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| Edizione | [1st ed. 2017.] |
| Descrizione fisica | 1 online resource (XVI, 448 p. 170 illus., 48 illus. in color.) |
| Disciplina | 631.52 660.6 |
| Soggetti | Plant breeding Developmental biology Plant genetics Agriculture Food—Biotechnology Plant Breeding/Biotechnology Developmental Biology Plant Genetics and Genomics Food Science |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di bibliografia | Includes bibliographical references at the end of each chapters. |
| Nota di contenuto | Chapter 1. Litchi Fruit Set, Development and Maturation -- Chapter 2. Litchi Breeding and Plant Management in Taiwan -- Chapter 3. Biotechnological Advances in Lychee (Litchi chinensis.) and Their Future Implication in Improvement of Crop -- Chapter 4. Biotechnological Interventions in Litchi (Litchi chinensis Sonn.) for the Improvement of Fruit Quality and Post-Harvest Storage -- Chapter 5. Lychee Biology and Biotechnology -- Chapter 6. The Lychee Fruit: Post Harvest Handling Techniques -- Chapter 7. Secondary Metabolite Credentials and Biological Properties of Litchi Chinensis -- Chapter 8. Abiotic Stress Management in Fruit Crop Litchi chinensis -- Chapter 9. Strategies to Retard Postharvest Pericarp Browning in Lychee Fruit -- Chapter 10. Intellectual Property Rights Protection in Plants: Scopes in Lychee Commercialization -- Chapter 11. Genetic Manipulation of |

Litchi for Crop Improvement: Challenges and Possibilities -- Chapter 12. Regeneration from Nodal Explants of Field-Grown Litchi (*Litchi chinensis* Sonn.) Fruit Trees -- Chapter 13. Bioactive Compounds and Medicinal Importance of *Litchi chinensis* -- Chapter 14. Advances in Litchi Biotechnology: Achievements and Opportunities -- Chapter 15. Ex Situ Conservation Strategies in Litchi Germplasm -- Chapter 16. Isolation, Identification and Pharmacological Activity of Phytochemicals Present in *Litchi chinensis* -- Chapter 17. *Litchi chinensis* (litchi): A General Account with Special Reference to Propagation Practices -- Chapter 18. Advances in Genetic Transformation of Litchi -- Chapter 19. Conventional versus Modern Approaches to Litchi Tissue Culture.

Sommario/riassunto

This book provides systematic information on the lychee and modern tools to promote its sustainable growth and development. Including dedicated chapters on the evolution and diversification of the lychee, it highlights its genetic makeup and reciprocal exogenous factors, addressing the narrow genetic pool and lack of natural biodiversity. It also discusses issues related to post-harvest losses and robust approaches at the commercial level. Further, the book offers insights on in vitro propagation methods and prospective transgenic approaches for selected lychee cultivars. Chapters on the production of bioactive compounds and their enhancement through genetic transformation and elicitation are also included, reflecting the latest advances in the field of lychee biotechnology. Lastly, the book explores the use of molecular marker techniques to achieve the desired improvements in fruit trees' medicinal and aesthetic value.
