



**CORRELATION OF LEAD CONCENTRATIONS IN *ACETES INDICUS*
(ALAMANG) AND WATERS WITH THE PHYSICO-CHEMICAL
PARAMETERS OF BACCOOR BAY, CAVITE, PHILIPPINES**

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ABSTRACT

The study determined the lead concentration in *Acetes indicus* and in the waters of Bacoor Bay and its correlation with the selected physico- chemical parameters of the water. The samples underwent wet and dry nitric acid digestion followed by the use of flame atomic absorption spectrophotometer to determine the amount of lead accumulated by *Acetes indicus* and by the water. Physico- chemical parameters such as dissolved oxygen, temperature, pH, turbidity, total dissolve solids, conductivity, and salinity were also measured. Results showed that pH and temperature have significant ($p = <0.05$) relationship with the lead concentration in the water. These parameters could contribute to the solubility and toxicity of lead. Other physico- chemical parameters have no significant relationship with the lead concentration in *Acetes indicus*. Moreover, the level of lead concentration in *A. indicus* is higher compared with the content of the water. *Acetes indicus* eats the suspended lead particles in the water and the concept of bioaccumulation explains the reason behind higher accumulation of heavy metal in an organism than in water.



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