

A STUDY ON WATER VELOCITY TOWARDS  
DIVERSITY AND DISTRIBUTION OF  
FRESHWATER FISH AT FOUR SELECTED  
STREAMS IN PAHANG

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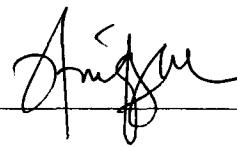
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## ABSTRACT

### **A STUDY ON WATER VELOCITY TOWARDS DIVERSITY AND DISTRIBUTION OF FRESHWATER FISH AT FOUR SELECTED STREAMS IN PAHANG.**

Fishes from four streams in Pahang namely Sungai Kenau, Sungai Rimau, Sungai Pandan and Sungai Bekelah were surveyed with the aim to investigate their effect of water velocity on diversity and distribution. Fish samples were collected from September to November 2013. Trawl and Hydrolab water quality sampler were used in each stream. All samples collected were preserved by using 10% diluted formalin. The coordinate, elevation, depth, width, pH, water temperature and other physical parameter of the sampling sites were recorded to study their influence on the distribution and abundance of freshwater fish. Shannon-Weiner Index and Simpson-Diversity Index were used to analyse the diversity index for each selected rivers. Stream flowmeter was also used to measure the water velocity of the streams. All fishes was from family Cyprinidae with a total of 43 individuals from eight species which includes *Lobocheilos rhabdoura*, *Acrossocheilus hexagonolepis*, *Osteochilus hasselti*, *Poropuntius smedleyi*, *Puntius javanicus*, *Puntius Schwanenfeldii*, *Mystacoleucus marginatus* and *Trigonopoma gracile*. Highest diversity of fish was found to be at Sungai Rimau. The correlation coefficient between water velocity and number of individual was 0.382208 which is weak. Sungai Kenau which recorded average water velocity of 0.86 m/s obtained the highest abundance of fish with 19 individuals while Sungai Berkelah which recorded velocity of 0.79 m/s has the lowest abundance with two individuals. *Acrossocheilus hexagonolepis* was the most abundant species of all four sites with 13 individuals while the lowest abundance of species was *Lobocheilos rhabdoura* with two individuals only.