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New records of Recent Brachiopoda from the Red Sea with a description of a new species

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Abstract

A revised checklist of 14 Recent brachiopod species from Egypt and the Sudan in the Red Sea has been compiled. New records of *Minutella minuta* (Cooper), *Thecidellina blochmanni* Dall and *Argyrotheca somaliensis* Cooper are described and a new species *Argyrotheca cooperi* is erected for specimens with few but very strong costae. The new records support earlier suggestions that the affinities of the Red Sea brachiopod fauna are with those of the Mediterranean and Indo-Pacific areas.

Key words: Recent, Brachiopoda, Red Sea, *Minutella*, *Thecidellina*, *Argyrotheca*

Introduction

Apart from isolated publications by Muir-Wood (1959), Cooper (1973) and Brunton (1988) Recent brachiopods have been rarely mentioned in the literature on the biota of the Red Sea and associated gulfs of Suez, Aqaba and Aden, and only 4 species, based on a total of 9 specimens, were recorded by these authors. These are *Leptothyrella ignota* (Muir-Wood), *Argyrotheca jacksoni* Cooper, *Megerlia echinata* (Fischer & Oehlert) and *Argyrotheca cuneata* (Risso). However, a more recent study by Logan *et al.* (2008) positively identified *Cryptopora curiosa* Cooper, *Argyrotheca jacksoni* Cooper, *Joania cordata* (Risso), *Platidia anomioides* (Scacchi & Philippi), *Megerlia echinata* (Fischer & Oehlert) and *Leptothyrella ignota* (Muir-Wood) and another 6 were identified to genus level (*Discinisca* sp. indet., *Novocrania* cf. *anomala* (Müller) *Thecidellina* sp. indet., *Frenulina* sp. indet., *Argyrotheca* ?*cuneata* (Risso) and *Argyrotheca* sp. indet.). These records were based mainly on over 2500 specimens collected by Martin Zuschin and colleagues at the University of Vienna. At that time the intention was to record the presence of these species and briefly describe and illustrate them, in the hope that further searches would produce more specimens. Since then new discoveries and new records from museum collections, such as those of the Senckenberg Museum in Frankfurt and the Tel Aviv and Hebrew Universities in Israel have been obtained, enabling us to identify three additional species from the region: *Minutella minuta* (Cooper), *Thecidellina blochmanni* Dall and *Argyrotheca somaliensis* Cooper and to describe one new species, *Argyrotheca cooperi* Bitner & Logan. Thus a revised checklist of all 14 taxa to date is as follows: *Discinisca* sp. indet., *Novocrania* cf. *anomala*, *Cryptopora curiosa*, *Minutella minuta*, *Thecidellina blochmanni*, *Frenulina* sp. indet., *Argyrotheca cooperi* sp. nov., *Joania cordata*, *Argyrotheca* ?*cuneata*, *Argyrotheca jacksoni*, *Argyrotheca somaliensis*, *Platidia anomioides*, *Leptothyrella ignota* and *Megerlia echinata*.

A recent study by Zuschin and Mayrhofer (2009) on brachiopods from cryptic habitats in the Dahab area of the Gulf of Aqaba concludes that low abundance, moderate diversity and small shell sizes characterize modern Red Sea brachiopods. They found living *Argyrotheca* cf. *jacksoni* in cryptic habitats attached to living and dead coral colonies and dead shells of this and other brachiopods, including *Thecidellina*, in the associated sediments. All figured specimens of the thecideids and *Argyrotheca* are housed in the Natural History Museum in Vienna (NHMW) in the Mollusca collection unless otherwise indicated in the captions.

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