

This study on "**FERNS OF ASSAM**" was undertaken during 1992-1997 with an aim to record the ferns occurring in Assam and to prepare a systematic account of them. The importance and the reasons for choosing the subject of this study are discussed in Chapter III.

The field, herbarium and library works have resulted in presenting this account of 215 species belonging to 43 families and 87 genera of ferns occurring in Assam. In general, the classification followed in this work is the one by Pichi Sermolli (1977) with a little modification of Ching (1978). However, the genera are arranged alphabetically under each family and similarly species are alphabetically arranged under each genus for the sake of convenience. The taxonomic treatment includes artificial keys to families, genera and species alongwith detail description of each species. At species level, every effort has been made to incorporate recent nomenclature. In addition to accepted valid name, basionym and important synonym(s) if any, known for a species and relevant to Indian works have been given. Distribution of each species in India and world has been provided. As an aid to identification, the description of each and every species are supplemented with illustrations.

It must be admitted here that some specimens collected during the present study, however, have been confirmed either as new varieties or species. Since the whole process to establish and publish these new varieties or new species requires considerable time, it is considered not proper to include these in the present treatise before these taxa are effectively published elsewhere. Therefore, subsequent addendum of these taxa will provide a complete account of fern flora of Assam - an outcome of the present study.

The work is respectfully submitted to the University of Gauhati for examination for award of the degree of **DOCTOR OF PHILOSOPHY** in Botany.

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