



**LEAD BIOACCUMULATION IN *Chanos chanos* (MILKFISH)
FROM LAGUNA de BAY, LUZON ISLAND, PHILIPPINES**



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ABSTRACT

This study evaluated the bioaccumulation of lead in *Chanos chanos* (Milkfish) from Laguna de Bay, Luzon Island, Philippines. The Laguna de Bay water shed area has a number of industrial and agricultural establishments whose wastes directly or indirectly empty into the lake. Heavy metals, including lead, are among the waste products discharged into the lake. The fish was examined gross morphologically, focusing on possible damage on the head, eyes, fins, scales and operculum. The gills and muscles were obtained by dissecting the fish and were subjected to chemical analysis to determine the lead content. The results of the morphological examination showed no significant damage on the head, eyes and operculum. There were damages on the fins and scales but the said damages were more likely to be attributed to the handling of the fish and not to the effect of lead bioaccumulation in the fish's body. The results of the chemical analysis did not detect significant values of lead in the gills and muscles of milkfish from Laguna de Bay. Also, a supporting water analysis was conducted to detect the presence of lead in the waters from which the fish samples were collected. The results of the water analysis did not detect significant lead content in the samples. However, due to the limitations in the area of sampling and the season in which the sampling was conducted, it is not safe to say that the fish from Laguna de Bay are free from lead bioaccumulation. This means that the fish might or might not be safe for human consumption.



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