

Seksan Duangsri 2008: Species Composition and Distribution of Benthic Fauna in the Mae Klong Estuary. Master of Science (Fisheries Science), Major Field: Fisheries Science, Department of Fishery Biology. Thesis Advisor: Assistant Professor Teera Lekcholayut, M.Sc. 139 pages.

Species composition and distribution of benthic fauna at nine sampling stations in the Mae Klong estuary were studied in monthly during June 2004 to May 2005. Samples were collected by Ekman dredge to investigate and compile data on species, quantities and distribution of benthic fauna. Then the collected data on the environmental parameters and benthic fauna was analyzed to see the correlation.

Seventy-five species of benthic fauna within 5 groups : Polychaetes, Gastropods, Bivalves, Crustaceans and Inarticulate were found at the percentages of 57.34, 5.33, 16.00, 20.00 and 1.33 respectively. The total average density was 609 organisms per square meters. The Diversity Index was value in the range of 0.25 to 2.29 and the Evenness was ranged from 0.18 to 0.85. The structure of benthic fauna community can be classified into 3 groups with 31.85 percentages of similarity index showed different ecological habitats. The correlation analysis found that water and sediment qualities has less correlation with benthic fauna community because of the low Pearson's correlation coefficient ( r-value -0.42 to 0.42).

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Thesis Advisor's signature

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