



Holorchis gigas* n. sp. (Digenea: Lepocreadiidae) from the yellow-striped sweet-lips *Plectorhinchus chrysotaenia* (Perciformes: Haemulidae) from Lizard Island, Great Barrier Reef, with observations on *Aephnidiogenes major

RODNEY A. BRAY¹ & THOMAS H. CRIBB²

¹Department of Zoology, Natural History Museum, Cromwell Road, London SW7 5BD, UK. E-mail: rab@nhm.ac.uk

²Centre for Marine Studies and Department of Microbiology and Parasitology, The University of Queensland, Brisbane, Queensland 4072, Australia. E-mail: t.cribb@uq.edu.au

Abstract

Holorchis gigas n. sp. is described from the fish *Plectorhinchus chrysotaenia* off Lizard Island on the Great Barrier Reef. It grows to over 180mm and is, therefore, much larger than any previously described species. It also differs from other *Holorchis* spp. in combinations of a different cirrus-sac structure, widely separated testes, entire ovary, short post-testicular region and the vitellarium not reaching the ventral sucker. *Aephnidiogenes major* is reported from *Diagramma labiosum* off Lizard and Heron Islands and *P. chrysotaenia*, off Lizard Island. Measurements of *A. major* are given.

Key words: Digenea, Lepocreadiidae, *Holorchis gigas* n. sp., *Aephnidiogenes major*, *Plectorhinchus chrysotaenia*, *Diagramma labiosum*, Haemulidae, Great Barrier Reef

Introduction

Haemulid fishes have a rich fauna of lepecreadiid trematodes, incorporating species of all three subfamilies recognised by Bray (2005) in his revision of the family. In the tropical oceans there are at least three species of the aephnidiogenine genus *Aephnidiogenes* Nicoll, 1915 and the lepidapedine genus *Holorchis* Stossich, 1901 and single species from the lepidapedine genus *Lepidapedon* Stafford, 1904 and the lepecreadiine genera *Lepidapedoides* Yamaguti, 1970, *Lepocreadium* Stossich, 1903 and *Hypocreadium* Ozaki, 1936. Here we report a new giant species of *Holorchis* and new host and locality records for *Aephnidiogenes major* Yamaguti, 1934.

Materials and methods

Digeneans collected from freshly killed fish were fixed by being pipetted into nearly boiling saline and immediately preserved in formalin or 70% ethanol. Whole-mounts were stained with Mayer's paracarmine, cleared in beechwood creosote and mounted in Canada balsam. Measurements were made through a drawing tube on an Olympus BH-2 microscope, using a Digicad Plus digitising tablet and Carl Zeiss KS100 software adapted by Imaging Associates, and are quoted in micrometres, with the range and the mean in parentheses (Table 1). The following abbreviations are used: BMNH, the British Museum (Natural History) Collection at the Natural History Museum, London, UK; QM, Queensland Museum Collection, Brisbane, Australia.