



LEAD CONCENTRATION IN THE MUSCLES and LIVER OF *Chanos chanos* (MILKFISH) AND *Oreochromis niloticus* (NILE TILAPIA) AND WATER IN TAAL LAKE, TALISAY, BATANGAS

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ABSTRACT

This study evaluated the heavy metal lead concentration in the waters and in both muscles and livers of the fishes *Chanos chanos* (milkfish) and *Oreochromis niloticus* (Nile tilapia) of Taal Lake in Sampaloc, Talisay, Batangas. The Taal Lake water area has a number of fish cages and establishments that raised fishes like milkfishes and tilapias. The area is prone to heavy metals, including lead, because of the use of boats and cages around the area of the lake. The *Chanos chanos* (milkfish) and *Oreochromis niloticus* (Nile tilapia) were examined to find any lead concentration in both of their muscles and livers. The muscles and livers were obtained by dissecting the fish and were subjected to flame Atomic Absorption Spectrophotometer (AAS) for lead (Pb) analysis. A total of twenty seven results were recorded. This study revealed positive correlation of heavy metal lead concentration in the water and fish muscle and liver samples in Taal Lake. Similar studies are encouraged to be conducted to confirm the level of lead concentration in the fish muscles and livers for the analysis of the risk in consuming the given species and its impact on the environment.

Key terms: Chanos chanos (Milkfish), Oreochromis niloticus (Nile Tilapia), Atomic Absorption Spectrophotometer (AAS).



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