

PREFACE

Floristically, Eastern Himalaya is one of the richest regions in the world and is literally considered as Botanist's Paradise that has attracted plant lovers and hunters equally at least for the last three centuries. Some scientists treat this region as the treasure house of diversified plant species. The Northern part of the Indian State of West Bengal, touching the feet of Eastern Himalaya is generally referred as Terai and Duars. The Terai and Duars regions are politically represent the plains of Darjeeling and the whole of Jalpaiguri and Alipurduar districts of West Bengal. Famous Wildlife Sanctuaries and National Parks like Mahananda Wildlife Sanctuary, Gorumara National Park, Chapramari Wildlife Sanctuary, Buxa Tiger Reserve and Jaldapara National Park are located in this region. The vegetation of Terai and Duars are floristically very rich and covers all major groups of Plant Kingdom including several endemic and RET species. The wide diversity in habitat structure helped numerous plant families to settle in this area. Lauraceae is one of the dominant families of higher plants in this region which is also economically quite important.

Lauraceae covers around 55 genera and 2500 to 3000 species world-wide, mostly from warmer or tropical regions, especially South east Asia and Brazil. Laurels are economically important as sources of medicine, timber, nutritious fruits, spices and perfumes. Bark and the roots of some Laurels are often used in traditional medicines.

Although it is economically very important, the species of Lauraceae remains poorly recognized and are difficult to distinguish taxonomically. The main reason is that many species are tall trees with minute, inconspicuous flowers that are difficult to collect and of considerable small reproductive season. This makes identification of such species uncertain, since most genera are circumscribed by floral characters.

For solving the difficulties of identification of some economically important Laurels of Terai-Duars region different techniques *viz.* anatomy, leaf-architecture, chemotaxonomic approaches (antioxidant, phytochemical screening, thin-layer chromatographic figure print) were utilized in this dissertation. Finally, a dendrogram was also constructed for to illustrate the phylogenetic relationship among these species.

A clear picture of Laurels distribution in Terai-Duars region has been framed through this study. All these species were enumerated along with their local names, salient features, exsiccatae, availability status, flowering and fruiting periods, occurrence in Terai & Duars region and world distribution.

So, the present work provided considerable bulk of data not only for the taxonomy of Laurels of Terai and Duars but has also collected and worked out considerable data for the resources assessment and utilization.