## THE DIVERSITY OF TERMITES AT SUGUT FOREST RESERVE (BELURAN), SABAH

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## **ABSTRACT**

This research was conducted to study the diversity and taxonomy of termites at Sugut Forest Reserve, Beluran, Sabah. The objectives of the study were: 1) to study the diversity of termites in Sugut Forest Reserve, 2) to construct a pictorial dichotomous key for the termites available at the study site. The keys constructed are necessary to aid in identification purpose of termites at Sugut Forest Reserve, especially for amateur researchers. The sampling of the termites was done using three standardized belt transects, 100 m x 2 m at random sites within Sugut Forest Reserve. The termites collected were recorded from three families, 16 genera, and 20 species. Family Termitidae was the family with the most number of termite occurrences recorded (100 occurrences), followed by Rhinotermitidae (43 occurrences), and lastly Kalotermitidae (one occurrence). There were some rare species have been recorded from the study site, which are Glyptotermes paracaudomunitus and Termitogeton minor. The diversity of termites at the study site is high whereby the value of Shannon-Wiener Diversity Index, H' that was obtained is quite high, which is 2.5373. Two identification keys have been constructed, which are key to family level and key to generic level, based on the morphological characteristics of the soldiers. The termite species were distributed evenly in the study area. From this study, it has been found that there is no pest species of termite at Sugut Forest Reserve. More researches should be done to identify the factors that might affect the diversity of termites at Sugut Forest Reserve.