

## D-17 Quantitative analysis of understorey vegetation of Hakgala Strict Natural Reserve at two elevations

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A study of quantitative analysis of understorey vegetation was carried out in Hakgala Strict Natural Reserve at 2 elevations (at about 1600 m - lower elevation and at about 2000 m - near peak elevation). For the present study, representative areas were selected at each elevation. Species present in the overstorey vegetation at each representative area were identified and their life forms, endemism and medicinal importance were studied. Plots were demarcated at each elevation and frequency and density of each species were estimated at each elevation.

58 species belonging to 51 genera and 38 families were recorded at lower elevation, while 34.5% (20 species) were endemic and 10.3% (6 species) were medicinally important. 26 families, 36 genera and 41 species were recorded at near peak elevation; 31.5% (20 species) were endemic and 12.2% (5 species) were medicinally important. The understorey vegetations at both elevations mainly consisted of trees and shrubs. Most frequent species at lower elevation were *Cestrum aurantiacum*, *Psychotria zeylanica* and *Leptochilus* sp. (frequencies: 85.6%, 61.5% and 42.3% respectively), whilst at near peak elevation, *Syzygium sclerophyllum*, *Indocalamus debilis* and *Actinodaphne ambigua* were found to be the most frequent species (frequencies: 63%, 41% and 39% respectively).

Understorey vegetation at lower elevation was floristically richer than that of near peak elevation. 70 species were recorded in the quantitative survey and among them 19 species were found at both elevations. Dominant species at lower elevation were exotics (e.g. *Centrum aurantiacum*) and dominant species at lower elevation were endemic (e.g. *Syzygium sclerophyllum*).