

D-61: Flora of Knuckles region : an analysis

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A field survey was carried out to identify and document the flowering plants of the Knuckles region of Sri Lanka ($7^{\circ}18'N$, $7^{\circ}34'N$, $80^{\circ}41'E$ and $80^{\circ}55'E$; area 182 sq. km).

Specimens of plants were collected 'cris-crossing' different habitats of the study area. The specimens were labelled along with field notes, fixed with methyl alcohol, dried using 100 W x 15 bulbs 72 h and made into herbarium specimens. Botanical names were verified with reference to standard herbarium samples at the National Herbarium, Peradeniya.

Results showed the presence of 1,033 flowering plant species of 595 genera belonging to 141 families; on average 1.73 species per genera and 7.32 species per family. Number of tree species recorded were 255 (25%), and the rest can be grouped as shrubs or herbs (75 %). The first 5 leading families of flowering plants representing the largest number of species in the Knuckles region were Graminea (71 species), Leguminosae (62 species), Rubiaceae (45 species), Euphorbiaceae (44 species), and Orchidaceae (32 species). Of the total number of species 160 species were endemic to Sri Lanka i.e. 18% of the Island's endemic flora.

This study proved the existence of a highly diverse flowering plant community in the Knuckles region. Although the Knuckles region occupied only 0.2% of the total land area of Sri Lanka it has represented almost one third of the Island's flora. This floristic richness can be attributed mainly to the extreme biogeographical variations of the Knuckles region.

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