

**KESAN GANGGUAN HUTAN TERHADAP  
ANAI-ANAI DI HUTAN SIMPAN TRUSAN  
SUGUT, SABAH**

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## **ABSTRACT**

### **EFFECT OF FOREST DISTURBANCE ON TERMITES AT TRUSAN SUGUT FOREST RESERVE, SABAH**

*The study was conducted at the Trusan Sugut Forest Reserve (HSTS) and in the area of oil palm plantations near the HSTS. This study was aimed to determine the diversity of termites in HSTS and oil palm plantations; and to compare the composition of termite between HSTS and oil palm plantations. Six standardized line transects (100m x 2m) were used in this study of which three transects were placed in HSTS and three transects in oil palm plantations. Overall, a total of 16 species of termites were recorded from both of the study area. A total of 14 species of termites were recorded from HSTS area while in oil palm plantations there were nine species. Of the 16 species, seven species were recorded from both of the study area. These species are from the family of Kalotermitidae, Rhinotermitidae and Termitidae. Shannon-Wiener diversity index ( $H'$ ) showed that the  $H'$  in HSTS is higher ( $H' = 2.3158$ ) compared to the value of  $H'$  in oil palm plantations ( $H' = 1.9780$ ). Evennes index value ( $E_H$ ) in HSTS was higher ( $E_H = 0.8352$ ) compared to the  $E_H$  in oil palm plantations ( $E_H = 0.7134$ ). Sorenson's equation index value ( $S_s$ ) for this study ( $S_s = 0.374$ ) was towards zero indicating that termite species in the two areas were different. This study showed that there are differences in the diversity of species of termites in HSTS and oil palm plantations.*

*Keywords: Termites, Trusan Sugut Forest Reserve, IJM's oil palm plantation, Diversity, Species composition.*