3970041923 : MAJOR MARINE SCIENCE
KEY WORD: SEAGRASS / MARINE FAUNA / ZOOPLANKTON / POLYCHAETES / GASTROPODS / PELECYPODS/ CRUSTACEANS/ FISHES/ PATTANI
KRISSANA INTHARASOOK : SEASONAL DISTRIBUTION AND DIVERSITY OF MARINE FAUNA IN SEAGRASS BEDS AT PATTANI BAY. THESIS ADVISOR : ASSIST.PROF. SURAPHOL SUDARA, Ph.D. 209 pp. ISBN 974-334-695-3.

The seasonal distribution and diversity of marine fauna in seagrass beds at Pattani Bay were investigated using the techniques developed for the ASEAN-Australia Marine Science: Living Coastal Resources Project, from November 1997 to November 1998. Mainly, the objective is to compare the marine fauna between three study sites, comprising of a monospecific seagrass bed, a mixed-species seagrass bad, and a site with no seagrass present. In addition, the study aims at determining the relationship between various habitats and their associated fauna. The results of this study reveal a total of 31 groups of zooplanktons dominated notably by copepods, shrimp larvae, and brachyuran zoea. Furthermore, 58 genera, from 28 families, of polychaetes were recorded, consisting predominantly of *Ceratonereis sp.*, *Aglaophamus spp.*, *Prionospio spp.*, and *Euclymene sp.* Among the 36 species, from a total of 22 families, the common species of gastropods recorded were *Fairbankia sp.*, *Stenothyra sp.*, and *Melanoides spp.* Fifty two species, from 23 families of pelecypods, were recorded with the dominant groups being *Licina sp.*, *Bachidontes stristulus*, *Tellina sp.*, and *Donax sp.* A total of 26 families, encompassing 50 species, of crustaceans were recorded. Among the 50 species, the dominant species were *Quadrivisio bengalensis*, *Penaeus semisulcatus*, *P. merguiensis*, *Metapenaeus spp.*, and *Portunus pelagicus*. The only species of Echinoderm that was recorded was *Ophiotrix sp.* The groups of fishes recorded from the study areas were consisted of 103 species, from 43 families, *with Acentrogobius viganensis*, *Ambassis kopsii*, and *Siganus spp.* being the dominant species. Moreover, the majority of the fishes that were recorded was in juvenile stage and was of economic importance, such as *Pelates quadrilineatus*, *Epinephelus spp.*, *Lates calcarifer*, *Lutjanus spp.*, *Chelon spp.*, *and Stolephorus spp.*

Ultimately, it can be concluded from this study that the diversity and the abundance of the marine fauna were relatively higher in mixed-species seagrass bed compared to monospecific seagrass bed and the area with no seagrass present ($P < 0.05$). This is largely due to the presence and complexity of micro-habitats in mixed-species seagrass bed. The characteristics of the sediment also play an important role in determining the species composition and distribution of benthic fauna on seagrass beds. Deposit feeders are found in areas composed of silt and clay while suspension feeders are mostly found where the substratum is composed of sand or sandy mud.

ภาควิชา...วิทยาศาสตร์ทางทะเล.....
สาขาวิชา...วิทยาศาสตร์ทางทะเล.....
ปีการศึกษา.....2542.....

ลายมือนิสิต .....Krissana Intharasook.....
ลายมือชื่ออาจารย์ที่ปรึกษา.....
ลายมือชื่ออาจารย์ที่ปรึกษาร่วม.....