

Heavy metal concentrations(CU, FE, NI AND ZN) in the clam, *Glaucanome virens*, collected from the northern intertidal areas of Peninsular Malaysia.

Abstract

Samples of the clam, *Glaucanome virens*, were collected from Kg. Sg. Berembang (Perlis), Sungai Layar (Kedah) and Pantai Teluk Air Tawar (Pulau Pinang). Present study aimed to determine the heavy metal concentrations in the different parts of *G. virens*. Besides the shells, the soft tissues of the clam were dissected into the gill, muscle, foot, mantle, siphon and remainder and then Cu, Fe, Ni and Zn levels were determined. The concentrations of Cu, Fe, Ni and Zn in the different parts ranged from 4.77-38.8 $\mu\text{g/g}$ dry weight, 211-1328 $\mu\text{g/g}$ dry weight, 0.55-7.91 $\mu\text{g/g}$ dry weight and 10.2-296 $\mu\text{g/g}$ dry weight, respectively. In general, it was found that the other parts of soft tissues contained higher concentrations Cu and Fe. Meanwhile, the shell in general contained higher Ni from the remaining parts. As for Zn, higher concentrations were found in the gill than other parts. Future biomonitoring study on this clam species should be focused on the tissues (such as the remainder, shell and gill) to determine their potential as biomonitoring organs/materials.

Keyword: Biomonitor; Different tissues; *Glaucanome virens*; Heavy metals; Peninsular Malaysia.