

***Caenestheriella mariae* sp. nov. (Crustacea: Branchiopoda: Spinicaudata: Cyzicidae): a new clam shrimp from Western Australia**

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Abstract

Caenestheriella mariae, a new species of the Spinicaudata (Branchiopoda), is described from Western Australia. It is most similar to the Australian *Caenestheriella packardi* (Brady, 1886), from which it differs most notably by several characters in the head region. In contrast to *Caenestheriella packardi*, *Caenestheriella mariae* sp. nov. (1) has a small hump anterior to the occipital condyle, (2) has a 90° pointed angle between the eye lobe and the rostrum, (3) has a more prominent eye lobe, and (4) lacks distinct sculpturing between the growth lines of the carapace. *Caenestheriella mariae* lives in gnamma (rock) pools when they hold water in winter-spring.

Key words. Australia, Conchostraca, taxonomy, SEM, *Caenestheria*, rock pools

Introduction

The dry areas of Australia has a diverse fauna of large branchiopods (Anostraca, Notostoraca, and Spinicaudata, Laevicaudata), freshwater crustaceans which complete their life cycle very fast mostly in small, temporary pools of different kinds (e.g., in semi-deserts). While the taxonomy of Australian Anostraca has received comprehensive attention in recent years (Geddes 1981; Herbert & Timms 2000; Timms 2001, 2002, 2004, in press; Timms & Geddes 2003), the taxonomy of the clam shrimps lags far behind and has received little attention since early last century. Recent publications include a catalogue summarising the current taxonomic situation for the 25 valid species (Richter & Timms in press). Most Australian species of clam shrimps were described between 1855 and 1927. Richter & Timms (in press) state that our knowledge of Australian clam shrimps ('Conchostraca') is fragmented, that some of the described species are likely to be synonymous, and that many new species can be expected. Currently few Australian 'conchostracans' can be identified with any degree of certainty. This is due to the fact that many of the original descriptions are poor in detail, and there are difficulties locating stable, species-spe-