World Academy of Science, Engineering and Technology International Journal of Environmental and Ecological Engineering Vol:17, No:02, 2023

A Precursory Observation on Butterflies (Arthropoda, Insecta, Lepidoptera) of Umphang District, Tak Province, Western part of Thailand

Authors : Pisit Poolprasert, Auttpol Nakwa, Keerati Tanruean, Ezra Mongkolchaichana, Ezra Mongkolchaichana, Sinlapachai Senarat, Mark Tunmore

Abstract : This present preliminary study aimed to observe the butterfly species diversity in two selected subdistricts i.e., Mae Klong and Umphang of Umphang district, Tak province, northern Thailand, during May to September 2018. A survey method using sweep net was employed along line transects between 10.00-12.00 a.m. and 13.00-15.00 p.m. A total of 337 butterflies representing 37 species, 26 genera in five families were encountered. The family Nymphalidae held the highest species richness (15 species), followed by Papilionidae (9 species) and Pieridae (6 speices), respectively. Herein, four uncommon species, namely Junonia iphita iphita, Tanaecia julii odilina, Penthema darlisa melema, and Papilio alcmenor alcmenor, were discovered in this time. The Shannon diversity (H') for all samples obtained from the pooled data set of this observation valued 2.563 with relatively high values of Evenness (J'= 0.710) and Simpson index and (D = 0.829). For similarity index (Ss), the assemblage recorded of butterfly species between Mae Klang-Umphang shared about 0.629, implying that the environmental conditions in both surveyed zones were alike. Additionally, the accumulation curve in both locations of the butterfly was still increasing gradually when the collection ended, indicating that the lepidopteran species would be raised if we continue to survey more in next month. Nevertheless, to gain more butterfly taxa, observing different plant communities covering every season and using several survey techniques should be considered for further investigation.

Keywords: butterfly, biodiversity, tak province, thailand

Conference Title: ICEB 2023: International Conference on Ecosystems and Biodiversity

Conference Location : Bangkok, Thailand **Conference Dates :** February 06-07, 2023