ISOLATION AND IDENTIFICATION OF WATERBORNE PARASITES FROM TELUK KEMANG BEACH IN PORT DICKSON, NEGERI SEMBILAN

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ABSTRACT

ISOLATION AND IDENTIFICATION OF WATERBORNE PARASITES FROM TELUK KEMANG BEACH IN PORT DICKSON, NEGERI SEMBILAN

Water is a tasteless, colorless and odorless liquid, composed of hydrogen and oxygen. 70% of the world is made up of water, which includes lakes, streams, oceans, and also the fluids of living organisms. Sea water can also be a major reservoir of parasites and popular route of transmission for parasitic diseases other than fresh water. The transmission occurs by direct exposure of parasites from the sea water. The purpose of this study is to isolate and identify waterborne parasites from the sea water using flotation technique and microscopic observation. The results of this study showed that eight types of parasites were isolated and identified from water samples collected from three different sites in Teluk Kemang Beach. The identification of parasites was done based on their morphological characteristics. The identified parasites are Ascaris lumbricoides, Balantidium coli, Toxoplasma gondii, Entamoeba coli, Oesophagostomum spp, Necator americanus, Entamoeba histolytica and Cytosisospora belli. Most identified parasites originated from the samples of the sewage drainage site that flows into the sea. Respectively, these parasites can cause various diseases generally involving the gastrointestinal tract that subsequently results in further bodily complications. Hence, the results obtained can be used to increase the awareness among people about the probability of contracting parasitic infections during their weekend and holidays visits to natural, recreational waters.