

THE STUDY OF BIRD POPULATION IN TWO YEARS OLD *Acacia mangium* PLANTATION, SABAH FOREST INDUSTRIES SDN BHD, SABAH.

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ABSTRACT

Large areas of tropical forest worldwide have been converted rapidly into forest plantation. Plantation can play an important role in restoring productivity, ecosystem stability, and biological diversity to degraded tropical lands. However, the conversion of forest areas to plantation rapidly resulting birds to lose their natural habitat. Therefore, acacia mangium plantations have the potential as the refuges for birds. As such, this study was conducted to investigate the bird population in 2-year Acacia mangium plantation, SFI, Sabah to determine the bird population density and diversity of 2 year mangium plantation in SFI. There is no published information of the detailed status of bird in Sabah Forest Industries (SFI) yet. Bird survey was done by using point count method and vegetation survey was done by using vegetation sampling method. The bird population density was analyzed by using distance 6.2 and bird diversity was calculated by using Shannon-Wiener diversity index. The relationship between bird abundance and stem density was determined using Pearson's correlation. A total of 343 birds belong to 53 species from 21 families were detected. The bird population in 2-year mangium plantation was 17.71 individual per hectare and Shannon-Wiener diversity index for bird diversity was 3.24. A strong relationship between bird abundance and stem density was analyzed statistically based on Pearson's correlation ($r=0.826$; $p=0.085$). This indicated that the bird population is influenced by stem density and surrounding vegetation. This study shows that the bird population density and diversity in SFI were higher as compared to other past studies in Borneo plantation area.