THE VEGETATION OF USSANGODA

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Situated, about 222 km south of Colombo close to Nonagama Junction in th Amabalantota DS division, Ussangoda is a unique area both geologically and ecologically. It i one of the few, known serpentine areas of Sri Lanka. Yet, unlike other serpentine areas of th country Ussangoda is a coastal geological formation, with open scrub vegetation. There ar also legends associated with this site adding a cultural value to it. This area has been declared 'pre-historic site' under the Coast Conservation Department while its periphery is part of th Kalametiya Sanctuary under the purview of the Department of Wildlife Conservation. Th objective of the present study was to survey this area's vegetation with emphasis on zonatio structure and composition.

The methodology consisted of: (1) identification of soil units and (2) study o vegetation in the soil units. The topographic parameters and location were studied by a GP survey. Slope was measured by an Abney Level. Soil color was determined by the use of Munsell Color Chart. Vegetation was studied in the field in quadrats (1/4 m2 ones in ope areas). No soil chemical analyses were done.

The study revealed the following: Ussangoda is a mound-like edaphic unit gentl sloping on all directions ranging from 07m to 30m above sea level. Slope varies between 07% and 10%. The undifferentiated soil overlying serpentine rocks has two units: (1) A 'Re Earth' formation similar to what is found in the Aruakalu area north of Puttlam (10R 3/6 dr and 2.5 YR 3/4 wet). (2) A yellow to white formation (10 YR 5/4 dry and 2.5 YR 3/3 wet t 5YR 4/4 dry and 5YR 3/4 wet)). These overlying soils do not seem to be typical chocolat brown 'serpentine soils' found in the serpentine areas of Yudagana-pitiya, Gingal-pelessa an Indikola-pelessa.

Each of the two soil units has dense 'scrub' vegetation areas and 'open vegetatio areas. The open areas include several small 'scrub islands' of varying size. If the narro 'shore-line vegetation' is excluded there are 29 species of flowering plant common to the are They belong to 21 families. Seventeen woody species (within 12 families) are in the scru vegetation including scrub islands whereas; 12 species of non-perennial herbs (within families) exist in the open vegetation areas. The presence of 'nickel hyper accumulator among the herbs in the Red Earth area has been reported by Seneviratne *et al.* (2000) in *Proc 6th Annual Forestry Symp.* of the Dept of Forestry, Univ. of Sri Jayawardenapura and th Ministry of Forestry and Environment.

Tree height in the area ranges from 1.4 m to 3.7 m. In the open areas the trees ar prostrate. The dbh of tree species ranges from 1.5cm to 12.4 cm. The open vegetation area have discontinuous ground vegetation of which the density ranges from 98 to 53 individual /2500cm^2 (i.e. ¼ m^2).