

FLORAL BIODIVERSITY ASSESSMENT OF TIMALAN RIVER WATERSHED, CAVITE, PHILIPPINES

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*Floral biodiversity assessment of Timalan
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ABSTRACT

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The study was conducted in Timalan River Watershed from August 2017 to April 2018. Specifically, this study aims to: (1) classify the land use of Timalan River Watershed (TRW); (2) identify the floral species that are found in TRW; (3) determine the number of floral species that can be found in TRW; (4) analyze the distribution of floral species within TRW; and (5) identify the indigenous floral species present in TRW. The data were gathered through ocular visits, actual field survey, literature review and secondary data. A land use map obtained from DENR-PENRO-Cavite (2017) was utilized to identify the land use types in TRW. Data collection and identification of floral species were conducted on ten sites in grassland, ten sites in forest, ten sites in mixed orchard, and ten sites in agricultural areas, which give a total of 40 selected sampling sites in TRW. Quadrat sampling method was done for every site.

Timalan River Watershed has a total area of 2,557.53 ha of grassland, 14.31 ha of forest, 0.36 ha of mixed orchard and 1,121.94 ha of agricultural areas. Grassland has the highest total area among the other land use types. A total of 92 floral species were identified and categorized into trees, intermediate and understorey. The indigenous floral species have almost the same number of exotic species in TRW.

The results showed that the average Shannon-Wiener Diversity Index of the whole TRW is low to very low, which ranged from 1.14 to 2.57. These results indicate that TRW has low diversity because there are relatively few species in the area. The

average Shannon's Evenness Index score is high to very high, which ranged from 1.55 to 1.00 due to having equal number of frequencies.

The indigenous floral species in Timalan River Watershed are threatened and slowly dominated by exotic species like mahogany. There is a need to conserve the indigenous floral species of TRW through programs like tree planting which will benefit the environment and the community.

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