

DIVERSITY OF EPIBENTHIC INTERTIDAL MOLLUSCAN COMMUNITIES ON THE SEAGRASS BEDS OF MIDDLE BANK, PENANG, MALAYSIA

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ABSTRACT: The diversity of intertidal molluscan communities inhabiting the seagrass beds of Middle Bank, Penang, Malaysia was studied at four stations during the lowest tides, following the Natural Geography in Shore Areas (NaGISA) protocol. Fifteen 1m x 1m quadrats were placed at each station on the seagrass bed along the Middle Bank. The seagrass species reported in this study area are *Enhalus acoroides* (Linnaeus f.) Royle, 1839, *Halophila ovalis* (R. Brown) Hooker, 1858, and *Thalassia hemprichii* (Ehrenberg) Ascherson, 1871 with *E. acoroides* being the dominant seagrass species. A total of 12 species in eight families of Gastropoda and Bivalvia, namely Arcidae, Cerithiidae, Columbelloidea, Melongenidae, Muricidae, Nassariidae, Neritidae, and Pinnidae were recorded. One-way ANOVA showed that p values of the substratum temperature (p=0.104) and salinity (p=0.866) had no significant difference among the stations, seagrass coverage and substratum particle size had a significant influence on the distribution of molluscs at Middle Bank. As a whole, molluscs can be found throughout the intertidal zone of the island. *Cerithium coralium* (Gastropoda: Cerithiidae) was the most dominant molluscan species inhabiting the seagrass beds.

Keywords: Diversity, mollusc communities, seagrass bed, Middle Bank, Penang Malaysia
