

ISSN 1175-5326 (print edition) ZOOTAXA ISSN 1175-5334 (online edition)



## New species of *Macoma* (Bivalvia: Tellinoidea: Tellinidae) from southeastern Brazil, and with description of its gross anatomy

ELIANE P. ARRUDA<sup>1</sup> & OSMAR DOMANESCHI<sup>2</sup>

Departamento de Zoologia, Instituto de Biociências, Universidade de São Paulo, Caixa Postal 11461, CEP 05422-970, São Paulo-SP, Brazil. <sup>1</sup>arrudaep@yahoo.com.br <sup>2</sup>domanesc@ib.usp.br

## Abstract

Macoma biota n. sp. is described from material collected in the intertidal zone of Praia da Cidade, Caraguatatuba Bay on the northern coast of the state of São Paulo, Brazil. The species is characterized by its shell features and gross anatomy. The western Atlantic M. constricta (Bruguière, 1792) is the most similar species to *M. biota*, both hardly distinguishing by their shell characteristics. The main shell feature distinguishing M. biota from M. constricta is the ventral limb of the pallial sinus that is shorter, steeper and confluent with the pallial line along the first quarter of this scar in M. biota, and long, closely parallel to and confluent with the pallial line far posteriorly in M. constricta. Anatomical characters distinguishing M. biota are: ventral channel formed by asymmetrical left and right additional mantle folds; paired, asymmetrical siphonal organs; all four labial palps provided of short conical papillae on their outer surface and simple, acute terminal tip; both demibranchs equally long; and presence of a single short, stout "accessory adductor muscle" adjacent to the cruciform muscle. Macoma constricta has ventral channel formed by the right additional mantle fold only; unpaired, left siphonal organ; all four labial palps lacking papillae on their outer surface and terminal tip of the left inner labial palp produced into a thin sheath with undulated plicae; inner demibranch longer and extending beyond the antero-dorsal limit of the outer demibranch; and "accessory adductor muscle" absent.

**Key words**: *Macoma biota* n. sp., Macominae, Tellinidae, Tellinoidea, Bivalvia, taxonomy, gross anatomy, southeastern Brazil

## Introduction

During field activities carried out in autumn and winter of 2001, 2003 and 2004 under the BIOTA/FAPESP Program—"Marine Benthic Biodiversity of São Paulo State, Brazil", 22