



## Polycirridae (Annelida, Terebelliformia) from Lizard Island, Great Barrier Reef, Australia

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### Abstract

In a survey of the polychaetes of the Lizard Island Group, sixteen species of polycirrids were found, from material collected during the two weeks Lizard Island Taxonomic Workshop, together with material collected by previous projects of the Australian Museum based at Lizard Island, including CReefs (<http://www.aims.gov.au/creefs/field-program.html>). Those species are distributed as follows: two species of *Amaeana* Hartman, 1959, one new species of *Hauchiella* Levinson, 1893, 2 species of *Lysilla* Malmgren, 1866, one of which is new to science, and 11 species of *Polycirrus* Grube, 1850, eight of which are new to science. Keys for identification of these genera and species are provided, together with full descriptions for all species, except for those with recent descriptions, and comparisons with the morphologically most similar congeners, in the case of the new species.

**Key words:** Polychaeta, taxonomy, morphology, new species, Queensland

### Introduction

In August 2013 the Australian Museum hosted the 11<sup>th</sup> International Polychaete Conference and immediately after the meeting a group of researchers attended a workshop held at Lizard Island Research Station (a facility of the Australian Museum), funded by the Lizard Island Reef Research Foundation. The purpose of the workshop was to document some of the polychaete fauna of Lizard Island, on the northern Great Barrier Reef. This is one of a series of papers describing the polychaete fauna, which are produced in this special issue of *Zootaxa*.

Prior to this study, Hutchings and Glasby (1986) had described three species of *Polycirrus* from Lizard Island and a species of *Amaeana* from the region. In this paper we describe 10 new species belonging to three genera within the newly erected family the Polycirridae (Nogueira *et al.* 2013; Fitzhugh *et al.* 2015). Another two species, belonging to a fourth genus, were described elsewhere (Nogueira *et al.* 2015). While polychaetes are abundant around Lizard Island and on the Great Barrier Reef, they have been poorly documented and no comprehensive surveys have been carried out (Hutchings 2008). Polychaetes occur within coral substrates but are also abundant in inter-reefal sediments.

### Material and methods

Part of the material included in the present study was collected along the Lizard Island Taxonomic Workshop, which was held at the Lizard Island Research Station, from 12–23 August, 2013. Collections were made daily by snorkeling and SCUBA diving, from the intertidal zone to ~30 m deep, covering most types of habitats found in the Lizard Island Group, including coral reefs, mangroves and sandy beaches, with sandy, muddy and coral rubble substrates (see Ribas & Hutchings 2015, this volume for location of sampling sites and their co-ordinates). Number of specimens per registration number are 1 unless stated otherwise.