

## **Probability models for the distribution of copepods in different coastal ecosystems along the straits of Malacca.**

### **ABSTRACT**

Copepods are the most abundant microcrustaceans in the marine waters and are the major food resource for many commercial fish species. In addition, changes in the distribution and population composition of copepods may also serve as an indicator of global climate changes. Therefore, it is important to model the copepod distribution in different ecosystems. Copepod samples were collected from three different ecosystems (seagrass area, cage aquaculture area and coastal waters off shrimp aquaculture farm) along the coastal waters of the Malacca Straits over a one year period. In this study the major statistical analysis consisted of fitting different probability models. This paper highlights the fitting of probability distributions and discusses the adequateness of the fitted models. The usefulness of these fitted models would enable one to make probability statements about the distribution of copepods in three different ecosystems.

**Keyword:** Probability models; Copepods; Coastal ecosystems.