

## THE RAPINAT HERBARIUM (RHT)

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### INTRODUCTION

The Rapinat Herbarium is a university herbarium organized in 1967 and named after Alfred Rapinat, S. J. (1892-1959) who initiated botanical studies in this College (Matthew 1972 a, b ; 1974). Besides being a devoted teacher, he was an active and careful plant explorer whose collections formed the nucleus of the herbarium listed among the international herbaria in 1972 (Holmgren & Keuken, 1974).

### COLLECTIONS

By March 1974, the herbarium had incorporated 21916 specimens. The bulk of the earlier collections were from the surrounding Tiruchirapalli district, Tamilnadu State, made by A. Rapinat and K. M. Matthew. Since 1967, the latter added more collections (Matthew 1970, 1975).

A well-represented area is the Palni (Pulney) Hills, Madurai district. There are several collections from the area. A general collection of flowering plants is the first. Secondly, is the original collection of the exotic plants of Kodaikanal on which *The Exotic Flora of Kodaikanal* (Matthew 1969 a) was published. The author has been keeping up the interest in this area ever since (Matthew, Blasco & Ignacimuthu 1975).

Another important collection is that of the mosses of the Palnis by G. Foreau, S. J. (1882-1967), a pioneer moss collector in the country, who collected over 500 species of mosses from the area of which over 100 were described as new taxa. (Foreau 1930, 1961, 1964 ; Matthew 1973). The ferns of the Palnis had been collected off and on, until Manickam made an exhaustive collection of 134 species (Manickam & Ninan 1976). An extensive collection of liverworts of the area by A. Rapinat cannot be traced (Chopra 1930).

Also represented are the (eastern) Himalayas (Kurseong subdivision, Darjeeling district). 969 species of flowering plants (Matthew 1966, 1969 b) and 93 species of pteridophytes (Matthew 1971) are represented in the herbarium.

A few special collections deserve mention. The major one is that of over 2000 numbers of British (1450) and continental European (110) plants personally collected by the author during 1971-1972 or acquired by exchange (624). Mass gatherings of 136 numbers of *Bidens* experimentally grown at Kew for phytochemical and cytological work (Matthew 1977 a) and some British mosses (63) are also included. The value of this collection of temperate plants is that over three-fourth of the British species are repre-

sented. Students, still widely using textbooks with illustrations from temperate species, should find this collection particularly valuable. Jerusalem and Spain, too, are included. There is also a collection from Hiroshima (136), Japan, procured by exchange. A collection of *Mastixia* (Cornaceae) is being built up with the author's world revision of the genus (Matthew 1976, 1977 b).

#### CURRENT WORK

Since 1975 the herbarium is fully committed to The Carnatic Flora Project (Matthew 1977 c, in press). The term 'Carnatic' is used in a geographical sense after Hooker & Thomson (1855). The tract is bounded by the Ponnaiyar river in the north, Mettur Dam in the west, the Cauvery-Kollidam (Coleroon) rivers in the south and the Bay of Bengal in the east, and comprises the district of Salem and parts of those of Tiruchirapalli, South Arcot and Dharmapuri. The significance of this choice lies in that the area is small enough to be exhaustively explored by a private foundation in about five years and large enough to be a phytogeographical unit. The tract comprises nearly every type of vegetation of peninsular India east of the western ghats—the highest hills of the eastern ghats (Shevaroy), together with the Pacchaimalai-Kollimalai-Kalrayan ranges, the Cauvery-Kollidam deltas, mangroves (Picchavaram), coastal and dune vegetation and a section of the Tamilnadu plains. The ethnobotany of the tribal hills is to be specially studied and an ICAR scheme is currently under operation. Four research scholars with supporting staff in addition to the present author are at work already. The eventual *Flora* will virtually cover the whole State excluding the evergreen tracts and is expected to deal with over 2000 species.

The immediate objective is to provide

an exhaustive, modern and competently written *Flora* for general use, as those by Gamble & Fischer (1916-1935) and Fyson (1932) are far from adequate and long dated. This project, eventually, will provide materials for monographic studies of the south Indian taxa.

#### FUTURE PROGRAMMES

Monography is considered the urgent task of Indian taxonomy. As a first step, the predominantly peninsular Indian taxa are to be monographed first, with collections and information resulting from the present project as source material. The ethnobotany in the tribal areas is to be studied exhaustively for which a beginning has already been made.

#### LITERATURE

A set of over 5000 classical reprints obtained from Kew and Leiden herbaria is a precious part of the library. In addition to the essential literature, are a collection of 50 taxonomic journals several of them with complete back numbers.

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