumption that the protoconch sculpture in *Mioawateria* is diagonally cancellated. That assumption has been recently questioned by Figueira & Absalão (2012) as *Mioawateria personata* (Powell, 1942), type species of *Mioawateria*, was based on a single specimen with broken and eroded protoconch. Comparison between Middle Miocene specimens of *Mioawateria personata* studied by Maxwell (1988), bearing an intact “typical” raphitomine protoconch, with the holotype of *M. personata* clearly indicates identical teleoconch features thus suggesting conspecificity. For this reason, we consider justified the use of the generic name *Mioawateria* for recent species.

### Material and methods

The material studied originated from the RED SED 92 expedition performed in the southern Red Sea and Gulf of Aden by the French research vessel *Marion Dufresne* in order to contribute to the knowledge of the bathyal thanatocoenoses and biocenosis of that area, and from the AURORA 2007 expedition performed in the Philippines within the French Tropical Deep-Sea Benthos programme, a joint project of the Institut de Recherche pour le Développement (IRD) and the Muséum National d’Histoire Naturelle (MNHN) Paris (France).