

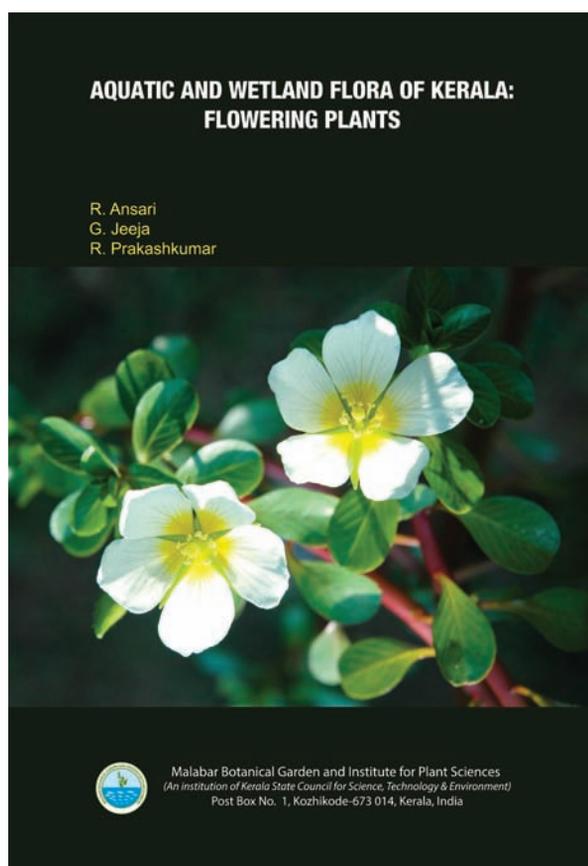
## Book Review

R. Ansari, G. Jeeja and R. Prakashkumar, 2016

### **Aquatic and Wetland Flora of Kerala: Flowering Plants**

Published by Malabar Botanical Garden and Institute for Plant Sciences, Kozhikode – 673014, Kerala.

ISBN 978-81-931285-3-4. Hard Cover. Pages 945. Line Diagrams 388. Colour Photo Plates 12. Price: (INR) ₹3000/-



Human civilisations and wetlands are inseparable. Human economic and cultural activities such as agriculture, fishing, transport, tourism and religious ceremonies are centred on wetlands apart from providing various ecosystem services including carbon sequestration, flood management, soil fertility, and pollution control. Hence, wetland ecosystem is always subjected to a great anthropogenic pressure all through the human history. The vegetation of the wetland ecosystem is underexplored owing to various constraints in the field throughout the world. The significance of

wetlands coupled with the high degree of threats faced by this important ecosystem has evoked the thrust on exploring and documenting the wetland flora across the globe.

The book was the culmination of twenty years of arduous research work undertaken by the institute on aquatic and wetland ecosystems in Kerala. The book begins with a foreword by Dr. Paul P. Smith, Secretary General of Botanical Gardens Conservation International. The book may be divided into four chapters, although the authors did not explicitly spell it: [i] introductory chapter deals with the general information on wetlands such as geography, physiography, climate, soil and lists aquatic and wetland systems in Kerala along with the classification of wetland vegetation; [ii] the methodology adopted to accomplish the research work with the comprehensive review of earlier literature on the aquatic and wetland flora of Kerala with special emphasis on its bioprospecting potentials and endemism and threats; [iii] a brief discussion on the statistical analysis of enumerated aquatic and wetland flora of Kerala and finally [iv] a more elaborate taxonomic enumeration of the documented species. References and index to scientific names are appended at the end.

It is the first published comprehensive compilation of aquatic and wetland flora of a state in India. The authors have effectively utilised both published and unpublished source of literature for this voluminous compilation. A total of 699 species belonging to 266 genera in 73 families, constituting about 15% of the total recorded species from the state have been documented in this book. Ten percent of them are steno-endemics to the state of Kerala. The number of species recorded in the present work exceeds the total number of aquatic species that has earlier been documented for the whole of India by C.D.K. Cook (1996), which unambiguously highlights the diversity of

aquatic and wetland plants and habitats. This study also indicates the need for serious field studies in other states to enrich the knowledge on the aquatic and wetland flora of the entire country. The major taxonomic outcomes of the present publication are the relegation of five recently described species and reinstatement of five species that have earlier been treated as synonyms. Further, etymology of all the scientific names is an added value to the book that enables both specialist and general readers to understand as well as to know the correct meaning of the botanical names, which facilitate easy remembrance. The local names and uses hitherto unrecorded for many plants are provided for the first time that integrates the folk knowledge and science for a meaningful conservation initiatives.

The taxonomic enumeration begins with the bracketed keys to major categories of flowering plants and families which are unambiguous and workable. All the families, genera and species are arranged alphabetically. Each family is provided with details such as common name (if any), global number of genera and distribution, general characteristic features and allied family(ies) followed by key to genera. Each genus is enumerated with the following details: common name (if any), number of species and distribution in the world and in Kerala followed by etymology and key to species. Name of each taxon is given in boldface with a brief nomenclature followed by etymology, detailed description, ecology and distribution in Kerala.

The IUCN threat status for some of the species is indicated at the end without any reference. The

book contains 388 line diagrams and 12 colour photo plates, which would immensely be helpful to identify more than fifty percent of the species that have been enumerated in this book.

The standard forms of many authors names are not as per Brummitt & Powell (1992) as advised by the ICN. The correct scientific names should have been printed in boldface uniformly and the intermixed usage of italics and boldfaces in the text should have been avoided. A careful scrutiny of the final galley proof would have minimised most of these inadvertent errors and enhanced the quality of the publication. Further, reference to most of the data such as global number of genera and species and their distribution given in the text are not provided. The authors should have updated the nomenclature of members of certain families and genera for which recent literature and databases are available.

Aside from the printed quality of line diagrams and other format problems, this book would be an absolutely essential reference for aquatic plant identification for students, scholars, foresters, environmentalists, and general public. The price of the book is slightly high that may not encourage many students and interested individuals to own a copy. We congratulate the authors for their outstanding efforts in compiling a comprehensive source of reference on aquatic and wetland flowering plants.

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