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Glyceriformia Fauchald, 1977 (Annelida: "Polychaeta") from Lizard Island, Great Barrier Reef, Australia

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Abstract

Eight species of Glyceridae (*Glycera brevicirris*, *Glycera* cf. *lapidum*, *Glycera onomichiensis*, *Glycera sagittariae*, *Glycera tesselata*, *Glycera tridactyla*, *Glycerella magellanica*, *Hemipodia* cf. *simplex*) and six species of Goniadidae (*Goniada antipoda*, *Goniada* cf. *brunnea*, *Goniada echinulata*, *Goniada emerita*, *Goniada grahami*, *Goniada paucidens*) have been collected during several expeditions to the vicinity of Lizard Island (Australia, Queensland). An identification key to the Glyceriformia that inhabit the region is presented. Detailed and illustrated morphological descriptions are given for all investigated species.

Key words: Annelida, Polychaetes, Glyceriformia, Glyceridae, Goniadidae, Great Barrier Reef, Australia, Queensland, Lizard Island

Introduction

The habitats of the Lizard Island Group have been intensely investigated during the last forty years since the Australian Museum's Research Station inception in 1973 (Shuetrim 2013). The coral reefs and their different environments and dwellers have been the focus of many studies (see: http://australianmuseum.net.au/Lizard-Island-Research-Station/). Most of the publications concentrated on reef fishes and the corals themselves, but others with regard to endo-cryptolithic fauna and to bioerosion by grazers and micro- and macroborers including polychaetes have been examined (e.g. Hutchings 1977, 1983, 1986; Hutchings & Weate 1977, 1979; Hutchings & Murray 1982; Hutchings *et al.* 1992, 2005; Tribolett *et al.* 2002; Osorno *et al.* 2005). However, there is very little information in the literature on the Annelida of the sandy to muddy sediments around the corals. Therefore, it is not surprising that most of the herein studied Glyceriformia Fauchald, 1977, one of the widely distributed and very common groups in such soft sediments, have not been previously recorded from the northern Great Barrier Reef.

Material and methods

Most of the materials examined were collected over the years 1975 to 2013 by different groups from several locations in the well-developed fringing reefs around the granitic Lizard Island Group (Fig. 1A). Furthermore, additional material comes from the Carter Reef, Day Reef, MacGillivray Reef, Yonge Reef and the North Direction Island (Fig. 1B). All of them are located in the northern portion of Australia's Great Barrier Reef. Sediment samples from the different stations were usually taken by large hand-held corer or directly by hand when snorkelling or diving.

Material was fixed in 5–10 % formalin diluted with seawater and later transferred to 80% ethanol or directly fixed in 95 % ethanol. Observations, measurements and figures were made using a Leica Wild M 3 stereo microscope, a Zeiss compound microscope, and an Olympus BX 41 compound microscope, each equipped with a camera lucida. For SEM investigation fragments of specimens were dehydrated in a graded ethanol series, critical-

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