

**MARINE FISH RESOURCES OF THE ADANG-RAWI ARCHIPELAGO  
AND ADJACENT ANDAMAN SEA AREA, THAILAND**

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**ABSTRACT**

An investigation of marine resources around the Adang-Rawi Archipelago using a German trawl was carried out bimonthly, on three daytime cruises from December 1998 to April 1999. Water depths and salinity increased in a nearshore to offshore direction whereas the opposite pattern was shown for temperature. A total of 174 species/taxa belonging to 74 families were recorded and diversity indices are reported. The average catch rate and total biomass from 39 hauls were 25.79 kg/hr and 1,958.12 tons, respectively. Maximum catch rate was found in February (31.98 kg/hr) followed by December (23.82 kg/hr) and April (21.58 kg/hr). Catches were composed of trash fish (38.77%), demersal fish (33.27%), cephalopods (16.83%), other invertebrate groups (6.13%) and pelagic fish (5.00%). Members of Leiognathidae, Loliginidae, Priacanthidae, Nemipteridae and Synodontidae dominated the fish community. A high productive yield was obtained in the north and the west of Adang-Rawi Archipelago and to a lesser extent around the north-west of Tarutao Island. The size distribution and reproductive condition of economically important species are reported.

The fish communities comprise 2 groups using multivariate statistics, *i.e.* one around the Adang-Rawi Archipelago and another at Tarutao Island. Salinity was the best fitting environmental parameter with biotic pattern and may play a role in structuring the community.

Average catch rate in the present study was less than that in 1985 and 1995. In addition, analysis of the size distribution of economic fish indicated overfishing. As a result we recommend that a strong enforcement for fisheries is urgently needed in this area.