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Nota di contenuto	1.Adaptation and Mitigation Strategies for Climate Resilient Horticulture -- 2.Impacts of climate change on horticulture across India -- 3. Modeling climate change impacts, adaptation strategies and mitigation potential in horticultural crops -- 4.Impact of abiotic stresses on horticulture and strategies for mitigation in North Eastern India -- 5. Impact, adaptation and mitigation strategies for climate resilient banana production -- 6.Harmonious phenological data: A basic need for understanding the impact of climate change on mango -- 7.Effect of Climate Change on Grape and its Value Added Products -- 8.Climate resilient adaptation strategies for litchi production -- 9.Impact of Climate Change on Mountain Horticulture -- 10.Development of Vegetable Hybrids for Climate Change Scenarios -- 11.Genetic enhancement of Tomato crop for abiotic stress tolerance -- 12.Impact of climate change on potato -- 13.Adaptation options for sustainable production of cucurbitaceous vegetable under climate change situation -- 14.Phenotyping horticultural crops for abiotic stress tolerance -- 15.Significance of Grafting in Improving Tolerance to Abiotic Stresses in Vegetable Crops Under Climate Change Scenario -- 16. Plantation crops response to climate change: coconut perspective -- 17.Impact of climate change on cashew and adaptation strategies -- 18.Adaptation

and mitigation strategies for climate resilient oil palm -- 19. Floriculture a viable option of diversification in the light of climate change -- 20. Strategies for soil carbon sequestration through horticultural crops -- 21. Effect of climate change on fruit and vegetable quality -- 22. Urban Landscapes and Carbon sequestration in climate changing scenario -- 23. Impact of Climate change on insect vectors and vector borne plant viruses and phytoplasma -- 24. Pest Dynamics and Potential Emergence of New Biotypes under Climate Change Scenario in Horticultural Crops -- 25. Use of degree-days and plant phenology – A reliable tool for predicting insect pest activity under climate change conditions -- 26. Plant-pollinator interactions: A highly evolved synchrony at risk due to climate change.

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## Sommario/riassunto

Climate change, a global phenomenon, has attracted scientists to contribute in anticipatory research to mitigate adverse impacts, which are more important for horticulture, considering that the scenario is in the midst of revolution, reaching the production level of 250 million tonnes in India. Impacts of climate variability have, invariably, profound influence on production and quality. An understanding of the impacts and relevant adaptation strategies are of foremost importance to sustain the productivity and profitability of horticulture crops in the climate change scenario, which necessitates synthesis of current knowledge to develop strategies for adaptation and mitigation to achieve climate-resilient horticulture. The book *Climate-resilient horticulture: adaptation and mitigation strategies* addresses the effects of climate change on different horticultural crops and focuses on the adaptation strategies based on the scientific knowledge generated by the experts in different agro-climatic regions in India. Issues have been covered in various chapters to make this book a treasure of knowledge in horticulture vis-a-vis climate change. Some of the crops included in the book are apple, grapes, cashew, banana, litchi, mango, coconut, oil palm, potato, tomato, cucurbits and flowers. In addition to strategies to be adapted in these crops, various other important aspects like carbon sequestration, pests and diseases, and urban landscaping are also covered in the book. Information on climatic risks and adaptation options for resilience in horticultural crops and future strategies and information on pest and disease dynamics on horticultural crops in relation to climate change and available mitigation strategies have also been documented. The book is edited by Dr H P Singh, a visionary leader, and his colleagues, which will be highly valuable to research workers, students, policy planners and farmers to understand and checkmate the adverse effect of climate change, so as to convert weakness into opportunity. .

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