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Assessment of heavy metals in *Tilapia zillii* from some Nun River Estuaries in the Niger Delta region of Nigeria**Ayobami Omozemoje Aigberua and Timi Tarawou**
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This study investigated the heavy metal concentration in *Tilapia zillii* from River Nun in Bayelsa state, Nigeria. The samples were collected from the brackish environment in the Nun River Estuary. *Tilapia zillii* were collected from creek lines traversing five communities at Obama, Tebidaba, Clough creek, Ogbainbiri and Samabiri. The samples were preserved in ice chest and transported to the laboratory. The fish samples were prepared by oven-drying, dry-ashing and digesting using a mixture of nitric and hydrochloric acid. The fish samples were analyzed using flame atomic absorption spectrometry. Result of the fish ranged from 0.380-21.555 mg/kg (lead), <0.001 mg/kg (copper), 0.190-1.670 mg/kg (chromium), 0.290-22.67 mg/kg (manganese), 2.785-30.340 mg/kg (zinc), 40.860-195.905 mg/kg (iron) and 0.205-1.145 mg/kg (nickel). Statistically, there was significance difference ($P < 0.05$) in the fish collected from the different locations apart from copper. The heavy metal concentration were above the limits recommended by various agencies including Food and Agricultural Organization/World Health Organization, Median international standard, European Union, United State Environmental Protection Agency and Water Pollution Control Legislation. The high concentration of heavy metals above permissible level suggests the need for caution during the consumption of *Tilapia zillii* from the Nun Estuary due to health implications associated with heavy metals.

References

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Biography

Ayobami Omozemoje Aigberua is currently a PhD student at Niger Delta University, Nigeria. He has completed his MSc in Analytical and Environmental Chemistry from Niger Delta University. He has 3 publications in both international and national journals. He has research interest in environmental biotechnology and pollution treatment techniques.

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