



Book | © 2023 Smart Plant Breeding for Vegetable Crops in Post-genomics Era

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Editors: <u>Saurabh Singh</u> , <u>Devender Sharma</u> , <u>Susheel</u> <u>Kumar Sharma</u> , <u>Rajender Singh</u>
Covers latest developments in vegetable crop improvement in post genomic world
Explains smart plant breeding methods in vegetable crops
Covers advanced molecular analysis techniques
1666 Accesses 11 <u>Altmetric</u>

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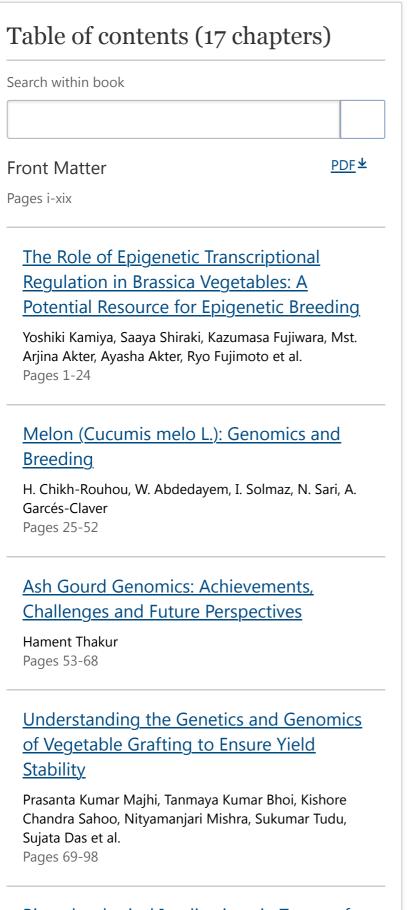
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About this book

This book dispenses a comprehensive coverage of up-to-date account of genomics and genome editing enriched smart plant breeding approaches for enhancing genetic gains in vegetable crops in the post-genomics era. The main focus of the present volume is to illuminate the applications of new techniques evolved in the post-genomics era. The techniques covered are high-throughput sequencing of DNA and RNA, genome editing, epigenetics and epigenomics, genotype by sequencing (GBS), QTLseq and RNA-seq for transcriptome analysis. Vegetables are the important component of healthy diet, source of energy and hold a promising position in building up a strong immunity. Zero hunger and attaining the food and nutritional security is the top priority of United Nations development goals. Smart breeding of food and vegetable crops to fight the challenges ahead in sustainable manner by keeping the harmony with nature is an important approach to fulfill the United Nations Sustainable Development Goals (UN-SDGs). This edited book highlights the modern results in smart vegetable breeding in the post genomics era and forecasts crucial areas of future needs. It is an important reference for the, readers, students, researchers, scientists in academia and research industries to provide them comprehensive information of innovative approaches for crop improvement in the post-genomics era and in the era of and climate change. Even the readers, academia, social activists, and others fond of reading will get a fair idea of journey travelled so far and future roadmap for fighting the challenges ahead to meet the sustainable development goals.

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Post-genomics era	Vegetable Breeding
Epigenomics Ge	enomic Resources
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Dr. Rajender Singh is currently working as Research Associate at ICAR-CPRI, Shimla, Himachal Pradesh, India. He Completed his Ph.D. from Thapar University, Patiala, and ICAR-DMR, Solan, Himachal Pradesh, India. He has also qualified ICAR-NET in Agricultural Biotechnology. He is the recipient of Junior Scientist of the Year award 2010 NESA, New Delhi. He has more than 11 years of experience in research. He has published research papers and peer-reviewed journals like Bioresource Technology, 3 Biotech, and Indian Journal of Microbiology. He has published 11 book chapters and one edited book. Previously, he was associated with research and development in edible fungi. Currently, his main research interest is technology management and licensing in potato research at ICAR-Central Potato Research Institute, Shimla.

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