

***Brachycalanus rothlisbergi*, a new species of planktobenthic copepod (Calanoida, Phaennidae) from the Gulf of Carpentaria, Australia**

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ABSTRACT. *Brachycalanus rothlisbergi* n.sp. females sampled from the Gulf of Carpentaria are described and figured. Comparisons are made between this species and the four others belonging to this genus.

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During studies of copepods of the Gulf of Carpentaria, females of a new species of copepod from the family Phaennidae were encountered, and are described below. This species was taken in stepped-oblique hauls from near-bottom to the sea surface using plankton nets of mesh aperture size 140 μ m. The specimens were examined, measured and dissected in glycerine/water medium and drawings were all made using a Leitz HM-LUX microscope with the aid of a camera lucida.

***Brachycalanus rothlisbergi* n.sp.**

Figs 1,2

Type material. Type materials are deposited in the Queensland Museum (QM) as follows: female holotype of total length (TL) 1.57 mm, 1 female paratype. Reference nos. QM W12198, QM W12199.

Type locality. Gulf of Carpentaria, 11°55.5'S, 138°49.5'E.

Material examined. 1 female, sample no. 28A2, 14°01.5'S, 138°E, 19 Aug 1975; 1 female, sample no. 447A4, 11°55.5'S, 138°49.5'E, 7 Nov 1977; 2 females, sample no. 971A3, 14°S, 140°E, 11 May 1977 (see Rothlisberg & Jackson (1982) for sample details).

In the following descriptions medial refers to that border of an appendage or segment which faces the

midline of the body and lateral to that border directed toward the lateral surface of the body.

Description of female (Figs 1A-F, 2A-H). *Size:* TL (tip of prosome to end of furcal rami) is 1.61 mm (mean from 3 measurements range 1.57-1.68 mm standard deviation 0.0214). Prosome length-to-width ratio 1.91:1, prosome to urosome length ratio 4.36:1.

Body very robust, oval in dorsal view, with relatively short urosome (Fig. 1A). In lateral view, head smoothly rounded, ending in short rostrum with 2 filaments. Head separated from first thoracic somite, fourth and fifth thoracic somites fused. Very distinct setae arise near midlateral surface of third thoracic somite (Fig. 1A,B). Posterior thoracic margins symmetrical, margins appear triangular in shape but are well rounded posteriorly both in dorsal and lateral views.

Urosome 4-segmented, surfaces of each somite covered densely with spinules. Anal segment extremely short, relative lengths of visible somites as follows:

| | | | | | | |
|-------------|----|----|----|----|-------------|-------|
| Somites | 1 | 2 | 3 | 4 | caudal rami | |
| Proportions | 47 | 20 | 13 | 11 | 9 | = 100 |

Caudal rami symmetrical, with 4 subequal apical