Heavy metal (Cd, Cu, Pb and Zn) concentrations in the green-lipped mussel Perna viridis (Linnaeus) collected from some wild and aquacultural sites in the west coast of Peninsular Malaysia

Abstract

The green-lipped mussel Perna viridis (L.), collected from nine (four wild and five aquacultural) sites between 1999 and 2001, off the west coast of Peninsular Malaysia, were analysed for cadmium (Cd), copper (Cu), lead (Pb) and zinc (Zn). The concentrations (µg/g dry weight) of these heavy metals ranged from 0.68 to 1.25 for Cd, 7.76 to 20.1 for Cu, 2.51 to 8.76 for Pb and 75.1 to 129 for Zn. These levels should result in no acute toxicities of the metals since they are lower than the permissible limits for human consumption. In addition, these metal concentrations are also considered to be low when compared with regional data using P. viridis as a biomonitoring agent. © 2003 Elsevier Ltd. All rights reserved.

Keyword: Heavy metals; Perna viridis; West coast of Peninsular Malaysia