



RISK ASSESSMENT ON COPPER INTAKE FROM MILKFISH

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Abstract

Studies on bioaccumulation of copper (Cu) in freshwater-cultured milkfish (*Chanos chanos*) were carried out to assess the risks on human health. Samples of milkfish and ambient water were obtained from 12 culture ponds in southwest Taiwan. The resulting data showed that the Cu concentration in pond water was $69.36 \pm 27.81 \mu\text{g L}^{-1}$, while in milkfish these concentrations was $2.01 \pm 0.96 \mu\text{g g}^{-1}$. The Cu level in milkfish showed a significant positive relation to the Cu concentrations in pond water. Questionnaire interview about milkfish consumption was conducted to evaluate the risks. Target hazard quotients (THQ) for intake of milkfish 0.13 ± 0.00 , lower than the standard 1, demonstrates that ingestion of in this way contaminated milkfish does not result in overexposure of Cu in inhabitants.

Keywords: Bioconcentration, Copper (Cu), Milkfish (*Chanos chanos*), Risk assessment

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