

# QUANTITATIVE SURVEY OF THE MACROBENTHIC FAUNA ALONG THE WEST COAST OF THAILAND IN THE ANDAMAN SEA

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## ABSTRACT

The macrobenthic fauna along the west coast of Thailand was investigated at 59 stations in March-April 1982 and January-February 1983. Five grab samples ( $0.1\text{m}^2$ ) were taken at each station. Average abundance of macrofauna obtained with a 1 mm mesh sieve was found to be  $889 \pm 432$  individuals  $\text{m}^{-2}$ , ranging between stations from 248 to 2608 individuals  $\text{m}^{-2}$ . The average biomass expressed as wet weight was  $20.6 \pm 37.8$  g  $\text{m}^{-2}$  with a range from 1 to 254 g  $\text{m}^{-2}$ .

The Polychaeta was the most abundant group (53.4% of the individuals) followed by the Crustacea (35.8%), Echinodermata (3.7%), Mollusca (1.6%), and Chordate (1.3%)

Numbers of animals obtained in the second year of investigation were somewhat higher in most areas; the average for 1982 being  $861 \pm 386$  individuals  $\text{m}^{-2}$  and  $17.7 \pm 35.9$  g  $\text{m}^{-2}$ , while 1983 yielded  $916 \pm 474$  individuals  $\text{m}^{-2}$  and  $23.4 \pm 39.7$  g  $\text{m}^{-2}$ . Abundance and biomass decreased with depth. Average abundance in the shallow onshore zone (above 30 m depth) was  $1,060 \pm 433$  individuals  $\text{m}^{-2}$ , with only  $593 \pm 218$  individuals  $\text{m}^{-2}$  in the deeper offshore area (30 to 75 m depth). Biomass was about 3.9 times higher in the onshore zone. Grain size composition and organic content of sediment proved to be poorly correlated with total abundance and biomass.

There was a notable difference between the exposed coast with a steep slope to the north of Phuket Island compared with the more sheltered estuarine and insular region to its south. In the north, average abundance and biomass were  $701 \pm 307$  individuals  $\text{m}^{-2}$  and  $10.3 \pm 8.2$  g  $\text{m}^{-2}$ , respectively, in the south averages were  $1,123 \pm 452$  individuals  $\text{m}^{-2}$  and  $33.4 \pm 53.4$  g biomass  $\text{m}^{-2}$ . The shallow bottoms in the southern region, from Phang-nga to Satul, are regarded as rich feeding grounds for demersal fish species.