Indian Pandanaceae-an overview
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India can justly lay claim to be the cradle of Pandanaceae taxonomy. The four species of Pandanus carefully described and illustrated in van Rheede’s *Hortus Malabaricus* in 1679 are the first to be mentioned in the botanical literature. A century later, in 1786, William Roxburg, the Director of the Calcutta Botanical Garden brought van Rheede’s Indian screwpine names into line with Carl Linnaeus’ new binomial classification system, that was gradually being adopted by botanists all over the world.

During the course of the nineteenth and twentieth centuries, several botanists notably Otto Warburg, Ugolino Martelli, Harold St. John and Benjamin Stone worked on the taxonomy of the Indian Screwpines- introducing new synonymies and describing new species, but none of them took on the task to revise the Indian screwpines as a whole. This was mostly due to the difficulty of obtaining good preserved material of this mysterious and fascinating family.

During the past decade, Dr. Altafhusain Nadaf and Dr. Rahul Zanan have undertaken a very demanding challenge: to understand the Indian Pandanaceae as a whole and to advance its taxonomy in a global context, making full use of modern techniques including molecular systematics. The results of this huge and much-needed work are presented in this book: “Indian Pandanaceae – an overview”.

With this book, the authors present the first complete overview of Indian screwpines more than 300 years after the first Pandanus species were recorded by van Rheede from the Malabar region. Dr. Altafhusain Nadaf and Dr. Rahul Zanan have visited the whole sub-continent to collect, study and understand the species in the field. In this book they present the Indian screwpines in unparalleled clarity and detail, dealing with their history, economic importance, molecular phylogenetic and conservation, as well as their taxonomy. I am convinced that this book will serve people with a broad spectrum of interests and it will stimulate future research and interest in this economically important family in India. We could not have hoped for such a thorough and complete overview of the Indian screwpines!

Martin W. Callmander
While studying the phylogeny of Indian screw pines for the past seven years, we realised that the taxonomy of Indian Pandanaceae is in very unsatisfactory state. Since van Rhedee’s time (1679), a number of species have been described that have never been critically compared. The treatment by the taxonomists was very sketchy, as several species were founded on the poorest of specimens and unfortunately some have also been incorrectly or inexacty described leading in the creation of several synonyms and number of species. This has initiated us to come up with the complete revision of Indian Pandanaceae. This book is the original research work that provides not only updated taxonomic status of Indian screw pines but also their phylogenetic interrelationship in Indian and global context. The Pandanaceae family is distributed in two hotspots of India – Western Ghats and northeast Himalayan region and Andaman and Nicobar Islands. Our study has led in the addition of three new Pandanus species (two from Western Ghats and one from northeast Himalaya), merging of synonyms and totalling the species number to 14. Genus Benstonea with two species from Southern and Northeastern India; genus Freycinetia with two species, restricted in Andaman and Nicobar Islands. The species belonging to Benstonea and Pandanus have been described with respect to their biogeographical distribution, morphology, detailed species identification key and economic importance. The species have been assessed for their conservation status based on IUCN Red List Categories and Criteria (2001) revealing six species under threatened categories. The real outcome of the work is establishing phylogenetic relationship among the species based on the chloroplast DNA-based molecular phylogenetic approach. For the first time, the infrageneric classification for Indian Pandanus species is given. We hope that this book will be useful to taxonomists and phylogenetists working on screw pines and other related genera. It will also be a guideline for assessing evolutionary relationship among the taxa at different hierarchical levels using chloroplast DNA-based molecular phylogenetic approach.
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