
Cytological Effect Of Ethyl Methane Sulphonate And Sodium

Perspectives in Cytology and Genetics
Indian National Agricultural Bibliography, 1975-84
Advancing Frontiers in Cytogenetics in Evolution & Improvement of Plants
The Health Consequences of Smoking
The Japan Science Review
The Indian Journal of Agricultural Sciences
Induced Mutations and Polyploidy in Birch, *Betula* Spp
Mutagenesis, Cytotoxicity and Crop Improvement
Mutation Breeding in Chickpea:
Plant Cytogenetics
Biotechnologies and Genetics in Plant Mutation Breeding
Nuclear Science Abstracts
The Journal of Cytology and Genetics
International Review of Cytology
Pesticides Abstracts
Journal for Scientific Agricultural Research
Chemicals and the Future of Man
Acta Biologica Hungarica
Indian Science Abstracts
Induced Mutation Breeding
Genetics Abstracts
Effects of Ionizing Radiations on Seeds
Proceedings of the Indian Science Congress
Canadian Journal of Genetics and Cytology
Journal of Palynology
Nuclear Science Abstracts
The Journal of the Indian Botanical Society
Bibliography of Agriculture with Subject Index
Cytology and Genetics
TOX-TIPS, Toxicology Testing in Progress
Chromosome Structure and Aberrations
Bibliography of Agriculture
The Health Consequences of Smoking
Pesticides Documentation Bulletin
Agrindex
Chemicals and the Future of Man
Genetics
Progress in Botany
Apomixis in Plants
Mulberry

LIVINGSTON KASSANDRA

Perspectives in Cytology and Genetics Springer

International Review of Cytology

Indian National Agricultural Bibliography, 1975-84 Springer

Science & Business Media

Covering aspects of Cell Science, ranging from Basic and Applied, to their modern developments including cell cycle and check-point, Cytology and Genetics elucidates all relevant notions thoroughly.

Advancing Frontiers in Cytogenetics in Evolution & Improvement of Plants

Cambridge Scholars Publishing

"An indispensable source for researchers, teachers, and graduate and postgraduate students interested in mutation breeding and genetic engineering. It introduces readers to contemporary knowledge and state-of-the-art technologies in the field of mutation breeding, including fundamental mechanisms and applications. . . . It will provide new directions, and avenues for enhancement of food security and food quality by using the latest techniques for the 'mutation as breeding' approach." - From Prof. Jameel M. Al-Khayri, King Faisal University, Saudi Arabia This comprehensive three-volume set book aims to help combat the challenge of providing enough food for the world by the use of advanced genetic processes to improve crop production, both in quantity and quality. Volume 1: Mutagenesis and Crop Improvement discusses mutagenesis, cytotoxicity, and crop improvement, covering the processes, mutagenic effectiveness, and

mechanisms. The volume emphasizes the improvement of agronomic characteristics by manipulating the genotype of plant species, resulting in increased productivity. Volume 2: Revolutionizing Plant Biology covers the use of mutagenesis and biotechnology to explore the variability of mutant genes for crop improvement. The chapters deal with in-vitro mutagenesis to exploit the somaclonal variations induced in cell culture and highlight the importance of in-vitro mutagenesis in inducing salt resistance, heat resistance, and drought resistance. Volume 3: Mechanisms for Genetic Manipulation of Plants and Plant Mutants reviews the genetic engineering techniques used to mutate genes and to incorporate them into different plant species of cereals, pulses, vegetables, and fruits. Also discussed are the principles of genetic engineering by which desired genes can be transferred from plants to animals to microorganisms and vice versa.

The Health Consequences of Smoking
CRC Press

This reference book provides information on plant cytogenetics for students, instructors, and researchers. Topics covered by international experts include classical cytogenetics of plant genomes; plant chromosome structure; functional, molecular cytology; and genome dynamics. In addition, chapters are included on several methods in plant cytogenetics, informatics, and even laboratory exercises for aspiring or practiced instructors. The book provides a unique combination of historical and modern subject matter, revealing the central role of plant cytogenetics in plant genetics and genomics as currently practiced. This breadth of coverage, together with the inclusion of methods and instruction, is intended to convey a

deep and useful appreciation for plant cytogenetics. We hope it will inform and inspire students, researchers, and teachers to continue to employ plant cytogenetics to address fundamental questions about the cytology of plant chromosomes and genomes for years to come. Hank W. Bass is a Professor in the Department of Biological Science at Florida State University. James A. Birchler is a Professor in the Division of Biological Sciences at the University of Missouri.

The Japan Science Review Walter de Gruyter GmbH & Co KG

Mulberry (*Morus* spp.) is an important horticultural plant in the sericulture industry. It belongs to the family Moraceae. The leaf of mulberry is used to feed the silkworm *Bombyx mori* L. It is also used as a fodder. Due to its economic and agricultural importance, mulberry is cultivated in many parts of the world. An estimated 60% of the total cost of silk cocoon production is for production and maintenance of mulberry plants. Therefore, much attention is needed to improve the quality and quantity of mulberry leaves. It is vital to increase the production of superior quality mulberry leaves with high nutritive value for the sericulture industry. Although a lot of research is going on in mulberry, very little effort has been made to compile the results of this research in a single book. This book provides an update of recent research works going on in this plant. It describes the taxonomy, conservation of germplasm, genetic diversity of various mulberry species, application of breeding techniques to improve the quality of mulberry, in vitro conservation, application of tissue culture techniques to improve mulberry species, production of haploids and

triploids in mulberry and improvement of abiotic stress adaptive traits in mulberry with relevance to adaptiveness to global warming.

The Indian Journal of Agricultural Sciences Springer Science & Business Media

Includes notices of research projects submitted to the Smithsonian Science Information Exchange concerning toxicological testing.

Induced Mutations and Polyploidy in Birch, *Betula* Spp Routledge

Induced mutagenesis is a common and promising method for the screening of new crops with improved production methods, and has made a tremendous contribution to crop improvement. Now, as the techniques of molecular biology become more widely adopted by plant breeders, this comprehensive summary sets mutation breeding within a contemporary context and relates it to other breeding techniques. This book opens a new chapter of inducing mutations at the gene level, and details techniques that can be used to harvest and exploit such mutation to improve the productivity of crops, particularly cereals, grains and vegetables. The chapters within this volume are supported by diagrams, tables and graphs to make the content more comprehensible. The book will be extremely useful for advanced undergraduates, graduates, postgraduate students, and research scientists of botany, agriculture, horticulture, genetics, biotechnology, biochemistry and agronomy.

Mutagenesis, Cytotoxicity and Crop Improvement CRC Press

Apomixis in Plants presents a comprehensive review of different aspects of asexual seed formation in plants. This is important in plant

research since apomixis could greatly facilitate breeding in important crops. It is also interesting theoretically because it carries problems related to genetic variation and evolution to its extreme. The book features a broad selection of topics, including a historical review of ideas and landmarks in the field; comparisons with other types of asexual reproduction in higher plants and with related phenomena in animals and related plants; a presentation of cytology and embryology of apomicts and the diversified terminology in the field; views on the genetic background of apomixis and environmental effects on its expression; and the interrelation between apomixis and other traits. Additional topics covered include classical and modern theories of sexual versus asexual reproduction; geographical and taxonomical trends in apomicts; ecological implications of apomixis, and a review of future possibilities for using apomixis in plant breeding. *Apomixis in Plants* is an important reference volume for researchers and students in all areas of botany, ecology, and plant breeding. Mutation Breeding in Chickpea: Springer Nature

The book is an excellent reference collection of the research conducted by different workers on induced mutagenesis, worldwide, for more than 80 years. One can get almost all mutation breeding references at one place. The book gives a coherent and concise account of all the important and relevant aspects related to induced mutagenesis with an emphasis on recent developments in the field of crop improvement. The references have been arranged crop wise and important topic wise which deal with not only classical mutation breeding but also spontaneous

mutations, somaclonal variations, nanoparticles, and relevant modern aspects. The book highlights 22 chapters covering holistic information on almost all important components such as radiosensitivity, chromosomal and morphological abnormalities, detection of mutation, management of chimera, present status of mutation etc.) of Mutation Breeding. Chapters are very informative, and one can follow the references on crop and aspect basis since the start of mutation breeding work. This book is an excellent resource for researchers and students for understanding proper applications of induced mutations in crop improvement and biological research. It is of interest and useful to graduate and postgraduate students, horticulturists, floriculturists, agricultural scientists, and breeders related to crop improvement program.

Plant Cytogenetics Academic Press
The book by M. Imran Kozgar aims to cover the problems of mutation breeding in pulse crops in the light of issues related to food insecurity and malnutrition, which according to FAO are the major threats at the present time. So far the research on induction of mutation in pulse crops is negligible compared to cereal crops, though the pulse crops and especially the chickpea are the largest grown crops in India. The main objective of the book is to reveal and explore the possibility of inducing genetic variability in early generations of mutated chickpea, describe the positive aspects of mutagenic treatments, evaluate the content of mineral elements (iron, manganese, zinc and copper) and physiological parameters of isolated high yielding mutant lines. The author hopes that his book will help to advance studies on pulse crops, and that in the long term it will help to reduce the food

insecurity and malnutrition problems presently persisting in various developing countries, including India. *Biotechnologies and Genetics in Plant Mutation Breeding* Alpha Science Int'l Ltd.

This book is a compilation of various chapters contributed by a group of leading researchers from different countries and covering up to date information based on published reports and personal experience of authors in the field of cytogenetics. Beginning with the introduction of chromosome, the subsequent chapters on organization of genetic material, karyotype evolution, structural and numerical variations in chromosomes, B-chromosomes and chromosomal aberrations provide an in-depth knowledge and easy understanding of the subject matter. A special feature of the book is the inclusion of a series of chapters on various types of chromosomal aberrations and their impact on breeding behaviour and crop improvement. The possible mechanism, their consequences and role in genetic analysis has been

emphasized in these chapters. A few chapters have also been dedicated on various techniques routinely used in the laboratory by students and researchers. Each chapter ends with an extensive bibliography so that the students and researchers may find it relevant to consult more literature on the subject than a book of this size can offer. The book is intended to fulfill the needs of undergraduate and post graduate students of botany, zoology and agriculture besides, teachers and researchers engaged in the field of genetics, cytogenetics, and molecular genetics. In general the readers will find each chapter of the book informative and easy to understand.

Nuclear Science Abstracts

The Journal of Cytology and Genetics

International Review of Cytology

Pesticides Abstracts

Journal for Scientific Agricultural Research

Chemicals and the Future of Man

Acta Biologica Hungarica

Indian Science Abstracts

Induced Mutation Breeding