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Diversity of edible and inedible macro fungi in Turgo tropical forest ecosystem Mount Merapi National Park

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The macrofungi exploration in Turgo tropical forest ecosystem of Mount Merapi National Park aimed to document the diversity and distribution of edible and inedible macrofungi in that region. Macrofungi sampling was distinguished by different forest elevations i.e., Turgo forest, Tritis forest, and Bingungan forest using adaptive sampling method of plot making. Data collection was conducted in May-June where the month is categorized as the wettest month in Turgo area. The total number of macrofungi obtained were 133 specimens, 48 species were found in the Turgo forest, 36 species in Bingungan forest and 49 species in Tritis forest. Species with a high level of macrofungi diversity based on the Shannon-Wiener index is owned by Tritis forest with the lowest elevation among the three with 2.521 followed by the Bingungan forest with an index value of 2.51 and Turgo forest with index value of 2.01, which means the three tracks have a moderate-high level of diversity. Comparing similarity between the three tracks based on the Sorenson index value found that the three tracks have a much different similarity at values 0.04, 0.08, and 0.1. Judging from the important values, the highest value morphogroups is owned by macrofungi agarics group with 82%-169% value, followed by other groups i.e., jelly, polypore, cup, club, coral, and tooth which are calculated based on relative frequency and relative density values. Found 8 species that are edible, 12 species are inedible 6 species are medicinal 106 still remaining unknown.

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