

## **Bacteria Flora in the Gut and Respiratory Organs of *Clarias gariepinus* in Fresh and Brackish Water Habitats of Ondo State, South/West Nigeria**

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**Abstract :** Bacteria flora of *Clarias gariepinus* collected from two natural habitats namely Owena River (freshwater) and Igbokoda lagoon (brackish water) were examined using standard microbiological procedures. Thirteen bacterial species were identified. The result indicated that from the identified bacteria isolated, *Vibrio* sp, *Proteus* sp, *Shigella* sp. and *E. coli* were present in both habitats (fresh and brackish waters). Others were habitat-selective such as *Salmonella* sp., *Pseudomonas* sp, *Enterococcus* sp, *Staphylococcus* sp. that were found only in freshwater habitat. While *Branhamella* sp, *Streptococcus* sp. and *Micrococcus* sp. were found in brackish water habitat. Bacteria load from Owena river (freshwater) was found to be the highest load recorded at  $6.21 \times 10^4$ cfu. T-test analysis also revealed that there was a marked significant difference between bacterial load in guts of sampled *Clarias* from fresh water and brackish water habitats.

**Keywords :** bacteria flora, gut, *Clarias gariepinus*, Owena river

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