

De La Salle University – Dasmariñas BIOLOGY PROGRAM

ABSTRACT

The vegetation of Mt. Gonzales, Tagaytay City, Cavite, Philippines is poorly known. Hence, a vegetation analysis was conducted to determine the species of trees present, the most represented family/genus, endemic species and its forest vegetation type. Point-Centered Quarter Method (PCQM) was used to determine the tree species, density, frequency, abundance and dominance. All the trees encountered, ranging from 10ft tall and above, were included even though it is not >10cm in DBH. Voucher specimens were collected in duplicate. Standard ecological formulas were used in the computation and data analysis. Results showed that 27 species belonging to 24 genera and 13 families were encountered. The tree species with highest importance value index (IVI) were: Gliricidia sepium (Jacq.) Kunth ex. Walp. (Fabaceae), Ficus nota (Blco.) Merr. (Moraceae), Melanolepis multiglandulosa (Reinw.) Reichb. F. & Zoll (Euphorbiaceae), Ficus septica Burm.f. (Moraceae) and Erythrina variegata L. (Fabaceae). Thus, Moraceae was recognized to be the most represented family since there were five species with two specific genera namely *Ficus* and *Artocarpus* that represent the family. The area has 7.40% endemicity which is considered low. It was observed that the vegetation type of Mt. Gonzales is disturbed because the greater percentage of the species of trees that are present was already secondary or introduced type of trees such as *Gliricidia sepium* (Jacq.) Kunth. ex. Walp., which is its most important species. It is suggested that more ecological research should be conducted for further assessment of the mountain's conservation concerns and issues.

Keywords: Trees, Endemic, Importance value index, Mt. Gonzales, Tagaytay City, Cavite, Philippines, Vegatation analysis