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Technology in Sunflower -- 13. Application, Challenges and Opportunities of Safflower Hybrid Seed Production -- 14. Hybrid Seed Production in Tomato -- 15. Hybrid Seed Production of Chilli (Capsicum annuum L.) for Sustaining Yield and Profitability -- 16. Hybrid Seed Production of Brinjal: Application, Challenges and Opportunities -- 17. Hybrid Seed Production Technology in Cucumber (Cucumis sativus L.) -- 18. An Overview of Hybrid Seed Production in Onion -- 19. Mechanism of Hybrid Development and Quality Seed Production in Okra -- 20. Modern Molecular Techniques to Support Hybrid Seed Industry in Crop Plants.

Sommario/riassunto

This book provides an overview of various procedures involved in hybrid seed production of field and vegetable crops, including historical development and principles, maintenance of seed purity of parental lines, evolution of breeding systems, male sterility and self-incompatibility. A section of the proposed book is dedicated to quality control procedures, comprising of purity testing, seed testing and certification process, and seed production management. The major shortcomings of the existing systems, new opportunities and future prospects of hybrid seed production are also discussed. The book focuses on field and vegetable crops like rice, maize, pearl millet, sorghum, pigeon pea, rapeseed, mustard, cotton, castor, soybean, and sunflower among others. This book is for students, researchers, and professionals working in the field of public sectors and commercial seed industries, as well as to other stakeholders who are working to improve their skills on hybrid seed production.