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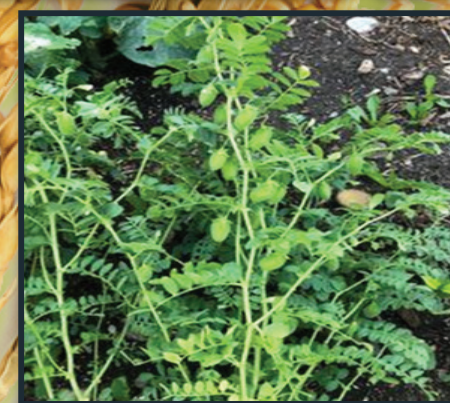
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PREFACE

Agriculture is the backbone of the Indian economy, with over 60% of the population deriving their livelihood directly or indirectly from this sector. Among the two major cropping seasons in India, rabi or the winter crop season is critical for the nation's food security. Rabi crops are sown in winter from October to December and harvested in spring from April to June. The major rabi crops include wheat, barley, peas, gram and mustard.

Enhancing the productivity and profitability of rabi crops is vital for ensuring the food and nutritional security of the nation while improving farmers' incomes. However, the rabi cropping system faces numerous challenges including climatic variability, natural resource degradation, rising input costs, and labor shortages. Overcoming these constraints necessitates the adoption of improved crop production technologies that are productive, profitable, and sustainable.

This book, "Practical Manual on Crop Production Technology (Rabi Crops)" aims to provide a comprehensive guide on the principles and practices of rabi crop production for students, researchers, extension workers and progressive farmers. It compiles the latest research findings and recommendations on all aspects of rabi crop management including variety selection, field preparation, sowing, nutrient management, water management, weed management, and pest and disease management for the major rabi crops.

The book adopts a crop-wise approach with dedicated chapters for each of the major rabi crops. Each chapter provides a detailed account of the crop's origin and distribution, climate and soil requirements, improved varieties, cultural practices, yield potential, and major insect pests, diseases and their management. The content is presented in a simple and lucid style with ample illustrations and tables for better understanding.

Importantly, the book emphasizes the adoption of good agricultural practices and conservation agriculture technologies like zero tillage, crop rotations, residue retention, precise water and nutrient management to enhance the productivity, profitability and sustainability of rabi cropping systems. It also covers contemporary topics like crop diversification, agroforestry, protected cultivation, farm mechanization, post-harvest management and value addition relevant to rabi crop production.

In summary, this book is an earnest attempt to provide all stakeholders with a ready reference on rabi crop production technologies. We hope that it serves as a practical guide for enhancing the productivity and profitability of rabi cropping systems in a sustainable manner. We are grateful to all the contributors for sharing their expertise and insights in this book. We welcome critical feedback from the readers for further improving the content and presentation of this publication. will contribute significantly to the advancement of plant protection science and its practical application in modern agriculture.

Happy reading and happy gardening!

Authors❏

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