

**Abundance, Composition, and Vertical Distribution of
Calanoid Copepods in Central Sulu Sea**

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ABSTRACT

Calanoid copepods are dominant component of the copepod community, which in turn highlights their influence on the overall zooplankton assemblage of the water column. Studying their abundance and distribution, is important on understanding their role in the dynamics of commercially important organism like the fish. Calanoid samples in study, were part of the zooplankton samples taken during the Joint PhilEx oceanographic cruise on board R/V Melville in December 2007 in the Central Sulu Sea from MOCNESS station 29. Calanoid abundance, composition and distribution were investigated. Fifteen (15) calanoid families were identified all throughout the water column (0 - 400 m). The calanoid assemblage was dominated by 27 % *Eucalanidae*, 12 % *Rhincalanidae*, *Scolecitrichidae* with 7 % and other families contributing to roughly 19 % of the total. The water column was divided into 2 distinct depth cluster based on species distributions; (1) layers above thermocline (0 – 150 m) and (2) deeper layers (200 – 400 m). Furthermore upper layers were characterized by distinctive calanoid family assemblage which includes; *Calanidae*, *Euchaetidae*, *Eucalanidae*, *Candaciidae*, *Rhincalanidae*, and *Temoridae*. While deeper layers calanoid families includes; *Metridinidae*, *Scolecitrichidae*, *Rhincalanidae*, and *Euchaetidae*. ANOSIM results showed significant differences between these depth clusters, with global $R = 0.81$ and $p = 0.01$. These appear to be highly related to the thermocline in both stations, where typically higher upper layer primary productivity can support dense communities of zooplankton.