



## Leucothoidae\*

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\* *In*: Lowry, J.K. & Myers, A.A. (Eds) (2009) Benthic Amphipoda (Crustacea: Peracarida) of the Great Barrier Reef, Australia. *Zootaxa*, 2260, 1–930.

### Abstract

Four genera and 17 species of leucothoids, the majority of these belonging to the genus *Leucothoe*, are herein reported from the Great Barrier Reef. Fifteen species are new to science and only *Anamixis bazimut* has been previously reported from the Great Barrier Reef.

**Key words:** Crustacea, Amphipoda, Leucothoidae, Great Barrier Reef, Australia, taxonomy, new species, *Anamixis bazimut*, *Leucothoe adelphe*, *Leucothoe bova*, *Leucothoe epidemos*, *Leucothoe eumilli*, *Leucothoe hipposideros*, *Leucothoe laevipalma*, *Leucothoe makrommatos*, *Leucothoe odontiskos*, *Leucothoe pollexa*, *Leucothoe rudicula*, *Leucothoe serrata*, *Leucothoe sparsa*, *Leucothoe thula*, *Leucothoe undulata*, *Leucothoella gracilis*, *Paranamixis jügurru*

### Introduction

Leucothoids are common gammaridean amphipods in surveys from all marine ecosystems. Including the species described here, the family contains 138 species in six genera: *Anamixis* Stebbing, 1897 (21 species); *Nepanamixis* Thomas, 1997 (4 species); *Paranamixis* Schellenberg, 1938 (13 species); *Leucothoe* Leach, 1814 (96 species); *Leucothoella* Schellenberg, 1928 (2 species); and *Paraleucothoe* Stebbing, 1899 (2 species). Leucothoids are most often found as endocommensals in sessile invertebrates, such as sponges, ascidians, or mantle cavities of bivalve molluscs. They are found less frequently in crevices in coral rubble (Thomas & Klebba 2006, 2007). Eighteen species of Leucothoidae have been reported from Australia in the past, with only three from the Great Barrier Reef (Lowry & Stoddart, 2003). This study increased that number to 33 species from Australia, with 19 from the Great Barrier Reef. Seven of the new species (*Leucothoe hipposideros* **sp. nov.**, *Leucothoe odontiskos* **sp. nov.**, *Leucothoe sparsa* **sp. nov.**, *Leucothoe thula* **sp. nov.**, *Leucothoe laevipalma* **sp. nov.**, *Leucothoe undulata* **sp. nov.** and *Leucothoe pollexa* **sp. nov.**) have a uniaarticulate maxilla 1 palp, which has not been recorded in any described *Leucothoe* species to date. An “indistinct suture” in the maxilla 1 palp has been reported in *Leucothoe basilobata* Serejo, 1998, *Leucothoe cheiriserra* Serejo, 1998, *Leucothoe urospinosa* Serejo, 1998 and *Leucothoe assimilis* J.L. Barnard, 1974. This character further illustrates the need for taxonomic revision of the Leucothoidae.