

ORAL COMMUNICATION

Theme 3: Water Management and Socio-Ecological Dynamics of Hydrological Systems

Title: Fish Parasites related to water quality and health bio indicator

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Abstract

This study investigated fishes' parasitic communities' composition and structure respected to water quality level in three water reservoirs. The objective is to determine parasites behavior related to the organic pollution of aquatic environments. Also to identify bioindicators parasites of water pollution in the studied areas. Fish were collected and parasites were harvested followed by organic and chemical pollutants water analyzed 122 fish including *Clarias anguilaris*, *Oreochromis niloticus* and *Saroterodon galileus* were sampling of the studies sites from May to July 2022. After fish parasites examination fish muscles were collected for pollutants analysis. All the fish were infected but the infection rate was different between the catch sites. Infection rate and parasites abundance were high in Bangreweogo. Among the fish collected, *C. anguilaris* specie was more infected. It harbored more parasites particularly by trematode larvae and infected rate was higher. More than 15 parasites species have been identified in seven parasites groups including Trematode Digena, Monogenea, Nematoda, Cestoda, Acanthocephala, Myxosoa and crustacea. All site pesticide assessment was inferior to 0.01 mg/Kg, lower than value accepted by OMS.

Keywords: Fish, parasites, water quality, water reservoir