

ABSTRACT

The purpose of this study was to use two fixed plots and transect-line sampling (30 x 30 meters per station) over two sites in order to describe the biodiversity of macrofungi in Mt. Opao, Carles, Iloilo, Philippines. Weekly field surveys and laboratory studies were carried out from August to October 2023 with the goal of identifying morphological characteristics and evaluating the biodiversity of macrofungi. The most prevalent families of fungi were Psathyrellaceae and Marasmiaceae, which belong to the phylum Basidiomycota, *Leucocybe* sp., *Parasola* sp. *Psathyrella cundolleana*, *Marasmius calhouniae*, *Lentinus tigrinus*, and *Agaricus placomyces* were the six species identified in the stations. With a Simpson's index of 0.5233 and a Shannon-Wiener index of 0.9133, Station 1 showed semi-balanced distribution (1-0.5300) and considerable dominance. Station 2 exhibited the lowest species richness and moderate dominance, but the largest diversity $H = 2.02$ $D = 0.8530$, $J = 0.2343$) Station 3 displayed balanced abundance ($J = 0.4733$) moderately high dominance ($D = 0.65$) and low species richness ($H = 1.0467$) Out of the two stations, Station 2 has the greatest overall diversity and evenness, with Station 1 coming in second. It was advised that long-term monitoring programs be put in place at the sampled stations in order to monitor changes in the variety of macrofungi over time and evaluate the effects of human activity and environmental factors on fungal communities

Keywords: Macrofungi, biodiversity, community, diversity indices, taxonomic classification, morphological characteristics