Mercury concentrations in the different soft tissues and byssus of Perna viridis (L.) collected from the west coast of Peninsular Malaysia.

Abstract

Green-lipped mussel Perna viridis collected between 1999-2000 from 7 geographical sites from the west coast of Peninsular Malaysia were dissected into mantle, foot, gill, crystalline style, muscle, gonad and byssus. All the 6 different soft tissues and byssus were analyzed for elemental Hg by using a Hg Analyzer Model MA-1S. When compared to food safety guidelines, the concentrations of Hg in all the different soft tissues of mussels were below typical public health recommended limits. Therefore, the consumption of P. viridis from the west coast of Peninsular Malaysia is not a health hazard as far as contamination by Hg is concerned. It was also found that tissue distributions of Hg is similar to Cd, Cu, Pb, Zn although their concentrations are different from metal to another and from one tissue to another. It is recommended that future studies are much needed to monitor the metal contamination in the coastal waters potentially receiving anthropogenic inputs of heavy metals.

Keyword: Perna viridis; Hg; West coast of Peninsular Malaysia.