

عنوان مقاله:

A Study on the Diversity and Relative Abundance of Insect Fauna in Wukari, Taraba State, Nigeria

محل انتشار:

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خلاصه مقاله:

A field survey was conducted in Wukari, Taraba State to assess the diversity and abundance of insect species in selected habitats (residential, open field made up of grassland and an agro ecosystem). Insects recovered were wet preserved in 70% ethanol except butterflies and moths. A total of 4,501 insects spread across 9 orders, 34 families and 77 species were recovered. The most dominant order was Coleoptera with a relative abundance of (44.41%) and, the least was Orthoptera (0.84%). The most dominant insect species are Heteronychus mossambicus (11.44%) followed by Termes sp. (7.77%) and, Goryphus sp. (7.71%). Chlaenius decipiens, Cheilomenes sulphurea, Copris sp., Cicindela sp., Pseudantheraea sp., Derobrachus geminatus, Glaurocara townsendi, Camponotus perrisi, and Gryllus bimaculatus were the rare species with relative abundance of 0.02%. Species richness is based on number of individual insects measured. The highest species diversity was observed in the order Coleoptera (Shannon $H' = 2.547$) while, Isoptera was the least ($H' = 0.00$). However, the highest species evenness was observed in the order Isoptera ($E' = 1.00$). Fisher-alpha (α) index of diversity shows that the agro ecosystem has the highest index of diversity ($\alpha = 14.24$) while, the residential area had the least ($\alpha = 11.9$). This study therefore, brings to the fore the diversity and abundance of insects in Wukari and underscores the need for a more intensive study and for sustainable actions to be taken in conserving beneficial rare species while, managing the abundant pestiferous ones.

کلمات کلیدی:

(Diversity, Fisher-alpha (α), Insects, Jaccard's similarity index, Shannon index (H

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