PRINT: ISSN 0970-9274 ONLINE: ISSN 2456-6608
JOURNAL OF HUMAN ECOLOGY
International Interdisciplinary Journal of Man-Environment Relationship

PRINT: ISSN 0970-9274 ONLINE: ISSN 2456-6608
J Hum Ecol, 39(2): 171-174 (2012)
DOI: 10.31901/24566608.2012/39.02.08

Acute Toxicity Tests of Different Concentrations of Diesel Fuel on the Mudskipper, *Periophthalmus koelreuteri* (Pallas 1770): (Gobiidae)

Fayeofori G. Bob-Manuel

Department Of Biology, Rivers State University of Education, Rumuolumeni, P. M. B. 5047, Port Harcourt, Nigeria
E-mail: fayeoforib@yahoo.com

KEYWORDS Aquatoxicology. Lethal Dose. Water Soluble Fractions. Musdskiper. Petroleum Hydrocerbons

ABSTRACT Acute toxicity test of water soluble fraction (WSF) of diesel fuel was carried out to determine its effect on the mudskipper, *Periophthalmus koelreuteri* (Pallas). Each of the six experimental tanks containing 20 mudskippers were subjected to graded levels of water soluble fractions (WSF) of diesel fuel with the following concentraction: oppm; 5.20ppm; 8.33ppm, 12.50ppm; 16.66ppm and 29.16 ppm respectively, oppm serves as the control, without any toxicant. The results indicate that despite its amphibious nature, the mudskipper is highly vulnerable to even low concentrations of water-soluble fractions of diesel fuel. The LD_{50} was determined at 4.58ppm. It was suggested that effort should be made to check pollution of the brackish water ecosystem by petroleum hydrocarbons in order to maintain the biodiversity of *P. koelreuteri* in the Niger Delta.