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Titolo	Advances in Plant Breeding Strategies: Nut and Beverage Crops : Volume 4 // edited by Jameel M. Al-Khayri, Shri Mohan Jain, Dennis V. Johnson
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Descrizione fisica	1 online resource (XIV, 573 p. 120 illus., 100 illus. in color.)
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Lingua di pubblicazione	Inglese
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Nota di contenuto	Preface -- About the Editors -- Contributors -- Part I. Nut Crops -- 1. Almond [<i>Prunus dulcis</i> (Miller) D.A. Webb] Breeding; Pedro J. Martínez-García et al -- 2. Genetic Diversity and Breeding of Argan Tree (<i>Argania spinosa</i> L. Skeels); Naima Ait Aabd et al -- 3. Brazil Nut (<i>Bertholletia excels</i> Bonpl.) Breeding; Aisy Botega Baldoni et al -- 4. Cashew Nut (<i>Anacardium occidentale</i> L.) Breeding Strategies; Suvalaxmi Palei et al -- 5. Chestnut (<i>Castanea</i> spp. Miller) Breeding; J. Hill Craddock, M. Taylor Perkins -- 6. Hazelnut (<i>Corylus</i> spp.) Breeding; Roberto Botta et al -- 7. Macadamia (<i>Macadamia</i> spp.) Breeding; Bruce L. Topp et al -- 8. Peanut (<i>Arachis hypogaea</i> L.) Breeding; Saikat Gantait et al -- 9. Advances in Edible Pine Nut Trees (<i>Pinus</i> spp.) Breeding Strategies; Hanguo Zhang, Zhen Zhang -- 10. Pistachio (<i>Pistacia</i> spp.) Breeding; Abdollatif Sheikhi et al -- 11. Advances in Walnut (<i>Juglans regia</i> L.) Breeding Strategies; Kourosh Vahdati et al -- Part II. Beverage Crops -- 12. Genetic Resources and Breeding of Coffee (<i>Coffea</i> spp.); Manoj K.

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. In addition to developing improved crops for innovative industrial products such as pharmaceuticals and food additives, biofuels, oils and textiles. Three volumes of this book series were published in 2015, 2016 and 2018, respectively: Volume 1. Breeding, Biotechnology and Molecular Tools; Volume 2. Agronomic, Abiotic and Biotic Stress Traits and Volume 3. Fruits. In 2019, the following four volumes are concurrently being published: Volume 4. Nut and Beverage Crops, Volume 5. Cereals, Volume 6. Industrial and Food Crops and Volume 7. Legumes. This Volume 4, subtitled Nut and Beverage Crops, focuses on advances in breeding strategies using both traditional and modern approaches for the improvement of individual plantation crops. Included in Part I, eleven important nut species recognized for their economical and nutritional importance including Almond, Argan, Brazil nut, Cashew nut, Chestnut, Hazelnut, Macadamia, Peanut, Pine nut, Pistachio and Walnut. Part II covers two popular beverage species, coffee and tea. Chapters are written by 53 internationally reputable scientists from 13 countries 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 108 high quality color figures, and relevant data in 55 tables. The chapter concludes with recommendations for future research directions, appendixes of genetic resources and concerned research institutes and a comprehensive list of pertinent references to facilitate further reading. 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.
