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Abstract

Mangrove zones in Brazil are extremely sensitive to impacts from global climate change and urbanization. To understand the effects of urbanization on organic matter inputs in the coastal zone of Ceará State (northeastern Brazil), seasonal campaigns were carried out in two of the most environmentally significant river/mangrove systems within the region : the Cocó river, in the metropolitan region of the huge city of Fortaleza, and the Pacoti River, an environmental protection area, without urban influence, on the east coast of the state. Additionally, a spatial study was conducted along the Jaguaribe River, the largest river in the state connected a mangrove area. Organic matter characterization by dissolved organic carbon, spectrofluorescence and fluorescence quenching, and metal complexation capacity shows clearly that under urban pressure, the produced organic matter in mangrove areas is different, proving that carbon budget and pollutant fate have to be revised to take in account this difference.

Keywords :

Mangrove Organic matter Fluorescence Metal complexation Urban pressure

Voir en ligne : <https://link.springer.com/chapter/1...>