

# **Conversion of Forest to Oil Palm (*Elaeis guineensis*) Plantation in Aborlan, Palawan: Unveiling its Impact to Forest Avifaunal Diversity**

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## **ABSTRACT**

Oil Palm (*Elaeis guineensis*) is a recently introduced crop in Palawan. Its widespread cultivation replaced most of the important bird habitats such as riparian, secondary and primary forests. To determine the impact of forest conversion to oil palm plantation on forest bird community, the avifaunal assemblage between a forest and an adjacent oil palm plantation which is known to be previously part of the selected forest fragment were compared using avifaunal transect walk survey. The study was conducted from August to November 2013 in Aborlan, Palawan. The species richness, abundance, diversity index, presence of endemic and high conservation priority species were used to compare the bird communities. The study unfolded that the bird community in oil palm plantation was depauperate as indicated by the low species richness, abundance and diversity index relative to the forest. The low community similarity index between oil palm plantation and forest revealed the big difference in bird assemblage and confirmed the settlement of open dwelling generalist species in replacement to the forest dwelling species lost. The low species richness and abundance of endemic and the loss of high conservation priority birds in oil palm plantation further emphasized the impact of oil palm cultivation to forest bird community. To maintain the avifaunal diversity at the landscape level, policies in the establishment of oil palm plantation must be reviewed to limit the cultivation of oil palms in barren and underutilized areas only. Finally, enhancement of extant forest fragments adjacent to oil palm plantations is highly recommended.

**Keywords:** oil palm, avifauna, forest