

PSEUDO-MAPPING OF INSECT DIVERSITY IN KUALA KENIAM, NATIONAL PARK, PAHANG

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ABSTRACT

PSEUDO-MAPPING OF INSECT DIVERSITY IN KUALA KENIAM NATIONAL PARK, PAHANG

A study on pseudo-mapping of insect diversity in Kuala Keniam, a part of National Park was carried out in December 2009 until March 2010. National Park of Malaysia is a premier National Park, with a total area of 4,343 square kilometres covering the states of Pahang, Kelantan and Terengganu. The study was carried out using four sampling techniques including yellow pan trap, pitfall trap, light trap and sweep net and each sampling point has been made randomly. The location has been determined by using Global Positioning System (GPS) device to determine the location of every sampling point. The insects were preserved, identified and counted for their abundance and distribution. Throughout the study period, a total of 1,640 of insects individually and also classified them to insects orders. It has been found that there was a wide range species of insects belonging to at least nine orders and spiders (order: Araneae) in the study area. All data were analysed and presented using pseudo-mapping. The orders of insect found in this study namely Coleoptera, Diptera, Hemiptera, Homoptera, Hymenoptera, Lepidoptera, Orthoptera, and Isoptera. This indicates the richness and diverse groups of insects in the study area are more obvious on their distribution and dispersion by using pseudo-mapping technique. Our observations found that there was no significant difference (t=-0.20 and P=0.845) among insects' orders at different places. Instead of ecological indices to describe the diversity and distribution of terrestrial insects, pseudo-mapping techniques might potentially describe the pattern of distribution and intensity of the insects in a map outward appearance for user to understand in a friendly manner. In future, this information and the presentation of insect's distribution in a pseudomapping will be easily used to predict the population and dispersion of insect and potentially encourage the ecotourism industry for providing good information on the mesmerizing of the insects.