



"Fruit and Vegetable Crop Production: Sustainable Technologies in Climate-Stressed Environments" is a pioneering textbook that comprehensively examines the intricate interplay between climate change and the cultivation of fruit and vegetable crops. This book is a vital resource for students, researchers, and practitioners seeking a deep understanding of the challenges posed by a changing climate and innovative solutions for sustainable agricultural practices.

xi+434p., tables., ind., 25 cm



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ISBN: 978-81-7622-582-3



₹ 4450



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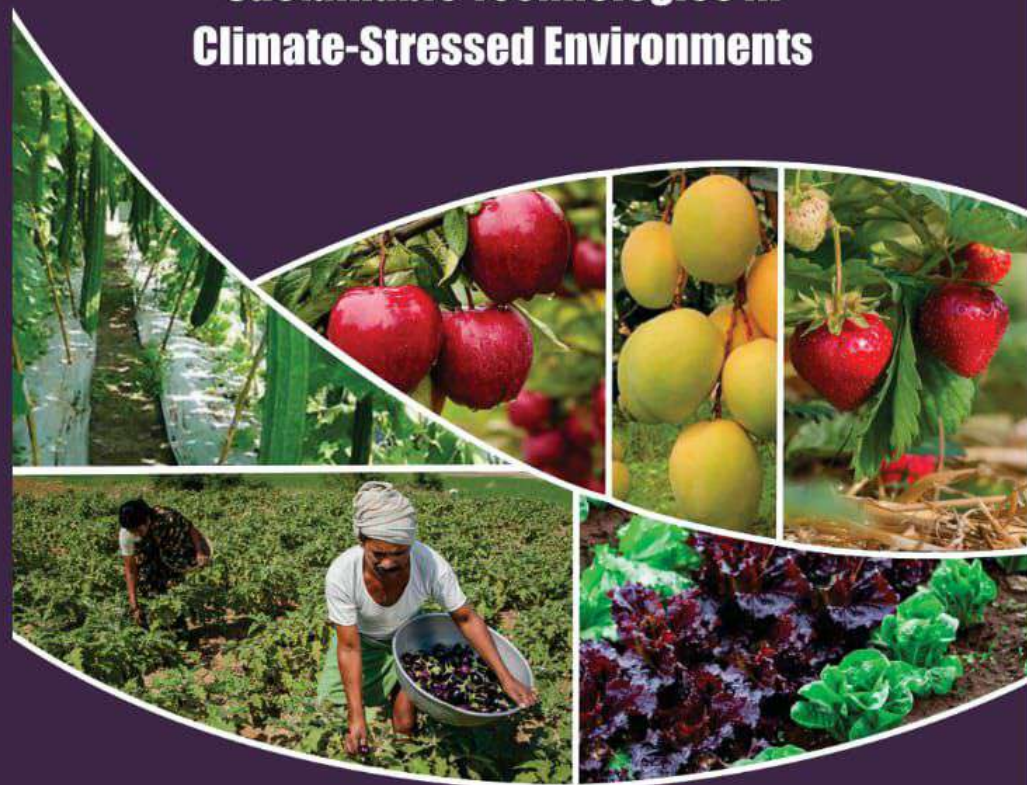
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Fruit and Vegetable Crop Production
Sustainable Technologies in Climate-Stressed Environments

Naik • Leua • Kadam
Rodge • Hasan • Gupta

Fruit and Vegetable Crop Production

Sustainable Technologies in Climate-Stressed Environments



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2024

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ISBN 978-81-7622-582-3

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Published by: **BIOTECH BOOKS®**
4762-63/23, Ansari Road, Darya Ganj,
New Delhi - 110 002
Phone: 09899295259, 011-43003222
E-mail: biotechbooks@yahoo.co.in
Website: www.biotechbooks.in

Typeset at: **Classic Computer Services**
Delhi - 110 035

Printed at: **Replika Printing Press**

PRINTED IN INDIA

Preface

As our planet faces unprecedented climate stress, the agricultural sector is at the forefront of the battle to ensure global food security. This book is a response to the urgent need for a holistic and forward-thinking resource that addresses the complexities of fruit and vegetable crop production in the face of climate change.

In the introductory chapters, we delve into the fundamental aspects of climate stress in agriculture, providing a solid foundation for understanding the dynamics that shape the rest of the book. We explore the physiological responses of crops to changing climates and the strategies that can be employed to enhance their resilience. The subsequent chapters transition into cutting-edge technologies and practices. We explore advanced monitoring techniques, climate-resilient crop rotation strategies, and the role of biotechnology in crop improvement. The book also delves into the application of renewable energy in agriculture, providing a glimpse into the future of sustainable farming practices.

We would like to express our gratitude to the numerous experts and researchers whose work has informed the content of this book. Their dedication to advancing agricultural practices in the face of climate change is truly inspiring.

As we embark on this journey through the dynamics of fruit and vegetable crop production in a changing climate, we hope that this book serves as a guide, fostering a deeper understanding of the challenges we face and inspiring innovative solutions for a more resilient and sustainable future.

This textbook is a timely and invaluable contribution to the literature on sustainable agriculture, offering a roadmap for navigating the complexities of global climate stress in the context of fruit and vegetable crop production.

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Dr. Hasmukh N. Leua

Dr. Darshan Shashank Kadam

Mr. Rahul R. Rodge

Dr. Wajid Hasan

Dr. Sheetanshu Gupta

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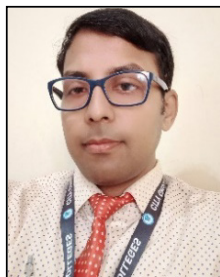
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Dr. Sheetanshu Gupta is an Assistant Professor at the Department of Biotechnology, Institute of Technology and Management, BKT, Lucknow, U.P. He has been working in Biochemistry, Molecular Biology and Biotechnology, and emphasizing Environmental Health and Climate Change for the last 12 years, an alumnus of G.B. Pant University of Agriculture and Technology, Pantnagar, Uttarakhand, India. He qualified CSIR and ICAR ARS NET in Life Sciences and Plant Biochemistry and Plant Physiology respectively. Dr.

Sheetanshu Gupta's academic qualifications, research experience, and expertise in biochemistry and biotechnology make him a valuable asset. With his passion for teaching and research, dedication to innovative farming techniques, and student advocacy, Dr. Gupta continues to contribute significantly to advancing agricultural and biochemical sciences.

