

## GROUND HERBACEOUS FLORA IN UNLOGGED SITES OF SINHARAJA WORLD HERITAGE SITE

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The composition and distribution of herbaceous plants were investigated at Sinharaja World Heritage site.

Previously unlogged forest areas were selected for the present study. Several transects were marked purposively in each site from valley to ridge to study the topographical variation of herbaceous plant distribution. Circular plots, each 10 m<sup>2</sup> were demarcated on each transect to study the herbaceous flora. In addition, 200 m<sup>2</sup> plots surrounding the 10 m<sup>2</sup> plot were marked to enumerate the tree species in the area. The distance between two, 200 m<sup>2</sup> plots was 20 m.

In each plot number of plant species was recorded. Voucher specimens were prepared for identification of species found in plots as well as outside the plots. Dominance diversity curves and Shannon diversity indices were prepared for each transect.

Ninety one species belonging to 40 families were recorded. Twenty nine of 91 species are found outside plots. The estimation of individuals of herbaceous plants per hectare was 21,790. Herbs and herbaceous climbers represented 38.47% of the total herbaceous flora. Fern and fern allies represented 45.67% and grasses and sedges 15.84%, respectively.

Species rich families were Zingiberaceae (6 spp.) and Rubiaceae (5 spp.) Density dominance families were Rubiaceae (6.97%) Zingiberaceae (3.9%), Mysinaceae (3.6%), Polipodiaceae (17.3%), Dennestaediaceae (7.8%) Cyatheaceae (3.8%) and Cyperaceae (5.5%). Diversity indices in valley and ridge were 0.2153 and 0.1754, respectively.

Results indicate the localised distribution of herbaceous species in understory vegetation of lowland rain forest. This may be due to the differences in micro habitats from valley to ridge.