COLLECTION AND PRESERVATION OF SPECIMENS

The fungi treated here were studied in their natural habitat. Data presented in this work were collected from the study of the materials, both fresh and preserved, comprising the infected leaves of Pteridophytic and Angiospermic (both dicotyledonous and monocotyledonous) host plants infected by different species of hyphomycetous fungi.

With a view to study the hyphomycetous fungi in their natural habitat and to collect them for detailed study in the laboratory, frequently field trips were undertaken at certain interval of time almost throughout the whole year (particularly during the winter months) in different localities under varied climatic conditions during the year 1983-1987. The area of field study and collections included districts of Calcutta, 24-Parganas, Howrah, Hooghly, Burdwan, Midnapore, Nadia, West Dinajpur, Darjeeling, Jalpaiguri and Cooch Behar. Extensive field studies and collections were made in the forests and foothills (dooars) areas, like Garubathan forest (1,500 ft.), Naksalbari forest (1,000 ft.), Sukna forest (500-1000 ft.), in the district of Darjeeling and the forests of Lataguri, Dhupguri, Maynaguri, Gayarkata (500-1000 ft.), Buxaduar (1000 ft.), Kumai, Baradighi (500 ft.), Jayanti in the district of Jalpaiguri and Chilapata forest in Cooch Behar district.

During collection, before collecting materials for preservation, general conditions of the collected specimens were
recorded. In the present investigation attention was also paid to the behaviour of the different hyphomycetous fungi on the living leaves of different groups of host plants. During field observation special attention for collection of infected host materials were concentrated on leaves. Every host plant was closely examined whenever infected leaves were found, they were examined both with the help of 10X-20X magnifying glass and with the unaided eye. Field notes were taken about the behaviour of the pathogen on host tissue under natural conditions. The infected leaves of different ages were detached intact from the host plant and they were kept in the polythene bags, closing the mouth by rubber ring. Healthy unaffected twigs bearing flowers and fruits were also collected at the same time from the same host plant and herbarium sheets were prepared with a view to identify the host plants properly in all cases. When the collection was over, the infected leaves were spread out in between two blotting papers, and dried following standard technique. Infected leaves of different ages were collected, labelled and preserved carefully in properly labelled paper bags.

The preserved materials were treated with paradichlorobenzene (PDB) at frequent intervals to keep them in good condition and to prevent against destruction by insects.

All materials collected were numbered and labelled as PCC (Presidency College herbarium, Calcutta).