

## **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  $17.0 \pm 2.8 \times 10^4$  individuals/m<sup>3</sup>. 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