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TREE AND SHRUB DIVERSITY AND ABUNDANCE ALONG AN ELEVATION GRADIENT OF AMBOKKA MOUNTAIN RANGE, SRI LANKA

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Ambokka Mountain Range (AMR), margined by Central and North-Western provinces, is separated from the Central Massif of Sri Lanka. The southern part of the AMR is in the wet zone while the northern part facing the intermediate zone. The present study assessed the tree and shrub (above 2 m in height) diversity and abundance along an elevation gradient in one of the peaks in the AMR. Five random 100 m^2 quadrats placed each at four elevation classes *viz.*, 450-500, 550-600, 650-700 and > 800 m were used to enumerate the vegetation, totaling 20 quadrats. All individuals belonging to more than 2 m in height including epiphytes were enumerated. The diversity and evenness indices were calculated. Mean abundance and species richness along different elevation classes were compared using ANOVA. The survey was recorded a total of 123 species including 74 trees, 20 shrubs, 24 lianas and 5 epiphytes. Of them, 21% were endemics, 66% natives and 6% exotics. Of them, 17% identified as nationally threatened and 11% as near-threatened. Anacardiaceae, Euphorbiaceae, Clusiaceae and Rutaceae were the most dominant families in all elevation classes. Species that are uncommon to the particular floristic region *viz.*, *Garcinia hermonii* and *Symplocos elegans var. hirsuta* (a threatened endemic) were also recorded. Diversity and evenness indices showed a decreasing trend from lower to upper elevation. The mean abundance (40.6, 28.8, 28.4 and 22.4) and richness (17.4. 15.0, 12.6 and 11.0) also showed decreasing trends from lower to upper elevations. The Correspondence Analysis indicated elevational differences in floristic compositions. The lower elevation classes were dominated by species common to intermediate zone forests while the upper elevation forests were dominated by typical sub-montane forest species. This preliminary study highlights the conservation value of the AMR that harbor a unique floral assemblage.

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