

**CONTAMINATION OF HEAVY METALS IN PATIN FISH
(*Pangasius sp.*) FROM JELAI RIVER AND TEMBELING RIVER,
PAHANG**

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ABSTRACT

CONTAMINATION OF HEAVY METALS IN PATIN FISH (*Pangasius sp.*) FROM JELAI RIVER AND TEMBELING RIVER, PAHANG

A study was conducted to determine and compare the concentration level of heavy metals in *Pangasius sp.* from Jelai River and Tembeling River, Pahang. Physical parameters measured were water temperature, dissolved oxygen concentration, pH and conductivity. Metals concentration in fish and grower fish feed samples were analyzed using Energy Dispersive X-Ray Fluorescence meanwhile the water samples was analyzed using Inductively Coupled Plasma- Optical Emission Spectroscopy. According to Malaysian National Interim Water Quality Standard (INWQS), Jelai River and Tembeling River were classified between moderate to good quality. Heavy metals in both rivers was found higher in aluminum followed by Fe and four elements (As, Fe, Mn and Zn) were found exceed the maximum allowable limit suggested by World Health Organization, Food and Agriculture Organization (WHO/FAO, 2004) and Malaysia Food and Drug Regulation (MFR, 1985). Generally, present of As, Cd and Ni within the Patin fish from both Jelai River and Tembeling River were due to the fish feed. The findings of this research study indicates that, Patin Fish in Jelai River contained high concentration of heavy metals compared to the samples in Tembeling River.

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