

Eminent Indian Botanists
– *Past and Present* –
(Biographies and Contributions)

by

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Preface

The concept of presenting this publication in print sprouted in our minds during our conversation on the evening of 15 August, 2008, over a cup of tea. It was then, we felt the need of a consolidated reference of Indian Botanists at a single place to every student of botany irrespective of being a scientist, university or a college teacher, a researcher or the aspirants of different competitive examinations like civil services, group services and many others. Many publications are available in the markets which describe the biographies of scientists but most of them deal with those of different branches of Basic Sciences like Mathematics, Physics, Chemistry and Biology. However, among the biologists, botanists do not find a proper place, and in general, biologists appear to be a neglected lot. It is in this background, our venture started with a few biographies and over a 12-month period it went on piling up and the dream is realized. During the preparation, we searched many journals, books, monographs, bulletins, research publications, newspaper clippings and browsed through thousands of pages on the web. The result is in your hands now.

The object of this publication of biographies and contributions of several immortal Indian Botanists is to let know the reader, of eminent Indian men and women who were instrumental in the development of botany in India as it is the need of the hour for the present generation to know about the great men and women in Plant Sciences. The book has been planned to remove the lacuna of the availability of the authoritative biographies in the field of Plant Sciences except for some written by competent persons who knew them well.

In this book, "*Eminent Indian Botanists: Past and Present*", the history and the development of Botany (Plant Sciences) with particular reference to India is explained through the biographies and contributions of some eminent Indian Botanists and this concentrates through their scientific toils. The book may have its own

shortcomings, but it has its own merit of scientific details that have been gathered for the benefit of the reader. The botanists included in this book are listed in an alphabetical order, related to different branches of Plant Sciences, both pure and applied. The foundations of Botany in India and its development over time were laid during the days of Portuguese East India Company during sixteenth century followed by British India into the modern times. As foundations are important for any branch of science to develop, the biographies of the earlier Portuguese and British plant explorers have been dealt with in detail because, without their efforts plant science would not have been as what it is today in India. The scientific papers published by them during their life time have been included to let the reader know what exactly their line of work was.

The readers will find in this book, the material they need either to refer in their research work, to prepare for their competitive examinations with special reference to Botany as their optional subject, for a better background in teaching, or a general reading material for a lay man interested in the subject. The biographies were intended to explain to the lay man and a non-scientist alike the basic idea which underlies the scientific achievements of the concerned botanists and the selection is the outcome of our own interest in Plant Sciences. It is our sincere hope that this book will show how foreigners contributed to the development of Botany in India, how Indians from various parts of the sub-continent are contributing and how the Indian-born foreigners are contributing to the stream of modern scientific thought in plant sciences, and the work made can bear a comparison with those made anywhere else in the world. The readers interested in knowing more about the contributions may consult the other reading material like the books, monographs and the scientific papers published by the concerned men and women of Botany.

During the 12 month period we have associated ourselves with the preparation of this book and have gained much knowledge about the progress of not only the scientists but also the technology in Plant Sciences. We have done our best to incorporate all the details as far as possible and the book has run longer than we have expected. In spite of our sincere efforts to include as many biographies as possible, we could confine ourselves to 75, at the first instance, and this list is still not complete and there is a lot to be added. We wish to state that every care has been taken to bring out an error-free volume and some errors and omissions if any might have crept in without our knowledge, they will be rectified in future editions. The suggestions for the improvement of the quality of this publication are welcome.

We express our sincere thanks to Dr. Govindjee, University of Illinois, Urbana, Illinois, USA, and Dr. Indra K. Vasil, Associate Director, Genetics Institute, Graduate Research Professor Emeritus, University of Florida, Gainesville, Florida, USA, for providing us the relevant material and also for editing their write ups prior to inclusion. We are grateful to Prof. K. S. Manilal, Emeritus Professor, Department of Botany and Former Dean, Faculty of Science, University of Calicut, Kerala and Dr. M. S. Swaminathan, Chairman, M. S. Swaminathan Research Foundation, Chennai, Tamil Nadu, for their suggestions and careful reading through the manuscripts to improve the quality of this publication. Our thanks are due to Dr. Satish C. Maheshwari (son of late Prof. P. Maheshwari), Department of Plant

Molecular Biology, University of Delhi, South Campus, New Delhi, Dr. M. M. Johri (son of late Prof. B. M. Johri), Tata Institute of Fundamental Research, Mumbai, Dr. Y. Vimala (daughter of late Prof. Y. S. Murthy), Professor of Botany, Ch. Charan Singh University, Meerut, Uttar Pradesh, Dr. Bani Gajra, Department of Botany, Centre for Advanced Studies, University of Calcutta, Kolkata, West Bengal Prof. S.S. Bir, Professor Emeritus, Department of Botany, Punjabi University, Patiala, Prof. V.S.R. Das, Former Professor of Botany, University of Hyderabad, Hyderabad, A.P. and Dr. A.S. Raghavendra, Dean, School of Life sciences, Department of Plant Sciences, University of Hyderabad, Hyderabad, A.P., in going through the write-ups for necessary corrections. We thank Dr. Panuganti N. Rao, Visakhapatnam, Andhra Pradesh, for providing us the necessary material for the biography of Prof. J. Venkateswarlu, and Prof. M. Vijayalakshmi, Head, Department of Botany and Microbiology, Acharya Nagarjuna University, Nagarjuna Nagar, Guntur, A.P., for going through the write-ups of plant pathologists included in the book. Our thanks are due to Prof. G. Rajendrudu, Department of Botany, S.V. University, Tirupati, A.P. and Prof. P. Sreenivasulu, Department of Virology, S. V. University, Tirupati, A.P. who have obliged to go through the drafts of Prof. V. S. R. Das and late Prof. M.V. Nayudu respectively and suggested the necessary corrections before the book went to press. Last but not the least, we are thankful to our Publisher, Regency Publications to take out this publication within a short time and in a highly presentable form.

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Excerpts from Mail

Ref: E-mail dated 15 January, 2009.

Dear Suresh Narayana,

"I am glad to note that you have embarked on a good project. I am currently in USA and can respond after 22 January, when I would be back in Hyderabad. May I request you not to hesitate to send me a reminder, in case I miss to respond by the end of January. With warm regards".

A.S. Raghavendra

Ref: Letter dated 11 May, 2009.

Dear Dr. Pullaiah,

"I am glad to find that you are compiling information on Botanists of India. Copies of the write-ups about me and of Dr. Janaki Ammal sent by you are also received here. They are OK. You know, for the past many years several people have been talking about such a book as planned by you now. As I very well know that you are basically a `doer` rather than a `talker` who believes in "..... But the caravan moves", I am sure that you will successfully complete this work taken upon by yourself. My good wishes are with you, as always".

K.S. Manilal

Ref: Mail dated NIL

Dear Prof. Pullaiah,

"I thank you very much for your kind letter. I am grateful to you for the trouble you have taken to prepare my biography. I enclose the same with a few corrections. With warm personal regards".

M.S. Swaminathan

Ref: E-mail dated 27 June, 2009.

Dear Prof. Pullaiah,

"This is with reference to your recent letter enclosing the manuscript concerning my late father. We are going through the manuscript and I hope to return in about a week's time. On the whole it is well-written and I am wondering who your co-author or the person who has drafted the original manuscript? With best wishes".

Satish C. Maheshwari

Ref: E-mail dated 1 August, 2009.

Dear Pathiki,

"Thank you for including me in your list of prominent Indian Botanists. It is an honour. You can find biographical information and a partial list of publications under my name at www.isihighlycited.com and at www.google scholar.com. Additional biographical information can be found in the attached publication. I look forward to receiving your write-up. Best wishes".

Indra K. Vasil

Ref: E-mail dated 9 August, 2009.

Dear Suresh Pathiki,

"I got a little more time to study your list (the contents). My immediate impression is that you have embarked on a very difficult task because getting information on so many people is not going to be easy at all. And, even after you obtain information it is a very difficult task to rewrite, and get everything accurately. I can only convey my best wishes for your endeavour and we shall try to help in whatever way we can..... I would like to make two suggestions. Prof. Shri Ranjan played a significant role in channeling young people like Govindjee into new areas. I think he taught my father too. Govindjee is the right person to obtain further information on him. Another omission I see is Prof. J. Venkateswarlu who also hailed from Andhra. With R. A. Brinks and D. C. Cooper, he carried out some classical studies on paramutation (in Maize). In recent years, alteration in hereditary material by methylation of DNA, in organisms in general, has become a very important issue and I found that his work was a kind of starting point for modern molecular

work done later by American plant biologists like Vicki Chandler. I think Prof. Venkateswarlu was quite close to my father as he used to stay in our house and once I took him in 1950s to Radhakrishnan`s residence near the Parliament House when the latter was Vice-President of India. With all good wishes”.

Satish C. Maheshwari

Ref: E-mail dated 13 August, 2009.

Dear Suresh Narayana,

“I am very happy that you have chosen to write on Indian Botanists. I am sure this book will be very useful since there is no publication on this aspect.....looking into the write-ups you sent already about my late father and my former collaborator, Prof. Sipra Guha Mukherjee..... It is a good idea to include Indra Vasil (he was a class-mate of ours) and Govindjee (a close friend). I am sure you will include a write-up also on late Prof. Johri too. However, it is an enormous undertaking to write about both past and present. I wish you all success”.

Satish C. Maheshwari

Ref: E-mail dated 21 August, 2009.

Dear Suresh,

“I marvel you for taking up such an ambitious job. It is lot of hard work. I am honoured that you have included me”.

Govindjee

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