

STAND STRUCTURE AND TREE SPECIES DIVERSITY OF TROPICAL EVERGREEN MOIST CLOSE FOREST IN TAN PHU AREA, DONG NAI PROVINCE

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Summary

Stand structure and tree species diversity of six plant communities were determined in this study from 30 sample plots with square 0.25 ha (50 x 50 m)/plot in Tan Phu area of Dong Nai province. The results revealed that these plant communities have total number of families which were similar to each other ranged from 28 to 29, but dominant and co-dominant families were markedly different. Tree species compositions of the six plant communities were quite rich with 42 families and 130 tree species; in which the lowest value of tree species compositions was found in Dipterocarpaceae - Fabaceae - Sapindaceae community (42 species), and the highest value was recorded in Dipterocarpaceae - Fabaceae - Sapindaceae community (63 species). Diameter – height distribution of this community type was shown in inverse “J” form. Tree height distribution was found in skewed left form, with top curve at tree height level = 14 m. The dominant and co-dominant tree species were indicated in all diameter and height classes, in which they predominated in the class diameter > 40 cm and class height > 25 m. The structure complexity index was the highest in the community of Dipterocarpaceae - Fabaceae - Sapindaceae (SCI=1.16) and the lowest value in the community of Dipterocarpaceae - Rosaceae - Sapindaceae (SCI=0.29). Tree species diversity index (H') for this six community types ranged from 2.52 to 3.23.

Keywords: *Stand structure, tree species diversity, tropical evergreen moist close forest, Tan Phu, Dong Nai.*