

D-10: Diversity and stratification of diurnal lepidopterans in the core area of Bellanwila-Attidiya Sanctuary

C Munasinghe, N Pallewatte
(Dept of Zoology, Univ of Colombo, Colombo 3)

The Bellanwila - Attidiya sanctuary is targeted for the development of management strategies and as such information about its flora and fauna is required. Butterflies as a group which holds a special place among insects are considered a 'Flagship' group in the study and conservation of insects.

The diversity and stratification of butterfly fauna were studied using transects which ran through 2 main terrestrial vegetation assemblages, grasslands and shrubs with trees of the core area of the sanctuary. The number and species of butterflies observed along each transect were recorded 3 times a week, under 2 types of weather conditions. Use of traps baited with attractant substances, hung at different heights on the vegetation, show no vertical stratification of species. The most abundant species were selected by log abundance plots and calculated for all species.

The Shannon - Wiener index was used to measure diversity. A total of 29 species belonging to 19 genera were recorded. Three endemics all of the genus *Euplocea* belonging to the species *Hugii*, *phaenerta* and *core* are included among them.

Diversity and abundance differ in the 2 habitat types. Adult food plants of the area include *Lantana camara*, *Leucas zeylanica*, and *Urena lobata*. Some of the larvae food plants are *Cassia alata*, *Annona glabara*, *Acanthus* and *Panicum maximum*.