Preface

Plant taxonomy is a fundamental science. It is recognized as the "focal point of biology" based on the fact that it is related to morphology, anatomy, embryology, cytology, chemistry, and evolution, as well as the classification of plants. In order to understand the developments of this science, the present volume attempts to provide a full scenario of plant taxonomy. Thus, topics related to nomenclature, species and evolutionary aspects, methods of identification, anatomical features, palynology, and molecular systematics have been discussed.

Dr Prithipalsingh has devoted his life to academic pursuits. Ever since he joined the Department of Botany, University of Delhi, he has been engaged in the study of different aspects of plant taxonomy. He has been teaching the subject for almost 40 years. This Festschrift commemorates his long span as a teacher who inspired generations of students by his depth of knowledge and the easy manner in which he explained the fundamental aspects of plant taxonomy. I have had the good fortune of interacting with Dr Prithipalsingh for more than 10 years and learning many concepts of angiosperm taxonomy from him.

In compiling this volume, it has been my endeavour to focus on different aspects of plant taxonomy. Nomenclature is a significant aspect of plant taxonomy. Different aspects of this science of naming plants have been developed in some of the contributions. It is also an established fact that "species is a fundamental unit in biology". The species concept and the process of speciation have been elaborately discussed. The importance of proper identification of the species has been recognized and modern tools and techniques used for this purpose have been elaborated. The wisdom of traditional knowledge and "folklore taxonomy" as well as the importance of protecting this ancient science needs elaborate legal knowledge and has been described in detail. The significance of plant taxonomy for managing "genetic resources" has been analysed in depth. The use of evidence from anatomy, cytology, chemistry, and palynology for taxonomic purposes leads to a better understanding of taxonomic relationships. These have been evaluated in great detail in this volume.

Since understanding phylogeny and phylogenetic relationships has always been a challenge to students of plant taxonomy, these have been

explained in simple terms. The importance of herbaria and data storage systems, as well as the floristics of the future, have been elaborately described. Thus, this volume shall serve as a useful source of information for graduate and postgraduate students in plant science courses.

I am highly obliged to all the contributors for their cooperation. In spite of such short notice, they prepared their manuscripts and generously accepted the suggestions made by the reviewers. Without their support and cooperation, the task of editing the volume would have been impossible. The citation of references in most of the contributions follows a basic pattern, but in the case of one contribution (*Indigenous Knowledge of Plants and Biopiracy in India*) a different pattern has been adopted. This was necessary in view of the legal aspects covered in this contribution.

It is an honour to have the foreword written by Professor K M M Dakshini, a teacher who has been the source of inspiration for generations of students. Due to indifferent health, he was unable to provide a complete article for inclusion in this Festschrift. Special thanks are also extended to Professor N N Bhandari for a very useful message on the importance of observations in plant taxonomy. He has provided some interesting facts about the embryology of the family Ranunculaceae and the taxonomic significance of these observations.

I thank all the contributors and my colleagues in the Department of Botany, Kirori Mal College, for their valuable cooperation and encouragement, which helped me complete the task. Last, but not the least, I remain grateful to my family members for their valuable support.