A preliminary study on the concentrations of Cu and Zn in Java medaka Oryzias javanicus and sediments collected from some estuaries in the West Coast of Peninsular Malaysia

Abstract

Two surveys and samplings of Java medaka Oryzias javanicus were conducted, between February and April 2002, along some estuaries from Penang to Kelang of the West Coast of Peninsular Malaysia. The fish species was collected from five sampling sites in the west coast of Peninsular Malaysia together with sediment samples. All the fish and sediment samples were analysed for copper (Cu) and zinc (Zn). The concentrations (pg/g wet weight) of Cu and Zn of Java medaka ranged from 3.55 to 5.84 and 16.2 to 53.8, respectively. For the sediment samples, the concentrations (pg/g dry weight) of Cu and Zn ranged from 7.34 to 58.3 and 52.3 to 101, respectively. These metal concentrations in the fish samples were considered low.

Keyword: Copper; Zinc; Java medaka Oryzias javanicus; Sediment sample; Fish; Penang; Kelang; Peninsular Malaysia