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Nota di contenuto	Cornucopia that Brazil Gifted the World -- The Reyan 7-33-97 Rubber Tree Genome: Insight into its Structure, Composition and Application -- The RRIM 600 Rubber Tree Genome: Sequencing and Analysis Strategies of a Premier Pedigree Clone -- The BPM 24 Rubber Tree Genome, Organellar Genomes and Synteny within the Family Euphorbiaceae -- Development of Molecular Markers in Hevea brasiliensis for Marker-assisted Breeding -- Genome-wide Analysis of Transcription Start Sites and Core Promoter Elements in Hevea brasiliensis -- Genomics of Rubber Biosynthesis in Hevea brasiliensis -- Current Progress in Transcriptomics and Proteomics of Latex Physiology and Metabolism in the Hevea brasiliensis Rubber Tree -- HeveaDB: A Hub for Rubber Tree Genetic and Genomic Resources -- New Developments in Rubber Particle Biogenesis of Rubber-Producing Species -- Perspectives and Ongoing Challenges.

Sommario/riassunto

This book presents the first comprehensive compilation of genome research on the Hevea brasiliensis rubber tree. The genomes of Hevea tree clones (cultivars) are described by three major international groups. Chapters on omics-driven investigations address a broad range of topics including genome annotation and utilisation, transcriptome and gene family analysis, genetic mapping, metabolic pathways in latex and molecular breeding. Additionally, an overview of fundamental rubber biology, especially on laticifers, provides a historical background that is relevant to rubber genome analysis. The book concludes with several perspectives on the future needs of rubber investigations and prospects of rubber genomics. Given the scope of topics, this book will appeal to researchers and university students working in genomics and biotechnology of the rubber tree, and to rubber breeders with an interest in non-conventional approaches to trait analysis, selection and breeding.