

## **Concentration of Cd, Cr, Cu, Pb and Zn in Water During Southwest Monsoon in Salut-Mengkabong Lagoon, Tuaran, Sabah**

### **ABSTRACT**

Concentrations of selected heavy metals (Cd, Cr, Cu, Pb and Zn) in water were determined adjacent to aquaculture sites located in Salut-Mengkabong Lagoon, Tuaran, Sabah. Samples collected from six stations were analyzed by Inductively Coupled Plasma – Optical Emission Spectrometer (ICP-OES). The average concentrations of Cr, Cu Pb and Zn in lagoon water were  $3.43 \times 10^{-3}$ ,  $4.37 \times 10^{-3}$ ,  $2.55 \times 10^{-2}$ ,  $1.51 \times 10^{-1}$ mg/L respectively and concentration for Cd was below detection limit. Referring to Malaysia Marine Water Quality Criteria and Standard (MMWQS), concentrations of Cd and Cr were in acceptable range whereas Cu, Pb and Zn were slightly higher than the standard. This study offers result of five heavy metals' concentrations during south-west monsoon which is important reference for aquaculture activities and lagoon water quality management.