

About The Editors



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Dr. Siva Roopa Kumar KSD is working as an assistant professor in plant pathology at Sri Krishnadevaraya College of Horticultural Sciences (affiliated with Dr.YSRHU), Andhra Pradesh. In 2015, he completed his graduation in horticulture from Dr.Y.S.R. Horticultural University. He successfully completed his master's degree in plant pathology from Dr.Y.S.R. Horticultural University in 2017. He has qualified for the ICAR-AIEEA-PhD (SRF) 2017 entrance examination and completed his doctoral degree in plant pathology from Assam Agricultural University in 2023. He has qualified for ASRB-NET. His main emphasis of research in masters and doctoral degrees was on citrus diseases like citrus greening disease (HLB) and citrus tristeza virus (CTV). He also worked as a Junior Research Fellow (JRF) for two years under the DBT-Twinning project at Assam Agricultural University and ICAR-ACPV. He presented his papers at various national and international conferences. He has attended a ten-day national training program on metagenomics. He has contributed to research articles, conference papers,



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Abhisek Tripathy, K Sai Durga Siva Roopa
Kumar and Shivam Singh



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PREFACE

Welcome to Plant protection is a vital aspect of agriculture and environmental stewardship. As the global population burgeons and climate change poses increasingly complex challenges, ensuring the health and productivity of crops becomes paramount. In recent years, there has been a noticeable shift in the approaches and technologies employed in plant protection, driven by advancements in science, technology, and evolving agricultural practices.

This volume on emerging trends in plant protection aims to provide a comprehensive overview of the innovative strategies, tools, and methodologies that are shaping the future of plant health management. From traditional practices to cutting-edge biotechnological solutions, this compilation explores the multifaceted landscape of plant protection, highlighting both established methods and novel approaches that promise to revolutionize the field.

The chapters contained herein cover a wide array of topics, ranging from integrated pest management and biocontrol to precision agriculture and genetic engineering. Each chapter delves into specific aspects of plant protection, offering insights into the latest research findings, practical applications, and future directions. By bringing together contributions from experts across various disciplines, this volume serves as a valuable resource for researchers, practitioners, policymakers, and students interested in advancing the sustainability and resilience of global agriculture.

As editors, we are deeply grateful to the contributors for their scholarly contributions and to the readers for their interest in this important subject. We hope that this volume will inspire further exploration, collaboration, and innovation in the field of plant protection, ultimately contributing to the achievement of food security, environmental conservation, and agricultural sustainability on a global scale.

Happy reading and happy gardening!

EDITORS.....

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