

B-38: Structure and composition of a semi-evergreen forest community in Wilpattu National Park

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Semi-evergreen forest which is mainly restricted to the eastern part of the Wilpattu National Park, occupies about 25-30% of the total land area, with a tree density of 675-680 trees/ha (above 10 cm DBH) and basal area of 30-36 m²/ha.

Random plot sampling method was used for the study after the identification of the community in various localities.

The canopy (15-18 m) is dominated by *Manilkara hexandra* and *Chloroxylon swietenia* forming a rather discontinuous layer. The sub-canopy (8-10 m) was dominated by *Drypetes sepiaria*, *Pleiospermum alatum* and *Diospyros ovalifolia* while *Glycosmis pentaphylla* was the dominant species in the shrub layer (1 m). Few grass species were observed in the poorly developed ground layer and lianas, *Derris parviflora*, *Salacia prinoides* and *Naravelia zeylanica* were recorded.

Drypetes showed the highest Important Value Index. The dominant family was Euphorbiaceae which was largely represented by *Drypetes sepiaria*.

Underlying geology, the soil type and the depth of the water table can be regarded as the main ecological parameters which govern the existence of this community in the eastern part of the Wilpattu National Park.