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## Environmental factors influencing antibiotic resistant bacterial pathogens in polluted lake Manzala, Egypt

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Lake Manzala is considered one of the most important Coastal lakes, in the northern part of Egypt. It suffers from high load of pollutants from different sources such as sewage, industrial and agricultural wastes. In this study, physicochemical characterization of lake water revealed high level of pollution in different sampling sites such as, pH, T.S.S, T.D.S, ammonia, nitrates, sulfates, alkalinity, chlorides, calcium and magnesium. Bacterial count such as TVB and fecal coliform of water and fishes of the lake revealed high contamination in lake Manzala, a total of 90 isolates were identified and resulted in different bacterial pathogens such as, *E. coil*, *Proteus mirabilis*, *Sphomonas paucimobilis*, *Citrobacter freunii*, *Erwinia sp*, *Pasturella sp.* and *Pseudomonas sp*. Antibigram was done for all isolates using eight antibiotics such as penicillin, ampicillin, cefotaxime, chloramphenicol, rifampicin, tetracycline, streptomycine and gentamicin. The result showed high resistant pattern among different species which are harboring plasmid DNA. This is an indication that these bacterial pathogens have risk factors on the communities around lake Manzala.

### Biography

Mahmoud.M.M.Zaky has completed his Ph.D at the age of 36 years from Mansoura University and postdoctoral studies from Port-Said University Faculty of science. He is lecturer and consultant of microbiology ,Botany department, Faculty of science, Port Said University a He has published more than 13 papers in reputed journals and serving as a reviewer of many journals.

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