

Korelasi Konsentrasi Kadmium (Cd) pada Melanoides turricula dan Air Sungai Wangan yang Terkontaminasi Limbah Batik

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Abstract	<p>Cadmium usually use as a commound in coloring agents that commonly used in industry. It's toxic and undistangleable in water. The polluted water will give the bad effects to the biota and human too. Melanoides turricula is kind of gastropod, acts as a strong bio accumulator in accumulating heavy metals. The purpose of this research is to analyze the concentration of kadmium and its correlation with the existence of M turricula on Wangan River. This research was done in Wangan River, Sokaraja. The research method that is used is survey between the concentration of cadmium in M. turricula's body and the water of Wangan River is analyzed by Spearman Rank's Correlation Analysis. The result of the research shows that there are lowest cadmium method. The objects of the research are M. turricula and Wangan River's water. The independent variable that has been observed is the concentration of cadmium in Wangan River's water and the dependent variable is the concentration of cadmium in M. turricula's body. The main parameters measured are the concentration of cadmium on both M. turricula's body and Wangan River's water. The supporting parameters are temperatures, pH and BOD (Biochemical Oxygen Demand). The samples are taken four times in four months on three observations station. Those are the unclouded area, the polluted area and the waste disposal area. The correlation concentration on the M. turricula and river's water, before given any waste, around 2.075 $\mu\text{g/g}$ and 0.750 $\mu\text{g/L}$. In the area of waste disposal station, there are the highest cadmium concentration on the M. turricula and also on the river's water around 6.450 $\mu\text{g/g}$ and 1.050 $\mu\text{g/L}$. Meanwhile the cadmium concentration on the M. turricula and on the river's water, after given waste, are around 4.600 $\mu\text{g/g}$ and 0.875 $\mu\text{g/L}$. Based on Spearman's Rank Correlation Analysis, it is shown that there is a correlation between cadmium concentration with M. turricula and river's water.</p>
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