Heavy metal concentration (Cd, Cu, Fe, Ni, Pb and Zn) in clam, Polymesoda erosa collected from intertidal area of Tok Bali and Kuala Kemasin, Kelantan.

Abstract

Present paper focused on determination of heavy metal concentrations in the different parts of a mangrove clam, Polymesoda erosa (Family:Corbiculidea) (Figure 1) collected from Tok Bali and Kuala Kemasin, Kelantan (Figure 2). Both places are known as fishing village where no direct pollution are observed besides receiving domestic waste from the nearby villages (Table 1). The clam, P. erosa is a large and fleshy bivalve that attains a shell length of up to 11 cm (Gimin et al., 2004) and it is reported in the literature that the clam is capable to accumulate high concentrations of heavy metals from the ambient water (Modassir, 2000). This allows its use as a potential biomonitor of metal bioavailabilities in the coastal area since biomonitor facilitates comparison of metal bioavailabilities over space and time besides offering easily analysed integrated measures of the ecologically significant fraction of ambient metals in the habitat (Phillips and Rainbow, 1993; Rainbow, 1995; Rainbow and Blackmore, 2001).

Keyword: Polymesoda erosa; Heavy metal; Clam.