

**A higher metal bioavailability and contamination of trace metals in Pantai Lido than Sungai Semerak: Evidence from trace metal concentrations in *Polymesoda expansa* and surface sediments.**

**Abstract**

Ecotoxicological studies always focused on the pollutant levels in the biomonitors in order to understand better its distribution and abundance over a geographical range. Distribution of metals in the different tissues of bivalves are means to understand the fate and initial transport of metals from the sources to the final storage site of metals in the biomonitors (Yap et al., 2006a; 2006b). This information is important since those metals stored and bioavailable to the biomonitors are of ecotoxicological relevance. The use of bivalve as a biomonitor of trace metals in the coastal waters are well documented in the literature (Hamed and Emara, 2006; Yap et al., 2006a, 2006b). Marine bivalves are advantageous since the concentrations found in the soft tissues of mussels can provide a time-integrated measurement of metal pollution apart from contamination and bioavailability of metals in the coastal waters (Yap et al., 2006a, 2006b). Since they are sedentary, longlived and widely distributed, their metal body burden can reflect the contamination history of a certain coastal environment (Rainbow, 1995). In Malaysia, Edward et al. (2009) and Yap and Azri (2009) had documented the metal levels in *Polymesoda* clams.

**Keyword:** *Polymesoda expansa*; Trace metal; Metal bioavailability.