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Vertical Profile Of Heavy Metal Concentration In Sediments From Sadong River, Sarawak, Malaysia

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Several sources of heavy metals in the environment include biological, geochemical, geological and anthropogenic sources. A total of eighteen core sediments were taken from Sadong river, Sarawak, Malaysia. These samples were digested by acid extraction and thereafter subjected to atomic absorption spectrometry (AAS). This paper aims to determine the vertical profile of heavy metals in core sediments, infer the accumulation history and assess the possible sources of pollution. The results showed that Fe was the most abundant element while Cd had the lowest concentration. Sediment pollution assessment was carried out for the top layer using geoaccumulation index (Igeo), enrichment factor and contamination factor. EF values showed moderate to significant enrichment of heavy metals.

KEYWORDS

Anthropogenic, Atomic absorption spectrometry (AAS), Core sediments, Geoaccumulation index, Sadong river

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