



A complex of putative acanthocolpid cercariae (Digenea) from *Nassarius olivaceus* and *N. dorsatus* (Gastropoda: Nassariidae) in Central Queensland, Australia

LEONIE J. BARNETT¹, LESLEY R. SMALES², & THOMAS H. CRIBB³

¹Centre for Environmental Management, Central Queensland University, Bruce Highway, North Rockhampton, Queensland 4702, Australia. E-mail: l.barnett@cqu.edu.au

²College of Sciences, Central Queensland University, Bruce Highway, North Rockhampton, Queensland 4702, Australia. E-mail: l.warner@cqu.edu.au

³Centre 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

Cercariae capricornia I–VI, six new cercariae putatively identified as belonging to the Acanthocolpidae, are described and named from prosobranch gastropods of the family Nassariidae collected from the intertidal zone in the Capricornia region, Central Queensland, Australia. Four species are reported from *Nassarius olivaceus* and two from *N. dorsatus*. The cercariae have a unique and complex three-dimensional body shape, including a keel, which differentiates them from previously described acanthocolpid cercariae. These are the first cercariae to be described from these gastropods.

Key words: *Cercaria capricornia*, Capricornia, Acanthocolpidae, *Nassarius dorsatus*, new species, gastropod parasites

Introduction

Several authors have described large oculate cercariae that have generally been considered to belong to the Acanthocolpidae: *Cercaria caribbea* XXXIV Cable, 1956, *C. portosacculus* Holliman, 1961, *C. caribbea* LXXII Cable, 1963, *C. caribbea* LXXIII Cable, 1963, *C. itoi* Shimura, 1984 and a probable *Tormopsolus* cercaria (Bartoli & Gibson 1998, Cable 1956, Cable 1963, Holliman 1961, Shimura 1984). These cercariae were reported from marine gastropods of the families Buccinidae, Columbelloidea and Fasciolariidae, all belonging to the Muricoidea. Here, we report a complex of comparable but distinct cercariae from another muricoid family, the Nassariidae.

The marine gastropods *Nassarius olivaceus* (Bruguière) and *N. dorsatus* (Röding) are common scavengers in the intertidal mangroves of the Capricornia region in Central Queensland, Australia. *Nassarius olivaceus* is found in the mid intertidal zone, amongst mangroves and ranging out into adjacent inundated areas, while *N. dorsatus* is predominantly found in the low intertidal zone. *Nassarius olivaceus* is distributed from Darwin, Northern Territory, across northern Australia to Moreton Bay in south-eastern Queensland, while *N. dorsatus* is distributed north from Exmouth Gulf in Western Australia, across the Northern Territory and Queensland to northern New South Wales (Wilson 1994). The trematodes reported here are the first from these gastropod species and the first larval digeneans reported from mainland Capricornia.