Abstract

Tropical forests vegetation and community research have tended to focus on the tree component, and limited attention has been paid to understory vegetation. Species diversity and composition of the understory of tropical seasonal rain forest were inventoried in a 625m² area (for sapling layer) and a 100m² area (for herb/seedling layer) in three 1ha plots. We found 3068 individuals belonging to 309 species, 192 genera and 89 families. The most important family as determined by the Family Importance Value (FIV) was Rubiaceae in both sapling and herb/seedling layers. In terms of Importance Value Index (IVI), the shrub Mycetia gracilis (Rubiaceae) was the most important species in the sapling layer and the pteridophyte Selaginella delicatula (Selaginellaceae) was the most ecological significant species in the herb/seedling layer. Much more vascular plant species were registered in the understory than in the tree layer totaled among the three plots. The species diversity did not differ significantly among the tree layer, sapling layer and herb/seedling layer. Given that we still know little about the understory plant community for growth forms other than trees, the results from the present study indicate that more attention should be paid to the understory vegetation during the decision-making process for biodiversity conservation in the tropical forests.

Keywords

Herb, non-dipterocarp tropical forest, sapling, shrub, species richness, seedling, understory plants.