Sterols in Surface Sediments of the Redang Island, Terengganu

Abstract

A total of ten surface sediment samples collected around the Redang Island, Terengganu were used to evaluate sterol variations in the study area. The sediment samples were extracted and analyzed using gas chromatography-mass spectrometer (GCMS). Generally, the study area is dominated by cholesterol which accounted for 32% of total sterols, followed by phytosterols (27%), marine sterols (20%), fecal sterols (17%) and cholestanol (4%). The sterol source index (SSI) showed low input of phytosterols indicated terrestrial plants source. This might be due to influence of the marine environment of the study area. Furthermore, the sewage contamination index clarified the study area was not contaminated by sewage. The presence of sterols in the study area was derived from various sources which were dominated by inputs from marine sources.