

Evidence of Micropollutants in Sediment and Mud Clams (*Polymesoda erosa*) from One of Mangrove Biodiversity Hotspots in Indonesia

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Abstract	<p>This study aims to explore persistent microorganic pollutants (Poly chloro byphneyls (PCBs) and Organochlorine Pesticides (OCPs)) in sediment and mud clams (<i>Polymesoda erosa</i>) in Segara Anakan Lagoon (SAL). In addition, polycyclic aromatic hydrocarbons (PAHs) in the mud clams were evaluated their risk consumption and Bioaccumulation factor in sediment. Concentrations of seven PCBs in the sediment were found in the range 0.11 +/- 0.05 to 2.63 +/- 0.1 mu g kg(-1) sed dw. OCPs levels were found in the range of 0.2 +/- 0.05 and 2.9 +/- 0.01 mu g kg(-1) sed dw. In <i>P. erosa</i>, 16 Polycyclic Aromatic Hydrocarbons (PAHs) (USEPA) were found in the range from 103.34 +/- 2.01 to 1348.31 +/- 18.21 mu g kg(-1) tissue dry weight (dw), PCBs content was found only in one station at concentration 2.34 +/- 1.72 mu g kg(-1) tissue dw and OCPs content was found in the range 0.87 +/- 0.03 to 24.79 +/- 1.30 mu g kg(-1) tissue dw. The disturbance matrices have been evaluated with the appropriate samples according to the extraction yield and yield analysis. Several guidelines evaluate the quality of sediment on PCBs and OCPs (i.e. pp-DDE). The consumption evaluation shows that this mud clam <i>P. erosa</i> has been contaminated of PAHs and not recommended for human consumption. They were potentially as site-specific bioaccumulation in sediment for organic micropollutants which receives from any untreated sewage, industrial waste discharge into the canal system of river of Segara Anakan Lagoon.</p>
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