

**The correlations between bird relative abundance with the stem density in
two years old acacia mangium plantation at Sabah Forest Industries,
Sipitang**

Abstract

Avian population is one of the components of biodiversity that is affected by the loss of the natural forest. Acacia mangium is one of the exotic species that is mainly planted in Sabah Forest Industries (SFI) in order to meet the demand of pulp and paper supply. Due to the fast growing ability of mangium species, the tree stand density in Mendulong Estate is relatively high. This research was conducted to investigate the influence of tree stem density toward the avian population in 2-years age Acacia mangium forest plantation, SFI. Bird survey was conducted using point count method and binocular with 10 (magnification) X 40 (objective size) was used for direct observation. A positive correlation between tree stem density and bird population was obtained via Pearson's correlation ($r=0.394$, $p=0.031$). This study shows that increasing of tree stem density can positively influence the avian population significantly.