Convolutidae (Acoela) from Tanzania

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Abstract

Four species of Convolutidae, including a new genus and species, from shallow marine sediments in Tanzania are described: *Convoluta enelitta*, *Convoluta thela comb. nov.*, *Heterochaerus australis* and *Picola gen. nov. renei sp. nov*. The species *Conaperta krana* and *Conaperta thela* are reassigned to the genus *Convoluta*.

Key words: Confocal microscopy, turbellarians, meiofauna, Rupert Riedl

Introduction

Except for mention of the occurrence of *Heterochaerus australis* Haswell, 1905, on the coast of Kenya by Dörjes & Young (1973), no information on distribution of Acoela on the eastern shore of Africa is available. The closest body of water investigated is the Red Sea, where Antonius (1968) paid special attention to the Convolutidae. His work resulted in the erection of three new genera and the description of six new species, two of which we found in our samples from Tanzania.

Our investigation of Acoela from the beaches of Dar es Salaam and Zanzibar, Tanzania, yielded numerous species from several families. We present here descriptions of four species belonging to the family Convolutidae, including one new to science. All species were examined using classical methods (examination of live animals and histological sections) as well as with the modern techniques of confocal laser scanning microscopy (CLSM) and transmission electron microscopy (TEM), thereby providing us with an abundance of morphological data, including some new information on the previously described species.