ABSTRACT

Lead which is one of the most toxic heavy metals was studied in *Callinectus sapidus* (blue crab) and water samples in Maragondon River, Cavite to determine its concentration whether or not it is safe for public health.

Crab and water samples were collected in two stations: High Salinity Zone (HSZ) and Low Salinity Zone (LSZ). Collection and testing of samples were done in three consecutive months from June to August 2008. Atomic Absorption Spectrophotometer (AAS) was used in detecting the presence of lead in both samples.

For the period June and July, both samples were found below the detection limits of the two AAS used. However, for the month of August the crab sample, the lead content was found higher than the detection limit of the AAS used.

In conclusion, the bioaccumulation of the heavy metal lead was not detected on the water and crab samples for the months of June and July. However, for the month of August it was found out that the lead concentration in *Callinectus sapidus* was 0.23 ppm for LSZ and 0.34 ppm for HSZ. The lead content of the water and crab samples were still safe for public health, but continued used of the same may pose great danger.

