

Distribution of fatty alcohols in surface sediments of the Endau River, Johor

ABSTRACT

The distribution and concentrations of extractable fatty alcohols in surface sediments of the Endau River were determined to identify their sources and variations. A total of 18 surface sediment samples were taken from Sungai Endau, Johor. Samples were then extracted and analyzed using a gas chromatography-mass spectrometer (GC-MS). Total fatty alcohol concentration ranged from 0.62 to 34.54 ngg⁻¹ dry weight sediment. Generally, the study area is dominated by long chain fatty alcohols which are indicator for terrestrial organic matter. This is also supported by the ratio of short chain/long chain fatty alcohol and alcohol source index (ASI). This study showed the fatty alcohols detected in the study area originated from various sources with inputs from terrestrial being the more dominant sources