

7<sup>th</sup> International Conference on

# BIODIVERSITY CONSERVATION AND ECOSYSTEM MANAGEMENT

July 26-27, 2018 Melbourne, Australia

## Diversity and distribution of Diptera in Bohol and Mindanao, Philippines using DNA barcodes

Reizl Jose, Kay Ramos, Olga Nuneza and Rudolf Meier

Bohol Island State University, Philippines

This study was conducted to determine diversity and distribution of true flies in Bohol and Mindanao, Philippines. Malaise traps were used to collect samples in different habitats. A total of 104 presumptive species of dipterans were identified based on the number of Molecular Operational Taxonomic Units (MOTUs) clustering at 3% threshold. The results showed that diversity of presumptive species of dipteral is higher in Bohol compared to Mindanao with species diversity indices,  $H' = 3.70$  and  $H' = 3.26$ , respectively. The observed difference may be influenced by the heterogeneous habitat between sampling sites and the longer periods of sampling. Further, DNA barcodes were then mapped using QGIS. The result showed that 87.5% of the presumptive species belonging to eight families of Diptera were found only in Magsaysay Park, Bohol. These include: Culicidae, Dolichopodidae, Empididae, Mycetophilidae, Sepsidae, Stratiomyidae, Tabanidae and Tephritidae. This is possibly due to the unique characteristic of habitat in Magsaysay Park, Bohol, hence, a key site for conservation.

### Biography

Reizl Jose has been conducting researches for over a decade. She has done a lot of education campaign and biodiversity conservation in several public schools and universities in Bohol. She has joined several wildlife conservation trainings and workshops. She is one of the leading Research Biologists in Bohol Island State University (BISU), Philippines.

gzlbreyen@gmail.com

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