基隆市望海巷潮境海灣資源保育區潮間帶物種多樣性調查

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本研究於2016年7月至11月於基隆市望海巷潮境海灣資源保育區潮間帶進行7次生物調查,調查對象以潮間帶之大型無脊椎動物及脊椎動物為主。於保育區內外之潮間帶各設置2條穿越線,並於低、中、高潮位各以50公分*50公分的樣框進行觀測,建立此保育區潮間帶基礎生態資料,並利用香農生物多樣性指數(Shannon diversity index)、Margalef生物豐富度及豐量指數等指數探討不同潮位、區域、月份之生物群聚是否有差異。本研究總計紀錄8門42科69種物種。依據生物多樣性指數發現潮境海灣資源保育區之潮間帶多樣性高於鄰近對照組。豐富度指數顯示中潮帶生物豐富度高於低潮帶與高潮帶。未來將持續調查,以進行季節分析,並選定長期監測物種。

關鍵詞:生物多樣性指標、潮間帶、海洋資源保育區

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The Research of Biodiversity of the Intertidal Zone of Wanghaixiang's Chao-Jing Bay Resource Conservation Area in Keelung

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This study investigated the ecology of the intertidal zone of Wanghaixiang's Chao-Jing bay resource conservation area in Keelung by 7 times from July 2016 to November 2016. The major investigative target was macroinvertebrates and vertebrates. In order to build ecological data of intertidal zone in conservation area, 2 transect lines were set in both inside and outside of the conservation area. Each transect lines low, middle, high tidal area, and the data were observed in 50 cm*50 cm quadrat of each area at each transect lines. The Shannon diversity index, Margalef richness index and abundance index were used to discuss the community of fauna in different tide, location and month. In the result, 69 species in 8 Phyla, 42 Families were recorded. According to diversity index, the diversity of conservation area get higher score than control area which adjacent the conservation area. The richness index was highest in middle tide, follow by the lower tide, and lowest at upper tide. In order to conduct seasonal analysis and select long-term monitoring species, it's necessary to continue the investigation in the future.

Key words: diversity index, intertidal zone, resource conservation area

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