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Descrizione fisica	1 online resource (460 pages)
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Soggetti	Biodiversity Agriculture Forestry Plant breeding Plant pathology Natural resources Plant Breeding/Biotechnology Plant Pathology Natural Resources Biotecnologia agrícola Genètica vegetal Protecció ambiental Nutrició Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Genetically modified organisms (GMOs) impact and current status in Latin America: technological sovereignty or dependence? -- New biotechnology promising approaches for disease control on bananas and plantains -- Complementation of bananas conventional breeding programs through biotechnological genetic improvement -- The stress as inducer of heritable changes in micropropagated banana: the hypothesis of cytokinin accumulation -- Somatic embryogenesis for

clonal propagation and associated molecular studies in cacao (Theobroma cacao L.) -- Use of biotechnology in Forestry breeding programs for natural resources and biodiversity conservation; Creating super trees for the future -- Stress modulation in Pinus spp. Somatic embryogenesis as model for climate change mitigation; Stress is not always a problem -- A Protective Role for Accumulated Dry Matter Reserves in Seeds During Desiccation: Implications for Conservation -- Biodiversity in Ecuador and its immense potential for agricultural pest control -- Native biodiversity: a strategic resource to accelerate bioeconomy development in Latin America and the Caribbean -- Low cost crop waste biosorbent technology for removing toxic and pollutants from wastewater -- The status of plant and plant-microbe interactions related to medicinal agents -- Bringing new function to packaging materials by agricultural byproducts -- Use of banana crop wastes to develop products in the aquaculture and plastic sectors -- Use of agroindustrial biomass for biofuels, enzymes discovery and production -- Temperature Profiles during the Fermentation of Cacao 'Nacional' to understand chocolate quality -- Ethno Phytopharmacology. Product validation process based on traditional knowledge of medicinal plants -- Biological control as a key tool for the management of invasive species in Latin America and the Caribbean -- Current research on Andean fruit crop diseases -- Biotechnological tools for the development of Foc TR4-resistant or tolerant Musa spp. Cultivars -- Integrated pest management of whitefly crop-free periods can reduce the Begomovirus transmission in tomato.

Sommario/riassunto

Food security, crop protection, biodiversity, and human and environmental health are among the main needs and concerns of society. Modern biotechnology and life sciences represent a constantly evolving area that is key for the rational use of natural resources – resources that in turn are indispensable for societal development. This book features the outcomes of the IV International Biotechnology and Biodiversity Congress, held in Guayaquil, Ecuador, 2018. It includes extensive reviews of the trends in agricultural and forestry biotechnology, molecules and materials biodiscovery, ethnomedicine, environmental impact and bioindustry research, describing many of these topics from the Latin America perspective and showing how the biodiversity and ancient knowledge of these countries are vital for worldwide sustainable development. .
