Climate-Smart Agronomy for Sustainable Crop Production

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Preface

Agriculture is increasingly challenged by climate change, resource degradation, and the growing demand for food. In this context, climate-smart agronomy has become essential for achieving sustainable crop production while ensuring environmental protection and resilience against climatic stresses. The book, *Climate-Smart Agronomy for Sustainable Crop Production*, aims to present modern agronomic approaches that integrate productivity, sustainability, and climate adaptation.

This volume highlights innovative practices such as conservation agriculture, precision farming, integrated nutrient and water management, crop diversification, and climate-resilient cropping systems. These approaches not only improve crop productivity but also enhance soil health, water-use efficiency, and carbon sequestration while reducing environmental impacts.

The book brings together contributions from researchers, academicians, and agricultural professionals to provide scientific insights and practical solutions for sustainable farming. It is intended to serve as a valuable resource for students, scientists, extension workers, policymakers, and development practitioners engaged in climate-resilient agriculture.

The editors sincerely appreciate the efforts of all contributors and reviewers whose support made this publication possible. It is hoped that this book will contribute to advancing sustainable agriculture and strengthening global food security in a changing climate.

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Dr. Mahima Begum
Dr. Pranjit Sutradhar
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Mr. Shantonu Paul

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