

FERNANDES, Maria Aparecida de Araújo; PASSAVANTE, José Zanon de Oliveira; MACÊDO, Sílvio José de; FEITOSA, Fernando Antônio do Nascimento; LINS, Iara Correia; SILVA-CUNHA, Maria da Glória Gonçalves da. Fitoplâncton do estuário do rio Congo (Itapissuma, Pernambuco): Produtividade e hidrologia. In: **CONFERENCE SUSTAINABLE USE OF ESTUARIES AND MANGROVE: CHALLENGES AND PROSPECTS**, 2000. Recife: CD-ROM. 2000. p.1-34

ABSTRACT

This research was made at the estuary of the River Congo (07° 46' 26" S; 34° 53' 27" W) located 50km north of Recife City (PE). This river has an extension of 2.42km from its river-head, at Itapissuma Town, to its mouth at Santa Cruz Channel. Along its edge develop a dense mangrove vegetation, riverine type. This research was developed in order to know the microflora (spatial and temporal primary production) and its correlation with the hydrological. A van Dorn bottle was used for production determination and a Nansen bottle for hydrology. Primary productivity was measured through the ^{14}C method using incubation *in situ* for 3 hours. The hydrological data showed a homogeneous estuary, mixo-mesohaline to euhaline, free of organic and industrial pollutions. The rainy season presented higher phytoplankton production (from 5.16 to 78.17mg C.h⁻¹.m⁻²).

KEYWORDS: 1 – Primary productivity; 2 – Hydrology; 3 - Phytoplankton.