# ASSESSMENT OF CADMIUM AND LEAD IN *PARASTROMATEUS NIGER* FROM WET MARKETS AND SUPERMARKETS IN KLANG VALLEY

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## ABSTRACT

Levels of heavy metals in fish are of particular interest due to the potential risk to humans who consume them. This research was conducted to determine the concentration of lead and cadmium present in the organs namely brain, gills, liver, kidney, flesh and intestine of *Parastromateus niger.* Sampled of fish obtained from wet markets and supermarkets in Klang Valley were analyzed for the cadmium and lead. In this study, cadmium and lead concentration were determined using atomic absorption spectrometer after samples were digested with acetic acid. The organs concentrations of Pb and Cd in the ranged of 0.003-1.300 and 0.2173-1.7386 respectively. Results that were obtained from the instrument were compared with Malaysian Food Regulation (1985) and World Health Organization (1996). Results obtained concluded that Cd and Pb in fishes sampled from supermarkets are generally higher compare to wet markets. The highest concentration of cadmium and lead were detected in the gills. All the organs that were detected with cadmium and lead except for gills did not exceed the permissible limits set by Malaysia Food Regulation (1985) and WHO. It can be concluded that supermarket has a higher value of heavy metal compare to wet market but still safe for consumption. High levels of cadmium and lead in the fish muscle are hazardous to the human health and preventive measures is necessary due to fish muscle is one of the most common food consumed by humans. The potential of harm from cadmium and lead suggest that people not only eat smaller quantities of fish but should eat variety fish.