



**DIVERSITY OF AQUATIC INSECTS IN KENIAM RIVER,  
NATIONAL PARK, PAHANG**

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## **ABSTRACT**

### **DIVERSITY OF AQUATIC INSECTS IN KENIAM RIVER, NATIONAL PARK, PAHANG.**

The study on biodiversity of aquatic insects was carried out covering the area of Kuala Keniam to Kuala Permai River, National Park, Pahang, Malaysia. The macroinvertebrate community was found in the various flowing speed levels of Keniam Rivers consisted mainly of aquatic insects. There are large numbers and wide species of aquatic insects in aquatic habitats make them of great ecological importance. Some midges and other aquatic insects are often being fish food and an important role as part of bottom-dwelling communities. There are three divided strata with total of nine sampling location were carried within several varieties of microhabitats. They are the sandy, cobble, gravel, leaf and the pool area. The aquatic insects were collected and sampled by using a D-framed aquatic kick net. The insects were later preserved, identified and counted for their abundance and distribution. In this study, it has been found that there was a wide variety of aquatic insects belonging to at least 8 orders in the study area. The orders of insect were Odonata, Coleoptera, Diptera, Trichoptera, Thysanura, Orthoptera, Hemiptera and Ephemeroptera. Throughout the study period, there is range from total of 140 to 604 individuals of aquatic insect trapped monthly and collected in Keniam River from September 2009 to December 2010. Some group of aquatic insects were found significant ( $\chi^2 < 0.05$ ) different abundance between strata and sampling dates as well as habitat on the diversity of aquatic insects in Keniam River. The abundance and distribution of aquatic insects' species were varied and not constant from one month to another during the study period due to biotic and abiotic factors. Species diversity of aquatic insects varied in different strata of the Keniam River. This indicates the richness and diverse groups of aquatic insects in the study area. It adds to the fact that the undisturbed habitat quality is most suitable for insects to breed and multiply under the natural ecosystem. There is abundant food supply for the insects too. Moving upstream from Kuala Permai to lower stream to Kuala Keniam, one can observe various types of habitats for aquatic insects to live.