ASSESSMENT OF NUTRIENT POLLUTION IN INANAM LIKAS RIVER BASIN (ILRB), KOTA KINABALU, SABAH

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ABSTRACT

ASSESSEMENT OF NUTRIENT POLLUTION IN INANAM LIKAS RIVER BASIN (ILRB), KOTA KINABALU, SABAH

A study was conducted in February to June, 2017 on assessing the human health impact of nutrient pollution located in Inanam Likas River Basin, Kota Kinabalu, Sabah. The aim of the study was to identify the level of nitrate and nitrite, to determine the potential of nutrient level to human risk and to see the correlation between climatic factor and nutrient level in the river. In study area, there are 27 replicated samples of water taken in three different stations were place in cool box and brought to the Acuatic Laboratory of UiTM, Sabah Branch and then analysis by using UV-Vis spectrophotometer in nitrate (NO_3) and using DR2800 Spectrophotometer in nitrite (NO_2) analysis. The data of air temperature and precipitation was obtain from Jabatan Metereologi Cawangan Sabah in previous 10 years. The result has shown that the nutrient level in three stations is below the standard maximum level. The highest nitrate concentration is in Station 1 and the lower nitrate concentration is in Station 3. In comparing with other study, there is no potential health risk through the overall sampling station. The data analysis using IBM SPSS Ver.23 was conducted to assess the correlation between climatic factor and nutrient level. The outcome shown was that there were between air temperature and nitrate (r=-0.699), air temperature and nitrite (r=0.015), precipitation and nitrate (r=0.188), and precipitation and nitrite (r=0.547). This is mean by the precipitation was influence the nutrient level in river.