## Aquatic Insects and Water Quality Study at Kimanis River, Crocker Range National Park, Sabah, Malaysia

## ABSTRACT

A survey on the aquatic insect communities was conducted in Kimanis River, Ulu Kimanis, Crocker Range Park (CRP), Sabah with the objectives to study (i) the composition of stream insect communities, (ii) stream water quality and (iii) the relationships between aquatic insects and freshwater quality parameters in Kimanis River, Ulu Kimanis, CRP. The sampling was carried out using surber net in October 2015 and January 2016. A total of 1,801 individuals from nine orders of 28 families were collected from Kimanis River. Trichopterans fauna was found to be the prominent taxa in this study. Shannon-Wiener Index of upstream strata was recorded slightly higher than downstream strata with H'= 1.97 and H'= 1.85 respectively. Water integrity of Kimanis River could be considered as excellent with minimal pollution. Both water quality parameters and biotic indices indicated that the aquatic insect population was affected by the water quality in their surroundings. This proved the use of aquatic insect communities as bioindicator for rapid assessment of water quality in CRP.