

**A study of spatial distribution of
floristic richness in
Ussangoda natural relevation.**

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There are five known Serpentine outcrops in Sri Lanka. Ussangoda is one of them which is located as a small hilly area at the edge of the sea shore close to Nonagama in the Hambantota district. One of the unique characteristics of this area is its soil structure, having red colour soil. This soil is highly infertile with low levels of potassium, phosphorus and calcium. Soil often has high concentrations of iron and magnesium and the toxic metals such as nickel and chrome. These chemical components prohibit the growth of vegetation. Therefore, in this study an attempt was made to study the floristic richness and its spatial distribution in this special area. Vegetation sampling was carried out in five transects and sixteen samples were selected. Located sample size is 10 m X 10 m in the tree and shrub area and it was 1 m X 1 m in grass areas. The gap between each contiguous sample was 200 m. Over 05cm girth at breast height trees were enumerated in the tree and shrub area. All the species types within the quadrant were identified in the grass area.

The results revealed that thirty four floral species that belong to twenty families were identified. According to the study of the spatial distribution of floristic richness from the sea side to the land side of the area, two types of eco-tones could be identified. One was in between Serpentine soil area and coastal line and the other one was in between Serpentine soil area and land area. The information extracted from the study reveals that the study would be of great help to disclose the phyto-sociological and phyto-geographical information in the Ussangoda area.