



GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS)

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Affiliated to Bharathidasan University

DST - CURIE Sponsored Institution

IV Cycle of Accreditation

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CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.4. RESEARCH PUBLICATION AND AWARDS

3.4.4 Number of Books and Chapters in Edited Volumes Published per Teacher

COVER PAGE FOR BOOK

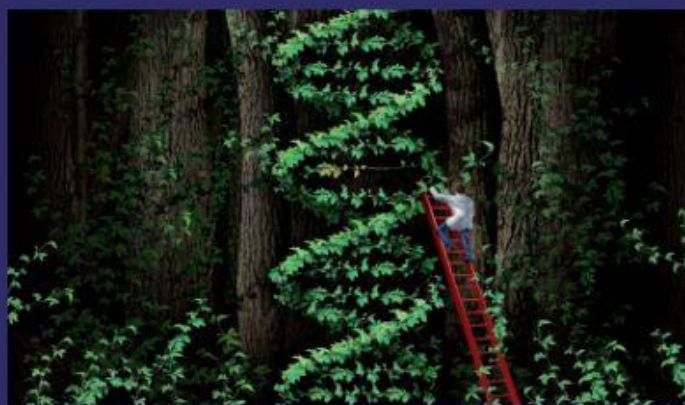
Dr. M.Govindarajan

“Plant Mutagenesis”



Name of the teacher	Title of the book published	Year of publication	ISBN number	Whether at the time of publication Affiliating Institution was same Yes/No	Name of the publisher
S.Umavathi, K. Gopinath & M. Govindarajan	Plant Mutagenesis	2020	978-620-2-66744-9	Yes	Lap LAMBERT Academic publishing

This book comprises a collection of chapters on Mutation breeding approaches for the enhancement of crop growth in terms of productivity. The book looks at ways to establish long term safe, cost-effective and sustainable breeding practices over classical plant breeding methods. Genetic variation is a prerequisite for crop improvement program and was accomplished mainly through mutagenic treatment methods. This book will prove useful for researchers and professionals working in the field of Plant and molecular breeding. The book contains seven chapters. Chapter 1 provides a general introduction. In chapter 2, Effects of mutagens on plants with special reference to biophysical damages are given. Chapter 3 provides mitotic and meiotic chromosomal aberrations due to mutagenic treatment. In chapter 4, the spectrum of morphological mutations and its causes was discussed. The mutagenesis and genetic variability is well explained in chapter 5. Mutagenesis and molecular profiling are discussed in chapter 6. Finally, chapter 7 concludes the molecular approaches and future prospective of mutation breeding.



Dr.S.Umavathi working as an Assistant Professor of Botany, Adhiyaman Arts and Science College for Women, Uthangarai, Tamilnadu, India. Dr.K.Gopinath is serving as a postdoctoral fellow at the School of Materials and Energy, Southwest University, P.R. China. Dr.M.Govindarajan serves as an Assistant Professor of Zoology, Annamalai University, India.

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PLANT MUTAGENESIS
Induced Mutation for Crop Improvement



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