

Butterfly diversity along the different elevations along Crocker Range Park, in Malaysian Borneo

ABSTRACT

The butterfly diversity and assemblages at five substations located at the different elevations along the Crocker Range Park, ranging from 396m to 1,891m a.s.l were documented in this study. The butterfly samplings were conducted from April to December 2019, involving 10 sampling sessions. The butterflies were sampled by using 20 baited traps and an aerial net at 20 sampling stations. A total of 727 individuals were sampled comprising 187 species. Nymphalidae was the dominant family at the five substations, which accounted for approximately 53% of the total species and 71% of the total individuals recorded, while *Ypthima pandocus* was the dominant species. The highest number of species was recorded at Keningau substation (965-1,062 m a.s.l) but the highest number of individuals was recorded at Mahua substation (1060-1,249 m a.s.l). Mount Alab substation recorded the least number of butterfly species and individuals. The overall pattern indicated that the butterfly species and abundance were relatively high at an elevation range of about 960-1,250 m a.s.l. Keningau substation was the most diverse area as shown by Shannon-Wiener Index ($H' = 2.885$), followed by Inobong, Mahua and Ulu Kimanis substations. Ten endemic species were sampled in this study with most of these found at an elevation above 965 m a.s.l. The information obtained from this study would contribute to a better understanding of the elevational diversity pattern of tropical biota and also could serve as baseline data for conservation management at Crocker Range Park in facing threats on biodiversity, including global warming.