

MAB Studies in Sri Lanka

Preparation of Check Lists and Handbooks to the Fauna and Flora

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Sri Lanka, even though it is a relatively small country, has a wide range of environmental conditions and consequently a rich and interesting flora and fauna. At a very early period this attracted many famous foreign scientists. Linnaeus himself worked on a collection of Ceylon plants when he was in Leyden and he published his "Flora Zeylanica" in 1747. Some of his pupils came here and made collections from the island. By 1900 Ceylon, as it was then called, was one of the best botanized tropical islands. Practically all their findings, however, were published in foreign journals and often in continental European languages, and most of them are not readily available to workers in Sri Lanka. This and the inadequacy, and in some instances the total absence, of guides or handbooks to the flora and fauna have been a serious handicap for biological field studies in the island.

The main objective of the present project is to prepare background literature on the local plants and animals. It was started in 1977 and is centred in the Biological Laboratories of the University of Colombo. Under this project, specimens are collected and identified, and all available literature is collected, studied and collated. Using this information Check Lists of species, keys to and descriptions of Genera, and Handbooks for their identification are prepared. The co-ordinators are Professor B. A. Abeywickrama (Flora studies) and Professor K. D. Arudpragasam (Fauna studies) and the principal collaborators are Professor R. N. de Fonseka, Dr. (Mrs) Umarance Coomaraswamy, Dr. (Mrs) Kanti Abeynayake, Dr. S. Kotagama, Dr. (Mrs) Thelma Gunawardena, Mrs. Ranjini Ratnapala, Mrs. P. Arulgnanam, Mr. M. A. B. Jansen, Miss. I. Kotelawala and Mrs. L. K. Senaratna.

Flora studies: A Handbook to the Families of the Monocotyledonous Flowering Plants has been completed and is now in press. One on the Dicotyledonous plants is in preparation. As a revision of Flowering Plants of Sri Lanka is being carried out under another project, studies at generic and specific levels on flowering plants are not being done under this project. As regards flowerless plants preparation of Check Lists of the following have been completed.

Fresh Water algae	160	genera	580	species
Liverworts	69	"	190	"
Mosses	174	"	575	"
Ferns and Fern Allies	93	"	320	"
Fungi parasitic on plants	255	"	750	"
Mushrooms and Toadstools	53	"	380	"
Soil Fungi	63	"	150	"
Fungi associated with insects	62	"	160	"
Macrofungi	106	"	530	"

Several guides and Handbooks to the Genera have also been prepared and the present position regarding publications is as follows :—

1. A checklist of the Liverworts of Sri Lanka.
(B. A. Abeywickrama and M. A. B. Jansen) 1978.
2. A checklist of the Mosses of Sri Lanka
(B. A. Abeywickrama and M. A. B. Jansen) 1978.
3. A checklist of the Pteridophytes of Sri Lanka
(B. A. Abeywickrama) 1978.
4. A Handbook to the Fungi parasitic on plants of Sri Lanka (U. Coomaraswamy) 1979.
5. A Handbook to the Agarics of Sri Lanka
(U. Coomaraswamy) 1979.
6. A Handbook to the Freshwater Algae of Sri Lanka
(Part I) (B. A. Abeywickrama 1980).

In Press :

7. A Handbook to the Soil Fungi of Sri Lanka.
(U. Coomaraswamy and R. N. de Fonseka)
8. The Families of the Flowering Plants of Sri Lanka
Part I — Monocotyledons (B. A. Abeywickrama).

Fauna studies: Checklists of Land Snails, Mosquitoes, Amphibians, Reptiles, Birds and Mammals have been completed. Some of them are in the process of being published. The preparation of the Check List of Butterflies (128 genera with 240 species) and Ants (64 genera with 225 species) is nearing completion. The check list of Reptiles includes 5 families and 8 genera of chelonians, and 5 families and 27 genera of lizards of which 7 genera with 13 species are endemic. In addition there are 21 other endemic species of lizards making up a total of 34 endemic species. 47 genera of snakes have been listed, 4 of them being endemic. The total number of endemic species of snakes is 38. The crocodiles are represented in the island by a single monogeneric family.

The checklist of Land Snails brings together information relating to Sri Lanka on this group for the first time, and includes 23 families, 64 genera and 266 species.

In addition to the checklists, illustrated field keys have been prepared for the amphibians and mammals. Short descriptions of the species have been made using mostly the external features that are easily seen in the field. These would help laymen with little technical knowledge to make quick on the spot identifications.