

Sedges & Grasses of Eastern **UTTAR PRADESH**

– Volume 1 –

by
Ajai Kumar Singh
Reader
Department of Botany
Udai Pratap Autonomous College
Varanasi - 221 002

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DEDICATION

Dedicated to my family who went through the fatigues of seeing the book take shape; to my students who worked with me during the extensive and tiring field studies.

Preface

Most of the areas of reorganized Uttar Pradesh is cultivated. The region is under explored and very little is known about its plant resources. Some district floras viz., Flora of Agra, Flora of Allahabad and Flora Gorakhpurensis and checklists of some districts have been published but the detailed floristic account is not yet published and as such there is meagre information on plant resources of the state. The concept of endemism is also altered in many cases.

In Indian Plant Taxonomy what is needed more is elaborate description encompassing a complete range of variation with illustrations of all species. The vegetative characters neglected in the past, and others if any, should be studied to check whether any of them constitute more striking characters to enhance our understanding on flora. Keeping these facts in mind present work was started eight years back.

Though there have been some studies in eastern Uttar Pradesh in past, they are of a general nature. An in-depth study of limited groups of economic value has not been undertaken so far. The family Cyperaceae and Poaceae form an important and difficult group with the latter having considerable economic potential, and it was thought desirable to undertake a floristic survey of Eastern Uttar Pradesh for getting a through inventory of the members of these specialized group of flowering plants.

The present book is the outcome of about eight years study of author and his students. This book has been written without any research grants or any paid technical assistance. With the exception of author's own salary and the College infrastructure, this book has consumed no taxpayer's money. Total area was carefully explored, critical studies were done for identification, nomenclature and field notes. All specimens are deposited in the Herbarium, Department of Botany, Udai Pratap Autonomous College, Varanasi (India).

Sedges and Grasses of Eastern Uttar Pradesh deal with 320 species (86 species and 4 subspecies of sedges and 234 species and 2 varieties of Grasses). Thirty-two species of Sedges are new addition to the Upper Gangetic Plain, 10 species of Sedges; 3 genera and 23 species of Grasses are new to the Uttar Pradesh. Five species of Sedges are new to India. Species description, upto date name, field notes, synonyms and simple key for identification have been provided, line diagrams of 293 taxa are given. Appendices includes check-list of sedges and grasses of 7 districts of Eastern Uttar Pradesh, Upper Gangetic Plain, Uttar Pradesh and India

This book will be useful for the research scholars, teachers, students and persons, interested in weed and grassland management. In particular it will be more useful in Eastern Uttar Pradesh and also adjacent area of Bihar state.

I express my sincere thanks to the Principal, Udai Pratap Autonomous College, Varanasi for providing the facilities to complete the work. I also thanks to Daya Publishing House, Delhi for the publication of this book.

Ajai Kumar Singh

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Chapter 1

Introduction

After a long period of antipathy, Biodiversity study has once again come to the centre-stage of biology, the world over. We now know, that the future quality of human life on this planet would very much depend upon the existing plant and animal diversity and are aware of the need for their documentation, conservation and for its better understanding. Unfortunately, this has come at a time when we are passing through an age of rapid loss of Biodiversity, which would have catastrophic results for all of us in future (Heywood, 1993).

Plants and plant products play a vital role in the material prosperity of any country, and therefore a thorough study of the occurrence, distribution, ecological association, phenological notes, local names, economic uses etc., of the natural vegetation assume a great importance. Vegetational and floristic studies have gained increased importance and relevance in recent years in view of the present need for a thorough, up to date assessment of the natural resources of our vast country. The need for conservation and balanced exploitation of the nation's plant wealth has also been keenly felt. In this context intensive exploration of limited areas for obtaining an inventory of the floristic elements present and identification of the potential sources of economic importance have become imperative. Initiating the work on Indian flora, Santapau (1958a), suggested that Universities should be encouraged and helped to produce the flora of University campuses, towns and neighbouring areas. Similar suggestions and recommendations were made at Summer School in Botany, held at Kodaikanal (1962) and by Johri and Doreswamy (1970) also. As a result, there has been a revival of interest among botanists in reinvestigating and modernizing the floristic studies in different regions of the Indian subcontinent. Since the attainment of Independence there has been an urge for better utilization of plant resources of the country. The late Prime Minister Sri Jawahar Lal Nehru appropriately wrote in his

Uttar Pradesh is a state in the Plains region of India. Awadh is the central part of the state including the capital, Lucknow. Doab is between the Ganges and Yamuna rivers in the western and southwestern part of the state. Northern Bundelkhand is in the southwest of the state. Purvanchal is in the eastern part of the state. Rohilkhand is in the northern part of the state. Braj is in the western part of the state. Lucknow is the capital of Uttar Pradesh, also home to one of the IIM. Uttar Pradesh is the land of art. Starting with sages singing hymns, the music tradition of the state has only grown. In the medieval era, two distinct branches of music rose to the front- the court music and the bhakti cult. The history of Uttar Pradesh goes back to 4000 years. This is the land which is said to have been the foreground for Hindu epics like Mahabharata and Ramayana. Under British rule, the state was known as the Northern Western Provinces of Agra and Oudh. Uttar Pradesh, the most populous and fourth largest state of India, which lies in the north-central part of the country. The state's name is Hindi for "northern state" and its capital is Lucknow, in the west-central part of the state. Learn more about Uttar Pradesh's history and government in this article. Uttar Pradesh, the most populous and fourth largest state of India. It lies in the north-central part of the country. Uttar Pradesh, India. Encyclopædia Britannica, Inc.