Status of planktonic copepod diversity in the Merambong seagrass meadow, Johor, Peninsular Malaysia

ABSTRACT

The diversity and abundance of planktonic copepods were analysed from zooplankton samples collected within six times throughout the year in the Merambong seagrass area. A total of 48 species from 20 genera and 15 families comprising an average of 78.8%, of the total zooplankton populations were recorded throughout the sampling period. Among the copepod groups, calanoids were the most abundant inhabiting all the stations, taking an average of 51.2% of the total copepod populations. The most common species observed in the area were Paracalanus parvus, Paracalanus elegans, Oithona rigida, and Euterpina acutifrons. The highest copepod density was recorded at 17.0±2.8 x104 individuals/m3. Copepod species diversity (H') and species richness (d) were highest at H' = 3.58 and d=7.08, respectively. Species evenness (J) was, however, relatively constant (0.9) during the entire sampling period. The findings from this study provide important baseline information for future research and monitoring programs.

Keyword: Copepod; Seagrass area; Diversity; Abundance