

1. Record Nr.	UNINA9910298400703321
Titolo	Advances in Plant Breeding Strategies: Fruits [[electronic resource] ] : Volume 3 / / edited by Jameel Al-Khayri, Shri Mohan Jain, Dennis V. Johnson
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-91944-X
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XVII, 990 p. 164 illus., 150 illus. in color.)
Disciplina	630
Soggetti	Agriculture Plant breeding Plant genetics Genetic engineering Plant Breeding/Biotechnology Plant Genetics and Genomics Genetic Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- List of Contributors -- Part I. Temperate Fruits -- 1. Apple (Malus spp.) Breeding: Present and Future; S. Pereira-Lorenzo et al -- 2. Cherry Breeding: Sweet Cherry (Prunus avium L.) and Sour Cherry (Prunus cerasus L.); L. Dondini et al -- 3. Mulberry (Morus spp.) Breeding for Higher Fruit Production; K. Vijayan et al -- 4. Pear (Pyrus spp.) Breeding; G.J. da Silva et al -- 5. Plum (Prunus spp.) Breeding; T. Miloševi, N. Miloševi -- 6. Quince (Cydonia oblonga Mill.) Breeding; S. Kafkas et al -- Part II. Subtropical Fruits -- 8. Cactus Pear (Opuntia spp.) Breeding; M.A. Mazri -- 9. Improvement of Fig (Ficus carica L.) by Conventional Breeding and Biotechnology; F. Aljane et al -- 10. Kiwifruit (Actinidia spp.) Breeding; Z. Hanley -- 11. Citrus Genetics and Breeding; J. Cuenca et al -- 12. Advanced Innovative Tools in Lemon (Citrus limon L.) Breeding; I. Polat -- 13. Mandarin (Citrus reticulata Blanco) Breeding; M. Usman, B. Fatima -- 14. Strategies for Olive (Olea europaea L.) Breeding: Cultivated Genetic Resources and Crossbreeding;

L. Rallo et al -- 15. Pomegranate (*Punica granatum* L.) Breeding; D. Holland, I. Bar-Ya'akov -- Part III. Tropical Fruits -- 16. Genetics and Breeding of Fruit Crops in the Annonaceae Family: *Annona* spp. and *Asimina* spp.; J. Lora et al -- 17. Breeding of Coconut (*Cocos nucifera* L.): The Tree of Life; Y. Yang et al -- 18. Advances in Date Palm (*Phoenix dactylifera* L.) Breeding; J.M. Al-Khayri et al -- 19. Breeding of *Garcinia* spp.; H.N. Murthy et al -- 20. Mango (*Mangifera indica* L.) Breeding; I.S.E. Bally, N.L. Dillon -- 21. Genetic Improvement of Papaya (*Carica papaya* L.); F. Karambu Rimberia et al -- 22. Passion Fruit (*Passiflora* spp.) Breeding; C.B. Moreno Cerquiera-Silva et al -- 23. Genetics and Breeding of Fruit Crops in the Sapindaceae Family: Lychee (*Litchi chinensis* Sonn.) and Longan (*Dimocarpus longan* Lour.); J. Lora et al -- Index.

---

## Sommario/riassunto

Plant breeders and geneticists are under constant pressure to sustain and expand food production by using innovative breeding strategies and introducing minor crops, which are well adapted to marginal lands, provide a source of nutrition, and have abiotic and biotic stress tolerance, to feed an ever-increasing human population. The basic concept of this book is to examine the use of innovative methods augmenting traditional plant breeding towards the improvement and development of new crop varieties, under the increasingly limiting environmental and cultivation factors, to achieve sustainable agricultural production and enhanced food security. Two volumes of the book series *Advances in Plant Breeding Strategies* were published in 2015 and 2016, respectively; Volume I: *Breeding, Biotechnology and Molecular Tools* and Volume II: *Agronomic, Abiotic and Biotic Stress Traits*. This is Volume 3: *Fruits*, which is focused on advances in breeding strategies for the improvement of individual fruit crops. It consists of 23 chapters grouped into three parts, according to distribution classification of fruit trees: Part I, Temperate Fruits, Part II, Subtropical Fruits, and Part III, Tropical Fruits. Each chapter comprehensively reviews the contemporary literature on the subject and reflects the authors own experience. Chapters are written by internationally reputable scientists and subjected to a review process to assure quality presentation and scientific accuracy. Each chapter begins with an introduction covering related backgrounds and provides in-depth discussion of the subject supported with high quality color photos, illustrations and relevant data. The chapter concludes with recommendations for future research directions, a comprehensive list of pertinent references to facilitate further reading, and appendixes of genetic resources and concerned research institutes. This book series is a valuable resource for advanced students, researchers, scientists, commercial producers and seed companies as well as consultants and policymakers interested in agriculture, particularly in modern breeding technologies.

---