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## Effects of industrial paint effluents on water quality and fungi associated with *Clarias gariepinus*

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Paints effluents contain a complex mixture of chemicals which may have potential threats to biota. The present study was carried out to assess the potential impacts of paint effluents entering the aquatic environment. The paint effluents were collected directly from a paint industry in Lagos from the releasing tank into a sterile bottle. The heavy metals present in the paint effluent include lead ( $0.34 \pm 0.01$  ppm) and zinc ( $1.20 \pm 0.01$  ppm). Twenty liters of water was used in the aquaria and concentration

of the toxicant varied from 1.25ml/l to 6.25mls/l in the separate tanks containing the *Clarias gariepinus* fish. Differences were observed in pH and the biochemical oxygen demand of water which were monitored for 96 hours. There were increases in the fungal population with an increase in the treatments of the pollutant. Fungi were isolated from the polluted fish aquaria and parts of the harvested fish. The fungi isolated were *Penicillium italicum*, *Aspergillus niger*, *Aureobasidium pullulans*, *Articulospora inflata*, *Trichosporon sp*, *Mucor mucedo*, *Rhodotorula rubra*, *Rhizopus stolonifer* and *Candida albicans*. The paint effluent affects the pH, biochemical oxygen demand, fungal types and loads, leads to bioaccumulation of heavy

metals in catfish. It can be concluded that discharging the effluent paint into water bodies could lead to bioaccumulation of heavy metals in catfish which could be detrimental to human health when consumed.

### Biography

Orimoloye Adedolapo Mary a Nigerian from West Africa have just been offered Admission into her PhD Research program into the Department of Microbiology of The Federal University of Technology Akure. She completed her Master's and Undergraduate studies from the same Department and University. She completed her Master's Degree in 2015. She is currently working on her research work as a student. Have published 2 papers in reputed journals.

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