

## D-65: Ecology of woody species of Oliyagankele forest reserve in Matara district, Part I

S P Samarakoon  
(Dept of Botany, Univ of Ruhuna, Matara)

This work was undertaken to compile a list and to study the ecology of tree species over 30 cm girth at breast height (GBH) of Oliyagankele forest reserve (6°10'N; 80°32'E). The total area of the forest was 488 ha.

There were 3 study sites each of which was a 16 contiguous grid of 25 x 25 m sampling plots.

The physico chemical properties of the soils examined showed a pH range 4.3 - 7.4 and extractable N, P and K value ranges of 5.5 - 42.6, 43 - 172 and 2.3 - 17.5 mg/100 g respectively.

The floristic composition of the species of trees above 30 cm GBH ranged from site to site between 49 - 62. A total of 1,159 trees belonging to 35 families, 62 genera and 81 species in the entire area of 3 ha sampled were recorded in this forest.

The dominant tree species (determined on the total number of trees) were *Dipterocarpus zeylanicus* (14%), *Swietenia mahogany* (12%), *Doona congestiflora* (9%), *Dillenia retusa* (9%) and *Semicarpus walkeri* (9%). The other common species were *Hydnocarpus octandra*, *Kokoona zeylanica*, *Xylopiya parvifolia*, *Anisophylla cinnamomoides* and *Alstonia macrophylla*. Less than 47% of the trees were represented by more than 76 species. About 45% of the species encountered in the area were endemic to Sri Lanka.