

**Diversity and abundance of the fruit-feeding butterflies
(Lepidoptera: Nymphalidae) in Kubah National Park, Sarawak,
Southwest Borneo**

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Abstract: Species diversity and abundance of the fruit-feeding butterflies in Kubah National Park are varied in different dimensions, which indicated a specific species composition according to the environment. The 84-days of butterfly sampling had resulted in 665 individuals representing 49 species of this guild, and Satyrinae was recorded as the most diverse subfamily (H' : 2.347). However, 42% of the total abundance was dominated by Nymphalinae nymphalids, and *Bassarona dunya* was listed as the most abundant species. Significant preference of these butterflies was observed between monthly replicates and forest strata, yet none in contrasting forest habitats. Temporal variations were evident for the satyrines, as there was rainfall fluctuations associated during the survey, which had affected the host-plants quality. Meanwhile, the presence of rotting fruits on the ground has most probably attracted these frugivorous butterflies except for Morphinae, and thus abundantly sampled in this stratum. However, the homogeneous assemblages across all forest habitats is hypothesised to be due to the mobility of the butterflies which also aided by the strong wind due to the rugged terrains in the study area. Widespread nymphalids were recorded to be abundant, as assisted with dispersal ability. We concluded that by conducting a butterfly survey with a simultaneous approach on all possible dimensions was meaningful, yet detailed observations on the vegetations is also essential for habitat study.

Keywords: Diversity, Lepidoptera, Nymphalidae, fruit-feeding butterflies, Kubah National Park

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