

REDUCTION AND OXIDATION PROPERTIES OF THE MANGROVE SEDIMENT, PHUKET ISLAND, SOUTHERN THAILAND

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ABSTRACT

Measurement of redox potential of mangrove sediments was carried out at the Ao Nam-Bor mangrove shore, Phuket Island, Southern Thailand. The surface sediment was found to consist of an oxidized layer which was only a few mm. thick; below this there was a redox discontinuity or transitional layer about 1 cm. thick followed by a reducing sediment.

The relationship between redox potential, microbiological activities, nutrients (NO_3^- , PO_4^{--} , etc.), organic materials, sediment grain size, sediment pH and macrofauna are discussed.