Benthic Community Variability at Himchori Beach Point, Cox's Bazar: In Relations with Sediment Characteristics

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Roll No. 0118/02

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A thesis submitted in the partial fulfillment of the requirements for the degree of Master of Science in Marine Bioresource Science

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This is to certify that we have examined the above Master's thesis and have found that, is completed and satisfactory in all respects, and that all revisions required by the thesis examination committee have been made

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The Author

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Abstract

This study was undertaken to know the benthic community of Himchori Beach Point in relations with any differences between a newly deposited muddy beach and adjacent sandy beaches. 15 samples representing muddy and sandy beaches were collected and analyzed following standard methods. A total of 20 macro benthos and 18 micro benthos species were identified. In case of macro benthos, the most dominant species was Mesogastropoda comprising 39.29% in muddy beaches, while Ponderous ark (34.90%) and Pila globosa (35.71%) was dominant species in two sandy beaches. In case of micro benthos, Nephtys (27.27%), Bivalves and *Urothoe sp.* (40%) and Unionidae (92.30%) was dominant species in muddy and sandy beaches respectively. Both macro and micro benthos distribution showed differences between the newly deposited muddy beach and the sandy beaches in north and south. 10 species of macro benthos out of 20 were found only in the muddy beach and 2 species only in sandy beaches. 13 species of micro benthos out of 18 species were restricted to the newly deposited muddy beach. Contrary to this only one species `Unionidae' was common in sandy beaches. From the differences observed in this study, it can be concluding that the newly deposited beach which visually seems muddy is different from the existing sandy beaches of north and south part of Himchori Beach Point.

Keywords: Sandy beach, Muddy beach, Macro benthos, Micro benthos

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