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Nota di contenuto	About the Special Issue Editors -- Preface to "Plant Genetics and Biotechnology in Biodiversity" -- Special Issue: Plant Genetics and Biotechnology in Biodiversity -- Towards the Genomic Basis of Local Adaptation in Landraces -- NGS-Based Genotyping, High-Throughput Phenotyping and Genome-Wide Association Studies Laid the Foundations for Next-Generation Breeding in Horticultural Crops -- International Instruments for Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture: An Historical Appraisal -- Twenty Years of Tomato Breeding at EPSO-UMH: Transfer Resistance from Wild Types to Local Landraces From the First Molecular Markers to Genotyping by Sequencing (GBS) -- Harnessing Genetic Diversity of Wild Gene Pools to Enhance Wheat Crop Production and Sustainability: Challenges and Opportunities -- Barley Developmental Mutants: The High Road to Understand the Cereal Spike Morphology -- Olive Tree ( <i>Olea europaea</i> L.) Diversity in Traditional Small Farms of Ficalho, Portugal -- Patterns of Spontaneous Nucleotide Substitutions in Grape Processed Pseudogenes -- Venetian Local Com ( <i>Zea mays</i> L.) Germplasm: Disclosing the Genetic Anatomy of Old -- Landraces Suited for Typical Cornmeal Mush Production -- Putting Plant Genetic Diversity and Variability at Work for Breeding: Hybrid Rice Suitability in West Africa -- Allelic Variants of Glutamine Synthetase and Glutamate

Synthase Genes in a Collection of Durum Wheat and Association with Grain Protein Content -- The Phylogeny and Biogeography of *Phyla nodiflora* (Verbenaceae) Reveals Native and Invasive Lineages throughout the World -- The Contribution of Professor Gian Tommaso Scarascia Mugnozza to the Conservation and Sustainable Use of Biodiversity.

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Sommario/riassunto

Plant genetic resources for food and agriculture (PGRFA) have been collected and exchanged for centuries. The rapid development of novel tools for genetic and phenotypic analysis is changing the way we can uncover diversity and exploit its value in modern agriculture. The integration of novel analytical tools is crucial for translating research into much-needed, more efficient management and use of PGRFA. This Special Issue provides an overview of recent topics on plant genetics and biotechnology in biodiversity. The proposed reviews and research papers present current trends and examples of genetic resources' description, conservation, management, and exploitation, highlighting that new approaches and methodologies can increase our understanding and efficient use of PGRFA to address the agricultural challenges that lie ahead.

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